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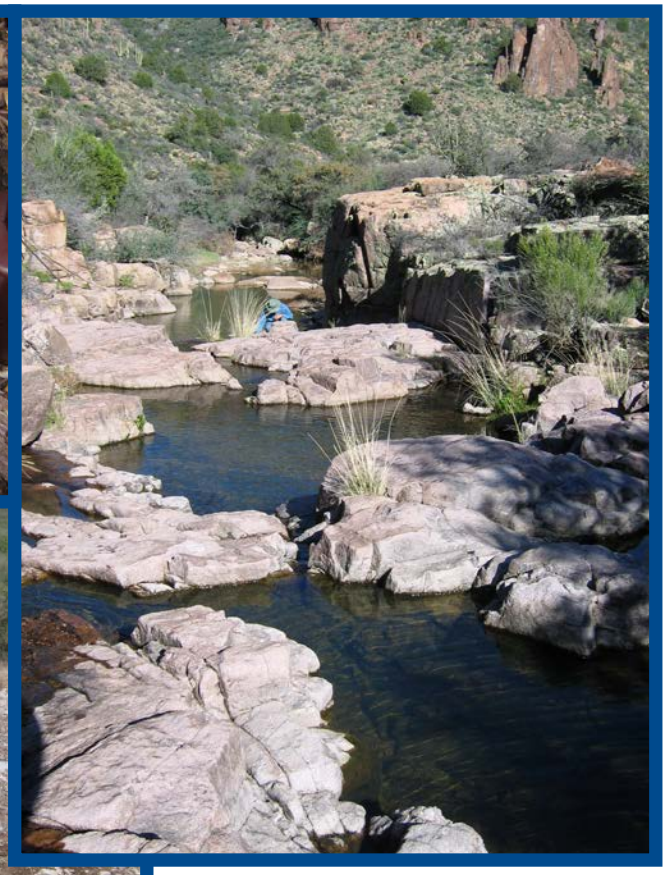
Prepared for:
Resolution Copper Mining

Hydrochemistry Addendum
Groundwater and Surface Water
Upper Queen Creek/Devils Canyon Study Area



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HYDROCHEMISTRY ADDENDUM
GROUNDWATER AND SURFACE WATER
UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

RESOLUTION COPPER MINING LLC, PINAL COUNTY, ARIZONA

Contents

1 EXECUTIVE SUMMARY 1
1.1 Introduction 1
1.2 Results 2

2 INTRODUCTION 4
2.1 Background 6
2.1.1 Climate 7
2.1.2 Hydrogeologic Context 7
2.1.3 Surface Water and Springs 10
2.2 Approach 11
2.2.1 Scope of Hydrochemical Sampling 12
2.2.2 Data Presentation 12
2.2.3 Water Quality Standards 14

3 GROUNDWATER 17
3.1 Shallow Groundwater System 17
3.1.1 Chemical Composition 17
3.1.2 Isotopic Composition 18
3.1.3 Temporal Variability 19
3.1.4 Water Quality 20
3.2 Apache Leap Tuff Aquifer 20
3.2.1 Chemical Composition 20
3.2.2 Isotopic Composition 21
3.2.3 Temporal Variability 22
3.2.4 Water Quality 23
3.3 Deep Groundwater System 23
3.3.1 Chemical Composition 24
3.3.2 Isotopic Composition 25
3.3.3 Water Quality 27

4 SURFACE WATER AND SPRINGS 28
4.1 Queen Creek Watershed 28
4.1.1 Chemical Composition 29
4.1.2 Isotopic Composition 30
4.1.3 Temporal Variability 30
4.1.4 Water Quality 31
4.1.5 Springs South of Superior 31
4.2 Devils Canyon Watershed 33
4.2.1 Chemical Composition 33
4.2.2 Isotopic Composition 35
4.2.3 Temporal Variability 36

Contents – continued

4.2.4 Water Quality 37
4.3 Mineral Creek Watershed 37
4.3.1 Chemical Composition 38
4.3.2 Isotopic Composition 39
4.3.3 Temporal Variability 39
4.3.4 Water Quality 40

5 SUMMARY 41

6 REFERENCES CITED 43

7 ACRONYMS & ABBREVIATIONS 45

Tables

Table 1. Groundwater Sampling Locations and Well Construction Details, Upper Queen Creek/Devils Canyon Study Area, Resolution Copper Mining LLC, Pinal County, Arizona

Table 2. Surface Water and Spring Sampling Locations, Upper Queen Creek/Devils Canyon Study Area, Resolution Copper Mining LLC, Pinal County, Arizona

Table 3. Quarterly Hydrochemistry Sampling Events for Groundwater Monitoring Stations

Table 4. Quarterly Hydrochemistry Sampling Events for Springs and Surface Water Monitoring Stations

Table 5. Analytical Suite for Groundwater and Surface Water Sampling, Resolution Copper Mining LLC

Table 6. Summary of Exceedances of Applicable Water Quality Standards in Groundwater

Table 7. Summary of Exceedances of Applicable Water Quality Standards in Surface Water and Springs

Illustrations

Figure 1. Regional Location Map

Figure 2. Monitoring Locations

Figure 3. Geology

Figure 4. Stiff Diagrams

Figure 5. Trilinear Diagram of Common Ion Compositions – All Groundwater Samples

Figure 6. Trilinear Diagram of Common Ion Compositions – Apache Leap Tuff Aquifer

Figure 7. Trilinear Diagram of Common Ion Compositions – Shallow Groundwater System

Figure 8. Trilinear Diagram of Common Ion Compositions – Deep Groundwater System

Figure 9. δ^2H versus $\delta^{18}O$ Composition – All Groundwater Samples

Figure 10. δ^2H versus $\delta^{18}O$ Composition – Apache Leap Tuff Aquifer

Figure 11. δ^2H versus $\delta^{18}O$ Composition – Shallow Groundwater System

Figure 12. δ^2H versus $\delta^{18}O$ Composition – Deep Groundwater System

Figure 13. ^3H versus ^{14}C – All Groundwater Samples

Figure 14. $\delta^{34}S_{SO4}$ versus SO_4/Cl Mass Ratio – All Groundwater Samples

Figure 15. $^{87}Sr/^{86}Sr$ Isotope Ratio versus Inverse Strontium Concentration – All Groundwater Samples

Figure 16. Trilinear Diagram of Common Ion Compositions – Surface Waters and Springs

Figure 17. Trilinear Diagram of Common Ion Compositions – Upper Queen Creek Watershed

Figure 18. Trilinear Diagram of Common Ion Compositions – Select Springs South of Superior, Queen Creek Watershed

Figure 19. Trilinear Diagram of Common Ion Compositions – Devils Canyon Watershed

Figure 20. Trilinear Diagram of Common Ion Compositions – Mineral Creek Watershed

Figure 21. δ^2H versus $\delta^{18}O$ Composition – Surface Water and Springs

Illustrations – continued

Figure 22. δ^2H versus $\delta^{18}O$ Composition – Surface Water and Springs, Upper Queen Creek Watershed

Figure 23. δ^2H versus $\delta^{18}O$ Composition – Surface Water Data by Quarter, Upper Queen Creek Watershed

Figure 24. δ^2H versus $\delta^{18}O$ Composition – Select Springs South of Superior, Queen Creek Watershed

Figure 25. δ^2H versus $\delta^{18}O$ Composition – Surface Water and Springs, Devils Canyon Watershed

Figure 26. δ^2H versus $\delta^{18}O$ Composition – Surface Water Data by Quarter, Devils Canyon Watershed

Figure 27. δ^2H versus $\delta^{18}O$ Composition – Surface Water and Springs, Mineral Creek Watershed

Figure 28. ^3H versus ^{14}C – Surface Water and Springs

Figure 29. $\delta^{34}S_{SO4}$ versus SO_4/Cl Mass Ratio – Surface Water and Springs

Figure 30. $^{87}Sr/^{86}Sr$ Isotope Ratio versus Inverse Strontium Concentration – Surface Water and Springs

Appendices

Appendix A. Hydrochemistry Data Tables – Groundwater

Appendix B. Hydrochemistry Data Tables – Surface Water

Appendix C. Major Ion Chemistry by Quarter – Groundwater

Appendix D. Major Ion Chemistry by Quarter – Surface Water

Appendix E. Time Series Plots of Hydrochemical Results Compared to Regulatory Standards – Groundwater

Appendix F. Time Series Plots of Hydrochemical Results Compared to Regulatory Standards – Surface Water

1 EXECUTIVE SUMMARY

1.1 Introduction

At the request of Resolution Copper Mining LLC (RCM), Montgomery & Associates (M&A) has prepared this hydrochemistry addendum report to support ongoing National Environmental Policy Act (NEPA) review process for the Resolution Project near Superior, Arizona. This report is an addendum to several previous reports prepared by Montgomery & Associates (M&A) that include detailed analysis and discussion of hydrochemical sampling results for surface water and groundwater in the Upper Queen Creek/Devils Canyon (QCDC) study area. These reports include:

> "Interim Results of Groundwater Monitoring, Upper Queen Creek and Devils Canyon Watersheds" published February 17, 2010 (M&A, 2010)
>
> "Results of Hydrochemical Characterization, Upper Queen Creek/Devils Canyon Study Area" published March 9, 2012 (M&A, 2012)
>
> "Surface Water Baseline Report, Devils Canyon, Mineral Creek and Queen Creek Watersheds" published May 16, 2013 (M&A, 2013a)

The principal objectives of this addendum are to:

1. Update reporting of all groundwater hydrochemical data developed by RCM starting in 2004 and extending through Quarter 3 2015;
2. Update reporting of all surface water hydrochemical data developed by RCM starting in 2003 and extending through Quarter 3 2015;
3. Assess new data with respect to the current hydrogeologic conceptual model and highlight any changes made to the conceptual model in consideration of new data.

This addendum is intended to augment the body of work previously reported by M&A (2010, 2012, 2013a). For this addendum, M&A has provided some additional graphical tools and summary tables to assist reviewers in evaluating and interpreting the data set.

1.2 Results

New data collected since 2012/2013 support observations and interpretations from previous reports (M&A 2010, 2012, 2013a). A summary of salient observations for the hydrogeologic system as interpreted from review of the updated hydrochemistry data set is provided below:

Shallow Groundwater System

The shallow groundwater system consists of numerous shallow, perched, largely seasonal aquifers of limited areal extent hosted in unconsolidated alluvial deposits and veneers. These deposits attenuate local precipitation and associated runoff. Water exits the shallow groundwater system via evapotranspiration and as direct discharge to surface water drainages over the course of weeks or months. The shallow system is susceptible to impact by anthropogenic activities.

Apache Leap Tuff Aquifer

Groundwater Recharge to the Apache Leap Tuff (ALT) aquifer: Hydrochemistry data indicate that the ALT aquifer is recharged through infiltration of runoff from precipitation via preferential flow pathways along principal drainages across the outcrop belt.

Groundwater Discharge from the Apache Leap Tuff (ALT) aquifer: The ALT aquifer discharges to the Devils Canyon and Mineral Creek drainages. There does not appear to be a current discharge point for the ALT aquifer in Upper Queen Creek. There is no strong hydrochemical evidence of substantial interaction with the deep or shallow groundwater systems. Mean residence times in the ALT Aquifer range from modern to more than 2000 years.

Groundwater in the Southeast Sector of the ALT aquifer (Lyons Fork): Hydrochemistry data for two wells completed in the ALT aquifer along Lyons Fork appear to reflect modern recharge of runoff from areas with substantially different geology as evidenced by apparent age and chemical composition. Groundwater from this sector discharges at Lyons Fork near the confluence with Mineral Creek.

Deep Groundwater System

Hydrochemistry of the deep groundwater system reflects the heterogeneity of local geology. In general, groundwater residence times in the deep system are substantially larger than within the ALT aquifer and shallow groundwater system.

Queen Creek Watershed

Surface water flow in the Upper Queen Creek watershed is ephemeral. Springs and seeps along the Upper Queen Creek Corridor appear to represent relatively recent precipitation that is captured and released from local fractures and/or alluvial deposits.

Four springs south of Superior (Kane, Blue, Hidden, and Bored Springs) are supported by local groundwater systems that appear to be recharged by infiltration of precipitation. In the case of Bored Spring, enhanced surface water runoff from a nearby quarry may help support spring flow.

Devils Canyon Watershed

Surface water in the Devils Canyon watershed is comprised of a combination of precipitation-driven runoff and base flow supported by groundwater from the ALT aquifer. Sites in the upper portion of the watershed are predominately composed of runoff-dominated ephemeral surface water resulting from seasonal precipitation. Perennial surface water flow and springs in the lower portion of the watershed are supported by discharge from the ALT aquifer.

Mineral Creek Watershed

Perennial surface water flow in the Mineral Creek watershed is supported by groundwater discharge from the eastern part of the Mineral Creek watershed at Government Springs and Lyons Fork, and discharge from the ALT aquifer. Contribution of the ALT aquifer to base flow of Mineral Creek increases below the confluence of Lyons Fork and Mineral Creek.

2 INTRODUCTION

At the request of Resolution Copper Mining LLC (RCM), Montgomery & Associates (M&A) has prepared this hydrochemistry addendum report to support ongoing National Environmental Policy Act (NEPA) review process for the Resolution Project near Superior, Arizona. This report is an addendum to several previous reports prepared by M&A that include detailed analysis and discussion of hydrochemical sampling results for surface water and groundwater in the Upper Queen Creek/Devils Canyon (QCDC) study area.

The study area covered by this report encompasses:

- The Upper Queen Creek watershed from the Town of Superior upstream to the headwaters
- Four selected springs in Queen Creek watershed south of the Town of Superior
- The Devils Canyon watershed
- The western part of the upper Mineral Creek watershed from the confluence with Devils Canyon upstream to the Government Springs Ranch and including Lyons Fork

The QCDC study area is a subset of the overall Resolution Project study area; location for the study area is shown on **Figure 1**. Investigation of groundwater and surface water to the west of the Concentrator Fault in the Superior basin is ongoing, with drilling investigations planned for summer of 2016 for the site of the proposed Near West tailings storage facility. Hydrochemical characterization of this domain is ongoing and will be presented in a future report.

RCM initiated hydrogeologic investigations of the QCDC study area beginning in 2001 in conjunction with preliminary studies related to development of a large-scale copper mine east of Superior, Arizona. RCM has proposed to develop a new mine that targets the Resolution orebody using the block-cave mining method. The Resolution orebody is located southeast of the existing Magma mine at depths ranging from 6,000 to 7,000 feet below land surface; elevation of the ore body ranges from 2,000 to 3,000 feet below mean sea level.

Early hydrogeologic investigations focused on evaluating potential impacts from proposed block-cave mining operations on groundwater and surface water in the QCDC study area. Because the proposed block-cave mining operations are deep, and subsidence impacts from the block-cave are assumed to propagate to the land surface, these studies have focused on the hydrogeologic system adjacent to, and overlying the proposed mine. Hydrogeologic characterization has since expanded to include other areas where proposed mineral processing, tailings storage, and transportation corridors are planned by RCM. This addendum is limited to hydrochemical data collected in the QCDC study area.

This report was prepared as an addendum to three earlier reports published by M&A that included data and discussion of hydrochemical conditions for groundwater and surface water in the QCDC study area.

- *Interim Results of Groundwater Monitoring, Upper Queen Creek and Devils Canyon Watersheds*, published February 17, 2010 (M&A, 2010)
- *Results of Hydrochemical Characterization, Upper Queen Creek/Devils Canyon Study Area*, published March 9, 2012 (M&A, 2012)
- *Surface Water Baseline Report, Devils Canyon, Mineral Creek and Queen Creek Watersheds*, published May 16, 2013 (M&A, 2013a)

These previous reports provided analysis and discussion of hydrochemical data for the period from 2004 through Quarter 1 (Q1) 2012 for groundwater (M&A, 2012) and 2003 through Q1 2013 for surface water (M&A, 2013a). Data presented and discussed in this report include all data collected previously, as well as additional data collected from the Q2 2012 through Q3 2015.

The principal objectives of this addendum are to:

1. Update reporting of all groundwater hydrochemical data developed by RCM starting in 2004 and extending through Quarter 3 2015;
2. Update reporting of all surface water hydrochemical data developed by RCM starting in 2003 and extending through Quarter 3 2015;
3. Assess new data with respect to the current hydrogeologic conceptual model and highlight any changes made to the conceptual model in consideration of new data.

This addendum is intended to augment the body of work previously reported by M&A (2010, 2012, 2013a). For this addendum, M&A has provided some additional graphical tools and summary tables to assist reviewers in evaluating and interpreting the data set.

2.1 Background

Hydrochemical sampling was initiated by RCM for the QCDC study area in order to refine the conceptual hydrogeologic model for the Apache Leap Tuff (ALT) aquifer and adjacent groundwater systems. The principal goals of the hydrochemical characterization program include:

- Establish water quality baseline for the ALT aquifer and adjacent groundwater systems in the vicinity of the proposed block-cave mining operations, and for springs and other surface water features in the study area;
- Identify principal sources of groundwater recharge and pathways for groundwater discharge to/from the ALT aquifer and adjacent groundwater systems; and
- Define the connectivity between the shallow groundwater system, the ALT aquifer, the deep groundwater system, and springs and surface waters in the study area.

Groundwater and surface water sampling locations are shown on **Figure 2** and summarized in **Tables 1 and 2**. A geologic map of the study area is provided on **Figure 3**. Summaries of quarterly hydrochemical sampling events for groundwater and surface water monitoring sites are given in **Tables 3 and 4**.

Samples were collected for common and trace constituents, routine parameters, radiological constituents, stable isotopes, and radioisotopes. The complete groundwater and surface water analytical suites are provided in **Table 5**. Analytical data for groundwater and surface water samples are provided in **Appendices A and B**.

This report is organized by aquifer/groundwater system and by watershed. For each system, hydrochemical characterization is discussed including major ion chemistry and water type, and isotopic data. Where temporal data are available, seasonal variability is assessed. These data are interpreted to elucidate

recharge/discharge relationships for groundwater and sources of water to surface water and springs. For details regarding hydrochemical sampling and the associated water level monitoring program, and for explanations of isotopic analyses and interpretation see M&A (2010 and 2012).

2.1.1 Climate

Climate of the project area is generally arid to semi-arid. Precipitation typically occurs as high-intensity, short-duration storms during the months of July through September, and longer-term storms of more moderate intensity that occur during the months of November through March. Although several meteorological stations have been, and are currently, maintained in the study area there is no one data set that is complete for the period covered in this report (2002 through 2015). As described in previous reports (M&A 2012, 2013a, 2013b), M&A has chosen to use the PRISM precipitation data set for the East Plant (Shaft No. 9 and No. 10) site (Oregon State University, 2016). PRISM data are interpolated from gage data for the entire USA using the Parameter-elevation Regressions on Independent Slopes Model.

Average annual precipitation over the period of record (1895 to 2015) of the East Plant PRISM data set is 23.6 inches. Precipitation varies considerably over the project area which incorporates elevations ranging from 5,500 feet above mean sea level at Kings Crown in the Queen Creek headwaters to 2,400 feet above mean sea level near the confluence of Devils Canyon and Mineral Creek and is therefore subject to substantial orographic variability.

2.1.2 Hydrogeologic Context

Based on results of hydrogeologic characterization conducted by M&A on behalf of RCM (M&A 2010, 2012), three principal groundwater systems have been identified in the study area including: a perched shallow groundwater system hosted in sparsely distributed unconsolidated alluvial sediments of limited areal extent, the ALT aquifer hosted in fractured dacite tuff that extends across much of the study area, and a deep groundwater system hosted in a variety of older rock units. Salient observations regarding each groundwater system are summarized below.

Shallow Groundwater System

The shallow groundwater system consists of numerous shallow, perched, largely seasonal aquifers of limited areal extent hosted in unconsolidated alluvial deposits and veneers. Areal extent of these alluvial deposits ranges from several hundred square feet to more than 300 acres. The largest of these deposits are naturally occurring and are found above Pump Station Spring in Upper Queen Creek watershed, and at Top of the World, Hackberry Canyon, and Rancho Rio Canyon in the Devils Canyon watershed (**Figure 3**). Thickness of these deposits ranges from less than 10 feet to several tens of feet. Groundwater occurs in these deposits and in the underlying weathered bedrock units, and is recharged by direct infiltration of precipitation and runoff.

There are also numerous accumulations of alluvium resulting from construction of hundreds of man-made check dams and several stock tanks in the Oak Flat area. Thickness of the alluvial deposits captured by these check dams and stock tanks is generally less than 10 feet. Groundwater that accumulates in these alluvial deposits may support sustained discharge to surface water drainages for several months following the winter snowmelt.

Apache Leap Tuff Aquifer

The ALT aquifer is a fractured-rock aquifer hosted in the Tertiary Apache Leap Tuff (Tal) outcrop belt that extends throughout much of the Upper Queen Creek and Devils Canyon drainages, and a portion of the Mineral Creek drainage (**Figure 3**). The ALT aquifer is separated from the deep groundwater system by a thick sequence of older Tertiary basin-fill sediments (Whitetail Conglomerate (Tw)). For the majority of its central and southern extent the Tal is underlain by the low-permeability Tw, although there are local areas along the western margin of the Tal outcrop belt where Tal directly overlies Paleozoic carbonates. In the northern area of the Tal outcrop belt, early Tertiary volcanic and sedimentary rocks (Tev and Tes) lie between the Tw and the Tal; however, the Tw still separates the ALT aquifer from the deep groundwater system. Although some local hydraulic response to sinking of Shafts No. 9 and No. 10 has likely occurred in the past, no on-going response to dewatering of existing mine workings has otherwise been observed in wells completed in the ALT aquifer.

Deep Groundwater System

The deep groundwater system, as defined for the QCDC study area, includes two principal groundwater domains that encompass a variety of geologic units. These groundwater domains are currently defined as follows:

- *Deep Groundwater System within the Resolution Graben:* The Resolution Graben hosts the Resolution ore body; a series of regional faults offset the rocks within the graben from those units that are located outside the graben. Rock units within the graben include: Cretaceous volcaniclastic rocks, Paleozoic limestones and shales, younger Precambrian diabase, quartzites, limestones and shales, and Precambrian Pinal Schist. Within the Resolution Graben, the deep groundwater system is hydraulically connected to existing mine workings and a clear hydraulic response to ongoing dewatering of the mine workings is observed.

- *Deep groundwater east of Concentrator Fault - outside Resolution Graben:* Outside the graben, rock units include Paleozoic and Precambrian units as above, but the Cretaceous volcaniclastic units are absent. Graben-bounding faults appear to impede hydraulic communication between the deep groundwater system outside the graben and the deep groundwater system inside the graben. Water levels are substantially higher outside the graben and limited response to dewatering of the existing mine workings has been observed to date.

The groundwater system west of the Concentrator Fault is hosted in low-permeability Tertiary basin-fill deposits (Gila Conglomerate) and fractured Tertiary volcanic rocks (younger than Tal) **(Figure 3)**. At greater depths, the same rock units that crop out east of the Concentrator Fault are encountered. Investigation of this groundwater domain is ongoing, with drilling investigations planned for summer of 2016 for the site of the proposed Near West tailings storage facility. Hydrochemical data for this domain will be discussed in a future report.

Groundwater Monitoring Network

RCM currently monitors water level and/or pore pressure from a network of 42 wells in the QCDC study area. The wells are shown on **Figures 2 and 3**. A subset of 29 wells has been used to obtain hydrochemical samples. Location and

construction information for these wells are given in **Table 1**. The total number of wells completed in each part of the groundwater system is as follows:

- 3 wells completed in the shallow alluvial groundwater system
- 19 wells completed in the ALT aquifer
- 7 wells completed in the deep groundwater system

2.1.3 Surface Water and Springs

Surface water monitoring is conducted in three principal watersheds within the QCDC study area: Queen Creek, Devils Canyon and Upper Mineral Creek. Queen Creek, a tributary of the Gila River, drains the northwestern part of the study area, and runs generally to the west-southwest through Superior. The central part of the study area is drained by Devils Canyon, which is a major tributary of Mineral Creek. Devils Canyon flows from north to south to the confluence with Mineral Creek in the south part of the study area. The southeast and east parts of the study area are drained by Mineral Creek, which is a tributary of the Gila River.

Hydrochemical sampling of springs and surface waters within the QCDC study area began in 2003, and now includes:

- 12 sampling sites in Queen Creek Watershed
- 17 sampling sites in Devils Canyon Watershed
- 6 sampling sites in Mineral Creek Watershed

Maps showing surface water and spring sampling locations are provided on **Figures 2 and 3**. A summary of surface water sampling locations is provided in **Table 2**.

Watersheds and Monitoring Station Identifiers

For most surface water sampling stations, station identifiers consist of one or two letters identifying the watershed or sub-watershed, a numerical value that identifies the number of kilometers along the stream channel upstream from a defined confluence or major hydrographic feature, and a single letter related to the position of the station relative to the streambed. The station prefixes that identify

each watershed or sub-watershed and the datum from which upstream distance is measured are designated as follows:

Watershed/Sub-watershed	Station Identifier Prefix	Distance upstream from
Queen Creek	QC	Whitlow Ranch Dam
Devils Canyon	DC	Confluence with Mineral Creek
• Iron Canyon	IC	Confluence with Devils Canyon
• Rancho Rio Canyon	RR	Confluence with Devils Canyon
• Hackberry Canyon	H	Confluence with Devils Canyon
Mineral Creek	MC	Confluence with Devils Canyon
• Lyons Fork	LF	Confluence with Mineral Creek

Location relative to the streambed is indicated by the following letters:

- Main stream channel = C
- Spring to the west of the main stream channel = W
- Spring to the east of the main stream channel = E

Occurrence of Perennial Streamflow

Surface water occurrence surveys have been conducted for surface water drainages in the QCDC study area since 2003. Based on these occurrence surveys, locations for perennial reaches of streams have been delineated. Procedures for determining locations for perennial stream reaches are described in M&A (2013a). Perennial stream reaches for Devils Canyon and Mineral Creek, as determined previously, are shown on **Figures 2 and 3**. No perennial stream reaches have been identified in Queen Creek upstream from the Town of Superior.

2.2 Approach

Proposed block-cave mining operations are anticipated to result in a zone of subsidence above the mine, and impact to overlying rock units and the groundwater systems hosted in those rock units is likely to occur. Because the ALT aquifer overlies the proposed mine, changes to aquifer properties within the subsidence zone will likely result in hydraulic effects in the ALT aquifer outside the subsidence zone. An understanding of the primary sources of recharge, points/areas of discharge, and movement of water within the ALT aquifer is important for predicting potential impacts from mining operations. As a result, much of the hydrochemical sampling program to date has been focused on

understanding the relationship between the ALT aquifer and adjacent groundwater and surface water features.

2.2.1 Scope of Hydrochemical Sampling

The suite of hydrochemical data collected by RCM since 2003 includes a comprehensive range of both routine analytes (common ions and trace constituents, and radiological constituents) and analytes with more specialized applications (stable isotopes and radioisotopes). Interpretation of these data requires evaluation of all datasets taken together. For example, while waters from several sources may appear similar in major ion chemistry, isotopic analyses may highlight important differences in relative age or provenance.

The analytical suite for each sampling event and for each station varied over time. The suite of analyses for each sampling event is provided in **Tables 3 and 4.** All samples are analyzed for common and trace constituents. Additional analytes were added and removed from the analytical suites for each site as results were reviewed and potential benefits of the additional data were assessed.

Sampling frequency for surface water sites generally consists of quarterly monitoring designed to capture seasonal variability in precipitation and evapotranspiration, as summarized below:

Quarter 1	January - March	Winter rains/snow
Quarter 2	April - June	Spring runoff/drying period
Quarter 3	July - September	Summer monsoon rains
Quarter 4	October - December	Fall dry period

This is important for evaluating surface water systems, where variability in precipitation and surface water flow on a seasonal or annual scale may have a substantial impact on hydrochemistry results.

2.2.2 Data Presentation

In this report, as with previous reports by M&A (2010, 2012, 2013a), hydrochemistry data are presented in a series of graphs to highlight and compare chemical and isotopic characteristics of each sample, and ultimately each component of the groundwater systems, springs, and surface water features. These graphs are used as a basis to identify distinct populations, evaluate degree of spatial or temporal variability, and allow for interpretation of the

hydrochemistry data to support refinement of the conceptual model of the groundwater and surface water systems.

Specific graphical tools for interpretation of the hydrochemistry data set include:

- *Stiff Diagrams*: show relative proportions of common ions for a suite of samples, preferably taken at the same time, that are shown as distinctly-shaped diagrams on a map to help evaluate spatial variability of water composition;
- *Trilinear (Piper) Diagrams:* show relative proportions of major cations and anions for all samples simultaneously so that distinct groupings and mixing relationships, if present, can be identified and compared;
- *Quarterly Variability (Schoeller)Plots*: show major ion concentrations for each sample collected from a given site and identified by the quarter within which the samples were taken to evaluate seasonal variability of water composition;
- *Stable Isotope Plots:* compare isotopes of oxygen ($\partial^{18}O$), hydrogen ($\partial^{2}H$), and sulfur ($\partial^{34}S$) to identify potential sources of water;
- *Radioisotope Plots:* compare relative mean residence times of waters from different parts of the system (^{14}C, ^{3}H), and 'fingerprint' sources of water to the system (e.g. $^{87}Sr/^{86}Sr$).

Stiff diagrams for groundwater and surface water samples are shown on **Figure 4**. Most of the samples were collected in Q2 2012. For sites where samples were not collected during Q2 2012, data from the nearest quarterly sampling event are presented.

Hydrochemistry graphs are presented in the following sequence to facilitate comparison of sample sets:

Figure Number	Graph Type	Sample Grouping(s)
Figures 5 - 8	Trilinear Diagrams	All Groundwater, ALT Aquifer, Shallow System, Deep System
Figures 9 - 12	Oxygen-18/Deuterium	All Groundwater, ALT Aquifer, Shallow System, Deep System
Figures 13 - 15	Other isotope plots	All Groundwater
Figures 16 - 20	Trilinear Diagrams	All Surface Water, Upper Queen Creek, Queen Creek Springs South of Superior, Devils Canyon, Mineral Creek

Figure Number	Graph Type	Sample Grouping(s)
Figures 21 - 27	Oxygen-18/Deuterium	All Surface Water, Upper Queen Creek, Queen Creek Springs South of Superior, Devils Canyon, Mineral Creek
Figures 28 - 30	Other isotope plots	All Surface Water

2.2.3 Water Quality Standards

All hydrochemistry data provided in this report are compared to both federal and state water quality standards. The goal of comparing these hydrochemistry data to these federal and state standards is to provide a general assessment of water quality in the QCDC study area, and to establish baseline conditions.

Groundwater Quality Standards: Hydrochemical data from groundwater and surface water samples have been compared with the United States Environmental Protection Agency (U.S. EPA) National Primary Drinking Water Regulations (NPDWR), the U.S. EPA National Secondary Drinking Water Regulations (NSDWR), and the State of Arizona Numeric Aquifer Water Quality Standards (AWQS). Hydrochemical groundwater and the numerical NPDWR, NSDWR, and AWQS values are provided in **Appendix A**, with exceedances highlighted. Time-series plots showing analytical results for all groundwater samples for comparison to standards have been prepared for each regulated constituent under U.S. EPA and State of Arizona drinking water standards and are shown in **Appendix E**. A summary of exceedances of drinking water standards for groundwater samples is given in **Table 6.**

Surface Water Quality Standards: Surface water hydrochemistry data are compared to federal drinking water standards and State of Arizona aquifer water quality standards in order to provide a general assessment of water quality. Hydrochemical data and the numerical NPDWR, NSDWR, and AWQS values are provided in **Appendix B**, with exceedances highlighted.

Surface water hydrochemical data are also compared with applicable State of Arizona Water Quality Standards for Surface Water (Arizona Administrative Code, 2008). Arizona surface water quality standards are specific to defined surface water uses and are therefore specified by reach for individual waterways. The three watersheds included in this analysis are subject to the standards listed in the following table:

STREAM	REACH	APPLICABLE STANDARDS				
Queen Creek	Headwaters to the Town of Superior WWTP outfall at 33°16'45"/111°17'25"	A&Ww		PBC		AgL
Devils Canyon	Tributary to Mineral Creek at 33°12'58"/110°59'42"	A&Ww	FBC		FC	AgL
Mineral Creek	Tributary to the Gila River at 34°17'42"/112°13'34"	A&Ww	FBC		FC	AgL

A&Ww = Aquatic and wildlife warm water, acute and chronic
FBC = Full-body contact
PBC = Partial-body contact
FC = Fish consumption
AgL = Agricultural livestock watering

The surface water standard for warm water aquatic and wildlife (A&Ww) has both acute and chronic applications. A&Ww Acute (A&Ww-a) pertains to a single exposure event of short duration. A&Ww Chronic (A&Ww-c) pertains to long-term exposure. Many standards apply to a specific filtered fraction; filtered fraction describes the method of collecting and analyzing the sample. Total and total recoverable fractions are analyzed from an unfiltered sample so they include any material that might be present in particulate or colloidal form; the dissolved fraction is analyzed from a filtered sample and represents the analyte that is in the dissolved form only.

For selected constituents (cadmium, copper, lead, nickel, silver and zinc), the A&Ww standard is hardness-dependent; all hardness-dependent samples are applicable to the dissolved fraction. Hardness is calculated as the sum of calcium and magnesium concentrations, expressed as calcium carbonate (CaCO3) in milligrams per liter (mg/L). Where hardness-dependent standards apply they are calculated based on the hardness of the sample.

Time-series plots showing analytical results for all surface water samples for comparison to State of Arizona surface water standards are provided in **Appendix F**. A summary of exceedances of drinking water standards for groundwater samples is given in **Table 7**.

Reporting Limit (RL) higher than Standard: In some cases, the laboratory reporting limit (RL) for a particular constituent for a given sample is higher than certain standards. For example, the U.S. EPA maximum contaminant level (MCL) for arsenic is 0.010 mg/L; however, for some groundwater samples the RL was set at 0.025 mg/L, in spite of the fact that the instrumental detection limit is 0.003 mg/L. Since 2013, laboratories have been directed to report the detected value. However, there are instances in the dataset where analytes were detected

somewhere between the MCL and the RL, and these values were reported and flagged as possible exceedances, even though it is possible that the value could fall below the standard. These data are highlighted in **Tables 6 and 7** and in **Appendices A, B, E and F**.

3 GROUNDWATER

A total of 38 groundwater samples have been collected for hydrochemical analysis from wells in the QCDC study area during the period from Q2 2012 through Q3 2015 (**Table 3)**. These include:

- A comprehensive round of sampling that was conducted during Q2/Q3 2012 for 21 wells;
- Additional sampling for 8 wells for baseline hydrochemical characterization;
- Samples for new deep groundwater system well DHRES-15

Hydrochemical results for these new groundwater samples and previously collected groundwater samples are given in **Appendix A.**

3.1 Shallow Groundwater System

The shallow groundwater system in the study area consists of numerous shallow aquifers and alluvial veneers of limited areal extent. RCM currently monitors three wells completed in alluvium in the QCDC study area (**Table 1**). Two of these wells (Corral and Middle wells) are located at JI Ranch near the west edge of the alluvial deposits outcrop belt at Top of the World (**Figure 3**). The third well, Hackberry Windmill, is located near the downstream outlet of the alluvial deposits outcrop belt in Hackberry Canyon. Hydrochemical data for the shallow groundwater system wells are provided in **Appendix A, Tables A-1 through A-5**. For this reporting period (Q2 2012 through Q3 2015), hydrochemical samples were collected from all 3 shallow groundwater system monitoring wells (**Table 4).**

3.1.1 Chemical Composition

Inspection of Stiff diagrams on **Figure 4** shows that the JI Ranch Corral and Middle wells have a distinct chemistry when compared to the ALT aquifer and deep system samples. This is mainly due to a difference in sulfate and chloride content of groundwater at the JI Ranch wells. Hackberry Windmill well has low total dissolved solids (TDS) content and moderately higher sulfate content compared to the ALT aquifer.

Major ion chemistry for all groundwater samples is shown on a trilinear diagram on **Figure 5**, illustrating the distinctions in water type between the three principal groundwater systems in the study area. A trilinear diagram showing data from the ALT aquifer is shown on **Figure 6**, along with fields defining three distinct water types for the ALT aquifer, which are discussed in detail in **Section 3.2**. These ALT aquifer fields as defined on **Figure 6** are shown on all subsequent trilinear diagrams for comparative analysis.

Major ion compositions of the shallow groundwater system sampled at three monitoring locations are plotted on a trilinear diagram on **Figure 7**. Shallow groundwater types range from calcium-bicarbonate type at Hackberry Windmill to calcium-bicarbonate-sulfate type at the JI Ranch Middle well and calcium-sulfate type at the JI Ranch Corral Well.

Each of these wells was sampled again in 2012; the new data are consistent with previously published results.

3.1.2 Isotopic Composition

Stable isotopes of oxygen and hydrogen in water ($\partial^{18}O$ and $\partial^{2}H$) are frequently used in hydrologic studies to 'fingerprint' sources of water. Different water sources often have unique isotopic signatures due to fractionation of these isotopes during processes such as evaporation and precipitation (Clark and Fritz, 2000). Analysis of stable isotopes of oxygen and hydrogen indicates that the shallow groundwater system is recharged by local precipitation with some degree of evaporation occurring during recharge (**Figure 11**). Discharge from the shallow groundwater system occurs through evapotranspiration and direct discharge to surface water drainages. Groundwater from Hackberry Windmill well shows a distinct evaporation signal, while groundwater from the JI Ranch wells does not (**Figure 11**). The lack of an evaporation signal in shallow groundwater at JI Ranch suggests that transpiration is the dominant component of evapo-transpiration at JI Ranch (transpiration is a purely advective process and does not result in isotope fractionation). The presence of a large stock tank and absence of a substantial tree canopy at the Hackberry Windmill alluvial deposits explains the evaporation signal at this location.

Tritium (^{3}H) and carbon-14 (^{14}C) are used to estimate recharge rates and residence times of groundwater. Tritium data provide information regarding the presence or absence of modern-day recharge (Clark and Fritz, 2000). Higher ^{14}C activities

(i.e., larger percent modern carbon (pmC) values) indicate groundwaters with shorter residence times. Estimates of mean groundwater residence times are approximate as many processes within the aquifer can potentially affect the ^{14}C activity (see Appendix E, M&A (2010) for detailed explanation of calculation of groundwater ages from ^{14}C activities and associated uncertainties). Despite the limitations of the method, ^{14}C data provide valuable qualitative information regarding the approximate residence time distribution of groundwater as well as identification of areas of active recharge. Carbon-14 and tritium data indicate that shallow groundwaters have short mean residence times ranging from modern (recharged within <5 to 10 years) at Hackberry Windmill to a mixture of submodern waters (with mean residence times perhaps as long as 700 years) and recent recharge at the JI Ranch wells (**Figure 13**).

Stable isotopes of sulfur and oxygen in dissolved sulfate ($\partial^{34}S_{SO4}$ and $\partial^{18}O_{SO4}$) can be used to 'fingerprint' sources of dissolved sulfate in water samples (Clark and Fritz, 2000). **Figure 14** shows that samples from the shallow groundwater system have more depleted $\partial^{34}S$ values relative to the ALT aquifer. Depleted $\partial^{34}S$ values suggest that shallow groundwaters have interacted with dryfall sulfur particles deposited on the surface by smelter operations that occurred in Superior between 1924 and 1971 (Bassett and others, 1994) or by other on-going smelter operations in the area. As with the carbon-14 and tritium data, this indicates that shallow groundwaters have a substantial recent recharge component.

It does not appear that substantial amounts of groundwater move vertically to the ALT aquifer from the alluvial deposits that host shallow groundwater at JI Ranch. If recharge to the ALT in this area were mediated by the shallow groundwater system we would expect to observe a depleted $\partial^{34}S$ signature in ALT groundwater at well HRES-06. However, $\partial^{34}S$ values from well HRES-06 are on the order of 5‰, similar to those observed in the majority of the ALT aquifer and considerably enriched compared to values from the shallow groundwater system at JI Ranch (**Figure 14**).

3.1.3 Temporal Variability

Major ion data for Hackberry Windmill, JI Ranch Corral Well, and JI Ranch Middle Well is plotted by quarter on **Appendix C, Figures C-01 through C-03**. Inspection of these plots shows that there is little seasonal variation in hydrochemical composition of shallow groundwater sampled at Hackberry Windmill. However, hydrochemistry at both JI Ranch wells is more variable

overall, and TDS in samples collected from Corral Well decreases significantly through time from 2007 through 2012 (**Figure C-02**). This is likely due to changes in local agricultural and residential inputs. Data are presented in **Appendix A, Table A-1**.

3.1.4 Water Quality

For the constituents measured, shallow groundwater meets U.S. EPA NPDWR and State of Arizona AWQS with the exception of two samples taken from JI Ranch Corral Well that exceed the NPDWR and Arizona AWQS for nitrate/nitrite (NO_3 + NO_2 as N). Shallow groundwater meets the majority of the U.S. EPA secondary standards with the exception of several samples that exceed the secondary standards for sulfate, total dissolved solids, pH, iron, and/or manganese (for details see **Table 6; Appendix A, Tables A-1 through A-3; and Appendix E**).

3.2 Apache Leap Tuff Aquifer

The ALT aquifer is a fractured-rock aquifer hosted in dacite tuff that extends throughout much of the Upper Queen Creek and Devils Canyon drainages, and a portion of the Mineral Creek drainage. The major focus of hydrogeologic investigations, including hydrochemistry, has been to understand recharge to, and discharge from, the ALT aquifer along with the degree of connection between the ALT aquifer and adjacent groundwater systems and surface water features. ALT groundwater has been sampled at 19 locations in the Devils Canyon, Upper Queen Creek and Mineral Creek watersheds (**Table 1**; **Figures 2 and 3**). Hydrochemical data for the ALT aquifer wells are provided in **Appendix A, Tables A-1 through A-5**. For this reporting period (Q2 2012 through Q3 2015), hydrochemical samples were collected from 16 ALT aquifer wells (**Table 4).**

3.2.1 Chemical Composition

Inspection of Stiff diagrams on **Figure 4** shows that the ALT groundwater has a similar chemistry across most of the aquifer, with the exception of HRES-10 in the Mineral Creek basin. This is mainly due to higher sulfate content at HRES-10.

A trilinear diagram showing data from the ALT aquifer is shown on **Figure 6**. Groundwater from the majority of the ALT aquifer is generally calcium-sodium-bicarbonate type with approximately equal cation weighting of calcium and

sodium. Groundwater sampled from the deepest parts of the ALT aquifer at three wells (HRES-01, HRES-02, and HRES-03d) is a sodium-bicarbonate type. In the Mineral Creek drainage, groundwater from HRES-10 and CT Well along Lyon's Fork is calcium-bicarbonate-sulfate type.

With the exception of HRES-1, HRES-03d, and CT Well, each of the ALT aquifer wells was sampled again during the current reporting period (Q1 2012 through Q3 2015); the new data are consistent with previously published results.

3.2.2 Isotopic Composition

Stable isotope (∂^2H and ∂^{18}O) results show that the ALT aquifer is recharged by infiltration of precipitation or precipitation-driven runoff. Samples plot close to the global meteoric water line which indicates that groundwater in the ALT aquifer is composed of precipitation with limited evaporation (**Figure 10**). Precipitation that lands on the ALT outcrop belt is thought to enter one of two infiltration domains:

1. Shallow circulation in which water enters near-surface fractures where it is subject to evaporation and transpiration, and from which it may move through connected fractures and drain out to the surface over the days and weeks following a precipitation event. This domain is not considered a major source of recharge to the ALT aquifer.

2. Deep infiltration through preferential flow paths that results in recharge to the ALT aquifer. The limited evaporation signature in the stable isotope data is consistent with recharge to the ALT aquifer occurring largely as focused recharge along principal surface drainages with limited interaction with the near-surface circulation system.

This type of dual infiltration regime, and the resulting lack of an evaporation signal in the regional aquifer, is well documented in arid and semi-arid environments (e.g., Mathieu and Bariac, 1996; Clark and Fritz, 2000).

For the most part, ^{14}C activities in the majority of the ALT aquifer suggest mean residence times of approximately 2,000 to 5,000 years (**Figure 13**). However, groundwater with smaller residence times is observed along Iron Canyon at well HRES-06, along Queen Creek at well HRES-12, and along Lyon's Fork of Mineral Creek at HRES-10 and CT Well. Smaller residence times, coupled with the presence of detectable tritium, indicate that these principal drainages are areas

of active recharge to the ALT aquifer. Depleted $\delta^{34}S$ values consistent with interaction with dryfall sulfur particles in surficial materials also indicate that groundwater sampled at HRES-10 and CT Well contains a substantial component of recent precipitation-driven runoff (**Figure 14**).

An additional difference in chemical and isotopic composition is evident at HRES-10 and CT Well at Lyons Fork of Mineral Creek. In the majority of ALT aquifer wells sampled to date, uranium concentrations are low (typically less than 0.002 mg/L); however, in HRES-10 and CT Well, uranium concentrations are higher, ranging from 0.0029 to 0.0134 mg/L (**Appendix A; Table A-3**). In addition, strontium ratios, which are relatively homogenous in the majority of the ALT aquifer, are elevated in samples from HRES-10 and CT Well (**Figure 15**).

As described in M&A (2012), Cretaceous-Tertiary intrusive rocks, Younger Precambrian sedimentary and intrusive rocks, and Precambrian Pinal Schist crop out in the Mineral Creek watershed to the east of Lyons Fork and the Tal outcrop belt (**Figure 3**). Due to differences in mineralogy and bulk chemistry between these units and the Tal, surface water runoff and shallow groundwater recharging the ALT aquifer from the east may be expected to have elevated uranium concentrations and $^{87}Sr/^{86}Sr$ ratios. Considering the short residence times indicated in the other isotope analyses, the source of recharge is likely to be predominantly from surface water runoff from the upper Mineral Creek watershed.

3.2.3 Temporal Variability

Major ion data for wells in the ALT aquifer are plotted by quarter in **Appendix C; Figures C-04 through C-22**. Inspection of these plots shows that there is generally negligible seasonal variability in hydrochemical composition of groundwater in the ALT aquifer. One exception is well HRES-10, which shows more variation in concentration of several ions and TDS content (**Figure C-15**). As previously discussed in **Section 3.2.1**, there are several indications that well HRES-10 is strongly influenced by runoff in Lyons Fork of Mineral Creek. In addition, substantial water level fluctuations correlated to runoff events have been documented at HRES-10, consistent with local rapid infiltration of runoff at this well.

In general, ALT aquifer wells with multiple samples exhibit constant TDS concentrations through time. Exceptions include HRES-09, HRES-10 (as

previously discussed), and HRES-07. A significant increase in TDS concentration was observed at HRES-07 during a long-term aquifer test in 2009 (**Figure C-12**); conversely, a decrease in TDS concentration was observed at well HRES-09 during a long-term aquifer test in 2011 (**Figure C-14**). This may indicate changes in contributions to the well bore from different depth zones within the fractured ALT aquifer during a sustained pumping stress.

3.2.4 Water Quality

For the constituents measured, groundwater from the ALT aquifer in the Resolution Project area meets U.S. EPA NPDWR and State of Arizona AWQS. Some groundwater samples collected from the ALT aquifer exceed U.S. EPA secondary standards for aluminum, manganese, iron, and/or pH. For details see **Table 6; Appendix A, Tables A-1 through A-3; and Appendix E**).

3.3 Deep Groundwater System

The deep groundwater system in the QCDC includes two groundwater domains: (1) groundwater within the Resolution Graben, and (2) groundwater outside the Resolution Graben and east of the Concentrator Fault.

The deep groundwater system has been sampled at seven locations in the QCDC study area (**Table 1; Figure 2**):

- DHRES-01 and DHRES-02: Completed in Cretaceous volcaniclastic rocks within the Resolution Graben
- DHRES-06: Completed in Paleozoic carbonate rocks south of the Resolution Graben
- DHRES-09: Completed in the younger Precambrian Dripping Spring Quartzite and Diabase to the west of the Main fault.
- DHRES-11: Completed in the lower Paleozoic Martin limestone and Bolsa quartzite, younger Precambrian Dripping Spring Quartzite, Mescal Limestone, and Diabase northeast of the Resolution Graben.
- DHRES-13: Completed in the younger Precambrian Dripping Spring Quartzite, Pioneer Shale, and Diabase, and older Precambrian Pinal Schist to the southwest of the Resolution Graben.

- DHRES-15: Completed in Paleozoic carbonate rocks (same as DHRES-06) south of the Resolution Graben.

Other DHRES-series wells have not been sampled due to: (1) completion of the well as fully grouted piezometer array (DRES-08); (2) poor groundwater yields to well bore (DHRES-05, DHRES-07, and DHRES-14); and (3) completion of well for water level monitoring in mine workings only (DHRES-10).

Hydrochemical data for the deep groundwater system wells are provided in **Appendix A, Tables A-1 through A-5**. For this reporting period (Q2 2013 through Q3 2015), hydrochemical samples were collected from 4 deep groundwater system wells (DHRES-09, DHRES-11, DHRES-13, and DHRES-15) (**Table 4)**.

3.3.1 Chemical Composition

Major ion chemistry of the deep groundwater system is plotted on a trilinear diagram on **Figure 8** along with fields indicating the range of groundwater compositions in the ALT aquifer. Chemical composition of groundwater sampled from the deep groundwater system varies considerably depending on the geologic units present at each sampling location. Stiff diagrams for deep groundwater system wells are shown on **Figure 4**, illustrating the spatial variability of this system. The predominant groundwater types identified to date include:

- *Sodium-bicarbonate-sulfate type*: groundwater sampled from Cretaceous volcaniclastic rocks within the Resolution Graben at DHRES-01.

- *Calcium-sodium-sulfate type*: groundwater sampled from Cretaceous volcaniclastic rocks within the Resolution Graben at well DHRES-02. This composition is substantially different from the composition of groundwater from the Cretaceous volcaniclastic rocks as represented by DHRES-01. In addition to the difference in chemical composition the total dissolved solids concentration is higher at DHRES-02 (1,400 mg/L) compared with DHRES-01 (500 mg/L).

- *Mixed cation-bicarbonate type:* groundwater sampled from Paleozoic carbonate rocks south of the Resolution Graben (DHRES-06 and DHRES-15), younger Precambrian Dripping Spring Quartzite, Mescal Limestone, and Diabase northeast of the Resolution Graben (DHRES-11), younger Precambrian Dripping Spring Quartzite, Pioneer Shale, and

Diabase, and older Precambrian Pinal Schist southwest of the Resolution Graben (DHRES-13).

- *Calcium-magnesium-bicarbonate-sulfate type*: groundwater sampled from DHRES-09 in the younger Precambrian Dripping Spring Quartzite and Diabase between the Concentrator Fault and the Main Fault. Higher sulfate may be the result of sulfide mineralization in the area.

In general, the chemical composition of groundwater sampled from a specific location within the deep groundwater system appears to reflect the composition of the geologic units at that location. This suggests that the system is compartmentalized and that there is not substantial mixing of groundwater within the system. Wells DHRES-09, DHRES-11, and DHRES-13 have been re-sampled since the previous hydrochemistry submittal (M&A, 2012). Well DHRES-15 was constructed in 2014 and hydrochemistry samples were collected during long-term testing in late 2014. The new hydrochemistry data are consistent with previously published results for similar hydrogeologic units.

3.3.2 Isotopic Composition

Stable isotope (∂^2H and ∂^{18}O) results show that the deep groundwater system is recharged by infiltration of meteoric water. Samples plot close to the meteoric water line which indicates that deep groundwater has undergone little evaporation during recharge (**Figure 12**). Stable isotope compositions (∂^2H and ∂^{18}O) of deep groundwater sampled at wells DHRES-01, DHRES-02, DHRES-06, and DHRES-15 are lighter than stable isotope compositions in groundwater from the ALT aquifer (**Figure 12**). The lighter isotopic signature is consistent with recharge under a cooler, wetter climate regime (e.g., late Pleistocene which occurred more than 10,000 years ago). Stable isotope data from wells DHRES-09, DHRES-11 and DHRES-13 lie within the field occupied by stable isotope data from the ALT aquifer and the shallow groundwater system, suggesting that groundwater sampled from the deep system at these locations may integrate compositions of more recent meteoric water (i.e., precipitation that has fallen within the current climate regime).

Carbon-14 estimates of mean groundwater residence times are approximate, as many processes within the aquifer can potentially affect the ^{14}C activity (M&A, 2010). However, ^{14}C data provide valuable qualitative information regarding the

approximate residence time distribution of groundwater in the deep system. ^{14}C data indicate that:

1. Groundwater sampled from Paleozoic carbonate rocks south of the Resolution Graben at DHRES-06 and DHRES-15 is the oldest in the deep groundwater system, yielding estimated mean residence times ranging from 15,000 to 40,000 years (**Figure 13**).

2. Groundwater sampled from the Cretaceous volcaniclastic rocks within the Resolution Graben at wells DHRES-01 and DHRES-02 has a mean residence time on the order of 7,000 to 25,000 years (**Figure 13**).

3. Groundwater sampled from the younger Precambrian Dripping Spring Quartzite, Mescal Limestone, and Diabase northeast of the Resolution Graben at DHRES-11 yields an estimated residence time on the order of 18,000 - 22,000 years (**Figure 13**).

4. Groundwater collected from younger Precambrian Dripping Spring Quartzite, Pioneer Shale, and Diabase and Older Precambrian Pinal Schist southwest of the Resolution Graben at DHRES-13 yields a shorter mean residence time estimate on the order of 7,000 years (**Figure 13**).

Absence of detectable tritium at these locations provides further evidence that mean residence times are long and that recharge to the deep groundwater system at these locations is submodern. These results indicate that the deep groundwater system has substantially longer mean residence times than the ALT aquifer and shallow groundwater system.

In contrast to the older waters observed in other parts of the deep groundwater system, groundwater sampled from the younger Precambrian Dripping Spring Quartzite and Diabase between the Concentrator Fault and the Main Fault at well DHRES-09 yields an estimated mean residence time on the order of 1,000 to 2,000 years (**Figure 13**). Tritium was detected in this sample at a concentration of 1.5 TU, suggesting that the groundwater is a mixture of modern and submodern recharge. Because well DHRES-09 is completed at a much shallower depth than any of the other deep groundwater system wells, with the uppermost perforated interval ranging from 431 to 911 feet below land surface (M&A, 2011), it represents a much shallower circulation system than the other wells in the deep groundwater system. Samples from DHRES-09 are relatively enriched in $\partial^{2}H$ and $\partial^{18}O$ compared to other locations within the deep groundwater system

(**Figure 12**), which, when combined with ^{14}C and tritium data, suggest that groundwater in this area has recharged more recently than groundwater sampled from other parts of the deep system.

Stable isotopes of dissolved sulfate ($\partial^{34}S$) in samples from the deep groundwater system reflect the heterogeneity of local geology (**Figure 14**). For example, weathered sulfide minerals resulting in enriched $\partial^{34}S$ are accompanied by high concentrations of dissolved sulfate at DHRES-01 and DHRES-02 within the Resolution Graben, while $\partial^{34}S$ values associated with Paleozoic carbonate rocks at DHRES-11 and DHRES-15 are more moderate, and $\partial^{34}S$ values from DHRES-09 in the Precambrian Dripping Spring Quartzite and Diabase to the west of the Main fault are relatively depleted. Strontium isotope ratios also reflect the heterogeneous geology of the deep ground water system (**Figure 15**).

3.3.3 Water Quality

Several samples from the deep groundwater system exceed U.S. EPA NPDWR and State of Arizona AWQS standards for the radiological constituents: gross alpha, gross beta, and/or radium (Ra-226 + Ra-228). In addition, exceedances of the NPDWR and/or AWQS for arsenic, chromium, copper, fluoride, lead, and nickel are occasionally observed in samples from the deep groundwater system. A substantial number of deep groundwater samples exceed U.S. EPA secondary standards for aluminum, copper, fluoride, iron, manganese, sulfate, pH, and/or total dissolved solids (for details see **Table 6; Appendix A, Tables A-1 through A-3; and Appendix E**).

4 SURFACE WATER AND SPRINGS

A total of 15 surface water samples have been collected for hydrochemical analysis from selected surface water sampling stations in the QCDC study area during the period from Q2 2013 through Q3 2015 (**Table 4**). These include:

- 3 samples in the upper Queen Creek watershed;
- 7 samples in the Devils Canyon watershed;
- 5 samples in the Mineral Creek watershed.

The goal of this additional sampling was to continue to enhance the statistical reliability of the surface water baseline dataset. All sites sampled during this period have previously been sampled for at least 3 quarters. Hydrochemical results for these new surface water samples and the previously collected samples are given in **Appendix B.**

4.1 Queen Creek Watershed

Within the QCDC area, the Upper Queen Creek watershed is characterized by diverse geology, including Precambrian sedimentary and intrusive rocks, Paleozoic carbonates, Tertiary Apache Leap Tuff and older volcanic rocks, and floodplain alluvium. The Upper Queen Creek watershed also has a relatively long history of disturbance resulting from human activities in the area, including ranching, prospecting, and mining. Surface water chemistry data have been collected in the Queen Creek watershed since 2003 **(Table 4)**.

For the QCDC study area, surface water sampling sites in the Upper Queen Creek watershed include eight surface water and spring stations along the Queen Creek corridor from the town of Superior (Station QWC 19.7 C) to Pump Station Spring (QC 30.7 C). Based on streamflow occurrence surveys, all streams in the Upper Queen Creek watershed are ephemeral, meaning that flowing water is present only during, and for a short duration after, precipitation events in a typical year (M&A, 2013a). In addition, hydrochemistry from four select springs in the Queen Creek watershed located south of Superior and east of the Concentrator Fault are discussed. RCM sampling stations for the Upper Queen Creek watershed are shown on **Figures 2 and 3**, and summarized in **Table 2.** Hydrochemical data for the Queen Creek watershed are provided in **Appendix B, Tables B-1 through**

B-5. For this reporting period (Q2 2012 through Q3 2015), hydrochemical samples were collected from one RCM monitoring station in Upper Queen Creek watershed (QC 19.7 C) (**Table 4**).

4.1.1 Chemical Composition

Stiff diagrams for Upper Queen Creek samples for Q2 to Q4 2012 are shown on **Figure 4**. Although overall composition appears to be similar for these eight stations, TDS varies widely, ranging from 112 mg/L at Oak Flat Wash to 463 mg/L at Pump Station Spring. Summaries of major ion chemistry by quarter for the Upper Queen Creek stations are shown in **Appendix D, Figures D-01 through D-08.**

Common ion compositions for all available surface water and spring samples in the QCDC study area are presented on a trilinear diagram on **Figure 16**. Inspection of **Figure 16** shows that surface water samples from Upper Queen Creek are generally distinct from Devils Canyon and Mineral Creek due to a larger proportion of calcium and, to a lesser extent, magnesium.

Figure 17 shows all available common ion data for the eight stations in the Upper Queen Creek watershed. Comparison of Upper Queen Creek samples with ALT aquifer fields indicates that the Upper Queen Creek samples are, for the most part, chemically distinct from ALT aquifer groundwater.

Samples from Pump Station Spring and QC 27.3 C are a calcium-magnesium-bicarbonate water type (**Figure 17**). TDS at these sites is relatively high (**Appendix D, Figures D-01 and D-02**), particularly at Pump Station Spring, possibly due to activity at a marble quarry immediately upstream of this site.

Samples from Number 9 Wash and Oak Flat Wash show substantial variability in bicarbonate-sulfate composition (**Figure 17; Appendix D, Figures D-03 and D-04**). Precipitation-driven runoff is often associated with higher sulfate content that varies depending on antecedent moisture conditions (M&A, 2013a). TDS at these sites is typically between 50 and 150 mg/L. The variability of bicarbonate to sulfate compositions along with the low TDS indicates an ephemeral, runoff-dominated source. There is no evidence of discharge from the ALT aquifer at these locations.

Boulder Hole and QC 22.6 E (Karst Spring) have a calcium-bicarbonate water type and have some similarity to ALT aquifer groundwater such as that sampled

at well HRES-13 (**Figure 4**). However, there is substantial variability in TDS content, particularly for Boulder Hole (**Appendix D, Figure D-05**), consistent with dilution from runoff events and evaporation of the open pool during the dry season. Flow at QC 22.6C (Karst Spring) appears to occur primarily in Q1 when runoff from winter rain/snow is active (**Appendix D, Figure D-06**). These observations are consistent with a predominantly ephemeral surface water system.

4.1.2 Isotopic Composition

Figure 21 shows stable isotope (∂^2H and ∂^{18}O) signatures from surface water and spring samples for all three catchments. Inspection of **Figure 21** shows that samples from Upper Queen Creek are more variable than samples from Devils Canyon or Mineral Creek. This is because the isotopic compositions of samples collected from ephemeral sites in Upper Queen Creek represent recent precipitation which varies widely between seasons and years. Samples from QC 27.3 C, Oak Flat Wash, Number 9 Wash, and QC 21.7 C also have a strong evaporative signature **(Figure 22)**.

Relatively high ^{14}C values and the presence of detectable tritium at sampling locations in Upper Queen Creek watershed provide further evidence that these sampling sites are supported by modern precipitation **(Figure 28)**.

The range of stable isotopes of sulfate (∂^{34}S) in samples from Upper Queen Creek is large, ranging from depleted ∂^{34}S values consistent with those observed in the ALT aquifer and shallow groundwater system to much more enriched ∂^{34}S values (**Figure 29**).

Strontium isotope ratios are relatively invariant among samples from Upper Queen Creek watershed (**Figure 30**).

4.1.3 Temporal Variability

Seasonal patterns in major ion chemistry are widely variable among the sites in Upper Queen Creek watershed and do not appear to have a consistent seasonal pattern (**Appendix D, Figures D-01 through D-08**). However, as discussed previously, stable isotopes of ∂^2H and ∂^{18}O in Upper Queen Creek surface waters show a distinct seasonal pattern (**Figure 23**). Samples collected during Q1 group close to the meteoric water line and are enriched in the heavier isotopes relative to samples collected during Q2, Q3 and Q4. Samples collected during Q2 have a distinct evaporative signature, which would be expected during these hot, dry

months. Samples collected during Q3, the monsoon rain season, also generally group together and are relatively enriched in the lighter isotopes. There are no samples available for Q4. One sample collected from QC 27.3 C during Q3 also plots to the right of the meteoric water line, suggesting that it has undergone evaporation.

While it is common for winter precipitation to be enriched in lighter isotopes relative to summer precipitation (Clark and Fritz, 2000), the opposite pattern is observed in these data. However, a review of precipitation data collected and made available by the University of Arizona Environmental Isotope Laboratory (Environmental Isotope Laboratory, 2016) revealed that precipitation from the monsoon season of 2008, the year that the majority of these data were collected, was exceptionally enriched in the lighter isotopes. While this is not typical of seasonal precipitation, it confirms that surface water derives directly from seasonal precipitation, and may even represent individual precipitation events.

4.1.4 Water Quality

For the constituents measured, samples in Queen Creek watershed exceed the Aquatic and Wildlife , Agricultural Livestock Watering, and Partial Body Contact Arizona surface water quality standards for cadmium, chromium, copper, lead, mercury, selenium, dissolved oxygen, E. coli, and/or pH (for details see **Table 7; Appendix F**). For more discussion on observed exceedances, see M&A (2013a).

4.1.5 Springs South of Superior

Four springs (Bored, Hidden, Kane, and Blue Springs) discharge roughly 3-5 kilometers (km) southwest of the Tal outcrop belt (**Figures 2 and 3**). Hidden and Kane Springs discharge from Paleozoic carbonates (Naco and Escabrosa limestones). Bored Spring discharges from a small alluvial deposit downstream from a diabase quarry where there has been substantial surface disturbance. Blue Spring discharges from an outlying block of Tal roughly 5 km to the southwest of the main Tal outcrop.

Between the Tal outcrop belt and the springs, the geologic units dip generally eastward and the area is dissected by large-scale, sub-vertical faults that compartmentalize the Paleozoic and younger Precambrian rocks. The surface topography between the Tal outcrop belt and the springs is deeply incised by ephemeral stream channels that run roughly westward and discharge to Arnett Creek (**Figures 2 and 3**).

Stiff diagrams for the four springs are shown on **Figure 4**. Three of these samples are from Q2 2012, while the sample from Hidden Spring is from Q4, 2010. TDS content ranges from 268 mg/L at Blue Spring to 434 mg/L at Hidden Spring. Summaries of major ion chemistry by quarter for these springs are shown in **Appendix D, Figures D-9 through D-12**. Results of hydrochemical and isotopic analyses collected from the four springs since 2012 support the following observations:

- Water from Bored, Hidden, and Kane Springs is a calcium-magnesium-bicarbonate type (**Figure 18**) in contrast to the calcium-sodium-bicarbonate water sampled from the ALT aquifer. Base flow at Blue Spring is chemically similar to ALT aquifer groundwater due to interaction with a detached block of Tal. The higher magnesium concentrations at Hidden and Kane Springs likely result from interaction with the Paleozoic units from which they discharge. Bored Spring has the most variable data overall, likely due to enhanced runoff from the diabase quarry up-gradient from the spring.

- Bored Spring appears to have consistent seasonal variability in ion concentration: Q2 has lowest concentrations, Q1 and 3 have intermediate concentrations, and Q4 has the highest concentrations (**Appendix D, Figure D-09**). Seasonal variability is most prominent in bicarbonate, sulfate, and calcium concentrations. Hidden Spring has negligible variability in ion composition (**Appendix D, Figure D-10**). Kane Spring and Blue Spring have variable ion composition but no consistent seasonal pattern (**Appendix D, Figures D-11 and D-12**).

- Stable isotope (∂^2H and ∂^{18}O) results show that all four springs are recharged by infiltration of meteoric water (**Figure 24**). Bored Spring has a distinct evaporative signature.

- Carbon-14 and tritium activities indicate that Hidden and Bored Springs are supported by a mix of modern and sub-modern water (**Figure 28**). Active tritium in samples from Kane Spring suggests this spring is also supported by a mix of modern and sub-modern waters, although the ^{14}C activities at Kane Spring are lower, indicating longer residence times. Samples from Blue Spring have no active tritium and ^{14}C activities indicate that this spring is supported by sub-modern recharge.

- The range of stable isotopes of sulfate ($\partial^{34}S$) in samples from the springs South of Superior is comparable to that observed in samples from the ALT aquifer and shallow groundwater system (**Figure 29**).
- Strontium isotope ratios are relatively invariant among samples from the springs South of Superior (**Figure 30**).

4.2 Devils Canyon Watershed

Surface water in the Devils Canyon watershed is derived from two distinct sources: (1) surface water runoff and discharge of bank storage along local veneers of stream-channel alluvium and shallow fractures, and (2) discharge of groundwater from the ALT aquifer. Surface water chemistry data have been collected in Devils Canyon watershed since 2003 (**Table 4**). RCM sampling stations for the Devils Canyon watershed are shown on **Figures 2 and 3**, and summarized in **Table 2**. Hydrochemical data for the Queen Creek watershed are provided in **Appendix B, Tables B-1 through B-5**. For this reporting period (Q2 2013 through Q3 2015), hydrochemical samples were collected from six RCM monitoring stations in the Devils Canyon drainage (IC 1.0 C, DC 14.7 C, DC 13.5 C, DC 8.2 W, DC 6.14 C, and DC 4.1 E) (**Table 4**).

Based on streamflow occurrence surveys, surface water sites in the upper portion of Devils Canyon watershed are ephemeral, having flowing water only during and for a short time after precipitation events (M&A 2013a). In the lower portion of the watershed, surface water sampling sites are either intermittent or perennial. Intermittent sites are supported by a mix of groundwater and precipitation runoff; however, during dry periods between the winter rain and monsoon seasons, or during years with below average precipitation, intermittent streams may not have flowing water. Perennial sites have flowing water year-round during a typical year, and groundwater is the primary source of water for stream flow.

4.2.1 Chemical Composition

Stiff diagrams for Devils Canyon station samples for Q1 to Q3 of 2012 are shown on **Figure 4**. The largest TDS observed for this sample set, 276 mg/L, occurs at station IC 1.0 C in Iron Canyon, which is located downstream from the JI Ranch/Top of the World area. TDS is small for those stations located within ephemeral reaches of Devils Canyon and its tributaries (DC15.5 C, DC 13.5 C, DC 10.9 C, RR 1.5 C, and H 0.1 C), ranging from 69 to 112 mg/L. TDS for

stations within the intermittent/perennial reaches of Devils Canyon ranges from 139 to 270 mg/L. Summaries of major ion chemistry by quarter for Devils Canyon stations are shown in **Appendix D, Figures D-13 through D-29.**

Major ion chemistry from ephemeral and intermittent/perennial surface waters and from springs in Devils Canyon watershed is plotted on a trilinear diagram on **Figure 19,** along with ALT aquifer fields. In general, Devils Canyon sites exhibit a range of major ion compositions. Dominant cations are generally Ca and Na + K; anions are highly variable. Many of the sites exhibit variability in anion content ranging from low sulfate (very high bicarbonate) to relatively high sulfate (low bicarbonate).

Figure 19 shows that anion data from springs and surface waters plot along a continuum from the bicarbonate-dominant ALT aquifer field to a high sulfate composition that represents recent precipitation runoff. Nearly all the spring samples plot within the ALT aquifer field and many of the intermittent/perennial surface water sampling sites match the composition of the ALT aquifer. Ephemeral sampling sites in the upper reaches of Devils Canyon (DC 15.5 C, DC 15.2 C, DC 14.7 C, DC 13.5 C, and DC 10.9 C) and in the Devils Canyon tributaries Iron Canyon (IC 1.0 C), Rancho Rio (RR 1.5 C), and Hackberry Canyon (H 0.1 C) have the most variable composition and the most pronounced spread of bicarbonate and sulfate values (**Figure 19**). Surface water samples collected in Iron Canyon are more chloride-rich than the majority of the Devils Canyon surface water samples (**Figure 19**). Iron Canyon, a tributary of Devils Canyon, drains an area characterized by greater anthropogenic activity including ranching operations and a small community, Top-of-the-World, which may contribute to the elevated chloride levels.

Stream sampling sites in the lower reach of Devils Canyon (DC 8.8 C, DC 8.1 C, DC 7.1 C, DC 6.14 C and DC 5.5 C) are intermittent or perennial (M&A, 2013a). The anion composition at these sites varies between high bicarbonate and moderate sulfate (**Figure 19**). Over 50 percent of the observations at each of these sites plot within the range of the ALT aquifer, consistent with current understanding that the groundwater discharge from the ALT aquifer supports base flow in the intermittent/perennial reach. The scatter towards higher sulfate indicates that variable proportions of surface runoff contribute to streamflow.

Springs in Devils Canyon (DC 8.2 W, DC 6.6 W, DC 6.1 E, and DC 4.1 E) generally plot within the ALT aquifer range consistent with current understanding

that the ALT aquifer discharges in this region (**Figure 19**). At DC 6.6 W and DC 6.1 E there are a few points which fall outside the close grouping that generally characterizes these springs. These samples were collected during the winter months when precipitation-driven runoff is typically highest and likely reflect a small proportion of surface water runoff or through-flow contributing to the spring sample.

4.2.2 Isotopic Composition

Stable isotopes of ∂^2H and ∂^{18}O from springs in Devils Canyon watershed (DC 8.2 W, DC 6.6 W and DC 6.1 E) plot within the field occupied by the ALT aquifer (**Figure 25**), consistent with the conceptual model that these represent discharge points for the ALT aquifer. Perennial and intermittent surface water sites (DC 8.8 C, DC 8.1 C, DC 7.1 C, and DC 6.14 C) all plot relatively near or within the range of the ALT aquifer, likely because these sites are supported by a seasonally variable mix of precipitation/runoff and base flow supported by ALT groundwater discharge. Ephemeral surface water sites (DC 15.5 C, DC 14.7 C, DC 13.5 C, IC 1.0 C and H 0.1 C) have the widest spread of ∂^2H and ∂^{18}O data (**Figures 25 and 26**), due to isotopic signatures imparted by seasonal precipitation or even individual storm events which vary substantially in their isotopic content. H 0.1 C has a clear evaporative signature (**Figure 26**). A more detailed discussion of the effects of seasonality in stable isotope composition is presented in **Section 4.2.3**.

Samples from perennial/intermittent sites generally have lower ^{14}C and tritium activities relative to ephemeral sites, because the intermittent and perennial reaches are supported in part by older groundwater and the isotopic compositions represent a variable mixture of ALT groundwater and precipitation-driven surface runoff **(Figure 28)**. Spring samples from DC 8.2 W have tritium values and ^{14}C activities comparable to samples from the ALT aquifer (**Figure 28**). DC 6.6 W has no tritium activity but a relatively high ^{14}C activity, suggesting that this spring has relatively short residence times but still does not represent modern water.

The range of sulfur isotope compositions in samples from Devils Canyon watershed is large, ranging from depleted ∂^{34}S values consistent with those observed in the shallow groundwater system (**Figure 14**) to much more enriched ∂^{34}S values (**Figure 29**). Values for ∂^{34}S in samples from springs and perennial surface water are largely consistent with those observed in the ALT aquifer.

Strontium isotope ratios are relatively invariant among samples from Devils Canyon watershed (**Figure 30**).

4.2.3 Temporal Variability

Seasonal trends in major ion chemistry for Devils Canyon ephemeral and perennial surface water stations are generally characterized by overall lower ion concentrations during the Q1 winter rainy season (**Appendix D, Figures D-13 through D-29)**. Seasonal trends in Devils Canyon spring sampling sites are less distinct, as would be expected for springs discharging from the ALT aquifer.

Ephemeral sites in Devils Canyon (DC 15.5 C, DC 15.2, DC 14.7 C, DC 13.5 C, DC 10.9 C, RR 1.5 C, and H 0.1 C) all have low TDS so the relative differences from season to season are less apparent (**Appendix D, Figures D-14 through D-19, D-21**). Furthermore, during dry periods, ephemeral sites often have no flow so the apparent lack of a clear seasonal pattern is largely due to the sporadic nature of flow at these sites. At IC 1.0 C, TDS is higher (**Appendix D, Figure D-13**). Q1 typically has the lowest concentrations overall, but in general there is not a strong seasonal pattern.

The perennial/intermittent sites DC 8.8 C, DC 8.1 C, DC 7.1 C, 6.14 C, DC 5.5 C typically have low ion concentrations during Q1, increasing ion concentrations in Q2, and highest ion concentrations in Q3, or Q4 (**Appendix D, Figures D-20, D-22, D-23, D-24, D-26, D-28**). This seasonal fluctuation in ionic concentrations (and TDS) is primarily due to increased contribution of precipitation-based surface runoff during the winter rainy seasons (Q1) relative to base flow contribution supported by ALT groundwater during the dry seasons (Q2 and Q4). During the monsoon season (Q3), the increased TDS can be attributed to (1) increased turbidity resulting from the more intense monsoon storms, (2) concentration due to increased moisture demand and higher transpiration rates during the growing season, and/or (3) mobilization of salts during ‘first flush’ events after extended periods with no precipitation.

Springs DC 8.2 W and DC 4.1 E exhibit negligible seasonal variability in major ion chemistry (**Appendix D, Figures D-22 and D-29**). Spring DC 6.6 W also has little to no seasonal variability; however, one very dilute sample was collected at DC 6.6 W during an exceptionally rainy season in early 2005 (**Appendix D, Figure D-25**).

Stable isotope compositions (∂^2H and ∂^{18}O) of Devils Canyon springs are similar to the stable isotope composition of groundwater in the ALT aquifer (**Figure 25**) and show no seasonal variability. Stable isotopes in surface waters have a distinct seasonal pattern in Devils Canyon **(Figure 26)** watershed that closely matches that observed in Upper Queen Creek watershed (**Figure 23**). Samples collected during Q1 plot near the meteoric water line, and are enriched in the heavier isotopes relative to samples collected during Q2, Q3 and Q4. Samples collected during Q2 have a slight evaporative signature, which would be expected during these hot, dry months. Samples collected during Q3 are relatively enriched in the lighter isotopes. As with ephemeral sites in the Upper Queen Creek watershed, this seasonal pattern confirms that surface water derives directly from seasonal precipitation.

4.2.4 Water Quality

For the constituents measured, samples from Devils Canyon watershed exceed the Aquatic and Wildlife, Agricultural Livestock Watering, and Full Body Contact Arizona surface water quality standards for arsenic, cadmium, copper, mercury, dissolved oxygen, E. coli, and/or pH (for details see **Table 7; Appendix F**).

4.3 Mineral Creek Watershed

Surface water in Mineral Creek is derived from a mixture of groundwater from the upper Mineral Creek watershed, groundwater from the ALT aquifer, and precipitation-driven surface water runoff. Groundwater from the Mineral Creek drainage discharges at Government Springs and along the main stem of Mineral Creek and contributes to perennial/intermittent flow for the majority of the reach between Government Springs and the confluence with Devils Canyon **(Figures 2 and 3)**. ALT groundwater discharges at spring MC 3.4 W and possibly at other sites along the stream channel downstream of Lyon's Fork and contributes to perennial flow in the lower reach of Mineral Creek. Surface water chemistry data have been collected in Mineral Creek watershed since 2008 (**Table 4**). The following section describes the chemistry of springs and stream water within the western portion of Mineral Creek watershed adjacent to the Devils Canyon watershed. RCM sampling stations for the Mineral Creek watershed are shown on **Figures 2 and 3**, and summarized in **Table 2**. Hydrochemical data for the Mineral Creek watershed are provided in **Appendix B, Tables B-1 through B-5.** For this reporting period (Q2 2013 through Q3 2015), hydrochemical samples

were collected at three of the six RCM monitoring stations in the upper Mineral Creek drainage (Government Springs, MC 5.2 C, and MC 3.3 C).

4.3.1 Chemical Composition

Stiff diagrams for Mineral Creek station samples for Q2 2012 are shown on **Figure 4**. Overall composition appears to be similar for most stations, with TDS generally decreasing downstream. TDS ranges from 428 mg/L at Government Spring to 167 mg/L at Wet Leg Spring (MC 3.4 W). All sampling stations in Mineral Creek are within reaches that are currently mapped as perennial. Summaries of major ion chemistry by quarter for Mineral Creek stations are shown in **Appendix D, Figures D-30 through D-35**.

Data from perennial surface waters and springs in Mineral Creek watershed are plotted on a trilinear diagram on **Figure 20**. Common ion chemistry of samples collected in the Mineral Creek drainage is generally distinct from that of the main portion of the ALT aquifer with the exception of the spring MC 3.4 W (**Figure 20**). The composition of spring water sampled at spring MC 3.4 W is very similar to that of the ALT aquifer, indicating that spring MC 3.4 W is a discharge point for the ALT aquifer.

Perennial flow in Mineral Creek appears to be largely supported by groundwater discharge from three different domains, each with a distinct composition. The first domain, Government Springs, has a calcium-magnesium-bicarbonate water type and surface water collected just downstream at the head of a short perennial reach (MC 8.4 C) is similar. The second domain, a more sulfate-rich chemical composition, is observed in surface water samples collected in Lyons Fork (LF 0.2 C) and is similar to groundwater composition observed at well HRES-10 and CT well upstream from LF 0.2 C. The third domain, represented by ALT aquifer groundwater discharging from spring MC 3.4 W, has distinctly lower sulfate and higher sodium content.

Surface water sampled at MC 5.2 appears to be a mixture of water represented by Government Springs/MC 8.4 C and water from Lyons Fork. However, MC 5.2 C has a lower TDS content than these sites higher in the watershed suggesting that some additional contribution to Mineral Creek surface water flow occurs from the ALT aquifer. Downstream of the spring at MC 3.4 W the stream water hydrochemistry is more variable but consistently plots along a continuum between MC 3.4 W and the upstream data. These observations are consistent with current

understanding that streamflow in Mineral Creek is derived from a mixture of groundwater from the Mineral Creek watershed, the main ALT aquifer, Lyon's Fork, and seasonal precipitation-driven runoff.

4.3.2 Isotopic Composition

Stable isotope (∂^2H and ∂^{18}O) data for samples from Mineral Creek watershed are shown on **Figure 27**. All data plot along the global meteoric water line with little indication of evaporation. Perennial surface water sites have slightly more variable isotopic compositions than Government Spring and the MC 3.4 W spring. The variability of stable isotope data at perennial surface water sites likely reflects variable contributions from seasonal precipitation and runoff.

Samples from MC 3.4 W contain no active tritium and have ^{14}C activities and ∂^{34}S compositions comparable to ALT groundwater (**Figures 28 and 29**), again indicating that this spring is a discharge point for the ALT aquifer. In contrast, Government Springs and all surface water sampling locations in Mineral Creek watershed have measureable tritium and high ^{14}C activities, suggesting that base flow at these sites is supported by recently recharged groundwater with short mean residence times. Depleted ∂^{34}S signatures in Mineral Creek surface water samples, interpreted to represent interaction with smelter-derived dryfall, support this interpretation (**Figure 29**).

Strontium isotope ratios in samples from Mineral Creek watershed are higher and more variable than surface waters elsewhere in the QCDC study area (**Figure 30**) and are similar to those observed for groundwater samples from well HRES-10 and CT well in Lyons Fork. With the exception of MC 3.4 W, all Mineral Creek samples have elevated strontium isotope ratios, reflecting the interaction with Precambrian rock units that occur in the upper Mineral Creek watershed. Spring MC 3.4 W has a strontium isotope ratio similar to the ALT aquifer.

4.3.3 Temporal Variability

Seasonal patterns in major ion chemistry are negligible at the two springs, Government Springs and MC 3.4 W (**Appendix D, Figures D-30 and D-34**). Surface water sites MC 8.4 C and LF 0.2 C have lower TDS during Q1 than during the other quarters. MC 5.2 C and MC 3.3 C do not have a distinct seasonal pattern. Seasonality observed in hydrochemistry for surface water sites is likely due to variable contributions of precipitation-based surface runoff during the rainy seasons that mix with surface water base flow (from groundwater discharge). The

lack of a seasonal signature in the lower reaches of Mineral Creek may be due to larger, more consistent contributions from groundwater discharge relative to the upper reaches.

4.3.4 Water Quality

For the constituents measured, samples in Mineral Creek watershed exceed the Aquatic and Wildlife, Agricultural Livestock Watering, and Full Body Contact Arizona surface water quality standards for arsenic, copper, lead, selenium, and/or dissolved oxygen (for details see **Table 7; Appendix F**).

5 SUMMARY

Review of hydrochemistry data for groundwater and surface water obtained for the period Q2 2012 through Q3 2015 substantially support previous observations regarding the conceptual hydrogeologic framework for groundwater and surface water systems in the QCDC study area as reported in M&A 2010, 2012, and 2013a. These observations are summarized below:

Shallow Groundwater System

- Shallow groundwater is supported by local precipitation that infiltrates over relatively short time scales.
- There does not appear to be a connection between the shallow system and the ALT regional aquifer.
- Hydrochemical characteristics and water quality of shallow groundwater in the JI Ranch/Top of the World area are influenced by existing residential and agricultural activities.

Apache Leap Tuff Aquifer

- The ALT Aquifer is recharged by local precipitation and surface water runoff on timescales that range from modern to more than 2000 years.
    - Shorter residence times along Iron Canyon at well HRES-06, along Queen Creek at well HRES-12, and along Lyon's Fork of Mineral Creek at HRES-10 and CT Well indicate that these principal drainages are areas of active recharge to the ALT Aquifer.
- Water discharges from the ALT aquifer at springs and seeps within and adjacent to the perennial reaches of Devils Canyon and Mineral Creek. There is no evidence that the ALT aquifer currently discharges to the Queen Creek drainage.

Deep Groundwater System

- The hydrochemistry of the deep groundwater system is heterogeneous and reflects local geologic conditions. Residence times are much longer relative to other regional aquifers. Deep groundwater is assumed to

currently discharge to the existing mine workings, and to Shaft 10, which extends several thousand feet below the existing mine workings.

Queen Creek Watershed

- Ephemeral surface water sites in Upper Queen Creek watershed are supported by precipitation-driven surface water runoff.
- Boulder Hole and QC 22.6 E (Karst Spring) also appear to be primarily supported by surface water runoff. Pump Station Spring chemistry is likely influenced by occasional discharge from a nearby marble quarry.
- Springs south of Superior are supported by local groundwater systems that are recharged by infiltration of precipitation. In the case of Bored Spring, enhanced surface water runoff from a nearby quarry may help support spring flow.

Devils Canyon Watershed

- Springs and surface water base flow in Devils Canyon watershed are sustained by discharge from the ALT aquifer.
- Surface water in Devils Canyon watershed is comprised of a mix of precipitation-based surface runoff and groundwater from the ALT aquifer:
    - Ephemeral sites in the upper reaches of the watershed are runoff-dominated
    - Perennial sites in the lower reaches of the watershed are supported by a mix of discharge from the ALT aquifer and precipitation-driven runoff that varies throughout the year.

Mineral Creek Watershed

- Surface water flow in the Mineral Creek watershed is comprised of a mix of surface water runoff and groundwater base flow that is supported by both the ALT aquifer and groundwater from Precambrian rocks in the eastern portion of the Mineral Creek watershed. Contribution of the ALT aquifer to base flow of Mineral Creek increases below the confluence of Lyons Fork and Mineral Creek.

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7 ACRONYMS & ABBREVIATIONS

ADEQ .....Arizona Department of Environmental Quality
ADWR .....Arizona Department of Water Resources
ALT .....Apache Leaf Tuff
AWQS .....State of Arizona Numeric Aquifer Water Quality Standards
Km.....kilometers
meq/L .....milliequivalents per liter
mg/L .....milligrams per liter
MCL .....maximum contaminant level
M&A .....Montgomery & Associates
NEPA .....National Environmental Policy Act
NPDWR.....National Primary Drinking Water Regulations
NSDWR.....National Secondary Drinking Water Regulations
PRISM.....Parameter-elevation Regressions on Independent Slopes Model
Q1.....Quarter 1
QA/QC .....quality assurance / quality control
QCDC.....Upper Queen Creek and Devils Canyon
R^2.....correlation coefficient
RL.....reporting limit
RCM.....Resolution Copper Mining LLC
TDS .....total dissolved solids
U.S. EPA .....United States Environmental Protection Agency
VSMOW.....Vienna Standard Mean Ocean Water
δ.....delta; represents the ratio of heavier and lighter isotopes
‰.....per mil units

TABLE 1. GROUNDWATER SAMPLING LOCATIONS AND WELL CONSTRUCTION DETAILS
UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA
RESOLUTION COPPER MINING LLC, PINAL COUNTY, ARIZONA

WELL IDENTIFIER	... SURVEY COORDINATES[a]... (AZSPC, feet) NORTHING (feet)	EASTING (feet)	LAND SURFACE ELEVATION (feet, amsl)[b]	……..BOREHOLE…….. BOREHOLE DIAMETER (inches)	BOREHOLE DEPTH (feet, bls)[c]	……..CASING…….. DIAMETER (inches)	DEPTH (feet, bls)	PERFORATED INTERVAL (feet, bls)	PERFORATED INTERVAL (feet, amsl)	HYDROGEOLOGIC UNIT(S) ADJACENT TO OPEN INTERVAL OF WELL
SHALLOW GROUNDWATER SYSTEM										
JI Ranch Corral Well	852639.865	977697.153	4435.39	NA NA	NA 83	8 open	0 - 10 10 - 83	--- 10 - 83[d]	--- 4425 - 4352[d]	Qal - Shallow Alluvium Tal - Upper Apache Leap Tuff
JI Ranch Middle Well	852431.030	977608.906	4441.65	NA NA	NA 53	8 4	NA 0 - 53	--- 1 - 53	--- 4441 - 4389	Qal - Shallow Alluvium Tal - Upper Apache Leap Tuff
Hackberry Windmill Well	828601.598	967894.073	3898.56	NA	46	5-1/2	NA	NA	NA	Qal - Shallow Alluvium Tal - Upper Apache Leap Tuff (?)
APACHE LEAP TUFF AQUIFER										
HRES-01	839000.266	959223.381	4168.92	17-1/2 9	0 - 19 19 - 1885	12 4	0 - 19 0 - 1597.5	--- 1055 - 1077 1360 - 1403 1577.5 - 1597.5	--- 3114 - 3092 2809 - 2760 2591 - 2571	--- Tal - Apache Leap Tuff (Brown) Tal - Apache Leap Tuff (Lithic) Tal - Apache Leap Tuff (Lithic)
HRES-02	836245.400	961757.156	3979.08	17-1/2 9	0 - 19 19 - 1587	12 4	0 - 19 0 - 1310	--- 655.9 - 677.7 1026.1 - 1047.9 1265.7 - 1310	--- 3323 - 3301 2953 - 2931 2713 - 2669	--- Tal - Apache Leap Tuff (Gray) Tal - Apache Leap Tuff (Brown) Tal - Apache Leap Tuff (Lithic)
HRES-03d	841033.155	967959.749	4075.56	17-1/2 9	0 - 19 19 - 2116	12 4	0 - 19 0 - 1500	--- 1456.5 - 1500	--- 2619 - 2576	--- Tal - Apache Leap Tuff (Brown)
HRES-04	835383.253	964531.555	4074.71	17-1/2 9	0 - 19 19 - 1747	12 4	0 - 19 0 - 1440	--- 584.4 - 624.4 724.4 - 764.4 1284.3 - 1304.3 1419.3 - 1440	--- 3490 - 3450 3350 - 3310 2790 - 2770 2655 - 2635	--- Tal - Apache Leap Tuff (Gray) Tal - Apache Leap Tuff (Brown) Tal - Apache Leap Tuff (Brown) Tal - Apache Leap Tuff (Brown)
HRES-05	830986.161	965229.746	3992.14	17-1/2 9	0 - 19 19 - 1147	12 4	0 - 19 0 - 1055	--- 385 - 425 585 - 605[e] 1015 - 1035	--- 3607 - 3567 3407 - 3387[e] 2977 - 2957	--- Tal - Apache Leap Tuff (Brown) Tal - Apache Leap Tuff (Brown) Tal - Apache Leap Tuff (Lithic)
HRES-06	852681.669	977111.797	4431.86	17-1/2 9	0 - 18 18 - 1500	12 4	0 - 18 0 - 800	--- 340 - 800	--- 4092 - 3632	--- Tal - Apache Leap Tuff (Gray - Brown)
HRES-07	829960.075	969606.450	4016.46	14-3/4 8-3/4	0 - 19 19 - 1068	10 4	0 - 19 0 - 1041	--- 335 - 749 812 - 1019	--- 3681 - 3267 3204 - 2997	--- Tal - Apache Leap Tuff (Brown) Tal - Apache Leap Tuff (Brown - Vitro.)
HRES-08	825985.648	965599.776	4046.77	14-3/4 8-3/4	0 - 20 20 - 1455	10 4	0 - 20 0 - 1022	--- 194 - 297 793 - 1000[f]	--- 3853 - 3750 3254 - 3047[f]	--- Tal - Apache Leap Tuff (Brown - Basal) Tw3 - WhiteTail Conglomerate

TABLE 1. GROUNDWATER SAMPLING LOCATIONS AND WELL CONSTRUCTION DETAILS
UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA
RESOLUTION COPPER MINING LLC, PINAL COUNTY, ARIZONA

WELL IDENTIFIER	… SURVEY COORDINATES[a]… (AZSPC, feet) NORTHING (feet)	EASTING (feet)	LAND SURFACE ELEVATION (feet, amsl)[b]	……..BOREHOLE…….. BOREHOLE DIAMETER (inches)	BOREHOLE DEPTH (feet, bls)[c]	……..CASING…….. DIAMETER (inches)	DEPTH (feet, bls)	PERFORATED INTERVAL (feet, bls)	PERFORATED INTERVAL (feet, amsl)	HYDROGEOLOGIC UNIT(S) ADJACENT TO OPEN INTERVAL OF WELL
APACHE LEAP TUFF AQUIFER										
HRES-09	831902.978	965770.234	3923.32	20-1/2 14-3/4	0 - 23 23 - 1125	16 8-5/8	0 - 23 0 - 1122	--- 271 - 1078	--- 3652 - 2845	--- Tal - Apache Leap Tuff (Gray - Brown)
HRES-10	829224.879	990434.231	2935.14	17-1/2 10	0 - 94 94 - 1546	12 4-1/2	0 - 94 0 - 1119	--- 158 - 398 698 - 1099[g]	--- 2777 - 2537 2237 - 1836[g]	--- Tal - Apache Leap Tuff (White - Gray) Tal - Apache Leap Tuff (Brown)
HRES-11	821967.096	980584.270	3466.09	17-1/2 10	0 - 20 20 - 1111	12 4-1/2	0 - 20 0 - 1078	--- 598 - 1078	--- 2868 - 2388	--- Tal - Apache Leap Tuff (Brown - Basal)
HRES-12	847210.324	963794.061	4168.58	17-1/2 10	0 - 80 80 - 2140	12-1/4 4-1/2	0 - 80 0 - 1988	--- 1767 - 1967	--- 2402 - 2202	--- Tal - Apache Leap Tuff (Brown)
HRES-13	829164.988	962267.671	4199.09	17-1/2 10-1/4	0 - 30 30 - 915	12-1/4 4-1/2	0 - 30 0 - 900	--- 423 - 860	--- 3737 - 3339	--- Tal - Apache Leap Tuff (Brown - Basal)
HRES-14	848272.497	972011.005	4214.69	17-1/2 10 9-7/8	0 - 40 40 - 1310 1310 - 1643	12-1/4 4-1/2	0 - 40 0 - 1460	--- 962 - 1440	--- 3253 - 2775	--- Tal - Apache Leap Tuff (Brown - Basal)
HRES-15	842357.318	971983.412	4315.37	17-1/2 10 9-7/8	0 - 60 60 - 1095 1095 - 2018	12-1/4 4-1/2	0 - 60 0 - 1977	--- 679 - 1530 1750 - 1958	--- 3636 - 2785 2565 - 2357	--- Tal - Apache Leap Tuff (Gray - Brown) Tev - Tertiary Basalt
HRES-17	840709.579	976950.799	4392.33	17-1/4 10	0 - 40 40- 1455	12-1/4 4-1/2	0 - 40 0 - 1345	--- 726 - 1330	--- 3666 - 3062	--- Tal - Apache Leap Tuff (Gray - Brown)
A-06	834171.542	971257.978	4167.82	NA 8	NA 1665	8 open	0 - 10.2 10.2 - 1665	--- 10.2 - 1665[d]	--- 4158 - 2503[d]	Tal - Apache Leap Tuff Tw - Whitetail Congl.
CT Well				NA	NA	6	?	?	?	QTg - Gila Congl. (?) Tal - Apache Leap Tuff (?)
MJ-11	829455.906	973629.342	3918.33	NA 6	NA 805	6 open	0 - 10.2 10.2 - 786	--- 10.2 - 786[d]	--- 3908 - 3132[d]	--- Tal - Apache Leap Tuff
DEEP GROUNDWATER SYSTEM										
DHRES-01	835362.846	964528.342	4076.27	19 12.45 12-1/4 6-3/4	0 - 25 25 - 665 665 - 4547 4547 - 6018	14 7-5/8 4-1/2	0 - 25 0 - 4538 4423 - 6002	--- ---[h] 4793 - 4978 5304 - 5489 5594 - 5618 5814 - 5938	-715 - -1860	Kvs - Volcaniclastics - Leached Cap Kvs - Volcaniclastics
DHRES-02	836733.333	961873.632	3976.67	19 12-1/4 6-1/8 6	0 - 40 40 - 3330 3330 - 5626 5626 - 6713	14 7-5/8 4-1/2	0 - 40 0 - 3325 3117 - 6555	--- ---[h] 3506 - 3732 5904 - 6007 6430 - 6533	471 - -2556	Kvs - Volcaniclastics - Leached Cap Kvs - Volcaniclastics p€bdiab - Younger Precambrian - Diabase

TABLE 1. GROUNDWATER SAMPLING LOCATIONS AND WELL CONSTRUCTION DETAILS
UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA
RESOLUTION COPPER MINING LLC, PINAL COUNTY, ARIZONA

WELL IDENTIFIER	… SURVEY COORDINATES[a]… (AZSPC, feet) NORTHING (feet)	EASTING (feet)	LAND SURFACE ELEVATION (feet, amsl)[b]	……..BOREHOLE…….. BOREHOLE DIAMETER (inches)	BOREHOLE DEPTH (feet, bls)[c]	……..CASING…….. DIAMETER (inches)	DEPTH (feet, bls)	PERFORATED INTERVAL (feet, bls)	PERFORATED INTERVAL (feet, amsl)	HYDROGEOLOGIC UNIT(S) ADJACENT TO OPEN INTERVAL OF WELL
DEEP GROUNDWATER SYSTEM										
DHRES-06	826028.632	965587.788	4045.57	19 12-1/4 6-3/4 6-1/2	0 - 40 40 - 1262 1262 - 1945 1945 - 2891	14 7-5/8 4-1/2	0 - 40 0 - 1254 1225 - 2690	--- ---[h] 1636 - 2649	2410 - 1397	Paleozic Sedimentary - Bolsa, Martin, Escabrosa, Naco p€bdiab - Younger Precambrian - Diabase
DHRES-09	841697.190	947570.518	3115.90	17 10 9-7/8	0 - 40 40 - 1600 1600 - 2175	12 4-1/2	0 - 40 0 - 2130	--- 431 - 911 1611 - 1671 1971 - 2071	2686 - 1045	p€bdsq Younder Precambrian - Dripping Spring Quartzite p€bdiab - Younger Precambrian - Diabase
DHRES-11	847171.255	963819.937	4168.33	19 12-1/4 6-3/4	0 - 38 38 - 3703 3703 - 6724	14 7-5/8 4-1/2	0 - 38 0 - 3691 3631 - 6700	--- ---[h] 4910 - 6679	-742 - -2511	p€bdiab - Younger Precambrian - Diabase
DHRES-13	832219.347	954075.423	3443.33	19 12-1/4 6-3/4	0 - 40 40 - 1509 1509 - 3571	14 7-5/8 4-1/2	0 - 40 0 - 1499 1385 - 3550	--- ---[h] 1768 - 2296 2457 - 3530	1675 - -87	p€bdiab - Younger Precambrian Xpl - Older Precambrian - Pinal Schist
DHRES-15	831076.102	964977.715	3990.83	19 12-1/4 6	0 - 37 37 - 2900 2900 - 3920	14 7-5/8 4-1/2	0 - 37 37 - 2872 2872 - 3633	--- ---[h] 2875 - 3633	1116 - 358	Paleozic Sedimentary - Bolsa, Martin, Escabrosa, Naco p€bdiab - Younger Precambrian - Diabase

[a] Datum NAD83 (Epoch NA2011), Arizona State Plane Coordinates, Zone 0202 - NAVD88 (Geoid12A), in feet. Data from Geodetic Analysis, LLC (August 2013)
[b] amsl = above mean sea level
[c] bls = below land surface
[d] open borehole
[e] HRES-05: plastic-core rubber plug installed at 440 feet bls on May 25, 2011
[f] HRES-08: plastic-core rubber plug installed at 320 feet bls on May 24, 2011
[g] HRES-10: plastic-core rubber plug installed at 460 feet bls on December 6, 2011
[h] grouted-in piezometers attached to pipe

NA = not available

TABLE 2. SURFACE WATER AND SPRING SAMPLING LOCATIONS
UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA
RESOLUTION COPPER MINING LLC, PINAL COUNTY, ARIZONA

STATION IDENTIFIER	AZSPC Coordinates[a] EASTING (feet)	NORTHING (feet)	APPROXIMATE ELEVATION (feet, amsl)[b]	TYPE	LOCATION
QUEEN CREEK WATERSHED					
Pump Station Spring (QC 30.7 C)	960384	852426	4,390	Spring	Channel
QC 27.3 C (Upper QC)	963301	843983	3,950	Reach	Intermittent channel - slot/incised portion of canyon
Oak Flat Wash	962075	841514	3,845	Reach	Sandy bottom reach with bedrock coming down to creek on southside (river left) (~75 meters above confluence with QC)
Number 9 Wash	960957	840966	3,760	Reach	Bedrock pool drops visible from US 60 (~50 meter above confluence with QC)
Boulder Hole (QC 23.6 C)	954577	838359	3,061	Seep	Channel
QC 22.6 E (Karst Spring)	952705	836649	2,940	Spring	Solution void in limestone on east bank of creek (~3 meters from channel) - immediately upstream of old highway bridge
QC 21.7 C (Magma Avenue)	951019	835016	2,844	Reach	Approximately 100 meters upstream of Magma Avenue Bridge. Approximately 30 meters downstream from large boulder on river left and 10 meters upstream of powerlines crossing channel
QC 19.7 C (Queen above Magma Wash)	946025	831779	2,680	Reach	Along high cut bank on river left
Bored Spring	951057	826539	2,881	Spring	Small drainage immediately east of AZ highway 177, down from rock quarry - sample from pipe discharging into cement trough
Hidden Spring	951492	821475	3,041	Spring	Discharges from Paleozoic carbonates west of the Apache Leap Tuff outcrop belt.
Kane Spring	957392	817552	3,159	Spring	Discharges from Paleozoic carbonates west of the Apache Leap Tuff outcrop belt.
Blue Spring	953773	811386	2,949	Spring	Discharges from shallow alluvium overlying detached block of Apache Leap Tuff in Arnett Creek channel.
DEVILS CANYON WATERSHED					
IC 1.0 C (Iron Canyon)	972724	851103	4,199	Reach	Small bedrock narrows. Drainage on northside of US 60 ~ 30 meters upstream of small parking area on south side of highway
DC 15.5 C	970506	849899	4,081	Reach	Channel - bedrock with pools immediately above confluence with Iron Canyon
DC 15.2 C	970147	848862	4,039	Reach	Near confluence of Devils Canyon and Iron Canyon
DC 14.7 C (US 60 Bridge)	970056	847393	3,999	Reach	Devils Canyon at US 60 Bridge
DC 13.5 C	969507	843700	3,901	Reach	Channel
DC 10.9 C	970071	835824	3,730	Reach	Channel
RR 1.5 C (Rancho Rio Canyon)	967000	832393	3,881	Reach	Approximately 100 meters downstream from parking area (that's just beyond breached stock tank)
DC 8.8 C	971549	829413	3,579	Reach	Channel
H 0.1 C (Hackberry Canyon)	971447	828297	3,599	Reach	Approximately 20 meters upstream of large pool ("hackberry pool")
DC 8.2 W	971881	827486	3,540	Spring	~ 1 meter above main channel on west bank
DC 8.1 C	971977	827389	3,520	Reach	Pool approximately 75 meters downstream of DC8.2W
DC 7.1 C	973193	824596	3,389	Reach	Channel
DC 6.6 W (DCT 6.6 W)	971650	823181	3,520	Spring	~200 meters above main stem of Devils Canyon

TABLE 2. SURFACE WATER AND SPRING SAMPLING LOCATIONS
UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA
RESOLUTION COPPER MINING LLC, PINAL COUNTY, ARIZONA

STATION IDENTIFIER	AZSPC Coordinates[a] EASTING (feet)	NORTHING (feet)	APPROXIMATE ELEVATION (feet, amsl)[b]	TYPE	LOCATION
DEVILS CANYON WATERSHED (CONTINUED)					
DC 6.14 C	973214	822217	3,281	pool/reach	First Crater Tank
DC 6.1 E	973865	822088	3,159	Spring	Hanging Garden emanating from Apache Leap Tuff
DC 5.5 C	974401	820878	2,959	Reach	Channel
DC 4.1 E	977648	818511	2,720	Spring	Hanging Garden emanating from Apache Leap Tuff
MINERAL CREEK WATERSHED					
Government Springs	994863	821153	2,972	Spring	Largest spring emanating from concrete vault behind ranch house; discharges from a brecciated zone of the Apache Leap Tuff
MC 8.4 C (Ranch Fork Headwater Spring)	993574	822199	2,881	Spring	First Apache Leap pinch point along drainage with Government Ranch (Mineral Creek)
LF 0.2 C (Lyons Fork Headwater Spring)	989243	823861	2,818	Spring	Lyons Fork Spring - Approximately 100 meters above confluence with Mineral Creek
MC 5.2 C	985061	820230	2,648	Reach	Approximately 1/2 way down perennial reach below end of currently defined gaining reach. Preliminary GPS location approximate.
MC 3.4 W (Wet Leg Spring)	984205	816684	2,579	Spring	Largest spring emanating from river right; discharges from shallow colluvium overlying Apache Leap Tuff
MC 3.3 C	984170	816188	2,513	Reach	Approximately 3/4 of way down perennial reach - in bedrock channel immediately upstream of first outcrop of vitrophyre

[a] Datum NAD83 (Epoch NA2011), Arizona State Plane Coordinates, Zone 0202 - NAVD88 (Geoid12A), in feet.

[b] amsl = above mean sea level

TABLE 3. QUARTERLY HYDROCHEMISTRY SAMPLING EVENTS FOR GROUNDWATER MONITORING STATIONS
UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA, RESOLUTION COPPER MINING LLC

Year	2003				2004				2005				2006				2007				2008				2009				2010				2011				2012				2013				2014				2015			
Quarter	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Shallow Groundwater System																																																				
Hackberry Windmill Well																					X	X	X	X	X	X												X														
JI Ranch Corral Well																		X				X	X	X	X	X												X														
JI Ranch Middle Well																						X	X	X	X	X												X														
Apache Leap Tuff Aquifer																																																				
A-06																			X			X	X	X	X	X												X														
CT Well																														X																						
HRES-01					X																																															
HRES-02						X																																X														
HRES-03d						X																																														
HRES-04						X										X					X		X		X	X												X														
HRES-05						X															X	X	X	X	X	X												X														
HRES-06																		X			X	X	X	X	X	X												X														
HRES-07																					X	X	X	X	X	X		X										X														
HRES-08																																			X			X														
HRES-09																																X		X	X												X					
HRES-10																															X							X	X	X												
HRES-11																															X							X	X	X												
HRES-12																																			X			X	X	X												
HRES-13																																		X				X	X	X												
HRES-14																																			X			X	X	X												
HRES-15																																						X	X													
HRES-17																																						X	X	X												
MJ-11																			X		X	X	X															X														
Deep Groundwater System																																																				
DHRES-01																								X																												
DHRES-02																																			X	X																
DHRES-06																																	X																			
DHRES-09																																			X				X													
DHRES-11																																		X					X													
DHRES-13																																		X					X													
DHRES-15																																															X	X	X				

X	COM/TR	**COM/TR = Common and Trace Constituents**
X	COM/TR; ST	**ST = Stable Isotopes**
X	COM/TR; RL	**RG = Radioisotopes**
X	COM/TR; ST; RG	**RL = Radiological Constituents**
X	COM/TR; ST; RG; RL	
	Samples collected since last reporting (Montgomery & Associates, 2012)	

TABLE 4. QUARTERLY HYDROCHEMISTRY SAMPLING EVENTS FOR SPRINGS AND SURFACE WATER MONITORING STATIONS
UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA, RESOLUTION COPPER MINING LLC

Year	2003				2004				2005				2006				2007				2008				2009				2010				2011				2012				2013				2014				2015			
Quarter	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Queen Creek																																																					
Pump Station Spring		X	X	X	X	X	X	X	X	X	X												X	X	X	X			X			X		X					X														
QC 27.3 C									X	X													X	X	X	X						X			X	X	X	X															
Oak Flat Wash																							X		X	X									X	X	X		X	X	X													
Number 9 Wash																							X	X	X	X						X			X	X	X	X																
Boulder Hole		X	X	X	X	X	X	X	X	X													X	X	X	X			X			X		X				X																
QC 22.6 E									X														X		X												X			X	X													
QC 21.7 C																							X	X	X	X						X			X	X	X	X	X															
QC 19.7 C																							X		X											X				X	X				X		X	X						
Bored Spring						X		X	X	X	X												X	X	X	X			X			X						X																
Hidden Spring		X	X	X	X	X	X	X	X	X	X												X	X	X	X			X		X	X																						
Kane Spring		X	X	X	X			X	X	X	X												X	X	X	X			X		X	X							X															
Blue Spring						X	X		X	X	X												X	X	X	X			X		X	X							X															
Devils Canyon																																																					
IC 1.0 C																							X		X	X	X	X	X							X	X				X													
DC 15.5 C																							X	X	X	X						X			X	X	X	X	X															
DC 15.2 C									X	X	X																																											
DC 14.7 C					X																		X						X																X									
DC 13.5 C		X	X	X	X	X			X	X	X												X	X	X	X						X						X				X												
DC 10.9 C		X	X	X	X	X	X	X	X	X	X																											X																
RR 1.5 C																							X	X	X	X			X			X				X	X	X	X															
DC 8.8 C		X	X	X	X	X	X	X	X	X	X																											X																
H 0.1 C																							X	X	X	X						X			X	X	X	X	X															
DC 8.2 W		X	X	X	X	X	X	X	X	X	X										X	X	X	X	X	X						X						X				X	X											
DC 8.1 C																							X	X	X	X						X			X	X	X	X	X															
DC 7.1 C		X		X	X	X	X	X	X	X	X																								X		X																
DC 6.6 W		X	X	X	X	X	X	X	X	X	X																											X																
DC 6.14 C																							X	X	X	X									X	X	X		X	X	X													
DC 6.1 E						X	X	X	X	X	X												X	X	X	X			X			X							X															
DC 5.5 C				X	X	X	X	X	X	X	X																								X		X																
DC 4.1 E		X	X	X	X																																									X		X					
Mineral Creek																																																					
Government Springs																												X	X						X	X	X	X	X	X	X	X	X										
MC 8.4 C																								X	X	X	X	X	X			X	X	X		X		X																
LF 0.2 C																								X	X	X	X	X	X			X	X	X	X			X																
MC 5.2 C																																		X	X	X	X	X	X	X	X	X	X									
MC 3.4 W																								X	X	X	X	X	X			X	X	X	X			X																
MC 3.3 C																								X	X	X	X	X	X			X	X	X	X			X				X												

X	COM/TR	**COM/TR = Common and Trace Constituents**
X	COM/TR; ST	**ST = Stable Isotopes**
X	COM/TR; RL	**RG = Radioisotopes**
X	COM/TR; ST; RG	**RL = Radiological Constituents**
X	COM/TR; ST; RG; RL	

Spring or surface water location not yet established as a monitoring station

No samples were collected during this period

Samples collected since last reporting (Montgomery & Associates, 2013a)

Resolution Copper Mining

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TABLE 5. ANALYTICAL SUITE FOR GROUNDWATER AND SURFACE WATER SAMPLING, RESOLUTION COPPER MINING LLC

Routine Parameters		
pH	Temperature	
Electrical Conductivity (EC)	Total Dissolved Solids (TDS)	
Common Constituents		
Calcium (Ca)	Sulfate (SO_4)	
Magnesium (Mg)	Silica (SiO_2)	
Sodium (Na)	Bromide (Br)	
Potassium (K)	Fluoride (F)	
Chloride (Cl)	Nitrate (NO_3)	
Carbonate (CO_3)	Nitrite (NO_2)	
Bicarbonate (HCO_3)		
Trace Constituents		
Aluminum (Al)	Cobalt (Co)	Manganese (Mn)
Antimony (Sb)	Copper (Cu)	Nickel (Ni)
Arsenic (As)	Cyanide (CN)	Selenium (Se)
Barium (Ba)	Iron (Fe)	Silver (Ag)
Beryllium (Be)	Lead (Pb)	Sulfide (S)
Boron (B)	Mercury (Hg)	Thallium (Tl)
Cadmium (Cd)	Molybdenum (Mo)	Zinc (Zn)
Chromium (Cr)		
Radiological Consituents		
Gross Alpha	Radium-226 (^{226}Ra)	Uranium (U)
Gross Beta	Radium-228 (^{228}Ra)	
Stable Isotopes		
Oxygen-18 ($\delta^{18}O$) in water	Carbon-13 ($\delta^{13}C$) in dissolved inorganic carbon	Oxygen-18 in dissolved sulfate ($\delta^{18}O_{SO4}$)
Deuterium ($\delta^{2}H$) in water	Sulfur-34 ($\delta^{34}S$) in dissolved sulfate	
Radioisotopes		
Tritium (^{3}H)	Strontium (Sr)	Uranium-234 (^{234}U)
Carbon-14 (^{14}C)	Strontium-87/Strontium-86 ($^{87}Sr/^{86}Sr$)	Uranium-235 (^{235}U)
		Uranium-238 (^{238}U)

MONTGOMERY & ASSOCIATES

TABLE 6. SUMMARY OF EXCEEDANCES OF APPLICABLE WATER QUALITY STANDARDS IN GROUNDWATER
UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA, RESOLUTION COPPER MINING LLC, PINAL COUNTY, ARIZONA

Station Name	Parameter	Units[a]	Regulatory Standard[b]	Sample ID	Date	Standards		Results[d]				Number of Exceedances Over Total Measurements	Number of Non-Detects with Detection Limits Greater Than the Standard Over Total Measurements	Exceedance
						Standard	Filter Fraction[c]	Dissolved	Total	Total Recoverable	Field			
SHALLOW GROUNDWATER SYSTEM														
Hackberry Windmill Well	Iron	mg/L	EPA Secondary MCL	RESE-1003024	12/2/2008	0.3	---	**0.51**				1/7	---	*yes*
Hackberry Windmill Well	Manganese	mg/L	EPA Secondary MCL	RESE-1003011	6/3/2008	0.05	---		**0.074**			3/6	---	*yes*
Hackberry Windmill Well	Manganese	mg/L	EPA Secondary MCL	RESE-1003019	9/2/2008	0.05	---		**0.078**			3/6	---	*yes*
Hackberry Windmill Well	Manganese	mg/L	EPA Secondary MCL	RESE-1000462	5/24/2012	0.05	---	**0.053**	0.050			3/6	---	*yes*
Hackberry Windmill Well	pH (Field)	s.u.	EPA Secondary MCL	RESE-1003011	6/3/2008	6.5-8.5	---				**6.47**	4/7	---	*yes*
Hackberry Windmill Well	pH (Field)	s.u.	EPA Secondary MCL	RESE-1003024	12/2/2008	6.5-8.5	---				**6.41**	4/7	---	*yes*
Hackberry Windmill Well	pH (Field)	s.u.	EPA Secondary MCL	RESE-1003033	3/3/2009	6.5-8.5	---				**6.40**	4/7	---	*yes*
Hackberry Windmill Well	pH (Field)	s.u.	EPA Secondary MCL	RESE-1003042	6/2/2009	6.5-8.5	---				**6.43**	4/7	---	*yes*
JI Ranch Corral Well	Iron	mg/L	EPA Secondary MCL	RESE-1000302	6/21/2007	0.3	---	**30**				5/8	---	*yes*
JI Ranch Corral Well	Iron	mg/L	EPA Secondary MCL	RESE-1003029	12/3/2008	0.3	---	**8.5**				5/8	---	*yes*
JI Ranch Corral Well	Iron	mg/L	EPA Secondary MCL	RESE-1003038	3/4/2009	0.3	---	**2.7**				5/8	---	*yes*
JI Ranch Corral Well	Iron	mg/L	EPA Secondary MCL	RESE-1003047	6/5/2009	0.3	---	**4.1**				5/8	---	*yes*
JI Ranch Corral Well	Iron	mg/L	EPA Secondary MCL	RESE-1000460	5/23/2012	0.3	---	**5.9**	**8.2**			5/8	---	*yes*
JI Ranch Corral Well	Manganese	mg/L	EPA Secondary MCL	RESE-1000302	6/21/2007	0.05	---	**1.3**				6/7	---	*yes*
JI Ranch Corral Well	Manganese	mg/L	EPA Secondary MCL	RESE-1003004	5/29/2008	0.05	---		**0.72**			6/7	---	*yes*
JI Ranch Corral Well	Manganese	mg/L	EPA Secondary MCL	RESE-1003005	5/29/2008	0.05	---		**0.52**			6/7	---	*yes*
JI Ranch Corral Well	Manganese	mg/L	EPA Secondary MCL	RESE-1003038	3/4/2009	0.05	---	**0.50**				6/7	---	*yes*
JI Ranch Corral Well	Manganese	mg/L	EPA Secondary MCL	RESE-1003047	6/5/2009	0.05	---	**0.52**				6/7	---	*yes*
JI Ranch Corral Well	Manganese	mg/L	EPA Secondary MCL	RESE-1000460	5/23/2012	0.05	---	**0.49**	**0.48**			6/7	---	*yes*
JI Ranch Corral Well	Nitrate as N	mg/L	AZ Numeric Aquifer Water Quality Standards	RESE-1003004	5/29/2008	10	---		**16**			2/8	---	*yes*
JI Ranch Corral Well	Nitrate as N	mg/L	AZ Numeric Aquifer Water Quality Standards	RESE-1003005	5/29/2008	10	---		**16**			2/8	---	*yes*
JI Ranch Corral Well	Nitrate as N	mg/L	EPA Maximum Contaminant Levels	RESE-1003004	5/29/2008	10	---		**16**			2/8	---	*yes*
JI Ranch Corral Well	Nitrate as N	mg/L	EPA Maximum Contaminant Levels	RESE-1003005	5/29/2008	10	---		**16**			2/8	---	*yes*
JI Ranch Corral Well	pH (Field)	s.u.	EPA Secondary MCL	RESE-1000302	6/21/2007	6.5-8.5	---				**5.88**	7/8	---	*yes*
JI Ranch Corral Well	pH (Field)	s.u.	EPA Secondary MCL	RESE-1003004	5/29/2008	6.5-8.5	---				**5.55**	7/8	---	*yes*
JI Ranch Corral Well	pH (Field)	s.u.	EPA Secondary MCL	RESE-1003005	5/29/2008	6.5-8.5	---				**5.51**	7/8	---	*yes*
JI Ranch Corral Well	pH (Field)	s.u.	EPA Secondary MCL	RESE-1003014	8/25/2008	6.5-8.5	---				**5.66**	7/8	---	*yes*
JI Ranch Corral Well	pH (Field)	s.u.	EPA Secondary MCL	RESE-1003029	12/3/2008	6.5-8.5	---				**5.49**	7/8	---	*yes*
JI Ranch Corral Well	pH (Field)	s.u.	EPA Secondary MCL	RESE-1003038	3/4/2009	6.5-8.5	---				**6.02**	7/8	---	*yes*
JI Ranch Corral Well	pH (Field)	s.u.	EPA Secondary MCL	RESE-1003047	6/5/2009	6.5-8.5	---				**5.94**	7/8	---	*yes*
JI Ranch Corral Well	pH (Laboratory)	s.u.	EPA Secondary MCL	RESE-1003004	5/29/2008	6.5-8.5	---		**5.78**			4/7	---	*yes*
JI Ranch Corral Well	pH (Laboratory)	s.u.	EPA Secondary MCL	RESE-1003005	5/29/2008	6.5-8.5	---		**5.54**			4/7	---	*yes*
JI Ranch Corral Well	pH (Laboratory)	s.u.	EPA Secondary MCL	RESE-1003014	8/25/2008	6.5-8.5	---		**5.81**			4/7	---	*yes*
JI Ranch Corral Well	pH (Laboratory)	s.u.	EPA Secondary MCL	RESE-1003029	12/3/2008	6.5-8.5	---		**5.65**			4/7	---	*yes*
JI Ranch Corral Well	Sulfate	mg/L	EPA Secondary MCL	RESE-1000302	6/21/2007	250	---		**390**			4/8	---	*yes*
JI Ranch Corral Well	Sulfate	mg/L	EPA Secondary MCL	RESE-1003005	5/29/2008	250	---		**260**			4/8	---	*yes*
JI Ranch Corral Well	Sulfate	mg/L	EPA Secondary MCL	RESE-1003014	8/25/2008	250	---		**450**			4/8	---	*yes*
JI Ranch Corral Well	Sulfate	mg/L	EPA Secondary MCL	RESE-1003029	12/3/2008	250	---		**290**			4/8	---	*yes*
JI Ranch Corral Well	Total Dissolved Solids (Laboratory)	mg/L	EPA Secondary MCL	RESE-1000302	6/21/2007	500	---		**730**			6/8	---	*yes*
JI Ranch Corral Well	Total Dissolved Solids (Laboratory)	mg/L	EPA Secondary MCL	RESE-1003004	5/29/2008	500	---		**580**			6/8	---	*yes*
JI Ranch Corral Well	Total Dissolved Solids (Laboratory)	mg/L	EPA Secondary MCL	RESE-1003005	5/29/2008	500	---		**620**			6/8	---	*yes*
JI Ranch Corral Well	Total Dissolved Solids (Laboratory)	mg/L	EPA Secondary MCL	RESE-1003014	8/25/2008	500	---		**750**			6/8	---	*yes*
JI Ranch Corral Well	Total Dissolved Solids (Laboratory)	mg/L	EPA Secondary MCL	RESE-1003029	12/3/2008	500	---		**550**			6/8	---	*yes*
JI Ranch Corral Well	Total Dissolved Solids (Laboratory)	mg/L	EPA Secondary MCL	RESE-1003038	3/4/2009	500	---		**530**			6/8	---	*yes*
JI Ranch Middle Well	Iron	mg/L	EPA Secondary MCL	RESE-1003028	12/3/2008	0.3	---	**12**				4/6	---	*yes*

TABLE 6. SUMMARY OF EXCEEDANCES OF APPLICABLE WATER QUALITY STANDARDS IN GROUNDWATER
UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA, RESOLUTION COPPER MINING LLC, PINAL COUNTY, ARIZONA

Station Name	Parameter	Units[a]	Regulatory Standard[b]	Sample ID	Date	Standards		Results[d]				Number of Exceedances Over Total Measurements	Number of Non-Detects with Detection Limits Greater Than the Standard Over Total Measurements	Exceedance
						Standard	Filter Fraction[c]	Dissolved	Total	Total Recoverable	Field			
JI Ranch Middle Well	Iron	mg/L	EPA Secondary MCL	RESE-1003037	3/4/2009	0.3	---	**4.6**				4/6	---	*yes*
JI Ranch Middle Well	Iron	mg/L	EPA Secondary MCL	RESE-1003048	6/5/2009	0.3	---	**12**				4/6	---	*yes*
JI Ranch Middle Well	Iron	mg/L	EPA Secondary MCL	RESE-1000461	5/23/2012	0.3	---	**6.9**	**9.8**			4/6	---	*yes*
JI Ranch Middle Well	Manganese	mg/L	EPA Secondary MCL	RESE-1003006	5/30/2008	0.05	---		**0.40**			5/5	---	*yes*
JI Ranch Middle Well	Manganese	mg/L	EPA Secondary MCL	RESE-1003017	8/27/2008	0.05	---		**0.067**			5/5	---	*yes*
JI Ranch Middle Well	Manganese	mg/L	EPA Secondary MCL	RESE-1003037	3/4/2009	0.05	---	**0.92**				5/5	---	*yes*
JI Ranch Middle Well	Manganese	mg/L	EPA Secondary MCL	RESE-1003048	6/5/2009	0.05	---	**0.67**				5/5	---	*yes*
JI Ranch Middle Well	Manganese	mg/L	EPA Secondary MCL	RESE-1000461	5/23/2012	0.05	---	**0.63**	**0.64**			5/5	---	*yes*
JI Ranch Middle Well	pH (Field)	s.u.	EPA Secondary MCL	RESE-1003006	5/30/2008	6.5-8.5	---				**6.16**	4/6	---	*yes*
JI Ranch Middle Well	pH (Field)	s.u.	EPA Secondary MCL	RESE-1003017	8/27/2008	6.5-8.5	---				**6.26**	4/6	---	*yes*
JI Ranch Middle Well	pH (Field)	s.u.	EPA Secondary MCL	RESE-1003037	3/4/2009	6.5-8.5	---				**6.38**	4/6	---	*yes*
JI Ranch Middle Well	pH (Field)	s.u.	EPA Secondary MCL	RESE-1003048	6/5/2009	6.5-8.5	---				**6.21**	4/6	---	*yes*
JI Ranch Middle Well	pH (Laboratory)	s.u.	EPA Secondary MCL	RESE-1003017	8/27/2008	6.5-8.5	---		**6.32**			1/6	---	*yes*
APACHE LEAP TUFF AQUIFER														
A-06	Aluminum	mg/L	EPA Secondary MCL	RESE-1000255	9/24/2007	0.2	---	<0.50				---	1/7	*uncertain*
A-06	Manganese	mg/L	EPA Secondary MCL	RESE-1003008	6/2/2008	0.05	---		**0.13**			1/6	---	*yes*
CT Well	Iron	mg/L	EPA Secondary MCL	RESE-1003101	4/20/2010	0.3	---	<0.050	**0.85**			1/1	---	*yes*
HRES-01	Thallium	mg/L	AZ Numeric Aquifer Water Quality Standards	RESE-1001102	3/15/2004	0.002	---	<0.010				---	2/2	*uncertain*
HRES-01	Thallium	mg/L	AZ Numeric Aquifer Water Quality Standards	RESE-1001103	3/18/2004	0.002	---	<0.010				---	2/2	*uncertain*
HRES-01	Thallium	mg/L	EPA Maximum Contaminant Levels	RESE-1001102	3/15/2004	0.002	---	<0.010				---	2/2	*uncertain*
HRES-01	Thallium	mg/L	EPA Maximum Contaminant Levels	RESE-1001103	3/18/2004	0.002	---	<0.010				---	2/2	*uncertain*
HRES-02	Aluminum	mg/L	EPA Secondary MCL	RESE-1000455	5/17/2012	0.2	---	<0.20	**0.24**			1/4	---	*yes*
HRES-02	Iron	mg/L	EPA Secondary MCL	RESE-1000455	5/17/2012	0.3	---	0.11	**0.42**			1/4	---	*yes*
HRES-02	Manganese	mg/L	EPA Secondary MCL	RESE-1000455	5/17/2012	0.05	---	**0.061**	**0.064**			1/4	---	*yes*
HRES-02	pH (Field)	s.u.	EPA Secondary MCL	RESE-1001108	4/8/2004	6.5-8.5	---				**9.30**	2/4	---	*yes*
HRES-02	pH (Field)	s.u.	EPA Secondary MCL	RESE-1001109	4/10/2004	6.5-8.5	---				**9.36**	2/4	---	*yes*
HRES-02	pH (Laboratory)	s.u.	EPA Secondary MCL	RESE-1001108	4/8/2004	6.5-8.5	---	**9.23**				2/4	---	*yes*
HRES-02	pH (Laboratory)	s.u.	EPA Secondary MCL	RESE-1001109	4/10/2004	6.5-8.5	---	**9.21**				2/4	---	*yes*
HRES-03d	pH (Field)	s.u.	EPA Secondary MCL	RESE-1001111	4/16/2004	6.5-8.5	---				**10.17**	1/1	---	*yes*
HRES-03d	pH (Laboratory)	s.u.	EPA Secondary MCL	RESE-1001111	4/16/2004	6.5-8.5	---	**9.79**				1/1	---	*yes*
HRES-04	Aluminum	mg/L	EPA Secondary MCL	4531	11/3/2006	0.2	---	<0.50				---	2/7	*uncertain*
HRES-04	Aluminum	mg/L	EPA Secondary MCL	RESE-1001114	1/18/2008	0.2	---	<0.50				---	2/7	*uncertain*
HRES-04	Aluminum	mg/L	EPA Secondary MCL	RESE-1000458	5/17/2012	0.2	---	<0.20	**0.34**			1/7	2/7	*yes*
HRES-04	Iron	mg/L	EPA Secondary MCL	RESE-1000458	5/17/2012	0.3	---	<0.050	**0.54**			1/7	---	*yes*
HRES-04	Manganese	mg/L	EPA Secondary MCL	RESE-1001110	4/15/2004	0.05	---	**0.0775**				2/6	---	*yes*
HRES-04	Manganese	mg/L	EPA Secondary MCL	RESE-1000458	5/17/2012	0.05	---	<0.010	**0.10**			2/6	---	*yes*
HRES-06	Aluminum	mg/L	EPA Secondary MCL	RESE-1000301	6/12/2007	0.2	---	<0.50				---	1/8	*uncertain*
HRES-06	Iron	mg/L	EPA Secondary MCL	RESE-1000265	2/27/2008	0.3	---	**1.1**				1/8	---	*yes*
HRES-07	Iron	mg/L	EPA Secondary MCL	RESE-1003009	6/3/2008	0.3	---	**0.50**				4/17	---	*yes*
HRES-07	Iron	mg/L	EPA Secondary MCL	RESE-1003022	12/1/2008	0.3	---	**0.52**				4/17	---	*yes*
HRES-07	Iron	mg/L	EPA Secondary MCL	RESE-1003032	3/3/2009	0.3	---	**0.36**				4/17	---	*yes*
HRES-07	Iron	mg/L	EPA Secondary MCL	RESE-1003245	5/10/2012	0.3	---	0.071	**1.8**			4/17	---	*yes*
HRES-07	Manganese	mg/L	EPA Secondary MCL	RESE-1000262	2/26/2008	0.05	---	**0.059**				6/16	---	*yes*
HRES-07	Manganese	mg/L	EPA Secondary MCL	RESE-1003009	6/3/2008	0.05	---		**0.098**			6/16	---	*yes*
HRES-07	Manganese	mg/L	EPA Secondary MCL	RESE-1003018	9/2/2008	0.05	---		**0.092**			6/16	---	*yes*
HRES-07	Manganese	mg/L	EPA Secondary MCL	RESE-1003032	3/3/2009	0.05	---	**0.089**				6/16	---	*yes*

TABLE 6. SUMMARY OF EXCEEDANCES OF APPLICABLE WATER QUALITY STANDARDS IN GROUNDWATER
UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA, RESOLUTION COPPER MINING LLC, PINAL COUNTY, ARIZONA

Station Name	Parameter	Units[a]	Regulatory Standard[b]	Sample ID	Date	Standards		Results[d]				Number of Exceedances Over Total Measurements	Number of Non-Detects with Detection Limits Greater Than the Standard Over Total Measurements	Exceedance
						Standard	Filter Fraction[c]	Dissolved	Total	Total Recoverable	Field			
HRES-07	Manganese	mg/L	EPA Secondary MCL	RESE-1003041	6/2/2009	0.05	---	**0.076**				6/16	---	*yes*
HRES-07	Manganese	mg/L	EPA Secondary MCL	RESE-1003245	5/10/2012	0.05	---	0.041	**0.051**			6/16	---	*yes*
HRES-08	Iron	mg/L	EPA Secondary MCL	RESE-1003149	7/21/2011	0.3	---	**0.71**	**1.3**			2/2	---	*yes*
HRES-08	Iron	mg/L	EPA Secondary MCL	RESE-1003246	5/10/2012	0.3	---	**1.7**	**2.3**			2/2	---	*yes*
HRES-08	Manganese	mg/L	EPA Secondary MCL	RESE-1003149	7/21/2011	0.05	---	**0.21**	**0.22**			2/2	---	*yes*
HRES-08	Manganese	mg/L	EPA Secondary MCL	RESE-1003246	5/10/2012	0.05	---	**0.33**	**0.33**			2/2	---	*yes*
HRES-09	Iron	mg/L	EPA Secondary MCL	RESE-1003182	12/29/2010	0.3	---	0.30	**0.35**			2/6	---	*yes*
HRES-09	Iron	mg/L	EPA Secondary MCL	RESE-1001324	7/29/2014	0.3	---	**0.39**		**0.57**		2/6	---	*yes*
HRES-09	Manganese	mg/L	EPA Secondary MCL	RESE-1003182	12/29/2010	0.05	---	**0.82**	**0.86**			6/6	---	*yes*
HRES-09	Manganese	mg/L	EPA Secondary MCL	RESE-1003133	6/12/2011	0.05	---	**0.79**	**0.73**			6/6	---	*yes*
HRES-09	Manganese	mg/L	EPA Secondary MCL	RESE-1003136	6/21/2011	0.05	---	**0.54**	**0.53**			6/6	---	*yes*
HRES-09	Manganese	mg/L	EPA Secondary MCL	RESE-1003137	6/28/2011	0.05	---	**0.46**	**0.46**			6/6	---	*yes*
HRES-09	Manganese	mg/L	EPA Secondary MCL	RESE-1003143	7/4/2011	0.05	---	**0.42**	**0.42**			6/6	---	*yes*
HRES-09	Manganese	mg/L	EPA Secondary MCL	RESE-1001324	7/29/2014	0.05	---	**0.69**		**0.61**		6/6	---	*yes*
HRES-10	Aluminum	mg/L	EPA Secondary MCL	RESE-1003175	9/24/2010	0.2	---	<0.40	<0.20			---	1/4	*uncertain*
HRES-10	Antimony	mg/L	AZ Numeric Aquifer Water Quality Standards	RESE-1003175	9/24/2010	0.006	---	<0.015	<0.0030			---	1/4	*uncertain*
HRES-10	Antimony	mg/L	EPA Maximum Contaminant Levels	RESE-1003175	9/24/2010	0.006	---	<0.015	<0.0030			---	1/4	*uncertain*
HRES-10	Thallium	mg/L	AZ Numeric Aquifer Water Quality Standards	RESE-1003175	9/24/2010	0.002	---	<0.0050	<0.0010			---	1/4	*uncertain*
HRES-10	Thallium	mg/L	EPA Maximum Contaminant Levels	RESE-1003175	9/24/2010	0.002	---	<0.0050	<0.0010			---	1/4	*uncertain*
HRES-11	Aluminum	mg/L	EPA Secondary MCL	RESE-1003174	9/23/2010	0.2	---	<0.40	<0.20			---	1/4	*uncertain*
HRES-11	Antimony	mg/L	AZ Numeric Aquifer Water Quality Standards	RESE-1003174	9/23/2010	0.006	---	<0.015	<0.0030			---	1/4	*uncertain*
HRES-11	Antimony	mg/L	EPA Maximum Contaminant Levels	RESE-1003174	9/23/2010	0.006	---	<0.015	<0.0030			---	1/4	*uncertain*
HRES-11	Iron	mg/L	EPA Secondary MCL	RESE-1003174	9/23/2010	0.3	---	0.20	**0.52**			4/4	---	*yes*
HRES-11	Iron	mg/L	EPA Secondary MCL	RESE-1003243	5/1/2012	0.3	---	**0.40**	**3.3**			4/4	---	*yes*
HRES-11	Iron	mg/L	EPA Secondary MCL	RESE-1001312	8/16/2012	0.3	---	**0.34**	**1.5**			4/4	---	*yes*
HRES-11	Iron	mg/L	EPA Secondary MCL	RESE-1001320	11/14/2012	0.3	---	**0.45**	**0.82**			4/4	---	*yes*
HRES-11	Manganese	mg/L	EPA Secondary MCL	RESE-1003174	9/23/2010	0.05	---	**0.063**	**0.069**			4/4	---	*yes*
HRES-11	Manganese	mg/L	EPA Secondary MCL	RESE-1003243	5/1/2012	0.05	---	**0.15**	**0.33**			4/4	---	*yes*
HRES-11	Manganese	mg/L	EPA Secondary MCL	RESE-1001312	8/16/2012	0.05	---	**0.11**	**0.14**			4/4	---	*yes*
HRES-11	Manganese	mg/L	EPA Secondary MCL	RESE-1001320	11/14/2012	0.05	---	**0.11**	**0.12**			4/4	---	*yes*
HRES-11	Thallium	mg/L	AZ Numeric Aquifer Water Quality Standards	RESE-1003174	9/23/2010	0.002	---	<0.0050	<0.0010			---	1/4	*uncertain*
HRES-11	Thallium	mg/L	EPA Maximum Contaminant Levels	RESE-1003174	9/23/2010	0.002	---	<0.0050	<0.0010			---	1/4	*uncertain*
HRES-12	Iron	mg/L	EPA Secondary MCL	RESE-1003144	7/10/2011	0.3	---	**3.2**	**7.9**			4/4	---	*yes*
HRES-12	Iron	mg/L	EPA Secondary MCL	RESE-1003249	5/15/2012	0.3	---	**3.5**	**6.0**			4/4	---	*yes*
HRES-12	Iron	mg/L	EPA Secondary MCL	RESE-1001309	8/14/2012	0.3	---	**2.9**	**10**			4/4	---	*yes*
HRES-12	Iron	mg/L	EPA Secondary MCL	RESE-1001316	11/7/2012	0.3	---	**3.0**	**4.5**			4/4	---	*yes*
HRES-12	Manganese	mg/L	EPA Secondary MCL	RESE-1003144	7/10/2011	0.05	---	**0.38**	**0.38**			4/4	---	*yes*
HRES-12	Manganese	mg/L	EPA Secondary MCL	RESE-1003249	5/15/2012	0.05	---	**0.44**	**0.44**			4/4	---	*yes*
HRES-12	Manganese	mg/L	EPA Secondary MCL	RESE-1001309	8/14/2012	0.05	---	**0.31**	**0.36**			4/4	---	*yes*
HRES-12	Manganese	mg/L	EPA Secondary MCL	RESE-1001316	11/7/2012	0.05	---	**0.28**	**0.27**			4/4	---	*yes*
HRES-13	Manganese	mg/L	EPA Secondary MCL	RESE-1000456	5/17/2012	0.05	---	**0.18**	**0.18**			3/4	---	*yes*
HRES-13	Manganese	mg/L	EPA Secondary MCL	RESE-1001305	8/7/2012	0.05	---	**0.15**	**0.17**			3/4	---	*yes*
HRES-13	Manganese	mg/L	EPA Secondary MCL	RESE-1001317	11/8/2012	0.05	---	**0.17**	**0.18**			3/4	---	*yes*
HRES-14	Aluminum	mg/L	EPA Secondary MCL	RESE-1003147	7/15/2011	0.2	---	<0.20	**0.39**			2/4	---	*yes*
HRES-14	Aluminum	mg/L	EPA Secondary MCL	RESE-1001306	8/8/2012	0.2	---	<0.20	**0.31**			2/4	---	*yes*
HRES-14	Iron	mg/L	EPA Secondary MCL	RESE-1003147	7/15/2011	0.3	---	0.065	**0.37**			4/4	---	*yes*

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UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA, RESOLUTION COPPER MINING LLC, PINAL COUNTY, ARIZONA

Station Name	Parameter	Units[a]	Regulatory Standard[b]	Sample ID	Date	Standards		Results[d]				Number of Exceedances Over Total Measurements	Number of Non-Detects with Detection Limits Greater Than the Standard Over Total Measurements	Exceedance
						Standard	Filter Fraction[c]	Dissolved	Total	Total Recoverable	Field			
HRES-14	Iron	mg/L	EPA Secondary MCL	RESE-1003240	4/30/2012	0.3	---	**0.79**	**1.2**			4/4	---	*yes*
HRES-14	Iron	mg/L	EPA Secondary MCL	RESE-1001306	8/8/2012	0.3	---	**0.70**	**1.3**			4/4	---	*yes*
HRES-14	Iron	mg/L	EPA Secondary MCL	RESE-1001318	11/9/2012	0.3	---	**0.70**	**1.1**			4/4	---	*yes*
HRES-14	Manganese	mg/L	EPA Secondary MCL	RESE-1003147	7/15/2011	0.05	---	**0.057**	**0.061**			4/4	---	*yes*
HRES-14	Manganese	mg/L	EPA Secondary MCL	RESE-1003240	4/30/2012	0.05	---	**0.081**	**0.090**			4/4	---	*yes*
HRES-14	Manganese	mg/L	EPA Secondary MCL	RESE-1001306	8/8/2012	0.05	---	**0.071**	**0.086**			4/4	---	*yes*
HRES-14	Manganese	mg/L	EPA Secondary MCL	RESE-1001318	11/9/2012	0.05	---	**0.077**	**0.082**			4/4	---	*yes*
HRES-15	Iron	mg/L	EPA Secondary MCL	RESE-1003241	4/30/2012	0.3	---	0.27	**0.32**			1/2	---	*yes*
HRES-17	Iron	mg/L	EPA Secondary MCL	RESE-1003250	5/16/2012	0.3	---	**0.60**	**1.3**			3/3	---	*yes*
HRES-17	Iron	mg/L	EPA Secondary MCL	RESE-1001307	8/8/2012	0.3	---	**0.51**	**2.3**			3/3	---	*yes*
HRES-17	Iron	mg/L	EPA Secondary MCL	RESE-1001319	11/9/2012	0.3	---	**0.53**	**1.8**			3/3	---	*yes*
HRES-17	Manganese	mg/L	EPA Secondary MCL	RESE-1003250	5/16/2012	0.05	---	**0.11**	**0.11**			3/3	---	*yes*
HRES-17	Manganese	mg/L	EPA Secondary MCL	RESE-1001307	8/8/2012	0.05	---	**0.10**	**0.13**			3/3	---	*yes*
HRES-17	Manganese	mg/L	EPA Secondary MCL	RESE-1001319	11/9/2012	0.05	---	**0.11**	**0.12**			3/3	---	*yes*
MJ-11	Aluminum	mg/L	EPA Secondary MCL	RESE-1000257	9/29/2007	0.2	---	<0.50				---	2/5	*uncertain*
MJ-11	Aluminum	mg/L	EPA Secondary MCL	RESE-1000261	2/20/2008	0.2	---	<0.50				---	2/5	*uncertain*
MJ-11	Manganese	mg/L	EPA Secondary MCL	RESE-1003015	8/26/2008	0.05	---		**1.3**			1/5	---	*yes*
DEEP GROUNDWATER SYSTEM														
DHRES-01	Fluoride	mg/L	EPA Secondary MCL	RESE-112808	11/28/2008	2	---		**3.2**			1/1	---	*yes*
DHRES-01	Iron	mg/L	EPA Secondary MCL	RESE-112808	11/28/2008	0.3	---	**2.7**	**2.7**			1/1	---	*yes*
DHRES-01	Manganese	mg/L	EPA Secondary MCL	RESE-112808	11/28/2008	0.05	---	**0.16**	**0.16**			1/1	---	*yes*
DHRES-02	Aluminum	mg/L	EPA Secondary MCL	RESE-1003227	10/27/2011	0.2	---	<0.20	**4.5**			1/4	---	*yes*
DHRES-02	Antimony	mg/L	AZ Numeric Aquifer Water Quality Standards	RESE-1003227	10/27/2011	0.006	---	<0.0030	<0.060			---	1/4	*uncertain*
DHRES-02	Antimony	mg/L	EPA Maximum Contaminant Levels	RESE-1003227	10/27/2011	0.006	---	<0.0030	<0.060			---	1/4	*uncertain*
DHRES-02	Arsenic	mg/L	AZ Numeric Aquifer Water Quality Standards	RESE-1003227	10/27/2011	0.05	---	0.0047	**0.13**			1/4	---	*yes*
DHRES-02	Arsenic	mg/L	EPA Maximum Contaminant Levels	RESE-1003227	10/27/2011	0.01	---	0.0047	**0.13**			1/4	---	*yes*
DHRES-02	Cadmium	mg/L	AZ Numeric Aquifer Water Quality Standards	RESE-1003227	10/27/2011	0.005	---	<0.0010	<0.020			---	1/4	*uncertain*
DHRES-02	Cadmium	mg/L	EPA Maximum Contaminant Levels	RESE-1003227	10/27/2011	0.005	---	<0.0010	<0.020			---	1/4	*uncertain*
DHRES-02	Chromium	mg/L	AZ Numeric Aquifer Water Quality Standards	RESE-1003227	10/27/2011	0.1	---	<0.0010	**0.61**			1/4	---	*yes*
DHRES-02	Chromium	mg/L	EPA Maximum Contaminant Levels	RESE-1003227	10/27/2011	0.1	---	<0.0010	**0.61**			1/4	---	*yes*
DHRES-02	Copper	mg/L	EPA Maximum Contaminant Levels	RESE-1003227	10/27/2011	1.3	---	0.0024	**1.8**			1/4	---	*yes*
DHRES-02	Copper	mg/L	EPA Secondary MCL	RESE-1003227	10/27/2011	1	---	0.0024	**1.8**			1/4	---	*yes*
DHRES-02	Copper	mg/L	EPA Treatment Technique Limit	RESE-1003227	10/27/2011	1.3	---	0.0024	**1.8**			1/4	---	*yes*
DHRES-02	Fluoride	mg/L	AZ Numeric Aquifer Water Quality Standards	RESE-1003218	10/22/2011	4	---		**4.1**			2/4	---	*yes*
DHRES-02	Fluoride	mg/L	AZ Numeric Aquifer Water Quality Standards	RESE-1003222	10/25/2011	4	---		**4.1**			2/4	---	*yes*
DHRES-02	Fluoride	mg/L	EPA Maximum Contaminant Levels	RESE-1003218	10/22/2011	4	---		**4.1**			2/4	---	*yes*
DHRES-02	Fluoride	mg/L	EPA Maximum Contaminant Levels	RESE-1003222	10/25/2011	4	---		**4.1**			2/4	---	*yes*
DHRES-02	Fluoride	mg/L	EPA Secondary MCL	RESE-1003150	7/20/2011	2	---		**4.0**			4/4	---	*yes*
DHRES-02	Fluoride	mg/L	EPA Secondary MCL	RESE-1003218	10/22/2011	2	---		**4.1**			4/4	---	*yes*
DHRES-02	Fluoride	mg/L	EPA Secondary MCL	RESE-1003222	10/25/2011	2	---		**4.1**			4/4	---	*yes*
DHRES-02	Fluoride	mg/L	EPA Secondary MCL	RESE-1003227	10/27/2011	2	---		**3.9**			4/4	---	*yes*
DHRES-02	Gross Alpha	pCi/L	AZ Numeric Aquifer Water Quality Standards	RESE-1003150	7/20/2011	15	---		**23**			4/4	---	*yes*
DHRES-02	Gross Alpha	pCi/L	AZ Numeric Aquifer Water Quality Standards	RESE-1003218	10/22/2011	15	---		**19**			4/4	---	*yes*
DHRES-02	Gross Alpha	pCi/L	AZ Numeric Aquifer Water Quality Standards	RESE-1003222	10/25/2011	15	---		**49**			4/4	---	*yes*
DHRES-02	Gross Alpha	pCi/L	AZ Numeric Aquifer Water Quality Standards	RESE-1003227	10/27/2011	15	---		**28**			4/4	---	*yes*
DHRES-02	Gross Alpha	pCi/L	EPA Maximum Contaminant Levels	RESE-1003150	7/20/2011	15	---		**23**			4/4	---	*yes*

TABLE 6. SUMMARY OF EXCEEDANCES OF APPLICABLE WATER QUALITY STANDARDS IN GROUNDWATER
UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA, RESOLUTION COPPER MINING LLC, PINAL COUNTY, ARIZONA

Station Name	Parameter	Units[a]	Regulatory Standard[b]	Sample ID	Date	Standards		Results[d]				Number of Exceedances Over Total Measurements	Number of Non-Detects with Detection Limits Greater Than the Standard Over Total Measurements	Exceedance
						Standard	Filter Fraction[c]	Dissolved	Total	Total Recoverable	Field			
DHRES-02	Gross Alpha	pCi/L	EPA Maximum Contaminant Levels	RESE-1003218	10/22/2011	15	---		**19**			4/4	---	*yes*
DHRES-02	Gross Alpha	pCi/L	EPA Maximum Contaminant Levels	RESE-1003222	10/25/2011	15	---		**49**			4/4	---	*yes*
DHRES-02	Gross Alpha	pCi/L	EPA Maximum Contaminant Levels	RESE-1003227	10/27/2011	15	---		**28**			4/4	---	*yes*
DHRES-02	Gross Beta	pCi/L	EPA Maximum Contaminant Levels	RESE-1003222	10/25/2011	50	---		**54**			2/4	---	*yes*
DHRES-02	Gross Beta	pCi/L	EPA Maximum Contaminant Levels	RESE-1003227	10/27/2011	50	---		**56**			2/4	---	*yes*
DHRES-02	Iron	mg/L	EPA Secondary MCL	RESE-1003150	7/20/2011	0.3	---	**11**	**14**			4/4	---	*yes*
DHRES-02	Iron	mg/L	EPA Secondary MCL	RESE-1003218	10/22/2011	0.3	---	**8.3**	**11**			4/4	---	*yes*
DHRES-02	Iron	mg/L	EPA Secondary MCL	RESE-1003222	10/25/2011	0.3	---	**7.3**	**7.8**			4/4	---	*yes*
DHRES-02	Iron	mg/L	EPA Secondary MCL	RESE-1003227	10/27/2011	0.3	---	**11**	**1100**			4/4	---	*yes*
DHRES-02	Lead	mg/L	AZ Numeric Aquifer Water Quality Standards	RESE-1003227	10/27/2011	0.05	---	<0.0010	**0.43**			1/4	---	*yes*
DHRES-02	Lead	mg/L	EPA Maximum Contaminant Levels	RESE-1003227	10/27/2011	0.015	---	<0.0010	**0.43**			1/4	---	*yes*
DHRES-02	Lead	mg/L	EPA Treatment Technique Limit	RESE-1003227	10/27/2011	0.015	---	<0.0010	**0.43**			1/4	---	*yes*
DHRES-02	Manganese	mg/L	EPA Secondary MCL	RESE-1003150	7/20/2011	0.05	---	**0.37**	**0.42**			4/4	---	*yes*
DHRES-02	Manganese	mg/L	EPA Secondary MCL	RESE-1003218	10/22/2011	0.05	---	**0.35**	**0.38**			4/4	---	*yes*
DHRES-02	Manganese	mg/L	EPA Secondary MCL	RESE-1003222	10/25/2011	0.05	---	**0.34**	**0.34**			4/4	---	*yes*
DHRES-02	Manganese	mg/L	EPA Secondary MCL	RESE-1003227	10/27/2011	0.05	---	**1.5**	**15**			4/4	---	*yes*
DHRES-02	Nickel	mg/L	AZ Numeric Aquifer Water Quality Standards	RESE-1003227	10/27/2011	0.1	---	0.0076	**0.22**			1/4	---	*yes*
DHRES-02	Radium 226 + Radium 228	pCi/L	AZ Numeric Aquifer Water Quality Standards	RESE-1003150	7/20/2011	5	---		**11**			4/4	---	*yes*
DHRES-02	Radium 226 + Radium 228	pCi/L	AZ Numeric Aquifer Water Quality Standards	RESE-1003218	10/22/2011	5	---		**12**			4/4	---	*yes*
DHRES-02	Radium 226 + Radium 228	pCi/L	AZ Numeric Aquifer Water Quality Standards	RESE-1003222	10/25/2011	5	---		**15**			4/4	---	*yes*
DHRES-02	Radium 226 + Radium 228	pCi/L	AZ Numeric Aquifer Water Quality Standards	RESE-1003227	10/27/2011	5	---		**16**			4/4	---	*yes*
DHRES-02	Radium 226 + Radium 228	pCi/L	EPA Maximum Contaminant Levels	RESE-1003150	7/20/2011	5	---		**11**			4/4	---	*yes*
DHRES-02	Radium 226 + Radium 228	pCi/L	EPA Maximum Contaminant Levels	RESE-1003218	10/22/2011	5	---		**12**			4/4	---	*yes*
DHRES-02	Radium 226 + Radium 228	pCi/L	EPA Maximum Contaminant Levels	RESE-1003222	10/25/2011	5	---		**15**			4/4	---	*yes*
DHRES-02	Radium 226 + Radium 228	pCi/L	EPA Maximum Contaminant Levels	RESE-1003227	10/27/2011	5	---		**16**			4/4	---	*yes*
DHRES-02	Sulfate	mg/L	EPA Secondary MCL	RESE-1003150	7/20/2011	250	---		**810**			4/4	---	*yes*
DHRES-02	Sulfate	mg/L	EPA Secondary MCL	RESE-1003218	10/22/2011	250	---		**840**			4/4	---	*yes*
DHRES-02	Sulfate	mg/L	EPA Secondary MCL	RESE-1003222	10/25/2011	250	---		**840**			4/4	---	*yes*
DHRES-02	Sulfate	mg/L	EPA Secondary MCL	RESE-1003227	10/27/2011	250	---		**740**			4/4	---	*yes*
DHRES-02	Thallium	mg/L	AZ Numeric Aquifer Water Quality Standards	RESE-1003227	10/27/2011	0.002	---	<0.0010	<0.020			---	1/4	*uncertain*
DHRES-02	Thallium	mg/L	EPA Maximum Contaminant Levels	RESE-1003227	10/27/2011	0.002	---	<0.0010	<0.020			---	1/4	*uncertain*
DHRES-02	Total Dissolved Solids (Laboratory)	mg/L	EPA Secondary MCL	RESE-1003150	7/20/2011	500	---		**1400**			4/4	---	*yes*
DHRES-02	Total Dissolved Solids (Laboratory)	mg/L	EPA Secondary MCL	RESE-1003218	10/22/2011	500	---		**1400**			4/4	---	*yes*
DHRES-02	Total Dissolved Solids (Laboratory)	mg/L	EPA Secondary MCL	RESE-1003222	10/25/2011	500	---		**1400**			4/4	---	*yes*
DHRES-02	Total Dissolved Solids (Laboratory)	mg/L	EPA Secondary MCL	RESE-1003227	10/27/2011	500	---		**1200**			4/4	---	*yes*
DHRES-06	Iron	mg/L	EPA Secondary MCL	RESE-1003186	1/9/2011	0.3	---	**2.4**	**3.1**			1/1	---	*yes*
DHRES-06	Manganese	mg/L	EPA Secondary MCL	RESE-1003186	1/9/2011	0.05	---	**0.53**	**0.53**			1/1	---	*yes*
DHRES-09	Gross Alpha	pCi/L	AZ Numeric Aquifer Water Quality Standards	RESE-1003206	9/2/2011	15	---		**36**			2/2	---	*yes*
DHRES-09	Gross Alpha	pCi/L	AZ Numeric Aquifer Water Quality Standards	RESE-1001313	8/20/2012	15	---		**39**			2/2	---	*yes*
DHRES-09	Gross Alpha	pCi/L	EPA Maximum Contaminant Levels	RESE-1003206	9/2/2011	15	---		**36**			2/2	---	*yes*
DHRES-09	Gross Alpha	pCi/L	EPA Maximum Contaminant Levels	RESE-1001313	8/20/2012	15	---		**39**			2/2	---	*yes*
DHRES-09	Iron	mg/L	EPA Secondary MCL	RESE-1003206	9/2/2011	0.3	---	0.088	**0.99**			2/2	---	*yes*
DHRES-09	Iron	mg/L	EPA Secondary MCL	RESE-1001313	8/20/2012	0.3	---	**1.5**	**1.6**			2/2	---	*yes*
DHRES-09	Manganese	mg/L	EPA Secondary MCL	RESE-1003206	9/2/2011	0.05	---	**0.058**	**0.057**			2/2	---	*yes*
DHRES-09	Manganese	mg/L	EPA Secondary MCL	RESE-1001313	8/20/2012	0.05	---	**0.12**	**0.096**			2/2	---	*yes*
DHRES-09	Sulfate	mg/L	EPA Secondary MCL	RESE-1001313	8/20/2012	250	---		**260**			1/2	---	*yes*

TABLE 6. SUMMARY OF EXCEEDANCES OF APPLICABLE WATER QUALITY STANDARDS IN GROUNDWATER
UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA, RESOLUTION COPPER MINING LLC, PINAL COUNTY, ARIZONA

Station Name	Parameter	Units[a]	Regulatory Standard[b]	Sample ID	Date	Standards		Results[d]				Number of Exceedances Over Total Measurements	Number of Non-Detects with Detection Limits Greater Than the Standard Over Total Measurements	Exceedance
						Standard	Filter Fraction[c]	Dissolved	Total	Total Recoverable	Field			
DHRES-09	Total Dissolved Solids (Laboratory)	mg/L	EPA Secondary MCL	RESE-1003206	9/2/2011	500	---		**650**			2/2	---	*yes*
DHRES-09	Total Dissolved Solids (Laboratory)	mg/L	EPA Secondary MCL	RESE-1001313	8/20/2012	500	---		**680**			2/2	---	*yes*
DHRES-11	Arsenic	mg/L	EPA Maximum Contaminant Levels	RESE-1003131	6/29/2011	0.01	---	0.0086	**0.036**			1/2	---	*yes*
DHRES-11	Iron	mg/L	EPA Secondary MCL	RESE-1003131	6/29/2011	0.3	---	0.26	**3.8**			2/2	---	*yes*
DHRES-11	Iron	mg/L	EPA Secondary MCL	RESE-1001310	8/15/2012	0.3	---	**0.38**	**0.56**			2/2	---	*yes*
DHRES-11	Manganese	mg/L	EPA Secondary MCL	RESE-1003131	6/29/2011	0.05	---	**0.17**	**0.17**			1/2	---	*yes*
DHRES-11	pH (Field)	s.u.	EPA Secondary MCL	RESE-1001310	8/15/2012	6.5-8.5	---				**8.58**	1/2	---	*yes*
DHRES-11	pH (Laboratory)	s.u.	EPA Secondary MCL	RESE-1001310	8/15/2012	6.5-8.5	---		**8.77**			1/2	---	*yes*
DHRES-13	Aluminum	mg/L	EPA Secondary MCL	RESE-1003138	6/28/2011	0.2	---	<0.20	**0.54**			1/2	---	*yes*
DHRES-13	Iron	mg/L	EPA Secondary MCL	RESE-1003138	6/28/2011	0.3	---	0.30	**2.0**			2/2	---	*yes*
DHRES-13	Iron	mg/L	EPA Secondary MCL	RESE-1001314	8/22/2012	0.3	---	**2.0**	**1.9**			2/2	---	*yes*
DHRES-13	Manganese	mg/L	EPA Secondary MCL	RESE-1003138	6/28/2011	0.05	---	**0.19**	**0.22**			2/2	---	*yes*
DHRES-13	Manganese	mg/L	EPA Secondary MCL	RESE-1001314	8/22/2012	0.05	---	**0.14**	**0.14**			2/2	---	*yes*
DHRES-15	Aluminum	mg/L	EPA Secondary MCL	RESE-1001149	7/16/2014	0.2	---	<0.10	**0.31**			1/4	---	*yes*
DHRES-15	Iron	mg/L	EPA Secondary MCL	RESE-1001149	7/16/2014	0.3	---	**1.0**	**1.8**			1/4	---	*yes*
DHRES-15	Manganese	mg/L	EPA Secondary MCL	RESE-1001149	7/16/2014	0.05	---	**0.13**	**0.16**			1/4	---	*yes*

Values in bold red are out of compliance with water quality standard
Values in blue indicate that detection limit exceeds standard

[a]Units
mg/L = milligrams per liter
s.u. = standard units
pCi/L = pico Curies per liter

[b]Regulatory Standard
MCL = maximum contaminant level
EPA = Environmental Protection Agency

[c]Filter fraction
--- = not applicable

[d]Results
< = value below detection limit
j = estimated value

TABLE 7. SUMMARY OF EXCEEDANCES OF APPLICABLE WATER QUALITY STANDARDS IN SURFACE WATER AND SPRINGS
UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA, RESOLUTION COPPER MINING LLC, PINAL COUNTY, ARIZONA

Station Name	Parameter	Units[a]	Regulatory Standard	Sample ID	Date	Standards		Hardness Results[c]		Results[c]				Number of Exceedances Over Total Measurements	Number of Non-Detects with Detection Limits Greater Than the Standard Over Total Measurements	Exceedance
						Standard	Filter Fraction[b]	Hardness Value	Hardness Filter	Dissolved	Total	Total Recoverable	Field			
QUEEN CREEK WATERSHED																
Pump Station Spring (QC 30.7 C)	Cyanide, Free	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001001	5/15/2003	0.041	TRC	---	---		<0.10			---	1/1	uncertain
Pump Station Spring (QC 30.7 C)	Cyanide, Free	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001001	5/15/2003	0.0097	TRC	---	---		<0.10			---	1/1	uncertain
Pump Station Spring (QC 30.7 C)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001024	9/4/2003	6 (min)	---	---	---				**2.75**	10/18	---	yes
Pump Station Spring (QC 30.7 C)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001056	2/9/2004	6 (min)	---	---	---				**5.10**	10/18	---	yes
Pump Station Spring (QC 30.7 C)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001084	5/25/2004	6 (min)	---	---	---				**5.67**	10/18	---	yes
Pump Station Spring (QC 30.7 C)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001096	8/3/2004	6 (min)	---	---	---				**2.93**	10/18	---	yes
Pump Station Spring (QC 30.7 C)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001166	11/3/2004	6 (min)	---	---	---				**4.93**	10/18	---	yes
Pump Station Spring (QC 30.7 C)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002001	8/5/2008	6 (min)	---	---	---				**3.55**	10/18	---	yes
Pump Station Spring (QC 30.7 C)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002023	11/4/2008	6 (min)	---	---	---				**2.77**	10/18	---	yes
Pump Station Spring (QC 30.7 C)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002144	11/3/2010	6 (min)	---	---	---				**4.94**	10/18	---	yes
Pump Station Spring (QC 30.7 C)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002168	5/17/2011	6 (min)	---	---	---				**5.94**	10/18	---	yes
Pump Station Spring (QC 30.7 C)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002248	5/9/2012	6 (min)	---	---	---				**4.0**	10/18	---	yes
Pump Station Spring (QC 30.7 C)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001024	9/4/2003	6 (min)	---	---	---				**2.75**	10/18	---	yes
Pump Station Spring (QC 30.7 C)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001056	2/9/2004	6 (min)	---	---	---				**5.10**	10/18	---	yes
Pump Station Spring (QC 30.7 C)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001084	5/25/2004	6 (min)	---	---	---				**5.67**	10/18	---	yes
Pump Station Spring (QC 30.7 C)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001096	8/3/2004	6 (min)	---	---	---				**2.93**	10/18	---	yes
Pump Station Spring (QC 30.7 C)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001166	11/3/2004	6 (min)	---	---	---				**4.93**	10/18	---	yes
Pump Station Spring (QC 30.7 C)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002001	8/5/2008	6 (min)	---	---	---				**3.55**	10/18	---	yes
Pump Station Spring (QC 30.7 C)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002023	11/4/2008	6 (min)	---	---	---				**2.77**	10/18	---	yes
Pump Station Spring (QC 30.7 C)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002144	11/3/2010	6 (min)	---	---	---				**4.94**	10/18	---	yes
Pump Station Spring (QC 30.7 C)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002168	5/17/2011	6 (min)	---	---	---				**5.94**	10/18	---	yes
Pump Station Spring (QC 30.7 C)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002248	5/9/2012	6 (min)	---	---	---				**4.0**	10/18	---	yes
Pump Station Spring (QC 30.7 C)	E. Coli	MPN/100ml	AZ Partial Body Contact	RESE-1001222	8/8/2005	575	---	---	---		**1600 ge**			1/9	---	yes
Pump Station Spring (QC 30.7 C)	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001001	5/15/2003	0.00001	DIS	---	---	<0.00020	<0.00020			---	12/12	uncertain
Pump Station Spring (QC 30.7 C)	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001024	9/4/2003	0.00001	DIS	---	---	<0.00020	<0.00020			---	12/12	uncertain
Pump Station Spring (QC 30.7 C)	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001029	11/3/2003	0.00001	DIS	---	---	<0.00020	<0.00020			---	12/12	uncertain
Pump Station Spring (QC 30.7 C)	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001056	2/9/2004	0.00001	DIS	---	---	<0.00020	<0.00020			---	12/12	uncertain
Pump Station Spring (QC 30.7 C)	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001084	5/25/2004	0.00001	DIS	---	---	<0.00020	<0.00020			---	12/12	uncertain
Pump Station Spring (QC 30.7 C)	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001096	8/3/2004	0.00001	DIS	---	---	<0.00020	<0.00020			---	12/12	uncertain
Pump Station Spring (QC 30.7 C)	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001166	11/3/2004	0.00001	DIS	---	---	<0.00020	<0.00020			---	12/12	uncertain
Pump Station Spring (QC 30.7 C)	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001182	2/8/2005	0.00001	DIS	---	---	<0.00020	<0.00020			---	12/12	uncertain
Pump Station Spring (QC 30.7 C)	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001206	5/4/2005	0.00001	DIS	---	---	<0.00020	<0.00020			---	12/12	uncertain
Pump Station Spring (QC 30.7 C)	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001222	8/8/2005	0.00001	DIS	---	---	<0.0002	<0.0002			---	12/12	uncertain
Pump Station Spring (QC 30.7 C)	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002001	8/5/2008	0.00001	DIS	---	---	<0.00020	<0.00020			---	12/12	uncertain
Pump Station Spring (QC 30.7 C)	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002023	11/4/2008	0.00001	DIS	---	---	<0.00020	<0.00020			---	12/12	uncertain
Pump Station Spring (QC 30.7 C)	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001001	5/15/2003	0.002	TRC	---	---		<0.0030	<0.0030		3/18	9/18	uncertain
Pump Station Spring (QC 30.7 C)	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001024	9/4/2003	0.002	TRC	---	---		<0.0090	<0.0030		3/18	9/18	uncertain
Pump Station Spring (QC 30.7 C)	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001029	11/3/2003	0.002	TRC	---	---		<0.0030	<0.0030		3/18	9/18	uncertain
Pump Station Spring (QC 30.7 C)	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001084	5/25/2004	0.002	TRC	---	---		<0.0030	<0.0030		3/18	9/18	uncertain
Pump Station Spring (QC 30.7 C)	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001096	8/3/2004	0.002	TRC	---	---		<0.0030	<0.0030		3/18	9/18	uncertain
Pump Station Spring (QC 30.7 C)	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001166	11/3/2004	0.002	TRC	---	---		<0.0060	<0.0060		3/18	9/18	uncertain
Pump Station Spring (QC 30.7 C)	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001182	2/8/2005	0.002	TRC	---	---		**0.00850**	**0.00770**		3/18	9/18	yes
Pump Station Spring (QC 30.7 C)	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001206	5/4/2005	0.002	TRC	---	---		<0.00300	<0.00300		3/18	9/18	uncertain
Pump Station Spring (QC 30.7 C)	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001222	8/8/2005	0.002	TRC	---	---		<0.00300	**0.0031**		3/18	9/18	yes
Pump Station Spring (QC 30.7 C)	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002001	8/5/2008	0.002	TRC	---	---			<0.00300		3/18	9/18	uncertain
Pump Station Spring (QC 30.7 C)	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002023	11/4/2008	0.002	TRC	---	---			<0.00300		3/18	9/18	uncertain
Pump Station Spring (QC 30.7 C)	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002144	11/3/2010	0.002	TRC	---	---			**0.00203 jd**		3/18	9/18	yes
QC 27.3 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002002	8/5/2008	6 (min)	---	---	---				**5.23**	4/11	---	yes
QC 27.3 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002024	11/4/2008	6 (min)	---	---	---				**5.86**	4/11	---	yes
QC 27.3 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002079	5/7/2009	6 (min)	---	---	---				**1.15**	4/11	---	yes
QC 27.3 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002175	8/19/2011	6 (min)	---	---	---				**5.76**	4/11	---	yes
QC 27.3 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002002	8/5/2008	6 (min)	---	---	---				**5.23**	4/11	---	yes
QC 27.3 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002024	11/4/2008	6 (min)	---	---	---				**5.86**	4/11	---	yes

TABLE 7. SUMMARY OF EXCEEDANCES OF APPLICABLE WATER QUALITY STANDARDS IN SURFACE WATER AND SPRINGS
UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA, RESOLUTION COPPER MINING LLC, PINAL COUNTY, ARIZONA

						Standards		Hardness Results[c]		Results[c]						
Station Name	Parameter	Units[a]	Regulatory Standard	Sample ID	Date	Standard	Filter Fraction[b]	Hardness Value	Hardness Filter	Dissolved	Total	Total Recoverable	Field	Number of Exceedances Over Total Measurements	Number of Non-Detects with Detection Limits Greater Than the Standard Over Total Measurements	Exceedance
QC 27.3 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002079	5/7/2009	6 (min)	---	---	---				**1.15**	4/11	---	yes
QC 27.3 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002175	8/19/2011	6 (min)	---	---	---				**5.76**	4/11	---	yes
QC 27.3 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001184	2/8/2005	0.00001	DIS	---	---	<0.00020	<0.00020			---	4/4	uncertain
QC 27.3 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001207	5/4/2005	0.00001	DIS	---	---	<0.00020	<0.00020			---	4/4	uncertain
QC 27.3 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002002	8/5/2008	0.00001	DIS	---	---	<0.00020	<0.00020			---	4/4	uncertain
QC 27.3 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002024	11/4/2008	0.00001	DIS	---	---	<0.00020	<0.00020			---	4/4	uncertain
QC 27.3 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001184	2/8/2005	0.002	TRC	---	---		<0.00300	<0.00300		---	4/11	uncertain
QC 27.3 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001207	5/4/2005	0.002	TRC	---	---		<0.00300	<0.00300		---	4/11	uncertain
QC 27.3 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002002	8/5/2008	0.002	TRC	---	---			<0.00300		---	4/11	uncertain
QC 27.3 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002024	11/4/2008	0.002	TRC	---	---			<0.00300		---	4/11	uncertain
Oak Flat Wash	Cadmium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1003060	8/23/2012	0.00014	DIS	13.7	TRC	**0.00016 j**		<0.0020		1/11	---	yes
Oak Flat Wash	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002016	8/27/2008	0.00511	DIS	35.8	Total	**0.0506**	0.0508			11/11	---	yes
Oak Flat Wash	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002068	2/26/2009	0.00527	DIS	37	DIS	**0.0318**		0.036		11/11	---	yes
Oak Flat Wash	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002076	5/5/2009	0.01011	DIS	73.9	DIS	**0.0289**		0.055		11/11	---	yes
Oak Flat Wash	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002176	8/19/2011	0.00232	DIS	15.5	TRC	**0.0402**		0.052		11/11	---	yes
Oak Flat Wash	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002205	12/9/2011	0.00579	DIS	40.9	TRC	**0.0215**		0.027		11/11	---	yes
Oak Flat Wash	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002214	2/29/2012	0.00633	DIS	45	TRC	**0.0166**		0.020		11/11	---	yes
Oak Flat Wash	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1003060	8/23/2012	0.00207	DIS	13.7	TRC	**0.0570**		0.062		11/11	---	yes
Oak Flat Wash	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1003063	11/12/2012	0.00301	DIS	20.4	TRC	**0.0293**		0.038		11/11	---	yes
Oak Flat Wash	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1003071	12/17/2012	0.00494	DIS	34.6	TRC	**0.0402**		0.042		11/11	---	yes
Oak Flat Wash	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1003074	1/29/2013	0.00478	DIS	33.4	TRC	**0.0421**		0.048		11/11	---	yes
Oak Flat Wash	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1003088	3/13/2013	0.00564	DIS	39.8	TRC	**0.0421**		0.044		11/11	---	yes
Oak Flat Wash	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002016	8/27/2008	0.00372	DIS	35.8	Total	**0.0506**	0.0508			11/11	---	yes
Oak Flat Wash	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002068	2/26/2009	0.00383	DIS	37	DIS	**0.0318**		0.036		11/11	---	yes
Oak Flat Wash	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002076	5/5/2009	0.00692	DIS	73.9	DIS	**0.0289**		0.055		11/11	---	yes
Oak Flat Wash	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002176	8/19/2011	0.00182	DIS	15.5	TRC	**0.0402**		0.052		11/11	---	yes
Oak Flat Wash	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002205	12/9/2011	0.00417	DIS	40.9	TRC	**0.0215**		0.027		11/11	---	yes
Oak Flat Wash	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002214	2/29/2012	0.00453	DIS	45	TRC	**0.0166**		0.020		11/11	---	yes
Oak Flat Wash	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1003060	8/23/2012	0.00164	DIS	13.7	TRC	**0.0570**		0.062		11/11	---	yes
Oak Flat Wash	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1003063	11/12/2012	0.0023	DIS	20.4	TRC	**0.0293**		0.038		11/11	---	yes
Oak Flat Wash	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1003071	12/17/2012	0.00362	DIS	34.6	TRC	**0.0402**		0.042		11/11	---	yes
Oak Flat Wash	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1003074	1/29/2013	0.00351	DIS	33.4	TRC	**0.0421**		0.048		11/11	---	yes
Oak Flat Wash	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1003088	3/13/2013	0.00408	DIS	39.8	TRC	**0.0421**		0.044		11/11	---	yes
Oak Flat Wash	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1003060	8/23/2012	6 (min)	---	---	---				**4.96**	2/10	---	yes
Oak Flat Wash	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1003088	3/13/2013	6 (min)	---	---	---				**2.00**	2/10	---	yes
Oak Flat Wash	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1003060	8/23/2012	6 (min)	---	---	---				**4.96**	2/10	---	yes
Oak Flat Wash	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1003088	3/13/2013	6 (min)	---	---	---				**2.00**	2/10	---	yes
Oak Flat Wash	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002176	8/19/2011	0.00032	DIS	15.5	TRC	**0.000762 j**		<0.00300		3/11	---	yes
Oak Flat Wash	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1003060	8/23/2012	0.00027	DIS	13.7	TRC	**0.000624 j**		<0.00300		3/11	---	yes
Oak Flat Wash	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1003063	11/12/2012	0.00043	DIS	20.4	TRC	**0.000480 j**		<0.00300		3/11	---	yes
Oak Flat Wash	pH (Field)	s.u.	AZ Agricultural Livestock Watering	RESE-1002176	8/19/2011	6.5-9	---	---	---				**6.4**	2/11	---	yes
Oak Flat Wash	pH (Field)	s.u.	AZ Agricultural Livestock Watering	RESE-1003063	11/12/2012	6.5-9	---	---	---				**6.36**	2/11	---	yes
Oak Flat Wash	pH (Field)	s.u.	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002176	8/19/2011	6.5-9	---	---	---				**6.4**	2/11	---	yes
Oak Flat Wash	pH (Field)	s.u.	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1003063	11/12/2012	6.5-9	---	---	---				**6.36**	2/11	---	yes
Oak Flat Wash	pH (Field)	s.u.	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002176	8/19/2011	6.5-9	---	---	---				**6.4**	2/11	---	yes
Oak Flat Wash	pH (Field)	s.u.	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1003063	11/12/2012	6.5-9	---	---	---				**6.36**	2/11	---	yes
Oak Flat Wash	pH (Field)	s.u.	AZ Partial Body Contact	RESE-1002176	8/19/2011	6.5-9	---	---	---				**6.4**	2/11	---	yes
Oak Flat Wash	pH (Field)	s.u.	AZ Partial Body Contact	RESE-1003063	11/12/2012	6.5-9	---	---	---				**6.36**	2/11	---	yes
Number 9 Wash	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002020	8/28/2008	0.00328	DIS	22.4	Total	**0.0591**	0.0566			10/10	---	yes
Number 9 Wash	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002042	11/12/2008	0.00945	DIS	68.8	DIS	**0.0389**		0.045		10/10	---	yes
Number 9 Wash	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002058	2/19/2009	0.00271	DIS	18.3	DIS	**0.0442**		0.049		10/10	---	yes
Number 9 Wash	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002077	5/5/2009	0.00364	DIS	25	DIS	**0.0462**		0.084		10/10	---	yes
Number 9 Wash	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002139	11/1/2010	0.00428	DIS	29.7	TRC	**0.0425**		0.062		10/10	---	yes
Number 9 Wash	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002147	11/3/2010	0.01546	DIS	116	TRC	**0.0201**		0.045		10/10	---	yes

TABLE 7. SUMMARY OF EXCEEDANCES OF APPLICABLE WATER QUALITY STANDARDS IN SURFACE WATER AND SPRINGS
UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA, RESOLUTION COPPER MINING LLC, PINAL COUNTY, ARIZONA

						Standards		Hardness Results[c]		Results[c]						
Station Name	Parameter	Units[a]	Regulatory Standard	Sample ID	Date	Standard	Filter Fraction[b]	Hardness Value	Hardness Filter	Dissolved	Total	Total Recoverable	Field	Number of Exceedances Over Total Measurements	Number of Non-Detects with Detection Limits Greater Than the Standard Over Total Measurements	Exceedance
Number 9 Wash	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002178	8/19/2011	0.00637	DIS	45.3	TRC	**0.0169**		0.025		10/10	---	yes
Number 9 Wash	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002198	12/1/2011	0.00661	DIS	47.1	TRC	**0.0151**		0.021		10/10	---	yes
Number 9 Wash	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002211	2/29/2012	0.00541	DIS	38.1	TRC	**0.0156**		0.018		10/10	---	yes
Number 9 Wash	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002250	5/9/2012	0.00692	DIS	49.4	TRC	**0.0477**		0.0453		10/10	---	yes
Number 9 Wash	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002020	8/28/2008	0.00249	DIS	22.4	Total	**0.0591**	0.0566			10/10	---	yes
Number 9 Wash	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002042	11/12/2008	0.00651	DIS	68.8	DIS	**0.0389**		0.045		10/10	---	yes
Number 9 Wash	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002058	2/19/2009	0.0021	DIS	18.3	DIS	**0.0442**		0.049		10/10	---	yes
Number 9 Wash	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002077	5/5/2009	0.00274	DIS	25	DIS	**0.0462**		0.084		10/10	---	yes
Number 9 Wash	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002139	11/1/2010	0.00317	DIS	29.7	TRC	**0.0425**		0.062		10/10	---	yes
Number 9 Wash	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002147	11/3/2010	0.01017	DIS	116	TRC	**0.0201**		0.045		10/10	---	yes
Number 9 Wash	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002178	8/19/2011	0.00455	DIS	45.3	TRC	**0.0169**		0.025		10/10	---	yes
Number 9 Wash	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002198	12/1/2011	0.00471	DIS	47.1	TRC	**0.0151**		0.021		10/10	---	yes
Number 9 Wash	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002211	2/29/2012	0.00393	DIS	38.1	TRC	**0.0156**		0.018		10/10	---	yes
Number 9 Wash	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002250	5/9/2012	0.0049	DIS	49.4	TRC	**0.0477**		0.0453		10/10	---	yes
Number 9 Wash	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002042	11/12/2008	6 (min)	---	---	---				**2.35**	1/10	---	yes
Number 9 Wash	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002042	11/12/2008	6 (min)	---	---	---				**2.35**	1/10	---	yes
Number 9 Wash	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002042	11/12/2008	0.00167	DIS	68.8	DIS	<0.00300		<0.00300		---	1/9	uncertain
Number 9 Wash	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002042	11/12/2008	0.00001	DIS	---	---	<0.00020	<0.00020			---	1/1	uncertain
Number 9 Wash	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002042	11/12/2008	0.002	TRC	---	---			<0.00300		---	1/10	uncertain
Boulder Hole (QC 23.6 C)	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002060	2/19/2009	0.00958	DIS	69.8	DIS	**0.0150**		0.019		1/17	---	yes
Boulder Hole (QC 23.6 C)	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001181	2/8/2005	0.00863	DIS	95.8	Total	<0.0100	<0.0100	<0.0100		1/17	1/17	uncertain
Boulder Hole (QC 23.6 C)	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002060	2/19/2009	0.00659	DIS	69.8	DIS	**0.0150**		0.019		1/17	1/17	yes
Boulder Hole (QC 23.6 C)	Cyanide, Free	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001008	5/22/2003	0.041	TRC	---	---		<0.10			---	1/1	uncertain
Boulder Hole (QC 23.6 C)	Cyanide, Free	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001008	5/22/2003	0.0097	TRC	---	---		<0.10			---	1/1	uncertain
Boulder Hole (QC 23.6 C)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001008	5/22/2003	6 (min)	---	---	---				**5.09**	14/17	---	yes
Boulder Hole (QC 23.6 C)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001023	9/4/2003	6 (min)	---	---	---				**0.90**	14/17	---	yes
Boulder Hole (QC 23.6 C)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001028	11/3/2003	6 (min)	---	---	---				**4.00**	14/17	---	yes
Boulder Hole (QC 23.6 C)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001054	2/9/2004	6 (min)	---	---	---				**5.30**	14/17	---	yes
Boulder Hole (QC 23.6 C)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001083	5/24/2004	6 (min)	---	---	---				**3.02**	14/17	---	yes
Boulder Hole (QC 23.6 C)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001094	8/3/2004	6 (min)	---	---	---				**0.42**	14/17	---	yes
Boulder Hole (QC 23.6 C)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001165	11/3/2004	6 (min)	---	---	---				**1.66**	14/17	---	yes
Boulder Hole (QC 23.6 C)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001205	5/4/2005	6 (min)	---	---	---				**1.91**	14/17	---	yes
Boulder Hole (QC 23.6 C)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002006	8/6/2008	6 (min)	---	---	---				**5.50**	14/17	---	yes
Boulder Hole (QC 23.6 C)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002031	11/6/2008	6 (min)	---	---	---				**1.05**	14/17	---	yes
Boulder Hole (QC 23.6 C)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002082	5/7/2009	6 (min)	---	---	---				**4.87**	14/17	---	yes
Boulder Hole (QC 23.6 C)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002140	11/1/2010	6 (min)	---	---	---				**3.1**	14/17	---	yes
Boulder Hole (QC 23.6 C)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002167	5/16/2011	6 (min)	---	---	---				**5.94**	14/17	---	yes
Boulder Hole (QC 23.6 C)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002227	5/2/2012	6 (min)	---	---	---				**3.10**	14/17	---	yes
Boulder Hole (QC 23.6 C)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001008	5/22/2003	6 (min)	---	---	---				**5.09**	14/17	---	yes
Boulder Hole (QC 23.6 C)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001023	9/4/2003	6 (min)	---	---	---				**0.90**	14/17	---	yes
Boulder Hole (QC 23.6 C)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001028	11/3/2003	6 (min)	---	---	---				**4.00**	14/17	---	yes
Boulder Hole (QC 23.6 C)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001054	2/9/2004	6 (min)	---	---	---				**5.30**	14/17	---	yes
Boulder Hole (QC 23.6 C)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001083	5/24/2004	6 (min)	---	---	---				**3.02**	14/17	---	yes
Boulder Hole (QC 23.6 C)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001094	8/3/2004	6 (min)	---	---	---				**0.42**	14/17	---	yes
Boulder Hole (QC 23.6 C)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001165	11/3/2004	6 (min)	---	---	---				**1.66**	14/17	---	yes
Boulder Hole (QC 23.6 C)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001205	5/4/2005	6 (min)	---	---	---				**1.91**	14/17	---	yes
Boulder Hole (QC 23.6 C)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002006	8/6/2008	6 (min)	---	---	---				**5.50**	14/17	---	yes
Boulder Hole (QC 23.6 C)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002031	11/6/2008	6 (min)	---	---	---				**1.05**	14/17	---	yes
Boulder Hole (QC 23.6 C)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002082	5/7/2009	6 (min)	---	---	---				**4.87**	14/17	---	yes
Boulder Hole (QC 23.6 C)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002140	11/1/2010	6 (min)	---	---	---				**3.1**	14/17	---	yes
Boulder Hole (QC 23.6 C)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002167	5/16/2011	6 (min)	---	---	---				**5.94**	14/17	---	yes
Boulder Hole (QC 23.6 C)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002227	5/2/2012	6 (min)	---	---	---				**3.10**	14/17	---	yes
Boulder Hole (QC 23.6 C)	E. Coli	MPN/100ml	AZ Partial Body Contact	RESE-1001165	11/3/2004	575	---	---	---		**900**			1/8	---	yes
Boulder Hole (QC 23.6 C)	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001181	2/8/2005	0.0024	DIS	95.8	Total	<0.00300	<0.00300	<0.00300		---	1/17	uncertain

TABLE 7. SUMMARY OF EXCEEDANCES OF APPLICABLE WATER QUALITY STANDARDS IN SURFACE WATER AND SPRINGS
UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA, RESOLUTION COPPER MINING LLC, PINAL COUNTY, ARIZONA

						Standards		Hardness Results[c]		Results[c]						
Station Name	Parameter	Units[a]	Regulatory Standard	Sample ID	Date	Standard	Filter Fraction[b]	Hardness Value	Hardness Filter	Dissolved	Total	Total Recoverable	Field	Number of Exceedances Over Total Measurements	Number of Non-Detects with Detection Limits Greater Than the Standard Over Total Measurements	Exceedance
Boulder Hole (QC 23.6 C)	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001008	5/22/2003	0.00001	DIS	---	---	<0.00020	<0.00020			---	11/11	uncertain
Boulder Hole (QC 23.6 C)	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001023	9/4/2003	0.00001	DIS	---	---	<0.00020	<0.00020			---	11/11	uncertain
Boulder Hole (QC 23.6 C)	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001028	11/3/2003	0.00001	DIS	---	---	<0.00020	<0.00020			---	11/11	uncertain
Boulder Hole (QC 23.6 C)	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001054	2/9/2004	0.00001	DIS	---	---	<0.00020	<0.00020			---	11/11	uncertain
Boulder Hole (QC 23.6 C)	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001083	5/24/2004	0.00001	DIS	---	---	<0.00020	<0.00020			---	11/11	uncertain
Boulder Hole (QC 23.6 C)	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001094	8/3/2004	0.00001	DIS	---	---	<0.00020	<0.00020			---	11/11	uncertain
Boulder Hole (QC 23.6 C)	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001165	11/3/2004	0.00001	DIS	---	---	<0.00020	<0.00020			---	11/11	uncertain
Boulder Hole (QC 23.6 C)	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001181	2/8/2005	0.00001	DIS	---	---	<0.00020	<0.00020			---	11/11	uncertain
Boulder Hole (QC 23.6 C)	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001205	5/4/2005	0.00001	DIS	---	---	<0.00020	<0.00020			---	11/11	uncertain
Boulder Hole (QC 23.6 C)	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002006	8/6/2008	0.00001	DIS	---	---	<0.00020	<0.00020			---	11/11	uncertain
Boulder Hole (QC 23.6 C)	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002031	11/6/2008	0.00001	DIS	---	---	<0.00020	<0.00020			---	11/11	uncertain
Boulder Hole (QC 23.6 C)	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001008	5/22/2003	0.002	TRC	---	---		<0.0030	<0.0030		---	10/17	uncertain
Boulder Hole (QC 23.6 C)	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001023	9/4/2003	0.002	TRC	---	---		<0.0030	<0.0030		---	10/17	uncertain
Boulder Hole (QC 23.6 C)	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001028	11/3/2003	0.002	TRC	---	---		<0.0030	<0.0030		---	10/17	uncertain
Boulder Hole (QC 23.6 C)	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001083	5/24/2004	0.002	TRC	---	---		<0.0030	<0.0030		---	10/17	uncertain
Boulder Hole (QC 23.6 C)	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001094	8/3/2004	0.002	TRC	---	---		<0.0030	<0.0030		---	10/17	uncertain
Boulder Hole (QC 23.6 C)	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001165	11/3/2004	0.002	TRC	---	---		<0.0030	<0.0030		---	10/17	uncertain
Boulder Hole (QC 23.6 C)	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001181	2/8/2005	0.002	TRC	---	---		<0.00300	<0.00300		---	10/17	uncertain
Boulder Hole (QC 23.6 C)	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001205	5/4/2005	0.002	TRC	---	---		<0.00300	<0.00300		---	10/17	uncertain
Boulder Hole (QC 23.6 C)	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002006	8/6/2008	0.002	TRC	---	---			<0.00300		---	10/17	uncertain
Boulder Hole (QC 23.6 C)	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002031	11/6/2008	0.002	TRC	---	---			<0.00300		---	10/17	uncertain
QC 22.6 E (Karst Spring)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001180	2/8/2005	6 (min)	---	---	---				**4.40**	4/6	---	yes
QC 22.6 E (Karst Spring)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002017	8/28/2008	6 (min)	---	---	---				**4.10**	4/6	---	yes
QC 22.6 E (Karst Spring)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002049	2/11/2009	6 (min)	---	---	---				**3.51**	4/6	---	yes
QC 22.6 E (Karst Spring)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1003086	3/13/2013	6 (min)	---	---	---				**2.88**	4/6	---	yes
QC 22.6 E (Karst Spring)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001180	2/8/2005	6 (min)	---	---	---				**4.40**	4/6	---	yes
QC 22.6 E (Karst Spring)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002017	8/28/2008	6 (min)	---	---	---				**4.10**	4/6	---	yes
QC 22.6 E (Karst Spring)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002049	2/11/2009	6 (min)	---	---	---				**3.51**	4/6	---	yes
QC 22.6 E (Karst Spring)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1003086	3/13/2013	6 (min)	---	---	---				**2.88**	4/6	---	yes
QC 22.6 E (Karst Spring)	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001180	2/8/2005	0.00001	DIS	---	---	<0.00020	<0.00020			---	1/1	uncertain
QC 22.6 E (Karst Spring)	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001180	2/8/2005	0.002	TRC	---	---		<0.00300	<0.00300		1/7	1/7	uncertain
QC 22.6 E (Karst Spring)	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1003072	12/17/2012	0.002	TRC	---	---			**0.00209 jd**		1/7	1/7	yes
QC 21.7 C (Magma Avenue)	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002047	2/11/2009	0.00825	DIS	59.6	DIS	**0.0203**		0.023		3/9	---	yes
QC 21.7 C (Magma Avenue)	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002177	8/19/2011	0.01658	DIS	125	TRC	**0.0508**		0.144		3/9	---	yes
QC 21.7 C (Magma Avenue)	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002190	11/28/2011	0.01771	DIS	134	TRC	**0.0286**		0.033		3/9	---	yes
QC 21.7 C (Magma Avenue)	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002047	2/11/2009	0.00576	DIS	59.6	DIS	**0.0203**		0.023		5/9	---	yes
QC 21.7 C (Magma Avenue)	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002141	11/1/2010	0.01473	DIS	179	TRC	**0.0159**		0.034		5/9	---	yes
QC 21.7 C (Magma Avenue)	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002177	8/19/2011	0.01084	DIS	125	TRC	**0.0508**		0.144		5/9	---	yes
QC 21.7 C (Magma Avenue)	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002190	11/28/2011	0.0115	DIS	134	TRC	**0.0286**		0.033		5/9	---	yes
QC 21.7 C (Magma Avenue)	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002228	5/2/2012	0.00979	DIS	111	TRC	**0.0098**		0.0133		5/9	---	yes
QC 21.7 C (Magma Avenue)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002177	8/19/2011	6 (min)	---	---	---				**4.95**	2/10	---	yes
QC 21.7 C (Magma Avenue)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1003054	8/14/2012	6 (min)	---	---	---				**3.95**	2/10	---	yes
QC 21.7 C (Magma Avenue)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002177	8/19/2011	6 (min)	---	---	---				**4.95**	2/10	---	yes
QC 21.7 C (Magma Avenue)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1003054	8/14/2012	6 (min)	---	---	---				**3.95**	2/10	---	yes
QC 21.7 C (Magma Avenue)	Lead	mg/L	AZ Partial Body Contact	RESE-1002177	8/19/2011	0.015	TRC	---	---	0.000349 j		**0.0215**		1/9	---	yes
QC 21.7 C (Magma Avenue)	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002025	11/4/2008	0.00001	DIS	---	---	<0.00020	<0.00020			---	1/1	uncertain
QC 21.7 C (Magma Avenue)	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002025	11/4/2008	0.002	TRC	---	---			<0.00300		---	1/9	uncertain
QC 19.7 C	Cadmium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001150	7/15/2014	0.00034	DIS	49	DIS	<0.0010		0.0037		---	1/8	uncertain
QC 19.7 C	Chromium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic (Chromium, Trivalent)	RESE-1001150	7/15/2014	0.04132	TRC	49	DIS	<0.010	**0.062**			1/9	---	yes
QC 19.7 C	Copper	mg/L	AZ Agricultural Livestock Watering	RESE-1001150	7/15/2014	0.5	TRC	---	---	0.061		**0.68**		1/9	---	yes
QC 19.7 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002048	2/11/2009	0.00953	DIS	69.4	DIS	**0.0195**		0.022		6/9	---	yes
QC 19.7 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002206	12/14/2011	0.0082	DIS	59.2	TRC	**0.0257**		0.032		6/9	---	yes
QC 19.7 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1003070	12/17/2012	0.01621	DIS	122	TRC	**0.0201**		0.024		6/9	---	yes

TABLE 7. SUMMARY OF EXCEEDANCES OF APPLICABLE WATER QUALITY STANDARDS IN SURFACE WATER AND SPRINGS
UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA, RESOLUTION COPPER MINING LLC, PINAL COUNTY, ARIZONA

						Standards		Hardness Results[c]		Results[c]						
Station Name	Parameter	Units[a]	Regulatory Standard	Sample ID	Date	Standard	Filter Fraction[b]	Hardness Value	Hardness Filter	Dissolved	Total	Total Recoverable	Field	Number of Exceedances Over Total Measurements	Number of Non-Detects with Detection Limits Greater Than the Standard Over Total Measurements	Exceedance
QC 19.7 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1003076	1/29/2013	0.01021	DIS	74.7	TRC	**0.0200**		0.025		6/9	---	yes
QC 19.7 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001150	7/15/2014	0.00686	DIS	49	DIS	**0.061**		0.68		6/9	---	yes
QC 19.7 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001333	10/9/2014	0.01217	DIS	90	Total	**0.039**		0.14		6/9	---	yes
QC 19.7 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002021	8/28/2008	0.01424	DIS	172	Total	**0.0183**	0.0173			8/9	---	yes
QC 19.7 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002048	2/11/2009	0.00655	DIS	69.4	DIS	**0.0195**		0.022		8/9	---	yes
QC 19.7 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002206	12/14/2011	0.00572	DIS	59.2	TRC	**0.0257**		0.032		8/9	---	yes
QC 19.7 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1003070	12/17/2012	0.01061	DIS	122	TRC	**0.0201**		0.024		8/9	---	yes
QC 19.7 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1003076	1/29/2013	0.00698	DIS	74.7	TRC	**0.0200**		0.025		8/9	---	yes
QC 19.7 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1003085	3/13/2013	0.01113	DIS	129	TRC	**0.0126**		0.012		8/9	---	yes
QC 19.7 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001150	7/15/2014	0.00487	DIS	49	DIS	**0.061**		0.68		8/9	---	yes
QC 19.7 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001333	10/9/2014	0.00818	DIS	90	Total	**0.039**		0.14		8/9	---	yes
QC 19.7 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1003085	3/13/2013	6 (min)	---	---	---				**3.36**	1/7	---	yes
QC 19.7 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1003085	3/13/2013	6 (min)	---	---	---				**3.36**	1/7	---	yes
QC 19.7 C	Lead	mg/L	AZ Agricultural Livestock Watering	RESE-1001150	7/15/2014	0.1	TRC	---	---	0.0044		**0.36**		1/9	---	yes
QC 19.7 C	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001150	7/15/2014	0.00115	DIS	49	DIS	**0.0044**		0.36		1/9	---	yes
QC 19.7 C	Lead	mg/L	AZ Partial Body Contact	RESE-1001150	7/15/2014	0.015	TRC	---	---	0.0044		**0.36**		2/9	---	yes
QC 19.7 C	Lead	mg/L	AZ Partial Body Contact	RESE-1001333	10/9/2014	0.015	TRC	---	---	0.0011		**0.025**		2/9	---	yes
QC 19.7 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001150	7/15/2014	0.00001	DIS	---	---	<0.00020	<0.00020			1/2	1/2	uncertain
QC 19.7 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001333	10/9/2014	0.00001	DIS	---	---	**0.000049 j**	0.000051 j			1/2	1/2	yes
QC 19.7 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001150	7/15/2014	0.002	TRC	---	---	<0.0020		<0.0040		---	1/9	uncertain
QC 19.7 C	Silver	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001150	7/15/2014	0.000943	DIS	49	DIS	<0.0010		0.0036		---	1/9	uncertain
Bored Spring	Cadmium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001088	5/26/2004	0.00069	DIS	136	Total	<0.0010	<0.00010	<0.00010		---	1/11	uncertain
Bored Spring	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001088	5/26/2004	0.01796	DIS	136	Total	**0.0221**	0.0254	0.0248		1/11	---	yes
Bored Spring	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001088	5/26/2004	0.01165	DIS	136	Total	**0.0221**	0.0254	0.0248		1/11	---	yes
Bored Spring	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001221	8/3/2005	6 (min)	---	---	---				**3.60**	1/10	---	yes
Bored Spring	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001221	8/3/2005	6 (min)	---	---	---				**3.60**	1/10	---	yes
Bored Spring	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001088	5/26/2004	0.00001	DIS	---	---	<0.00020	<0.00020			---	6/6	uncertain
Bored Spring	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001163	11/3/2004	0.00001	DIS	---	---	<0.00020	<0.00020			---	6/6	uncertain
Bored Spring	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001188	2/9/2005	0.00001	DIS	---	---	<0.00020	<0.00020			---	6/6	uncertain
Bored Spring	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001204	5/3/2005	0.00001	DIS	---	---	<0.00020	<0.00020			---	6/6	uncertain
Bored Spring	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001221	8/3/2005	0.00001	DIS	---	---	<0.0002	<0.0002			---	6/6	uncertain
Bored Spring	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002044	11/13/2008	0.00001	DIS	---	---	<0.00020	<0.00020			---	6/6	uncertain
Bored Spring	pH (Field)	s.u.	AZ Agricultural Livestock Watering	RESE-1001088	5/26/2004	6.5-9	---	---	---				**10.1**	2/11	---	yes
Bored Spring	pH (Field)	s.u.	AZ Agricultural Livestock Watering	RESE-1002089	5/13/2009	6.5-9	---	---	---				**9.62**	2/11	---	yes
Bored Spring	pH (Field)	s.u.	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001088	5/26/2004	6.5-9	---	---	---				**10.1**	2/11	---	yes
Bored Spring	pH (Field)	s.u.	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002089	5/13/2009	6.5-9	---	---	---				**9.62**	2/11	---	yes
Bored Spring	pH (Field)	s.u.	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001088	5/26/2004	6.5-9	---	---	---				**10.1**	2/11	---	yes
Bored Spring	pH (Field)	s.u.	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002089	5/13/2009	6.5-9	---	---	---				**9.62**	2/11	---	yes
Bored Spring	pH (Field)	s.u.	AZ Partial Body Contact	RESE-1001088	5/26/2004	6.5-9	---	---	---				**10.1**	2/11	---	yes
Bored Spring	pH (Field)	s.u.	AZ Partial Body Contact	RESE-1002089	5/13/2009	6.5-9	---	---	---				**9.62**	2/11	---	yes
Bored Spring	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001088	5/26/2004	0.002	TRC	---	---		<0.0030	<0.0030		---	6/11	uncertain
Bored Spring	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001163	11/3/2004	0.002	TRC	---	---		<0.0030	<0.0030		---	6/11	uncertain
Bored Spring	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001188	2/9/2005	0.002	TRC	---	---		<0.00300	<0.00300		---	6/11	uncertain
Bored Spring	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001204	5/3/2005	0.002	TRC	---	---		<0.00300	<0.00300		---	6/11	uncertain
Bored Spring	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001221	8/3/2005	0.002	TRC	---	---		<0.0030	<0.00300		---	6/11	uncertain
Bored Spring	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002044	11/13/2008	0.002	TRC	---	---			<0.00300		---	6/11	uncertain
Hidden Spring	Cyanide, Free	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001003	5/15/2003	0.041	TRC	---	---		<0.10			---	1/1	uncertain
Hidden Spring	Cyanide, Free	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001003	5/15/2003	0.0097	TRC	---	---		<0.10			---	1/1	uncertain
Hidden Spring	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001003	5/15/2003	6 (min)	---	---	---				**3.30**	10/16	---	yes
Hidden Spring	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001015	8/20/2003	6 (min)	---	---	---				**0.22**	10/16	---	yes
Hidden Spring	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001027	11/3/2003	6 (min)	---	---	---				**0.48**	10/16	---	yes
Hidden Spring	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001097	8/4/2004	6 (min)	---	---	---				**0.11**	10/16	---	yes
Hidden Spring	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001162	11/3/2004	6 (min)	---	---	---				**0.56**	10/16	---	yes
Hidden Spring	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001187	2/9/2005	6 (min)	---	---	---				**5.56**	10/16	---	yes

TABLE 7. SUMMARY OF EXCEEDANCES OF APPLICABLE WATER QUALITY STANDARDS IN SURFACE WATER AND SPRINGS
UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA, RESOLUTION COPPER MINING LLC, PINAL COUNTY, ARIZONA

Station Name	Parameter	Units[a]	Regulatory Standard	Sample ID	Date	Standards		Hardness Results[c]		Results[c]				Number of Exceedances Over Total Measurements	Number of Non-Detects with Detection Limits Greater Than the Standard Over Total Measurements	Exceedance
						Standard	Filter Fraction[b]	Hardness Value	Hardness Filter	Dissolved	Total	Total Recoverable	Field			
Hidden Spring	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001220	8/3/2005	6 (min)	---	---	---				**4.00**	10/16	---	yes
Hidden Spring	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002008	8/19/2008	6 (min)	---	---	---				**4.41**	10/16	---	yes
Hidden Spring	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002030	11/6/2008	6 (min)	---	---	---				**3.23**	10/16	---	yes
Hidden Spring	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002045	2/10/2009	6 (min)	---	---	---				**5.53**	10/16	---	yes
Hidden Spring	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001003	5/15/2003	6 (min)	---	---	---				**3.30**	10/16	---	yes
Hidden Spring	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001015	8/20/2003	6 (min)	---	---	---				**0.22**	10/16	---	yes
Hidden Spring	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001027	11/3/2003	6 (min)	---	---	---				**0.48**	10/16	---	yes
Hidden Spring	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001097	8/4/2004	6 (min)	---	---	---				**0.11**	10/16	---	yes
Hidden Spring	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001162	11/3/2004	6 (min)	---	---	---				**0.56**	10/16	---	yes
Hidden Spring	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001187	2/9/2005	6 (min)	---	---	---				**5.56**	10/16	---	yes
Hidden Spring	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001220	8/3/2005	6 (min)	---	---	---				**4.00**	10/16	---	yes
Hidden Spring	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002008	8/19/2008	6 (min)	---	---	---				**4.41**	10/16	---	yes
Hidden Spring	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002030	11/6/2008	6 (min)	---	---	---				**3.23**	10/16	---	yes
Hidden Spring	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002045	2/10/2009	6 (min)	---	---	---				**5.53**	10/16	---	yes
Hidden Spring	E. Coli	MPN/100ml	AZ Partial Body Contact	RESE-1001082	5/24/2004	575	---	---	---		**900**			2/10	---	yes
Hidden Spring	E. Coli	MPN/100ml	AZ Partial Body Contact	RESE-1001097	8/4/2004	575	---	---	---		**1600**			2/10	---	yes
Hidden Spring	Lead	mg/L	AZ Partial Body Contact	RESE-1002008	8/19/2008	0.015	TRC	---	---	<0.000043	**0.0331**			1/17	---	yes
Hidden Spring	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001003	5/15/2003	0.00001	DIS	---	---	<0.00020	<0.00020			---	13/13	uncertain
Hidden Spring	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001015	8/20/2003	0.00001	DIS	---	---	<0.00020	<0.00020			---	13/13	uncertain
Hidden Spring	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001027	11/3/2003	0.00001	DIS	---	---	<0.00020	<0.00020			---	13/13	uncertain
Hidden Spring	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001052	2/9/2004	0.00001	DIS	---	---	<0.00020	<0.00020			---	13/13	uncertain
Hidden Spring	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001082	5/24/2004	0.00001	DIS	---	---	<0.00020	<0.00020			---	13/13	uncertain
Hidden Spring	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001097	8/4/2004	0.00001	DIS	---	---	<0.00020	<0.00020			---	13/13	uncertain
Hidden Spring	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001162	11/3/2004	0.00001	DIS	---	---	<0.00020	<0.00020			---	13/13	uncertain
Hidden Spring	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001187	2/9/2005	0.00001	DIS	---	---	<0.00020	<0.00020			---	13/13	uncertain
Hidden Spring	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001202	5/3/2005	0.00001	DIS	---	---	<0.00020	<0.00020			---	13/13	uncertain
Hidden Spring	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001220	8/3/2005	0.00001	DIS	---	---	<0.0002	<0.0002			---	13/13	uncertain
Hidden Spring	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002008	8/19/2008	0.00001	DIS	---	---	<0.000064	<0.000064			---	13/13	uncertain
Hidden Spring	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002030	11/6/2008	0.00001	DIS	---	---	<0.00020	<0.00020			---	13/13	uncertain
Hidden Spring	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1003163	7/17/2010	0.00001	DIS	---	---	<0.00020	0.0017			---	13/13	uncertain
Hidden Spring	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001003	5/15/2003	0.002	TRC	---	---		<0.0030	<0.0030		---	11/17	uncertain
Hidden Spring	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001015	8/20/2003	0.002	TRC	---	---		<0.0030	<0.0030		---	11/17	uncertain
Hidden Spring	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001027	11/3/2003	0.002	TRC	---	---		<0.0030	<0.0030		---	11/17	uncertain
Hidden Spring	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001082	5/24/2004	0.002	TRC	---	---		<0.0030	<0.0030		---	11/17	uncertain
Hidden Spring	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001097	8/4/2004	0.002	TRC	---	---		<0.0030	<0.0030		---	11/17	uncertain
Hidden Spring	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001162	11/3/2004	0.002	TRC	---	---		<0.0030	<0.0030		---	11/17	uncertain
Hidden Spring	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001187	2/9/2005	0.002	TRC	---	---		<0.00300	<0.00300		---	11/17	uncertain
Hidden Spring	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001202	5/3/2005	0.002	TRC	---	---		<0.00300	<0.00300		---	11/17	uncertain
Hidden Spring	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001220	8/3/2005	0.002	TRC	---	---		<0.0030	<0.00300		---	11/17	uncertain
Hidden Spring	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002008	8/19/2008	0.002	TRC	---	---		<0.005			---	11/17	uncertain
Hidden Spring	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002030	11/6/2008	0.002	TRC	---	---			<0.00300		---	11/17	uncertain
Kane Spring	Cyanide, Free	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001002	5/15/2003	0.041	TRC	---	---		<0.10			---	1/1	uncertain
Kane Spring	Cyanide, Free	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001002	5/15/2003	0.0097	TRC	---	---		<0.10			---	1/1	uncertain
Kane Spring	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001014	8/20/2003	6 (min)	---	---	---				**2.96**	4/15	---	yes
Kane Spring	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001026	11/3/2003	6 (min)	---	---	---				**3.76**	4/15	---	yes
Kane Spring	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001218	8/3/2005	6 (min)	---	---	---				**5.90**	4/15	---	yes
Kane Spring	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002035	11/5/2008	6 (min)	---	---	---				**5.79**	4/15	---	yes
Kane Spring	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001014	8/20/2003	6 (min)	---	---	---				**2.96**	4/15	---	yes
Kane Spring	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001026	11/3/2003	6 (min)	---	---	---				**3.76**	4/15	---	yes
Kane Spring	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001218	8/3/2005	6 (min)	---	---	---				**5.90**	4/15	---	yes
Kane Spring	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002035	11/5/2008	6 (min)	---	---	---				**5.79**	4/15	---	yes
Kane Spring	E. Coli	MPN/100ml	AZ Partial Body Contact	RESE-1001218	8/3/2005	575	---	---	---		**1600 ge**			1/8	---	yes
Kane Spring	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001002	5/15/2003	0.00001	DIS	---	---	<0.00020	<0.00020			---	10/10	uncertain
Kane Spring	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001014	8/20/2003	0.00001	DIS	---	---	<0.00020	<0.00050			---	10/10	uncertain

TABLE 7. SUMMARY OF EXCEEDANCES OF APPLICABLE WATER QUALITY STANDARDS IN SURFACE WATER AND SPRINGS
UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA, RESOLUTION COPPER MINING LLC, PINAL COUNTY, ARIZONA

Station Name	Parameter	Units[a]	Regulatory Standard	Sample ID	Date	Standards		Hardness Results[c]		Results[c]				Number of Exceedances Over Total Measurements	Number of Non-Detects with Detection Limits Greater Than the Standard Over Total Measurements	Exceedance
						Standard	Filter Fraction[b]	Hardness Value	Hardness Filter	Dissolved	Total	Total Recoverable	Field			
Kane Spring	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001026	11/3/2003	0.00001	DIS	---	---	<0.00020	<0.00020			---	10/10	uncertain
Kane Spring	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001051	2/9/2004	0.00001	DIS	---	---	<0.00020	<0.00020			---	10/10	uncertain
Kane Spring	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001161	11/3/2004	0.00001	DIS	---	---	<0.00020	<0.00020			---	10/10	uncertain
Kane Spring	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001186	2/9/2005	0.00001	DIS	---	---	<0.00020	<0.00020			---	10/10	uncertain
Kane Spring	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001201	5/3/2005	0.00001	DIS	---	---	<0.00020	<0.00020			---	10/10	uncertain
Kane Spring	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001218	8/3/2005	0.00001	DIS	---	---	<0.0002	<0.0002			---	10/10	uncertain
Kane Spring	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002035	11/5/2008	0.00001	DIS	---	---	<0.00020	<0.00020			---	10/10	uncertain
Kane Spring	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1003164	7/17/2010	0.00001	DIS	---	---	<0.00020	0.00037			---	10/10	uncertain
Kane Spring	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001002	5/15/2003	0.002	TRC	---	---		<0.0030	<0.0030		---	8/16	uncertain
Kane Spring	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001014	8/20/2003	0.002	TRC	---	---		<0.0030	<0.0030		---	8/16	uncertain
Kane Spring	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001026	11/3/2003	0.002	TRC	---	---		<0.0030	<0.0030		---	8/16	uncertain
Kane Spring	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001161	11/3/2004	0.002	TRC	---	---		<0.0030	<0.0030		---	8/16	uncertain
Kane Spring	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001186	2/9/2005	0.002	TRC	---	---		<0.00300	<0.00300		---	8/16	uncertain
Kane Spring	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001201	5/3/2005	0.002	TRC	---	---		<0.00300	<0.00300		---	8/16	uncertain
Kane Spring	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001218	8/3/2005	0.002	TRC	---	---		<0.0030	<0.00300		---	8/16	uncertain
Kane Spring	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002035	11/5/2008	0.002	TRC	---	---			<0.00300		---	8/16	uncertain
Blue Spring	Cadmium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1003165	7/17/2010	0.00074	DIS	150	DIS	<0.0010	<0.0010			---	1/13	uncertain
Blue Spring	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001087	5/26/2004	6 (min)	---	---	---				**5.86**	6/11	---	yes
Blue Spring	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001219	8/3/2005	6 (min)	---	---	---				**3.91**	6/11	---	yes
Blue Spring	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002009	8/19/2008	6 (min)	---	---	---				**3.72**	6/11	---	yes
Blue Spring	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002043	11/13/2008	6 (min)	---	---	---				**0.99**	6/11	---	yes
Blue Spring	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002088	5/13/2009	6 (min)	---	---	---				**5.91**	6/11	---	yes
Blue Spring	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002237	5/7/2012	6 (min)	---	---	---				**4.60**	6/11	---	yes
Blue Spring	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001087	5/26/2004	6 (min)	---	---	---				**5.86**	6/11	---	yes
Blue Spring	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001219	8/3/2005	6 (min)	---	---	---				**3.91**	6/11	---	yes
Blue Spring	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002009	8/19/2008	6 (min)	---	---	---				**3.72**	6/11	---	yes
Blue Spring	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002043	11/13/2008	6 (min)	---	---	---				**0.99**	6/11	---	yes
Blue Spring	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002088	5/13/2009	6 (min)	---	---	---				**5.91**	6/11	---	yes
Blue Spring	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002237	5/7/2012	6 (min)	---	---	---				**4.60**	6/11	---	yes
Blue Spring	Lead	mg/L	AZ Partial Body Contact	RESE-1002088	5/13/2009	0.015	TRC	---	---	<0.000053		**0.0568**		1/13	---	yes
Blue Spring	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001087	5/26/2004	0.00001	DIS	---	---	<0.00020	<0.00020			---	8/8	uncertain
Blue Spring	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001093	8/3/2004	0.00001	DIS	---	---	<0.00020	<0.00020			---	8/8	uncertain
Blue Spring	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001185	2/9/2005	0.00001	DIS	---	---	<0.00020	<0.00020			---	8/8	uncertain
Blue Spring	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001200	5/3/2005	0.00001	DIS	---	---	<0.00020	<0.00020			---	8/8	uncertain
Blue Spring	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001219	8/3/2005	0.00001	DIS	---	---	<0.0002	<0.0002			---	8/8	uncertain
Blue Spring	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002009	8/19/2008	0.00001	DIS	---	---	<0.000064	<0.000064			---	8/8	uncertain
Blue Spring	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002043	11/13/2008	0.00001	DIS	---	---	<0.00020	<0.00020			---	8/8	uncertain
Blue Spring	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1003165	7/17/2010	0.00001	DIS	---	---	<0.00020	<0.00020			---	8/8	uncertain
Blue Spring	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001087	5/26/2004	0.002	TRC	---	---		<0.030	<0.0030		1/13	6/13	uncertain
Blue Spring	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001093	8/3/2004	0.002	TRC	---	---		<0.0060	<0.0030		1/13	6/13	uncertain
Blue Spring	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001185	2/9/2005	0.002	TRC	---	---		<0.00300	<0.00300		1/13	6/13	uncertain
Blue Spring	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001200	5/3/2005	0.002	TRC	---	---		<0.00300	<0.00300		1/13	6/13	uncertain
Blue Spring	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001219	8/3/2005	0.002	TRC	---	---		<0.0030	<0.00300		1/13	6/13	uncertain
Blue Spring	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002043	11/13/2008	0.002	TRC	---	---			<0.00300		1/13	6/13	uncertain
Blue Spring	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002088	5/13/2009	0.002	TRC	---	---			**0.0421**		1/13	6/13	yes
DEVILS CANYON WATERSHED																
IC 1.0 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002019	8/28/2008	0.01008	DIS	73.7	Total	**0.0135**	0.0126			4/10	---	yes
IC 1.0 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002055	2/17/2009	0.00348	DIS	23.8	DIS	**0.0208**		0.033		4/10	---	yes
IC 1.0 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1003073	1/29/2013	0.00484	DIS	33.8	TRC	**0.0193**		0.027		4/10	---	yes
IC 1.0 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1003087	3/13/2013	0.00774	DIS	55.7	TRC	**0.0145**		0.014		4/10	---	yes
IC 1.0 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002019	8/28/2008	0.0069	DIS	73.7	Total	**0.0135**	0.0126			5/10	---	yes
IC 1.0 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002055	2/17/2009	0.00263	DIS	23.8	DIS	**0.0208**		0.033		5/10	---	yes
IC 1.0 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002126	2/17/2010	0.00826	DIS	91	TRC	**0.00955**		0.011		5/10	---	yes
IC 1.0 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1003073	1/29/2013	0.00354	DIS	33.8	TRC	**0.0193**		0.027		5/10	---	yes

TABLE 7. SUMMARY OF EXCEEDANCES OF APPLICABLE WATER QUALITY STANDARDS IN SURFACE WATER AND SPRINGS
UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA, RESOLUTION COPPER MINING LLC, PINAL COUNTY, ARIZONA

Station Name	Parameter	Units[a]	Regulatory Standard	Sample ID	Date	Standards		Hardness Results[c]		Results[c]				Number of Exceedances Over Total Measurements	Number of Non-Detects with Detection Limits Greater Than the Standard Over Total Measurements	Exceedance
						Standard	Filter Fraction[b]	Hardness Value	Hardness Filter	Dissolved	Total	Total Recoverable	Field			
IC 1.0 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1003087	3/13/2013	0.00543	DIS	55.7	TRC	**0.0145**		0.014		5/10	---	yes
IC 1.0 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1003087	3/13/2013	6 (min)	---	---	---				**2.88**	1/9	---	yes
IC 1.0 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1003087	3/13/2013	6 (min)	---	---	---				**2.88**	1/9	---	yes
IC 1.0 C	E. Coli	MPN/100ml	AZ Full Body Contact	RESE-1002019	8/28/2008	235	---	---	---		**365.4**			1/1	---	yes
DC 15.5 C	Arsenic	mg/L	AZ Full Body Contact	RESE-1003052	8/13/2012	0.03	TRC	---	---	<0.025		**0.038**		1/10	---	yes
DC 15.5 C	Cadmium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002003	8/5/2008	0.00014	DIS	14	DIS	<0.000200		<0.0020		---	2/10	uncertain
DC 15.5 C	Cadmium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002032	11/12/2008	0.00019	DIS	20.7	DIS	<0.000200		<0.0020		---	2/10	uncertain
DC 15.5 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002003	8/5/2008	0.00211	DIS	14	DIS	**0.00871**		<0.010		9/10	---	yes
DC 15.5 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002032	11/12/2008	0.00305	DIS	20.7	DIS	**0.00375**		<0.010		9/10	---	yes
DC 15.5 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002069	2/26/2009	0.00179	DIS	11.8	DIS	**0.00652**		<0.010		9/10	---	yes
DC 15.5 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002075	5/5/2009	0.0026	DIS	17.5	DIS	**0.00453**		<0.010		9/10	---	yes
DC 15.5 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002152	11/8/2010	0.00332	DIS	22.7	TRC	**0.00472**		0.011		9/10	---	yes
DC 15.5 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002179	8/22/2011	0.00266	DIS	17.9	TRC	**0.00494**		<0.010		9/10	---	yes
DC 15.5 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002191	11/29/2011	0.00236	DIS	15.8	TRC	**0.00335**		<0.010		9/10	---	yes
DC 15.5 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002215	3/1/2012	0.00247	DIS	16.6	TRC	**0.00425**		<0.010		9/10	---	yes
DC 15.5 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002246	5/9/2012	0.00271	DIS	18.3	TRC	**0.0029**		0.0036 j		9/10	---	yes
DC 15.5 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002003	8/5/2008	0.00167	DIS	14	DIS	**0.00871**		<0.010		9/10	---	yes
DC 15.5 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002032	11/12/2008	0.00233	DIS	20.7	DIS	**0.00375**		<0.010		9/10	---	yes
DC 15.5 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002069	2/26/2009	0.00144	DIS	11.8	DIS	**0.00652**		<0.010		9/10	---	yes
DC 15.5 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002075	5/5/2009	0.00202	DIS	17.5	DIS	**0.00453**		<0.010		9/10	---	yes
DC 15.5 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002152	11/8/2010	0.00252	DIS	22.7	TRC	**0.00472**		0.011		9/10	---	yes
DC 15.5 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002179	8/22/2011	0.00206	DIS	17.9	TRC	**0.00494**		<0.010		9/10	---	yes
DC 15.5 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002191	11/29/2011	0.00185	DIS	15.8	TRC	**0.00335**		<0.010		9/10	---	yes
DC 15.5 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002215	3/1/2012	0.00193	DIS	16.6	TRC	**0.00425**		<0.010		9/10	---	yes
DC 15.5 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002246	5/9/2012	0.0021	DIS	18.3	TRC	**0.0029**		0.0036 j		9/10	---	yes
DC 15.5 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002003	8/5/2008	6 (min)	---	---	---				**5.02**	3/10	---	yes
DC 15.5 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002032	11/12/2008	6 (min)	---	---	---				**1.76**	3/10	---	yes
DC 15.5 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1003052	8/13/2012	6 (min)	---	---	---				**4.26**	3/10	---	yes
DC 15.5 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002003	8/5/2008	6 (min)	---	---	---				**5.02**	3/10	---	yes
DC 15.5 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002032	11/12/2008	6 (min)	---	---	---				**1.76**	3/10	---	yes
DC 15.5 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1003052	8/13/2012	6 (min)	---	---	---				**4.26**	3/10	---	yes
DC 15.5 C	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002003	8/5/2008	0.00028	DIS	14	DIS	<0.00300		<0.00300		---	2/10	uncertain
DC 15.5 C	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002032	11/12/2008	0.00044	DIS	20.7	DIS	<0.00300		<0.00300		---	2/10	uncertain
DC 15.5 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002003	8/5/2008	0.00001	DIS	---	---	<0.00020	<0.00020			---	2/2	uncertain
DC 15.5 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002032	11/12/2008	0.00001	DIS	---	---	<0.00020	<0.00020			---	2/2	uncertain
DC 15.5 C	Mercury, Low Level	mg/L from ng/l	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002075	5/5/2009	0.00001	DIS	---	---	**12**				1/2	---	yes
DC 15.5 C	Nickel	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002003	8/5/2008	0.00986	DIS	14	DIS	<0.010		<0.010		---	1/10	uncertain
DC 15.5 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002003	8/5/2008	0.002	TRC	---	---			<0.00300		---	2/10	uncertain
DC 15.5 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002032	11/12/2008	0.002	TRC	---	---			<0.00300		---	2/10	uncertain
DC 15.5 C	Silver	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002069	2/26/2009	0.000081	DIS	11.8	DIS	<0.000100		<0.0050		---	1/10	uncertain
DC 15.2 C	Cadmium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001191	2/15/2005	0.00019	DIS	20.7	Total	<0.00020	<0.00020	<0.00020		---	1/3	uncertain
DC 15.2 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001191	2/15/2005	0.00305	DIS	20.7	Total	**0.0150**	0.0170	0.0160		1/3	---	yes
DC 15.2 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001191	2/15/2005	0.00233	DIS	20.7	Total	**0.0150**	0.0170	0.0160		1/3	2/3	yes
DC 15.2 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001210	5/9/2005	0.00694	DIS	74.2	Total	<0.0100	<0.0100	<0.0100		1/3	2/3	uncertain
DC 15.2 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001226	8/10/2005	0.00715	DIS	76.8	Total	<0.0100	<0.011	<0.0100		1/3	2/3	uncertain
DC 15.2 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001226	8/10/2005	6 (min)	---	---	---				**4.39**	1/3	---	yes
DC 15.2 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001226	8/10/2005	6 (min)	---	---	---				**4.39**	1/3	---	yes
DC 15.2 C	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001191	2/15/2005	0.00044	DIS	20.7	Total	<0.00300	<0.00300	<0.00300		---	3/3	uncertain
DC 15.2 C	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001210	5/9/2005	0.00182	DIS	74.2	Total	<0.00300	<0.00300	<0.00300		---	3/3	uncertain
DC 15.2 C	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001226	8/10/2005	0.00189	DIS	76.8	Total	<0.00300	<0.00300	<0.00300		---	3/3	uncertain
DC 15.2 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001191	2/15/2005	0.00001	DIS	---	---	<0.00020	<0.00020			---	3/3	uncertain
DC 15.2 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001210	5/9/2005	0.00001	DIS	---	---	<0.00020	<0.00020			---	3/3	uncertain
DC 15.2 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001226	8/10/2005	0.00001	DIS	---	---	<0.0002	<0.0002			---	3/3	uncertain
DC 15.2 C	pH (Field)	s.u.	AZ Agricultural Livestock Watering	RESE-1001226	8/10/2005	6.5-9	---	---	---				**6.3**	1/3	---	yes

TABLE 7. SUMMARY OF EXCEEDANCES OF APPLICABLE WATER QUALITY STANDARDS IN SURFACE WATER AND SPRINGS
UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA, RESOLUTION COPPER MINING LLC, PINAL COUNTY, ARIZONA

Station Name	Parameter	Units[a]	Regulatory Standard	Sample ID	Date	Standards		Hardness Results[c]		Results[c]				Number of Exceedances Over Total Measurements	Number of Non-Detects with Detection Limits Greater Than the Standard Over Total Measurements	Exceedance
						Standard	Filter Fraction[b]	Hardness Value	Hardness Filter	Dissolved	Total	Total Recoverable	Field			
DC 15.2 C	pH (Field)	s.u.	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001226	8/10/2005	6.5-9	---	---	---				**6.3**	1/3	---	yes
DC 15.2 C	pH (Field)	s.u.	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001226	8/10/2005	6.5-9	---	---	---				**6.3**	1/3	---	yes
DC 15.2 C	pH (Field)	s.u.	AZ Full Body Contact	RESE-1001226	8/10/2005	6.5-9	---	---	---				**6.3**	1/3	---	yes
DC 15.2 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001191	2/15/2005	0.002	TRC	---	---		<0.00300	<0.00300		---	3/3	uncertain
DC 15.2 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001210	5/9/2005	0.002	TRC	---	---		<0.00300	<0.00300		---	3/3	uncertain
DC 15.2 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001226	8/10/2005	0.002	TRC	---	---		<0.00300	<0.00300		---	3/3	uncertain
DC 15.2 C	Thallium	mg/L	AZ Fish Consumption	RESE-1001191	2/15/2005	0.001	TRC	---	---	<0.00200	<0.00200			---	3/3	uncertain
DC 15.2 C	Thallium	mg/L	AZ Fish Consumption	RESE-1001210	5/9/2005	0.001	TRC	---	---	<0.00200	<0.00200			---	3/3	uncertain
DC 15.2 C	Thallium	mg/L	AZ Fish Consumption	RESE-1001226	8/10/2005	0.001	TRC	---	---	<0.00200	<0.00200			---	3/3	uncertain
DC 14.7 C	Cadmium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001069	3/5/2004	0.00019	DIS	20.5	Total	<0.00020	<0.00010	<0.00010		---	1/4	uncertain
DC 14.7 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001069	3/5/2004	0.00302	DIS	20.5	Total	**0.0161**	0.0290	0.0251		3/4	---	yes
DC 14.7 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002015	8/27/2008	0.00386	DIS	26.6	Total	**0.0279**	0.0882			3/4	---	yes
DC 14.7 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002127	2/17/2010	0.00354	DIS	24.3	TRC	**0.00625**		<0.010		3/4	---	yes
DC 14.7 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001069	3/5/2004	0.00231	DIS	20.5	Total	**0.0161**	0.0290	0.0251		3/4	---	yes
DC 14.7 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002015	8/27/2008	0.00289	DIS	26.6	Total	**0.0279**	0.0882			3/4	---	yes
DC 14.7 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002127	2/17/2010	0.00267	DIS	24.3	TRC	**0.00625**		<0.010		3/4	---	yes
DC 14.7 C	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001069	3/5/2004	0.00043	DIS	20.5	Total	<0.0030	0.0030	0.0030		---	1/4	uncertain
DC 14.7 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001069	3/5/2004	0.00001	DIS	---	---	<0.00020	<0.00020			---	1/1	uncertain
DC 14.7 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001069	3/5/2004	0.002	TRC	---	---		<0.0030	<0.0030		---	1/4	uncertain
DC 14.7 C	Thallium	mg/L	AZ Fish Consumption	RESE-1001069	3/5/2004	0.001	TRC	---	---	<0.0020	<0.0020			---	1/4	uncertain
DC 13.5 C	Cadmium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001086	5/26/2004	0.00026	DIS	33.7	Total	**0.00100**	<0.00010	<0.00010		1/14	1/14	yes
DC 13.5 C	Cadmium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001190	2/15/2005	0.00019	DIS	20.8	Total	<0.00020	<0.00020	<0.00020		1/14	1/14	uncertain
DC 13.5 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001021	8/27/2003	0.00553	DIS	39	Total	**0.0203**	0.0248	0.0252		5/14	2/14	yes
DC 13.5 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001037	11/5/2003	0.00474	DIS	33.1	Total	**0.0054**	0.0055	0.0064		5/14	2/14	yes
DC 13.5 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001059	2/11/2004	0.00352	DIS	24.1	Total	**0.0041**	0.0061	0.0059		5/14	2/14	yes
DC 13.5 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001190	2/15/2005	0.00306	DIS	20.8	Total	**0.0150**	0.0170	0.0160		5/14	2/14	yes
DC 13.5 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001209	5/9/2005	0.00661	DIS	47.1	Total	<0.0100	<0.0100	<0.0100		5/14	2/14	uncertain
DC 13.5 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001225	8/10/2005	0.00391	DIS	27	Total	<0.0100	<0.013	<0.013		5/14	2/14	uncertain
DC 13.5 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002057	2/19/2009	0.00264	DIS	17.8	DIS	**0.0107**		0.013		5/14	2/14	yes
DC 13.5 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001011	5/30/2003	0.00396	DIS	38.5	Total	**0.0047 j-**	0.0085	0.0076		7/14	2/14	yes
DC 13.5 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001021	8/27/2003	0.00401	DIS	39	Total	**0.0203**	0.0248	0.0252		7/14	2/14	yes
DC 13.5 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001037	11/5/2003	0.00348	DIS	33.1	Total	**0.0054**	0.0055	0.0064		7/14	2/14	yes
DC 13.5 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001059	2/11/2004	0.00265	DIS	24.1	Total	**0.0041**	0.0061	0.0059		7/14	2/14	yes
DC 13.5 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001086	5/26/2004	0.00354	DIS	33.7	Total	**0.0036**	0.0067	0.0045		7/14	2/14	yes
DC 13.5 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001190	2/15/2005	0.00234	DIS	20.8	Total	**0.0150**	0.0170	0.0160		7/14	2/14	yes
DC 13.5 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001209	5/9/2005	0.00471	DIS	47.1	Total	<0.0100	<0.0100	<0.0100		7/14	2/14	uncertain
DC 13.5 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001225	8/10/2005	0.00293	DIS	27	Total	<0.0100	<0.013	<0.013		7/14	2/14	uncertain
DC 13.5 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002057	2/19/2009	0.00205	DIS	17.8	DIS	**0.0107**		0.013		7/14	2/14	yes
DC 13.5 C	Cyanide, Free	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001011	5/30/2003	0.041	TRC	---	---		<0.10			---	1/1	uncertain
DC 13.5 C	Cyanide, Free	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001011	5/30/2003	0.0097	TRC	---	---		<0.10			---	1/1	uncertain
DC 13.5 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002033	11/12/2008	6 (min)	---	---	---				**3.23**	1/14	---	yes
DC 13.5 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002033	11/12/2008	6 (min)	---	---	---				**3.23**	1/14	---	yes
DC 13.5 C	E. Coli	MPN/100ml	AZ Full Body Contact	RESE-1001225	8/10/2005	235	---	---	---		**1600 ge**			1/8	---	yes
DC 13.5 C	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001011	5/30/2003	0.00088	DIS	38.5	Total	<0.0030	<0.0050	<0.0030		---	9/14	uncertain
DC 13.5 C	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001021	8/27/2003	0.00089	DIS	39	Total	<0.0030	<0.0050	<0.0030		---	9/14	uncertain
DC 13.5 C	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001037	11/5/2003	0.00074	DIS	33.1	Total	<0.0030	<0.0050	<0.0030		---	9/14	uncertain
DC 13.5 C	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001059	2/11/2004	0.00052	DIS	24.1	Total	<0.0010	<0.0010	<0.0010		---	9/14	uncertain
DC 13.5 C	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001086	5/26/2004	0.00076	DIS	33.7	Total	<0.0030	<0.0030	<0.0030		---	9/14	uncertain
DC 13.5 C	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001190	2/15/2005	0.00044	DIS	20.8	Total	<0.00300	<0.00300	<0.00300		---	9/14	uncertain
DC 13.5 C	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001209	5/9/2005	0.0011	DIS	47.1	Total	<0.00300	<0.00300	<0.00300		---	9/14	uncertain
DC 13.5 C	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001225	8/10/2005	0.00059	DIS	27	Total	<0.00300	<0.00300	<0.00300		---	9/14	uncertain
DC 13.5 C	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002033	11/12/2008	0.00109	DIS	46.8	DIS	<0.00300		<0.00300		---	9/14	uncertain
DC 13.5 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001011	5/30/2003	0.00001	DIS	---	---	<0.00020	<0.00020			---	10/10	uncertain
DC 13.5 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001021	8/27/2003	0.00001	DIS	---	---	<0.00020	<0.00020			---	10/10	uncertain

TABLE 7. SUMMARY OF EXCEEDANCES OF APPLICABLE WATER QUALITY STANDARDS IN SURFACE WATER AND SPRINGS
UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA, RESOLUTION COPPER MINING LLC, PINAL COUNTY, ARIZONA

Station Name	Parameter	Units[a]	Regulatory Standard	Sample ID	Date	Standards		Hardness Results[c]		Results[c]				Number of Exceedances Over Total Measurements	Number of Non-Detects with Detection Limits Greater Than the Standard Over Total Measurements	Exceedance
						Standard	Filter Fraction[b]	Hardness Value	Hardness Filter	Dissolved	Total	Total Recoverable	Field			
DC 13.5 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001037	11/5/2003	0.00001	DIS	---	---	<0.00020	<0.00020			---	10/10	uncertain
DC 13.5 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001059	2/11/2004	0.00001	DIS	---	---	<0.00020	<0.00020			---	10/10	uncertain
DC 13.5 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001086	5/26/2004	0.00001	DIS	---	---	<0.00020	<0.00020			---	10/10	uncertain
DC 13.5 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001190	2/15/2005	0.00001	DIS	---	---	<0.00020	<0.00020			---	10/10	uncertain
DC 13.5 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001209	5/9/2005	0.00001	DIS	---	---	<0.00020	<0.00020			---	10/10	uncertain
DC 13.5 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001225	8/10/2005	0.00001	DIS	---	---	<0.0002	<0.0002			---	10/10	uncertain
DC 13.5 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002014	8/21/2008	0.00001	DIS	---	---	<0.000064	<0.000064			---	10/10	uncertain
DC 13.5 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002033	11/12/2008	0.00001	DIS	---	---	<0.00020	<0.00020			---	10/10	uncertain
DC 13.5 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001011	5/30/2003	0.002	TRC	---	---		<0.0030	<0.0030		---	9/14	uncertain
DC 13.5 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001021	8/27/2003	0.002	TRC	---	---		<0.0030	<0.0030		---	9/14	uncertain
DC 13.5 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001037	11/5/2003	0.002	TRC	---	---		<0.0030	<0.0030		---	9/14	uncertain
DC 13.5 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001086	5/26/2004	0.002	TRC	---	---		<0.0030	<0.0030		---	9/14	uncertain
DC 13.5 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001190	2/15/2005	0.002	TRC	---	---		<0.00300	<0.00300		---	9/14	uncertain
DC 13.5 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001209	5/9/2005	0.002	TRC	---	---		<0.00300	<0.00300		---	9/14	uncertain
DC 13.5 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001225	8/10/2005	0.002	TRC	---	---		<0.00300	<0.00300		---	9/14	uncertain
DC 13.5 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002014	8/21/2008	0.002	TRC	---	---		<0.005			---	9/14	uncertain
DC 13.5 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002033	11/12/2008	0.002	TRC	---	---			<0.00300		---	9/14	uncertain
DC 13.5 C	Thallium	mg/L	AZ Fish Consumption	RESE-1001011	5/30/2003	0.001	TRC	---	---	<0.0020		<0.0020		---	7/14	uncertain
DC 13.5 C	Thallium	mg/L	AZ Fish Consumption	RESE-1001021	8/27/2003	0.001	TRC	---	---	<0.0020	<0.0020			---	7/14	uncertain
DC 13.5 C	Thallium	mg/L	AZ Fish Consumption	RESE-1001037	11/5/2003	0.001	TRC	---	---	<0.0020	<0.0020			---	7/14	uncertain
DC 13.5 C	Thallium	mg/L	AZ Fish Consumption	RESE-1001086	5/26/2004	0.001	TRC	---	---	<0.0020	<0.0020			---	7/14	uncertain
DC 13.5 C	Thallium	mg/L	AZ Fish Consumption	RESE-1001190	2/15/2005	0.001	TRC	---	---	<0.00200	<0.00200			---	7/14	uncertain
DC 13.5 C	Thallium	mg/L	AZ Fish Consumption	RESE-1001209	5/9/2005	0.001	TRC	---	---	<0.00200	<0.00200			---	7/14	uncertain
DC 13.5 C	Thallium	mg/L	AZ Fish Consumption	RESE-1001225	8/10/2005	0.001	TRC	---	---	<0.00200	<0.00200			---	7/14	uncertain
DC 10.9 C	Cadmium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001036	11/5/2003	0.00009	DIS	7.54	Total	<0.00010	<0.00010	<0.00010		---	2/11	uncertain
DC 10.9 C	Cadmium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001189	2/15/2005	0.00018	DIS	19.8	Total	<0.00020	<0.00020	<0.00020		---	2/11	uncertain
DC 10.9 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001004	5/16/2003	0.00383	DIS	26.4	Total	**0.0061**	0.0089	0.0086		5/11	2/11	yes
DC 10.9 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001036	11/5/2003	0.00118	DIS	7.54	Total	**0.0063**	0.0090	0.0089		5/11	2/11	yes
DC 10.9 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001060	2/11/2004	0.00434	DIS	30.1	Total	**0.0045**	0.0078	0.0074		5/11	2/11	yes
DC 10.9 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001189	2/15/2005	0.00292	DIS	19.8	Total	**0.0150**	0.0170	0.0170		5/11	2/11	yes
DC 10.9 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001208	5/9/2005	0.0039	DIS	26.9	Total	<0.0100	<0.0100	<0.0100		5/11	2/11	uncertain
DC 10.9 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001224	8/10/2005	0.00489	DIS	34.2	Total	<0.0100	<0.017	<0.017		5/11	2/11	uncertain
DC 10.9 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002224	4/27/2012	0.00385	DIS	26.5	TRC	**0.0039**		0.005		5/11	2/11	yes
DC 10.9 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001004	5/16/2003	0.00287	DIS	26.4	Total	**0.0061**	0.0089	0.0086		5/11	3/11	yes
DC 10.9 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001036	11/5/2003	0.00098	DIS	7.54	Total	**0.0063**	0.0090	0.0089		5/11	3/11	yes
DC 10.9 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001060	2/11/2004	0.00321	DIS	30.1	Total	**0.0045**	0.0078	0.0074		5/11	3/11	yes
DC 10.9 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001091	5/27/2004	0.00265	DIS	24	Total	<0.0030	0.0088	0.0061		5/11	3/11	uncertain
DC 10.9 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001189	2/15/2005	0.00224	DIS	19.8	Total	**0.0150**	0.0170	0.0170		5/11	3/11	yes
DC 10.9 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001208	5/9/2005	0.00292	DIS	26.9	Total	<0.0100	<0.0100	<0.0100		5/11	3/11	uncertain
DC 10.9 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001224	8/10/2005	0.00358	DIS	34.2	Total	<0.0100	<0.017	<0.017		5/11	3/11	uncertain
DC 10.9 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002224	4/27/2012	0.00288	DIS	26.5	TRC	**0.0039**		0.005		5/11	3/11	yes
DC 10.9 C	Cyanide, Free	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001004	5/16/2003	0.041	TRC	---	---		<0.10			---	1/1	uncertain
DC 10.9 C	Cyanide, Free	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001004	5/16/2003	0.0097	TRC	---	---		<0.10			---	1/1	uncertain
DC 10.9 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001004	5/16/2003	6 (min)	---	---	---				**4.45**	6/12	---	yes
DC 10.9 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001020	8/27/2003	6 (min)	---	---	---				**1.05**	6/12	---	yes
DC 10.9 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001091	5/27/2004	6 (min)	---	---	---				**5.85**	6/12	---	yes
DC 10.9 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001099	8/11/2004	6 (min)	---	---	---				**0.43**	6/12	---	yes
DC 10.9 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001169	11/5/2004	6 (min)	---	---	---				**4.07**	6/12	---	yes
DC 10.9 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	z	8/6/2013	6 (min)	---	---	---				**1.46**	6/12	---	yes
DC 10.9 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001004	5/16/2003	6 (min)	---	---	---				**4.45**	6/12	---	yes
DC 10.9 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001020	8/27/2003	6 (min)	---	---	---				**1.05**	6/12	---	yes
DC 10.9 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001091	5/27/2004	6 (min)	---	---	---				**5.85**	6/12	---	yes
DC 10.9 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001099	8/11/2004	6 (min)	---	---	---				**0.43**	6/12	---	yes
DC 10.9 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001169	11/5/2004	6 (min)	---	---	---				**4.07**	6/12	---	yes

TABLE 7. SUMMARY OF EXCEEDANCES OF APPLICABLE WATER QUALITY STANDARDS IN SURFACE WATER AND SPRINGS
UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA, RESOLUTION COPPER MINING LLC, PINAL COUNTY, ARIZONA

Station Name	Parameter	Units[a]	Regulatory Standard	Sample ID	Date	Standards		Hardness Results[c]		Results[c]				Number of Exceedances Over Total Measurements	Number of Non-Detects with Detection Limits Greater Than the Standard Over Total Measurements	Exceedance
						Standard	Filter Fraction[b]	Hardness Value	Hardness Filter	Dissolved	Total	Total Recoverable	Field			
DC 10.9 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	z	8/6/2013	6 (min)	---	---	---				**1.46**	6/12	---	yes
DC 10.9 C	E. Coli	MPN/100ml	AZ Full Body Contact	RESE-1001099	8/11/2004	235	---	---	---		**1600 ge**			2/10	---	yes
DC 10.9 C	E. Coli	MPN/100ml	AZ Full Body Contact	RESE-1001224	8/10/2005	235	---	---	---		**900**			2/10	---	yes
DC 10.9 C	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001004	5/16/2003	0.00058	DIS	26.4	Total	<0.0030	<0.0050	<0.0030		---	10/11	uncertain
DC 10.9 C	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001020	8/27/2003	0.00151	DIS	62.9	Total	<0.0030	<0.0050	<0.0030		---	10/11	uncertain
DC 10.9 C	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001036	11/5/2003	0.00014	DIS	7.54	Total	<0.0030	<0.0050	<0.0030		---	10/11	uncertain
DC 10.9 C	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001060	2/11/2004	0.00067	DIS	30.1	Total	<0.0010	<0.0010	<0.0010		---	10/11	uncertain
DC 10.9 C	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001091	5/27/2004	0.00052	DIS	24	Total	<0.0030	<0.0030	<0.0030		---	10/11	uncertain
DC 10.9 C	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001099	8/11/2004	0.0007	DIS	31.5	Total	<0.0030	<0.0030	<0.0030		---	10/11	uncertain
DC 10.9 C	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001169	11/5/2004	0.00113	DIS	48.3	Total	<0.0030	<0.0030	<0.0030		---	10/11	uncertain
DC 10.9 C	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001189	2/15/2005	0.00042	DIS	19.8	Total	<0.00300	<0.00300	<0.00300		---	10/11	uncertain
DC 10.9 C	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001208	5/9/2005	0.00059	DIS	26.9	Total	<0.00300	<0.00300	<0.00300		---	10/11	uncertain
DC 10.9 C	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001224	8/10/2005	0.00077	DIS	34.2	Total	<0.00300	<0.00300	<0.00300		---	10/11	uncertain
DC 10.9 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001004	5/16/2003	0.00001	DIS	---	---	<0.00020	<0.00020			---	10/10	uncertain
DC 10.9 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001020	8/27/2003	0.00001	DIS	---	---	<0.00020	<0.00020			---	10/10	uncertain
DC 10.9 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001036	11/5/2003	0.00001	DIS	---	---	<0.00020	<0.00020			---	10/10	uncertain
DC 10.9 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001060	2/11/2004	0.00001	DIS	---	---	<0.00020	<0.00020			---	10/10	uncertain
DC 10.9 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001091	5/27/2004	0.00001	DIS	---	---	<0.00020	<0.00020			---	10/10	uncertain
DC 10.9 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001099	8/11/2004	0.00001	DIS	---	---	<0.00020	<0.00020			---	10/10	uncertain
DC 10.9 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001169	11/5/2004	0.00001	DIS	---	---	<0.00020	<0.00020			---	10/10	uncertain
DC 10.9 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001189	2/15/2005	0.00001	DIS	---	---	<0.00020	<0.00020			---	10/10	uncertain
DC 10.9 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001208	5/9/2005	0.00001	DIS	---	---	<0.00020	<0.00020			---	10/10	uncertain
DC 10.9 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001224	8/10/2005	0.00001	DIS	---	---	<0.0002	<0.0002			---	10/10	uncertain
DC 10.9 C	Nickel	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001036	11/5/2003	0.00584	DIS	7.54	Total	<0.010		<0.010		---	1/11	uncertain
DC 10.9 C	pH (Field)	s.u.	AZ Agricultural Livestock Watering	RESE-1001020	8/27/2003	6.5-9	---	---	---				**5.9**	1/13	---	yes
DC 10.9 C	pH (Field)	s.u.	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001020	8/27/2003	6.5-9	---	---	---				**5.9**	1/13	---	yes
DC 10.9 C	pH (Field)	s.u.	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001020	8/27/2003	6.5-9	---	---	---				**5.9**	1/13	---	yes
DC 10.9 C	pH (Field)	s.u.	AZ Full Body Contact	RESE-1001020	8/27/2003	6.5-9	---	---	---				**5.9**	1/13	---	yes
DC 10.9 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001004	5/16/2003	0.002	TRC	---	---		<0.0030	<0.0030		---	9/11	uncertain
DC 10.9 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001020	8/27/2003	0.002	TRC	---	---		<0.0030	<0.0030		---	9/11	uncertain
DC 10.9 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001036	11/5/2003	0.002	TRC	---	---		<0.0030	<0.0030		---	9/11	uncertain
DC 10.9 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001091	5/27/2004	0.002	TRC	---	---		<0.0030	<0.0030		---	9/11	uncertain
DC 10.9 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001099	8/11/2004	0.002	TRC	---	---		<0.0030	<0.0030		---	9/11	uncertain
DC 10.9 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001169	11/5/2004	0.002	TRC	---	---		<0.0030	<0.0030		---	9/11	uncertain
DC 10.9 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001189	2/15/2005	0.002	TRC	---	---		<0.00300	<0.00300		---	9/11	uncertain
DC 10.9 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001208	5/9/2005	0.002	TRC	---	---		<0.00300	<0.00300		---	9/11	uncertain
DC 10.9 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001224	8/10/2005	0.002	TRC	---	---		<0.00300	<0.00300		---	9/11	uncertain
DC 10.9 C	Silver	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001036	11/5/2003	0.000038	DIS	7.54	Total	<0.00010	<0.00010	<0.00010		---	1/11	uncertain
DC 10.9 C	Thallium	mg/L	AZ Fish Consumption	RESE-1001004	5/16/2003	0.001	TRC	---	---	<0.0020		<0.0020		---	9/11	uncertain
DC 10.9 C	Thallium	mg/L	AZ Fish Consumption	RESE-1001020	8/27/2003	0.001	TRC	---	---	<0.0020	<0.0020			---	9/11	uncertain
DC 10.9 C	Thallium	mg/L	AZ Fish Consumption	RESE-1001036	11/5/2003	0.001	TRC	---	---	<0.0020	<0.0020			---	9/11	uncertain
DC 10.9 C	Thallium	mg/L	AZ Fish Consumption	RESE-1001091	5/27/2004	0.001	TRC	---	---	<0.0020	<0.0020			---	9/11	uncertain
DC 10.9 C	Thallium	mg/L	AZ Fish Consumption	RESE-1001099	8/11/2004	0.001	TRC	---	---	<0.0020	<0.0020			---	9/11	uncertain
DC 10.9 C	Thallium	mg/L	AZ Fish Consumption	RESE-1001169	11/5/2004	0.001	TRC	---	---	<0.0020	<0.0020			---	9/11	uncertain
DC 10.9 C	Thallium	mg/L	AZ Fish Consumption	RESE-1001189	2/15/2005	0.001	TRC	---	---	<0.00200	<0.00200			---	9/11	uncertain
DC 10.9 C	Thallium	mg/L	AZ Fish Consumption	RESE-1001208	5/9/2005	0.001	TRC	---	---	<0.00200	<0.00200			---	9/11	uncertain
DC 10.9 C	Thallium	mg/L	AZ Fish Consumption	RESE-1001224	8/10/2005	0.001	TRC	---	---	<0.00200	<0.00200			---	9/11	uncertain
RR 1.5 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002065	2/26/2009	0.00305	DIS	20.7	DIS	**0.00896**		0.010		5/10	---	yes
RR 1.5 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002128	2/18/2010	0.00496	DIS	34.7	TRC	**0.00665**		<0.010		5/10	---	yes
RR 1.5 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002143	11/2/2010	0.00536	DIS	37.7	TRC	**0.00840**		<0.010		5/10	---	yes
RR 1.5 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002202	12/9/2011	0.00349	DIS	23.9	TRC	**0.00776**		<0.010		5/10	---	yes
RR 1.5 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1003061	8/27/2012	0.00469	DIS	32.7	TRC	**0.00889**		0.011		5/10	---	yes
RR 1.5 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002065	2/26/2009	0.00233	DIS	20.7	DIS	**0.00896**		0.010		5/10	---	yes
RR 1.5 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002128	2/18/2010	0.00363	DIS	34.7	TRC	**0.00665**		<0.010		5/10	---	yes

TABLE 7. SUMMARY OF EXCEEDANCES OF APPLICABLE WATER QUALITY STANDARDS IN SURFACE WATER AND SPRINGS
UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA, RESOLUTION COPPER MINING LLC, PINAL COUNTY, ARIZONA

Station Name	Parameter	Units[a]	Regulatory Standard	Sample ID	Date	Standards		Hardness Results[c]		Results[c]				Number of Exceedances Over Total Measurements	Number of Non-Detects with Detection Limits Greater Than the Standard Over Total Measurements	Exceedance
						Standard	Filter Fraction[b]	Hardness Value	Hardness Filter	Dissolved	Total	Total Recoverable	Field			
RR 1.5 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002143	11/2/2010	0.00389	DIS	37.7	TRC	**0.00840**		<0.010		5/10	---	yes
RR 1.5 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002202	12/9/2011	0.00264	DIS	23.9	TRC	**0.00776**		<0.010		5/10	---	yes
RR 1.5 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1003061	8/27/2012	0.00345	DIS	32.7	TRC	**0.00889**		0.011		5/10	---	yes
RR 1.5 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002029	11/5/2008	6 (min)	---	---	---				**4.38**	3/10	---	yes
RR 1.5 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002100	5/21/2009	6 (min)	---	---	---				**4.00**	3/10	---	yes
RR 1.5 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002225	4/27/2012	6 (min)	---	---	---				**5.70**	3/10	---	yes
RR 1.5 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002029	11/5/2008	6 (min)	---	---	---				**4.38**	3/10	---	yes
RR 1.5 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002100	5/21/2009	6 (min)	---	---	---				**4.00**	3/10	---	yes
RR 1.5 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002225	4/27/2012	6 (min)	---	---	---				**5.70**	3/10	---	yes
RR 1.5 C	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002029	11/5/2008	0.00126	DIS	53.3	DIS	<0.00300		<0.00300		---	1/10	uncertain
RR 1.5 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002012	8/19/2008	0.00001	DIS	---	---	<0.000064	<0.000064			---	2/2	uncertain
RR 1.5 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002029	11/5/2008	0.00001	DIS	---	---	<0.00020	<0.00020			---	2/2	uncertain
RR 1.5 C	pH (Field)	s.u.	AZ Agricultural Livestock Watering	RESE-1002012	8/19/2008	6.5-9	---	---	---				**9.67**	2/11	---	yes
RR 1.5 C	pH (Field)	s.u.	AZ Agricultural Livestock Watering	RESE-1002100	5/21/2009	6.5-9	---	---	---				**6.15**	2/11	---	yes
RR 1.5 C	pH (Field)	s.u.	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002012	8/19/2008	6.5-9	---	---	---				**9.67**	2/11	---	yes
RR 1.5 C	pH (Field)	s.u.	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002100	5/21/2009	6.5-9	---	---	---				**6.15**	2/11	---	yes
RR 1.5 C	pH (Field)	s.u.	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002012	8/19/2008	6.5-9	---	---	---				**9.67**	2/11	---	yes
RR 1.5 C	pH (Field)	s.u.	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002100	5/21/2009	6.5-9	---	---	---				**6.15**	2/11	---	yes
RR 1.5 C	pH (Field)	s.u.	AZ Full Body Contact	RESE-1002012	8/19/2008	6.5-9	---	---	---				**9.67**	2/11	---	yes
RR 1.5 C	pH (Field)	s.u.	AZ Full Body Contact	RESE-1002100	5/21/2009	6.5-9	---	---	---				**6.15**	2/11	---	yes
RR 1.5 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002029	11/5/2008	0.002	TRC	---	---			<0.00300		---	1/10	uncertain
DC 8.8 C	Cadmium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001062	2/17/2004	0.0003	DIS	41.3	Total	**0.00036**	<0.00010	<0.00010		1/11	1/11	yes
DC 8.8 C	Cadmium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001197	2/25/2005	0.00019	DIS	20.4	Total	<0.00020	<0.00020	<0.00020		1/11	1/11	uncertain
DC 8.8 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001197	2/25/2005	0.00301	DIS	20.4	Total	**0.0130**	0.0150	0.0140		1/11	2/11	yes
DC 8.8 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001211	5/11/2005	0.00787	DIS	56.7	Total	<0.0100	<0.0100	<0.0100		1/11	2/11	uncertain
DC 8.8 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001228	8/16/2005	0.0049	DIS	34.3	Total	<0.0100	0.012	<0.0100		1/11	2/11	uncertain
DC 8.8 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001174	11/16/2004	0.00911	DIS	102	Total	<0.010	<0.010	<0.010		1/11	3/11	uncertain
DC 8.8 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001197	2/25/2005	0.0023	DIS	20.4	Total	**0.0130**	0.0150	0.0140		1/11	3/11	yes
DC 8.8 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001211	5/11/2005	0.00551	DIS	56.7	Total	<0.0100	<0.0100	<0.0100		1/11	3/11	uncertain
DC 8.8 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001228	8/16/2005	0.00359	DIS	34.3	Total	<0.0100	0.012	<0.0100		1/11	3/11	uncertain
DC 8.8 C	Cyanide, Free	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001005	5/20/2003	0.041	TRC	---	---		<0.10			---	1/1	uncertain
DC 8.8 C	Cyanide, Free	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001005	5/20/2003	0.0097	TRC	---	---		<0.10			---	1/1	uncertain
DC 8.8 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001018	8/21/2003	6 (min)	---	---	---				**5.05**	4/13	---	yes
DC 8.8 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001151	8/16/2004	6 (min)	---	---	---				**3.86**	4/13	---	yes
DC 8.8 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	z	6/14/2013	6 (min)	---	---	---				**2.82**	4/13	---	yes
DC 8.8 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	z	8/5/2013	6 (min)	---	---	---				**1.94**	4/13	---	yes
DC 8.8 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001018	8/21/2003	6 (min)	---	---	---				**5.05**	4/13	---	yes
DC 8.8 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001151	8/16/2004	6 (min)	---	---	---				**3.86**	4/13	---	yes
DC 8.8 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	z	6/14/2013	6 (min)	---	---	---				**2.82**	4/13	---	yes
DC 8.8 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	z	8/5/2013	6 (min)	---	---	---				**1.94**	4/13	---	yes
DC 8.8 C	E. Coli	MPN/100ml	AZ Full Body Contact	RESE-1001042	11/12/2003	235	---	---	---		**900**			1/10	---	yes
DC 8.8 C	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001005	5/20/2003	0.00183	DIS	74.7	Total	<0.0030	<0.0050	<0.0030		---	10/11	uncertain
DC 8.8 C	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001018	8/21/2003	0.00263	DIS	104	Total	<0.0030	<0.0050	<0.0030		---	10/11	uncertain
DC 8.8 C	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001042	11/12/2003	0.00242	DIS	96.5	Total	<0.0030	<0.0050	<0.0030		---	10/11	uncertain
DC 8.8 C	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001062	2/17/2004	0.00095	DIS	41.3	Total	<0.0010	<0.0010	<0.0010		---	10/11	uncertain
DC 8.8 C	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001078	5/21/2004	0.0018	DIS	73.7	Total	<0.0030	<0.0030	<0.0030		---	10/11	uncertain
DC 8.8 C	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001151	8/16/2004	0.00271	DIS	107	Total	<0.0030	<0.0030	<0.0030		---	10/11	uncertain
DC 8.8 C	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001174	11/16/2004	0.00257	DIS	102	Total	<0.0030	<0.0030	<0.0030		---	10/11	uncertain
DC 8.8 C	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001197	2/25/2005	0.00043	DIS	20.4	Total	<0.00300	<0.00300	<0.00300		---	10/11	uncertain
DC 8.8 C	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001211	5/11/2005	0.00135	DIS	56.7	Total	<0.00300	<0.00300	<0.00300		---	10/11	uncertain
DC 8.8 C	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001228	8/16/2005	0.00077	DIS	34.3	Total	<0.00300	<0.00300	<0.00300		---	10/11	uncertain
DC 8.8 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001005	5/20/2003	0.00001	DIS	---	---	<0.00020	<0.00020			---	10/10	uncertain
DC 8.8 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001018	8/21/2003	0.00001	DIS	---	---	<0.00020	<0.00020			---	10/10	uncertain
DC 8.8 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001042	11/12/2003	0.00001	DIS	---	---	<0.00020	<0.00020			---	10/10	uncertain

TABLE 7. SUMMARY OF EXCEEDANCES OF APPLICABLE WATER QUALITY STANDARDS IN SURFACE WATER AND SPRINGS
UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA, RESOLUTION COPPER MINING LLC, PINAL COUNTY, ARIZONA

Station Name	Parameter	Units[a]	Regulatory Standard	Sample ID	Date	Standards		Hardness Results[c]		Results[c]				Number of Exceedances Over Total Measurements	Number of Non-Detects with Detection Limits Greater Than the Standard Over Total Measurements	Exceedance
						Standard	Filter Fraction[b]	Hardness Value	Hardness Filter	Dissolved	Total	Total Recoverable	Field			
DC 8.8 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001062	2/17/2004	0.00001	DIS	---	---	<0.00020	<0.00020			---	10/10	uncertain
DC 8.8 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001078	5/21/2004	0.00001	DIS	---	---	<0.00020	<0.00020			---	10/10	uncertain
DC 8.8 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001151	8/16/2004	0.00001	DIS	---	---	<0.00020	<0.00020			---	10/10	uncertain
DC 8.8 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001174	11/16/2004	0.00001	DIS	---	---	<0.00020	<0.00020			---	10/10	uncertain
DC 8.8 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001197	2/25/2005	0.00001	DIS	---	---	<0.00020	<0.00020			---	10/10	uncertain
DC 8.8 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001211	5/11/2005	0.00001	DIS	---	---	<0.00020	<0.00020			---	10/10	uncertain
DC 8.8 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001228	8/16/2005	0.00001	DIS	---	---	<0.0002	<0.0002			---	10/10	uncertain
DC 8.8 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001005	5/20/2003	0.002	TRC	---	---		<0.0030	<0.0030		---	9/11	uncertain
DC 8.8 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001018	8/21/2003	0.002	TRC	---	---		<0.0060	<0.0030		---	9/11	uncertain
DC 8.8 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001042	11/12/2003	0.002	TRC	---	---		<0.0030	<0.0030		---	9/11	uncertain
DC 8.8 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001078	5/21/2004	0.002	TRC	---	---		<0.0030	<0.0030		---	9/11	uncertain
DC 8.8 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001151	8/16/2004	0.002	TRC	---	---		<0.0030	<0.0030		---	9/11	uncertain
DC 8.8 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001174	11/16/2004	0.002	TRC	---	---		<0.0030	<0.0030		---	9/11	uncertain
DC 8.8 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001197	2/25/2005	0.002	TRC	---	---		<0.00300	<0.00300		---	9/11	uncertain
DC 8.8 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001211	5/11/2005	0.002	TRC	---	---		<0.00300	<0.00300		---	9/11	uncertain
DC 8.8 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001228	8/16/2005	0.002	TRC	---	---		<0.00300	<0.00300		---	9/11	uncertain
DC 8.8 C	Thallium	mg/L	AZ Fish Consumption	RESE-1001005	5/20/2003	0.001	TRC	---	---	<0.0020		<0.0020		---	9/11	uncertain
DC 8.8 C	Thallium	mg/L	AZ Fish Consumption	RESE-1001018	8/21/2003	0.001	TRC	---	---	<0.0020	<0.0020			---	9/11	uncertain
DC 8.8 C	Thallium	mg/L	AZ Fish Consumption	RESE-1001042	11/12/2003	0.001	TRC	---	---	<0.0020	<0.0020			---	9/11	uncertain
DC 8.8 C	Thallium	mg/L	AZ Fish Consumption	RESE-1001078	5/21/2004	0.001	TRC	---	---	<0.0020	<0.0020			---	9/11	uncertain
DC 8.8 C	Thallium	mg/L	AZ Fish Consumption	RESE-1001151	8/16/2004	0.001	TRC	---	---	<0.0020	<0.0020			---	9/11	uncertain
DC 8.8 C	Thallium	mg/L	AZ Fish Consumption	RESE-1001174	11/16/2004	0.001	TRC	---	---	<0.0020	<0.0020			---	9/11	uncertain
DC 8.8 C	Thallium	mg/L	AZ Fish Consumption	RESE-1001197	2/25/2005	0.001	TRC	---	---	<0.00200	<0.00200			---	9/11	uncertain
DC 8.8 C	Thallium	mg/L	AZ Fish Consumption	RESE-1001211	5/11/2005	0.001	TRC	---	---	<0.00200	<0.00200			---	9/11	uncertain
DC 8.8 C	Thallium	mg/L	AZ Fish Consumption	RESE-1001228	8/16/2005	0.001	TRC	---	---	<0.00200	<0.00200			---	9/11	uncertain
H 0.1 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002061	2/24/2009	0.00374	DIS	25.7	DIS	**0.00388**		<0.010		1/10	---	yes
H 0.1 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002061	2/24/2009	0.0028	DIS	25.7	DIS	**0.00388**		<0.010		2/10	---	yes
H 0.1 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1003057	8/15/2012	0.00644	DIS	68	TRC	**0.00664**		<0.010		2/10	---	yes
H 0.1 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002028	11/5/2008	6 (min)	---	---	---				**4.89**	2/9	---	yes
H 0.1 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002229	5/3/2012	6 (min)	---	---	---				**5.25**	2/9	---	yes
H 0.1 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002028	11/5/2008	6 (min)	---	---	---				**4.89**	2/9	---	yes
H 0.1 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002229	5/3/2012	6 (min)	---	---	---				**5.25**	2/9	---	yes
H 0.1 C	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002028	11/5/2008	0.00263	DIS	104	DIS	<0.00300		<0.00300		---	1/10	uncertain
H 0.1 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002011	8/19/2008	0.00001	DIS	---	---	<0.000064	<0.000064			---	2/2	uncertain
H 0.1 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002028	11/5/2008	0.00001	DIS	---	---	<0.00020	<0.00020			---	2/2	uncertain
H 0.1 C	pH (Field)	s.u.	AZ Agricultural Livestock Watering	RESE-1002011	8/19/2008	6.5-9	---	---	---				**9.52**	1/10	---	yes
H 0.1 C	pH (Field)	s.u.	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002011	8/19/2008	6.5-9	---	---	---				**9.52**	1/10	---	yes
H 0.1 C	pH (Field)	s.u.	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002011	8/19/2008	6.5-9	---	---	---				**9.52**	1/10	---	yes
H 0.1 C	pH (Field)	s.u.	AZ Full Body Contact	RESE-1002011	8/19/2008	6.5-9	---	---	---				**9.52**	1/10	---	yes
H 0.1 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002028	11/5/2008	0.002	TRC	---	---			<0.00300		---	1/10	uncertain
DC 8.2 W	Cadmium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1000260	2/19/2008	0.00055	DIS	96	DIS	<0.0010				---	2/18	uncertain
DC 8.2 W	Cadmium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1003023	12/2/2008	0.00055	DIS	98	DIS	<0.0010				---	2/18	uncertain
DC 8.2 W	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001175	11/16/2004	0.00903	DIS	101	Total	<0.010	<0.010	<0.010		---	6/19	uncertain
DC 8.2 W	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001196	2/25/2005	0.00846	DIS	93.6	Total	<0.0100	<0.0100	<0.0100		---	6/19	uncertain
DC 8.2 W	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001212	5/11/2005	0.00839	DIS	92.7	Total	<0.0100	<0.0100	<0.0100		---	6/19	uncertain
DC 8.2 W	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001227	8/16/2005	0.0083	DIS	91.5	Total	<0.0100	<0.0100	<0.0100		---	6/19	uncertain
DC 8.2 W	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1000260	2/19/2008	0.00865	DIS	96	DIS	<0.010				---	6/19	uncertain
DC 8.2 W	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1003023	12/2/2008	0.0088	DIS	98	DIS	<0.010				---	6/19	uncertain
DC 8.2 W	Cyanide, Free	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001006	5/20/2003	0.041	TRC	---	---		<0.10			---	1/1	uncertain
DC 8.2 W	Cyanide, Free	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001006	5/20/2003	0.0097	TRC	---	---		<0.10			---	1/1	uncertain
DC 8.2 W	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001006	5/20/2003	6 (min)	---	---	---				**5.89**	10/17	---	yes
DC 8.2 W	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001017	8/21/2003	6 (min)	---	---	---				**5.89**	10/17	---	yes
DC 8.2 W	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001044	11/12/2003	6 (min)	---	---	---				**5.20**	10/17	---	yes
DC 8.2 W	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001079	5/21/2004	6 (min)	---	---	---				**5.47**	10/17	---	yes

TABLE 7. SUMMARY OF EXCEEDANCES OF APPLICABLE WATER QUALITY STANDARDS IN SURFACE WATER AND SPRINGS
UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA, RESOLUTION COPPER MINING LLC, PINAL COUNTY, ARIZONA

Station Name	Parameter	Units[a]	Regulatory Standard	Sample ID	Date	Standards		Hardness Results[c]		Results[c]				Number of Exceedances Over Total Measurements	Number of Non-Detects with Detection Limits Greater Than the Standard Over Total Measurements	Exceedance
						Standard	Filter Fraction[b]	Hardness Value	Hardness Filter	Dissolved	Total	Total Recoverable	Field			
DC 8.2 W	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001175	11/16/2004	6 (min)	---	---	---				3.70	10/17	---	yes
DC 8.2 W	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002027	11/5/2008	6 (min)	---	---	---				3.10	10/17	---	yes
DC 8.2 W	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002063	2/24/2009	6 (min)	---	---	---				5.30	10/17	---	yes
DC 8.2 W	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002097	5/19/2009	6 (min)	---	---	---				5.33	10/17	---	yes
DC 8.2 W	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002231	5/3/2012	6 (min)	---	---	---				5.52	10/17	---	yes
DC 8.2 W	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	z	6/14/2013	6 (min)	---	---	---				2.68	10/17	---	yes
DC 8.2 W	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001006	5/20/2003	6 (min)	---	---	---				5.89	10/17	---	yes
DC 8.2 W	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001017	8/21/2003	6 (min)	---	---	---				5.89	10/17	---	yes
DC 8.2 W	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001044	11/12/2003	6 (min)	---	---	---				5.20	10/17	---	yes
DC 8.2 W	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001079	5/21/2004	6 (min)	---	---	---				5.47	10/17	---	yes
DC 8.2 W	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001175	11/16/2004	6 (min)	---	---	---				3.70	10/17	---	yes
DC 8.2 W	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002027	11/5/2008	6 (min)	---	---	---				3.10	10/17	---	yes
DC 8.2 W	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002063	2/24/2009	6 (min)	---	---	---				5.30	10/17	---	yes
DC 8.2 W	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002097	5/19/2009	6 (min)	---	---	---				5.33	10/17	---	yes
DC 8.2 W	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002231	5/3/2012	6 (min)	---	---	---				5.52	10/17	---	yes
DC 8.2 W	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	z	6/14/2013	6 (min)	---	---	---				2.68	10/17	---	yes
DC 8.2 W	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001006	5/20/2003	0.0024	DIS	95.7	Total	<0.0030	<0.0050	<0.0030		---	11/18	uncertain
DC 8.2 W	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001017	8/21/2003	0.00249	DIS	99	Total	<0.0030	<0.0050	<0.0030		---	11/18	uncertain
DC 8.2 W	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001044	11/12/2003	0.00245	DIS	97.4	Total	<0.0030	<0.0050	<0.0030		---	11/18	uncertain
DC 8.2 W	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001079	5/21/2004	0.0023	DIS	91.9	Total	<0.0030	<0.0030	<0.0030		---	11/18	uncertain
DC 8.2 W	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001152	8/16/2004	0.00228	DIS	91.4	Total	<0.0030	<0.0030	<0.0030		---	11/18	uncertain
DC 8.2 W	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001175	11/16/2004	0.00254	DIS	101	Total	<0.0030	<0.0030	<0.0030		---	11/18	uncertain
DC 8.2 W	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001196	2/25/2005	0.00234	DIS	93.6	Total	<0.00300	<0.00300	<0.00300		---	11/18	uncertain
DC 8.2 W	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001212	5/11/2005	0.00232	DIS	92.7	Total	<0.00300	<0.00300	<0.00300		---	11/18	uncertain
DC 8.2 W	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001227	8/16/2005	0.00228	DIS	91.5	Total	<0.00300	<0.00300	<0.00300		---	11/18	uncertain
DC 8.2 W	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002004	8/6/2008	0.00221	DIS	88.8	DIS	<0.00300		<0.00300		---	11/18	uncertain
DC 8.2 W	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002027	11/5/2008	0.00228	DIS	91.4	DIS	<0.00300		<0.00300		---	11/18	uncertain
DC 8.2 W	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001006	5/20/2003	0.00001	DIS	---	---	<0.00020	<0.00020			---	14/14	uncertain
DC 8.2 W	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001017	8/21/2003	0.00001	DIS	---	---	<0.00020	<0.00020			---	14/14	uncertain
DC 8.2 W	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001044	11/12/2003	0.00001	DIS	---	---	<0.00020	<0.00020			---	14/14	uncertain
DC 8.2 W	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001063	2/17/2004	0.00001	DIS	---	---	<0.00020	<0.00020			---	14/14	uncertain
DC 8.2 W	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001079	5/21/2004	0.00001	DIS	---	---	<0.00020	<0.00020			---	14/14	uncertain
DC 8.2 W	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001152	8/16/2004	0.00001	DIS	---	---	<0.00020	<0.00020			---	14/14	uncertain
DC 8.2 W	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001175	11/16/2004	0.00001	DIS	---	---	<0.00020	<0.00020			---	14/14	uncertain
DC 8.2 W	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001196	2/25/2005	0.00001	DIS	---	---	<0.00020	<0.00020			---	14/14	uncertain
DC 8.2 W	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001212	5/11/2005	0.00001	DIS	---	---	<0.00020	<0.00020			---	14/14	uncertain
DC 8.2 W	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001227	8/16/2005	0.00001	DIS	---	---	<0.0002	<0.0002			---	14/14	uncertain
DC 8.2 W	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1000260	2/19/2008	0.00001	DIS	---	---	<0.00020				---	14/14	uncertain
DC 8.2 W	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002004	8/6/2008	0.00001	DIS	---	---	<0.00020	<0.00020			---	14/14	uncertain
DC 8.2 W	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002027	11/5/2008	0.00001	DIS	---	---	<0.00020	<0.00020			---	14/14	uncertain
DC 8.2 W	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1003023	12/2/2008	0.00001	DIS	---	---	<0.00020				---	14/14	uncertain
DC 8.2 W	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001006	5/20/2003	0.002	TRC	---	---		<0.0030	<0.0060		---	12/17	uncertain
DC 8.2 W	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001017	8/21/2003	0.002	TRC	---	---		<0.0030	<0.0030		---	12/17	uncertain
DC 8.2 W	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001044	11/12/2003	0.002	TRC	---	---		<0.0030	<0.0030		---	12/17	uncertain
DC 8.2 W	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001079	5/21/2004	0.002	TRC	---	---		<0.0030	<0.0030		---	12/17	uncertain
DC 8.2 W	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001152	8/16/2004	0.002	TRC	---	---		<0.0030	<0.0030		---	12/17	uncertain
DC 8.2 W	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001175	11/16/2004	0.002	TRC	---	---		<0.0030	<0.0030		---	12/17	uncertain
DC 8.2 W	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001196	2/25/2005	0.002	TRC	---	---		<0.00300	<0.00300		---	12/17	uncertain
DC 8.2 W	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001212	5/11/2005	0.002	TRC	---	---		<0.00300	<0.00300		---	12/17	uncertain
DC 8.2 W	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001227	8/16/2005	0.002	TRC	---	---		<0.00300	<0.00300		---	12/17	uncertain
DC 8.2 W	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002004	8/6/2008	0.002	TRC	---	---			<0.00300		---	12/17	uncertain
DC 8.2 W	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002027	11/5/2008	0.002	TRC	---	---			<0.00300		---	12/17	uncertain
DC 8.2 W	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002159	11/10/2010	0.002	TRC	---	---			<0.0038		---	12/17	uncertain
DC 8.2 W	Silver	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1000260	2/19/2008	0.002999	DIS	96	DIS	<0.010				---	1/17	uncertain

TABLE 7. SUMMARY OF EXCEEDANCES OF APPLICABLE WATER QUALITY STANDARDS IN SURFACE WATER AND SPRINGS
UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA, RESOLUTION COPPER MINING LLC, PINAL COUNTY, ARIZONA

Station Name	Parameter	Units[a]	Regulatory Standard	Sample ID	Date	Standards		Hardness Results[c]		Results[c]				Number of Exceedances Over Total Measurements	Number of Non-Detects with Detection Limits Greater Than the Standard Over Total Measurements	Exceedance
						Standard	Filter Fraction[b]	Hardness Value	Hardness Filter	Dissolved	Total	Total Recoverable	Field			
DC 8.2 W	Thallium	mg/L	AZ Fish Consumption	RESE-1001006	5/20/2003	0.001	TRC	---	---	<0.0020		<0.0020		---	9/17	uncertain
DC 8.2 W	Thallium	mg/L	AZ Fish Consumption	RESE-1001017	8/21/2003	0.001	TRC	---	---	<0.0020	<0.0020			---	9/17	uncertain
DC 8.2 W	Thallium	mg/L	AZ Fish Consumption	RESE-1001044	11/12/2003	0.001	TRC	---	---	<0.0020	<0.0020			---	9/17	uncertain
DC 8.2 W	Thallium	mg/L	AZ Fish Consumption	RESE-1001079	5/21/2004	0.001	TRC	---	---	<0.0020	<0.0020			---	9/17	uncertain
DC 8.2 W	Thallium	mg/L	AZ Fish Consumption	RESE-1001152	8/16/2004	0.001	TRC	---	---	<0.0020	<0.0020			---	9/17	uncertain
DC 8.2 W	Thallium	mg/L	AZ Fish Consumption	RESE-1001175	11/16/2004	0.001	TRC	---	---	<0.0020	<0.0020			---	9/17	uncertain
DC 8.2 W	Thallium	mg/L	AZ Fish Consumption	RESE-1001196	2/25/2005	0.001	TRC	---	---	<0.00200	<0.00200			---	9/17	uncertain
DC 8.2 W	Thallium	mg/L	AZ Fish Consumption	RESE-1001212	5/11/2005	0.001	TRC	---	---	<0.00200	<0.00200			---	9/17	uncertain
DC 8.2 W	Thallium	mg/L	AZ Fish Consumption	RESE-1001227	8/16/2005	0.001	TRC	---	---	<0.00200	<0.00200			---	9/17	uncertain
DC 8.1 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002062	2/24/2009	0.00327	DIS	22.3	DIS	**0.00753**		<0.010		1/10	---	yes
DC 8.1 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002062	2/24/2009	0.00248	DIS	22.3	DIS	**0.00753**		<0.010		1/10	---	yes
DC 8.1 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002026	11/5/2008	6 (min)	---	---	---				**4.70**	1/10	---	yes
DC 8.1 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002026	11/5/2008	6 (min)	---	---	---				**4.70**	1/10	---	yes
DC 8.1 C	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002005	8/6/2008	0.00219	DIS	87.9	DIS	<0.00300		<0.00300		---	2/10	uncertain
DC 8.1 C	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002026	11/5/2008	0.00215	DIS	86.4	DIS	<0.00300		<0.00300		---	2/10	uncertain
DC 8.1 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002005	8/6/2008	0.00001	DIS	---	---	<0.00020	<0.00020			---	2/2	uncertain
DC 8.1 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002026	11/5/2008	0.00001	DIS	---	---	<0.00020	<0.00020			---	2/2	uncertain
DC 8.1 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002005	8/6/2008	0.002	TRC	---	---			<0.00300		---	3/10	uncertain
DC 8.1 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002026	11/5/2008	0.002	TRC	---	---			<0.00300		---	3/10	uncertain
DC 8.1 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002160	11/10/2010	0.002	TRC	---	---			<0.0038		---	3/10	uncertain
DC 7.1 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001193	2/16/2005	0.00341	DIS	23.3	Total	**0.0120**	0.0130	0.0120		1/11	1/11	yes
DC 7.1 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001215	5/17/2005	0.0094	DIS	68.4	Total	<0.0100	<0.0100	<0.0100		1/11	1/11	uncertain
DC 7.1 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001193	2/16/2005	0.00258	DIS	23.3	Total	**0.0120**	0.0130	0.0120		1/11	2/11	yes
DC 7.1 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001215	5/17/2005	0.00647	DIS	68.4	Total	<0.0100	<0.0100	<0.0100		1/11	2/11	uncertain
DC 7.1 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001231	9/7/2005	0.00755	DIS	81.9	Total	<0.0100	<0.0100	<0.0100		1/11	2/11	uncertain
DC 7.1 C	Cyanide, Free	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001009	5/29/2003	0.041	TRC	---	---		<0.10			---	1/1	uncertain
DC 7.1 C	Cyanide, Free	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001009	5/29/2003	0.0097	TRC	---	---		<0.10			---	1/1	uncertain
DC 7.1 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	z	6/14/2013	6 (min)	---	---	---				**2.73**	1/12	---	yes
DC 7.1 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	z	6/14/2013	6 (min)	---	---	---				**2.73**	1/12	---	yes
DC 7.1 C	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001009	5/29/2003	0.00268	DIS	106	Total	<0.0030	<0.0050	<0.0030		---	7/11	uncertain
DC 7.1 C	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001034	11/4/2003	0.00287	DIS	113	Total	<0.0030	<0.0050	<0.0030		---	7/11	uncertain
DC 7.1 C	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001075	5/5/2004	0.00167	DIS	68.8	Total	<0.0030	<0.0030	<0.0030		---	7/11	uncertain
DC 7.1 C	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001171	11/12/2004	0.00254	DIS	101	Total	<0.0030	<0.0030	<0.0030		---	7/11	uncertain
DC 7.1 C	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001193	2/16/2005	0.0005	DIS	23.3	Total	<0.00300	<0.00300	<0.00300		---	7/11	uncertain
DC 7.1 C	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001215	5/17/2005	0.00166	DIS	68.4	Total	<0.00300	<0.00300	<0.00300		---	7/11	uncertain
DC 7.1 C	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001231	9/7/2005	0.00202	DIS	81.9	Total	<0.00300	<0.00300	<0.00300		---	7/11	uncertain
DC 7.1 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001009	5/29/2003	0.00001	DIS	---	---	<0.00020	<0.00020			---	9/9	uncertain
DC 7.1 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001034	11/4/2003	0.00001	DIS	---	---	<0.00020	<0.00020			---	9/9	uncertain
DC 7.1 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001065	2/18/2004	0.00001	DIS	---	---	<0.00020	<0.00020			---	9/9	uncertain
DC 7.1 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001075	5/5/2004	0.00001	DIS	---	---	<0.00020	<0.00020			---	9/9	uncertain
DC 7.1 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001156	8/19/2004	0.00001	DIS	---	---	<0.00020	<0.00020			---	9/9	uncertain
DC 7.1 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001171	11/12/2004	0.00001	DIS	---	---	<0.00020	<0.00020			---	9/9	uncertain
DC 7.1 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001193	2/16/2005	0.00001	DIS	---	---	<0.00020	<0.00020			---	9/9	uncertain
DC 7.1 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001215	5/17/2005	0.00001	DIS	---	---	<0.00020	<0.00020			---	9/9	uncertain
DC 7.1 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001231	9/7/2005	0.00001	DIS	---	---	<0.0002	<0.0002			---	9/9	uncertain
DC 7.1 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001009	5/29/2003	0.002	TRC	---	---		<0.0030	<0.0030		---	8/11	uncertain
DC 7.1 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001034	11/4/2003	0.002	TRC	---	---		<0.0030	<0.0030		---	8/11	uncertain
DC 7.1 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001075	5/5/2004	0.002	TRC	---	---		<0.0030	<0.0030		---	8/11	uncertain
DC 7.1 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001156	8/19/2004	0.002	TRC	---	---		<0.0030	<0.0060		---	8/11	uncertain
DC 7.1 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001171	11/12/2004	0.002	TRC	---	---		<0.0030	<0.0030		---	8/11	uncertain
DC 7.1 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001193	2/16/2005	0.002	TRC	---	---		<0.00300	<0.00300		---	8/11	uncertain
DC 7.1 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001215	5/17/2005	0.002	TRC	---	---		<0.00300	<0.00300		---	8/11	uncertain
DC 7.1 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001231	9/7/2005	0.002	TRC	---	---		<0.00300	<0.00300		---	8/11	uncertain
DC 7.1 C	Thallium	mg/L	AZ Fish Consumption	RESE-1001009	5/29/2003	0.001	TRC	---	---	<0.0020		<0.0020		---	8/11	uncertain

TABLE 7. SUMMARY OF EXCEEDANCES OF APPLICABLE WATER QUALITY STANDARDS IN SURFACE WATER AND SPRINGS
UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA, RESOLUTION COPPER MINING LLC, PINAL COUNTY, ARIZONA

Station Name	Parameter	Units[a]	Regulatory Standard	Sample ID	Date	Standards		Hardness Results[c]		Results[c]				Number of Exceedances Over Total Measurements	Number of Non-Detects with Detection Limits Greater Than the Standard Over Total Measurements	Exceedance
						Standard	Filter Fraction[b]	Hardness Value	Hardness Filter	Dissolved	Total	Total Recoverable	Field			
DC 7.1 C	Thallium	mg/L	AZ Fish Consumption	RESE-1001034	11/4/2003	0.001	TRC	---	---	<0.0020	<0.0020			---	8/11	uncertain
DC 7.1 C	Thallium	mg/L	AZ Fish Consumption	RESE-1001075	5/5/2004	0.001	TRC	---	---	<0.0020	<0.0020			---	8/11	uncertain
DC 7.1 C	Thallium	mg/L	AZ Fish Consumption	RESE-1001156	8/19/2004	0.001	TRC	---	---	<0.0020	<0.0020			---	8/11	uncertain
DC 7.1 C	Thallium	mg/L	AZ Fish Consumption	RESE-1001171	11/12/2004	0.001	TRC	---	---	<0.0020	<0.0020			---	8/11	uncertain
DC 7.1 C	Thallium	mg/L	AZ Fish Consumption	RESE-1001193	2/16/2005	0.001	TRC	---	---	<0.00200	<0.00200			---	8/11	uncertain
DC 7.1 C	Thallium	mg/L	AZ Fish Consumption	RESE-1001215	5/17/2005	0.001	TRC	---	---	<0.00200	<0.00200			---	8/11	uncertain
DC 7.1 C	Thallium	mg/L	AZ Fish Consumption	RESE-1001231	9/7/2005	0.001	TRC	---	---	<0.00200	<0.00200			---	8/11	uncertain
DC 6.6 W (DCT 6.6 W)	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001192	2/16/2005	0.00462	DIS	32.2	Total	<0.0100	<0.0100	<0.0100		---	1/11	uncertain
DC 6.6 W (DCT 6.6 W)	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001192	2/16/2005	0.0034	DIS	32.2	Total	<0.0100	<0.0100	<0.0100		1/11	2/11	uncertain
DC 6.6 W (DCT 6.6 W)	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001214	5/17/2005	0.00934	DIS	105	Total	**0.011**	<0.0100	<0.0100		1/11	2/11	yes
DC 6.6 W (DCT 6.6 W)	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001232	9/7/2005	0.00895	DIS	99.9	Total	<0.0100	<0.0100	<0.0100		1/11	2/11	uncertain
DC 6.6 W (DCT 6.6 W)	Cyanide, Free	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001010	5/29/2003	0.041	TRC	---	---		<0.10			---	1/1	uncertain
DC 6.6 W (DCT 6.6 W)	Cyanide, Free	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001010	5/29/2003	0.0097	TRC	---	---		<0.10			---	1/1	uncertain
DC 6.6 W (DCT 6.6 W)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001010	5/29/2003	6 (min)	---	---	---				**5.55**	8/10	---	yes
DC 6.6 W (DCT 6.6 W)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001022	9/3/2003	6 (min)	---	---	---				**3.16**	8/10	---	yes
DC 6.6 W (DCT 6.6 W)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001033	11/4/2003	6 (min)	---	---	---				**0.73**	8/10	---	yes
DC 6.6 W (DCT 6.6 W)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001074	5/5/2004	6 (min)	---	---	---				**5.69**	8/10	---	yes
DC 6.6 W (DCT 6.6 W)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001155	8/19/2004	6 (min)	---	---	---				**1.59**	8/10	---	yes
DC 6.6 W (DCT 6.6 W)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001170	11/12/2004	6 (min)	---	---	---				**4.73**	8/10	---	yes
DC 6.6 W (DCT 6.6 W)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001214	5/17/2005	6 (min)	---	---	---				**2.39**	8/10	---	yes
DC 6.6 W (DCT 6.6 W)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001232	9/7/2005	6 (min)	---	---	---				**2.65**	8/10	---	yes
DC 6.6 W (DCT 6.6 W)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001010	5/29/2003	6 (min)	---	---	---				**5.55**	8/10	---	yes
DC 6.6 W (DCT 6.6 W)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001022	9/3/2003	6 (min)	---	---	---				**3.16**	8/10	---	yes
DC 6.6 W (DCT 6.6 W)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001033	11/4/2003	6 (min)	---	---	---				**0.73**	8/10	---	yes
DC 6.6 W (DCT 6.6 W)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001074	5/5/2004	6 (min)	---	---	---				**5.69**	8/10	---	yes
DC 6.6 W (DCT 6.6 W)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001155	8/19/2004	6 (min)	---	---	---				**1.59**	8/10	---	yes
DC 6.6 W (DCT 6.6 W)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001170	11/12/2004	6 (min)	---	---	---				**4.73**	8/10	---	yes
DC 6.6 W (DCT 6.6 W)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001214	5/17/2005	6 (min)	---	---	---				**2.39**	8/10	---	yes
DC 6.6 W (DCT 6.6 W)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001232	9/7/2005	6 (min)	---	---	---				**2.65**	8/10	---	yes
DC 6.6 W (DCT 6.6 W)	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001010	5/29/2003	0.00287	DIS	113	Total	<0.0030	<0.0050	<0.0030		---	7/11	uncertain
DC 6.6 W (DCT 6.6 W)	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001033	11/4/2003	0.00088	DIS	38.7	Total	<0.0030	<0.0050	<0.0030		---	7/11	uncertain
DC 6.6 W (DCT 6.6 W)	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001074	5/5/2004	0.00271	DIS	107	Total	<0.0030	<0.0030	<0.0030		---	7/11	uncertain
DC 6.6 W (DCT 6.6 W)	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001170	11/12/2004	0.00271	DIS	107	Total	<0.0030	<0.0030	<0.0030		---	7/11	uncertain
DC 6.6 W (DCT 6.6 W)	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001192	2/16/2005	0.00072	DIS	32.2	Total	<0.00300	<0.00300	<0.00300		---	7/11	uncertain
DC 6.6 W (DCT 6.6 W)	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001214	5/17/2005	0.00265	DIS	105	Total	<0.00300	<0.00300	<0.00300		---	7/11	uncertain
DC 6.6 W (DCT 6.6 W)	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001232	9/7/2005	0.00251	DIS	99.9	Total	<0.00300	<0.00300	<0.00300		---	7/11	uncertain
DC 6.6 W (DCT 6.6 W)	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001010	5/29/2003	0.00001	DIS	---	---	<0.00020	<0.00020			---	10/10	uncertain
DC 6.6 W (DCT 6.6 W)	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001022	9/3/2003	0.00001	DIS	---	---	<0.00020	<0.00020			---	10/10	uncertain
DC 6.6 W (DCT 6.6 W)	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001033	11/4/2003	0.00001	DIS	---	---	<0.00020	<0.00020			---	10/10	uncertain
DC 6.6 W (DCT 6.6 W)	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001064	2/18/2004	0.00001	DIS	---	---	<0.00020	<0.00020			---	10/10	uncertain
DC 6.6 W (DCT 6.6 W)	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001074	5/5/2004	0.00001	DIS	---	---	<0.00020	<0.00020			---	10/10	uncertain
DC 6.6 W (DCT 6.6 W)	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001155	8/19/2004	0.00001	DIS	---	---	<0.00020	<0.00020			---	10/10	uncertain
DC 6.6 W (DCT 6.6 W)	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001170	11/12/2004	0.00001	DIS	---	---	<0.00020	<0.00020			---	10/10	uncertain
DC 6.6 W (DCT 6.6 W)	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001192	2/16/2005	0.00001	DIS	---	---	<0.00020	<0.00020			---	10/10	uncertain
DC 6.6 W (DCT 6.6 W)	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001214	5/17/2005	0.00001	DIS	---	---	<0.00020	<0.00020			---	10/10	uncertain
DC 6.6 W (DCT 6.6 W)	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001232	9/7/2005	0.00001	DIS	---	---	<0.0002	<0.0002			---	10/10	uncertain
DC 6.6 W (DCT 6.6 W)	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001010	5/29/2003	0.002	TRC	---	---		<0.0060	<0.0060		---	9/11	uncertain
DC 6.6 W (DCT 6.6 W)	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001022	9/3/2003	0.002	TRC	---	---		<0.0150	<0.0150		---	9/11	uncertain
DC 6.6 W (DCT 6.6 W)	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001033	11/4/2003	0.002	TRC	---	---		<0.0060	<0.0150		---	9/11	uncertain
DC 6.6 W (DCT 6.6 W)	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001074	5/5/2004	0.002	TRC	---	---		<0.0060	<0.0030		---	9/11	uncertain
DC 6.6 W (DCT 6.6 W)	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001155	8/19/2004	0.002	TRC	---	---		<0.0060	<0.0150		---	9/11	uncertain
DC 6.6 W (DCT 6.6 W)	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001170	11/12/2004	0.002	TRC	---	---		<0.0150	<0.0150		---	9/11	uncertain
DC 6.6 W (DCT 6.6 W)	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001192	2/16/2005	0.002	TRC	---	---		<0.00300	<0.00300		---	9/11	uncertain
DC 6.6 W (DCT 6.6 W)	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001214	5/17/2005	0.002	TRC	---	---		<0.00300	<0.00300		---	9/11	uncertain

TABLE 7. SUMMARY OF EXCEEDANCES OF APPLICABLE WATER QUALITY STANDARDS IN SURFACE WATER AND SPRINGS
UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA, RESOLUTION COPPER MINING LLC, PINAL COUNTY, ARIZONA

Station Name	Parameter	Units[a]	Regulatory Standard	Sample ID	Date	Standards		Hardness Results[c]		Results[c]				Number of Exceedances Over Total Measurements	Number of Non-Detects with Detection Limits Greater Than the Standard Over Total Measurements	Exceedance
						Standard	Filter Fraction[b]	Hardness Value	Hardness Filter	Dissolved	Total	Total Recoverable	Field			
DC 6.6 W (DCT 6.6 W)	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001232	9/7/2005	0.002	TRC	---	---		<0.00300	<0.00300		---	9/11	uncertain
DC 6.6 W (DCT 6.6 W)	Thallium	mg/L	AZ Fish Consumption	RESE-1001010	5/29/2003	0.001	TRC	---	---	<0.0020		<0.0020		---	9/11	uncertain
DC 6.6 W (DCT 6.6 W)	Thallium	mg/L	AZ Fish Consumption	RESE-1001022	9/3/2003	0.001	TRC	---	---	<0.0020	<0.0020			---	9/11	uncertain
DC 6.6 W (DCT 6.6 W)	Thallium	mg/L	AZ Fish Consumption	RESE-1001033	11/4/2003	0.001	TRC	---	---	<0.0020	<0.0020			---	9/11	uncertain
DC 6.6 W (DCT 6.6 W)	Thallium	mg/L	AZ Fish Consumption	RESE-1001074	5/5/2004	0.001	TRC	---	---	<0.0020	<0.0020			---	9/11	uncertain
DC 6.6 W (DCT 6.6 W)	Thallium	mg/L	AZ Fish Consumption	RESE-1001155	8/19/2004	0.001	TRC	---	---	<0.0020	<0.0020			---	9/11	uncertain
DC 6.6 W (DCT 6.6 W)	Thallium	mg/L	AZ Fish Consumption	RESE-1001170	11/12/2004	0.001	TRC	---	---	<0.0020	<0.0020			---	9/11	uncertain
DC 6.6 W (DCT 6.6 W)	Thallium	mg/L	AZ Fish Consumption	RESE-1001192	2/16/2005	0.001	TRC	---	---	<0.00200	<0.00200			---	9/11	uncertain
DC 6.6 W (DCT 6.6 W)	Thallium	mg/L	AZ Fish Consumption	RESE-1001214	5/17/2005	0.001	TRC	---	---	<0.00200	<0.00200			---	9/11	uncertain
DC 6.6 W (DCT 6.6 W)	Thallium	mg/L	AZ Fish Consumption	RESE-1001232	9/7/2005	0.001	TRC	---	---	<0.00200	<0.00200			---	9/11	uncertain
DC 6.14 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002056	2/18/2009	0.00271	DIS	18.3	DIS	**0.0117**		0.013		1/10	---	yes
DC 6.14 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002056	2/18/2009	0.0021	DIS	18.3	DIS	**0.0117**		0.013		2/10	---	yes
DC 6.14 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1003082	2/11/2013	0.00435	DIS	43	TRC	**0.00470**		<0.010		2/10	---	yes
DC 6.14 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1003082	2/11/2013	6 (min)	---	---	---				**5.84**	2/10	---	yes
DC 6.14 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1003101	6/14/2013	6 (min)	---	---	---				**3.75**	2/10	---	yes
DC 6.14 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1003082	2/11/2013	6 (min)	---	---	---				**5.84**	2/10	---	yes
DC 6.14 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1003101	6/14/2013	6 (min)	---	---	---				**3.75**	2/10	---	yes
DC 6.14 C	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002037	11/12/2008	0.00211	DIS	85	DIS	<0.00300		<0.00300		---	1/10	uncertain
DC 6.14 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002013	8/20/2008	0.00001	DIS	---	---	<0.000064	<0.000064			---	2/2	uncertain
DC 6.14 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002037	11/12/2008	0.00001	DIS	---	---	<0.00020	<0.00020			---	2/2	uncertain
DC 6.14 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002037	11/12/2008	0.002	TRC	---	---			<0.00300		---	1/10	uncertain
DC 6.1 E	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001177	11/18/2004	0.00934	DIS	105	Total	<0.010	<0.010	<0.010		---	3/14	uncertain
DC 6.1 E	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001217	5/24/2005	0.00956	DIS	108	Total	<0.0100	<0.0100	<0.0100		---	3/14	uncertain
DC 6.1 E	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001230	8/23/2005	0.00987	DIS	112	Total	<0.0100	<0.0100	<0.0100		---	3/14	uncertain
DC 6.1 E	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001177	11/18/2004	6 (min)	---	---	---				**0.0**	1/11	---	yes
DC 6.1 E	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001177	11/18/2004	6 (min)	---	---	---				**0.0**	1/11	---	yes
DC 6.1 E	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001077	5/20/2004	0.00265	DIS	105	Total	<0.0030	<0.0030	<0.0030		---	7/14	uncertain
DC 6.1 E	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001159	8/23/2004	0.0026	DIS	103	Total	<0.0030	<0.0030	<0.0030		---	7/14	uncertain
DC 6.1 E	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001177	11/18/2004	0.00265	DIS	105	Total	<0.0030	<0.0030	<0.0030		---	7/14	uncertain
DC 6.1 E	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001217	5/24/2005	0.00274	DIS	108	Total	<0.00300	<0.00300	<0.00300		---	7/14	uncertain
DC 6.1 E	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001230	8/23/2005	0.00285	DIS	112	Total	<0.00300	<0.00300	<0.00300		---	7/14	uncertain
DC 6.1 E	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002007	8/7/2008	0.00254	DIS	101	DIS	<0.00300		<0.00300		---	7/14	uncertain
DC 6.1 E	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002036	11/6/2008	0.00268	DIS	106	DIS	<0.00300		<0.00300		---	7/14	uncertain
DC 6.1 E	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001077	5/20/2004	0.00001	DIS	---	---	<0.00020	<0.00020			---	8/8	uncertain
DC 6.1 E	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001159	8/23/2004	0.00001	DIS	---	---	<0.00020	<0.00020			---	8/8	uncertain
DC 6.1 E	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001177	11/18/2004	0.00001	DIS	---	---	<0.00020	<0.00020			---	8/8	uncertain
DC 6.1 E	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001199	2/28/2005	0.00001	DIS	---	---	<0.00020	<0.00020			---	8/8	uncertain
DC 6.1 E	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001217	5/24/2005	0.00001	DIS	---	---	<0.00020	<0.00020			---	8/8	uncertain
DC 6.1 E	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001230	8/23/2005	0.00001	DIS	---	---	<0.0002	<0.0002			---	8/8	uncertain
DC 6.1 E	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002007	8/7/2008	0.00001	DIS	---	---	<0.00020	<0.00020			---	8/8	uncertain
DC 6.1 E	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002036	11/6/2008	0.00001	DIS	---	---	<0.00020	<0.00020			---	8/8	uncertain
DC 6.1 E	pH (Field)	s.u.	AZ Agricultural Livestock Watering	RESE-1003055	8/15/2012	6.5-9	---	---	---				**9.02**	1/13	---	yes
DC 6.1 E	pH (Field)	s.u.	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1003055	8/15/2012	6.5-9	---	---	---				**9.02**	1/13	---	yes
DC 6.1 E	pH (Field)	s.u.	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1003055	8/15/2012	6.5-9	---	---	---				**9.02**	1/13	---	yes
DC 6.1 E	pH (Field)	s.u.	AZ Full Body Contact	RESE-1003055	8/15/2012	6.5-9	---	---	---				**9.02**	1/13	---	yes
DC 6.1 E	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001077	5/20/2004	0.002	TRC	---	---		<0.0030	<0.0030		---	9/14	uncertain
DC 6.1 E	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001159	8/23/2004	0.002	TRC	---	---		<0.0030	<0.0030		---	9/14	uncertain
DC 6.1 E	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001177	11/18/2004	0.002	TRC	---	---		<0.0030	<0.0030		---	9/14	uncertain
DC 6.1 E	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001199	2/28/2005	0.002	TRC	---	---		<0.00300	<0.00300		---	9/14	uncertain
DC 6.1 E	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001217	5/24/2005	0.002	TRC	---	---		<0.00300	<0.00300		---	9/14	uncertain
DC 6.1 E	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001230	8/23/2005	0.002	TRC	---	---		<0.00300	<0.00300		---	9/14	uncertain
DC 6.1 E	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002007	8/7/2008	0.002	TRC	---	---			<0.00300		---	9/14	uncertain
DC 6.1 E	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002036	11/6/2008	0.002	TRC	---	---			<0.00300		---	9/14	uncertain
DC 6.1 E	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002161	11/10/2010	0.002	TRC	---	---			<0.0038		---	9/14	uncertain

TABLE 7. SUMMARY OF EXCEEDANCES OF APPLICABLE WATER QUALITY STANDARDS IN SURFACE WATER AND SPRINGS
UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA, RESOLUTION COPPER MINING LLC, PINAL COUNTY, ARIZONA

Station Name	Parameter	Units[a]	Regulatory Standard	Sample ID	Date	Standards		Hardness Results[c]		Results[c]				Number of Exceedances Over Total Measurements	Number of Non-Detects with Detection Limits Greater Than the Standard Over Total Measurements	Exceedance
						Standard	Filter Fraction[b]	Hardness Value	Hardness Filter	Dissolved	Total	Total Recoverable	Field			
DC 6.1 E	Thallium	mg/L	AZ Fish Consumption	RESE-1001077	5/20/2004	0.001	TRC	---	---	<0.0020	<0.0020			---	6/14	uncertain
DC 6.1 E	Thallium	mg/L	AZ Fish Consumption	RESE-1001159	8/23/2004	0.001	TRC	---	---	<0.0020	<0.0020			---	6/14	uncertain
DC 6.1 E	Thallium	mg/L	AZ Fish Consumption	RESE-1001177	11/18/2004	0.001	TRC	---	---	<0.0020	<0.0020			---	6/14	uncertain
DC 6.1 E	Thallium	mg/L	AZ Fish Consumption	RESE-1001199	2/28/2005	0.001	TRC	---	---	<0.00200	<0.00200			---	6/14	uncertain
DC 6.1 E	Thallium	mg/L	AZ Fish Consumption	RESE-1001217	5/24/2005	0.001	TRC	---	---	<0.00200	<0.00200			---	6/14	uncertain
DC 6.1 E	Thallium	mg/L	AZ Fish Consumption	RESE-1001230	8/23/2005	0.001	TRC	---	---	<0.00200	<0.00200			---	6/14	uncertain
DC 5.5 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001198	2/28/2005	0.0039	DIS	26.9	Total	<0.0100	0.0100	0.0110		---	1/10	uncertain
DC 5.5 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001198	2/28/2005	0.00292	DIS	26.9	Total	<0.0100	0.0100	0.0110		---	3/10	uncertain
DC 5.5 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001216	5/24/2005	0.00836	DIS	92.3	Total	<0.0100	<0.0100	<0.0100		---	3/10	uncertain
DC 5.5 C	Copper	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001229	8/23/2005	0.00722	DIS	77.7	Total	<0.0100	<0.0100	<0.0100		---	3/10	uncertain
DC 5.5 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001076	5/20/2004	6 (min)	---	---	---				**4.93**	4/11	---	yes
DC 5.5 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001158	8/23/2004	6 (min)	---	---	---				**4.64**	4/11	---	yes
DC 5.5 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002180	8/26/2011	6 (min)	---	---	---				**4.66**	4/11	---	yes
DC 5.5 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	z	8/9/2013	6 (min)	---	---	---				**3.35**	4/11	---	yes
DC 5.5 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001076	5/20/2004	6 (min)	---	---	---				**4.93**	4/11	---	yes
DC 5.5 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001158	8/23/2004	6 (min)	---	---	---				**4.64**	4/11	---	yes
DC 5.5 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002180	8/26/2011	6 (min)	---	---	---				**4.66**	4/11	---	yes
DC 5.5 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	z	8/9/2013	6 (min)	---	---	---				**3.35**	4/11	---	yes
DC 5.5 C	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001076	5/20/2004	0.00254	DIS	101	Total	<0.0030	<0.0030	<0.0030		---	5/10	uncertain
DC 5.5 C	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001176	11/18/2004	0.00298	DIS	117	Total	<0.0030	<0.0030	<0.0030		---	5/10	uncertain
DC 5.5 C	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001198	2/28/2005	0.00059	DIS	26.9	Total	<0.00300	<0.00300	<0.00300		---	5/10	uncertain
DC 5.5 C	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001216	5/24/2005	0.00231	DIS	92.3	Total	<0.00300	<0.00300	<0.00300		---	5/10	uncertain
DC 5.5 C	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001229	8/23/2005	0.00191	DIS	77.7	Total	<0.00300	<0.00300	<0.00300		---	5/10	uncertain
DC 5.5 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001039	11/10/2003	0.00001	DIS	---	---	<0.00020	<0.00020			---	8/8	uncertain
DC 5.5 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001067	2/25/2004	0.00001	DIS	---	---	<0.00020	<0.00020			---	8/8	uncertain
DC 5.5 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001076	5/20/2004	0.00001	DIS	---	---	<0.00020	<0.00020			---	8/8	uncertain
DC 5.5 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001158	8/23/2004	0.00001	DIS	---	---	<0.00020	<0.00020			---	8/8	uncertain
DC 5.5 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001176	11/18/2004	0.00001	DIS	---	---	<0.00020	<0.00033			---	8/8	uncertain
DC 5.5 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001198	2/28/2005	0.00001	DIS	---	---	<0.00020	<0.00020			---	8/8	uncertain
DC 5.5 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001216	5/24/2005	0.00001	DIS	---	---	<0.00020	<0.00020			---	8/8	uncertain
DC 5.5 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001229	8/23/2005	0.00001	DIS	---	---	<0.0002	<0.0002			---	8/8	uncertain
DC 5.5 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001039	11/10/2003	0.002	TRC	---	---		<0.0030	<0.0030		---	7/10	uncertain
DC 5.5 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001076	5/20/2004	0.002	TRC	---	---		<0.0030	<0.0030		---	7/10	uncertain
DC 5.5 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001158	8/23/2004	0.002	TRC	---	---		<0.0030	<0.0030		---	7/10	uncertain
DC 5.5 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001176	11/18/2004	0.002	TRC	---	---		<0.0030	<0.0030		---	7/10	uncertain
DC 5.5 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001198	2/28/2005	0.002	TRC	---	---		<0.00300	<0.00300		---	7/10	uncertain
DC 5.5 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001216	5/24/2005	0.002	TRC	---	---		<0.00300	<0.00300		---	7/10	uncertain
DC 5.5 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001229	8/23/2005	0.002	TRC	---	---		<0.00300	<0.00300		---	7/10	uncertain
DC 5.5 C	Thallium	mg/L	AZ Fish Consumption	RESE-1001039	11/10/2003	0.001	TRC	---	---	<0.0020	<0.0020			---	7/10	uncertain
DC 5.5 C	Thallium	mg/L	AZ Fish Consumption	RESE-1001076	5/20/2004	0.001	TRC	---	---	<0.0020	<0.0020			---	7/10	uncertain
DC 5.5 C	Thallium	mg/L	AZ Fish Consumption	RESE-1001158	8/23/2004	0.001	TRC	---	---	<0.0020	<0.0020			---	7/10	uncertain
DC 5.5 C	Thallium	mg/L	AZ Fish Consumption	RESE-1001176	11/18/2004	0.001	TRC	---	---	<0.0020	<0.0020			---	7/10	uncertain
DC 5.5 C	Thallium	mg/L	AZ Fish Consumption	RESE-1001198	2/28/2005	0.001	TRC	---	---	<0.00200	<0.00200			---	7/10	uncertain
DC 5.5 C	Thallium	mg/L	AZ Fish Consumption	RESE-1001216	5/24/2005	0.001	TRC	---	---	<0.00200	<0.00200			---	7/10	uncertain
DC 5.5 C	Thallium	mg/L	AZ Fish Consumption	RESE-1001229	8/23/2005	0.001	TRC	---	---	<0.00200	<0.00200			---	7/10	uncertain
DC 4.1 E	Cyanide, Free	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001007	5/21/2003	0.041	TRC	---	---		<0.10			---	1/1	uncertain
DC 4.1 E	Cyanide, Free	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001007	5/21/2003	0.0097	TRC	---	---		<0.10			---	1/1	uncertain
DC 4.1 E	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001007	5/21/2003	0.00221	DIS	88.7	Total	<0.0030	<0.0050	<0.0030		---	3/6	uncertain
DC 4.1 E	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001019	8/26/2003	0.00221	DIS	88.9	Total	<0.0030	<0.0050	<0.0030		---	3/6	uncertain
DC 4.1 E	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001040	11/11/2003	0.0022	DIS	88.3	Total	<0.0030	<0.0050	<0.0030		---	3/6	uncertain
DC 4.1 E	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001007	5/21/2003	0.00001	DIS	---	---	<0.00020	<0.00020			1/6	5/6	uncertain
DC 4.1 E	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001019	8/26/2003	0.00001	DIS	---	---	<0.00020	<0.00020			1/6	5/6	uncertain
DC 4.1 E	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001040	11/11/2003	0.00001	DIS	---	---	<0.00020	<0.00020			1/6	5/6	uncertain
DC 4.1 E	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001058	2/10/2004	0.00001	DIS	---	---	<0.00020	<0.00020			1/6	5/6	uncertain

TABLE 7. SUMMARY OF EXCEEDANCES OF APPLICABLE WATER QUALITY STANDARDS IN SURFACE WATER AND SPRINGS
UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA, RESOLUTION COPPER MINING LLC, PINAL COUNTY, ARIZONA

Station Name	Parameter	Units[a]	Regulatory Standard	Sample ID	Date	Standards		Hardness Results[c]		Results[c]				Number of Exceedances Over Total Measurements	Number of Non-Detects with Detection Limits Greater Than the Standard Over Total Measurements	Exceedance
						Standard	Filter Fraction[b]	Hardness Value	Hardness Filter	Dissolved	Total	Total Recoverable	Field			
DC 4.1 E	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001143	5/20/2014	0.00001	DIS	---	---	<0.000030	<0.000030			1/6	5/6	uncertain
DC 4.1 E	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001336	11/25/2014	0.00001	DIS	---	---	**0.000044 j**	<0.000030			1/6	5/6	yes
DC 4.1 E	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001007	5/21/2003	0.002	TRC	---	---		<0.0030	<0.0030		---	3/6	uncertain
DC 4.1 E	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001019	8/26/2003	0.002	TRC	---	---		<0.0030	<0.0030		---	3/6	uncertain
DC 4.1 E	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001040	11/11/2003	0.002	TRC	---	---		<0.0030	<0.0030		---	3/6	uncertain
DC 4.1 E	Thallium	mg/L	AZ Fish Consumption	RESE-1001007	5/21/2003	0.001	TRC	---	---	<0.0020		<0.0020		---	3/6	uncertain
DC 4.1 E	Thallium	mg/L	AZ Fish Consumption	RESE-1001019	8/26/2003	0.001	TRC	---	---	<0.0020	<0.0020			---	3/6	uncertain
DC 4.1 E	Thallium	mg/L	AZ Fish Consumption	RESE-1001040	11/11/2003	0.001	TRC	---	---	<0.0020	<0.0020			---	3/6	uncertain
MINERAL CREEK WATERSHED																
Government Springs	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002130	3/18/2010	6 (min)	---	---	---				**4.90**	8/10	---	yes
Government Springs	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002209	2/28/2012	6 (min)	---	---	---				**5.92**	8/10	---	yes
Government Springs	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002239	5/8/2012	6 (min)	---	---	---				**4.30**	8/10	---	yes
Government Springs	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1003058	8/22/2012	6 (min)	---	---	---				**3.93**	8/10	---	yes
Government Springs	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1003067	11/28/2012	6 (min)	---	---	---				**4.18**	8/10	---	yes
Government Springs	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1003078	2/4/2013	6 (min)	---	---	---				**2.96**	8/10	---	yes
Government Springs	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1003099	6/11/2013	6 (min)	---	---	---				**4.52**	8/10	---	yes
Government Springs	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	z	8/10/2013	6 (min)	---	---	---				**2.71**	8/10	---	yes
Government Springs	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002130	3/18/2010	6 (min)	---	---	---				**4.90**	8/10	---	yes
Government Springs	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002209	2/28/2012	6 (min)	---	---	---				**5.92**	8/10	---	yes
Government Springs	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002239	5/8/2012	6 (min)	---	---	---				**4.30**	8/10	---	yes
Government Springs	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1003058	8/22/2012	6 (min)	---	---	---				**3.93**	8/10	---	yes
Government Springs	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1003067	11/28/2012	6 (min)	---	---	---				**4.18**	8/10	---	yes
Government Springs	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1003078	2/4/2013	6 (min)	---	---	---				**2.96**	8/10	---	yes
Government Springs	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1003099	6/11/2013	6 (min)	---	---	---				**4.52**	8/10	---	yes
Government Springs	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	z	8/10/2013	6 (min)	---	---	---				**2.71**	8/10	---	yes
MC 8.4 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002038	11/13/2008	6 (min)	---	---	---				**2.03**	8/12	---	yes
MC 8.4 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002090	5/14/2009	6 (min)	---	---	---				**5.71**	8/12	---	yes
MC 8.4 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002134	3/18/2010	6 (min)	---	---	---				**5.91**	8/12	---	yes
MC 8.4 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002148	11/4/2010	6 (min)	---	---	---				**2.35**	8/12	---	yes
MC 8.4 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002166	2/24/2011	6 (min)	---	---	---				**5.68**	8/12	---	yes
MC 8.4 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002169	5/31/2011	6 (min)	---	---	---				**4.92**	8/12	---	yes
MC 8.4 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002200	12/8/2011	6 (min)	---	---	---				**5.44**	8/12	---	yes
MC 8.4 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002240	5/8/2012	6 (min)	---	---	---				**2.81**	8/12	---	yes
MC 8.4 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002038	11/13/2008	6 (min)	---	---	---				**2.03**	8/12	---	yes
MC 8.4 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002090	5/14/2009	6 (min)	---	---	---				**5.71**	8/12	---	yes
MC 8.4 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002134	3/18/2010	6 (min)	---	---	---				**5.91**	8/12	---	yes
MC 8.4 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002148	11/4/2010	6 (min)	---	---	---				**2.35**	8/12	---	yes
MC 8.4 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002166	2/24/2011	6 (min)	---	---	---				**5.68**	8/12	---	yes
MC 8.4 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002169	5/31/2011	6 (min)	---	---	---				**4.92**	8/12	---	yes
MC 8.4 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002200	12/8/2011	6 (min)	---	---	---				**5.44**	8/12	---	yes
MC 8.4 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002240	5/8/2012	6 (min)	---	---	---				**2.81**	8/12	---	yes
MC 8.4 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002038	11/13/2008	0.00001	DIS	---	---	<0.00020	<0.00020			---	1/1	uncertain
MC 8.4 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002038	11/13/2008	0.002	TRC	---	---			<0.00300		---	1/11	uncertain
LF 0.2 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002039	11/13/2008	6 (min)	---	---	---				**0.94**	7/12	---	yes
LF 0.2 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002093	5/14/2009	6 (min)	---	---	---				**1.24**	7/12	---	yes
LF 0.2 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002111	12/15/2009	6 (min)	---	---	---				**5.53**	7/12	---	yes
LF 0.2 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002149	11/4/2010	6 (min)	---	---	---				**2.17**	7/12	---	yes
LF 0.2 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002165	2/24/2011	6 (min)	---	---	---				**5.05**	7/12	---	yes
LF 0.2 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002174	5/31/2011	6 (min)	---	---	---				**5.69**	7/12	---	yes
LF 0.2 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002245	5/8/2012	6 (min)	---	---	---				**2.82**	7/12	---	yes
LF 0.2 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002039	11/13/2008	6 (min)	---	---	---				**0.94**	7/12	---	yes
LF 0.2 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002093	5/14/2009	6 (min)	---	---	---				**1.24**	7/12	---	yes
LF 0.2 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002111	12/15/2009	6 (min)	---	---	---				**5.53**	7/12	---	yes
LF 0.2 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002149	11/4/2010	6 (min)	---	---	---				**2.17**	7/12	---	yes

TABLE 7. SUMMARY OF EXCEEDANCES OF APPLICABLE WATER QUALITY STANDARDS IN SURFACE WATER AND SPRINGS
UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA, RESOLUTION COPPER MINING LLC, PINAL COUNTY, ARIZONA

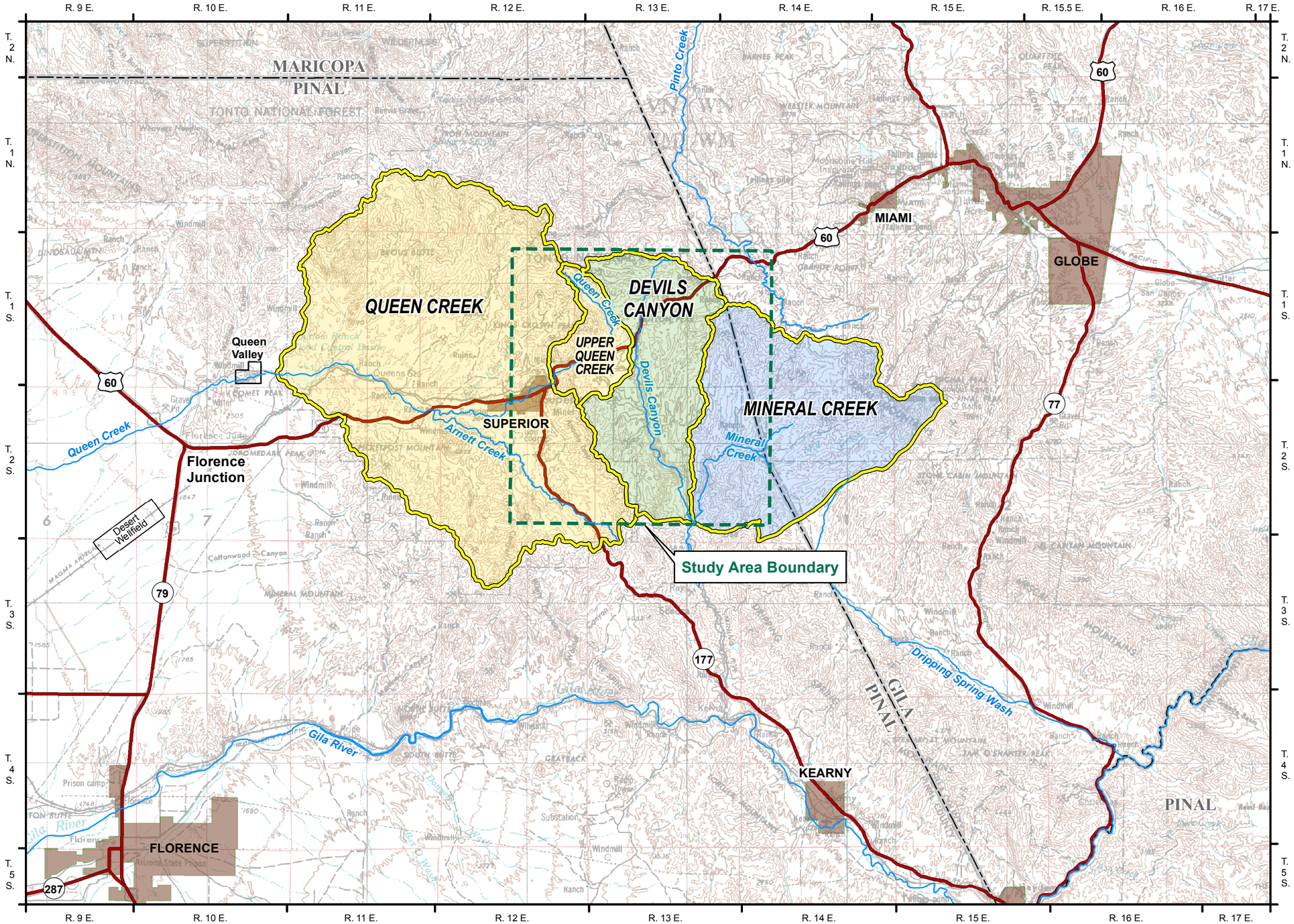
Station Name	Parameter	Units[a]	Regulatory Standard	Sample ID	Date	Standards		Hardness Results[c]		Results[c]				Number of Exceedances Over Total Measurements	Number of Non-Detects with Detection Limits Greater Than the Standard Over Total Measurements	Exceedance
						Standard	Filter Fraction[b]	Hardness Value	Hardness Filter	Dissolved	Total	Total Recoverable	Field			
LF 0.2 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002165	2/24/2011	6 (min)	---	---	---				**5.05**	7/12	---	yes
LF 0.2 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002174	5/31/2011	6 (min)	---	---	---				**5.69**	7/12	---	yes
LF 0.2 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002245	5/8/2012	6 (min)	---	---	---				**2.82**	7/12	---	yes
LF 0.2 C	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002039	11/13/2008	0.00001	DIS	---	---	<0.00020	<0.00020			---	1/1	uncertain
LF 0.2 C	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002039	11/13/2008	0.002	TRC	---	---			<0.00300		---	1/11	uncertain
MC 5.2 C	Arsenic	mg/L	AZ Full Body Contact	RESE-1003059	8/22/2012	0.03	TRC	---	---	<0.025		**0.043**		1/10	---	yes
MC 5.2 C	Copper	mg/L	AZ Agricultural Livestock Watering	RESE-1003059	8/22/2012	0.5	TRC	---	---	0.0133		**0.702**		1/10	---	yes
MC 5.2 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1003079	2/4/2013	6 (min)	---	---	---				**4.36**	2/10	---	yes
MC 5.2 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1001120	8/12/2013	6 (min)	---	---	---				**2.49**	2/10	---	yes
MC 5.2 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1003079	2/4/2013	6 (min)	---	---	---				**4.36**	2/10	---	yes
MC 5.2 C	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1001120	8/12/2013	6 (min)	---	---	---				**2.49**	2/10	---	yes
MC 5.2 C	Lead	mg/L	AZ Agricultural Livestock Watering	RESE-1003059	8/22/2012	0.1	TRC	---	---	0.000322 j		**0.222**		1/10	---	yes
MC 5.2 C	Lead	mg/L	AZ Full Body Contact	RESE-1003059	8/22/2012	0.015	TRC	---	---	0.000322 j		**0.222**		1/10	---	yes
MC 3.4 W (Wet Leg Spring)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	RESE-1002244	5/8/2012	6 (min)	---	---	---				**5.50**	2/13	---	yes
MC 3.4 W (Wet Leg Spring)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Acute	z	8/10/2013	6 (min)	---	---	---				**2.48**	2/13	---	yes
MC 3.4 W (Wet Leg Spring)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002244	5/8/2012	6 (min)	---	---	---				**5.50**	2/13	---	yes
MC 3.4 W (Wet Leg Spring)	Dissolved oxygen	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	z	8/10/2013	6 (min)	---	---	---				**2.48**	2/13	---	yes
MC 3.4 W (Wet Leg Spring)	Lead	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002041	11/13/2008	0.00254	DIS	101	DIS	<0.00300		<0.00300		---	1/11	uncertain
MC 3.4 W (Wet Leg Spring)	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002041	11/13/2008	0.00001	DIS	---	---	<0.00020	<0.00020			---	1/1	uncertain
MC 3.4 W (Wet Leg Spring)	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002041	11/13/2008	0.002	TRC	---	---			<0.00300		---	1/11	uncertain
MC 3.3 C (Lower Mineral)	Mercury	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002040	11/13/2008	0.00001	DIS	---	---	<0.00020	<0.00020			---	1/1	uncertain
MC 3.3 C (Lower Mineral)	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002040	11/13/2008	0.002	TRC	---	---			<0.00300		1/11	1/11	uncertain
MC 3.3 C (Lower Mineral)	Selenium	mg/L	AZ Aquatic and Wildlife - Warm Water Chronic	RESE-1002150	11/4/2010	0.002	TRC	---	---			**0.00204 jd**		1/11	1/11	yes

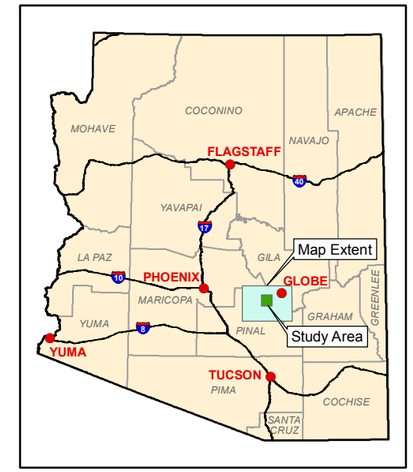
Values in bold red are out of compliance with water quality standard
Values in blue indicate that detection limit exceeds standard

[a]Units
mg/L = milligrams per liter
s.u. = standard units
MPN/100ml = Most Probable Number per 100 milliliters

[b]Filter fraction
DIS = dissolved
TRC = total recoverable
--- = not applicable

[c]Results
< = value below detection limit
j = estimated value
j- = estimated value, low bias
ge = concentration greater than or equal to value reported
d = diluted





EXPLANATION

Watershed Boundary

0 5
Miles

Resolution Copper Mining

REGIONAL LOCATION MAP

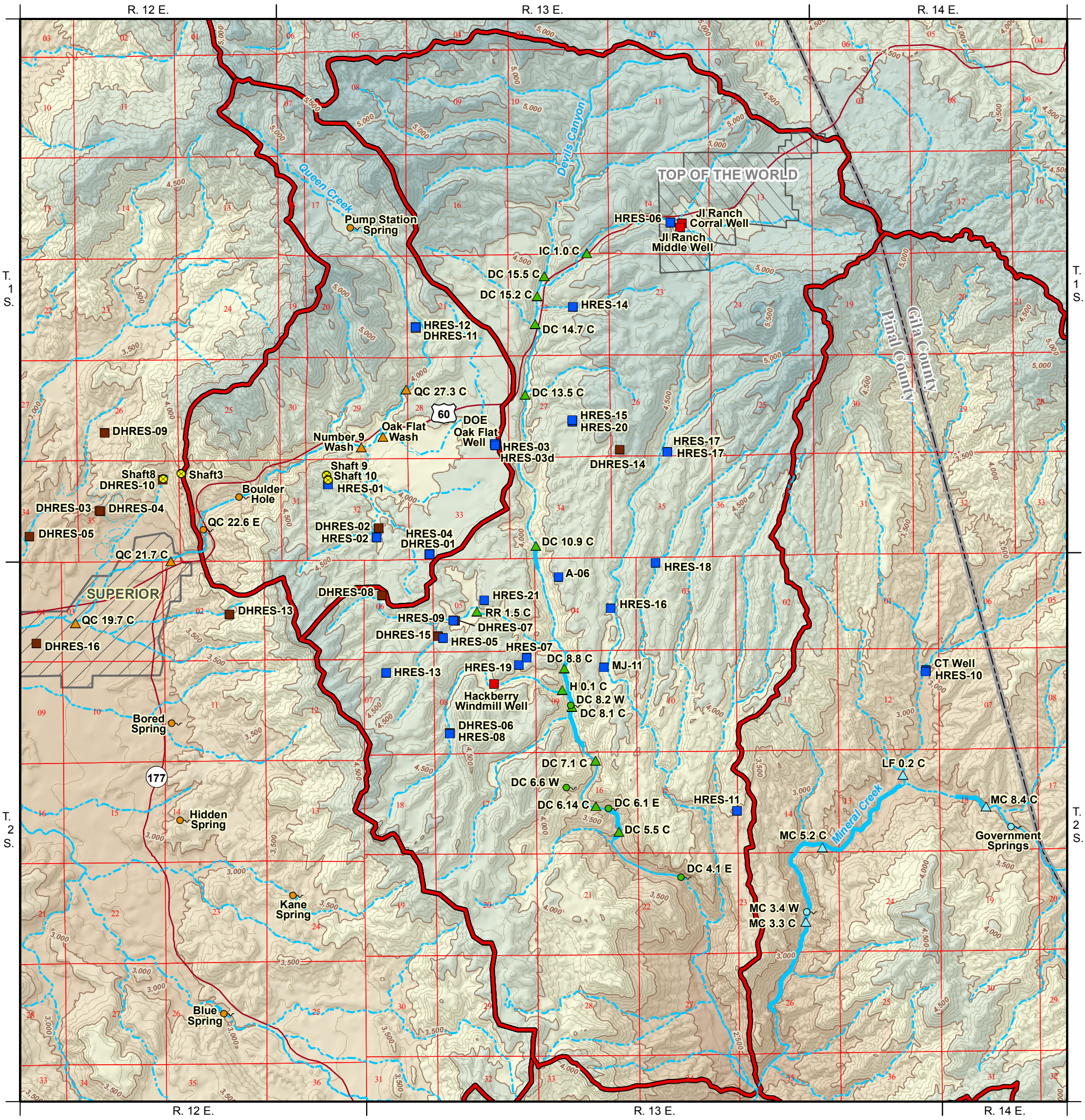
UPPER QUEEN CREEK / DEVILS CANYON STUDY AREA

MONTGOMERY & ASSOCIATES
Water Resource Consultants

2016

FIGURE 1

GIS-Tuc\605.5201\2016Hydrochem_Rpt\RegionalLocation_Superior_June2016Addendum.mxd\10Aug2016



EXPLANATION

- Watershed Boundary
- Perennial Reach (M&A, 2013a)
- Ephemeral or Intermittent Stream

GROUNDWATER MONITORING SITES

- Shallow Groundwater System Monitor Well
- Apache Leap Tuff Aquifer Monitor Well
- Deep Groundwater System Monitor Well
- Shaft

SURFACE WATER MONITORING SITES

- Spring, Queen Creek Watershed
- Spring, Devils Canyon Watershed
- Spring, Mineral Creek Watershed
- Surface Water, Queen Creek Watershed
- Surface Water, Devils Canyon Watershed
- Surface Water, Mineral Creek Watershed

ELEVATION RANGE
(feet above mean sea level)

- 1,500 - 2,000
- 2,000 - 2,500
- 2,500 - 3,000
- 3,000 - 3,500
- 3,500 - 4,000
- 4,000 - 4,500
- 4,500 - 5,000
- 5,000 - 5,500
- 5,500 - 6,000

0 0.5 1 1.5 2
Miles

Resolution Copper Mining

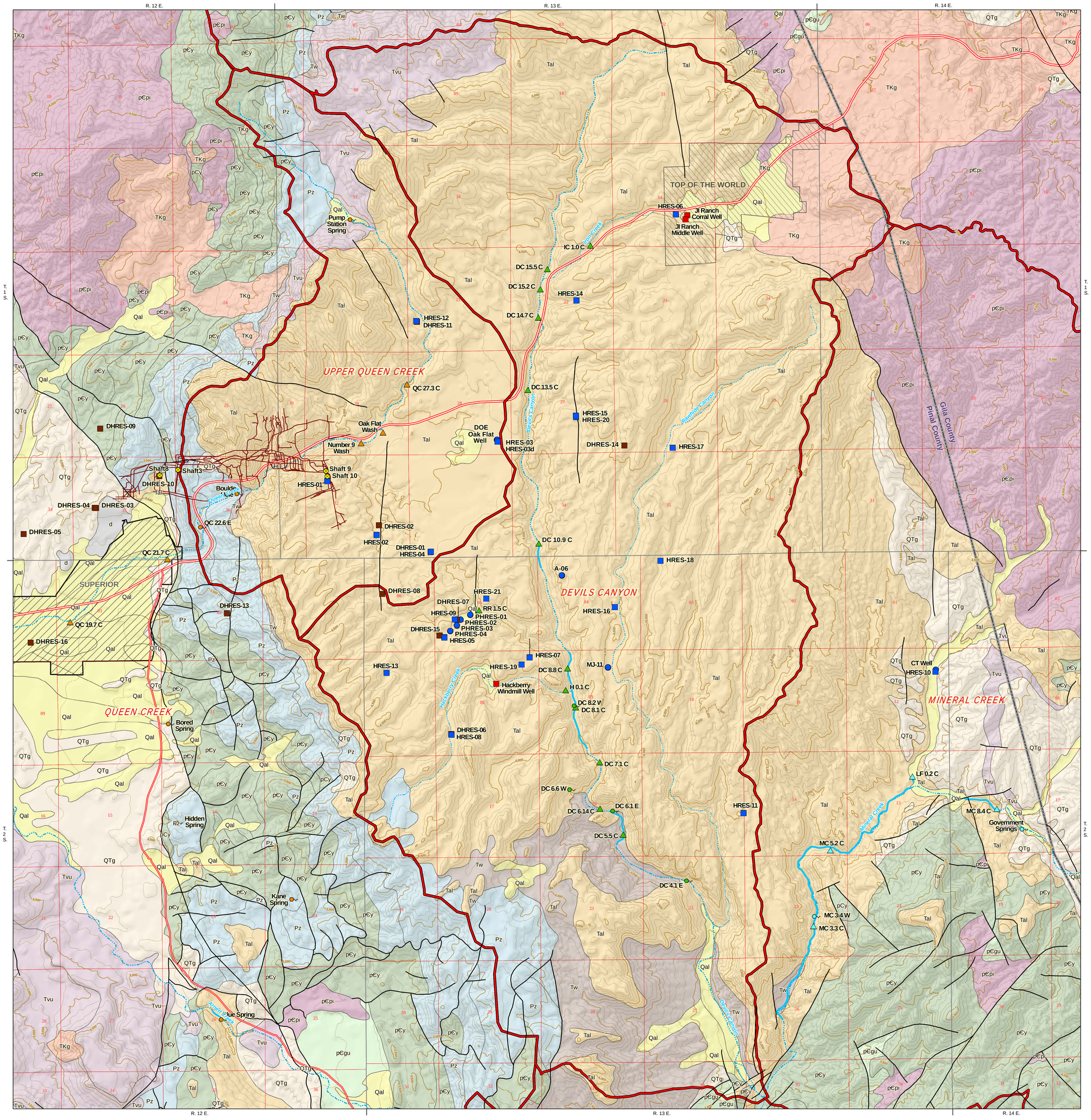
MONITORING LOCATIONS
UPPER QUEEN CREEK / DEVILS CANYON STUDY AREA

MONTGOMERY & ASSOCIATES
Water Resource Consultants

2016

FIGURE 2

\GIS-Tuc\Projects\605\605.5201\MonitoringLocMap_SP83ft_Ledger\10August2016



EXPLANATION

- Watershed Boundary
- Stream
- Perennial Reach (M&A, 2013a)
- Fault (Published)
- Magma Mine Workings

GROUNDWATER MONITORING SITES

- Shallow Groundwater System Monitor Well
- Apache Leap Tuff Aquifer Monitor Well
- Apache Leap Tuff Aquifer Other Well
- Deep Groundwater System Monitor Well

SURFACE WATER MONITORING SITES

- Spring, Queen Creek Watershed
- Spring, Devils Canyon Watershed
- Spring, Mineral Creek Watershed
- Surface Water Sample, Queen Creek Watershed
- Surface Water Sample, Devils Canyon Watershed
- Surface Water Sample, Mineral Creek Watershed

GEOLOGIC UNITS

d	Disturbed Surficial Deposits
Qal	Quaternary Alluvial Deposits
QTg	Quaternary-Tertiary Basin-Fill Deposits
Tvu	Tertiary Volcanic Rocks, undifferentiated
Tal	Tertiary Apache Leap Tuff
Tw	Tertiary Whitetail Conglomerate
TKg	Cretaceous and Tertiary Intrusive Rocks
Pz	Paleozoic Sedimentary Rocks
p€y	Younger Precambrian Sedimentary Rocks, Basalt, and Diabase
p€gu	Undifferentiated Precambrian Intrusive Rocks
p€pi	Older Precambrian Pinal Schist

N

0 2,000 4,000 6,000 8,000 Feet

0 500 1,000 1,500 2,000 2,500 Meters

Topographic Contour Interval: 500 Feet

Resolution Copper Mining

GEOLOGY

UPPER QUEEN CREEK / DEVILS CANYON STUDY AREA

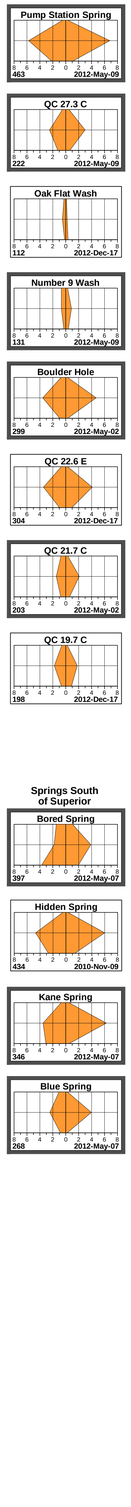
MONTGOMERY & ASSOCIATES
Water Resource Consultants

2016

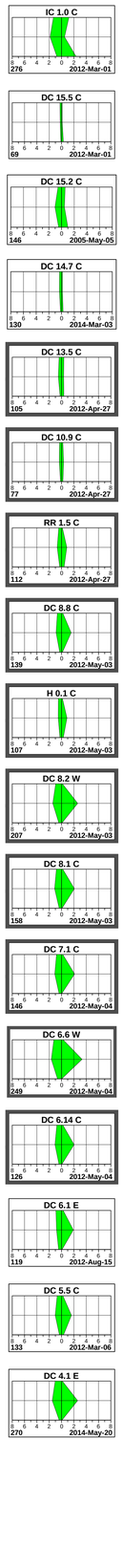
FIGURE 3

GIS\605.5201\GEOLOGY_SP83.mxd\10Aug2016

QUEEN CREEK
From Top of Watershed to Bottom

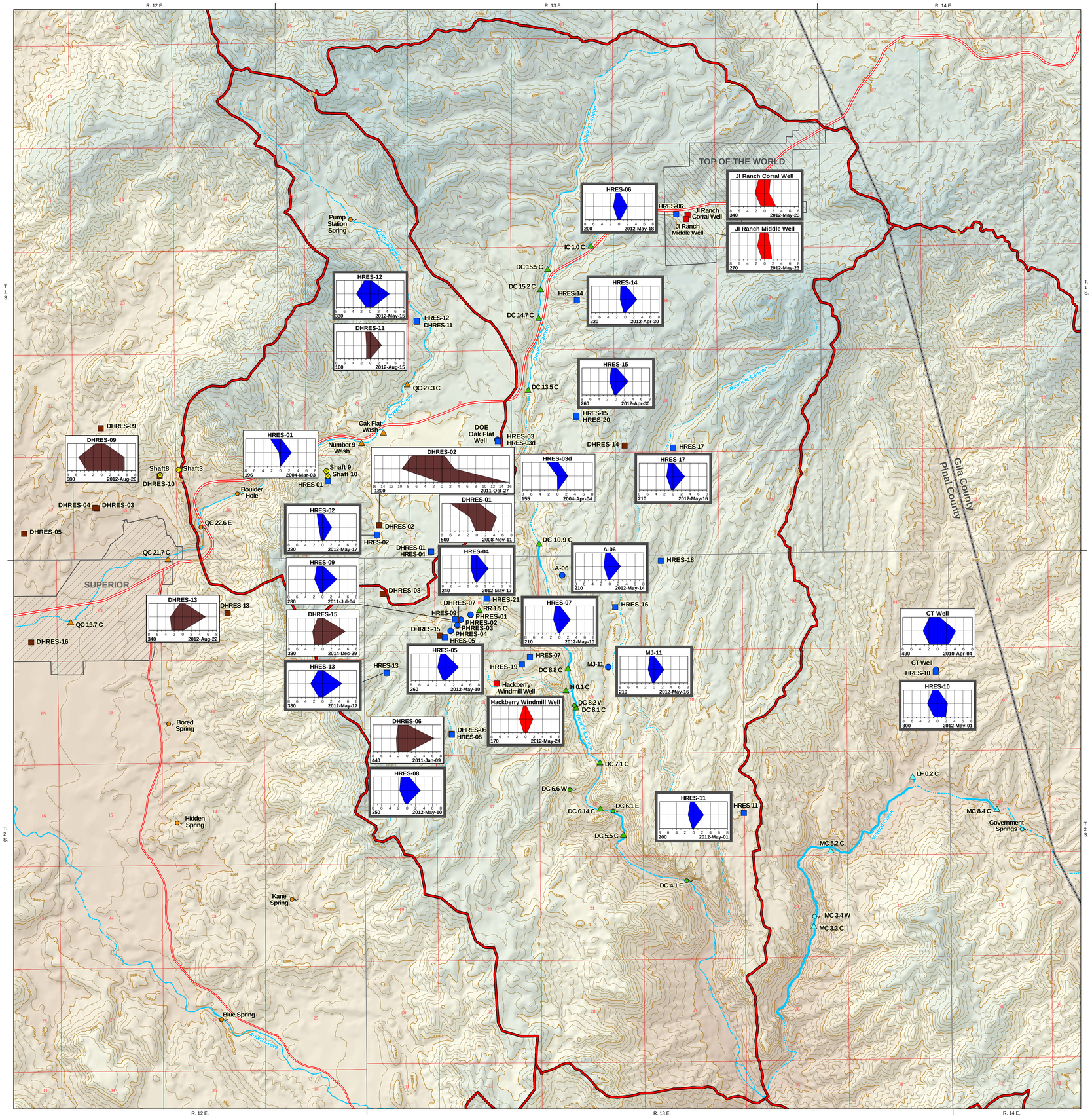


DEVILS CANYON
From Top of Watershed to Bottom



MINERAL CREEK
From Top of Watershed to Bottom

Springs South of Superior



EXPLANATION

Watershed Boundary

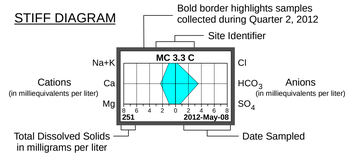
GROUNDWATER MONITORING SITES

- Shallow Groundwater System Monitor Well
- Apache Leap Tuff Aquifer Monitor Well
- Apache Leap Tuff Aquifer Other Well
- Deep Groundwater System Monitor Well

SURFACE WATER MONITORING SITES (selected)

- Spring, Queen Creek Watershed
- Spring, Devils Canyon Watershed
- Spring, Mineral Creek Watershed
- Surface Water Sample, Queen Creek Watershed
- Surface Water Sample, Devils Canyon Watershed
- Surface Water Sample, Mineral Creek Watershed
- Stream
- Perennial Reach (M&A, 2013a)

STIFF DIAGRAM



Groundwater Monitoring Stations

- Shallow Groundwater System
- Apache Leap Tuff Aquifer
- Deep Groundwater System

Spring and Surface Water Monitoring Stations

- Queen Creek
- Devils Canyon
- Mineral Creek

ELEVATION RANGE
(feet above mean sea level)

- 1,500 - 2,000
- 2,000 - 2,500
- 2,500 - 3,000
- 3,000 - 3,500
- 3,500 - 4,000
- 4,000 - 4,500
- 4,500 - 5,000
- 5,000 - 5,500
- 5,500 - 6,000

N

0 2,000 4,000 6,000 8,000
Feet

0 500 1,000 1,500 2,000 2,500
Meters

Topographic Contour Interval: 500 Feet

Resolution Copper Mining

STIFF DIAGRAMS
UPPER QUEEN CREEK / DEVILS CANYON STUDY AREA

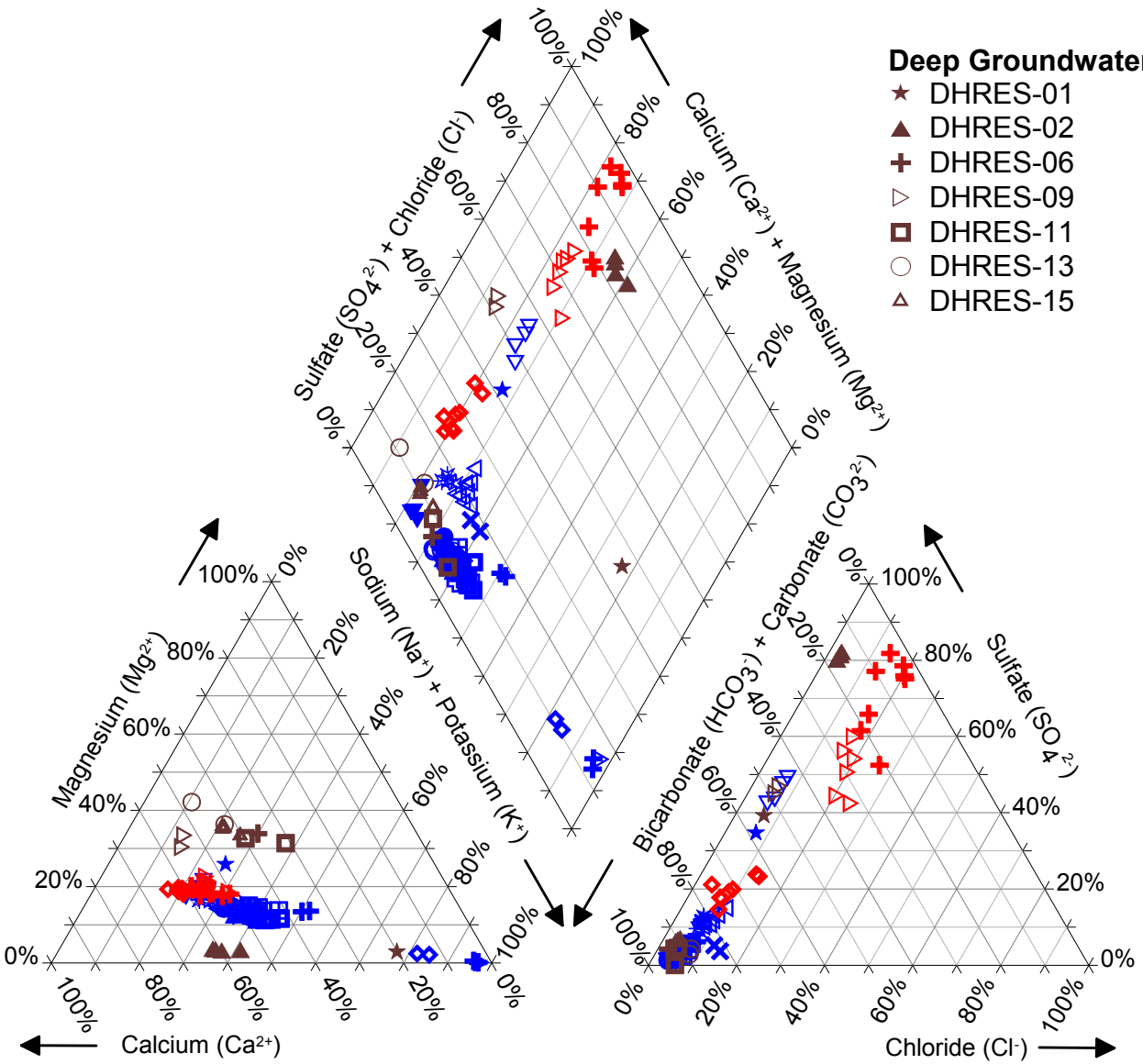
MONTGOMERY & ASSOCIATES
Water Resource Consultants

2016

FIGURE 4

GIS\605.5201\Stiffs_Spring2016_SP83.mxd\10Aug2016

605.5/2016 Hydrochemistry Addendum/Figure_Piper/Piper_Groundwater.grf June2016



EXPLANATION

Deep Groundwater System
- ★ DHRES-01
- ▲ DHRES-02
- ✚ DHRES-06
- ▷ DHRES-09
- ◘ DHRES-11
- ○ DHRES-13
- △ DHRES-15

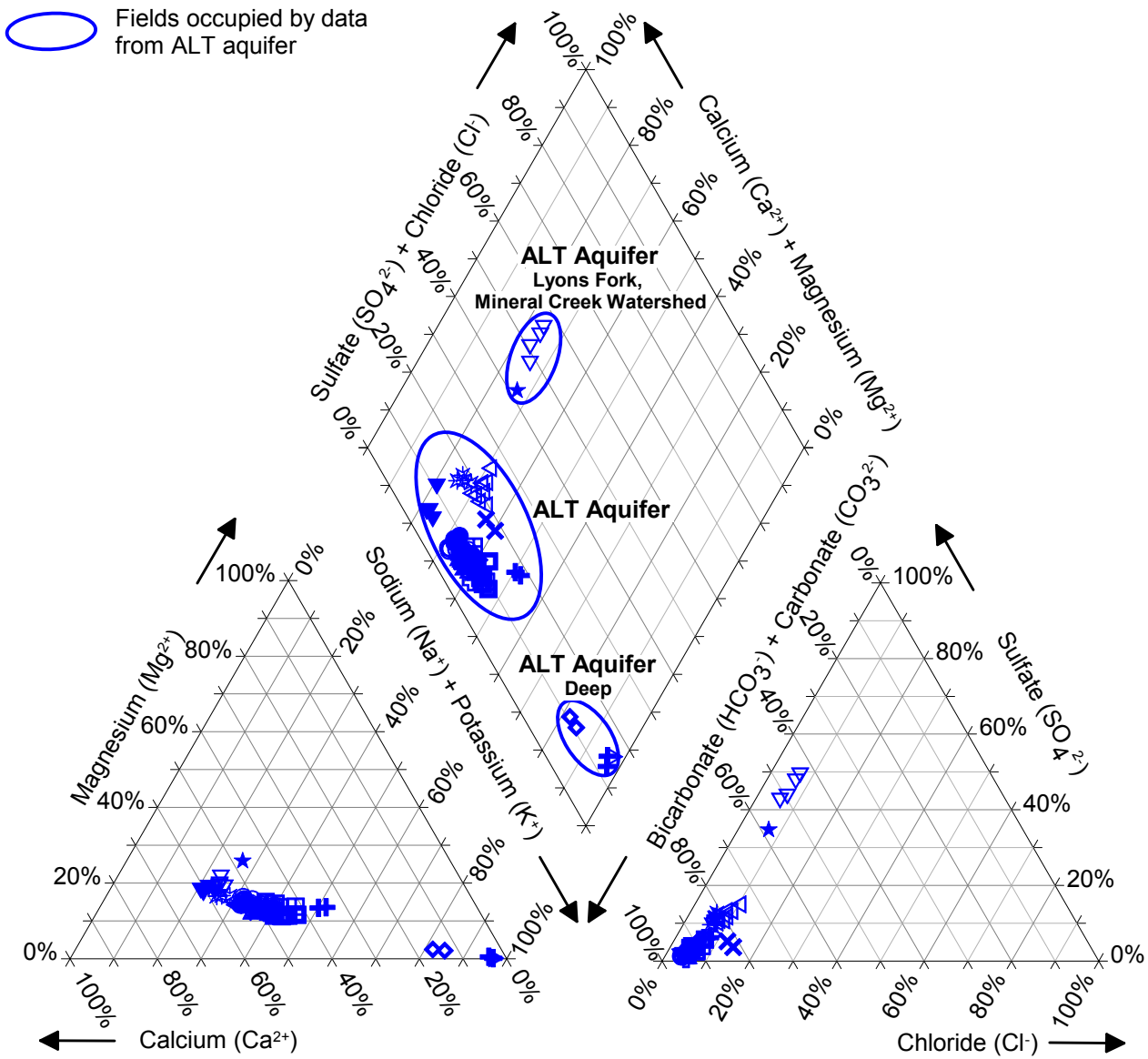
Apache Leap Tuff Aquifer
- ▲ A-06
- ◇ HRES-01
- ✚ HRES-02
- ▷ HRES-03d
- ◘ HRES-04
- ○ HRES-05
- ◁ HRES-06
- ◆ HRES-07
- ✕ HRES-08
- ✜ HRES-09
- ▽ HRES-10
- ● HRES-11
- ✲ HRES-12
- ▼ HRES-13
- ⊞ HRES-14
- ▲ HRES-15
- ◭ HRES-17
- ★ CT Well
- ⊕ MJ-11

Shallow Groundwater System
- ◇ Hackberry Windmill
- ✚ JI Ranch Corral Well
- ▷ JI Ranch Middle Well

FIGURE 5. TRILINEAR DIAGRAM OF COMMON ION COMPOSITIONS - ALL GROUNDWATER SAMPLES

MONTGOMERY & ASSOCIATES

605.5/2016 Hydrochemistry Addendum/Figure_Piper/Piper_Groundwater_ALT.grf June2016



EXPLANATION

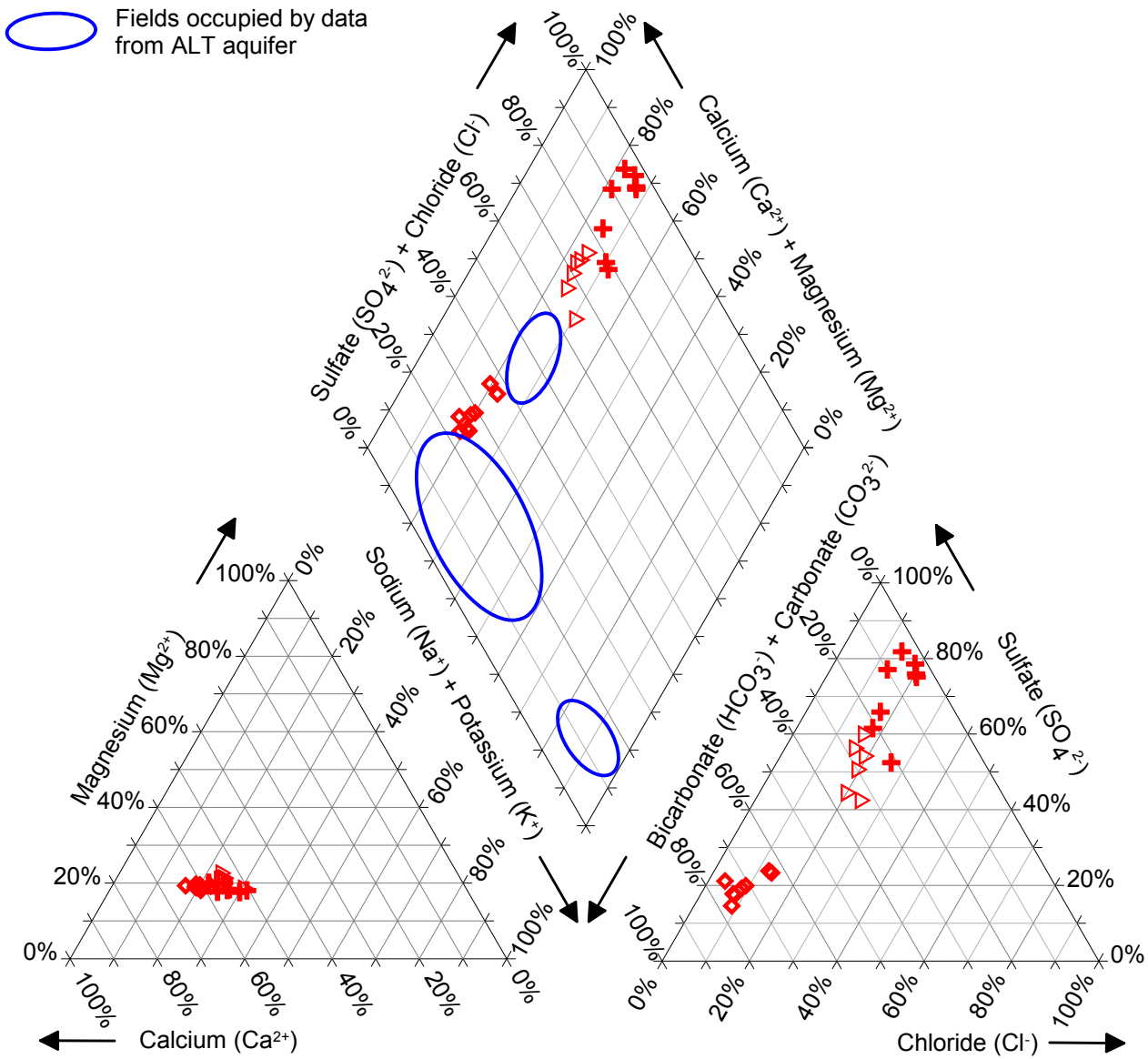
Apache Leap Tuff Aquifer

- ▲ A-06
- ◇ HRES-01
- ✚ HRES-02
- ▷ HRES-03d
- ◘ HRES-04
- ○ HRES-05
- ◁ HRES-06
- ◆ HRES-07
- ✕ HRES-08
- ✜ HRES-09
- ▽ HRES-10
- ● HRES-11
- ✳ HRES-12
- ▼ HRES-13
- ⊞ HRES-14
- ▲ HRES-15
- ◭ HRES-17
- ★ CT Well
- ⊕ MJ-11

FIGURE 6. TRILINEAR DIAGRAM OF COMMON ION COMPOSITIONS - APACHE LEAP TUFF AQUIFER

MONTGOMERY & ASSOCIATES

605.5/2016 Hydrochemistry Addendum/Figure_Piper/Piper_Groundwater_Shallow.grf June2016



EXPLANATION

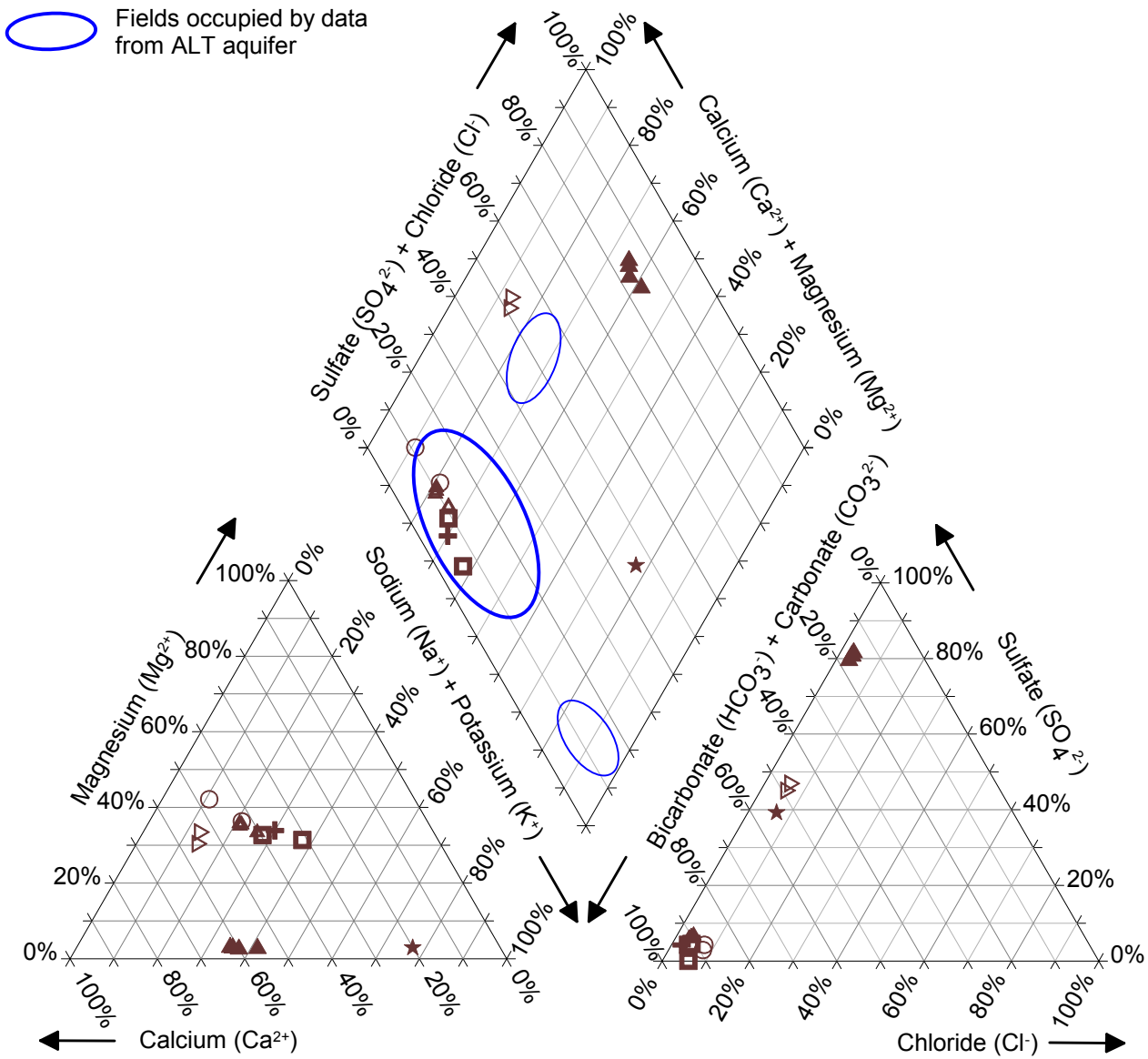
Shallow Groundwater System

- ◇ Hackberry Windmill
- ✚ JI Ranch Corral Well
- ▷ JI Ranch Middle Well

FIGURE 7. TRILINEAR DIAGRAM OF COMMON ION COMPOSITIONS - SHALLOW GROUNDWATER SYSTEM

MONTGOMERY & ASSOCIATES

605.5/2016 Hydrochemistry Addendum/Figure_Piper/Piper_Groundwater_Deep.grf June2016



EXPLANATION

Deep Groundwater System

- ★ DHRES-01
- ▲ DHRES-02
- ✚ DHRES-06
- ▷ DHRES-09
- ◘ DHRES-11
- ○ DHRES-13
- △ DHRES-15

FIGURE 8. TRILINEAR DIAGRAM OF COMMON ION COMPOSITIONS - DEEP GROUNDWATER SYSTEM

MONTGOMERY & ASSOCIATES

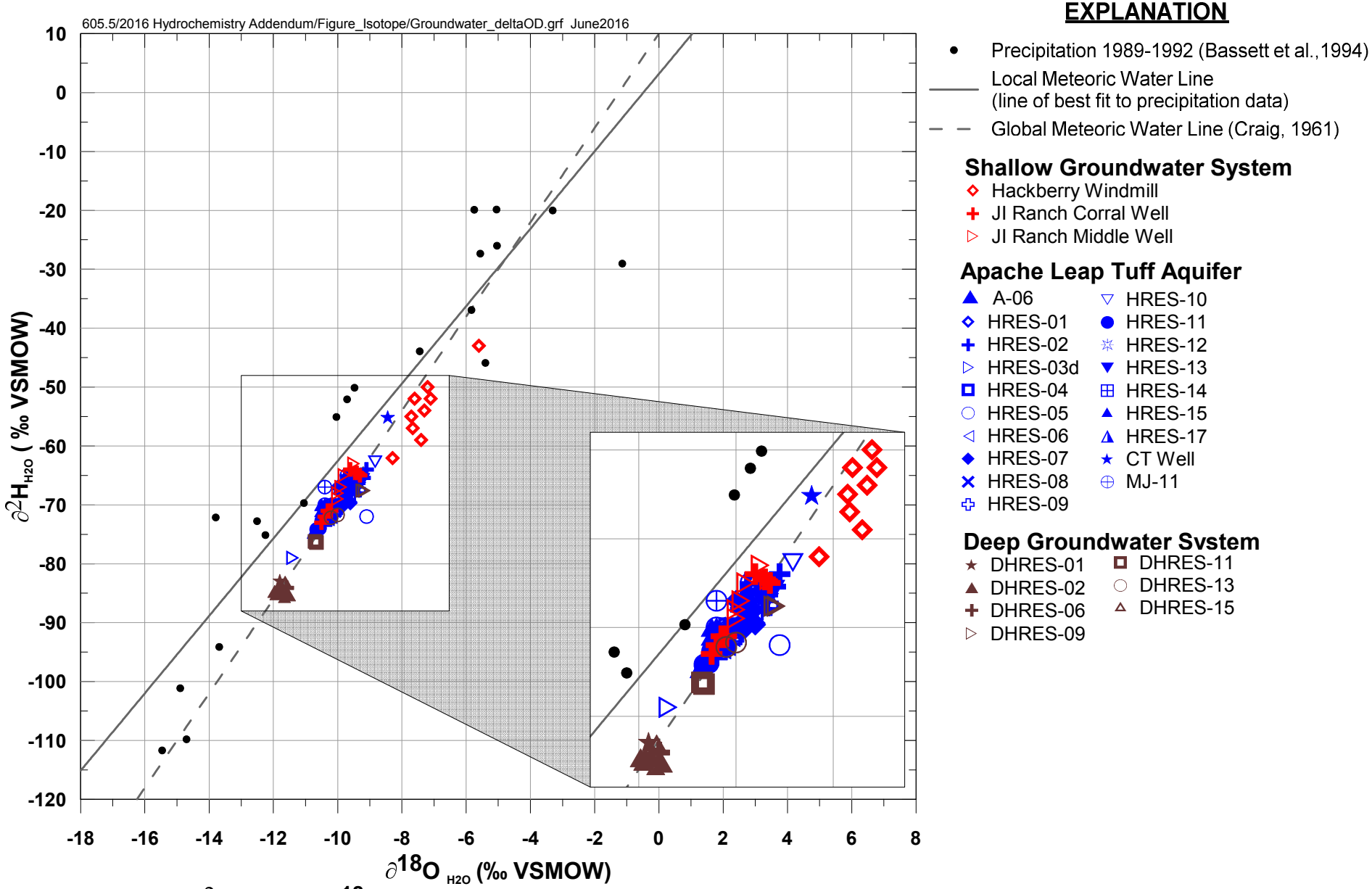


FIGURE 9. ∂^2H VERSUS ∂^{18}O COMPOSITION - ALL GROUNDWATER SAMPLES

MONTGOMERY & ASSOCIATES

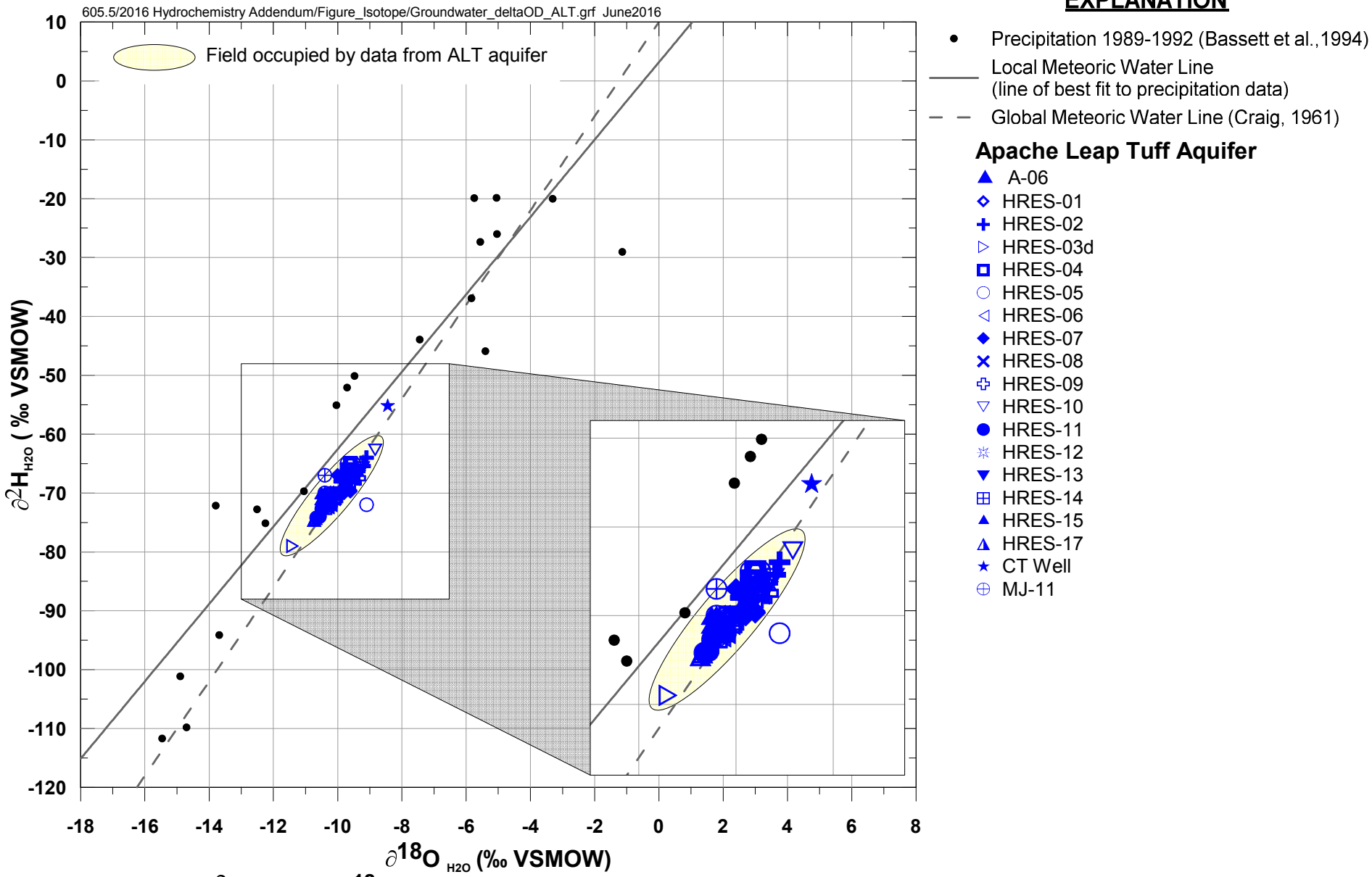


FIGURE 10. ∂^2H VERSUS ∂^{18}O COMPOSITION - APACHE LEAP TUFF AQUIFER

MONTGOMERY & ASSOCIATES

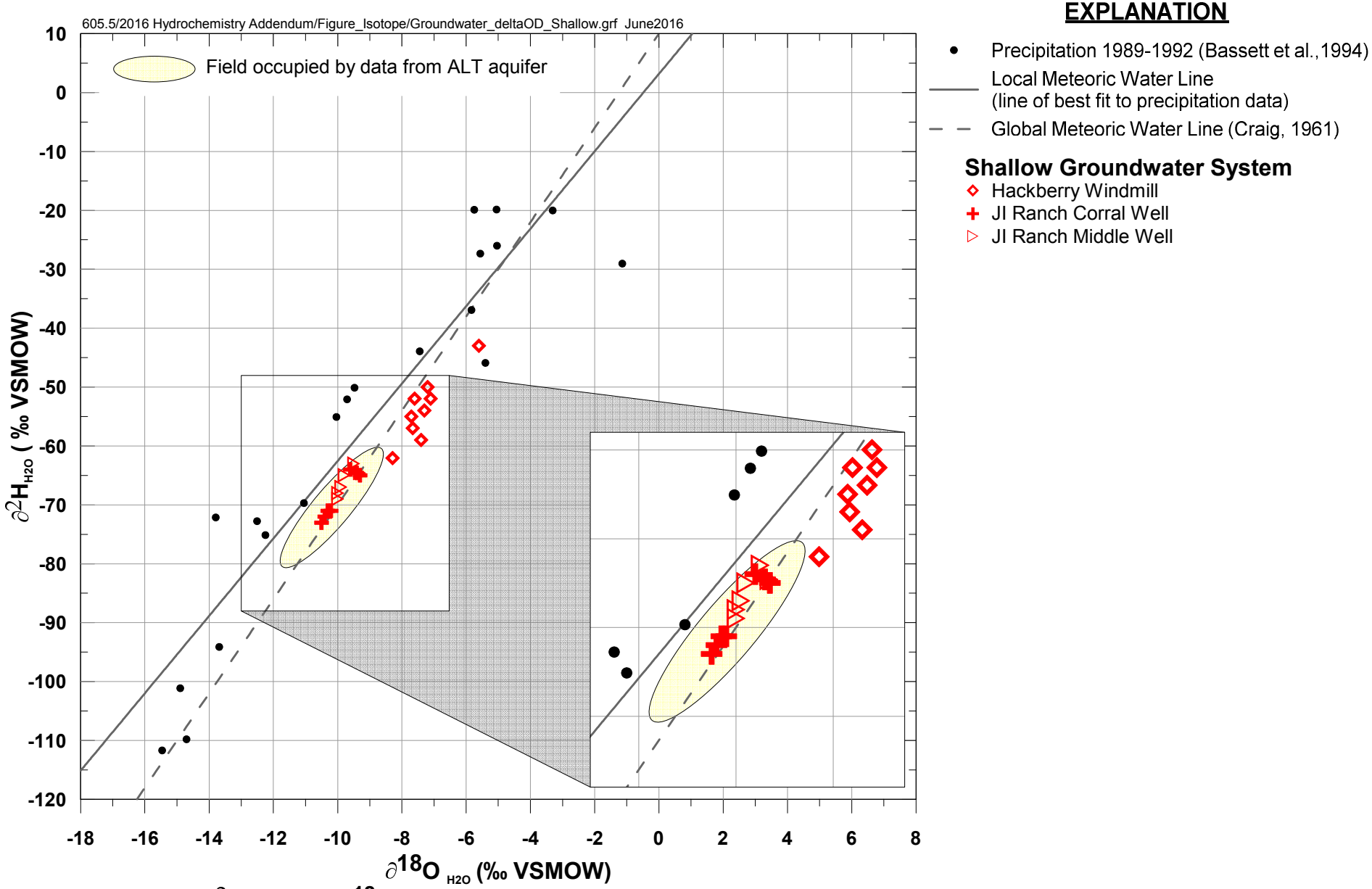


FIGURE 11. ∂^2H VERSUS ∂^{18}O COMPOSITION - SHALLOW GROUNDWATER SYSTEM

MONTGOMERY & ASSOCIATES

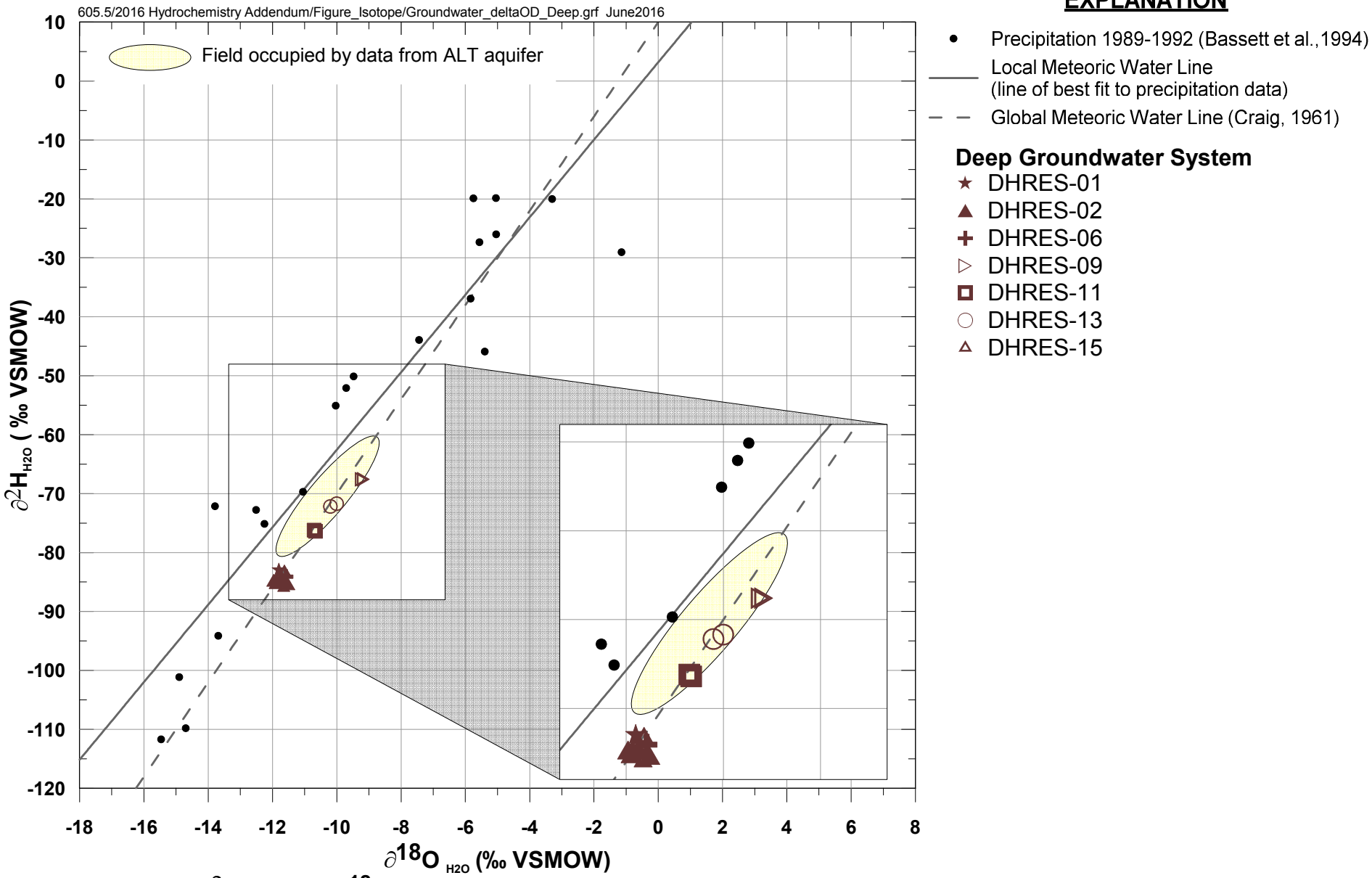
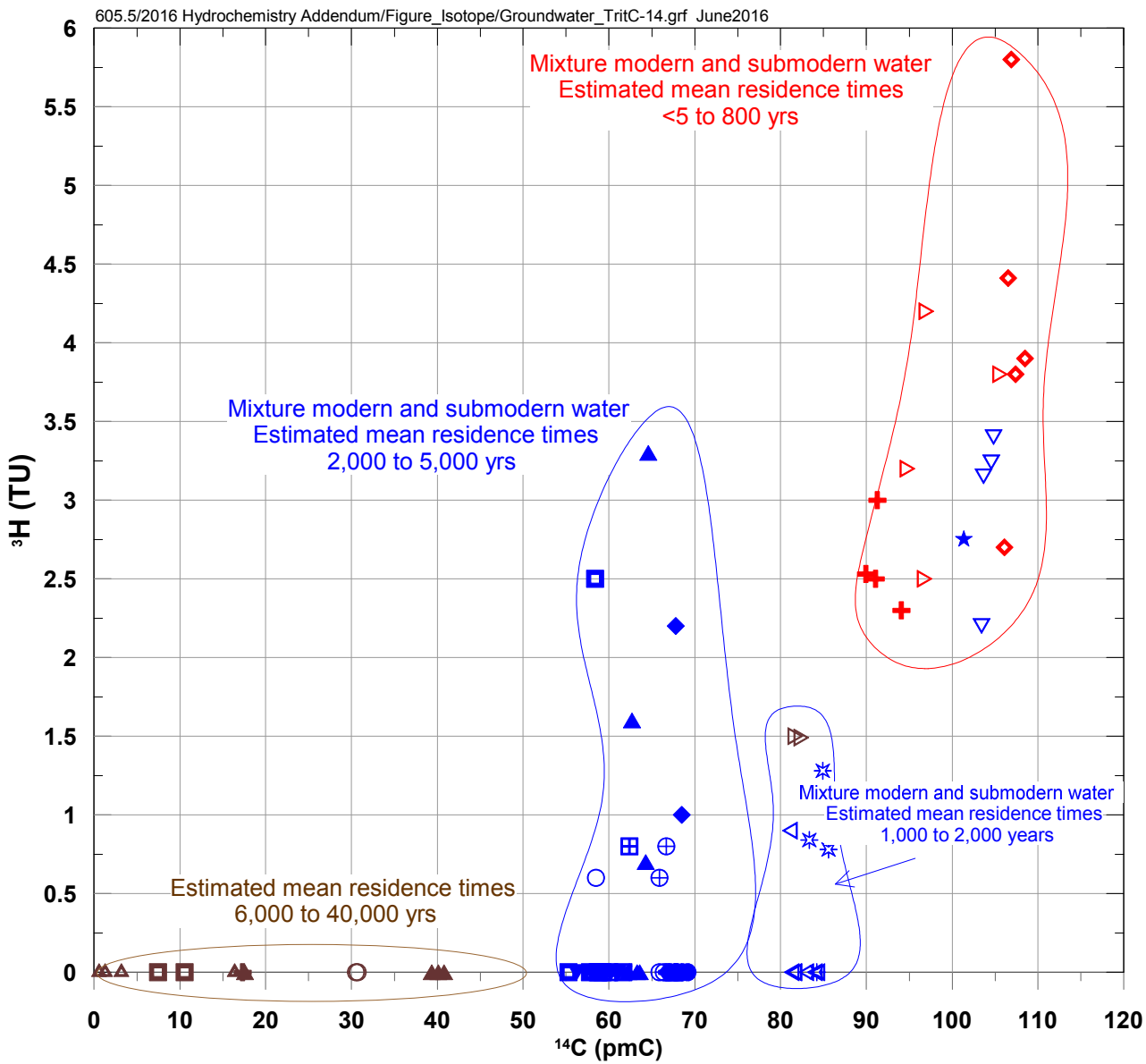


FIGURE 12. ∂^2H VERSUS ∂^{18}O COMPOSITION - DEEP GROUNDWATER SYSTEM

MONTGOMERY & ASSOCIATES



EXPLANATION

Shallow Groundwater System

- Hackberry Windmill
- JI Ranch Corral Well
- JI Ranch Middle Well

Apache Leap Tuff Aquifer

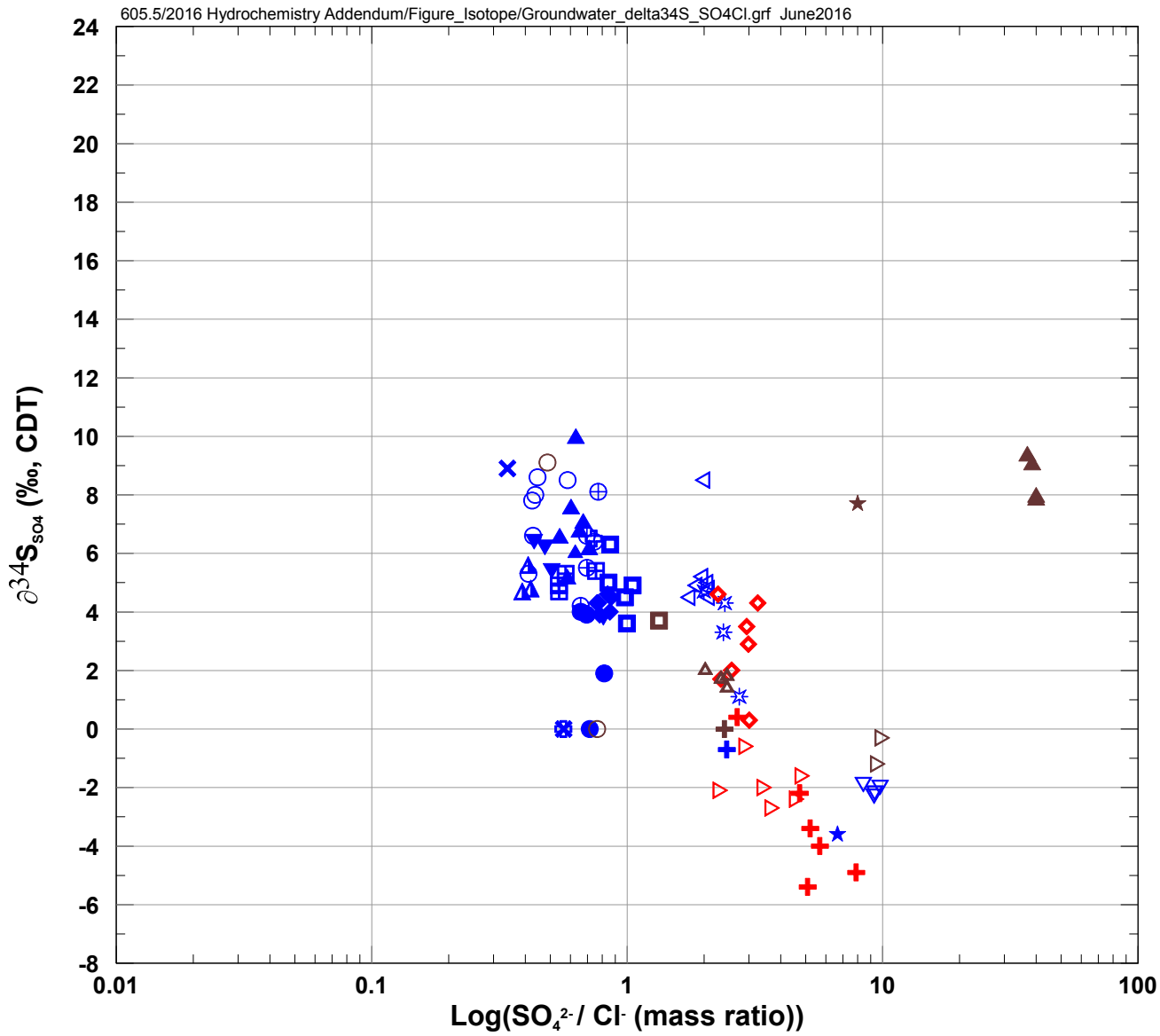
- A-06
- HRES-02
- HRES-04
- HRES-05
- HRES-06
- HRES-07
- HRES-08
- HRES-10
- HRES-11
- HRES-12
- HRES-13
- HRES-14
- HRES-15
- HRES-17
- CT Well
- MJ-11

Deep Groundwater System

- DHRES-02
- DHRES-06
- DHRES-09
- DHRES-11
- DHRES-13
- DHRES-15

FIGURE 13. ^{3}H VERSUS ^{14}C - ALL GROUNDWATER SAMPLES

MONTGOMERY & ASSOCIATES



EXPLANATION

Shallow Groundwater System
- Hackberry Windmill
- JI Ranch Corral Well
- JI Ranch Middle Well

Apache Leap Tuff Aquifer
- A-06
- HRES-02
- HRES-04
- HRES-05
- HRES-06
- HRES-07
- HRES-08
- HRES-09
- HRES-10
- HRES-11
- HRES-12
- HRES-13
- HRES-14
- HRES-15
- HRES-17
- CT Well
- MJ-11

Deep Groundwater System
- DHRES-01
- DHRES-02
- DHRES-09
- DHRES-11
- DHRES-13
- DHRES-15

FIGURE 14. $\partial^{34}S_{SO4}$ VERSUS SO_4/Cl MASS RATIO - ALL GROUNDWATER SAMPLES

MONTGOMERY & ASSOCIATES

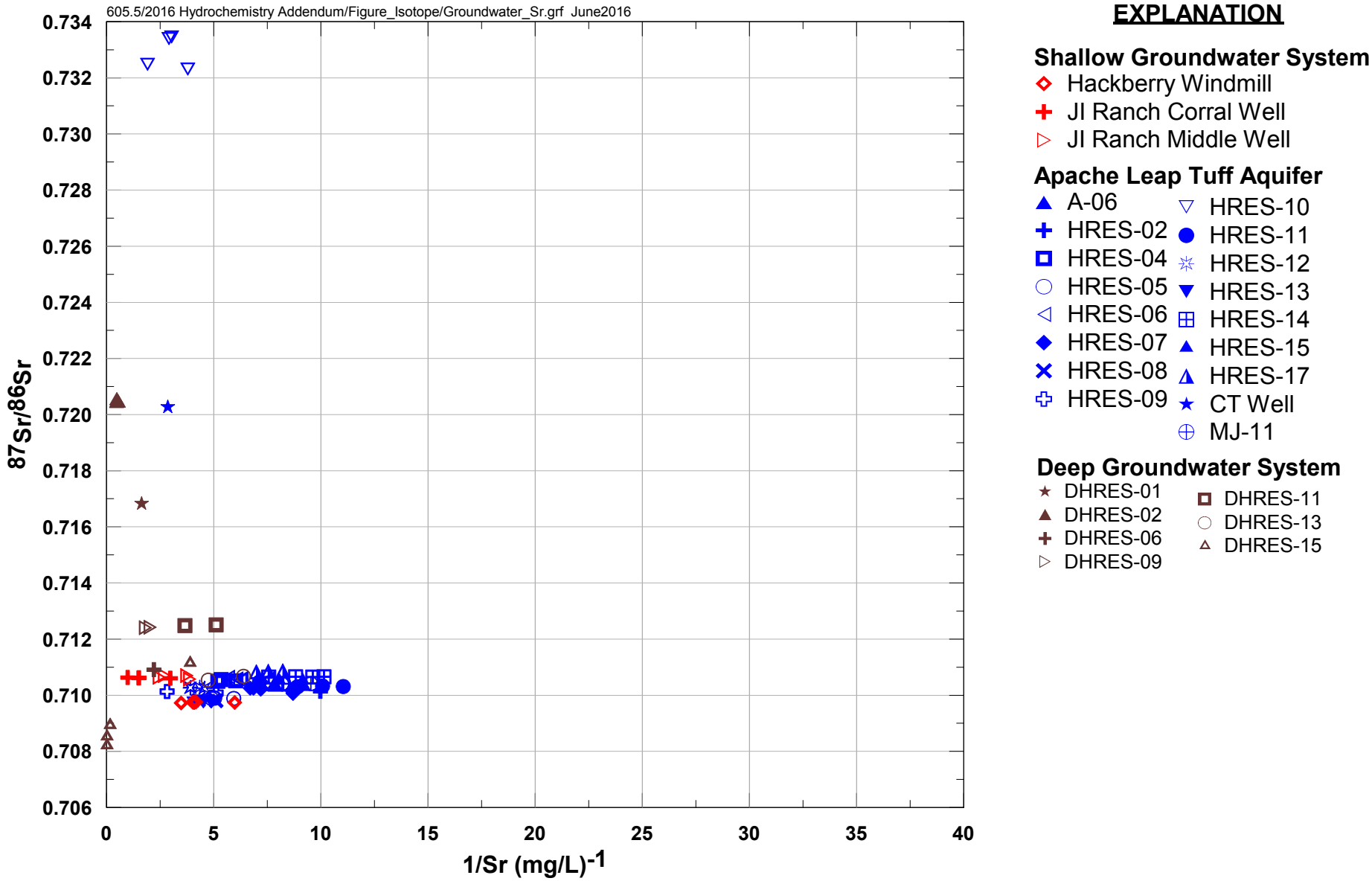
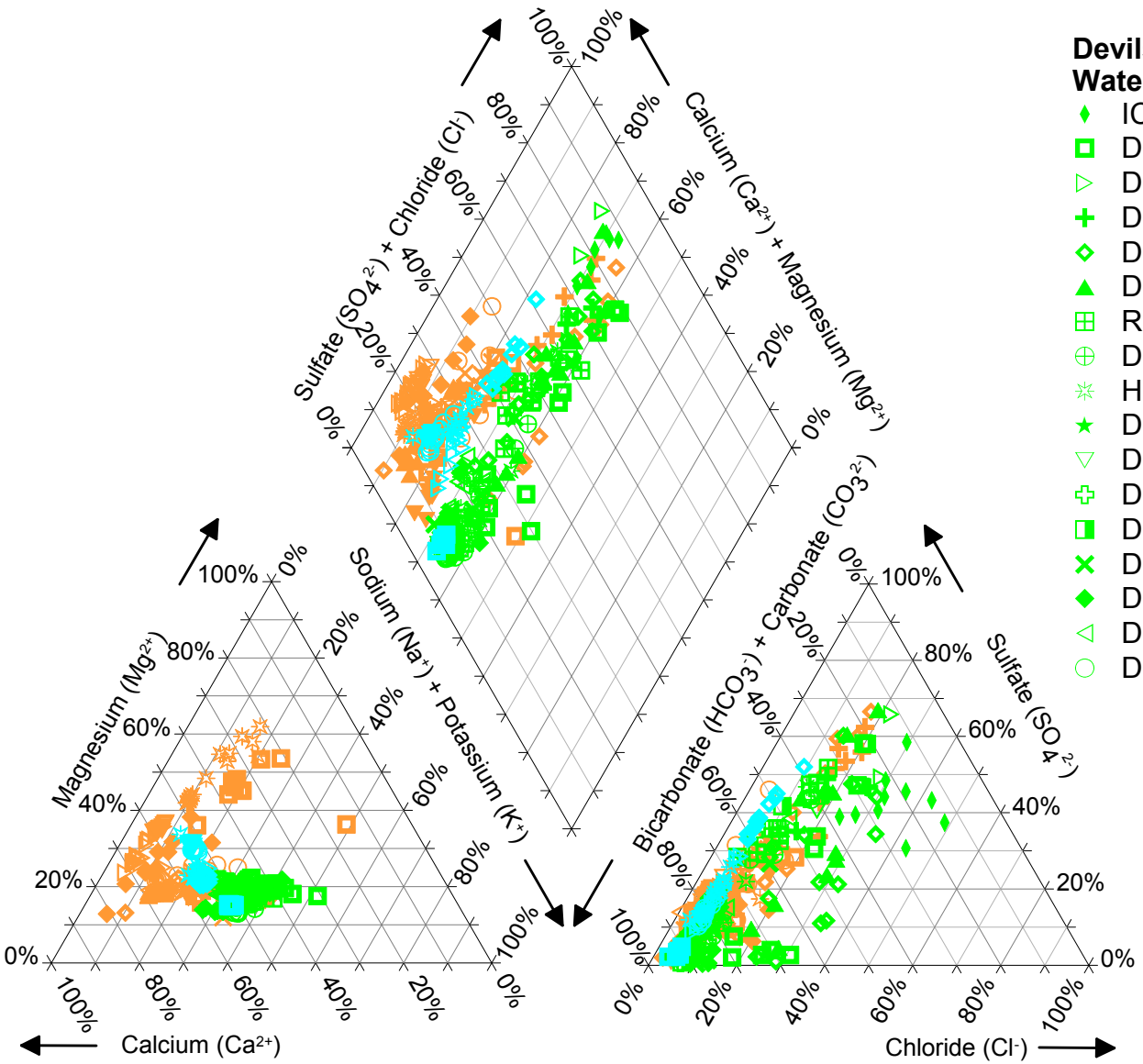


FIGURE 15. $^{87}Sr/^{86}Sr$ ISOTOPE RATIO VERSUS INVERSE STRONTIUM CONCENTRATION - ALL GROUNDWATER SAMPLES

MONTGOMERY & ASSOCIATES

605.5/2016 Hydrochemistry Addendum/Figure_Piper/Piper_SurfaceWater.grf June2016



Devils Canyon Watershed

- IC 1.0 C
- DC 15.5 C
- DC 15.2 C
- DC 14.7 C
- DC 13.5 C
- DC 10.9 C
- RR 1.5 C
- DC 8.8 C
- H 0.1 C
- DC 8.2 W
- DC 8.1 C
- DC 7.1 C
- DC 6.6 W
- DC 6.14 C
- DC 6.1 E
- DC 5.5 C
- DC 4.1 E

EXPLANATION

Upper Queen Creek Watershed

- Pump Station Spring
- QC 27.3 C
- Oak Flat Wash
- Number 9 Wash
- Boulder Hole
- QC 22.6 E
- QC 21.7 C
- QC 19.7 C

Queen Creek Watershed Springs South of Superior

- Bored Spring
- Hidden Spring
- Kane Spring
- Blue Spring

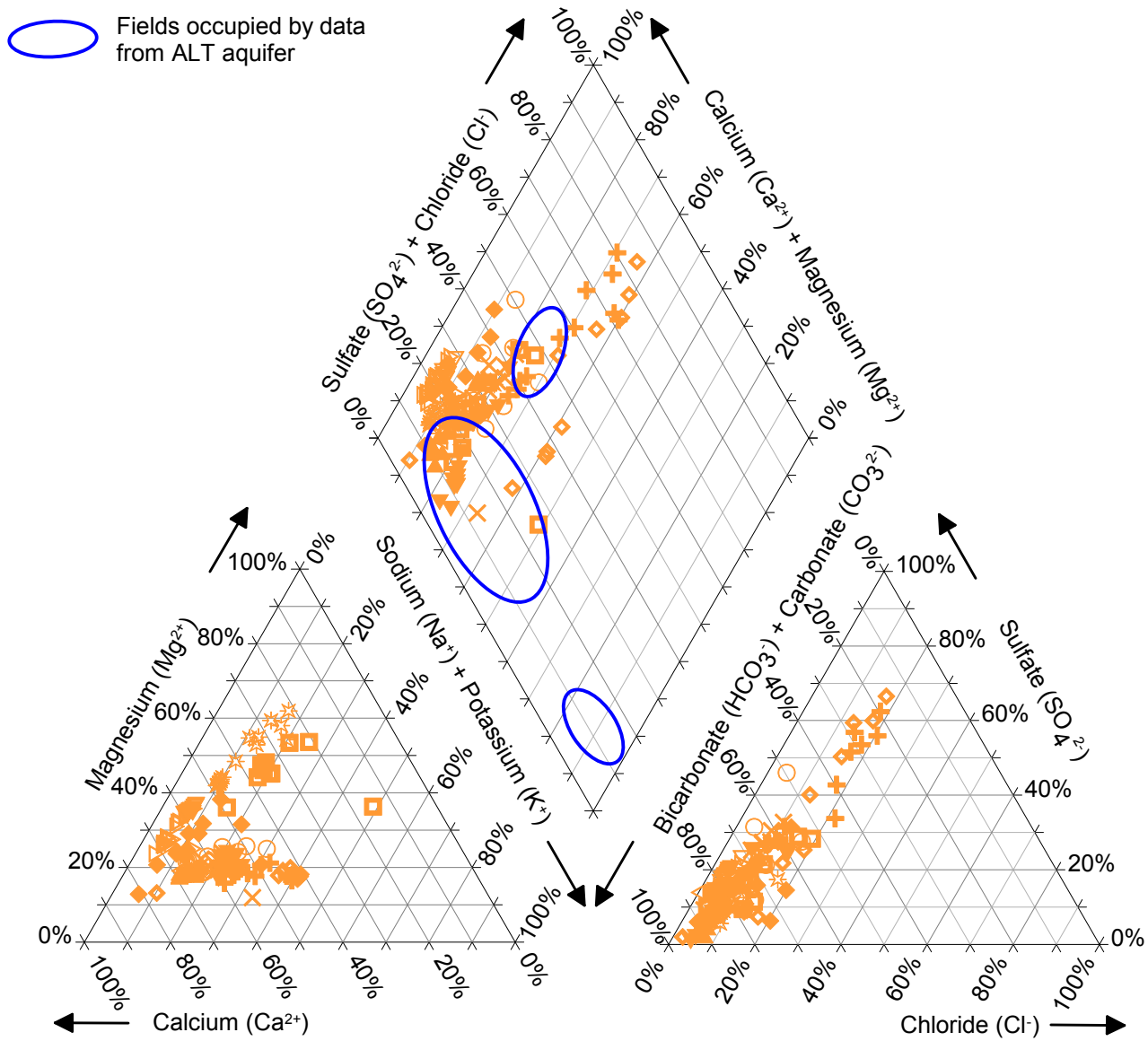
Mineral Creek Watershed

- Government Springs
- MC 8.4 C
- LF 0.2 C
- MC 5.2 C
- MC 3.4 W
- MC 3.3 C

FIGURE 16. TRILINEAR DIAGRAM OF COMMON ION COMPOSITIONS - SURFACE WATERS AND SPRINGS

MONTGOMERY & ASSOCIATES

605.5/2016 Hydrochemistry Addendum/Figure_Piper/Piper_SurfaceWater_QC.grf June2016



EXPLANATION

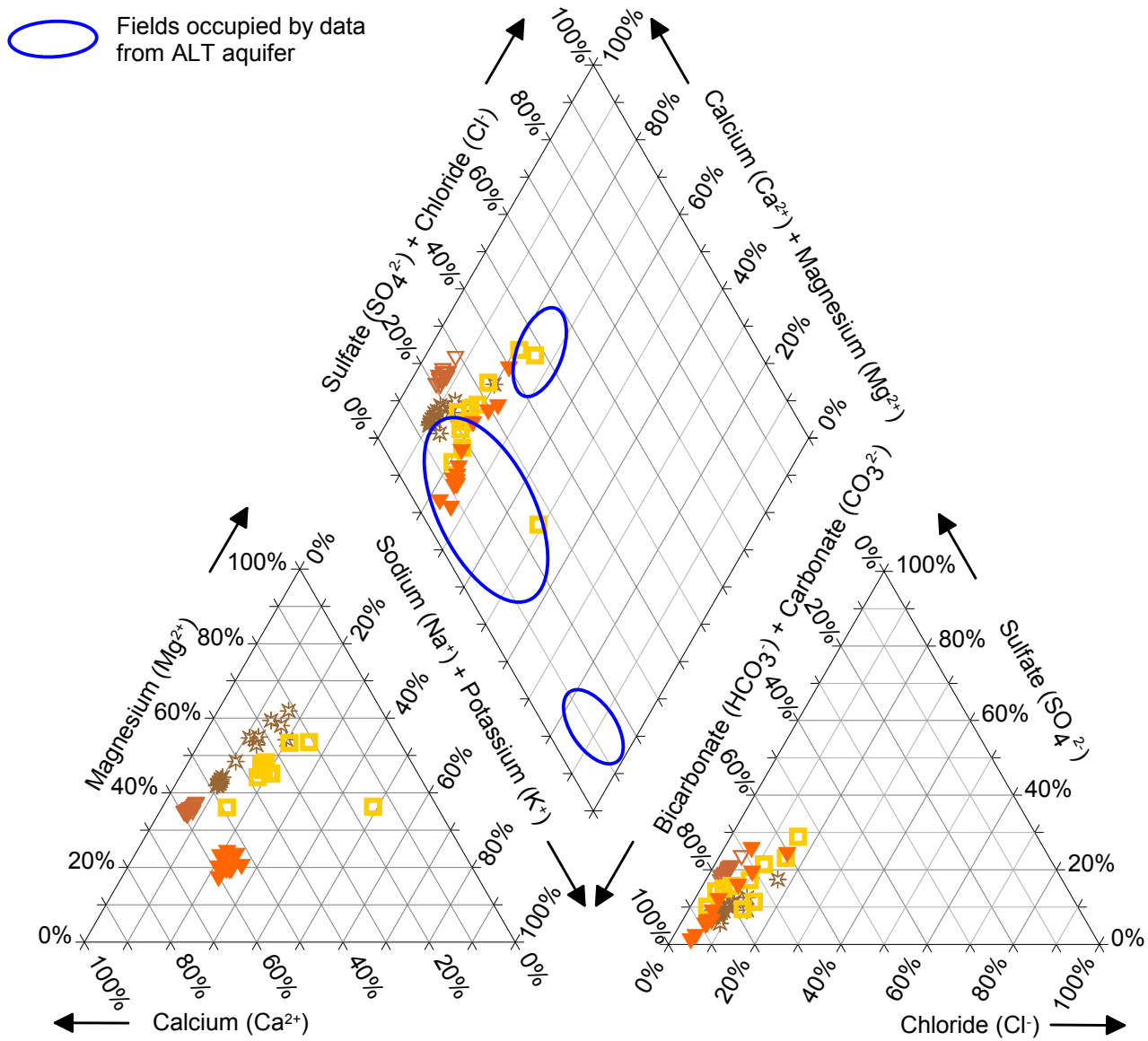
Upper Queen Creek Watershed

- ▷ Pump Station Spring
- ◆ QC 27.3 C
- + Oak Flat Wash
- ◇ Number 9 Wash
- ▲ Boulder Hole
- ◁ QC 22.6 E
- ○ QC 21.7 C
- × QC 19.7 C

FIGURE 17. TRILINEAR DIAGRAM OF COMMON ION COMPOSITIONS - UPPER QUEEN CREEK WATERSHED

MONTGOMERY & ASSOCIATES

605.5/2016 Hydrochemistry Addendum/Figure_Piper/Piper_SurfaceWater_QC_SelectSprings.grf June2016



EXPLANATION

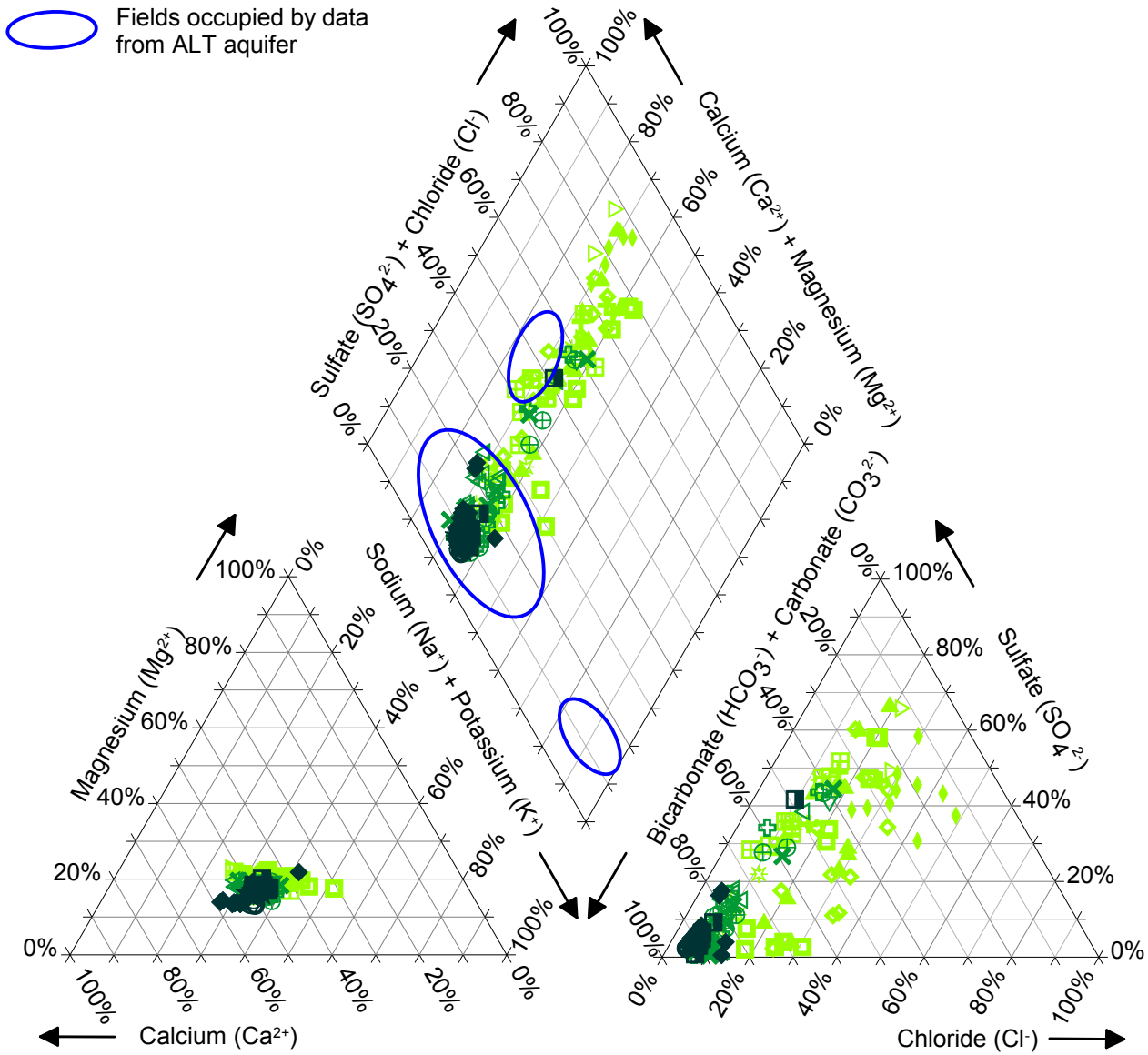
Springs South of Superior Queen Creek Watershed

- Bored Spring
- Hidden Spring
- Kane Spring
- Blue Spring

FIGURE 18. TRILINEAR DIAGRAM OF COMMON ION COMPOSITIONS - SELECT SPRINGS SOUTH OF SUPERIOR QUEEN CREEK WATERSHED

MONTGOMERY & ASSOCIATES

605.5/2016 Hydrochemistry Addendum/Figure_Piper/Piper_SurfaceWater_DC.grf June2016



EXPLANATION

Devils Canyon Watershed

Ephemeral
- IC 1.0 C
- DC 15.5 C
- DC 15.2 C
- DC 14.7 C
- DC 13.5 C
- DC 10.9 C
- RR 1.5 C
- H 0.1 C

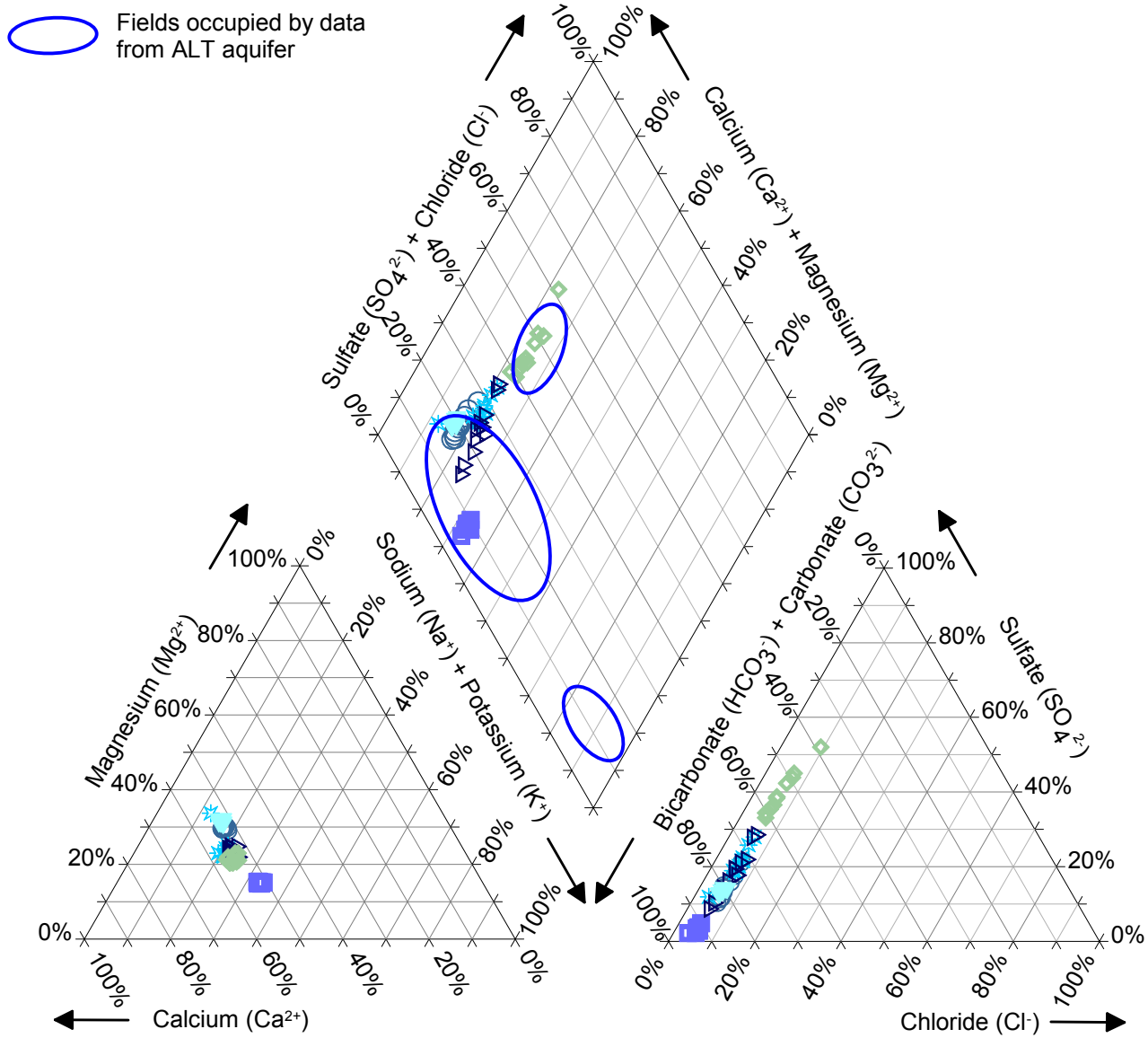
Perennial
- DC 8.8 C
- DC 8.1 C
- DC 7.1 C
- DC 6.14 C
- DC 5.5 C

Spring
- DC 8.2 W
- DC 6.6 W
- DC 6.1 E
- DC 4.1 E

FIGURE 19. TRILINEAR DIAGRAM OF COMMON ION COMPOSITIONS - DEVILS CANYON WATERSHED

MONTGOMERY & ASSOCIATES

605.5/2016 Hydrochemistry Addendum/Figure_Piper/Piper_SurfaceWater_MC.grf June2016



EXPLANATION

SURFACE WATER AND SPRINGS

Mineral Creek Watershed

- Government Springs
- MC 8.4 C
- LF 0.2 C
- MC 5.2 C
- MC 3.4 W
- MC 3.3 C

FIGURE 20. TRILINEAR DIAGRAM OF COMMON ION COMPOSITIONS - MINERAL CREEK WATERSHED

MONTGOMERY & ASSOCIATES

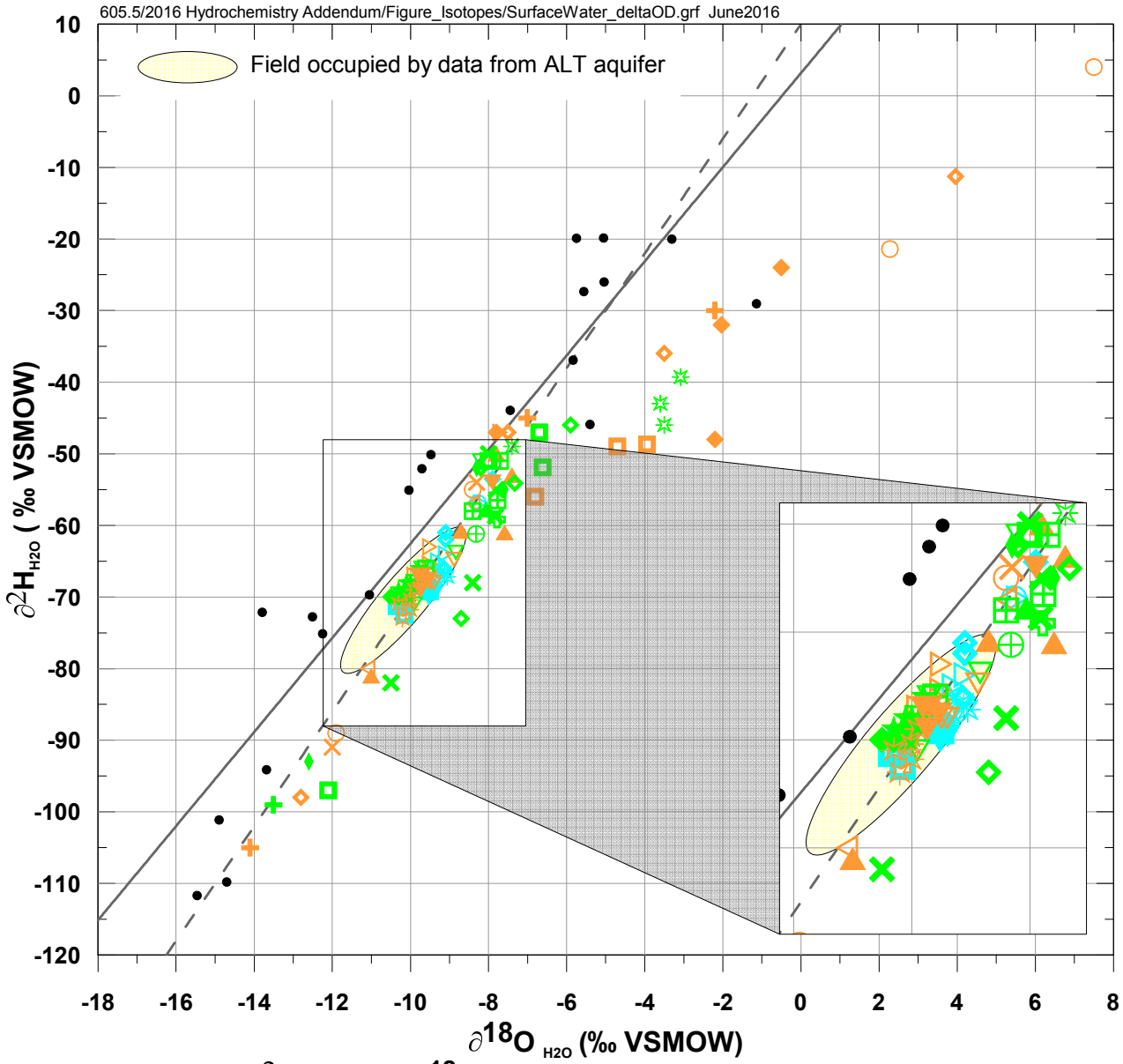


FIGURE 21. ∂^2H VERSUS ∂^{18}O COMPOSITION - SURFACE WATER AND SPRINGS

EXPLANATION

- Precipitation 1989-1992 (Bassett et al.,1994)
- Local Meteoric Water Line (line of best fit to precipitation data)
- Global Meteoric Water Line (Craig, 1961)

Upper Queen Creek Watershed

- Pump Station Spring
- QC 27.3 C
- Oak Flat Wash
- Number 9 Wash
- Boulder Hole
- QC 19.7 C
- QC 21.7 C
- QC 22.6 E

Queen Creek Watershed Springs South of Superior

- Bored Spring
- Hidden Spring
- Kane Spring
- Blue Spring

Devils Canyon Watershed

- IC 1.0 C
- DC 15.5 C
- DC 14.7 C
- DC 13.5 C
- DC 10.9 C
- RR 1.5 C
- DC 8.8 C
- H 0.1 C
- DC 8.2 W
- DC 8.1 C
- DC 7.1 C
- DC 6.6 W
- DC 6.14 C
- DC 6.1 E

Mineral Creek Watershed

- Government Springs
- MC 8.4 C
- LF 0.2 C
- MC 5.2 C
- MC 3.4 W
- MC 3.3 C

MONTGOMERY & ASSOCIATES

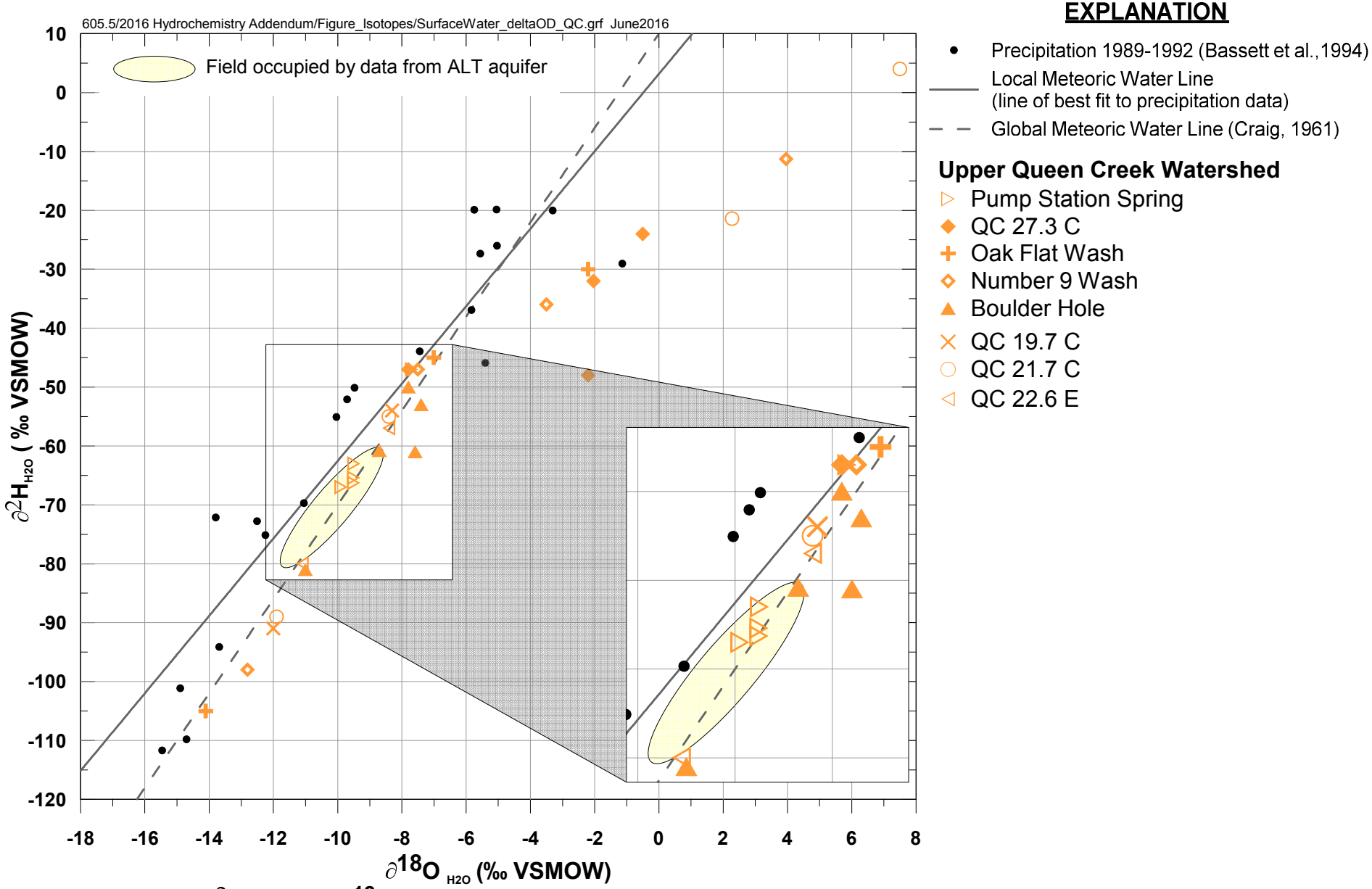


FIGURE 22. ∂^2H VERSUS ∂^{18}O COMPOSITION - SURFACE WATER AND SPRINGS, UPPER QUEEN CREEK WATERSHED

MONTGOMERY & ASSOCIATES

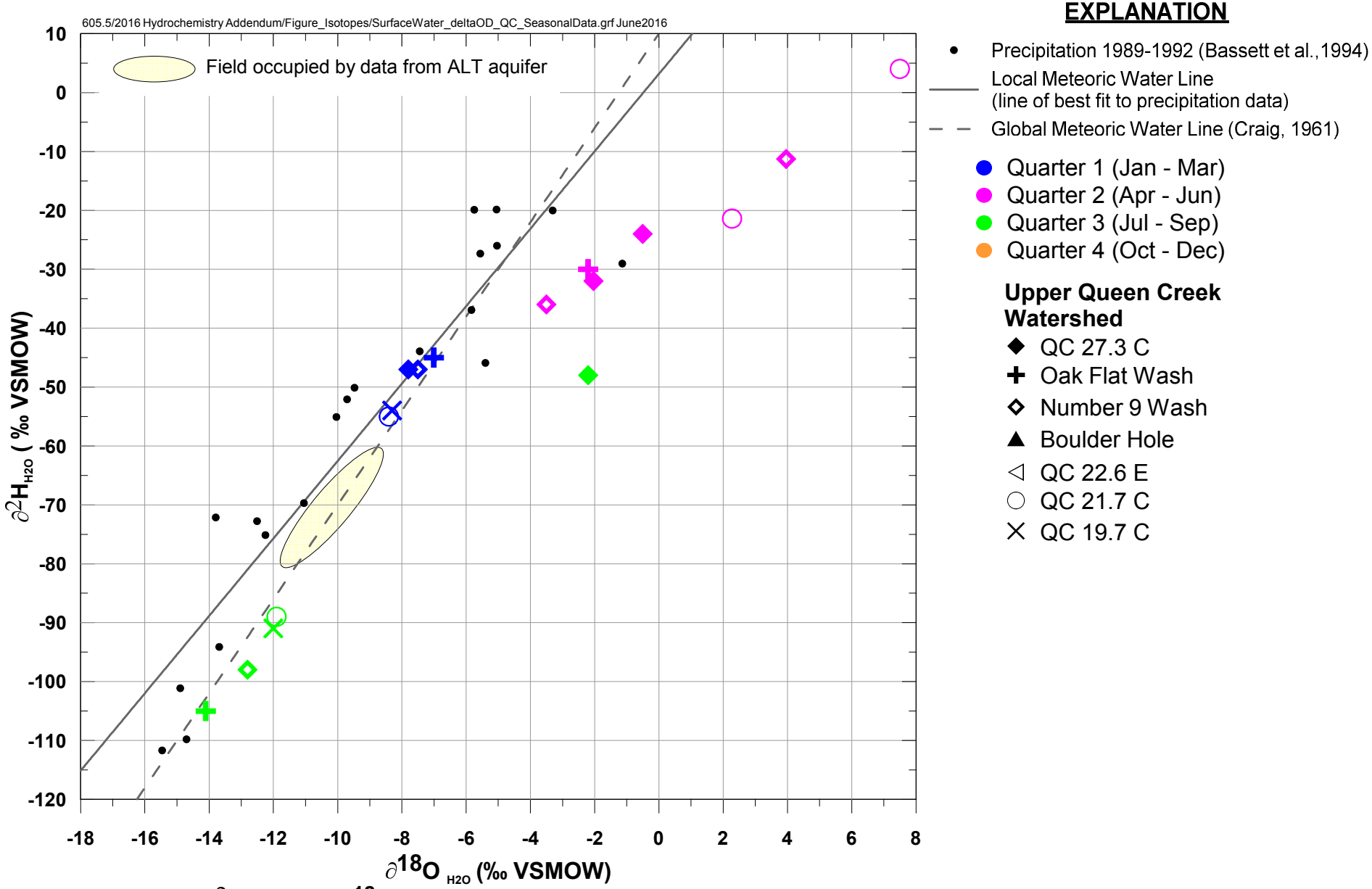


FIGURE 23. ∂^2H VERSUS ∂^{18}O COMPOSITION - SURFACE WATER DATA BY QUARTER, UPPER QUEEN CREEK WATERSHED

MONTGOMERY & ASSOCIATES

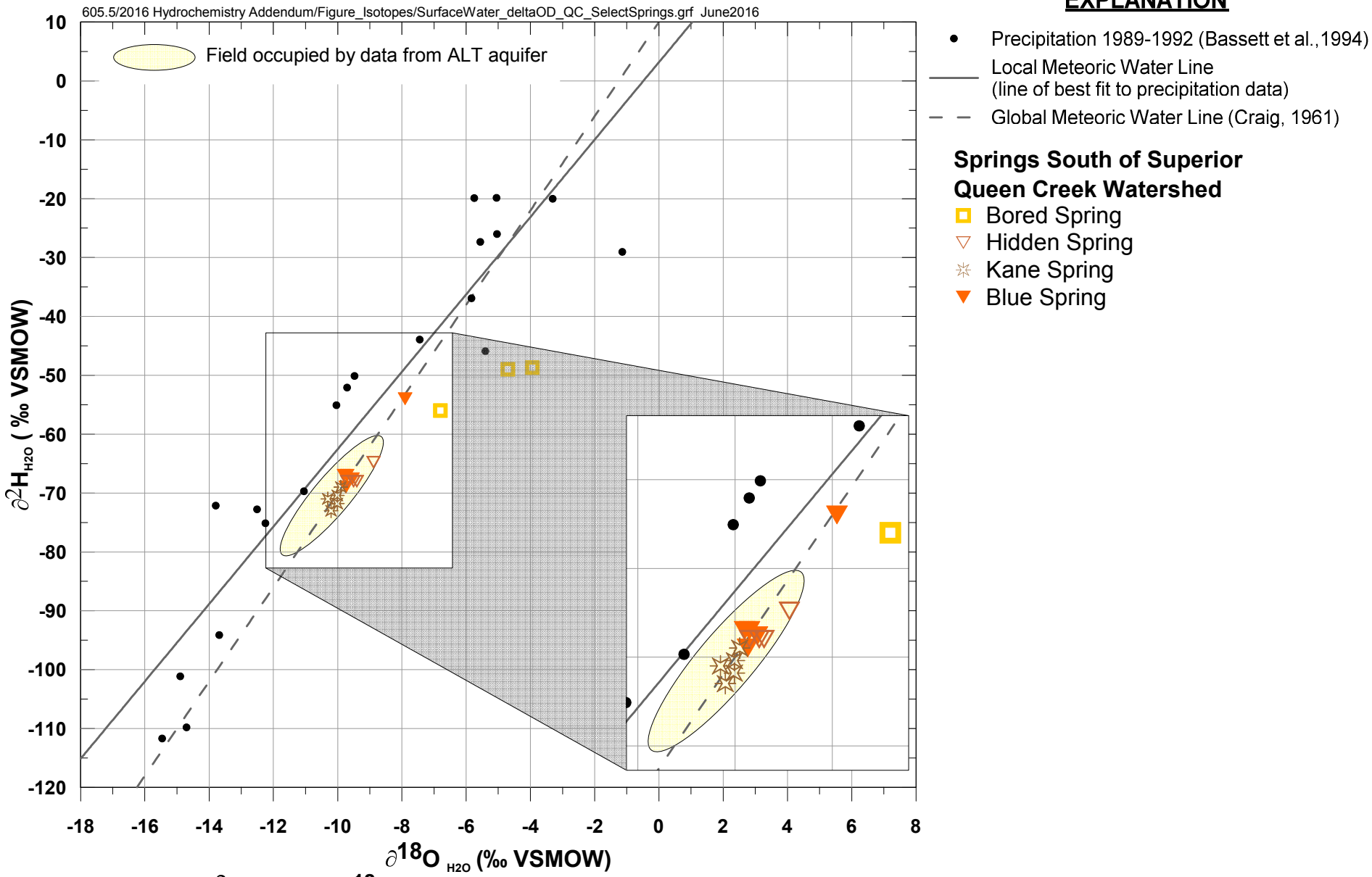


FIGURE 24. ∂^2H VERSUS ∂^{18}O COMPOSITION - SELECT SPRINGS SOUTH OF SUPERIOR, QUEEN CREEK WATERSHED

MONTGOMERY & ASSOCIATES

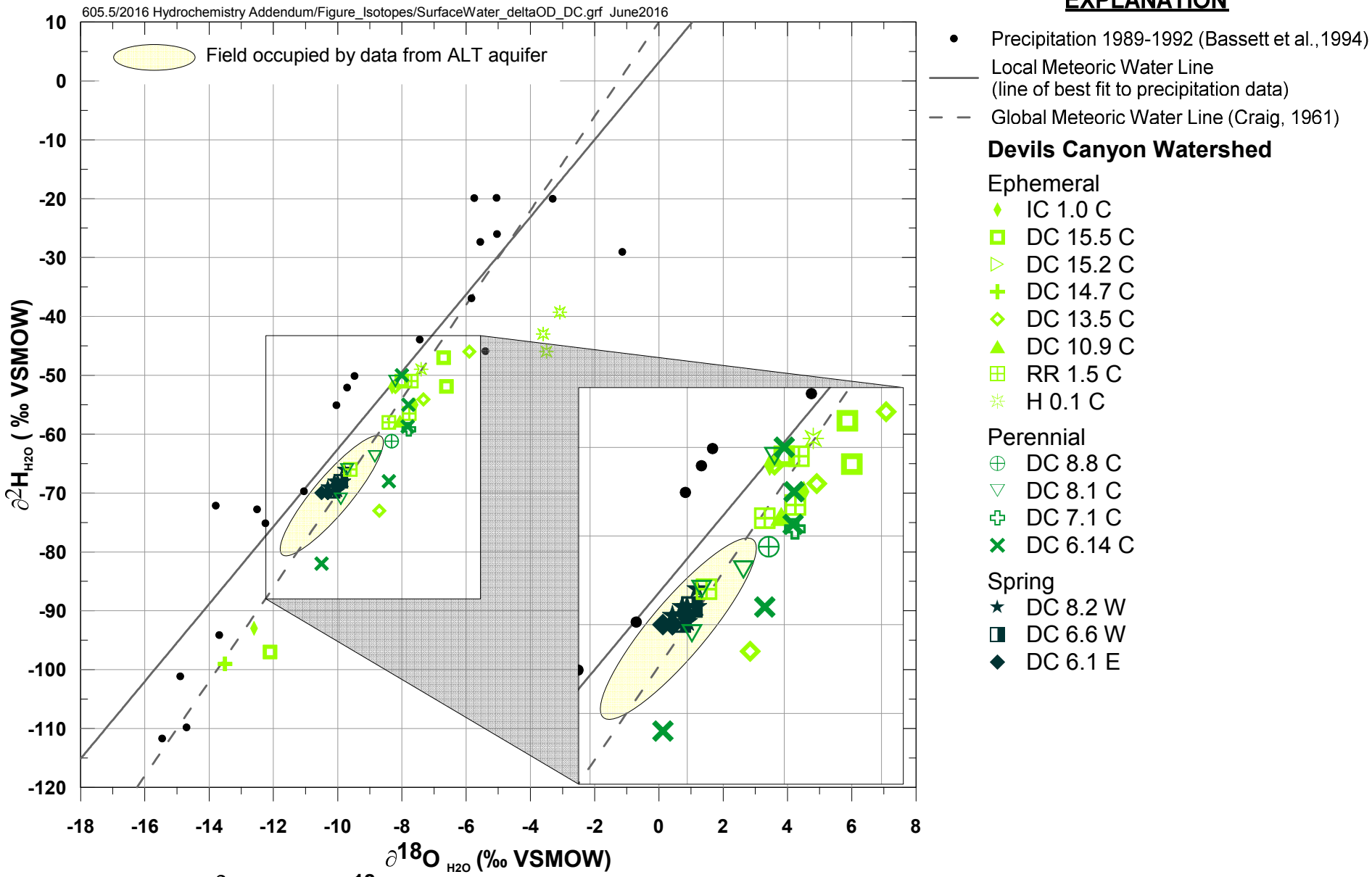


FIGURE 25. ∂^2H VERSUS ∂^{18}O COMPOSITION - SURFACE WATER AND SPRINGS, DEVILS CANYON WATERSHED

MONTGOMERY & ASSOCIATES

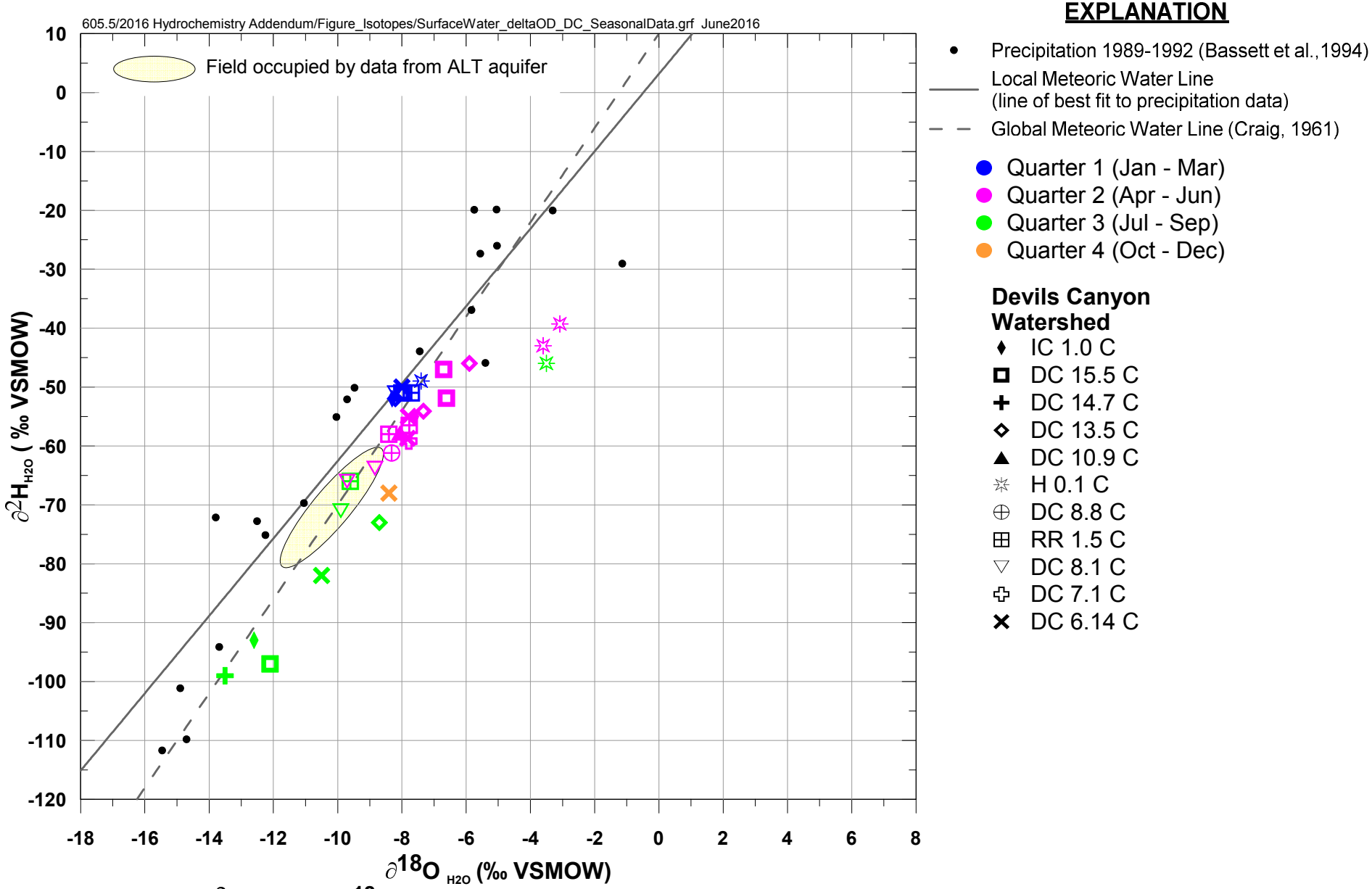


FIGURE 26. ∂^2H VERSUS ∂^{18}O COMPOSITION - SURFACE WATER DATA BY QUARTER, DEVILS CANYON WATERSHED

MONTGOMERY & ASSOCIATES

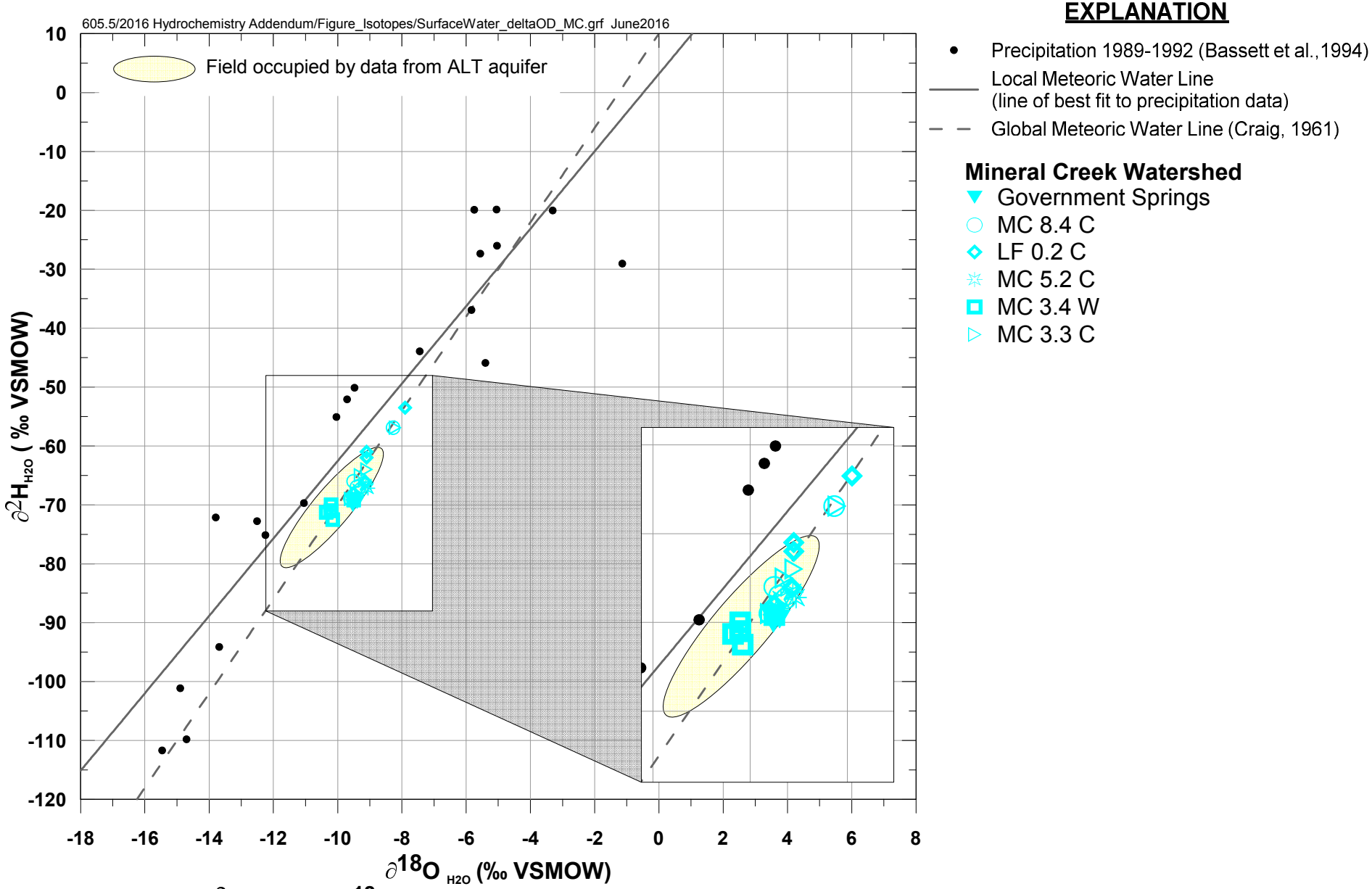
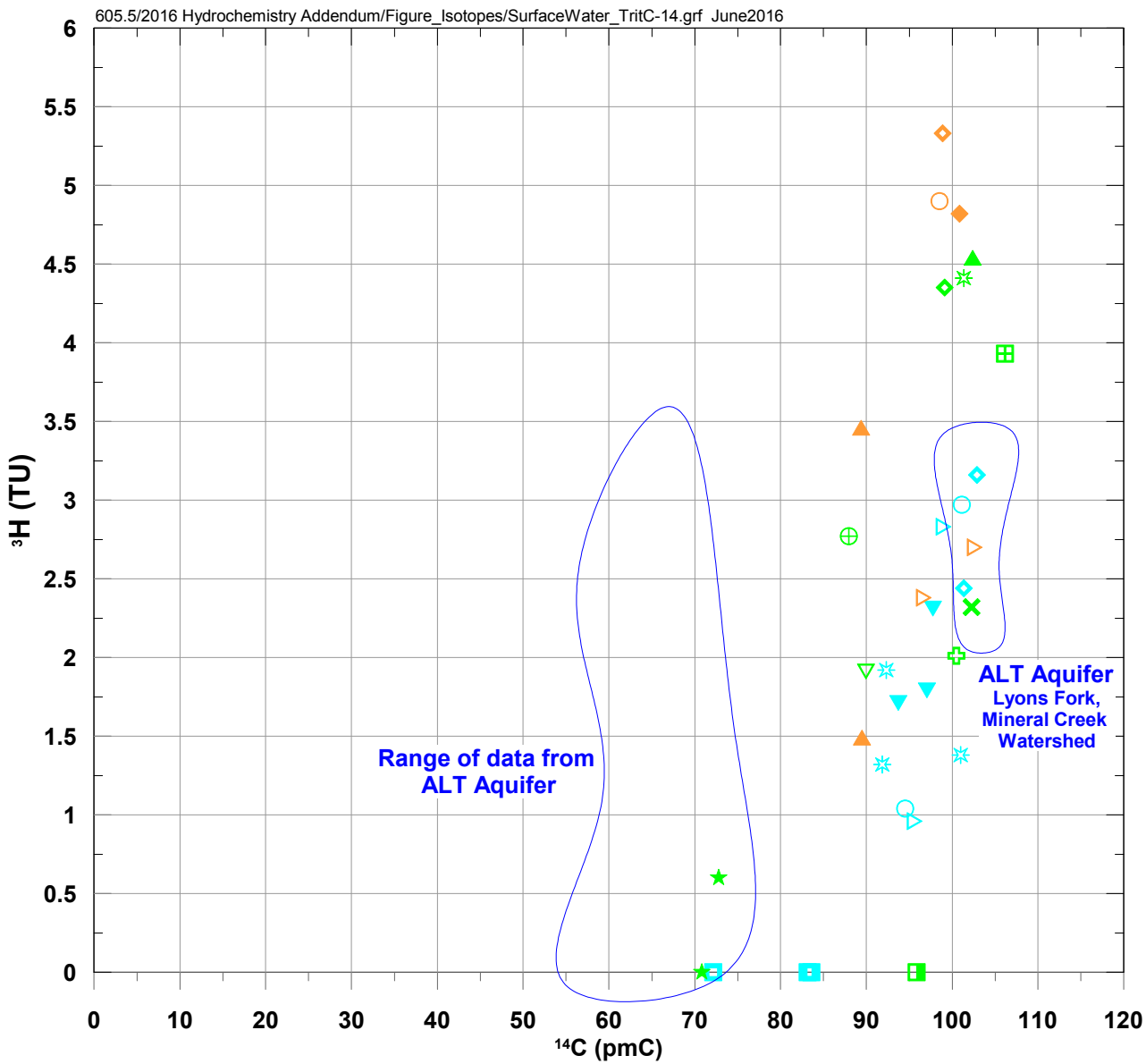


FIGURE 27. ∂^2H VERSUS ∂^{18}O COMPOSITION - SURFACE WATER AND SPRINGS, MINERAL CREEK WATERSHED

MONTGOMERY & ASSOCIATES



EXPLANATION

Upper Queen Creek Watershed
- Pump Station Spring
- QC 27.3 C
- Number 9 Wash
- Boulder Hole
- QC 21.7 C

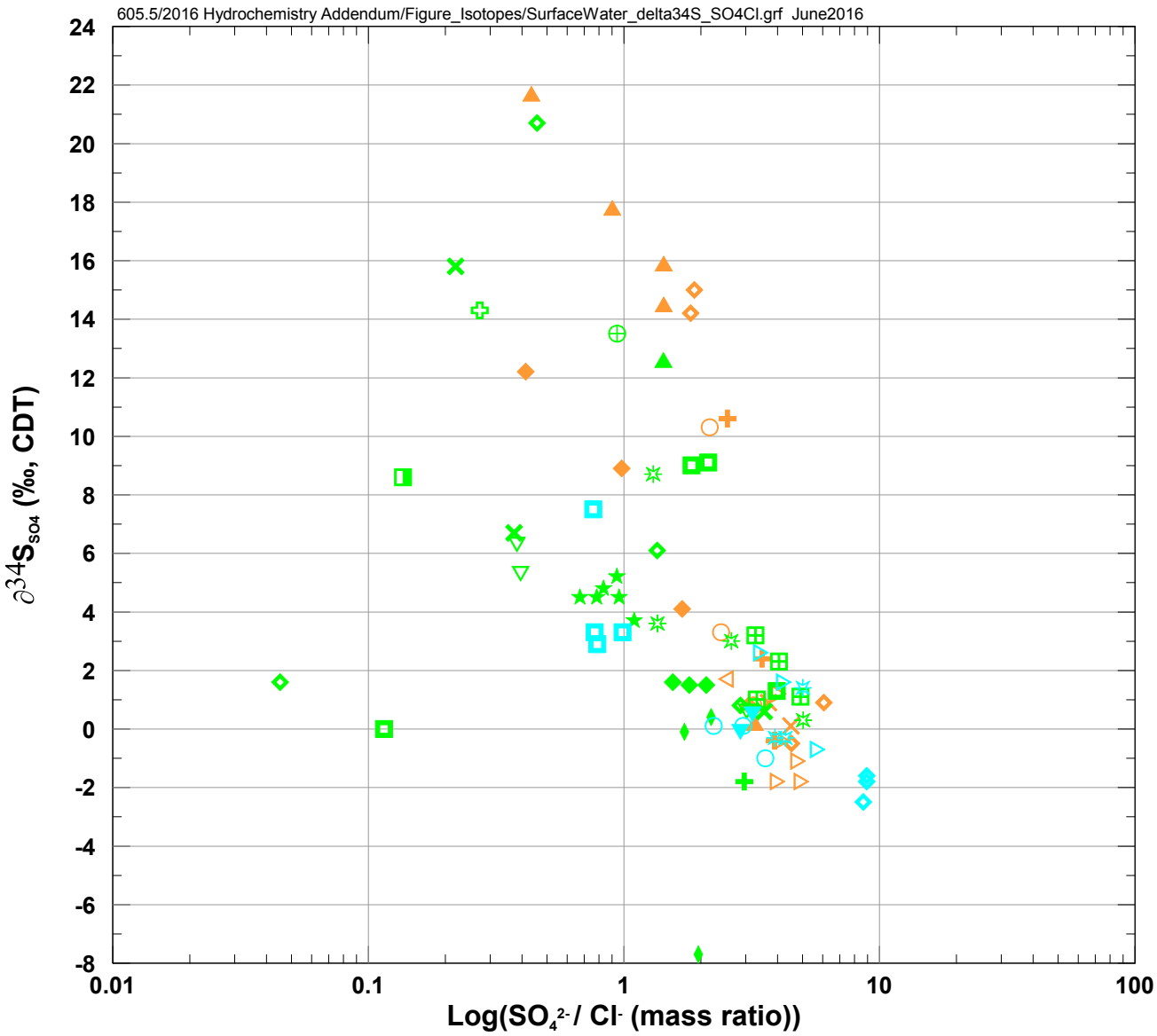
Queen Creek Watershed Springs South of Superior
- Bored Spring
- Hidden Spring
- Kane Spring
- Blue Spring

Devils Canyon Watershed
- DC 13.5 C
- DC 10.9 C
- RR 1.5 C
- DC 8.8 C
- H 0.1 C
- DC 8.2 W
- DC 8.1 C
- DC 7.1 C
- DC 6.6 W
- DC 6.14 C

Mineral Creek Watershed
- Government Springs
- MC 8.4 C
- LF 0.2 C
- MC 5.2 C
- MC 3.4 W
- MC 3.3 C

FIGURE 28. ^{3}H VERSUS ^{14}C - SURFACE WATER AND SPRINGS

MONTGOMERY & ASSOCIATES



EXPLANATION

Upper Queen Creek Watershed
- Pump Station Spring
- QC 27.3 C
- Oak Flat Wash
- Number 9 Wash
- Boulder Hole
- QC 19.7 C
- QC 21.7 C
- QC 22.6 E

Queen Creek Watershed Springs South of Superior
- Bored Spring
- Hidden Spring
- Kane Spring
- Blue Spring

Devils Canyon Watershed
- IC 1.0 C
- DC 15.5 C
- DC 14.7 C
- DC 13.5 C
- DC 10.9 C
- RR 1.5 C
- DC 8.8 C
- H 0.1 C
- DC 8.2 W
- DC 8.1 C
- DC 7.1 C
- DC 6.6 W
- DC 6.14 C
- DC 6.1 E

Mineral Creek Watershed
- Government Springs
- MC 8.4 C
- LF 0.2 C
- MC 5.2 C
- MC 3.4 W
- MC 3.3 C

FIGURE 29. $\partial^{34}S_{SO4}$ VERSUS SO_4/Cl MASS RATIO - SURFACE WATER AND SPRINGS

MONTGOMERY & ASSOCIATES

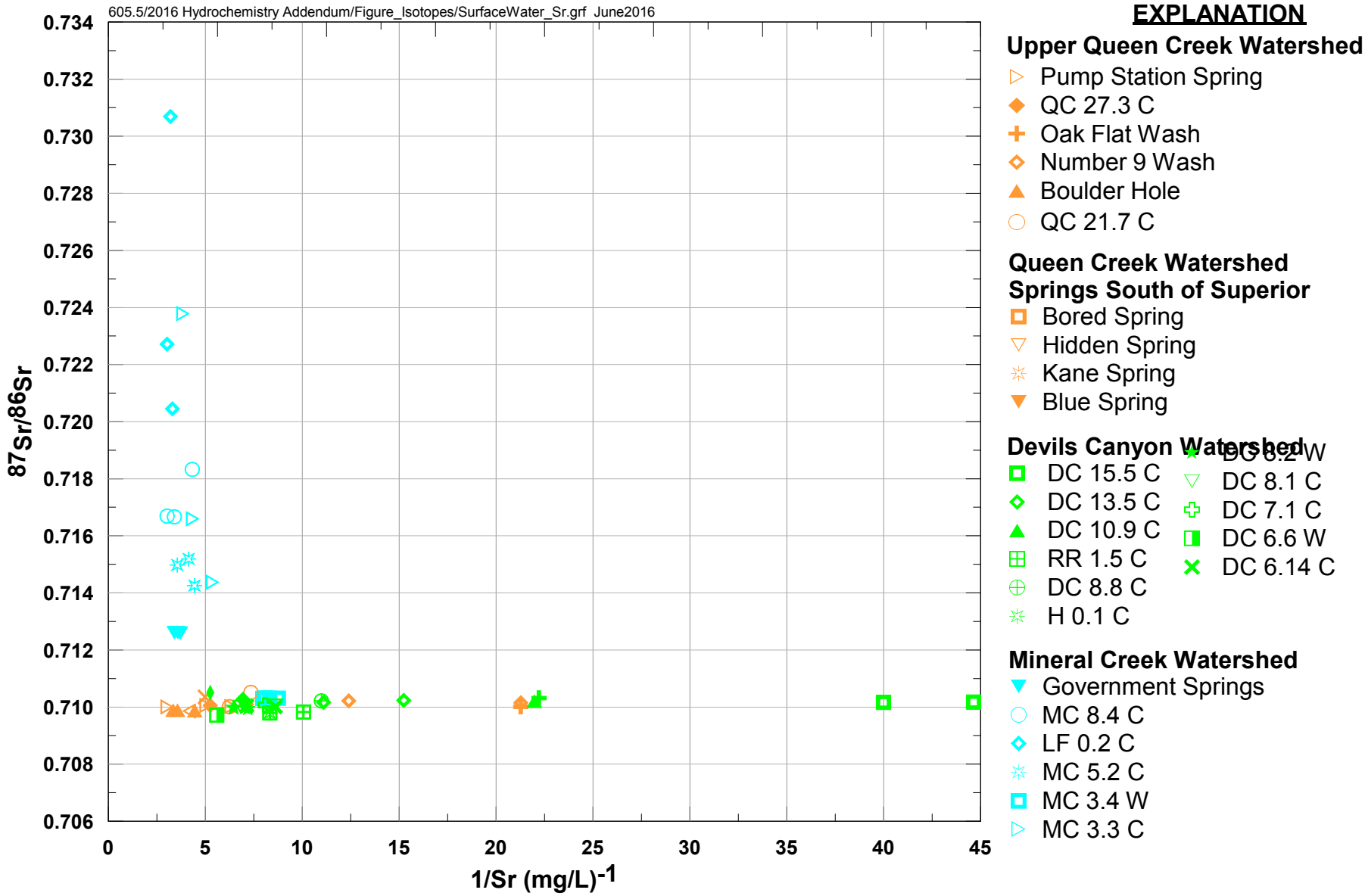


FIGURE 30. $^{87}Sr/^{86}Sr$ ISOTOPE RATIO VERSUS INVERSE STRONTIUM CONCENTRATION - SURFACE WATER AND SPRINGS

MONTGOMERY & ASSOCIATES

Appendix A

HYDROCHEMISTRY DATA TABLES – GROUNDWATER

TABLE A-1. COMMON CONSTITUENTS AND ROUTINE PARAMETERS
FOR GROUNDWATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	COMMON CONSTITUENTS[a] (mg/L)[b]													ROUTINE PARAMETERS					ANALYTICAL LABORATORY
																FIELD			LABORATORY		
			Ca	Mg	Na	K	Cl	CO_3	HCO_3	SO_4	SiO_2	Br	F	$NO_3 + NO_2$ (as N)	TDS	TEMP (°C)[c]	pH	SC (µS/cm)[d]	pH	SC (µS/cm)	
Groundwater 1 - Shallow Groundwater System																					
Hackberry Windmill Well	WM-ALU	17-Jun-86	28.2	5.15	7	2.61	3.52	---	117	25.9	31.9	---	0.45	<0.14	135	20.0	6.50	---	---	---	
Hackberry Windmill Well	RESE-1000263	27-Feb-08	---	---	---	---	---	---	---	---	---	---	---	---	---	14.9	6.61	328	---	---	
Hackberry Windmill Well	RESE-1000263	27-Feb-08	40	8.0	16	3.1	---	---	---	---	30	---	---	---	---	---	---	---	---	---	TestAmerica
Hackberry Windmill Well	RESE-1000263	27-Feb-08	---	---	---	---	15	ND	121	35	---	<0.50	<0.40	2.4	230	---	---	---	---	---	TestAmerica
Hackberry Windmill Well	RESE-1003011	03-Jun-08	---	---	---	---	---	---	---	---	---	---	---	---	---	16.8	*6.47*	267.6	---	---	
Hackberry Windmill Well	RESE-1003011	03-Jun-08	33	6.4	11	2.5	---	---	---	---	34	---	---	---	---	---	---	---	---	---	TestAmerica
Hackberry Windmill Well	RESE-1003011	03-Jun-08	---	---	---	---	8.5	ND	113	25	---	<0.50	<0.40	ND	190	---	---	---	6.78	270	TestAmerica
Hackberry Windmill Well	RESE-1003019	02-Sep-08	---	---	---	---	---	---	---	---	---	---	---	---	---	20.7	6.66	279	---	---	
Hackberry Windmill Well	RESE-1003019	02-Sep-08	36	6.7	11	3.1	---	---	---	---	40	---	---	---	---	---	---	---	---	---	TestAmerica
Hackberry Windmill Well	RESE-1003019	02-Sep-08	---	---	---	---	9.3	ND	134	28	---	<0.50	<0.40	ND	200	---	---	---	6.83	280	TestAmerica
Hackberry Windmill Well DUP	RESE-1003020	02-Sep-08	---	---	---	---	---	---	---	---	---	---	---	---	---	20.7	6.66	279	---	---	
Hackberry Windmill Well DUP	RESE-1003020	02-Sep-08	35	7.0	12	3.3	---	---	---	---	39	---	---	---	---	---	---	---	---	---	TestAmerica
Hackberry Windmill Well DUP	RESE-1003020	02-Sep-08	---	---	---	---	9.3	ND	134	28	---	<0.50	<0.40	ND	170	---	---	---	7.19	280	TestAmerica
Hackberry Windmill Well	RESE-1003024	02-Dec-08	---	---	---	---	---	---	---	---	---	---	---	---	---	20.2	*6.41*	270.4	---	---	
Hackberry Windmill Well	RESE-1003024	02-Dec-08	36	7.0	11	3.0	---	---	---	---	39	---	---	---	---	---	---	---	---	---	TestAmerica
Hackberry Windmill Well	RESE-1003024	02-Dec-08	---	---	---	---	8.8	ND	134	20	---	<0.50	<0.40	ND	190	---	---	---	6.81	280	TestAmerica
Hackberry Windmill Well	RESE-1003033	03-Mar-09	---	---	---	---	---	---	---	---	---	---	---	---	---	17.1	*6.40*	312.8	---	---	
Hackberry Windmill Well	RESE-1003033	03-Mar-09	37	6.8	12	2.5	---	---	---	---	31	---	---	---	---	---	---	---	---	---	TestAmerica
Hackberry Windmill Well	RESE-1003033	03-Mar-09	---	---	---	---	14	ND	122	36	---	<0.50	<0.40	1.2	200	---	---	---	7.28	310	TestAmerica
Hackberry Windmill Well SP	RESE-1003033	03-Mar-09	---	---	---	---	14.0	---	---	37.6	---	0.112	<0.100	---	---	---	---	---	---	---	SVL
Hackberry Windmill Well	RESE-1003042	02-Jun-09	---	---	---	---	---	---	---	---	---	---	---	---	---	17.6	*6.43*	270.7	---	---	
Hackberry Windmill Well	RESE-1003042	02-Jun-09	33	6.4	11	2.7	---	---	---	---	35	---	---	---	---	---	---	---	---	---	TestAmerica
Hackberry Windmill Well	RESE-1003042	02-Jun-09	---	---	---	---	7.7	ND	134	25	---	<0.50	<0.40	<0.30	150	---	---	---	7.31	260	TestAmerica
Hackberry Windmill Well SP	RESE-1003042	02-Jun-09	---	---	---	---	8.23	---	---	25.8	---	0.108	<0.100	---	---	---	---	---	---	---	SVL
Hackberry Windmill Well	RESE-1000462	24-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	17.74	6.65	199	---	---	
Hackberry Windmill Well	RESE-1000462	24-May-12	29	5.2	10	2.4	---	---	---	---	38	---	---	---	---	---	---	---	---	---	TestAmerica
Hackberry Windmill Well	RESE-1000462	24-May-12	28	5.2	10	2.4	6.7	ND	109	20	38	<0.50	<0.40	ND	170	---	---	---	7.10	220	TestAmerica
JI Ranch Corral Well	RESE-1000302	21-Jun-07	---	---	---	---	---	---	---	---	---	---	---	---	---	16.0	*5.88*	990	---	---	
JI Ranch Corral Well	RESE-1000302	21-Jun-07	110	23	46	2.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	TestAmerica
JI Ranch Corral Well	RESE-1000302	21-Jun-07	---	---	---	---	49	ND	63	*390*	---	<0.50	0.11	<0.40	*730*	---	---	---	---	---	TestAmerica
JI Ranch Corral Well	RESE-1003004	29-May-08	---	---	---	---	---	---	---	---	---	---	---	---	---	16.4	*5.55*	772.2	---	---	
JI Ranch Corral Well	RESE-1003004	29-May-08	83	17	48	<2.0	---	---	---	---	37	---	---	---	---	---	---	---	---	---	TestAmerica
JI Ranch Corral Well	RESE-1003004	29-May-08	---	---	---	---	49	ND	17	240	---	<0.50	<0.40	**16**	*580*	---	---	---	*5.78*	770	TestAmerica
JI Ranch Corral Well	RESE-1003005	29-May-08	---	---	---	---	---	---	---	---	---	---	---	---	---	15.0	*5.51*	786.8	---	---	
JI Ranch Corral Well	RESE-1003005	29-May-08	85	17	48	<2.0	---	---	---	---	37	---	---	---	---	---	---	---	---	---	TestAmerica
JI Ranch Corral Well	RESE-1003005	29-May-08	---	---	---	---	51	ND	17	*260*	---	<0.50	<0.40	**16**	*620*	---	---	---	*5.54*	780	TestAmerica
JI Ranch Corral Well	RESE-1003014	25-Aug-08	---	---	---	---	---	---	---	---	---	---	---	---	---	17.0	*5.66*	1020	---	---	
JI Ranch Corral Well	RESE-1003014	25-Aug-08	130	26	55	2.1	---	---	---	---	39	---	---	---	---	---	---	---	---	---	TestAmerica
JI Ranch Corral Well	RESE-1003014	25-Aug-08	---	---	---	---	57	ND	29	*450*	---	<0.50	<0.40	ND	*750*	---	---	---	*5.81*	1100	TestAmerica

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TABLE A-1. COMMON CONSTITUENTS AND ROUTINE PARAMETERS FOR GROUNDWATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	COMMON CONSTITUENTS[a] (mg/L)[b]													ROUTINE PARAMETERS					ANALYTICAL LABORATORY
																FIELD			LABORATORY		
			Ca	Mg	Na	K	Cl	CO_3	HCO_3	SO_4	SiO_2	Br	F	$NO_3 + NO_2$ (as N)	TDS	TEMP (°C)[c]	pH	SC (µS/cm)[d]	pH	SC (µS/cm)	
Groundwater 1 - Shallow Groundwater System																					
JI Ranch Corral Well	RESE-1003029	03-Dec-08	---	---	---	---	---	---	---	---	---	---	---	---	---	14.4	*5.49*	778.2	---	---	
JI Ranch Corral Well	RESE-1003029	03-Dec-08	85	19	45	<2.0	---	---	---	---	38	---	---	---	---	---	---	---	---	---	TestAmerica
JI Ranch Corral Well	RESE-1003029	03-Dec-08	---	---	---	---	51	ND	13	*290*	---	<0.50	<0.40	ND	*550*	---	---	---	*5.65*	780	TestAmerica
JI Ranch Corral Well	RESE-1003038	04-Mar-09	---	---	---	---	---	---	---	---	---	---	---	---	---	13.6	*6.02*	776	---	---	
JI Ranch Corral Well	RESE-1003038	04-Mar-09	86	16	41	3.3	---	---	---	---	38	---	---	---	---	---	---	---	---	---	TestAmerica
JI Ranch Corral Well	RESE-1003038	04-Mar-09	---	---	---	---	46	ND	79	240	---	<0.50	<0.40	4.7	*530*	---	---	---	6.83	760	TestAmerica
JI Ranch Corral Well SP	RESE-1003038	04-Mar-09	---	---	---	---	39.8	---	---	229	---	0.160	0.143	---	---	---	---	---	---	---	SVL
JI Ranch Corral Well	RESE-1003047	05-Jun-09	---	---	---	---	---	---	---	---	---	---	---	---	---	15.8	*5.94*	613.8	---	---	
JI Ranch Corral Well	RESE-1003047	05-Jun-09	64	13	41	2.0	---	---	---	---	41	---	---	---	---	---	---	---	---	---	TestAmerica
JI Ranch Corral Well	RESE-1003047	05-Jun-09	---	---	---	---	40	ND	82	190	---	<0.50	<0.40	<0.30	400	---	---	---	6.91	600	TestAmerica
JI Ranch Corral Well SP	RESE-1003047	05-Jun-09	---	---	---	---	40.2	---	---	177	---	0.252	<0.100	---	---	---	---	---	---	---	SVL
JI Ranch Corral Well	RESE-1000460	23-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	17.26	6.89	421	---	---	
JI Ranch Corral Well	RESE-1000460	23-May-12	46	10	33	<2.0	---	---	---	---	31	---	---	---	---	---	---	---	---	---	TestAmerica
JI Ranch Corral Well	RESE-1000460	23-May-12	45	10	33	<2.0	48	ND	67	130	31	<0.50	<0.40	ND	340	---	---	---	6.71	460	TestAmerica
JI Ranch Middle Well	RESE-1003006	30-May-08	---	---	---	---	---	---	---	---	---	---	---	---	---	17.0	*6.16*	300	---	---	
JI Ranch Middle Well	RESE-1003006	30-May-08	30	7.1	16	<2.0	---	---	---	---	36	---	---	---	---	---	---	---	---	---	TestAmerica
JI Ranch Middle Well	RESE-1003006	30-May-08	---	---	---	---	25	ND	57	58	---	<0.50	<0.40	0.44	240	---	---	---	6.54	300	TestAmerica
JI Ranch Middle Well	RESE-1003017	27-Aug-08	---	---	---	---	---	---	---	---	---	---	---	---	---	17.1	*6.26*	377	---	---	
JI Ranch Middle Well	RESE-1003017	27-Aug-08	43	10	22	<2.0	---	---	---	---	36	---	---	---	---	---	---	---	---	---	TestAmerica
JI Ranch Middle Well	RESE-1003017	27-Aug-08	---	---	---	---	27	ND	61	100	---	<0.50	<0.40	0.36	270	---	---	---	*6.32*	420	TestAmerica
JI Ranch Middle Well	RESE-1003028	03-Dec-08	---	---	---	---	---	---	---	---	---	---	---	---	---	17.7	6.50	494.1	---	---	
JI Ranch Middle Well	RESE-1003028	03-Dec-08	47	12	24	<2.0	---	---	---	---	39	---	---	---	---	---	---	---	---	---	TestAmerica
JI Ranch Middle Well	RESE-1003028	03-Dec-08	---	---	---	---	26	ND	74	120	---	<0.50	<0.40	ND	310	---	---	---	6.60	470	TestAmerica
JI Ranch Middle Well	RESE-1003037	04-Mar-09	---	---	---	---	---	---	---	---	---	---	---	---	---	17.1	*6.38*	444.3	---	---	
JI Ranch Middle Well	RESE-1003037	04-Mar-09	43	9.9	22	<2.0	---	---	---	---	35	---	---	---	---	---	---	---	---	---	TestAmerica
JI Ranch Middle Well	RESE-1003037	04-Mar-09	---	---	---	---	29	ND	74	100	---	<0.50	<0.40	0.78	290	---	---	---	7.20	420	TestAmerica
JI Ranch Middle Well SP	RESE-1003037	04-Mar-09	---	---	---	---	26.0	---	---	100	---	0.198	0.109	---	---	---	---	---	---	---	SVL
JI Ranch Middle Well	RESE-1003048	05-Jun-09	---	---	---	---	---	---	---	---	---	---	---	---	---	17.8	*6.21*	563	---	---	
JI Ranch Middle Well	RESE-1003048	05-Jun-09	54	13	29	<2.0	---	---	---	---	37	---	---	---	---	---	---	---	---	---	TestAmerica
JI Ranch Middle Well	RESE-1003048	05-Jun-09	---	---	---	---	35	ND	84	170	---	<0.50	<0.40	0.46	350	---	---	---	7.07	530	TestAmerica
JI Ranch Middle Well SP	RESE-1003048	05-Jun-09	---	---	---	---	30.4	---	---	122	---	0.136	<0.100	---	---	---	---	---	---	---	SVL
JI Ranch Middle Well	RESE-1000461	23-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	17.7	7.42	315	---	---	
JI Ranch Middle Well	RESE-1000461	23-May-12	34	7.6	24	<2.0	---	---	---	---	32	---	---	---	---	---	---	---	---	---	TestAmerica
JI Ranch Middle Well	RESE-1000461	23-May-12	34	7.8	25	<2.0	28	ND	82	82	34	<0.50	<0.40	0.22	270	---	---	---	7.27	350	TestAmerica
Groundwater 2 - Apache Leap Tuff Aquifer																					
A-06	RESE-1000255	24-Sep-07	---	---	---	---	---	---	---	---	---	---	---	---	---	25.9	7.13	268.1	---	---	
A-06	RESE-1000255	24-Sep-07	29	4.8	25	1.1	---	---	---	---	71	---	---	---	---	---	---	---	---	---	TestAmerica
A-06	RESE-1000255	24-Sep-07	---	---	---	---	4.6	ND	183	2.9	---	<0.50	0.35	0.37	210	---	---	---	---	---	TestAmerica

MONTGOMERY & ASSOCIATES

TABLE A-1. COMMON CONSTITUENTS AND ROUTINE PARAMETERS
FOR GROUNDWATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	COMMON CONSTITUENTS[a] (mg/L)[b]													ROUTINE PARAMETERS					ANALYTICAL LABORATORY
																FIELD			LABORATORY		
			Ca	Mg	Na	K	Cl	CO_3	HCO_3	SO_4	SiO_2	Br	F	$NO_3 + NO_2$ (as N)	TDS	TEMP (°C)[c]	pH	SC (µS/cm)[d]	pH	SC (µS/cm)	
Groundwater 2 - Apache Leap Tuff Aquifer																					
A-06 DUP	RESE-1000256	24-Sep-07	---	---	---	---	---	---	---	---	---	---	---	---	---	25.9	7.13	268.1	---	---	
A-06 DUP	RESE-1000256	24-Sep-07	30	5.0	24	1.0	---	---	---	---	73	---	---	---	---	---	---	---	---	---	TestAmerica
A-06 DUP	RESE-1000256	24-Sep-07	---	---	---	---	4.6	ND	183	2.8	---	<0.50	0.35	0.36	210	---	---	---	---	---	TestAmerica
A-06	RESE-1003008	02-Jun-08	---	---	---	---	---	---	---	---	---	---	---	---	---	26.2	7.17	264.4	---	---	
A-06	RESE-1003008	02-Jun-08	28	4.8	23	<2.0	---	---	---	---	69	---	---	---	---	---	---	---	---	---	TestAmerica
A-06	RESE-1003008	02-Jun-08	---	---	---	---	4.4	ND	146	2.4	---	<0.50	<0.40	0.27	220	---	---	---	7.42	260	TestAmerica
A-06	RESE-1003016	28-Aug-08	---	---	---	---	---	---	---	---	---	---	---	---	---	26.0	7.23	267	---	---	
A-06	RESE-1003016	28-Aug-08	29	4.8	24	<2.0	---	---	---	---	72	---	---	---	---	---	---	---	---	---	TestAmerica
A-06	RESE-1003016	28-Aug-08	---	---	---	---	4.5	ND	171	3.2	---	<0.50	<0.40	0.32	180	---	---	---	7.29	280	TestAmerica
A-06	RESE-1003030	04-Dec-08	---	---	---	---	---	---	---	---	---	---	---	---	---	25.5	7.39	264.3	---	---	
A-06	RESE-1003030	04-Dec-08	28	4.8	22	<2.0	---	---	---	---	71	---	---	---	---	---	---	---	---	---	TestAmerica
A-06	RESE-1003030	04-Dec-08	---	---	---	---	4.9	ND	171	3.3	---	<0.50	0.41	0.29	220	---	---	---	7.41	270	TestAmerica
A-06	RESE-1003039	05-Mar-09	---	---	---	---	---	---	---	---	---	---	---	---	---	25.1	7.28	265	---	---	
A-06	RESE-1003039	05-Mar-09	26	4.4	22	<2.0	---	---	---	---	68	---	---	---	---	---	---	---	---	---	TestAmerica
A-06	RESE-1003039	05-Mar-09	---	---	---	---	4.6	ND	171	3.0	---	<0.50	0.75	0.30	190	---	---	---	7.73	260	TestAmerica
A-06 SP	RESE-1003039	05-Mar-09	---	---	---	---	4.76	---	---	3.10	---	<0.100	0.247	---	---	---	---	---	---	---	SVL
A-06	RESE-1003046	04-Jun-09	---	---	---	---	---	---	---	---	---	---	---	---	---	26.3	7.22	267.8	---	---	
A-06	RESE-1003046	04-Jun-09	28	4.7	24	<2.0	---	---	---	---	70	---	---	---	---	---	---	---	---	---	TestAmerica
A-06	RESE-1003046	04-Jun-09	---	---	---	---	4.8	ND	171	2.9	---	<0.50	0.73	0.38	190	---	---	---	7.88	260	TestAmerica
A-06 SP	RESE-1003046	04-Jun-09	---	---	---	---	4.73	---	---	3.04	---	<0.100	0.218	---	---	---	---	---	---	---	SVL
A-06	RESE-1003248	14-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	26.04	7.39	255	---	---	
A-06	RESE-1003248	14-May-12	28	4.6	23	<2.0	---	---	---	---	68	---	---	---	---	---	---	---	---	---	TestAmerica
A-06	RESE-1003248	14-May-12	28	4.5	23	<2.0	4.8	ND	159	2.8	68	<0.50	<0.40	<2.0	210	---	---	---	7.80	240	TestAmerica
CT Well	RESE-1003101	20-Apr-10	---	---	---	---	---	---	---	---	---	---	---	---	---	15.0	6.77	662.2	---	---	
CT Well	RESE-1003101	20-Apr-10	67	22	43	<2.0	---	---	---	---	29	---	---	---	---	---	---	---	---	---	TestAmerica
CT Well	RESE-1003101	20-Apr-10	67	22	43	<2.0	18	ND	256	120	30	<0.50	0.44	0.36	490	---	---	---	7.88	680	TestAmerica
CT Well	RESE-1003102	20-Apr-10	---	---	---	---	---	---	---	---	---	---	---	---	---	15.6	6.79	677.8	---	---	
HRES-01	RESE-1001102	15-Mar-04	---	---	---	---	---	---	---	---	---	---	---	---	---	26.2	8.34	259	---	---	
HRES-01	RESE-1001102	15-Mar-04	8.75	0.815	52.2	<1.0	5.64	ND	155	6.82	55.0	---	0.29	0.840	205	---	---	---	8.30	269	SVL
HRES-01	RESE-1001103	18-Mar-04	---	---	---	---	---	---	---	---	---	---	---	---	---	26.9	8.42	259	---	---	
HRES-01	RESE-1001103	18-Mar-04	7.41	0.722	54.8	<1.0	5.70	ND	155	6.80	54.4	---	0.31	0.810	196	---	---	---	8.31	270	SVL
HRES-02	RESE-1001105	06-Apr-04	---	---	---	---	---	---	---	---	---	---	---	---	---	23.8	8.03	268.8	---	---	
HRES-02	RESE-1001105	06-Apr-04	21.3	4.76	33.8	<1.0	7.42	ND	144	13.6	60.7	---	0.4	0.94	206	---	---	---	8.01	285	SVL
HRES-02	RESE-1001108	08-Apr-04	---	---	---	---	---	---	---	---	---	---	---	---	---	25.4	*9.30*	322	---	---	
HRES-02	RESE-1001108	08-Apr-04	2.3	0.177	66.3	<1.0	7.46	21	119.1	7.97	44.8	---	0.68	0.88	192	---	---	---	*9.23*	304	SVL
HRES-02	RESE-1001109	10-Apr-04	---	---	---	---	---	---	---	---	---	---	---	---	---	22.6	*9.36*	333	---	---	
HRES-02	RESE-1001109	10-Apr-04	1.89	0.047	69.3	<1.0	6.64	21.9	131	8.31	47.6	---	0.76	0.89	211	---	---	---	*9.21*	324	SVL
HRES-02	RESE-1000455	17-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	26.45	7.99	275	---	---	
HRES-02	RESE-1000455	17-May-12	18	4.3	31	<2.0	---	---	---	---	57	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-02	RESE-1000455	17-May-12	18	4.3	31	<2.0	6.1	ND	134	15	57	<0.50	0.45	<2.0	220	---	---	---	8.19	250	TestAmerica

MONTGOMERY & ASSOCIATES

TABLE A-1. COMMON CONSTITUENTS AND ROUTINE PARAMETERS
FOR GROUNDWATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	COMMON CONSTITUENTS[a] (mg/L)[b]													ROUTINE PARAMETERS					ANALYTICAL LABORATORY
																FIELD			LABORATORY		
			Ca	Mg	Na	K	Cl	CO_3	HCO_3	SO_4	SiO_2	Br	F	$NO_3 + NO_2$ (as N)	TDS	TEMP (°C)[c]	pH	SC (µS/cm)[d]	pH	SC (µS/cm)	
Groundwater 2 - Apache Leap Tuff Aquifer																					
HRES-03d	RESE-1001111	16-Apr-04	---	---	---	---	---	---	---	---	---	---	---	---	---	24.2	*10.17*	515	---	---	
HRES-03d	RESE-1001111	16-Apr-04	1.16	0.041	55.7	<1.0	6.8	36.5	73.8	7.16	6.98	---	1.05	<0.020	155	---	---	---	*9.79*	293	SVL
HRES-04	RESE-1001110	15-Apr-04	29	4.31	30.9	<1.0	8.45	ND	182	9.25	56.1	---	0.41	0.36	217	---	---	---	7.9	321	SVL
HRES-04	4531	03-Nov-06	---	---	---	---	---	---	---	---	---	---	---	---	---	27.1	6.72	298	---	---	
HRES-04	4531	03-Nov-06	28	4.3	27	<1.0	---	---	---	---	68	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-04	4531	03-Nov-06	---	---	---	---	5.9	ND	159	5.0	---	---	0.46	0.589	210	---	---	---	7.83	260	TestAmerica
HRES-04	RESE-1001114	18-Jan-08	---	---	---	---	---	---	---	---	---	---	---	---	---	25.6	7.87	299	---	---	
HRES-04	RESE-1001114	18-Jan-08	32	4.6	31	0.95	---	---	---	---	67	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-04	RESE-1001114	18-Jan-08	---	---	---	---	5.7	ND	183	4.9	---	<0.50	0.37	0.33	200	---	---	---	7.99	300	TestAmerica
HRES-04	RESE-1003021	03-Sep-08	---	---	---	---	---	---	---	---	---	---	---	---	---	28.2	7.28	290	---	---	
HRES-04	RESE-1003021	03-Sep-08	27	4.5	34	<2.0	---	---	---	---	66	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-04	RESE-1003021	03-Sep-08	---	---	---	---	5.8	ND	183	6.1	---	<0.50	0.42	0.49	190	---	---	---	7.83	280	TestAmerica
HRES-04	RESE-1003031	02-Mar-09	---	---	---	---	---	---	---	---	---	---	---	---	---	27.7	7.54	292.4	---	---	
HRES-04	RESE-1003031	02-Mar-09	27	4.0	29	<2.0	---	---	---	---	63	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-04	RESE-1003031	02-Mar-09	---	---	---	---	5.6	ND	183	5.6	---	<0.50	0.71	0.51	210	---	---	---	7.99	290	TestAmerica
HRES-04 SP	RESE-1003031	02-Mar-09	---	---	---	---	5.76	---	---	5.78	---	<0.100	0.263	---	---	---	---	---	---	---	SVL
HRES-04	RESE-1003040	01-Jun-09	---	---	---	---	---	---	---	---	---	---	---	---	---	28.4	7.59	294	---	---	
HRES-04	RESE-1003040	01-Jun-09	27	4.2	31	<2.0	---	---	---	---	63	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-04	RESE-1003040	01-Jun-09	---	---	---	---	5.5	ND	183	5.4	---	<0.50	0.46	0.54	180	---	---	---	8.10	280	TestAmerica
HRES-04 SP	RESE-1003040	01-Jun-09	---	---	---	---	5.61	---	---	5.58	---	<0.100	0.214	---	---	---	---	---	---	---	SVL
HRES-04	RESE-1000458	17-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	27.65	7.84	308	---	---	
HRES-04	RESE-1000458	17-May-12	28	4.3	31	<2.0	---	---	---	---	64	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-04	RESE-1000458	17-May-12	28	4.5	31	<2.0	5.8	ND	171	5.7	64	<0.50	0.46	<2.0	240	---	---	---	8.21	280	TestAmerica
HRES-05	RESE-1001104	02-Apr-04	---	---	---	---	---	---	---	---	---	---	---	---	---	21.3	7.64	328.8	---	---	
HRES-05	RESE-1001104	02-Apr-04	38.8	6.74	28.5	1.1	5.96	ND	210	3.89	67.4	---	0.32	0.65	240	---	---	---	7.66	351	SVL
HRES-05	RESE-1000264	27-Feb-08	---	---	---	---	---	---	---	---	---	---	---	---	---	23.3	7.49	319.5	---	---	
HRES-05	RESE-1000264	27-Feb-08	35	6.6	27	<2.0	---	---	---	---	66	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-05	RESE-1000264	27-Feb-08	---	---	---	---	5.8	ND	195	3.4	---	<0.50	0.46	0.81	210	---	---	---	---	---	TestAmerica
HRES-05	RESE-1003001	28-May-08	---	---	---	---	---	---	---	---	---	---	---	---	---	24.9	7.34	329.9	---	---	
HRES-05	RESE-1003001	28-May-08	37	6.7	26	<2.0	---	---	---	---	66	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-05	RESE-1003001	28-May-08	---	---	---	---	5.1	ND	195	2.1	---	<0.50	<0.40	0.56	250	---	---	---	7.73	320	TestAmerica
HRES-05	RESE-1003012	25-Aug-08	---	---	---	---	---	---	---	---	---	---	---	---	---	25.3	7.37	321	---	---	
HRES-05	RESE-1003012	25-Aug-08	38	6.8	27	<2.0	---	---	---	---	70	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-05	RESE-1003012	25-Aug-08	---	---	---	---	4.7	ND	183	2.0	---	<0.50	<0.40	0.57	230	---	---	---	7.64	330	TestAmerica
HRES-05	RESE-1003025	02-Dec-08	---	---	---	---	---	---	---	---	---	---	---	---	---	24.2	7.64	325.9	---	---	
HRES-05	RESE-1003025	02-Dec-08	36	6.8	25	<2.0	---	---	---	---	69	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-05	RESE-1003025	02-Dec-08	---	---	---	---	4.9	ND	207	2.1	---	<0.50	0.44	0.56	220	---	---	---	7.62	330	TestAmerica

TABLE A-1. COMMON CONSTITUENTS AND ROUTINE PARAMETERS
FOR GROUNDWATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	COMMON CONSTITUENTS[a] (mg/L)[b]													ROUTINE PARAMETERS					ANALYTICAL LABORATORY
																FIELD			LABORATORY		
			Ca	Mg	Na	K	Cl	CO_3	HCO_3	SO_4	SiO_2	Br	F	$NO_3 + NO_2$ (as N)	TDS	TEMP (°C)[c]	pH	SC (µS/cm)[d]	pH	SC (µS/cm)	
Groundwater 2 - Apache Leap Tuff Aquifer																					
HRES-05	RESE-1003034	03-Mar-09	---	---	---	---	---	---	---	---	---	---	---	---	---	24.3	7.53	324.6	---	---	
HRES-05	RESE-1003034	03-Mar-09	34	6.1	24	<2.0	---	---	---	---	64	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-05	RESE-1003034	03-Mar-09	---	---	---	---	4.7	ND	207	2.1	---	<0.50	0.73	0.55	230	---	---	---	7.96	310	TestAmerica
HRES-05 SP	RESE-1003034	03-Mar-09	---	---	---	---	4.88	---	---	2.16	---	<0.100	0.246	---	---	---	---	---	---	---	SVL
HRES-05	RESE-1003043	03-Jun-09	---	---	---	---	---	---	---	---	---	---	---	---	---	24.5	7.39	327.6	---	---	
HRES-05	RESE-1003043	03-Jun-09	37	6.5	26	<2.0	---	---	---	---	68	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-05	RESE-1003043	03-Jun-09	---	---	---	---	4.8	ND	207	2.1	---	<0.50	0.66	0.59	190	---	---	---	8.01	310	TestAmerica
HRES-05 SP	RESE-1003043	03-Jun-09	---	---	---	---	4.95	---	---	2.27	---	<0.100	0.230	---	---	---	---	---	---	---	SVL
HRES-05	RESE-1003247	10-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	23.28	7.57	308	---	---	
HRES-05	RESE-1003247	10-May-12	36	6.2	25	<2.0	---	---	---	---	65	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-05	RESE-1003247	10-May-12	36	6.1	25	<2.0	4.9	ND	195	2.3	63	<0.50	0.42	0.62	260	---	---	---	8.08	310	TestAmerica
HRES-06	RESE-1000301	12-Jun-07	---	---	---	---	---	---	---	---	---	---	---	---	---	19.7	6.72	261	---	---	
HRES-06	RESE-1000301	12-Jun-07	26	4.3	19	1.6	---	---	---	---	55	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-06	RESE-1000301	12-Jun-07	---	---	---	---	8.1	ND	134	14	---	<0.50	0.32	0.27	200	---	---	---	---	---	TestAmerica
HRES-06	RESE-1000265	27-Feb-08	---	---	---	---	---	---	---	---	---	---	---	---	---	19.1	7.27	243.00	---	---	
HRES-06	RESE-1000265	27-Feb-08	26	4.4	18	<2.0	---	---	---	---	54	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-06	RESE-1000265	27-Feb-08	---	---	---	---	7.6	ND	121	14	---	<0.50	<0.40	0.52	180	---	---	---	---	---	TestAmerica
HRES-06 DUP	RESE-1000266	27-Feb-08	---	---	---	---	---	---	---	---	---	---	---	---	---	19.1	7.27	243	---	---	
HRES-06 DUP	RESE-1000266	27-Feb-08	27	4.4	18	<2.0	---	---	---	---	55	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-06 DUP	RESE-1000266	27-Feb-08	---	---	---	---	7.6	ND	121	14	---	<0.50	<0.40	0.54	180	---	---	---	---	---	TestAmerica
HRES-06	RESE-1003003	28-May-08	---	---	---	---	---	---	---	---	---	---	---	---	---	20.3	6.51	245.2	---	---	
HRES-06	RESE-1003003	28-May-08	27	4.4	18	<2.0	---	---	---	---	55	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-06	RESE-1003003	28-May-08	---	---	---	---	7.1	ND	105	14	---	<0.50	<0.40	0.26	200	---	---	---	7.20	240	TestAmerica
HRES-06	RESE-1003013	25-Aug-08	---	---	---	---	---	---	---	---	---	---	---	---	---	21.2	7.74	262	---	---	
HRES-06	RESE-1003013	25-Aug-08	30	4.7	19	<2.0	---	---	---	---	60	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-06	RESE-1003013	25-Aug-08	---	---	---	---	6.9	ND	89	14	---	<0.50	<0.40	0.26	170	---	---	---	7.16	250	TestAmerica
HRES-06	RESE-1003026	03-Dec-08	---	---	---	---	---	---	---	---	---	---	---	---	---	20.9	6.51	252.7	---	---	
HRES-06	RESE-1003026	03-Dec-08	28	4.6	17	<2.0	---	---	---	---	56	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-06	RESE-1003026	03-Dec-08	---	---	---	---	6.7	ND	134	13	---	<0.50	<0.40	0.25	180	---	---	---	7.18	250	TestAmerica
HRES-06 DUP	RESE-1003027	03-Dec-08	---	---	---	---	---	---	---	---	---	---	---	---	---	20.9	6.51	252.7	---	---	
HRES-06 DUP	RESE-1003027	03-Dec-08	28	4.5	17	<2.0	---	---	---	---	57	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-06 DUP	RESE-1003027	03-Dec-08	---	---	---	---	6.9	ND	134	14	---	<0.50	<0.40	0.26	220	---	---	---	7.27	250	TestAmerica
HRES-06	RESE-1003035	04-Mar-09	---	---	---	---	---	---	---	---	---	---	---	---	---	20.4	7.00	241.2	---	---	
HRES-06	RESE-1003035	04-Mar-09	25	4.0	16	<2.0	---	---	---	---	53	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-06	RESE-1003035	04-Mar-09	---	---	---	---	6.8	ND	134	14	---	<0.50	0.60	0.26	180	---	---	---	7.61	240	TestAmerica
HRES-06 SP	RESE-1003035	04-Mar-09	---	---	---	---	7.24	---	---	14.7	---	<0.100	0.142	---	---	---	---	---	---	---	SVL
HRES-06 DUP	RESE-1003036	04-Mar-09	---	---	---	---	---	---	---	---	---	---	---	---	---	20.4	7.00	241.2	---	---	
HRES-06 DUP	RESE-1003036	04-Mar-09	25	4.1	17	<2.0	---	---	---	---	55	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-06 DUP	RESE-1003036	04-Mar-09	---	---	---	---	6.9	ND	134	14	---	<0.50	0.57	0.26	180	---	---	---	7.63	240	TestAmerica
HRES-06 SPD	RESE-1003036	04-Mar-09	---	---	---	---	7.24	---	---	14.7	---	<0.100	0.140	---	---	---	---	---	---	---	SVL

MONTGOMERY & ASSOCIATES

TABLE A-1. COMMON CONSTITUENTS AND ROUTINE PARAMETERS
FOR GROUNDWATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	COMMON CONSTITUENTS[a] (mg/L)[b]													ROUTINE PARAMETERS					ANALYTICAL LABORATORY
																FIELD			LABORATORY		
			Ca	Mg	Na	K	Cl	CO_3	HCO_3	SO_4	SiO_2	Br	F	$NO_3 + NO_2$ (as N)	TDS	TEMP (°C)[c]	pH	SC (µS/cm)[d]	pH	SC (µS/cm)	
Groundwater 2 - Apache Leap Tuff Aquifer																					
HRES-06	RESE-1003044	03-Jun-09	---	---	---	---	---	---	---	---	---	---	---	---	---	20.6	6.99	243.8	---	---	
HRES-06	RESE-1003044	03-Jun-09	26	4.2	18	<2.0	---	---	---	---	55	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-06	RESE-1003044	03-Jun-09	---	---	---	---	6.8	ND	134	14	---	<0.50	0.52	<0.30	140	---	---	---	7.63	240	TestAmerica
HRES-06 SP	RESE-1003044	03-Jun-09	---	---	---	---	7.14	---	---	14.5	---	<0.100	0.126	---	---	---	---	---	---	---	SVL
HRES-06 DUP	RESE-1003045	03-Jun-09	---	---	---	---	---	---	---	---	---	---	---	---	---	20.6	6.99	243.8	---	---	
HRES-06 DUP	RESE-1003045	03-Jun-09	27	4.3	18	<2.0	---	---	---	---	56	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-06 DUP	RESE-1003045	03-Jun-09	---	---	---	---	7.0	ND	134	14	---	<0.50	0.57	<0.30	170	---	---	---	7.60	240	TestAmerica
HRES-06 SPD	RESE-1003045	03-Jun-09	---	---	---	---	7.15	---	---	14.7	---	0.121	0.132	---	---	---	---	---	---	---	SVL
HRES-06	RESE-1000459	18-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	20.57	7.25	233	---	---	
HRES-06	RESE-1000459	18-May-12	27	4.2	17	<2.0	---	---	---	---	55	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-06	RESE-1000459	18-May-12	27	4.2	17	<2.0	7.0	ND	122	16	53	<0.50	<0.40	0.27	200	---	---	---	7.89	240	TestAmerica
HRES-07	RESE-1000262	26-Feb-08	---	---	---	---	---	---	---	---	---	---	---	---	---	23.2	7.50	278	---	---	
HRES-07	RESE-1000262	26-Feb-08	27	4.7	27	<2.0	---	---	---	---	62	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-07	RESE-1000262	26-Feb-08	---	---	---	---	6.7	ND	159	5.8	---	<0.50	0.46	0.89	210	---	---	---	---	---	TestAmerica
HRES-07	RESE-1003009	03-Jun-08	---	---	---	---	---	---	---	---	---	---	---	---	---	24.0	7.32	271	---	---	
HRES-07	RESE-1003009	03-Jun-08	27	4.7	26	<2.0	---	---	---	---	60	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-07	RESE-1003009	03-Jun-08	---	---	---	---	5.6	ND	134	4.7	---	<0.50	<0.40	0.62	220	---	---	---	7.61	270	TestAmerica
HRES-07 DUP	RESE-1003010	03-Jun-08	---	---	---	---	---	---	---	---	---	---	---	---	---	24.0	7.32	271	---	---	
HRES-07 DUP	RESE-1003010	03-Jun-08	26	4.4	24	<2.0	---	---	---	---	57	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-07 DUP	RESE-1003010	03-Jun-08	---	---	---	---	5.6	ND	146	4.7	---	<0.50	<0.40	0.62	230	---	---	---	7.63	270	TestAmerica
HRES-07	RESE-1003018	02-Sep-08	---	---	---	---	---	---	---	---	---	---	---	---	---	24.0	7.16	272	---	---	
HRES-07	RESE-1003018	02-Sep-08	27	4.8	27	<2.0	---	---	---	---	62	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-07	RESE-1003018	02-Sep-08	---	---	---	---	5.7	ND	159	4.4	---	<0.50	<0.40	0.58	190	---	---	---	7.76	260	TestAmerica
HRES-07	RESE-1003022	01-Dec-08	---	---	---	---	---	---	---	---	---	---	---	---	---	23.7	7.31	271.3	---	---	
HRES-07	RESE-1003022	01-Dec-08	29	4.8	24	<2.0	---	---	---	---	61	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-07	RESE-1003022	01-Dec-08	---	---	---	---	5.6	ND	171	4.3	---	<0.50	0.44	0.61	200	---	---	---	7.43	280	TestAmerica
HRES-07	RESE-1003032	03-Mar-09	---	---	---	---	---	---	---	---	---	---	---	---	---	25.3	7.25	268.6	---	---	
HRES-07	RESE-1003032	03-Mar-09	27	4.2	23	<2.0	---	---	---	---	59	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-07	RESE-1003032	03-Mar-09	---	---	---	---	5.5	ND	171	4.2	---	<0.50	0.60	0.59	190	---	---	---	7.88	260	TestAmerica
HRES-07 SP	RESE-1003032	03-Mar-09	---	---	---	---	5.68	---	---	4.46	---	<0.100	0.252	---	---	---	---	---	---	---	SVL
HRES-07	RESE-1003041	02-Jun-09	---	---	---	---	---	---	---	---	---	---	---	---	---	23.9	7.02	274.6	---	---	
HRES-07	RESE-1003041	02-Jun-09	28	4.5	25	<2.0	---	---	---	---	61	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-07	RESE-1003041	02-Jun-09	---	---	---	---	5.5	ND	171	4.3	---	<0.50	0.65	0.62	160	---	---	---	7.92	260	TestAmerica
HRES-07 SP	RESE-1003041	02-Jun-09	---	---	---	---	5.67	---	---	4.49	---	0.100	0.247	---	---	---	---	---	---	---	SVL
HRES-07	RESE-1000279	08-Oct-09	---	---	---	---	---	---	---	---	---	---	---	---	---	23.3	7.23	265.3	---	---	
HRES-07	RESE-1000279	08-Oct-09	27	4.5	24	<2.0	---	---	---	---	64	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-07	RESE-1000279	08-Oct-09	---	---	---	---	5.5	ND	159	4.7	---	<0.50	<0.40	0.71	200	---	---	---	8.01	270	TestAmerica
HRES-07	RESE-1000280	15-Oct-09	---	---	---	---	---	---	---	---	---	---	---	---	---	23.8	7.58	256.6	---	---	
HRES-07	RESE-1000280	15-Oct-09	28	4.6	24	<2.0	---	---	---	---	67	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-07	RESE-1000280	15-Oct-09	---	---	---	---	5.8	ND	183	4.8	---	<0.50	<0.40	0.69	180	---	---	---	7.55	270	TestAmerica

MONTGOMERY & ASSOCIATES

TABLE A-1. COMMON CONSTITUENTS AND ROUTINE PARAMETERS FOR GROUNDWATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	COMMON CONSTITUENTS[a] (mg/L)[b]													ROUTINE PARAMETERS					ANALYTICAL LABORATORY
																FIELD			LABORATORY		
			Ca	Mg	Na	K	Cl	CO_3	HCO_3	SO_4	SiO_2	Br	F	$NO_3 + NO_2$ (as N)	TDS	TEMP (°C)[c]	pH	SC (µS/cm)[d]	pH	SC (µS/cm)	
Groundwater 2 - Apache Leap Tuff Aquifer																					
HRES-07	RESE-1000281	20-Oct-09	---	---	---	---	---	---	---	---	---	---	---	---	---	23.7	7.12	257.3	---	---	
HRES-07	RESE-1000281	20-Oct-09	29	4.7	26	<2.0	---	---	---	---	67	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-07	RESE-1000281	20-Oct-09	---	---	---	---	5.5	ND	134	4.5	---	<0.50	0.69	0.74	190	---	---	---	7.62	270	TestAmerica
HRES-07	RESE-1000282	28-Oct-09	27	4.5	23	<2.0	---	---	---	---	67	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-07	RESE-1000282	28-Oct-09	---	---	---	---	5.2	ND	195	4.6	---	<0.50	0.74	0.70	210	---	---	---	7.38	240	TestAmerica
HRES-07	RESE-1000284	03-Nov-09	---	---	---	---	---	---	---	---	---	---	---	---	---	24.0	7.22	264.2	---	---	
HRES-07	RESE-1000284	03-Nov-09	27	4.5	23	<2.0	---	---	---	---	67	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-07	RESE-1000284	03-Nov-09	---	---	---	---	5.2	ND	146	4.6	---	<0.50	<0.40	0.70	200	---	---	---	7.72	240	TestAmerica
HRES-07	RESE-1000285	10-Nov-09	---	---	---	---	---	---	---	---	---	---	---	---	---	24.0	7.07	259.4	---	---	
HRES-07	RESE-1000285	10-Nov-09	26	4.5	26	<2.0	---	---	---	---	66	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-07	RESE-1000285	10-Nov-09	---	---	---	---	5.2	ND	171	4.6	---	<0.50	<0.40	0.70	300	---	---	---	7.50	260	TestAmerica
HRES-07	RESE-1000286	17-Nov-09	---	---	---	---	---	---	---	---	---	---	---	---	---	24.2	7.29	281	---	---	
HRES-07	RESE-1000286	17-Nov-09	27	4.5	24	<2.0	---	---	---	---	66	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-07	RESE-1000286	17-Nov-09	---	---	---	---	5.2	ND	159	4.7	---	<0.50	0.73	0.71	210	---	---	---	7.53	260	TestAmerica
HRES-07	RESE-1000287	24-Nov-09	---	---	---	---	---	---	---	---	---	---	---	---	---	23.7	7.19	266	---	---	
HRES-07	RESE-1000287	24-Nov-09	27	4.6	24	<2.0	---	---	---	---	66	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-07	RESE-1000287	24-Nov-09	---	---	---	---	5.2	ND	159	4.8	---	<0.50	<0.40	0.71	190	---	---	---	7.34	260	TestAmerica
HRES-07	RESE-1000289	30-Nov-09	---	---	---	---	---	---	---	---	---	---	---	---	---	23.5	7.30	268.9	---	---	
HRES-07	RESE-1000289	30-Nov-09	26	4.6	25	<2.0	---	---	---	---	65	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-07	RESE-1000289	30-Nov-09	---	---	---	---	5.2	ND	159	4.7	---	<0.50	0.41	0.71	230	---	---	---	7.58	270	TestAmerica
HRES-07	RESE-1000290	06-Dec-09	---	---	---	---	---	---	---	---	---	---	---	---	---	23.5	7.22	266.6	---	---	
HRES-07	RESE-1000290	06-Dec-09	28	4.6	24	<2.0	---	---	---	---	68	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-07	RESE-1000290	06-Dec-09	---	---	---	---	5.2	ND	159	4.7	---	<0.50	<0.40	0.71	360	---	---	---	7.86	270	TestAmerica
HRES-07	RESE-1003245	10-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	23.65	7.64	255	---	---	
HRES-07	RESE-1003245	10-May-12	29	4.4	24	<2.0	---	---	---	---	57	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-07	RESE-1003245	10-May-12	29	4.3	24	<2.0	5.6	ND	159	4.8	62	<0.50	0.45	0.63	210	---	---	---	8.04	260	TestAmerica
HRES-08	RESE-1003149	21-Jul-11	---	---	---	---	---	---	---	---	---	---	---	---	---	23.4	7.11	371.7	---	---	
HRES-08	RESE-1003149	21-Jul-11	39	5.7	32	<2.0	---	---	---	---	61	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-08	RESE-1003149	21-Jul-11	40	6.0	31	2.0	17	ND	195	9.6	60	<0.50	<0.40	0.33	260	---	---	---	7.36	370	TestAmerica
HRES-08	RESE-1003246	10-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	22.40	7.39	325	---	---	
HRES-08	RESE-1003246	10-May-12	35	5.6	34	<2.0	---	---	---	---	50	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-08	RESE-1003246	10-May-12	35	5.6	35	<2.0	20	ND	195	6.8	48	<0.50	0.46	0.28	250	---	---	---	7.99	350	TestAmerica
HRES-09	RESE-1003182	29-Dec-10	---	---	---	---	---	---	---	---	---	---	---	---	---	26.3	7.24	498.3	---	---	
HRES-09	RESE-1003182	29-Dec-10	64	10	48	<2.0	---	---	---	---	63	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-09	RESE-1003182	29-Dec-10	62	9.9	48	<2.0	11	ND	305	6.2	63	<0.50	<0.40	<2.0	470	---	---	---	7.75	480	TestAmerica
HRES-09	RESE-1003133	12-Jun-11	---	---	---	---	---	---	---	---	---	---	---	---	---	26.6	7.44	470.5	---	---	
HRES-09	RESE-1003133	12-Jun-11	53	8.5	41	<2.0	---	---	---	---	62	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-09	RESE-1003133	12-Jun-11	52	8.4	41	<2.0	8.6	ND	281	5.5	60	<1.0	<0.40	<2.0	410	---	---	---	7.91	460	TestAmerica

TABLE A-1. COMMON CONSTITUENTS AND ROUTINE PARAMETERS FOR GROUNDWATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	COMMON CONSTITUENTS[a] (mg/L)[b]													ROUTINE PARAMETERS					ANALYTICAL LABORATORY
																FIELD			LABORATORY		
			Ca	Mg	Na	K	Cl	CO_3	HCO_3	SO_4	SiO_2	Br	F	$NO_3 + NO_2$ (as N)	TDS	TEMP (°C)[c]	pH	SC (µS/cm)[d]	pH	SC (µS/cm)	
Groundwater 2 - Apache Leap Tuff Aquifer																					
HRES-09	RESE-1003136	21-Jun-11	---	---	---	---	---	---	---	---	---	---	---	---	---	26.7	7.07	363.5	---	---	
HRES-09	RESE-1003136	21-Jun-11	42	6.5	33	<2.0	---	---	---	---	66	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-09	RESE-1003136	21-Jun-11	40	6.2	33	<2.0	6.4	ND	220	4.9	70	<0.50	<0.40	ND	290	---	---	---	7.67	360	TestAmerica
HRES-09	RESE-1003137	28-Jun-11	---	---	---	---	---	---	---	---	---	---	---	---	---	27.7	7.14	350.1	---	---	
HRES-09	RESE-1003137	28-Jun-11	39	6.1	32	<2.0	---	---	---	---	65	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-09	RESE-1003137	28-Jun-11	39	6.2	31	<2.0	5.9	ND	207	4.4	66	<0.50	<0.40	0.22	280	---	---	---	7.81	340	TestAmerica
HRES-09	RESE-1003143	04-Jul-11	---	---	---	---	---	---	---	---	---	---	---	---	---	26.9	7.04	337.9	---	---	
HRES-09	RESE-1003143	04-Jul-11	38	5.9	31	<2.0	---	---	---	---	66	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-09	RESE-1003143	04-Jul-11	39	6.2	31	<2.0	5.8	ND	207	4.3	67	<0.50	<0.40	0.26	280	---	---	---	7.49	330	TestAmerica
HRES-09	RESE-1001324	29-Jul-14	---	---	---	---	---	---	---	---	---	---	---	---	---	27.1	8.01	---	---	---	
HRES-09	RESE-1001324	29-Jul-14	---	---	---	---	---	---	---	---	51	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-09	RESE-1001324	29-Jul-14	---	---	---	---	11	ND	342	1.4 j	---	0.065 j	0.24 j	---	430	---	---	---	7.63	550	TestAmerica
HRES-09	RESE-1001324	29-Jul-14	60	10	61	1.5	---	---	---	---	55	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-10	RESE-1003175	24-Sep-10	---	---	---	---	---	---	---	---	---	---	---	---	---	19.9	6.97	736.2	---	---	
HRES-10	RESE-1003175	24-Sep-10	76	18	38	<4.0	---	---	---	---	38	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-10	RESE-1003175	24-Sep-10	88	19	42	2.1	19	ND	232	160	36	<0.50	<0.40	0.60	500	---	---	---	7.12	740	TestAmerica
HRES-10	RESE-1003244	01-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	20.30	6.9	375	---	---	
HRES-10	RESE-1003244	01-May-12	48	9.9	26	<2.0	---	---	---	---	31	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-10	RESE-1003244	01-May-12	49	10	26	<2.0	9.6	ND	146	94	32	<0.50	<0.40	<2.0	300	---	---	---	7.81	430	TestAmerica
HRES-10	RESE-1001311	16-Aug-12	---	---	---	---	---	---	---	---	---	---	---	---	---	20.1	6.78	573.2	---	---	
HRES-10	RESE-1001311	16-Aug-12	66	14	32	2.0	---	---	---	---	33	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-10	RESE-1001311	16-Aug-12	64	13	32	2.0	15	ND	159	140	33	<0.50	<0.40	1.6	430	---	---	---	7.01	540	TestAmerica
HRES-10	RESE-1001322	14-Nov-12	---	---	---	---	---	---	---	---	---	---	---	---	---	19.7	6.80	594.4	---	---	
HRES-10	RESE-1001322	14-Nov-12	68	14	33	2.1	---	---	---	---	33	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-10	RESE-1001322	14-Nov-12	68	14	33	2.1	14	ND	159	130	32	<0.50	<0.40	<2.0	400	---	---	---	7.04	540	TestAmerica
HRES-11	RESE-1003174	23-Sep-10	---	---	---	---	---	---	---	---	---	---	---	---	---	27.5	7.28	274.6	---	---	
HRES-11	RESE-1003174	23-Sep-10	28	4.8	20	<4.0	---	---	---	---	68	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-11	RESE-1003174	23-Sep-10	29	5.1	21	<2.0	5.4	ND	146	4.4	68	<0.50	<0.40	0.46	200	---	---	---	7.44	260	TestAmerica
HRES-11	RESE-1003243	01-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	27.26	7.33	251	---	---	
HRES-11	RESE-1003243	01-May-12	26	4.2	18	<2.0	---	---	---	---	59	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-11	RESE-1003243	01-May-12	29	4.5	20	<2.0	4.4	ND	146	2.9	62	<0.50	<0.40	<2.0	200	---	---	---	7.98	240	TestAmerica
HRES-11	RESE-1001312	16-Aug-12	---	---	---	---	---	---	---	---	---	---	---	---	---	27.5	7.25	256.2	---	---	
HRES-11	RESE-1001312	16-Aug-12	28	4.5	19	<2.0	---	---	---	---	59	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-11	RESE-1001312	16-Aug-12	28	4.4	19	<2.0	4.6	ND	146	3.2	64	<0.50	<0.40	0.47	220	---	---	---	7.44	230	TestAmerica
HRES-11	RESE-1001320	14-Nov-12	---	---	---	---	---	---	---	---	---	---	---	---	---	27.3	7.09	250.3	---	---	
HRES-11	RESE-1001320	14-Nov-12	27	4.5	19	<2.0	---	---	---	---	63	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-11	RESE-1001320	14-Nov-12	26	4.5	18	<2.0	4.2	ND	134	3.0	60	<0.50	<0.40	<2.0	200	---	---	---	7.44	240	TestAmerica
HRES-11 DUP	RESE-1001321	14-Nov-12	---	---	---	---	---	---	---	---	---	---	---	---	---	27.3	7.09	250.3	---	---	
HRES-11 DUP	RESE-1001321	14-Nov-12	27	4.5	19	<2.0	---	---	---	---	64	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-11 DUP	RESE-1001321	14-Nov-12	27	4.5	18	<2.0	4.3	ND	134	2.9	60	<0.50	<0.40	<2.0	210	---	---	---	7.38	220	TestAmerica

MONTGOMERY & ASSOCIATES

TABLE A-1. COMMON CONSTITUENTS AND ROUTINE PARAMETERS
FOR GROUNDWATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	COMMON CONSTITUENTS[a] (mg/L)[b]													ROUTINE PARAMETERS					ANALYTICAL LABORATORY
																FIELD			LABORATORY		
			Ca	Mg	Na	K	Cl	CO_3	HCO_3	SO_4	SiO_2	Br	F	$NO_3 + NO_2$ (as N)	TDS	TEMP (°C)[c]	pH	SC (µS/cm)[d]	pH	SC (µS/cm)	
Groundwater 2 - Apache Leap Tuff Aquifer																					
HRES-12	RESE-1003144	10-Jul-11	---	---	---	---	---	---	---	---	---	---	---	---	---	24.8	7.35	542.5	---	---	
HRES-12	RESE-1003144	10-Jul-11	66	12	39	<2.0	---	---	---	---	48	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-12	RESE-1003144	10-Jul-11	61	11	38	<2.0	12	ND	268	33	48	<0.50	0.47	<2.0	320	---	---	---	7.66	510	TestAmerica
HRES-12	RESE-1003249	15-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	25.68	7.54	500	---	---	
HRES-12	RESE-1003249	15-May-12	64	11	32	<2.0	---	---	---	---	40	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-12	RESE-1003249	15-May-12	65	11	31	<2.0	13	ND	281	31	41	<0.50	<0.40	<2.0	330	---	---	---	7.98	480	TestAmerica
HRES-12	RESE-1001309	14-Aug-12	---	---	---	---	---	---	---	---	---	---	---	---	---	26.1	7.56	521.4	---	---	
HRES-12	RESE-1001309	14-Aug-12	62	11	33	<2.0	---	---	---	---	39	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-12	RESE-1001309	14-Aug-12	59	11	33	<2.0	12	ND	268	29	46	<0.50	<0.40	<2.0	330	---	---	---	7.64	470	TestAmerica
HRES-12	RESE-1001316	07-Nov-12	---	---	---	---	---	---	---	---	---	---	---	---	---	25.9	7.48	515.1	---	---	
HRES-12	RESE-1001316	07-Nov-12	62	12	31	<2.0	---	---	---	---	42	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-12	RESE-1001316	07-Nov-12	55	10	29	<2.0	12	ND	268	24	40	<0.50	<0.40	<2.0	320	---	---	---	7.65	490	TestAmerica
HRES-13	RESE-1003130	03-Jun-11	---	---	---	---	---	---	---	---	---	---	---	---	---	24.4	7.12	448.4	---	---	
HRES-13	RESE-1003130	03-Jun-11	56	10	22	<2.0	---	---	---	---	69	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-13	RESE-1003130	03-Jun-11	53	9.7	20	<2.0	11	ND	256	8.9	64	<0.50	<0.40	0.83	300	---	---	---	7.38	430	TestAmerica
HRES-13	RESE-1000456	17-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	24.97	7.30	435	---	---	
HRES-13	RESE-1000456	17-May-12	57	11	25	<2.0	---	---	---	---	67	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-13	RESE-1000456	17-May-12	55	10	24	<2.0	7.1	ND	281	3.6	64	<0.50	0.46	<2.0	330	---	---	---	8.03	440	TestAmerica
HRES-13 DUP	RESE-1000457	17-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	24.97	7.30	435	---	---	
HRES-13 DUP	RESE-1000457	17-May-12	57	11	25	<2.0	---	---	---	---	67	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-13 DUP	RESE-1000457	17-May-12	54	10	24	<2.0	7.1	ND	281	3.5	65	<0.50	0.46	<2.0	330	---	---	---	8.08	440	TestAmerica
HRES-13	RESE-1001305	07-Aug-12	---	---	---	---	---	---	---	---	---	---	---	---	---	25.0	7.19	451.8	---	---	
HRES-13	RESE-1001305	07-Aug-12	52	9.6	25	<2.0	---	---	---	---	52	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-13	RESE-1001305	07-Aug-12	58	11	24	<2.0	6.7	ND	281	3.2	66	<0.50	<0.40	<2.0	320	---	---	---	7.34	450	TestAmerica
HRES-13	RESE-1001317	08-Nov-12	---	---	---	---	---	---	---	---	---	---	---	---	---	24.5	7.19	450.8	---	---	
HRES-13	RESE-1001317	08-Nov-12	58	10	24	<2.0	---	---	---	---	64	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-13	RESE-1001317	08-Nov-12	55	10	24	<2.0	6.0	ND	268	2.6	64	<0.50	<0.40	<2.0	310	---	---	---	7.36	430	TestAmerica
HRES-14	RESE-1003147	15-Jul-11	---	---	---	---	---	---	---	---	---	---	---	---	---	26.5	7.15	280.6	---	---	
HRES-14	RESE-1003147	15-Jul-11	29	5.5	26	<2.0	---	---	---	---	71	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-14	RESE-1003147	15-Jul-11	28	5.5	23	5.8	7.4	ND	159	5.6	70	<0.50	0.43	0.38	220	---	---	---	7.47	270	TestAmerica
HRES-14	RESE-1003240	30-Apr-12	---	---	---	---	---	---	---	---	---	---	---	---	---	25.15	7.34	328	---	---	
HRES-14	RESE-1003240	30-Apr-12	24	4.4	25	<2.0	---	---	---	---	50	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-14	RESE-1003240	30-Apr-12	26	4.6	27	<2.0	7.0	ND	171	3.8	48	<0.50	<0.40	<2.0	220	---	---	---	8.02	260	TestAmerica
HRES-14	RESE-1001306	08-Aug-12	---	---	---	---	---	---	---	---	---	---	---	---	---	26.2	7.33	272.3	---	---	
HRES-14	RESE-1001306	08-Aug-12	21	4.2	26	<2.0	---	---	---	---	50	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-14	RESE-1001306	08-Aug-12	24	4.9	26	<2.0	6.6	ND	159	3.8	55	<0.50	0.40	<2.0	210	---	---	---	7.48	270	TestAmerica
HRES-14	RESE-1001318	09-Nov-12	---	---	---	---	---	---	---	---	---	---	---	---	---	25.8	7.40	273.7	---	---	
HRES-14	RESE-1001318	09-Nov-12	25	4.8	25	<2.0	---	---	---	---	54	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-14	RESE-1001318	09-Nov-12	24	4.9	26	<2.0	6.1	ND	146	3.3	55	<0.50	<0.40	<2.0	190	---	---	---	7.53	260	TestAmerica

TABLE A-1. COMMON CONSTITUENTS AND ROUTINE PARAMETERS
FOR GROUNDWATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	COMMON CONSTITUENTS[a] (mg/L)[b]													ROUTINE PARAMETERS					ANALYTICAL LABORATORY
																FIELD			LABORATORY		
			Ca	Mg	Na	K	Cl	CO_3	HCO_3	SO_4	SiO_2	Br	F	$NO_3 + NO_2$ (as N)	TDS	TEMP (°C)[c]	pH	SC (µS/cm)[d]	pH	SC (µS/cm)	
Groundwater 2 - Apache Leap Tuff Aquifer																					
HRES-15	RESE-1003241	30-Apr-12	---	---	---	---	---	---	---	---	---	---	---	---	---	26.85	7.52	294	---	---	
HRES-15	RESE-1003241	30-Apr-12	30	4.9	26	<2.0	---	---	---	---	63	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-15	RESE-1003241	30-Apr-12	31	4.9	27	<2.0	6.5	ND	183	3.5	59	<0.50	<0.40	<2.0	260	---	---	---	8.03	290	TestAmerica
HRES-15 DUP	RESE-1003242	30-Apr-12	---	---	---	---	---	---	---	---	---	---	---	---	---	26.85	7.52	294	---	---	
HRES-15 DUP	RESE-1003242	30-Apr-12	30	4.9	26	<2.0	---	---	---	---	62	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-15 DUP	RESE-1003242	30-Apr-12	32	5.0	27	<2.0	6.5	ND	183	3.5	60	<0.50	<0.40	<2.0	260	---	---	---	8.05	290	TestAmerica
HRES-15	RESE-1001308	09-Aug-12	---	---	---	---	---	---	---	---	---	---	---	---	---	27.1	7.27	297.2	---	---	
HRES-15	RESE-1001308	09-Aug-12	27	4.5	27	<2.0	---	---	---	---	61	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-15	RESE-1001308	09-Aug-12	30	5.1	26	<2.0	5.9	ND	171	3.7	64	<0.50	<0.40	<2.0	240	---	---	---	7.48	290	TestAmerica
HRES-17	RESE-1003250	16-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	27.13	7.63	305	---	---	
HRES-17	RESE-1003250	16-May-12	31	4.8	25	<2.0	---	---	---	---	59	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-17	RESE-1003250	16-May-12	30	4.6	24	<2.0	5.4	ND	171	2.1	58	<0.50	<0.40	0.38	210	---	---	---	7.89	260	TestAmerica
HRES-17	RESE-1001307	08-Aug-12	---	---	---	---	---	---	---	---	---	---	---	---	---	27.3	7.15	291.9	---	---	
HRES-17	RESE-1001307	08-Aug-12	27	4.2	25	<2.0	---	---	---	---	53	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-17	RESE-1001307	08-Aug-12	30	4.7	25	<2.0	5.6	ND	171	2.3	57	<0.50	<0.40	<2.0	220	---	---	---	7.47	280	TestAmerica
HRES-17	RESE-1001319	09-Nov-12	---	---	---	---	---	---	---	---	---	---	---	---	---	27.0	7.27	288.9	---	---	
HRES-17	RESE-1001319	09-Nov-12	31	4.6	24	<2.0	---	---	---	---	57	---	---	---	---	---	---	---	---	---	TestAmerica
HRES-17	RESE-1001319	09-Nov-12	29	4.6	24	<2.0	5.0	ND	171	2.1	57	<0.50	<0.40	<2.0	220	---	---	---	7.55	270	TestAmerica
JI Ranch House Well	RESE-1000303	21-Jun-07	---	---	---	---	---	---	---	---	---	---	---	---	---	22.8	6.80	232	---	---	
JI Ranch House Well	RESE-1000303	21-Jun-07	26	3.8	17	2.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	TestAmerica
JI Ranch House Well	RESE-1000303	21-Jun-07	---	---	---	---	7.3	ND	122	7.3	---	<0.50	0.27	1.1	190	---	---	---	---	---	TestAmerica
MJ-11	RESE-1000257	29-Sep-07	---	---	---	---	---	---	---	---	---	---	---	---	---	23.7	7.09	248.7	---	---	
MJ-11	RESE-1000257	29-Sep-07	27	4.6	22	0.97	---	---	---	---	71	---	---	---	---	---	---	---	---	---	TestAmerica
MJ-11	RESE-1000257	29-Sep-07	---	---	---	---	4.4	ND	159	3.4	---	<0.50	0.34	0.41	190	---	---	---	---	---	TestAmerica
MJ-11	RESE-1000261	20-Feb-08	---	---	---	---	---	---	---	---	---	---	---	---	---	22.0	7.14	256	---	---	
MJ-11	RESE-1000261	20-Feb-08	25	4.6	24	1.2	---	---	---	---	71	---	---	---	---	---	---	---	---	---	TestAmerica
MJ-11	RESE-1000261	20-Feb-08	---	---	---	---	4.3	ND	146	3.0	---	<0.50	0.38	0.43	230	---	---	---	---	---	TestAmerica
MJ-11	RESE-1003007	02-Jun-08	---	---	---	---	---	---	---	---	---	---	---	---	---	23.3	7.17	247.9	---	---	
MJ-11	RESE-1003007	02-Jun-08	26	4.6	22	<2.0	---	---	---	---	71	---	---	---	---	---	---	---	---	---	TestAmerica
MJ-11	RESE-1003007	02-Jun-08	---	---	---	---	4.3	ND	134	3.2	---	<0.50	<0.40	0.46	220	---	---	---	7.39	250	TestAmerica
MJ-11	RESE-1003015	26-Aug-08	---	---	---	---	---	---	---	---	---	---	---	---	---	23.9	7.08	251	---	---	
MJ-11	RESE-1003015	26-Aug-08	27	4.8	23	<2.0	---	---	---	---	75	---	---	---	---	---	---	---	---	---	TestAmerica
MJ-11	RESE-1003015	26-Aug-08	---	---	---	---	4.3	ND	109	3.0	---	<0.50	<0.40	0.46	190	---	---	---	7.40	270	TestAmerica
MJ-11	RESE-1000454	16-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	24.05	7.61	245	---	---	
MJ-11	RESE-1000454	16-May-12	28	4.6	22	<2.0	---	---	---	---	72	---	---	---	---	---	---	---	---	---	TestAmerica
MJ-11	RESE-1000454	16-May-12	26	4.4	21	<2.0	4.4	ND	146	2.9	68	<0.50	<0.40	0.48	210	---	---	---	7.78	230	TestAmerica
Oak Flat Well	RESE-1001301	16-Aug-06	---	---	---	---	---	---	---	---	---	---	---	---	---	23.0	---	---	---	---	
Oak Flat Well	RESE-1001301	16-Aug-06	25	3.9	31	5.3	---	---	---	---	88	---	---	---	---	---	---	---	---	---	TestAmerica
Oak Flat Well	RESE-1001301	16-Aug-06	---	---	---	---	14	14	112	6.8	---	---	0.36	1.3	240	---	---	---	*8.86*	270	TestAmerica

MONTGOMERY & ASSOCIATES

TABLE A-1. COMMON CONSTITUENTS AND ROUTINE PARAMETERS
FOR GROUNDWATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	COMMON CONSTITUENTS[a] (mg/L)[b]													ROUTINE PARAMETERS					ANALYTICAL LABORATORY
																FIELD			LABORATORY		
			Ca	Mg	Na	K	Cl	CO_3	HCO_3	SO_4	SiO_2	Br	F	$NO_3 + NO_2$ (as N)	TDS	TEMP (°C)[c]	pH	SC (µS/cm)[d]	pH	SC (µS/cm)	
Groundwater 3 - Deep Groundwater System																					
DHRES-01	RESE-112808	28-Nov-08	---	---	---	---	---	---	---	---	---	---	---	---	---	68.7	7.20	865	---	---	
DHRES-01	RESE-112808	28-Nov-08	32	2.8	130	18	---	---	---	---	44	---	---	---	---	---	---	---	---	---	TestAmerica
DHRES-01	RESE-112808	28-Nov-08	32	2.8	130	18	20	ND	281	160	45	<0.50	*3.2*	ND	500	---	---	---	7.91	810	TestAmerica
DHRES-02	RESE-1003150	20-Jul-11	---	---	---	---	---	---	---	---	---	---	---	---	---	59.1	6.59	3167	---	---	
DHRES-02	RESE-1003150	20-Jul-11	240	7.7	150	36	---	---	---	---	41	---	---	---	---	---	---	---	---	---	TestAmerica
DHRES-02	RESE-1003150	20-Jul-11	250	8.7	160	38	21	ND	220	*810*	46	<0.50	*4.0*	ND	*1400*	---	---	---	7.09	1800	TestAmerica
DHRES-02 DUP	RESE-1003201	20-Jul-11	---	---	---	---	---	---	---	---	---	---	---	---	---	58.7	6.82	3155	---	---	
DHRES-02 DUP	RESE-1003201	20-Jul-11	250	8.9	160	39	---	---	---	---	46	---	---	---	---	---	---	---	---	---	TestAmerica
DHRES-02 DUP	RESE-1003201	20-Jul-11	250	8.5	160	38	21	ND	220	*820*	45	<0.50	*3.9*	ND	*1400*	---	---	---	7.04	1800	TestAmerica
DHRES-02	RESE-1003216	21-Oct-11	---	---	---	---	---	---	---	---	---	---	---	---	---	42.4	7.50	2081	---	---	
DHRES-02	RESE-1003218	22-Oct-11	---	---	---	---	---	---	---	---	---	---	---	---	---	61.88	7.02	1922	---	---	
DHRES-02	RESE-1003218	22-Oct-11	240	8.4	140	35	---	---	---	---	40	---	---	---	---	---	---	---	---	---	TestAmerica
DHRES-02	RESE-1003218	22-Oct-11	240	8.6	150	37	21	ND	207	*840*	42	<0.50	***4.1***	<2.0	*1400*	---	---	---	7.00	1800	TestAmerica
DHRES-02	RESE-1003217	22-Oct-11	---	---	---	---	---	---	---	---	---	---	---	---	---	43.9	7.39	2131	---	---	
DHRES-02	RESE-1003219	23-Oct-11	---	---	---	---	---	---	---	---	---	---	---	---	---	45.4	7.42	2256	---	---	
DHRES-02	RESE-1003220	24-Oct-11	---	---	---	---	---	---	---	---	---	---	---	---	---	41.9	7.15	2485	---	---	
DHRES-02	RESE-1003222	25-Oct-11	---	---	---	---	---	---	---	---	---	---	---	---	---	62.72	7.03	4196	---	---	
DHRES-02	RESE-1003222	25-Oct-11	230	8.3	130	33	---	---	---	---	41	---	---	---	---	---	---	---	---	---	TestAmerica
DHRES-02	RESE-1003222	25-Oct-11	240	8.5	140	36	21	ND	195	*840*	41	<0.50	***4.1***	ND	*1400*	---	---	---	7.50	1700	TestAmerica
DHRES-02	RESE-1003221	25-Oct-11	---	---	---	---	---	---	---	---	---	---	---	---	---	39.1	7.13	2721	---	---	
DHRES-02	RESE-1003223	26-Oct-11	---	---	---	---	---	---	---	---	---	---	---	---	---	44.4	7.30	2779	---	---	
DHRES-02	RESE-1003226	27-Oct-11	---	---	---	---	---	---	---	---	---	---	---	---	---	42.7	7.37	2668	---	---	
DHRES-02	RESE-1003227	27-Oct-11	---	---	---	---	---	---	---	---	---	---	---	---	---	48.01	7.16	2256	---	---	
DHRES-02	RESE-1003227	27-Oct-11	190	6.9	140	38	---	---	---	---	26	---	---	---	---	---	---	---	---	---	TestAmerica
DHRES-02	RESE-1003227	27-Oct-11	270	8.9	150	39	20	ND	183	*740*	87	<0.50	*3.9*	<2.0	*1200*	---	---	---	7.13	1700	TestAmerica
DHRES-02	RESE-1003230	28-Oct-11	---	---	---	---	---	---	---	---	---	---	---	---	---	29.6	7.70	2565	---	---	
DHRES-06 DUP	RESE-1003184	09-Jan-11	---	---	---	---	---	---	---	---	---	---	---	---	---	37.7	7.36	599.1	---	---	
DHRES-06 DUP	RESE-1003184	09-Jan-11	51	29	46	4.3	---	---	---	---	21	---	---	---	---	---	---	---	---	---	TestAmerica
DHRES-06 DUP	RESE-1003184	09-Jan-11	53	29	49	4.7	5.8	ND	390	14	20	<0.50	0.57	<2.0	450	---	---	---	7.37	580	TestAmerica
DHRES-06	RESE-1003186	09-Jan-11	---	---	---	---	---	---	---	---	---	---	---	---	---	37.7	7.36	599.1	---	---	
DHRES-06	RESE-1003186	09-Jan-11	51	29	46	4.3	---	---	---	---	20	---	---	---	---	---	---	---	---	---	TestAmerica
DHRES-06	RESE-1003186	09-Jan-11	53	29	48	4.6	5.8	ND	390	14	20	<0.50	0.57	<2.0	440	---	---	---	7.38	570	TestAmerica
DHRES-09	RESE-1003206	02-Sep-11	---	---	---	---	---	---	---	---	---	---	---	---	---	29.1	7.34	954.2	---	---	
DHRES-09	RESE-1003206	02-Sep-11	120	40	34	3.7	---	---	---	---	20	---	---	---	---	---	---	---	---	---	TestAmerica
DHRES-09	RESE-1003206	02-Sep-11	110	43	33	3.8	25	ND	329	240	20	<0.50	<0.40	1.1	*650*	---	---	---	7.70	920	TestAmerica
DHRES-09	RESE-1001313	20-Aug-12	---	---	---	---	---	---	---	---	---	---	---	---	---	28.8	7.20	979.3	---	---	
DHRES-09	RESE-1001313	20-Aug-12	110	42	30	3.6	---	---	---	---	19	---	---	---	---	---	---	---	---	---	TestAmerica
DHRES-09	RESE-1001313	20-Aug-12	110	42	32	3.8	26	ND	329	*260*	19	<0.50	<0.40	<2.0	*680*	---	---	---	7.30	980	TestAmerica

MONTGOMERY & ASSOCIATES

TABLE A-1. COMMON CONSTITUENTS AND ROUTINE PARAMETERS
FOR GROUNDWATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	COMMON CONSTITUENTS[a] (mg/L)[b]													ROUTINE PARAMETERS					ANALYTICAL LABORATORY
																FIELD			LABORATORY		
			Ca	Mg	Na	K	Cl	CO_3	HCO_3	SO_4	SiO_2	Br	F	$NO_3 + NO_2$ (as N)	TDS	TEMP (°C)[c]	pH	SC (µS/cm)[d]	pH	SC (µS/cm)	
Groundwater 3 - Deep Groundwater System																					
DHRES-11	RESE-1003131	29-Jun-11	---	---	---	---	---	---	---	---	---	---	---	---	---	39.5	7.16	366.3	---	---	
DHRES-11	RESE-1003131	29-Jun-11	32	16	23	4.7	---	---	---	---	31	---	---	---	---	---	---	---	---	---	TestAmerica
DHRES-11	RESE-1003131	29-Jun-11	31	15	22	4.4	6.0	ND	207	8.0	31	<0.50	1.1	1.0	210	---	---	---	7.80	350	TestAmerica
DHRES-11	RESE-1001310	15-Aug-12	---	---	---	---	---	---	---	---	---	---	---	---	---	34.9	*8.58*	285.1	---	---	
DHRES-11	RESE-1001310	15-Aug-12	18	11	22	4.9	---	---	---	---	5.8	---	---	---	---	---	---	---	---	---	TestAmerica
DHRES-11	RESE-1001310	15-Aug-12	18	10	21	4.7	6.1	4.3	159	<2.0	5.3	<0.50	0.93	<2.0	160	---	---	---	*8.77*	260	TestAmerica
DHRES-13	RESE-1003138	28-Jun-11	---	---	---	---	---	---	---	---	---	---	---	---	---	34.8	7.36	745	---	---	
DHRES-13	RESE-1003138	28-Jun-11	56	29	29	5.1	---	---	---	---	21	---	---	---	---	---	---	---	---	---	TestAmerica
DHRES-13	RESE-1003138	28-Jun-11	57	30	29	5.3	17	ND	342	13	22	<0.50	<0.40	1.4	350	---	---	---	7.67	570	TestAmerica
DHRES-13	RESE-1001314	22-Aug-12	---	---	---	---	---	---	---	---	---	---	---	---	---	34.4	7.32	594.5	---	---	
DHRES-13	RESE-1001314	22-Aug-12	59	32	13	4.3	---	---	---	---	19	---	---	---	---	---	---	---	---	---	TestAmerica
DHRES-13	RESE-1001314	22-Aug-12	58	32	13	4.4	17	ND	329	8.3	19	<0.50	<0.40	<2.0	340	---	---	---	7.38	540	TestAmerica
DHRES-13 DUP	RESE-1001315	22-Aug-12	---	---	---	---	---	---	---	---	---	---	---	---	---	34.4	7.32	594.5	---	---	
DHRES-13 DUP	RESE-1001315	22-Aug-12	61	34	13	4.4	---	---	---	---	19	---	---	---	---	---	---	---	---	---	TestAmerica
DHRES-13 DUP	RESE-1001315	22-Aug-12	58	32	13	4.3	17	ND	329	8.3	19	<0.50	<0.40	<2.0	370	---	---	---	7.38	540	TestAmerica
DHRES-15	RESE-1001149	16-Jul-14	---	---	---	---	---	---	---	---	---	---	---	---	---	44.6	8.30	---	---	---	
DHRES-15	RESE-1001149	16-Jul-14	46	23	---	---	---	---	---	---	24	---	---	---	---	---	---	---	---	---	TestAmerica
DHRES-15	RESE-1001149	16-Jul-14	52	25	30	7.1	7.7	ND	305	18	26	<0.50	0.60	0.26	340	---	---	---	8.49	510	TestAmerica
DHRES-15	RESE-1001338	29-Dec-14	---	---	---	---	---	---	---	---	---	---	---	---	---	48.4	6.83	531.0	---	---	
DHRES-15	RESE-1001338	29-Dec-14	---	---	---	---	---	---	---	---	23	---	---	---	---	---	---	---	---	---	TestAmerica
DHRES-15	RESE-1001338	29-Dec-14	---	---	---	---	6.9	ND	329	17	---	0.066 j	0.68	0.37	330	---	---	---	7.31	510	TestAmerica
DHRES-15	RESE-1001338	29-Dec-14	48	24	24	6.1	---	---	---	---	24	---	---	---	---	---	---	---	---	---	TestAmerica
DHRES-15	RESE-1000474	29-Jan-15	---	---	---	---	---	---	---	---	---	---	---	---	---	48.3	7.15	---	---	---	
DHRES-15	RESE-1000474	29-Jan-15	---	---	---	---	---	---	---	---	23	---	---	---	---	---	---	---	---	---	TestAmerica
DHRES-15	RESE-1000474	29-Jan-15	---	---	---	---	6.9	ND	305	17	---	0.066 j	0.67	0.39	300	---	---	---	7.40	520	TestAmerica
DHRES-15	RESE-1000474	29-Jan-15	49	24	24	6.2	---	---	---	---	24	---	---	---	---	---	---	---	---	---	TestAmerica
DHRES-15 LD	RESE-1000474	29-Jan-15	---	---	---	---	---	---	---	---	---	---	---	0.41	---	---	---	---	---	---	TestAmerica
DHRES-15	RESE-1001340	18-Feb-15	---	---	---	---	---	---	---	---	---	---	---	---	---	48.4	7.03	516.4	---	---	
DHRES-15	RESE-1001340	18-Feb-15	---	---	---	---	---	---	---	---	24	---	---	---	---	---	---	---	---	---	TestAmerica
DHRES-15	RESE-1001340	18-Feb-15	---	---	---	---	7.9	ND	293	16	---	0.097 j	0.64	0.41	320	---	---	---	7.39	520	TestAmerica
DHRES-15	RESE-1001340	18-Feb-15	48	24	23	6.1	---	---	---	---	23	---	---	---	---	---	---	---	---	---	TestAmerica

MONTGOMERY & ASSOCIATES

TABLE A-1. COMMON CONSTITUENTS AND ROUTINE PARAMETERS FOR GROUNDWATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	COMMON CONSTITUENTS[a] (mg/L)[b]													ROUTINE PARAMETERS					ANALYTICAL LABORATORY
																FIELD			LABORATORY		
			Ca	Mg	Na	K	Cl	CO_3	HCO_3	SO_4	SiO_2	Br	F	$NO_3 + NO_2$ (as N)	TDS	TEMP (°C)[c]	pH	SC (µS/cm)[d]	pH	SC (µS/cm)	
U.S EPA National Primary Drinking Water Regulations			---	---	---	---	---	---	---	---	---	---	4.0	10	---	---	---	---	---	---	
U.S EPA National Secondary Drinking Water Regulations			---	---	---	---	250	---	---	250	---	---	2.0	---	500	---	6.5 to 8.5	---	6.5 to 8.5	---	
Arizona Numeric Aquifer Water Quality Standards			---	---	---	---	---	---	---	---	---	---	4.0	10	---	---	---	---	---	---	

Values in bold red are out of compliance with EPA primary water quality standards

Values in red italics are out of compliance with EPA secondary water quality standards

Values in red underline are out of compliance with Arizona numeric water quality standards

Values in blue indicate that detection limit exceeds standard

--- = Not available, not applicable

-- = Not calculated due to non-detect

* = Value reported as Na+K

Shading indicates dissolved results
Shading indicates total results
Shading indicates total recoverable results
Shading indicates unknown filtration or no filtration method provided for analyses

[a] Ca = Calcium
Mg = Magnesium
Na = Sodium
K = Potassium
Cl = Chloride
CO_3 = Carbonate
HCO_3 = Bicarbonate
SO_4 = Sulfate
SiO_2 = Silica
Br = Bromide
F = Fluoride
NO_3+NO_2 (as N) = Nitrate plus Nitrite, in equivalent milligrams of nitrogen per liter
TDS = Total dissolved solids

[b] mg/L = milligrams per liter

[c] TEMP (°C) = Temperature, in degrees Celsius

[d] SC (µS/cm) = Specific Conductance in microsiemens per centimeter

Explanation of Codes

Absent = Analyte not present
ge = Greater than or equal to reported value
i = Insufficient sample
j = Estimated value
j+ = Estimated value, high bias
j- = Estimated value, low bias
Lost = Sample lost in processing
n = Not measured
na = Not available
ND = Not Detected
np = Analyte not applicable
Present = Analyte was detected
q = Uncertain value
r = Unusable data
< = Less than reported detection limit
> = Greater than reported value
d = Diluted. Diluted samples are indicated only when value is estimated.
DUP = Field Duplicate
LD = Laboratory duplicate
SP = Split sample
SPD = Split-Duplicate

MONTGOMERY & ASSOCIATES

TABLE A-2. TRACE CONSTITUENTS
FOR GROUNDWATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	TRACE CONSTITUENTS[a] (mg/L)[b]																						ANALYTICAL LABORATORY
			Al	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	CN	Fe	Pb	Mn	Hg	Mo	Ni	Se	Ag	S	Tl	Zn	
Groundwater 1 - Shallow Groundwater System																									
Hackberry Windmill Well	RESE-1000263	27-Feb-08	<0.20	<0.0030	<0.0010	0.11	<0.0010	<0.20	<0.0010	<0.010	<0.0010	<0.010	---	<0.050	0.0011	0.024	<0.00020	<0.010	<0.010	<0.0020	<0.0010	---	<0.0010	0.082	TestAmerica
Hackberry Windmill Well	RESE-1000263	27-Feb-08	---	---	---	---	---	---	---	---	---	---	<0.020	---	---	---	---	---	---	---	---	<0.040	---	---	TestAmerica
Hackberry Windmill Well	RESE-1003011	03-Jun-08	<0.20	---	---	0.094	<0.0010	<0.20	---	<0.010	---	<0.010	---	<0.050	---	---	---	<0.010	<0.010	---	---	---	---	<0.050	TestAmerica
Hackberry Windmill Well	RESE-1003011	03-Jun-08	---	<0.0030	<0.0010	---	---	---	<0.0010	---	<0.0010	---	<0.025	---	<0.0010	*0.074*	<0.00020	---	---	<0.0020	<0.0010	<0.040	<0.0010	---	TestAmerica
Hackberry Windmill Well	RESE-1003019	02-Sep-08	<0.20	---	---	0.10	<0.0010	<0.20	---	<0.010	---	<0.010	---	<0.050	---	---	<0.00020	<0.010	<0.010	---	---	---	---	0.061	TestAmerica
Hackberry Windmill Well	RESE-1003019	02-Sep-08	---	<0.0030	<0.0010	---	---	---	<0.0010	---	<0.0010	---	<0.020	---	<0.0010	*0.078*	---	---	---	<0.0020	<0.0010	<0.040	<0.0010	---	TestAmerica
Hackberry Windmill Well DUP	RESE-1003020	02-Sep-08	<0.20	---	---	0.10	<0.0010	<0.20	---	<0.010	---	<0.010	---	<0.050	---	---	<0.00020	<0.010	<0.010	---	---	---	---	0.064	TestAmerica
Hackberry Windmill Well DUP	RESE-1003020	02-Sep-08	---	<0.0030	<0.0010	---	---	---	<0.0010	---	<0.0010	---	<0.020	---	<0.0010	*0.079*	---	---	---	<0.0020	<0.0010	<0.040	<0.0010	---	TestAmerica
Hackberry Windmill Well	RESE-1003024	02-Dec-08	<0.20	<0.0030	<0.0010	0.10	<0.0010	---	<0.0010	<0.010	---	<0.010	---	*0.51*	<0.0010	---	<0.00020	<0.010	<0.010	<0.0020	<0.0010	---	<0.0010	0.31	TestAmerica
Hackberry Windmill Well	RESE-1003024	02-Dec-08	---	---	---	---	---	---	---	---	---	---	<0.025	---	---	---	---	---	---	---	---	<0.10	---	---	TestAmerica
Hackberry Windmill Well	RESE-1003033	03-Mar-09	<0.20	<0.0030	<0.0010	0.11	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	0.0018	---	0.20	<0.0010	0.034	<0.00020	<0.0010	0.0028	<0.0020	<0.0010	---	<0.0010	0.074	TestAmerica
Hackberry Windmill Well	RESE-1003033	03-Mar-09	---	---	---	---	---	---	---	---	---	---	<0.020	---	---	---	---	---	---	---	---	<0.040	---	---	TestAmerica
Hackberry Windmill Well	RESE-1003042	02-Jun-09	<0.20	<0.0030	<0.0010	0.094	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	0.27	<0.0010	0.048	<0.00020	<0.0010	0.0015	<0.0020	<0.0010	---	<0.0010	0.095	TestAmerica
Hackberry Windmill Well	RESE-1003042	02-Jun-09	---	---	---	---	---	---	---	---	---	---	<0.020	---	---	---	---	---	---	---	---	<0.040	---	---	TestAmerica
Hackberry Windmill Well	RESE-1000462	24-May-12	<0.20	<0.0030	<0.0010	0.079	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	0.14	<0.0010	*0.053*	<0.00020	<0.0010	<0.0010	<0.0020	<0.0010	---	<0.0010	<0.050	TestAmerica
Hackberry Windmill Well	RESE-1000462	24-May-12	<0.20	<0.0030	<0.0010	0.079	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	0.0045	<0.050	0.24	<0.0010	0.050	<0.00020	<0.0010	<0.0010	<0.0020	<0.0010	<0.050	<0.0010	<0.050	TestAmerica
JI Ranch Corral Well	RESE-1000302	21-Jun-07	<0.050	<0.002	<0.001	0.033	<0.0020	<0.050	<0.001	<0.0050	0.036	<0.010	---	*30*	0.0073	*1.3*	---	<0.020	0.019	<0.002	<0.001	---	<0.001	0.60	TestAmerica
JI Ranch Corral Well	RESE-1000302	21-Jun-07	---	---	---	---	---	---	---	---	---	---	<0.020	---	---	---	---	---	---	---	---	<0.10	---	---	TestAmerica
JI Ranch Corral Well	RESE-1003004	29-May-08	<0.20	---	---	0.040	<0.0010	<0.20	---	<0.010	---	<0.010	---	<0.050	---	---	---	<0.010	0.019	---	---	---	---	0.13	TestAmerica
JI Ranch Corral Well	RESE-1003004	29-May-08	---	<0.0030	0.0011	---	---	---	<0.0010	---	0.024	---	<0.025	---	<0.0010	*0.72*	<0.00020	---	---	0.015	<0.0010	<0.040	<0.0010	---	TestAmerica
JI Ranch Corral Well	RESE-1003005	29-May-08	<0.20	---	---	0.039	<0.0010	<0.20	---	<0.010	---	<0.010	---	<0.050	---	---	---	<0.010	0.019	---	---	---	---	0.083	TestAmerica
JI Ranch Corral Well	RESE-1003005	29-May-08	---	<0.0030	0.0011	---	---	---	<0.0010	---	0.026	---	<0.025	---	<0.0010	*0.52*	<0.00020	---	---	0.013	<0.0010	<0.040	<0.0010	---	TestAmerica
JI Ranch Corral Well	RESE-1003014	25-Aug-08	<0.20	---	---	0.048	<0.0010	<0.20	---	<0.010	---	<0.010	---	<0.050	---	---	<0.00020	<0.010	0.019	---	---	---	---	0.36	TestAmerica
JI Ranch Corral Well	RESE-1003014	25-Aug-08	---	<0.0030	0.0015	---	---	---	<0.0010	---	<0.0010	---	<0.025	---	<0.0010	0.025	---	---	---	<0.0020	<0.0010	<0.040	<0.0010	---	TestAmerica
JI Ranch Corral Well	RESE-1003029	03-Dec-08	<0.20	<0.0030	<0.0010	0.027	<0.0010	---	<0.0010	<0.010	---	<0.010	---	*8.5*	<0.0010	---	<0.00020	<0.010	0.016	<0.0020	<0.0010	---	<0.0010	0.093	TestAmerica
JI Ranch Corral Well	RESE-1003029	03-Dec-08	---	---	---	---	---	---	---	---	---	---	<0.025	---	---	---	---	---	---	---	---	<0.10	---	---	TestAmerica
JI Ranch Corral Well	RESE-1003038	04-Mar-09	<0.20	<0.0030	0.0011	0.034	<0.0010	<0.20	<0.0010	<0.0010	0.012	0.0049	---	*2.7*	<0.0010	*0.50*	<0.00020	<0.0010	0.014	<0.0020	<0.0010	---	<0.0010	0.044	TestAmerica
JI Ranch Corral Well	RESE-1003038	04-Mar-09	---	---	---	---	---	---	---	---	---	---	<0.020	---	---	---	---	---	---	---	---	<0.040	---	---	TestAmerica
JI Ranch Corral Well	RESE-1003047	05-Jun-09	<0.20	<0.0030	0.0016	0.034	<0.0010	<0.20	<0.0010	<0.0010	0.015	0.0047	---	*4.1*	<0.0010	*0.52*	<0.00020	<0.0010	0.0084	<0.0020	<0.0010	---	<0.0010	0.029	TestAmerica
JI Ranch Corral Well	RESE-1003047	05-Jun-09	---	---	---	---	---	---	---	---	---	---	<0.020	---	---	---	---	---	---	---	---	<0.040	---	---	TestAmerica
JI Ranch Corral Well	RESE-1000460	23-May-12	<0.20	<0.0030	0.0012	0.041	<0.0010	<0.20	<0.0010	<0.0010	0.0080	<0.0010	---	*5.9*	<0.0010	*0.49*	<0.00020	<0.0010	0.0085	<0.0020	<0.0010	---	<0.0010	<0.050	TestAmerica
JI Ranch Corral Well	RESE-1000460	23-May-12	<0.20	<0.0030	0.0023	0.052	<0.0010	<0.20	<0.0010	<0.0010	0.0077	0.0040	<0.050	*8.2*	<0.0010	*0.48*	<0.00020	<0.0010	0.0065	<0.0020	<0.0010	<0.050	<0.0010	<0.050	TestAmerica
JI Ranch Middle Well	RESE-1003006	30-May-08	<0.20	---	---	0.083	<0.0010	<0.20	---	<0.010	---	<0.010	---	<0.050	---	---	---	<0.010	<0.010	---	---	---	---	<0.050	TestAmerica
JI Ranch Middle Well	RESE-1003006	30-May-08	---	<0.0030	<0.0010	---	---	---	<0.0010	---	0.0044	---	<0.025	---	<0.0010	*0.40*	<0.00020	---	---	<0.0020	<0.0010	<0.040	<0.0010	---	TestAmerica
JI Ranch Middle Well	RESE-1003017	27-Aug-08	<0.20	---	---	0.13	<0.0010	<0.20	---	<0.010	---	<0.010	---	<0.050	---	---	<0.00020	<0.010	<0.010	---	---	---	---	<0.050	TestAmerica
JI Ranch Middle Well	RESE-1003017	27-Aug-08	---	<0.0030	0.0019	---	---	---	<0.0010	---	<0.0010	---	<0.025	---	0.0011	*0.067*	---	---	---	<0.0020	<0.0010	<0.040	<0.0010	---	TestAmerica
JI Ranch Middle Well	RESE-1003028	03-Dec-08	<0.20	<0.0030	<0.0010	0.15	<0.0010	---	<0.0010	<0.010	---	<0.010	---	*12*	<0.0010	---	<0.00020	<0.010	<0.010	<0.0020	<0.0010	---	<0.0010	<0.050	TestAmerica
JI Ranch Middle Well	RESE-1003028	03-Dec-08	---	---	---	---	---	---	---	---	---	---	<0.025	---	---	---	---	---	---	---	---	<0.10	---	---	TestAmerica
JI Ranch Middle Well	RESE-1003037	04-Mar-09	<0.20	<0.0030	<0.0010	0.13	<0.0010	<0.20	<0.0010	<0.0010	0.0029	0.0015	---	*4.6*	<0.0010	*0.92*	<0.00020	<0.0010	0.0041	<0.0020	<0.0010	---	<0.0010	<0.010	TestAmerica
JI Ranch Middle Well	RESE-1003037	04-Mar-09	---	---	---	---	---	---	---	---	---	---	<0.020	---	---	---	---	---	---	---	---	<0.040	---	---	TestAmerica

MONTGOMERY & ASSOCIATES

TABLE A-2. TRACE CONSTITUENTS
FOR GROUNDWATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	TRACE CONSTITUENTS[a] (mg/L)[b]																						ANALYTICAL LABORATORY
			Al	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	CN	Fe	Pb	Mn	Hg	Mo	Ni	Se	Ag	S	Tl	Zn	
Groundwater 1 - Shallow Groundwater System																									
JI Ranch Middle Well	RESE-1003048	05-Jun-09	<0.20	<0.0030	<0.0010	0.16	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	*12*	<0.0010	*0.67*	<0.00020	<0.0010	0.0025	<0.0020	<0.0010	---	<0.0010	<0.010	TestAmerica
JI Ranch Middle Well	RESE-1003048	05-Jun-09	---	---	---	---	---	---	---	---	---	---	<0.020	---	---	---	---	---	---	---	---	<0.040	---	---	TestAmerica
JI Ranch Middle Well	RESE-1000461	23-May-12	<0.20	<0.0030	<0.0010	0.085	<0.0010	<0.20	<0.0010	<0.0010	0.0013	<0.0010	---	*6.9*	<0.0010	*0.63*	<0.00020	<0.0010	0.0011	<0.0020	<0.0010	---	<0.0010	<0.050	TestAmerica
JI Ranch Middle Well	RESE-1000461	23-May-12	<0.20	<0.0030	<0.0010	0.090	<0.0010	<0.20	<0.0010	<0.0010	0.0012	0.0022	<0.050	*9.8*	0.0022	*0.64*	<0.00020	<0.0010	<0.0010	<0.0020	<0.0010	<0.050	<0.0010	<0.050	TestAmerica
Groundwater 2 - Apache Leap Tuff Aquifer																									
A-06	RESE-1000255	24-Sep-07	*<0.50*	<0.002	0.0015	0.017	<0.0040	<0.50	<0.001	<0.010	<0.050	<0.020	---	<0.20	0.0014	0.048	<0.00020	<0.050	<0.050	<0.002	<0.001	---	<0.001	0.17	TestAmerica
A-06	RESE-1000255	24-Sep-07	---	---	---	---	---	---	---	---	---	---	<0.020	---	---	---	---	---	---	---	---	<0.10	---	---	TestAmerica
A-06 DUP	RESE-1000256	24-Sep-07	*<0.50*	<0.002	0.0016	0.016	<0.0040	<0.50	<0.001	<0.010	<0.050	<0.020	---	<0.20	0.0018	0.048	<0.00020	<0.050	<0.050	<0.002	<0.001	---	<0.001	0.16	TestAmerica
A-06 DUP	RESE-1000256	24-Sep-07	---	---	---	---	---	---	---	---	---	---	<0.020	---	---	---	---	---	---	---	---	<0.10	---	---	TestAmerica
A-06	RESE-1003008	02-Jun-08	<0.20	---	---	0.016	<0.0010	<0.20	---	<0.010	---	<0.010	---	<0.050	---	---	---	<0.010	<0.010	---	---	---	---	0.48	TestAmerica
A-06	RESE-1003008	02-Jun-08	---	<0.0030	0.0016	---	---	---	<0.0010	---	<0.0010	---	<0.025	---	0.0016	*0.13*	<0.00020	---	---	<0.0020	<0.0010	<0.040	<0.0010	---	TestAmerica
A-06	RESE-1003016	28-Aug-08	<0.20	---	---	0.015	<0.0010	<0.20	---	<0.010	---	<0.010	---	<0.050	---	---	<0.00020	<0.010	<0.010	---	---	---	---	0.34	TestAmerica
A-06	RESE-1003016	28-Aug-08	---	<0.0030	0.0023	---	---	---	<0.0010	---	<0.0010	---	<0.025	---	<0.0010	<0.0050	---	---	---	<0.0020	<0.0010	<0.040	<0.0010	---	TestAmerica
A-06	RESE-1003030	04-Dec-08	<0.20	<0.0030	0.0021	0.014	<0.0010	---	<0.0010	<0.010	---	<0.010	---	<0.050	<0.0010	---	<0.00020	<0.010	<0.010	<0.0020	<0.0010	---	<0.0010	0.39	TestAmerica
A-06	RESE-1003030	04-Dec-08	---	---	---	---	---	---	---	---	---	---	<0.025	---	---	---	---	---	---	---	---	<0.10	---	---	TestAmerica
A-06	RESE-1003039	05-Mar-09	<0.20	<0.0030	0.0021	0.014	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	0.0018	---	<0.050	<0.0010	0.034	<0.00020	<0.0010	0.0018	<0.0020	<0.0010	---	<0.0010	0.25	TestAmerica
A-06	RESE-1003039	05-Mar-09	---	---	---	---	---	---	---	---	---	---	<0.020	---	---	---	---	---	---	---	---	<0.040	---	---	TestAmerica
A-06	RESE-1003046	04-Jun-09	<0.20	<0.0030	0.0020	0.014	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	<0.050	<0.0010	0.026	<0.00020	<0.0010	<0.0010	<0.0020	<0.0010	---	<0.0010	0.16	TestAmerica
A-06	RESE-1003046	04-Jun-09	---	---	---	---	---	---	---	---	---	---	<0.020	---	---	---	---	---	---	---	---	<0.040	---	---	TestAmerica
A-06	RESE-1003248	14-May-12	<0.20	<0.0030	0.0013	0.013	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	<0.050	<0.0010	0.011	<0.00020	0.0010	<0.0010	<0.0020	<0.0010	---	<0.0010	0.094	TestAmerica
A-06	RESE-1003248	14-May-12	<0.20	<0.0030	0.0016	0.014	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	<0.050	<0.050	<0.0010	0.025	<0.00020	<0.0010	<0.0010	<0.0020	<0.0010	<0.050	<0.0010	0.10	TestAmerica
CT Well	RESE-1003101	20-Apr-10	<0.20	<0.0030	<0.0010	0.024	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	0.023	---	<0.050	<0.0010	0.031	<0.00020	0.0017	0.0032	<0.0020	<0.0010	---	<0.0010	0.34	TestAmerica
CT Well	RESE-1003101	20-Apr-10	<0.20	<0.0030	<0.0010	0.023	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	0.036	<0.020	*0.85*	<0.0010	0.033	<0.00020	0.0017	0.0035	<0.0020	<0.0010	<0.050	<0.0010	0.40	TestAmerica
HRES-01	RESE-1001102	15-Mar-04	<0.020	<0.0050	<0.010	0.0038	<0.0020	<0.040	<0.0020	<0.0060	<0.0060	<0.0030	---	0.083	<0.0050	0.0216	<0.00020	<0.0080	<0.010	<0.010	<0.0050	---	**<0.010**	0.0138	SVL
HRES-01	RESE-1001103	18-Mar-04	<0.020	<0.0050	<0.010	0.0037	<0.0020	<0.040	<0.0020	<0.0060	<0.0060	<0.0030	---	0.155	<0.0050	0.0171	<0.00020	<0.0080	<0.010	<0.010	<0.0050	---	**<0.010**	0.0277	SVL
HRES-02	RESE-1001105	06-Apr-04	<0.020	<0.0030	0.003	0.0114	<0.0020	<0.040	<0.00010	<0.0060	<0.0060	0.0135	---	0.037	0.006	0.02	<0.00020	<0.0080	<0.010	<0.0030	<0.00010	---	<0.0020	0.0316	SVL
HRES-02	RESE-1001108	08-Apr-04	0.143	<0.0030	0.01	0.0038	<0.0020	0.043	<0.00010	<0.0060	<0.0060	0.0189	---	0.19	<0.0030	0.0183	<0.00020	<0.0080	<0.010	<0.0030	<0.00010	---	<0.0020	0.0206	SVL
HRES-02	RESE-1001109	10-Apr-04	0.062	<0.0030	0.009	<0.0020	<0.0020	0.043	<0.00010	<0.0060	<0.0060	<0.0030	---	0.021	<0.0030	0.0037	<0.00020	<0.0080	<0.010	<0.0030	<0.00010	---	<0.0020	<0.0050	SVL
HRES-02	RESE-1000455	17-May-12	<0.20	<0.0030	0.0051	0.013	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	0.11	<0.0010	*0.061*	<0.00020	0.0029	<0.0010	<0.0020	<0.0010	---	<0.0010	<0.050	TestAmerica
HRES-02	RESE-1000455	17-May-12	*0.24*	<0.0030	0.0057	0.014	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	0.0011	<0.050	*0.42*	<0.0010	*0.064*	<0.00020	0.0030	<0.0010	<0.0020	<0.0010	<0.050	<0.0010	<0.050	TestAmerica
HRES-03d	RESE-1001111	16-Apr-04	0.035	<0.0030	<0.0030	<0.0020	<0.0020	0.061	<0.00010	<0.0060	<0.0060	<0.0030	---	0.263	<0.0030	0.006	<0.00020	0.0258	<0.010	<0.0030	<0.00010	---	<0.0020	0.007	SVL
HRES-04	RESE-1001110	15-Apr-04	<0.020	<0.0030	<0.0030	0.0105	<0.0020	<0.040	<0.00010	<0.0060	<0.0060	<0.0030	---	0.061	<0.0030	*0.0775*	<0.00020	0.0094	<0.010	<0.0030	<0.00010	---	<0.0020	0.017	SVL
HRES-04	4531	03-Nov-06	*<0.50*	<0.002	0.0042	<0.010	<0.0040	<0.50	<0.0050	0.012	<0.050	<0.020	---	<0.20	<0.001	<0.020	<0.00020	<0.050	<0.050	<0.002	<0.0050	---	<0.001	0.057	TestAmerica
HRES-04	RESE-1001114	18-Jan-08	*<0.50*	<0.002	0.0025	0.010	<0.0040	---	<0.001	<0.010	---	<0.020	---	<0.20	0.0016	---	---	<0.050	<0.050	<0.002	<0.001	---	<0.001	0.17	TestAmerica
HRES-04	RESE-1001114	18-Jan-08	---	---	---	---	---	---	---	---	---	---	<0.020	---	---	---	<0.00020	---	---	---	---	<0.10	---	---	TestAmerica
HRES-04	RESE-1003021	03-Sep-08	<0.20	---	---	<0.010	<0.0010	<0.20	---	<0.010	---	<0.010	---	<0.050	---	---	<0.00020	<0.010	<0.010	---	---	---	---	0.099	TestAmerica
HRES-04	RESE-1003021	03-Sep-08	---	<0.0030	0.0035	---	---	---	<0.0010	---	<0.0010	---	<0.020	---	<0.0010	<0.0050	---	---	---	0.0023	<0.0010	<0.040	<0.0010	---	TestAmerica
HRES-04	RESE-1003031	02-Mar-09	<0.20	<0.0030	0.0036	0.0084	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	0.0018	---	<0.050	<0.0010	<0.0050	<0.00020	0.0030	0.0017	<0.0020	<0.0010	---	<0.0010	0.15	TestAmerica
HRES-04	RESE-1003031	02-Mar-09	---	---	---	---	---	---	---	---	---	---	<0.020	---	---	---	---	---	---	---	---	<0.040	---	---	TestAmerica

MONTGOMERY & ASSOCIATES

TABLE A-2. TRACE CONSTITUENTS
FOR GROUNDWATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	TRACE CONSTITUENTS[a] (mg/L)[b]																						ANALYTICAL LABORATORY
			Al	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	CN	Fe	Pb	Mn	Hg	Mo	Ni	Se	Ag	S	Tl	Zn	
Groundwater 2 - Apache Leap Tuff Aquifer																									
HRES-04	RESE-1003040	01-Jun-09	<0.20	<0.0030	0.0035	0.0078	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	0.0011	---	<0.050	<0.0010	<0.0050	<0.00020	0.0024	<0.0010	<0.0020	<0.0010	---	<0.0010	0.14	TestAmerica
HRES-04	RESE-1003040	01-Jun-09	---	---	---	---	---	---	---	---	---	---	<0.020	---	---	---	---	---	---	---	---	<0.040	---	---	TestAmerica
HRES-04	RESE-1000458	17-May-12	<0.20	<0.0030	0.0025	0.0079	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	<0.050	<0.0010	<0.010	<0.00020	0.0024	<0.0010	<0.0020	<0.0010	---	<0.0010	0.18	TestAmerica
HRES-04	RESE-1000458	17-May-12	*0.34*	<0.0030	0.0033	0.012	<0.0010	<0.20	<0.0010	0.0011	<0.0010	0.0039	<0.050	*0.54*	<0.0010	*0.10*	<0.00020	0.0026	0.0012	<0.0020	<0.0010	<0.050	<0.0010	0.22	TestAmerica
HRES-05	RESE-1001104	02-Apr-04	<0.020	<0.0030	<0.0030	0.028	<0.0020	<0.040	<0.00010	<0.0060	<0.0060	<0.0030	---	0.111	<0.0030	0.0339	<0.00020	0.0082	<0.010	<0.0030	<0.00010	---	<0.0020	0.0178	SVL
HRES-05	RESE-1000264	27-Feb-08	<0.20	<0.0030	0.0023	0.030	<0.0010	<0.20	<0.0010	<0.010	<0.0010	<0.010	---	<0.050	<0.0010	0.015	<0.00020	<0.010	<0.010	<0.0020	<0.0010	---	<0.0010	0.059	TestAmerica
HRES-05	RESE-1000264	27-Feb-08	---	---	---	---	---	---	---	---	---	---	<0.020	---	---	---	---	---	---	---	---	<0.040	---	---	TestAmerica
HRES-05	RESE-1003001	28-May-08	<0.20	---	---	0.030	<0.0010	<0.20	---	<0.010	---	<0.010	---	<0.050	---	---	---	<0.010	<0.010	---	---	---	---	0.23	TestAmerica
HRES-05	RESE-1003001	28-May-08	---	<0.0030	0.0023	---	---	---	<0.0010	---	<0.0010	---	<0.025	---	0.0010	0.028	<0.00020	---	---	<0.0020	<0.0010	<0.040	<0.0010	---	TestAmerica
HRES-05	RESE-1003012	25-Aug-08	<0.20	---	---	0.032	<0.0010	<0.20	---	<0.010	---	<0.010	---	<0.050	---	---	<0.00020	<0.010	<0.010	---	---	---	---	0.26	TestAmerica
HRES-05	RESE-1003012	25-Aug-08	---	<0.0030	0.0086	---	---	---	<0.0010	---	<0.0010	---	<0.025	---	<0.0010	0.028	---	---	---	0.0058	<0.0010	<0.040	<0.0010	---	TestAmerica
HRES-05	RESE-1003025	02-Dec-08	<0.20	<0.0030	0.0024	0.030	<0.0010	---	<0.0010	<0.010	---	<0.010	---	<0.050	<0.0010	---	<0.00020	<0.010	<0.010	<0.0020	<0.0010	---	<0.0010	0.26	TestAmerica
HRES-05	RESE-1003025	02-Dec-08	---	---	---	---	---	---	---	---	---	---	<0.025	---	---	---	---	---	---	---	---	<0.10	---	---	TestAmerica
HRES-05	RESE-1003034	03-Mar-09	<0.20	<0.0030	0.0025	0.031	<0.0010	<0.20	<0.0010	<0.0010	0.0021	0.0015	---	<0.050	<0.0010	0.021	<0.00020	0.0023	0.0023	<0.0020	<0.0010	---	<0.0010	0.22	TestAmerica
HRES-05	RESE-1003034	03-Mar-09	---	---	---	---	---	---	---	---	---	---	<0.020	---	---	---	---	---	---	---	---	<0.040	---	---	TestAmerica
HRES-05	RESE-1003043	03-Jun-09	<0.20	<0.0030	0.0024	0.031	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	0.0014	---	<0.050	<0.0010	0.015	<0.00020	0.0020	<0.0010	0.0020	<0.0010	---	<0.0010	0.22	TestAmerica
HRES-05	RESE-1003043	03-Jun-09	---	---	---	---	---	---	---	---	---	---	<0.020	---	---	---	---	---	---	---	---	<0.040	---	---	TestAmerica
HRES-05	RESE-1003247	10-May-12	<0.20	<0.0030	0.0022	0.030	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	<0.050	<0.0010	<0.010	<0.00020	0.0016	<0.0010	<0.0020	<0.0010	---	<0.0010	0.24	TestAmerica
HRES-05	RESE-1003247	10-May-12	<0.20	<0.0030	0.0025	0.029	<0.0010	0.34	<0.0010	<0.0010	<0.0010	0.0016	<0.050	<0.050	0.0012	<0.010	<0.00020	0.0016	<0.0010	<0.0020	<0.0010	<0.050	<0.0010	0.24	TestAmerica
HRES-06	RESE-1000301	12-Jun-07	*<0.50*	<0.002	0.0014	0.027	<0.0040	---	<0.001	<0.010	---	<0.020	---	<0.20	0.0011	---	---	<0.050	<0.050	<0.002	<0.001	---	<0.001	0.78	TestAmerica
HRES-06	RESE-1000301	12-Jun-07	---	---	---	---	---	---	---	---	---	---	<0.020	---	---	---	---	---	---	---	---	<0.10	---	---	TestAmerica
HRES-06	RESE-1000265	27-Feb-08	<0.20	<0.0030	0.0015	0.025	<0.0010	<0.20	<0.0010	<0.010	<0.0010	0.013	---	*1.1*	0.0031	0.040	<0.00020	<0.010	<0.010	<0.0020	<0.0010	---	<0.0010	0.96	TestAmerica
HRES-06	RESE-1000265	27-Feb-08	---	---	---	---	---	---	---	---	---	---	<0.020	---	---	---	---	---	---	---	---	<0.040	---	---	TestAmerica
HRES-06 DUP	RESE-1000266	27-Feb-08	<0.20	<0.0030	0.0013	0.026	<0.0010	<0.20	<0.0010	<0.010	<0.0010	0.010	---	0.23	0.0024	0.040	<0.00020	<0.010	<0.010	<0.0020	<0.0010	---	<0.0010	0.85	TestAmerica
HRES-06 DUP	RESE-1000266	27-Feb-08	---	---	---	---	---	---	---	---	---	---	<0.020	---	---	---	---	---	---	---	---	<0.040	---	---	TestAmerica
HRES-06	RESE-1003003	28-May-08	<0.20	---	---	0.026	<0.0010	<0.20	---	<0.010	---	<0.010	---	<0.050	---	---	---	<0.010	<0.010	---	---	---	---	0.76	TestAmerica
HRES-06	RESE-1003003	28-May-08	---	<0.0030	0.0014	---	---	---	<0.0010	---	<0.0010	---	<0.025	---	<0.0010	0.024	<0.00020	---	---	<0.0020	<0.0010	<0.040	<0.0010	---	TestAmerica
HRES-06	RESE-1003013	25-Aug-08	<0.20	---	---	0.026	<0.0010	<0.20	---	<0.010	---	<0.010	---	0.12	---	---	<0.00020	<0.010	<0.010	---	---	---	---	0.84	TestAmerica
HRES-06	RESE-1003013	25-Aug-08	---	<0.0030	0.0025	---	---	---	<0.0010	---	<0.0010	---	<0.025	---	<0.0010	0.020	---	---	---	<0.0020	<0.0010	<0.040	<0.0010	---	TestAmerica
HRES-06	RESE-1003026	03-Dec-08	<0.20	<0.0030	0.0014	0.024	<0.0010	---	<0.0010	<0.010	---	<0.010	---	0.053	<0.0010	---	<0.00020	<0.010	<0.010	<0.0020	<0.0010	---	<0.0010	1.9	TestAmerica
HRES-06	RESE-1003026	03-Dec-08	---	---	---	---	---	---	---	---	---	---	<0.025	---	---	---	---	---	---	---	---	<0.10	---	---	TestAmerica
HRES-06 DUP	RESE-1003027	03-Dec-08	<0.20	<0.0030	0.0014	0.025	<0.0010	---	<0.0010	<0.010	---	<0.010	---	0.051	<0.0010	---	<0.00020	<0.010	<0.010	<0.0020	<0.0010	---	<0.0010	1.9	TestAmerica
HRES-06 DUP	RESE-1003027	03-Dec-08	---	---	---	---	---	---	---	---	---	---	<0.025	---	---	---	---	---	---	---	---	<0.10	---	---	TestAmerica
HRES-06	RESE-1003035	04-Mar-09	<0.20	<0.0030	0.0016	0.025	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	0.0020	---	<0.050	<0.0010	0.025	<0.00020	0.0024	0.0020	<0.0020	<0.0010	---	<0.0010	0.87	TestAmerica
HRES-06	RESE-1003035	04-Mar-09	---	---	---	---	---	---	---	---	---	---	<0.020	---	---	---	---	---	---	---	---	<0.040	---	---	TestAmerica
HRES-06 DUP	RESE-1003036	04-Mar-09	<0.20	<0.0030	0.0016	0.026	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	0.0011	---	<0.050	<0.0010	0.024	<0.00020	0.0021	0.0021	<0.0020	<0.0010	---	<0.0010	0.91	TestAmerica
HRES-06 DUP	RESE-1003036	04-Mar-09	---	---	---	---	---	---	---	---	---	---	<0.020	---	---	---	---	---	---	---	---	<0.040	---	---	TestAmerica
HRES-06	RESE-1003044	03-Jun-09	<0.20	<0.0030	0.0016	0.026	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	<0.050	<0.0010	0.019	<0.00020	0.0020	0.0010	<0.0020	<0.0010	---	<0.0010	0.87	TestAmerica
HRES-06	RESE-1003044	03-Jun-09	---	---	---	---	---	---	---	---	---	---	<0.020	---	---	---	---	---	---	---	---	<0.040	---	---	TestAmerica
HRES-06 DUP	RESE-1003045	03-Jun-09	<0.20	<0.0030	0.0015	0.026	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	<0.050	<0.0010	0.019	<0.00020	0.0020	<0.0010	<0.0020	<0.0010	---	<0.0010	0.84	TestAmerica
HRES-06 DUP	RESE-1003045	03-Jun-09	---	---	---	---	---	---	---	---	---	---	<0.020	---	---	---	---	---	---	---	---	<0.040	---	---	TestAmerica

MONTGOMERY & ASSOCIATES

TABLE A-2. TRACE CONSTITUENTS
FOR GROUNDWATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	TRACE CONSTITUENTS[a] (mg/L)[b]																						ANALYTICAL LABORATORY
			Al	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	CN	Fe	Pb	Mn	Hg	Mo	Ni	Se	Ag	S	Tl	Zn	
Groundwater 2 - Apache Leap Tuff Aquifer																									
HRES-06	RESE-1000459	18-May-12	<0.20	<0.0030	<0.0010	0.024	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	0.12	<0.0010	0.045	<0.00020	0.0019	<0.0010	<0.0020	<0.0010	---	<0.0010	0.83	TestAmerica
HRES-06	RESE-1000459	18-May-12	<0.20	<0.0030	0.0012	0.025	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	<0.050	0.29	<0.0010	0.038	<0.00020	0.0019	<0.0010	<0.0020	<0.0010	<0.050	<0.0010	0.89	TestAmerica
HRES-07	RESE-1000262	26-Feb-08	<0.20	<0.0030	0.0015	0.019	<0.0010	<0.20	<0.0010	<0.010	<0.0010	<0.010	---	0.10	<0.0010	*0.059*	<0.00020	<0.010	<0.010	<0.0020	<0.0010	---	<0.0010	<0.050	TestAmerica
HRES-07	RESE-1000262	26-Feb-08	---	---	---	---	---	---	---	---	---	---	<0.020	---	---	---	---	---	---	---	---	<0.040	---	---	TestAmerica
HRES-07	RESE-1003009	03-Jun-08	<0.20	---	---	0.015	<0.0010	<0.20	---	<0.010	---	<0.010	---	*0.50*	---	---	---	<0.010	<0.010	---	---	---	---	<0.050	TestAmerica
HRES-07	RESE-1003009	03-Jun-08	---	<0.0030	0.0012	---	---	---	<0.0010	---	<0.0010	---	<0.025	---	<0.0010	*0.098*	<0.00020	---	---	<0.0020	<0.0010	<0.040	<0.0010	---	TestAmerica
HRES-07 DUP	RESE-1003010	03-Jun-08	<0.20	---	---	0.014	<0.0010	<0.20	---	<0.010	---	<0.010	---	*0.47*	---	---	---	<0.010	<0.010	---	---	---	---	<0.050	TestAmerica
HRES-07 DUP	RESE-1003010	03-Jun-08	---	<0.0030	0.0012	---	---	---	<0.0010	---	<0.0010	---	<0.025	---	<0.0010	*0.098*	<0.00020	---	---	<0.0020	<0.0010	<0.040	<0.0010	---	TestAmerica
HRES-07	RESE-1003018	02-Sep-08	<0.20	---	---	0.012	<0.0010	<0.20	---	<0.010	---	<0.010	---	0.27	---	---	<0.00020	<0.010	<0.010	---	---	---	---	<0.050	TestAmerica
HRES-07	RESE-1003018	02-Sep-08	---	<0.0030	0.0014	---	---	---	<0.0010	---	0.0016	---	<0.020	---	<0.0010	*0.092*	---	---	---	<0.0020	<0.0010	<0.040	<0.0010	---	TestAmerica
HRES-07	RESE-1003022	01-Dec-08	<0.20	<0.0030	0.0014	0.015	<0.0010	---	<0.0010	<0.010	---	<0.010	---	*0.52*	<0.0010	---	<0.00020	<0.010	<0.010	<0.0020	<0.0010	---	<0.0010	<0.050	TestAmerica
HRES-07	RESE-1003022	01-Dec-08	---	---	---	---	---	---	---	---	---	---	<0.025	---	---	---	---	---	---	---	---	<0.10	---	---	TestAmerica
HRES-07	RESE-1003032	03-Mar-09	<0.20	<0.0030	0.0014	0.015	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	*0.36*	<0.0010	*0.089*	<0.00020	0.0016	0.010	<0.0020	<0.0010	---	<0.0010	0.044	TestAmerica
HRES-07	RESE-1003032	03-Mar-09	---	---	---	---	---	---	---	---	---	---	<0.020	---	---	---	---	---	---	---	---	<0.040	---	---	TestAmerica
HRES-07	RESE-1003041	02-Jun-09	<0.20	<0.0030	0.0015	0.015	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	0.29	<0.0010	*0.076*	<0.00020	0.0014	0.0032	0.0023	<0.0010	---	<0.0010	0.036	TestAmerica
HRES-07	RESE-1003041	02-Jun-09	---	---	---	---	---	---	---	---	---	---	<0.020	---	---	---	---	---	---	---	---	<0.040	---	---	TestAmerica
HRES-07	RESE-1000279	08-Oct-09	<0.20	<0.0030	0.0019	0.016	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	0.12	<0.0010	0.027	<0.00020	0.0013	0.0018	<0.0020	<0.0010	---	<0.0010	<0.010	TestAmerica
HRES-07	RESE-1000279	08-Oct-09	---	---	---	---	---	---	---	---	---	---	<0.020	---	---	---	---	---	---	---	---	<0.040	---	---	TestAmerica
HRES-07	RESE-1000280	15-Oct-09	<0.20	<0.0030	0.0025	0.016	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	0.0015	---	<0.050	<0.0010	0.013	<0.00020	0.0012	0.0013	<0.0020	<0.0010	---	<0.0010	0.032	TestAmerica
HRES-07	RESE-1000280	15-Oct-09	---	---	---	---	---	---	---	---	---	---	<0.020	---	---	---	---	---	---	---	---	<0.040	---	---	TestAmerica
HRES-07	RESE-1000281	20-Oct-09	<0.20	<0.0030	0.0022	0.016	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	0.0045	---	<0.050	<0.0010	0.013	<0.00020	0.0010	0.0023	<0.0020	<0.0010	---	<0.0010	0.036	TestAmerica
HRES-07	RESE-1000281	20-Oct-09	---	---	---	---	---	---	---	---	---	---	<0.020	---	---	---	---	---	---	---	---	<0.040	---	---	TestAmerica
HRES-07	RESE-1000282	28-Oct-09	<0.20	<0.0030	0.0026	0.015	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	<0.050	<0.0010	0.010	<0.00020	0.0012	0.0014	<0.0020	<0.0010	---	<0.0010	0.011	TestAmerica
HRES-07	RESE-1000282	28-Oct-09	---	---	---	---	---	---	---	---	---	---	<0.020	---	---	---	---	---	---	---	---	<0.040	---	---	TestAmerica
HRES-07	RESE-1000284	03-Nov-09	<0.20	<0.0030	0.0023	0.015	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	0.0017	---	<0.050	<0.0010	0.0086	<0.00020	<0.0010	0.0013	<0.0020	<0.0010	---	<0.0010	0.015	TestAmerica
HRES-07	RESE-1000284	03-Nov-09	---	---	---	---	---	---	---	---	---	---	<0.020	---	---	---	---	---	---	---	---	<0.040	---	---	TestAmerica
HRES-07	RESE-1000285	10-Nov-09	<0.20	<0.0030	0.0024	0.016	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	0.15	<0.0010	0.0073	<0.00020	0.0012	<0.0010	<0.0020	<0.0010	---	<0.0010	0.015	TestAmerica
HRES-07	RESE-1000285	10-Nov-09	---	---	---	---	---	---	---	---	---	---	<0.020	---	---	---	---	---	---	---	---	<0.040	---	---	TestAmerica
HRES-07	RESE-1000286	17-Nov-09	<0.20	<0.0030	0.0024	0.015	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	<0.050	<0.0010	0.0062	<0.00020	0.0018	0.0012	<0.0020	<0.0010	---	<0.0010	0.011	TestAmerica
HRES-07	RESE-1000286	17-Nov-09	---	---	---	---	---	---	---	---	---	---	<0.020	---	---	---	---	---	---	---	---	<0.050	---	---	TestAmerica
HRES-07	RESE-1000287	24-Nov-09	<0.20	<0.0030	0.0024	0.015	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	<0.050	<0.0010	0.0053	<0.00020	0.0012	0.0012	<0.0020	<0.0010	---	<0.0010	0.013	TestAmerica
HRES-07	RESE-1000287	24-Nov-09	---	---	---	---	---	---	---	---	---	---	<0.020	---	---	---	---	---	---	---	---	<0.050	---	---	TestAmerica
HRES-07	RESE-1000289	30-Nov-09	<0.20	<0.0030	0.0023	0.015	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	<0.050	<0.0010	0.0052	<0.00020	<0.0010	0.0014	<0.0020	<0.0010	---	<0.0010	<0.010	TestAmerica
HRES-07	RESE-1000289	30-Nov-09	---	---	---	---	---	---	---	---	---	---	<0.020	---	---	---	---	---	---	---	---	<0.050	---	---	TestAmerica
HRES-07	RESE-1000290	06-Dec-09	<0.20	<0.0030	0.0022	0.015	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	0.0010	---	<0.050	<0.0010	<0.0050	<0.00020	0.0012	0.0011	<0.0020	<0.0010	---	<0.0010	0.017	TestAmerica
HRES-07	RESE-1000290	06-Dec-09	---	---	---	---	---	---	---	---	---	---	<0.020	---	---	---	---	---	---	---	---	<0.050	---	---	TestAmerica
HRES-07	RESE-1003245	10-May-12	<0.20	<0.0030	0.0017	0.022	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	0.071	<0.0010	0.041	<0.00020	0.0016	<0.0010	<0.0020	<0.0010	---	<0.0010	<0.050	TestAmerica
HRES-07	RESE-1003245	10-May-12	<0.20	<0.0030	0.0023	0.020	<0.0010	<0.20	<0.0010	0.0019	<0.0010	0.0074	<0.050	*1.8*	<0.0010	*0.051*	<0.00020	0.0015	0.0030	<0.0020	<0.0010	<0.050	<0.0010	<0.050	TestAmerica
HRES-08	RESE-1003149	21-Jul-11	<0.20	<0.0030	0.0024	0.053	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	*0.71*	<0.0010	*0.21*	<0.00020	0.0035	0.0048	0.0020	<0.0010	---	<0.0010	0.051	TestAmerica
HRES-08	RESE-1003149	21-Jul-11	<0.20	<0.0030	0.0032	0.060	<0.0010	<0.20	<0.0010	0.0011	<0.0010	0.0019	<0.0080	*1.3*	<0.0010	*0.22*	<0.00020	0.0035	0.0061	<0.0020	<0.0010	<0.050	<0.0010	0.053	TestAmerica

MONTGOMERY & ASSOCIATES

TABLE A-2. TRACE CONSTITUENTS
FOR GROUNDWATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	TRACE CONSTITUENTS[a] (mg/L)[b]																						ANALYTICAL LABORATORY
			Al	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	CN	Fe	Pb	Mn	Hg	Mo	Ni	Se	Ag	S	Tl	Zn	
Groundwater 2 - Apache Leap Tuff Aquifer																									
HRES-08	RESE-1003246	10-May-12	<0.20	<0.0030	0.0015	0.055	<0.0010	<0.20	<0.0010	<0.0010	0.0010	<0.0010	---	1.7	<0.0010	0.33	<0.00020	0.0052	0.0033	<0.0020	<0.0010	---	<0.0010	0.081	TestAmerica
HRES-08	RESE-1003246	10-May-12	<0.20	<0.0030	0.0021	0.053	<0.0010	0.48	<0.0010	<0.0010	<0.0010	<0.0010	<0.050	2.3	<0.0010	0.33	<0.00020	0.0049	0.0029	<0.0020	<0.0010	<0.050	<0.0010	0.079	TestAmerica
HRES-09	RESE-1003182	29-Dec-10	<0.20	<0.0030	0.0015	0.056	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	0.30	<0.0010	0.82	<0.00020	0.012	0.0041	<0.0020	<0.0010	---	<0.0010	0.12	TestAmerica
HRES-09	RESE-1003182	29-Dec-10	<0.20	<0.0030	0.0014	0.055	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	<0.0050	0.35	<0.0010	0.86	<0.00020	0.011	0.0026	<0.0020	<0.0010	<0.050	<0.0010	0.13	TestAmerica
HRES-09	RESE-1003133	12-Jun-11	<0.20	<0.0030	0.0018	0.045	<0.0010	<0.20	<0.0010	<0.0010	0.0012	<0.0010	---	0.23	<0.0010	0.79	<0.00020	0.0095	0.0022	<0.0020	<0.0050	---	<0.0010	0.19	TestAmerica
HRES-09	RESE-1003133	12-Jun-11	<0.20	<0.0030	0.0015	0.048	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	0.0058	<0.0080	0.26	0.0019	0.73	<0.00020	0.010	0.0027	<0.0020	<0.0010	<0.050	<0.0010	0.15	TestAmerica
HRES-09	RESE-1003136	21-Jun-11	<0.20	<0.0030	0.0018	0.033	<0.0010	<0.20	<0.0010	<0.0010	0.0019	<0.0010	---	0.068	<0.0010	0.54	<0.00020	0.0045	0.0017	<0.0020	<0.0010	---	<0.0010	0.15	TestAmerica
HRES-09	RESE-1003136	21-Jun-11	<0.20	<0.0030	0.0017	0.033	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	0.0010	<0.0080	<0.050	<0.0010	0.53	<0.00020	0.0045	0.0017	<0.0020	<0.0010	<0.050	<0.0010	0.11	TestAmerica
HRES-09	RESE-1003137	28-Jun-11	<0.20	<0.0030	0.0019	0.030	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	0.12	<0.0010	0.46	<0.00020	0.0036	0.0015	<0.0020	<0.0010	---	<0.0010	0.11	TestAmerica
HRES-09	RESE-1003137	28-Jun-11	<0.20	<0.0030	0.0018	0.028	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	<0.0080	0.052	<0.0010	0.46	<0.00020	0.0035	0.0016	<0.0020	<0.0010	<0.050	<0.0010	0.10	TestAmerica
HRES-09	RESE-1003143	04-Jul-11	<0.20	<0.0030	0.0019	0.028	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	0.12	<0.0010	0.42	<0.00020	0.0032	0.0016	<0.0020	<0.0010	---	<0.0010	0.12	TestAmerica
HRES-09	RESE-1003143	04-Jul-11	<0.20	<0.0030	0.0018	0.028	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	<0.0080	0.067	<0.0010	0.42	<0.00020	0.0032	0.0012	<0.0020	<0.0010	<0.050	<0.0010	0.12	TestAmerica
HRES-09	RESE-1001324	29-Jul-14	0.064 j	<0.00050	0.0020	0.051	<0.00020	0.054	<0.00025	<0.00050	<0.00050	<0.0017	---	0.39	0.00088 j	0.69	**8.6**	0.018	<0.0016	<0.00050	<0.00050	---	<0.00050	0.40	TestAmerica
HRES-09	RESE-1001324	29-Jul-14	0.18	<0.00050	0.0016	0.048	<0.00020	0.047 j	<0.00025	<0.00050	0.00081 j	0.0035 j	---	0.57	0.00061 j	0.61	---	0.016	<0.0016	<0.00050	<0.00050	---	<0.00050	0.35	TestAmerica
HRES-10	RESE-1003175	24-Sep-10	<0.40	**<0.015**	<0.0050	0.042	<0.0020	<0.40	<0.0050	<0.0050	<0.0050	<0.0050	---	0.13	<0.0050	<0.020	<0.00020	0.0059	<0.0050	<0.010	<0.0050	---	**<0.0050**	0.18	TestAmerica
HRES-10	RESE-1003175	24-Sep-10	<0.20	<0.0030	0.0012	0.042	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	0.0030	<0.020	0.24	<0.0010	<0.010	<0.00020	0.0058	0.0011	<0.0020	<0.0010	<0.050	<0.0010	0.20	TestAmerica
HRES-10	RESE-1003244	01-May-12	<0.20	<0.0030	<0.0010	0.023	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	0.0018	---	0.054	<0.0010	<0.010	<0.00020	0.0045	<0.0010	<0.0020	<0.0010	---	<0.0010	0.26	TestAmerica
HRES-10	RESE-1003244	01-May-12	<0.20	<0.0030	0.0010	0.026	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	0.0029	<0.050	0.094	<0.0010	<0.010	<0.00020	0.0047	<0.0010	<0.0020	<0.0010	<0.050	<0.0010	0.29	TestAmerica
HRES-10	RESE-1001311	16-Aug-12	<0.20	<0.0030	<0.0010	0.030	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	0.0022	---	<0.10	<0.0010	<0.010	<0.00020	0.0052	0.0010	<0.0020	<0.0010	---	<0.0010	0.18	TestAmerica
HRES-10	RESE-1001311	16-Aug-12	<0.20	<0.0030	<0.0010	0.033	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	0.0022	<0.050	<0.10	0.0037	<0.010	<0.00020	0.0055	0.0012	<0.0020	<0.0010	<0.050	<0.0010	0.22	TestAmerica
HRES-10	RESE-1001322	14-Nov-12	<0.20	<0.0030	<0.0030	0.031	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0030	---	<0.10	<0.0010	<0.010	<0.00020	0.0054	<0.0010	<0.0010	<0.0010	---	<0.0010	0.15	TestAmerica
HRES-10	RESE-1001322	14-Nov-12	<0.20	<0.0030	<0.0030	0.030	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0030	<0.050	0.16	<0.0010	0.015	<0.00020	0.0049	<0.0010	<0.0010	<0.0010	<0.050	<0.0010	0.17	TestAmerica
HRES-11	RESE-1003174	23-Sep-10	<0.40	**<0.015**	<0.0050	0.017	<0.0020	<0.40	<0.0050	<0.0050	<0.0050	<0.0050	---	0.20	<0.0050	0.063	<0.00020	<0.0050	<0.0050	<0.010	<0.0050	---	**<0.0050**	<0.10	TestAmerica
HRES-11	RESE-1003174	23-Sep-10	<0.20	<0.0030	0.0015	0.017	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	<0.020	0.52	<0.0010	0.069	<0.00020	0.0021	0.0012	<0.0020	<0.0010	<0.050	<0.0010	<0.050	TestAmerica
HRES-11	RESE-1003243	01-May-12	<0.20	<0.0030	0.0011	0.022	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	0.40	<0.0010	0.15	<0.00020	0.0017	<0.0010	<0.0020	<0.0010	---	<0.0010	0.022	TestAmerica
HRES-11	RESE-1003243	01-May-12	<0.20	<0.0030	0.0021	0.028	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	0.0017	<0.050	3.3	<0.0010	0.33	<0.00020	0.0016	0.0014	<0.0020	<0.0010	<0.050	<0.0010	0.024	TestAmerica
HRES-11	RESE-1001312	16-Aug-12	<0.20	<0.0030	0.0012	0.017	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	0.34	<0.0010	0.11	<0.00020	0.0014	0.0010	<0.0020	<0.0010	---	<0.0010	<0.050	TestAmerica
HRES-11	RESE-1001312	16-Aug-12	<0.20	<0.0030	0.0013	0.019	<0.0010	<0.20	<0.0010	0.0011	<0.0010	0.0025	<0.050	1.5	<0.0010	0.14	<0.00020	0.0015	0.0019	<0.0020	<0.0010	<0.050	<0.0010	<0.050	TestAmerica
HRES-11	RESE-1001320	14-Nov-12	<0.20	<0.0030	<0.0030	0.015	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0030	---	0.45	<0.0010	0.11	<0.00020	<0.0030	<0.0010	<0.0010	<0.0010	---	<0.0010	<0.050	TestAmerica
HRES-11	RESE-1001320	14-Nov-12	<0.20	<0.0030	<0.0030	0.014	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0030	<0.050	0.82	<0.0010	0.12	<0.00020	<0.0030	0.0011	<0.0010	<0.0010	<0.050	<0.0010	<0.050	TestAmerica
HRES-11 DUP	RESE-1001321	14-Nov-12	<0.20	<0.0030	<0.0030	0.014	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0030	---	0.41	<0.0010	0.12	<0.00020	<0.0030	0.0011	<0.0010	<0.0010	---	<0.0010	<0.050	TestAmerica
HRES-11 DUP	RESE-1001321	14-Nov-12	<0.20	<0.0030	<0.0030	0.014	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	0.0039	<0.050	0.92	0.0047	0.12	<0.00020	<0.0030	0.0010	<0.0010	<0.0010	<0.050	<0.0010	<0.050	TestAmerica
HRES-12	RESE-1003144	10-Jul-11	<0.20	<0.0030	<0.0010	0.012	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	3.2	<0.0010	0.38	<0.00020	0.0063	0.0059	<0.0020	<0.0010	---	<0.0010	0.43	TestAmerica
HRES-12	RESE-1003144	10-Jul-11	<0.20	<0.0030	<0.0010	0.014	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	0.0015	<0.0080	7.9	0.0032	0.38	<0.00020	0.0063	0.0078	<0.0020	<0.0010	<0.050	<0.0010	0.77	TestAmerica
HRES-12	RESE-1003249	15-May-12	<0.20	<0.0030	<0.0010	0.018	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	3.5	<0.0010	0.44	<0.00020	0.0056	<0.0010	<0.0020	<0.0010	---	<0.0010	0.28	TestAmerica
HRES-12	RESE-1003249	15-May-12	<0.20	<0.0030	<0.0010	0.019	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	<0.050	6.0	<0.0010	0.44	<0.00020	0.0056	0.0019	<0.0020	<0.0010	<0.050	<0.0010	0.41	TestAmerica
HRES-12	RESE-1001309	14-Aug-12	<0.20	<0.0030	<0.0010	0.015	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	0.0025	---	2.9	<0.0010	0.31	<0.00020	0.0056	0.0011	<0.0020	<0.0010	---	<0.0010	0.29	TestAmerica
HRES-12	RESE-1001309	14-Aug-12	<0.20	<0.0030	<0.0010	0.019	<0.0010	<0.20	<0.0010	0.0018	<0.0010	0.011	<0.050	10	0.0018	0.36	<0.00020	0.0064	0.0034	<0.0020	<0.0010	<0.050	<0.0010	0.49	TestAmerica
HRES-12	RESE-1001316	07-Nov-12	<0.20	<0.0030	<0.0010	0.015	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	3.0	<0.0010	0.28	<0.00020	0.0061	<0.0010	<0.0020	<0.0010	---	<0.0010	0.26	TestAmerica
HRES-12	RESE-1001316	07-Nov-12	<0.20	<0.0030	<0.0010	0.016	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	0.015	<0.050	4.5	0.0026	0.27	<0.00020	0.0064	0.0013	<0.0020	<0.0010	<0.050	<0.0010	0.35	TestAmerica

MONTGOMERY & ASSOCIATES

TABLE A-2. TRACE CONSTITUENTS
FOR GROUNDWATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	TRACE CONSTITUENTS[a] (mg/L)[b]																						ANALYTICAL LABORATORY
			Al	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	CN	Fe	Pb	Mn	Hg	Mo	Ni	Se	Ag	S	Tl	Zn	
Groundwater 2 - Apache Leap Tuff Aquifer																									
HRES-13	RESE-1003130	03-Jun-11	<0.20	<0.0030	0.0021	0.042	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	<0.050	<0.0010	0.047	<0.00020	0.0018	0.0017	<0.0020	<0.0010	---	<0.0010	0.22	TestAmerica
HRES-13	RESE-1003130	03-Jun-11	<0.20	<0.0030	0.0023	0.038	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	0.0023	<0.0080	0.13	<0.0010	0.046	<0.00020	0.0023	0.0022	<0.0020	<0.0010	<0.050	<0.0010	0.21	TestAmerica
HRES-13	RESE-1000456	17-May-12	<0.20	<0.0030	0.0014	0.046	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	0.11	<0.0010	0.18	<0.00020	0.0026	0.0038	<0.0020	<0.0010	---	<0.0010	0.53	TestAmerica
HRES-13	RESE-1000456	17-May-12	<0.20	<0.0030	0.0020	0.047	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	<0.050	0.13	<0.0010	0.18	<0.00020	0.0025	0.0015	<0.0020	<0.0010	<0.050	<0.0010	0.53	TestAmerica
HRES-13 DUP	RESE-1000457	17-May-12	<0.20	<0.0030	0.0015	0.045	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	0.10	<0.0010	0.18	<0.00020	0.0025	<0.0010	<0.0020	<0.0010	---	<0.0010	0.54	TestAmerica
HRES-13 DUP	RESE-1000457	17-May-12	<0.20	<0.0030	0.0020	0.046	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	<0.050	0.13	<0.0010	0.18	<0.00020	0.0025	0.0015	<0.0020	<0.0010	<0.050	<0.0010	0.53	TestAmerica
HRES-13	RESE-1001305	07-Aug-12	<0.20	<0.0030	0.0023	0.047	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	<0.10	0.0013	0.15	<0.00020	0.0024	0.0011	<0.0020	<0.0010	---	<0.0010	0.51	TestAmerica
HRES-13	RESE-1001305	07-Aug-12	<0.20	<0.0030	0.0022	0.047	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	0.0052	<0.050	0.16	0.0013	0.17	<0.00020	0.0023	0.0013	<0.0020	<0.0010	<0.050	<0.0010	0.59	TestAmerica
HRES-13	RESE-1001317	08-Nov-12	<0.20	<0.0030	0.0018	0.045	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	0.10	<0.0010	0.17	<0.00020	0.0020	<0.0010	<0.0020	<0.0010	---	<0.0010	0.60	TestAmerica
HRES-13	RESE-1001317	08-Nov-12	<0.20	<0.0030	0.0019	0.046	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	0.0016	<0.050	0.12	0.0010	0.18	<0.00020	0.0023	<0.0010	<0.0020	<0.0010	<0.050	<0.0010	0.58	TestAmerica
HRES-14	RESE-1003147	15-Jul-11	<0.20	<0.0030	0.0019	0.011	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	0.065	<0.0010	0.057	<0.00020	0.0026	0.0016	<0.0020	<0.0010	---	<0.0010	<0.010	TestAmerica
HRES-14	RESE-1003147	15-Jul-11	0.39	<0.0030	0.0024	0.011	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	<0.0080	0.37	<0.0010	0.061	<0.00020	0.0034	0.0016	<0.0020	<0.0010	<0.050	<0.0010	<0.010	TestAmerica
HRES-14	RESE-1003240	30-Apr-12	<0.20	<0.0030	0.0017	0.011	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	0.79	<0.0010	0.081	<0.00020	0.0048	<0.0010	<0.0020	<0.0010	---	<0.0010	0.018	TestAmerica
HRES-14	RESE-1003240	30-Apr-12	<0.20	<0.0030	0.0023	0.012	<0.0010	<0.20	<0.0010	0.0047	<0.0010	<0.0010	<0.050	1.2	<0.0010	0.090	<0.00020	0.0046	0.0045	<0.0020	<0.0010	<0.050	<0.0010	0.015	TestAmerica
HRES-14	RESE-1001306	08-Aug-12	<0.20	<0.0030	0.0021	0.011	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	0.70	<0.0010	0.071	<0.00020	0.0044	0.0018	<0.0020	<0.0010	---	<0.0010	<0.050	TestAmerica
HRES-14	RESE-1001306	08-Aug-12	0.31	<0.0030	0.0023	0.012	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	0.0064	<0.050	1.3	0.0019	0.086	<0.00020	0.0045	<0.0010	<0.0020	<0.0010	<0.050	<0.0010	<0.050	TestAmerica
HRES-14	RESE-1001318	09-Nov-12	<0.20	<0.0030	0.0019	0.011	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	0.70	<0.0010	0.077	<0.00020	0.0041	<0.0010	<0.0020	<0.0010	---	<0.0010	<0.050	TestAmerica
HRES-14	RESE-1001318	09-Nov-12	<0.20	<0.0030	0.0022	0.013	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	0.0012	<0.050	1.1	<0.0010	0.082	<0.00020	0.0045	<0.0010	<0.0020	<0.0010	<0.050	<0.0010	<0.050	TestAmerica
HRES-15	RESE-1003241	30-Apr-12	<0.20	<0.0030	0.0018	0.019	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	0.27	<0.0010	0.030	<0.00020	0.0031	<0.0010	<0.0020	<0.0010	---	<0.0010	0.011	TestAmerica
HRES-15	RESE-1003241	30-Apr-12	<0.20	<0.0030	0.0024	0.022	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	<0.050	0.32	<0.0010	0.031	<0.00020	0.0033	0.0014	<0.0020	<0.0010	<0.050	<0.0010	<0.010	TestAmerica
HRES-15 DUP	RESE-1003242	30-Apr-12	<0.20	<0.0030	0.0020	0.020	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	0.28	<0.0010	0.030	<0.00020	0.0032	<0.0010	<0.0020	<0.0010	---	<0.0010	<0.010	TestAmerica
HRES-15 DUP	RESE-1003242	30-Apr-12	<0.20	<0.0030	0.0023	0.022	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	<0.050	0.32	<0.0010	0.031	<0.00020	0.0033	0.0014	<0.0020	<0.0010	<0.050	<0.0010	<0.010	TestAmerica
HRES-15	RESE-1001308	09-Aug-12	<0.20	<0.0030	0.0023	0.019	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	0.15	<0.0010	0.020	<0.00020	0.0028	0.0016	<0.0020	<0.0010	---	<0.0010	<0.050	TestAmerica
HRES-15	RESE-1001308	09-Aug-12	<0.20	<0.0030	0.0024	0.021	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	<0.050	0.24	<0.0010	0.022	<0.00020	0.0031	0.0017	<0.0020	<0.0010	<0.050	<0.0010	<0.050	TestAmerica
HRES-17	RESE-1003250	16-May-12	<0.20	<0.0030	<0.0010	0.016	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	0.60	<0.0010	0.11	<0.00020	0.0026	<0.0010	<0.0020	<0.0010	---	<0.0010	<0.050	TestAmerica
HRES-17	RESE-1003250	16-May-12	<0.20	<0.0030	<0.0010	0.017	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	<0.050	1.3	<0.0010	0.11	<0.00020	0.0025	<0.0010	<0.0020	<0.0010	<0.050	<0.0010	<0.050	TestAmerica
HRES-17	RESE-1001307	08-Aug-12	<0.20	<0.0030	0.0014	0.016	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	0.51	<0.0010	0.10	<0.00020	0.0021	0.0011	<0.0020	<0.0010	---	<0.0010	<0.050	TestAmerica
HRES-17	RESE-1001307	08-Aug-12	<0.20	<0.0030	0.0015	0.017	<0.0010	<0.20	<0.0010	0.0012	<0.0010	0.0016	<0.050	2.3	<0.0010	0.13	<0.00020	0.0018	0.0012	<0.0020	<0.0010	<0.050	<0.0010	<0.050	TestAmerica
HRES-17	RESE-1001319	09-Nov-12	<0.20	<0.0030	<0.0010	0.014	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	0.53	<0.0010	0.11	<0.00020	0.0014	0.0011	<0.0020	<0.0010	---	<0.0010	<0.050	TestAmerica
HRES-17	RESE-1001319	09-Nov-12	<0.20	<0.0030	0.0012	0.016	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	0.0013	<0.050	1.8	<0.0010	0.12	<0.00020	0.0017	0.0012	<0.0020	<0.0010	<0.050	<0.0010	<0.050	TestAmerica
JI Ranch House Well	RESE-1000303	21-Jun-07	<0.050	<0.002	0.0017	0.022	<0.0020	<0.050	<0.001	<0.0050	<0.010	<0.010	---	<0.040	<0.001	<0.020	---	<0.020	<0.010	<0.002	<0.001	---	<0.001	<0.020	TestAmerica
JI Ranch House Well	RESE-1000303	21-Jun-07	---	---	---	---	---	---	---	---	---	---	<0.020	---	---	---	---	---	---	---	---	<0.10	---	---	TestAmerica
MJ-11	RESE-1000257	29-Sep-07	<0.50	<0.002	0.0021	0.016	<0.0040	<0.50	<0.001	<0.010	<0.050	<0.020	---	<0.20	0.0014	<0.020	<0.00020	<0.050	<0.050	<0.002	<0.001	---	<0.001	<0.050	TestAmerica
MJ-11	RESE-1000257	29-Sep-07	---	---	---	---	---	---	---	---	---	---	<0.020	---	---	---	---	---	---	---	---	<0.10	---	---	TestAmerica
MJ-11	RESE-1000261	20-Feb-08	<0.50	<0.002	0.0019	0.014	<0.0040	<0.20	<0.001	<0.010	<0.010	<0.020	---	<0.20	<0.001	<0.010	---	<0.050	<0.050	<0.002	<0.001	---	<0.001	<0.050	TestAmerica
MJ-11	RESE-1000261	20-Feb-08	---	---	---	---	---	---	---	---	---	---	<0.020	---	---	---	<0.00020	---	---	---	---	<0.10	---	---	TestAmerica
MJ-11	RESE-1003007	02-Jun-08	<0.20	---	---	0.015	<0.0010	<0.20	---	<0.010	---	<0.010	---	<0.050	---	---	---	<0.010	<0.010	---	---	---	---	<0.050	TestAmerica
MJ-11	RESE-1003007	02-Jun-08	---	<0.0030	0.0022	---	---	---	<0.0010	---	<0.0010	---	<0.025	---	<0.0010	<0.0050	<0.00020	---	---	<0.0020	<0.0010	<0.040	<0.0010	---	TestAmerica
MJ-11	RESE-1003015	26-Aug-08	<0.20	---	---	0.015	<0.0010	<0.20	---	<0.010	---	<0.010	---	<0.050	---	---	<0.00020	<0.010	<0.010	---	---	---	---	<0.050	TestAmerica
MJ-11	RESE-1003015	26-Aug-08	---	<0.0030	0.0018	---	---	---	<0.0010	---	0.040	---	<0.025	---	<0.0010	1.3	---	---	---	0.022	<0.0010	<0.040	<0.0010	---	TestAmerica

MONTGOMERY & ASSOCIATES

TABLE A-2. TRACE CONSTITUENTS
FOR GROUNDWATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	TRACE CONSTITUENTS[a] (mg/L)[b]																						ANALYTICAL LABORATORY
			Al	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	CN	Fe	Pb	Mn	Hg	Mo	Ni	Se	Ag	S	Tl	Zn	
Groundwater 2 - Apache Leap Tuff Aquifer																									
MJ-11	RESE-1000454	16-May-12	<0.20	<0.0030	0.0014	0.014	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	<0.050	<0.0010	<0.010	<0.00020	<0.0010	<0.0010	<0.0020	<0.0010	---	<0.0010	<0.050	TestAmerica
MJ-11	RESE-1000454	16-May-12	<0.20	<0.0030	0.0015	0.014	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	<0.050	<0.050	<0.0010	<0.010	<0.00020	<0.0010	<0.0010	<0.0020	<0.0010	<0.050	<0.0010	<0.050	TestAmerica
Oak Flat Well	RESE-1001301	16-Aug-06	*<0.50*	<0.002	0.0031	0.025	<0.0040	<0.50	<0.0050	<0.010	<0.050	<0.020	---	<0.20	0.0014	*0.051*	<0.00020	<0.050	<0.050	<0.002	<0.0050	---	<0.001	<0.050	TestAmerica
Groundwater 3 - Deep Groundwater System																									
DHRES-01	RESE-112808	28-Nov-08	<0.20	<0.0030	0.0056	0.48	<0.0010	---	<0.0010	<0.010	---	0.0081	---	*2.7*	<0.0010	*0.16*	<0.00020	0.032	<0.010	<0.0020	<0.0010	---	<0.0010	<0.050	TestAmerica
DHRES-01	RESE-112808	28-Nov-08	<0.20	<0.0030	0.0054	0.48	<0.0010	---	<0.0010	<0.010	---	0.059	<0.020	*2.7*	<0.0010	*0.16*	<0.00020	0.031	<0.010	<0.0020	<0.0010	<0.040	<0.0010	<0.050	TestAmerica
DHRES-02	RESE-1003150	20-Jul-11	<0.20	<0.0030	0.0031	0.061	<0.0010	0.22	<0.0010	<0.0010	<0.0010	0.0025	---	*11*	<0.0010	*0.37*	<0.00020	0.013	0.0074	<0.0020	<0.0010	---	<0.0010	<0.010	TestAmerica
DHRES-02	RESE-1003150	20-Jul-11	<0.20	<0.0030	0.0038	0.054	<0.0010	0.29	<0.0010	0.0020	<0.0010	0.0054	<0.0080	*14*	<0.0010	*0.42*	<0.00020	0.012	0.016	<0.0020	<0.0010	0.26	<0.0010	<0.010	TestAmerica
DHRES-02 DUP	RESE-1003201	20-Jul-11	<0.20	<0.0030	0.0031	0.056	<0.0010	0.27	<0.0010	0.0010	<0.0010	0.0018	---	*12*	<0.0010	*0.35*	<0.00020	0.012	0.0070	<0.0020	<0.0010	---	<0.0010	<0.010	TestAmerica
DHRES-02 DUP	RESE-1003201	20-Jul-11	<0.20	<0.0030	0.0037	0.053	<0.0010	0.26	<0.0010	0.0018	<0.0010	0.0044	<0.0080	*14*	<0.0010	*0.41*	<0.00020	0.012	0.012	<0.0020	<0.0010	0.27	<0.0010	<0.010	TestAmerica
DHRES-02	RESE-1003218	22-Oct-11	<0.20	<0.0030	0.0040	0.052	<0.0010	<0.20	<0.0010	<0.0010	0.0025	0.0021	---	*8.3*	<0.0010	*0.35*	<0.00020	0.0073	0.0072	<0.0020	<0.0010	---	<0.0010	<0.050	TestAmerica
DHRES-02	RESE-1003218	22-Oct-11	<0.20	<0.0030	0.0084	0.049	0.0010	<0.20	<0.0010	0.0027	<0.0010	0.0082	<0.0080	*11*	<0.0010	*0.38*	<0.00020	0.0080	0.012	<0.0020	<0.0010	0.20	<0.0010	<0.050	TestAmerica
DHRES-02	RESE-1003222	25-Oct-11	<0.20	<0.0030	0.0026	0.052	0.0012	<0.20	<0.0010	<0.0010	<0.0010	0.0013	---	*7.3*	<0.0010	*0.34*	<0.00020	0.0057	0.0089	<0.0020	<0.0010	---	<0.0010	<0.050	TestAmerica
DHRES-02	RESE-1003222	25-Oct-11	<0.20	<0.0030	0.0064	0.053	0.0012	<0.20	<0.0010	0.0016	<0.0010	0.0044	<0.050	*7.8*	<0.0010	*0.34*	<0.00020	0.0071	0.017	<0.0020	<0.0010	0.17	<0.0010	<0.050	TestAmerica
DHRES-02	RESE-1003227	27-Oct-11	<0.20	<0.0030	0.0047	0.075	<0.0010	<0.20	<0.0010	<0.0010	0.0010	0.0024	---	*11*	<0.0010	*1.5*	<0.00020	0.023	0.0076	<0.0020	<0.0010	---	<0.0010	<0.050	TestAmerica
DHRES-02	RESE-1003227	27-Oct-11	*4.5*	**<0.060**	**0.13**	0.16	0.0016	1.5	**<0.020**	**0.61**	0.061	***1.8***	<0.0080	*1100*	**0.43**	*15*	<0.00020	0.27	0.22	<0.040	<0.020	12	**<0.020**	0.76	TestAmerica
DHRES-06 DUP	RESE-1003184	09-Jan-11	<0.20	<0.0030	0.0077	0.19	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	0.0012	---	*2.9*	0.0018	*0.53*	<0.00020	0.032	0.0025	<0.0020	<0.0010	---	<0.0010	1.6	TestAmerica
DHRES-06 DUP	RESE-1003184	09-Jan-11	<0.20	<0.0030	0.0076	0.19	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	0.0036	<0.0050	*3.1*	0.0025	*0.55*	<0.00020	0.030	0.0028	<0.0020	<0.0010	<0.10	<0.0010	1.7	TestAmerica
DHRES-06	RESE-1003186	09-Jan-11	<0.20	<0.0030	0.0070	0.19	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	0.0020	---	*2.4*	0.0017	*0.53*	<0.00020	0.030	0.0026	<0.0020	<0.0010	---	<0.0010	1.6	TestAmerica
DHRES-06	RESE-1003186	09-Jan-11	<0.20	<0.0030	0.0079	0.19	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	0.0038	<0.0050	*3.1*	0.0027	*0.53*	<0.00020	0.031	0.0029	<0.0020	<0.0010	<0.10	<0.0010	1.7	TestAmerica
DHRES-09	RESE-1003206	02-Sep-11	<0.20	<0.0030	<0.0010	0.043	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	0.088	<0.0010	*0.058*	<0.00020	0.0039	0.0033	0.0028	<0.0010	---	<0.0010	<0.050	TestAmerica
DHRES-09	RESE-1003206	02-Sep-11	<0.20	<0.0030	<0.0010	0.041	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	<0.0080	*0.99*	0.0016	*0.057*	<0.00020	0.042	0.0039	0.0028	<0.0010	<0.050	<0.0010	<0.050	TestAmerica
DHRES-09	RESE-1001313	20-Aug-12	<0.20	<0.0030	<0.0010	0.043	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	*1.5*	<0.0010	*0.12*	<0.00020	0.0034	0.0015	0.0022	<0.0010	---	<0.0010	<0.050	TestAmerica
DHRES-09	RESE-1001313	20-Aug-12	<0.20	<0.0030	<0.0010	0.045	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	<0.050	*1.6*	<0.0010	*0.096*	<0.00020	0.0040	0.0015	0.0023	<0.0010	<0.050	<0.0010	<0.050	TestAmerica
DHRES-11	RESE-1003131	29-Jun-11	<0.20	<0.0030	0.0086	0.026	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	0.26	<0.0010	*0.17*	<0.00020	0.0057	0.0011	<0.0020	<0.0010	---	<0.0010	<0.010	TestAmerica
DHRES-11	RESE-1003131	29-Jun-11	<0.20	<0.0030	**0.036**	0.026	<0.0010	<0.20	<0.0010	0.0011	<0.0010	<0.0010	<0.0080	*3.8*	<0.0010	*0.17*	<0.00020	0.0052	<0.0010	<0.0020	<0.0010	<0.050	<0.0010	0.010	TestAmerica
DHRES-11	RESE-1001310	15-Aug-12	<0.20	<0.0030	0.0026	0.022	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	*0.38*	<0.0010	0.033	<0.00020	0.023	<0.0010	<0.0020	<0.0010	---	<0.0010	<0.050	TestAmerica
DHRES-11	RESE-1001310	15-Aug-12	<0.20	<0.0030	0.0025	0.023	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	0.0015	<0.050	*0.56*	<0.0010	0.035	<0.00020	0.024	<0.0010	<0.0020	<0.0010	<0.050	<0.0010	<0.050	TestAmerica
DHRES-13	RESE-1003138	28-Jun-11	<0.20	<0.0030	0.0010	0.024	<0.0010	<0.20	<0.0010	<0.0010	0.0018	<0.0010	---	0.30	<0.0010	*0.19*	<0.00020	0.017	0.0021	<0.0020	<0.0010	---	<0.0010	0.011	TestAmerica
DHRES-13	RESE-1003138	28-Jun-11	*0.54*	<0.0030	0.0018	0.025	<0.0010	<0.20	<0.0010	0.0014	<0.0010	0.0018	<0.0080	*2.0*	0.0049	*0.22*	<0.00020	0.016	0.0023	<0.0020	<0.0010	<0.050	<0.0010	0.019	TestAmerica
DHRES-13	RESE-1001314	22-Aug-12	<0.20	<0.0030	<0.0010	0.014	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	*2.0*	<0.0010	*0.14*	<0.00020	0.016	<0.0010	<0.0020	<0.0010	---	<0.0010	<0.050	TestAmerica
DHRES-13	RESE-1001314	22-Aug-12	<0.20	<0.0030	0.0011	0.015	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	<0.050	*1.9*	<0.0010	*0.14*	<0.00020	0.015	<0.0010	<0.0020	<0.0010	<0.050	<0.0010	<0.050	TestAmerica
DHRES-13 DUP	RESE-1001315	22-Aug-12	<0.20	<0.0030	0.0010	0.015	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	*2.1*	<0.0010	*0.14*	<0.00020	0.015	<0.0010	<0.0020	<0.0010	---	<0.0010	<0.050	TestAmerica
DHRES-13 DUP	RESE-1001315	22-Aug-12	<0.20	<0.0030	0.0010	0.015	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	<0.050	*2.0*	<0.0010	*0.14*	<0.00020	0.016	<0.0010	<0.0020	<0.0010	<0.050	<0.0010	<0.050	TestAmerica
DHRES-15	RESE-1001149	16-Jul-14	<0.10	<0.0020	0.0044	0.014	<0.0010	0.073	<0.0010	<0.010	<0.010	<0.0020	---	*1.0*	<0.0010	*0.13*	---	0.014	<0.010	<0.0020	<0.0010	---	<0.0010	0.052	TestAmerica
DHRES-15	RESE-1001149	16-Jul-14	*0.31*	---	---	0.015	<0.0010	0.080	---	<0.010	<0.010	---	<0.050	*1.8*	---	*0.16*	<0.00020	0.013	---	---	---	<0.050	---	0.087	TestAmerica
DHRES-15	RESE-1001149	16-Jul-14	---	<0.0020	0.0048	---	---	---	<0.0010	---	---	0.0022	---	---	0.0060	---	---	---	<0.0020	<0.0020	<0.0010	---	<0.0010	---	TestAmerica
DHRES-15	RESE-1001338	29-Dec-14	<0.026	<0.00050	0.0050	0.016	<0.00020	0.070	<0.00025	<0.00050	<0.00050	<0.0017	---	r	<0.00050	0.024	<0.000030	0.011	<0.0016	0.00071 j	<0.00050	---	<0.00050	0.022	TestAmerica
DHRES-15	RESE-1001338	29-Dec-14	---	---	---	---	---	---	---	---	---	---	<0.0035	---	---	---	<0.000030	---	---	---	---	<0.017	---	---	TestAmerica
DHRES-15	RESE-1001338	29-Dec-14	0.034 j	<0.00050	0.0057	0.017	<0.00020	0.074	<0.00025	0.00067 j	<0.00050	0.0091 j	---	0.12	0.00072 j	0.026	---	0.010	<0.0016	0.00083 j	<0.00050	---	<0.00050	0.021	TestAmerica

MONTGOMERY & ASSOCIATES

TABLE A-2. TRACE CONSTITUENTS
FOR GROUNDWATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	TRACE CONSTITUENTS[a] (mg/L)[b]																						ANALYTICAL LABORATORY
			Al	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	CN	Fe	Pb	Mn	Hg	Mo	Ni	Se	Ag	S	Tl	Zn	
Groundwater 3 - Deep Groundwater System																									
DHRES-15	RESE-1000474	29-Jan-15	<0.026	<0.00050	0.0064	0.017	0.00020 j	0.072	<0.00025	0.00079 j	<0.00050	0.0031 j	---	<0.011	<0.00050	0.014	<0.000030	0.0098	<0.0016	0.0011 j	<0.00050	---	<0.00050	0.024	TestAmerica
DHRES-15	RESE-1000474	29-Jan-15	---	---	---	---	---	---	---	---	---	---	0.0035 j	---	---	---	<0.000030	---	---	---	---	<0.017	---	---	TestAmerica
DHRES-15	RESE-1000474	29-Jan-15	<0.026	<0.00050	0.0066	0.017	<0.00020	0.074	<0.00025	0.0011 j	<0.00050	0.0039 j	---	0.057 j	<0.00050	0.013	---	0.010	<0.0016	0.00078 j	<0.00050	---	<0.00050	0.024	TestAmerica
DHRES-15	RESE-1001340	18-Feb-15	<0.026	<0.00050	0.0067	0.018	<0.00020	0.074	<0.00025	0.00096 j	0.00061 j	0.0036 j	---	<0.011	<0.00050	0.011	<0.000060	0.010	<0.0016	0.00098 j	<0.00050	---	<0.00050	0.028 j	TestAmerica
DHRES-15	RESE-1001340	18-Feb-15	---	---	---	---	---	---	---	---	---	---	<0.0035	---	---	---	<0.000060	---	---	---	---	<0.017	---	---	TestAmerica
DHRES-15	RESE-1001340	18-Feb-15	<0.026	<0.00050	0.0067	0.017	r	0.071	<0.00025	0.00086 j	<0.00050	0.0050 j	---	0.055 j	<0.00050	0.010	---	0.0095	<0.0016	0.00086 j	<0.00050	---	<0.00050	0.027 j	TestAmerica
U.S EPA National Primary Drinking Water Regulations			---	0.006	0.010	2	0.004	---	0.005	0.1	---	1.3	0.20	---	0.015	---	0.002	---	---	0.05	---	---	0.002	---	
U.S EPA National Secondary Drinking Water Regulations			0.05 to 0.2	---	---	---	---	---	---	---	---	1.0	---	0.3	---	0.050	---	---	---	---	0.1	---	---	5	
Arizona Numeric Aquifer Water Quality Standards			---	0.006	0.05	2.0	0.004	---	0.005	0.1	---	---	0.20	---	0.05	---	0.002	---	0.1	0.05	---	---	0.002	---	

Values in bold red are out of compliance with EPA primary water quality standards

Values in red italics are out of compliance with EPA secondary water quality standards

Values in red underline are out of compliance with Arizona numeric water quality standards

Values in blue indicate that detection limit exceeds standard

--- = Not available, not applicable

-- = Not calculated due to non-detect

Shading indicates dissolved results
Shading indicates total results
Shading indicates total recoverable results
Shading indicates unknown filtration or no filtration method provided for analyses

[a]
Al = Aluminum
Sb = Antimony
As = Arsenic
Ba = Barium
Be = Beryllium
B = Boron
Cd = Cadmium
Cr = Chromium (total)
Co = Cobalt
Cu = Copper
CN = Cyanide (amenable)
Fe = Iron
Pb = Lead
Mn = Manganese
Hg = Mercury
Mo = Molybdenum
Ni = Nickel
Se = Selenium
Ag = Silver
S = Sulfide
Tl = Thallium
Zn = Zinc

[b] mg/L = milligrams per liter

Explanation of Codes

Absent = Analyte not present
ge = Greater than or equal to reported value
i = Insufficient sample
j = Estimated value
j+ = Estimated value, high bias
j- = Estimated value, low bias
Lost = Sample lost in processing
n = Not measured
na = Not available
ND = Not Detected
np = Analyte not applicable
Present = Analyte was detected
q = Uncertain value
r = Unusable data
< = Less than reported detection limit
> = Greater than reported value
d = Diluted. Diluted samples are indicated only when value is estimated.
DUP = Field Duplicate
LD = Laboratory duplicate
SP = Split sample
SPD = Split-Duplicate

MONTGOMERY & ASSOCIATES

TABLE A-3. RADIOLOGICAL DATA
FOR GROUNDWATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	RADIOLOGICAL CONSTITUENTS [a]							ANALYTICAL LABORATORY
			Gross Alpha (pCi/L)[b]	Gross Beta (pCi/L)	Ra-226 (pCi/L)	Ra-228 (pCi/L)	Ra-226 + Ra-228 (pCi/L)	Total U (pCi/L)	Total U (mg/L)[c]	
Groundwater 1 - Shallow Groundwater System										
Hackberry Windmill Well	RESE-1000263	27-Feb-08	<1.3	2.5 ± 1.4	<0.1	<1.3	ND	<0.2	<0.0003	Energy Labs
Hackberry Windmill Well	RESE-1003011	03-Jun-08	<1.5	<2.6	0.25 ± 0.15	2.8 ± 0.85	3.05	<0.2	<0.0003	Energy Labs
Hackberry Windmill Well	RESE-1003019	02-Sep-08	<1.4	2.9 ± 1.7	<0.23	<1.2	ND	<0.2	<0.0003	Energy Labs
Hackberry Windmill Well DUP	RESE-1003020	02-Sep-08	<1.4	<2.7	<0.19	<1.2	ND	<0.2	<0.0003	Energy Labs
Hackberry Windmill Well	RESE-1003024	02-Dec-08	3.5 ± 1.1	6.0 ± 1.7	<0.15	<1.2	ND	<0.2	<0.0003	Energy Labs
JI Ranch Corral Well	RESE-1000302	21-Jun-07	<1.0	<2.0	0.6 ± 0.3	<1.0	0.6	<0.2	<0.0003	Energy Labs
JI Ranch Corral Well	RESE-1003005	29-May-08	2.6 ± 1.6	<2.7	0.55 ± 0.15	1.1 ± 0.55	1.65	<0.2	<0.0003	Energy Labs
JI Ranch Corral Well	RESE-1003014	25-Aug-08	<3.1	<4.0	<0.23	<1.2	ND	<0.2	<0.0003	Energy Labs
JI Ranch Corral Well	RESE-1003029	03-Dec-08	8.6 ± 3	5.1 ± 2.8	<0.18	1.7 ± 0.8	1.70	<0.2	<0.0003	Energy Labs
JI Ranch Middle Well	RESE-1003006	30-May-08	<1.5	<2.6	0.29 ± 0.11	<0.85	0.29	<0.2	<0.0003	Energy Labs
JI Ranch Middle Well	RESE-1003017	27-Aug-08	<1.6	<2.7	<0.25	<1.2	ND	<0.2	<0.0003	Energy Labs
JI Ranch Middle Well	RESE-1003028	03-Dec-08	4.6 ± 1.5	3.9 ± 1.7	<0.16	2.0 ± 0.81	2.00	<0.2	<0.0003	Energy Labs
Groundwater 2 - Apache Leap Tuff Aquifer										
A-06	RESE-1000255	24-Sep-07	1.8 ± 0.5	<2.0	<0.2	<1.0	ND	0.7 ± 0.5	0.0004	Energy Labs
A-06 DUP	RESE-1000256	24-Sep-07	1.3 ± 0.5	<2.0	<0.2	<1.0	ND	3.1 ± 0.7	0.0004	Energy Labs
A-06	RESE-1003008	02-Jun-08	<1.6	<2.7	0.12 ± 0.09	<0.85	0.12	1.1 ± 0.3	0.0003	Energy Labs
A-06	RESE-1003016	28-Aug-08	<1.5	<2.7	<0.23	<1.2	ND	0.9 ± 0.4	<0.0003	Energy Labs
A-06	RESE-1003030	04-Dec-08	<1.5	<2.6	<0.17	<1.2	ND	0.7 ± 0.3	0.0003	Energy Labs
CT Well	RESE-1003102	20-Apr-10	10.0 ± 2.6	3.8 ± 1.7	<0.19	<1.3	ND	6.4	0.0090	Energy Labs
HRES-04	RESE-1001114	18-Jan-08	2.3 ± 0.7	<2.0	<0.2	<1.0	ND	2.8 ± 0.7	0.0022	Energy Labs
HRES-04	RESE-1003021	03-Sep-08	1.7 ± 1	<2.7	<0.20	<1.2	ND	2.7 ± 0.6	0.0016	Energy Labs
HRES-05	RESE-1000264	27-Feb-08	5.5 ± 1	<2.5	<0.1	<1.3	ND	2.9 ± 0.5	0.0012	Energy Labs
HRES-05	RESE-1003001	28-May-08	<1.8	<2.7	0.13 ± 0.09	<0.85	0.13	2.6 ± 0.5	0.0010	Energy Labs
HRES-05	RESE-1003012	25-Aug-08	2.0 ± 1.1	<2.7	<0.22	<1.2	ND	2.6 ± 0.6	0.0008	Energy Labs
HRES-05	RESE-1003025	02-Dec-08	<1.6	<2.6	<0.15	<1.2	ND	2.4 ± 0.6	0.0009	Energy Labs
HRES-06	RESE-1000301	12-Jun-07	<1.0	<2.0	<0.2	<1.0	ND	1.1 ± 0.6	0.0004	Energy Labs
HRES-06	RESE-1000265	27-Feb-08	2.0 ± 0.7	<2.5	<0.1	<1.3	ND	0.4 ± 0.2	0.0003	Energy Labs
HRES-06 DUP	RESE-1000266	27-Feb-08	3.7 ± 0.8	<2.5	<0.1	<1.3	ND	0.6 ± 0.2	<0.0003	Energy Labs
HRES-06	RESE-1003003	28-May-08	<1.5	<2.6	<0.14	2.2 ± 0.6	2.20	0.4 ± 0.2	<0.0003	Energy Labs
HRES-06	RESE-1003013	25-Aug-08	<1.4	<2.7	<0.23	<1.2	ND	0.4 ± 0.2	<0.0003	Energy Labs
HRES-06	RESE-1003026	03-Dec-08	<1.4	<2.6	<0.15	<1.2	ND	<0.2	<0.0003	Energy Labs
HRES-06 DUP	RESE-1003027	03-Dec-08	1.5 ± 1	<2.6	<0.15	<1.2	ND	<0.2	<0.0003	Energy Labs
HRES-07	RESE-1000262	26-Feb-08	2.7 ± 0.8	3.3 ± 1.5	<0.1	<1.3	ND	1.1 ± 0.3	0.0006	Energy Labs
HRES-07	RESE-1003009	03-Jun-08	1.6 ± 1.1	<2.6	<0.14	1.8 ± 0.58	1.80	1.3 ± 0.4	0.0007	Energy Labs
HRES-07 DUP	RESE-1003010	03-Jun-08	<1.6	<2.6	0.19 ± 0.1	<0.85	0.19	1.7 ± 0.5	0.0008	Energy Labs
HRES-07	RESE-1003018	02-Sep-08	<1.4	<2.7	<0.23	<1.2	ND	1.3 ± 0.5	0.0006	Energy Labs
HRES-07	RESE-1003022	01-Dec-08	<1.5	<2.6	<0.16	<1.2	ND	1.7 ± 0.4	0.0007	Energy Labs
HRES-07	RESE-1000290	06-Dec-09	2.5 ± 1.5	<2.7	<0.18	1.5 ± 0.9	1.50	1.2 ± 0.3	0.0004	Energy Labs
HRES-08	RESE-1003149	21-Jul-11	2.2 ± 2.8	<4.2	<0.39	<1.20	ND	---	0.0008	ACZ
HRES-09	RESE-1003182	29-Dec-10	<2.3	<4.20	<0.64	<1.3	ND	---	0.0016	ACZ
HRES-09	RESE-1003143	04-Jul-11	4.1 ± 2.8	4.6 ± 2.9	<0.30	1.9 ± 0.56	1.90	---	0.0009	ACZ
HRES-10	RESE-1003175	24-Sep-10	<2.3	<4.0	<0.40	<1.50	ND	---	0.0134	ACZ
HRES-10	RESE-1003244	01-May-12	2.5 ± 2.1	<3.8	<0.19	<1.20	ND	---	0.0029	ACZ
HRES-10	RESE-1001311	16-Aug-12	4.7 ± 2.9	<3.9	0.36 ± 0.11	1.4 ± 0.47	1.76	---	0.0054	ACZ
HRES-10	RESE-1001322	14-Nov-12	4 ± 2.8	<3.9	<0.19	<1.7	ND	---	0.0059	ACZ
HRES-11	RESE-1003174	23-Sep-10	<1.9	<4.00	<0.21	<1.6	ND	---	0.0004	ACZ
HRES-11	RESE-1003243	01-May-12	<1.90	<3.9	0.18 ± 0.05	<0.61	0.18	---	0.0003	ACZ

MONTGOMERY & ASSOCIATES

TABLE A-3. RADIOLOGICAL DATA
FOR GROUNDWATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	RADIOLOGICAL CONSTITUENTS [a]							ANALYTICAL LABORATORY
			Gross Alpha (pCi/L)[b]	Gross Beta (pCi/L)	Ra-226 (pCi/L)	Ra-228 (pCi/L)	Ra-226 + Ra-228 (pCi/L)	Total U (pCi/L)	Total U (mg/L)[c]	
Groundwater 2 - Apache Leap Tuff Aquifer										
HRES-11	RESE-1001312	16-Aug-12	<1.8	<3.8	0.69 ± 0.54	<0.98	0.69	---	0.0002	ACZ
HRES-11	RESE-1001320	14-Nov-12	<1.8	<3.9	<0.11	<1.5	ND	---	0.0002	ACZ
HRES-11 DUP	RESE-1001321	14-Nov-12	<1.9	<3.9	<0.17	<1.8	ND	---	0.0002	ACZ
HRES-12	RESE-1003144	10-Jul-11	3.2 ± 3.4	<4.40	<0.29	<1.30	ND	---	0.0030	ACZ
HRES-12	RESE-1003249	15-May-12	<2.2	<3.90	0.38 ± 0.16	<1.30	0.38	---	0.0014	ACZ
HRES-12	RESE-1001309	14-Aug-12	<2.2	<4	<0.21	<0.97	ND	---	0.0017	ACZ
HRES-12	RESE-1001316	07-Nov-12	<2	<3.9	<0.17	1.1 ± 0.49	1.10	---	0.0013	ACZ
HRES-13	RESE-1003130	03-Jun-11	<2.20	<4.2	<0.32	<1.10	ND	---	0.0011	ACZ
HRES-13	RESE-1000456	17-May-12	3 ± 2.7	6.4 ± 2.9	<0.43	<1.3	ND	---	0.0014	ACZ
HRES-13 DUP	RESE-1000457	17-May-12	3 ± 2.9	<4.00	<0.34	2.5 ± 0.69	2.50	---	0.0014	ACZ
HRES-13	RESE-1001305	07-Aug-12	7 ± 3.2	<4	<0.28	1.1 ± 0.45	1.10	---	0.0014	ACZ
HRES-13	RESE-1001317	08-Nov-12	2.4 ± 2.1	<3.9	0.16 ± 0.07	<2.6	0.16	---	0.0011	ACZ
HRES-14	RESE-1003147	15-Jul-11	<2.1	<4.30	<0.46	<1.10	ND	---	0.0006	ACZ
HRES-14	RESE-1003240	30-Apr-12	<4.7	<9.70	<0.16	<1.10	ND	---	0.0006	ACZ
HRES-14	RESE-1001306	08-Aug-12	1.9 ± 2	<4	<0.12	<0.97	ND	---	0.0006	ACZ
HRES-14	RESE-1001318	09-Nov-12	<1.8	<4	<0.13	2 ± 0.49	2.00	---	0.0005	ACZ
HRES-15	RESE-1003241	30-Apr-12	<1.9	<3.9	0.27 ± 0.1	<0.95	0.27	---	0.0007	ACZ
HRES-15 DUP	RESE-1003242	30-Apr-12	<1.9	<3.8	0.22 ± 0.11	<1.00	0.22	---	0.0007	ACZ
HRES-15	RESE-1001308	09-Aug-12	<1.8	<3.8	<0.09	1.6 ± 0.48	1.60	---	0.0008	ACZ
HRES-17	RESE-1003250	16-May-12	<1.9	<3.90	<0.16	1.8 ± 0.62	ND	---	0.0004	ACZ
HRES-17	RESE-1001307	08-Aug-12	4.4 ± 2.5	7.8 ± 2.9	0.25 ± 0.08	1.4 ± 0.48	1.65	---	0.0005	ACZ
HRES-17	RESE-1001319	09-Nov-12	2 ± 2	<4	0.08 ± 0.06	<2	0.08	---	0.0004	ACZ
JI Ranch House Well	RESE-1000303	21-Jun-07	<1.0	<2.0	<0.2	<1.0	ND	<0.2	<0.0003	Energy Labs
MJ-11	RESE-1000257	29-Sep-07	1.3 ± 0.5	<2.0	<0.2	<1.0	ND	1.2 ± 0.5	0.0003	Energy Labs
MJ-11	RESE-1000261	20-Feb-08	2.9 ± 0.8	<2.5	<0.1	<1.3	ND	0.6 ± 0.3	0.0003	Energy Labs
MJ-11	RESE-1003007	02-Jun-08	<1.6	<2.7	0.17 ± 0.12	1.5 ± 0.79	1.67	0.9 ± 0.3	<0.0003	Energy Labs
MJ-11	RESE-1003015	26-Aug-08	<1.4	<2.7	<0.23	<1.2	ND	0.8 ± 0.5	<0.0003	Energy Labs
Groundwater 3 - Deep Groundwater System										
DHRES-01	RESE-112808	28-Nov-08	9.5 ± 2.3	25.0 ± 2.2	2.4 ± 0.31	2.3 ± 0.82	4.7	<0.2	<0.0003	Energy Labs
DHRES-02	RESE-1003150	20-Jul-11	**23 ± 8.4**	49 ± 7.7	10 ± 0.5	0.97 ± 0.45	**11**	---	<0.0001	ACZ
DHRES-02 DUP	RESE-1003201	20-Jul-11	**21 ± 8.4**	48 ± 7.9	10 ± 0.49	1.1 ± 0.5	**11**	---	<0.0001	ACZ
DHRES-02	RESE-1003218	22-Oct-11	**19 ± 7.4**	47 ± 7	10 ± 0.45	1.5 ± 0.57	**12**	---	<0.0001	ACZ
DHRES-02	RESE-1003222	25-Oct-11	**49 ± 13**	**54 ± 9.3**	11 ± 0.53	3.9 ± 0.6	**15**	---	<0.0001	ACZ
DHRES-02	RESE-1003227	27-Oct-11	**28 ± 18**	**56 ± 17**	11 ± 0.82	5.3 ± 1	**16**	---	0.0017	ACZ
DHRES-06 DUP	RESE-1003184	09-Jan-11	3.2 ± 3.5	6.5 ± 3.4	0.73 ± 0.18	<1.7	0.73	---	0.0033	ACZ
DHRES-06	RESE-1003186	09-Jan-11	<2.5	8.3 ± 3.8	1.5 ± 0.26	<1.40	1.5	---	0.0033	ACZ
DHRES-09	RESE-1003206	02-Sep-11	**36 ± 7.1**	6.9 ± 3.2	0.31 ± 0.1	<0.96	0.31	---	0.0115	ACZ
DHRES-09	RESE-1001313	20-Aug-12	**39 ± 7.1**	9.4 ± 3.1	0.28 ± 0.07	<1	0.28	---	0.0123	ACZ
DHRES-11	RESE-1003131	29-Jun-11	<2.20	5.6 ± 3.1	0.74 ± 0.17	0.99 ± 0.43	1.73	---	0.0002	ACZ
DHRES-11	RESE-1001310	15-Aug-12	<1.8	<4	0.51 ± 0.15	<0.59	0.51	---	<0.0001	ACZ
DHRES-13	RESE-1003138	28-Jun-11	<2.6	9.1 ± 3.7	0.67 ± 0.2	1.7 ± 0.54	2.37	---	0.0011	ACZ
DHRES-13	RESE-1001314	22-Aug-12	<2.1	5 ± 3	<0.2	<0.86	ND	---	0.0012	ACZ
DHRES-13 DUP	RESE-1001315	22-Aug-12	<2.1	4.9 ± 3	0.33 ± 0.11	<0.76	0.33	---	0.0012	ACZ
DHRES-15	RESE-1001149	16-Jul-14	<2.5	9.2 ± 4.5	0.21 ± 0.07	<0.74	0.21	---	0.0046	ACZ
DHRES-15	RESE-1001338	29-Dec-14	<3.2	11 ± 5.5	0.34 ± 0.1	<0.57	0.34	---	0.0041	ACZ
DHRES-15	RESE-1000474	29-Jan-15	<3.2	13 ± 5.1	0.63 ± 0.16	<0.88	0.63	---	0.0041	ACZ

MONTGOMERY & ASSOCIATES

TABLE A-3. RADIOLOGICAL DATA
FOR GROUNDWATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	RADIOLOGICAL CONSTITUENTS [a]							ANALYTICAL LABORATORY
			Gross Alpha (pCi/L) [b]	Gross Beta (pCi/L)	Ra-226 (pCi/L)	Ra-228 (pCi/L)	Ra-226 + Ra-228 (pCi/L)	Total U (pCi/L)	Total U (mg/L) [c]	
Groundwater 3 - Deep Groundwater System										
DHRES-15	RESE-1001340	18-Feb-15	<3.1	9.4 ± 4.9	0.34 ± 0.16	<0.62	0.34	---	0.0041	ACZ
U.S.EPA National Primary Drinking Water Regulations			15 pCi/L	50 pCi/L [d]	---	---	5 pCi/L	---	0.03 mg/L	
Arizona Numeric Aquifer Water Quality Standards			15 pCi/L	50 pCi/L	---	---	5 pCi/L	---	---	

Values in bold red are out of compliance with EPA primary water quality standards

Values in red italics are out of compliance with Arizona numeric water quality standards

Values in blue indicate that detection limit exceeds standard

[a] Ra-226 = Radium 226
Ra-228 = Radium 228
U = Uranium

[b] pCi/L = picocuries per liter

[c] mg/L = milligrams per liter

[d] pCi/L alert level for EPA and Arizona Numeric Standard of 4 mrem/year (milliroentgen equivalent man per year)

< = Less than reported detection limit
--- = Not available, not applicable
-- = Not calculated due to non-detect

Explanation of Codes

Absent = Analyte not present
ge = Greater than or equal to reported value
i = Insufficient sample
j = Estimated value
j+ = Estimated value, high bias
j- = Estimated value, low bias
Lost = Sample lost in processing
n = Not measured
na = Not available
ND = Not Detected
np = Analyte not applicable

Present = Analyte was detected
q = Uncertain value
r = Unusable data
< = Less than reported detection limit
> = Greater than reported value
d = Diluted. Diluted samples are indicated only when value is estimated.
DUP = Field Duplicate
LD = Laboratory duplicate
SP = Split sample
SPD = Split-Duplicate

MONTGOMERY & ASSOCIATES

TABLE A-4. STABLE ISOTOPE DATA
FOR GROUNDWATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	ISOTOPES					ANALYTICAL LABORATORY
			$\delta^{18}O$ [a] (‰)	δD [b] (‰)	$\delta^{13}C$ in DIC [c] (‰)	$\delta^{34}S$ [d] (‰)	$\delta^{18}O$ in SO_4 [e] (‰)	
Groundwater 1 - Shallow Groundwater System								
Hackberry Windmill Well	WM-ALU	17-Jun-86	-8.29	-62.05	---	---	---	
Hackberry Windmill Well	001225	04-Jun-03	-5.6	-43	---	---	---	University of Arizona
Hackberry Windmill Well	RESE-1000263	27-Feb-08	-7.6	-52	-10.5	1.7	8.4	University of Arizona
Hackberry Windmill Well	RESE-1003011	03-Jun-08	-7.2	-50	-14.7	3.5	12.6	University of Arizona
Hackberry Windmill Well	RESE-1003019	02-Sep-08	-7.1	-52	-15.9	0.3	10.8	University of Arizona
Hackberry Windmill Well DUP	RESE-1003020	02-Sep-08	-7.2	-52	---	0.4	9.5	University of Arizona
Hackberry Windmill Well	RESE-1003024	02-Dec-08	-7.4	-59	-15.3	4.6	8.0	University of Arizona
Hackberry Windmill Well	RESE-1003033	03-Mar-09	-7.7	-55	---	2.0	5.6	University of Arizona
Hackberry Windmill Well	RESE-1003042	02-Jun-09	-7.3	-54	---	4.3	i	University of Arizona
Hackberry Windmill Well	RESE-1000462	24-May-12	---	---	-19.4	---	---	Beta Analytic
Hackberry Windmill Well	RESE-1000462	24-May-12	-7.66	-57.0	---	2.9	7.9	Isotech
JI Ranch Corral Well	RESE-1003004	29-May-08	-9.3	-65	---	---	---	University of Arizona
JI Ranch Corral Well	RESE-1003005	29-May-08	-9.6	-64	---	-5.4	5.6	University of Arizona
JI Ranch Corral Well	RESE-1003014	25-Aug-08	-10.4	-72	-19.4	-4.9	-0.7	University of Arizona
JI Ranch Corral Well	RESE-1003029	03-Dec-08	-10.5	-73	-20.0	-4.0	0.9	University of Arizona
JI Ranch Corral Well	RESE-1003038	04-Mar-09	-10.3	-71	-18.0	-3.4	-0.1	University of Arizona
JI Ranch Corral Well	RESE-1003047	05-Jun-09	-10.2	-71	---	-2.2	2.7	University of Arizona
JI Ranch Corral Well	RESE-1000460	23-May-12	---	---	-20.9	---	---	Beta Analytic
JI Ranch Corral Well	RESE-1000460	23-May-12	-9.40	-64.6	---	0.4	6.0	Isotech
JI Ranch Middle Well	RESE-1003006	30-May-08	-9.5	-63	---	-2.1	28.8	University of Arizona
JI Ranch Middle Well	RESE-1003017	27-Aug-08	-9.9	-67	-18.9	-2.7	32.3	University of Arizona
JI Ranch Middle Well	RESE-1003028	03-Dec-08	-10.0	-69	-18.8	-2.4	4.3	University of Arizona
JI Ranch Middle Well	RESE-1003037	04-Mar-09	-9.8	-65	-18.9	-2.0	3.9	University of Arizona
JI Ranch Middle Well	RESE-1003048	05-Jun-09	-10.0	-68	---	-1.6	4.8	University of Arizona
JI Ranch Middle Well	RESE-1000461	23-May-12	---	---	-20.9	---	---	Beta Analytic
JI Ranch Middle Well	RESE-1000461	23-May-12	-9.32	-64.6	---	-0.6	2.9	Isotech
Groundwater 2 - Apache Leap Tuff Aquifer								
A-06	RESE-1000255	24-Sep-07	-10.4	-70	-16.4	10.0	13.5	University of Arizona
A-06 DUP	RESE-1000256	24-Sep-07	-10.4	-71	---	9.2	i	University of Arizona
A-06	RESE-1003008	02-Jun-08	-10.4	-70	-15.8	6.6	8.3	University of Arizona
A-06	RESE-1003016	28-Aug-08	-10.5	-71	-16.3	6.2	12.5	University of Arizona
A-06	RESE-1003030	04-Dec-08	-10.4	-71	-16.0	7.1	i	University of Arizona
A-06	RESE-1003039	05-Mar-09	-10.5	-70	-15.9	6.8	6.3	University of Arizona
A-06	RESE-1003046	04-Jun-09	-10.4	-70	---	7.6	14.1	University of Arizona
A-06	RESE-1003248	14-May-12	---	---	-17.7	---	---	Beta Analytic
A-06	RESE-1003248	14-May-12	-10.26	-71.0	---	5.2	-2.2	Isotech

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TABLE A-4. STABLE ISOTOPE DATA
FOR GROUNDWATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	ISOTOPES					ANALYTICAL LABORATORY
			$\delta^{18}O$ [a] (‰)	δD [b] (‰)	$\delta^{13}C$ in DIC [c] (‰)	$\delta^{34}S$ [d] (‰)	$\delta^{18}O$ in SO_4 [e] (‰)	
Groundwater 2 - Apache Leap Tuff Aquifer								
CT Well	RESE-1003102	20-Apr-10	---	---	-14.0	---	---	Beta Analytic
CT Well	RESE-1003102	20-Apr-10	-8.44	-55.2	---	-3.6	2.1	Isotech
HRES-01	RESE-1001103	18-Mar-04	-9.5	-66	---	---	---	University of Arizona
HRES-02	RESE-1001105	06-Apr-04	-9.1	-64	---	---	---	University of Arizona
HRES-02	RESE-1001108	08-Apr-04	-9.9	-68	---	---	---	University of Arizona
HRES-02	RESE-1001109	10-Apr-04	-9.9	-68	---	---	---	University of Arizona
HRES-02	RESE-1000455	17-May-12	---	---	-17.6	---	---	Beta Analytic
HRES-02	RESE-1000455	17-May-12	-9.19	-65.4	---	-0.7	9.0	Isotech
HRES-03d	RESE-1001111	16-Apr-04	-11.4	-79	---	---	---	University of Arizona
HRES-04	RESE-1001110	15-Apr-04	-9.6	-65	---	---	---	University of Arizona
HRES-04	4531	03-Nov-06	-9.6	-65	-15.6	5.0	8.2	University of Arizona
HRES-04	RESE-1001114	18-Jan-08	-9.7	-66	-15.1	6.3	12.0	University of Arizona
HRES-04	RESE-1003021	03-Sep-08	-9.6	-67	-14.5	4.9	16.7	University of Arizona
HRES-04	RESE-1003031	02-Mar-09	-9.6	-65	-14.0	3.6	5.3	University of Arizona
HRES-04	RESE-1003040	01-Jun-09	-9.6	-65	---	4.5	9.8	University of Arizona
HRES-04	RESE-1000458	17-May-12	---	---	-15.3	---	---	Beta Analytic
HRES-04	RESE-1000458	17-May-12	-9.52	-67.0	---	---	---	Isotech
HRES-05	RESE-1001104	02-Apr-04	-9.5	-65	---	---	---	University of Arizona
HRES-05	RESE-1000264	27-Feb-08	-9.7	-66	-13.3	8.5	13.5	University of Arizona
HRES-05	RESE-1003001	28-May-08	-9.5	-65	-14.0	5.3	13.1	University of Arizona
HRES-05	RESE-1003012	25-Aug-08	-9.1	-72	-14.2	7.8	7.8	University of Arizona
HRES-05	RESE-1003025	02-Dec-08	-9.5	-67	-14.7	6.6	i	University of Arizona
HRES-05	RESE-1003034	03-Mar-09	-9.6	-65	-14.2	8.6	3.3	University of Arizona
HRES-05 SP	RESE-1003034	03-Mar-09	---	---	-13.5	---	---	Beta Analytic
HRES-05	RESE-1003043	03-Jun-09	-9.7	-65	---	8.0	7.4	University of Arizona
HRES-05	RESE-1003247	10-May-12	---	---	-14.1	---	---	Beta Analytic
HRES-05	RESE-1003247	10-May-12	-9.57	-67.1	---	---	-5.9	Isotech
HRES-06	RESE-1000301	12-Jun-07	-10.3	-70	-15.6	4.5	9.9	University of Arizona
HRES-06	RESE-1000265	27-Feb-08	-10.3	-71	-7.7	4.9	9.2	University of Arizona
HRES-06 DUP	RESE-1000266	27-Feb-08	-10.3	-71	-15.0	4.8	9.3	University of Arizona
HRES-06	RESE-1003003	28-May-08	-10.1	-71	-16.5	8.5	18.7	University of Arizona
HRES-06	RESE-1003013	25-Aug-08	-10.2	-72	-15.6	5.0	11.6	University of Arizona
HRES-06	RESE-1003026	03-Dec-08	-10.2	-72	-16.1	5.2	9.6	University of Arizona
HRES-06 DUP	RESE-1003027	03-Dec-08	-10.3	-71	-15.8	4.9	8.0	University of Arizona

TABLE A-4. STABLE ISOTOPE DATA
FOR GROUNDWATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	ISOTOPES					ANALYTICAL LABORATORY
			$\delta^{18}O$ [a] (‰)	δD [b] (‰)	$\delta^{13}C$ in DIC [c] (‰)	$\delta^{34}S$ [d] (‰)	$\delta^{18}O$ in SO_4 [e] (‰)	
Groundwater 2 - Apache Leap Tuff Aquifer								
HRES-06	RESE-1003035	04-Mar-09	-10.4	-70	-15.4	4.5	8.7	University of Arizona
HRES-06 SP	RESE-1003035	04-Mar-09	---	---	-14.5	---	---	Beta Analytic
HRES-06 DUP	RESE-1003036	04-Mar-09	-10.4	-70	-15.3	5.0	5.6	University of Arizona
HRES-06 SPD	RESE-1003036	04-Mar-09	---	---	-15.2	---	---	Beta Analytic
HRES-06	RESE-1003044	03-Jun-09	-10.3	-71	---	4.8	9.2	University of Arizona
HRES-06 DUP	RESE-1003045	03-Jun-09	-10.3	-70	---	4.7	9.8	University of Arizona
HRES-06	RESE-1000459	18-May-12	---	---	-19.2	---	---	Beta Analytic
HRES-06	RESE-1000459	18-May-12	-10.29	-72.4	---	---	---	Isotech
HRES-07	RESE-1000262	26-Feb-08	-9.8	-67	-14.2	4.5	17.6	University of Arizona
HRES-07	RESE-1003009	03-Jun-08	-9.8	-70	-13.5	4.6	9.0	University of Arizona
HRES-07 DUP	RESE-1003010	03-Jun-08	-9.8	-67	-13.9	4.8	6.5	University of Arizona
HRES-07	RESE-1003018	02-Sep-08	-9.7	-68	-14.3	4.3	9.0	University of Arizona
HRES-07	RESE-1003022	01-Dec-08	-9.8	-68	-15.1	4.3	5.2	University of Arizona
HRES-07	RESE-1003032	03-Mar-09	-10.0	-67	---	4.3	5.8	University of Arizona
HRES-07	RESE-1003041	02-Jun-09	-9.8	-69	---	3.9	10.3	University of Arizona
HRES-07	RESE-1000290	06-Dec-09	---	---	-15.1	---	---	Beta Analytic
HRES-07	RESE-1000290	06-Dec-09	-9.60	-69.7	---	---	---	Isotech
HRES-07	RESE-1003245	10-May-12	---	---	-17.1	---	---	Beta Analytic
HRES-07	RESE-1003245	10-May-12	-9.79	-67.2	---	4.0	4.6	Isotech
HRES-08	RESE-1003149	21-Jul-11	---	---	-13.0	---	---	Beta Analytic
HRES-08	RESE-1003149	21-Jul-11	-9.61	-68.7	---	Lost	Lost	Isotech
HRES-08	RESE-1003246	10-May-12	---	---	-16.7	---	---	Beta Analytic
HRES-08	RESE-1003246	10-May-12	-9.75	-67.9	---	8.9	5.1	Isotech
HRES-09	RESE-1003182	29-Dec-10	---	---	-14.7	---	---	Beta Analytic
HRES-09	RESE-1003182	29-Dec-10	-9.34	-67.5	---	i	i	Isotech
HRES-09	RESE-1003143	04-Jul-11	---	---	-19.0	---	---	Beta Analytic
HRES-09	RESE-1003143	04-Jul-11	-9.52	-68.0	---	6.5	-0.7	Isotech
HRES-10	RESE-1003175	24-Sep-10	---	---	-17.2	---	---	Beta Analytic
HRES-10	RESE-1003175	24-Sep-10	-8.83	-62.7	---	-1.9	2.3	Isotech
HRES-10	RESE-1003244	01-May-12	---	---	-19.2	---	---	Beta Analytic
HRES-10	RESE-1003244	01-May-12	-9.51	-67.1	---	-2.0	1.8	Isotech
HRES-10	RESE-1001311	16-Aug-12	---	---	-20.1	---	---	Beta Analytic
HRES-10	RESE-1001311	16-Aug-12	-9.32	-66.5	---	-2.2	2.7	Isotech
HRES-10	RESE-1001322	14-Nov-12	---	---	-18.4	---	---	Beta Analytic
HRES-10	RESE-1001322	14-Nov-12	-9.21	-65.7	---	-2.3	2.7	Isotech

TABLE A-4. STABLE ISOTOPE DATA
FOR GROUNDWATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	ISOTOPES					ANALYTICAL LABORATORY
			$\delta^{18}O$ [a] (‰)	δD [b] (‰)	$\delta^{13}C$ in DIC [c] (‰)	$\delta^{34}S$ [d] (‰)	$\delta^{18}O$ in SO_4 [e] (‰)	
Groundwater 2 - Apache Leap Tuff Aquifer								
HRES-11	RESE-1003174	23-Sep-10	---	---	-16.6	---	---	Beta Analytic
HRES-11	RESE-1003174	23-Sep-10	-10.21	-72.0	---	1.9	-0.5	Isotech
HRES-11	RESE-1003243	01-May-12	---	---	-19.5	---	---	Beta Analytic
HRES-11	RESE-1003243	01-May-12	-10.56	-74.0	---	4.0	1.8	Isotech
HRES-11	RESE-1001312	16-Aug-12	---	---	-18.5	---	---	Beta Analytic
HRES-11	RESE-1001312	16-Aug-12	-10.49	-72.7	---	3.9	0.7	Isotech
HRES-11	RESE-1001320	14-Nov-12	---	---	-18.0	---	---	Beta Analytic
HRES-11	RESE-1001320	14-Nov-12	-10.65	-74.2	---	i	i	Isotech
HRES-11 DUP	RESE-1001321	14-Nov-12	---	---	-18.3	---	---	Beta Analytic
HRES-11 DUP	RESE-1001321	14-Nov-12	-10.49	-73.5	---	i	i	Isotech
HRES-12	RESE-1003144	10-Jul-11	---	---	-15.3	---	---	Beta Analytic
HRES-12	RESE-1003144	10-Jul-11	-9.45	-66.3	---	1.1	7.5	Isotech
HRES-12	RESE-1003249	15-May-12	---	---	-14.5	---	---	Beta Analytic
HRES-12	RESE-1003249	15-May-12	-9.34	-66.2	---	3.3	4.6	Isotech
HRES-12	RESE-1001309	14-Aug-12	---	---	-18.9	---	---	Beta Analytic
HRES-12	RESE-1001309	14-Aug-12	-9.47	-66.9	---	4.3	9.0	Isotech
HRES-12	RESE-1001316	07-Nov-12	---	---	-17.2	---	---	Beta Analytic
HRES-12	RESE-1001316	07-Nov-12	-9.48	-67.8	---	4.7	7.7	Isotech
HRES-13	RESE-1003130	03-Jun-11	---	---	-15.2	---	---	Beta Analytic
HRES-13	RESE-1003130	03-Jun-11	-10.01	-70.2	---	3.8	1.3	Isotech
HRES-13	RESE-1000456	17-May-12	---	---	-14.1	---	---	Beta Analytic
HRES-13	RESE-1000456	17-May-12	-9.87	-70.4	---	5.4	0.4	Isotech
HRES-13 DUP	RESE-1000457	17-May-12	---	---	-14.5	---	---	Beta Analytic
HRES-13 DUP	RESE-1000457	17-May-12	-10.10	-69.3	---	---	---	Isotech
HRES-13	RESE-1001305	07-Aug-12	---	---	-16.1	---	---	Beta Analytic
HRES-13	RESE-1001305	07-Aug-12	-10.02	-70.1	---	6.2	-2.5	Isotech
HRES-13	RESE-1001317	08-Nov-12	---	---	-18.0	---	---	Beta Analytic
HRES-13	RESE-1001317	08-Nov-12	-10.16	-71.1	---	6.4	2.3	Isotech
HRES-14	RESE-1003147	15-Jul-11	---	---	-15.6	---	---	Beta Analytic
HRES-14	RESE-1003147	15-Jul-11	-10.14	-70.1	---	5.4	-3.9	Isotech
HRES-14	RESE-1003240	30-Apr-12	---	---	-17.1	---	---	Beta Analytic
HRES-14	RESE-1003240	30-Apr-12	-10.09	-70.8	---	4.7	3.7	Isotech
HRES-14	RESE-1001306	08-Aug-12	---	---	-16.7	---	---	Beta Analytic
HRES-14	RESE-1001306	08-Aug-12	-10.05	-70.5	---	5.3	0.7	Isotech
HRES-14	RESE-1001318	09-Nov-12	---	---	-17.5	---	---	Beta Analytic
HRES-14	RESE-1001318	09-Nov-12	-10.39	-72.5	---	4.9	3.5	Isotech

TABLE A-4. STABLE ISOTOPE DATA
FOR GROUNDWATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	ISOTOPES					ANALYTICAL LABORATORY
			$\delta^{18}O$ [a] (‰)	δD [b] (‰)	$\delta^{13}C$ in DIC [c] (‰)	$\delta^{34}S$ [d] (‰)	$\delta^{18}O$ in SO_4 [e] (‰)	
Groundwater 2 - Apache Leap Tuff Aquifer								
HRES-15	RESE-1003241	30-Apr-12	---	---	-16.7	---	---	Beta Analytic
HRES-15	RESE-1003241	30-Apr-12	-10.28	-71.9	---	---	2.5	Isotech
HRES-15 DUP	RESE-1003242	30-Apr-12	---	---	-17.0	---	---	Beta Analytic
HRES-15 DUP	RESE-1003242	30-Apr-12	-10.34	-72.4	---	---	2.7	Isotech
HRES-15	RESE-1001308	09-Aug-12	---	---	-17.1	---	---	Beta Analytic
HRES-15	RESE-1001308	09-Aug-12	-10.23	-71.8	---	6.0	2.6	Isotech
HRES-17	RESE-1003250	16-May-12	---	---	-15.2	---	---	Beta Analytic
HRES-17	RESE-1003250	16-May-12	-10.66	-73.8	---	4.7	-3.0	Isotech
HRES-17	RESE-1001307	08-Aug-12	---	---	-16.8	---	---	Beta Analytic
HRES-17	RESE-1001307	08-Aug-12	-10.69	-74.2	---	5.6	-2.8	Isotech
HRES-17	RESE-1001319	09-Nov-12	---	---	-18.1	---	---	Beta Analytic
HRES-17	RESE-1001319	09-Nov-12	-10.73	-74.5	---	4.8	1.8	Isotech
JI Ranch House Well	RESE-1000303	21-Jun-07	-10.3	-72	-16.2	5.1	23.8	University of Arizona
MJ-11	RESE-1000257	29-Sep-07	-10.4	-71	-16.7	8.1	9.8	University of Arizona
MJ-11	RESE-1000261	20-Feb-08	-10.4	-67	-15.6	6.6	i	University of Arizona
MJ-11	RESE-1003007	02-Jun-08	-10.4	-70	-15.6	6.4	10.6	University of Arizona
MJ-11	RESE-1003015	26-Aug-08	-10.4	-71	-15.9	5.5	8.3	University of Arizona
MJ-11	RESE-1000454	16-May-12	---	---	-16.8	---	---	Beta Analytic
MJ-11	RESE-1000454	16-May-12	-10.37	-72.3	---	4.2	-2.0	Isotech
Groundwater 3 - Deep Groundwater System								
DHRES-01	RESE-112808	28-Nov-08	-11.8	-83	-7.3	7.7	2.0	University of Arizona
DHRES-02	RESE-1003150	20-Jul-11	---	---	-14.6	---	---	Beta Analytic
DHRES-02	RESE-1003150	20-Jul-11	-11.52	-85.3	---	9.10	7.60	Isotech
DHRES-02 DUP	RESE-1003201	20-Jul-11	---	---	-17.3	---	---	Beta Analytic
DHRES-02 DUP	RESE-1003201	20-Jul-11	-11.50	-85.2	---	8.20	7.09	Isotech
DHRES-02	RESE-1003218	22-Oct-11	---	---	-19.3	---	---	Beta Analytic
DHRES-02	RESE-1003218	22-Oct-11	-11.77	-84.7	---	8.0	6.7	Isotech
DHRES-02	RESE-1003222	25-Oct-11	---	---	-13.0	---	---	Beta Analytic
DHRES-02	RESE-1003222	25-Oct-11	-11.96	-84.7	---	7.9	6.5	Isotech
DHRES-02	RESE-1003227	27-Oct-11	---	---	-15.1	---	---	Beta Analytic
DHRES-02	RESE-1003227	27-Oct-11	-11.89	-85.1	---	9.4	6.2	Isotech
DHRES-06 DUP	RESE-1003184	09-Jan-11	---	---	-13.1	---	---	Beta Analytic
DHRES-06 DUP	RESE-1003184	09-Jan-11	-11.69	-83.1	---	i	i	Isotech
DHRES-06	RESE-1003186	09-Jan-11	---	---	-16.0	---	---	Beta Analytic
DHRES-06	RESE-1003186	09-Jan-11	-11.58	-84.1	---	i	i	Isotech

TABLE A-4. STABLE ISOTOPE DATA
FOR GROUNDWATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	ISOTOPES					ANALYTICAL LABORATORY
			$\delta^{18}O$ [a] (‰)	δD [b] (‰)	$\delta^{13}C$ in DIC [c] (‰)	$\delta^{34}S$ [d] (‰)	$\delta^{18}O$ in SO_4 [e] (‰)	
Groundwater 3 - Deep Groundwater System								
DHRES-09	RESE-1003206	02-Sep-11	---	---	-15.2	---	---	Beta Analytic
DHRES-09	RESE-1003206	02-Sep-11	-9.24	-67.6	---	-1.2	4.4	Isotech
DHRES-09	RESE-1001313	20-Aug-12	---	---	-17.1	---	---	Beta Analytic
DHRES-09	RESE-1001313	20-Aug-12	-9.17	-67.6	---	-0.3	0.9	Isotech
DHRES-11	RESE-1003131	29-Jun-11	---	---	-13.4	---	---	Beta Analytic
DHRES-11	RESE-1003131	29-Jun-11	-10.66	-76.4	---	3.7	5.1	Isotech
DHRES-11	RESE-1001310	15-Aug-12	---	---	-7.4	---	---	Beta Analytic
DHRES-11	RESE-1001310	15-Aug-12	-10.70	-76.2	---	---	-0.8	Isotech
DHRES-13	RESE-1003138	28-Jun-11	---	---	-12.3	---	---	Beta Analytic
DHRES-13	RESE-1003138	28-Jun-11	-10.20	-72.2	---	i	i	Isotech
DHRES-13	RESE-1001314	22-Aug-12	---	---	-14.0	---	---	Beta Analytic
DHRES-13	RESE-1001314	22-Aug-12	-10.00	-71.7	---	9.1	r	Isotech
DHRES-13 DUP	RESE-1001315	22-Aug-12	---	---	-13.4	---	---	Beta Analytic
DHRES-13 DUP	RESE-1001315	22-Aug-12	-10.05	-71.4	---	9.0	r	Isotech
DHRES-15	RESE-1001149	16-Jul-14	---	---	-9.8	---	---	Beta Analytic
DHRES-15	RESE-1001149	16-Jul-14	-11.65	-86	---	1.7	1.1	Isotech
DHRES-15	RESE-1001338	29-Dec-14	---	---	-10.4	---	---	Beta Analytic
DHRES-15	RESE-1001338	29-Dec-14	-11.77	-83.8	---	1.8	2.2	Isotech
DHRES-15	RESE-1000474	29-Jan-15	---	---	-12.9	---	---	Beta Analytic
DHRES-15	RESE-1000474	29-Jan-15	-11.79	-84.3	---	1.4	1.5	Isotech
DHRES-15	RESE-1001340	18-Feb-15	---	---	-7.8	---	---	Beta Analytic
DHRES-15	RESE-1001340	18-Feb-15	-11.63	-83.3	---	2.0	2.3	Isotech

a $\delta^{18}O$ (‰) = delta oxygen-18 (per mil)
b δD (‰) = delta deuterium (per mil)
c $\delta^{13}C$ in DIC (‰) = delta carbon-13 in dissolved inorganic carbon (per mil)
d $\delta^{34}S$ (‰) = delta sulfur-34 (per mil)
e $\delta^{18}O$ in SO_4 (‰) = delta oxygen-18 in sulfate (per mil)

--- = Not available, not applicable
-- = Not calculated due to non-detect

Explanation of Codes

Absent = Analyte not present
ge = Greater than or equal to reported value
i = Insufficient sample
j = Estimated value
j+ = Estimated value, high bias
j- = Estimated value, low bias
Lost = Sample lost in processing
n = Not measured
na = Not available
ND = Not Detected
np = Analyte not applicable
Present = Analyte was detected
q = Uncertain value
r = Unusable data
< = Less than reported detection limit
> = Greater than reported value
d = Diluted. Diluted samples are indicated only when value is estimated.
DUP = Field Duplicate
LD = Laboratory duplicate
SP = Split sample
SPD = Split-Duplicate

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TABLE A-5. RADIOISOTOPE DATA
FOR GROUNDWATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	RADIOISOTOPE DATA								ANALYTICAL LABORATORY
			^{3}H (TU)[a]	^{14}C (pmC)[b]	Sr (ppm)[c]	$^{87}Sr/^{86}Sr$[d]	^{234}U (pCi/L)[e]	^{235}U (pCi/L)[f]	^{238}U (pCi/L)[g]	$^{234}U/^{238}U$[h]	
Groundwater 1 - Shallow Groundwater System											
Hackberry Windmill Well	RESE-1000263	27-Feb-08	---	---	---	---	<0.2	<0.2	<0.2	---	Energy Labs
Hackberry Windmill Well	RESE-1000263	27-Feb-08	---	---	0.2868	0.709723 ± 0.000007	---	---	---	---	Geochron
Hackberry Windmill Well	RESE-1000263	27-Feb-08	2.7 ± 0.26	106.1 ± 2.6	---	---	---	---	---	---	University of Arizona
Hackberry Windmill Well	RESE-1003011	03-Jun-08	---	---	---	---	<0.2	<0.2	<0.2	---	Energy Labs
Hackberry Windmill Well	RESE-1003011	03-Jun-08	---	---	0.2395	0.709750 ± 0.000009	---	---	---	---	Geochron
Hackberry Windmill Well	RESE-1003011	03-Jun-08	3.9 ± 0.28	108.5 ± 1.2	---	---	---	---	---	---	University of Arizona
Hackberry Windmill Well	RESE-1003019	02-Sep-08	---	---	---	---	<0.2	<0.2	<0.2	---	Energy Labs
Hackberry Windmill Well	RESE-1003019	02-Sep-08	---	---	0.2481	0.709744 ± 0.000014	---	---	---	---	Geochron
Hackberry Windmill Well	RESE-1003019	02-Sep-08	5.8 ± 0.42	106.9 ± 1.3	---	---	---	---	---	---	University of Arizona
Hackberry Windmill Well DUP	RESE-1003020	02-Sep-08	---	---	---	---	<0.2	<0.2	<0.2	---	Energy Labs
Hackberry Windmill Well DUP	RESE-1003020	02-Sep-08	---	---	0.2477	0.709722 ± 0.000011	---	---	---	---	Geochron
Hackberry Windmill Well DUP	RESE-1003020	02-Sep-08	5.1 ± 0.41	---	---	---	---	---	---	---	University of Arizona
Hackberry Windmill Well	RESE-1003024	02-Dec-08	---	---	---	---	<0.2	<0.2	<0.2	---	Energy Labs
Hackberry Windmill Well	RESE-1003024	02-Dec-08	---	---	0.2442	0.709737 ± 0.000009	---	---	---	---	Geochron
Hackberry Windmill Well	RESE-1003024	02-Dec-08	3.8 ± 0.35	107.4 ± 1.5	---	---	---	---	---	---	University of Arizona
Hackberry Windmill Well	RESE-1003033	03-Mar-09	3.0 ± 0.34	---	---	---	---	---	---	---	University of Arizona
Hackberry Windmill Well	RESE-1003042	02-Jun-09	6.2 ± 0.3	---	---	---	---	---	---	---	University of Arizona
Hackberry Windmill Well	RESE-1000462	24-May-12	---	106.55 ± 0.26	---	---	---	---	---	---	Beta Analytic
Hackberry Windmill Well	RESE-1000462	24-May-12	---	---	0.1672	0.709740 ± 0.000009	---	---	---	---	Geochron
Hackberry Windmill Well	RESE-1000462	24-May-12	4.41 ± 0.17	---	---	---	---	---	---	---	Isotech
JI Ranch Corral Well	RESE-1000302	21-Jun-07	---	---	---	---	<0.2	<0.2	<0.2	---	Energy Labs
JI Ranch Corral Well	RESE-1003005	29-May-08	---	---	---	---	<0.2	<0.2	<0.2	---	Energy Labs
JI Ranch Corral Well	RESE-1003005	29-May-08	---	---	0.6607	0.710617 ± 0.000007	---	---	---	---	Geochron
JI Ranch Corral Well	RESE-1003005	29-May-08	3.2 ± 0.29	---	---	---	---	---	---	---	University of Arizona
JI Ranch Corral Well	RESE-1003014	25-Aug-08	---	---	---	---	<0.2	<0.2	<0.2	---	Energy Labs
JI Ranch Corral Well	RESE-1003014	25-Aug-08	---	---	1.0042	0.710626 ± 0.000007	---	---	---	---	Geochron
JI Ranch Corral Well	RESE-1003014	25-Aug-08	2.5 ± 0.34	91.1 ± 1.1	---	---	---	---	---	---	University of Arizona
JI Ranch Corral Well	RESE-1003029	03-Dec-08	---	---	---	---	<0.2	<0.2	<0.2	---	Energy Labs
JI Ranch Corral Well	RESE-1003029	03-Dec-08	---	---	0.6636	0.710609 ± 0.000009	---	---	---	---	Geochron
JI Ranch Corral Well	RESE-1003029	03-Dec-08	2.3 ± 0.34	94.1 ± 0.7	---	---	---	---	---	---	University of Arizona
JI Ranch Corral Well LD	RESE-1003029	03-Dec-08	---	---	0.6642	0.710611 ± 0.00001	---	---	---	---	Geochron
JI Ranch Corral Well	RESE-1003038	04-Mar-09	3.0 ± 0.3	91.3 ± 0.8	---	---	---	---	---	---	University of Arizona
JI Ranch Corral Well	RESE-1003047	05-Jun-09	4.8 ± 0.28	---	---	---	---	---	---	---	University of Arizona

TABLE A-5. RADIOISOTOPE DATA
FOR GROUNDWATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	RADIOISOTOPE DATA								ANALYTICAL LABORATORY
			^{3}H (TU)[a]	^{14}C (pmC)[b]	Sr (ppm)[c]	$^{87}Sr/^{86}Sr$[d]	^{234}U (pCi/L)[e]	^{235}U (pCi/L)[f]	^{238}U (pCi/L)[g]	$^{234}U/^{238}U$[h]	
Groundwater 1 - Shallow Groundwater System											
JI Ranch Corral Well	RESE-1000460	23-May-12	---	89.96 ± 0.33	---	---	---	---	---	---	Beta Analytic
JI Ranch Corral Well	RESE-1000460	23-May-12	---	---	0.3347	0.710601 ± 0.000007	---	---	---	---	Geochron
JI Ranch Corral Well	RESE-1000460	23-May-12	2.53 ± 0.18	---	---	---	---	---	---	---	Isotech
JI Ranch Middle Well	RESE-1003006	30-May-08	---	---	---	---	<0.2	<0.2	<0.2	---	Energy Labs
JI Ranch Middle Well	RESE-1003006	30-May-08	---	---	0.2667	0.710693 ± 0.000007	---	---	---	---	Geochron
JI Ranch Middle Well	RESE-1003006	30-May-08	3.3 ± 0.24	---	---	---	---	---	---	---	University of Arizona
JI Ranch Middle Well	RESE-1003017	27-Aug-08	---	---	---	---	<0.2	<0.2	<0.2	---	Energy Labs
JI Ranch Middle Well	RESE-1003017	27-Aug-08	---	---	0.3694	0.710692 ± 0.000009	---	---	---	---	Geochron
JI Ranch Middle Well	RESE-1003017	27-Aug-08	2.5 ± 0.46	96.8 ± 0.9	---	---	---	---	---	---	University of Arizona
JI Ranch Middle Well	RESE-1003028	03-Dec-08	---	---	---	---	<0.2	<0.2	<0.2	---	Energy Labs
JI Ranch Middle Well	RESE-1003028	03-Dec-08	---	---	0.4056	0.710638 ± 0.000009	---	---	---	---	Geochron
JI Ranch Middle Well	RESE-1003028	03-Dec-08	3.8 ± 0.32	105.6 ± 1.6	---	---	---	---	---	---	University of Arizona
JI Ranch Middle Well	RESE-1003037	04-Mar-09	4.2 ± 0.36	97.0 ± 1.3	---	---	---	---	---	---	University of Arizona
JI Ranch Middle Well	RESE-1003048	05-Jun-09	3.8 ± 0.39	---	---	---	---	---	---	---	University of Arizona
JI Ranch Middle Well	RESE-1000461	23-May-12	---	94.79 ± 0.35	---	---	---	---	---	---	Beta Analytic
JI Ranch Middle Well	RESE-1000461	23-May-12	---	---	0.2573	0.710568 ± 0.000007	---	---	---	---	Geochron
JI Ranch Middle Well	RESE-1000461	23-May-12	3.20 ± 0.19	---	---	---	---	---	---	---	Isotech
Groundwater 2 - Apache Leap Tuff Aquifer											
A-06	RESE-1000255	24-Sep-07	---	---	---	---	0.7 ± 0.5	<0.2	<0.2	---	Energy Labs
A-06	RESE-1000255	24-Sep-07	---	---	0.1271	0.710390 ± 0.000007	---	---	---	---	Geochron
A-06	RESE-1000255	24-Sep-07	<0.7	63.6 ± 0.9	---	---	---	---	---	---	University of Arizona
A-06 DUP	RESE-1000256	24-Sep-07	---	---	---	---	1.9 ± 0.6	<0.2	1.2 ± 0.4	1.6	Energy Labs
A-06 DUP	RESE-1000256	24-Sep-07	---	---	0.1281	0.710386 ± 0.000009	---	---	---	---	Geochron
A-06 DUP	RESE-1000256	24-Sep-07	<0.6	---	---	---	---	---	---	---	University of Arizona
A-06	RESE-1003008	02-Jun-08	---	---	---	---	1.0 ± 0.3	<0.2	<0.2	---	Energy Labs
A-06	RESE-1003008	02-Jun-08	---	---	0.1279	0.710372 ± 0.000009	---	---	---	---	Geochron
A-06	RESE-1003008	02-Jun-08	1.6 ± 0.23	62.7 ± 0.6	---	---	---	---	---	---	University of Arizona
A-06	RESE-1003016	28-Aug-08	---	---	---	---	0.6 ± 0.3	<0.2	0.3 ± 0.2	2.0	Energy Labs
A-06	RESE-1003016	28-Aug-08	---	---	0.1281	0.710385 ± 0.00001	---	---	---	---	Geochron
A-06	RESE-1003016	28-Aug-08	<0.7	63.3 ± 1.1	---	---	---	---	---	---	University of Arizona
A-06	RESE-1003030	04-Dec-08	---	---	---	---	0.6 ± 0.3	<0.2	<0.2	---	Energy Labs
A-06	RESE-1003030	04-Dec-08	---	---	0.1270	0.710360 ± 0.000007	---	---	---	---	Geochron
A-06	RESE-1003030	04-Dec-08	3.3 ± 0.33	64.6 ± 1	---	---	---	---	---	---	University of Arizona
A-06	RESE-1003039	05-Mar-09	0.7 ± 0.28	64.3 ± 0.8	---	---	---	---	---	---	University of Arizona
A-06	RESE-1003046	04-Jun-09	0.6 ± 0.29	---	---	---	---	---	---	---	University of Arizona

TABLE A-5. RADIOISOTOPE DATA
FOR GROUNDWATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	RADIOISOTOPE DATA								ANALYTICAL LABORATORY
			^{3}H (TU)[a]	^{14}C (pmC)[b]	Sr (ppm)[c]	$^{87}Sr/^{86}Sr$[d]	^{234}U (pCi/L)[e]	^{235}U (pCi/L)[f]	^{238}U (pCi/L)[g]	$^{234}U/^{238}U$[h]	
Groundwater 2 - Apache Leap Tuff Aquifer											
A-06	RESE-1003248	14-May-12	---	62.31 ± 0.23	---	---	---	---	---	---	Beta Analytic
A-06	RESE-1003248	14-May-12	---	---	0.1088	0.710384 ± 0.000009	---	---	---	---	Geochron
A-06	RESE-1003248	14-May-12	<1.00	---	---	---	---	---	---	---	Isotech
CT Well	RESE-1003102	20-Apr-10	---	101.38 ± 0.49	---	---	---	---	---	---	Beta Analytic
CT Well	RESE-1003102	20-Apr-10	---	---	---	---	3.7 ± 0.5	<0.20	2.7 ± 0.4	1.4	Energy Labs
CT Well	RESE-1003102	20-Apr-10	---	---	0.3494	0.720268 ± 0.000007	---	---	---	---	Geochron
CT Well	RESE-1003102	20-Apr-10	2.75 ± 0.26	---	---	---	---	---	---	---	Isotech
HRES-02	RESE-1000455	17-May-12	---	66.81 ± 0.25	---	---	---	---	---	---	Beta Analytic
HRES-02	RESE-1000455	17-May-12	---	---	0.1001	0.710134 ± 0.000007	---	---	---	---	Geochron
HRES-02	RESE-1000455	17-May-12	<1.00	---	---	---	---	---	---	---	Isotech
HRES-04	4531	03-Nov-06	<1.1	55.3 ± 1	---	---	---	---	---	---	University of Arizona
HRES-04	RESE-1001114	18-Jan-08	---	---	---	---	2.0 ± 0.6	<0.2	0.8 ± 0.4	2.5	Energy Labs
HRES-04	RESE-1001114	18-Jan-08	---	---	0.1923	0.710492 ± 0.000007	---	---	---	---	Geochron
HRES-04	RESE-1001114	18-Jan-08	2.5 ± 0.29	58.4 ± 0.4	---	---	---	---	---	---	University of Arizona
HRES-04	RESE-1003021	03-Sep-08	---	---	---	---	2.0 ± 0.5	<0.2	0.6 ± 0.3	3.3	Energy Labs
HRES-04	RESE-1003021	03-Sep-08	---	---	0.1867	0.710550 ± 0.000011	---	---	---	---	Geochron
HRES-04	RESE-1003021	03-Sep-08	<0.6	58.8 ± 0.8	---	---	---	---	---	---	University of Arizona
HRES-04	RESE-1003031	02-Mar-09	<0.5	57.8 ± 0.3	---	---	---	---	---	---	University of Arizona
HRES-04	RESE-1003040	01-Jun-09	<1.2	---	---	---	---	---	---	---	University of Arizona
HRES-04	RESE-1000458	17-May-12	---	58.70 ± 0.21	---	---	---	---	---	---	Beta Analytic
HRES-04	RESE-1000458	17-May-12	---	---	0.1658	0.710513 ± 0.000009	---	---	---	---	Geochron
HRES-04	RESE-1000458	17-May-12	<1.00	---	---	---	---	---	---	---	Isotech
HRES-05	RESE-1000264	27-Feb-08	---	---	---	---	2.6 ± 0.5	<0.2	0.3 ± 0.2	8.7	Energy Labs
HRES-05	RESE-1000264	27-Feb-08	---	---	0.1979	0.709890 ± 0.000009	---	---	---	---	Geochron
HRES-05	RESE-1000264	27-Feb-08	<0.8	59.6 ± 1.5	---	---	---	---	---	---	University of Arizona
HRES-05	RESE-1003001	28-May-08	---	---	---	---	2.3 ± 0.5	<0.2	0.3 ± 0.2	7.7	Energy Labs
HRES-05	RESE-1003001	28-May-08	---	---	0.2042	0.709882 ± 0.00001	---	---	---	---	Geochron
HRES-05	RESE-1003001	28-May-08	0.6 ± 0.23	58.5 ± 0.7	---	---	---	---	---	---	University of Arizona
HRES-05	RESE-1003012	25-Aug-08	---	---	---	---	2.0 ± 0.5	<0.2	0.6 ± 0.3	3.3	Energy Labs
HRES-05	RESE-1003012	25-Aug-08	---	---	0.2003	0.709908 ± 0.000009	---	---	---	---	Geochron
HRES-05	RESE-1003012	25-Aug-08	<0.6	59.6 ± 1	---	---	---	---	---	---	University of Arizona
HRES-05	RESE-1003025	02-Dec-08	---	---	---	---	2.3 ± 0.6	<0.2	<0.2	---	Energy Labs
HRES-05	RESE-1003025	02-Dec-08	---	---	0.2006	0.709914 ± 0.00001	---	---	---	---	Geochron
HRES-05	RESE-1003025	02-Dec-08	<0.9	59.4 ± 0.3	---	---	---	---	---	---	University of Arizona

TABLE A-5. RADIOISOTOPE DATA
FOR GROUNDWATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	RADIOISOTOPE DATA								ANALYTICAL LABORATORY
			^{3}H (TU)[a]	^{14}C (pmC)[b]	Sr (ppm)[c]	$^{87}Sr/^{86}Sr$[d]	^{234}U (pCi/L)[e]	^{235}U (pCi/L)[f]	^{238}U (pCi/L)[g]	$^{234}U/^{238}U$[h]	
Groundwater 2 - Apache Leap Tuff Aquifer											
HRES-05	RESE-1003034	03-Mar-09	---	60.83 ± 0.3	---	---	---	---	---	---	Beta Analytic
HRES-05	RESE-1003034	03-Mar-09	<0.6	---	---	---	---	---	---	---	University of Arizona
HRES-05	RESE-1003043	03-Jun-09	<0.9	---	---	---	---	---	---	---	University of Arizona
HRES-05	RESE-1003247	10-May-12	---	65.90 ± 0.24	---	---	---	---	---	---	Beta Analytic
HRES-05	RESE-1003247	10-May-12	---	---	0.1682	0.709882 ± 0.000009	---	---	---	---	Geochron
HRES-05	RESE-1003247	10-May-12	<1.00	---	---	---	---	---	---	---	Isotech
HRES-06	RESE-1000301	12-Jun-07	---	---	---	---	1.1 ± 0.6	<0.2	<0.2	---	Energy Labs
HRES-06	RESE-1000301	12-Jun-07	---	---	0.1757	0.710635 ± 0.000009	---	---	---	---	Geochron
HRES-06	RESE-1000301	12-Jun-07	<0.4	81.6 ± 1.4	---	---	---	---	---	---	University of Arizona
HRES-06	RESE-1000265	27-Feb-08	---	---	---	---	0.3 ± 0.2	<0.2	<0.2	---	Energy Labs
HRES-06	RESE-1000265	27-Feb-08	---	---	0.1645	0.710579 ± 0.000009	---	---	---	---	Geochron
HRES-06	RESE-1000265	27-Feb-08	<0.4	81.3 ± 1.2	---	---	---	---	---	---	University of Arizona
HRES-06 DUP	RESE-1000266	27-Feb-08	---	---	---	---	0.5 ± 0.2	<0.2	<0.2	---	Energy Labs
HRES-06 DUP	RESE-1000266	27-Feb-08	---	---	0.1639	0.710558 ± 0.000009	---	---	---	---	Geochron
HRES-06 DUP	RESE-1000266	27-Feb-08	<0.8	82.6 ± 1.6	---	---	---	---	---	---	University of Arizona
HRES-06	RESE-1003003	28-May-08	---	---	---	---	0.4 ± 0.2	<0.2	<0.2	---	Energy Labs
HRES-06	RESE-1003003	28-May-08	---	---	0.1601	0.710525 ± 0.000013	---	---	---	---	Geochron
HRES-06	RESE-1003003	28-May-08	0.9 ± 0.26	81.1 ± 0.9	---	---	---	---	---	---	University of Arizona
HRES-06	RESE-1003013	25-Aug-08	---	---	---	---	0.4 ± 0.2	<0.2	<0.2	---	Energy Labs
HRES-06	RESE-1003013	25-Aug-08	---	---	0.1586	0.710587 ± 0.00001	---	---	---	---	Geochron
HRES-06	RESE-1003013	25-Aug-08	<0.6	84.0 ± 1.1	---	---	---	---	---	---	University of Arizona
HRES-06	RESE-1003026	03-Dec-08	---	---	---	---	<0.2	<0.2	<0.2	---	Energy Labs
HRES-06	RESE-1003026	03-Dec-08	---	---	0.1581	0.710571 ± 0.000011	---	---	---	---	Geochron
HRES-06	RESE-1003026	03-Dec-08	r	83.0 ± 1.2	---	---	---	---	---	---	University of Arizona
HRES-06 DUP	RESE-1003027	03-Dec-08	---	---	---	---	<0.2	<0.2	<0.2	---	Energy Labs
HRES-06 DUP	RESE-1003027	03-Dec-08	---	---	0.1581	0.710574 ± 0.00001	---	---	---	---	Geochron
HRES-06 DUP	RESE-1003027	03-Dec-08	r	82.6 ± 1.7	---	---	---	---	---	---	University of Arizona
HRES-06	RESE-1003035	04-Mar-09	<0.6	84.3 ± 1.3	---	---	---	---	---	---	University of Arizona
HRES-06 SP	RESE-1003035	04-Mar-09	---	79.79 ± 0.4	---	---	---	---	---	---	Beta Analytic
HRES-06 DUP	RESE-1003036	04-Mar-09	<0.6	85.7 ± 1.2	---	---	---	---	---	---	University of Arizona
HRES-06 SPD	RESE-1003036	04-Mar-09	---	81.5 ± 0.41	---	---	---	---	---	---	Beta Analytic
HRES-06	RESE-1003044	03-Jun-09	1.2 ± 0.31	---	---	---	---	---	---	---	University of Arizona
HRES-06 DUP	RESE-1003045	03-Jun-09	0.6 ± 0.28	---	---	---	---	---	---	---	University of Arizona

TABLE A-5. RADIOISOTOPE DATA
FOR GROUNDWATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	RADIOISOTOPE DATA								ANALYTICAL LABORATORY
			^{3}H (TU)[a]	^{14}C (pmC)[b]	Sr (ppm)[c]	$^{87}Sr/^{86}Sr$[d]	^{234}U (pCi/L)[e]	^{235}U (pCi/L)[f]	^{238}U (pCi/L)[g]	$^{234}U/^{238}U$[h]	
Groundwater 2 - Apache Leap Tuff Aquifer											
HRES-06	RESE-1000459	18-May-12	---	81.63 ± 0.3	---	---	---	---	---	---	Beta Analytic
HRES-06	RESE-1000459	18-May-12	---	---	0.1325	0.710576 ± 0.000009	---	---	---	---	Geochron
HRES-06	RESE-1000459	18-May-12	<1.00	---	---	---	---	---	---	---	Isotech
HRES-07	RESE-1000262	26-Feb-08	---	---	---	---	0.8 ± 0.3	<0.2	0.2 ± 0.1	4.0	Energy Labs
HRES-07	RESE-1000262	26-Feb-08	---	---	0.1492	0.710245 ± 0.000009	---	---	---	---	Geochron
HRES-07	RESE-1000262	26-Feb-08	1.0 ± 0.27	68.5 ± 0.7	---	---	---	---	---	---	University of Arizona
HRES-07	RESE-1003009	03-Jun-08	---	---	---	---	1.0 ± 0.3	<0.2	0.4 ± 0.2	2.5	Energy Labs
HRES-07	RESE-1003009	03-Jun-08	---	---	0.1458	0.710247 ± 0.000011	---	---	---	---	Geochron
HRES-07	RESE-1003009	03-Jun-08	2.2 ± 0.27	67.8 ± 0.6	---	---	---	---	---	---	University of Arizona
HRES-07 DUP	RESE-1003010	03-Jun-08	---	---	---	---	1.3 ± 0.4	<0.2	0.3 ± 0.2	4.3	Energy Labs
HRES-07 DUP	RESE-1003010	03-Jun-08	---	---	0.1462	0.710271 ± 0.000009	---	---	---	---	Geochron
HRES-07 DUP	RESE-1003010	03-Jun-08	1.4 ± 0.29	66.3 ± 0.7	---	---	---	---	---	---	University of Arizona
HRES-07	RESE-1003018	02-Sep-08	---	---	---	---	1.0 ± 0.4	<0.2	0.2 ± 0.2	5.0	Energy Labs
HRES-07	RESE-1003018	02-Sep-08	---	---	0.1389	0.710209 ± 0.000011	---	---	---	---	Geochron
HRES-07	RESE-1003018	02-Sep-08	<0.9	67.1 ± 0.6	---	---	---	---	---	---	University of Arizona
HRES-07 LD	RESE-1003018	02-Sep-08	---	---	0.1396	0.710229 ± 0.000009	---	---	---	---	Geochron
HRES-07	RESE-1003022	01-Dec-08	---	---	---	---	1.3 ± 0.4	<0.2	0.3 ± 0.2	4.3	Energy Labs
HRES-07	RESE-1003022	01-Dec-08	---	---	0.1383	0.710237 ± 0.000009	---	---	---	---	Geochron
HRES-07	RESE-1003022	01-Dec-08	<0.7	67.7 ± 1.1	---	---	---	---	---	---	University of Arizona
HRES-07	RESE-1003032	03-Mar-09	<0.6	---	---	---	---	---	---	---	University of Arizona
HRES-07	RESE-1003041	02-Jun-09	<0.9	---	---	---	---	---	---	---	University of Arizona
HRES-07	RESE-1000290	06-Dec-09	---	68.46 ± 0.34	---	---	---	---	---	---	Beta Analytic
HRES-07	RESE-1000290	06-Dec-09	---	---	---	---	0.9 ± 0.3	<0.1	0.2 ± 0.1	4.5	Energy Labs
HRES-07	RESE-1000290	06-Dec-09	---	---	0.1149	0.710058 ± 0.000013	---	---	---	---	Geochron
HRES-07	RESE-1000290	06-Dec-09	<1.00	---	---	---	---	---	---	---	Isotech
HRES-07	RESE-1003245	10-May-12	---	66.73 ± 0.25	---	---	---	---	---	---	Beta Analytic
HRES-07	RESE-1003245	10-May-12	---	---	0.1151	0.710129 ± 0.00001	---	---	---	---	Geochron
HRES-07	RESE-1003245	10-May-12	<1.00	---	---	---	---	---	---	---	Isotech
HRES-08	RESE-1003149	21-Jul-11	---	---	---	---	1.2 ± 1.6	<1.10	1.67 ± 1.2	0.7	ACZ
HRES-08	RESE-1003149	21-Jul-11	---	68.66 ± 0.25	---	---	---	---	---	---	Beta Analytic
HRES-08	RESE-1003149	21-Jul-11	---	---	0.233	0.709809 ± 0.000007	---	---	---	---	Geochron
HRES-08	RESE-1003149	21-Jul-11	<1.00	---	---	---	---	---	---	---	Isotech
HRES-08	RESE-1003246	10-May-12	---	61.69 ± 0.23	---	---	---	---	---	---	Beta Analytic
HRES-08	RESE-1003246	10-May-12	---	---	0.1953	0.709800 ± 0.000009	---	---	---	---	Geochron
HRES-08	RESE-1003246	10-May-12	<1.00	---	---	---	---	---	---	---	Isotech

TABLE A-5. RADIOISOTOPE DATA
FOR GROUNDWATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	RADIOISOTOPE DATA								ANALYTICAL LABORATORY
			^{3}H (TU)[a]	^{14}C (pmC)[b]	Sr (ppm)[c]	$^{87}Sr/^{86}Sr$[d]	^{234}U (pCi/L)[e]	^{235}U (pCi/L)[f]	^{238}U (pCi/L)[g]	$^{234}U/^{238}U$[h]	
Groundwater 2 - Apache Leap Tuff Aquifer											
HRES-09	RESE-1003182	29-Dec-10	---	---	---	---	4.5 ± 2.1	<1.20	3.5 ± 1.5	1.3	ACZ
HRES-09	RESE-1003182	29-Dec-10	---	75.29 ± 0.28	---	---	---	---	---	---	Beta Analytic
HRES-09	RESE-1003182	29-Dec-10	---	---	0.3537	0.710125 ± 0.000009	---	---	---	---	Geochron
HRES-09	RESE-1003143	04-Jul-11	---	---	---	---	1.6 ± 2.4	<1.0	<1.00	---	ACZ
HRES-09	RESE-1003143	04-Jul-11	---	66.56 ± 0.25	---	---	---	---	---	---	Beta Analytic
HRES-09	RESE-1003143	04-Jul-11	---	---	0.1954	0.710082 ± 0.00001	---	---	---	---	Geochron
HRES-10	RESE-1003175	24-Sep-10	---	---	---	---	7.3 ± 2.5	<1.2	5.32 ± 2	1.4	ACZ
HRES-10	RESE-1003175	24-Sep-10	---	104.58 ± 0.38	---	---	---	---	---	---	Beta Analytic
HRES-10	RESE-1003175	24-Sep-10	---	---	0.521	0.732473 ± 0.000007	---	---	---	---	Geochron
HRES-10	RESE-1003175	24-Sep-10	3.24 ± 0.17	---	---	---	---	---	---	---	Isotech
HRES-10	RESE-1003244	01-May-12	---	---	---	---	1.1 ± 1.3	<0.98	<0.98	---	ACZ
HRES-10	RESE-1003244	01-May-12	---	104.84 ± 0.26	---	---	---	---	---	---	Beta Analytic
HRES-10	RESE-1003244	01-May-12	---	---	0.2637	0.732309 ± 0.000009	---	---	---	---	Geochron
HRES-10	RESE-1003244	01-May-12	3.40 ± 0.29	---	---	---	---	---	---	---	Isotech
HRES-10	RESE-1001311	16-Aug-12	---	---	---	---	2.1 ± 2.4	<1.1	1.65 ± 2.1	1.3	ACZ
HRES-10	RESE-1001311	16-Aug-12	---	103.42 ± 0.38	---	---	---	---	---	---	Beta Analytic
HRES-10	RESE-1001311	16-Aug-12	---	---	0.3432	0.733394 ± 0.000007	---	---	---	---	Geochron
HRES-10	RESE-1001311	16-Aug-12	2.20 ± 0.24	---	---	---	---	---	---	---	Isotech
HRES-10	RESE-1001322	14-Nov-12	---	---	---	---	3.7 ± 2.4	<1.2	2.3 ± 2	1.6	ACZ
HRES-10	RESE-1001322	14-Nov-12	---	103.68 ± 0.25	---	---	---	---	---	---	Beta Analytic
HRES-10	RESE-1001322	14-Nov-12	---	---	0.3291	0.733449 ± 0.000006	---	---	---	---	Geochron
HRES-10	RESE-1001322	14-Nov-12	3.15 ± 0.17	---	---	---	---	---	---	---	Isotech
HRES-11	RESE-1003174	23-Sep-10	---	---	---	---	<1.3	<1.30	<1.30	---	ACZ
HRES-11	RESE-1003174	23-Sep-10	---	69.18 ± 0.34	---	---	---	---	---	---	Beta Analytic
HRES-11	RESE-1003174	23-Sep-10	---	---	0.140	0.710463 ± 0.000009	---	---	---	---	Geochron
HRES-11	RESE-1003174	23-Sep-10	<1.00	---	---	---	---	---	---	---	Isotech
HRES-11	RESE-1003243	01-May-12	---	---	---	---	<0.97	<0.97	<0.97	---	ACZ
HRES-11	RESE-1003243	01-May-12	---	67.98 ± 0.25	---	---	---	---	---	---	Beta Analytic
HRES-11	RESE-1003243	01-May-12	---	---	0.1121	0.710295 ± 0.000007	---	---	---	---	Geochron
HRES-11	RESE-1003243	01-May-12	<1.00	---	---	---	---	---	---	---	Isotech
HRES-11	RESE-1001312	16-Aug-12	---	---	---	---	1.4 ± 1.9	<1.1	<1.1	---	ACZ
HRES-11	RESE-1001312	16-Aug-12	---	67.81 ± 0.25	---	---	---	---	---	---	Beta Analytic
HRES-11	RESE-1001312	16-Aug-12	---	---	0.0992	0.710320 ± 0.000011	---	---	---	---	Geochron
HRES-11	RESE-1001312	16-Aug-12	<1.00	---	---	---	---	---	---	---	Isotech

TABLE A-5. RADIOISOTOPE DATA
FOR GROUNDWATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	RADIOISOTOPE DATA								ANALYTICAL LABORATORY
			^{3}H (TU)[a]	^{14}C (pmC)[b]	Sr (ppm)[c]	$^{87}Sr/^{86}Sr$[d]	^{234}U (pCi/L)[e]	^{235}U (pCi/L)[f]	^{238}U (pCi/L)[g]	$^{234}U/^{238}U$[h]	
Groundwater 2 - Apache Leap Tuff Aquifer											
HRES-11	RESE-1001320	14-Nov-12	---	---	---	---	<1	<1	<1	---	ACZ
HRES-11	RESE-1001320	14-Nov-12	---	68.58 ± 0.25	---	---	---	---	---	---	Beta Analytic
HRES-11	RESE-1001320	14-Nov-12	---	---	0.0905	0.710306 ± 0.000006	---	---	---	---	Geochron
HRES-11	RESE-1001320	14-Nov-12	<1.00	---	---	---	---	---	---	---	Isotech
HRES-11 DUP	RESE-1001321	14-Nov-12	---	---	---	---	<1.1	<1.1	<1.1	---	ACZ
HRES-11 DUP	RESE-1001321	14-Nov-12	---	67.81 ± 0.25	---	---	---	---	---	---	Beta Analytic
HRES-11 DUP	RESE-1001321	14-Nov-12	---	---	0.0903	0.710333 ± 0.000007	---	---	---	---	Geochron
HRES-11 DUP	RESE-1001321	14-Nov-12	<1.00	---	---	---	---	---	---	---	Isotech
HRES-12	RESE-1003144	10-Jul-11	---	---	---	---	2.5 ± 2.1	<0.97	2.22 ± 1.6	1.1	ACZ
HRES-12	RESE-1003144	10-Jul-11	---	83.38 ± 0.31	---	---	---	---	---	---	Beta Analytic
HRES-12	RESE-1003144	10-Jul-11	---	---	0.2544	0.710271 ± 0.000009	---	---	---	---	Geochron
HRES-12	RESE-1003144	10-Jul-11	0.84 ± 0.26	---	---	---	---	---	---	---	Isotech
HRES-12	RESE-1003249	15-May-12	---	---	---	---	1.3 ± 1.6	<1.00	<1.00	---	ACZ
HRES-12	RESE-1003249	15-May-12	---	85.59 ± 0.31	---	---	---	---	---	---	Beta Analytic
HRES-12	RESE-1003249	15-May-12	---	---	0.2559	0.710252 ± 0.000009	---	---	---	---	Geochron
HRES-12	RESE-1003249	15-May-12	0.78 ± 0.15	---	---	---	---	---	---	---	Isotech
HRES-12	RESE-1001309	14-Aug-12	---	---	---	---	1.3 ± 1.3	<1	<1	---	ACZ
HRES-12	RESE-1001309	14-Aug-12	---	84.22 ± 0.31	---	---	---	---	---	---	Beta Analytic
HRES-12	RESE-1001309	14-Aug-12	---	---	0.2299	0.710283 ± 0.000009	---	---	---	---	Geochron
HRES-12	RESE-1001309	14-Aug-12	<1.00	---	---	---	---	---	---	---	Isotech
HRES-12	RESE-1001316	07-Nov-12	---	---	---	---	2.5 ± 2.1	<1.1	1.8 ± 1.9	1.4	ACZ
HRES-12	RESE-1001316	07-Nov-12	---	84.95 ± 0.31	---	---	---	---	---	---	Beta Analytic
HRES-12	RESE-1001316	07-Nov-12	---	---	0.2184	0.710247 ± 0.000006	---	---	---	---	Geochron
HRES-12	RESE-1001316	07-Nov-12	1.28 ± 0.17	---	---	---	---	---	---	---	Isotech
HRES-13	RESE-1003130	03-Jun-11	---	---	---	---	3.4 ± 2.3	<1.10	1.38 ± 2	2.5	ACZ
HRES-13	RESE-1003130	03-Jun-11	---	58.70 ± 0.21	---	---	---	---	---	---	Beta Analytic
HRES-13	RESE-1003130	03-Jun-11	---	---	0.2449	0.709723 ± 0.000009	---	---	---	---	Geochron
HRES-13	RESE-1003130	03-Jun-11	<1.00	---	---	---	---	---	---	---	Isotech
HRES-13	RESE-1000456	17-May-12	---	---	---	---	3.4 ± 1.9	<1.20	1.24 ± 1.2	2.7	ACZ
HRES-13	RESE-1000456	17-May-12	---	56.26 ± 0.27	---	---	---	---	---	---	Beta Analytic
HRES-13	RESE-1000456	17-May-12	---	---	0.2338	0.709788 ± 0.000007	---	---	---	---	Geochron
HRES-13	RESE-1000456	17-May-12	<1.00	---	---	---	---	---	---	---	Isotech

TABLE A-5. RADIOISOTOPE DATA
FOR GROUNDWATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	RADIOISOTOPE DATA								ANALYTICAL LABORATORY
			^{3}H (TU)[a]	^{14}C (pmC)[b]	Sr (ppm)[c]	$^{87}Sr/^{86}Sr$[d]	^{234}U (pCi/L)[e]	^{235}U (pCi/L)[f]	^{238}U (pCi/L)[g]	$^{234}U/^{238}U$[h]	
Groundwater 2 - Apache Leap Tuff Aquifer											
HRES-13 DUP	RESE-1000457	17-May-12	---	---	---	---	2.3 ± 1.8	<1.1	<1.10	---	ACZ
HRES-13 DUP	RESE-1000457	17-May-12	---	56.90 ± 0.21	---	---	---	---	---	---	Beta Analytic
HRES-13 DUP	RESE-1000457	17-May-12	---	---	0.2325	0.709786 ± 0.000009	---	---	---	---	Geochron
HRES-13 DUP	RESE-1000457	17-May-12	<1.00	---	---	---	---	---	---	---	Isotech
HRES-13	RESE-1001305	07-Aug-12	---	---	---	---	<1	<1	<1	---	ACZ
HRES-13	RESE-1001305	07-Aug-12	---	57.32 ± 0.21	---	---	---	---	---	---	Beta Analytic
HRES-13	RESE-1001305	07-Aug-12	---	---	0.2212	0.709762 ± 0.000007	---	---	---	---	Geochron
HRES-13	RESE-1001305	07-Aug-12	<1.00	---	---	---	---	---	---	---	Isotech
HRES-13	RESE-1001317	08-Nov-12	---	---	---	---	2.3 ± 1.8	<1.1	2.94 ± 1.6	0.8	ACZ
HRES-13	RESE-1001317	08-Nov-12	---	61.08 ± 0.23	---	---	---	---	---	---	Beta Analytic
HRES-13	RESE-1001317	08-Nov-12	---	---	0.2043	0.709764 ± 0.000007	---	---	---	---	Geochron
HRES-13	RESE-1001317	08-Nov-12	<1.00	---	---	---	---	---	---	---	Isotech
HRES-14	RESE-1003147	15-Jul-11	---	---	---	---	<0.99	<0.99	<0.99	---	ACZ
HRES-14	RESE-1003147	15-Jul-11	---	62.39 ± 0.23	---	---	---	---	---	---	Beta Analytic
HRES-14	RESE-1003147	15-Jul-11	---	---	0.132	0.710645 ± 0.001878	---	---	---	---	Geochron
HRES-14	RESE-1003147	15-Jul-11	0.80 ± 0.26	---	---	---	---	---	---	---	Isotech
HRES-14	RESE-1003240	30-Apr-12	---	---	---	---	1.9 ± 1.3	<1.0	<1.00	---	ACZ
HRES-14	RESE-1003240	30-Apr-12	---	59.88 ± 0.22	---	---	---	---	---	---	Beta Analytic
HRES-14	RESE-1003240	30-Apr-12	---	---	0.1132	0.710657 ± 0.000009	---	---	---	---	Geochron
HRES-14	RESE-1003240	30-Apr-12	<1.00	---	---	---	---	---	---	---	Isotech
HRES-14	RESE-1001306	08-Aug-12	---	---	---	---	2 ± 2.2	<1.3	<1.3	---	ACZ
HRES-14	RESE-1001306	08-Aug-12	---	59.28 ± 0.29	---	---	---	---	---	---	Beta Analytic
HRES-14	RESE-1001306	08-Aug-12	---	---	0.1038	0.710644 ± 0.000009	---	---	---	---	Geochron
HRES-14	RESE-1001306	08-Aug-12	<1.00	---	---	---	---	---	---	---	Isotech
HRES-14	RESE-1001318	09-Nov-12	---	---	---	---	1.6 ± 1.6	<1.1	3.61 ± 1.7	0.4	ACZ
HRES-14	RESE-1001318	09-Nov-12	---	61.69 ± 0.23	---	---	---	---	---	---	Beta Analytic
HRES-14	RESE-1001318	09-Nov-12	---	---	0.0985	0.710651 ± 0.000007	---	---	---	---	Geochron
HRES-14	RESE-1001318	09-Nov-12	<1.00	---	---	---	---	---	---	---	Isotech
HRES-15	RESE-1003241	30-Apr-12	---	---	---	---	<1.00	<1.00	<1.00	---	ACZ
HRES-15	RESE-1003241	30-Apr-12	---	59.58 ± 0.22	---	---	---	---	---	---	Beta Analytic
HRES-15	RESE-1003241	30-Apr-12	---	---	0.1241	0.710528 ± 0.00001	---	---	---	---	Geochron
HRES-15	RESE-1003241	30-Apr-12	<1.00	---	---	---	---	---	---	---	Isotech

TABLE A-5. RADIOISOTOPE DATA
FOR GROUNDWATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	RADIOISOTOPE DATA								ANALYTICAL LABORATORY
			^{3}H (TU)[a]	^{14}C (pmC)[b]	Sr (ppm)[c]	$^{87}Sr/^{86}Sr$[d]	^{234}U (pCi/L)[e]	^{235}U (pCi/L)[f]	^{238}U (pCi/L)[g]	$^{234}U/^{238}U$[h]	
Groundwater 2 - Apache Leap Tuff Aquifer											
HRES-15 DUP	RESE-1003242	30-Apr-12	---	---	---	---	1.1 ± 1.7	<1.00	<1.00	---	ACZ
HRES-15 DUP	RESE-1003242	30-Apr-12	---	57.97 ± 0.21	---	---	---	---	---	---	Beta Analytic
HRES-15 DUP	RESE-1003242	30-Apr-12	---	---	0.1255	0.710555 ± 0.000009	---	---	---	---	Geochron
HRES-15 DUP	RESE-1003242	30-Apr-12	<1.00	---	---	---	---	---	---	---	Isotech
HRES-15	RESE-1001308	09-Aug-12	---	---	---	---	1.1 ± 1.2	<0.94	<0.94	---	ACZ
HRES-15	RESE-1001308	09-Aug-12	---	60.03 ± 0.22	---	---	---	---	---	---	Beta Analytic
HRES-15	RESE-1001308	09-Aug-12	---	---	0.1092	0.710514 ± 0.000007	---	---	---	---	Geochron
HRES-15	RESE-1001308	09-Aug-12	<1.00	---	---	---	---	---	---	---	Isotech
HRES-17	RESE-1003250	16-May-12	---	---	---	---	<1.10	<1.10	<1.10	---	ACZ
HRES-17	RESE-1003250	16-May-12	---	67.65 ± 0.25	---	---	---	---	---	---	Beta Analytic
HRES-17	RESE-1003250	16-May-12	---	---	0.1429	0.710834 ± 0.000009	---	---	---	---	Geochron
HRES-17	RESE-1003250	16-May-12	<1.00	---	---	---	---	---	---	---	Isotech
HRES-17	RESE-1001307	08-Aug-12	---	---	---	---	<1.1	<1.1	<1.1	---	ACZ
HRES-17	RESE-1001307	08-Aug-12	---	67.31 ± 0.25	---	---	---	---	---	---	Beta Analytic
HRES-17	RESE-1001307	08-Aug-12	---	---	0.1325	0.710847 ± 0.000009	---	---	---	---	Geochron
HRES-17	RESE-1001307	08-Aug-12	<1.00	---	---	---	---	---	---	---	Isotech
HRES-17	RESE-1001319	09-Nov-12	---	---	---	---	<1.1	<1.1	<1.1	---	ACZ
HRES-17	RESE-1001319	09-Nov-12	---	67.65 ± 0.25	---	---	---	---	---	---	Beta Analytic
HRES-17	RESE-1001319	09-Nov-12	---	---	0.1216	0.710867 ± 0.000009	---	---	---	---	Geochron
HRES-17	RESE-1001319	09-Nov-12	<1.00	---	---	---	---	---	---	---	Isotech
JI Ranch House Well	RESE-1000303	21-Jun-07	---	---	---	---	<0.2	<0.2	<0.2	---	Energy Labs
JI Ranch House Well	RESE-1000303	21-Jun-07	---	---	0.1299	0.710837 ± 0.000011	---	---	---	---	Geochron
JI Ranch House Well	RESE-1000303	21-Jun-07	<1.0	81.1 ± 1.6	---	---	---	---	---	---	University of Arizona
MJ-11	RESE-1000257	29-Sep-07	---	---	---	---	1.2 ± 0.5	<0.2	<0.2	---	Energy Labs
MJ-11	RESE-1000257	29-Sep-07	---	---	0.1222	0.710397 ± 0.000009	---	---	---	---	Geochron
MJ-11	RESE-1000257	29-Sep-07	<0.3	67.1 ± 1.2	---	---	---	---	---	---	University of Arizona
MJ-11	RESE-1000261	20-Feb-08	---	---	---	---	0.6 ± 0.3	<0.2	<0.2	---	Energy Labs
MJ-11	RESE-1000261	20-Feb-08	---	---	0.1218	0.710404 ± 0.000009	---	---	---	---	Geochron
MJ-11	RESE-1000261	20-Feb-08	0.6 ± 0.23	65.9 ± 1.1	---	---	---	---	---	---	University of Arizona
MJ-11	RESE-1003007	02-Jun-08	---	---	---	---	0.6 ± 0.3	<0.2	0.2 ± 0.1	3.0	Energy Labs
MJ-11	RESE-1003007	02-Jun-08	---	---	0.1212	0.710392 ± 0.00001	---	---	---	---	Geochron
MJ-11	RESE-1003007	02-Jun-08	0.8 ± 0.24	66.7 ± 0.8	---	---	---	---	---	---	University of Arizona
MJ-11 LD	RESE-1003007	02-Jun-08	---	---	0.1201	0.710403 ± 0.000009	---	---	---	---	Geochron

TABLE A-5. RADIOISOTOPE DATA
FOR GROUNDWATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	RADIOISOTOPE DATA								ANALYTICAL LABORATORY
			^{3}H (TU)[a]	^{14}C (pmC)[b]	Sr (ppm)[c]	$^{87}Sr/^{86}Sr$[d]	^{234}U (pCi/L)[e]	^{235}U (pCi/L)[f]	^{238}U (pCi/L)[g]	$^{234}U/^{238}U$[h]	
Groundwater 2 - Apache Leap Tuff Aquifer											
MJ-11	RESE-1003015	26-Aug-08	---	---	---	---	0.6 ± 0.4	<0.2	<0.2	---	Energy Labs
MJ-11	RESE-1003015	26-Aug-08	---	---	0.1208	0.710415 ± 0.000011	---	---	---	---	Geochron
MJ-11	RESE-1003015	26-Aug-08	<0.6	66.4 ± 1.4	---	---	---	---	---	---	University of Arizona
MJ-11	RESE-1000454	16-May-12	---	67.73 ± 0.25	---	---	---	---	---	---	Beta Analytic
MJ-11	RESE-1000454	16-May-12	---	---	0.1048	0.710403 ± 0.000007	---	---	---	---	Geochron
MJ-11	RESE-1000454	16-May-12	<1.00	---	---	---	---	---	---	---	Isotech
Groundwater 3 - Deep Groundwater System											
DHRES-01	RESE-112808	28-Nov-08	---	---	---	---	<0.2	<0.2	<0.2	---	Energy Labs
DHRES-01	RESE-112808	28-Nov-08	---	---	0.6118	0.716824 ± 0.000009	---	---	---	---	Geochron
DHRES-01	RESE-112808	28-Nov-08	r	4.9 ± 0.2	---	---	---	---	---	---	University of Arizona
DHRES-02	RESE-1003150	20-Jul-11	---	---	---	---	<0.98	<0.98	<0.98	---	ACZ
DHRES-02	RESE-1003150	20-Jul-11	---	39.36 ± 0.19	---	---	---	---	---	---	Beta Analytic
DHRES-02	RESE-1003150	20-Jul-11	---	---	2.081	0.720566 ± 0.000012	---	---	---	---	Geochron
DHRES-02	RESE-1003150	20-Jul-11	<1.00	---	---	---	---	---	---	---	Isotech
DHRES-02 DUP	RESE-1003201	20-Jul-11	---	---	---	---	<1.0	<1.00	1.16 ± 0.84	---	ACZ
DHRES-02 DUP	RESE-1003201	20-Jul-11	---	41.11 ± 0.2	---	---	---	---	---	---	Beta Analytic
DHRES-02 DUP	RESE-1003201	20-Jul-11	---	---	2.085	0.720514 ± 0.000007	---	---	---	---	Geochron
DHRES-02 DUP	RESE-1003201	20-Jul-11	<1.00	---	---	---	---	---	---	---	Isotech
DHRES-02	RESE-1003218	22-Oct-11	---	---	---	---	<0.99	<0.99	<0.99	---	ACZ
DHRES-02	RESE-1003218	22-Oct-11	---	40.81 ± 0.2	---	---	---	---	---	---	Beta Analytic
DHRES-02	RESE-1003218	22-Oct-11	---	---	2.1069	0.720460 ± 0.00001	---	---	---	---	Geochron
DHRES-02	RESE-1003218	22-Oct-11	<1.00	---	---	---	---	---	---	---	Isotech
DHRES-02	RESE-1003222	25-Oct-11	---	---	---	---	<0.97	<0.97	<0.97	---	ACZ
DHRES-02	RESE-1003222	25-Oct-11	---	17.61 ± 0.13	---	---	---	---	---	---	Beta Analytic
DHRES-02	RESE-1003222	25-Oct-11	---	---	2.0852	0.720490 ± 0.00001	---	---	---	---	Geochron
DHRES-02	RESE-1003222	25-Oct-11	<1.00	---	---	---	---	---	---	---	Isotech
DHRES-02	RESE-1003227	27-Oct-11	---	---	---	---	9.7 ± 4.4	<2.80	<2.80	---	ACZ
DHRES-02	RESE-1003227	27-Oct-11	---	40.15 ± 0.24	---	---	---	---	---	---	Beta Analytic
DHRES-02	RESE-1003227	27-Oct-11	---	---	1.8149	0.720476 ± 0.00001	---	---	---	---	Geochron
DHRES-02	RESE-1003227	27-Oct-11	<1.00	---	---	---	---	---	---	---	Isotech
DHRES-06 DUP	RESE-1003184	09-Jan-11	---	---	---	---	3.3 ± 1.8	<1.00	2.85 ± 1.6	1.2	ACZ
DHRES-06 DUP	RESE-1003184	09-Jan-11	---	16.18 ± 0.14	---	---	---	---	---	---	Beta Analytic
DHRES-06 DUP	RESE-1003184	09-Jan-11	---	---	0.6181	0.710898 ± 0.000007	---	---	---	---	Geochron
DHRES-06 DUP	RESE-1003184	09-Jan-11	<1.00	---	---	---	---	---	---	---	Isotech

TABLE A-5. RADIOISOTOPE DATA
FOR GROUNDWATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	RADIOISOTOPE DATA								ANALYTICAL LABORATORY
			^{3}H (TU)[a]	^{14}C (pmC)[b]	Sr (ppm)[c]	$^{87}Sr/^{86}Sr$[d]	^{234}U (pCi/L)[e]	^{235}U (pCi/L)[f]	^{238}U (pCi/L)[g]	$^{234}U/^{238}U$[h]	
Groundwater 3 - Deep Groundwater System											
DHRES-06	RESE-1003186	09-Jan-11	---	---	---	---	3.5 ± 1.3	<0.73	1.26 ± 0.88	2.8	ACZ
DHRES-06	RESE-1003186	09-Jan-11	---	17.33 ± 0.13	---	---	---	---	---	---	Beta Analytic
DHRES-06	RESE-1003186	09-Jan-11	---	---	0.4513	0.710908 ± 0.000009	---	---	---	---	Geochron
DHRES-06	RESE-1003186	09-Jan-11	<1.00	---	---	---	---	---	---	---	Isotech
DHRES-09	RESE-1003206	02-Sep-11	---	---	---	---	46 ± 4.9	<1.00	3.68 ± 1.6	13	ACZ
DHRES-09	RESE-1003206	02-Sep-11	---	81.74 ± 0.3	---	---	---	---	---	---	Beta Analytic
DHRES-09	RESE-1003206	02-Sep-11	---	---	0.550	0.712401 ± 0.000011	---	---	---	---	Geochron
DHRES-09	RESE-1003206	02-Sep-11	1.50 ± 0.3	---	---	---	---	---	---	---	Isotech
DHRES-09	RESE-1001313	20-Aug-12	---	---	---	---	40 ± 4.9	<0.99	2.91 ± 2	14	ACZ
DHRES-09	RESE-1001313	20-Aug-12	---	82.45 ± 0.3	---	---	---	---	---	---	Beta Analytic
DHRES-09	RESE-1001313	20-Aug-12	---	---	0.4912	0.712414 ± 0.000009	---	---	---	---	Geochron
DHRES-09	RESE-1001313	20-Aug-12	1.49 ± 0.18	---	---	---	---	---	---	---	Isotech
DHRES-11	RESE-1003131	29-Jun-11	---	---	---	---	<1.10	<1.10	<1.10	---	ACZ
DHRES-11	RESE-1003131	29-Jun-11	---	7.48 ± 0.07	---	---	---	---	---	---	Beta Analytic
DHRES-11	RESE-1003131	29-Jun-11	---	---	0.2729	0.712478 ± 0.000007	---	---	---	---	Geochron
DHRES-11	RESE-1003131	29-Jun-11	<1.00	---	---	---	---	---	---	---	Isotech
DHRES-11	RESE-1001310	15-Aug-12	---	---	---	---	<1.1	<1.1	<1.1	---	ACZ
DHRES-11	RESE-1001310	15-Aug-12	---	10.58 ± 0.09	---	---	---	---	---	---	Beta Analytic
DHRES-11	RESE-1001310	15-Aug-12	---	---	0.1954	0.712507 ± 0.000009	---	---	---	---	Geochron
DHRES-11	RESE-1001310	15-Aug-12	<1.00	---	---	---	---	---	---	---	Isotech
DHRES-13	RESE-1003138	28-Jun-11	---	---	---	---	<0.98	<0.98	<0.98	---	ACZ
DHRES-13	RESE-1003138	28-Jun-11	---	30.53 ± 0.15	---	---	---	---	---	---	Beta Analytic
DHRES-13	RESE-1003138	28-Jun-11	---	---	0.2106	0.710538 ± 0.000007	---	---	---	---	Geochron
DHRES-13	RESE-1003138	28-Jun-11	<1.00	---	---	---	---	---	---	---	Isotech
DHRES-13	RESE-1001314	22-Aug-12	---	---	---	---	<1	<1	<1	---	ACZ
DHRES-13	RESE-1001314	22-Aug-12	---	30.72 ± 0.15	---	---	---	---	---	---	Beta Analytic
DHRES-13	RESE-1001314	22-Aug-12	---	---	0.1564	0.710674 ± 0.000007	---	---	---	---	Geochron
DHRES-13	RESE-1001314	22-Aug-12	<1.00	---	---	---	---	---	---	---	Isotech
DHRES-13 DUP	RESE-1001315	22-Aug-12	---	---	---	---	2.3 ± 1.6	<0.99	<0.99	---	ACZ
DHRES-13 DUP	RESE-1001315	22-Aug-12	---	30.46 ± 0.15	---	---	---	---	---	---	Beta Analytic
DHRES-13 DUP	RESE-1001315	22-Aug-12	---	---	0.1564	0.710671 ± 0.000007	---	---	---	---	Geochron
DHRES-13 DUP	RESE-1001315	22-Aug-12	<1.00	---	---	---	---	---	---	---	Isotech

TABLE A-5. RADIOISOTOPE DATA
FOR GROUNDWATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	RADIOISOTOPE DATA								ANALYTICAL LABORATORY
			^{3}H (TU)[a]	^{14}C (pmC)[b]	Sr (ppm)[c]	$^{87}Sr/^{86}Sr$[d]	^{234}U (pCi/L)[e]	^{235}U (pCi/L)[f]	^{238}U (pCi/L)[g]	$^{234}U/^{238}U$[h]	
Groundwater 3 - Deep Groundwater System											
DHRES-15	RESE-1001149	16-Jul-14	---	---	---	---	5.7 ± 4.8	<5	6.29 ± 4.7	0.9	ACZ
DHRES-15	RESE-1001149	16-Jul-14	---	16.4 ± 0.1	---	---	---	---	---	---	Beta Analytic
DHRES-15	RESE-1001149	16-Jul-14	---	---	0.256	0.711148 ± 0.000009	---	---	---	---	Geochron
DHRES-15	RESE-1001149	16-Jul-14	<1.00	---	---	---	---	---	---	---	Isotech
DHRES-15	RESE-1001338	29-Dec-14	---	---	---	---	<0.94	<0.94	<0.94	---	ACZ
DHRES-15	RESE-1001338	29-Dec-14	---	3.2 ± 0.1	---	---	---	---	---	---	Beta Analytic
DHRES-15	RESE-1001338	29-Dec-14	---	---	5.67	0.708933 ± 0.00001	---	---	---	---	Geochron
DHRES-15	RESE-1001338	29-Dec-14	<1.00	---	---	---	---	---	---	---	Isotech
DHRES-15	RESE-1000474	29-Jan-15	---	---	---	---	1.9 ± 1.7	<0.98	3.35 ± 1.9	0.60	ACZ
DHRES-15	RESE-1000474	29-Jan-15	---	1.3 ± 0.1	---	---	---	---	---	---	Beta Analytic
DHRES-15	RESE-1000474	29-Jan-15	---	---	41.83	0.708520 ± 0.000011	---	---	---	---	Geochron
DHRES-15	RESE-1000474	29-Jan-15	<1.00	---	---	---	---	---	---	---	Isotech
DHRES-15	RESE-1001340	18-Feb-15	---	---	---	---	3.3 ± 1.9	<1.1	<1.1	---	ACZ
DHRES-15	RESE-1001340	18-Feb-15	---	0.6 ± 0.1	---	---	---	---	---	---	Beta Analytic
DHRES-15	RESE-1001340	18-Feb-15	---	---	36.83	0.708210 ± 0.000011	---	---	---	---	Geochron
DHRES-15	RESE-1001340	18-Feb-15	<1.00	---	---	---	---	---	---	---	Isotech

a ^{3}H = Tritium; tritium unit (1 TU = 1 tritium atom per 10^{18} atoms of hydrogen)
b ^{14}C = carbon-14; pmC = percent modern carbon
c Sr = strontium; ppm = parts per million
d Mass of strontium-87 isotope divided by mass of strontium-86 isotope
e Uranium-234 isotope; pCi/L = activity in picoCuries per liter
f Uranium-235 isotope; pCi/L = activity in picoCuries per liter
g Uranium-238 isotope; pCi/L = activity in picoCuries per liter
h Activity of uranium-234 isotope divided by activity of uranium-238 isotope

--- = Not available, not applicable
-- = Not calculated due to non-detect

Explanation of Codes

Absent = Analyte not present
ge = Greater than or equal to reported value
i = Insufficient sample
j = Estimated value
j+ = Estimated value, high bias
j- = Estimated value, low bias
Lost = Sample lost in processing
n = Not measured
na = Not available
ND = Not Detected
np = Analyte not applicable

Present = Analyte was detected
q = Uncertain value
r = Unusable data
< = Less than reported detection limit
> = Greater than reported value
d = Diluted. Diluted samples are indicated only when value is estimated.
DUP = Field Duplicate
LD = Laboratory duplicates
SP = Split samples
SPD = Split-Duplicates

MONTGOMERY & ASSOCIATES

Appendix B

HYDROCHEMISTRY DATA TABLES – SURFACE WATER

TABLE B-1. COMMON CONSTITUENTS AND ROUTINE PARAMETERS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	COMMON CONSTITUENTS[a] (mg/L)[b]													ROUTINE PARAMETERS					ANALYTICAL LABORATORY
																FIELD			LABORATORY		
			Ca	Mg	Na	K	Cl	CO_3	HCO_3	SO_4	SiO_2	Br	F	$NO_3 + NO_2$ (as N)	TDS	TEMP (°C)[c]	pH	SC (µS/cm)[d]	pH	SC (µS/cm)	
Surface Water 1 - Queen Creek																					
Blue Spring	RESE-1001087	26-May-04	---	---	---	---	---	---	---	---	---	---	---	---	---	25.8	7.4	558	---	---	
Blue Spring	RESE-1001087	26-May-04	---	---	---	---	---	---	---	---	---	---	---	<0.20	---	---	---	---	---	---	Del Mar
Blue Spring	RESE-1001087	26-May-04	59.2	13.5	32.5	1.7	12.2	ND	365	6.10	72.9	0.11	0.40	---	370	---	---	---	---	---	SVL
Blue Spring	RESE-1001093	03-Aug-04	---	---	---	---	---	---	---	---	---	---	---	---	---	22.9	7.4	809	---	---	
Blue Spring	RESE-1001093	03-Aug-04	---	---	---	---	---	---	---	---	---	---	---	<0.20	---	---	---	---	---	---	Del Mar
Blue Spring	RESE-1001093	03-Aug-04	89.4	23.6	43.4	3.9	23.8	ND	420	123	69.2	0.19	0.27	---	*594*	---	---	---	---	---	SVL
Blue Spring	RESE-1001185	09-Feb-05	---	---	---	---	---	---	---	---	---	---	---	---	---	10.3	7.7	519	---	---	
Blue Spring	RESE-1001185	09-Feb-05	---	---	---	---	---	---	---	---	---	---	---	<0.20	---	---	---	---	---	---	Del Mar
Blue Spring	RESE-1001185	09-Feb-05	63.4	15.3	24.8	1.48	16.7	ND	259	41.2	46.7	0.174	0.300	---	347	---	---	---	---	---	SVL
Blue Spring	RESE-1001200	03-May-05	---	---	---	---	---	---	---	---	---	---	---	---	---	17.9	7.6	746	---	---	
Blue Spring	RESE-1001200	03-May-05	---	---	---	---	---	---	---	---	---	---	---	<0.20	---	---	---	---	---	---	Del Mar
Blue Spring	RESE-1001200	03-May-05	103	27.2	44.5	1.80	51.4	ND	343	107	57.8	0.38	0.301	---	*564*	---	---	---	---	---	SVL
Blue Spring	RESE-1001219	03-Aug-05	---	---	---	---	---	---	---	---	---	---	---	---	---	25.6	7.1	443.6	---	---	
Blue Spring	RESE-1001219	03-Aug-05	---	---	---	---	---	---	---	---	---	---	---	<0.20	---	---	---	---	---	---	Del Mar
Blue Spring	RESE-1001219	03-Aug-05	57.1	9.68	23.6	1.75	10.3	ND	254	20.1	64.6	0.124	0.276	---	320	---	---	---	---	---	SVL
Blue Spring	RESE-1002009	19-Aug-08	---	---	---	---	---	---	---	---	---	---	---	---	---	23.6	7.54	367	---	---	
Blue Spring	RESE-1002009	19-Aug-08	45.7	9.4	21.9	1.75	9.58	---	---	12.0	63.2	---	---	---	---	---	---	---	---	---	SVL
Blue Spring	RESE-1002009	19-Aug-08	50	9.93	23	1.95	9.62	ND	238	12.0	---	0.161	0.185	---	280 j	---	---	---	---	---	SVL
Blue Spring	RESE-1002009	19-Aug-08	---	---	---	---	---	---	---	---	---	---	---	0.70	---	---	---	---	---	---	TestAmerica
Blue Spring DUP	RESE-1002010	19-Aug-08	45.7	9.34	21.9	1.74	9.58	---	---	12.0	62.9	---	---	---	---	---	---	---	---	---	SVL
Blue Spring DUP	RESE-1002010	19-Aug-08	50.1	10	23	1.96	9.60	ND	237	12.1	---	0.160	0.186	---	280	---	---	---	---	---	SVL
Blue Spring DUP	RESE-1002010	19-Aug-08	---	---	---	---	---	---	---	---	---	---	---	0.70	---	---	---	---	---	---	TestAmerica
Blue Spring	RESE-1002043	13-Nov-08	---	---	---	---	---	---	---	---	---	---	---	---	---	16.1	7.25	591	---	---	
Blue Spring	RESE-1002043	13-Nov-08	---	---	---	---	---	---	---	---	67.7	---	---	---	---	---	---	---	---	---	SVL
Blue Spring	RESE-1002043	13-Nov-08	---	---	---	---	11.2	ND	383	2.66	---	<0.100	0.479	---	380	---	---	---	---	---	SVL
Blue Spring	RESE-1002043	13-Nov-08	---	---	---	---	---	---	---	---	---	---	---	<0.30	---	---	---	---	---	---	TestAmerica
Blue Spring	RESE-1002043	13-Nov-08	70.7	18.0	32.3	3.25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Blue Spring	RESE-1002052	12-Feb-09	---	---	---	---	---	---	---	---	---	---	---	---	---	14.0	7.91	343	---	---	
Blue Spring	RESE-1002052	12-Feb-09	---	---	---	---	---	---	---	---	38.8	---	---	---	---	---	---	---	---	---	SVL
Blue Spring	RESE-1002052	12-Feb-09	---	---	---	---	8.95	ND	218	24.1	---	0.126	0.198	---	242	---	---	---	---	---	SVL
Blue Spring	RESE-1002052	12-Feb-09	43.5	8.83	17.0	1.55	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Blue Spring	RESE-1002088	13-May-09	---	---	---	---	---	---	---	---	---	---	---	---	---	24.4	7.76	404	---	---	
Blue Spring	RESE-1002088	13-May-09	---	---	---	---	---	---	---	---	63.2	---	---	---	---	---	---	---	---	---	SVL
Blue Spring	RESE-1002088	13-May-09	---	---	---	---	11.4	ND	244	13.4	---	<0.100	0.282	---	308 j	---	---	---	---	---	SVL
Blue Spring	RESE-1002088	13-May-09	53.5	10.8	23.9	2.02	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Blue Spring	RESE-1002118	12-Feb-10	---	---	---	---	---	---	---	---	---	---	---	---	---	14	7.95	517	---	---	
Blue Spring	RESE-1002118	12-Feb-10	---	---	---	---	---	---	---	---	46.8	---	---	---	---	---	---	---	---	---	SVL
Blue Spring	RESE-1002118	12-Feb-10	---	---	---	---	20.3	ND	250	52.5	---	<0.100	0.164	---	338	---	---	---	---	---	SVL
Blue Spring	RESE-1002118	12-Feb-10	64.8	15.1	28.0	1.96	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL

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TABLE B-1. COMMON CONSTITUENTS AND ROUTINE PARAMETERS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	COMMON CONSTITUENTS[a] (mg/L)[b]													ROUTINE PARAMETERS					ANALYTICAL LABORATORY
																FIELD			LABORATORY		
			Ca	Mg	Na	K	Cl	CO_3	HCO_3	SO_4	SiO_2	Br	F	$NO_3 + NO_2$ (as N)	TDS	TEMP (°C)[c]	pH	SC (µS/cm)[d]	pH	SC (µS/cm)	
Surface Water 1 - Queen Creek																					
Blue Spring	RESE-1003165	17-Jul-10	---	---	---	---	---	---	---	---	---	---	---	---	---	25.3	7.96	380	---	---	
Blue Spring	RESE-1003165	17-Jul-10	45	9.4	22	<2.0	---	---	---	---	69	---	---	---	---	---	---	---	---	---	TestAmerica
Blue Spring	RESE-1003165	17-Jul-10	46	9.6	22	<2.0	8.6	ND	207	11	70	<0.50	0.55	0.43	270	---	---	---	8.00	380	TestAmerica
Blue Spring	RESE-1002153	08-Nov-10	---	---	---	---	---	---	---	---	---	---	---	---	---	19.6	7.46	345	---	---	
Blue Spring	RESE-1002153	08-Nov-10	---	---	---	---	---	---	---	---	63.3	---	---	---	---	---	---	---	---	---	SVL
Blue Spring	RESE-1002153	08-Nov-10	---	---	---	---	10.2	ND	244	11.3	---	0.143	0.288	---	276	---	---	---	---	---	SVL
Blue Spring	RESE-1002153	08-Nov-10	54.5	11.1	23.5	2.53	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Blue Spring	RESE-1002237	07-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	20.23	7.21	350	---	---	
Blue Spring	RESE-1002237	07-May-12	---	---	---	---	---	---	---	---	70.7	---	---	---	---	---	---	---	---	---	SVL
Blue Spring	RESE-1002237	07-May-12	---	---	---	---	9.5 j-	ND	242	10.8 j-	---	<0.10	0.30 j-	---	268 j-	---	---	---	---	---	SVL
Blue Spring	RESE-1002237	07-May-12	49.3	9.96	23.3	1.34	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Blue Spring	---	12-Jun-13	---	---	---	---	---	---	---	---	---	---	---	---	---	23.1	7.44	344	---	---	
Bored Spring	RESE-1001088	26-May-04	---	---	---	---	---	---	---	---	---	---	---	---	---	26.7	*10.1*	446	---	---	
Bored Spring	RESE-1001088	26-May-04	---	---	---	---	---	---	---	---	---	---	---	<0.20	---	---	---	---	---	---	Del Mar
Bored Spring	RESE-1001088	26-May-04	15.8	23.4	53.0	11.2	20.8	94	92.7	22.7	10.3	0.32	0.55	---	332	---	---	---	---	---	SVL
Bored Spring DUP	RESE-1001164	03-Nov-04	---	---	---	---	---	---	---	---	---	---	---	<0.20	---	---	---	---	---	---	Del Mar
Bored Spring DUP	RESE-1001164	03-Nov-04	42.3	33.7	25.8	5.4	9.77	ND	366	35.0	41.4	0.14	0.30	---	334	---	---	---	---	---	SVL
Bored Spring	RESE-1001163	03-Nov-04	---	---	---	---	---	---	---	---	---	---	---	---	---	11.7	7.9	540	---	---	
Bored Spring	RESE-1001163	03-Nov-04	---	---	---	---	---	---	---	---	---	---	---	<0.20	---	---	---	---	---	---	Del Mar
Bored Spring	RESE-1001163	03-Nov-04	42.5	33.8	25.9	5.4	9.95	ND	372	34.2	41.0	0.15	0.29	---	354	---	---	---	---	---	SVL
Bored Spring	RESE-1001188	09-Feb-05	---	---	---	---	---	---	---	---	---	---	---	---	---	18.5	7.7	598	---	---	
Bored Spring	RESE-1001188	09-Feb-05	---	---	---	---	---	---	---	---	---	---	---	<0.20	---	---	---	---	---	---	Del Mar
Bored Spring	RESE-1001188	09-Feb-05	43.6	35.1	28.3	3.89	9.37	ND	328	44.7	37.2	0.163	0.405	---	353	---	---	---	---	---	SVL
Bored Spring	RESE-1001204	03-May-05	---	---	---	---	---	---	---	---	---	---	---	---	---	23.4	7.6	523	---	---	
Bored Spring	RESE-1001204	03-May-05	---	---	---	---	---	---	---	---	---	---	---	0.25	---	---	---	---	---	---	Del Mar
Bored Spring	RESE-1001204	03-May-05	43.6	34.5	22.7	4.10	11.6	ND	300	44.1	36.4	0.175	0.318	---	330	---	---	---	---	---	SVL
Bored Spring	RESE-1001221	03-Aug-05	---	---	---	---	---	---	---	---	---	---	---	---	---	24.6	7.1	609	---	---	
Bored Spring	RESE-1001221	03-Aug-05	---	---	---	---	---	---	---	---	---	---	---	0.21	---	---	---	---	---	---	Del Mar
Bored Spring	RESE-1001221	03-Aug-05	52.0	36.9	25.5	5.54	16.2	ND	323	51.4	39.2	0.247	0.304	---	383	---	---	---	---	---	SVL
Bored Spring	RESE-1002044	13-Nov-08	---	---	---	---	---	---	---	---	---	---	---	---	---	18.0	7.88	642	---	---	
Bored Spring	RESE-1002044	13-Nov-08	---	---	---	---	---	---	---	---	39.6	---	---	---	---	---	---	---	---	---	SVL
Bored Spring	RESE-1002044	13-Nov-08	---	---	---	---	25.3	ND	307	57.3	---	0.233	0.386	---	410	---	---	---	---	---	SVL
Bored Spring	RESE-1002044	13-Nov-08	---	---	---	---	---	---	---	---	---	---	---	<0.30	---	---	---	---	---	---	TestAmerica
Bored Spring	RESE-1002044	13-Nov-08	50.8	40.1	26.2	7.55	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Bored Spring	RESE-1002051	12-Feb-09	---	---	---	---	---	---	---	---	---	---	---	---	---	11.5	7.5	592	---	---	
Bored Spring	RESE-1002051	12-Feb-09	---	---	---	---	---	---	---	---	35.7	---	---	---	---	---	---	---	---	---	SVL
Bored Spring	RESE-1002051	12-Feb-09	---	---	---	---	24.8	ND	346	58.3	---	0.327	0.262	---	385	---	---	---	---	---	SVL
Bored Spring	RESE-1002051	12-Feb-09	46.7	38.2	23.6	4.76	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL

MONTGOMERY & ASSOCIATES

TABLE B-1. COMMON CONSTITUENTS AND ROUTINE PARAMETERS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	COMMON CONSTITUENTS[a] (mg/L)[b]													ROUTINE PARAMETERS					ANALYTICAL LABORATORY
																FIELD			LABORATORY		
			Ca	Mg	Na	K	Cl	CO_3	HCO_3	SO_4	SiO_2	Br	F	$NO_3 + NO_2$ (as N)	TDS	TEMP (°C)[c]	pH	SC (µS/cm)[d]	pH	SC (µS/cm)	
Surface Water 1 - Queen Creek																					
Bored Spring	RESE-1002089	13-May-09	---	---	---	---	---	---	---	---	---	---	---	---	---	31.6	*9.62*	465	---	---	
Bored Spring	RESE-1002089	13-May-09	---	---	---	---	---	---	---	---	35	---	---	---	---	---	---	---	---	---	SVL
Bored Spring	RESE-1002089	13-May-09	---	---	---	---	31.1	42.5	103.7	62.3	---	0.309	0.337	---	312	---	---	---	---	---	SVL
Bored Spring	RESE-1002089	13-May-09	23.7	36.6	29.1	6.14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Bored Spring	RESE-1002119	12-Feb-10	---	---	---	---	---	---	---	---	---	---	---	---	---	15.6	8.18	609	---	---	
Bored Spring	RESE-1002119	12-Feb-10	---	---	---	---	---	---	---	---	36.7	---	---	---	---	---	---	---	---	---	SVL
Bored Spring	RESE-1002119	12-Feb-10	---	---	---	---	27.3	ND	276	69.5	---	0.187	<0.100	---	353	---	---	---	---	---	SVL
Bored Spring	RESE-1002119	12-Feb-10	45.0	38.9	25.0	4.53	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Bored Spring	RESE-1002157	09-Nov-10	---	---	---	---	---	---	---	---	---	---	---	---	---	16.0	7.44	580	---	---	
Bored Spring	RESE-1002157	09-Nov-10	---	---	---	---	---	---	---	---	32.9	---	---	---	---	---	---	---	---	---	SVL
Bored Spring	RESE-1002157	09-Nov-10	---	---	---	---	37.9	ND	407	38.7	---	0.378	0.284	---	485	---	---	---	---	---	SVL
Bored Spring	RESE-1002157	09-Nov-10	83.1	37.1	23.6	9.76	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Bored Spring	RESE-1002238	07-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	23.22	*8.55*	573	---	---	
Bored Spring	RESE-1002238	07-May-12	---	---	---	---	---	---	---	---	38.1	---	---	---	---	---	---	---	---	---	SVL
Bored Spring	RESE-1002238	07-May-12	---	---	---	---	37.7 j-d	7.8	221	93.5 j-d	---	0.72 j-	0.36 j-	---	397 j-	---	---	---	---	---	SVL
Bored Spring	RESE-1002238	07-May-12	36	45.3	30.2	5.86	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Boulder Hole (QC 23.6 C)	RESE-1001008	22-May-03	---	---	---	---	---	---	---	---	---	---	---	---	---	19.8	7.8	441	---	---	
Boulder Hole (QC 23.6 C)	RESE-1001008	22-May-03	---	---	---	---	---	---	---	---	---	0.24	0.13	---	---	---	---	---	---	---	SVL
Boulder Hole (QC 23.6 C)	RESE-1001008	22-May-03	---	---	---	---	---	---	---	---	---	---	---	<0.10	---	---	---	---	---	---	Del Mar
Boulder Hole (QC 23.6 C)	RESE-1001008	22-May-03	74.8	12.0	16.0	2.5	13.4	ND	293	20.7	41.5	---	---	---	333	---	---	---	---	---	SVL
Boulder Hole (QC 23.6 C)	RESE-1001023	04-Sep-03	---	---	---	---	---	---	---	---	---	---	---	---	---	24.2	7.5	412	---	---	
Boulder Hole (QC 23.6 C)	RESE-1001023	04-Sep-03	---	---	---	---	---	---	---	---	---	0.14	0.12	---	---	---	---	---	---	---	SVL
Boulder Hole (QC 23.6 C)	RESE-1001023	04-Sep-03	---	---	---	---	---	---	---	---	---	---	---	0.16	---	---	---	---	---	---	Del Mar
Boulder Hole (QC 23.6 C)	RESE-1001023	04-Sep-03	56.1	9.40	12.3	4.3	8.11	ND	212	23.0	33.2	---	---	---	214	---	---	---	---	---	SVL
Boulder Hole (QC 23.6 C)	RESE-1001028	03-Nov-03	---	---	---	---	---	---	---	---	---	---	---	---	---	15.8	7.5	747	---	---	
Boulder Hole (QC 23.6 C)	RESE-1001028	03-Nov-03	---	---	---	---	---	---	---	---	---	---	---	<0.10	---	---	---	---	---	---	Del Mar
Boulder Hole (QC 23.6 C)	RESE-1001028	03-Nov-03	112	17.7	23.2	3.3	18.5	ND	399	62.3	45.2	0.35	0.14	---	473	---	---	---	---	---	SVL
Boulder Hole (QC 23.6 C) DUP	RESE-1001055	09-Feb-04	---	---	---	---	---	---	---	---	---	---	---	0.24	---	---	---	---	---	---	Del Mar
Boulder Hole (QC 23.6 C) DUP	RESE-1001055	09-Feb-04	57.3	9.49	15.7	1.86	8.30	ND	218	32.1	---	0.152	0.161	---	281	---	---	---	---	---	SVL
Boulder Hole (QC 23.6 C)	RESE-1001054	09-Feb-04	---	---	---	---	---	---	---	---	---	---	---	---	---	14.5	7.6	417.1	---	---	
Boulder Hole (QC 23.6 C)	RESE-1001054	09-Feb-04	---	---	---	---	---	---	---	---	---	---	---	0.24	---	---	---	---	---	---	Del Mar
Boulder Hole (QC 23.6 C)	RESE-1001054	09-Feb-04	55.9	9.31	15.4	1.82	8.73	ND	217	33.6	---	0.158	0.156	---	276	---	---	---	---	---	SVL
Boulder Hole (QC 23.6 C)	RESE-1001083	24-May-04	---	---	---	---	---	---	---	---	---	---	---	---	---	17.6	7.6	502	---	---	
Boulder Hole (QC 23.6 C)	RESE-1001083	24-May-04	---	---	---	---	---	---	---	---	---	---	---	<0.20	---	---	---	---	---	---	Del Mar
Boulder Hole (QC 23.6 C)	RESE-1001083	24-May-04	74.8	11.5	15.2	2.3	11.0	ND	310	15.9	40.0	0.28	0.15	---	320	---	---	---	---	---	SVL
Boulder Hole (QC 23.6 C) DUP	RESE-1001095	03-Aug-04	---	---	---	---	---	---	---	---	---	---	---	<0.20	---	---	---	---	---	---	Del Mar
Boulder Hole (QC 23.6 C) DUP	RESE-1001095	03-Aug-04	78.0	13.6	19.0	6.7	15.0	ND	340	19.6	42.7	0.24	0.21	---	361	---	---	---	---	---	SVL
Boulder Hole (QC 23.6 C)	RESE-1001094	03-Aug-04	---	---	---	---	---	---	---	---	---	---	---	---	---	24.1	7.7	536	---	---	
Boulder Hole (QC 23.6 C)	RESE-1001094	03-Aug-04	---	---	---	---	---	---	---	---	---	---	---	<0.20	---	---	---	---	---	---	Del Mar
Boulder Hole (QC 23.6 C)	RESE-1001094	03-Aug-04	78.0	13.6	19.2	6.8	14.8	ND	339	19.5	42.7	0.22	0.21	---	349	---	---	---	---	---	SVL

MONTGOMERY & ASSOCIATES

TABLE B-1. COMMON CONSTITUENTS AND ROUTINE PARAMETERS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	COMMON CONSTITUENTS[a] (mg/L)[b]													ROUTINE PARAMETERS					ANALYTICAL LABORATORY
																FIELD			LABORATORY		
			Ca	Mg	Na	K	Cl	CO_3	HCO_3	SO_4	SiO_2	Br	F	$NO_3 + NO_2$ (as N)	TDS	TEMP (°C)[c]	pH	SC (µS/cm)[d]	pH	SC (µS/cm)	
Surface Water 1 - Queen Creek																					
Boulder Hole (QC 23.6 C)	RESE-1001165	03-Nov-04	---	---	---	---	---	---	---	---	---	---	---	---	---	13.3	7.7	599	---	---	
Boulder Hole (QC 23.6 C)	RESE-1001165	03-Nov-04	---	---	---	---	---	---	---	---	---	---	---	1.3	---	---	---	---	---	---	Del Mar
Boulder Hole (QC 23.6 C)	RESE-1001165	03-Nov-04	91.7	14.6	18.2	5.2	12.7	ND	465	64.5	40.2	0.18	0.12	---	408	---	---	---	---	---	SVL
Boulder Hole (QC 23.6 C)	RESE-1001181	08-Feb-05	---	---	---	---	---	---	---	---	---	---	---	---	---	9.7	7.9	200	---	---	
Boulder Hole (QC 23.6 C)	RESE-1001181	08-Feb-05	---	---	---	---	---	---	---	---	---	---	---	0.94	---	---	---	---	---	---	Del Mar
Boulder Hole (QC 23.6 C)	RESE-1001181	08-Feb-05	30.0	5.10	7.06	1.51	6.36	ND	91.3	22.0	28.4	0.112	0.135	---	171	---	---	---	---	---	SVL
Boulder Hole (QC 23.6 C)	RESE-1001205	04-May-05	---	---	---	---	---	---	---	---	---	---	---	---	---	15.9	7.3	415.4	---	---	
Boulder Hole (QC 23.6 C)	RESE-1001205	04-May-05	---	---	---	---	---	---	---	---	---	---	---	<0.20	---	---	---	---	---	---	Del Mar
Boulder Hole (QC 23.6 C)	RESE-1001205	04-May-05	66.2	10.3	13.1	2.41	11.2	ND	238	29.0	36.5	0.155	0.105	---	243	---	---	---	---	---	SVL
Boulder Hole (QC 23.6 C)	RESE-1002006	06-Aug-08	---	---	---	---	---	---	---	---	---	---	---	---	---	27.0	7.68	578	---	---	
Boulder Hole (QC 23.6 C)	RESE-1002006	06-Aug-08	81.6	13.5	17.6	3.30	11.3	---	---	16.2	51.2	---	---	---	---	---	---	---	---	---	SVL
Boulder Hole (QC 23.6 C)	RESE-1002006	06-Aug-08	---	---	---	---	12.4	ND	361	15.0	---	0.170	0.278	---	390	---	---	---	---	---	SVL
Boulder Hole (QC 23.6 C)	RESE-1002006	06-Aug-08	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	TestAmerica
Boulder Hole (QC 23.6 C)	RESE-1002006	06-Aug-08	79.3	12.8	17.5	3.10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Boulder Hole (QC 23.6 C)	RESE-1002031	06-Nov-08	---	---	---	---	---	---	---	---	---	---	---	---	---	13.2	7.53	672	---	---	
Boulder Hole (QC 23.6 C)	RESE-1002031	06-Nov-08	---	---	---	---	---	---	---	---	34.2	---	---	---	---	---	---	---	---	---	SVL
Boulder Hole (QC 23.6 C)	RESE-1002031	06-Nov-08	---	---	---	---	17.5	ND	397	28.3	---	0.286	0.198	---	400	---	---	---	---	---	SVL
Boulder Hole (QC 23.6 C)	RESE-1002031	06-Nov-08	---	---	---	---	---	---	---	---	---	---	---	<0.30	---	---	---	---	---	---	TestAmerica
Boulder Hole (QC 23.6 C)	RESE-1002031	06-Nov-08	96.2	17.1	20.0	5.38	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Boulder Hole (QC 23.6 C)	RESE-1002060	19-Feb-09	---	---	---	---	---	---	---	---	---	---	---	---	---	10.6	8.13	189	---	---	
Boulder Hole (QC 23.6 C)	RESE-1002060	19-Feb-09	---	---	---	---	---	---	---	---	23.7	---	---	---	---	---	---	---	---	---	SVL
Boulder Hole (QC 23.6 C)	RESE-1002060	19-Feb-09	---	---	---	---	5.73	ND	69.4	18.7	---	<0.100	<0.100	---	156	---	---	---	---	---	SVL
Boulder Hole (QC 23.6 C)	RESE-1002060	19-Feb-09	21.5	3.93	5.54	1.55	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Boulder Hole (QC 23.6 C)	RESE-1002082	07-May-09	---	---	---	---	---	---	---	---	---	---	---	---	---	18.0	7.57	447	---	---	
Boulder Hole (QC 23.6 C)	RESE-1002082	07-May-09	---	---	---	---	---	---	---	---	34.0	---	---	---	---	---	---	---	---	---	SVL
Boulder Hole (QC 23.6 C)	RESE-1002082	07-May-09	---	---	---	---	13.3	ND	300	12.0	---	0.196	0.115	---	291	---	---	---	---	---	SVL
Boulder Hole (QC 23.6 C)	RESE-1002082	07-May-09	75.7	12.4	14.8	2.49	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Boulder Hole (QC 23.6 C)	RESE-1002120	13-Feb-10	---	---	---	---	---	---	---	---	---	---	---	---	---	10.4	7.85	228	---	---	
Boulder Hole (QC 23.6 C)	RESE-1002120	13-Feb-10	---	---	---	---	---	---	---	---	26.4	---	---	---	---	---	---	---	---	---	SVL
Boulder Hole (QC 23.6 C)	RESE-1002120	13-Feb-10	---	---	---	---	6.88	ND	90.6	22.8	---	<0.100	<0.100	---	120	---	---	---	---	---	SVL
Boulder Hole (QC 23.6 C)	RESE-1002120	13-Feb-10	30.1	5.22	7.02	1.54	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Boulder Hole (QC 23.6 C)	RESE-1002140	01-Nov-10	---	---	---	---	---	---	---	---	---	---	---	---	---	17.5	7.68	735	---	---	
Boulder Hole (QC 23.6 C)	RESE-1002140	01-Nov-10	---	---	---	---	---	---	---	---	38.1	---	---	---	---	---	---	---	---	---	SVL
Boulder Hole (QC 23.6 C)	RESE-1002140	01-Nov-10	---	---	---	---	17.0	4.6	379	58.6	---	0.219	<0.100	---	442	---	---	---	---	---	SVL
Boulder Hole (QC 23.6 C)	RESE-1002140	01-Nov-10	107	17.9	20.2	6.06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL

TABLE B-1. COMMON CONSTITUENTS AND ROUTINE PARAMETERS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	COMMON CONSTITUENTS[a] (mg/L)[b]													ROUTINE PARAMETERS					ANALYTICAL LABORATORY
																FIELD			LABORATORY		
			Ca	Mg	Na	K	Cl	CO_3	HCO_3	SO_4	SiO_2	Br	F	$NO_3 + NO_2$ (as N)	TDS	TEMP (°C)[c]	pH	SC (µS/cm)[d]	pH	SC (µS/cm)	
Surface Water 1 - Queen Creek																					
Boulder Hole (QC 23.6 C)	RESE-1002167	16-May-11	---	---	---	---	---	---	---	---	---	---	---	---	---	17.6	7.72	741	---	---	
Boulder Hole (QC 23.6 C)	RESE-1002167	16-May-11	---	---	---	---	---	---	---	---	37.6	---	---	---	---	---	---	---	---	---	SVL
Boulder Hole (QC 23.6 C)	RESE-1002167	16-May-11	---	---	---	---	18.8	ND	406	8.19	---	0.21	<0.10	---	390	---	---	---	---	---	SVL
Boulder Hole (QC 23.6 C)	RESE-1002167	16-May-11	92.8	18.2	25.9	4.07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Boulder Hole (QC 23.6 C) SP	RESE-1002167	16-May-11	89	18	27	4.3	---	---	---	---	41	---	---	---	---	---	---	---	---	---	TestAmerica
Boulder Hole (QC 23.6 C) SP	RESE-1002167	16-May-11	91	18	28	4.2	19	ND	390	8.3	38	<0.50	<0.40	<2.0	420	---	---	---	8.00	650	TestAmerica
Boulder Hole (QC 23.6 C)	RESE-1002227	02-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	17.54	7.36	382	---	---	
Boulder Hole (QC 23.6 C)	RESE-1002227	02-May-12	---	---	---	---	---	---	---	---	41.2	---	---	---	---	---	---	---	---	---	SVL
Boulder Hole (QC 23.6 C)	RESE-1002227	02-May-12	---	---	---	---	10.4	ND	287	14.9	---	0.12	0.13	---	299	---	---	---	---	---	SVL
Boulder Hole (QC 23.6 C)	RESE-1002227	02-May-12	71.4	11.4	15.3	2.4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Hidden Spring	RESE-1001003	15-May-03	---	---	---	---	---	---	---	---	---	---	---	---	---	18.3	7.6	642	---	---	
Hidden Spring	RESE-1001003	15-May-03	---	---	---	---	---	---	---	---	---	0.15	0.21	---	---	---	---	---	---	---	SVL
Hidden Spring	RESE-1001003	15-May-03	---	---	---	---	---	---	---	---	---	---	---	0.78	---	---	---	---	---	---	Del Mar
Hidden Spring	RESE-1001003	15-May-03	90.2	34.4	13.4	<1.0	14.1	ND	321	81.8	24.6	---	---	---	447	---	---	---	---	---	SVL
Hidden Spring	RESE-1001015	20-Aug-03	---	---	---	---	---	---	---	---	---	---	---	---	---	23.1	7.4	710	---	---	
Hidden Spring	RESE-1001015	20-Aug-03	---	---	---	---	---	---	---	---	---	0.16	0.21	---	---	---	---	---	---	---	SVL
Hidden Spring	RESE-1001015	20-Aug-03	---	---	---	---	---	---	---	---	---	---	---	0.30	---	---	---	---	---	---	Del Mar
Hidden Spring	RESE-1001015	20-Aug-03	93.3	34.0	13.7	1.5	12.1	ND	376	75.3	26.5	---	---	---	442	---	---	---	---	---	SVL
Hidden Spring DUP	RESE-1001016	20-Aug-03	---	---	---	---	---	---	---	---	---	0.15	0.21	---	---	---	---	---	---	---	SVL
Hidden Spring DUP	RESE-1001016	20-Aug-03	---	---	---	---	---	---	---	---	---	---	---	0.32	---	---	---	---	---	---	Del Mar
Hidden Spring DUP	RESE-1001016	20-Aug-03	80.0	34.5	13.1	<1.0	12.1	ND	378	74.3	26.7	---	---	---	440	---	---	---	---	---	SVL
Hidden Spring	RESE-1001027	03-Nov-03	---	---	---	---	---	---	---	---	---	---	---	---	---	18.0	7.4	767	---	---	
Hidden Spring	RESE-1001027	03-Nov-03	---	---	---	---	---	---	---	---	---	---	---	0.13	---	---	---	---	---	---	Del Mar
Hidden Spring	RESE-1001027	03-Nov-03	93.6	33.9	13.0	<1.0	12.3	ND	387	75.3	25.6	0.15	0.22	---	410	---	---	---	---	---	SVL
Hidden Spring	RESE-1001052	09-Feb-04	---	---	---	---	---	---	---	---	---	---	---	---	---	11.5	8.0	485	---	---	
Hidden Spring	RESE-1001052	09-Feb-04	---	---	---	---	---	---	---	---	---	---	---	---	440	---	---	---	---	---	SVL
Hidden Spring	RESE-1001052	09-Feb-04	---	---	---	---	---	---	---	---	---	---	---	0.70	---	---	---	---	---	---	Del Mar
Hidden Spring	RESE-1001052	09-Feb-04	86.5	34.2	13.2	0.502 j	12.3	ND	372	79.6	24.7	0.169	0.213	---	413	---	---	---	---	---	SVL
Hidden Spring	RESE-1001082	24-May-04	---	---	---	---	---	---	---	---	---	---	---	---	---	17.6	7.4	716	---	---	
Hidden Spring	RESE-1001082	24-May-04	---	---	---	---	---	---	---	---	---	---	---	0.78	---	---	---	---	---	---	Del Mar
Hidden Spring	RESE-1001082	24-May-04	90.7	33.9	12.7	<1.0	11.8	ND	404	75.9	23.7	0.14	0.24	---	427	---	---	---	---	---	SVL
Hidden Spring LD	RESE-1001082	24-May-04	---	---	---	---	---	---	---	---	---	---	---	<2.0	---	---	---	---	---	---	Del Mar
Hidden Spring	RESE-1001097	04-Aug-04	---	---	---	---	---	---	---	---	---	---	---	---	---	23.3	7.8	342	---	---	
Hidden Spring	RESE-1001097	04-Aug-04	---	---	---	---	---	---	---	---	---	---	---	<0.20	---	---	---	---	---	---	Del Mar
Hidden Spring	RESE-1001097	04-Aug-04	91.6	35.8	13.8	<1.0	12.2	ND	438	76.2	25.1	0.14	0.22	---	435	---	---	---	---	---	SVL
Hidden Spring	RESE-1001162	03-Nov-04	---	---	---	---	---	---	---	---	---	---	---	---	---	15.6	7.4	694	---	---	
Hidden Spring	RESE-1001162	03-Nov-04	---	---	---	---	---	---	---	---	---	---	---	<0.20	---	---	---	---	---	---	Del Mar
Hidden Spring	RESE-1001162	03-Nov-04	84.6	33.9	13.1	<1.0	11.2	ND	422	74.5	27.3	0.13	0.20	---	420	---	---	---	---	---	SVL

MONTGOMERY & ASSOCIATES

TABLE B-1. COMMON CONSTITUENTS AND ROUTINE PARAMETERS FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	COMMON CONSTITUENTS[a] (mg/L)[b]													ROUTINE PARAMETERS					ANALYTICAL LABORATORY
																FIELD			LABORATORY		
			Ca	Mg	Na	K	Cl	CO_3	HCO_3	SO_4	SiO_2	Br	F	$NO_3 + NO_2$ (as N)	TDS	TEMP (°C)[c]	pH	SC (µS/cm)[d]	pH	SC (µS/cm)	
Surface Water 1 - Queen Creek																					
Hidden Spring	RESE-1001187	09-Feb-05	---	---	---	---	---	---	---	---	---	---	---	---	---	14.9	7.5	709	---	---	
Hidden Spring	RESE-1001187	09-Feb-05	---	---	---	---	---	---	---	---	---	---	---	1.3	---	---	---	---	---	---	Del Mar
Hidden Spring	RESE-1001187	09-Feb-05	86.7	32.0	12.3	<0.500	11.6	ND	356	74.3	24.3	0.179	0.254	---	431	---	---	---	---	---	SVL
Hidden Spring DUP	RESE-1001203	03-May-05	---	---	---	---	---	---	---	---	---	---	---	1.8	---	---	---	---	---	---	Del Mar
Hidden Spring DUP	RESE-1001203	03-May-05	86.9	29.9	11.9	<0.500	11.0	ND	338	69.8	24	0.134	0.23	---	396	---	---	---	---	---	SVL
Hidden Spring	RESE-1001202	03-May-05	---	---	---	---	---	---	---	---	---	---	---	---	---	21.6	7.3	628	---	---	
Hidden Spring	RESE-1001202	03-May-05	---	---	---	---	---	---	---	---	---	---	---	1.8	---	---	---	---	---	---	Del Mar
Hidden Spring	RESE-1001202	03-May-05	88.0	30.4	12.0	<0.500	10.9	ND	339	69.7	24.3	0.156	0.234	---	389	---	---	---	---	---	SVL
Hidden Spring	RESE-1001220	03-Aug-05	---	---	---	---	---	---	---	---	---	---	---	---	---	22.8	7.1	663	---	---	
Hidden Spring	RESE-1001220	03-Aug-05	---	---	---	---	---	---	---	---	---	---	---	1.3	---	---	---	---	---	---	Del Mar
Hidden Spring	RESE-1001220	03-Aug-05	88.8	30.7	11.7	<0.500	10.9	ND	353	65.8	25.3	0.15	0.208	---	412	---	---	---	---	---	SVL
Hidden Spring	RESE-1002008	19-Aug-08	---	---	---	---	---	---	---	---	---	---	---	---	---	24.5	7.16	678	---	---	
Hidden Spring	RESE-1002008	19-Aug-08	84.1	30.6	10.9	0.252 j	11.4	---	---	67.7	25.1	---	---	---	---	---	---	---	---	---	SVL
Hidden Spring	RESE-1002008	19-Aug-08	142	35.1	11.4	1.06	11.3	ND	378	67.8	---	<0.100	0.171	---	390	---	---	---	---	---	SVL
Hidden Spring	RESE-1002008	19-Aug-08	---	---	---	---	---	---	---	---	---	---	---	1.6	---	---	---	---	---	---	TestAmerica
Hidden Spring	RESE-1002030	06-Nov-08	---	---	---	---	---	---	---	---	---	---	---	---	---	19.1	7.08	716	---	---	
Hidden Spring	RESE-1002030	06-Nov-08	---	---	---	---	---	---	---	---	24.9	---	---	---	---	---	---	---	---	---	SVL
Hidden Spring	RESE-1002030	06-Nov-08	---	---	---	---	11.0	ND	378	69.7	---	<0.100	0.251	---	410	---	---	---	---	---	SVL
Hidden Spring	RESE-1002030	06-Nov-08	---	---	---	---	---	---	---	---	---	---	---	1.3	---	---	---	---	---	---	TestAmerica
Hidden Spring	RESE-1002030	06-Nov-08	87.1	32.2	11.8	<0.50	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Hidden Spring	RESE-1002045	10-Feb-09	---	---	---	---	---	---	---	---	---	---	---	---	---	19.4	7.41	637	---	---	
Hidden Spring	RESE-1002045	10-Feb-09	---	---	---	---	---	---	---	---	23.3	---	---	---	---	---	---	---	---	---	SVL
Hidden Spring	RESE-1002045	10-Feb-09	---	---	---	---	11.0	ND	403	66.6	---	0.129	0.151	---	420	---	---	---	---	---	SVL
Hidden Spring	RESE-1002045	10-Feb-09	82.7	29.7	10.5	<0.50	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Hidden Spring	RESE-1002086	12-May-09	---	---	---	---	---	---	---	---	---	---	---	---	---	20.6	7.23	673	---	---	
Hidden Spring	RESE-1002086	12-May-09	---	---	---	---	---	---	---	---	25.5	---	---	---	---	---	---	---	---	---	SVL
Hidden Spring	RESE-1002086	12-May-09	---	---	---	---	11.4	ND	354	70.2	---	0.128	0.307	---	393	---	---	---	---	---	SVL
Hidden Spring	RESE-1002086	12-May-09	90.1	31.7	11.5	<0.50	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Hidden Spring	RESE-1002116	12-Feb-10	---	---	---	---	---	---	---	---	---	---	---	---	---	21.6	7.33	619	---	---	
Hidden Spring	RESE-1002116	12-Feb-10	---	---	---	---	---	---	---	---	25.1	---	---	---	---	---	---	---	---	---	SVL
Hidden Spring	RESE-1002116	12-Feb-10	---	---	---	---	10.5	ND	345	64.9	---	<0.100	0.127	---	358	---	---	---	---	---	SVL
Hidden Spring	RESE-1002116	12-Feb-10	87.4	31.2	11.2	<0.50	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Hidden Spring	RESE-1003163	17-Jul-10	---	---	---	---	---	---	---	---	---	---	---	---	---	25.8	6.81	667.3	---	---	
Hidden Spring	RESE-1003163	17-Jul-10	86	30	10	<2.0	---	---	---	---	26	---	---	---	---	---	---	---	---	---	TestAmerica
Hidden Spring	RESE-1003163	17-Jul-10	90	31	11	<2.0	10	ND	329	68	26	<0.50	<0.40	2.4	490	---	---	---	7.49	680	TestAmerica
Hidden Spring	RESE-1002155	09-Nov-10	---	---	---	---	---	---	---	---	---	---	---	---	---	19.2	7.09	639	---	---	
Hidden Spring	RESE-1002155	09-Nov-10	---	---	---	---	---	---	---	---	24.5	---	---	---	---	---	---	---	---	---	SVL
Hidden Spring	RESE-1002155	09-Nov-10	---	---	---	---	11.1	ND	366	66.6	---	0.127	0.271	---	434	---	---	---	---	---	SVL
Hidden Spring	RESE-1002155	09-Nov-10	94.1	33.0	10.8	<0.50	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL

MONTGOMERY & ASSOCIATES

TABLE B-1. COMMON CONSTITUENTS AND ROUTINE PARAMETERS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	COMMON CONSTITUENTS[a] (mg/L)[b]													ROUTINE PARAMETERS					ANALYTICAL LABORATORY
																FIELD			LABORATORY		
			Ca	Mg	Na	K	Cl	CO_3	HCO_3	SO_4	SiO_2	Br	F	$NO_3 + NO_2$ (as N)	TDS	TEMP (°C)[c]	pH	SC (µS/cm)[d]	pH	SC (µS/cm)	
Surface Water 1 - Queen Creek																					
Hidden Spring DUP	RESE-1002156	09-Nov-10	---	---	---	---	---	---	---	---	---	---	---	---	---	19.2	7.09	639	---	---	
Hidden Spring DUP	RESE-1002156	09-Nov-10	---	---	---	---	---	---	---	---	24.5	---	---	---	---	---	---	---	---	---	SVL
Hidden Spring DUP	RESE-1002156	09-Nov-10	---	---	---	---	11.2	ND	366	66.9	---	0.154	0.270	---	420	---	---	---	---	---	SVL
Hidden Spring DUP	RESE-1002156	09-Nov-10	94.1	32.7	10.7	<0.50	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Kane Spring	RESE-1001002	15-May-03	---	---	---	---	---	---	---	---	---	---	---	---	---	27.7	8.5	397	---	---	
Kane Spring	RESE-1001002	15-May-03	---	---	---	---	---	---	---	---	---	0.21	0.37	---	---	---	---	---	---	---	SVL
Kane Spring	RESE-1001002	15-May-03	---	---	---	---	---	---	---	---	---	---	---	<0.10	---	---	---	---	---	---	Del Mar
Kane Spring	RESE-1001002	15-May-03	52.4	54.3	24.2	<1.0	32.6	41.3	275	29.4	29.8	---	---	---	420	---	---	---	---	---	SVL
Kane Spring	RESE-1001014	20-Aug-03	---	---	---	---	---	---	---	---	---	---	---	---	---	22.7	8.1	790	---	---	
Kane Spring	RESE-1001014	20-Aug-03	---	---	---	---	---	---	---	---	---	0.23	0.30	---	---	---	---	---	---	---	SVL
Kane Spring	RESE-1001014	20-Aug-03	---	---	---	---	---	---	---	---	---	---	---	<0.10	---	---	---	---	---	---	Del Mar
Kane Spring	RESE-1001014	20-Aug-03	47.6	63.6	26.4	2.2	30.3	ND	484	25.0	40.7	---	---	---	476	---	---	---	---	---	SVL
Kane Spring	RESE-1001026	03-Nov-03	---	---	---	---	---	---	---	---	---	---	---	---	---	14.6	8.1	903	---	---	
Kane Spring	RESE-1001026	03-Nov-03	---	---	---	---	---	---	---	---	---	---	---	<0.10	---	---	---	---	---	---	Del Mar
Kane Spring	RESE-1001026	03-Nov-03	43.5	75.6	35.0	5.1	44.1	ND	478	62.4	33.2	0.12	0.34	---	*528*	---	---	---	---	---	SVL
Kane Spring	RESE-1001051	09-Feb-04	---	---	---	---	---	---	---	---	---	---	---	---	---	4.2	7.6	771	---	---	
Kane Spring	RESE-1001051	09-Feb-04	---	---	---	---	---	---	---	---	---	---	---	---	474	---	---	---	---	---	SVL
Kane Spring	RESE-1001051	09-Feb-04	---	---	---	---	---	---	---	---	---	---	---	<0.10	---	---	---	---	---	---	Del Mar
Kane Spring	RESE-1001051	09-Feb-04	59.4	56.6	23.1	7.47	30.2	ND	436	46.5	28.7	0.117	0.277	---	440	---	---	---	---	---	SVL
Kane Spring	04Aug04ALKS	04-Aug-04	---	---	---	---	---	---	---	---	---	---	---	---	---	24.5	8.1	785	---	---	
Kane Spring	RESE-1001161	03-Nov-04	---	---	---	---	---	---	---	---	---	---	---	---	---	6.9	8.2	757	---	---	
Kane Spring	RESE-1001161	03-Nov-04	---	---	---	---	---	---	---	---	---	---	---	<0.20	---	---	---	---	---	---	Del Mar
Kane Spring	RESE-1001161	03-Nov-04	45.8	63.6	30.1	7.8	34.0	ND	481	54.7	31.4	<0.10	0.33	---	*501*	---	---	---	---	---	SVL
Kane Spring	RESE-1001186	09-Feb-05	---	---	---	---	---	---	---	---	---	---	---	---	---	6.9	8.3	698	---	---	
Kane Spring	RESE-1001186	09-Feb-05	---	---	---	---	---	---	---	---	---	---	---	<0.20	---	---	---	---	---	---	Del Mar
Kane Spring	RESE-1001186	09-Feb-05	53.0	51.2	18.1	2.23	21.8	2.39	409	29.3	23.3	0.151	0.388	---	416	---	---	---	---	---	SVL
Kane Spring	RESE-1001201	03-May-05	---	---	---	---	---	---	---	---	---	---	---	---	---	15.8	8.1	752	---	---	
Kane Spring	RESE-1001201	03-May-05	---	---	---	---	---	---	---	---	---	---	---	<0.20	---	---	---	---	---	---	Del Mar
Kane Spring	RESE-1001201	03-May-05	76.1	54.9	23.1	0.68	28.3	ND	453	45.7	26.3	0.204	0.35	---	460	---	---	---	---	---	SVL
Kane Spring	RESE-1001218	03-Aug-05	---	---	---	---	---	---	---	---	---	---	---	---	---	22.7	7.8	1019	---	---	
Kane Spring	RESE-1001218	03-Aug-05	---	---	---	---	---	---	---	---	---	---	---	<0.20	---	---	---	---	---	---	Del Mar
Kane Spring	RESE-1001218	03-Aug-05	62.1	78.3	51.0	5.17	72.4	ND	492	102	34.7	0.275	0.269	---	*713*	---	---	---	---	---	SVL
Kane Spring	RESE-1002022	29-Aug-08	---	---	---	---	---	---	---	---	---	---	---	---	---	23.7	7.91	707	---	---	
Kane Spring	RESE-1002022	29-Aug-08	74.8	42.5	17.2	1.87	20.2	---	---	31.0	22.4	---	---	---	---	---	---	---	---	---	SVL
Kane Spring	RESE-1002022	29-Aug-08	66.9	37.6	15.5	1.72	18.6	ND	427	33.6	---	0.207	0.274	---	366	---	---	---	---	---	SVL
Kane Spring	RESE-1002022	29-Aug-08	---	---	---	---	---	---	---	---	---	---	---	0.99	---	---	---	---	---	---	TestAmerica

MONTGOMERY & ASSOCIATES

TABLE B-1. COMMON CONSTITUENTS AND ROUTINE PARAMETERS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	COMMON CONSTITUENTS[a] (mg/L)[b]													ROUTINE PARAMETERS					ANALYTICAL LABORATORY
																FIELD			LABORATORY		
			Ca	Mg	Na	K	Cl	CO_3	HCO_3	SO_4	SiO_2	Br	F	$NO_3 + NO_2$ (as N)	TDS	TEMP (°C)[c]	pH	SC (µS/cm)[d]	pH	SC (µS/cm)	
Surface Water 1 - Queen Creek																					
Kane Spring	RESE-1002035	05-Nov-08	---	---	---	---	---	---	---	---	---	---	---	---	---	20.7	6.96	654	---	---	
Kane Spring	RESE-1002035	05-Nov-08	---	---	---	---	---	---	---	---	21.0	---	---	---	---	---	---	---	---	---	SVL
Kane Spring	RESE-1002035	05-Nov-08	---	---	---	---	18.7	ND	431	29.6	---	0.153	0.282	---	420	---	---	---	---	---	SVL
Kane Spring	RESE-1002035	05-Nov-08	---	---	---	---	---	---	---	---	---	---	---	0.82	---	---	---	---	---	---	TestAmerica
Kane Spring	RESE-1002035	05-Nov-08	74.3	41.5	17.2	1.96	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Kane Spring	RESE-1002046	10-Feb-09	---	---	---	---	---	---	---	---	---	---	---	---	---	20.7	7.37	613	---	---	
Kane Spring	RESE-1002046	10-Feb-09	---	---	---	---	---	---	---	---	19.6	---	---	---	---	---	---	---	---	---	SVL
Kane Spring	RESE-1002046	10-Feb-09	---	---	---	---	18.4	ND	437	28.8	---	0.146	0.229	---	374	---	---	---	---	---	SVL
Kane Spring	RESE-1002046	10-Feb-09	67.4	36.6	15.5	1.71	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Kane Spring	RESE-1002087	13-May-09	---	---	---	---	---	---	---	---	---	---	---	---	---	21.8	7.27	650	---	---	
Kane Spring	RESE-1002087	13-May-09	---	---	---	---	---	---	---	---	20.1	---	---	---	---	---	---	---	---	---	SVL
Kane Spring	RESE-1002087	13-May-09	---	---	---	---	20.1	ND	397	30.0	---	0.172	0.337	---	386	---	---	---	---	---	SVL
Kane Spring	RESE-1002087	13-May-09	70.5	38.6	16	1.82	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Kane Spring	RESE-1002117	12-Feb-10	---	---	---	---	---	---	---	---	---	---	---	---	---	18.6	7.54	653	---	---	
Kane Spring	RESE-1002117	12-Feb-10	---	---	---	---	---	---	---	---	21.4	---	---	---	---	---	---	---	---	---	SVL
Kane Spring	RESE-1002117	12-Feb-10	---	---	---	---	22.2	ND	379	31.9	---	0.142	0.246	---	356	---	---	---	---	---	SVL
Kane Spring	RESE-1002117	12-Feb-10	73.6	39.8	16.7	1.63	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Kane Spring	RESE-1003164	17-Jul-10	---	---	---	---	---	---	---	---	---	---	---	---	---	24.4	7.36	730.0	---	---	
Kane Spring	RESE-1003164	17-Jul-10	72	42	18	<2.0	---	---	---	---	23	---	---	---	---	---	---	---	---	---	TestAmerica
Kane Spring	RESE-1003164	17-Jul-10	76	43	19	<2.0	24	ND	390	38	24	<0.50	<0.40	0.87	440	---	---	---	7.45	730	TestAmerica
Kane Spring	RESE-1002154	09-Nov-10	---	---	---	---	---	---	---	---	---	---	---	---	---	20.3	6.65	318.3	---	---	
Kane Spring	RESE-1002154	09-Nov-10	---	---	---	---	---	---	---	---	20.2	---	---	---	---	---	---	---	---	---	SVL
Kane Spring	RESE-1002154	09-Nov-10	---	---	---	---	22.3	ND	410	32.8	---	0.259	0.370	---	392	---	---	---	---	---	SVL
Kane Spring	RESE-1002154	09-Nov-10	78.0	41.0	17.0	1.88	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Kane Spring	RESE-1002236	07-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	20.12	7.37	562	---	---	
Kane Spring	RESE-1002236	07-May-12	---	---	---	---	---	---	---	---	20.8	---	---	---	---	---	---	---	---	---	SVL
Kane Spring	RESE-1002236	07-May-12	---	---	---	---	17.5 j-d	ND	383	25.8 j-	---	0.24 j-	0.34 j-	---	346 j-	---	---	---	---	---	SVL
Kane Spring	RESE-1002236	07-May-12	70.4	37.3	15.5	1.76	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Number 9 Wash	RESE-1002020	28-Aug-08	---	---	---	---	---	---	---	---	---	---	---	---	---	27.6	7.11	85.5	---	---	
Number 9 Wash	RESE-1002020	28-Aug-08	7.25	1.7	5.25	2.18	3.40	---	---	15.4	24.2	---	---	---	---	---	---	---	---	---	SVL
Number 9 Wash	RESE-1002020	28-Aug-08	6.42	1.54	4.71	2.09	2.48	ND	13.5	16.1	---	<0.100	<0.100	---	93	---	---	---	---	---	SVL
Number 9 Wash	RESE-1002020	28-Aug-08	---	---	---	---	---	---	---	---	---	---	---	0.64	---	---	---	---	---	---	TestAmerica
Number 9 Wash	RESE-1002042	12-Nov-08	---	---	---	---	---	---	---	---	---	---	---	---	---	14.5	*8.56*	210.9	---	---	
Number 9 Wash	RESE-1002042	12-Nov-08	---	---	---	---	---	---	---	---	25.9	---	---	---	---	---	---	---	---	---	SVL
Number 9 Wash	RESE-1002042	12-Nov-08	---	---	---	---	12.3	ND	93.7	7.14	---	0.153	0.369	---	200	---	---	---	---	---	SVL
Number 9 Wash	RESE-1002042	12-Nov-08	---	---	---	---	---	---	---	---	---	---	---	<0.30	---	---	---	---	---	---	TestAmerica
Number 9 Wash	RESE-1002042	12-Nov-08	18.7	5.34	17.1	3.65	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL

MONTGOMERY & ASSOCIATES

TABLE B-1. COMMON CONSTITUENTS AND ROUTINE PARAMETERS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	COMMON CONSTITUENTS[a] (mg/L)[b]													ROUTINE PARAMETERS					ANALYTICAL LABORATORY
																FIELD			LABORATORY		
			Ca	Mg	Na	K	Cl	CO_3	HCO_3	SO_4	SiO_2	Br	F	$NO_3 + NO_2$ (as N)	TDS	TEMP (°C)[c]	pH	SC (µS/cm)[d]	pH	SC (µS/cm)	
Surface Water 1 - Queen Creek																					
Number 9 Wash	RESE-1002058	19-Feb-09	---	---	---	---	---	---	---	---	---	---	---	---	---	9.9	7.64	71	---	---	
Number 9 Wash	RESE-1002058	19-Feb-09	---	---	---	---	---	---	---	---	21.6	---	---	---	---	---	---	---	---	---	SVL
Number 9 Wash	RESE-1002058	19-Feb-09	---	---	---	---	2.34	ND	8.3	14.2	---	<0.100	<0.100	---	114	---	---	---	---	---	SVL
Number 9 Wash	RESE-1002058	19-Feb-09	5.17	1.31	4.99	1.19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Number 9 Wash DUP	RESE-1002059	19-Feb-09	---	---	---	---	---	---	---	---	20.5	---	---	---	---	---	---	---	---	---	SVL
Number 9 Wash DUP	RESE-1002059	19-Feb-09	---	---	---	---	2.36	ND	8.4	14.2	---	<0.100	<0.100	---	93	---	---	---	---	---	SVL
Number 9 Wash DUP	RESE-1002059	19-Feb-09	4.87	1.25	4.74	1.16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Number 9 Wash	RESE-1002077	05-May-09	---	---	---	---	---	---	---	---	---	---	---	---	---	24.2	7.72	101.2	---	---	
Number 9 Wash	RESE-1002077	05-May-09	---	---	---	---	---	---	---	---	25.2	---	---	---	---	---	---	---	---	---	SVL
Number 9 Wash	RESE-1002077	05-May-09	---	---	---	---	4.67	ND	32.3	8.82	---	0.169	<0.100	---	85	---	---	---	---	---	SVL
Number 9 Wash	RESE-1002077	05-May-09	7.15	1.74	7.15	1.45	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Number 9 Wash	RESE-1002139	01-Nov-10	---	---	---	---	---	---	---	---	---	---	---	---	---	12.9	7.88	125.6	---	---	
Number 9 Wash	RESE-1002139	01-Nov-10	---	---	---	---	---	---	---	---	26.4	---	---	---	---	---	---	---	---	---	SVL
Number 9 Wash	RESE-1002139	01-Nov-10	---	---	---	---	3.47	ND	38.9	12.8	---	<0.100	0.103	---	76	---	---	---	---	---	SVL
Number 9 Wash	RESE-1002139	01-Nov-10	8.33	2.16	9.04	0.95	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Number 9 Wash	RESE-1002147	03-Nov-10	---	---	---	---	---	---	---	---	---	---	---	---	---	19.9	7.91	240	---	---	
Number 9 Wash	RESE-1002147	03-Nov-10	---	---	---	---	---	---	---	---	7.59	---	---	---	---	---	---	---	---	---	SVL
Number 9 Wash	RESE-1002147	03-Nov-10	---	---	---	---	2.08	ND	149	2.36	---	<0.100	0.163	---	148	---	---	---	---	---	SVL
Number 9 Wash	RESE-1002147	03-Nov-10	39.6	4.12	2.81	5.56	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Number 9 Wash	RESE-1002178	19-Aug-11	---	---	---	---	---	---	---	---	---	---	---	---	---	24.7	7.55	114.1	---	---	
Number 9 Wash	RESE-1002178	19-Aug-11	---	---	---	---	---	---	---	---	12.8	---	---	---	---	---	---	---	---	---	SVL
Number 9 Wash	RESE-1002178	19-Aug-11	---	---	---	---	5.24	ND	33.2	22.2	---	<0.10	0.18	---	99	---	---	---	---	---	SVL
Number 9 Wash	RESE-1002178	19-Aug-11	12.7	3.28	7.29	3.26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Number 9 Wash	RESE-1002198	01-Dec-11	---	---	---	---	---	---	---	---	---	---	---	---	---	9.1	*8.68*	148.4	---	---	
Number 9 Wash	RESE-1002198	01-Dec-11	---	---	---	---	---	---	---	---	20.6	---	---	---	---	---	---	---	---	---	SVL
Number 9 Wash	RESE-1002198	01-Dec-11	---	---	---	---	9.41	ND	15.1	48.8	---	<0.10	<0.10	---	131	---	---	---	---	---	SVL
Number 9 Wash	RESE-1002198	01-Dec-11	13.2	3.45	11.7	1.32	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Number 9 Wash	RESE-1002211	29-Feb-12	---	---	---	---	---	---	---	---	---	---	---	---	---	6.3	7.17	142	---	---	
Number 9 Wash	RESE-1002211	29-Feb-12	---	---	---	---	---	---	---	---	22.6	---	---	---	---	---	---	---	---	---	SVL
Number 9 Wash	RESE-1002211	29-Feb-12	---	---	---	---	7.37	ND	16.3	34.1	---	<0.10	0.12	---	90	---	---	---	---	---	SVL
Number 9 Wash	RESE-1002211	29-Feb-12	10.7	2.74	10.4	1.38	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Number 9 Wash DUP	RESE-1002212	29-Feb-12	---	---	---	---	---	---	---	---	---	---	---	---	---	6.3	7.17	142	---	---	
Number 9 Wash DUP	RESE-1002212	29-Feb-12	---	---	---	---	---	---	---	---	22.9	---	---	---	---	---	---	---	---	---	SVL
Number 9 Wash DUP	RESE-1002212	29-Feb-12	---	---	---	---	7.42	ND	17.0	34.1	---	<0.10	0.12	---	100	---	---	---	---	---	SVL
Number 9 Wash DUP	RESE-1002212	29-Feb-12	10.5	2.69	10.2	1.41	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Number 9 Wash	RESE-1002250	09-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	22.70	8.45	151	---	---	
Number 9 Wash	RESE-1002250	09-May-12	---	---	---	---	---	---	---	---	31.5	---	---	---	---	---	---	---	---	---	SVL
Number 9 Wash	RESE-1002250	09-May-12	---	---	---	---	10.5	ND	53.9	19.2	---	0.10	0.23	---	131 j	---	---	---	---	---	SVL
Number 9 Wash	RESE-1002250	09-May-12	13.7	3.69	14.3	2.68	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL

MONTGOMERY & ASSOCIATES

TABLE B-1. COMMON CONSTITUENTS AND ROUTINE PARAMETERS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	COMMON CONSTITUENTS[a] (mg/L)[b]													ROUTINE PARAMETERS					ANALYTICAL LABORATORY
																FIELD			LABORATORY		
			Ca	Mg	Na	K	Cl	CO_3	HCO_3	SO_4	SiO_2	Br	F	$NO_3 + NO_2$ (as N)	TDS	TEMP (°C)[c]	pH	SC (µS/cm)[d]	pH	SC (µS/cm)	
Surface Water 1 - Queen Creek																					
Oak Flat Wash	RESE-1002016	27-Aug-08	---	---	---	---	---	---	---	---	---	---	---	---	---	24.3	7.25	99.5	---	---	
Oak Flat Wash	RESE-1002016	27-Aug-08	12.4	2	3.86	3.43	2.80	---	---	10.9	18.9	---	---	---	---	---	---	---	---	---	SVL
Oak Flat Wash	RESE-1002016	27-Aug-08	11.3	1.85	3.55	3.37	2.50	ND	33.2	11.2	---	<0.100	<0.100	---	104	---	---	---	---	---	SVL
Oak Flat Wash	RESE-1002016	27-Aug-08	---	---	---	---	---	---	---	---	---	---	---	1.9	---	---	---	---	---	---	TestAmerica
Oak Flat Wash	RESE-1002068	26-Feb-09	---	---	---	---	---	---	---	---	---	---	---	---	---	17.7	7.25	123.9	---	---	
Oak Flat Wash	RESE-1002068	26-Feb-09	---	---	---	---	---	---	---	---	22.7	---	---	---	---	---	---	---	---	---	SVL
Oak Flat Wash	RESE-1002068	26-Feb-09	---	---	---	---	4.19	ND	40.5	14.6	---	<0.100	<0.100	---	145	---	---	---	---	---	SVL
Oak Flat Wash	RESE-1002068	26-Feb-09	11.2	2.17	4.84	1.78	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Oak Flat Wash	RESE-1002076	05-May-09	---	---	---	---	---	---	---	---	---	---	---	---	---	17.15	7.08	182	---	---	
Oak Flat Wash	RESE-1002076	05-May-09	---	---	---	---	---	---	---	---	27.9	---	---	---	---	---	---	---	---	---	SVL
Oak Flat Wash	RESE-1002076	05-May-09	---	---	---	---	9.76	ND	71.0	24.9	---	0.146	<0.100	---	119	---	---	---	---	---	SVL
Oak Flat Wash	RESE-1002076	05-May-09	22.4	4.37	9.26	3.80	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Oak Flat Wash	RESE-1002176	19-Aug-11	---	---	---	---	---	---	---	---	---	---	---	---	---	21.4	*6.4*	48.3	---	---	
Oak Flat Wash	RESE-1002176	19-Aug-11	---	---	---	---	---	---	---	---	10.0	---	---	---	---	---	---	---	---	---	SVL
Oak Flat Wash	RESE-1002176	19-Aug-11	---	---	---	---	1.70	ND	4.6	6.83	---	<0.10	0.13	---	63	---	---	---	---	---	SVL
Oak Flat Wash	RESE-1002176	19-Aug-11	4.43	1.08	2.67	2.94	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Oak Flat Wash	RESE-1002205	09-Dec-11	---	---	---	---	---	---	---	---	---	---	---	---	---	6.3	7.12	116.2	---	---	
Oak Flat Wash	RESE-1002205	09-Dec-11	---	---	---	---	---	---	---	---	21.6	---	---	---	---	---	---	---	---	---	SVL
Oak Flat Wash	RESE-1002205	09-Dec-11	---	---	---	---	7.10	ND	13.3	33.3	---	0.10	<0.10	---	114	---	---	---	---	---	SVL
Oak Flat Wash	RESE-1002205	09-Dec-11	11.5	2.95	6.97	2.28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Oak Flat Wash	RESE-1002214	29-Feb-12	---	---	---	---	---	---	---	---	---	---	---	---	---	9.0	8.29	122.5	---	---	
Oak Flat Wash	RESE-1002214	29-Feb-12	---	---	---	---	---	---	---	---	22.0	---	---	---	---	---	---	---	---	---	SVL
Oak Flat Wash	RESE-1002214	29-Feb-12	---	---	---	---	4.68	ND	41.2	17.8	---	<0.10	0.16	---	95	---	---	---	---	---	SVL
Oak Flat Wash	RESE-1002214	29-Feb-12	13.4	2.79	6.23	1.89	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Oak Flat Wash	RESE-1003060	23-Aug-12	---	---	---	---	---	---	---	---	---	---	---	---	---	26.67	7.78	r	---	---	
Oak Flat Wash	RESE-1003060	23-Aug-12	---	---	---	---	---	---	---	---	14.1	---	---	---	---	---	---	---	---	---	SVL
Oak Flat Wash	RESE-1003060	23-Aug-12	---	---	---	---	1.49	ND	4.9	7.74	---	<0.10	0.11	---	71	---	---	---	---	---	SVL
Oak Flat Wash	RESE-1003060	23-Aug-12	3.99	0.917	2.89	2.24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Oak Flat Wash	RESE-1003063	12-Nov-12	---	---	---	---	---	---	---	---	---	---	---	---	---	12.8	*6.36*	62.30	---	---	
Oak Flat Wash	RESE-1003063	12-Nov-12	---	---	---	---	---	---	---	---	4.96	---	---	---	---	---	---	---	---	---	SVL
Oak Flat Wash	RESE-1003063	12-Nov-12	---	---	---	---	2.74	ND	5.4	10.1	---	<0.10	0.11	---	42	---	---	---	---	---	SVL
Oak Flat Wash	RESE-1003063	12-Nov-12	5.61	1.56	2.97	2.63	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Oak Flat Wash	RESE-1003071	17-Dec-12	---	---	---	---	---	---	---	---	---	---	---	---	---	8.27	8.02	62	---	---	
Oak Flat Wash	RESE-1003071	17-Dec-12	---	---	---	---	---	---	---	---	16.6	---	---	---	---	---	---	---	---	---	SVL
Oak Flat Wash	RESE-1003071	17-Dec-12	---	---	---	---	4.15	ND	13.7	17.5	---	<0.10	0.20	---	112	---	---	---	---	---	SVL
Oak Flat Wash	RESE-1003071	17-Dec-12	10.3	2.18	5.01	2.35	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Oak Flat Wash	RESE-1003074	29-Jan-13	---	---	---	---	---	---	---	---	---	---	---	---	---	6.90	7.41	---	---	---	
Oak Flat Wash	RESE-1003074	29-Jan-13	---	---	---	---	---	---	---	---	21.6	---	---	---	---	---	---	---	---	---	SVL
Oak Flat Wash	RESE-1003074	29-Jan-13	---	---	---	---	4.45	ND	17.2	14.6	---	<0.10	0.10	---	106	---	---	---	---	---	SVL
Oak Flat Wash	RESE-1003074	29-Jan-13	9.95	2.07	5.60	2.09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL

TABLE B-1. COMMON CONSTITUENTS AND ROUTINE PARAMETERS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	COMMON CONSTITUENTS[a] (mg/L)[b]													ROUTINE PARAMETERS					ANALYTICAL LABORATORY
																FIELD			LABORATORY		
			Ca	Mg	Na	K	Cl	CO_3	HCO_3	SO_4	SiO_2	Br	F	$NO_3 + NO_2$ (as N)	TDS	TEMP (°C)[c]	pH	SC (µS/cm)[d]	pH	SC (µS/cm)	
Surface Water 1 - Queen Creek																					
Oak Flat Wash	RESE-1003088	13-Mar-13	---	---	---	---	---	---	---	---	---	---	---	---	---	20.95	7.5	126	---	---	
Oak Flat Wash	RESE-1003088	13-Mar-13	---	---	---	---	---	---	---	---	23.2	---	---	---	---	---	---	---	---	---	SVL
Oak Flat Wash	RESE-1003088	13-Mar-13	---	---	---	---	8.25	ND	28.9	17.3	---	<0.10	0.19	---	121	---	---	---	---	---	SVL
Oak Flat Wash	RESE-1003088	13-Mar-13	11.8	2.49	6.17	2.03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Pump Station Spring (QC 30.7 C)	RESE-1001001	15-May-03	---	---	---	---	---	---	---	---	---	---	---	---	---	14.8	7.6	746	---	---	
Pump Station Spring (QC 30.7 C)	RESE-1001001	15-May-03	---	---	---	---	---	---	---	---	---	0.13	0.23	---	---	---	---	---	---	---	SVL
Pump Station Spring (QC 30.7 C)	RESE-1001001	15-May-03	---	---	---	---	---	---	---	---	---	---	---	2.7	---	---	---	---	---	---	Del Mar
Pump Station Spring (QC 30.7 C)	RESE-1001001	15-May-03	123	29.1	11.3	1.4	9.81	ND	394	54.2	43.8	---	---	---	*523*	---	---	---	---	---	SVL
Pump Station Spring (QC 30.7 C) LD	RESE-1001001	15-May-03	---	---	---	---	---	---	---	---	---	---	---	2.5	---	---	---	---	---	---	Del Mar
Pump Station Spring (QC 30.7 C)	RESE-1001024	04-Sep-03	---	---	---	---	---	---	---	---	---	---	---	---	---	18.7	7.4	770	---	---	
Pump Station Spring (QC 30.7 C)	RESE-1001024	04-Sep-03	---	---	---	---	---	---	---	---	---	0.17	0.25	---	---	---	---	---	---	---	SVL
Pump Station Spring (QC 30.7 C)	RESE-1001024	04-Sep-03	---	---	---	---	---	---	---	---	---	---	---	9.2	---	---	---	---	---	---	Del Mar
Pump Station Spring (QC 30.7 C)	RESE-1001024	04-Sep-03	151	30.3	11.2	1.4	10.2	ND	456	56.8	49.5	---	---	---	496	---	---	---	---	---	SVL
Pump Station Spring (QC 30.7 C)	RESE-1001029	03-Nov-03	---	---	---	---	---	---	---	---	---	---	---	---	---	13.6	7.5	872	---	---	
Pump Station Spring (QC 30.7 C)	RESE-1001029	03-Nov-03	---	---	---	---	---	---	---	---	---	---	---	**11**	---	---	---	---	---	---	Del Mar
Pump Station Spring (QC 30.7 C)	RESE-1001029	03-Nov-03	130	29.9	11.0	1.2	10.1	ND	336	60.8	45.7	0.17	0.24	---	*602*	---	---	---	---	---	SVL
Pump Station Spring (QC 30.7 C) DUP	RESE-1001030	03-Nov-03	---	---	---	---	---	---	---	---	---	---	---	**11**	---	---	---	---	---	---	Del Mar
Pump Station Spring (QC 30.7 C) DUP	RESE-1001030	03-Nov-03	132	30.2	11.1	1.2	10.1	ND	458	59.8	46.1	0.16	0.26	---	*558*	---	---	---	---	---	SVL
Pump Station Spring (QC 30.7 C)	RESE-1001056	09-Feb-04	---	---	---	---	---	---	---	---	---	---	---	---	---	9.3	7.4	820	---	---	
Pump Station Spring (QC 30.7 C)	RESE-1001056	09-Feb-04	---	---	---	---	---	---	---	---	---	---	---	9.8	---	---	---	---	---	---	Del Mar
Pump Station Spring (QC 30.7 C)	RESE-1001056	09-Feb-04	104	31	10.9	1.06	11.2	ND	470	61.8	---	0.192	0.240	---	*545*	---	---	---	---	---	SVL
Pump Station Spring (QC 30.7 C) DUP	RESE-1001085	25-May-04	---	---	---	---	---	---	---	---	---	---	---	9.8	---	---	---	---	---	---	Del Mar
Pump Station Spring (QC 30.7 C) DUP	RESE-1001085	25-May-04	119	29.8	10.6	1.1	11.0	ND	477	57.0	45.5	0.18	0.27	---	*571*	---	---	---	---	---	SVL
Pump Station Spring (QC 30.7 C)	RESE-1001084	25-May-04	---	---	---	---	---	---	---	---	---	---	---	---	---	16.8	7.3	845	---	---	
Pump Station Spring (QC 30.7 C)	RESE-1001084	25-May-04	---	---	---	---	---	---	---	---	---	---	---	9.8	---	---	---	---	---	---	Del Mar
Pump Station Spring (QC 30.7 C)	RESE-1001084	25-May-04	85.4	29.8	10.8	1.1	10.6	ND	479	58.8	45.6	0.13	0.25	---	*544*	---	---	---	---	---	SVL
Pump Station Spring (QC 30.7 C) LD	RESE-1001084	25-May-04	---	---	---	---	---	---	---	---	---	---	---	9.2	---	---	---	---	---	---	Del Mar
Pump Station Spring (QC 30.7 C)	RESE-1001096	03-Aug-04	---	---	---	---	---	---	---	---	---	---	---	---	---	18.0	7.7	830	---	---	
Pump Station Spring (QC 30.7 C)	RESE-1001096	03-Aug-04	---	---	---	---	---	---	---	---	---	---	---	**12**	---	---	---	---	---	---	Del Mar
Pump Station Spring (QC 30.7 C)	RESE-1001096	03-Aug-04	77.8	29.9	11.6	1.3	11.9	ND	479	60.1	45.1	0.18	0.26	---	*536*	---	---	---	---	---	SVL
Pump Station Spring (QC 30.7 C)	RESE-1001166	03-Nov-04	---	---	---	---	---	---	---	---	---	---	---	---	---	12.3	7.3	857	---	---	
Pump Station Spring (QC 30.7 C)	RESE-1001166	03-Nov-04	---	---	---	---	---	---	---	---	---	---	---	**12**	---	---	---	---	---	---	Del Mar
Pump Station Spring (QC 30.7 C)	RESE-1001166	03-Nov-04	90.5	30.9	11.3	1.1	17.8	ND	482	76.1	47.0	0.31	0.22	---	*554*	---	---	---	---	---	SVL
Pump Station Spring (QC 30.7 C) DUP	RESE-1001183	08-Feb-05	---	---	---	---	---	---	---	---	---	---	---	**26**	---	---	---	---	---	---	Del Mar
Pump Station Spring (QC 30.7 C) DUP	RESE-1001183	08-Feb-05	85.3	21.7	6.41	1.99	11.4	ND	285	48.8	40.6	0.149	0.346	---	430	---	---	---	---	---	SVL
Pump Station Spring (QC 30.7 C)	RESE-1001182	08-Feb-05	---	---	---	---	---	---	---	---	---	---	---	---	---	9.0	7.9	634	---	---	
Pump Station Spring (QC 30.7 C)	RESE-1001182	08-Feb-05	---	---	---	---	---	---	---	---	---	---	---	**26**	---	---	---	---	---	---	Del Mar
Pump Station Spring (QC 30.7 C)	RESE-1001182	08-Feb-05	84.4	21.6	6.45	2.00	11.4	ND	299	48.8	40.5	0.155	0.343	---	440	---	---	---	---	---	SVL

MONTGOMERY & ASSOCIATES

TABLE B-1. COMMON CONSTITUENTS AND ROUTINE PARAMETERS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	COMMON CONSTITUENTS[a] (mg/L)[b]													ROUTINE PARAMETERS					ANALYTICAL LABORATORY
																FIELD			LABORATORY		
			Ca	Mg	Na	K	Cl	CO_3	HCO_3	SO_4	SiO_2	Br	F	$NO_3 + NO_2$ (as N)	TDS	TEMP (°C)[c]	pH	SC (µS/cm)[d]	pH	SC (µS/cm)	
Surface Water 1 - Queen Creek																					
Pump Station Spring (QC 30.7 C)	RESE-1001206	04-May-05	---	---	---	---	---	---	---	---	---	---	---	---	---	16.3	7.9	710	---	---	
Pump Station Spring (QC 30.7 C)	RESE-1001206	04-May-05	---	---	---	---	---	---	---	---	---	---	---	**11**	---	---	---	---	---	---	Del Mar
Pump Station Spring (QC 30.7 C)	RESE-1001206	04-May-05	104	32.6	9.64	2.73	16.0	ND	337	74.4	38.9	0.172	0.254	---	453	---	---	---	---	---	SVL
Pump Station Spring (QC 30.7 C)	RESE-1001222	08-Aug-05	---	---	---	---	---	---	---	---	---	---	---	---	---	21.3	7.5	832	---	---	
Pump Station Spring (QC 30.7 C)	RESE-1001222	08-Aug-05	---	---	---	---	---	---	---	---	---	---	---	**20**	---	---	---	---	---	---	Del Mar
Pump Station Spring (QC 30.7 C)	RESE-1001222	08-Aug-05	114	36.2	11.4	2.67	17.7	ND	349	82.4	66.5 j	0.217 j	0.28	---	*541 j*	---	---	---	---	---	SVL
Pump Station Spring (QC 30.7 C) DUP	RESE-1001223	08-Aug-05	---	---	---	---	---	---	---	---	---	---	---	**18**	---	---	---	---	---	---	Del Mar
Pump Station Spring (QC 30.7 C) DUP	RESE-1001223	08-Aug-05	109	34.8	10.8	2.57	17.9	ND	351	82.5	63.5 j	0.21	0.269	---	*540 j*	---	---	---	---	---	SVL
Pump Station Spring (QC 30.7 C)	RESE-1002001	05-Aug-08	---	---	---	---	---	---	---	---	---	---	---	---	---	20.5	7.54	851	---	---	
Pump Station Spring (QC 30.7 C)	RESE-1002001	05-Aug-08	118	29.3	11.3	2.38	14.3	---	---	68.7	49.4	---	---	---	---	---	---	---	---	---	SVL
Pump Station Spring (QC 30.7 C)	RESE-1002001	05-Aug-08	---	---	---	---	15.0	ND	450	64.4	---	0.135	0.344	---	*570*	---	---	---	---	---	SVL
Pump Station Spring (QC 30.7 C)	RESE-1002001	05-Aug-08	---	---	---	---	---	---	---	---	---	---	---	7.3	---	---	---	---	---	---	TestAmerica
Pump Station Spring (QC 30.7 C)	RESE-1002001	05-Aug-08	113	27.3	11.0	2.12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Pump Station Spring (QC 30.7 C)	RESE-1002023	04-Nov-08	---	---	---	---	---	---	---	---	---	---	---	---	---	14.7	7.06	891	---	---	
Pump Station Spring (QC 30.7 C)	RESE-1002023	04-Nov-08	---	---	---	---	---	---	---	---	45.8	---	---	---	---	---	---	---	---	---	SVL
Pump Station Spring (QC 30.7 C)	RESE-1002023	04-Nov-08	---	---	---	---	14.8	ND	443	65.9	---	0.149	0.259	---	*540*	---	---	---	---	---	SVL
Pump Station Spring (QC 30.7 C)	RESE-1002023	04-Nov-08	---	---	---	---	---	---	---	---	---	---	---	10	---	---	---	---	---	---	TestAmerica
Pump Station Spring (QC 30.7 C)	RESE-1002023	04-Nov-08	121	30.9	10.7	1.84	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Pump Station Spring (QC 30.7 C)	RESE-1002053	17-Feb-09	---	---	---	---	---	---	---	---	---	---	---	---	---	9.1	8.22	147	---	---	
Pump Station Spring (QC 30.7 C)	RESE-1002053	17-Feb-09	---	---	---	---	---	---	---	---	25.7	---	---	---	---	---	---	---	---	---	SVL
Pump Station Spring (QC 30.7 C)	RESE-1002053	17-Feb-09	---	---	---	---	3.16	ND	66.7	12.8	---	<0.100	<0.100	---	145	---	---	---	---	---	SVL
Pump Station Spring (QC 30.7 C)	RESE-1002053	17-Feb-09	23.2	5.67	3.92	2.83	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Pump Station Spring (QC 30.7 C)	RESE-1002080	12-May-09	---	---	---	---	---	---	---	---	---	---	---	---	---	16.5	7.32	8.41	---	---	
Pump Station Spring (QC 30.7 C)	RESE-1002080	12-May-09	---	---	---	---	---	---	---	---	40.6	---	---	---	---	---	---	---	---	---	SVL
Pump Station Spring (QC 30.7 C)	RESE-1002080	12-May-09	---	---	---	---	13.4	ND	393	55.9	---	0.151	0.278	---	457	---	---	---	---	---	SVL
Pump Station Spring (QC 30.7 C)	RESE-1002080	12-May-09	104	26.5	11.0	2.70	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Pump Station Spring (QC 30.7 C) DUP	RESE-1002084	12-May-09	---	---	---	---	---	---	---	---	43.0	---	---	---	---	---	---	---	---	---	SVL
Pump Station Spring (QC 30.7 C) DUP	RESE-1002084	12-May-09	---	---	---	---	14.4	ND	387	57.1	---	0.155	0.275	---	458	---	---	---	---	---	SVL
Pump Station Spring (QC 30.7 C) DUP	RESE-1002084	12-May-09	107	27.0	11.1	2.77	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Pump Station Spring (QC 30.7 C)	RESE-1002125	16-Feb-10	---	---	---	---	---	---	---	---	---	---	---	---	---	11.6	7.67	374.9	---	---	
Pump Station Spring (QC 30.7 C)	RESE-1002125	16-Feb-10	---	---	---	---	---	---	---	---	40.8	---	---	---	---	---	---	---	---	---	SVL
Pump Station Spring (QC 30.7 C)	RESE-1002125	16-Feb-10	---	---	---	---	10.5	ND	270	38.4	---	<0.100	<0.100	---	296	---	---	---	---	---	SVL
Pump Station Spring (QC 30.7 C)	RESE-1002125	16-Feb-10	76.5	18.1	8.48	1.89	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Pump Station Spring (QC 30.7 C)	RESE-1002144	03-Nov-10	---	---	---	---	---	---	---	---	---	---	---	---	---	13.5	7.04	784	---	---	
Pump Station Spring (QC 30.7 C)	RESE-1002144	03-Nov-10	---	---	---	---	---	---	---	---	46.8	---	---	---	---	---	---	---	---	---	SVL
Pump Station Spring (QC 30.7 C)	RESE-1002144	03-Nov-10	---	---	---	---	14.2	ND	426	59.2	---	0.188	0.206	---	494	---	---	---	---	---	SVL
Pump Station Spring (QC 30.7 C)	RESE-1002144	03-Nov-10	116	27.4	11.2	1.68	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL

TABLE B-1. COMMON CONSTITUENTS AND ROUTINE PARAMETERS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	COMMON CONSTITUENTS[a] (mg/L)[b]													ROUTINE PARAMETERS					ANALYTICAL LABORATORY
																FIELD			LABORATORY		
			Ca	Mg	Na	K	Cl	CO_3	HCO_3	SO_4	SiO_2	Br	F	$NO_3 + NO_2$ (as N)	TDS	TEMP (°C)[c]	pH	SC (µS/cm)[d]	pH	SC (µS/cm)	
Surface Water 1 - Queen Creek																					
Pump Station Spring (QC 30.7 C) DUP	RESE-1002145	03-Nov-10	---	---	---	---	---	---	---	---	---	---	---	---	---	13.5	7.04	784	---	---	
Pump Station Spring (QC 30.7 C) DUP	RESE-1002145	03-Nov-10	---	---	---	---	---	---	---	---	46.5	---	---	---	---	---	---	---	---	---	SVL
Pump Station Spring (QC 30.7 C) DUP	RESE-1002145	03-Nov-10	---	---	---	---	14.5	ND	427	60.0	---	0.169	0.228	---	497	---	---	---	---	---	SVL
Pump Station Spring (QC 30.7 C) DUP	RESE-1002145	03-Nov-10	118	27.6	11.4	1.52	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Pump Station Spring (QC 30.7 C)	RESE-1002168	17-May-11	---	---	---	---	---	---	---	---	---	---	---	---	---	12.7	7.3	876	---	---	
Pump Station Spring (QC 30.7 C)	RESE-1002168	17-May-11	---	---	---	---	---	---	---	---	46.1	---	---	---	---	---	---	---	---	---	SVL
Pump Station Spring (QC 30.7 C)	RESE-1002168	17-May-11	---	---	---	---	13.8	ND	442	55.1	---	0.14	0.19	---	*517*	---	---	---	---	---	SVL
Pump Station Spring (QC 30.7 C)	RESE-1002168	17-May-11	124	29.1	10.2	1.61	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Pump Station Spring (QC 30.7 C) SP	RESE-1002168	17-May-11	120	30	11	<2.0	---	---	---	---	49	---	---	---	---	---	---	---	---	---	TestAmerica
Pump Station Spring (QC 30.7 C) SP	RESE-1002168	17-May-11	120	28	11	<2.0	13	ND	427	57	48	<0.50	<0.40	3.8	*540*	---	---	---	7.77	790	TestAmerica
Pump Station Spring (QC 30.7 C)	RESE-1002248	09-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	13.85	7.06	540	---	---	
Pump Station Spring (QC 30.7 C)	RESE-1002248	09-May-12	---	---	---	---	---	---	---	---	49.8	---	---	---	---	---	---	---	---	---	SVL
Pump Station Spring (QC 30.7 C)	RESE-1002248	09-May-12	---	---	---	---	10.6	ND	416	52.5	---	0.12	0.24	---	463	---	---	---	---	---	SVL
Pump Station Spring (QC 30.7 C)	RESE-1002248	09-May-12	115	26.4	10.2	1.37	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
QC 19.7 C	RESE-1002021	28-Aug-08	---	---	---	---	---	---	---	---	---	---	---	---	---	28.9	8.29	438	---	---	
QC 19.7 C	RESE-1002021	28-Aug-08	57	12.4	14.5	4.17	12.6	---	---	56.9	30	---	---	---	---	---	---	---	---	---	SVL
QC 19.7 C	RESE-1002021	28-Aug-08	50.7	11	13	3.93	11.8	ND	171	58.2	---	0.111	0.159	---	292	---	---	---	---	---	SVL
QC 19.7 C	RESE-1002021	28-Aug-08	---	---	---	---	---	---	---	---	---	---	---	4.6	---	---	---	---	---	---	TestAmerica
QC 19.7 C	RESE-1002048	11-Feb-09	---	---	---	---	---	---	---	---	---	---	---	---	---	11.6	8.11	188	---	---	
QC 19.7 C	RESE-1002048	11-Feb-09	---	---	---	---	---	---	---	---	22.8	---	---	---	---	---	---	---	---	---	SVL
QC 19.7 C	RESE-1002048	11-Feb-09	---	---	---	---	5.95	ND	75.4	21.9	---	0.236	<0.100	---	147	---	---	---	---	---	SVL
QC 19.7 C	RESE-1002048	11-Feb-09	21.0	4.08	6.27	1.48	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
QC 19.7 C	RESE-1002206	14-Dec-11	---	---	---	---	---	---	---	---	---	---	---	---	---	9.1	8.19	127.2	---	---	
QC 19.7 C	RESE-1002206	14-Dec-11	---	---	---	---	---	---	---	---	20.0	---	---	---	---	---	---	---	---	---	SVL
QC 19.7 C	RESE-1002206	14-Dec-11	---	---	---	---	4.84	ND	45.8	20.7	---	<0.10	0.13	---	122	---	---	---	---	---	SVL
QC 19.7 C	RESE-1002206	14-Dec-11	18.1	3.43	5.93	1.99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
QC 19.7 C	RESE-1003070	17-Dec-12	---	---	---	---	---	---	---	---	---	---	---	---	---	10.68	7.98	240	---	---	
QC 19.7 C	RESE-1003070	17-Dec-12	---	---	---	---	---	---	---	---	21.7	---	---	---	---	---	---	---	---	---	SVL
QC 19.7 C	RESE-1003070	17-Dec-12	---	---	---	---	8.97	ND	108.6	42.8	---	<0.10	0.21	---	198	---	---	---	---	---	SVL
QC 19.7 C	RESE-1003070	17-Dec-12	35.4	8.06	12.3	2.96	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
QC 19.7 C	RESE-1003076	29-Jan-13	---	---	---	---	---	---	---	---	---	---	---	---	---	9.5	8.19	125.2	---	---	
QC 19.7 C	RESE-1003076	29-Jan-13	---	---	---	---	---	---	---	---	23.3	---	---	---	---	---	---	---	---	---	SVL
QC 19.7 C	RESE-1003076	29-Jan-13	---	---	---	---	5.84	ND	62.8	21.7	---	<0.10	0.12	---	150	---	---	---	---	---	SVL
QC 19.7 C	RESE-1003076	29-Jan-13	22.6	4.44	8.20	1.91	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
QC 19.7 C DUP	RESE-1003077	29-Jan-13	---	---	---	---	---	---	---	---	---	---	---	---	---	9.5	8.19	125.2	---	---	
QC 19.7 C DUP	RESE-1003077	29-Jan-13	---	---	---	---	---	---	---	---	24.3	---	---	---	---	---	---	---	---	---	SVL
QC 19.7 C DUP	RESE-1003077	29-Jan-13	---	---	---	---	5.85	ND	63.1	21.8	---	<0.10	0.11	---	149	---	---	---	---	---	SVL
QC 19.7 C DUP	RESE-1003077	29-Jan-13	23.2	4.53	8.34	1.91	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL

MONTGOMERY & ASSOCIATES

TABLE B-1. COMMON CONSTITUENTS AND ROUTINE PARAMETERS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	COMMON CONSTITUENTS[a] (mg/L)[b]													ROUTINE PARAMETERS					ANALYTICAL LABORATORY
																FIELD			LABORATORY		
			Ca	Mg	Na	K	Cl	CO_3	HCO_3	SO_4	SiO_2	Br	F	$NO_3 + NO_2$ (as N)	TDS	TEMP (°C)[c]	pH	SC (µS/cm)[d]	pH	SC (µS/cm)	
Surface Water 1 - Queen Creek																					
QC 19.7 C	RESE-1003085	13-Mar-13	---	---	---	---	---	---	---	---	---	---	---	---	---	10.98	8.17	340	---	---	
QC 19.7 C	RESE-1003085	13-Mar-13	---	---	---	---	---	---	---	---	25.5	---	---	---	---	---	---	---	---	---	SVL
QC 19.7 C	RESE-1003085	13-Mar-13	---	---	---	---	9.91	ND	131	42.8	---	<0.10	0.25	---	213	---	---	---	---	---	SVL
QC 19.7 C	RESE-1003085	13-Mar-13	36.4	9.38	13.8	2.16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
QC 19.7 C	RESE-1001127	03-Mar-14	---	---	---	---	---	---	---	---	---	---	---	---	---	12.6	8.5	---	---	---	
QC 19.7 C	RESE-1001127	03-Mar-14	---	---	---	---	---	---	---	---	23	---	---	---	---	---	---	---	---	---	TestAmerica
QC 19.7 C	RESE-1001127	03-Mar-14	---	---	---	---	5.5	ND	96	28	---	<0.083	0.15 j	---	200	---	---	---	8.02	250	TestAmerica
QC 19.7 C	RESE-1001127	03-Mar-14	30	6.5	9.8	2.3	---	---	---	---	24	---	---	---	---	---	---	---	---	---	TestAmerica
QC 19.7 C	RESE-1001150	15-Jul-14	---	---	---	---	---	---	---	---	---	---	---	---	---	25.60	*8.98*	---	---	---	
QC 19.7 C	RESE-1001150	15-Jul-14	16	2.1	---	---	---	---	---	---	7.2	---	---	---	---	---	---	---	---	---	TestAmerica
QC 19.7 C	RESE-1001150	15-Jul-14	200	28	2.2	15	2.0	ND	82	6.8	110	<0.50	<0.40	---	220	---	---	---	7.86	200	TestAmerica
QC 19.7 C	RESE-1001333	09-Oct-14	---	---	---	---	---	---	---	---	---	---	---	---	---	18.49	7.65	136	---	---	
QC 19.7 C	RESE-1001333	09-Oct-14	---	---	---	---	---	---	---	---	16	---	---	---	---	---	---	---	---	---	TestAmerica
QC 19.7 C	RESE-1001333	09-Oct-14	---	---	---	---	3.9	ND	55	11	---	<0.051	0.11 j	0.67	170	---	---	---	7.91	140	TestAmerica
QC 19.7 C	RESE-1001333	09-Oct-14	27	5.2	6.0	3.7	---	---	---	---	46	---	---	---	---	---	---	---	---	---	TestAmerica
QC 21.7 C (Magma Avenue)	RESE-1002018	28-Aug-08	---	---	---	---	---	---	---	---	---	---	---	---	---	26.2	8.27	335	---	---	
QC 21.7 C (Magma Avenue)	RESE-1002018	28-Aug-08	---	---	---	---	---	---	---	---	---	---	---	5.6	---	---	---	---	---	---	TestAmerica
QC 21.7 C (Magma Avenue) LD	RESE-1002018	28-Aug-08	45.4	8.48	8.69	3.09	8.82	---	---	29.6	30.7	---	---	---	---	---	---	---	---	---	SVL
QC 21.7 C (Magma Avenue) LD	RESE-1002018	28-Aug-08	41.1	7.59	7.94	2.93	8.23	ND	137	32.3	---	0.116	0.122	---	236	---	---	---	---	---	SVL
QC 21.7 C (Magma Avenue)	RESE-1002025	04-Nov-08	---	---	---	---	---	---	---	---	---	---	---	---	---	16.5	8.3	405	---	---	
QC 21.7 C (Magma Avenue)	RESE-1002025	04-Nov-08	---	---	---	---	---	---	---	---	24.5	---	---	---	---	---	---	---	---	---	SVL
QC 21.7 C (Magma Avenue)	RESE-1002025	04-Nov-08	---	---	---	---	21.4	ND	192	24.3	---	0.213	0.290	---	250	---	---	---	---	---	SVL
QC 21.7 C (Magma Avenue)	RESE-1002025	04-Nov-08	---	---	---	---	---	---	---	---	---	---	---	<0.30	---	---	---	---	---	---	TestAmerica
QC 21.7 C (Magma Avenue)	RESE-1002025	04-Nov-08	43.6	12.2	19.4	5.43	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
QC 21.7 C (Magma Avenue)	RESE-1002047	11-Feb-09	---	---	---	---	---	---	---	---	---	---	---	---	---	6.5	8.13	168	---	---	
QC 21.7 C (Magma Avenue)	RESE-1002047	11-Feb-09	---	---	---	---	---	---	---	---	22.9	---	---	---	---	---	---	---	---	---	SVL
QC 21.7 C (Magma Avenue)	RESE-1002047	11-Feb-09	---	---	---	---	5.41	ND	64.1	17.4	---	0.214	<0.100	---	141	---	---	---	---	---	SVL
QC 21.7 C (Magma Avenue)	RESE-1002047	11-Feb-09	18.4	3.31	5.31	1.41	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
QC 21.7 C (Magma Avenue)	RESE-1002083	07-May-09	---	---	---	---	---	---	---	---	---	---	---	---	---	22.2	8.44	307	---	---	
QC 21.7 C (Magma Avenue)	RESE-1002083	07-May-09	---	---	---	---	---	---	---	---	3.56	---	---	---	---	---	---	---	---	---	SVL
QC 21.7 C (Magma Avenue)	RESE-1002083	07-May-09	---	---	---	---	21.0	ND	116.1	45.5	---	0.180	0.229	---	224	---	---	---	---	---	SVL
QC 21.7 C (Magma Avenue)	RESE-1002083	07-May-09	31.6	10.6	20.3	6.21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
QC 21.7 C (Magma Avenue)	RESE-1002141	01-Nov-10	---	---	---	---	---	---	---	---	---	---	---	---	---	18.3	7.78	449.8	---	---	
QC 21.7 C (Magma Avenue)	RESE-1002141	01-Nov-10	---	---	---	---	---	---	---	---	7.55	---	---	---	---	---	---	---	---	---	SVL
QC 21.7 C (Magma Avenue)	RESE-1002141	01-Nov-10	---	---	---	---	24.2	ND	156	61.5	---	0.152	0.196	---	273	---	---	---	---	---	SVL
QC 21.7 C (Magma Avenue)	RESE-1002141	01-Nov-10	49.2	13.7	15.9	6.47	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
QC 21.7 C (Magma Avenue)	RESE-1002177	19-Aug-11	---	---	---	---	---	---	---	---	---	---	---	---	---	27.1	7.51	249	---	---	
QC 21.7 C (Magma Avenue)	RESE-1002177	19-Aug-11	---	---	---	---	---	---	---	---	10.6	---	---	---	---	---	---	---	---	---	SVL
QC 21.7 C (Magma Avenue)	RESE-1002177	19-Aug-11	---	---	---	---	3.32	ND	64.1	46.8	---	<0.10	0.20	---	220	---	---	---	---	---	SVL
QC 21.7 C (Magma Avenue)	RESE-1002177	19-Aug-11	37.5	7.56	4.55	7.30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL

TABLE B-1. COMMON CONSTITUENTS AND ROUTINE PARAMETERS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	COMMON CONSTITUENTS[a] (mg/L)[b]													ROUTINE PARAMETERS					ANALYTICAL LABORATORY
																FIELD			LABORATORY		
			Ca	Mg	Na	K	Cl	CO_3	HCO_3	SO_4	SiO_2	Br	F	$NO_3 + NO_2$ (as N)	TDS	TEMP (°C)[c]	pH	SC (µS/cm)[d]	pH	SC (µS/cm)	
Surface Water 1 - Queen Creek																					
QC 21.7 C (Magma Avenue)	RESE-1002190	28-Nov-11	---	---	---	---	---	---	---	---	---	---	---	---	---	8.0	8.45	279	---	---	
QC 21.7 C (Magma Avenue)	RESE-1002190	28-Nov-11	---	---	---	---	---	---	---	---	9.31	---	---	---	---	---	---	---	---	---	SVL
QC 21.7 C (Magma Avenue)	RESE-1002190	28-Nov-11	---	---	---	---	4.92	ND	131	50.3	---	<0.10	0.20	---	186	---	---	---	---	---	SVL
QC 21.7 C (Magma Avenue)	RESE-1002190	28-Nov-11	40.3	8.05	6.28	4.76	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
QC 21.7 C (Magma Avenue)	RESE-1002208	27-Feb-12	---	---	---	---	---	---	---	---	---	---	---	---	---	11.9	8.4	332	---	---	
QC 21.7 C (Magma Avenue)	RESE-1002208	27-Feb-12	---	---	---	---	---	---	---	---	21.4	---	---	---	---	---	---	---	---	---	SVL
QC 21.7 C (Magma Avenue)	RESE-1002208	27-Feb-12	---	---	---	---	8.66	ND	155	34.0	---	<0.10	0.18	---	203	---	---	---	---	---	SVL
QC 21.7 C (Magma Avenue)	RESE-1002208	27-Feb-12	42.5	9.82	12.0	3.34	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
QC 21.7 C (Magma Avenue)	RESE-1002228	02-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	22.84	*8.59*	258	---	---	
QC 21.7 C (Magma Avenue)	RESE-1002228	02-May-12	---	---	---	---	---	---	---	---	29.7	---	---	---	---	---	---	---	---	---	SVL
QC 21.7 C (Magma Avenue)	RESE-1002228	02-May-12	---	---	---	---	11.6	16.5	94.2	27.9	---	<0.10	0.21	---	203	---	---	---	---	---	SVL
QC 21.7 C (Magma Avenue)	RESE-1002228	02-May-12	29.4	9.24	16	1.47	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
QC 21.7 C (Magma Avenue)	RESE-1003054	14-Aug-12	---	---	---	---	---	---	---	---	---	---	---	---	---	26.1	7.64	507.9	---	---	
QC 21.7 C (Magma Avenue)	RESE-1003054	14-Aug-12	---	---	---	---	---	---	---	---	30.2	---	---	---	---	---	---	---	---	---	SVL
QC 21.7 C (Magma Avenue)	RESE-1003054	14-Aug-12	---	---	---	---	10.5	ND	232	44.9	---	0.11	0.37	---	323	---	---	---	---	---	SVL
QC 21.7 C (Magma Avenue)	RESE-1003054	14-Aug-12	58.7	12.6	15.7	7.63	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
QC 22.6 E (Karst Spring)	RESE-1001180	08-Feb-05	---	---	---	---	---	---	---	---	---	---	---	---	---	15.2	7.5	366	---	---	
QC 22.6 E (Karst Spring)	RESE-1001180	08-Feb-05	---	---	---	---	---	---	---	---	---	---	---	0.84	---	---	---	---	---	---	Del Mar
QC 22.6 E (Karst Spring)	RESE-1001180	08-Feb-05	53.1	8.96	9.75	2.15	8.39	ND	179	27.4	29.6	0.135	0.162	---	254	---	---	---	---	---	SVL
QC 22.6 E (Karst Spring)	RESE-1002017	28-Aug-08	---	---	---	---	---	---	---	---	---	---	---	---	---	19.4	7.14	570	---	---	
QC 22.6 E (Karst Spring)	RESE-1002017	28-Aug-08	84.2	14.6	20	3.07	15.2	---	---	38.2	35.3	---	---	---	---	---	---	---	---	---	SVL
QC 22.6 E (Karst Spring)	RESE-1002017	28-Aug-08	76	13	18.3	2.9	13.9	ND	322	41.4	---	0.143	0.166	---	359	---	---	---	---	---	SVL
QC 22.6 E (Karst Spring)	RESE-1002017	28-Aug-08	---	---	---	---	---	---	---	---	---	---	---	1.6	---	---	---	---	---	---	TestAmerica
QC 22.6 E (Karst Spring) DUP	RESE-1002050	11-Feb-09	---	---	---	---	---	---	---	---	28.2	---	---	---	---	---	---	---	---	---	SVL
QC 22.6 E (Karst Spring) DUP	RESE-1002050	11-Feb-09	---	---	---	---	10.4	ND	242	31.1	---	0.189	<0.100	---	257	---	---	---	---	---	SVL
QC 22.6 E (Karst Spring) DUP	RESE-1002050	11-Feb-09	54.5	9.26	12.7	2.17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
QC 22.6 E (Karst Spring)	RESE-1002049	11-Feb-09	---	---	---	---	---	---	---	---	---	---	---	---	---	17.0	7.29	392	---	---	
QC 22.6 E (Karst Spring)	RESE-1002049	11-Feb-09	---	---	---	---	---	---	---	---	27.6	---	---	---	---	---	---	---	---	---	SVL
QC 22.6 E (Karst Spring)	RESE-1002049	11-Feb-09	---	---	---	---	<0.200	ND	244	31.0	---	<0.100	<0.100	---	267	---	---	---	---	---	SVL
QC 22.6 E (Karst Spring)	RESE-1002049	11-Feb-09	56.1	9.56	13.0	2.21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
QC 22.6 E (Karst Spring)	RESE-1002207	27-Feb-12	---	---	---	---	---	---	---	---	---	---	---	---	---	17.6	7.89	445	---	---	
QC 22.6 E (Karst Spring)	RESE-1002207	27-Feb-12	---	---	---	---	---	---	---	---	30.5	---	---	---	---	---	---	---	---	---	SVL
QC 22.6 E (Karst Spring)	RESE-1002207	27-Feb-12	---	---	---	---	10.7	ND	256	38.2	---	<0.10	0.13	---	301	---	---	---	---	---	SVL
QC 22.6 E (Karst Spring)	RESE-1002207	27-Feb-12	68.6	12.0	13.7	2.47	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
QC 22.6 E (Karst Spring)	RESE-1003072	17-Dec-12	---	---	---	---	---	---	---	---	---	---	---	---	---	18.62	7.34	376	---	---	
QC 22.6 E (Karst Spring)	RESE-1003072	17-Dec-12	---	---	---	---	---	---	---	---	29.9	---	---	---	---	---	---	---	---	---	SVL
QC 22.6 E (Karst Spring)	RESE-1003072	17-Dec-12	---	---	---	---	10.9	ND	250	46.2	---	0.11	0.14	---	304	---	---	---	---	---	SVL
QC 22.6 E (Karst Spring)	RESE-1003072	17-Dec-12	69.0	11.9	14.5	2.74	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL

MONTGOMERY & ASSOCIATES

TABLE B-1. COMMON CONSTITUENTS AND ROUTINE PARAMETERS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	COMMON CONSTITUENTS[a] (mg/L)[b]													ROUTINE PARAMETERS					ANALYTICAL LABORATORY
																FIELD			LABORATORY		
			Ca	Mg	Na	K	Cl	CO_3	HCO_3	SO_4	SiO_2	Br	F	$NO_3 + NO_2$ (as N)	TDS	TEMP (°C)[c]	pH	SC (µS/cm)[d]	pH	SC (µS/cm)	
Surface Water 1 - Queen Creek																					
QC 22.6 E (Karst Spring)	RESE-1003075	29-Jan-13	---	---	---	---	---	---	---	---	---	---	---	---	---	15.3	7.38	309.8	---	---	
QC 22.6 E (Karst Spring)	RESE-1003075	29-Jan-13	---	---	---	---	---	---	---	---	27.4	---	---	---	---	---	---	---	---	---	SVL
QC 22.6 E (Karst Spring)	RESE-1003075	29-Jan-13	---	---	---	---	8.85	ND	205	31.3	---	<0.10	0.11	---	245	---	---	---	---	---	SVL
QC 22.6 E (Karst Spring)	RESE-1003075	29-Jan-13	58.9	9.72	13.3	2.22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
QC 22.6 E (Karst Spring)	RESE-1003086	13-Mar-13	---	---	---	---	---	---	---	---	---	---	---	---	---	14.7	7.73	357	---	---	
QC 22.6 E (Karst Spring)	RESE-1003086	13-Mar-13	---	---	---	---	---	---	---	---	27.0	---	---	---	---	---	---	---	---	---	SVL
QC 22.6 E (Karst Spring)	RESE-1003086	13-Mar-13	---	---	---	---	9.35	ND	168	27.4	---	<0.10	0.17	---	224	---	---	---	---	---	SVL
QC 22.6 E (Karst Spring)	RESE-1003086	13-Mar-13	48.1	8.26	10.5	1.93	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
QC 27.3 C	RESE-1001184	08-Feb-05	---	---	---	---	---	---	---	---	---	---	---	---	---	10.4	8.3	336	---	---	
QC 27.3 C	RESE-1001184	08-Feb-05	---	---	---	---	---	---	---	---	---	---	---	2.1	---	---	---	---	---	---	Del Mar
QC 27.3 C	RESE-1001184	08-Feb-05	81.9	14.1	6.41	3.52	16.8	ND	266	24.4	69.7	0.321	0.135	---	295	---	---	---	---	---	SVL
QC 27.3 C	RESE-1001207	04-May-05	---	---	---	---	---	---	---	---	---	---	---	---	---	20.9	8.4	442	---	---	
QC 27.3 C	RESE-1001207	04-May-05	---	---	---	---	---	---	---	---	---	---	---	2.1	---	---	---	---	---	---	Del Mar
QC 27.3 C	RESE-1001207	04-May-05	60.9	17.5	9.44	2.81	21.3	ND	160	70.7	27.1	0.22	0.125	---	298	---	---	---	---	---	SVL
QC 27.3 C	RESE-1002002	05-Aug-08	---	---	---	---	---	---	---	---	---	---	---	---	---	23.2	*8.69*	444	---	---	
QC 27.3 C	RESE-1002002	05-Aug-08	43.0	17.2	17.0	7.55	33.6	---	---	13.9	20.6	---	---	---	---	---	---	---	---	---	SVL
QC 27.3 C	RESE-1002002	05-Aug-08	---	---	---	---	33.7	ND	207	12.7	---	0.392	0.230	---	210	---	---	---	---	---	SVL
QC 27.3 C	RESE-1002002	05-Aug-08	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	TestAmerica
QC 27.3 C	RESE-1002002	05-Aug-08	44.9	16.3	16.5	7.16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
QC 27.3 C	RESE-1002024	04-Nov-08	---	---	---	---	---	---	---	---	---	---	---	---	---	14.7	*8.98*	396	---	---	
QC 27.3 C	RESE-1002024	04-Nov-08	---	---	---	---	---	---	---	---	0.18	---	---	---	---	---	---	---	---	---	SVL
QC 27.3 C	RESE-1002024	04-Nov-08	---	---	---	---	17.9	ND	157	56.8	---	0.131	0.239	---	230	---	---	---	---	---	SVL
QC 27.3 C	RESE-1002024	04-Nov-08	---	---	---	---	---	---	---	---	---	---	---	<0.30	---	---	---	---	---	---	TestAmerica
QC 27.3 C	RESE-1002024	04-Nov-08	40.6	19.1	9.49	4.08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
QC 27.3 C	RESE-1002054	17-Feb-09	---	---	---	---	---	---	---	---	---	---	---	---	---	10.9	8.33	161	---	---	
QC 27.3 C	RESE-1002054	17-Feb-09	---	---	---	---	---	---	---	---	23.1	---	---	---	---	---	---	---	---	---	SVL
QC 27.3 C	RESE-1002054	17-Feb-09	---	---	---	---	4.32	ND	69.5	13.3	---	<0.100	<0.100	---	154	---	---	---	---	---	SVL
QC 27.3 C	RESE-1002054	17-Feb-09	67.2	6.46	4.45	2.44	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
QC 27.3 C	RESE-1002079	07-May-09	---	---	---	---	---	---	---	---	---	---	---	---	---	14.4	7.76	503	---	---	
QC 27.3 C	RESE-1002079	07-May-09	---	---	---	---	---	---	---	---	21.9	---	---	---	---	---	---	---	---	---	SVL
QC 27.3 C	RESE-1002079	07-May-09	---	---	---	---	43.0	ND	242	42.2	---	0.541	0.131	---	321	---	---	---	---	---	SVL
QC 27.3 C	RESE-1002079	07-May-09	69.6	23.7	13.8	4.50	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
QC 27.3 C	RESE-1002146	03-Nov-10	---	---	---	---	---	---	---	---	---	---	---	---	---	13.8	*8.53*	267	---	---	
QC 27.3 C	RESE-1002146	03-Nov-10	---	---	---	---	---	---	---	---	16.4	---	---	---	---	---	---	---	---	---	SVL
QC 27.3 C	RESE-1002146	03-Nov-10	---	---	---	---	13.6	ND	138	12.1	---	0.183	0.105	---	175	---	---	---	---	---	SVL
QC 27.3 C	RESE-1002146	03-Nov-10	35.9	8.44	5.58	3.06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
QC 27.3 C	RESE-1002175	19-Aug-11	---	---	---	---	---	---	---	---	---	---	---	---	---	23.7	7.32	261	---	---	
QC 27.3 C	RESE-1002175	19-Aug-11	---	---	---	---	---	---	---	---	28.5	---	---	---	---	---	---	---	---	---	SVL
QC 27.3 C	RESE-1002175	19-Aug-11	---	---	---	---	3.99	ND	165	8.62	---	<0.10	0.13	---	193	---	---	---	---	---	SVL
QC 27.3 C	RESE-1002175	19-Aug-11	40.4	8.57	6.43	3.39	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL

TABLE B-1. COMMON CONSTITUENTS AND ROUTINE PARAMETERS FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	COMMON CONSTITUENTS[a] (mg/L)[b]													ROUTINE PARAMETERS					ANALYTICAL LABORATORY
																FIELD			LABORATORY		
			Ca	Mg	Na	K	Cl	CO_3	HCO_3	SO_4	SiO_2	Br	F	$NO_3 + NO_2$ (as N)	TDS	TEMP (°C)[c]	pH	SC (µS/cm)[d]	pH	SC (µS/cm)	
Surface Water 1 - Queen Creek																					
QC 27.3 C	RESE-1002197	01-Dec-11	---	---	---	---	---	---	---	---	---	---	---	---	---	8.0	8.4	287	---	---	
QC 27.3 C	RESE-1002197	01-Dec-11	---	---	---	---	---	---	---	---	16.4	---	---	---	---	---	---	---	---	---	SVL
QC 27.3 C	RESE-1002197	01-Dec-11	---	---	---	---	15.6	ND	155	15.4	---	0.16	<0.10	---	204	---	---	---	---	---	SVL
QC 27.3 C	RESE-1002197	01-Dec-11	42.9	9.19	5.41	2.70	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
QC 27.3 C	RESE-1002213	29-Feb-12	---	---	---	---	---	---	---	---	---	---	---	---	---	8.8	6.73	413	---	---	
QC 27.3 C	RESE-1002213	29-Feb-12	---	---	---	---	---	---	---	---	28.2	---	---	---	---	---	---	---	---	---	SVL
QC 27.3 C	RESE-1002213	29-Feb-12	---	---	---	---	12.3	ND	212	31.1	---	0.12	0.14	---	249	---	---	---	---	---	SVL
QC 27.3 C	RESE-1002213	29-Feb-12	57.6	12.8	7.86	2.27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
QC 27.3 C	RESE-1002249	09-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	15.12	8.24	291	---	---	
QC 27.3 C	RESE-1002249	09-May-12	---	---	---	---	---	---	---	---	29.5	---	---	---	---	---	---	---	---	---	SVL
QC 27.3 C	RESE-1002249	09-May-12	---	---	---	---	18.0	7.3	168	30.5	---	1.11	0.12	---	222	---	---	---	---	---	SVL
QC 27.3 C	RESE-1002249	09-May-12	50.2	15	10.3	2.45	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Surface Water 2 - Devils Canyon																					
DC 10.9 C	RESE-1001004	16-May-03	---	---	---	---	---	---	---	---	---	---	---	---	---	18.2	6.6	79.5	---	---	
DC 10.9 C	RESE-1001004	16-May-03	---	---	---	---	---	---	---	---	---	<0.10	<0.10	---	---	---	---	---	---	---	SVL
DC 10.9 C	RESE-1001004	16-May-03	---	---	---	---	---	---	---	---	---	---	---	<0.10	---	---	---	---	---	---	Del Mar
DC 10.9 C	RESE-1001004	16-May-03	7.23	2.02	5.95	1.8	5.59	ND	17.7	17.8	32.8	---	---	---	110	---	---	---	---	---	SVL
DC 10.9 C	RESE-1001020	27-Aug-03	---	---	---	---	---	---	---	---	---	---	---	---	---	23.2	*5.9*	216	---	---	
DC 10.9 C	RESE-1001020	27-Aug-03	---	---	---	---	---	---	---	---	---	0.21	<0.10	---	---	---	---	---	---	---	SVL
DC 10.9 C	RESE-1001020	27-Aug-03	---	---	---	---	---	---	---	---	---	---	---	0.79	---	---	---	---	---	---	Del Mar
DC 10.9 C	RESE-1001020	27-Aug-03	17.6	4.58	10.0	2.8	10.9	ND	14.4	52.6	53.6	---	---	---	195	---	---	---	---	---	SVL
DC 10.9 C	RESE-1001036	05-Nov-03	---	---	---	---	---	---	---	---	---	---	---	---	---	11.7	6.6	81.6	---	---	
DC 10.9 C	RESE-1001036	05-Nov-03	---	---	---	---	---	---	---	---	---	---	---	<0.10	---	---	---	---	---	---	Del Mar
DC 10.9 C	RESE-1001036	05-Nov-03	6.73	1.83	5.81	1.6	5.16	ND	34.3	3.58	34.7	<0.10	<0.10	---	60	---	---	---	---	---	SVL
DC 10.9 C	RESE-1001060	11-Feb-04	---	---	---	---	---	---	---	---	---	---	---	---	---	11.8	6.7	93.4	---	---	
DC 10.9 C	RESE-1001060	11-Feb-04	---	---	---	---	---	---	---	---	---	---	---	<0.10	---	---	---	---	---	---	Del Mar
DC 10.9 C	RESE-1001060	11-Feb-04	8.26	2.3	5.56	1.48	4.44	ND	12.6	24.4	---	<0.10	<0.10	---	113	---	---	---	---	---	SVL
DC 10.9 C	RESE-1001091	27-May-04	---	---	---	---	---	---	---	---	---	---	---	---	---	17.9	6.75	84.1	---	---	
DC 10.9 C	RESE-1001091	27-May-04	---	---	---	---	---	---	---	---	---	---	---	<0.20	---	---	---	---	---	---	Del Mar
DC 10.9 C	RESE-1001091	27-May-04	6.44	1.93	6.03	1.7	6.08	ND	32.0	6.39	31.8	0.11	<0.10	---	95	---	---	---	---	---	SVL
DC 10.9 C	RESE-1001099	11-Aug-04	---	---	---	---	---	---	---	---	---	---	---	---	---	23.0	6.6	123.4	---	---	
DC 10.9 C	RESE-1001099	11-Aug-04	---	---	---	---	---	---	---	---	---	---	---	<0.20	---	---	---	---	---	---	Del Mar
DC 10.9 C	RESE-1001099	11-Aug-04	8.70	2.38	7.86	2.0	11.2	ND	48.1	2.49	37.1	0.16	<0.10	---	91	---	---	---	---	---	SVL
DC 10.9 C	RESE-1001169	05-Nov-04	---	---	---	---	---	---	---	---	---	---	---	---	---	10.3	7.6	145.6	---	---	
DC 10.9 C	RESE-1001169	05-Nov-04	---	---	---	---	---	---	---	---	---	---	---	<0.20	---	---	---	---	---	---	Del Mar
DC 10.9 C	RESE-1001169	05-Nov-04	13.1	3.82	9.18	2.1	6.75	ND	39.2	31.0	34.0	<0.10	<0.10	---	117	---	---	---	---	---	SVL
DC 10.9 C	RESE-1001189	15-Feb-05	---	---	---	---	---	---	---	---	---	---	---	---	---	9.3	7.5	58	---	---	
DC 10.9 C	RESE-1001189	15-Feb-05	---	---	---	---	---	---	---	---	---	---	---	0.29	---	---	---	---	---	---	Del Mar
DC 10.9 C	RESE-1001189	15-Feb-05	5.47	1.49	4.02	1.66	2.87	ND	10.58	10.5	25.1	<0.100	<0.100	---	70.0	---	---	---	---	---	SVL

MONTGOMERY & ASSOCIATES

TABLE B-1. COMMON CONSTITUENTS AND ROUTINE PARAMETERS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	COMMON CONSTITUENTS[a] (mg/L)[b]													ROUTINE PARAMETERS					ANALYTICAL LABORATORY
																FIELD			LABORATORY		
			Ca	Mg	Na	K	Cl	CO_3	HCO_3	SO_4	SiO_2	Br	F	$NO_3 + NO_2$ (as N)	TDS	TEMP (°C)[c]	pH	SC (µS/cm)[d]	pH	SC (µS/cm)	
Surface Water 2 - Devils Canyon																					
DC 10.9 C	RESE-1001208	09-May-05	---	---	---	---	---	---	---	---	---	---	---	---	---	15.8	6.8	89.1	---	---	
DC 10.9 C	RESE-1001208	09-May-05	---	---	---	---	---	---	---	---	---	---	---	<0.20	---	---	---	---	---	---	Del Mar
DC 10.9 C	RESE-1001208	09-May-05	7.46	2.01	5.97	1.67	8.23	ND	21.4	10.7	28.4	0.115	<0.100	---	42	---	---	---	---	---	SVL
DC 10.9 C	RESE-1001224	10-Aug-05	---	---	---	---	---	---	---	---	---	---	---	---	---	22.0	7.3	105.5	---	---	
DC 10.9 C	RESE-1001224	10-Aug-05	---	---	---	---	---	---	---	---	---	---	---	0.72	---	---	---	---	---	---	Del Mar
DC 10.9 C	RESE-1001224	10-Aug-05	9.44	2.58	6.63	2.54	9.38	ND	26.7	10.4	27.7 j	0.102	<0.100	---	93	---	---	---	---	---	SVL
DC 10.9 C	RESE-1002224	27-Apr-12	---	---	---	---	---	---	---	---	---	---	---	---	---	18.34	6.72	73	---	---	
DC 10.9 C	RESE-1002224	27-Apr-12	---	---	---	---	---	---	---	---	29.6	---	---	---	---	---	---	---	---	---	SVL
DC 10.9 C	RESE-1002224	27-Apr-12	---	---	---	---	7.62	ND	20.1	10.9	---	<0.10	0.11	---	77	---	---	---	---	---	SVL
DC 10.9 C	RESE-1002224	27-Apr-12	7.2	2.06	6.35	1.68	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
DC 10.9 C	---	06-Jun-13	---	---	---	---	---	---	---	---	---	---	---	---	---	20	6.64	92	---	---	
DC 10.9 C	---	06-Aug-13	---	---	---	---	---	---	---	---	---	---	---	---	---	22.52	7.22	164	---	---	
DC 13.5 C DUP	RESE-1001012	30-May-03	---	---	---	---	---	---	---	---	---	0.12	0.18	---	---	---	---	---	---	---	SVL
DC 13.5 C DUP	RESE-1001012	30-May-03	---	---	---	---	---	---	---	---	---	---	---	<0.10	---	---	---	---	---	---	Del Mar
DC 13.5 C DUP	RESE-1001012	30-May-03	10.6	2.90	7.71	2.3	7.62	ND	34.0	19.3 j	34.6 j	---	---	---	91 j	---	---	---	---	---	SVL
DC 13.5 C	RESE-1001011	30-May-03	---	---	---	---	---	---	---	---	---	---	---	---	---	25.0	8.3	125	---	---	
DC 13.5 C	RESE-1001011	30-May-03	---	---	---	---	---	---	---	---	---	0.35	0.17	---	---	---	---	---	---	---	SVL
DC 13.5 C	RESE-1001011	30-May-03	---	---	---	---	---	---	---	---	---	---	---	<0.10	---	---	---	---	---	---	Del Mar
DC 13.5 C	RESE-1001011	30-May-03	10.7	2.88	7.73	2.3	7.60	ND	33.9	19.2 j	35.1 j	---	---	---	91 j	---	---	---	---	---	SVL
DC 13.5 C	RESE-1001021	27-Aug-03	---	---	---	---	---	---	---	---	---	---	---	---	---	26.3	6.6	139	---	---	
DC 13.5 C	RESE-1001021	27-Aug-03	---	---	---	---	---	---	---	---	---	<0.10	<0.10	---	---	---	---	---	---	---	SVL
DC 13.5 C	RESE-1001021	27-Aug-03	---	---	---	---	---	---	---	---	---	---	---	1.4	---	---	---	---	---	---	Del Mar
DC 13.5 C	RESE-1001021	27-Aug-03	11.0	2.78	7.17	2.3	4.44	ND	33.8	14.6	23.2	---	---	---	121	---	---	---	---	---	SVL
DC 13.5 C	RESE-1001037	05-Nov-03	---	---	---	---	---	---	---	---	---	---	---	---	---	16.6	8.0	110.8	---	---	
DC 13.5 C	RESE-1001037	05-Nov-03	---	---	---	---	---	---	---	---	---	---	---	<0.10	---	---	---	---	---	---	Del Mar
DC 13.5 C	RESE-1001037	05-Nov-03	9.23	2.44	7.03	1.7	6.89	ND	40.9	8.79	30.6	0.47	0.12	---	96	---	---	---	---	---	SVL
DC 13.5 C	RESE-1001059	11-Feb-04	---	---	---	---	---	---	---	---	---	---	---	---	---	6.8	6.5	80.5	---	---	
DC 13.5 C	RESE-1001059	11-Feb-04	---	---	---	---	---	---	---	---	---	---	---	<0.10	---	---	---	---	---	---	Del Mar
DC 13.5 C	RESE-1001059	11-Feb-04	6.6	1.86	5.29	1.37	3.60	ND	11.15	20.6	---	<0.10	<0.10	---	76	---	---	---	---	---	SVL
DC 13.5 C LD	RESE-1001059	11-Feb-04	---	---	---	---	---	---	---	---	---	---	---	<1.0	---	---	---	---	---	---	Del Mar
DC 13.5 C	RESE-1001086	26-May-04	---	---	---	---	---	---	---	---	---	---	---	---	---	16.7	7.4	112.9	---	---	
DC 13.5 C	RESE-1001086	26-May-04	---	---	---	---	---	---	---	---	---	---	---	<0.20	---	---	---	---	---	---	Del Mar
DC 13.5 C	RESE-1001086	26-May-04	8.96	2.75	7.20	2.0	10.9	ND	33.8	11.5	33.2	0.14	<0.10	---	123	---	---	---	---	---	SVL
DC 13.5 C	RESE-1001190	15-Feb-05	---	---	---	---	---	---	---	---	---	---	---	---	---	10.0	7.4	61.6	---	---	
DC 13.5 C	RESE-1001190	15-Feb-05	---	---	---	---	---	---	---	---	---	---	---	0.35	---	---	---	---	---	---	Del Mar
DC 13.5 C	RESE-1001190	15-Feb-05	5.79	1.55	4.09	1.78	3.19	ND	11.25	10.9	26.4	<0.100	0.104	---	75.0	---	---	---	---	---	SVL
DC 13.5 C	RESE-1001209	09-May-05	---	---	---	---	---	---	---	---	---	---	---	---	---	26.3	7.4	151.2	---	---	
DC 13.5 C	RESE-1001209	09-May-05	---	---	---	---	---	---	---	---	---	---	---	<0.20	---	---	---	---	---	---	Del Mar
DC 13.5 C	RESE-1001209	09-May-05	13.2	3.4	7.93	2.27	13.7	ND	20.6	27.4	28.4	0.116	<0.100	---	122	---	---	---	---	---	SVL

MONTGOMERY & ASSOCIATES

TABLE B-1. COMMON CONSTITUENTS AND ROUTINE PARAMETERS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	COMMON CONSTITUENTS[a] (mg/L)[b]													ROUTINE PARAMETERS					ANALYTICAL LABORATORY
																FIELD			LABORATORY		
			Ca	Mg	Na	K	Cl	CO_3	HCO_3	SO_4	SiO_2	Br	F	$NO_3 + NO_2$ (as N)	TDS	TEMP (°C)[c]	pH	SC (µS/cm)[d]	pH	SC (µS/cm)	
Surface Water 2 - Devils Canyon																					
DC 13.5 C	RESE-1001225	10-Aug-05	---	---	---	---	---	---	---	---	---	---	---	---	---	24.8	7.6	88	---	---	
DC 13.5 C	RESE-1001225	10-Aug-05	---	---	---	---	---	---	---	---	---	---	---	0.55	---	---	---	---	---	---	Del Mar
DC 13.5 C	RESE-1001225	10-Aug-05	7.54	1.99	4.10	1.75	7.65	ND	18.8	6.78	12.9 j	<0.100	<0.100	---	30	---	---	---	---	---	SVL
DC 13.5 C	RESE-1002014	21-Aug-08	---	---	---	---	---	---	---	---	---	---	---	---	---	30.6	8.25	152	---	---	
DC 13.5 C	RESE-1002014	21-Aug-08	13	3.37	8.99	2.31	14.6	---	---	0.66	39.1	---	---	---	---	---	---	---	---	---	SVL
DC 13.5 C	RESE-1002014	21-Aug-08	14	3.47	9.29	2.51	14.6	ND	62.3	0.70	---	0.187	<0.100	---	130 j	---	---	---	---	---	SVL
DC 13.5 C	RESE-1002014	21-Aug-08	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	TestAmerica
DC 13.5 C	RESE-1002033	12-Nov-08	---	---	---	---	---	---	---	---	---	---	---	---	---	17.0	7.84	141.5	---	---	
DC 13.5 C	RESE-1002033	12-Nov-08	---	---	---	---	---	---	---	---	32.3	---	---	---	---	---	---	---	---	---	SVL
DC 13.5 C	RESE-1002033	12-Nov-08	---	---	---	---	11.5	ND	62.7	1.45	---	0.169	0.202	---	110	---	---	---	---	---	SVL
DC 13.5 C	RESE-1002033	12-Nov-08	---	---	---	---	---	---	---	---	---	---	---	<0.30	---	---	---	---	---	---	TestAmerica
DC 13.5 C	RESE-1002033	12-Nov-08	13.0	3.47	8.21	2.05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
DC 13.5 C DUP	RESE-1002034	12-Nov-08	---	---	---	---	---	---	---	---	32.1	---	---	---	---	---	---	---	---	---	SVL
DC 13.5 C DUP	RESE-1002034	12-Nov-08	---	---	---	---	10.9	ND	63.2	1.45	---	0.208	0.337	---	120	---	---	---	---	---	SVL
DC 13.5 C DUP	RESE-1002034	12-Nov-08	---	---	---	---	---	---	---	---	---	---	---	<0.30	---	---	---	---	---	---	TestAmerica
DC 13.5 C DUP	RESE-1002034	12-Nov-08	13.3	3.55	8.31	2.08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
DC 13.5 C	RESE-1002057	19-Feb-09	---	---	---	---	---	---	---	---	---	---	---	---	---	7.0	7.68	70.6	---	---	
DC 13.5 C	RESE-1002057	19-Feb-09	---	---	---	---	---	---	---	---	23.7	---	---	---	---	---	---	---	---	---	SVL
DC 13.5 C	RESE-1002057	19-Feb-09	---	---	---	---	3.91	ND	9.0	11.2	---	<0.100	<0.100	---	107	---	---	---	---	---	SVL
DC 13.5 C	RESE-1002057	19-Feb-09	4.89	1.35	4.47	1.45	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
DC 13.5 C	RESE-1002103	21-May-09	---	---	---	---	---	---	---	---	---	---	---	---	---	21.9	7.22	136	---	---	
DC 13.5 C	RESE-1002103	21-May-09	---	---	---	---	---	---	---	---	33.3	---	---	---	---	---	---	---	---	---	SVL
DC 13.5 C	RESE-1002103	21-May-09	---	---	---	---	14.5	ND	38.8	6.64	---	0.166	0.574	---	104	---	---	---	---	---	SVL
DC 13.5 C	RESE-1002103	21-May-09	10.2	2.99	7.74	2.00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
DC 13.5 C	RESE-1002142	02-Nov-10	---	---	---	---	---	---	---	---	---	---	---	---	---	9.6	*8.53*	212	---	---	
DC 13.5 C	RESE-1002142	02-Nov-10	---	---	---	---	---	---	---	---	35.8	---	---	---	---	---	---	---	---	---	SVL
DC 13.5 C	RESE-1002142	02-Nov-10	---	---	---	---	27.3	ND	77.2	12.0	---	0.218	0.125	---	158	---	---	---	---	---	SVL
DC 13.5 C	RESE-1002142	02-Nov-10	22.3	5.81	12.5	2.69	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
DC 13.5 C	RESE-1002223	27-Apr-12	---	---	---	---	---	---	---	---	---	---	---	---	---	15.72	6.84	100	---	---	
DC 13.5 C	RESE-1002223	27-Apr-12	---	---	---	---	---	---	---	---	30.8	---	---	---	---	---	---	---	---	---	SVL
DC 13.5 C	RESE-1002223	27-Apr-12	---	---	---	---	13.4	ND	20.9	18.1	---	<0.10	<0.10	---	105	---	---	---	---	---	SVL
DC 13.5 C	RESE-1002223	27-Apr-12	10.3	2.9	7.93	1.98	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
DC 13.5 C	---	06-Jun-13	---	---	---	---	---	---	---	---	---	---	---	---	---	16.8	7.15	175	---	---	
DC 14.7 C	RESE-1001069	05-Mar-04	---	---	---	---	---	---	---	---	---	---	---	---	---	4.2	6.8	48.4	---	---	
DC 14.7 C	RESE-1001069	05-Mar-04	---	---	---	---	---	---	---	---	---	---	---	0.44	---	---	---	---	---	---	Del Mar
DC 14.7 C	RESE-1001069	05-Mar-04	5.54	1.62	3.15	2.4	1.90	ND	7.1	7.85	26.3	<0.10	<0.10	---	35	---	---	---	---	---	SVL
DC 14.7 C	RESE-1002015	27-Aug-08	---	---	---	---	---	---	---	---	---	---	---	---	---	25.1	7.07	79	---	---	
DC 14.7 C	RESE-1002015	27-Aug-08	6.16	1.55	4.07	2.47	2.89	---	---	8.56	18.2	---	---	---	---	---	---	---	---	---	SVL
DC 14.7 C	RESE-1002015	27-Aug-08	6.88	2.3	3.81	3.21	2.75	ND	15.1	9.40	---	<0.100	<0.100	---	94	---	---	---	---	---	SVL
DC 14.7 C	RESE-1002015	27-Aug-08	---	---	---	---	---	---	---	---	---	---	---	0.77	---	---	---	---	---	---	TestAmerica

MONTGOMERY & ASSOCIATES

TABLE B-1. COMMON CONSTITUENTS AND ROUTINE PARAMETERS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	COMMON CONSTITUENTS[a] (mg/L)[b]													ROUTINE PARAMETERS					ANALYTICAL LABORATORY
																FIELD			LABORATORY		
			Ca	Mg	Na	K	Cl	CO_3	HCO_3	SO_4	SiO_2	Br	F	$NO_3 + NO_2$ (as N)	TDS	TEMP (°C)[c]	pH	SC (µS/cm)[d]	pH	SC (µS/cm)	
Surface Water 2 - Devils Canyon																					
DC 14.7 C	RESE-1002127	17-Feb-10	---	---	---	---	---	---	---	---	---	---	---	---	---	9	6.92	57.1	---	---	
DC 14.7 C	RESE-1002127	17-Feb-10	---	---	---	---	---	---	---	---	25.0	---	---	---	---	---	---	---	---	---	SVL
DC 14.7 C	RESE-1002127	17-Feb-10	---	---	---	---	6.82	ND	12.0	16.4	---	<0.100	<0.100	---	48	---	---	---	---	---	SVL
DC 14.7 C	RESE-1002127	17-Feb-10	6.62	1.89	5.46	1.60	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
DC 14.7 C	RESE-1001128	03-Mar-14	---	---	---	---	---	---	---	---	---	---	---	---	---	10.3	7.56	---	---	---	
DC 14.7 C	RESE-1001128	03-Mar-14	---	---	---	---	---	---	---	---	28	---	---	---	---	---	---	---	---	---	TestAmerica
DC 14.7 C	RESE-1001128	03-Mar-14	---	---	---	---	5.1	ND	8.7	12	---	<0.083	<0.083	---	130	---	---	---	6.92	81	TestAmerica
DC 14.7 C	RESE-1001128	03-Mar-14	6.6	2.0	6.0	2.1	---	---	---	---	31	---	---	---	---	---	---	---	---	---	TestAmerica
DC 15.2 C	RESE-1001191	15-Feb-05	---	---	---	---	---	---	---	---	---	---	---	---	---	10.3	7.6	64.2	---	---	
DC 15.2 C	RESE-1001191	15-Feb-05	---	---	---	---	---	---	---	---	---	---	---	0.39	---	---	---	---	---	---	Del Mar
DC 15.2 C	RESE-1001191	15-Feb-05	5.87	1.47	4.12	1.86	3.45	ND	11.54	11.0	23.3	<0.100	0.103	---	73.0	---	---	---	---	---	SVL
DC 15.2 C	RESE-1001210	09-May-05	---	---	---	---	---	---	---	---	---	---	---	---	---	20.5	7.1	214.1	---	---	
DC 15.2 C	RESE-1001210	09-May-05	---	---	---	---	---	---	---	---	---	---	---	<0.20	---	---	---	---	---	---	Del Mar
DC 15.2 C	RESE-1001210	09-May-05	20.6	5.51	10.9	2.93	20.2	ND	27.8	47.8	31.0	0.121	<0.100	---	146	---	---	---	---	---	SVL
DC 15.2 C	RESE-1001226	10-Aug-05	---	---	---	---	---	---	---	---	---	---	---	---	---	24.3	*6.3*	234.9	---	---	
DC 15.2 C	RESE-1001226	10-Aug-05	---	---	---	---	---	---	---	---	---	---	---	2.5	---	---	---	---	---	---	Del Mar
DC 15.2 C	RESE-1001226	10-Aug-05	21.3	5.74	9.93	4.11	14.5	ND	13.4	58.0	28.9 j	0.13	<0.100	---	156	---	---	---	---	---	SVL
DC 15.5 C	RESE-1002003	05-Aug-08	---	---	---	---	---	---	---	---	---	---	---	---	---	28.9	7.15	58.8	---	---	
DC 15.5 C	RESE-1002003	05-Aug-08	3.77	1.14	4.34	1.89	5.38	---	---	0.62	36.5	---	---	---	---	---	---	---	---	---	SVL
DC 15.5 C	RESE-1002003	05-Aug-08	---	---	---	---	5.78	ND	20.0	0.31	---	0.133	0.306	---	110	---	---	---	---	---	SVL
DC 15.5 C	RESE-1002003	05-Aug-08	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	TestAmerica
DC 15.5 C	RESE-1002003	05-Aug-08	3.87	1.14	4.48	1.88	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
DC 15.5 C	RESE-1002032	12-Nov-08	---	---	---	---	---	---	---	---	---	---	---	---	---	9.7	7.98	70.1	---	---	
DC 15.5 C	RESE-1002032	12-Nov-08	---	---	---	---	---	---	---	---	34.8	---	---	---	---	---	---	---	---	---	SVL
DC 15.5 C	RESE-1002032	12-Nov-08	---	---	---	---	4.60	ND	35.1	0.69	---	0.123	0.198	---	76	---	---	---	---	---	SVL
DC 15.5 C	RESE-1002032	12-Nov-08	---	---	---	---	---	---	---	---	---	---	---	<0.30	---	---	---	---	---	---	TestAmerica
DC 15.5 C	RESE-1002032	12-Nov-08	5.53	1.67	5.38	2.06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
DC 15.5 C	RESE-1002069	26-Feb-09	---	---	---	---	---	---	---	---	---	---	---	---	---	10.9	7.57	57	---	---	
DC 15.5 C	RESE-1002069	26-Feb-09	---	---	---	---	---	---	---	---	27.9	---	---	---	---	---	---	---	---	---	SVL
DC 15.5 C	RESE-1002069	26-Feb-09	---	---	---	---	2.62	ND	5.0	10.4	---	<0.100	<0.100	---	101	---	---	---	---	---	SVL
DC 15.5 C	RESE-1002069	26-Feb-09	3.14	0.962	3.24	1.11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
DC 15.5 C	RESE-1002075	05-May-09	---	---	---	---	---	---	---	---	---	---	---	---	---	21.0	6.59	75.4	---	---	
DC 15.5 C	RESE-1002075	05-May-09	---	---	---	---	---	---	---	---	31.2	---	---	---	---	---	---	---	---	---	SVL
DC 15.5 C	RESE-1002075	05-May-09	---	---	---	---	4.17	ND	15.1	8.94	---	<0.100	<0.100	---	79	---	---	---	---	---	SVL
DC 15.5 C	RESE-1002075	05-May-09	4.63	1.43	4.53	1.63	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
DC 15.5 C	RESE-1002152	08-Nov-10	---	---	---	---	---	---	---	---	---	---	---	---	---	11.2	6.81	70.2	---	---	
DC 15.5 C	RESE-1002152	08-Nov-10	---	---	---	---	---	---	---	---	38.5	---	---	---	---	---	---	---	---	---	SVL
DC 15.5 C	RESE-1002152	08-Nov-10	---	---	---	---	3.92	ND	33.2	2.56	---	0.149	<0.100	---	73	---	---	---	---	---	SVL
DC 15.5 C	RESE-1002152	08-Nov-10	6.01	1.88	5.36	2.29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL

TABLE B-1. COMMON CONSTITUENTS AND ROUTINE PARAMETERS FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	COMMON CONSTITUENTS[a] (mg/L)[b]													ROUTINE PARAMETERS					ANALYTICAL LABORATORY
																FIELD			LABORATORY		
			Ca	Mg	Na	K	Cl	CO_3	HCO_3	SO_4	SiO_2	Br	F	$NO_3 + NO_2$ (as N)	TDS	TEMP (°C)[c]	pH	SC (µS/cm)[d]	pH	SC (µS/cm)	
Surface Water 2 - Devils Canyon																					
DC 15.5 C	RESE-1002179	22-Aug-11	---	---	---	---	---	---	---	---	---	---	---	---	---	24.2	7.06	54.1	---	---	
DC 15.5 C	RESE-1002179	22-Aug-11	---	---	---	---	---	---	---	---	41.2	---	---	---	---	---	---	---	---	---	SVL
DC 15.5 C	RESE-1002179	22-Aug-11	---	---	---	---	5.96	ND	27.9	1.24	---	0.15	0.11	---	94	---	---	---	---	---	SVL
DC 15.5 C	RESE-1002179	22-Aug-11	4.57	1.57	6.87	3.28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
DC 15.5 C	RESE-1002191	29-Nov-11	---	---	---	---	---	---	---	---	---	---	---	---	---	10.5	6.54	56.7	---	---	
DC 15.5 C	RESE-1002191	29-Nov-11	---	---	---	---	---	---	---	---	29.5	---	---	---	---	---	---	---	---	---	SVL
DC 15.5 C	RESE-1002191	29-Nov-11	---	---	---	---	4.60	ND	9.6	12.3	---	<0.10	<0.10	---	49	---	---	---	---	---	SVL
DC 15.5 C	RESE-1002191	29-Nov-11	4.10	1.34	4.11	1.49	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
DC 15.5 C DUP	RESE-1002192	29-Nov-11	---	---	---	---	---	---	---	---	---	---	---	---	---	10.5	6.54	56.7	---	---	
DC 15.5 C DUP	RESE-1002192	29-Nov-11	---	---	---	---	---	---	---	---	29.8	---	---	---	---	---	---	---	---	---	SVL
DC 15.5 C DUP	RESE-1002192	29-Nov-11	---	---	---	---	4.63	ND	9.8	12.6	---	<0.10	<0.10	---	45	---	---	---	---	---	SVL
DC 15.5 C DUP	RESE-1002192	29-Nov-11	4.14	1.36	4.13	1.48	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
DC 15.5 C	RESE-1002215	01-Mar-12	---	---	---	---	---	---	---	---	---	---	---	---	---	10.1	7.81	63.6	---	---	
DC 15.5 C	RESE-1002215	01-Mar-12	---	---	---	---	---	---	---	---	29.1	---	---	---	---	---	---	---	---	---	SVL
DC 15.5 C	RESE-1002215	01-Mar-12	---	---	---	---	3.76	ND	6.7	14.3	---	<0.10	<0.10	---	69	---	---	---	---	---	SVL
DC 15.5 C	RESE-1002215	01-Mar-12	4.36	1.39	4.75	1.81	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
DC 15.5 C	RESE-1002246	09-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	18.63	6.90	64	---	---	
DC 15.5 C	RESE-1002246	09-May-12	---	---	---	---	---	---	---	---	32.9	---	---	---	---	---	---	---	---	---	SVL
DC 15.5 C	RESE-1002246	09-May-12	---	---	---	---	4.42	ND	16.0	8.15 j+	---	<0.10	<0.10	---	r	---	---	---	---	---	SVL
DC 15.5 C	RESE-1002246	09-May-12	4.86	1.5	4.86	1.72	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
DC 15.5 C DUP	RESE-1002247	09-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	18.63	6.90	64	---	---	
DC 15.5 C DUP	RESE-1002247	09-May-12	---	---	---	---	---	---	---	---	33.2	---	---	---	---	---	---	---	---	---	SVL
DC 15.5 C DUP	RESE-1002247	09-May-12	---	---	---	---	4.27 j+	ND	15.9	8.15 j+	---	<0.10	<0.10	---	r	---	---	---	---	---	SVL
DC 15.5 C DUP	RESE-1002247	09-May-12	4.75	1.46	4.73	1.69	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
DC 15.5 C	RESE-1003052	13-Aug-12	---	---	---	---	---	---	---	---	---	---	---	---	---	24.4	7.10	261.2	---	---	
DC 15.5 C	RESE-1003052	13-Aug-12	---	---	---	---	---	---	---	---	54.4	---	---	---	---	---	---	---	---	---	SVL
DC 15.5 C	RESE-1003052	13-Aug-12	---	---	---	---	19.4	ND	99.4	2.85	---	0.32	0.24	---	224	---	---	---	---	---	SVL
DC 15.5 C	RESE-1003052	13-Aug-12	20.3	6.30	13.2	8.76	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
DC 15.5 C DUP	RESE-1003053	13-Aug-12	---	---	---	---	---	---	---	---	---	---	---	---	---	24.4	7.10	261.2	---	---	
DC 15.5 C DUP	RESE-1003053	13-Aug-12	---	---	---	---	---	---	---	---	54.8	---	---	---	---	---	---	---	---	---	SVL
DC 15.5 C DUP	RESE-1003053	13-Aug-12	---	---	---	---	19.0	ND	97.8	2.78	---	0.25	0.28	---	206	---	---	---	---	---	SVL
DC 15.5 C DUP	RESE-1003053	13-Aug-12	20.1	6.24	13.1	8.62	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
DC 4.1 E	RESE-1001007	21-May-03	---	---	---	---	---	---	---	---	---	---	---	---	---	23.2	8.0	247	---	---	
DC 4.1 E	RESE-1001007	21-May-03	---	---	---	---	---	---	---	---	---	<0.10	0.36	---	---	---	---	---	---	---	SVL
DC 4.1 E	RESE-1001007	21-May-03	---	---	---	---	---	---	---	---	---	---	---	0.48	---	---	---	---	---	---	Del Mar
DC 4.1 E	RESE-1001007	21-May-03	28.2	4.47	22.0	1.0	4.47	ND	160	3.12	68.6	---	---	---	224	---	---	---	---	---	SVL
DC 4.1 E	RESE-1001019	26-Aug-03	---	---	---	---	---	---	---	---	---	---	---	---	---	24.8	7.6	264	---	---	
DC 4.1 E	RESE-1001019	26-Aug-03	---	---	---	---	---	---	---	---	---	<0.10	0.34	---	---	---	---	---	---	---	SVL
DC 4.1 E	RESE-1001019	26-Aug-03	---	---	---	---	---	---	---	---	---	---	---	0.22	---	---	---	---	---	---	Del Mar
DC 4.1 E	RESE-1001019	26-Aug-03	28.4	4.35	21.6	<1.0	4.37	ND	163	3.11	72.2	---	---	---	208	---	---	---	---	---	SVL

MONTGOMERY & ASSOCIATES

TABLE B-1. COMMON CONSTITUENTS AND ROUTINE PARAMETERS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	COMMON CONSTITUENTS[a] (mg/L)[b]													ROUTINE PARAMETERS					ANALYTICAL LABORATORY
																FIELD			LABORATORY		
			Ca	Mg	Na	K	Cl	CO_3	HCO_3	SO_4	SiO_2	Br	F	$NO_3 + NO_2$ (as N)	TDS	TEMP (°C)[c]	pH	SC (µS/cm)[d]	pH	SC (µS/cm)	
Surface Water 2 - Devils Canyon																					
DC 4.1 E	RESE-1001040	11-Nov-03	---	---	---	---	---	---	---	---	---	---	---	---	---	22.2	7.1	261.3	---	---	
DC 4.1 E	RESE-1001040	11-Nov-03	---	---	---	---	---	---	---	---	---	---	---	0.32	---	---	---	---	---	---	Del Mar
DC 4.1 E	RESE-1001040	11-Nov-03	27.5	4.73	21.6	<1.0	4.62	ND	156	3.25	70.1	<0.10	0.35	---	175	---	---	---	---	---	SVL
DC 4.1 E	RESE-1001058	10-Feb-04	---	---	---	---	---	---	---	---	---	---	---	---	---	20.0	7.1	243	---	---	
DC 4.1 E	RESE-1001058	10-Feb-04	---	---	---	---	---	---	---	---	---	---	---	0.38	---	---	---	---	---	---	Del Mar
DC 4.1 E	RESE-1001058	10-Feb-04	27.1	4.34	21.4	0.972 j	4.29	ND	157	3.0	---	0.102	0.313	---	202	---	---	---	---	---	SVL
DC 4.1 E	RESE-1001143	20-May-14	---	---	---	---	---	---	---	---	---	---	---	---	---	22.2	8.05	---	---	---	
DC 4.1 E	RESE-1001143	20-May-14	---	---	---	---	---	---	---	---	58	---	---	---	---	---	---	---	---	---	TestAmerica
DC 4.1 E	RESE-1001143	20-May-14	---	---	---	---	4.5	ND	159	3.1	---	<0.051	0.24 j	---	270	---	---	---	7.35	270	TestAmerica
DC 4.1 E	RESE-1001143	20-May-14	30	4.6	23	0.99	---	---	---	---	71	---	---	---	---	---	---	---	---	---	TestAmerica
DC 4.1 E	RESE-1001336	25-Nov-14	---	---	---	---	---	---	---	---	---	---	---	---	---	21.1	7.61	---	---	---	
DC 4.1 E	RESE-1001336	25-Nov-14	---	---	---	---	---	---	---	---	67	---	---	---	---	---	---	---	---	---	TestAmerica
DC 4.1 E	RESE-1001336	25-Nov-14	---	---	---	---	4.6	ND	159	3.6	---	0.073 j	0.34 j	---	190	---	---	---	7.81	260	TestAmerica
DC 4.1 E	RESE-1001336	25-Nov-14	28	4.3	22	1.1	---	---	---	---	67	---	---	---	---	---	---	---	---	---	TestAmerica
DC 5.5 C	RESE-1001039	10-Nov-03	---	---	---	---	---	---	---	---	---	---	---	---	---	15.7	7.4	341.3	---	---	
DC 5.5 C	RESE-1001039	10-Nov-03	---	---	---	---	---	---	---	---	---	---	---	<0.10	---	---	---	---	---	---	Del Mar
DC 5.5 C	RESE-1001039	10-Nov-03	46.6	10.5	26.3	2.2	11.1	ND	203	38.5	46.8	0.15	0.19	---	296	---	---	---	---	---	SVL
DC 5.5 C	RESE-1001067	25-Feb-04	---	---	---	---	---	---	---	---	---	---	---	---	---	9.5	7.7	206	---	---	
DC 5.5 C	RESE-1001067	25-Feb-04	---	---	---	---	---	---	---	---	---	---	---	<0.10	---	---	---	---	---	---	Del Mar
DC 5.5 C	RESE-1001067	25-Feb-04	21.4	4.64	16.5	1.57	6.14	ND	108.28	19.2	---	<0.10	0.174	---	130	---	---	---	---	---	SVL
DC 5.5 C	RESE-1001076	20-May-04	---	---	---	---	---	---	---	---	---	---	---	---	---	18.3	7.6	280	---	---	
DC 5.5 C	RESE-1001076	20-May-04	---	---	---	---	---	---	---	---	---	---	---	<0.20	---	---	---	---	---	---	Del Mar
DC 5.5 C	RESE-1001076	20-May-04	30.2	6.28	19.3	2.1	7.13	ND	165	12.3	43.5	0.15	0.18	---	192	---	---	---	---	---	SVL
DC 5.5 C	RESE-1001158	23-Aug-04	---	---	---	---	---	---	---	---	---	---	---	---	---	21.6	7.2	466	---	---	
DC 5.5 C	RESE-1001158	23-Aug-04	---	---	---	---	---	---	---	---	---	---	---	<0.20	---	---	---	---	---	---	Del Mar
DC 5.5 C	RESE-1001158	23-Aug-04	55.9	11.4	32.2	3.1	11.0	ND	275	41.6	53.8	0.19	0.24	---	321	---	---	---	---	---	SVL
DC 5.5 C	RESE-1001176	18-Nov-04	---	---	---	---	---	---	---	---	---	---	---	---	---	14.6	7.6	298.7	---	---	
DC 5.5 C	RESE-1001176	18-Nov-04	---	---	---	---	---	---	---	---	---	---	---	<0.20	---	---	---	---	---	---	Del Mar
DC 5.5 C	RESE-1001176	18-Nov-04	35.0	7.13	22.0	2.21	10.0	ND	157	17.7	42.7	<0.10	0.20	---	214	---	---	---	---	---	SVL
DC 5.5 C	RESE-1001198	28-Feb-05	---	---	---	---	---	---	---	---	---	---	---	---	---	9.8	7.9	87.9	---	---	
DC 5.5 C	RESE-1001198	28-Feb-05	---	---	---	---	---	---	---	---	---	---	---	<0.20	---	---	---	---	---	---	Del Mar
DC 5.5 C	RESE-1001198	28-Feb-05	7.78	1.82	5.72	1.43	3.37	ND	22.1	13.7	27.4	<0.100	<0.100	---	89.0	---	---	---	---	---	SVL
DC 5.5 C	RESE-1001216	24-May-05	---	---	---	---	---	---	---	---	---	---	---	---	---	19.1	7.6	254	---	---	
DC 5.5 C	RESE-1001216	24-May-05	---	---	---	---	---	---	---	---	---	---	---	<0.20	---	---	---	---	---	---	Del Mar
DC 5.5 C	RESE-1001216	24-May-05	27.7	5.58	15.6	2.02	8.69	ND	134	13.7	38.8	0.124	0.144	---	200	---	---	---	---	---	SVL
DC 5.5 C	RESE-1001229	23-Aug-05	---	---	---	---	---	---	---	---	---	---	---	---	---	22.4	7.4	2061.1	---	---	
DC 5.5 C	RESE-1001229	23-Aug-05	---	---	---	---	---	---	---	---	---	---	---	<0.20	---	---	---	---	---	---	Del Mar
DC 5.5 C	RESE-1001229	23-Aug-05	23.5	4.64	14.0	2.28	6.28	ND	103.3	14.5	44.1	<0.100	0.144	---	136	---	---	---	---	---	SVL

MONTGOMERY & ASSOCIATES

TABLE B-1. COMMON CONSTITUENTS AND ROUTINE PARAMETERS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	COMMON CONSTITUENTS[a] (mg/L)[b]													ROUTINE PARAMETERS					ANALYTICAL LABORATORY
																FIELD			LABORATORY		
			Ca	Mg	Na	K	Cl	CO_3	HCO_3	SO_4	SiO_2	Br	F	$NO_3 + NO_2$ (as N)	TDS	TEMP (°C)[c]	pH	SC (µS/cm)[d]	pH	SC (µS/cm)	
Surface Water 2 - Devils Canyon																					
DC 5.5 C	RESE-1002180	26-Aug-11	---	---	---	---	---	---	---	---	---	---	---	---	---	24.5	7.49	415	---	---	
DC 5.5 C	RESE-1002180	26-Aug-11	---	---	---	---	---	---	---	---	47.4	---	---	---	---	---	---	---	---	---	SVL
DC 5.5 C	RESE-1002180	26-Aug-11	---	---	---	---	9.32	ND	248	19.2	---	0.11	0.18	---	305	---	---	---	---	---	SVL
DC 5.5 C	RESE-1002180	26-Aug-11	50.3	10.1	30.4	3.66	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
DC 5.5 C	RESE-1002222	06-Mar-12	---	---	---	---	---	---	---	---	---	---	---	---	---	12.0	6.88	200.3	---	---	
DC 5.5 C	RESE-1002222	06-Mar-12	---	---	---	---	---	---	---	---	30.6	---	---	---	---	---	---	---	---	---	SVL
DC 5.5 C	RESE-1002222	06-Mar-12	---	---	---	---	7.82	ND	97.6	15.6	---	<0.10	0.17	---	133	---	---	---	---	---	SVL
DC 5.5 C	RESE-1002222	06-Mar-12	20.4	4.21	15.2	1.84	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
DC 5.5 C	---	10-Jun-13	---	---	---	---	---	---	---	---	---	---	---	---	---	19.3	7.38	305	---	---	
DC 5.5 C	---	09-Aug-13	---	---	---	---	---	---	---	---	---	---	---	---	---	21.16	7.85	390	---	---	
DC 6.1 E	RESE-1001077	20-May-04	---	---	---	---	---	---	---	---	---	---	---	---	---	20.8	8.2	297	---	---	
DC 6.1 E	RESE-1001077	20-May-04	---	---	---	---	---	---	---	---	---	---	---	0.65	---	---	---	---	---	---	Del Mar
DC 6.1 E	RESE-1001077	20-May-04	33.6	5.10	22.2	1.1	4.78	ND	181	7.81	72.3	0.11	0.31	---	234	---	---	---	---	---	SVL
DC 6.1 E	RESE-1001159	23-Aug-04	---	---	---	---	---	---	---	---	---	---	---	---	---	21.5	8.0	296	---	---	
DC 6.1 E	RESE-1001159	23-Aug-04	---	---	---	---	---	---	---	---	---	---	---	0.52	---	---	---	---	---	---	Del Mar
DC 6.1 E	RESE-1001159	23-Aug-04	33.1	5.04	21.1	1.0	4.97	ND	187	7.84	69.8	<0.10	0.31	---	226	---	---	---	---	---	SVL
DC 6.1 E	RESE-1001177	18-Nov-04	---	---	---	---	---	---	---	---	---	---	---	---	---	18.2	8.1	273.9	---	---	
DC 6.1 E	RESE-1001177	18-Nov-04	---	---	---	---	---	---	---	---	---	---	---	0.51	---	---	---	---	---	---	Del Mar
DC 6.1 E	RESE-1001177	18-Nov-04	33.7	5.09	22.4	1.10	4.97	ND	161	7.66	67.0	<0.10	0.32	---	226	---	---	---	---	---	SVL
DC 6.1 E	RESE-1001199	28-Feb-05	---	---	---	---	---	---	---	---	---	---	---	---	---	18.9	7.8	374	---	---	
DC 6.1 E	RESE-1001199	28-Feb-05	---	---	---	---	---	---	---	---	---	---	---	1.5	---	---	---	---	---	---	Del Mar
DC 6.1 E	RESE-1001199	28-Feb-05	43.8	6.28	22.9	1.13	6.56	ND	177	31.5	70.3	<0.100	0.230	---	275	---	---	---	---	---	SVL
DC 6.1 E	RESE-1001217	24-May-05	---	---	---	---	---	---	---	---	---	---	---	---	---	20.7	8.0	299.6	---	---	
DC 6.1 E	RESE-1001217	24-May-05	---	---	---	---	---	---	---	---	---	---	---	0.77	---	---	---	---	---	---	Del Mar
DC 6.1 E	RESE-1001217	24-May-05	34.9	5.02	21.1	1.05	5.53	ND	171	13.0	69.2	0.102	0.272	---	240	---	---	---	---	---	SVL
DC 6.1 E	RESE-1001230	23-Aug-05	---	---	---	---	---	---	---	---	---	---	---	---	---	24.7	---	302.3	---	---	
DC 6.1 E	RESE-1001230	23-Aug-05	---	---	---	---	---	---	---	---	---	---	---	0.70	---	---	---	---	---	---	Del Mar
DC 6.1 E	RESE-1001230	23-Aug-05	36.2	5.36	22.5	1.13	5.20	ND	173	10.2	72.7	<0.100	0.295	---	220	---	---	---	---	---	SVL
DC 6.1 E	RESE-1002007	07-Aug-08	---	---	---	---	---	---	---	---	---	---	---	---	---	22.6	8.48	298.5	---	---	
DC 6.1 E	RESE-1002007	07-Aug-08	32.7	5.02	21.5	1.14	5.32	---	---	11.2	73.3	---	---	---	---	---	---	---	---	---	SVL
DC 6.1 E	RESE-1002007	07-Aug-08	---	---	---	---	5.35	1.7	171	10.2	---	<0.100	0.385	---	250	---	---	---	---	---	SVL
DC 6.1 E	RESE-1002007	07-Aug-08	---	---	---	---	---	---	---	---	---	---	---	0.69	---	---	---	---	---	---	TestAmerica
DC 6.1 E	RESE-1002007	07-Aug-08	32.2	4.86	21.4	0.97	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
DC 6.1 E	RESE-1002036	06-Nov-08	---	---	---	---	---	---	---	---	---	---	---	---	---	15.6	8.2	274	---	---	
DC 6.1 E	RESE-1002036	06-Nov-08	---	---	---	---	---	---	---	---	68.4	---	---	---	---	---	---	---	---	---	SVL
DC 6.1 E	RESE-1002036	06-Nov-08	---	---	---	---	5.12	ND	177	9.45	---	<0.100	0.373	---	260	---	---	---	---	---	SVL
DC 6.1 E	RESE-1002036	06-Nov-08	---	---	---	---	---	---	---	---	---	---	---	0.65	---	---	---	---	---	---	TestAmerica
DC 6.1 E	RESE-1002036	06-Nov-08	34.1	5.11	22.6	1.19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL

MONTGOMERY & ASSOCIATES

TABLE B-1. COMMON CONSTITUENTS AND ROUTINE PARAMETERS FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	COMMON CONSTITUENTS[a] (mg/L)[b]													ROUTINE PARAMETERS					ANALYTICAL LABORATORY
																FIELD			LABORATORY		
			Ca	Mg	Na	K	Cl	CO_3	HCO_3	SO_4	SiO_2	Br	F	$NO_3 + NO_2$ (as N)	TDS	TEMP (°C)[c]	pH	SC (µS/cm)[d]	pH	SC (µS/cm)	
Surface Water 2 - Devils Canyon																					
DC 6.1 E	RESE-1002064	25-Feb-09	---	---	---	---	---	---	---	---	---	---	---	---	---	20.5	8.18	291	---	---	
DC 6.1 E	RESE-1002064	25-Feb-09	---	---	---	---	---	---	---	---	71.3	---	---	---	---	---	---	---	---	---	SVL
DC 6.1 E	RESE-1002064	25-Feb-09	---	---	---	---	5.28	ND	167	9.52	---	<0.100	0.247	---	266	---	---	---	---	---	SVL
DC 6.1 E	RESE-1002064	25-Feb-09	30.5	4.57	20.2	0.97	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
DC 6.1 E	RESE-1002099	20-May-09	---	---	---	---	---	---	---	---	---	---	---	---	---	21.8	8.04	300	---	---	
DC 6.1 E	RESE-1002099	20-May-09	---	---	---	---	---	---	---	---	75.5	---	---	---	---	---	---	---	---	---	SVL
DC 6.1 E	RESE-1002099	20-May-09	---	---	---	---	6.11	ND	168	9.52	---	0.100	0.490	---	218	---	---	---	---	---	SVL
DC 6.1 E	RESE-1002099	20-May-09	32.5	5.07	22.4	1.04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
DC 6.1 E	RESE-1002135	19-Mar-10	---	---	---	---	---	---	---	---	---	---	---	---	---	16.9	8.18	287	---	---	
DC 6.1 E	RESE-1002135	19-Mar-10	---	---	---	---	---	---	---	---	69.4	---	---	---	---	---	---	---	---	---	SVL
DC 6.1 E	RESE-1002135	19-Mar-10	---	---	---	---	6.67	ND	182	29.6	---	<0.100	0.193	---	290	---	---	---	---	---	SVL
DC 6.1 E	RESE-1002135	19-Mar-10	45.1	6.77	24.2	1.22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
DC 6.1 E DUP	RESE-1002136	19-Mar-10	---	---	---	---	---	---	---	---	69.3	---	---	---	---	---	---	---	---	---	SVL
DC 6.1 E DUP	RESE-1002136	19-Mar-10	---	---	---	---	6.68	ND	182	30.2	---	<0.100	0.196	---	292	---	---	---	---	---	SVL
DC 6.1 E DUP	RESE-1002136	19-Mar-10	43.4	6.51	23.5	1.17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
DC 6.1 E	RESE-1002138	19-Oct-10	---	---	---	---	---	---	---	---	---	---	---	---	---	22.4	7.33	332.4	---	---	
DC 6.1 E	RESE-1002138	19-Oct-10	---	---	---	---	---	---	---	---	75.2	---	---	---	---	---	---	---	---	---	SVL
DC 6.1 E	RESE-1002138	19-Oct-10	---	---	---	---	5.72	ND	168	10.8	---	0.102	0.217	---	244	---	---	---	---	---	SVL
DC 6.1 E	RESE-1002138	19-Oct-10	35.6	5.37	21.9	1.09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
DC 6.1 E	RESE-1002161	10-Nov-10	---	---	---	---	---	---	---	---	---	---	---	---	---	15.2	7.39	245.5	---	---	
DC 6.1 E	RESE-1002161	10-Nov-10	---	---	---	---	---	---	---	---	43.9	---	---	---	---	---	---	---	---	---	SVL
DC 6.1 E	RESE-1002161	10-Nov-10	---	---	---	---	12.8 j-d	ND	142	0.59 j-	---	0.136 j-	0.130 j-	---	174 j-	---	---	---	---	---	SVL
DC 6.1 E	RESE-1002161	10-Nov-10	26.3	6.25	18.6	2.28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
DC 6.1 E	RESE-1003055	15-Aug-12	---	---	---	---	---	---	---	---	---	---	---	---	---	26.1	*9.02*	211.8	---	---	
DC 6.1 E	RESE-1003055	15-Aug-12	---	---	---	---	---	---	---	---	23.7	---	---	---	---	---	---	---	---	---	SVL
DC 6.1 E	RESE-1003055	15-Aug-12	---	---	---	---	9.41	8.9	98.6	4.01	---	0.11	0.18	---	119	---	---	---	---	---	SVL
DC 6.1 E	RESE-1003055	15-Aug-12	16.1	5.79	19.5	2.37	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
DC 6.14 C	RESE-1002013	20-Aug-08	---	---	---	---	---	---	---	---	---	---	---	---	---	26.1	*8.68*	244	---	---	
DC 6.14 C	RESE-1002013	20-Aug-08	23.9	5.58	17	2.35	9.52	---	---	3.54	38.5	---	---	---	---	---	---	---	---	---	SVL
DC 6.14 C	RESE-1002013	20-Aug-08	26.1	5.81	17.9	2.64	9.64	1.1	138	3.53	---	0.573	<0.100	---	160	---	---	---	---	---	SVL
DC 6.14 C	RESE-1002013	20-Aug-08	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	TestAmerica
DC 6.14 C	RESE-1002037	12-Nov-08	---	---	---	---	---	---	---	---	---	---	---	---	---	13.3	7.71	223	---	---	
DC 6.14 C	RESE-1002037	12-Nov-08	---	---	---	---	---	---	---	---	43.8	---	---	---	---	---	---	---	---	---	SVL
DC 6.14 C	RESE-1002037	12-Nov-08	---	---	---	---	9.64	ND	138	0.45	---	0.131	0.283	---	160	---	---	---	---	---	SVL
DC 6.14 C	RESE-1002037	12-Nov-08	---	---	---	---	---	---	---	---	---	---	---	<0.30	---	---	---	---	---	---	TestAmerica
DC 6.14 C	RESE-1002037	12-Nov-08	24.7	5.68	17.3	2.30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
DC 6.14 C	RESE-1002056	18-Feb-09	---	---	---	---	---	---	---	---	---	---	---	---	---	9.5	7.59	71.7	---	---	
DC 6.14 C	RESE-1002056	18-Feb-09	---	---	---	---	---	---	---	---	21.3	---	---	---	---	---	---	---	---	---	SVL
DC 6.14 C	RESE-1002056	18-Feb-09	---	---	---	---	3.02	ND	11.8	10.7	---	<0.100	<0.100	---	99	---	---	---	---	---	SVL
DC 6.14 C	RESE-1002056	18-Feb-09	5.13	1.33	4.59	1.35	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL

TABLE B-1. COMMON CONSTITUENTS AND ROUTINE PARAMETERS FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	COMMON CONSTITUENTS[a] (mg/L)[b]													ROUTINE PARAMETERS					ANALYTICAL LABORATORY
																FIELD			LABORATORY		
			Ca	Mg	Na	K	Cl	CO_3	HCO_3	SO_4	SiO_2	Br	F	$NO_3 + NO_2$ (as N)	TDS	TEMP (°C)[c]	pH	SC (µS/cm)[d]	pH	SC (µS/cm)	
Surface Water 2 - Devils Canyon																					
DC 6.14 C	RESE-1002078	06-May-09	---	---	---	---	---	---	---	---	---	---	---	---	---	18.9	7.02	191	---	---	
DC 6.14 C	RESE-1002078	06-May-09	---	---	---	---	---	---	---	---	34.1	---	---	---	---	---	---	---	---	---	SVL
DC 6.14 C	RESE-1002078	06-May-09	---	---	---	---	8.24	ND	116.8	1.81	---	<0.100	<0.100	---	114	---	---	---	---	---	SVL
DC 6.14 C	RESE-1002078	06-May-09	20.6	4.83	16.1	2.05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
DC 6.14 C	RESE-1002196	30-Nov-11	---	---	---	---	---	---	---	---	---	---	---	---	---	13.0	7.53	278	---	---	
DC 6.14 C	RESE-1002196	30-Nov-11	---	---	---	---	---	---	---	---	33.8	---	---	---	---	---	---	---	---	---	SVL
DC 6.14 C	RESE-1002196	30-Nov-11	---	---	---	---	12.4	ND	170	15.1	---	0.10	0.19	---	184	---	---	---	---	---	SVL
DC 6.14 C	RESE-1002196	30-Nov-11	29.3	6.89	24.5	2.20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
DC 6.14 C	RESE-1002219	02-Mar-12	---	---	---	---	---	---	---	---	---	---	---	---	---	13.6	7.81	197.3	---	---	
DC 6.14 C	RESE-1002219	02-Mar-12	---	---	---	---	---	---	---	---	34.4	---	---	---	---	---	---	---	---	---	SVL
DC 6.14 C	RESE-1002219	02-Mar-12	---	---	---	---	7.08	ND	97.8	13.6	---	<0.10	0.20	---	137	---	---	---	---	---	SVL
DC 6.14 C	RESE-1002219	02-Mar-12	18.5	4.22	15.1	1.69	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
DC 6.14 C	RESE-1002235	04-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	21.97	7.40	194	---	---	
DC 6.14 C	RESE-1002235	04-May-12	---	---	---	---	---	---	---	---	35.5	---	---	---	---	---	---	---	---	---	SVL
DC 6.14 C	RESE-1002235	04-May-12	---	---	---	---	7.81	ND	124	2.83	---	<0.10	0.16	---	126	---	---	---	---	---	SVL
DC 6.14 C	RESE-1002235	04-May-12	21.2	5	16.3	1.96	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
DC 6.14 C	RESE-1003066	26-Nov-12	---	---	---	---	---	---	---	---	---	---	---	---	---	13.3	7.93	339.4	---	---	
DC 6.14 C	RESE-1003066	26-Nov-12	---	---	---	---	---	---	---	---	38.0	---	---	---	---	---	---	---	---	---	SVL
DC 6.14 C	RESE-1003066	26-Nov-12	---	---	---	---	9.72	ND	216	2.99	---	0.10	0.21	---	216	---	---	---	---	---	SVL
DC 6.14 C	RESE-1003066	26-Nov-12	36.8	8.44	22.0	2.73	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
DC 6.14 C	RESE-1003082	11-Feb-13	---	---	---	---	---	---	---	---	---	---	---	---	---	7.62	7.96	141	---	---	
DC 6.14 C	RESE-1003082	11-Feb-13	---	---	---	---	---	---	---	---	32.2	---	---	---	---	---	---	---	---	---	SVL
DC 6.14 C	RESE-1003082	11-Feb-13	---	---	---	---	6.50	ND	46.5	16.5	---	<0.10	0.15	---	123	---	---	---	---	---	SVL
DC 6.14 C	RESE-1003082	11-Feb-13	12.7	2.76	9.05	1.33	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
DC 6.14 C	RESE-1003101	14-Jun-13	---	---	---	---	---	---	---	---	---	---	---	---	---	25.23	7.01	256	---	---	
DC 6.14 C	RESE-1003101	14-Jun-13	---	---	---	---	---	---	---	---	30.5	---	---	---	---	---	---	---	---	---	SVL
DC 6.14 C	RESE-1003101	14-Jun-13	---	---	---	---	11.7	5.0	129	1.56	---	0.14	0.15	---	170	---	---	---	---	---	SVL
DC 6.14 C	RESE-1003101	14-Jun-13	26.8	6.45	18.0	2.30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
DC 6.6 W (DCT 6.6 W)	RESE-1001010	29-May-03	---	---	---	---	---	---	---	---	---	---	---	---	---	25.4	8.0	325	---	---	
DC 6.6 W (DCT 6.6 W)	RESE-1001010	29-May-03	---	---	---	---	---	---	---	---	---	<0.10	0.42	---	---	---	---	---	---	---	SVL
DC 6.6 W (DCT 6.6 W)	RESE-1001010	29-May-03	---	---	---	---	---	---	---	---	---	---	---	<0.10	---	---	---	---	---	---	Del Mar
DC 6.6 W (DCT 6.6 W)	RESE-1001010	29-May-03	32.7	7.70	26.6	1.6	7.85	ND	190	7.09 j	83.1 j	---	---	---	258 j	---	---	---	---	---	SVL
DC 6.6 W (DCT 6.6 W)	RESE-1001022	03-Sep-03	---	---	---	---	---	---	---	---	---	---	---	---	---	22.6	6.6	362	---	---	
DC 6.6 W (DCT 6.6 W)	RESE-1001022	03-Sep-03	---	---	---	---	---	---	---	---	---	0.12	0.42	---	---	---	---	---	---	---	SVL
DC 6.6 W (DCT 6.6 W)	RESE-1001022	03-Sep-03	---	---	---	---	---	---	---	---	---	---	---	<0.10	---	---	---	---	---	---	Del Mar
DC 6.6 W (DCT 6.6 W)	RESE-1001022	03-Sep-03	36.1	8.27	26.8	1.8	7.96	ND	200	11.6	93.3	---	---	---	200	---	---	---	---	---	SVL
DC 6.6 W (DCT 6.6 W)	RESE-1001033	04-Nov-03	---	---	---	---	---	---	---	---	---	---	---	---	---	18.3	6.8	412	---	---	
DC 6.6 W (DCT 6.6 W)	RESE-1001033	04-Nov-03	---	---	---	---	---	---	---	---	---	---	---	<0.10	---	---	---	---	---	---	Del Mar
DC 6.6 W (DCT 6.6 W)	RESE-1001033	04-Nov-03	40.0	9.40	33.4	1.5	9.26	ND	234	13.3	98.9	0.28	0.50	---	293	---	---	---	---	---	SVL

MONTGOMERY & ASSOCIATES

TABLE B-1. COMMON CONSTITUENTS AND ROUTINE PARAMETERS FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	COMMON CONSTITUENTS[a] (mg/L)[b]													ROUTINE PARAMETERS					ANALYTICAL LABORATORY
																FIELD			LABORATORY		
			Ca	Mg	Na	K	Cl	CO_3	HCO_3	SO_4	SiO_2	Br	F	$NO_3 + NO_2$ (as N)	TDS	TEMP (°C)[c]	pH	SC (µS/cm)[d]	pH	SC (µS/cm)	
Surface Water 2 - Devils Canyon																					
DC 6.6 W (DCT 6.6 W)	RESE-1001064	18-Feb-04	---	---	---	---	---	---	---	---	---	---	---	---	---	15.7	7.1	155	---	---	
DC 6.6 W (DCT 6.6 W)	RESE-1001064	18-Feb-04	---	---	---	---	---	---	---	---	---	---	---	---	164	---	---	---	---	---	SVL
DC 6.6 W (DCT 6.6 W)	RESE-1001064	18-Feb-04	---	---	---	---	---	---	---	---	---	---	---	<0.10	---	---	---	---	---	---	Del Mar
DC 6.6 W (DCT 6.6 W)	RESE-1001064	18-Feb-04	29	6.48	25.9	1.21	7.41	ND	179	5.18	---	0.127	0.407	---	235	---	---	---	---	---	SVL
DC 6.6 W (DCT 6.6 W)	RESE-1001074	05-May-04	---	---	---	---	---	---	---	---	---	---	---	---	---	17.7	7.6	318	---	---	
DC 6.6 W (DCT 6.6 W)	RESE-1001074	05-May-04	---	---	---	---	---	---	---	---	---	---	---	<0.10	---	---	---	---	---	---	Del Mar
DC 6.6 W (DCT 6.6 W)	RESE-1001074	05-May-04	31.2	7.00	26.4	1.2	7.80	ND	198	4.39	89.8	<0.10	0.30	---	228	---	---	---	---	---	SVL
DC 6.6 W (DCT 6.6 W)	RESE-1001155	19-Aug-04	---	---	---	---	---	---	---	---	---	---	---	---	---	21.5	7.1	224	---	---	
DC 6.6 W (DCT 6.6 W)	RESE-1001155	19-Aug-04	---	---	---	---	---	---	---	---	---	---	---	<0.20	---	---	---	---	---	---	Del Mar
DC 6.6 W (DCT 6.6 W)	RESE-1001155	19-Aug-04	34.3	7.79	28.0	1.5	10.2	ND	203	17.4	92.0	0.11	0.41	---	305	---	---	---	---	---	SVL
DC 6.6 W (DCT 6.6 W)	RESE-1001170	12-Nov-04	---	---	---	---	---	---	---	---	---	---	---	---	---	17.5	7.2	178.6	---	---	
DC 6.6 W (DCT 6.6 W)	RESE-1001170	12-Nov-04	---	---	---	---	---	---	---	---	---	---	---	<0.20	---	---	---	---	---	---	Del Mar
DC 6.6 W (DCT 6.6 W)	RESE-1001170	12-Nov-04	30.8	7.28	27.9	1.2	7.77	ND	190	5.02	89.9	<0.10	0.44	---	245	---	---	---	---	---	SVL
DC 6.6 W (DCT 6.6 W)	RESE-1001192	16-Feb-05	---	---	---	---	---	---	---	---	---	---	---	---	---	11.9	7.5	101.2	---	---	
DC 6.6 W (DCT 6.6 W)	RESE-1001192	16-Feb-05	---	---	---	---	---	---	---	---	---	---	---	<0.20	---	---	---	---	---	---	Del Mar
DC 6.6 W (DCT 6.6 W)	RESE-1001192	16-Feb-05	8.97	2.37	6.78	1.38	3.26	ND	28.5	19.2	31.5	<0.100	0.125	---	68.0	---	---	---	---	---	SVL
DC 6.6 W (DCT 6.6 W)	RESE-1001214	17-May-05	---	---	---	---	---	---	---	---	---	---	---	---	---	18.1	7.3	303.2	---	---	
DC 6.6 W (DCT 6.6 W)	RESE-1001214	17-May-05	---	---	---	---	---	---	---	---	---	---	---	<0.20	---	---	---	---	---	---	Del Mar
DC 6.6 W (DCT 6.6 W)	RESE-1001214	17-May-05	30.5	6.97	26.1	1.5	8.15	ND	182	4.82	86.2	<0.100	0.249	---	245	---	---	---	---	---	SVL
DC 6.6 W (DCT 6.6 W)	RESE-1001232	07-Sep-05	---	---	---	---	---	---	---	---	---	---	---	---	---	23.5	6.8	297.6	---	---	
DC 6.6 W (DCT 6.6 W)	RESE-1001232	07-Sep-05	---	---	---	---	---	---	---	---	---	---	---	<0.20	---	---	---	---	---	---	Del Mar
DC 6.6 W (DCT 6.6 W)	RESE-1001232	07-Sep-05	29.0	6.70	25.0	1.64	7.56	ND	173	7.40	85.3	0.113	0.37	---	239	---	---	---	---	---	SVL
DC 6.6 W (DCT 6.6 W)	RESE-1002234	04-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	25.14	7.55	339	---	---	
DC 6.6 W (DCT 6.6 W)	RESE-1002234	04-May-12	---	---	---	---	---	---	---	---	96.5	---	---	---	---	---	---	---	---	---	SVL
DC 6.6 W (DCT 6.6 W)	RESE-1002234	04-May-12	---	---	---	---	9.21	ND	203	1.26	---	0.10	0.45	---	249 j	---	---	---	---	---	SVL
DC 6.6 W (DCT 6.6 W)	RESE-1002234	04-May-12	33.1	7.91	27.6	1.69	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
DC 7.1 C	RESE-1001009	29-May-03	---	---	---	---	---	---	---	---	---	---	---	---	---	24.6	8.1	287	---	---	
DC 7.1 C	RESE-1001009	29-May-03	---	---	---	---	---	---	---	---	---	0.15	0.21	---	---	---	---	---	---	---	SVL
DC 7.1 C	RESE-1001009	29-May-03	---	---	---	---	---	---	---	---	---	---	---	<0.10	---	---	---	---	---	---	Del Mar
DC 7.1 C	RESE-1001009	29-May-03	31.2	6.72	21.7	2.4	7.92	ND	181	0.92 j	51.5 j	---	---	---	199 j	---	---	---	---	---	SVL
DC 7.1 C	RESE-1001034	04-Nov-03	---	---	---	---	---	---	---	---	---	---	---	---	---	15.6	7.8	352	---	---	
DC 7.1 C	RESE-1001034	04-Nov-03	---	---	---	---	---	---	---	---	---	---	---	<0.10	---	---	---	---	---	---	Del Mar
DC 7.1 C	RESE-1001034	04-Nov-03	33.6	7.17	30.0	2.2	9.71	ND	179	24.8	52.4	0.15	0.35	---	218	---	---	---	---	---	SVL
DC 7.1 C	RESE-1001065	18-Feb-04	---	---	---	---	---	---	---	---	---	---	---	---	---	9.0	7.4	184.3	---	---	
DC 7.1 C	RESE-1001065	18-Feb-04	---	---	---	---	---	---	---	---	---	---	---	---	110	---	---	---	---	---	SVL
DC 7.1 C	RESE-1001065	18-Feb-04	---	---	---	---	---	---	---	---	---	---	---	<0.10	---	---	---	---	---	---	Del Mar
DC 7.1 C	RESE-1001065	18-Feb-04	18.6	3.86	16.4	1.1	5.32	ND	97.6	16.8	---	0.104	0.227	---	138	---	---	---	---	---	SVL
DC 7.1 C	RESE-1001065	18-Feb-04	---	---	---	---	---	---	---	---	---	---	---	---	110	---	---	---	---	---	SVL

TABLE B-1. COMMON CONSTITUENTS AND ROUTINE PARAMETERS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	COMMON CONSTITUENTS[a] (mg/L)[b]													ROUTINE PARAMETERS					ANALYTICAL LABORATORY
																FIELD			LABORATORY		
			Ca	Mg	Na	K	Cl	CO_3	HCO_3	SO_4	SiO_2	Br	F	$NO_3 + NO_2$ (as N)	TDS	TEMP (°C)[c]	pH	SC (µS/cm)[d]	pH	SC (µS/cm)	
Surface Water 2 - Devils Canyon																					
DC 7.1 C	RESE-1001075	05-May-04	---	---	---	---	---	---	---	---	---	---	---	---	---	20.0	8.1	204	---	---	
DC 7.1 C	RESE-1001075	05-May-04	---	---	---	---	---	---	---	---	---	---	---	<0.10	---	---	---	---	---	---	Del Mar
DC 7.1 C	RESE-1001075	05-May-04	20.6	4.21	17.0	1.5	6.44	ND	111.0	9.89	42.9	<0.10	0.17	---	126	---	---	---	---	---	SVL
DC 7.1 C	RESE-1001156	19-Aug-04	---	---	---	---	---	---	---	---	---	---	---	---	---	23.8	7.8	378.5	---	---	
DC 7.1 C	RESE-1001156	19-Aug-04	---	---	---	---	---	---	---	---	---	---	---	0.90	---	---	---	---	---	---	Del Mar
DC 7.1 C	RESE-1001156	19-Aug-04	41.4	8.82	28.4	3.1	10.7	ND	155	71.1	50.7	0.12	0.22	---	320	---	---	---	---	---	SVL
DC 7.1 C	RESE-1001171	12-Nov-04	---	---	---	---	---	---	---	---	---	---	---	---	---	12.4	8.0	279	---	---	
DC 7.1 C	RESE-1001171	12-Nov-04	---	---	---	---	---	---	---	---	---	---	---	<0.20	---	---	---	---	---	---	Del Mar
DC 7.1 C	RESE-1001171	12-Nov-04	29.8	6.44	28.5	1.7	8.69	ND	176	7.94	49.8	<0.10	0.36	---	186	---	---	---	---	---	SVL
DC 7.1 C	RESE-1001193	16-Feb-05	---	---	---	---	---	---	---	---	---	---	---	---	---	10.5	7.7	72.1	---	---	
DC 7.1 C	RESE-1001193	16-Feb-05	---	---	---	---	---	---	---	---	---	---	---	0.28	---	---	---	---	---	---	Del Mar
DC 7.1 C	RESE-1001193	16-Feb-05	6.67	1.62	4.67	1.51	3.02	ND	15.5	12.6	25.0	<0.100	<0.100	---	80.0	---	---	---	---	---	SVL
DC 7.1 C	RESE-1001215	17-May-05	---	---	---	---	---	---	---	---	---	---	---	---	---	19.2	8.0	205.1	---	---	
DC 7.1 C	RESE-1001215	17-May-05	---	---	---	---	---	---	---	---	---	---	---	<0.20	---	---	---	---	---	---	Del Mar
DC 7.1 C	RESE-1001215	17-May-05	20.3	4.31	18.1	1.80	8.30	ND	113.3	6.33	39.3	<0.100	0.101	---	161	---	---	---	---	---	SVL
DC 7.1 C	RESE-1001231	07-Sep-05	---	---	---	---	---	---	---	---	---	---	---	---	---	25.4	8.0	242.9	---	---	
DC 7.1 C	RESE-1001231	07-Sep-05	---	---	---	---	---	---	---	---	---	---	---	<0.20	---	---	---	---	---	---	Del Mar
DC 7.1 C	RESE-1001231	07-Sep-05	24.1	5.28	18.9	2.53	8.21	ND	145	1.38	48.3	0.165	0.209	---	173	---	---	---	---	---	SVL
DC 7.1 C	RESE-1002195	30-Nov-11	---	---	---	---	---	---	---	---	---	---	---	---	---	11.3	8.3	297	---	---	
DC 7.1 C	RESE-1002195	30-Nov-11	---	---	---	---	---	---	---	---	43.7	---	---	---	---	---	---	---	---	---	SVL
DC 7.1 C	RESE-1002195	30-Nov-11	---	---	---	---	11.1	ND	200	9.27	---	<0.10	0.33	---	207	---	---	---	---	---	SVL
DC 7.1 C	RESE-1002195	30-Nov-11	30.8	7.05	29.6	1.53	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
DC 7.1 C	RESE-1002233	04-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	19.50	8.22	188	---	---	
DC 7.1 C	RESE-1002233	04-May-12	---	---	---	---	---	---	---	---	35.7	---	---	---	---	---	---	---	---	---	SVL
DC 7.1 C	RESE-1002233	04-May-12	---	---	---	---	7.14	ND	129	1.95	---	<0.10	0.21	---	146	---	---	---	---	---	SVL
DC 7.1 C	RESE-1002233	04-May-12	21.9	4.82	17.7	1.54	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
DC 7.1 C	---	14-Jun-13	---	---	---	---	---	---	---	---	---	---	---	---	---	24.07	6.64	341	---	---	
DC 7.1 C	---	05-Aug-13	---	---	---	---	---	---	---	---	---	---	---	---	---	23.3	7.72	396	---	---	
DC 8.1 C	RESE-1002005	06-Aug-08	---	---	---	---	---	---	---	---	---	---	---	---	---	24.4	7.92	265.3	---	---	
DC 8.1 C	RESE-1002005	06-Aug-08	26.6	5.41	21.9	1.53	7.00	---	---	2.76	68.1	---	---	---	---	---	---	---	---	---	SVL
DC 8.1 C	RESE-1002005	06-Aug-08	---	---	---	---	7.52	ND	166	2.37	---	<0.100	0.509	---	230	---	---	---	---	---	SVL
DC 8.1 C	RESE-1002005	06-Aug-08	---	---	---	---	---	---	---	---	---	---	---	0.21	---	---	---	---	---	---	TestAmerica
DC 8.1 C	RESE-1002005	06-Aug-08	26.4	5.21	21.6	1.38	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
DC 8.1 C	RESE-1002026	05-Nov-08	---	---	---	---	---	---	---	---	---	---	---	---	---	16.9	7.51	270.8	---	---	
DC 8.1 C	RESE-1002026	05-Nov-08	---	---	---	---	---	---	---	---	57.6	---	---	---	---	---	---	---	---	---	SVL
DC 8.1 C	RESE-1002026	05-Nov-08	---	---	---	---	6.40	ND	163	3.94	---	<0.100	0.356	---	180	---	---	---	---	---	SVL
DC 8.1 C	RESE-1002026	05-Nov-08	---	---	---	---	---	---	---	---	---	---	---	<0.30	---	---	---	---	---	---	TestAmerica
DC 8.1 C	RESE-1002026	05-Nov-08	26.0	5.24	22.6	1.56	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL

MONTGOMERY & ASSOCIATES

TABLE B-1. COMMON CONSTITUENTS AND ROUTINE PARAMETERS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	COMMON CONSTITUENTS[a] (mg/L)[b]													ROUTINE PARAMETERS					ANALYTICAL LABORATORY
																FIELD			LABORATORY		
			Ca	Mg	Na	K	Cl	CO_3	HCO_3	SO_4	SiO_2	Br	F	$NO_3 + NO_2$ (as N)	TDS	TEMP (°C)[c]	pH	SC (µS/cm)[d]	pH	SC (µS/cm)	
Surface Water 2 - Devils Canyon																					
DC 8.1 C	RESE-1002062	24-Feb-09	---	---	---	---	---	---	---	---	---	---	---	---	---	15.0	7.7	90	---	---	
DC 8.1 C	RESE-1002062	24-Feb-09	---	---	---	---	---	---	---	---	28.8	---	---	---	---	---	---	---	---	---	SVL
DC 8.1 C	RESE-1002062	24-Feb-09	---	---	---	---	4.46	ND	17.6	13.5	---	<0.100	<0.100	---	143	---	---	---	---	---	SVL
DC 8.1 C	RESE-1002062	24-Feb-09	6.25	1.62	5.34	1.23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
DC 8.1 C	RESE-1002098	19-May-09	---	---	---	---	---	---	---	---	---	---	---	---	---	24.0	8.12	262	---	---	
DC 8.1 C	RESE-1002098	19-May-09	---	---	---	---	---	---	---	---	64.1	---	---	---	---	---	---	---	---	---	SVL
DC 8.1 C	RESE-1002098	19-May-09	---	---	---	---	7.34	ND	153	2.80	---	<0.100	0.556	---	205	---	---	---	---	---	SVL
DC 8.1 C	RESE-1002098	19-May-09	25.8	5.23	21.5	1.37	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
DC 8.1 C	RESE-1002160	10-Nov-10	---	---	---	---	---	---	---	---	---	---	---	---	---	13.8	7.41	270.7	---	---	
DC 8.1 C	RESE-1002160	10-Nov-10	---	---	---	---	---	---	---	---	64.8	---	---	---	---	---	---	---	---	---	SVL
DC 8.1 C	RESE-1002160	10-Nov-10	---	---	---	---	7.77 j-	ND	173	4.08 j-	---	<0.100	0.243 j-	---	219 j-	---	---	---	---	---	SVL
DC 8.1 C	RESE-1002160	10-Nov-10	29.6	6.08	24.8	1.66	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
DC 8.1 C	RESE-1002187	31-Aug-11	---	---	---	---	---	---	---	---	---	---	---	---	---	24	8.05	276	---	---	
DC 8.1 C	RESE-1002187	31-Aug-11	---	---	---	---	---	---	---	---	71.4	---	---	---	---	---	---	---	---	---	SVL
DC 8.1 C	RESE-1002187	31-Aug-11	---	---	---	---	7.42	ND	170	3.83	---	0.14	0.33	---	224	---	---	---	---	---	SVL
DC 8.1 C	RESE-1002187	31-Aug-11	32.9	6.07	25.4	1.16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
DC 8.1 C	RESE-1002194	30-Nov-11	---	---	---	---	---	---	---	---	---	---	---	---	---	11.7	7.79	287	---	---	
DC 8.1 C	RESE-1002194	30-Nov-11	---	---	---	---	---	---	---	---	58.7	---	---	---	---	---	---	---	---	---	SVL
DC 8.1 C	RESE-1002194	30-Nov-11	---	---	---	---	8.86	ND	199	6.26	---	<0.10	0.26	---	231	---	---	---	---	---	SVL
DC 8.1 C	RESE-1002194	30-Nov-11	30.6	6.47	28.1	1.42	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
DC 8.1 C	RESE-1002218	02-Mar-12	---	---	---	---	---	---	---	---	---	---	---	---	---	9.7	7.31	195.6	---	---	
DC 8.1 C	RESE-1002218	02-Mar-12	---	---	---	---	---	---	---	---	45.1	---	---	---	---	---	---	---	---	---	SVL
DC 8.1 C	RESE-1002218	02-Mar-12	---	---	---	---	6.94	ND	97.6	13.4	---	0.17	0.25	---	144	---	---	---	---	---	SVL
DC 8.1 C	RESE-1002218	02-Mar-12	19.0	3.93	15.5	1.26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
DC 8.1 C	RESE-1002232	03-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	18.79	7.80	185	---	---	
DC 8.1 C	RESE-1002232	03-May-12	---	---	---	---	---	---	---	---	51.6	---	---	---	---	---	---	---	---	---	SVL
DC 8.1 C	RESE-1002232	03-May-12	---	---	---	---	6.76	ND	127	3.89	---	0.10	0.27	---	158	---	---	---	---	---	SVL
DC 8.1 C	RESE-1002232	03-May-12	22.4	4.61	18.3	1.34	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
DC 8.1 C	RESE-1003056	15-Aug-12	---	---	---	---	---	---	---	---	---	---	---	---	---	24.9	7.67	312.3	---	---	
DC 8.1 C	RESE-1003056	15-Aug-12	---	---	---	---	---	---	---	---	73.0	---	---	---	---	---	---	---	---	---	SVL
DC 8.1 C	RESE-1003056	15-Aug-12	---	---	---	---	6.47	ND	184	5.39	---	<0.10	0.30	---	220	---	---	---	---	---	SVL
DC 8.1 C	RESE-1003056	15-Aug-12	31.1	6.04	24.4	1.40	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
DC 8.2 W	RESE-1001006	20-May-03	---	---	---	---	---	---	---	---	---	---	---	---	---	23.6	7.6	266	---	---	
DC 8.2 W	RESE-1001006	20-May-03	---	---	---	---	---	---	---	---	---	<0.10	0.34	---	---	---	---	---	---	---	SVL
DC 8.2 W	RESE-1001006	20-May-03	---	---	---	---	---	---	---	---	---	---	---	0.49	---	---	---	---	---	---	Del Mar
DC 8.2 W	RESE-1001006	20-May-03	29.3	5.50	22.1	1.0	4.77	ND	166	4.14	70.4	---	---	---	231	---	---	---	---	---	SVL
DC 8.2 W	RESE-1001017	21-Aug-03	---	---	---	---	---	---	---	---	---	---	---	---	---	23.4	7.2	229	---	---	
DC 8.2 W	RESE-1001017	21-Aug-03	---	---	---	---	---	---	---	---	---	<0.10	0.37	---	---	---	---	---	---	---	SVL
DC 8.2 W	RESE-1001017	21-Aug-03	---	---	---	---	---	---	---	---	---	---	---	0.38	---	---	---	---	---	---	Del Mar
DC 8.2 W	RESE-1001017	21-Aug-03	29.6	6.05	22.1	<1.0	4.70	ND	176	3.63	76.1	---	---	---	218	---	---	---	---	---	SVL

TABLE B-1. COMMON CONSTITUENTS AND ROUTINE PARAMETERS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	COMMON CONSTITUENTS[a] (mg/L)[b]													ROUTINE PARAMETERS					ANALYTICAL LABORATORY
																FIELD			LABORATORY		
			Ca	Mg	Na	K	Cl	CO_3	HCO_3	SO_4	SiO_2	Br	F	$NO_3 + NO_2$ (as N)	TDS	TEMP (°C)[c]	pH	SC (µS/cm)[d]	pH	SC (µS/cm)	
Surface Water 2 - Devils Canyon																					
DC 8.2 W	RESE-1001044	12-Nov-03	---	---	---	---	---	---	---	---	---	---	---	---	---	22.7	7.1	273.6	---	---	
DC 8.2 W	RESE-1001044	12-Nov-03	---	---	---	---	---	---	---	---	---	---	---	0.30	---	---	---	---	---	---	Del Mar
DC 8.2 W	RESE-1001044	12-Nov-03	29.2	5.97	22.2	1.0	4.90	ND	163	4.11	72.8	<0.10	0.39	---	197	---	---	---	---	---	SVL
DC 8.2 W	RESE-1001063	17-Feb-04	---	---	---	---	---	---	---	---	---	---	---	---	---	22.8	7.2	244	---	---	
DC 8.2 W	RESE-1001063	17-Feb-04	---	---	---	---	---	---	---	---	---	---	---	---	146	---	---	---	---	---	SVL
DC 8.2 W	RESE-1001063	17-Feb-04	---	---	---	---	---	---	---	---	---	---	---	0.57	---	---	---	---	---	---	Del Mar
DC 8.2 W	RESE-1001063	17-Feb-04	28.3	5.07	21.1	1.01	4.77	ND	165	4.0	---	<0.10	0.343	---	180	---	---	---	---	---	SVL
DC 8.2 W	RESE-1001079	21-May-04	---	---	---	---	---	---	---	---	---	---	---	---	---	23.1	7.6	276	---	---	
DC 8.2 W	RESE-1001079	21-May-04	---	---	---	---	---	---	---	---	---	---	---	0.40	---	---	---	---	---	---	Del Mar
DC 8.2 W	RESE-1001079	21-May-04	28.1	5.26	21.7	<1.0	4.65	ND	174	3.98	71.3	0.12	0.35	---	198	---	---	---	---	---	SVL
DC 8.2 W	RESE-1001152	16-Aug-04	---	---	---	---	---	---	---	---	---	---	---	---	---	23.3	7.4	274	---	---	
DC 8.2 W	RESE-1001152	16-Aug-04	---	---	---	---	---	---	---	---	---	---	---	0.34	---	---	---	---	---	---	Del Mar
DC 8.2 W	RESE-1001152	16-Aug-04	28.1	5.15	21.2	<1.0	4.94	ND	178	4.09	70.7	<0.10	0.35	---	210	---	---	---	---	---	SVL
DC 8.2 W	RESE-1001175	16-Nov-04	---	---	---	---	---	---	---	---	---	---	---	---	---	15.5	7.3	311	---	---	
DC 8.2 W	RESE-1001175	16-Nov-04	---	---	---	---	---	---	---	---	---	---	---	<0.20	---	---	---	---	---	---	Del Mar
DC 8.2 W	RESE-1001175	16-Nov-04	30.6	5.93	24.0	1.02	5.64	ND	178	5.45	70.0	<0.10	0.32	---	221	---	---	---	---	---	SVL
DC 8.2 W	RESE-1001196	25-Feb-05	---	---	---	---	---	---	---	---	---	---	---	---	---	22.4	7.5	273.8	---	---	
DC 8.2 W	RESE-1001196	25-Feb-05	---	---	---	---	---	---	---	---	---	---	---	0.51	---	---	---	---	---	---	Del Mar
DC 8.2 W	RESE-1001196	25-Feb-05	28.8	5.30	21.5	1.11	4.61	ND	159	4.65	70.2	<0.100	0.282	---	201	---	---	---	---	---	SVL
DC 8.2 W	RESE-1001212	11-May-05	---	---	---	---	---	---	---	---	---	---	---	---	---	22.7	7.4	205.6	---	---	
DC 8.2 W	RESE-1001212	11-May-05	---	---	---	---	---	---	---	---	---	---	---	0.49	---	---	---	---	---	---	Del Mar
DC 8.2 W	RESE-1001212	11-May-05	28.5	5.20	20.7	0.87	5.04	ND	160	4.17	67.3	<0.100	0.293	---	158	---	---	---	---	---	SVL
DC 8.2 W	RESE-1001227	16-Aug-05	---	---	---	---	---	---	---	---	---	---	---	---	---	23.4	7.4	267.7	---	---	
DC 8.2 W	RESE-1001227	16-Aug-05	---	---	---	---	---	---	---	---	---	---	---	0.46	---	---	---	---	---	---	Del Mar
DC 8.2 W	RESE-1001227	16-Aug-05	27.9	5.27	21.6	1.03	4.80	ND	162	4.02	72.7	0.117	0.266	---	212	---	---	---	---	---	SVL
DC 8.2 W	RESE-1000260	19-Feb-08	29	5.6	25	1.3	---	---	---	---	71	---	---	---	---	---	---	---	---	---	TestAmerica
DC 8.2 W	RESE-1000260	19-Feb-08	---	---	---	---	4.9	ND	171	4.7	---	<0.50	0.40	0.65	230	---	---	---	---	---	TestAmerica
DC 8.2 W	RESE-1003002	27-May-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	6.8	274.8	---	---	
DC 8.2 W	RESE-1003002	27-May-08	28	5.3	21	<2.0	---	---	---	---	69	---	---	---	---	---	---	---	---	---	TestAmerica
DC 8.2 W	RESE-1003002	27-May-08	---	---	---	---	4.8	ND	134	4.0	---	<0.50	<0.40	0.60	230	---	---	---	7.32	270	TestAmerica
DC 8.2 W	RESE-1002004	06-Aug-08	---	---	---	---	---	---	---	---	---	---	---	---	---	23.5	7.57	264	---	---	
DC 8.2 W	RESE-1002004	06-Aug-08	27.4	5.15	21.3	1.04	4.97	---	---	4.67	73.5	---	---	---	---	---	---	---	---	---	SVL
DC 8.2 W	RESE-1002004	06-Aug-08	---	---	---	---	5.13	ND	163	4.06	---	<0.100	0.429	---	230	---	---	---	---	---	SVL
DC 8.2 W	RESE-1002004	06-Aug-08	---	---	---	---	---	---	---	---	---	---	---	0.57	---	---	---	---	---	---	TestAmerica
DC 8.2 W	RESE-1002004	06-Aug-08	27.5	5.13	21.5	0.92	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
DC 8.2 W	RESE-1002027	05-Nov-08	---	---	---	---	---	---	---	---	---	---	---	---	---	21.6	7.27	281.7	---	---	
DC 8.2 W	RESE-1002027	05-Nov-08	---	---	---	---	---	---	---	---	69.5	---	---	---	---	---	---	---	---	---	SVL
DC 8.2 W	RESE-1002027	05-Nov-08	---	---	---	---	5.06	ND	168	4.12	---	<0.100	0.427	---	210	---	---	---	---	---	SVL
DC 8.2 W	RESE-1002027	05-Nov-08	---	---	---	---	---	---	---	---	---	---	---	0.47	---	---	---	---	---	---	TestAmerica
DC 8.2 W	RESE-1002027	05-Nov-08	28.0	5.20	22.5	1.07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL

TABLE B-1. COMMON CONSTITUENTS AND ROUTINE PARAMETERS FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	COMMON CONSTITUENTS[a] (mg/L)[b]													ROUTINE PARAMETERS					ANALYTICAL LABORATORY
																FIELD			LABORATORY		
			Ca	Mg	Na	K	Cl	CO_3	HCO_3	SO_4	SiO_2	Br	F	$NO_3 + NO_2$ (as N)	TDS	TEMP (°C)[c]	pH	SC (µS/cm)[d]	pH	SC (µS/cm)	
Surface Water 2 - Devils Canyon																					
DC 8.2 W	RESE-1003023	02-Dec-08	---	---	---	---	---	---	---	---	---	---	---	---	---	23.1	6.87	271.1	---	---	
DC 8.2 W	RESE-1003023	02-Dec-08	30	5.8	21	<2.0	---	---	---	---	73	---	---	---	---	---	---	---	---	---	TestAmerica
DC 8.2 W	RESE-1003023	02-Dec-08	---	---	---	---	5.1	ND	171	4.0	---	<0.50	0.45	0.62	210	---	---	---	7.25	280	TestAmerica
DC 8.2 W	RESE-1002063	24-Feb-09	---	---	---	---	---	---	---	---	---	---	---	---	---	24.6	7.31	263	---	---	
DC 8.2 W	RESE-1002063	24-Feb-09	---	---	---	---	---	---	---	---	65.5	---	---	---	---	---	---	---	---	---	SVL
DC 8.2 W	RESE-1002063	24-Feb-09	---	---	---	---	5.11	ND	148	5.61	---	<0.100	0.269	---	240	---	---	---	---	---	SVL
DC 8.2 W	RESE-1002063	24-Feb-09	24.8	4.65	19.4	1.01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
DC 8.2 W	RESE-1002097	19-May-09	---	---	---	---	---	---	---	---	---	---	---	---	---	24.8	6.88	243	---	---	
DC 8.2 W	RESE-1002097	19-May-09	---	---	---	---	---	---	---	---	75.5	---	---	---	---	---	---	---	---	---	SVL
DC 8.2 W	RESE-1002097	19-May-09	---	---	---	---	6.41	ND	159	4.32	---	0.114	0.717	---	214	---	---	---	---	---	SVL
DC 8.2 W	RESE-1002097	19-May-09	28.7	5.47	23.0	0.96	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
DC 8.2 W	RESE-1002159	10-Nov-10	---	---	---	---	---	---	---	---	---	---	---	---	---	20.1	7.19	260.4	---	---	
DC 8.2 W	RESE-1002159	10-Nov-10	---	---	---	---	---	---	---	---	78.5	---	---	---	---	---	---	---	---	---	SVL
DC 8.2 W	RESE-1002159	10-Nov-10	---	---	---	---	5.13 j-	ND	171	3.49 j-	---	<0.100	0.274 j-	---	226 j-	---	---	---	---	---	SVL
DC 8.2 W	RESE-1002159	10-Nov-10	33	6.27	22.9	1.32	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
DC 8.2 W	RESE-1002231	03-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	22.85	7.26	245	---	---	
DC 8.2 W	RESE-1002231	03-May-12	---	---	---	---	---	---	---	---	71.7	---	---	---	---	---	---	---	---	---	SVL
DC 8.2 W	RESE-1002231	03-May-12	---	---	---	---	5.06	ND	160	3.54	---	<0.10	0.38	---	207 j	---	---	---	---	---	SVL
DC 8.2 W	RESE-1002231	03-May-12	28.3	5.33	21.2	0.931	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
DC 8.2 W	---	14-Jun-13	---	---	---	---	---	---	---	---	---	---	---	---	---	23.97	7.52	278	---	---	
DC 8.2 W	---	05-Aug-13	---	---	---	---	---	---	---	---	---	---	---	---	---	23.08	7.66	280	---	---	
DC 8.8 C	RESE-1001005	20-May-03	---	---	---	---	---	---	---	---	---	---	---	---	---	17.2	7.9	218	---	---	
DC 8.8 C	RESE-1001005	20-May-03	---	---	---	---	---	---	---	---	---	0.12	0.23	---	---	---	---	---	---	---	SVL
DC 8.8 C	RESE-1001005	20-May-03	---	---	---	---	---	---	---	---	---	---	---	<0.10	---	---	---	---	---	---	Del Mar
DC 8.8 C	RESE-1001005	20-May-03	22.5	4.50	19.0	1.2	6.02	ND	117.2	12.8	56.0	---	---	---	241	---	---	---	---	---	SVL
DC 8.8 C	RESE-1001018	21-Aug-03	---	---	---	---	---	---	---	---	---	---	---	---	---	22.4	7.6	302	---	---	
DC 8.8 C	RESE-1001018	21-Aug-03	---	---	---	---	---	---	---	---	---	<0.10	0.42	---	---	---	---	---	---	---	SVL
DC 8.8 C	RESE-1001018	21-Aug-03	---	---	---	---	---	---	---	---	---	---	---	<0.10	---	---	---	---	---	---	Del Mar
DC 8.8 C	RESE-1001018	21-Aug-03	31.3	6.28	27.5	<1.0	5.95	ND	199	4.71	82.3	---	---	---	241	---	---	---	---	---	SVL
DC 8.8 C	RESE-1001042	12-Nov-03	---	---	---	---	---	---	---	---	---	---	---	---	---	14.5	6.8	232.5	---	---	
DC 8.8 C	RESE-1001042	12-Nov-03	---	---	---	---	---	---	---	---	---	---	---	<0.10	---	---	---	---	---	---	Del Mar
DC 8.8 C	RESE-1001042	12-Nov-03	28.4	6.20	25.0	1.3	7.02	ND	155	15.7	66.9	<0.10	0.35	---	198	---	---	---	---	---	SVL
DC 8.8 C	RESE-1001062	17-Feb-04	---	---	---	---	---	---	---	---	---	---	---	---	---	7.0	7.0	128.6	---	---	
DC 8.8 C	RESE-1001062	17-Feb-04	---	---	---	---	---	---	---	---	---	---	---	---	75.5	---	---	---	---	---	SVL
DC 8.8 C	RESE-1001062	17-Feb-04	---	---	---	---	---	---	---	---	---	---	---	<0.10	---	---	---	---	---	---	Del Mar
DC 8.8 C	RESE-1001062	17-Feb-04	12.3	2.57	10.6	1.08	4.50	ND	52.7	18.2	---	<0.10	0.137	---	73.0	---	---	---	---	---	SVL
DC 8.8 C	RESE-1001078	21-May-04	---	---	---	---	---	---	---	---	---	---	---	---	---	15.8	8.0	220	---	---	
DC 8.8 C	RESE-1001078	21-May-04	---	---	---	---	---	---	---	---	---	---	---	<0.20	---	---	---	---	---	---	Del Mar
DC 8.8 C	RESE-1001078	21-May-04	22.3	4.40	19.3	1.2	5.95	ND	133	7.06	59.2	0.13	0.29	---	190	---	---	---	---	---	SVL
DC 8.8 C LD	RESE-1001078	21-May-04	---	---	---	---	---	---	---	---	---	---	---	<2.0	---	---	---	---	---	---	Del Mar

MONTGOMERY & ASSOCIATES

TABLE B-1. COMMON CONSTITUENTS AND ROUTINE PARAMETERS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	COMMON CONSTITUENTS[a] (mg/L)[b]													ROUTINE PARAMETERS					ANALYTICAL LABORATORY
																FIELD			LABORATORY		
			Ca	Mg	Na	K	Cl	CO_3	HCO_3	SO_4	SiO_2	Br	F	$NO_3 + NO_2$ (as N)	TDS	TEMP (°C)[c]	pH	SC (µS/cm)[d]	pH	SC (µS/cm)	
Surface Water 2 - Devils Canyon																					
DC 8.8 C	RESE-1001151	16-Aug-04	---	---	---	---	---	---	---	---	---	---	---	---	---	19.9	7.8	337.5	---	---	
DC 8.8 C	RESE-1001151	16-Aug-04	---	---	---	---	---	---	---	---	---	---	---	<0.20	---	---	---	---	---	---	Del Mar
DC 8.8 C	RESE-1001151	16-Aug-04	32.7	6.03	30.6	1.4	9.85	ND	215	9.06	70.1	<0.10	0.39	---	256	---	---	---	---	---	SVL
DC 8.8 C	RESE-1001174	16-Nov-04	---	---	---	---	---	---	---	---	---	---	---	---	---	10.7	7.6	297	---	---	
DC 8.8 C	RESE-1001174	16-Nov-04	---	---	---	---	---	---	---	---	---	---	---	<0.20	---	---	---	---	---	---	Del Mar
DC 8.8 C	RESE-1001174	16-Nov-04	30.8	6.10	27.8	1.22	6.42	ND	181	5.34	70.0	0.12	0.35	---	242	---	---	---	---	---	SVL
DC 8.8 C	RESE-1001197	25-Feb-05	---	---	---	---	---	---	---	---	---	---	---	---	---	11.0	7.8	66.7	---	---	
DC 8.8 C	RESE-1001197	25-Feb-05	---	---	---	---	---	---	---	---	---	---	---	0.22	---	---	---	---	---	---	Del Mar
DC 8.8 C	RESE-1001197	25-Feb-05	5.68	1.50	4.50	1.46	2.81	ND	13.1	10.8	25.9	<0.100	<0.100	---	76.0	---	---	---	---	---	SVL
DC 8.8 C	RESE-1001211	11-May-05	---	---	---	---	---	---	---	---	---	---	---	---	---	13.7	7.7	170.1	---	---	
DC 8.8 C	RESE-1001211	11-May-05	---	---	---	---	---	---	---	---	---	---	---	<0.20	---	---	---	---	---	---	Del Mar
DC 8.8 C	RESE-1001211	11-May-05	17.0	3.46	13.6	1.22	7.38	ND	86.1	9.69	43.9	0.115	0.164	---	96	---	---	---	---	---	SVL
DC 8.8 C	RESE-1001228	16-Aug-05	---	---	---	---	---	---	---	---	---	---	---	---	---	22.3	7.8	116	---	---	
DC 8.8 C	RESE-1001228	16-Aug-05	---	---	---	---	---	---	---	---	---	---	---	0.33	---	---	---	---	---	---	Del Mar
DC 8.8 C	RESE-1001228	16-Aug-05	9.79	2.39	7.92	2.21	5.37	ND	37.2	14.9	35.0	<0.100	<0.100	---	111	---	---	---	---	---	SVL
DC 8.8 C	RESE-1002230	03-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	16.33	7.56	146	---	---	
DC 8.8 C	RESE-1002230	03-May-12	---	---	---	---	---	---	---	---	39.4	---	---	---	---	---	---	---	---	---	SVL
DC 8.8 C	RESE-1002230	03-May-12	---	---	---	---	7.26	ND	94.7	6.84	---	<0.10	0.24	---	139 j	---	---	---	---	---	SVL
DC 8.8 C	RESE-1002230	03-May-12	17.6	3.56	14.8	1.21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
DC 8.8 C	---	14-Jun-13	---	---	---	---	---	---	---	---	---	---	---	---	---	19.41	6.55	280	---	---	
DC 8.8 C	---	05-Aug-13	---	---	---	---	---	---	---	---	---	---	---	---	---	21.15	7.54	319	---	---	
H 0.1 C	RESE-1002011	19-Aug-08	---	---	---	---	---	---	---	---	---	---	---	---	---	33.1	*9.52*	172	---	---	
H 0.1 C	RESE-1002011	19-Aug-08	16.7	2.87	10.9	2.11	5.78	---	---	7.54	33.5	---	---	---	---	---	---	---	---	---	SVL
H 0.1 C	RESE-1002011	19-Aug-08	18	2.94	11.3	2.3	5.92	22.2	41.2	7.55	---	<0.100	<0.100	---	120 j	---	---	---	---	---	SVL
H 0.1 C	RESE-1002011	19-Aug-08	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	TestAmerica
H 0.1 C	RESE-1002028	05-Nov-08	---	---	---	---	---	---	---	---	---	---	---	---	---	11.7	7.83	298	---	---	
H 0.1 C	RESE-1002028	05-Nov-08	---	---	---	---	---	---	---	---	31.7	---	---	---	---	---	---	---	---	---	SVL
H 0.1 C	RESE-1002028	05-Nov-08	---	---	---	---	6.52	ND	171	12.5	---	<0.100	0.315	---	190	---	---	---	---	---	SVL
H 0.1 C	RESE-1002028	05-Nov-08	---	---	---	---	---	---	---	---	---	---	---	<0.30	---	---	---	---	---	---	TestAmerica
H 0.1 C	RESE-1002028	05-Nov-08	30.5	6.64	20.8	2.28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
H 0.1 C	RESE-1002061	24-Feb-09	---	---	---	---	---	---	---	---	---	---	---	---	---	13.1	7.63	102	---	---	
H 0.1 C	RESE-1002061	24-Feb-09	---	---	---	---	---	---	---	---	25.1	---	---	---	---	---	---	---	---	---	SVL
H 0.1 C	RESE-1002061	24-Feb-09	---	---	---	---	3.68	ND	20.4	18.5	---	<0.100	<0.100	---	142	---	---	---	---	---	SVL
H 0.1 C	RESE-1002061	24-Feb-09	7.53	1.68	5.32	1.38	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
H 0.1 C	RESE-1002096	19-May-09	---	---	---	---	---	---	---	---	---	---	---	---	---	28.5	*8.74*	269	---	---	
H 0.1 C	RESE-1002096	19-May-09	---	---	---	---	---	---	---	---	56.3	---	---	---	---	---	---	---	---	---	SVL
H 0.1 C	RESE-1002096	19-May-09	---	---	---	---	8.87	ND	143	12.0	---	0.126	0.477	---	214	---	---	---	---	---	SVL
H 0.1 C	RESE-1002096	19-May-09	25.6	6.82	26.6	2.35	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL

TABLE B-1. COMMON CONSTITUENTS AND ROUTINE PARAMETERS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	COMMON CONSTITUENTS[a] (mg/L)[b]													ROUTINE PARAMETERS					ANALYTICAL LABORATORY
																FIELD			LABORATORY		
			Ca	Mg	Na	K	Cl	CO_3	HCO_3	SO_4	SiO_2	Br	F	$NO_3 + NO_2$ (as N)	TDS	TEMP (°C)[c]	pH	SC (µS/cm)[d]	pH	SC (µS/cm)	
Surface Water 2 - Devils Canyon																					
H 0.1 C	RESE-1002158	10-Nov-10	---	---	---	---	---	---	---	---	---	---	---	---	---	8.1	6.8	206.0	---	---	
H 0.1 C	RESE-1002158	10-Nov-10	---	---	---	---	---	---	---	---	35.4	---	---	---	---	---	---	---	---	---	SVL
H 0.1 C	RESE-1002158	10-Nov-10	---	---	---	---	5.85	ND	112.7	10.0	---	<0.100	0.210	---	153	---	---	---	---	---	SVL
H 0.1 C	RESE-1002158	10-Nov-10	21.8	5.57	16.0	2.22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
H 0.1 C	RESE-1002188	31-Aug-11	---	---	---	---	---	---	---	---	---	---	---	---	---	25.9	7.51	130.9	---	---	
H 0.1 C	RESE-1002188	31-Aug-11	---	---	---	---	---	---	---	---	38.4	---	---	---	---	---	---	---	---	---	SVL
H 0.1 C	RESE-1002188	31-Aug-11	---	---	---	---	5.54	ND	85.0	8.85	---	<0.10	0.25	---	157	---	---	---	---	---	SVL
H 0.1 C	RESE-1002188	31-Aug-11	14.9	4.17	13.6	3.55	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
H 0.1 C DUP	RESE-1002189	31-Aug-11	---	---	---	---	---	---	---	---	---	---	---	---	---	25.9	7.51	130.9	---	---	
H 0.1 C DUP	RESE-1002189	31-Aug-11	---	---	---	---	---	---	---	---	38.6	---	---	---	---	---	---	---	---	---	SVL
H 0.1 C DUP	RESE-1002189	31-Aug-11	---	---	---	---	5.02	ND	87.4	8.87	---	<0.10	0.26	---	139	---	---	---	---	---	SVL
H 0.1 C DUP	RESE-1002189	31-Aug-11	14.6	4.10	13.1	3.36	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
H 0.1 C	RESE-1002193	30-Nov-11	---	---	---	---	---	---	---	---	---	---	---	---	---	7.4	7.79	129.7	---	---	
H 0.1 C	RESE-1002193	30-Nov-11	---	---	---	---	---	---	---	---	20.8	---	---	---	---	---	---	---	---	---	SVL
H 0.1 C	RESE-1002193	30-Nov-11	---	---	---	---	3.63	ND	72.3	12.5	---	<0.10	<0.10	---	93	---	---	---	---	---	SVL
H 0.1 C	RESE-1002193	30-Nov-11	14.3	3.30	9.41	1.62	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
H 0.1 C	RESE-1002217	02-Mar-12	---	---	---	---	---	---	---	---	---	---	---	---	---	6.4	7.92	169.5	---	---	
H 0.1 C	RESE-1002217	02-Mar-12	---	---	---	---	---	---	---	---	21.8	---	---	---	---	---	---	---	---	---	SVL
H 0.1 C	RESE-1002217	02-Mar-12	---	---	---	---	5.66	ND	39.5	21.3	---	<0.10	0.11	---	93	---	---	---	---	---	SVL
H 0.1 C	RESE-1002217	02-Mar-12	12.1	2.82	7.81	1.87	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
H 0.1 C	RESE-1002229	03-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	19.51	7.71	112	---	---	
H 0.1 C	RESE-1002229	03-May-12	---	---	---	---	---	---	---	---	20.8	---	---	---	---	---	---	---	---	---	SVL
H 0.1 C	RESE-1002229	03-May-12	---	---	---	---	5.24	ND	53.6	13.8	---	<0.10	0.14	---	107 j	---	---	---	---	---	SVL
H 0.1 C	RESE-1002229	03-May-12	10.6	3.18	11.2	0.973	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
H 0.1 C	RESE-1003057	15-Aug-12	---	---	---	---	---	---	---	---	---	---	---	---	---	27.2	*8.51*	215.4	---	---	
H 0.1 C	RESE-1003057	15-Aug-12	---	---	---	---	---	---	---	---	49.5	---	---	---	---	---	---	---	---	---	SVL
H 0.1 C	RESE-1003057	15-Aug-12	---	---	---	---	7.77	ND	114.1	7.09	---	0.17	0.26	---	179	---	---	---	---	---	SVL
H 0.1 C	RESE-1003057	15-Aug-12	19.8	4.53	16.8	3.96	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
IC 1.0 C	RESE-1002019	28-Aug-08	---	---	---	---	---	---	---	---	---	---	---	---	---	27.6	6.88	264	---	---	
IC 1.0 C	RESE-1002019	28-Aug-08	23.6	5.69	14.9	4.41	23.2	---	---	45.4	35.5	---	---	---	---	---	---	---	---	---	SVL
IC 1.0 C	RESE-1002019	28-Aug-08	21.1	5.09	13.5	4.2	22.5	ND	48.7	49.4	---	<0.100	<0.100	---	192	---	---	---	---	---	SVL
IC 1.0 C	RESE-1002019	28-Aug-08	---	---	---	---	---	---	---	---	---	---	---	0.97	---	---	---	---	---	---	TestAmerica
IC 1.0 C	RESE-1002055	17-Feb-09	---	---	---	---	---	---	---	---	---	---	---	---	---	10.6	7.65	90.9	---	---	
IC 1.0 C	RESE-1002055	17-Feb-09	---	---	---	---	---	---	---	---	21.6	---	---	---	---	---	---	---	---	---	SVL
IC 1.0 C	RESE-1002055	17-Feb-09	---	---	---	---	5.55	ND	14.8	12.2	---	<0.100	<0.100	---	126	---	---	---	---	---	SVL
IC 1.0 C	RESE-1002055	17-Feb-09	6.64	1.75	5.72	2.39	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
IC 1.0 C	RESE-1002085	12-May-09	---	---	---	---	---	---	---	---	---	---	---	---	---	21.5	6.80	384	---	---	
IC 1.0 C	RESE-1002085	12-May-09	---	---	---	---	---	---	---	---	34.0	---	---	---	---	---	---	---	---	---	SVL
IC 1.0 C	RESE-1002085	12-May-09	---	---	---	---	43.4	ND	39.2	75.0	---	0.118	0.267	---	238	---	---	---	---	---	SVL
IC 1.0 C	RESE-1002085	12-May-09	33.1	7.97	20.6	2.39	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL

TABLE B-1. COMMON CONSTITUENTS AND ROUTINE PARAMETERS FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	COMMON CONSTITUENTS[a] (mg/L)[b]													ROUTINE PARAMETERS					ANALYTICAL LABORATORY
																FIELD			LABORATORY		
			Ca	Mg	Na	K	Cl	CO_3	HCO_3	SO_4	SiO_2	Br	F	$NO_3 + NO_2$ (as N)	TDS	TEMP (°C)[c]	pH	SC (µS/cm)[d]	pH	SC (µS/cm)	
Surface Water 2 - Devils Canyon																					
IC 1.0 C	RESE-1002109	07-Aug-09	---	---	---	---	---	---	---	---	---	---	---	---	---	20.7	6.95	348.7	---	---	
IC 1.0 C	RESE-1002109	07-Aug-09	---	---	---	---	---	---	---	---	40.3	---	---	---	---	---	---	---	---	---	SVL
IC 1.0 C	RESE-1002109	07-Aug-09	---	---	---	---	42.1	ND	62.6	72.6	---	0.106	0.184	---	281	---	---	---	---	---	SVL
IC 1.0 C	RESE-1002109	07-Aug-09	36.8	9.02	22.9	4.42	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
IC 1.0 C	RESE-1002115	16-Dec-09	---	---	---	---	---	---	---	---	---	---	---	---	---	6.9	6.80	370	---	---	
IC 1.0 C	RESE-1002115	16-Dec-09	---	---	---	---	---	---	---	---	36.1	---	---	---	---	---	---	---	---	---	SVL
IC 1.0 C	RESE-1002115	16-Dec-09	---	---	---	---	51.4	ND	29.0	70.3	---	0.121	<0.100	---	260	---	---	---	---	---	SVL
IC 1.0 C	RESE-1002115	16-Dec-09	31.3	8.12	22.5	1.44	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
IC 1.0 C	RESE-1002126	17-Feb-10	---	---	---	---	---	---	---	---	---	---	---	---	---	6	7.49	273.8	---	---	
IC 1.0 C	RESE-1002126	17-Feb-10	---	---	---	---	---	---	---	---	27.4	---	---	---	---	---	---	---	---	---	SVL
IC 1.0 C	RESE-1002126	17-Feb-10	---	---	---	---	25.2	ND	32.0	55.7	---	<0.100	<0.100	---	162	---	---	---	---	---	SVL
IC 1.0 C	RESE-1002126	17-Feb-10	26.3	6.13	16.1	4.09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
IC 1.0 C	RESE-1002204	09-Dec-11	---	---	---	---	---	---	---	---	---	---	---	---	---	4.8	7.35	474	---	---	
IC 1.0 C	RESE-1002204	09-Dec-11	---	---	---	---	---	---	---	---	28.8	---	---	---	---	---	---	---	---	---	SVL
IC 1.0 C	RESE-1002204	09-Dec-11	---	---	---	---	78.8	ND	39.2	82.1	---	0.30	0.17	---	292	---	---	---	---	---	SVL
IC 1.0 C	RESE-1002204	09-Dec-11	48.0	11.9	31.3	2.76	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
IC 1.0 C	RESE-1002216	01-Mar-12	---	---	---	---	---	---	---	---	---	---	---	---	---	9.6	6.68	421.6	---	---	
IC 1.0 C	RESE-1002216	01-Mar-12	---	---	---	---	---	---	---	---	27.8	---	---	---	---	---	---	---	---	---	SVL
IC 1.0 C	RESE-1002216	01-Mar-12	---	---	---	---	42.1	ND	29.6	113	---	<0.10	0.19	---	276	---	---	---	---	---	SVL
IC 1.0 C	RESE-1002216	01-Mar-12	37.2	9.19	28.1	3.53	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
IC 1.0 C	RESE-1003073	29-Jan-13	---	---	---	---	---	---	---	---	---	---	---	---	---	4.50	7.14	102.2	---	---	
IC 1.0 C	RESE-1003073	29-Jan-13	---	---	---	---	---	---	---	---	22.2	---	---	---	---	---	---	---	---	---	SVL
IC 1.0 C	RESE-1003073	29-Jan-13	---	---	---	---	9.97	ND	13.2	18.9	---	<0.10	0.11	---	129	---	---	---	---	---	SVL
IC 1.0 C	RESE-1003073	29-Jan-13	9.61	2.37	8.62	2.78	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
IC 1.0 C	RESE-1003087	13-Mar-13	---	---	---	---	---	---	---	---	---	---	---	---	---	14.6	7.72	213	---	---	
IC 1.0 C	RESE-1003087	13-Mar-13	---	---	---	---	---	---	---	---	28.7	---	---	---	---	---	---	---	---	---	SVL
IC 1.0 C	RESE-1003087	13-Mar-13	---	---	---	---	27.5	ND	28.7	26.5	---	<0.10	0.19	---	176	---	---	---	---	---	SVL
IC 1.0 C	RESE-1003087	13-Mar-13	15.9	3.87	14.3	3.51	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
RR 1.5 C	RESE-1002012	19-Aug-08	---	---	---	---	---	---	---	---	---	---	---	---	---	31.7	*9.67*	168	---	---	
RR 1.5 C	RESE-1002012	19-Aug-08	15.1	3.89	8.05	1.58	6.67	---	---	22.1	32.8	---	---	---	---	---	---	---	---	---	SVL
RR 1.5 C	RESE-1002012	19-Aug-08	16.7	4.2	8.71	1.8	6.84	1.7	55.1	22.6	---	<0.100	<0.100	---	150	---	---	---	---	---	SVL
RR 1.5 C	RESE-1002012	19-Aug-08	---	---	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	TestAmerica
RR 1.5 C	RESE-1002029	05-Nov-08	---	---	---	---	---	---	---	---	---	---	---	---	---	14.8	7.64	1637	---	---	
RR 1.5 C	RESE-1002029	05-Nov-08	---	---	---	---	---	---	---	---	29.9	---	---	---	---	---	---	---	---	---	SVL
RR 1.5 C	RESE-1002029	05-Nov-08	---	---	---	---	5.87	ND	52.8	27.6	---	<0.100	0.289	---	110	---	---	---	---	---	SVL
RR 1.5 C	RESE-1002029	05-Nov-08	---	---	---	---	---	---	---	---	---	---	---	<0.30	---	---	---	---	---	---	TestAmerica
RR 1.5 C	RESE-1002029	05-Nov-08	15.0	3.84	9.07	1.77	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
RR 1.5 C DUP	RESE-1002066	26-Feb-09	---	---	---	---	---	---	---	---	26.5	---	---	---	---	---	---	---	---	---	SVL
RR 1.5 C DUP	RESE-1002066	26-Feb-09	---	---	---	---	3.03	ND	16.0	15.0	---	<0.100	<0.100	---	110	---	---	---	---	---	SVL
RR 1.5 C DUP	RESE-1002066	26-Feb-09	5.66	1.43	4.92	1.09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL

TABLE B-1. COMMON CONSTITUENTS AND ROUTINE PARAMETERS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	COMMON CONSTITUENTS[a] (mg/L)[b]													ROUTINE PARAMETERS					ANALYTICAL LABORATORY
																FIELD			LABORATORY		
			Ca	Mg	Na	K	Cl	CO_3	HCO_3	SO_4	SiO_2	Br	F	$NO_3 + NO_2$ (as N)	TDS	TEMP (°C)[c]	pH	SC (µS/cm)[d]	pH	SC (µS/cm)	
Surface Water 2 - Devils Canyon																					
RR 1.5 C	RESE-1002065	26-Feb-09	---	---	---	---	---	---	---	---	---	---	---	---	---	15.1	6.78	88.5	---	---	
RR 1.5 C	RESE-1002065	26-Feb-09	---	---	---	---	---	---	---	---	26.4	---	---	---	---	---	---	---	---	---	SVL
RR 1.5 C	RESE-1002065	26-Feb-09	---	---	---	---	3.05	ND	15.9	15.0	---	<0.100	<0.100	---	112	---	---	---	---	---	SVL
RR 1.5 C	RESE-1002065	26-Feb-09	5.86	1.48	5.03	1.10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
RR 1.5 C	RESE-1002100	21-May-09	---	---	---	---	---	---	---	---	---	---	---	---	---	19.1	*6.15*	137.3	---	---	
RR 1.5 C	RESE-1002100	21-May-09	---	---	---	---	---	---	---	---	33.1	---	---	---	---	---	---	---	---	---	SVL
RR 1.5 C	RESE-1002100	21-May-09	---	---	---	---	5.80	ND	40.0	19.0	---	<0.100	0.341	---	106	---	---	---	---	---	SVL
RR 1.5 C	RESE-1002100	21-May-09	11.3	2.92	6.62	1.47	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
RR 1.5 C DUP	RESE-1002101	21-May-09	---	---	---	---	---	---	---	---	32.3	---	---	---	---	---	---	---	---	---	SVL
RR 1.5 C DUP	RESE-1002101	21-May-09	---	---	---	---	5.15	ND	39.9	19.1	---	<0.100	0.279	---	104	---	---	---	---	---	SVL
RR 1.5 C DUP	RESE-1002101	21-May-09	11.6	3.03	6.88	1.52	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
RR 1.5 C	RESE-1002128	18-Feb-10	---	---	---	---	---	---	---	---	---	---	---	---	---	15.4	6.89	88.6	---	---	
RR 1.5 C	RESE-1002128	18-Feb-10	---	---	---	---	---	---	---	---	26.0	---	---	---	---	---	---	---	---	---	SVL
RR 1.5 C	RESE-1002128	18-Feb-10	---	---	---	---	4.40	ND	16.8	20.5	---	<0.100	<0.100	---	66	---	---	---	---	---	SVL
RR 1.5 C	RESE-1002128	18-Feb-10	9.78	2.50	6.70	1.56	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
RR 1.5 C	RESE-1002143	02-Nov-10	---	---	---	---	---	---	---	---	---	---	---	---	---	17.1	7.62	115.4	---	---	
RR 1.5 C	RESE-1002143	02-Nov-10	---	---	---	---	---	---	---	---	27.7	---	---	---	---	---	---	---	---	---	SVL
RR 1.5 C	RESE-1002143	02-Nov-10	---	---	---	---	5.43	ND	38.9	19.6	---	<0.100	0.102	---	85	---	---	---	---	---	SVL
RR 1.5 C	RESE-1002143	02-Nov-10	10.6	2.73	8.18	1.91	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
RR 1.5 C	RESE-1002202	09-Dec-11	---	---	---	---	---	---	---	---	---	---	---	---	---	4.8	6.99	102.9	---	---	
RR 1.5 C	RESE-1002202	09-Dec-11	---	---	---	---	---	---	---	---	19.3	---	---	---	---	---	---	---	---	---	SVL
RR 1.5 C	RESE-1002202	09-Dec-11	---	---	---	---	5.06	ND	22.7	22.6	---	<0.10	0.10	---	89	---	---	---	---	---	SVL
RR 1.5 C	RESE-1002202	09-Dec-11	6.80	1.69	7.35	1.01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
RR 1.5 C DUP	RESE-1002203	09-Dec-11	---	---	---	---	---	---	---	---	---	---	---	---	---	4.8	6.99	102.9	---	---	
RR 1.5 C DUP	RESE-1002203	09-Dec-11	---	---	---	---	---	---	---	---	24.4	---	---	---	---	---	---	---	---	---	SVL
RR 1.5 C DUP	RESE-1002203	09-Dec-11	---	---	---	---	4.97	ND	22.7	22.5	---	<0.10	0.12	---	99	---	---	---	---	---	SVL
RR 1.5 C DUP	RESE-1002203	09-Dec-11	8.81	2.15	9.28	1.25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
RR 1.5 C	RESE-1002220	05-Mar-12	---	---	---	---	---	---	---	---	---	---	---	---	---	16.1	*8.59*	142.6	---	---	
RR 1.5 C	RESE-1002220	05-Mar-12	---	---	---	---	---	---	---	---	25.9	---	---	---	---	---	---	---	---	---	SVL
RR 1.5 C	RESE-1002220	05-Mar-12	---	---	---	---	5.41	ND	43.2	23.1	---	<0.10	0.12	---	103	---	---	---	---	---	SVL
RR 1.5 C	RESE-1002220	05-Mar-12	11.9	2.96	9.57	1.27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
RR 1.5 C DUP	RESE-1002221	05-Mar-12	---	---	---	---	---	---	---	---	---	---	---	---	---	16.1	*8.59*	142.6	---	---	
RR 1.5 C DUP	RESE-1002221	05-Mar-12	---	---	---	---	---	---	---	---	26.1	---	---	---	---	---	---	---	---	---	SVL
RR 1.5 C DUP	RESE-1002221	05-Mar-12	---	---	---	---	5.35	ND	43.3	23.0	---	<0.10	0.12	---	112	---	---	---	---	---	SVL
RR 1.5 C DUP	RESE-1002221	05-Mar-12	11.8	2.89	9.41	1.20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
RR 1.5 C	RESE-1002225	27-Apr-12	---	---	---	---	---	---	---	---	---	---	---	---	---	22.22	6.51	139	---	---	
RR 1.5 C	RESE-1002225	27-Apr-12	---	---	---	---	---	---	---	---	31.9	---	---	---	---	---	---	---	---	---	SVL
RR 1.5 C	RESE-1002225	27-Apr-12	---	---	---	---	4.91	ND	52.0	19.9	---	<0.10	0.12	---	112	---	---	---	---	---	SVL
RR 1.5 C	RESE-1002225	27-Apr-12	14	3.57	9.2	1.72	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL

TABLE B-1. COMMON CONSTITUENTS AND ROUTINE PARAMETERS FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	COMMON CONSTITUENTS[a] (mg/L)[b]													ROUTINE PARAMETERS					ANALYTICAL LABORATORY
																FIELD			LABORATORY		
			Ca	Mg	Na	K	Cl	CO_3	HCO_3	SO_4	SiO_2	Br	F	$NO_3 + NO_2$ (as N)	TDS	TEMP (°C)[c]	pH	SC (µS/cm)[d]	pH	SC (µS/cm)	
Surface Water 2 - Devils Canyon																					
RR 1.5 C DUP	RESE-1002226	27-Apr-12	---	---	---	---	---	---	---	---	---	---	---	---	---	22.22	6.51	139	---	---	
RR 1.5 C DUP	RESE-1002226	27-Apr-12	---	---	---	---	---	---	---	---	31.9	---	---	---	---	---	---	---	---	---	SVL
RR 1.5 C DUP	RESE-1002226	27-Apr-12	---	---	---	---	4.87	ND	51.7	19.7	---	<0.10	0.11	---	118	---	---	---	---	---	SVL
RR 1.5 C DUP	RESE-1002226	27-Apr-12	14	3.59	9.25	1.72	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
RR 1.5 C	RESE-1003061	27-Aug-12	---	---	---	---	---	---	---	---	---	---	---	---	---	32.3	6.75	r	---	---	
RR 1.5 C	RESE-1003061	27-Aug-12	---	---	---	---	---	---	---	---	27.5	---	---	---	---	---	---	---	---	---	SVL
RR 1.5 C	RESE-1003061	27-Aug-12	---	---	---	---	2.29	ND	42.2	14.4	---	<0.10	0.23	---	104	---	---	---	---	---	SVL
RR 1.5 C	RESE-1003061	27-Aug-12	9.24	2.34	6.93	1.85	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
RR 1.5 C DUP	RESE-1003062	27-Aug-12	---	---	---	---	---	---	---	---	---	---	---	---	---	32.3	6.75	r	---	---	
RR 1.5 C DUP	RESE-1003062	27-Aug-12	---	---	---	---	---	---	---	---	27.6	---	---	---	---	---	---	---	---	---	SVL
RR 1.5 C DUP	RESE-1003062	27-Aug-12	---	---	---	---	2.25	ND	41.6	14.3	---	<0.10	0.21	---	91	---	---	---	---	---	SVL
RR 1.5 C DUP	RESE-1003062	27-Aug-12	9.40	2.38	7.07	1.91	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
RR 1.5 C	---	06-Jun-13	---	---	---	---	---	---	---	---	---	---	---	---	---	30.2	7.06	126.5	---	---	
Surface Water 3 - Mineral Creek																					
Government Springs	RESE-1002112	15-Dec-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	7.23	---	---	---	
Government Springs	RESE-1002112	15-Dec-09	---	---	---	---	---	---	---	---	41.6	---	---	---	---	---	---	---	---	---	SVL
Government Springs	RESE-1002112	15-Dec-09	---	---	---	---	17.9	ND	371	49.3	---	0.134	0.386	---	423	---	---	---	---	---	SVL
Government Springs	RESE-1002112	15-Dec-09	78.3	28.7	27.3	1.90	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Government Springs	RESE-1002130	18-Mar-10	---	---	---	---	---	---	---	---	---	---	---	---	---	21.9	6.94	583	---	---	
Government Springs	RESE-1002181	29-Aug-11	---	---	---	---	---	---	---	---	---	---	---	---	---	21.9	7.23	612	---	---	
Government Springs	RESE-1002181	29-Aug-11	---	---	---	---	---	---	---	---	38.6	---	---	---	---	---	---	---	---	---	SVL
Government Springs	RESE-1002181	29-Aug-11	---	---	---	---	15.6	ND	382	44.7	---	0.15	0.35	---	437	---	---	---	---	---	SVL
Government Springs	RESE-1002181	29-Aug-11	79.8	27.8	26.9	2.41	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Government Springs	RESE-1002199	08-Dec-11	---	---	---	---	---	---	---	---	---	---	---	---	---	21.3	7.28	565	---	---	
Government Springs	RESE-1002199	08-Dec-11	---	---	---	---	---	---	---	---	39.7	---	---	---	---	---	---	---	---	---	SVL
Government Springs	RESE-1002199	08-Dec-11	---	---	---	---	19.0	ND	377	49.9	---	0.12	0.59	---	424	---	---	---	---	---	SVL
Government Springs	RESE-1002199	08-Dec-11	85.4	30.5	28.7	2.45	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Government Springs	RESE-1002209	28-Feb-12	---	---	---	---	---	---	---	---	---	---	---	---	---	21.1	7.41	624	---	---	
Government Springs	RESE-1002209	28-Feb-12	---	---	---	---	---	---	---	---	39.7	---	---	---	---	---	---	---	---	---	SVL
Government Springs	RESE-1002209	28-Feb-12	---	---	---	---	15.7	ND	383	48.6	---	0.15	0.39	---	419	---	---	---	---	---	SVL
Government Springs	RESE-1002209	28-Feb-12	81.6	28.7	27.0	2.14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Government Springs	RESE-1002239	08-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	21.30	7.2	604	---	---	
Government Springs	RESE-1002239	08-May-12	---	---	---	---	---	---	---	---	41.7	---	---	---	---	---	---	---	---	---	SVL
Government Springs	RESE-1002239	08-May-12	---	---	---	---	15.8 j-d	ND	375	50.4 j-	---	0.13 j-	0.44 j-	---	428 j-	---	---	---	---	---	SVL
Government Springs	RESE-1002239	08-May-12	83.7	29	27.4	2.02	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Government Springs	RESE-1003058	22-Aug-12	---	---	---	---	---	---	---	---	---	---	---	---	---	22.3	7.25	719.0	---	---	
Government Springs	RESE-1003058	22-Aug-12	---	---	---	---	---	---	---	---	40.2	---	---	---	---	---	---	---	---	---	SVL
Government Springs	RESE-1003058	22-Aug-12	---	---	---	---	15.7	ND	400	46.7	---	0.13	0.48	---	441	---	---	---	---	---	SVL
Government Springs	RESE-1003058	22-Aug-12	83.5	30.7	28.8	2.17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL

TABLE B-1. COMMON CONSTITUENTS AND ROUTINE PARAMETERS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	COMMON CONSTITUENTS[a] (mg/L)[b]													ROUTINE PARAMETERS					ANALYTICAL LABORATORY
																FIELD			LABORATORY		
			Ca	Mg	Na	K	Cl	CO_3	HCO_3	SO_4	SiO_2	Br	F	$NO_3 + NO_2$ (as N)	TDS	TEMP (°C)[c]	pH	SC (µS/cm)[d]	pH	SC (µS/cm)	
Surface Water 3 - Mineral Creek																					
Government Springs	RESE-1003067	28-Nov-12	---	---	---	---	---	---	---	---	---	---	---	---	---	20.5	7.09	742.7	---	---	
Government Springs	RESE-1003067	28-Nov-12	---	---	---	---	---	---	---	---	40.6	---	---	---	---	---	---	---	---	---	SVL
Government Springs	RESE-1003067	28-Nov-12	---	---	---	---	16.6	ND	412	49.0	---	0.11	0.41	---	425	---	---	---	---	---	SVL
Government Springs	RESE-1003067	28-Nov-12	85.4	30.7	27.2	2.07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Government Springs DUP	RESE-1003068	28-Nov-12	---	---	---	---	---	---	---	---	---	---	---	---	---	20.5	7.09	742.7	---	---	
Government Springs DUP	RESE-1003068	28-Nov-12	---	---	---	---	---	---	---	---	40.4	---	---	---	---	---	---	---	---	---	SVL
Government Springs DUP	RESE-1003068	28-Nov-12	---	---	---	---	16.1	ND	411	48.9	---	0.11	0.40	---	421	---	---	---	---	---	SVL
Government Springs DUP	RESE-1003068	28-Nov-12	83.3	29.9	26.3	1.99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Government Springs	RESE-1003078	04-Feb-13	---	---	---	---	---	---	---	---	---	---	---	---	---	20.80	7.29	685	---	---	
Government Springs	RESE-1003078	04-Feb-13	---	---	---	---	---	---	---	---	39.7	---	---	---	---	---	---	---	---	---	SVL
Government Springs	RESE-1003078	04-Feb-13	---	---	---	---	17.2	ND	390	48.7	---	0.18	0.48	---	422	---	---	---	---	---	SVL
Government Springs	RESE-1003078	04-Feb-13	78.3	27.1	27.9	2.30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
Government Springs	RESE-1003099	11-Jun-13	---	---	---	---	---	---	---	---	---	---	---	---	---	21.3	7.01	557	---	---	
Government Springs	RESE-1003099	11-Jun-13	---	---	---	---	---	---	---	---	42.0	---	---	---	---	---	---	---	---	---	SvL
Government Springs	RESE-1003099	11-Jun-13	---	---	---	---	16.7	ND	375	47.3	---	0.14	0.36	---	441	---	---	---	---	---	SvL
Government Springs	RESE-1003099	11-Jun-13	83.4	29.6	29.8	2.07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SvL
Government Springs	---	10-Aug-13	---	---	---	---	---	---	---	---	---	---	---	---	---	21.60	7.6	698	---	---	
LF 0.2 C	RESE-1002039	13-Nov-08	---	---	---	---	---	---	---	---	---	---	---	---	---	19.3	6.87	651	---	---	
LF 0.2 C	RESE-1002039	13-Nov-08	---	---	---	---	---	---	---	---	39.8	---	---	---	---	---	---	---	---	---	SVL
LF 0.2 C	RESE-1002039	13-Nov-08	---	---	---	---	18.7	ND	133	141	---	0.164	0.436	---	460	---	---	---	---	---	SVL
LF 0.2 C	RESE-1002039	13-Nov-08	---	---	---	---	---	---	---	---	---	---	---	<0.30	---	---	---	---	---	---	TestAmerica
LF 0.2 C	RESE-1002039	13-Nov-08	83.0	18.9	37.1	1.33	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
LF 0.2 C	RESE-1002072	05-Mar-09	---	---	---	---	---	---	---	---	---	---	---	---	---	17.7	7.51	519	---	---	
LF 0.2 C	RESE-1002072	05-Mar-09	---	---	---	---	---	---	---	---	29.1	---	---	---	---	---	---	---	---	---	SVL
LF 0.2 C	RESE-1002072	05-Mar-09	---	---	---	---	14.2	ND	176	123	---	0.117	0.320	---	361	---	---	---	---	---	SVL
LF 0.2 C	RESE-1002072	05-Mar-09	61.0	15.9	30.2	1.03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
LF 0.2 C	RESE-1002093	14-May-09	---	---	---	---	---	---	---	---	---	---	---	---	---	20.3	6.85	594	---	---	
LF 0.2 C	RESE-1002093	14-May-09	---	---	---	---	---	---	---	---	35.3	---	---	---	---	---	---	---	---	---	SVL
LF 0.2 C	RESE-1002093	14-May-09	---	---	---	---	14.0	ND	228	125	---	0.117	0.342	---	414	---	---	---	---	---	SVL
LF 0.2 C	RESE-1002093	14-May-09	70.1	17.4	35.4	1.01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
LF 0.2 C	RESE-1002106	06-Aug-09	---	---	---	---	---	---	---	---	---	---	---	---	---	23.6	6.79	658	---	---	
LF 0.2 C	RESE-1002106	06-Aug-09	---	---	---	---	---	---	---	---	39.1	---	---	---	---	---	---	---	---	---	SVL
LF 0.2 C	RESE-1002106	06-Aug-09	---	---	---	---	13.7	ND	222	120	---	<0.100	0.304	---	404	---	---	---	---	---	SVL
LF 0.2 C	RESE-1002106	06-Aug-09	69.9	16.1	36	1.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
LF 0.2 C	RESE-1002111	15-Dec-09	---	---	---	---	---	---	---	---	---	---	---	---	---	16.7	7.00	533	---	---	
LF 0.2 C	RESE-1002111	15-Dec-09	---	---	---	---	---	---	---	---	37.4	---	---	---	---	---	---	---	---	---	SVL
LF 0.2 C	RESE-1002111	15-Dec-09	---	---	---	---	12.8	ND	160	117	---	<0.100	0.229	---	410	---	---	---	---	---	SVL
LF 0.2 C	RESE-1002111	15-Dec-09	58.5	13.9	30.9	0.95	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL

TABLE B-1. COMMON CONSTITUENTS AND ROUTINE PARAMETERS FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	COMMON CONSTITUENTS[a] (mg/L)[b]													ROUTINE PARAMETERS					ANALYTICAL LABORATORY
																FIELD			LABORATORY		
			Ca	Mg	Na	K	Cl	CO_3	HCO_3	SO_4	SiO_2	Br	F	$NO_3 + NO_2$ (as N)	TDS	TEMP (°C)[c]	pH	SC (µS/cm)[d]	pH	SC (µS/cm)	
Surface Water 3 - Mineral Creek																					
LF 0.2 C	RESE-1002124	15-Feb-10	---	---	---	---	---	---	---	---	---	---	---	---	---	15.6	7.65	449.4	---	---	
LF 0.2 C	RESE-1002124	15-Feb-10	---	---	---	---	---	---	---	---	32.9	---	---	---	---	---	---	---	---	---	SVL
LF 0.2 C	RESE-1002124	15-Feb-10	---	---	---	---	10.2	ND	144	93.3	---	<0.100	0.207	---	286	---	---	---	---	---	SVL
LF 0.2 C	RESE-1002124	15-Feb-10	48.9	12.9	24.9	1.24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
LF 0.2 C	RESE-1002133	18-Mar-10	---	---	---	---	---	---	---	---	---	---	---	---	---	17.5	7.74	384.4	---	---	
LF 0.2 C	RESE-1002149	04-Nov-10	---	---	---	---	---	---	---	---	---	---	---	---	---	20.8	6.92	686	---	---	
LF 0.2 C	RESE-1002149	04-Nov-10	---	---	---	---	---	---	---	---	41.5	---	---	---	---	---	---	---	---	---	SVL
LF 0.2 C	RESE-1002149	04-Nov-10	---	---	---	---	18.7	ND	323	138	---	0.221	0.468	---	470	---	---	---	---	---	SVL
LF 0.2 C	RESE-1002149	04-Nov-10	89.4	21.4	40.4	1.21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
LF 0.2 C	RESE-1002165	24-Feb-11	---	---	---	---	---	---	---	---	---	---	---	---	---	14.9	7.77	542	---	---	
LF 0.2 C	RESE-1002165	24-Feb-11	---	---	---	---	---	---	---	---	38.7	---	---	---	---	---	---	---	---	---	SVL
LF 0.2 C	RESE-1002165	24-Feb-11	---	---	---	---	12.4	ND	210	99.6	---	0.13	0.26	---	365	---	---	---	---	---	SVL
LF 0.2 C	RESE-1002165	24-Feb-11	64.4	15.1	31.6	1.07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
LF 0.2 C	RESE-1002174	31-May-11	---	---	---	---	---	---	---	---	---	---	---	---	---	20.8	7	673	---	---	
LF 0.2 C	RESE-1002174	31-May-11	---	---	---	---	---	---	---	---	38.9	---	---	---	---	---	---	---	---	---	SVL
LF 0.2 C	RESE-1002174	31-May-11	---	---	---	---	14.0	ND	223	112	---	0.26	0.29	---	425	---	---	---	---	---	SVL
LF 0.2 C	RESE-1002174	31-May-11	75.5	16.6	35.6	1.33	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
LF 0.2 C	RESE-1002182	29-Aug-11	---	---	---	---	---	---	---	---	---	---	---	---	---	24.3	7.13	539	---	---	
LF 0.2 C	RESE-1002182	29-Aug-11	---	---	---	---	---	---	---	---	40.0	---	---	---	---	---	---	---	---	---	SVL
LF 0.2 C	RESE-1002182	29-Aug-11	---	---	---	---	12.1	ND	234	105	---	0.12	0.26	---	405	---	---	---	---	---	SVL
LF 0.2 C	RESE-1002182	29-Aug-11	72.1	16.1	35.0	2.28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
LF 0.2 C DUP	RESE-1002183	29-Aug-11	---	---	---	---	---	---	---	---	---	---	---	---	---	24.3	7.13	539	---	---	
LF 0.2 C DUP	RESE-1002183	29-Aug-11	---	---	---	---	---	---	---	---	39.9	---	---	---	---	---	---	---	---	---	SVL
LF 0.2 C DUP	RESE-1002183	29-Aug-11	---	---	---	---	13.3	ND	233	111	---	0.12	0.30	---	420	---	---	---	---	---	SVL
LF 0.2 C DUP	RESE-1002183	29-Aug-11	72.2	16.0	35.3	2.16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
LF 0.2 C	RESE-1002245	08-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	18.96	6.97	468	---	---	
LF 0.2 C	RESE-1002245	08-May-12	---	---	---	---	---	---	---	---	41.4	---	---	---	---	---	---	---	---	---	SVL
LF 0.2 C	RESE-1002245	08-May-12	---	---	---	---	12.1 j-d	ND	207	108 j-d	---	0.12 j-	0.23 j-	---	384 j-	---	---	---	---	---	SVL
LF 0.2 C	RESE-1002245	08-May-12	65	14.5	31.3	0.983	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
MC 3.3 C (Lower Mineral)	RESE-1002040	13-Nov-08	---	---	---	---	---	---	---	---	---	---	---	---	---	15.8	8.22	448	---	---	
MC 3.3 C (Lower Mineral)	RESE-1002040	13-Nov-08	---	---	---	---	---	---	---	---	56.5	---	---	---	---	---	---	---	---	---	SVL
MC 3.3 C (Lower Mineral)	RESE-1002040	13-Nov-08	---	---	---	---	11.6	ND	246	44.7	---	<0.100	0.532	---	310	---	---	---	---	---	SVL
MC 3.3 C (Lower Mineral)	RESE-1002040	13-Nov-08	---	---	---	---	---	---	---	---	---	---	---	<0.30	---	---	---	---	---	---	TestAmerica
MC 3.3 C (Lower Mineral)	RESE-1002040	13-Nov-08	54.6	14.5	25.5	1.26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
MC 3.3 C (Lower Mineral)	RESE-1002074	05-Mar-09	---	---	---	---	---	---	---	---	---	---	---	---	---	18.1	8.33	460	---	---	
MC 3.3 C (Lower Mineral)	RESE-1002074	05-Mar-09	---	---	---	---	---	---	---	---	41.7	---	---	---	---	---	---	---	---	---	SVL
MC 3.3 C (Lower Mineral)	RESE-1002074	05-Mar-09	---	---	---	---	12.9	ND	214	74.1	---	<0.100	0.287	---	321	---	---	---	---	---	SVL
MC 3.3 C (Lower Mineral)	RESE-1002074	05-Mar-09	53.1	14.4	23.8	1.13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL

TABLE B-1. COMMON CONSTITUENTS AND ROUTINE PARAMETERS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	COMMON CONSTITUENTS[a] (mg/L)[b]													ROUTINE PARAMETERS					ANALYTICAL LABORATORY
																FIELD			LABORATORY		
			Ca	Mg	Na	K	Cl	CO_3	HCO_3	SO_4	SiO_2	Br	F	$NO_3 + NO_2$ (as N)	TDS	TEMP (°C)[c]	pH	SC (µS/cm)[d]	pH	SC (µS/cm)	
Surface Water 3 - Mineral Creek																					
MC 3.3 C (Lower Mineral)	RESE-1002095	14-May-09	---	---	---	---	---	---	---	---	---	---	---	---	---	25.9	8.38	494	---	---	
MC 3.3 C (Lower Mineral)	RESE-1002095	14-May-09	---	---	---	---	---	---	---	---	49.4	---	---	---	---	---	---	---	---	---	SVL
MC 3.3 C (Lower Mineral)	RESE-1002095	14-May-09	---	---	---	---	13.4	4.3	243	56.7	---	<0.100	0.319	---	342	---	---	---	---	---	SVL
MC 3.3 C (Lower Mineral)	RESE-1002095	14-May-09	60.2	16.7	28.5	1.37	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
MC 3.3 C (Lower Mineral)	RESE-1002104	06-Aug-09	---	---	---	---	---	---	---	---	---	---	---	---	---	30.9	7.98	379.6	---	---	
MC 3.3 C (Lower Mineral)	RESE-1002104	06-Aug-09	---	---	---	---	---	---	---	---	63.8	---	---	---	---	---	---	---	---	---	SVL
MC 3.3 C (Lower Mineral)	RESE-1002104	06-Aug-09	---	---	---	---	9.19	ND	224	21.6	---	<0.100	0.324	---	266	---	---	---	---	---	SVL
MC 3.3 C (Lower Mineral)	RESE-1002104	06-Aug-09	47.1	11.8	23.8	1.56	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
MC 3.3 C (Lower Mineral)	RESE-1002114	15-Dec-09	---	---	---	---	---	---	---	---	---	---	---	---	---	14.7	7.98	448.6	---	---	
MC 3.3 C (Lower Mineral)	RESE-1002114	15-Dec-09	---	---	---	---	---	---	---	---	64.0	---	---	---	---	---	---	---	---	---	SVL
MC 3.3 C (Lower Mineral)	RESE-1002114	15-Dec-09	---	---	---	---	13.2	ND	224	41.7	---	<0.100	0.177	---	335	---	---	---	---	---	SVL
MC 3.3 C (Lower Mineral)	RESE-1002114	15-Dec-09	49.3	12.4	26.4	1.09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
MC 3.3 C (Lower Mineral)	RESE-1002121	15-Feb-10	---	---	---	---	---	---	---	---	---	---	---	---	---	15.5	8.2	440	---	---	
MC 3.3 C (Lower Mineral)	RESE-1002121	15-Feb-10	---	---	---	---	---	---	---	---	40.4	---	---	---	---	---	---	---	---	---	SVL
MC 3.3 C (Lower Mineral)	RESE-1002121	15-Feb-10	---	---	---	---	11.5	ND	214	70.9	---	<0.100	0.216	---	305	---	---	---	---	---	SVL
MC 3.3 C (Lower Mineral)	RESE-1002121	15-Feb-10	57.6	16.3	26.5	1.47	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
MC 3.3 C (Lower Mineral)	RESE-1002131	18-Mar-10	---	---	---	---	---	---	---	---	---	---	---	---	---	17.4	8.38	379.1	---	---	
MC 3.3 C (Lower Mineral)	RESE-1002150	04-Nov-10	---	---	---	---	---	---	---	---	---	---	---	---	---	18.9	7.96	372.0	---	---	
MC 3.3 C (Lower Mineral)	RESE-1002150	04-Nov-10	---	---	---	---	---	---	---	---	61.8	---	---	---	---	---	---	---	---	---	SVL
MC 3.3 C (Lower Mineral)	RESE-1002150	04-Nov-10	---	---	---	---	11.3	ND	232	47.4	---	0.107	0.278	---	314	---	---	---	---	---	SVL
MC 3.3 C (Lower Mineral)	RESE-1002150	04-Nov-10	58.1	15.3	26.8	1.38	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
MC 3.3 C (Lower Mineral)	RESE-1002163	24-Feb-11	---	---	---	---	---	---	---	---	---	---	---	---	---	13.8	8.27	426.7	---	---	
MC 3.3 C (Lower Mineral)	RESE-1002163	24-Feb-11	---	---	---	---	---	---	---	---	48.0	---	---	---	---	---	---	---	---	---	SVL
MC 3.3 C (Lower Mineral)	RESE-1002163	24-Feb-11	---	---	---	---	10.7	ND	228	46.8	---	0.12	0.28	---	303	---	---	---	---	---	SVL
MC 3.3 C (Lower Mineral)	RESE-1002163	24-Feb-11	51.0	14.8	26.0	1.07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
MC 3.3 C (Lower Mineral)	RESE-1002172	31-May-11	---	---	---	---	---	---	---	---	---	---	---	---	---	23.5	8.07	433	---	---	
MC 3.3 C (Lower Mineral)	RESE-1002172	31-May-11	---	---	---	---	---	---	---	---	63.3	---	---	---	---	---	---	---	---	---	SVL
MC 3.3 C (Lower Mineral)	RESE-1002172	31-May-11	---	---	---	---	8.90	ND	204	28.6	---	<0.10	0.29	---	305	---	---	---	---	---	SVL
MC 3.3 C (Lower Mineral)	RESE-1002172	31-May-11	46.3	11.5	24.4	0.72	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
MC 3.3 C (Lower Mineral)	RESE-1002186	29-Aug-11	---	---	---	---	---	---	---	---	---	---	---	---	---	29.9	7.97	345	---	---	
MC 3.3 C (Lower Mineral)	RESE-1002186	29-Aug-11	---	---	---	---	---	---	---	---	63.6	---	---	---	---	---	---	---	---	---	SVL
MC 3.3 C (Lower Mineral)	RESE-1002186	29-Aug-11	---	---	---	---	8.17	2.4	210	16.9	---	0.13	0.27	---	272	---	---	---	---	---	SVL
MC 3.3 C (Lower Mineral)	RESE-1002186	29-Aug-11	44.0	10.1	22.3	1.66	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
MC 3.3 C (Lower Mineral)	RESE-1002243	08-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	22.25	8.07	381	---	---	
MC 3.3 C (Lower Mineral)	RESE-1002243	08-May-12	---	---	---	---	---	---	---	---	61.7	---	---	---	---	---	---	---	---	---	SVL
MC 3.3 C (Lower Mineral)	RESE-1002243	08-May-12	---	---	---	---	10.2 j-	1.1	214	35.1 j-	---	<0.10	0.29 j-	---	251 j-	---	---	---	---	---	SVL
MC 3.3 C (Lower Mineral)	RESE-1002243	08-May-12	46.5	11.7	23.2	0.684	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
MC 3.3 C (Lower Mineral)	---	10-Jun-13	---	---	---	---	---	---	---	---	---	---	---	---	---	21	7.95	325	---	---	

MONTGOMERY & ASSOCIATES

TABLE B-1. COMMON CONSTITUENTS AND ROUTINE PARAMETERS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	COMMON CONSTITUENTS[a] (mg/L)[b]													ROUTINE PARAMETERS					ANALYTICAL LABORATORY
																FIELD			LABORATORY		
			Ca	Mg	Na	K	Cl	CO_3	HCO_3	SO_4	SiO_2	Br	F	$NO_3 + NO_2$ (as N)	TDS	TEMP (°C)[c]	pH	SC (µS/cm)[d]	pH	SC (µS/cm)	
Surface Water 3 - Mineral Creek																					
MC 3.4 W (Wet Leg Spring)	RESE-1002041	13-Nov-08	---	---	---	---	---	---	---	---	---	---	---	---	---	15.5	8.08	268	---	---	
MC 3.4 W (Wet Leg Spring)	RESE-1002041	13-Nov-08	---	---	---	---	---	---	---	---	79.8	---	---	---	---	---	---	---	---	---	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002041	13-Nov-08	---	---	---	---	5.22	ND	245	4.40	---	<0.100	0.519	---	220	---	---	---	---	---	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002041	13-Nov-08	---	---	---	---	---	---	---	---	---	---	---	<0.30	---	---	---	---	---	---	TestAmerica
MC 3.4 W (Wet Leg Spring)	RESE-1002041	13-Nov-08	31.2	5.53	22.6	<0.50	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002073	05-Mar-09	---	---	---	---	---	---	---	---	---	---	---	---	---	21.4	7.62	235	---	---	
MC 3.4 W (Wet Leg Spring)	RESE-1002073	05-Mar-09	---	---	---	---	---	---	---	---	69.0	---	---	---	---	---	---	---	---	---	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002073	05-Mar-09	---	---	---	---	4.64	ND	144	4.59	---	<0.100	0.217	---	187	---	---	---	---	---	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002073	05-Mar-09	26.2	4.56	18.2	1.09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002094	14-May-09	---	---	---	---	---	---	---	---	---	---	---	---	---	24.1	7.62	263	---	---	
MC 3.4 W (Wet Leg Spring)	RESE-1002094	14-May-09	---	---	---	---	---	---	---	---	81	---	---	---	---	---	---	---	---	---	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002094	14-May-09	---	---	---	---	5.58	ND	160	4.24	---	<0.100	0.256	---	218 j	---	---	---	---	---	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002094	14-May-09	29	5.24	22.2	0.193 j	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002105	06-Aug-09	---	---	---	---	---	---	---	---	---	---	---	---	---	25.0	7.68	278.2	---	---	
MC 3.4 W (Wet Leg Spring)	RESE-1002105	06-Aug-09	---	---	---	---	---	---	---	---	83.1	---	---	---	---	---	---	---	---	---	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002105	06-Aug-09	---	---	---	---	5.67	ND	174	3.28	---	<0.100	0.418	---	219 j	---	---	---	---	---	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002105	06-Aug-09	31.7	5.68	22.9	0.419	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002113	15-Dec-09	---	---	---	---	---	---	---	---	---	---	---	---	---	18.7	7.88	254.5	---	---	
MC 3.4 W (Wet Leg Spring)	RESE-1002113	15-Dec-09	---	---	---	---	---	---	---	---	76.4	---	---	---	---	---	---	---	---	---	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002113	15-Dec-09	---	---	---	---	5.07	ND	154	4.13	---	<0.100	0.188	---	174	---	---	---	---	---	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002113	15-Dec-09	27.5	4.90	20.1	0.97	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002122	15-Feb-10	---	---	---	---	---	---	---	---	---	---	---	---	---	21.4	7.85	245	---	---	
MC 3.4 W (Wet Leg Spring)	RESE-1002122	15-Feb-10	---	---	---	---	---	---	---	---	72.3	---	---	---	---	---	---	---	---	---	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002122	15-Feb-10	---	---	---	---	4.77	ND	144	6.09	---	<0.100	0.147	---	179	---	---	---	---	---	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002122	15-Feb-10	26.9	4.63	18.7	1.16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002132	18-Mar-10	---	---	---	---	---	---	---	---	---	---	---	---	---	22.4	7.81	220.9	---	---	
MC 3.4 W (Wet Leg Spring)	RESE-1002151	04-Nov-10	---	---	---	---	---	---	---	---	---	---	---	---	---	21.8	7.62	233.4	---	---	
MC 3.4 W (Wet Leg Spring)	RESE-1002151	04-Nov-10	---	---	---	---	---	---	---	---	83.5	---	---	---	---	---	---	---	---	---	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002151	04-Nov-10	---	---	---	---	5.29	ND	157	4.86	---	<0.100	0.385	---	208	---	---	---	---	---	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002151	04-Nov-10	30.1	5.39	21.4	0.65	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002164	24-Feb-11	---	---	---	---	---	---	---	---	---	---	---	---	---	20.3	8.11	230	---	---	
MC 3.4 W (Wet Leg Spring)	RESE-1002164	24-Feb-11	---	---	---	---	---	---	---	---	73.3	---	---	---	---	---	---	---	---	---	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002164	24-Feb-11	---	---	---	---	4.47	ND	146	4.28	---	<0.10	0.32	---	212	---	---	---	---	---	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002164	24-Feb-11	26.7	4.77	19.5	1.16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002173	31-May-11	---	---	---	---	---	---	---	---	---	---	---	---	---	23.3	7.62	309	---	---	
MC 3.4 W (Wet Leg Spring)	RESE-1002173	31-May-11	---	---	---	---	---	---	---	---	77.8	---	---	---	---	---	---	---	---	---	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002173	31-May-11	---	---	---	---	5.30	ND	160	4.17	---	<0.10	0.30	---	237	---	---	---	---	---	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002173	31-May-11	30.2	5.20	21.8	<0.50	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
MC 3.4 W (Wet Leg Spring) SP	RESE-1002173	31-May-11	28	5.1	21	<2.0	---	---	---	---	79	---	---	---	---	---	---	---	---	---	TestAmerica
MC 3.4 W (Wet Leg Spring) SP	RESE-1002173	31-May-11	28	5.2	21	<2.0	5.1	ND	159	4.4	77	<0.50	<0.40	ND	210	---	---	---	8.16	260	TestAmerica

MONTGOMERY & ASSOCIATES

TABLE B-1. COMMON CONSTITUENTS AND ROUTINE PARAMETERS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	COMMON CONSTITUENTS[a] (mg/L)[b]													ROUTINE PARAMETERS					ANALYTICAL LABORATORY
																FIELD			LABORATORY		
			Ca	Mg	Na	K	Cl	CO_3	HCO_3	SO_4	SiO_2	Br	F	$NO_3 + NO_2$ (as N)	TDS	TEMP (°C)[c]	pH	SC (µS/cm)[d]	pH	SC (µS/cm)	
Surface Water 3 - Mineral Creek																					
MC 3.4 W (Wet Leg Spring)	RESE-1002185	29-Aug-11	---	---	---	---	---	---	---	---	---	---	---	---	---	26.1	7.41	244	---	---	
MC 3.4 W (Wet Leg Spring)	RESE-1002185	29-Aug-11	---	---	---	---	---	---	---	---	77.7	---	---	---	---	---	---	---	---	---	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002185	29-Aug-11	---	---	---	---	6.01	ND	167	4.01	---	<0.10	0.33	---	234	---	---	---	---	---	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002185	29-Aug-11	30.4	5.29	22.3	0.67	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002244	08-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	22.89	7.80	233	---	---	
MC 3.4 W (Wet Leg Spring)	RESE-1002244	08-May-12	---	---	---	---	---	---	---	---	80.5	---	---	---	---	---	---	---	---	---	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002244	08-May-12	---	---	---	---	5.22 j-	ND	151	4.02 j-	---	<0.10	0.36 j-	---	167 j-	---	---	---	---	---	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002244	08-May-12	28.3	5.02	20.2	<0.08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
MC 3.4 W (Wet Leg Spring)	---	10-Aug-13	---	---	---	---	---	---	---	---	---	---	---	---	---	27.55	7.83	403	---	---	
MC 5.2 C	RESE-1002171	31-May-11	---	---	---	---	---	---	---	---	---	---	---	---	---	22.9	6.91	535	---	---	
MC 5.2 C	RESE-1002171	31-May-11	---	---	---	---	---	---	---	---	53.0	---	---	---	---	---	---	---	---	---	SVL
MC 5.2 C	RESE-1002171	31-May-11	---	---	---	---	11.6	4.6	227	49.8	---	<0.10	0.25	---	355	---	---	---	---	---	SVL
MC 5.2 C	RESE-1002171	31-May-11	60.9	15.6	26.6	1.26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
MC 5.2 C SP	RESE-1002171	31-May-11	54	15	24	<2.0	---	---	---	---	52	---	---	---	---	---	---	---	---	---	TestAmerica
MC 5.2 C SP	RESE-1002171	31-May-11	54	15	24	<2.0	10	ND	220	51	52	<0.50	<0.40	<2.0	330	---	---	---	8.42	490	TestAmerica
MC 5.2 C	RESE-1002184	29-Aug-11	---	---	---	---	---	---	---	---	---	---	---	---	---	26.8	8.3	413	---	---	
MC 5.2 C	RESE-1002184	29-Aug-11	---	---	---	---	---	---	---	---	53.8	---	---	---	---	---	---	---	---	---	SVL
MC 5.2 C	RESE-1002184	29-Aug-11	---	---	---	---	11.4	2.9	229	44.6	---	0.11	0.24	---	343	---	---	---	---	---	SVL
MC 5.2 C	RESE-1002184	29-Aug-11	55.3	13.1	23.1	1.54	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
MC 5.2 C	RESE-1002201	08-Dec-11	---	---	---	---	---	---	---	---	---	---	---	---	---	11.7	8.1	397	---	---	
MC 5.2 C	RESE-1002201	08-Dec-11	---	---	---	---	---	---	---	---	55.1	---	---	---	---	---	---	---	---	---	SVL
MC 5.2 C	RESE-1002201	08-Dec-11	---	---	---	---	11.7	ND	223	52.5	---	<0.10	0.24	---	339	---	---	---	---	---	SVL
MC 5.2 C	RESE-1002201	08-Dec-11	57.5	13.7	23.7	1.28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
MC 5.2 C	RESE-1002210	28-Feb-12	---	---	---	---	---	---	---	---	---	---	---	---	---	14.3	---	504	---	---	
MC 5.2 C	RESE-1002210	28-Feb-12	---	---	---	---	---	---	---	---	44.1	---	---	---	---	---	---	---	---	---	SVL
MC 5.2 C	RESE-1002210	28-Feb-12	---	---	---	---	12.2	4.6	249	74.9	---	0.24	0.41	---	344	---	---	---	---	---	SVL
MC 5.2 C	RESE-1002210	28-Feb-12	63.0	17.6	27.1	1.21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
MC 5.2 C	RESE-1002242	08-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	21.31	8.19	445	---	---	
MC 5.2 C	RESE-1002242	08-May-12	---	---	---	---	---	---	---	---	52.3	---	---	---	---	---	---	---	---	---	SVL
MC 5.2 C	RESE-1002242	08-May-12	---	---	---	---	11.9 j-d	5.0	238	59.8 j-d	---	0.10 j-	0.25 j-	---	300 j-	---	---	---	---	---	SVL
MC 5.2 C	RESE-1002242	08-May-12	60.9	16.2	25.6	1.11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
MC 5.2 C	RESE-1003059	22-Aug-12	---	---	---	---	---	---	---	---	---	---	---	---	---	23.6	7.87	385	---	---	
MC 5.2 C	RESE-1003059	22-Aug-12	---	---	---	---	---	---	---	---	29.5	---	---	---	---	---	---	---	---	---	SVL
MC 5.2 C	RESE-1003059	22-Aug-12	---	---	---	---	6.00	ND	259	28.7	---	<0.10	0.40	---	280	---	---	---	---	---	SVL
MC 5.2 C	RESE-1003059	22-Aug-12	95.1	36.1	13.6	19.9	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
MC 5.2 C	RESE-1003069	28-Nov-12	---	---	---	---	---	---	---	---	---	---	---	---	---	14.6	7.89	481.8	---	---	
MC 5.2 C	RESE-1003069	28-Nov-12	---	---	---	---	---	---	---	---	55.8	---	---	---	---	---	---	---	---	---	SVL
MC 5.2 C	RESE-1003069	28-Nov-12	---	---	---	---	10.6	ND	250	49.3	---	<0.10	0.29	---	316	---	---	---	---	---	SVL
MC 5.2 C	RESE-1003069	28-Nov-12	59.7	14.5	22.6	1.28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL

TABLE B-1. COMMON CONSTITUENTS AND ROUTINE PARAMETERS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	COMMON CONSTITUENTS[a] (mg/L)[b]													ROUTINE PARAMETERS					ANALYTICAL LABORATORY
																FIELD			LABORATORY		
			Ca	Mg	Na	K	Cl	CO_3	HCO_3	SO_4	SiO_2	Br	F	$NO_3 + NO_2$ (as N)	TDS	TEMP (°C)[c]	pH	SC (µS/cm)[d]	pH	SC (µS/cm)	
Surface Water 3 - Mineral Creek																					
MC 5.2 C	RESE-1003079	04-Feb-13	---	---	---	---	---	---	---	---	---	---	---	---	---	13.32	8.07	414	---	---	
MC 5.2 C	RESE-1003079	04-Feb-13	---	---	---	---	---	---	---	---	41.4	---	---	---	---	---	---	---	---	---	SVL
MC 5.2 C	RESE-1003079	04-Feb-13	---	---	---	---	11.6	ND	218	72.4	---	0.11	0.20	---	332	---	---	---	---	---	SVL
MC 5.2 C	RESE-1003079	04-Feb-13	55.9	15.0	24.2	1.48	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
MC 5.2 C	RESE-1003100	11-Jun-13	---	---	---	---	---	---	---	---	---	---	---	---	---	22.3	8.04	399.9	---	---	
MC 5.2 C	RESE-1003100	11-Jun-13	---	---	---	---	---	---	---	---	59.8	---	---	---	---	---	---	---	---	---	SvL
MC 5.2 C	RESE-1003100	11-Jun-13	---	---	---	---	12.2	ND	244	57.3	---	0.12	0.27	---	357	---	---	---	---	---	SvL
MC 5.2 C	RESE-1003100	11-Jun-13	60.4	15.6	27.5	1.04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SvL
MC 5.2 C	RESE-1001120	12-Aug-13	---	---	---	---	---	---	---	---	---	---	---	---	---	26.89	7.96	491	---	---	
MC 5.2 C	RESE-1001120	12-Aug-13	---	---	---	---	---	---	---	---	56.6	---	---	---	---	---	---	---	---	---	SVL
MC 5.2 C	RESE-1001120	12-Aug-13	---	---	---	---	12.0	ND	248	47.7	---	0.14	0.23	---	305	---	---	---	---	---	SVL
MC 5.2 C	RESE-1001120	12-Aug-13	58.9	14.3	25.1	1.73	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
MC 8.4 C	RESE-1002038	13-Nov-08	---	---	---	---	---	---	---	---	---	---	---	---	---	19.1	6.68	750	---	---	
MC 8.4 C	RESE-1002038	13-Nov-08	---	---	---	---	---	---	---	---	39.7	---	---	---	---	---	---	---	---	---	SVL
MC 8.4 C	RESE-1002038	13-Nov-08	---	---	---	---	18.9	ND	444	63.5	---	0.158	0.468	---	480	---	---	---	---	---	SVL
MC 8.4 C	RESE-1002038	13-Nov-08	---	---	---	---	---	---	---	---	---	---	---	0.36	---	---	---	---	---	---	TestAmerica
MC 8.4 C	RESE-1002038	13-Nov-08	92.7	31.8	34.0	1.33	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
MC 8.4 C	RESE-1002071	05-Mar-09	---	---	---	---	---	---	---	---	---	---	---	---	---	18.7	6.97	657	---	---	
MC 8.4 C	RESE-1002071	05-Mar-09	---	---	---	---	---	---	---	---	37.8	---	---	---	---	---	---	---	---	---	SVL
MC 8.4 C	RESE-1002071	05-Mar-09	---	---	---	---	17.1	ND	386	50.2	---	0.150	0.373	---	431	---	---	---	---	---	SVL
MC 8.4 C	RESE-1002071	05-Mar-09	79.7	27.5	29.9	1.26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
MC 8.4 C	RESE-1002090	14-May-09	---	---	---	---	---	---	---	---	---	---	---	---	---	22.8	7.14	757	---	---	
MC 8.4 C	RESE-1002090	14-May-09	---	---	---	---	---	---	---	---	38	---	---	---	---	---	---	---	---	---	SVL
MC 8.4 C	RESE-1002090	14-May-09	---	---	---	---	20.5	ND	405	73.5	---	0.166	0.367	---	474	---	---	---	---	---	SVL
MC 8.4 C	RESE-1002090	14-May-09	90.3	31.6	34	1.52	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
MC 8.4 C DUP	RESE-1002091	14-May-09	---	---	---	---	---	---	---	---	38.4	---	---	---	---	---	---	---	---	---	SVL
MC 8.4 C DUP	RESE-1002091	14-May-09	---	---	---	---	20.4	ND	412	72.6	---	0.175	0.373	---	498	---	---	---	---	---	SVL
MC 8.4 C DUP	RESE-1002091	14-May-09	91.6	32.1	34.9	1.54	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
MC 8.4 C	RESE-1002107	06-Aug-09	---	---	---	---	---	---	---	---	---	---	---	---	---	22.7	6.74	736	---	---	
MC 8.4 C	RESE-1002107	06-Aug-09	---	---	---	---	---	---	---	---	39.7	---	---	---	---	---	---	---	---	---	SVL
MC 8.4 C	RESE-1002107	06-Aug-09	---	---	---	---	16.9	ND	442	65.2	---	<0.100	0.358	---	489	---	---	---	---	---	SVL
MC 8.4 C	RESE-1002107	06-Aug-09	93.3	32.9	35.5	1.54	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
MC 8.4 C DUP	RESE-1002108	06-Aug-09	---	---	---	---	---	---	---	---	39.5	---	---	---	---	---	---	---	---	---	SVL
MC 8.4 C DUP	RESE-1002108	06-Aug-09	---	---	---	---	16.6	ND	433	63.9	---	<0.100	0.394	---	490	---	---	---	---	---	SVL
MC 8.4 C DUP	RESE-1002108	06-Aug-09	94.2	32.8	36.5	1.54	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
MC 8.4 C	RESE-1002110	15-Dec-09	---	---	---	---	---	---	---	---	---	---	---	---	---	15.2	6.90	692	---	---	
MC 8.4 C	RESE-1002110	15-Dec-09	---	---	---	---	---	---	---	---	38.8	---	---	---	---	---	---	---	---	---	SVL
MC 8.4 C	RESE-1002110	15-Dec-09	---	---	---	---	18.2	ND	373	59.9	---	0.120	0.322	---	456	---	---	---	---	---	SVL
MC 8.4 C	RESE-1002110	15-Dec-09	81.3	28.7	30.9	1.18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL

MONTGOMERY & ASSOCIATES

TABLE B-1. COMMON CONSTITUENTS AND ROUTINE PARAMETERS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	COMMON CONSTITUENTS[a] (mg/L)[b]													ROUTINE PARAMETERS					ANALYTICAL LABORATORY
																FIELD			LABORATORY		
			Ca	Mg	Na	K	Cl	CO_3	HCO_3	SO_4	SiO_2	Br	F	$NO_3 + NO_2$ (as N)	TDS	TEMP (°C)[c]	pH	SC (µS/cm)[d]	pH	SC (µS/cm)	
Surface Water 3 - Mineral Creek																					
MC 8.4 C	RESE-1002123	15-Feb-10	---	---	---	---	---	---	---	---	---	---	---	---	---	14.3	7.68	577	---	---	
MC 8.4 C	RESE-1002123	15-Feb-10	---	---	---	---	---	---	---	---	33.9	---	---	---	---	---	---	---	---	---	SVL
MC 8.4 C	RESE-1002123	15-Feb-10	---	---	---	---	14.2	ND	276	63.3	---	<0.100	0.382	---	344	---	---	---	---	---	SVL
MC 8.4 C	RESE-1002123	15-Feb-10	66.5	22.5	27.0	1.11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
MC 8.4 C	RESE-1002134	18-Mar-10	---	---	---	---	---	---	---	---	---	---	---	---	---	16.4	7.83	385.8	---	---	
MC 8.4 C	RESE-1002148	04-Nov-10	---	---	---	---	---	---	---	---	---	---	---	---	---	18.7	6.88	752.2	---	---	
MC 8.4 C	RESE-1002148	04-Nov-10	---	---	---	---	---	---	---	---	42.3	---	---	---	---	---	---	---	---	---	SVL
MC 8.4 C	RESE-1002148	04-Nov-10	---	---	---	---	17.3	ND	411	57.8	---	0.173	0.413	---	442	---	---	---	---	---	SVL
MC 8.4 C	RESE-1002148	04-Nov-10	91.6	30.8	32.7	1.40	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
MC 8.4 C	RESE-1002166	24-Feb-11	---	---	---	---	---	---	---	---	---	---	---	---	---	15.1	7.21	622.3	---	---	
MC 8.4 C	RESE-1002166	24-Feb-11	---	---	---	---	---	---	---	---	37.9	---	---	---	---	---	---	---	---	---	SVL
MC 8.4 C	RESE-1002166	24-Feb-11	---	---	---	---	14.7	ND	384	43.3	---	0.22	0.30	---	410	---	---	---	---	---	SVL
MC 8.4 C	RESE-1002166	24-Feb-11	76.1	26.4	30.1	1.29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
MC 8.4 C DUP	RESE-1002162	24-Feb-11	---	---	---	---	---	---	---	---	---	---	---	---	---	15.1	7.21	622.3	---	---	
MC 8.4 C DUP	RESE-1002162	24-Feb-11	---	---	---	---	---	---	---	---	38.5	---	---	---	---	---	---	---	---	---	SVL
MC 8.4 C DUP	RESE-1002162	24-Feb-11	---	---	---	---	14.9	ND	377	43.3	---	0.14	0.29	---	420	---	---	---	---	---	SVL
MC 8.4 C DUP	RESE-1002162	24-Feb-11	78.4	27.1	30.5	1.20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
MC 8.4 C	RESE-1002169	31-May-11	---	---	---	---	---	---	---	---	---	---	---	---	---	20.2	7.06	789	---	---	
MC 8.4 C	RESE-1002169	31-May-11	---	---	---	---	---	---	---	---	40.3	---	---	---	---	---	---	---	---	---	SVL
MC 8.4 C	RESE-1002169	31-May-11	---	---	---	---	17.7	ND	398	42.7	---	0.18	0.35	---	442	---	---	---	---	---	SVL
MC 8.4 C	RESE-1002169	31-May-11	87.4	29.2	32.6	1.42	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
MC 8.4 C DUP	RESE-1002170	31-May-11	---	---	---	---	---	---	---	---	---	---	---	---	---	20.2	7.06	789	---	---	
MC 8.4 C DUP	RESE-1002170	31-May-11	---	---	---	---	---	---	---	---	39.4	---	---	---	---	---	---	---	---	---	SVL
MC 8.4 C DUP	RESE-1002170	31-May-11	---	---	---	---	17.7	ND	395	43.3	---	0.18	0.34	---	448	---	---	---	---	---	SVL
MC 8.4 C DUP	RESE-1002170	31-May-11	84.2	28.2	31.4	1.42	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
MC 8.4 C	RESE-1002200	08-Dec-11	---	---	---	---	---	---	---	---	---	---	---	---	---	14.1	7.2	574	---	---	
MC 8.4 C	RESE-1002200	08-Dec-11	---	---	---	---	---	---	---	---	38.1	---	---	---	---	---	---	---	---	---	SVL
MC 8.4 C	RESE-1002200	08-Dec-11	---	---	---	---	17.9	ND	387	43.4	---	0.12	0.36	---	423	---	---	---	---	---	SVL
MC 8.4 C	RESE-1002200	08-Dec-11	86.3	28.7	30.9	2.22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
MC 8.4 C	RESE-1002240	08-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	18.67	6.96	591	---	---	
MC 8.4 C	RESE-1002240	08-May-12	---	---	---	---	---	---	---	---	42.5	---	---	---	---	---	---	---	---	---	SVL
MC 8.4 C	RESE-1002240	08-May-12	---	---	---	---	17.3 j-d	ND	401	38.9 j-	---	0.21 j-	0.40 j-	---	417 j-	---	---	---	---	---	SVL
MC 8.4 C	RESE-1002240	08-May-12	81.4	27.9	30.8	1.24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL
MC 8.4 C DUP	RESE-1002241	08-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	18.67	6.96	591	---	---	
MC 8.4 C DUP	RESE-1002241	08-May-12	---	---	---	---	---	---	---	---	43.3	---	---	---	---	---	---	---	---	---	SVL
MC 8.4 C DUP	RESE-1002241	08-May-12	---	---	---	---	17.4 j-d	ND	407	38.9 j-	---	0.24 j-	0.37 j-	---	391 j-	---	---	---	---	---	SVL
MC 8.4 C DUP	RESE-1002241	08-May-12	86.1	29.5	32.4	1.35	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SVL

TABLE B-1. COMMON CONSTITUENTS AND ROUTINE PARAMETERS FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	COMMON CONSTITUENTS[a] (mg/L)[b]													ROUTINE PARAMETERS					ANALYTICAL LABORATORY
																FIELD			LABORATORY		
			Ca	Mg	Na	K	Cl	CO_3	HCO_3	SO_4	SiO_2	Br	F	$NO_3 + NO_2$ (as N)	TDS	TEMP (°C)[c]	pH	SC (µS/cm)[d]	pH	SC (µS/cm)	
U.S EPA National Primary Drinking Water Regulations			---	---	---	---	---	---	---	---	---	---	4.0	10	---	---	---	---	---	---	
U.S EPA National Secondary Drinking Water Regulations			---	---	---	---	250	---	---	250	---	---	2.0	---	500	---	6.5 to 8.5	---	6.5 to 8.5	---	
Arizona Numeric Aquifer Water Quality Standards			---	---	---	---	---	---	---	---	---	---	4.0	10	---	---	---	---	---	---	

Values in bold red are out of compliance with EPA primary water quality standards

Values in red italics are out of compliance with EPA secondary water quality standards

Values in red underline are out of compliance with Arizona numeric water quality standards

Values in blue indicate that detection limit exceeds standard

--- = Not available, not applicable

-- = Not calculated due to non-detect

* = Value reported as Na+K

Shading indicates dissolved results
Shading indicates total results
Shading indicates total recoverable results
Shading indicates unknown filtration or no filtration method provided for analyses

[a] Ca = Calcium
Mg = Magnesium
Na = Sodium
K = Potassium
Cl = Chloride
CO_3 = Carbonate
HCO_3 = Bicarbonate
SO_4 = Sulfate
SiO_2 = Silica
Br = Bromide
F = Fluoride
NO_3+NO_2 (as N) = Nitrate plus Nitrite, in equivalent milligrams of nitrogen per liter
TDS = Total dissolved solids

[b] mg/L = milligrams per liter

[c] TEMP (°C) = Temperature, in degrees Celsius

[d] SC (µS/cm) = Specific Conductance in microsiemens per centimeter

Explanation of Codes

Absent = Analyte not present
ge = Greater than or equal to reported value
i = Insufficient sample
j = Estimated value
j+ = Estimated value, high bias
j- = Estimated value, low bias
Lost = Sample lost in processing
n = Not measured
na = Not available
ND = Not Detected
np = Analyte not applicable
Present = Analyte was detected
q = Uncertain value
r = Unusable data
< = Less than reported detection limit
> = Greater than reported value
d = Diluted. Diluted samples are indicated only when value is estimated.
DUP = Field Duplicate
LD = Laboratory duplicate
SP = Split sample
SPD = Split-Duplicate

MONTGOMERY & ASSOCIATES

TABLE B-2. TRACE CONSTITUENTS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	TRACE CONSTITUENTS[a] (mg/L)[b]																						ANALYTICAL LABORATORY
			Al	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	CN	Fe	Pb	Mn	Hg	Mo	Ni	Se	Ag	S	Tl	Zn	
Surface Water 1 - Queen Creek																									
Blue Spring	RESE-1001087	26-May-04	---	<0.0030	<0.0030	0.0305	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
Blue Spring	RESE-1001087	26-May-04	<0.020	<0.0030	<0.0030	---	<0.0020	<0.040	<0.00010	---	<0.0060	0.0033	<0.010	0.201	<0.0030	---	<0.00020	0.0086	---	<0.030	<0.00010	<1.0	<0.0020	<0.0050	SVL
Blue Spring	RESE-1001087	26-May-04	---	<0.0030	<0.0030	---	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	0.0443	---	---	<0.010	<0.0030	<0.00010	---	---	<0.0050	SVL
Blue Spring	RESE-1001093	03-Aug-04	---	<0.0030	<0.0030	0.0601	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
Blue Spring	RESE-1001093	03-Aug-04	0.041	<0.0030	0.0040	---	<0.0020	<0.040	<0.00010	---	<0.0060	<0.0030	---	*0.993*	<0.0030	---	<0.00020	0.0105	---	<0.0060	<0.00010	<1.0	<0.0020	<0.0050	SVL
Blue Spring	RESE-1001093	03-Aug-04	---	<0.0030	<0.0030	---	<0.0020	---	<0.00010	<0.0060	---	0.0030	---	---	<0.0030	*0.789*	---	---	<0.010	<0.0030	<0.00010	---	---	<0.0050	SVL
Blue Spring	RESE-1001185	09-Feb-05	---	<0.00300	<0.00300	0.0261	<0.00200	---	<0.00020	<0.00600	---	<0.0100	---	---	<0.00300	---	<0.00020	---	<0.0100	---	<0.00010	---	<0.00200	<0.0100	SVL
Blue Spring	RESE-1001185	09-Feb-05	<0.0300	<0.00300	0.00310	---	<0.00200	<0.0400	<0.00020	---	<0.00600	<0.0100	---	<0.0600	<0.00300	---	<0.00020	<0.00800	---	<0.00300	<0.00010	<1.00	<0.00200	<0.0100	SVL
Blue Spring	RESE-1001185	09-Feb-05	---	<0.00300	<0.00300	---	<0.00200	---	<0.00020	<0.00600	---	<0.0100	---	---	<0.00300	0.0362	---	---	<0.0100	<0.00300	<0.00010	---	---	<0.0100	SVL
Blue Spring	RESE-1001200	03-May-05	---	<0.00300	<0.00300	0.0348	<0.00200	---	<0.00020	<0.00600	---	<0.0100	---	---	<0.00300	---	<0.00020	---	<0.0100	---	<0.00010	---	<0.00200	<0.0100	SVL
Blue Spring	RESE-1001200	03-May-05	<0.0300	<0.00300	<0.00300	---	<0.00200	0.048	<0.00020	---	<0.00600	<0.0100	---	<0.0600	<0.00300	---	<0.00020	0.0082	---	<0.00300	<0.00010	<1.00	<0.00200	<0.0100	SVL
Blue Spring	RESE-1001200	03-May-05	---	<0.00300	<0.00300	---	<0.00200	---	<0.00020	<0.00600	---	<0.0100	---	---	<0.00300	0.0346	---	---	<0.0100	<0.00300	<0.00010	---	---	<0.0100	SVL
Blue Spring	RESE-1001219	03-Aug-05	---	<0.00300	<0.00300	0.0291	<0.0020	---	<0.00020	<0.0060	---	<0.0100	---	---	<0.00300	---	<0.0002	---	<0.0100	---	<0.00010	---	<0.00200	<0.0100	SVL
Blue Spring	RESE-1001219	03-Aug-05	<0.030	<0.0030	<0.00300	---	<0.0020	<0.04	<0.00010	---	<0.0060	<0.0100	---	0.243	<0.0030	---	<0.0002	<0.0080	---	<0.0030	<0.00010	<1	<0.00200	<0.0100	SVL
Blue Spring	RESE-1001219	03-Aug-05	---	<0.00300	<0.00300	---	<0.0020	---	<0.00020	<0.0060	---	<0.0100	---	---	<0.00300	*0.0783*	---	---	<0.0100	<0.00300	<0.00010	---	---	<0.0100	SVL
Blue Spring	RESE-1002009	19-Aug-08	<0.0141	<0.002	<0.0066	0.0199	<0.00036	---	<0.000034	---	<0.00065	0.000552 j	---	<0.0202	<0.000043	0.0179	<0.000064	0.0029 j	<0.0023	---	<0.000017	---	<0.000018	<0.0019	SVL
Blue Spring	RESE-1002009	19-Aug-08	---	<0.0004	<0.0065	---	<0.00036	0.0291 j	<0.00096	<0.001	---	<0.0039	---	---	<0.000172	0.0399 j	<0.000064	---	<0.0023	<0.0004	<0.00079	---	<0.000072	<0.0019	SVL
Blue Spring DUP	RESE-1002010	19-Aug-08	<0.0141	<0.0001	<0.0066	0.0199	<0.00036	---	<0.000034	---	<0.00065	0.000511 j	---	<0.0202	<0.000043	0.0165	<0.000064	<0.0023	<0.0023	---	<0.000017	---	<0.000018	<0.0019	SVL
Blue Spring DUP	RESE-1002010	19-Aug-08	---	<0.0004	<0.0065	---	<0.00036	0.0264 j	<0.00096	<0.001	---	<0.0039	---	---	0.000184 j,d	*0.178 j*	<0.000064	---	<0.0023	<0.0004	<0.00079	---	<0.000072	<0.0019	SVL
Blue Spring	RESE-1002043	13-Nov-08	<0.080	<0.00300	**<0.025**	0.0506	<0.00200	---	<0.000200	---	<0.0060	0.00177	---	<0.060	<0.00300	*0.361*	<0.00020	<0.0080	<0.010	---	<0.000100	---	<0.00100	<0.0100	SVL
Blue Spring	RESE-1002043	13-Nov-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Blue Spring	RESE-1002043	13-Nov-08	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	*0.467*	---	---	<0.010	<0.00300	<0.0050	---	<0.00100	<0.0100	SVL
Blue Spring	RESE-1002052	12-Feb-09	<0.080	<0.00300	**<0.025**	0.0215	<0.00200	---	<0.000034	---	<0.0060	0.00417	---	<0.060	<0.000043	0.0274	---	0.0198	0.00135	---	<0.000100	---	<0.00100	<0.0100	SVL
Blue Spring	RESE-1002052	12-Feb-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Blue Spring	RESE-1002052	12-Feb-09	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0271	---	---	<0.010	0.00028 jd	<0.0050	---	<0.00100	<0.0100	SVL
Blue Spring	RESE-1002088	13-May-09	<0.0141	<0.00022	0.009 j	---	<0.00036	---	<0.000024	---	<0.00065	0.000751 j	---	0.0243 j	<0.000053	0.013	---	0.0057 j	0.000839 j	---	<0.000019	---	<0.000023	<0.0019	SVL
Blue Spring	RESE-1002088	13-May-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00006	---	---	---	---	---	---	---	SVL
Blue Spring	RESE-1002088	13-May-09	---	**<0.022**	0.0089 j	0.0624	<0.00018	0.0257	<0.00048	0.0029 j	---	0.0099	---	---	**0.0568**	*1.65*	---	---	0.0022 j	0.0421	<0.00021	---	**<0.0023**	0.0085	SVL
Blue Spring	RESE-1002118	12-Feb-10	<0.080	<0.00300	**<0.025**	0.0321	---	---	<0.000024	---	<0.0060	0.00318	---	<0.060	<0.000053	0.0156	---	<0.0080	0.00146	---	<0.000100	---	<0.00100	<0.0100	SVL
Blue Spring	RESE-1002118	12-Feb-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Blue Spring	RESE-1002118	12-Feb-10	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0170	---	---	<0.010	0.00034 jd	<0.0050	---	<0.00100	<0.0100	SVL
Blue Spring	RESE-1003165	17-Jul-10	<0.20	<0.0030	0.0026	0.020	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	<0.050	<0.0010	0.023	<0.00020	0.0010	0.0013	<0.0020	<0.0010	---	<0.0010	<0.010	TestAmerica
Blue Spring	RESE-1003165	17-Jul-10	<0.20	<0.0030	0.0027	0.021	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	0.14	<0.0010	*0.060*	<0.00020	<0.0010	0.0013	<0.0020	<0.0010	---	<0.0010	<0.010	TestAmerica
Blue Spring	RESE-1002153	08-Nov-10	<0.080	<0.00300	**<0.025**	0.0221	---	---	<0.000024	---	<0.0060	<0.00100	---	<0.060	<0.000019	0.0138	---	<0.0080	0.00198	---	<0.000100	---	<0.00100	<0.0100	SVL
Blue Spring	RESE-1002153	08-Nov-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Blue Spring	RESE-1002153	08-Nov-10	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	*0.349*	---	---	<0.010	0.00065 jd	<0.0050	---	<0.00100	<0.0100	SVL
Blue Spring	RESE-1002237	07-May-12	<0.0222	<0.003	<0.0067	---	---	---	<0.000014	---	<0.0014	0.00068 j	---	<0.0222	<0.000059	0.019	---	<0.0081	0.0016	---	<0.000014	---	<0.000008	<0.0026	SVL
Blue Spring	RESE-1002237	07-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.000054	---	---	---	---	---	---	---	SVL
Blue Spring	RESE-1002237	07-May-12	---	<0.00015	<0.0033	0.0214	<0.00031	0.0301	<0.00029	0.0018 j	---	<0.0016	---	---	0.00014 j,d	0.0348	---	---	<0.002	<0.00028	<0.0007	---	<0.000009	<0.005	SVL
Bored Spring	RESE-1001088	26-May-04	---	<0.0030	0.0090	0.0102	<0.0020	---	<0.0010	<0.0060	---	0.0221	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
Bored Spring	RESE-1001088	26-May-04	0.079	<0.0030	0.0080	---	<0.0020	<0.040	<0.00010	---	<0.0060	0.0254	<0.010	0.092	<0.0030	---	<0.00020	0.0132	---	<0.0030	<0.00010	<1.0	<0.0020	<0.0050	SVL
Bored Spring	RESE-1001088	26-May-04	---	<0.0030	0.0090	---	<0.0020	---	<0.00010	<0.0060	---	0.0248	---	---	<0.0030	0.0469	---	---	<0.010	<0.0030	<0.00010	---	---	<0.0050	SVL

MONTGOMERY & ASSOCIATES

TABLE B-2. TRACE CONSTITUENTS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	TRACE CONSTITUENTS[a] (mg/L)[b]																						ANALYTICAL LABORATORY
			Al	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	CN	Fe	Pb	Mn	Hg	Mo	Ni	Se	Ag	S	Tl	Zn	
Surface Water 1 - Queen Creek																									
Bored Spring DUP	RESE-1001164	03-Nov-04	---	<0.0030	<0.0030	0.0128	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
Bored Spring DUP	RESE-1001164	03-Nov-04	<0.020	<0.0030	<0.0030	---	<0.0020	<0.040	<0.00010	---	<0.0060	<0.0030	---	0.094	<0.0030	---	<0.00020	0.0137	---	<0.0030	<0.00010	<1.0	<0.0020	<0.0050	SVL
Bored Spring DUP	RESE-1001164	03-Nov-04	---	<0.0030	<0.0030	---	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	0.0179	---	---	<0.010	<0.0030	<0.00010	---	---	<0.0050	SVL
Bored Spring	RESE-1001163	03-Nov-04	---	<0.0030	<0.0030	0.0132	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
Bored Spring	RESE-1001163	03-Nov-04	<0.020	<0.0030	<0.0030	---	<0.0020	<0.040	<0.00010	---	<0.0060	<0.0030	---	0.099	<0.0030	---	<0.00020	0.0142	---	<0.0030	<0.00010	<1.0	<0.0020	<0.0050	SVL
Bored Spring	RESE-1001163	03-Nov-04	---	<0.0030	<0.0030	---	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	0.0187	---	---	<0.010	<0.0030	<0.00010	---	---	<0.0050	SVL
Bored Spring	RESE-1001188	09-Feb-05	---	<0.00300	<0.00300	0.0115	<0.00200	---	<0.00020	<0.00600	---	<0.0100	---	---	<0.00300	---	<0.00020	---	<0.0100	---	<0.00010	---	<0.00200	0.0120	SVL
Bored Spring	RESE-1001188	09-Feb-05	<0.0300	<0.00300	<0.00300	---	<0.00200	<0.0400	<0.00020	---	<0.00600	<0.0100	---	<0.0600	<0.00300	---	<0.00020	<0.00800	---	<0.00300	<0.00010	<1.00	<0.00200	0.0110	SVL
Bored Spring	RESE-1001188	09-Feb-05	---	<0.00300	<0.00300	---	<0.00200	---	<0.00020	<0.00600	---	<0.0100	---	---	<0.00300	0.0467	---	---	<0.0100	<0.00300	<0.00010	---	---	0.0110	SVL
Bored Spring	RESE-1001204	03-May-05	---	<0.00300	<0.00300	0.0119	<0.00200	---	<0.00020	<0.00600	---	<0.0100	---	---	<0.00300	---	<0.00020	---	<0.0100	---	<0.00010	---	<0.00200	<0.0100	SVL
Bored Spring	RESE-1001204	03-May-05	<0.0300	<0.00300	<0.00300	---	<0.00200	<0.0400	<0.00020	---	<0.00600	<0.0100	---	<0.0600	<0.00300	---	<0.00020	0.0098	---	<0.00300	<0.00010	<1.00	<0.00200	<0.0100	SVL
Bored Spring	RESE-1001204	03-May-05	---	<0.00300	<0.00300	---	<0.00200	---	<0.00020	<0.00600	---	<0.0100	---	---	<0.00300	*0.0993*	---	---	<0.0100	<0.00300	<0.00010	---	---	0.015	SVL
Bored Spring	RESE-1001221	03-Aug-05	---	<0.00300	<0.00300	0.0129	<0.0020	---	<0.00020	<0.0060	---	<0.0100	---	---	<0.00300	---	<0.0002	---	<0.0100	---	<0.00010	---	<0.00200	<0.0100	SVL
Bored Spring	RESE-1001221	03-Aug-05	0.115	<0.0030	<0.00300	---	<0.0020	<0.04	0.00030	---	<0.0060	<0.0100	---	0.214	<0.0030	---	<0.0002	0.0093	---	<0.0030	<0.00010	<1	<0.00200	0.041	SVL
Bored Spring	RESE-1001221	03-Aug-05	---	<0.00300	<0.00300	---	<0.0020	---	<0.00020	<0.0060	---	<0.0100	---	---	<0.00300	*1.34*	---	---	<0.0100	<0.00300	<0.00010	---	---	0.044	SVL
Bored Spring	RESE-1002044	13-Nov-08	<0.080	<0.00300	**<0.025**	0.0357	<0.00200	---	<0.000200	---	<0.0060	<0.00100	---	0.077	<0.00300	*0.653*	<0.00020	<0.0080	<0.010	---	<0.000100	---	<0.00100	<0.0100	SVL
Bored Spring	RESE-1002044	13-Nov-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Bored Spring	RESE-1002044	13-Nov-08	---	<0.00300	**<0.025**	---	<0.00200	0.041	<0.0020	<0.0060	---	0.024	---	---	0.00691	*0.732*	---	---	<0.010	<0.00300	<0.0050	---	<0.00100	0.0237	SVL
Bored Spring	RESE-1002051	12-Feb-09	<0.080	<0.00300	**<0.025**	0.0123	<0.00200	---	<0.000034	---	<0.0060	<0.00100	---	<0.060	0.000086 j	*0.220*	---	0.0217	0.00221	---	<0.000100	---	<0.00100	<0.0100	SVL
Bored Spring	RESE-1002051	12-Feb-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Bored Spring	RESE-1002051	12-Feb-09	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	*0.214*	---	---	<0.010	<0.00012	<0.0050	---	<0.00100	<0.0100	SVL
Bored Spring	RESE-1002089	13-May-09	<0.0141	0.00027 j	<0.0066	---	<0.00036	---	<0.000024	---	0.0027 j	0.0018	---	<0.0202	0.000092 j	*0.0523*	---	0.0049 j	0.001 j	---	<0.000019	---	<0.000023	<0.0019	SVL
Bored Spring	RESE-1002089	13-May-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00006	---	---	---	---	---	---	---	SVL
Bored Spring	RESE-1002089	13-May-09	---	<0.00055	0.0057 j	0.0103	<0.00018	0.0359	<0.00048	0.00064 j	---	<0.002	---	---	0.000154 j,d	*0.07*	---	---	<0.0011	<0.0006	<0.00021	---	<0.000058	0.0053	SVL
Bored Spring	RESE-1002119	12-Feb-10	<0.080	<0.00300	**<0.025**	0.0089	---	---	<0.000024	---	<0.0060	0.00161	---	<0.060	0.000105 j	*0.0516*	---	<0.0080	0.00101	---	<0.000100	---	<0.00100	<0.0100	SVL
Bored Spring	RESE-1002119	12-Feb-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Bored Spring	RESE-1002119	12-Feb-10	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	*0.0782*	---	---	<0.010	0.00032 jd	<0.0050	---	<0.00100	0.0181	SVL
Bored Spring	RESE-1002157	09-Nov-10	<0.080	<0.00300	**<0.025**	0.0615	---	---	<0.000024	---	<0.0060	0.00304	---	0.166	0.000404 j	*1.34*	---	<0.0080	0.00418	---	<0.000100	---	<0.00100	<0.0100	SVL
Bored Spring	RESE-1002157	09-Nov-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Bored Spring	RESE-1002157	09-Nov-10	---	<0.00300	**<0.025**	---	<0.00200	0.060	<0.0020	<0.0060	---	0.012	---	---	<0.00300	*1.73*	---	---	<0.010	0.00111 jd	<0.0050	---	<0.00100	<0.0100	SVL
Bored Spring	RESE-1002238	07-May-12	<0.0222	<0.003	<0.0067	---	---	---	<0.000014	---	<0.0014	0.0049	---	<0.0222	<0.000059	0.0041	---	<0.0081	0.0015	---	<0.000014	---	<0.000008	<0.0026	SVL
Bored Spring	RESE-1002238	07-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.000054	---	---	---	---	---	---	---	SVL
Bored Spring	RESE-1002238	07-May-12	---	<0.00015	<0.0033	0.0093	<0.00031	0.0342	<0.00029	0.0025 j	---	0.0082	---	---	0.00024 j,d	*0.0666*	---	---	<0.002	0.00066 j,d	<0.0007	---	<0.000009	<0.005	SVL
Boulder Hole (QC 23.6 C)	RESE-1001008	22-May-03	---	<0.0060	**0.0140**	0.0408	<0.0020	<0.040	<0.00010	---	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	0.0099	SVL
Boulder Hole (QC 23.6 C)	RESE-1001008	22-May-03	<0.020	<0.0060	**0.0150**	---	<0.0020	---	<0.00010	---	<0.0060	<0.0030	<0.10	0.031	<0.0050	---	<0.00020	0.0130	---	<0.0030	<0.00010	<1.0	---	0.0094	SVL
Boulder Hole (QC 23.6 C)	RESE-1001008	22-May-03	---	<0.0060	**0.0140**	---	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	*0.0942*	---	---	<0.010	<0.0030	<0.00010	---	<0.0020	0.0104	SVL
Boulder Hole (QC 23.6 C)	RESE-1001023	04-Sep-03	---	<0.0030	**0.0300**	0.0481	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	0.0051	SVL
Boulder Hole (QC 23.6 C)	RESE-1001023	04-Sep-03	<0.020	<0.0030	**0.0330**	---	<0.0020	0.043	<0.00010	---	<0.0060	0.0038	<0.010	0.048	<0.0050	---	<0.00020	0.0097	---	<0.0030	<0.00010	<1.0	<0.0020	<0.0050	SVL
Boulder Hole (QC 23.6 C)	RESE-1001023	04-Sep-03	---	<0.0030	**0.0290**	---	<0.0020	---	<0.00010	<0.0060	---	0.0034	---	---	<0.0030	*0.124*	---	---	<0.010	<0.0030	<0.00010	---	---	<0.0050	SVL
Boulder Hole (QC 23.6 C)	RESE-1001028	03-Nov-03	---	<0.0030	**0.0150**	0.0696	<0.0020	---	<0.00010	<0.0060	---	0.0033	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
Boulder Hole (QC 23.6 C)	RESE-1001028	03-Nov-03	<0.020	<0.0030	**0.0160**	---	<0.0020	<0.040	<0.00010	---	<0.0060	0.0051	---	0.046	<0.0050	---	<0.00020	0.0127	---	<0.0030	<0.00010	<1.0	<0.0020	<0.0050	SVL
Boulder Hole (QC 23.6 C)	RESE-1001028	03-Nov-03	---	<0.0030	**0.0160**	---	<0.0020	---	<0.00010	<0.0060	---	0.0039	---	---	0.0050	*0.0510*	---	---	<0.010	<0.0030	<0.00010	---	---	<0.0050	SVL

MONTGOMERY & ASSOCIATES

TABLE B-2. TRACE CONSTITUENTS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	TRACE CONSTITUENTS[a] (mg/L)[b]																						ANALYTICAL LABORATORY
			Al	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	CN	Fe	Pb	Mn	Hg	Mo	Ni	Se	Ag	S	Tl	Zn	
Surface Water 1 - Queen Creek																									
Boulder Hole (QC 23.6 C) DUP	RESE-1001055	09-Feb-04	---	<0.00050	0.0089	0.0247	<0.00020	---	<0.00010	<0.00030	---	0.0052	---	---	<0.0010	---	<0.00020	---	0.00300 j	---	<0.00010	---	<0.00040	<0.00020	SVL
Boulder Hole (QC 23.6 C) DUP	RESE-1001055	09-Feb-04	0.0126 j	<0.00050	0.0092	---	<0.00020	<0.0070	<0.00010	---	<0.00070	0.0056	---	<0.0130	<0.0010	---	<0.00020	0.00720 j	---	<0.00080	<0.00010	<1.0	<0.00040	0.00026 j	SVL
Boulder Hole (QC 23.6 C) DUP	RESE-1001055	09-Feb-04	---	<0.00050	**0.0114**	---	<0.00020	---	<0.00010	<0.00030	---	0.0073	---	---	<0.0010	0.0055	---	---	<0.00130	<0.00080	<0.00010	---	---	0.00037 j	SVL
Boulder Hole (QC 23.6 C)	RESE-1001054	09-Feb-04	---	<0.00050	**0.0109**	0.0245	<0.00020	---	<0.00010	<0.00030	---	0.0042	---	---	<0.0010	---	<0.00020	---	0.00290 j	---	<0.00010	---	<0.00040	0.00031 j	SVL
Boulder Hole (QC 23.6 C)	RESE-1001054	09-Feb-04	0.0110 j	0.00078 j	0.0094	---	<0.00020	<0.0070	<0.00010	---	<0.00070	0.0066	---	0.0150 j	<0.0010	---	<0.00020	0.00780 j	---	<0.00080	<0.00010	<1.0	<0.00040	0.00046 j	SVL
Boulder Hole (QC 23.6 C)	RESE-1001054	09-Feb-04	---	<0.00050	**0.0128**	---	<0.00020	---	<0.00010	<0.00030	---	0.0051	---	---	<0.0010	0.0046	---	---	<0.00130	<0.00080	<0.00010	---	---	0.00041 j	SVL
Boulder Hole (QC 23.6 C)	RESE-1001083	24-May-04	---	<0.0030	**0.0160**	0.0447	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
Boulder Hole (QC 23.6 C)	RESE-1001083	24-May-04	<0.020	<0.0030	**0.0174**	---	<0.0020	<0.040	<0.00010	---	<0.0060	0.0056	<0.010	0.038	<0.0030	---	<0.00020	0.0135	---	<0.0030	<0.00010	<1.0	<0.0020	<0.0050	SVL
Boulder Hole (QC 23.6 C)	RESE-1001083	24-May-04	---	<0.0030	**0.0160**	---	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	*0.138*	---	---	<0.010	<0.0030	<0.00010	---	---	<0.0050	SVL
Boulder Hole (QC 23.6 C) DUP	RESE-1001095	03-Aug-04	---	<0.0030	**0.0240**	0.0731	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
Boulder Hole (QC 23.6 C) DUP	RESE-1001095	03-Aug-04	<0.020	<0.0030	**0.0430**	---	<0.0020	<0.040	<0.00010	---	<0.0060	<0.0030	---	0.065	<0.0030	---	<0.00020	0.0085	---	<0.0030	<0.00010	<1.0	<0.0020	<0.0050	SVL
Boulder Hole (QC 23.6 C) DUP	RESE-1001095	03-Aug-04	---	<0.0030	**0.0430**	---	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	*0.636*	---	---	<0.010	<0.0030	<0.00010	---	---	<0.0050	SVL
Boulder Hole (QC 23.6 C)	RESE-1001094	03-Aug-04	---	<0.0030	**0.0340**	0.0734	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
Boulder Hole (QC 23.6 C)	RESE-1001094	03-Aug-04	<0.020	<0.0030	**0.0400**	---	<0.0020	<0.040	<0.00010	---	<0.0060	<0.0030	---	0.058	<0.0030	---	<0.00020	0.0085	---	<0.0030	<0.00010	<1.0	<0.0020	<0.0050	SVL
Boulder Hole (QC 23.6 C)	RESE-1001094	03-Aug-04	---	<0.0030	**0.0390**	---	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	*0.565*	---	---	<0.010	<0.0030	<0.00010	---	---	<0.0050	SVL
Boulder Hole (QC 23.6 C)	RESE-1001165	03-Nov-04	---	<0.0030	**0.0260**	0.0706	<0.0020	---	<0.00010	<0.0060	---	0.0071	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
Boulder Hole (QC 23.6 C)	RESE-1001165	03-Nov-04	<0.020	<0.0030	**0.0280**	---	<0.0020	<0.040	<0.00010	---	<0.0060	0.0080	---	0.036	<0.0030	---	<0.00020	0.0115	---	<0.0030	<0.00010	<1.0	<0.0020	<0.0050	SVL
Boulder Hole (QC 23.6 C)	RESE-1001165	03-Nov-04	---	<0.0030	**0.0290**	---	<0.0020	---	<0.00010	<0.0060	---	0.0078	---	---	<0.0030	*0.0508*	---	---	<0.010	<0.0030	<0.00010	---	---	<0.0050	SVL
Boulder Hole (QC 23.6 C)	RESE-1001181	08-Feb-05	---	<0.00300	**0.0190**	0.0130	<0.00200	---	<0.00020	<0.00600	---	<0.0100	---	---	<0.00300	---	<0.00020	---	<0.0100	---	<0.00010	---	<0.00200	<0.0100	SVL
Boulder Hole (QC 23.6 C)	RESE-1001181	08-Feb-05	<0.0300	<0.00300	**0.0171**	---	<0.00200	<0.0400	<0.00020	---	<0.00600	<0.0100	---	<0.0600	<0.00300	---	<0.00020	<0.00800	---	<0.00300	<0.00010	<1.00	<0.00200	<0.0100	SVL
Boulder Hole (QC 23.6 C)	RESE-1001181	08-Feb-05	---	<0.00300	**0.0175**	---	<0.00200	---	<0.00020	<0.00600	---	<0.0100	---	---	<0.00300	<0.00400	---	---	<0.0100	<0.00300	<0.00010	---	---	<0.0100	SVL
Boulder Hole (QC 23.6 C)	RESE-1001205	04-May-05	---	<0.00300	**0.0176**	0.0364	<0.00200	---	<0.00020	<0.00600	---	<0.0100	---	---	<0.00300	---	<0.00020	---	<0.0100	---	<0.00010	---	<0.00200	<0.0100	SVL
Boulder Hole (QC 23.6 C)	RESE-1001205	04-May-05	<0.0300	<0.00300	**0.0171**	---	<0.00200	<0.0400	<0.00020	---	<0.00600	<0.0100	---	<0.0600	<0.00300	---	<0.00020	<0.00800	---	<0.00300	<0.00010	<1.00	<0.00200	<0.0100	SVL
Boulder Hole (QC 23.6 C)	RESE-1001205	04-May-05	---	<0.00300	**0.0173**	---	<0.00200	---	<0.00020	<0.00600	---	<0.0100	---	---	<0.00300	*0.194*	---	---	<0.0100	<0.00300	<0.00010	---	---	<0.0100	SVL
Boulder Hole (QC 23.6 C)	RESE-1002006	06-Aug-08	<0.080	<0.00300	**0.029**	0.0540	<0.00200	---	<0.000200	---	<0.0060	0.00243	---	<0.060	<0.00300	*0.0947*	<0.00020	0.0493	<0.010	---	<0.000100	---	<0.00100	<0.0100	SVL
Boulder Hole (QC 23.6 C)	RESE-1002006	06-Aug-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Boulder Hole (QC 23.6 C)	RESE-1002006	06-Aug-08	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	*0.148*	---	---	<0.010	<0.00300	<0.0050	---	<0.00100	<0.0100	SVL
Boulder Hole (QC 23.6 C)	RESE-1002031	06-Nov-08	<0.080	<0.00300	**0.026**	0.0563	<0.00200	---	<0.000200	---	<0.0060	0.00189	---	<0.060	<0.00300	*0.244*	<0.00020	<0.0080	<0.010	---	<0.000100	---	<0.00100	<0.0100	SVL
Boulder Hole (QC 23.6 C)	RESE-1002031	06-Nov-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Boulder Hole (QC 23.6 C)	RESE-1002031	06-Nov-08	---	<0.00300	**0.040**	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	*0.335*	---	---	<0.010	<0.00300	<0.0050	---	<0.00100	<0.0100	SVL
Boulder Hole (QC 23.6 C)	RESE-1002060	19-Feb-09	<0.080	<0.00300	**<0.025**	0.0132	<0.00200	---	<0.000034	---	<0.0060	0.0150	---	<0.060	0.000206 j	0.0082	---	<0.0080	<0.00100	---	<0.000100	---	<0.00100	<0.0100	SVL
Boulder Hole (QC 23.6 C)	RESE-1002060	19-Feb-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Boulder Hole (QC 23.6 C)	RESE-1002060	19-Feb-09	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	0.019	---	---	<0.00300	0.0104	---	---	<0.010	<0.00012	<0.0050	---	<0.00100	<0.0100	SVL
Boulder Hole (QC 23.6 C)	RESE-1002082	07-May-09	<0.080	<0.00300	**0.031**	0.0457	<0.00200	---	<0.000024	---	<0.0060	0.00216	---	<0.060	<0.000053	*0.110*	---	<0.0080	0.00120	---	<0.000100	---	<0.00100	<0.0100	SVL
Boulder Hole (QC 23.6 C)	RESE-1002082	07-May-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Boulder Hole (QC 23.6 C)	RESE-1002082	07-May-09	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	*0.122*	---	---	<0.010	<0.00030	<0.0050	---	<0.00100	<0.0100	SVL
Boulder Hole (QC 23.6 C)	RESE-1002120	13-Feb-10	<0.080	<0.00300	**<0.025**	0.0131	---	---	<0.000024	---	<0.0060	0.00638	---	<0.060	<0.000053	<0.0040	---	<0.0080	<0.00100	---	<0.000100	---	<0.00100	<0.0100	SVL
Boulder Hole (QC 23.6 C)	RESE-1002120	13-Feb-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Boulder Hole (QC 23.6 C)	RESE-1002120	13-Feb-10	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	<0.0040	---	---	<0.010	0.00031 jd	<0.0050	---	<0.00100	<0.0100	SVL
Boulder Hole (QC 23.6 C)	RESE-1002140	01-Nov-10	<0.080	<0.00300	**<0.025**	0.0752	---	---	<0.000024	---	<0.0060	0.00407	---	<0.060	0.00003 j	0.0318	---	0.0102	0.00369	---	<0.000100	---	<0.00100	<0.0100	SVL
Boulder Hole (QC 23.6 C)	RESE-1002140	01-Nov-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Boulder Hole (QC 23.6 C)	RESE-1002140	01-Nov-10	---	<0.00300	**0.025**	---	<0.00200	0.042	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0401	---	---	<0.010	0.00059 jd	<0.0050	---	<0.00100	<0.0100	SVL

MONTGOMERY & ASSOCIATES

TABLE B-2. TRACE CONSTITUENTS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	TRACE CONSTITUENTS[a] (mg/L)[b]																						ANALYTICAL LABORATORY
			Al	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	CN	Fe	Pb	Mn	Hg	Mo	Ni	Se	Ag	S	Tl	Zn	
Surface Water 1 - Queen Creek																									
Boulder Hole (QC 23.6 C)	RESE-1002167	16-May-11	<0.080	<0.00300	**<0.025**	---	---	---	<0.000036	---	<0.0060	<0.00100	---	0.099	0.000049 j	*2.32*	---	<0.008	0.00123	---	<0.000100	---	<0.00100	<0.0100	SVL
Boulder Hole (QC 23.6 C)	RESE-1002167	16-May-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Boulder Hole (QC 23.6 C)	RESE-1002167	16-May-11	---	<0.00300	**0.034**	0.0531	<0.0020	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	*2.49*	---	---	<0.010	0.00051 jd	<0.0050	---	<0.00100	<0.0100	SVL
Boulder Hole (QC 23.6 C) SP	RESE-1002167	16-May-11	<0.20	**<0.015**	**0.027**	0.049	<0.0010	<0.20	<0.0050	<0.0050	<0.0050	<0.0050	---	0.18	<0.0050	*2.6*	<0.00020	<0.0050	<0.0050	<0.010	<0.0050	---	**<0.0050**	<0.050	TestAmerica
Boulder Hole (QC 23.6 C) SP	RESE-1002167	16-May-11	<0.20	**<0.015**	**0.029**	0.053	<0.0010	<0.20	<0.0050	<0.0050	<0.0050	<0.0050	<0.0080	*0.61*	<0.0050	*2.7*	<0.00020	<0.0050	<0.0050	<0.010	<0.0050	<0.050	**<0.0050**	<0.050	TestAmerica
Boulder Hole (QC 23.6 C)	RESE-1002227	02-May-12	<0.0222	<0.003	**0.0107 j**	---	---	---	<0.000014	---	<0.0014	0.0012	---	<0.0222	<0.000059	*0.125*	---	<0.0021	0.0024	0.0007 j+	<0.000014	---	<0.000008	<0.0026	SVL
Boulder Hole (QC 23.6 C)	RESE-1002227	02-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.000054	---	---	---	---	---	---	---	SVL
Boulder Hole (QC 23.6 C)	RESE-1002227	02-May-12	---	<0.0038	**0.0107 j**	0.0404	<0.00031	0.022	<0.00029	0.0015 j	---	0.0031 j	---	---	<0.000072	*0.16*	---	---	<0.002	<0.00028	<0.0007	---	<0.000009	<0.0013	SVL
Hidden Spring	RESE-1001003	15-May-03	---	<0.0060	<0.0030	0.0269	<0.0020	<0.040	<0.00010	---	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	0.0095	SVL
Hidden Spring	RESE-1001003	15-May-03	0.042	<0.0060	<0.0030	---	<0.0020	---	<0.00010	---	<0.0060	<0.0030	<0.10	0.097	<0.0050	---	<0.00020	0.0216	---	<0.0030	<0.00010	<1.0	---	0.0108	SVL
Hidden Spring	RESE-1001003	15-May-03	---	<0.0060	<0.0030	---	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	0.0225	---	---	<0.010	<0.0030	<0.00010	---	<0.0020	0.0117	SVL
Hidden Spring	RESE-1001015	20-Aug-03	---	<0.0060	<0.0030	0.0273	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
Hidden Spring	RESE-1001015	20-Aug-03	<0.020	<0.0060	<0.0030	---	<0.0020	0.045	<0.00010	---	<0.0060	<0.0030	<0.010	0.213	<0.0050	---	<0.00020	0.0092	---	<0.0030	<0.00010	<1.0	<0.0020	0.0172	SVL
Hidden Spring	RESE-1001015	20-Aug-03	---	<0.0060	<0.0030	---	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	0.0211	---	---	<0.010	<0.0030	<0.00010	---	---	0.0173	SVL
Hidden Spring DUP	RESE-1001016	20-Aug-03	---	<0.0060	<0.0030	0.0271	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	0.0074	SVL
Hidden Spring DUP	RESE-1001016	20-Aug-03	<0.020	<0.0060	<0.0030	---	<0.0020	0.040	<0.00010	---	<0.0060	<0.0030	<0.010	*0.380*	<0.0050	---	<0.00020	0.0087	---	<0.0030	<0.00010	<1.0	<0.0020	0.0246	SVL
Hidden Spring DUP	RESE-1001016	20-Aug-03	---	<0.0060	<0.0030	---	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	0.0320	---	---	<0.010	<0.0030	<0.00010	---	---	0.0328	SVL
Hidden Spring	RESE-1001027	03-Nov-03	---	<0.0030	<0.0030	0.0269	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	0.0100	SVL
Hidden Spring	RESE-1001027	03-Nov-03	0.020	<0.0030	<0.0030	---	<0.0020	0.049	<0.00010	---	<0.0060	<0.0030	---	*0.302*	<0.0050	---	<0.00020	0.0155	---	<0.0030	<0.00010	<1.0	<0.0020	0.0246	SVL
Hidden Spring	RESE-1001027	03-Nov-03	---	<0.0030	<0.0030	---	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	0.0294	---	---	<0.010	<0.0030	<0.00010	---	---	0.0283	SVL
Hidden Spring	RESE-1001052	09-Feb-04	---	<0.00050	0.00094 j	0.0228	<0.00020	---	<0.00006	0.00047 j	---	<0.00210	---	---	<0.0010	---	<0.00020	---	0.0021 j	---	<0.00010	---	<0.00040	0.0056	SVL
Hidden Spring	RESE-1001052	09-Feb-04	<0.0060	0.00061 j	<0.00060	---	<0.00020	0.0292 j	<0.00006	---	<0.00070	<0.00210	---	0.0283	<0.0010	---	<0.00020	0.0113	---	<0.00080	<0.00010	<1.0	0.0004 j	0.0066	SVL
Hidden Spring	RESE-1001052	09-Feb-04	---	<0.00050	0.0012 j	---	<0.00020	---	<0.00006	0.00068 j	---	<0.00210	---	---	<0.0010	0.0034	---	---	<0.00130	<0.00080	<0.00010	---	---	0.0069	SVL
Hidden Spring	RESE-1001082	24-May-04	---	<0.0030	<0.0030	0.0265	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	0.0096	SVL
Hidden Spring	RESE-1001082	24-May-04	0.066	<0.0030	<0.0030	---	<0.0020	<0.040	<0.00010	---	<0.0060	<0.0030	<0.010	0.065	<0.0030	---	<0.00020	0.0135	---	<0.0030	<0.00010	<1.0	<0.0020	0.0079	SVL
Hidden Spring	RESE-1001082	24-May-04	---	<0.0030	<0.0030	---	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	0.0149	---	---	<0.010	<0.0030	<0.00010	---	---	0.0086	SVL
Hidden Spring	RESE-1001097	04-Aug-04	---	<0.0030	<0.0030	0.0278	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
Hidden Spring	RESE-1001097	04-Aug-04	0.059	<0.0030	<0.0030	---	<0.0020	<0.040	<0.00010	---	<0.0060	<0.0030	---	*0.475*	<0.0030	---	<0.00020	0.0113	---	<0.0030	<0.00010	<1.0	<0.0020	0.0054	SVL
Hidden Spring	RESE-1001097	04-Aug-04	---	<0.0030	<0.0030	---	<0.0020	---	<0.00010	<0.0060	---	0.0034	---	---	<0.0030	0.0495	---	---	<0.010	<0.0030	<0.00010	---	---	<0.0050	SVL
Hidden Spring	RESE-1001162	03-Nov-04	---	<0.0030	<0.0030	0.0267	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
Hidden Spring	RESE-1001162	03-Nov-04	0.028	<0.0030	<0.0030	---	<0.0020	0.043	<0.00010	---	<0.0060	<0.0030	---	0.134	<0.0030	---	<0.00020	0.0130	---	<0.0030	<0.00010	<1.0	<0.0020	0.0071	SVL
Hidden Spring	RESE-1001162	03-Nov-04	---	<0.0030	<0.0030	---	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	0.0363	---	---	<0.010	<0.0030	<0.00010	---	---	0.0078	SVL
Hidden Spring	RESE-1001187	09-Feb-05	---	<0.00300	<0.00300	0.0226	<0.00200	---	<0.00020	<0.00600	---	<0.0100	---	---	<0.00300	---	<0.00020	---	<0.0100	---	<0.00010	---	<0.00200	<0.0100	SVL
Hidden Spring	RESE-1001187	09-Feb-05	<0.0300	<0.00300	<0.00300	---	<0.00200	<0.0400	<0.00020	---	<0.00600	<0.0100	---	<0.0600	<0.00300	---	<0.00020	<0.00800	---	<0.00300	<0.00010	<1.00	<0.00200	<0.0100	SVL
Hidden Spring	RESE-1001187	09-Feb-05	---	<0.00300	<0.00300	---	<0.00200	---	<0.00020	<0.00600	---	<0.0100	---	---	<0.00300	<0.00400	---	---	<0.0100	<0.00300	<0.00010	---	---	0.0110	SVL
Hidden Spring DUP	RESE-1001203	03-May-05	---	<0.00300	<0.00300	0.0218	<0.00200	---	<0.00020	<0.00600	---	<0.0100	---	---	<0.00300	---	<0.00020	---	<0.0100	---	<0.00010	---	<0.00200	<0.0100	SVL
Hidden Spring DUP	RESE-1001203	03-May-05	<0.0300	<0.00300	<0.00300	---	<0.00200	<0.0400	<0.00020	---	<0.00600	<0.0100	---	<0.0600	<0.00300	---	<0.00020	0.0082	---	<0.00300	<0.00010	<1.00	<0.00200	<0.0100	SVL
Hidden Spring DUP	RESE-1001203	03-May-05	---	<0.00300	<0.00300	---	<0.00200	---	<0.00020	<0.00600	---	<0.0100	---	---	<0.00300	<0.00400	---	---	<0.0100	<0.00300	<0.00010	---	---	0.012	SVL
Hidden Spring	RESE-1001202	03-May-05	---	<0.00300	<0.00300	0.0216	<0.00200	---	<0.00020	<0.00600	---	<0.0100	---	---	<0.00300	---	<0.00020	---	<0.0100	---	<0.00010	---	<0.00200	<0.0100	SVL
Hidden Spring	RESE-1001202	03-May-05	<0.0300	<0.00300	<0.00300	---	<0.00200	<0.0400	<0.00020	---	<0.00600	<0.0100	---	<0.0600	<0.00300	---	<0.00020	0.0082	---	<0.00300	<0.00010	<1.00	<0.00200	<0.0100	SVL
Hidden Spring	RESE-1001202	03-May-05	---	<0.00300	<0.00300	---	<0.00200	---	<0.00020	<0.00600	---	<0.0100	---	---	<0.00300	<0.00400	---	---	<0.0100	<0.00300	<0.00010	---	---	<0.0100	SVL

MONTGOMERY & ASSOCIATES

TABLE B-2. TRACE CONSTITUENTS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	TRACE CONSTITUENTS[a] (mg/L)[b]																						ANALYTICAL LABORATORY
			Al	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	CN	Fe	Pb	Mn	Hg	Mo	Ni	Se	Ag	S	Tl	Zn	
Surface Water 1 - Queen Creek																									
Hidden Spring	RESE-1001220	03-Aug-05	---	<0.00300	<0.00300	0.0239	<0.0020	---	<0.00020	<0.0060	---	<0.0100	---	---	<0.00300	---	<0.0002	---	<0.0100	---	<0.00010	---	<0.00200	<0.0100	SVL
Hidden Spring	RESE-1001220	03-Aug-05	<0.030	<0.0030	<0.00300	---	<0.0020	<0.04	<0.00010	---	<0.0060	<0.0100	---	<0.060	<0.0030	---	<0.0002	<0.0080	---	<0.0030	<0.00010	<1	<0.00200	<0.0100	SVL
Hidden Spring	RESE-1001220	03-Aug-05	---	<0.00300	<0.00300	---	<0.0020	---	<0.00020	<0.0060	---	<0.0100	---	---	<0.00300	<0.0040	---	---	<0.0100	<0.00300	<0.00010	---	---	<0.0100	SVL
Hidden Spring	RESE-1002008	19-Aug-08	<0.0141	<0.002	<0.0066	0.0216	<0.00036	---	<0.000034	---	<0.00065	0.000311 j	---	0.0235 j	<0.000043	0.0113	<0.000064	<0.0023	<0.0023	---	<0.000017	---	<0.000018	0.004 j	SVL
Hidden Spring	RESE-1002008	19-Aug-08	---	<0.0004	<0.0065	---	<0.00036	0.0385 j	<0.00096	0.0046 j	---	0.0281	---	---	**0.0331**	*0.0789*	<0.000064	---	0.0028 j	<0.005	<0.00079	---	<0.000072	0.162	SVL
Hidden Spring	RESE-1002030	06-Nov-08	<0.080	<0.00300	**<0.025**	0.0215	<0.00200	---	<0.000200	---	<0.0060	<0.00100	---	<0.060	<0.00300	<0.0040	<0.00020	<0.0080	<0.010	---	<0.000100	---	<0.00100	<0.0100	SVL
Hidden Spring	RESE-1002030	06-Nov-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Hidden Spring	RESE-1002030	06-Nov-08	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0040	---	---	<0.010	<0.00300	<0.0050	---	<0.00100	<0.0100	SVL
Hidden Spring	RESE-1002045	10-Feb-09	<0.080	<0.00300	**<0.025**	0.0218	<0.00200	---	<0.000034	---	<0.0060	<0.00100	---	<0.060	<0.000043	<0.0040	---	0.0256	0.00111	---	<0.000100	---	<0.00100	<0.0100	SVL
Hidden Spring	RESE-1002045	10-Feb-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Hidden Spring	RESE-1002045	10-Feb-09	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	<0.0040	---	---	<0.010	0.00070 jd	<0.0050	---	<0.00100	<0.0100	SVL
Hidden Spring	RESE-1002086	12-May-09	<0.080	<0.00300	**<0.025**	---	<0.00200	---	<0.000024	---	<0.0060	<0.00100	---	<0.060	0.000689 j	0.0091	---	<0.0080	<0.00100	---	<0.000100	---	<0.00100	<0.0100	SVL
Hidden Spring	RESE-1002086	12-May-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Hidden Spring	RESE-1002086	12-May-09	---	<0.00300	**<0.025**	0.0232	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0151	---	---	<0.010	0.00119 jd	<0.0050	---	<0.00100	0.0171	SVL
Hidden Spring	RESE-1002116	12-Feb-10	<0.080	<0.00300	**<0.025**	0.0203	---	---	<0.000024	---	<0.0060	<0.00100	---	<0.060	0.000054 j	<0.0040	---	<0.0080	0.00124	---	<0.000100	---	<0.00100	<0.0100	SVL
Hidden Spring	RESE-1002116	12-Feb-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Hidden Spring	RESE-1002116	12-Feb-10	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	<0.0040	---	---	<0.010	0.00096 jd	<0.0050	---	<0.00100	<0.0100	SVL
Hidden Spring	RESE-1003163	17-Jul-10	<0.20	<0.0030	0.0017	0.024	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	<0.050	<0.0010	0.0086	<0.00020	<0.0010	0.0026	<0.0020	<0.0010	---	<0.0010	<0.010	TestAmerica
Hidden Spring	RESE-1003163	17-Jul-10	<0.20	<0.0030	0.0018	0.024	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	0.050	<0.0010	0.0087	0.0017	<0.0010	0.0023	<0.0020	<0.0010	---	<0.0010	0.010	TestAmerica
Hidden Spring	RESE-1002155	09-Nov-10	<0.080	<0.00300	**<0.025**	0.0222	---	---	<0.000024	---	<0.0060	<0.00100	---	<0.060	0.000024 j	<0.0040	---	<0.0080	0.00304	---	<0.000100	---	<0.00100	<0.0100	SVL
Hidden Spring	RESE-1002155	09-Nov-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Hidden Spring	RESE-1002155	09-Nov-10	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	<0.0040	---	---	<0.010	0.00195 jd	<0.0050	---	<0.00100	0.0187	SVL
Hidden Spring DUP	RESE-1002156	09-Nov-10	<0.080	<0.00300	**<0.025**	0.0223	---	---	<0.000024	---	<0.0060	<0.00100	---	<0.060	0.000042 j	<0.0040	---	<0.0080	0.00334	---	<0.000100	---	<0.00100	<0.0100	SVL
Hidden Spring DUP	RESE-1002156	09-Nov-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Hidden Spring DUP	RESE-1002156	09-Nov-10	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0048	---	---	<0.010	0.00090 jd	<0.0050	---	<0.00100	0.0284	SVL
Kane Spring	RESE-1001002	15-May-03	---	<0.0060	<0.0030	0.0493	<0.0020	0.075	<0.00010	---	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
Kane Spring	RESE-1001002	15-May-03	<0.020	<0.0060	0.0030	---	<0.0020	---	<0.00010	---	<0.0060	0.0041	<0.10	0.026	<0.0050	---	<0.00020	0.0279	---	<0.0030	<0.00010	<1.0	---	<0.0050	SVL
Kane Spring	RESE-1001002	15-May-03	---	<0.0060	<0.0030	---	<0.0020	---	<0.00010	<0.0060	---	0.0042	---	---	<0.0030	<0.0020	---	---	<0.010	<0.0030	<0.00010	---	<0.0020	<0.0050	SVL
Kane Spring	RESE-1001014	20-Aug-03	---	<0.0060	0.0030	0.0407	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
Kane Spring	RESE-1001014	20-Aug-03	<0.020	<0.0060	<0.0030	---	<0.0020	0.088	<0.00010	---	<0.0060	<0.0030	<0.010	<0.020	<0.0050	---	<0.00050	0.0082	---	<0.0030	<0.00010	<1.0	<0.0020	<0.0050	SVL
Kane Spring	RESE-1001014	20-Aug-03	---	<0.0060	<0.0030	---	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	<0.0020	---	---	<0.010	<0.0030	<0.00010	---	---	<0.0050	SVL
Kane Spring	RESE-1001026	03-Nov-03	---	<0.0030	0.0030	0.0331	<0.0020	---	<0.00010	<0.0060	---	0.0033	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	0.0071	SVL
Kane Spring	RESE-1001026	03-Nov-03	0.029	<0.0030	0.0040	---	<0.0020	0.069	<0.00010	---	<0.0060	0.0043	---	0.037	<0.0050	---	<0.00020	0.0204	---	<0.0030	<0.00010	<1.0	<0.0020	0.0094	SVL
Kane Spring	RESE-1001026	03-Nov-03	---	<0.0030	0.0030	---	<0.0020	---	<0.00010	<0.0060	---	0.0041	---	---	<0.0030	0.0234	---	---	<0.010	<0.0030	<0.00010	---	---	0.0100	SVL
Kane Spring	RESE-1001051	09-Feb-04	---	<0.0010	<0.00060	0.0317	<0.00020	---	<0.00006	0.00061 j	---	0.0026 j	---	---	<0.0010	---	<0.00020	---	0.0023 j	---	<0.00010	---	<0.00040	0.001 j	SVL
Kane Spring	RESE-1001051	09-Feb-04	<0.0060	<0.00050	0.0018 j	---	<0.00020	0.0285 j	<0.00006	---	<0.00070	0.0031	---	<0.0130	<0.0010	---	<0.00020	0.0132	---	<0.00080	<0.00010	<1.0	<0.00040	0.00052 j	SVL
Kane Spring	RESE-1001051	09-Feb-04	---	<0.00050	0.0019 j	---	<0.00020	---	<0.00006	0.00065 j	---	0.0029 j	---	---	<0.0010	0.0034	---	---	<0.00130	<0.00080	<0.00010	---	---	0.00077 j	SVL
Kane Spring	RESE-1001161	03-Nov-04	---	<0.0030	<0.0030	0.0267	<0.0020	---	<0.00010	<0.0060	---	0.0042	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
Kane Spring	RESE-1001161	03-Nov-04	<0.020	<0.0030	<0.0030	---	<0.0020	0.050	<0.00010	---	<0.0060	0.0050	---	0.077	<0.0030	---	<0.00020	0.0184	---	<0.0030	<0.00010	<1.0	<0.0020	<0.0050	SVL
Kane Spring	RESE-1001161	03-Nov-04	---	<0.0030	<0.0030	---	<0.0020	---	<0.00010	<0.0060	---	0.0047	---	---	<0.0030	0.0081	---	---	<0.010	<0.0030	<0.00010	---	---	<0.0050	SVL

MONTGOMERY & ASSOCIATES

TABLE B-2. TRACE CONSTITUENTS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	TRACE CONSTITUENTS[a] (mg/L)[b]																						ANALYTICAL LABORATORY
			Al	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	CN	Fe	Pb	Mn	Hg	Mo	Ni	Se	Ag	S	Tl	Zn	
Surface Water 1 - Queen Creek																									
Kane Spring	RESE-1001186	09-Feb-05	---	<0.00300	0.00330	0.0291	<0.00200	---	<0.00020	<0.00600	---	<0.0100	---	---	<0.00300	---	<0.00020	---	<0.0100	---	<0.00010	---	<0.00200	<0.0100	SVL
Kane Spring	RESE-1001186	09-Feb-05	<0.0300	<0.00300	0.00340	---	<0.00200	0.0410	<0.00020	---	<0.00600	<0.0100	---	<0.0600	<0.00300	---	<0.00020	<0.00800	---	<0.00300	<0.00010	<1.00	<0.00200	<0.0100	SVL
Kane Spring	RESE-1001186	09-Feb-05	---	<0.00300	0.00300	---	<0.00200	---	<0.00020	<0.00600	---	<0.0100	---	---	<0.00300	<0.00400	---	---	<0.0100	<0.00300	<0.00010	---	---	<0.0100	SVL
Kane Spring	RESE-1001201	03-May-05	---	<0.00300	<0.00300	0.0438	<0.00200	---	<0.00020	<0.00600	---	<0.0100	---	---	<0.00300	---	<0.00020	---	<0.0100	---	<0.00010	---	<0.00200	<0.0100	SVL
Kane Spring	RESE-1001201	03-May-05	0.030	<0.00300	<0.00300	---	<0.00200	0.056	<0.00020	---	<0.00600	<0.0100	---	<0.0600	<0.00300	---	<0.00020	0.0104	---	<0.00300	<0.00010	<1.00	<0.00200	<0.0100	SVL
Kane Spring	RESE-1001201	03-May-05	---	<0.00300	<0.00300	---	<0.00200	---	<0.00020	<0.00600	---	<0.0100	---	---	<0.00300	0.0047	---	---	<0.0100	<0.00300	<0.00010	---	---	<0.0100	SVL
Kane Spring	RESE-1001218	03-Aug-05	---	<0.00300	0.0047	0.0511	<0.0020	---	<0.00020	<0.0060	---	<0.0100	---	---	<0.00300	---	<0.0002	---	<0.0100	---	<0.00010	---	<0.00200	<0.0100	SVL
Kane Spring	RESE-1001218	03-Aug-05	<0.030	<0.0030	0.0050	---	<0.0020	0.09	<0.00010	---	<0.0060	<0.0100	---	<0.060	<0.0030	---	<0.0002	0.0135	---	<0.0030	<0.00010	<1	<0.00200	<0.0100	SVL
Kane Spring	RESE-1001218	03-Aug-05	---	<0.00300	0.0047	---	<0.0020	---	<0.00020	<0.0060	---	<0.0100	---	---	<0.00300	0.0107	---	---	<0.0100	<0.00300	<0.00010	---	---	<0.0100	SVL
Kane Spring	RESE-1002022	29-Aug-08	<0.0141	<0.0001	0.0094 j	0.0523	<0.00036	---	<0.000034	---	<0.00065	0.000339 j	---	<0.0202	<0.000043	<0.0013	---	0.0026 j	<0.0023	---	<0.000017	---	<0.000018	0.0141	SVL
Kane Spring	RESE-1002022	29-Aug-08	---	<0.0001	<0.0065	---	<0.00036	0.0443	<0.00096	<0.001	---	<0.0039	---	---	<0.000043	<0.0013	---	---	<0.0023	0.00052 j	<0.00079	---	<0.000018	0.0121	SVL
Kane Spring	RESE-1002035	05-Nov-08	<0.080	<0.00300	**<0.025**	0.0499	<0.00200	---	<0.000200	---	<0.0060	<0.0010	---	<0.060	<0.00300	<0.0040	<0.00020	<0.0080	<0.010	---	<0.000100	---	<0.00100	<0.0100	SVL
Kane Spring	RESE-1002035	05-Nov-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Kane Spring	RESE-1002035	05-Nov-08	---	<0.00300	**<0.025**	---	<0.00200	0.049	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	<0.0040	---	---	<0.010	<0.00300	<0.0050	---	<0.00100	<0.0100	SVL
Kane Spring	RESE-1002046	10-Feb-09	<0.080	<0.00300	**<0.025**	0.0447	<0.00200	---	<0.000034	---	<0.0060	<0.00100	---	<0.060	<0.000043	0.0064	---	0.0272	0.00136	---	<0.000100	---	<0.00100	<0.0100	SVL
Kane Spring	RESE-1002046	10-Feb-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Kane Spring	RESE-1002046	10-Feb-09	---	<0.00300	**<0.025**	---	<0.00200	0.042	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	<0.0040	---	---	<0.010	0.00060 jd	<0.0050	---	<0.00100	<0.0100	SVL
Kane Spring	RESE-1002087	13-May-09	<0.0141	<0.00022	**0.0113 j**	---	<0.00036	---	<0.000024	---	<0.00065	0.00053 j	---	<0.0202	<0.000053	<0.0013	---	0.0068 j	0.000809 j	---	<0.000019	---	<0.000023	<0.0019	SVL
Kane Spring	RESE-1002087	13-May-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00006	---	---	---	---	---	---	---	SVL
Kane Spring	RESE-1002087	13-May-09	---	<0.00055	0.0053 j	0.0462	<0.00018	0.0434	<0.00048	<0.0005	---	<0.002	---	---	<0.000132	<0.00065	---	---	<0.0011	<0.0006	<0.00021	---	<0.000058	0.0031 j	SVL
Kane Spring	RESE-1002117	12-Feb-10	<0.080	<0.00300	**<0.025**	0.0414	---	---	<0.000024	---	<0.0060	<0.00100	---	<0.060	0.000112 j	<0.0040	---	<0.0080	0.00124	---	<0.000100	---	<0.00100	<0.0100	SVL
Kane Spring	RESE-1002117	12-Feb-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Kane Spring	RESE-1002117	12-Feb-10	---	<0.00300	**<0.025**	---	<0.00200	0.044	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	<0.0040	---	---	<0.010	0.00058 jd	<0.0050	---	<0.00100	<0.0100	SVL
Kane Spring	RESE-1003164	17-Jul-10	<0.20	<0.0030	0.0018	0.055	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	<0.050	<0.0010	<0.0050	<0.00020	0.0013	0.0021	<0.0020	<0.0010	---	<0.0010	<0.010	TestAmerica
Kane Spring	RESE-1003164	17-Jul-10	<0.20	<0.0030	0.0017	0.054	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	<0.050	<0.0010	<0.0050	0.00037	0.0014	0.0024	<0.0020	<0.0010	---	<0.0010	<0.010	TestAmerica
Kane Spring	RESE-1002154	09-Nov-10	<0.080	<0.00300	**<0.025**	0.0504	---	---	<0.000024	---	<0.0060	<0.00100	---	<0.060	0.000023 j	<0.0040	---	<0.0080	0.00319	---	<0.000100	---	<0.00100	<0.0100	SVL
Kane Spring	RESE-1002154	09-Nov-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Kane Spring	RESE-1002154	09-Nov-10	---	<0.00300	**<0.025**	---	<0.00200	0.049	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0053	---	---	<0.010	0.00110 jd	<0.0050	---	<0.00100	<0.0100	SVL
Kane Spring	RESE-1002236	07-May-12	<0.0222	<0.003	<0.0067	---	---	---	<0.000014	---	<0.0014	0.00039 j	---	<0.0222	<0.000059	<0.0014	---	<0.0081	0.0023	---	<0.000014	---	<0.000008	<0.0026	SVL
Kane Spring	RESE-1002236	07-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.000054	---	---	---	---	---	---	---	SVL
Kane Spring	RESE-1002236	07-May-12	---	<0.00015	<0.0033	0.0485	<0.00031	0.0475	<0.00029	0.0028 j	---	0.0024 j	---	---	0.00048 j,d	0.0071	---	---	<0.002	0.00061 j,d	<0.0007	---	<0.000009	<0.005	SVL
Number 9 Wash	RESE-1002020	28-Aug-08	0.138	0.0015 j	**0.0248 j**	0.0302	<0.00036	---	<0.000034	---	<0.00065	0.0591	---	0.0916 j	0.000298 j	0.0104	---	<0.0023	<0.0023	---	0.00014 j	---	<0.000018	0.0041 j	SVL
Number 9 Wash	RESE-1002020	28-Aug-08	---	0.0016 j	**0.0187 j**	---	<0.00036	0.0234 j	<0.00096	<0.001	---	0.0566	---	---	0.000636 j	0.0118	---	---	<0.0023	0.00034 j	<0.00079	---	<0.000018	0.0057 j	SVL
Number 9 Wash	RESE-1002042	12-Nov-08	<0.080	<0.00300	**0.051**	0.0289	<0.00200	---	<0.000200	---	<0.0060	0.0389	---	0.125	<0.00300	*0.0813*	<0.00020	<0.0080	<0.010	---	<0.000100	---	<0.00100	<0.0100	SVL
Number 9 Wash	RESE-1002042	12-Nov-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Number 9 Wash	RESE-1002042	12-Nov-08	---	<0.00300	**0.058**	---	<0.00200	<0.040	<0.0020	<0.0060	---	0.045	---	---	<0.00300	*0.217*	---	---	<0.010	<0.00300	<0.0050	---	<0.00100	<0.0100	SVL
Number 9 Wash	RESE-1002058	19-Feb-09	0.182	<0.00300	**<0.025**	0.0206	<0.00200	---	<0.000034	---	0.0061	0.0442	---	0.097	0.000330 j	0.0169	---	<0.0080	0.00150	---	<0.000100	---	<0.00100	<0.0100	SVL
Number 9 Wash	RESE-1002058	19-Feb-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Number 9 Wash	RESE-1002058	19-Feb-09	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	0.049	---	---	<0.00300	0.0150	---	---	<0.010	<0.00012	<0.0050	---	<0.00100	<0.0100	SVL
Number 9 Wash DUP	RESE-1002059	19-Feb-09	0.175	<0.00300	**<0.025**	0.0197	<0.00200	---	<0.000034	---	<0.0060	0.0447	---	0.092	0.000362 j	0.0149	---	<0.0080	0.00140	---	<0.000100	---	<0.00100	<0.0100	SVL
Number 9 Wash DUP	RESE-1002059	19-Feb-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Number 9 Wash DUP	RESE-1002059	19-Feb-09	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	0.048	---	---	<0.00300	0.0190	---	---	<0.010	0.00029 jd	<0.0050	---	<0.00100	<0.0100	SVL

MONTGOMERY & ASSOCIATES

TABLE B-2. TRACE CONSTITUENTS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	TRACE CONSTITUENTS[a] (mg/L)[b]																						ANALYTICAL LABORATORY
			Al	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	CN	Fe	Pb	Mn	Hg	Mo	Ni	Se	Ag	S	Tl	Zn	
Surface Water 1 - Queen Creek																									
Number 9 Wash	RESE-1002077	05-May-09	0.101	<0.00300	**<0.025**	0.0261	<0.00200	---	<0.000024	---	<0.0060	0.0462	---	0.102	0.000216 j	0.0328	---	<0.0080	0.00117	---	<0.000100	---	<0.00100	<0.0100	SVL
Number 9 Wash	RESE-1002077	05-May-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Number 9 Wash	RESE-1002077	05-May-09	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	0.084	---	---	<0.00300	0.0423	---	---	<0.010	<0.00030	<0.0050	---	<0.00100	<0.0100	SVL
Number 9 Wash	RESE-1002139	01-Nov-10	<0.080	<0.00300	**<0.025**	0.0252	---	---	0.000025 j	---	<0.0060	0.0425	---	0.262	0.000480 j	0.0192	---	<0.0080	<0.00100	---	<0.000100	---	<0.00100	<0.0100	SVL
Number 9 Wash	RESE-1002139	01-Nov-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Number 9 Wash	RESE-1002139	01-Nov-10	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	0.062	---	---	<0.00300	0.0214	---	---	<0.010	<0.00034	<0.0050	---	<0.00100	<0.0100	SVL
Number 9 Wash	RESE-1002147	03-Nov-10	<0.080	<0.00300	**0.039**	0.0176	---	---	<0.000024	---	<0.0060	0.0201	---	<0.060	0.000135 j	0.0216	---	<0.0080	0.00190	---	<0.000100	---	<0.00100	<0.0100	SVL
Number 9 Wash	RESE-1002147	03-Nov-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Number 9 Wash	RESE-1002147	03-Nov-10	---	<0.00300	**0.047**	---	<0.00200	<0.040	<0.0020	<0.0060	---	0.045	---	---	0.00647	*0.172*	---	---	<0.010	0.00040 jd	<0.0050	---	<0.00100	0.0177	SVL
Number 9 Wash	RESE-1002178	19-Aug-11	<0.080	<0.00300	**0.026**	---	---	---	0.00005 j	---	<0.0060	0.0169	---	0.146	0.000344 j	*0.169*	---	<0.008	0.00191	---	<0.000100	---	<0.00100	<0.0100	SVL
Number 9 Wash	RESE-1002178	19-Aug-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Number 9 Wash	RESE-1002178	19-Aug-11	---	<0.00300	**0.032**	0.0373	<0.0020	<0.040	<0.0020	<0.0060	---	0.025	---	---	<0.00300	*0.200*	---	---	<0.010	<0.00070	<0.0050	---	<0.00100	<0.0100	SVL
Number 9 Wash	RESE-1002198	01-Dec-11	<0.080	<0.00300	**<0.025**	---	---	---	<0.000026	---	<0.0060	0.0151	---	<0.060	0.000069 j	<0.0040	---	<0.008	0.00161	---	<0.000100	---	<0.00100	<0.0100	SVL
Number 9 Wash	RESE-1002198	01-Dec-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Number 9 Wash	RESE-1002198	01-Dec-11	---	<0.00300	**<0.025**	0.0403	<0.0020	<0.040	<0.0020	<0.0060	---	0.021	---	---	<0.00300	0.0158	---	---	<0.010	<0.00070	<0.0050	---	<0.00100	<0.0100	SVL
Number 9 Wash	RESE-1002211	29-Feb-12	<0.080	<0.00300	**<0.025**	---	---	---	0.00009 j	---	<0.0060	0.0156	---	<0.060	0.000153 j	0.0106	---	<0.008	0.00112	---	<0.000100	---	<0.00100	<0.0100	SVL
Number 9 Wash	RESE-1002211	29-Feb-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Number 9 Wash	RESE-1002211	29-Feb-12	---	<0.00300	**<0.025**	0.0404	<0.0020	<0.040	<0.0020	<0.0060	---	0.018	---	---	<0.00300	0.0117	---	---	<0.010	<0.00028	<0.0050	---	<0.00100	<0.0100	SVL
Number 9 Wash DUP	RESE-1002212	29-Feb-12	<0.080	<0.00300	**<0.025**	---	---	---	0.00007 j	---	<0.0060	0.0139	---	<0.060	0.000071 j	0.0098	---	<0.008	0.00119	---	<0.000100	---	<0.00100	<0.0100	SVL
Number 9 Wash DUP	RESE-1002212	29-Feb-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Number 9 Wash DUP	RESE-1002212	29-Feb-12	---	<0.00300	**<0.025**	0.0395	<0.0020	<0.040	<0.0020	<0.0060	---	0.018	---	---	<0.00300	0.0120	---	---	<0.010	<0.00028	<0.0050	---	<0.00100	<0.0100	SVL
Number 9 Wash	RESE-1002250	09-May-12	<0.0222	<0.003	**0.0299**	---	---	---	0.000041 j	---	<0.0014	0.0477	---	0.0759 j	r	r	---	<0.0021	0.0016	---	<0.000014	---	0.000012 j	<0.0026	SVL
Number 9 Wash	RESE-1002250	09-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.000054	---	---	---	---	---	---	---	SVL
Number 9 Wash	RESE-1002250	09-May-12	---	<0.0038	**0.0299**	0.0363	<0.00031	<0.02	<0.00029	0.00088 j	---	0.0453	---	---	r	r	---	---	<0.002	0.00055 j,d	<0.0007	---	0.000014 j,d	<0.005	SVL
Number 9 Wash LD	RESE-1002250	09-May-12	---	---	---	---	---	---	---	---	---	---	---	---	r	r	---	---	---	---	---	---	---	---	SVL
Number 9 Wash LD	RESE-1002250	09-May-12	---	---	---	---	---	---	---	---	---	---	---	---	r	r	---	---	---	---	---	---	---	---	SVL
Oak Flat Wash	RESE-1002016	27-Aug-08	0.192	0.0013 j	**0.024 j**	0.0159	<0.00036	---	0.000058 j	---	<0.00065	0.0506	---	0.103	0.000419 j	0.0131	---	0.0026 j	<0.0023	---	0.000049 j	---	0.000034 j	0.0067 j	SVL
Oak Flat Wash	RESE-1002016	27-Aug-08	---	0.0012 j	**0.0218 j**	---	<0.00036	0.0288 j	<0.00096	<0.001	---	0.0508	---	---	0.0017 j	0.0215	---	---	<0.0023	0.00068 j	<0.00079	---	0.000051 j	0.0072 j	SVL
Oak Flat Wash	RESE-1002068	26-Feb-09	0.110	<0.00300	**<0.025**	0.0112	<0.00200	---	<0.000042	---	<0.0060	0.0318	---	0.087	0.000353 j	0.0192	---	<0.0080	0.00118	---	<0.000100	---	<0.00100	<0.0100	SVL
Oak Flat Wash	RESE-1002068	26-Feb-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Oak Flat Wash	RESE-1002068	26-Feb-09	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.00020	<0.0060	---	0.036	---	---	<0.00300	0.0163	---	---	<0.010	0.00068 jd	<0.0050	---	<0.00100	<0.0100	SVL
Oak Flat Wash	RESE-1002076	05-May-09	<0.080	<0.00300	**0.045**	0.0123	<0.00200	---	0.000025 j	---	<0.0060	0.0289	---	<0.060	0.000335 j	0.0444	---	0.0083	0.00194	---	<0.000100	---	<0.00100	<0.0100	SVL
Oak Flat Wash	RESE-1002076	05-May-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Oak Flat Wash	RESE-1002076	05-May-09	---	<0.00300	**0.038**	---	<0.00200	<0.040	<0.0020	<0.0060	---	0.055	---	---	0.00579	*0.313*	---	---	<0.010	0.00040 jd	<0.0050	---	<0.00100	0.0132	SVL
Oak Flat Wash	RESE-1002176	19-Aug-11	*0.253*	<0.00300	**<0.025**	---	---	---	0.00010 j	---	<0.0060	0.0402	---	0.160	0.000762 j	*0.0871*	---	<0.008	0.00108	---	<0.000100	---	<0.00100	<0.0100	SVL
Oak Flat Wash	RESE-1002176	19-Aug-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Oak Flat Wash	RESE-1002176	19-Aug-11	---	<0.00300	**0.028**	0.0139	<0.0020	<0.040	<0.0020	<0.0060	---	0.052	---	---	<0.00300	*0.100*	---	---	<0.010	<0.00070	<0.0050	---	<0.00100	0.0126	SVL
Oak Flat Wash	RESE-1002205	09-Dec-11	*0.344*	<0.00300	**<0.025**	---	---	---	0.00007 j	---	<0.0060	0.0215	---	0.174	0.000240 j	0.0302	---	<0.008	0.00137	---	<0.000100	---	<0.00100	<0.0100	SVL
Oak Flat Wash	RESE-1002205	09-Dec-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Oak Flat Wash	RESE-1002205	09-Dec-11	---	<0.00300	**<0.025**	0.0145	<0.0020	<0.040	<0.0020	<0.0060	---	0.027	---	---	<0.00300	0.0323	---	---	<0.010	<0.00070	<0.0050	---	<0.00100	<0.0100	SVL

MONTGOMERY & ASSOCIATES

TABLE B-2. TRACE CONSTITUENTS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	TRACE CONSTITUENTS[a] (mg/L)[b]																						ANALYTICAL LABORATORY
			Al	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	CN	Fe	Pb	Mn	Hg	Mo	Ni	Se	Ag	S	Tl	Zn	
Surface Water 1 - Queen Creek																									
Oak Flat Wash	RESE-1002214	29-Feb-12	<0.080	<0.00300	**<0.025**	---	---	---	0.00004 j	---	<0.0060	0.0166	---	<0.060	0.000062 j	0.0096	---	<0.008	0.00136	---	<0.000100	---	<0.00100	<0.0100	SVL
Oak Flat Wash	RESE-1002214	29-Feb-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Oak Flat Wash	RESE-1002214	29-Feb-12	---	<0.00300	**<0.025**	0.0080	<0.0020	<0.040	<0.0020	<0.0060	---	0.020	---	---	<0.00300	0.0106	---	---	<0.010	<0.00028	<0.0050	---	<0.00100	<0.0100	SVL
Oak Flat Wash	RESE-1003060	23-Aug-12	*0.238*	<0.00300	**0.033**	---	---	---	0.00016 j	---	<0.0060	0.0570	---	0.084	0.000624 j	0.0495	---	<0.008	<0.00100	---	<0.000100	---	<0.00100	0.0117	SVL
Oak Flat Wash	RESE-1003060	23-Aug-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Oak Flat Wash	RESE-1003060	23-Aug-12	---	<0.00300	**0.034**	0.0139	<0.0020	<0.040	<0.0020	<0.0060	---	0.062	---	---	<0.00300	*0.0548*	---	---	<0.010	<0.00028	<0.0050	---	<0.00100	<0.0100	SVL
Oak Flat Wash	RESE-1003063	12-Nov-12	<0.080	<0.00300	**<0.025**	---	---	---	0.00011 j	---	<0.0060	0.0293	---	<0.060	0.000480 j	*0.129*	---	<0.008	0.00126	---	<0.000100	---	<0.00100	<0.0100	SVL
Oak Flat Wash	RESE-1003063	12-Nov-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Oak Flat Wash	RESE-1003063	12-Nov-12	---	<0.00300	**<0.025**	0.0114	<0.0020	<0.040	<0.0020	<0.0060	---	0.038	---	---	<0.00300	*0.162*	---	---	<0.010	0.00030 jd	<0.0050	---	<0.00100	0.0118	SVL
Oak Flat Wash	RESE-1003071	17-Dec-12	0.137	<0.00300	**<0.025**	---	---	---	0.00005 j	---	<0.0060	0.0402	---	0.084	0.000524 j	0.0089	---	<0.008	0.00141	---	<0.000100	---	<0.00100	<0.0100	SVL
Oak Flat Wash	RESE-1003071	17-Dec-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Oak Flat Wash	RESE-1003071	17-Dec-12	---	<0.00300	**<0.025**	0.0130	<0.0020	<0.040	<0.0020	<0.0060	---	0.042	---	---	<0.00300	0.0151	---	---	<0.010	0.00054 jd	<0.0050	---	<0.00100	<0.0100	SVL
Oak Flat Wash	RESE-1003074	29-Jan-13	0.200	<0.00300	**<0.025**	---	---	---	0.00007 j	---	<0.0060	0.0421	---	0.092	0.000472 j	0.0096	---	<0.008	0.00171	---	<0.000100	---	<0.00100	<0.0100	SVL
Oak Flat Wash	RESE-1003074	29-Jan-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Oak Flat Wash	RESE-1003074	29-Jan-13	---	<0.00300	**<0.025**	0.0185	<0.0020	<0.040	<0.0020	<0.0060	---	0.048	---	---	<0.00300	0.0184	---	---	<0.010	0.00046 jd	<0.0050	---	<0.00100	<0.0100	SVL
Oak Flat Wash	RESE-1003088	13-Mar-13	0.113	<0.00300	**<0.025**	---	---	---	0.00009 j	---	<0.0060	0.0421	---	0.081	0.000368 j	0.0274	---	<0.008	0.00192	---	<0.000100	---	<0.00100	<0.0100	SVL
Oak Flat Wash	RESE-1003088	13-Mar-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Oak Flat Wash	RESE-1003088	13-Mar-13	---	<0.00300	**<0.025**	0.0117	<0.0020	<0.040	<0.0020	<0.0060	---	0.044	---	---	<0.00300	0.0239	---	---	<0.010	0.00039 jd	<0.0050	---	<0.00100	<0.0100	SVL
Pump Station Spring (QC 30.7 C)	RESE-1001001	15-May-03	---	<0.0060	<0.0030	0.0219	<0.0020	<0.040	<0.00010	---	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
Pump Station Spring (QC 30.7 C)	RESE-1001001	15-May-03	*0.454*	<0.0060	<0.0030	---	<0.0020	---	<0.00010	---	<0.0060	0.0040	<0.10	*0.593*	<0.0050	---	<0.00020	0.0225	---	<0.0030	<0.00010	<1.0	---	<0.0050	SVL
Pump Station Spring (QC 30.7 C)	RESE-1001001	15-May-03	---	<0.0060	<0.0030	---	<0.0020	---	<0.00010	<0.0060	---	0.0039	---	---	<0.0030	*0.268*	---	---	<0.010	<0.0030	<0.00010	---	<0.0020	<0.0050	SVL
Pump Station Spring (QC 30.7 C)	RESE-1001024	04-Sep-03	---	<0.0030	<0.0030	0.0164	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
Pump Station Spring (QC 30.7 C)	RESE-1001024	04-Sep-03	0.038	<0.0030	<0.0030	---	<0.0020	<0.040	<0.00010	---	<0.0060	0.0032	<0.010	0.020	<0.0050	---	<0.00020	0.0154	---	<0.0090	<0.00010	<1.0	<0.0020	<0.0050	SVL
Pump Station Spring (QC 30.7 C)	RESE-1001024	04-Sep-03	---	<0.0030	<0.0030	---	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	*0.0502*	---	---	<0.010	<0.0030	<0.00010	---	---	<0.0050	SVL
Pump Station Spring (QC 30.7 C)	RESE-1001029	03-Nov-03	---	<0.0030	<0.0030	0.0167	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
Pump Station Spring (QC 30.7 C)	RESE-1001029	03-Nov-03	0.021	<0.0030	<0.0030	---	<0.0020	<0.040	<0.00010	---	<0.0060	<0.0030	---	<0.020	<0.0050	---	<0.00020	0.0151	---	<0.0030	<0.00010	<1.0	<0.0020	<0.0050	SVL
Pump Station Spring (QC 30.7 C)	RESE-1001029	03-Nov-03	---	<0.0030	<0.0030	---	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	0.0067	---	---	<0.010	<0.0030	<0.00010	---	---	<0.0050	SVL
Pump Station Spring (QC 30.7 C) DUP	RESE-1001030	03-Nov-03	---	<0.0030	<0.0030	0.0166	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
Pump Station Spring (QC 30.7 C) DUP	RESE-1001030	03-Nov-03	<0.020	<0.0030	<0.0030	---	<0.0020	<0.040	<0.00010	---	<0.0060	<0.0030	---	<0.020	<0.0050	---	<0.00020	0.0145	---	<0.0030	<0.00010	<1.0	<0.0020	<0.0050	SVL
Pump Station Spring (QC 30.7 C) DUP	RESE-1001030	03-Nov-03	---	<0.0030	<0.0030	---	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	0.0066	---	---	<0.010	<0.0030	<0.00010	---	---	<0.0050	SVL
Pump Station Spring (QC 30.7 C)	RESE-1001056	09-Feb-04	---	<0.00050	0.00083 j	0.0141	<0.00020	---	<0.00010	0.00041 j	---	0.00300 j	---	---	<0.0010	---	<0.00020	---	0.00170 j	---	<0.00010	---	<0.00040	0.0004 j	SVL
Pump Station Spring (QC 30.7 C)	RESE-1001056	09-Feb-04	0.0391	<0.00050	0.00110 j	---	0.00022 j	<0.0070	<0.00010	---	<0.00070	0.004	---	0.0258	<0.0010	---	<0.00020	0.0106	---	<0.00160	<0.00010	<1.0	<0.00040	0.00390 j	SVL
Pump Station Spring (QC 30.7 C)	RESE-1001056	09-Feb-04	---	<0.00050	0.00087 j	---	<0.00020	---	<0.00010	0.00053 j	---	0.00290 j	---	---	<0.0010	0.0025	---	---	<0.00130	0.00140 j	<0.00010	---	---	<0.00020	SVL
Pump Station Spring (QC 30.7 C) DUP	RESE-1001085	25-May-04	---	<0.0030	<0.0030	0.0167	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
Pump Station Spring (QC 30.7 C) DUP	RESE-1001085	25-May-04	0.116	<0.0030	<0.0030	---	<0.0020	<0.040	<0.00010	---	<0.0060	<0.0030	<0.010	0.072	<0.0030	---	<0.00020	0.0147	---	<0.0030	<0.00010	<1.0	<0.0020	<0.0050	SVL
Pump Station Spring (QC 30.7 C) DUP	RESE-1001085	25-May-04	---	<0.0030	<0.0030	---	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	0.0076	---	---	<0.010	<0.030	<0.00010	---	---	<0.0050	SVL
Pump Station Spring (QC 30.7 C)	RESE-1001084	25-May-04	---	<0.0030	<0.0030	0.0141	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
Pump Station Spring (QC 30.7 C)	RESE-1001084	25-May-04	0.051	<0.0030	<0.0030	---	<0.0020	<0.040	<0.00010	---	<0.0060	<0.0030	<0.010	0.025	<0.0030	---	<0.00020	0.0137	---	<0.0030	<0.00010	<1.0	<0.0020	<0.0050	SVL
Pump Station Spring (QC 30.7 C)	RESE-1001084	25-May-04	---	<0.0030	<0.0030	---	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	0.0068	---	---	<0.010	<0.0030	<0.00010	---	---	<0.0050	SVL
Pump Station Spring (QC 30.7 C)	RESE-1001096	03-Aug-04	---	<0.0030	<0.0030	0.0144	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
Pump Station Spring (QC 30.7 C)	RESE-1001096	03-Aug-04	<0.020	<0.0030	<0.0030	---	<0.0020	<0.040	<0.00010	---	<0.0060	<0.0030	---	<0.020	<0.0030	---	<0.00020	0.0102	---	<0.0030	<0.00010	<1.0	<0.0020	<0.0050	SVL
Pump Station Spring (QC 30.7 C)	RESE-1001096	03-Aug-04	---	<0.0030	<0.0030	---	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	0.0049	---	---	<0.010	<0.0030	<0.00010	---	---	<0.0050	SVL

MONTGOMERY & ASSOCIATES

TABLE B-2. TRACE CONSTITUENTS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	TRACE CONSTITUENTS[a] (mg/L)[b]																						ANALYTICAL LABORATORY
			Al	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	CN	Fe	Pb	Mn	Hg	Mo	Ni	Se	Ag	S	Tl	Zn	
Surface Water 1 - Queen Creek																									
Pump Station Spring (QC 30.7 C)	RESE-1001166	03-Nov-04	---	<0.0030	<0.0030	0.0159	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
Pump Station Spring (QC 30.7 C)	RESE-1001166	03-Nov-04	<0.020	<0.0030	<0.0030	---	<0.0020	<0.040	<0.00010	---	<0.0060	<0.0030	---	<0.020	<0.0030	---	<0.00020	0.0121	---	<0.0060	<0.00010	<1.0	<0.0020	<0.0050	SVL
Pump Station Spring (QC 30.7 C)	RESE-1001166	03-Nov-04	---	<0.0030	<0.0030	---	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	0.0027	---	---	<0.010	<0.0060	<0.00010	---	---	<0.0050	SVL
Pump Station Spring (QC 30.7 C) DUP	RESE-1001183	08-Feb-05	---	0.00310	0.00350	0.0196	<0.00200	---	<0.00020	<0.00600	---	<0.0100	---	---	<0.00300	---	<0.00020	---	<0.0100	---	<0.00010	---	<0.00200	<0.0100	SVL
Pump Station Spring (QC 30.7 C) DUP	RESE-1001183	08-Feb-05	<0.0300	<0.00300	0.00360	---	<0.00200	<0.0400	<0.00020	---	<0.00600	<0.0100	---	<0.0600	<0.00300	---	<0.00020	0.0394	---	0.00840	<0.00010	<1.00	<0.00200	<0.0100	SVL
Pump Station Spring (QC 30.7 C) DUP	RESE-1001183	08-Feb-05	---	<0.00300	0.00340	---	<0.00200	---	<0.00020	<0.00600	---	<0.0100	---	---	<0.00300	<0.00400	---	---	<0.0100	0.00830	<0.00010	---	---	<0.0100	SVL
Pump Station Spring (QC 30.7 C)	RESE-1001182	08-Feb-05	---	0.00310	0.00360	0.0195	<0.00200	---	<0.00020	<0.00600	---	<0.0100	---	---	<0.00300	---	<0.00020	---	<0.0100	---	<0.00010	---	<0.00200	<0.0100	SVL
Pump Station Spring (QC 30.7 C)	RESE-1001182	08-Feb-05	<0.0300	<0.00300	0.00370	---	<0.00200	<0.0400	<0.00020	---	<0.00600	<0.0100	---	<0.0600	<0.00300	---	<0.00020	0.0393	---	0.00850	<0.00010	<1.00	<0.00200	<0.0100	SVL
Pump Station Spring (QC 30.7 C)	RESE-1001182	08-Feb-05	---	<0.00300	0.00340	---	<0.00200	---	<0.00020	<0.00600	---	<0.0100	---	---	<0.00300	<0.00400	---	---	<0.0100	0.00770	<0.00010	---	---	<0.0100	SVL
Pump Station Spring (QC 30.7 C)	RESE-1001206	04-May-05	---	<0.00300	0.0035	0.0216	<0.00200	---	<0.00020	<0.00600	---	<0.0100	---	---	<0.00300	---	<0.00020	---	<0.0100	---	<0.00010	---	<0.00200	<0.0100	SVL
Pump Station Spring (QC 30.7 C)	RESE-1001206	04-May-05	<0.0300	<0.00300	0.0036	---	<0.00200	<0.0400	<0.00020	---	<0.00600	<0.0100	---	<0.0600	<0.00300	---	<0.00020	0.0159	---	<0.00300	<0.00010	<1.00	<0.00200	<0.0100	SVL
Pump Station Spring (QC 30.7 C)	RESE-1001206	04-May-05	---	<0.00300	0.0035	---	<0.00200	---	<0.00020	<0.00600	---	<0.0100	---	---	<0.00300	<0.00400	---	---	<0.0100	<0.00300	<0.00010	---	---	<0.0100	SVL
Pump Station Spring (QC 30.7 C)	RESE-1001222	08-Aug-05	---	0.0032	0.0033	0.0255	<0.0020	---	<0.00020	<0.0060	---	<0.0100	---	---	<0.00300	---	<0.0002	---	<0.0100	---	<0.00010	---	<0.00200	<0.0100	SVL
Pump Station Spring (QC 30.7 C)	RESE-1001222	08-Aug-05	<0.030	<0.00390	0.00380	---	<0.0020	<0.04	0.00500 j	---	<0.0060	<0.0100	---	<0.060	<0.00300	---	<0.0002	0.0262	---	<0.00300	<0.00010	<1.0	<0.00200	<0.0100	SVL
Pump Station Spring (QC 30.7 C)	RESE-1001222	08-Aug-05	---	0.0031	0.0033	---	<0.0020	---	<0.00020	<0.0060	---	<0.0100	---	---	<0.00300	<0.0040	---	---	<0.0100	0.0031	<0.00010	---	---	<0.0100	SVL
Pump Station Spring (QC 30.7 C) DUP	RESE-1001223	08-Aug-05	---	0.0030	0.0033	0.0259	<0.0020	---	<0.00020	<0.0060	---	<0.0100	---	---	<0.00300	---	<0.0002	---	<0.0100	---	<0.00010	---	<0.00200	<0.0100	SVL
Pump Station Spring (QC 30.7 C) DUP	RESE-1001223	08-Aug-05	<0.030	<0.00360	0.00330	---	<0.0020	<0.04	<0.00100	---	<0.0060	<0.0100	---	<0.060	<0.00300	---	<0.0002	0.0248	---	<0.00300	<0.00010	<1.0	<0.00200	<0.0100	SVL
Pump Station Spring (QC 30.7 C) DUP	RESE-1001223	08-Aug-05	---	0.0034	0.0035	---	<0.0020	---	<0.00020	<0.0060	---	<0.0100	---	---	<0.00300	<0.0040	---	---	<0.0100	<0.00300	<0.00010	---	---	<0.0100	SVL
Pump Station Spring (QC 30.7 C)	RESE-1002001	05-Aug-08	<0.080	<0.00300	**0.027**	0.0249	<0.00200	---	<0.000200	---	<0.0060	0.00130	---	<0.060	<0.00300	*0.0702*	<0.00020	0.0556	<0.010	---	<0.000100	---	<0.00100	<0.0100	SVL
Pump Station Spring (QC 30.7 C)	RESE-1002001	05-Aug-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Pump Station Spring (QC 30.7 C)	RESE-1002001	05-Aug-08	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0421	---	---	<0.010	<0.00300	<0.0050	---	<0.00100	<0.0100	SVL
Pump Station Spring (QC 30.7 C)	RESE-1002023	04-Nov-08	<0.080	<0.00300	**<0.025**	0.0237	<0.00200	---	<0.000200	---	<0.0060	0.00131	---	<0.060	<0.00300	<0.0040	<0.00020	<0.0080	<0.010	---	<0.000100	---	<0.00100	<0.0100	SVL
Pump Station Spring (QC 30.7 C)	RESE-1002023	04-Nov-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Pump Station Spring (QC 30.7 C)	RESE-1002023	04-Nov-08	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	<0.0040	---	---	<0.010	<0.00300	<0.0050	---	<0.00100	<0.0100	SVL
Pump Station Spring (QC 30.7 C)	RESE-1002053	17-Feb-09	0.136	<0.00300	**<0.025**	0.0083	<0.00200	---	<0.000034	---	<0.0060	0.00739	---	0.078	0.000288 j	0.0052	---	<0.0080	<0.00100	---	<0.000100	---	<0.00100	<0.0100	SVL
Pump Station Spring (QC 30.7 C)	RESE-1002053	17-Feb-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Pump Station Spring (QC 30.7 C)	RESE-1002053	17-Feb-09	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	0.019	---	---	<0.00300	*0.0566*	---	---	<0.010	0.00018 jd	<0.0050	---	<0.00100	<0.0100	SVL
Pump Station Spring (QC 30.7 C)	RESE-1002080	12-May-09	<0.080	<0.00300	**<0.025**	---	<0.00200	---	<0.000024	---	<0.0060	0.00125	---	<0.060	<0.000053	<0.0040	---	<0.0080	0.00119	---	<0.000100	---	<0.00100	<0.0100	SVL
Pump Station Spring (QC 30.7 C)	RESE-1002080	12-May-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Pump Station Spring (QC 30.7 C)	RESE-1002080	12-May-09	---	<0.00300	**<0.025**	0.0192	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	<0.0040	---	---	<0.010	0.00095 jd	<0.0050	---	<0.00100	<0.0100	SVL
Pump Station Spring (QC 30.7 C) DUP	RESE-1002084	12-May-09	<0.080	<0.00300	**<0.025**	---	<0.00200	---	<0.000024	---	<0.0060	0.00119	---	<0.060	<0.000053	0.0048	---	<0.0080	0.00156	---	<0.000100	---	<0.00100	<0.0100	SVL
Pump Station Spring (QC 30.7 C) DUP	RESE-1002084	12-May-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Pump Station Spring (QC 30.7 C) DUP	RESE-1002084	12-May-09	---	<0.00300	**<0.025**	0.0204	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0076	---	---	<0.010	0.00126 jd	<0.0050	---	<0.00100	<0.0100	SVL
Pump Station Spring (QC 30.7 C)	RESE-1002125	16-Feb-10	<0.080	<0.00300	**<0.025**	0.0194	---	---	<0.000024	---	<0.0060	0.00188	---	<0.060	<0.000053	0.0096	---	<0.0080	0.00132	---	<0.000100	---	<0.00100	<0.0100	SVL
Pump Station Spring (QC 30.7 C)	RESE-1002125	16-Feb-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Pump Station Spring (QC 30.7 C)	RESE-1002125	16-Feb-10	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0110	---	---	<0.010	0.00167 jd	<0.0050	---	<0.00100	<0.0100	SVL
Pump Station Spring (QC 30.7 C)	RESE-1002144	03-Nov-10	<0.080	<0.00300	**<0.025**	0.0158	---	---	<0.000024	---	<0.0060	<0.00100	---	<0.060	<0.000019	0.0338	---	0.0082	0.00377	---	<0.000100	---	<0.00100	<0.0100	SVL
Pump Station Spring (QC 30.7 C)	RESE-1002144	03-Nov-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Pump Station Spring (QC 30.7 C)	RESE-1002144	03-Nov-10	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	*0.0727*	---	---	<0.010	0.00203 jd	<0.0050	---	<0.00100	0.0100	SVL
Pump Station Spring (QC 30.7 C) DUP	RESE-1002145	03-Nov-10	<0.080	<0.00300	**<0.025**	0.0155	---	---	<0.000024	---	<0.0060	<0.00100	---	<0.060	<0.000019	0.0359	---	0.0084	0.00421	---	<0.000100	---	<0.00100	<0.0100	SVL
Pump Station Spring (QC 30.7 C) DUP	RESE-1002145	03-Nov-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Pump Station Spring (QC 30.7 C) DUP	RESE-1002145	03-Nov-10	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0472	---	---	<0.010	0.00146 jd	<0.0050	---	<0.00100	<0.0100	SVL

MONTGOMERY & ASSOCIATES

TABLE B-2. TRACE CONSTITUENTS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	TRACE CONSTITUENTS[a] (mg/L)[b]																						ANALYTICAL LABORATORY
			Al	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	CN	Fe	Pb	Mn	Hg	Mo	Ni	Se	Ag	S	Tl	Zn	
Surface Water 1 - Queen Creek																									
Pump Station Spring (QC 30.7 C)	RESE-1002168	17-May-11	<0.080	<0.00300	**<0.025**	---	---	---	<0.000036	---	<0.0060	<0.00100	---	<0.060	0.000022 j	0.0441	---	<0.008	<0.00100	---	<0.000100	---	<0.00100	<0.0100	SVL
Pump Station Spring (QC 30.7 C)	RESE-1002168	17-May-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Pump Station Spring (QC 30.7 C)	RESE-1002168	17-May-11	---	<0.00300	**<0.025**	0.0191	<0.0020	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0377	---	---	<0.010	0.00146 jd	<0.0050	---	<0.00100	<0.0100	SVL
Pump Station Spring (QC 30.7 C) SP	RESE-1002168	17-May-11	<0.20	**<0.015**	<0.0050	0.019	<0.0010	<0.20	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.050	<0.0050	0.045	<0.00020	<0.0050	0.0051	<0.010	<0.0050	---	**<0.0050**	<0.050	TestAmerica
Pump Station Spring (QC 30.7 C) SP	RESE-1002168	17-May-11	<0.20	<0.0030	0.0023	0.023	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0050	<0.0080	0.21	<0.0010	0.037	<0.00020	<0.0010	0.0050	0.0022	<0.0010	<0.050	<0.0010	<0.010	TestAmerica
Pump Station Spring (QC 30.7 C)	RESE-1002248	09-May-12	<0.0222	<0.003	<0.0067	---	---	---	0.000062 j	---	<0.0014	0.00061 j	---	<0.0222	<0.000059	0.0381	---	<0.0081	0.0034	---	<0.000014	---	<0.000008	<0.0026	SVL
Pump Station Spring (QC 30.7 C)	RESE-1002248	09-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.000054	---	---	---	---	---	---	---	SVL
Pump Station Spring (QC 30.7 C)	RESE-1002248	09-May-12	---	<0.00015	<0.0033	0.0153	<0.00031	<0.02	<0.00029	0.0025 j	---	0.0017 j	---	---	<0.000072	0.0478	---	---	<0.002	0.00095 j,d	<0.0007	---	<0.000009	<0.005	SVL
QC 19.7 C	RESE-1002021	28-Aug-08	0.0142 j	0.0015 j	**0.0266**	0.034	<0.00036	---	<0.000034	---	<0.00065	0.0183	---	<0.0202	0.000051 j	0.005 j	---	0.0047 j	<0.0023	---	<0.000017	---	<0.000018	<0.0019	SVL
QC 19.7 C	RESE-1002021	28-Aug-08	---	0.0014 j	**0.0176 j**	---	<0.00036	0.05	<0.00096	<0.001	---	0.0173	---	---	0.000232 j	0.005 j	---	---	<0.0023	0.00072 j	<0.00079	---	0.000023 j	0.0028 j	SVL
QC 19.7 C	RESE-1002048	11-Feb-09	0.087	<0.00300	**0.026**	0.0143	<0.00200	---	<0.000034	---	<0.0060	0.0195	---	<0.060	0.000241 j	0.0099	---	0.0145	0.00111	---	<0.000100	---	<0.00100	<0.0100	SVL
QC 19.7 C	RESE-1002048	11-Feb-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
QC 19.7 C	RESE-1002048	11-Feb-09	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	0.022	---	---	<0.00300	0.0091	---	---	<0.010	0.00044 jd	<0.0050	---	<0.00100	<0.0100	SVL
QC 19.7 C	RESE-1002206	14-Dec-11	0.115	<0.00300	**<0.025**	---	---	---	<0.000026	---	<0.0060	0.0257	---	<0.060	0.000289 j	0.0079	---	<0.008	0.00121	---	<0.000100	---	<0.00100	<0.0100	SVL
QC 19.7 C	RESE-1002206	14-Dec-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
QC 19.7 C	RESE-1002206	14-Dec-11	---	<0.00300	**<0.025**	0.0179	<0.0020	<0.040	<0.0020	<0.0060	---	0.032	---	---	<0.00300	0.0214	---	---	<0.010	<0.00070	<0.0050	---	<0.00100	<0.0100	SVL
QC 19.7 C	RESE-1003070	17-Dec-12	<0.080	<0.00300	**<0.025**	---	---	---	0.00002 j	---	<0.0060	0.0201	---	<0.060	0.000367 j	<0.0040	---	<0.008	0.00148	---	<0.000100	---	<0.00100	<0.0100	SVL
QC 19.7 C	RESE-1003070	17-Dec-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
QC 19.7 C	RESE-1003070	17-Dec-12	---	<0.00300	**<0.025**	0.0162	<0.0020	<0.040	<0.0020	<0.0060	---	0.024	---	---	<0.00300	0.0056	---	---	<0.010	0.00099 jd	<0.0050	---	<0.00100	<0.0100	SVL
QC 19.7 C	RESE-1003076	29-Jan-13	<0.080	<0.00300	**<0.025**	---	---	---	0.00009 j	---	<0.0060	0.0200	---	<0.060	0.000321 j	0.0047	---	<0.008	0.00141	---	<0.000100	---	<0.00100	<0.0100	SVL
QC 19.7 C	RESE-1003076	29-Jan-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
QC 19.7 C	RESE-1003076	29-Jan-13	---	<0.00300	**<0.025**	0.0192	<0.0020	<0.040	<0.0020	<0.0060	---	0.025	---	---	<0.00300	0.0108	---	---	<0.010	0.00034 jd	<0.0050	---	<0.00100	<0.0100	SVL
QC 19.7 C DUP	RESE-1003077	29-Jan-13	0.116	<0.00300	**<0.025**	---	---	---	0.00007 j	---	<0.0060	0.0226	---	0.078	0.000860 j	0.0109	---	<0.008	0.00125	---	<0.000100	---	<0.00100	<0.0100	SVL
QC 19.7 C DUP	RESE-1003077	29-Jan-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
QC 19.7 C DUP	RESE-1003077	29-Jan-13	---	<0.00300	**<0.025**	0.0189	<0.0020	<0.040	<0.0020	<0.0060	---	0.024	---	---	<0.00300	0.0105	---	---	<0.010	0.00053 jd	<0.0050	---	<0.00100	<0.0100	SVL
QC 19.7 C	RESE-1003085	13-Mar-13	<0.080	<0.00300	**<0.025**	---	---	---	r	---	<0.0060	0.0126	---	<0.060	0.000170 j	0.0063	---	<0.008	0.00195	---	<0.000100	---	<0.00100	<0.0100	SVL
QC 19.7 C	RESE-1003085	13-Mar-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
QC 19.7 C	RESE-1003085	13-Mar-13	---	<0.00300	**<0.025**	0.0158	<0.0020	<0.040	<0.0020	<0.0060	---	0.012	---	---	<0.00300	<0.0040	---	---	<0.010	0.00055 jd	<0.0050	---	<0.00100	<0.0100	SVL
QC 19.7 C	RESE-1001127	03-Mar-14	*0.45*	0.0010 j	**0.020**	0.017	<0.00020	<0.023	<0.00025	<0.00050	0.00088 j	0.025	---	0.20	<0.00050	0.0052	---	0.0011 j	0.00053 j	0.00050 j	<0.00050	---	<0.00050	0.0097 j	TestAmerica
QC 19.7 C	RESE-1001127	03-Mar-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.000030	---	---	---	---	---	---	---	TestAmerica
QC 19.7 C	RESE-1001127	03-Mar-14	*0.51*	0.00084 j	**0.019**	0.018	<0.00020	<0.023	<0.00025	<0.00050	<0.00050	0.030	---	0.29	0.00063 j	0.0077	---	0.0010 j	<0.0014	0.00051 j	<0.00050	---	<0.00050	0.010 j	TestAmerica
QC 19.7 C	RESE-1001150	15-Jul-14	*0.79*	<0.0020	**0.014**	0.013	<0.0010	<0.050	<0.0010	<0.010	<0.010	0.061	---	*0.56*	0.0044	0.050	<0.00020	<0.010	<0.010	<0.0020	<0.0010	---	<0.0010	<0.050	TestAmerica
QC 19.7 C	RESE-1001150	15-Jul-14	*58*	---	---	0.35	0.0032	0.074	---	0.062	0.027	---	---	*51*	---	*3.8*	<0.00020	<0.010	---	---	---	---	---	1.2	TestAmerica
QC 19.7 C	RESE-1001150	15-Jul-14	---	<0.0040	**0.072**	---	---	---	0.0037	---	---	0.68	---	---	**0.36**	---	---	---	0.047	<0.0040	0.0036	---	<0.0020	---	TestAmerica
QC 19.7 C	RESE-1001333	09-Oct-14	*0.52*	0.0011 j	**0.022**	0.014	<0.00020	0.017 j	<0.00025	0.00053 j	0.0021	0.039	---	0.29	0.0011	0.017	0.000049 j	0.00061 j	<0.0016	0.00087 j	<0.00050	---	<0.00050	0.0049 j	TestAmerica
QC 19.7 C	RESE-1001333	09-Oct-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.000051 j	---	---	---	---	---	---	---	TestAmerica
QC 19.7 C	RESE-1001333	09-Oct-14	*7.2*	0.0013 j	**0.030**	0.060	0.00046 j	0.023 j	0.00028 j	0.0052	0.0026	0.14	---	*5.8*	**0.025**	*0.30*	---	0.00070 j	0.0029 j	0.00051 j	<0.00050	---	<0.00050	0.069	TestAmerica
QC 21.7 C (Magma Avenue) LD	RESE-1002018	28-Aug-08	0.0248 j	0.0011 j	**0.0209 j**	0.0289	<0.00036	---	<0.000034	---	<0.00065	0.0167	---	<0.0202	0.000079 j	0.0068 j	---	0.0038 j	<0.0023	---	0.000018 j	---	<0.000018	<0.0019	SVL
QC 21.7 C (Magma Avenue) LD	RESE-1002018	28-Aug-08	---	0.0011 j	**0.014 j**	---	<0.00036	0.0342 j	<0.00096	<0.001	---	0.0165	---	---	0.000444 j	0.0091 j	---	---	<0.0023	0.00087 j	<0.00079	---	<0.000018	0.0032 j	SVL
QC 21.7 C (Magma Avenue)	RESE-1002025	04-Nov-08	<0.080	<0.00300	**0.028**	0.0323	<0.00200	---	<0.000200	---	<0.0060	0.00540	---	<0.060	<0.00300	*0.230*	<0.00020	<0.0080	<0.010	---	<0.000100	---	<0.00100	<0.0100	SVL
QC 21.7 C (Magma Avenue)	RESE-1002025	04-Nov-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
QC 21.7 C (Magma Avenue)	RESE-1002025	04-Nov-08	---	<0.00300	**0.040**	---	<0.00200	0.054	<0.0020	<0.0060	---	0.010	---	---	<0.00300	*0.419*	---	---	<0.010	<0.00300	<0.0050	---	<0.00100	0.0248	SVL

MONTGOMERY & ASSOCIATES

TABLE B-2. TRACE CONSTITUENTS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	TRACE CONSTITUENTS[a] (mg/L)[b]																						ANALYTICAL LABORATORY
			Al	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	CN	Fe	Pb	Mn	Hg	Mo	Ni	Se	Ag	S	Tl	Zn	
Surface Water 1 - Queen Creek																									
QC 21.7 C (Magma Avenue)	RESE-1002047	11-Feb-09	0.106	<0.00300	**<0.025**	0.0143	<0.00200	---	<0.000034	---	<0.0060	0.0203	---	<0.060	0.000223 j	0.0088	---	0.0128	0.00112	---	<0.000100	---	<0.00100	<0.0100	SVL
QC 21.7 C (Magma Avenue)	RESE-1002047	11-Feb-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
QC 21.7 C (Magma Avenue)	RESE-1002047	11-Feb-09	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	0.023	---	---	<0.00300	0.0108	---	---	<0.010	0.00030 jd	<0.0050	---	<0.00100	<0.0100	SVL
QC 21.7 C (Magma Avenue)	RESE-1002083	07-May-09	<0.080	<0.00300	**0.035**	0.0299	<0.00200	---	0.000027 j	---	<0.0060	0.00775	---	<0.060	0.000185 j	*0.102*	---	0.0111	0.00259	---	<0.000100	---	<0.00100	<0.0100	SVL
QC 21.7 C (Magma Avenue)	RESE-1002083	07-May-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
QC 21.7 C (Magma Avenue)	RESE-1002083	07-May-09	---	<0.00300	**0.027**	---	<0.00200	<0.040	<0.0020	<0.0060	---	0.011	---	---	<0.00300	*0.327*	---	---	<0.010	<0.00030	<0.0050	---	<0.00100	<0.0100	SVL
QC 21.7 C (Magma Avenue)	RESE-1002141	01-Nov-10	<0.080	<0.00300	**<0.025**	0.0563	---	---	0.000063 j	---	<0.0060	0.0159	---	<0.060	0.000397 j	0.0258	---	0.0098	0.00270	---	<0.000100	---	<0.00100	<0.0100	SVL
QC 21.7 C (Magma Avenue)	RESE-1002141	01-Nov-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
QC 21.7 C (Magma Avenue)	RESE-1002141	01-Nov-10	---	<0.00300	**<0.025**	---	<0.00200	0.062	<0.0020	<0.0060	---	0.034	---	---	0.00523	*0.0596*	---	---	<0.010	0.00044 jd	<0.0050	---	<0.00100	0.0273	SVL
QC 21.7 C (Magma Avenue)	RESE-1002177	19-Aug-11	<0.080	<0.00300	**<0.025**	---	---	---	0.00006 j	---	<0.0060	0.0508	---	<0.060	0.000349 j	0.0326	---	0.010	0.00287	---	<0.000100	---	<0.00100	<0.0100	SVL
QC 21.7 C (Magma Avenue)	RESE-1002177	19-Aug-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
QC 21.7 C (Magma Avenue)	RESE-1002177	19-Aug-11	---	<0.00300	**<0.025**	0.0771	<0.0020	0.043	<0.0020	<0.0060	---	0.144	---	---	**0.0215**	*0.183*	---	---	<0.010	0.00116 jd	<0.0050	---	<0.00100	0.0898	SVL
QC 21.7 C (Magma Avenue)	RESE-1002190	28-Nov-11	<0.080	<0.00300	**<0.025**	---	---	---	0.00003 j	---	<0.0060	0.0286	---	<0.060	0.000537 j	0.0068	---	<0.008	0.00340	---	<0.000100	---	<0.00100	0.0104	SVL
QC 21.7 C (Magma Avenue)	RESE-1002190	28-Nov-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
QC 21.7 C (Magma Avenue)	RESE-1002190	28-Nov-11	---	<0.00300	**<0.025**	0.0318	<0.0020	<0.040	<0.0020	<0.0060	---	0.033	---	---	<0.00300	0.0315	---	---	<0.010	<0.00070	<0.0050	---	<0.00100	<0.0100	SVL
QC 21.7 C (Magma Avenue)	RESE-1002208	27-Feb-12	<0.080	<0.00300	**<0.025**	---	---	---	0.00003 j	---	<0.0060	0.00837	---	<0.060	0.000031 j	0.0099	---	<0.008	0.00202	---	<0.000100	---	<0.00100	<0.0100	SVL
QC 21.7 C (Magma Avenue)	RESE-1002208	27-Feb-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
QC 21.7 C (Magma Avenue)	RESE-1002208	27-Feb-12	---	<0.00300	**<0.025**	0.0243	<0.0020	<0.040	<0.0020	<0.0060	---	0.013	---	---	<0.00300	*0.0636*	---	---	<0.010	<0.00028	<0.0050	---	<0.00100	<0.0100	SVL
QC 21.7 C (Magma Avenue)	RESE-1002228	02-May-12	<0.0222	<0.003	**0.0227 j**	---	---	---	<0.000014	---	<0.0014	0.0098	---	<0.0222	0.00021 j+	0.0273	---	0.0042 j	0.0017	0.00059 j+	<0.000014	---	<0.000008	<0.0026	SVL
QC 21.7 C (Magma Avenue)	RESE-1002228	02-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.000054	---	---	---	---	---	---	---	SVL
QC 21.7 C (Magma Avenue)	RESE-1002228	02-May-12	---	<0.0038	**0.0236**	0.0236	<0.00031	0.0168 j	<0.00029	0.0014 j	---	0.0133	---	---	0.00097 j,d	*0.0528*	---	---	<0.002	<0.00028	<0.0007	---	<0.000009	0.0034 j	SVL
QC 21.7 C (Magma Avenue)	RESE-1003054	14-Aug-12	<0.080	<0.00300	**0.051**	---	---	---	<0.000014	---	<0.0060	0.00483	---	<0.060	0.000287 j	*0.612*	---	0.013	0.00341	---	<0.000100	---	<0.00100	<0.0100	SVL
QC 21.7 C (Magma Avenue)	RESE-1003054	14-Aug-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
QC 21.7 C (Magma Avenue)	RESE-1003054	14-Aug-12	---	<0.00300	**0.045**	0.0780	<0.0020	0.050	<0.0020	<0.0060	---	0.014	---	---	<0.00300	*0.643*	---	---	<0.010	0.00041 jd	<0.0050	---	<0.00100	<0.0100	SVL
QC 22.6 E (Karst Spring)	RESE-1001180	08-Feb-05	---	<0.00300	**0.0108**	0.00730	<0.00200	---	<0.00020	<0.00600	---	<0.0100	---	---	<0.00300	---	<0.00020	---	<0.0100	---	<0.00010	---	<0.00200	0.0210	SVL
QC 22.6 E (Karst Spring)	RESE-1001180	08-Feb-05	<0.0300	<0.00300	0.00990	---	<0.00200	<0.0400	<0.00020	---	<0.00600	<0.0100	---	<0.0600	<0.00300	---	<0.00020	<0.00800	---	<0.00300	<0.00010	<1.00	<0.00200	0.0200	SVL
QC 22.6 E (Karst Spring)	RESE-1001180	08-Feb-05	---	**<0.00750**	0.00980	---	<0.00200	---	<0.00050	<0.00600	---	<0.0100	---	---	<0.00750	<0.00400	---	---	<0.0100	<0.00300	<0.00025	---	---	0.0200	SVL
QC 22.6 E (Karst Spring)	RESE-1002017	28-Aug-08	<0.0141	0.00049 j	**0.0155 j**	0.0136	<0.00036	---	0.000241	---	<0.00065	0.009	---	<0.0202	0.000169 j	0.0079 j	---	0.0026 j	<0.0023	---	<0.000017	---	<0.000018	0.0628	SVL
QC 22.6 E (Karst Spring)	RESE-1002017	28-Aug-08	---	0.00049 j	<0.0065	---	<0.00036	0.0347 j	<0.00096	<0.001	---	0.0122	---	---	0.001 j	0.0122	---	---	<0.0023	0.00069 j	<0.00079	---	<0.000018	0.0626	SVL
QC 22.6 E (Karst Spring) DUP	RESE-1002050	11-Feb-09	<0.080	<0.00300	**<0.025**	0.0088	<0.00200	---	0.000122 j	---	<0.0060	0.00745	---	<0.060	0.000098 j	<0.0040	---	0.0221	<0.00100	---	<0.000100	---	<0.00100	0.0377	SVL
QC 22.6 E (Karst Spring) DUP	RESE-1002050	11-Feb-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
QC 22.6 E (Karst Spring) DUP	RESE-1002050	11-Feb-09	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0055	---	---	<0.010	0.00064 jd	<0.0050	---	<0.00100	0.0364	SVL
QC 22.6 E (Karst Spring)	RESE-1002049	11-Feb-09	<0.080	<0.00300	**0.028**	0.0089	<0.00200	---	0.000141 j	---	<0.0060	0.00739	---	<0.060	0.000110 j	0.0115	---	0.0226	0.00134	---	<0.000100	---	<0.00100	0.0392	SVL
QC 22.6 E (Karst Spring)	RESE-1002049	11-Feb-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
QC 22.6 E (Karst Spring)	RESE-1002049	11-Feb-09	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0065	---	---	<0.010	0.00029 jd	<0.0050	---	<0.00100	0.0379	SVL
QC 22.6 E (Karst Spring)	RESE-1002207	27-Feb-12	<0.080	<0.00300	**<0.025**	---	---	---	0.00015 j	---	<0.0060	0.00290	---	<0.060	0.000066 j	<0.0040	---	<0.008	0.00201	---	<0.000100	---	<0.00100	0.0285	SVL
QC 22.6 E (Karst Spring)	RESE-1002207	27-Feb-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
QC 22.6 E (Karst Spring)	RESE-1002207	27-Feb-12	---	<0.00300	**<0.025**	0.0110	<0.0020	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	<0.0040	---	---	<0.010	0.00060 jd	<0.0050	---	<0.00100	0.0286	SVL
QC 22.6 E (Karst Spring)	RESE-1003072	17-Dec-12	<0.080	<0.00300	**<0.025**	---	---	---	0.00021	---	<0.0060	0.0157	---	<0.060	0.000313 j	0.0088	---	<0.008	0.00243	---	<0.000100	---	<0.00100	0.0345	SVL
QC 22.6 E (Karst Spring)	RESE-1003072	17-Dec-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
QC 22.6 E (Karst Spring)	RESE-1003072	17-Dec-12	---	<0.00300	**<0.025**	0.0132	<0.0020	<0.040	<0.0020	<0.0060	---	0.032	---	---	0.00952	*0.0972*	---	---	<0.010	0.00209 jd	<0.0050	---	<0.00100	0.0826	SVL

MONTGOMERY & ASSOCIATES

TABLE B-2. TRACE CONSTITUENTS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	TRACE CONSTITUENTS[a] (mg/L)[b]																						ANALYTICAL LABORATORY
			Al	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	CN	Fe	Pb	Mn	Hg	Mo	Ni	Se	Ag	S	Tl	Zn	
Surface Water 1 - Queen Creek																									
QC 22.6 E (Karst Spring)	RESE-1003075	29-Jan-13	<0.080	<0.00300	**<0.025**	---	---	---	0.00017 j	---	<0.0060	0.00729	---	<0.060	0.000134 j	<0.0040	---	<0.008	0.00190	---	<0.000100	---	<0.00100	0.0371	SVL
QC 22.6 E (Karst Spring)	RESE-1003075	29-Jan-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
QC 22.6 E (Karst Spring)	RESE-1003075	29-Jan-13	---	<0.00300	**<0.025**	0.0087	<0.0020	<0.040	<0.0020	<0.0060	---	0.011	---	---	<0.00300	0.0059	---	---	<0.010	0.00058 jd	<0.0050	---	<0.00100	0.0410	SVL
QC 22.6 E (Karst Spring)	RESE-1003086	13-Mar-13	<0.080	<0.00300	**<0.025**	---	---	---	0.00014 j	---	<0.0060	0.00550	---	<0.060	0.000101 j	<0.0040	---	<0.008	0.00193	---	<0.000100	---	<0.00100	0.0232	SVL
QC 22.6 E (Karst Spring)	RESE-1003086	13-Mar-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
QC 22.6 E (Karst Spring)	RESE-1003086	13-Mar-13	---	<0.00300	**<0.025**	0.0071	<0.0020	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	<0.0040	---	---	<0.010	0.00038 jd	<0.0050	---	<0.00100	0.0251	SVL
QC 27.3 C	RESE-1001184	08-Feb-05	---	<0.00300	0.00490	0.0187	<0.00200	---	<0.00020	<0.00600	---	<0.0100	---	---	<0.00300	---	<0.00020	---	<0.0100	---	<0.00010	---	<0.00200	<0.0100	SVL
QC 27.3 C	RESE-1001184	08-Feb-05	*9.32*	<0.00300	0.00780	---	<0.00200	<0.0400	0.00021	---	<0.00600	0.0240	---	*5.11*	0.00770	---	<0.00020	<0.00800	---	<0.00300	<0.00010	<1.00	<0.00200	0.0200	SVL
QC 27.3 C	RESE-1001184	08-Feb-05	---	<0.00300	0.00730	---	<0.00200	---	0.00032	<0.00600	---	0.0200	---	---	0.00780	*0.120*	---	---	<0.0100	<0.00300	<0.00010	---	---	0.0180	SVL
QC 27.3 C	RESE-1001207	04-May-05	---	<0.00300	0.0042	0.0234	<0.00200	---	<0.00020	<0.00600	---	<0.0100	---	---	<0.00300	---	<0.00020	---	<0.0100	---	<0.00010	---	<0.00200	<0.0100	SVL
QC 27.3 C	RESE-1001207	04-May-05	<0.0300	<0.00300	0.0043	---	<0.00200	<0.0400	<0.00020	---	<0.00600	<0.0100	---	<0.0600	<0.00300	---	<0.00020	0.0088	---	<0.00300	<0.00010	<1.00	<0.00200	<0.0100	SVL
QC 27.3 C	RESE-1001207	04-May-05	---	<0.00300	0.0040	---	<0.00200	---	<0.00020	<0.00600	---	<0.0100	---	---	<0.00300	<0.00400	---	---	<0.0100	<0.00300	<0.00010	---	---	<0.0100	SVL
QC 27.3 C	RESE-1002002	05-Aug-08	<0.080	<0.00300	**0.051**	0.0362	<0.00200	---	<0.000200	---	<0.0060	0.00914	---	<0.060	<0.00300	*0.0626*	<0.00020	0.0437	<0.010	---	<0.000100	---	<0.00100	<0.0100	SVL
QC 27.3 C	RESE-1002002	05-Aug-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
QC 27.3 C	RESE-1002002	05-Aug-08	---	<0.00300	**0.033**	---	<0.00200	0.083	<0.0020	<0.0060	---	0.010	---	---	<0.00300	*0.264*	---	---	<0.010	<0.00300	<0.0050	---	<0.00100	<0.0100	SVL
QC 27.3 C	RESE-1002024	04-Nov-08	<0.080	<0.00300	**<0.025**	0.0288	<0.00200	---	<0.000200	---	<0.0060	0.0110	---	<0.060	<0.00300	0.0050	<0.00020	0.0105	<0.010	---	<0.000100	---	<0.00100	<0.0100	SVL
QC 27.3 C	RESE-1002024	04-Nov-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
QC 27.3 C	RESE-1002024	04-Nov-08	---	<0.00300	**<0.025**	---	<0.00200	0.064	<0.0020	<0.0060	---	0.020	---	---	<0.00300	*0.0962*	---	---	<0.010	<0.00300	<0.0050	---	<0.00100	<0.0100	SVL
QC 27.3 C	RESE-1002054	17-Feb-09	0.089	<0.00300	**<0.025**	0.0112	<0.00200	---	0.000038 j	---	<0.0060	0.00921	---	<0.060	0.000188 j	0.0098	---	<0.0080	0.00102	---	<0.000100	---	<0.00100	<0.0100	SVL
QC 27.3 C	RESE-1002054	17-Feb-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
QC 27.3 C	RESE-1002054	17-Feb-09	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	0.025	---	---	0.00363	*0.0861*	---	---	<0.010	0.00021 jd	<0.0050	---	<0.00100	0.0130	SVL
QC 27.3 C	RESE-1002079	07-May-09	<0.080	<0.00300	**<0.025**	0.0475	<0.00200	---	<0.000024	---	<0.0060	0.00250	---	<0.060	<0.000053	*0.444*	---	0.0119	0.00218	---	<0.000100	---	<0.00100	<0.0100	SVL
QC 27.3 C	RESE-1002079	07-May-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
QC 27.3 C	RESE-1002079	07-May-09	---	<0.00300	**<0.025**	---	<0.00200	0.048	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	*0.543*	---	---	<0.010	0.00056 jd	<0.0050	---	<0.00100	<0.0100	SVL
QC 27.3 C	RESE-1002146	03-Nov-10	<0.080	<0.00300	**<0.025**	0.0207	---	---	<0.000024	---	<0.0060	0.00903	---	<0.060	<0.000019	<0.0040	---	<0.0080	0.00152	---	<0.000100	---	<0.00100	<0.0100	SVL
QC 27.3 C	RESE-1002146	03-Nov-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
QC 27.3 C	RESE-1002146	03-Nov-10	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	0.010	---	---	<0.00300	0.0156	---	---	<0.010	0.00051 jd	<0.0050	---	<0.00100	<0.0100	SVL
QC 27.3 C	RESE-1002175	19-Aug-11	<0.080	<0.00300	**<0.025**	---	---	---	0.00003 j	---	<0.0060	0.00827	---	0.098	0.000127 j	*0.293*	---	0.008	0.00265	---	<0.000100	---	<0.00100	<0.0100	SVL
QC 27.3 C	RESE-1002175	19-Aug-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
QC 27.3 C	RESE-1002175	19-Aug-11	---	<0.00300	**<0.025**	0.0227	<0.0020	<0.040	<0.0020	<0.0060	---	0.011	---	---	<0.00300	*0.307*	---	---	<0.010	<0.00070	<0.0050	---	<0.00100	<0.0100	SVL
QC 27.3 C	RESE-1002197	01-Dec-11	<0.080	<0.00300	**<0.025**	---	---	---	<0.000026	---	<0.0060	0.00755	---	<0.060	<0.000042	<0.0040	---	0.009	0.00251	---	<0.000100	---	<0.00100	<0.0100	SVL
QC 27.3 C	RESE-1002197	01-Dec-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
QC 27.3 C	RESE-1002197	01-Dec-11	---	<0.00300	**<0.025**	0.0236	<0.0020	<0.040	<0.0020	<0.0060	---	0.010	---	---	<0.00300	<0.0040	---	---	<0.010	<0.00070	<0.0050	---	<0.00100	<0.0100	SVL
QC 27.3 C	RESE-1002213	29-Feb-12	<0.080	<0.00300	**<0.025**	---	---	---	0.00003 j	---	<0.0060	0.00273	---	<0.060	0.000047 j	0.0043	---	<0.008	0.00200	---	<0.000100	---	<0.00100	<0.0100	SVL
QC 27.3 C	RESE-1002213	29-Feb-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
QC 27.3 C	RESE-1002213	29-Feb-12	---	<0.00300	**<0.025**	0.0203	<0.0020	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0043	---	---	<0.010	<0.00028	<0.0050	---	<0.00100	<0.0100	SVL
QC 27.3 C	RESE-1002249	09-May-12	<0.0222	<0.003	0.0092 j	---	---	---	<0.000014	---	0.0023 j	0.003	---	<0.0222	<0.000059	0.0016 j	---	<0.0081	0.0019	---	<0.000014	---	<0.000008	0.0029 j	SVL
QC 27.3 C	RESE-1002249	09-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.000054	---	---	---	---	---	---	---	SVL
QC 27.3 C	RESE-1002249	09-May-12	---	<0.00015	0.0074 j	0.0226	<0.00031	0.0254	<0.00029	0.002 j	---	0.0046 j	---	---	<0.000072	0.0092	---	---	<0.002	0.00042 j,d	<0.0007	---	<0.000009	<0.005	SVL
Surface Water 2 - Devils Canyon																									

MONTGOMERY & ASSOCIATES

TABLE B-2. TRACE CONSTITUENTS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	TRACE CONSTITUENTS[a] (mg/L)[b]																						ANALYTICAL LABORATORY
			Al	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	CN	Fe	Pb	Mn	Hg	Mo	Ni	Se	Ag	S	Tl	Zn	
Surface Water 2 - Devils Canyon																									
DC 10.9 C	RESE-1001004	16-May-03	---	<0.0060	<0.0030	0.0128	<0.0020	<0.040	<0.00010	---	---	0.0061	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
DC 10.9 C	RESE-1001004	16-May-03	0.182	<0.0060	<0.0030	---	<0.0020	---	<0.00010	---	<0.0060	0.0089	<0.10	0.198	<0.0050	---	<0.00020	<0.0080	---	<0.0030	0.00010	<1.0	---	<0.0050	SVL
DC 10.9 C	RESE-1001004	16-May-03	---	<0.0060	<0.0030	---	<0.0020	---	<0.00010	<0.0060	---	0.0086	---	---	<0.0030	0.0224	---	---	<0.010	<0.0030	<0.00010	---	<0.0020	<0.0050	SVL
DC 10.9 C	RESE-1001020	27-Aug-03	---	<0.0060	**0.0110**	0.0358	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	0.0055	SVL
DC 10.9 C	RESE-1001020	27-Aug-03	0.040	<0.0060	**0.0130**	---	<0.0020	<0.040	<0.00010	---	<0.0060	<0.0030	<0.010	*8.26*	<0.0050	---	<0.00020	<0.0080	---	<0.0030	<0.00010	<1.0	<0.0020	<0.0050	SVL
DC 10.9 C	RESE-1001020	27-Aug-03	---	<0.0060	**0.0130**	---	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	*0.826*	---	---	<0.010	<0.0030	<0.00010	---	---	<0.0050	SVL
DC 10.9 C	RESE-1001036	05-Nov-03	---	<0.0030	<0.0030	0.0109	<0.0020	---	<0.00010	<0.0060	---	0.0063	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
DC 10.9 C	RESE-1001036	05-Nov-03	0.199	<0.0030	<0.0030	---	<0.0020	<0.040	<0.00010	---	<0.0060	0.0090	---	*0.679*	<0.0050	---	<0.00020	<0.0080	---	<0.0030	<0.00010	<1.0	<0.0020	<0.0050	SVL
DC 10.9 C	RESE-1001036	05-Nov-03	---	<0.0030	<0.0030	---	<0.0020	---	<0.00010	<0.0060	---	0.0089	---	---	<0.0030	*0.0596*	---	---	<0.010	<0.0030	<0.00010	---	---	<0.0050	SVL
DC 10.9 C	RESE-1001060	11-Feb-04	---	<0.00050	<0.00060	0.0089	<0.00020	---	<0.00010	<0.00030	---	0.0045	---	---	<0.0010	---	<0.00020	---	0.00390 j	---	<0.00010	---	<0.00040	0.0012 j	SVL
DC 10.9 C	RESE-1001060	11-Feb-04	*0.499*	<0.00050	0.00100 j	---	<0.00020	<0.0070	<0.00010	---	<0.00070	0.0078	---	0.22	<0.0010	---	<0.00020	0.00240 j	---	<0.00080	<0.00010	<1.0	<0.00040	0.0014 j	SVL
DC 10.9 C	RESE-1001060	11-Feb-04	---	<0.00050	<0.00060	---	<0.00020	---	<0.00010	0.00043 j	---	0.0074	---	---	<0.0010	0.0092	---	---	0.00240 j	<0.00080	<0.00010	---	---	0.00290 j	SVL
DC 10.9 C	RESE-1001091	27-May-04	---	<0.0030	<0.0030	0.0107	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
DC 10.9 C	RESE-1001091	27-May-04	0.192	<0.0030	<0.0030	---	<0.0020	<0.040	<0.00010	---	<0.0060	0.0088	<0.010	*0.696*	<0.0030	---	<0.00020	<0.0080	---	<0.0030	<0.00010	<1.0	<0.0020	<0.0050	SVL
DC 10.9 C	RESE-1001091	27-May-04	---	<0.0030	<0.0030	---	<0.0020	---	<0.00010	<0.0060	---	0.0061	---	---	<0.0030	*0.0769*	---	---	<0.010	<0.0030	<0.00010	---	---	<0.0050	SVL
DC 10.9 C	RESE-1001099	11-Aug-04	---	<0.0030	**0.0140**	0.0172	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
DC 10.9 C	RESE-1001099	11-Aug-04	0.123	<0.0030	**0.0130**	---	<0.0020	<0.040	<0.00010	---	<0.0060	<0.0030	---	*5.45*	<0.0030	---	<0.00020	<0.0080	---	<0.0030	<0.00010	<1.0	<0.0020	<0.0050	SVL
DC 10.9 C	RESE-1001099	11-Aug-04	---	<0.0030	**0.0140**	---	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	*0.532*	---	---	<0.010	<0.0030	<0.00010	---	---	<0.0050	SVL
DC 10.9 C	RESE-1001169	05-Nov-04	---	<0.0030	<0.0030	0.0248	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
DC 10.9 C	RESE-1001169	05-Nov-04	0.048	<0.0030	0.0040	---	<0.0020	<0.040	<0.00010	---	<0.0060	<0.0030	---	*4.41*	<0.0030	---	<0.00020	<0.0080	---	<0.0030	<0.00010	<1.0	<0.0020	<0.0050	SVL
DC 10.9 C	RESE-1001169	05-Nov-04	---	<0.0030	0.0040	---	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	*0.229*	---	---	<0.010	<0.0030	<0.00010	---	---	<0.0050	SVL
DC 10.9 C	RESE-1001189	15-Feb-05	---	<0.00300	0.00350	0.0110	<0.00200	---	<0.00020	<0.00600	---	0.0150	---	---	<0.00300	---	<0.00020	---	<0.0100	---	<0.00010	---	<0.00200	<0.0100	SVL
DC 10.9 C	RESE-1001189	15-Feb-05	*1.15*	<0.00300	0.00360	---	<0.00200	<0.0400	<0.00020	---	<0.00600	0.0170	---	*0.553*	<0.00300	---	<0.00020	<0.00800	---	<0.00300	<0.00010	<1.00	<0.00200	<0.0100	SVL
DC 10.9 C	RESE-1001189	15-Feb-05	---	<0.00300	0.00350	---	<0.00200	---	<0.00020	<0.00600	---	0.0170	---	---	<0.00300	0.00990	---	---	<0.0100	<0.00300	0.00031	---	---	<0.0100	SVL
DC 10.9 C	RESE-1001208	09-May-05	---	<0.00300	<0.00300	0.0118	<0.00200	---	<0.00020	<0.00600	---	<0.0100	---	---	<0.00300	---	<0.00020	---	<0.0100	---	<0.00010	---	<0.00200	<0.0100	SVL
DC 10.9 C	RESE-1001208	09-May-05	*0.275*	<0.00300	<0.00300	---	<0.00200	<0.0400	<0.00020	---	<0.00600	<0.0100	---	*0.436*	<0.00300	---	<0.00020	<0.00800	---	<0.00300	<0.00010	<1.00	<0.00200	<0.0100	SVL
DC 10.9 C	RESE-1001208	09-May-05	---	<0.00300	<0.00300	---	<0.00200	---	<0.00020	<0.00600	---	<0.0100	---	---	<0.00300	0.0424	---	---	<0.0100	<0.00300	<0.00010	---	---	<0.0100	SVL
DC 10.9 C	RESE-1001224	10-Aug-05	---	<0.00300	0.0053	0.0250	<0.0020	---	<0.00020	<0.0060	---	<0.0100	---	---	<0.00300	---	<0.0002	---	<0.0100	---	<0.00010	---	<0.00200	<0.0100	SVL
DC 10.9 C	RESE-1001224	10-Aug-05	*0.407*	<0.00300	0.00760	---	<0.0020	<0.04	0.00100 j	---	<0.0060	<0.017	---	*1.42*	<0.00300	---	<0.0002	<0.0080	---	<0.00300	<0.00010	<1	<0.00200	<0.0100	SVL
DC 10.9 C	RESE-1001224	10-Aug-05	---	<0.00300	0.0073	---	<0.0020	---	<0.00020	<0.0060	---	<0.017	---	---	<0.00300	*0.225*	---	---	<0.0100	<0.00300	<0.00010	---	---	<0.0100	SVL
DC 10.9 C	RESE-1002224	27-Apr-12	0.0671 j	0.00049 j	<0.0067	---	---	---	<0.000014	---	<0.0014	0.0039	---	*0.338*	0.000091 j	*0.0564*	---	0.0029 j	0.0012	---	<0.000014	---	<0.000008	<0.0026	SVL
DC 10.9 C	RESE-1002224	27-Apr-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.000054	---	---	---	---	---	---	---	SVL
DC 10.9 C	RESE-1002224	27-Apr-12	---	0.00017 j,d	0.0035 j	0.0124	<0.00031	0.0139 j	<0.00029	<0.00075	---	0.005	---	---	0.00016 j,d	*0.0604*	---	---	0.0022 j	<0.00028	<0.0007	---	<0.000009	<0.0013	SVL
DC 10.9 C	RESE-1001146	22-May-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.0000021	---	---	---	---	---	---	---	TestAmerica
DC 13.5 C DUP	RESE-1001012	30-May-03	---	<0.0030	0.0050	0.0135	<0.0020	<0.040	<0.00010	---	---	0.0046 j-	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
DC 13.5 C DUP	RESE-1001012	30-May-03	0.044	<0.0030	0.0060 j	---	<0.0020	---	<0.00010	---	<0.0060	0.0087	<0.10	0.223	<0.0050	---	<0.00020	<0.0080	---	<0.0030	<0.00010	<1.0	---	<0.0050	SVL
DC 13.5 C DUP	RESE-1001012	30-May-03	---	<0.0030	0.0060	---	<0.0020	---	<0.00010	<0.0060	---	0.0077	---	---	<0.0030	*0.0776*	---	---	<0.010	<0.0030	<0.00010	---	<0.0020	<0.0050	SVL
DC 13.5 C	RESE-1001011	30-May-03	---	<0.0030	0.0050	0.0135	<0.0020	<0.040	<0.00010	---	---	0.0047 j-	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
DC 13.5 C	RESE-1001011	30-May-03	0.035	<0.0030	0.0060 j	---	<0.0020	---	<0.00010	---	<0.0060	0.0085	<0.10	0.217	<0.0050	---	<0.00020	<0.0080	---	<0.0030	<0.00010	<1.0	---	<0.0050	SVL
DC 13.5 C	RESE-1001011	30-May-03	---	<0.0030	0.0060	---	<0.0020	---	<0.00010	<0.0060	---	0.0076	---	---	<0.0030	*0.0804*	---	---	<0.010	<0.0030	<0.00010	---	<0.0020	<0.0050	SVL

MONTGOMERY & ASSOCIATES

TABLE B-2. TRACE CONSTITUENTS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	TRACE CONSTITUENTS[a] (mg/L)[b]																						ANALYTICAL LABORATORY
			Al	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	CN	Fe	Pb	Mn	Hg	Mo	Ni	Se	Ag	S	Tl	Zn	
Surface Water 2 - Devils Canyon																									
DC 13.5 C	RESE-1001021	27-Aug-03	---	<0.0060	**0.0110**	0.0176	<0.0020	---	<0.00010	<0.0060	---	0.0203	---	---	<0.0030	---	<0.00020	---	<0.010	---	0.00010	---	<0.0020	0.0091	SVL
DC 13.5 C	RESE-1001021	27-Aug-03	0.123	<0.0060	**0.0130**	---	<0.0020	<0.040	<0.00010	---	<0.0060	0.0248	<0.010	0.144	<0.0050	---	<0.00020	<0.0080	---	<0.0030	0.00010	<1.0	<0.0020	0.0126	SVL
DC 13.5 C	RESE-1001021	27-Aug-03	---	<0.0060	**0.0110**	---	<0.0020	---	<0.00010	<0.0060	---	0.0252	---	---	<0.0030	*0.113*	---	---	<0.010	<0.0030	0.00010	---	---	0.0138	SVL
DC 13.5 C	RESE-1001037	05-Nov-03	---	<0.0030	<0.0030	0.0076	<0.0020	---	<0.00010	<0.0060	---	0.0054	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
DC 13.5 C	RESE-1001037	05-Nov-03	0.086	<0.0030	<0.0030	---	<0.0020	<0.040	<0.00010	---	<0.0060	0.0055	---	0.273	<0.0050	---	<0.00020	<0.0080	---	<0.0030	<0.00010	<1.0	<0.0020	<0.0050	SVL
DC 13.5 C	RESE-1001037	05-Nov-03	---	<0.0030	<0.0030	---	<0.0020	---	<0.00010	<0.0060	---	0.0064	---	---	<0.0030	0.0211	---	---	<0.010	<0.0030	<0.00010	---	---	<0.0050	SVL
DC 13.5 C	RESE-1001059	11-Feb-04	---	<0.00050	0.00069 j	0.0101	<0.00020	---	<0.00010	<0.00030	---	0.0041	---	---	<0.0010	---	<0.00020	---	0.00480 j	---	<0.00010	---	<0.00040	0.00091 j	SVL
DC 13.5 C	RESE-1001059	11-Feb-04	*0.482*	<0.00050	0.00065 j	---	<0.00020	<0.0070	<0.00010	---	<0.00070	0.0061	---	*0.309*	<0.0010	---	<0.00020	0.00180 j	---	<0.00080	<0.00010	<1.0	<0.00040	0.00120 j	SVL
DC 13.5 C	RESE-1001059	11-Feb-04	---	<0.00050	0.00083 j	---	<0.00020	---	<0.00010	<0.00030	---	0.0059	---	---	<0.0010	0.0198	---	---	0.00150 j	<0.00080	<0.00010	---	---	0.00160 j	SVL
DC 13.5 C	RESE-1001086	26-May-04	---	<0.0030	<0.0030	0.0119	<0.0020	---	0.00100	<0.0060	---	0.0036	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
DC 13.5 C	RESE-1001086	26-May-04	0.053	<0.0030	<0.0030	---	<0.0020	<0.040	<0.00010	---	<0.0060	0.0067	<0.010	*0.308*	<0.0030	---	<0.00020	<0.0080	---	<0.0030	<0.00010	<1.0	<0.0020	<0.0050	SVL
DC 13.5 C	RESE-1001086	26-May-04	---	<0.0030	<0.0030	---	<0.0020	---	<0.00010	<0.0060	---	0.0045	---	---	<0.0030	*0.0749*	---	---	<0.010	<0.0030	<0.00010	---	---	<0.0050	SVL
DC 13.5 C	RESE-1001190	15-Feb-05	---	<0.00300	0.00320	0.0121	<0.00200	---	<0.00020	<0.00600	---	0.0150	---	---	<0.00300	---	<0.00020	---	<0.0100	---	<0.00010	---	<0.00200	<0.0100	SVL
DC 13.5 C	RESE-1001190	15-Feb-05	*1.43*	<0.00300	0.00330	---	<0.00200	<0.0400	<0.00020	---	<0.00600	0.0170	---	*0.697*	<0.00300	---	<0.00020	<0.00800	---	<0.00300	<0.00010	<1.00	<0.00200	<0.0100	SVL
DC 13.5 C	RESE-1001190	15-Feb-05	---	<0.00300	0.00330	---	<0.00200	---	<0.00020	<0.00600	---	0.0160	---	---	<0.00300	0.00900	---	---	<0.0100	<0.00300	0.00013	---	---	<0.0100	SVL
DC 13.5 C	RESE-1001209	09-May-05	---	<0.00300	<0.00300	0.0153	<0.00200	---	<0.00020	<0.00600	---	<0.0100	---	---	<0.00300	---	<0.00020	---	<0.0100	---	<0.00010	---	<0.00200	<0.0100	SVL
DC 13.5 C	RESE-1001209	09-May-05	0.072	<0.00300	<0.00300	---	<0.00200	<0.0400	<0.00020	---	<0.00600	<0.0100	---	0.209	<0.00300	---	<0.00020	<0.00800	---	<0.00300	<0.00010	<1.00	<0.00200	<0.0100	SVL
DC 13.5 C	RESE-1001209	09-May-05	---	<0.00300	<0.00300	---	<0.00200	---	<0.00020	<0.00600	---	<0.0100	---	---	<0.00300	*0.0607*	---	---	<0.0100	<0.00300	<0.00010	---	---	<0.0100	SVL
DC 13.5 C	RESE-1001225	10-Aug-05	---	<0.00300	0.0084	0.0158	<0.0020	---	<0.00020	<0.0060	---	<0.0100	---	---	<0.00300	---	<0.0002	---	<0.0100	---	<0.00010	---	<0.00200	<0.0100	SVL
DC 13.5 C	RESE-1001225	10-Aug-05	0.154	<0.00300	0.00880	---	<0.0020	<0.04	0.00020 j	---	<0.0060	<0.013	---	0.211	<0.00300	---	<0.0002	<0.0080	---	<0.00300	<0.00010	<1	<0.00200	<0.0100	SVL
DC 13.5 C	RESE-1001225	10-Aug-05	---	<0.00300	0.0078	---	<0.0020	---	<0.00020	<0.0060	---	<0.013	---	---	<0.00300	*0.142*	---	---	<0.0100	<0.00300	<0.00010	---	---	<0.0100	SVL
DC 13.5 C	RESE-1002014	21-Aug-08	<0.0141	0.00021 j	<0.0066	0.02	<0.00036	---	<0.000034	---	<0.00065	0.0023	---	*0.471*	0.000106 j	*0.0756*	<0.000064	<0.0023	<0.0023	---	<0.000017	---	<0.000018	<0.0019	SVL
DC 13.5 C	RESE-1002014	21-Aug-08	---	<0.0004	<0.0065	---	<0.00036	0.0188 j	<0.00096	<0.001	---	<0.0039	---	---	0.000441 j,d	*0.219*	<0.000064	---	<0.0023	<0.005	<0.00079	---	<0.000072	0.0031 j	SVL
DC 13.5 C	RESE-1002033	12-Nov-08	<0.080	<0.00300	**<0.025**	0.0111	<0.00200	---	<0.000200	---	<0.0060	0.00190	---	*0.489*	<0.00300	0.0496	<0.00020	<0.0080	<0.010	---	<0.000100	---	<0.00100	<0.0100	SVL
DC 13.5 C	RESE-1002033	12-Nov-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
DC 13.5 C	RESE-1002033	12-Nov-08	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	*0.236*	---	---	<0.010	<0.00300	<0.0050	---	<0.00100	<0.0100	SVL
DC 13.5 C DUP	RESE-1002034	12-Nov-08	<0.080	<0.00300	**<0.025**	0.0110	<0.00200	---	<0.000200	---	<0.0060	0.00194	---	*0.502*	<0.00300	0.0493	<0.00020	<0.0080	<0.010	---	<0.000100	---	<0.00100	<0.0100	SVL
DC 13.5 C DUP	RESE-1002034	12-Nov-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
DC 13.5 C DUP	RESE-1002034	12-Nov-08	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	*0.260*	---	---	<0.010	<0.00300	<0.0050	---	<0.00100	<0.0100	SVL
DC 13.5 C	RESE-1002057	19-Feb-09	0.189	<0.00300	**<0.025**	0.0106	<0.00200	---	<0.000034	---	<0.0060	0.0107	---	0.103	0.000335 j	0.0057	---	<0.0080	<0.00100	---	<0.000100	---	<0.00100	<0.0100	SVL
DC 13.5 C	RESE-1002057	19-Feb-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
DC 13.5 C	RESE-1002057	19-Feb-09	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	0.013	---	---	<0.00300	0.0078	---	---	<0.010	0.00021 jd	<0.0050	---	<0.00100	<0.0100	SVL
DC 13.5 C	RESE-1002103	21-May-09	<0.080	<0.00300	**<0.025**	---	<0.00200	---	<0.000024	---	<0.0060	0.00209	---	*0.446*	0.000130 j	*0.135*	---	<0.0080	0.00390	---	<0.000100	---	<0.00100	<0.0100	SVL
DC 13.5 C	RESE-1002103	21-May-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
DC 13.5 C	RESE-1002103	21-May-09	---	<0.00300	**<0.025**	0.0150	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	*0.160*	---	---	<0.010	<0.00030	<0.0050	---	<0.00100	<0.0100	SVL
DC 13.5 C	RESE-1002142	02-Nov-10	<0.080	<0.00300	**<0.025**	0.0064	---	---	<0.000024	---	<0.0060	0.00172	---	*0.937*	0.000085 j	*0.113*	---	<0.0080	<0.00100	---	<0.000100	---	<0.00100	<0.0100	SVL
DC 13.5 C	RESE-1002142	02-Nov-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
DC 13.5 C	RESE-1002142	02-Nov-10	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	*0.139*	---	---	<0.010	0.00034 jd	<0.0050	---	<0.00100	<0.0100	SVL
DC 13.5 C	RESE-1002223	27-Apr-12	<0.0222	0.00049 j	<0.0067	---	---	---	<0.000014	---	<0.0014	0.0035	---	0.128	0.0001 j	*0.065*	---	0.004 j	0.0011	---	<0.000014	---	<0.000008	<0.0026	SVL
DC 13.5 C	RESE-1002223	27-Apr-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.000054	---	---	---	---	---	---	---	SVL
DC 13.5 C	RESE-1002223	27-Apr-12	---	0.00021 j,d	<0.0033	0.0129	<0.00031	0.0128 j	<0.00029	<0.00075	---	0.0046 j	---	---	0.00017 j,d	*0.068*	---	---	0.0024 j	<0.00028	<0.0007	---	<0.000009	<0.0013	SVL

MONTGOMERY & ASSOCIATES

TABLE B-2. TRACE CONSTITUENTS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	TRACE CONSTITUENTS[a] (mg/L)[b]																						ANALYTICAL LABORATORY
			Al	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	CN	Fe	Pb	Mn	Hg	Mo	Ni	Se	Ag	S	Tl	Zn	
Surface Water 2 - Devils Canyon																									
DC 14.7 C	RESE-1001069	05-Mar-04	---	<0.0030	<0.0060	0.0172	<0.0020	---	<0.00020	<0.0060	---	0.0161	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
DC 14.7 C	RESE-1001069	05-Mar-04	2.53	<0.0030	0.0050	---	<0.0020	<0.040	<0.00010	---	<0.0060	0.0290	---	1.65	0.0030	---	<0.00020	<0.0080	---	<0.0030	0.00010	<1.0	<0.0020	0.0100	SVL
DC 14.7 C	RESE-1001069	05-Mar-04	---	<0.0030	0.0050	---	<0.0020	---	<0.00010	<0.0060	---	0.0251	---	---	0.0030	0.0849	---	---	<0.010	<0.0030	<0.00010	---	---	0.0093	SVL
DC 14.7 C	RESE-1002015	27-Aug-08	0.247	0.00052 j	0.0081 j	0.0193	<0.00036	---	<0.000034	---	<0.00065	0.0279	---	0.137	0.000207 j	0.0132	---	<0.0023	<0.0023	---	0.000027 j	---	<0.000018	<0.0019	SVL
DC 14.7 C	RESE-1002015	27-Aug-08	---	0.00072 j	0.0071 j	---	0.00047 j	0.0234 j	<0.00096	0.0023 j	---	0.0882	---	---	0.0099	0.16	---	---	<0.0023	0.00047 j	<0.00079	---	0.000054 j	0.0197	SVL
DC 14.7 C	RESE-1002127	17-Feb-10	0.172	<0.00300	<0.025	0.0087	---	---	<0.000024	---	<0.0060	0.00625	---	<0.060	0.000115 j	<0.0040	---	<0.0080	<0.00100	---	<0.000100	---	<0.00100	<0.0100	SVL
DC 14.7 C	RESE-1002127	17-Feb-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
DC 14.7 C	RESE-1002127	17-Feb-10	---	<0.00300	<0.025	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	<0.0040	---	---	<0.010	<0.00030	<0.0050	---	<0.00100	<0.0100	SVL
DC 14.7 C	RESE-1001128	03-Mar-14	2.2	<0.00050	0.0030	0.015	0.00033 j	<0.023	<0.00025	<0.00050	r	0.013	---	1.0	<0.00050	0.0087	---	<0.00050	0.00093 j	<0.00050	<0.00050	---	<0.00050	0.024	TestAmerica
DC 14.7 C	RESE-1001128	03-Mar-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.000030	---	---	---	---	---	---	---	TestAmerica
DC 14.7 C	RESE-1001128	03-Mar-14	2.5	<0.00050	0.0029	0.016	<0.00020	<0.023	<0.00025	<0.00050	r	0.015	---	1.2	<0.00050	0.0071	---	<0.00050	<0.0014	<0.00050	<0.00050	---	<0.00050	0.012 j	TestAmerica
DC 15.2 C	RESE-1001191	15-Feb-05	---	<0.00300	<0.00300	0.0126	<0.00200	---	<0.00020	<0.00600	---	0.0150	---	---	<0.00300	---	<0.00020	---	<0.0100	---	<0.00010	---	<0.00200	<0.0100	SVL
DC 15.2 C	RESE-1001191	15-Feb-05	0.714	<0.00300	<0.00300	---	<0.00200	<0.0400	<0.00020	---	<0.00600	0.0170	---	0.376	<0.00300	---	<0.00020	<0.00800	---	<0.00300	<0.00010	<1.00	<0.00200	<0.0100	SVL
DC 15.2 C	RESE-1001191	15-Feb-05	---	<0.00300	0.00320	---	<0.00200	---	<0.00020	<0.00600	---	0.0160	---	---	<0.00300	0.0105	---	---	<0.0100	<0.00300	<0.00010	---	---	<0.0100	SVL
DC 15.2 C	RESE-1001210	09-May-05	---	<0.00300	<0.00300	0.0248	<0.00200	---	<0.00020	<0.00600	---	<0.0100	---	---	<0.00300	---	<0.00020	---	<0.0100	---	<0.00010	---	<0.00200	<0.0100	SVL
DC 15.2 C	RESE-1001210	09-May-05	0.044	<0.00300	<0.00300	---	<0.00200	<0.0400	<0.00020	---	<0.00600	<0.0100	---	<0.0600	<0.00300	---	<0.00020	<0.00800	---	<0.00300	<0.00010	<1.00	<0.00200	<0.0100	SVL
DC 15.2 C	RESE-1001210	09-May-05	---	<0.00300	<0.00300	---	<0.00200	---	<0.00020	<0.00600	---	<0.0100	---	---	<0.00300	0.0059	---	---	<0.0100	<0.00300	<0.00010	---	---	<0.0100	SVL
DC 15.2 C	RESE-1001226	10-Aug-05	---	<0.00300	<0.00300	0.0539	<0.0020	---	<0.00020	<0.0060	---	<0.0100	---	---	<0.00300	---	<0.0002	---	<0.0100	---	<0.00010	---	<0.00200	0.010	SVL
DC 15.2 C	RESE-1001226	10-Aug-05	0.533	<0.00300	0.00370	---	<0.0020	<0.04	0.00200 j	---	<0.0060	<0.011	---	0.466	<0.00300	---	<0.0002	<0.0083	---	<0.00300	<0.00010	<1	<0.00200	0.016	SVL
DC 15.2 C	RESE-1001226	10-Aug-05	---	<0.00300	<0.00300	---	<0.0020	---	<0.00020	<0.0060	---	<0.0100	---	---	<0.00300	0.103	---	---	<0.0100	<0.00300	<0.00010	---	---	0.016	SVL
DC 15.5 C	RESE-1002003	05-Aug-08	<0.080	<0.00300	<0.025	0.0045	<0.00200	---	<0.000200	---	<0.0060	0.00871	---	<0.060	<0.00300	0.0253	<0.00020	<0.0080	<0.010	---	<0.000100	---	<0.00100	<0.0100	SVL
DC 15.5 C	RESE-1002003	05-Aug-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
DC 15.5 C	RESE-1002003	05-Aug-08	---	<0.00300	<0.025	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0697	---	---	<0.010	<0.00300	<0.0050	---	<0.00100	<0.0100	SVL
DC 15.5 C	RESE-1002032	12-Nov-08	<0.080	<0.00300	<0.025	<0.0020	<0.00200	---	<0.000200	---	<0.0060	0.00375	---	<0.060	<0.00300	0.0137	<0.00020	<0.0080	<0.010	---	<0.000100	---	<0.00100	<0.0100	SVL
DC 15.5 C	RESE-1002032	12-Nov-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
DC 15.5 C	RESE-1002032	12-Nov-08	---	<0.00300	<0.025	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0230	---	---	<0.010	<0.00300	<0.0050	---	<0.00100	<0.0100	SVL
DC 15.5 C	RESE-1002069	26-Feb-09	0.272	<0.00300	<0.025	0.0045	<0.00200	---	<0.000042	---	<0.0060	0.00652	---	0.090	0.000199 j	0.0046	---	<0.0080	<0.00100	---	<0.000100	---	<0.00100	<0.0100	SVL
DC 15.5 C	RESE-1002069	26-Feb-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
DC 15.5 C	RESE-1002069	26-Feb-09	---	<0.00300	<0.025	---	<0.00200	<0.040	<0.00020	<0.0060	---	<0.010	---	---	<0.00300	<0.0040	---	---	<0.010	<0.00041	<0.0050	---	<0.00100	<0.0100	SVL
DC 15.5 C	RESE-1002075	05-May-09	0.249	<0.00300	<0.025	0.0062	<0.00200	---	<0.000024	---	<0.0060	0.00453	---	0.102	0.000271 j	0.0095	---	<0.0080	<0.00100	---	<0.000100	---	<0.00100	<0.0100	SVL
DC 15.5 C	RESE-1002075	05-May-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
DC 15.5 C	RESE-1002075	05-May-09	---	<0.00300	<0.025	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0092	---	---	<0.010	<0.00030	<0.0050	---	<0.00100	<0.0100	SVL
DC 15.5 C	RESE-1002152	08-Nov-10	0.144	<0.00300	<0.025	0.0049	---	---	<0.000024	---	<0.0060	0.00472	---	0.280	0.000267 j	0.0383	---	<0.0080	<0.00100	---	<0.000100	---	<0.00100	<0.0100	SVL
DC 15.5 C	RESE-1002152	08-Nov-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
DC 15.5 C	RESE-1002152	08-Nov-10	---	<0.00300	<0.025	---	<0.00200	<0.040	<0.0020	<0.0060	---	0.011	---	---	<0.00300	0.0438	---	---	<0.010	0.00092 jd	<0.0050	---	<0.00100	<0.0100	SVL
DC 15.5 C	RESE-1002179	22-Aug-11	<0.080	<0.00300	<0.025	---	---	---	<0.000026	---	<0.0060	0.00494	---	<0.060	<0.000042	0.0053	---	<0.008	0.00109	---	<0.000100	---	<0.00100	<0.0100	SVL
DC 15.5 C	RESE-1002179	22-Aug-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
DC 15.5 C	RESE-1002179	22-Aug-11	---	<0.00300	<0.025	0.0048	<0.0020	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.137	---	---	<0.010	<0.00070	<0.0050	---	<0.00100	<0.0100	SVL
DC 15.5 C	RESE-1002191	29-Nov-11	0.098	<0.00300	<0.025	---	---	---	<0.000026	---	<0.0060	0.00335	---	<0.060	0.000128 j	0.0126	---	<0.008	0.00103	---	<0.000100	---	<0.00100	<0.0100	SVL
DC 15.5 C	RESE-1002191	29-Nov-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
DC 15.5 C	RESE-1002191	29-Nov-11	---	<0.00300	<0.025	0.0056	<0.0020	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0123	---	---	<0.010	<0.00070	<0.0050	---	<0.00100	<0.0100	SVL

MONTGOMERY & ASSOCIATES

TABLE B-2. TRACE CONSTITUENTS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	TRACE CONSTITUENTS[a] (mg/L)[b]																						ANALYTICAL LABORATORY
			Al	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	CN	Fe	Pb	Mn	Hg	Mo	Ni	Se	Ag	S	Tl	Zn	
Surface Water 2 - Devils Canyon																									
DC 15.5 C DUP	RESE-1002192	29-Nov-11	0.097	<0.00300	**<0.025**	---	---	---	0.00003 j	---	<0.0060	0.00365	---	<0.060	0.000346 j	0.0119	---	<0.008	<0.00100	---	<0.000100	---	<0.00100	<0.0100	SVL
DC 15.5 C DUP	RESE-1002192	29-Nov-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
DC 15.5 C DUP	RESE-1002192	29-Nov-11	---	<0.00300	**<0.025**	0.0055	<0.0020	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0125	---	---	<0.010	<0.00070	<0.0050	---	<0.00100	<0.0100	SVL
DC 15.5 C	RESE-1002215	01-Mar-12	<0.080	<0.00300	**<0.025**	---	---	---	0.00002 j	---	<0.0060	0.00425	---	<0.060	0.000106 j	0.0061	---	<0.008	0.00166	---	<0.000100	---	<0.00100	<0.0100	SVL
DC 15.5 C	RESE-1002215	01-Mar-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
DC 15.5 C	RESE-1002215	01-Mar-12	---	<0.00300	**<0.025**	0.0052	<0.0020	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0051	---	---	<0.010	0.00029 jd	<0.0050	---	<0.00100	<0.0100	SVL
DC 15.5 C	RESE-1002246	09-May-12	0.103	<0.003	<0.0067	---	---	---	<0.000014	---	<0.0014	0.0029	---	0.06 j	<0.000059	0.0183	---	<0.0021	0.00064 j	---	<0.000014	---	<0.000008	<0.0026	SVL
DC 15.5 C	RESE-1002246	09-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.000054	---	---	---	---	---	---	---	SVL
DC 15.5 C	RESE-1002246	09-May-12	---	<0.00015	<0.0033	0.0059	<0.00031	0.0162 j	<0.00029	<0.00075	---	0.0036 j	---	---	0.000093 j,d	0.0232	---	---	<0.002	<0.00028	<0.0007	---	<0.000009	<0.005	SVL
DC 15.5 C DUP	RESE-1002247	09-May-12	0.0877	<0.003	<0.0067	---	---	---	<0.000014	---	<0.0014	0.0029	---	0.0618 j	<0.000059	0.0192	---	<0.0021	0.00059 j	---	<0.000014	---	0.00001 j	0.0033 j	SVL
DC 15.5 C DUP	RESE-1002247	09-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.000054	---	---	---	---	---	---	---	SVL
DC 15.5 C DUP	RESE-1002247	09-May-12	---	<0.00015	<0.0033	0.0057	<0.00031	<0.02	<0.00029	<0.00075	---	0.0039 j	---	---	0.00017 j,d	0.0226	---	---	<0.002	<0.00028	<0.0007	---	0.00001 j,d	<0.005	SVL
DC 15.5 C	RESE-1003052	13-Aug-12	<0.080	<0.00300	**<0.025**	---	---	---	<0.000014	---	<0.0060	<0.00100	---	*0.390*	0.000159 j	*0.822*	---	<0.008	0.00140	---	<0.000100	---	<0.00100	<0.0100	SVL
DC 15.5 C	RESE-1003052	13-Aug-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
DC 15.5 C	RESE-1003052	13-Aug-12	---	<0.00300	**0.038**	0.0361	<0.0020	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	*1.06*	---	---	<0.010	0.00085 jd	<0.0050	---	<0.00100	<0.0100	SVL
DC 15.5 C DUP	RESE-1003053	13-Aug-12	<0.080	<0.00300	**<0.025**	---	---	---	<0.000014	---	<0.0060	0.00101	---	*0.407*	0.000215 j	*0.824*	---	<0.008	0.00136	---	<0.000100	---	<0.00100	<0.0100	SVL
DC 15.5 C DUP	RESE-1003053	13-Aug-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
DC 15.5 C DUP	RESE-1003053	13-Aug-12	---	<0.00300	**0.032**	0.0335	<0.0020	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	*1.02*	---	---	<0.010	0.00075 jd	<0.0050	---	<0.00100	<0.0100	SVL
DC 4.1 E	RESE-1001007	21-May-03	---	<0.0060	<0.0030	0.0126	<0.0020	<0.040	<0.00010	---	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	0.0096	SVL
DC 4.1 E	RESE-1001007	21-May-03	<0.020	<0.0060	<0.0030	---	<0.0020	---	<0.00010	---	<0.0060	<0.0030	<0.10	<0.020	<0.0050	---	<0.00020	<0.0080	---	<0.0030	<0.00010	<1.0	---	0.0215	SVL
DC 4.1 E	RESE-1001007	21-May-03	---	<0.0060	<0.0030	---	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	<0.0020	---	---	<0.010	<0.0030	<0.00010	---	<0.0020	0.0224	SVL
DC 4.1 E	RESE-1001019	26-Aug-03	---	<0.0060	<0.0030	0.0132	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
DC 4.1 E	RESE-1001019	26-Aug-03	<0.020	<0.0060	<0.0030	---	<0.0020	<0.040	<0.00010	---	<0.0060	<0.0030	<0.010	<0.020	<0.0050	---	<0.00020	0.0081	---	<0.0030	<0.00010	<1.0	<0.0020	<0.0050	SVL
DC 4.1 E	RESE-1001019	26-Aug-03	---	<0.0060	<0.0030	---	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	<0.0020	---	---	<0.010	<0.0030	<0.00010	---	---	<0.0050	SVL
DC 4.1 E	RESE-1001040	11-Nov-03	---	<0.0030	<0.0030	0.0139	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
DC 4.1 E	RESE-1001040	11-Nov-03	<0.020	<0.0030	<0.0030	---	<0.0020	<0.040	<0.00010	---	<0.0060	<0.0030	---	<0.020	<0.0050	---	<0.00020	<0.0080	---	<0.0030	<0.00010	<1.0	<0.0020	<0.0050	SVL
DC 4.1 E	RESE-1001040	11-Nov-03	---	<0.0030	<0.0030	---	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	<0.0020	---	---	<0.010	<0.0030	<0.00010	---	---	<0.0050	SVL
DC 4.1 E	RESE-1001058	10-Feb-04	---	<0.00050	0.00120 j	0.0128	<0.00020	---	<0.00010	0.00033 j	---	<0.00210	---	---	<0.0010	---	<0.00020	---	0.00390 j	---	<0.00010	---	<0.00040	0.0007 j	SVL
DC 4.1 E	RESE-1001058	10-Feb-04	0.0082 j	<0.00050	0.00180 j	---	<0.00020	<0.0070	<0.00010	---	<0.00070	<0.00210	---	<0.0130	<0.0010	---	<0.00020	0.00490 j	---	<0.00080	<0.00010	<1.0	<0.00040	0.00140 j	SVL
DC 4.1 E	RESE-1001058	10-Feb-04	---	<0.00050	0.00110 j	---	<0.00020	---	<0.00010	0.00040 j	---	<0.00210	---	---	<0.0010	<0.0010	---	---	<0.00130	<0.00080	<0.00010	---	---	0.00180 j	SVL
DC 4.1 E	RESE-1001143	20-May-14	<0.026	<0.00050	0.0020	0.012	<0.00020	0.016 j	<0.00025	<0.00050	<0.00050	<0.0017	---	0.017 j	<0.00050	<0.00050	<0.000030	0.0013 j	<0.0016	<0.00050	<0.00050	---	<0.00050	<0.0050	TestAmerica
DC 4.1 E	RESE-1001143	20-May-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.000030	---	---	---	---	---	---	---	TestAmerica
DC 4.1 E	RESE-1001143	20-May-14	<0.026	<0.00050	0.0018	0.012	<0.00020	0.018 j	<0.00025	<0.00050	<0.00050	<0.0017	---	<0.011	<0.00050	<0.00050	---	0.0014 j	<0.0016	<0.00050	<0.00050	---	<0.00050	<0.0050	TestAmerica
DC 4.1 E	RESE-1001336	25-Nov-14	<0.026	<0.00050	0.0020	0.014	<0.00020	0.012 j	<0.00025	<0.00050	<0.00050	<0.0017	---	<0.011	<0.00050	0.0012	0.000044 j	0.00065 j	<0.0016	<0.00050	<0.00050	---	<0.00050	0.0027 j	TestAmerica
DC 4.1 E	RESE-1001336	25-Nov-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.000030	---	---	---	---	---	---	---	TestAmerica
DC 4.1 E	RESE-1001336	25-Nov-14	<0.026	<0.00050	0.0021	0.014	<0.00020	0.017 j	<0.00025	0.00059 j	<0.00050	<0.0017	---	0.014 j	0.00069 j	0.0017	---	0.00063 j	<0.0016	<0.00050	<0.00050	---	<0.00050	0.0026 j	TestAmerica
DC 5.5 C	RESE-1001039	10-Nov-03	---	<0.0030	0.0040	0.0405	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
DC 5.5 C	RESE-1001039	10-Nov-03	<0.020	<0.0030	0.0040	---	<0.0020	<0.040	<0.00010	---	<0.0060	<0.0030	---	0.043	<0.0050	---	<0.00020	0.0083	---	<0.0030	<0.00010	<1.0	<0.0020	<0.0050	SVL
DC 5.5 C	RESE-1001039	10-Nov-03	---	<0.0030	0.0040	---	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	0.0130	---	---	<0.010	<0.0030	<0.00010	---	---	<0.0050	SVL
DC 5.5 C	RESE-1001067	25-Feb-04	---	<0.00030	0.00310	0.0170	<0.00020	---	<0.00010	<0.00030	---	0.0022 j	---	---	<0.0010	---	<0.00020	---	0.0042 j	---	<0.00010	---	<0.00040	<0.00020	SVL
DC 5.5 C	RESE-1001067	25-Feb-04	0.0281	<0.00030	0.00410	---	<0.00020	<0.0070	<0.00010	---	<0.00070	0.0029 j	---	0.0256	<0.0010	---	<0.00020	0.0025 j	---	<0.00080	<0.00010	<1.0	<0.00040	0.003 j	SVL
DC 5.5 C	RESE-1001067	25-Feb-04	---	<0.00030	0.00310	---	<0.00020	---	<0.00010	<0.00030	---	<0.00210	---	---	<0.0010	0.0016 j	---	---	<0.00130	<0.00080	<0.00010	---	---	<0.00020	SVL

MONTGOMERY & ASSOCIATES

TABLE B-2. TRACE CONSTITUENTS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	TRACE CONSTITUENTS[a] (mg/L)[b]																						ANALYTICAL LABORATORY
			Al	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	CN	Fe	Pb	Mn	Hg	Mo	Ni	Se	Ag	S	Tl	Zn	
Surface Water 2 - Devils Canyon																									
DC 5.5 C	RESE-1001076	20-May-04	---	<0.0030	0.0040	0.0256	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
DC 5.5 C	RESE-1001076	20-May-04	<0.020	<0.0030	0.0050	---	<0.0020	<0.040	<0.00010	---	<0.0060	<0.0030	<0.010	0.077	<0.0030	---	<0.00020	<0.0080	---	<0.0030	0.00010	<1.0	<0.0020	<0.0050	SVL
DC 5.5 C	RESE-1001076	20-May-04	---	<0.0030	0.0040	---	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	0.0465	---	---	<0.010	<0.0030	<0.00010	---	---	<0.0050	SVL
DC 5.5 C	RESE-1001158	23-Aug-04	---	<0.0030	0.0050	0.0539	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	0.0086	SVL
DC 5.5 C	RESE-1001158	23-Aug-04	<0.020	<0.0030	0.0060	---	<0.0020	<0.040	<0.00010	---	<0.0060	0.0059	---	0.057	<0.0030	---	<0.00020	0.0091	---	<0.0030	<0.00010	<1.0	<0.0020	<0.0050	SVL
DC 5.5 C	RESE-1001158	23-Aug-04	---	<0.0030	0.0060	---	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	0.0257	---	---	<0.010	<0.0030	<0.00010	---	---	<0.0050	SVL
DC 5.5 C	RESE-1001176	18-Nov-04	---	<0.0030	<0.0030	0.0270	<0.0020	---	<0.00010	<0.0060	---	<0.010	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.010	SVL
DC 5.5 C	RESE-1001176	18-Nov-04	<0.030	<0.0030	<0.0030	---	<0.0020	<0.040	<0.00010	---	<0.0060	<0.010	---	<0.060	<0.0030	---	<0.00033	<0.0080	---	<0.0030	<0.00010	<1.0	<0.0020	<0.010	SVL
DC 5.5 C	RESE-1001176	18-Nov-04	---	<0.0030	<0.0030	---	<0.0020	---	<0.00010	<0.0060	---	<0.010	---	---	<0.0030	0.0056	---	---	<0.010	<0.0030	<0.00010	---	---	<0.010	SVL
DC 5.5 C	RESE-1001198	28-Feb-05	---	<0.00300	0.00320	0.0127	<0.00200	---	<0.00020	<0.00600	---	<0.0100	---	---	<0.00300	---	<0.00020	---	<0.0100	---	<0.00010	---	<0.00200	<0.0100	SVL
DC 5.5 C	RESE-1001198	28-Feb-05	*0.658*	<0.00300	0.00340	---	<0.00200	<0.0400	<0.00020	---	<0.00600	0.0100	---	*0.328*	<0.00300	---	<0.00020	<0.00800	---	<0.00300	<0.00010	<1.00	<0.00200	<0.0100	SVL
DC 5.5 C	RESE-1001198	28-Feb-05	---	<0.00300	0.00320	---	<0.00200	---	<0.00020	<0.00600	---	0.0110	---	---	<0.00300	0.00460	---	---	<0.0100	<0.00300	<0.00010	---	---	<0.0100	SVL
DC 5.5 C	RESE-1001216	24-May-05	---	<0.00300	0.0053	0.0253	<0.00200	---	<0.00020	<0.00600	---	<0.0100	---	---	<0.00300	---	<0.00020	---	<0.0100	---	<0.00010	---	<0.00200	<0.0100	SVL
DC 5.5 C	RESE-1001216	24-May-05	<0.0300	<0.00300	0.0050	---	<0.00200	<0.0400	<0.00020	---	<0.00600	<0.0100	---	0.088	<0.00300	---	<0.00020	<0.00800	---	<0.00300	<0.00010	<1.00	<0.00200	<0.0100	SVL
DC 5.5 C	RESE-1001216	24-May-05	---	<0.00300	0.0052	---	<0.00200	---	<0.00020	<0.00600	---	<0.0100	---	---	<0.00300	0.0466	---	---	<0.0100	<0.00300	<0.00010	---	---	<0.0100	SVL
DC 5.5 C	RESE-1001229	23-Aug-05	---	<0.00300	0.0060	0.0229	<0.0020	---	<0.00020	<0.0060	---	<0.0100	---	---	<0.00300	---	<0.0002	---	<0.0100	---	<0.00010	---	<0.00200	<0.0100	SVL
DC 5.5 C	RESE-1001229	23-Aug-05	0.037	<0.00300	0.00610	---	<0.0020	<0.04	<0.00010	---	<0.0060	<0.0100	---	0.106	<0.00300	---	<0.0002	<0.0080	---	<0.00300	<0.00010	<1	<0.00200	<0.0100	SVL
DC 5.5 C	RESE-1001229	23-Aug-05	---	<0.00300	0.0056	---	<0.0020	---	<0.00020	<0.0060	---	<0.0100	---	---	<0.00300	0.0445	---	---	<0.0100	<0.00300	<0.00010	---	---	0.020	SVL
DC 5.5 C	RESE-1002180	26-Aug-11	<0.080	<0.00300	**<0.025**	---	---	---	<0.000026	---	<0.0060	0.00125	---	<0.060	<0.000042	*0.252*	---	<0.008	0.00168	---	<0.000100	---	<0.00100	<0.0100	SVL
DC 5.5 C	RESE-1002180	26-Aug-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
DC 5.5 C	RESE-1002180	26-Aug-11	---	<0.00300	**<0.025**	0.0544	<0.0020	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	*0.276*	---	---	<0.010	<0.00070	<0.0050	---	<0.00100	<0.0100	SVL
DC 5.5 C	RESE-1002222	06-Mar-12	<0.080	<0.00300	**<0.025**	---	---	---	<0.000013	---	<0.0060	0.00211	---	<0.060	<0.000013	<0.0040	---	<0.008	<0.00100	---	<0.000100	---	<0.00100	<0.0100	SVL
DC 5.5 C	RESE-1002222	06-Mar-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
DC 5.5 C	RESE-1002222	06-Mar-12	---	<0.00300	**<0.025**	0.0176	<0.0020	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	<0.0040	---	---	<0.010	<0.00028	<0.0050	---	<0.00100	<0.0100	SVL
DC 6.1 E	RESE-1001077	20-May-04	---	<0.0030	<0.0030	0.0181	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
DC 6.1 E	RESE-1001077	20-May-04	<0.020	<0.0030	<0.0030	---	<0.0020	<0.040	<0.00010	---	<0.0060	<0.0030	<0.010	<0.020	<0.0030	---	<0.00020	<0.0080	---	<0.0030	<0.00010	<1.0	<0.0020	<0.0050	SVL
DC 6.1 E	RESE-1001077	20-May-04	---	<0.0030	<0.0030	---	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	<0.0020	---	---	<0.010	<0.0030	<0.00010	---	---	<0.0050	SVL
DC 6.1 E	RESE-1001159	23-Aug-04	---	<0.0030	<0.0030	0.0183	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
DC 6.1 E	RESE-1001159	23-Aug-04	<0.020	<0.0030	<0.0030	---	<0.0020	<0.040	<0.00010	---	<0.0060	<0.0030	---	<0.020	<0.0030	---	<0.00020	<0.0080	---	<0.0030	<0.00010	<1.0	<0.0020	<0.0050	SVL
DC 6.1 E	RESE-1001159	23-Aug-04	---	<0.0030	<0.0030	---	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	<0.0020	---	---	<0.010	<0.0030	<0.00010	---	---	<0.0050	SVL
DC 6.1 E	RESE-1001177	18-Nov-04	---	<0.0030	<0.0030	0.0181	<0.0020	---	<0.00010	<0.0060	---	<0.010	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.010	SVL
DC 6.1 E	RESE-1001177	18-Nov-04	<0.030	<0.0030	<0.0030	---	<0.0020	<0.040	<0.00010	---	<0.0060	<0.010	---	<0.060	<0.0030	---	<0.00020	<0.0080	---	<0.0030	<0.00010	<1.0	<0.0020	<0.010	SVL
DC 6.1 E	RESE-1001177	18-Nov-04	---	<0.0030	<0.0030	---	<0.0020	---	<0.00010	<0.0060	---	<0.010	---	---	<0.0030	<0.0040	---	---	<0.010	<0.0030	<0.00010	---	---	<0.010	SVL
DC 6.1 E	RESE-1001199	28-Feb-05	---	<0.00300	<0.00300	0.0231	<0.00200	---	<0.00020	<0.00600	---	<0.0100	---	---	<0.00300	---	<0.00020	---	<0.0100	---	<0.00010	---	<0.00200	<0.0100	SVL
DC 6.1 E	RESE-1001199	28-Feb-05	<0.0300	<0.00300	<0.00300	---	<0.00200	<0.0400	<0.00020	---	<0.00600	<0.0100	---	<0.0600	<0.00300	---	<0.00020	<0.00800	---	<0.00300	<0.00010	<1.00	<0.00200	<0.0100	SVL
DC 6.1 E	RESE-1001199	28-Feb-05	---	<0.00300	<0.00300	---	<0.00200	---	<0.00020	<0.00600	---	<0.0100	---	---	<0.00300	<0.00400	---	---	<0.0100	<0.00300	<0.00010	---	---	<0.0100	SVL
DC 6.1 E	RESE-1001217	24-May-05	---	<0.00300	<0.00300	0.0195	<0.00200	---	<0.00020	<0.00600	---	<0.0100	---	---	<0.00300	---	<0.00020	---	<0.0100	---	<0.00010	---	<0.00200	<0.0100	SVL
DC 6.1 E	RESE-1001217	24-May-05	<0.0300	<0.00300	<0.00300	---	<0.00200	<0.0400	<0.00020	---	<0.00600	<0.0100	---	<0.0600	<0.00300	---	<0.00020	<0.00800	---	<0.00300	<0.00010	<1.00	<0.00200	<0.0100	SVL
DC 6.1 E	RESE-1001217	24-May-05	---	<0.00300	<0.00300	---	<0.00200	---	<0.00020	<0.00600	---	<0.0100	---	---	<0.00300	<0.00400	---	---	<0.0100	<0.00300	<0.00010	---	---	<0.0100	SVL
DC 6.1 E	RESE-1001230	23-Aug-05	---	<0.00300	<0.00300	0.0185	<0.0020	---	<0.00020	<0.0060	---	<0.0100	---	---	<0.00300	---	<0.0002	---	<0.0100	---	<0.00010	---	<0.00200	<0.0100	SVL
DC 6.1 E	RESE-1001230	23-Aug-05	<0.030	<0.00300	<0.00300	---	<0.0020	<0.04	<0.00010	---	<0.0060	<0.0100	---	<0.060	<0.00300	---	<0.0002	<0.0080	---	<0.00300	<0.00010	<1	<0.00200	<0.0100	SVL
DC 6.1 E	RESE-1001230	23-Aug-05	---	<0.00300	<0.00300	---	<0.0020	---	<0.00020	<0.0060	---	<0.0100	---	---	<0.00300	<0.0040	---	---	<0.0100	<0.00300	<0.00010	---	---	<0.0100	SVL

MONTGOMERY & ASSOCIATES

TABLE B-2. TRACE CONSTITUENTS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	TRACE CONSTITUENTS[a] (mg/L)[b]																						ANALYTICAL LABORATORY
			Al	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	CN	Fe	Pb	Mn	Hg	Mo	Ni	Se	Ag	S	Tl	Zn	
Surface Water 2 - Devils Canyon																									
DC 6.1 E	RESE-1002007	07-Aug-08	<0.080	<0.00300	**<0.025**	0.0172	<0.00200	---	<0.000200	---	<0.0060	<0.00100	---	<0.060	<0.00300	<0.0040	<0.00020	0.0289	<0.010	---	<0.000100	---	<0.00100	<0.0100	SVL
DC 6.1 E	RESE-1002007	07-Aug-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
DC 6.1 E	RESE-1002007	07-Aug-08	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	<0.0040	---	---	<0.010	<0.00300	<0.0050	---	<0.00100	<0.0100	SVL
DC 6.1 E	RESE-1002036	06-Nov-08	<0.080	<0.00300	**<0.025**	0.0176	<0.00200	---	<0.000200	---	<0.0060	<0.0010	---	<0.060	<0.00300	<0.0040	<0.00020	<0.0080	<0.010	---	<0.000100	---	<0.00100	<0.0100	SVL
DC 6.1 E	RESE-1002036	06-Nov-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
DC 6.1 E	RESE-1002036	06-Nov-08	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	<0.0040	---	---	<0.010	<0.00300	<0.0050	---	<0.00100	<0.0100	SVL
DC 6.1 E	RESE-1002064	25-Feb-09	<0.080	<0.00300	**<0.025**	0.0171	<0.00200	---	<0.000042	---	<0.0060	<0.00100	---	<0.060	<0.000017	<0.0040	---	<0.0080	<0.00100	---	<0.000100	---	<0.00100	<0.0100	SVL
DC 6.1 E	RESE-1002064	25-Feb-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
DC 6.1 E	RESE-1002064	25-Feb-09	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.00020	<0.0060	---	<0.010	---	---	<0.00300	<0.0040	---	---	<0.010	<0.00041	<0.0050	---	<0.00100	<0.0100	SVL
DC 6.1 E	RESE-1002099	20-May-09	<0.080	<0.00300	**<0.025**	---	<0.00200	---	<0.000024	---	<0.0060	<0.00100	---	<0.060	<0.000053	<0.0040	---	<0.0080	<0.00100	---	<0.000100	---	<0.00100	<0.0100	SVL
DC 6.1 E	RESE-1002099	20-May-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
DC 6.1 E	RESE-1002099	20-May-09	---	<0.00300	**<0.025**	0.0172	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	<0.0040	---	---	<0.010	<0.00030	<0.0050	---	<0.00100	<0.0100	SVL
DC 6.1 E	RESE-1002135	19-Mar-10	<0.080	<0.00300	**<0.025**	0.0228	---	---	<0.000024	---	<0.0060	<0.00100	---	<0.060	<0.000053	<0.0040	---	<0.0080	<0.00100	---	<0.000100	---	<0.00100	<0.0100	SVL
DC 6.1 E	RESE-1002135	19-Mar-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
DC 6.1 E	RESE-1002135	19-Mar-10	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	<0.0040	---	---	<0.010	0.00033 jd	<0.0050	---	<0.00100	<0.0100	SVL
DC 6.1 E DUP	RESE-1002136	19-Mar-10	<0.080	<0.00300	**<0.025**	0.0228	---	---	<0.000024	---	<0.0060	<0.00100	---	<0.060	<0.000053	<0.0040	---	<0.0080	<0.00100	---	<0.000100	---	<0.00100	<0.0100	SVL
DC 6.1 E DUP	RESE-1002136	19-Mar-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
DC 6.1 E DUP	RESE-1002136	19-Mar-10	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	<0.0040	---	---	<0.010	<0.00030	<0.0050	---	<0.00100	<0.0100	SVL
DC 6.1 E	RESE-1002138	19-Oct-10	<0.080	<0.00300	**<0.025**	0.0191	---	---	<0.000024	---	<0.0060	<0.00100	---	<0.060	<0.000019	<0.0040	---	<0.0080	0.00107	---	<0.000100	---	<0.00100	<0.0100	SVL
DC 6.1 E	RESE-1002138	19-Oct-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
DC 6.1 E	RESE-1002138	19-Oct-10	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	<0.0040	---	---	<0.010	0.00068 jd	<0.0050	---	<0.00100	<0.0100	SVL
DC 6.1 E	RESE-1002161	10-Nov-10	<0.0172	<0.0001	<0.0066	0.0303	---	---	<0.000036	---	<0.00095	0.0014	---	0.032 j	<0.00002	0.0104	---	0.0058 j	0.0015 j+	---	<0.000012	---	<0.000018	<0.0019	SVL
DC 6.1 E	RESE-1002161	10-Nov-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.000065	---	---	---	---	---	---	---	SVL
DC 6.1 E	RESE-1002161	10-Nov-10	---	<0.00012	<0.0032	---	<0.00024	0.01 j	<0.00025	<0.00043	---	0.00 j	---	---	<0.003	0.0114	---	---	<0.0015	<0.0038	<0.0007	---	<0.000022	<0.01	SVL
DC 6.1 E	RESE-1003055	15-Aug-12	<0.080	<0.00300	**<0.025**	---	---	---	<0.000014	---	<0.0060	0.00223	---	<0.060	<0.000058	<0.0040	---	<0.008	<0.00100	---	<0.000100	---	<0.00100	<0.0100	SVL
DC 6.1 E	RESE-1003055	15-Aug-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
DC 6.1 E	RESE-1003055	15-Aug-12	---	<0.00300	**<0.025**	0.0191	<0.0020	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	<0.0040	---	---	<0.010	<0.00028	<0.0050	---	<0.00100	<0.0100	SVL
DC 6.14 C	RESE-1002013	20-Aug-08	<0.0141	<0.0001	<0.0066	0.0292	<0.00036	---	<0.000034	---	<0.00065	0.0022	---	<0.0202	<0.000043	<0.0013	<0.000064	<0.0023	<0.0023	---	<0.000017	---	<0.000018	<0.0019	SVL
DC 6.14 C	RESE-1002013	20-Aug-08	---	<0.0004	<0.0065	---	<0.00036	0.0258 j	<0.00096	<0.001	---	<0.0039	---	---	<0.000172	0.0062 j	<0.000064	---	<0.0023	<0.0004	<0.00079	---	<0.000072	<0.0019	SVL
DC 6.14 C	RESE-1002037	12-Nov-08	<0.080	<0.00300	**<0.025**	0.0249	<0.00200	---	<0.000200	---	<0.0060	0.00127	---	<0.060	<0.00300	0.0049	<0.00020	<0.0080	<0.010	---	<0.000100	---	<0.00100	<0.0100	SVL
DC 6.14 C	RESE-1002037	12-Nov-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
DC 6.14 C	RESE-1002037	12-Nov-08	---	<0.00300	**<0.025**	---	<0.00200	<0.040	0.0046	<0.0060	---	<0.010	---	---	<0.00300	0.0184	---	---	<0.010	<0.00300	<0.0050	---	<0.00100	<0.0100	SVL
DC 6.14 C	RESE-1002056	18-Feb-09	0.165	<0.00300	**<0.025**	0.0112	<0.00200	---	<0.000034	---	<0.0060	0.0117	---	0.097	0.000298 j	0.0105	---	<0.0080	0.00120	---	<0.000100	---	<0.00100	<0.0100	SVL
DC 6.14 C	RESE-1002056	18-Feb-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
DC 6.14 C	RESE-1002056	18-Feb-09	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	0.013	---	---	<0.00300	0.0097	---	---	<0.010	0.00016 jd	<0.0050	---	<0.00100	<0.0100	SVL
DC 6.14 C	RESE-1002078	06-May-09	<0.080	<0.00300	**<0.025**	0.0242	<0.00200	---	<0.000024	---	<0.0060	0.00134	---	<0.060	<0.000053	0.0090	---	<0.0080	<0.00100	---	<0.000100	---	<0.00100	<0.0100	SVL
DC 6.14 C	RESE-1002078	06-May-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
DC 6.14 C	RESE-1002078	06-May-09	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0079	---	---	<0.010	<0.00030	<0.0050	---	<0.00100	<0.0100	SVL
DC 6.14 C	RESE-1002196	30-Nov-11	<0.080	<0.00300	**<0.025**	---	---	---	<0.000026	---	<0.0060	0.00161	---	<0.060	<0.000042	<0.0040	---	<0.008	0.00178	---	<0.000100	---	<0.00100	<0.0100	SVL
DC 6.14 C	RESE-1002196	30-Nov-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
DC 6.14 C	RESE-1002196	30-Nov-11	---	<0.00300	**<0.025**	0.0316	<0.0020	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	<0.0040	---	---	<0.010	<0.00070	<0.0050	---	<0.00100	<0.0100	SVL

MONTGOMERY & ASSOCIATES

TABLE B-2. TRACE CONSTITUENTS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	TRACE CONSTITUENTS[a] (mg/L)[b]																						ANALYTICAL LABORATORY
			Al	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	CN	Fe	Pb	Mn	Hg	Mo	Ni	Se	Ag	S	Tl	Zn	
Surface Water 2 - Devils Canyon																									
DC 6.14 C	RESE-1002219	02-Mar-12	<0.080	<0.00300	**<0.025**	---	---	---	0.00002 j	---	<0.0060	0.00178	---	<0.060	0.000074 j	<0.0040	---	<0.008	0.00115	---	<0.000100	---	<0.00100	<0.0100	SVL
DC 6.14 C	RESE-1002219	02-Mar-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
DC 6.14 C	RESE-1002219	02-Mar-12	---	<0.00300	**<0.025**	0.0181	<0.0020	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	<0.0040	---	---	<0.010	0.00032 jd	<0.0050	---	<0.00100	<0.0100	SVL
DC 6.14 C	RESE-1002235	04-May-12	<0.0808	<0.003	<0.0067	---	---	---	<0.000014	---	<0.0014	0.0016	---	<0.0222	<0.000059	0.0049 j+	---	<0.0021	0.0012	<0.00022	<0.000014	---	<0.000008	<0.0026	SVL
DC 6.14 C	RESE-1002235	04-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.000054	---	---	---	---	---	---	---	SVL
DC 6.14 C	RESE-1002235	04-May-12	---	<0.00015	<0.0033	0.0237	<0.00031	<0.02	<0.00029	0.00084 j	---	0.0022 j	---	---	<0.000072	0.0037	---	---	<0.002	<0.00028	<0.0007	---	<0.000009	<0.0013	SVL
DC 6.14 C	RESE-1003066	26-Nov-12	<0.080	<0.00300	**<0.025**	---	---	---	<0.000014	---	<0.0060	0.00140	---	<0.060	<0.000058	0.0124	---	<0.008	<0.00100	---	<0.000100	---	<0.00100	<0.0100	SVL
DC 6.14 C	RESE-1003066	26-Nov-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
DC 6.14 C	RESE-1003066	26-Nov-12	---	<0.00300	**<0.025**	0.0407	<0.0020	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0313	---	---	<0.010	<0.00028	<0.0050	---	<0.00100	<0.0100	SVL
DC 6.14 C	RESE-1003082	11-Feb-13	<0.080	<0.00300	**<0.025**	---	---	---	<0.000014	---	<0.0060	0.00470	---	<0.060	<0.000058	0.0050	---	<0.008	0.00106	---	<0.000100	---	<0.00100	<0.0100	SVL
DC 6.14 C	RESE-1003082	11-Feb-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
DC 6.14 C	RESE-1003082	11-Feb-13	---	<0.00300	**<0.025**	0.0076	<0.0020	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0055	---	---	<0.010	<0.00032	<0.0050	---	<0.00100	<0.0100	SVL
DC 6.14 C	RESE-1003101	14-Jun-13	<0.080	<0.00300	0.0031	---	---	---	<0.00003	---	<0.0060	0.00189	---	<0.060	0.000127 j	0.0058	---	<0.008	0.00155	---	<0.000100	---	<0.00100	<0.0100	SVL
DC 6.14 C	RESE-1003101	14-Jun-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
DC 6.14 C	RESE-1003101	14-Jun-13	---	<0.00300	0.0030	0.0292	<0.0020	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0084	---	---	<0.010	0.00034 jd	<0.0050	---	<0.00100	<0.0100	SVL
DC 6.6 W (DCT 6.6 W)	RESE-1001010	29-May-03	---	<0.0030	0.0040	0.0238	<0.0020	<0.040	<0.00010	---	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
DC 6.6 W (DCT 6.6 W)	RESE-1001010	29-May-03	0.052	<0.0030	0.0040 j	---	<0.0020	---	<0.00010	---	<0.0060	<0.0030	<0.10	0.061	<0.0050	---	<0.00020	<0.0080	---	<0.0060	<0.00010	<1.0	---	<0.0050	SVL
DC 6.6 W (DCT 6.6 W)	RESE-1001010	29-May-03	---	<0.0030	0.0030	---	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	0.0086	---	---	<0.010	<0.0060	<0.00010	---	<0.0020	<0.0050	SVL
DC 6.6 W (DCT 6.6 W)	RESE-1001022	03-Sep-03	---	<0.0030	<0.0030	0.0324	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
DC 6.6 W (DCT 6.6 W)	RESE-1001022	03-Sep-03	<0.020	<0.0030	<0.0030	---	<0.0020	<0.040	<0.00010	---	<0.0060	<0.0030	<0.010	0.264	<0.0050	---	<0.00020	0.0088	---	<0.0150	<0.00010	<1.0	<0.0020	<0.0050	SVL
DC 6.6 W (DCT 6.6 W)	RESE-1001022	03-Sep-03	---	<0.0030	<0.0030	---	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	*0.323*	---	---	<0.010	<0.0150	<0.00010	---	---	<0.0050	SVL
DC 6.6 W (DCT 6.6 W)	RESE-1001033	04-Nov-03	---	<0.0030	0.0040	0.0361	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
DC 6.6 W (DCT 6.6 W)	RESE-1001033	04-Nov-03	<0.020	<0.0030	0.0060	---	<0.0020	<0.040	<0.00010	---	<0.0060	<0.0030	---	*0.433*	<0.0050	---	<0.00020	0.0100	---	<0.0060	<0.00010	<1.0	<0.0020	<0.0050	SVL
DC 6.6 W (DCT 6.6 W)	RESE-1001033	04-Nov-03	---	<0.0030	0.0050	---	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	*0.415*	---	---	<0.010	<0.0150	<0.00010	---	---	<0.0050	SVL
DC 6.6 W (DCT 6.6 W)	RESE-1001064	18-Feb-04	---	<0.00030	0.0056	0.0231	<0.00020	---	<0.00010	<0.00030	---	<0.00210	---	---	<0.0010	---	<0.00020	---	0.005 j	---	<0.00010	---	<0.00040	0.00051 j	SVL
DC 6.6 W (DCT 6.6 W)	RESE-1001064	18-Feb-04	0.02	0.00034 j	0.004	---	<0.00020	<0.0070	<0.00010	---	<0.00070	<0.00210	---	0.128	<0.0010	---	<0.00020	0.0054 j	---	<0.00080	<0.00010	<1.0	<0.00040	<0.00020	SVL
DC 6.6 W (DCT 6.6 W)	RESE-1001064	18-Feb-04	---	<0.00030	0.0043	---	<0.00020	---	<0.00010	<0.00030	---	<0.00210	---	---	<0.0010	*0.0809*	---	---	0.0021 j	<0.00080	<0.00010	---	---	<0.00020	SVL
DC 6.6 W (DCT 6.6 W)	RESE-1001074	05-May-04	---	<0.0030	<0.0030	0.0303	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
DC 6.6 W (DCT 6.6 W)	RESE-1001074	05-May-04	0.025	<0.0030	<0.0030	---	<0.0020	<0.040	<0.00010	---	<0.0060	<0.0030	<0.010	0.277	<0.0030	---	<0.00020	<0.0080	---	<0.0060	<0.00010	<1.0	<0.0020	<0.0050	SVL
DC 6.6 W (DCT 6.6 W)	RESE-1001074	05-May-04	---	<0.0030	<0.0030	---	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	*0.110*	---	---	<0.010	<0.0030	<0.00010	---	---	<0.0050	SVL
DC 6.6 W (DCT 6.6 W)	RESE-1001155	19-Aug-04	---	<0.0030	0.0040	0.0257	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	0.0075	SVL
DC 6.6 W (DCT 6.6 W)	RESE-1001155	19-Aug-04	<0.020	<0.0030	0.0030	---	<0.0020	<0.040	<0.00010	---	<0.0060	<0.0030	---	0.088	<0.0030	---	<0.00020	<0.0080	---	<0.0060	<0.00010	<1.0	<0.0020	0.0084	SVL
DC 6.6 W (DCT 6.6 W)	RESE-1001155	19-Aug-04	---	<0.0030	<0.0030	---	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	0.0201	---	---	<0.010	<0.0150	<0.00010	---	---	0.0088	SVL
DC 6.6 W (DCT 6.6 W)	RESE-1001170	12-Nov-04	---	<0.0030	<0.0030	0.0255	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
DC 6.6 W (DCT 6.6 W)	RESE-1001170	12-Nov-04	<0.020	<0.0030	<0.0030	---	<0.0020	<0.040	<0.00010	---	<0.0060	<0.0030	---	0.134	<0.0030	---	<0.00020	<0.0080	---	<0.0150	<0.00010	<1.0	<0.0020	0.0060	SVL
DC 6.6 W (DCT 6.6 W)	RESE-1001170	12-Nov-04	---	<0.0030	<0.0030	---	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	*0.0696*	---	---	<0.010	<0.0150	<0.00010	---	---	<0.0050	SVL
DC 6.6 W (DCT 6.6 W)	RESE-1001192	16-Feb-05	---	<0.00300	<0.00300	0.0169	<0.00200	---	<0.00020	<0.00600	---	<0.0100	---	---	<0.00300	---	<0.00020	---	<0.0100	---	<0.00010	---	<0.00200	<0.0100	SVL
DC 6.6 W (DCT 6.6 W)	RESE-1001192	16-Feb-05	*0.325*	<0.00300	<0.00300	---	<0.00200	<0.0400	<0.00020	---	<0.00600	<0.0100	---	0.146	<0.00300	---	<0.00020	<0.00800	---	<0.00300	<0.00010	<1.00	<0.00200	<0.0100	SVL
DC 6.6 W (DCT 6.6 W)	RESE-1001192	16-Feb-05	---	<0.00300	<0.00300	---	<0.00200	---	<0.00020	<0.00600	---	<0.0100	---	---	<0.00300	<0.00400	---	---	<0.0100	<0.00300	<0.00010	---	---	<0.0100	SVL
DC 6.6 W (DCT 6.6 W)	RESE-1001214	17-May-05	---	<0.00300	0.0048	0.0253	<0.00200	---	<0.00020	<0.00600	---	0.011	---	---	<0.00300	---	<0.00020	---	<0.0100	---	<0.00010	---	<0.00200	<0.0100	SVL
DC 6.6 W (DCT 6.6 W)	RESE-1001214	17-May-05	0.041	<0.00300	0.0050	---	<0.00200	<0.0400	<0.00020	---	<0.00600	<0.0100	---	*0.403*	<0.00300	---	<0.00020	<0.00800	---	<0.00300	<0.00010	<1.00	<0.00200	0.017	SVL
DC 6.6 W (DCT 6.6 W)	RESE-1001214	17-May-05	---	<0.00300	0.0049	---	<0.00200	---	<0.00020	<0.00600	---	<0.0100	---	---	<0.00300	*0.152*	---	---	<0.0100	<0.00300	<0.00010	---	---	<0.0100	SVL

MONTGOMERY & ASSOCIATES

TABLE B-2. TRACE CONSTITUENTS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	TRACE CONSTITUENTS[a] (mg/L)[b]																						ANALYTICAL LABORATORY
			Al	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	CN	Fe	Pb	Mn	Hg	Mo	Ni	Se	Ag	S	Tl	Zn	
Surface Water 2 - Devils Canyon																									
DC 6.6 W (DCT 6.6 W)	RESE-1001232	07-Sep-05	---	<0.00300	0.0048	0.0306	<0.0020	---	<0.00008	<0.0060	---	<0.0100	---	---	<0.00300	---	<0.0002	---	<0.0100	---	<0.00010	---	<0.00200	<0.0100	SVL
DC 6.6 W (DCT 6.6 W)	RESE-1001232	07-Sep-05	0.072	<0.00300	0.00460	---	<0.0020	<0.04	<0.00010	---	<0.0060	<0.0100	---	0.090	<0.00300	---	<0.0002	<0.0080	---	<0.00300	<0.00010	<1.0	<0.00200	<0.0100	SVL
DC 6.6 W (DCT 6.6 W)	RESE-1001232	07-Sep-05	---	<0.00300	0.0042	---	<0.0020	---	<0.00020	<0.0060	---	<0.0100	---	---	<0.00300	0.0185	---	---	<0.0100	<0.00300	<0.00010	---	---	<0.0100	SVL
DC 6.6 W (DCT 6.6 W)	RESE-1002234	04-May-12	<0.0808	<0.00012	<0.0067	---	---	---	<0.000014	---	<0.0014	0.0011	---	0.0235 j	<0.000059	*0.1*	---	<0.0021	0.0018	0.00034 j+	<0.000014	---	<0.000008	<0.0026	SVL
DC 6.6 W (DCT 6.6 W)	RESE-1002234	04-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.000054	---	---	---	---	---	---	---	SVL
DC 6.6 W (DCT 6.6 W)	RESE-1002234	04-May-12	---	<0.00015	<0.0033	0.0325	<0.00031	<0.02	<0.00029	0.0016 j	---	0.0033 j	---	---	0.00027 j,d	*0.17*	---	---	<0.002	<0.00028	<0.0007	---	<0.000009	<0.0013	SVL
DC 7.1 C	RESE-1001009	29-May-03	---	<0.0030	0.0080 j	0.0246	<0.0020	<0.040	<0.00010	---	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
DC 7.1 C	RESE-1001009	29-May-03	<0.020	<0.0030	0.0090 j	---	<0.0020	---	<0.00010	---	<0.0060	<0.0030	<0.10	0.206	<0.0050	---	<0.00020	<0.0080	---	<0.0030	<0.00010	<1.0	---	<0.0050	SVL
DC 7.1 C	RESE-1001009	29-May-03	---	<0.0030	0.0090	---	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	*0.137*	---	---	<0.010	<0.0030	<0.00010	---	<0.0020	<0.0050	SVL
DC 7.1 C	RESE-1001034	04-Nov-03	---	<0.0030	0.0050	0.0286	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
DC 7.1 C	RESE-1001034	04-Nov-03	<0.020	<0.0030	0.0060	---	<0.0020	<0.040	<0.00010	---	<0.0060	<0.0030	---	0.079	<0.0050	---	<0.00020	<0.0080	---	<0.0030	<0.00010	<1.0	<0.0020	<0.0050	SVL
DC 7.1 C	RESE-1001034	04-Nov-03	---	<0.0030	0.0050	---	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	0.0416	---	---	<0.010	<0.0030	<0.00010	---	---	<0.0050	SVL
DC 7.1 C	RESE-1001065	18-Feb-04	---	<0.00030	0.0035	0.0159	<0.00020	---	<0.00010	<0.00030	---	<0.00210	---	---	<0.0010	---	<0.00020	---	0.0048 j	---	<0.00010	---	<0.00040	<0.00020	SVL
DC 7.1 C	RESE-1001065	18-Feb-04	0.0534	<0.00030	0.003 j	---	<0.00020	<0.0070	<0.00010	---	<0.00070	0.0029 j	---	0.0786	<0.0010	---	<0.00020	0.0045 j	---	<0.00080	<0.00010	<1.0	<0.00040	0.00042 j	SVL
DC 7.1 C	RESE-1001065	18-Feb-04	---	<0.00030	0.0036	---	<0.00020	---	0.00017	<0.00030	---	<0.00210	---	---	<0.0010	0.0076	---	---	0.0026 j	<0.00080	<0.00010	---	---	0.00099 j	SVL
DC 7.1 C	RESE-1001075	05-May-04	---	<0.0030	<0.0030	0.0196	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
DC 7.1 C	RESE-1001075	05-May-04	<0.020	<0.0030	<0.0030	---	<0.0020	<0.040	<0.00010	---	<0.0060	0.0057	<0.010	0.088	<0.0030	---	<0.00020	<0.0080	---	<0.0030	<0.00010	<1.0	<0.0020	<0.0050	SVL
DC 7.1 C	RESE-1001075	05-May-04	---	<0.0030	<0.0030	---	<0.0020	---	<0.00010	<0.0060	---	0.0041	---	---	<0.0030	0.0184	---	---	<0.010	<0.0030	<0.00010	---	---	<0.0050	SVL
DC 7.1 C	RESE-1001156	19-Aug-04	---	<0.0030	<0.0030	0.0429	<0.0020	---	<0.00010	<0.0060	---	0.0061	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
DC 7.1 C	RESE-1001156	19-Aug-04	<0.020	<0.0030	0.0050	---	<0.0020	<0.040	<0.00010	---	<0.0060	0.0096	---	0.042	<0.0030	---	<0.00020	<0.0080	---	<0.0030	<0.00010	<1.0	<0.0020	<0.0050	SVL
DC 7.1 C	RESE-1001156	19-Aug-04	---	<0.0030	0.0040	---	<0.0020	---	<0.00010	<0.0060	---	0.0097	---	---	<0.0030	0.0128	---	---	<0.010	<0.0060	<0.00010	---	---	<0.0050	SVL
DC 7.1 C	RESE-1001171	12-Nov-04	---	<0.0030	0.0040	0.0224	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
DC 7.1 C	RESE-1001171	12-Nov-04	0.024	<0.0030	0.0030	---	<0.0020	<0.040	<0.00010	---	<0.0060	<0.0030	---	0.072	<0.0030	---	<0.00020	<0.0080	---	<0.0030	<0.00010	<1.0	<0.0020	<0.0050	SVL
DC 7.1 C	RESE-1001171	12-Nov-04	---	<0.0030	0.0030	---	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	0.0138	---	---	<0.010	<0.0030	<0.00010	---	---	<0.0050	SVL
DC 7.1 C	RESE-1001193	16-Feb-05	---	<0.00300	0.00300	0.0134	<0.00200	---	<0.00020	<0.00600	---	0.0120	---	---	<0.00300	---	<0.00020	---	<0.0100	---	<0.00010	---	<0.00200	<0.0100	SVL
DC 7.1 C	RESE-1001193	16-Feb-05	*0.570*	<0.00300	0.00310	---	<0.00200	<0.0400	<0.00020	---	<0.00600	0.0130	---	0.279	<0.00300	---	<0.00020	<0.00800	---	<0.00300	<0.00010	<1.00	<0.00200	<0.0100	SVL
DC 7.1 C	RESE-1001193	16-Feb-05	---	<0.00300	0.00330	---	<0.00200	---	<0.00020	<0.00600	---	0.0120	---	---	<0.00300	0.00730	---	---	<0.0100	<0.00300	<0.00010	---	---	<0.0100	SVL
DC 7.1 C	RESE-1001215	17-May-05	---	<0.00300	0.0053	0.0186	<0.00200	---	<0.00020	<0.00600	---	<0.0100	---	---	<0.00300	---	<0.00020	---	<0.0100	---	<0.00010	---	<0.00200	<0.0100	SVL
DC 7.1 C	RESE-1001215	17-May-05	<0.0300	<0.00300	0.0047	---	<0.00200	<0.0400	<0.00020	---	<0.00600	<0.0100	---	0.076	<0.00300	---	<0.00020	<0.00800	---	<0.00300	<0.00010	<1.00	<0.00200	0.016	SVL
DC 7.1 C	RESE-1001215	17-May-05	---	<0.00300	0.0049	---	<0.00200	---	<0.00020	<0.00600	---	<0.0100	---	---	<0.00300	0.0166	---	---	<0.0100	<0.00300	<0.00010	---	---	<0.0100	SVL
DC 7.1 C	RESE-1001231	07-Sep-05	---	<0.00300	0.0088	0.0294	<0.0020	---	<0.00008	<0.0060	---	<0.0100	---	---	<0.00300	---	<0.0002	---	<0.0100	---	<0.00010	---	<0.00200	<0.0100	SVL
DC 7.1 C	RESE-1001231	07-Sep-05	<0.030	<0.00300	0.00810	---	<0.0020	<0.04	<0.00010	---	<0.0060	<0.0100	---	0.109	<0.00300	---	<0.0002	<0.0080	---	<0.00300	<0.00010	<1.0	<0.00200	<0.0100	SVL
DC 7.1 C	RESE-1001231	07-Sep-05	---	<0.00300	0.0077	---	<0.0020	---	<0.00020	<0.0060	---	<0.0100	---	---	<0.00300	0.0452	---	---	<0.0100	<0.00300	<0.00010	---	---	<0.0100	SVL
DC 7.1 C	RESE-1002195	30-Nov-11	<0.080	<0.00300	**<0.025**	---	---	---	<0.000026	---	<0.0060	0.00174	---	<0.060	<0.000042	0.0046	---	<0.008	0.00207	---	<0.000100	---	<0.00100	<0.0100	SVL
DC 7.1 C	RESE-1002195	30-Nov-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
DC 7.1 C	RESE-1002195	30-Nov-11	---	<0.00300	**<0.025**	0.0248	<0.0020	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0047	---	---	<0.010	<0.00070	<0.0050	---	<0.00100	<0.0100	SVL
DC 7.1 C	RESE-1002233	04-May-12	<0.0808	<0.003	<0.0067	---	---	---	<0.000014	---	<0.0014	0.002	---	<0.0222	<0.000059	0.0165 j+	---	<0.0021	0.0013	0.00024 j	<0.000014	---	<0.000008	<0.0026	SVL
DC 7.1 C	RESE-1002233	04-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.000054	---	---	---	---	---	---	---	SVL
DC 7.1 C	RESE-1002233	04-May-12	---	<0.0038	0.004 j	0.0206	<0.00031	<0.02	<0.00029	0.00088 j	---	0.003 j	---	---	<0.000072	0.0247	---	---	<0.002	<0.00028	<0.0007	---	<0.000009	<0.0013	SVL
DC 8.1 C	RESE-1002005	06-Aug-08	<0.080	<0.00300	**<0.025**	0.0240	<0.00200	---	<0.000200	---	<0.0060	0.00111	---	<0.060	<0.00300	0.0203	<0.00020	0.0279	<0.010	---	<0.000100	---	<0.00100	<0.0100	SVL
DC 8.1 C	RESE-1002005	06-Aug-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
DC 8.1 C	RESE-1002005	06-Aug-08	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0222	---	---	<0.010	<0.00300	<0.0050	---	<0.00100	<0.0100	SVL

MONTGOMERY & ASSOCIATES

TABLE B-2. TRACE CONSTITUENTS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	TRACE CONSTITUENTS[a] (mg/L)[b]																						ANALYTICAL LABORATORY
			Al	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	CN	Fe	Pb	Mn	Hg	Mo	Ni	Se	Ag	S	Tl	Zn	
Surface Water 2 - Devils Canyon																									
DC 8.1 C	RESE-1002026	05-Nov-08	<0.080	<0.00300	**<0.025**	0.0224	<0.00200	---	<0.000200	---	<0.0060	<0.00100	---	<0.060	<0.00300	0.0051	<0.00020	<0.0080	<0.010	---	<0.000100	---	<0.00100	<0.0100	SVL
DC 8.1 C	RESE-1002026	05-Nov-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
DC 8.1 C	RESE-1002026	05-Nov-08	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0094	---	---	<0.010	<0.00300	<0.0050	---	<0.00100	0.0135	SVL
DC 8.1 C	RESE-1002062	24-Feb-09	0.136	<0.00300	**<0.025**	0.0118	<0.00200	---	<0.000042	---	<0.0060	0.00753	---	0.115	0.000200 j	0.0077	---	<0.0080	<0.00100	---	<0.000100	---	<0.00100	<0.0100	SVL
DC 8.1 C	RESE-1002062	24-Feb-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
DC 8.1 C	RESE-1002062	24-Feb-09	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.00020	<0.0060	---	<0.010	---	---	<0.00300	0.0082	---	---	<0.010	<0.00041	<0.0050	---	<0.00100	<0.0100	SVL
DC 8.1 C	RESE-1002098	19-May-09	<0.080	<0.00300	**<0.025**	---	<0.00200	---	<0.000024	---	<0.0060	0.00105	---	<0.060	<0.000053	0.0088	---	<0.0080	0.00101	---	<0.000100	---	<0.00100	<0.0100	SVL
DC 8.1 C	RESE-1002098	19-May-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
DC 8.1 C	RESE-1002098	19-May-09	---	<0.00300	**<0.025**	0.0215	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0157	---	---	<0.010	<0.00030	<0.0050	---	<0.00100	<0.0100	SVL
DC 8.1 C	RESE-1002160	10-Nov-10	<0.0172	<0.0001	<0.0066	0.0282	---	---	<0.000036	---	<0.00095	0.000 j	---	0.033 j	<0.00002	0.0079 j	---	0.0070 j	0.0014 j+	---	<0.000012	---	<0.000018	<0.0019	SVL
DC 8.1 C	RESE-1002160	10-Nov-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.000065	---	---	---	---	---	---	---	SVL
DC 8.1 C	RESE-1002160	10-Nov-10	---	<0.00012	<0.0032	---	<0.00024	0.01 j	<0.00025	<0.00043	---	0.00 j	---	---	<0.003	*0.0743*	---	---	<0.0015	<0.0038	<0.0007	---	<0.000022	<0.01	SVL
DC 8.1 C	RESE-1002187	31-Aug-11	<0.080	<0.00300	**<0.025**	---	---	---	<0.000026	---	<0.0060	<0.00100	---	<0.060	0.000053 j	0.0150	---	<0.008	0.00120	---	<0.000100	---	<0.00100	<0.0100	SVL
DC 8.1 C	RESE-1002187	31-Aug-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
DC 8.1 C	RESE-1002187	31-Aug-11	---	<0.00300	**<0.025**	0.0225	<0.0020	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0209	---	---	<0.010	<0.00070	<0.0050	---	<0.00100	<0.0100	SVL
DC 8.1 C	RESE-1002194	30-Nov-11	<0.080	<0.00300	**<0.025**	---	---	---	<0.000026	---	<0.0060	0.00110	---	<0.060	<0.000042	0.0101	---	<0.008	0.00175	---	<0.000100	---	<0.00100	<0.0100	SVL
DC 8.1 C	RESE-1002194	30-Nov-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
DC 8.1 C	RESE-1002194	30-Nov-11	---	<0.00300	**<0.025**	0.0280	<0.0020	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0081	---	---	<0.010	<0.00070	<0.0050	---	<0.00100	<0.0100	SVL
DC 8.1 C	RESE-1002218	02-Mar-12	<0.080	<0.00300	**<0.025**	---	---	---	<0.000013	---	<0.0060	0.00157	---	<0.060	0.000028 j	<0.0040	---	<0.008	<0.00100	---	<0.000100	---	<0.00100	<0.0100	SVL
DC 8.1 C	RESE-1002218	02-Mar-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
DC 8.1 C	RESE-1002218	02-Mar-12	---	<0.00300	**<0.025**	0.0179	<0.0020	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0056	---	---	<0.010	0.00028 jd	<0.0050	---	<0.00100	<0.0100	SVL
DC 8.1 C	RESE-1002232	03-May-12	<0.0222	<0.003	<0.0067	---	---	---	<0.000014	---	<0.0014	0.0013	---	0.0362 j	<0.000059	0.0079	---	<0.0021	0.0013	0.0005 j+	<0.000014	---	<0.000008	<0.0026	SVL
DC 8.1 C	RESE-1002232	03-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.000054	---	---	---	---	---	---	---	SVL
DC 8.1 C	RESE-1002232	03-May-12	---	<0.00015	<0.0033	0.0219	<0.00031	0.0149 j	<0.00029	0.001 j	---	0.0026 j	---	---	<0.000072	0.0147	---	---	<0.002	<0.00028	<0.0007	---	<0.000009	<0.0013	SVL
DC 8.1 C	RESE-1003056	15-Aug-12	<0.080	<0.00300	**<0.025**	---	---	---	<0.000014	---	<0.0060	<0.00100	---	<0.060	<0.000058	0.0214	---	<0.008	<0.00100	---	<0.000100	---	<0.00100	<0.0100	SVL
DC 8.1 C	RESE-1003056	15-Aug-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
DC 8.1 C	RESE-1003056	15-Aug-12	---	<0.00300	**<0.025**	0.0254	<0.0020	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	*0.0745*	---	---	<0.010	<0.00028	<0.0050	---	<0.00100	<0.0100	SVL
DC 8.2 W	RESE-1001006	20-May-03	---	<0.0060	<0.0030	0.0176	<0.0020	<0.040	<0.00010	---	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
DC 8.2 W	RESE-1001006	20-May-03	<0.020	<0.0060	<0.0030	---	<0.0020	---	<0.00010	---	<0.0060	<0.0030	<0.10	<0.020	<0.0050	---	<0.00020	0.0085	---	<0.0030	<0.00010	<1.0	---	<0.0050	SVL
DC 8.2 W	RESE-1001006	20-May-03	---	<0.0060	<0.0030	---	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	<0.0020	---	---	<0.010	<0.0060	<0.00010	---	<0.0020	<0.0050	SVL
DC 8.2 W	RESE-1001017	21-Aug-03	---	<0.0060	<0.0030	0.0200	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
DC 8.2 W	RESE-1001017	21-Aug-03	<0.020	<0.0060	<0.0030	---	<0.0020	<0.040	<0.00010	---	<0.0060	<0.0030	<0.010	<0.020	<0.0050	---	<0.00020	<0.0080	---	<0.0030	<0.00010	<1.0	<0.0020	<0.0050	SVL
DC 8.2 W	RESE-1001017	21-Aug-03	---	<0.0060	<0.0030	---	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	<0.0020	---	---	<0.010	<0.0030	<0.00010	---	---	<0.0050	SVL
DC 8.2 W	RESE-1001044	12-Nov-03	---	<0.0030	<0.0030	0.0201	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
DC 8.2 W	RESE-1001044	12-Nov-03	<0.020	<0.0030	<0.0030	---	<0.0020	<0.040	<0.00010	---	<0.0060	<0.0030	---	0.044	<0.0050	---	<0.00020	<0.0080	---	<0.0030	<0.00010	<1.0	<0.0020	<0.0050	SVL
DC 8.2 W	RESE-1001044	12-Nov-03	---	<0.0030	<0.0030	---	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	<0.0020	---	---	<0.010	<0.0030	<0.00010	---	---	<0.0050	SVL
DC 8.2 W	RESE-1001063	17-Feb-04	---	<0.00030	0.0028 j	0.0173	<0.00020	---	<0.00010	0.00038 j	---	<0.00210	---	---	<0.0010	---	<0.00020	---	0.0049 j	---	<0.00010	---	<0.00040	0.00042 j	SVL
DC 8.2 W	RESE-1001063	17-Feb-04	0.0318	<0.00030	0.0026 j	---	<0.00020	<0.0070	<0.00010	---	<0.00070	<0.00210	---	0.0256	<0.0010	---	<0.00020	0.0048 j	---	<0.00080	<0.00010	<1.0	<0.00040	0.00035 j	SVL
DC 8.2 W	RESE-1001063	17-Feb-04	---	<0.00030	0.0034	---	<0.00020	---	<0.00010	0.00049 j	---	<0.00210	---	---	<0.0010	0.0027	---	---	0.0023 j	<0.00080	<0.00010	---	---	0.00031 j	SVL
DC 8.2 W	RESE-1001079	21-May-04	---	<0.0030	<0.0030	0.0183	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
DC 8.2 W	RESE-1001079	21-May-04	<0.020	<0.0030	<0.0030	---	<0.0020	<0.040	<0.00010	---	<0.0060	<0.0030	<0.010	0.028	<0.0030	---	<0.00020	<0.0080	---	<0.0030	<0.00010	<1.0	<0.0020	<0.0050	SVL
DC 8.2 W	RESE-1001079	21-May-04	---	<0.0030	<0.0030	---	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	<0.0020	---	---	<0.010	<0.0030	<0.00010	---	---	<0.0050	SVL

MONTGOMERY & ASSOCIATES

TABLE B-2. TRACE CONSTITUENTS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	TRACE CONSTITUENTS[a] (mg/L)[b]																						ANALYTICAL LABORATORY
			Al	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	CN	Fe	Pb	Mn	Hg	Mo	Ni	Se	Ag	S	Tl	Zn	
Surface Water 2 - Devils Canyon																									
DC 8.2 W	RESE-1001152	16-Aug-04	---	<0.0030	<0.0030	0.0181	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
DC 8.2 W	RESE-1001152	16-Aug-04	<0.020	<0.0030	<0.0030	---	<0.0020	<0.040	<0.00010	---	<0.0060	<0.0030	---	<0.020	<0.0030	---	<0.00020	<0.0080	---	<0.0030	<0.00010	<1.0	<0.0020	<0.0050	SVL
DC 8.2 W	RESE-1001152	16-Aug-04	---	<0.0030	<0.0030	---	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	<0.0020	---	---	<0.010	<0.0030	<0.00010	---	---	<0.0050	SVL
DC 8.2 W	RESE-1001175	16-Nov-04	---	<0.0030	<0.0030	0.0224	<0.0020	---	<0.00010	<0.0060	---	<0.010	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.010	SVL
DC 8.2 W	RESE-1001175	16-Nov-04	0.073	<0.0030	<0.0030	---	<0.0020	<0.040	<0.00010	---	<0.0060	<0.010	---	0.161	<0.0030	---	<0.00020	<0.0080	---	<0.0030	<0.00010	<1.0	<0.0020	<0.010	SVL
DC 8.2 W	RESE-1001175	16-Nov-04	---	<0.0030	<0.0030	---	<0.0020	---	<0.00010	<0.0060	---	<0.010	---	---	<0.0030	0.0192	---	---	<0.010	<0.0030	<0.00010	---	---	<0.010	SVL
DC 8.2 W	RESE-1001196	25-Feb-05	---	<0.00300	0.00310	0.0181	<0.00200	---	<0.00020	<0.00600	---	<0.0100	---	---	<0.00300	---	<0.00020	---	<0.0100	---	<0.00010	---	<0.00200	<0.0100	SVL
DC 8.2 W	RESE-1001196	25-Feb-05	0.0610	<0.00300	<0.00300	---	<0.00200	<0.0400	<0.00020	---	<0.00600	<0.0100	---	<0.0600	<0.00300	---	<0.00020	<0.00800	---	<0.00300	<0.00010	<1.00	<0.00200	<0.0100	SVL
DC 8.2 W	RESE-1001196	25-Feb-05	---	<0.00300	<0.00300	---	<0.00200	---	<0.00020	<0.00600	---	<0.0100	---	---	<0.00300	<0.00400	---	---	<0.0100	<0.00300	<0.00010	---	---	<0.0100	SVL
DC 8.2 W	RESE-1001212	11-May-05	---	<0.00300	<0.00300	0.0186	<0.00200	---	<0.00020	<0.00600	---	<0.0100	---	---	<0.00300	---	<0.00020	---	<0.0100	---	<0.00010	---	<0.00200	<0.0100	SVL
DC 8.2 W	RESE-1001212	11-May-05	<0.0300	<0.00300	<0.00300	---	<0.00200	<0.0400	<0.00020	---	<0.00600	<0.0100	---	<0.0600	<0.00300	---	<0.00020	<0.00800	---	<0.00300	<0.00010	<1.00	<0.00200	<0.0100	SVL
DC 8.2 W	RESE-1001212	11-May-05	---	<0.00300	<0.00300	---	<0.00200	---	<0.00020	<0.00600	---	<0.0100	---	---	<0.00300	<0.00400	---	---	<0.0100	<0.00300	<0.00010	---	---	<0.0100	SVL
DC 8.2 W	RESE-1001227	16-Aug-05	---	<0.00300	<0.00300	0.0184	<0.0020	---	<0.00020	<0.0060	---	<0.0100	---	---	<0.00300	---	<0.0002	---	<0.0100	---	---	---	<0.00200	<0.0100	SVL
DC 8.2 W	RESE-1001227	16-Aug-05	0.173	<0.00300	<0.00300	---	<0.0020	<0.04	0.00010	---	<0.0060	<0.0100	---	0.137	<0.00300	---	<0.0002	<0.0080	---	<0.00300	<0.00010	<1	<0.00200	<0.0100	SVL
DC 8.2 W	RESE-1001227	16-Aug-05	---	<0.00300	<0.00300	---	<0.0020	---	<0.00020	<0.0060	---	<0.0100	---	---	<0.00300	0.0121	---	---	<0.0100	<0.00300	---	---	---	<0.0100	SVL
DC 8.2 W	RESE-1000260	19-Feb-08	<0.20	<0.0030	0.0025	0.024	<0.0010	---	<0.0010	<0.010	---	<0.010	---	<0.050	<0.0010	---	<0.00020	<0.010	<0.010	<0.0020	<0.010	---	<0.0010	<0.050	TestAmerica
DC 8.2 W	RESE-1000260	19-Feb-08	---	---	---	---	---	---	---	---	---	---	<0.020	---	---	---	---	---	---	---	---	<0.10	---	---	TestAmerica
DC 8.2 W	RESE-1003002	27-May-08	<0.20	---	---	0.018	<0.0010	<0.20	---	<0.010	---	0.014	---	<0.050	---	---	---	<0.010	<0.010	---	---	---	---	<0.050	TestAmerica
DC 8.2 W	RESE-1003002	27-May-08	---	<0.0030	0.0021	---	---	---	<0.0010	---	0.0081	---	<0.025	---	<0.0010	0.018	<0.00020	---	---	<0.0020	<0.0010	<0.040	<0.0010	---	TestAmerica
DC 8.2 W	RESE-1002004	06-Aug-08	<0.080	<0.00300	**<0.025**	0.0168	<0.00200	---	<0.000200	---	<0.0060	<0.00100	---	<0.060	<0.00300	<0.0040	<0.00020	0.0277	<0.010	---	<0.000100	---	<0.00100	<0.0100	SVL
DC 8.2 W	RESE-1002004	06-Aug-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
DC 8.2 W	RESE-1002004	06-Aug-08	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	<0.0040	---	---	<0.010	<0.00300	<0.0050	---	<0.00100	<0.0100	SVL
DC 8.2 W	RESE-1002027	05-Nov-08	<0.080	<0.00300	**<0.025**	0.0172	<0.00200	---	<0.000200	---	<0.0060	<0.00100	---	<0.060	<0.00300	<0.0040	<0.00020	<0.0080	<0.010	---	<0.000100	---	<0.00100	<0.0100	SVL
DC 8.2 W	RESE-1002027	05-Nov-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
DC 8.2 W	RESE-1002027	05-Nov-08	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	<0.0040	---	---	<0.010	<0.00300	<0.0050	---	<0.00100	<0.0100	SVL
DC 8.2 W	RESE-1003023	02-Dec-08	<0.20	<0.0030	0.0023	0.018	<0.0010	---	<0.0010	<0.010	---	<0.010	---	<0.050	<0.0010	---	<0.00020	<0.010	<0.010	<0.0020	<0.0010	---	<0.0010	<0.050	TestAmerica
DC 8.2 W	RESE-1003023	02-Dec-08	---	---	---	---	---	---	---	---	---	---	<0.025	---	---	---	---	---	---	---	---	<0.10	---	---	TestAmerica
DC 8.2 W	RESE-1002063	24-Feb-09	<0.080	<0.00300	**<0.025**	0.0178	<0.00200	---	<0.000042	---	<0.0060	0.00103	---	<0.060	0.000019 j	0.0044	---	<0.0080	<0.00100	---	<0.000100	---	<0.00100	<0.0100	SVL
DC 8.2 W	RESE-1002063	24-Feb-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
DC 8.2 W	RESE-1002063	24-Feb-09	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.00020	<0.0060	---	<0.010	---	---	<0.00300	<0.0040	---	---	<0.010	0.00043 jd	<0.0050	---	<0.00100	<0.0100	SVL
DC 8.2 W	RESE-1002097	19-May-09	<0.080	<0.00300	**<0.025**	---	<0.00200	---	<0.000024	---	<0.0060	<0.00100	---	<0.060	<0.000053	<0.0040	---	<0.0080	<0.00100	---	<0.000100	---	<0.00100	<0.0100	SVL
DC 8.2 W	RESE-1002097	19-May-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
DC 8.2 W	RESE-1002097	19-May-09	---	<0.00300	**<0.025**	0.0180	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	<0.0040	---	---	<0.010	<0.00030	<0.0050	---	<0.00100	<0.0100	SVL
DC 8.2 W	RESE-1002159	10-Nov-10	<0.0172	<0.0001	<0.0066	0.02	---	---	<0.000036	---	<0.00095	0.000 j	---	0.030 j	<0.00002	0.0066 j	---	0.0070 j	0.0013 j+	---	<0.000012	---	<0.000018	<0.0019	SVL
DC 8.2 W	RESE-1002159	10-Nov-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.000065	---	---	---	---	---	---	---	SVL
DC 8.2 W	RESE-1002159	10-Nov-10	---	<0.00012	<0.0032	---	0.0004 j	0.01 j	<0.00025	0.0059 j	---	0.00 j	---	---	<0.003	*0.104*	---	---	<0.0015	<0.0038	<0.0007	---	<0.000022	0.014 j+	SVL
DC 8.2 W	RESE-1002231	03-May-12	<0.0808	<0.00012	<0.0067	---	---	---	<0.000014	---	<0.0014	0.00046 j	---	<0.0222	<0.000059	0.0065	---	<0.0021	0.0011	0.00034 j+	<0.000014	---	<0.000008	<0.0026	SVL
DC 8.2 W	RESE-1002231	03-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.000054	---	---	---	---	---	---	---	SVL
DC 8.2 W	RESE-1002231	03-May-12	---	<0.00015	<0.0033	0.0193	<0.00031	0.0175 j	<0.00029	0.0016 j	---	0.0019 j	---	---	<0.000072	0.0051	---	---	<0.002	<0.00028	<0.0007	---	<0.000009	<0.0013	SVL
DC 8.8 C	RESE-1001005	20-May-03	---	<0.0060	<0.0030	0.0200	<0.0020	<0.040	<0.00010	---	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
DC 8.8 C	RESE-1001005	20-May-03	<0.020	<0.0060	<0.0030	---	<0.0020	---	<0.00010	---	<0.0060	<0.0030	<0.10	0.072	<0.0050	---	<0.00020	<0.0080	---	<0.0030	<0.00010	<1.0	---	<0.0050	SVL
DC 8.8 C	RESE-1001005	20-May-03	---	<0.0060	<0.0030	---	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	0.0106	---	---	<0.010	<0.0030	<0.00010	---	<0.0020	<0.0050	SVL

MONTGOMERY & ASSOCIATES

TABLE B-2. TRACE CONSTITUENTS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	TRACE CONSTITUENTS[a] (mg/L)[b]																						ANALYTICAL LABORATORY
			Al	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	CN	Fe	Pb	Mn	Hg	Mo	Ni	Se	Ag	S	Tl	Zn	
Surface Water 2 - Devils Canyon																									
DC 8.8 C	RESE-1001018	21-Aug-03	---	<0.0060	0.0050	0.0247	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
DC 8.8 C	RESE-1001018	21-Aug-03	<0.020	<0.0060	0.0050	---	<0.0020	<0.040	<0.00010	---	<0.0060	<0.0030	<0.010	0.115	<0.0050	---	<0.00020	<0.0080	---	<0.0060	<0.00010	<1.0	<0.0020	<0.0050	SVL
DC 8.8 C	RESE-1001018	21-Aug-03	---	<0.0060	0.0050	---	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	*0.0544*	---	---	<0.010	<0.0030	<0.00010	---	---	<0.0050	SVL
DC 8.8 C	RESE-1001042	12-Nov-03	---	<0.0030	0.0030	0.0247	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
DC 8.8 C	RESE-1001042	12-Nov-03	<0.020	<0.0030	<0.0030	---	<0.0020	<0.040	<0.00010	---	<0.0060	<0.0030	---	0.094	<0.0050	---	<0.00020	<0.0080	---	<0.0030	<0.00010	<1.0	<0.0020	<0.0050	SVL
DC 8.8 C	RESE-1001042	12-Nov-03	---	<0.0030	<0.0030	---	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	0.0171	---	---	<0.010	<0.0030	<0.00010	---	---	<0.0050	SVL
DC 8.8 C	RESE-1001062	17-Feb-04	---	<0.00030	0.0011 j	0.0129	<0.00020	---	0.00036	<0.00030	---	0.0026 j	---	---	<0.0010	---	<0.00020	---	0.0049 j	---	<0.00010	---	<0.00040	0.00028 j	SVL
DC 8.8 C	RESE-1001062	17-Feb-04	0.118	<0.00030	0.0011 j	---	<0.00020	<0.0070	<0.00010	---	<0.00070	0.0039	---	0.114	<0.0010	---	<0.00020	0.0031 j	---	<0.00080	<0.00010	<1.0	<0.00040	0.00087 j	SVL
DC 8.8 C	RESE-1001062	17-Feb-04	---	<0.00030	0.0013 j	---	<0.00020	---	<0.00010	<0.00030	---	0.0023 j	---	---	<0.0010	0.0076	---	---	0.0027 j	<0.00080	<0.00010	---	---	0.00063 j	SVL
DC 8.8 C	RESE-1001078	21-May-04	---	<0.0030	<0.0030	0.0200	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
DC 8.8 C	RESE-1001078	21-May-04	<0.020	<0.0030	<0.0030	---	<0.0020	<0.040	<0.00010	---	<0.0060	<0.0030	<0.010	0.086	<0.0030	---	<0.00020	<0.0080	---	<0.0030	<0.00010	<1.0	<0.0020	<0.0050	SVL
DC 8.8 C	RESE-1001078	21-May-04	---	<0.0030	<0.0030	---	<0.0020	---	<0.00010	<0.0060	---	0.0034	---	---	<0.0030	0.0181	---	---	<0.010	<0.0030	<0.00010	---	---	<0.0050	SVL
DC 8.8 C	RESE-1001151	16-Aug-04	---	<0.0030	0.0050	0.0262	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.0050	SVL
DC 8.8 C	RESE-1001151	16-Aug-04	0.020	<0.0030	0.0050	---	<0.0020	<0.040	0.00010	---	<0.0060	<0.0030	---	0.212	<0.0030	---	<0.00020	<0.0080	---	<0.0030	<0.00010	<1.0	<0.0020	<0.0050	SVL
DC 8.8 C	RESE-1001151	16-Aug-04	---	<0.0030	0.0040	---	<0.0020	---	<0.00010	<0.0060	---	<0.0030	---	---	<0.0030	*0.0619*	---	---	<0.010	<0.0030	<0.00010	---	---	<0.0050	SVL
DC 8.8 C	RESE-1001174	16-Nov-04	---	<0.0030	<0.0030	0.0229	<0.0020	---	<0.00010	<0.0060	---	<0.010	---	---	<0.0030	---	<0.00020	---	<0.010	---	<0.00010	---	<0.0020	<0.010	SVL
DC 8.8 C	RESE-1001174	16-Nov-04	<0.030	<0.0030	<0.0030	---	<0.0020	<0.040	<0.00010	---	<0.0060	<0.010	---	0.151	<0.0030	---	<0.00020	<0.0080	---	<0.0030	<0.00010	<1.0	<0.0020	<0.010	SVL
DC 8.8 C	RESE-1001174	16-Nov-04	---	<0.0030	<0.0030	---	<0.0020	---	<0.00010	<0.0060	---	<0.010	---	---	<0.0030	0.0242	---	---	<0.010	<0.0030	<0.00010	---	---	<0.010	SVL
DC 8.8 C	RESE-1001197	25-Feb-05	---	<0.00300	0.00340	0.0119	<0.00200	---	<0.00020	<0.00600	---	0.0130	---	---	<0.00300	---	<0.00020	---	<0.0100	---	<0.00010	---	<0.00200	<0.0100	SVL
DC 8.8 C	RESE-1001197	25-Feb-05	*0.905*	<0.00300	0.00360	---	<0.00200	<0.0400	<0.00020	---	<0.00600	0.0150	---	*0.454*	<0.00300	---	<0.00020	<0.00800	---	<0.00300	<0.00010	<1.00	<0.00200	<0.0100	SVL
DC 8.8 C	RESE-1001197	25-Feb-05	---	<0.00300	0.00370	---	<0.00200	---	<0.00020	<0.00600	---	0.0140	---	---	<0.00300	0.00790	---	---	<0.0100	<0.00300	<0.00010	---	---	<0.0100	SVL
DC 8.8 C	RESE-1001211	11-May-05	---	<0.00300	<0.00300	0.0184	<0.00200	---	<0.00020	<0.00600	---	<0.0100	---	---	<0.00300	---	<0.00020	---	<0.0100	---	<0.00010	---	<0.00200	<0.0100	SVL
DC 8.8 C	RESE-1001211	11-May-05	0.056	<0.00300	<0.00300	---	<0.00200	<0.0400	<0.00020	---	<0.00600	<0.0100	---	0.121	<0.00300	---	<0.00020	<0.00800	---	<0.00300	<0.00010	<1.00	<0.00200	<0.0100	SVL
DC 8.8 C	RESE-1001211	11-May-05	---	<0.00300	<0.00300	---	<0.00200	---	<0.00020	<0.00600	---	<0.0100	---	---	<0.00300	0.0109	---	---	<0.0100	<0.00300	<0.00010	---	---	<0.0100	SVL
DC 8.8 C	RESE-1001228	16-Aug-05	---	<0.00300	0.0057	0.0236	<0.0020	---	<0.00020	<0.0060	---	<0.0100	---	---	<0.00300	---	<0.0002	---	<0.0100	---	---	---	<0.00200	<0.0100	SVL
DC 8.8 C	RESE-1001228	16-Aug-05	*0.205*	<0.00300	0.00520	---	<0.0020	<0.04	0.00010	---	<0.0060	0.012	---	0.203	<0.00300	---	<0.0002	<0.0080	---	<0.00300	<0.00010	<1	<0.00200	<0.0100	SVL
DC 8.8 C	RESE-1001228	16-Aug-05	---	<0.00300	0.0052	---	<0.0020	---	<0.00020	<0.0060	---	<0.0100	---	---	<0.00300	0.0297	---	---	<0.0100	<0.00300	---	---	---	<0.0100	SVL
DC 8.8 C	RESE-1002230	03-May-12	<0.0808	<0.003	<0.0067	---	---	---	<0.000014	---	<0.0014	0.0025	---	0.0593 j	0.00013 j	0.0083	---	<0.0021	0.0012	0.00034 j+	<0.000014	---	<0.000008	0.0052 j	SVL
DC 8.8 C	RESE-1002230	03-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.000054	---	---	---	---	---	---	---	SVL
DC 8.8 C	RESE-1002230	03-May-12	---	<0.0038	<0.0033	0.0183	<0.00031	0.0144 j	<0.00029	<0.00075	---	0.0032 j	---	---	<0.000072	0.0126	---	---	<0.002	<0.00028	<0.0007	---	<0.000009	<0.0013	SVL
H 0.1 C	RESE-1002011	19-Aug-08	<0.0141	<0.002	<0.0066	0.0361	<0.00036	---	<0.000034	---	<0.00065	0.0033	---	<0.0202	0.000065 j	0.0112	<0.000064	<0.0023	<0.0023	---	<0.000017	---	<0.000018	<0.0019	SVL
H 0.1 C	RESE-1002011	19-Aug-08	---	<0.0004	0.0074 j	---	<0.00036	0.0163 j	<0.00096	<0.001	---	0.0051 j	---	---	<0.000172	0.0262	<0.000064	---	<0.0023	<0.0004	<0.00079	---	<0.000072	0.0078 j	SVL
H 0.1 C	RESE-1002028	05-Nov-08	<0.080	<0.00300	**<0.025**	0.0585	<0.00200	---	<0.000200	---	<0.0060	0.00123	---	<0.060	<0.00300	0.0129	<0.00020	<0.0080	<0.010	---	<0.000100	---	<0.00100	<0.0100	SVL
H 0.1 C	RESE-1002028	05-Nov-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
H 0.1 C	RESE-1002028	05-Nov-08	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0204	---	---	<0.010	<0.00300	<0.0050	---	<0.00100	<0.0100	SVL
H 0.1 C	RESE-1002061	24-Feb-09	<0.080	<0.00300	**<0.025**	0.0254	<0.00200	---	<0.000042	---	<0.0060	0.00388	---	<0.060	0.000054 j	<0.0040	---	<0.0080	<0.00100	---	<0.000100	---	<0.00100	<0.0100	SVL
H 0.1 C	RESE-1002061	24-Feb-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
H 0.1 C	RESE-1002061	24-Feb-09	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.00020	<0.0060	---	<0.010	---	---	<0.00300	<0.0040	---	---	<0.010	<0.00041	<0.0050	---	<0.00100	<0.0100	SVL
H 0.1 C	RESE-1002096	19-May-09	<0.080	<0.00300	**<0.025**	---	<0.00200	---	<0.000024	---	<0.0060	0.00218	---	<0.060	<0.000053	0.0324	---	<0.0080	<0.00100	---	<0.000100	---	<0.00100	<0.0100	SVL
H 0.1 C	RESE-1002096	19-May-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
H 0.1 C	RESE-1002096	19-May-09	---	<0.00300	**<0.025**	0.0568	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	*0.0958*	---	---	<0.010	0.00034 jd	<0.0050	---	<0.00100	<0.0100	SVL

MONTGOMERY & ASSOCIATES

TABLE B-2. TRACE CONSTITUENTS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	TRACE CONSTITUENTS[a] (mg/L)[b]																						ANALYTICAL LABORATORY
			Al	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	CN	Fe	Pb	Mn	Hg	Mo	Ni	Se	Ag	S	Tl	Zn	
Surface Water 2 - Devils Canyon																									
H 0.1 C	RESE-1002158	10-Nov-10	<0.080	<0.00300	**<0.025**	0.0421	---	---	<0.000024	---	<0.0060	0.00238	---	<0.060	<0.000019	0.0041	---	<0.0080	0.00125	---	<0.000100	---	<0.00100	<0.0100	SVL
H 0.1 C	RESE-1002158	10-Nov-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
H 0.1 C	RESE-1002158	10-Nov-10	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0044	---	---	<0.010	<0.00034	<0.0050	---	<0.00100	<0.0100	SVL
H 0.1 C	RESE-1002188	31-Aug-11	<0.080	<0.00300	**<0.025**	---	---	---	<0.000026	---	<0.0060	0.00328	---	<0.060	<0.000042	0.0370	---	<0.008	<0.00100	---	<0.000100	---	<0.00100	<0.0100	SVL
H 0.1 C	RESE-1002188	31-Aug-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
H 0.1 C	RESE-1002188	31-Aug-11	---	<0.00300	**<0.025**	0.0276	<0.0020	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0421	---	---	<0.010	<0.00070	<0.0050	---	<0.00100	<0.0100	SVL
H 0.1 C DUP	RESE-1002189	31-Aug-11	<0.080	<0.00300	**<0.025**	---	---	---	<0.000026	---	<0.0060	0.00326	---	<0.060	0.000046 j	0.0380	---	<0.008	0.00129	---	<0.000100	---	<0.00100	<0.0100	SVL
H 0.1 C DUP	RESE-1002189	31-Aug-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
H 0.1 C DUP	RESE-1002189	31-Aug-11	---	<0.00300	**<0.025**	0.0276	<0.0020	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0418	---	---	<0.010	<0.00070	<0.0050	---	<0.00100	<0.0100	SVL
H 0.1 C	RESE-1002193	30-Nov-11	<0.080	<0.00300	**<0.025**	---	---	---	<0.000026	---	<0.0060	0.00305	---	<0.060	0.000049 j	0.0092	---	<0.008	0.00153	---	<0.000100	---	<0.00100	0.0216	SVL
H 0.1 C	RESE-1002193	30-Nov-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
H 0.1 C	RESE-1002193	30-Nov-11	---	<0.00300	**<0.025**	0.0222	<0.0020	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	<0.0040	---	---	<0.010	<0.00070	<0.0050	---	<0.00100	<0.0100	SVL
H 0.1 C	RESE-1002217	02-Mar-12	<0.080	<0.00300	**<0.025**	---	---	---	<0.000013	---	<0.0060	0.00196	---	<0.060	0.000037 j	<0.0040	---	<0.008	<0.00100	---	<0.000100	---	<0.00100	<0.0100	SVL
H 0.1 C	RESE-1002217	02-Mar-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
H 0.1 C	RESE-1002217	02-Mar-12	---	<0.00300	**<0.025**	0.0318	<0.0020	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	<0.0040	---	---	<0.010	<0.00028	<0.0050	---	<0.00100	<0.0100	SVL
H 0.1 C	RESE-1002229	03-May-12	<0.0222	<0.003	<0.0067	---	---	---	<0.000014	---	<0.0014	0.0033	---	<0.0222	<0.000059	0.0052	---	<0.0021	0.0011	0.00043 j+	<0.000014	---	<0.000008	<0.0026	SVL
H 0.1 C	RESE-1002229	03-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.000054	---	---	---	---	---	---	---	SVL
H 0.1 C	RESE-1002229	03-May-12	---	<0.0038	<0.0033	0.0327	<0.00031	0.0113 j	<0.00029	<0.00075	---	0.0045 j	---	---	<0.000072	0.0142	---	---	<0.002	<0.00028	<0.0007	---	<0.000009	<0.0013	SVL
H 0.1 C	RESE-1003057	15-Aug-12	<0.080	<0.00300	**<0.025**	---	---	---	<0.000014	---	<0.0060	0.00664	---	<0.060	0.000066 j	0.0414	---	<0.008	<0.00100	---	<0.000100	---	<0.00100	<0.0100	SVL
H 0.1 C	RESE-1003057	15-Aug-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
H 0.1 C	RESE-1003057	15-Aug-12	---	<0.00300	**<0.025**	0.0552	<0.0020	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	*0.0713*	---	---	<0.010	0.00056 jd	<0.0050	---	<0.00100	<0.0100	SVL
IC 1.0 C	RESE-1002019	28-Aug-08	0.0527 j	0.00045 j	<0.0066	0.0569	<0.00036	---	<0.000034	---	<0.00065	0.0135	---	0.0374 j	0.000149 j	0.0053 j	---	<0.0023	<0.0023	---	<0.000017	---	<0.000018	0.0028 j	SVL
IC 1.0 C	RESE-1002019	28-Aug-08	---	0.00042 j	<0.0065	---	<0.00036	0.0328 j	<0.00096	<0.001	---	0.0126	---	---	0.000477 j	0.0052 j	---	---	<0.0023	0.00066 j	<0.00079	---	<0.000018	0.0092 j	SVL
IC 1.0 C	RESE-1002055	17-Feb-09	0.165	<0.00300	**<0.025**	0.0161	<0.00200	---	<0.000034	---	<0.0060	0.0208	---	0.136	0.000292 j	0.0134	---	<0.0080	0.00101	---	<0.000100	---	<0.00100	<0.0100	SVL
IC 1.0 C	RESE-1002055	17-Feb-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
IC 1.0 C	RESE-1002055	17-Feb-09	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	0.033	---	---	<0.00300	*0.0674*	---	---	<0.010	0.00039 jd	<0.0050	---	<0.00100	0.0135	SVL
IC 1.0 C	RESE-1002085	12-May-09	<0.080	<0.00300	**<0.025**	---	<0.00200	---	0.00003 j	---	<0.0060	0.00397	---	0.070	0.000072 j	*0.0845*	---	<0.0080	0.00159	---	<0.000100	---	<0.00100	<0.0100	SVL
IC 1.0 C	RESE-1002085	12-May-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
IC 1.0 C	RESE-1002085	12-May-09	---	<0.00300	**<0.025**	0.0778	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	*0.274*	---	---	<0.010	0.00037 jd	<0.0050	---	<0.00100	<0.0100	SVL
IC 1.0 C	RESE-1002109	07-Aug-09	<0.0192	0.00037 j	0.0081 j	0.0747	<0.00024	---	<0.000024	---	0.0025 j	0.007	---	0.24	0.000105 j	*0.161*	---	0.0034 j	0.0029	---	<0.000019	---	<0.000023	0.0074 j	SVL
IC 1.0 C	RESE-1002109	07-Aug-09	---	<0.00028	0.0046 j	---	<0.00012	0.0333	<0.00024	<0.0004	---	0.009	---	---	0.000281 j	*0.157*	---	---	<0.005	0.0004 j	0.00034 j	---	<0.000029	0.0017 j	SVL
IC 1.0 C	RESE-1002115	16-Dec-09	<0.080	<0.00300	**<0.025**	0.0628	---	---	0.000065 j	---	<0.0060	0.00664	---	<0.060	0.000089 j	*0.0990*	---	<0.0080	0.00165	---	<0.000100	---	<0.00100	0.0196	SVL
IC 1.0 C	RESE-1002115	16-Dec-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
IC 1.0 C	RESE-1002115	16-Dec-09	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	0.012	---	---	<0.00300	*0.0872*	---	---	<0.010	0.00063 jd	<0.0050	---	<0.00100	0.0179	SVL
IC 1.0 C	RESE-1002126	17-Feb-10	<0.080	<0.00300	**<0.025**	0.0422	---	---	<0.000024	---	<0.0060	0.00955	---	0.068	0.000086 j	<0.0040	---	<0.0080	0.00117	---	<0.000100	---	<0.00100	<0.0100	SVL
IC 1.0 C	RESE-1002126	17-Feb-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
IC 1.0 C	RESE-1002126	17-Feb-10	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	0.011	---	---	<0.00300	0.0044	---	---	<0.010	<0.00030	<0.0050	---	<0.00100	<0.0100	SVL
IC 1.0 C	RESE-1002204	09-Dec-11	<0.080	<0.00300	**<0.025**	---	---	---	0.00003 j	---	<0.0060	0.00894	---	<0.060	<0.000042	<0.0040	---	<0.008	0.00300	---	<0.000100	---	<0.00100	<0.0100	SVL
IC 1.0 C	RESE-1002204	09-Dec-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
IC 1.0 C	RESE-1002204	09-Dec-11	---	<0.00300	**<0.025**	0.0640	<0.0020	<0.040	<0.0020	<0.0060	---	0.012	---	---	<0.00300	<0.0040	---	---	<0.010	<0.00070	<0.0050	---	<0.00100	<0.0100	SVL

MONTGOMERY & ASSOCIATES

TABLE B-2. TRACE CONSTITUENTS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	TRACE CONSTITUENTS[a] (mg/L)[b]																						ANALYTICAL LABORATORY
			Al	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	CN	Fe	Pb	Mn	Hg	Mo	Ni	Se	Ag	S	Tl	Zn	
Surface Water 2 - Devils Canyon																									
IC 1.0 C	RESE-1002216	01-Mar-12	<0.080	<0.00300	**<0.025**	---	---	---	0.00002 j	---	<0.0060	0.00571	---	<0.060	0.00003 j	<0.0040	---	<0.008	0.00100	---	<0.000100	---	<0.00100	<0.0100	SVL
IC 1.0 C	RESE-1002216	01-Mar-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
IC 1.0 C	RESE-1002216	01-Mar-12	---	<0.00300	**<0.025**	0.0579	<0.0020	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	<0.0040	---	---	<0.010	0.00039 jd	<0.0050	---	<0.00100	<0.0100	SVL
IC 1.0 C	RESE-1003073	29-Jan-13	0.164	<0.00300	**<0.025**	---	---	---	0.00005 j	---	<0.0060	0.0193	---	0.115	0.000421 j	0.0093	---	<0.008	0.00183	---	<0.000100	---	<0.00100	<0.0100	SVL
IC 1.0 C	RESE-1003073	29-Jan-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
IC 1.0 C	RESE-1003073	29-Jan-13	---	<0.00300	**<0.025**	0.0335	<0.0020	<0.040	<0.0020	<0.0060	---	0.027	---	---	<0.00300	0.0459	---	---	<0.010	0.00043 jd	<0.0050	---	<0.00100	<0.0100	SVL
IC 1.0 C	RESE-1003087	13-Mar-13	0.107	<0.00300	**<0.025**	---	---	---	0.00012 j	---	<0.0060	0.0145	---	0.088	0.000363 j	0.0074	---	<0.008	0.00192	---	<0.000100	---	<0.00100	<0.0100	SVL
IC 1.0 C	RESE-1003087	13-Mar-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
IC 1.0 C	RESE-1003087	13-Mar-13	---	<0.00300	**<0.025**	0.0329	<0.0020	<0.040	<0.0020	<0.0060	---	0.014	---	---	<0.00300	0.0103	---	---	<0.010	0.00033 jd	<0.0050	---	<0.00100	<0.0100	SVL
RR 1.5 C	RESE-1002012	19-Aug-08	<0.0141	<0.002	<0.0066	0.0073 j	<0.00036	---	<0.000034	---	0.0014 j	0.0018	---	*0.364*	0.000065 j	*0.0871*	<0.000064	<0.0023	<0.0023	---	<0.000017	---	<0.000018	<0.0019	SVL
RR 1.5 C	RESE-1002012	19-Aug-08	---	<0.0004	0.0069 j	---	<0.00036	0.0217 j	<0.00096	<0.001	---	<0.0039	---	---	0.000273 j,d	*0.301*	<0.000064	---	<0.0023	<0.0004	<0.00079	---	<0.000072	<0.0019	SVL
RR 1.5 C	RESE-1002029	05-Nov-08	<0.080	<0.00300	**<0.025**	0.0614	<0.00200	---	<0.000200	---	<0.0060	0.00260	---	<0.060	<0.00300	0.0214	<0.00020	<0.0080	<0.010	---	<0.000100	---	<0.00100	<0.0100	SVL
RR 1.5 C	RESE-1002029	05-Nov-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
RR 1.5 C	RESE-1002029	05-Nov-08	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0243	---	---	<0.010	<0.00300	<0.0050	---	<0.00100	<0.0100	SVL
RR 1.5 C DUP	RESE-1002066	26-Feb-09	0.157	<0.00300	**<0.025**	0.0324	<0.00200	---	<0.000042	---	<0.0060	0.00904	---	0.086	0.000114 j	0.0338	---	<0.0080	<0.00100	---	<0.000100	---	<0.00100	<0.0100	SVL
RR 1.5 C DUP	RESE-1002066	26-Feb-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
RR 1.5 C DUP	RESE-1002066	26-Feb-09	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.00020	<0.0060	---	0.010	---	---	<0.00300	0.0316	---	---	<0.010	<0.00041	<0.0050	---	<0.00100	<0.0100	SVL
RR 1.5 C	RESE-1002065	26-Feb-09	0.175	<0.00300	**<0.025**	0.0307	<0.00200	---	<0.000042	---	<0.0060	0.00896	---	0.088	0.000125 j	0.0297	---	<0.0080	<0.00100	---	<0.000100	---	<0.00100	<0.0100	SVL
RR 1.5 C	RESE-1002065	26-Feb-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
RR 1.5 C	RESE-1002065	26-Feb-09	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.00020	<0.0060	---	0.010	---	---	<0.00300	0.0324	---	---	<0.010	<0.00041	<0.0050	---	<0.00100	<0.0100	SVL
RR 1.5 C	RESE-1002100	21-May-09	<0.080	<0.00300	**<0.025**	---	<0.00200	---	<0.000024	---	<0.0060	0.00212	---	0.174	0.000055 j	*0.202*	---	<0.0080	0.00159	---	<0.000100	---	<0.00100	<0.0100	SVL
RR 1.5 C	RESE-1002100	21-May-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
RR 1.5 C	RESE-1002100	21-May-09	---	<0.00300	**<0.025**	0.0586	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	*0.183*	---	---	<0.010	<0.00030	<0.0050	---	<0.00100	<0.0100	SVL
RR 1.5 C DUP	RESE-1002101	21-May-09	<0.080	<0.00300	**<0.025**	---	<0.00200	---	<0.000024	---	<0.0060	0.00199	---	0.189	<0.000053	*0.207*	---	<0.0080	0.00270	---	<0.000100	---	<0.00100	<0.0100	SVL
RR 1.5 C DUP	RESE-1002101	21-May-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
RR 1.5 C DUP	RESE-1002101	21-May-09	---	<0.00300	**<0.025**	0.0602	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	*0.187*	---	---	<0.010	<0.00030	<0.0050	---	<0.00100	<0.0100	SVL
RR 1.5 C	RESE-1002128	18-Feb-10	0.088	<0.00300	**<0.025**	0.0405	---	---	<0.000024	---	<0.0060	0.00665	---	<0.060	0.000053 j	0.0074	---	<0.0080	<0.00100	---	<0.000100	---	<0.00100	0.0377	SVL
RR 1.5 C	RESE-1002128	18-Feb-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
RR 1.5 C	RESE-1002128	18-Feb-10	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0068	---	---	<0.010	<0.00030	<0.0050	---	<0.00100	<0.0100	SVL
RR 1.5 C	RESE-1002143	02-Nov-10	<0.080	<0.00300	**<0.025**	0.0407	---	---	<0.000024	---	<0.0060	0.00840	---	0.274	0.000386 j	0.0178	---	<0.0080	<0.00100	---	<0.000100	---	<0.00100	<0.0100	SVL
RR 1.5 C	RESE-1002143	02-Nov-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
RR 1.5 C	RESE-1002143	02-Nov-10	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0252	---	---	<0.010	0.00056 jd	<0.0050	---	<0.00100	<0.0100	SVL
RR 1.5 C	RESE-1002202	09-Dec-11	<0.080	<0.00300	**<0.025**	---	---	---	<0.000026	---	<0.0060	0.00776	---	<0.060	<0.000042	0.0082	---	<0.008	0.00134	---	<0.000100	---	<0.00100	<0.0100	SVL
RR 1.5 C	RESE-1002202	09-Dec-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
RR 1.5 C	RESE-1002202	09-Dec-11	---	<0.00300	**<0.025**	0.0335	<0.0020	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0082	---	---	<0.010	<0.00070	<0.0050	---	<0.00100	<0.0100	SVL
RR 1.5 C DUP	RESE-1002203	09-Dec-11	0.088	<0.00300	**<0.025**	---	---	---	<0.000026	---	<0.0060	0.00767	---	<0.060	0.000061 j	0.0101	---	<0.008	0.00182	---	<0.000100	---	<0.00100	<0.0100	SVL
RR 1.5 C DUP	RESE-1002203	09-Dec-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
RR 1.5 C DUP	RESE-1002203	09-Dec-11	---	<0.00300	**<0.025**	0.0446	<0.0020	<0.040	<0.0020	<0.0060	---	0.010	---	---	<0.00300	0.0103	---	---	<0.010	<0.00070	<0.0050	---	<0.00100	<0.0100	SVL
RR 1.5 C	RESE-1002220	05-Mar-12	<0.080	<0.00300	**<0.025**	---	---	---	<0.000013	---	<0.0060	0.00328	---	<0.060	<0.000013	0.0171	---	<0.008	<0.00100	---	<0.000100	---	<0.00100	<0.0100	SVL
RR 1.5 C	RESE-1002220	05-Mar-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
RR 1.5 C	RESE-1002220	05-Mar-12	---	<0.00300	**<0.025**	0.0543	<0.0020	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0216	---	---	<0.010	<0.00028	<0.0050	---	<0.00100	<0.0100	SVL

MONTGOMERY & ASSOCIATES

TABLE B-2. TRACE CONSTITUENTS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	TRACE CONSTITUENTS[a] (mg/L)[b]																						ANALYTICAL LABORATORY
			Al	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	CN	Fe	Pb	Mn	Hg	Mo	Ni	Se	Ag	S	Tl	Zn	
Surface Water 2 - Devils Canyon																									
RR 1.5 C DUP	RESE-1002221	05-Mar-12	<0.080	<0.00300	**<0.025**	---	---	---	0.00002 j	---	<0.0060	0.00334	---	<0.060	<0.000013	0.0161	---	<0.008	<0.00100	---	<0.000100	---	<0.00100	<0.0100	SVL
RR 1.5 C DUP	RESE-1002221	05-Mar-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
RR 1.5 C DUP	RESE-1002221	05-Mar-12	---	<0.00300	**<0.025**	0.0514	<0.0020	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0174	---	---	<0.010	<0.00028	<0.0050	---	<0.00100	<0.0100	SVL
RR 1.5 C	RESE-1002225	27-Apr-12	<0.0222	0.00027 j	<0.0067	---	---	---	0.00003 j	---	<0.0014	0.0037	---	0.0598 j	<0.000059	*0.0594*	---	0.0033 j	0.00096 j	---	<0.000014	---	<0.000008	<0.0026	SVL
RR 1.5 C	RESE-1002225	27-Apr-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.000054	---	---	---	---	---	---	---	SVL
RR 1.5 C	RESE-1002225	27-Apr-12	---	0.00019 j,d	0.0038 j	0.0679	<0.00031	0.013 j	<0.00029	<0.00075	---	0.0068	---	---	0.00071 j,d	*0.129*	---	---	0.0028 j	<0.00028	<0.0007	---	<0.000009	0.0066	SVL
RR 1.5 C DUP	RESE-1002226	27-Apr-12	<0.0222	0.00029 j	<0.0067	---	---	---	<0.000014	---	<0.0014	0.0036	---	0.0557 j	<0.000059	*0.0558*	---	0.0036 j	0.001	---	<0.000014	---	<0.000008	<0.0026	SVL
RR 1.5 C DUP	RESE-1002226	27-Apr-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.000054	---	---	---	---	---	---	---	SVL
RR 1.5 C DUP	RESE-1002226	27-Apr-12	---	0.00021 j,d	0.0047 j	0.0669	<0.00031	0.0144 j	0.00033 j	<0.00075	---	0.0066	---	---	0.00066 j,d	*0.123*	---	---	0.0027 j	<0.00028	<0.0007	---	<0.000009	0.0035 j	SVL
RR 1.5 C	RESE-1003061	27-Aug-12	<0.080	<0.00300	**<0.025**	---	---	---	0.00002 j	---	<0.0060	0.00889	---	*0.348*	0.000488 j	*0.160*	---	<0.008	0.00110	---	<0.000100	---	<0.00100	<0.0100	SVL
RR 1.5 C	RESE-1003061	27-Aug-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
RR 1.5 C	RESE-1003061	27-Aug-12	---	<0.00300	**<0.025**	0.0366	<0.0020	<0.040	<0.0020	<0.0060	---	0.011	---	---	<0.00300	*0.199*	---	---	<0.010	0.00035 jd	<0.0050	---	<0.00100	<0.0100	SVL
RR 1.5 C DUP	RESE-1003062	27-Aug-12	<0.080	<0.00300	**<0.025**	---	---	---	0.00002 j	---	<0.0060	0.00906	---	*0.334*	0.000493 j	*0.156*	---	<0.008	0.00110	---	<0.000100	---	<0.00100	<0.0100	SVL
RR 1.5 C DUP	RESE-1003062	27-Aug-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
RR 1.5 C DUP	RESE-1003062	27-Aug-12	---	<0.00300	**<0.025**	0.0389	<0.0020	<0.040	<0.0020	<0.0060	---	0.012	---	---	<0.00300	*0.231*	---	---	<0.010	<0.00028	<0.0050	---	<0.00100	<0.0100	SVL
RR 1.5 C	RESE-1001147	22-May-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.0000016	---	---	---	---	---	---	---	TestAmerica
Surface Water 3 - Mineral Creek																									
Government Springs	RESE-1002112	15-Dec-09	<0.080	<0.00300	**<0.025**	0.0643	---	---	<0.000024	---	<0.0060	0.00231	---	<0.060	0.000172 j	<0.0040	---	<0.0080	0.00161	---	<0.000100	---	<0.00100	<0.0100	SVL
Government Springs	RESE-1002112	15-Dec-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Government Springs	RESE-1002112	15-Dec-09	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	<0.0040	---	---	<0.010	0.00060 jd	<0.0050	---	<0.00100	<0.0100	SVL
Government Springs	RESE-1002181	29-Aug-11	<0.080	<0.00300	**<0.025**	---	---	---	<0.000026	---	<0.0060	0.00343	---	<0.060	0.000158 j	<0.0040	---	<0.008	0.00245	---	<0.000100	---	<0.00100	<0.0100	SVL
Government Springs	RESE-1002181	29-Aug-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Government Springs	RESE-1002181	29-Aug-11	---	<0.00300	**<0.025**	0.0612	<0.0020	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	<0.0040	---	---	<0.010	<0.00070	<0.0050	---	<0.00100	<0.0100	SVL
Government Springs	RESE-1002199	08-Dec-11	<0.080	<0.00300	**<0.025**	---	---	---	<0.000026	---	<0.0060	0.00268	---	<0.060	0.000269 j	<0.0040	---	0.009	0.00341	---	<0.000100	---	<0.00100	<0.0100	SVL
Government Springs	RESE-1002199	08-Dec-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Government Springs	RESE-1002199	08-Dec-11	---	<0.00300	**<0.025**	0.0654	<0.0020	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	<0.0040	---	---	<0.010	<0.00070	<0.0050	---	<0.00100	<0.0100	SVL
Government Springs	RESE-1002209	28-Feb-12	<0.080	<0.00300	**<0.025**	---	---	---	0.00004 j	---	<0.0060	0.00227	---	<0.060	0.000235 j	<0.0040	---	<0.008	0.00268	---	<0.000100	---	<0.00100	<0.0100	SVL
Government Springs	RESE-1002209	28-Feb-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Government Springs	RESE-1002209	28-Feb-12	---	<0.00300	**<0.025**	0.0625	<0.0020	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	<0.0040	---	---	<0.010	0.00054 jd	<0.0050	---	<0.00100	<0.0100	SVL
Government Springs	RESE-1002239	08-May-12	<0.0222	<0.003	<0.0067	---	---	---	<0.000014	---	0.0024 j	0.0028	---	<0.0222	0.00082 j	0.0031 j	---	<0.0081	0.0027	---	<0.000014	---	<0.000008	<0.0026	SVL
Government Springs	RESE-1002239	08-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.000054	---	---	---	---	---	---	---	SVL
Government Springs	RESE-1002239	08-May-12	---	<0.00015	<0.0033	0.0671	<0.00031	0.0391	<0.00029	0.0026 j	---	0.004 j	---	---	0.00031 j,d	<0.0007	---	---	<0.002	0.00062 j,d	<0.0007	---	<0.000009	<0.005	SVL
Government Springs	RESE-1003058	22-Aug-12	<0.080	<0.00300	**<0.025**	---	---	---	<0.000014	---	<0.0060	0.00218	---	<0.060	0.000092 j	<0.0040	---	0.009	0.00242	---	<0.000100	---	<0.00100	<0.0100	SVL
Government Springs	RESE-1003058	22-Aug-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Government Springs	RESE-1003058	22-Aug-12	---	<0.00300	**<0.025**	0.0640	<0.0020	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	<0.0040	---	---	<0.010	0.00076 jd	<0.0050	---	<0.00100	<0.0100	SVL
Government Springs	RESE-1003067	28-Nov-12	<0.080	<0.00300	**<0.025**	---	---	---	<0.000014	---	<0.0060	0.00156	---	<0.060	0.000170 j	<0.0040	---	<0.008	<0.00100	---	<0.000100	---	<0.00100	<0.0100	SVL
Government Springs	RESE-1003067	28-Nov-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Government Springs	RESE-1003067	28-Nov-12	---	<0.00300	**<0.025**	0.0684	<0.0020	<0.040	<0.0020	<0.0060	---	<0.010	---	---	0.00422	<0.0040	---	---	<0.010	0.00033 jd	<0.0050	---	<0.00100	<0.0100	SVL
Government Springs DUP	RESE-1003068	28-Nov-12	<0.080	<0.00300	**<0.025**	---	---	---	<0.000014	---	<0.0060	0.00154	---	<0.060	0.000197 j	<0.0040	---	<0.008	<0.00100	---	<0.000100	---	<0.00100	<0.0100	SVL
Government Springs DUP	RESE-1003068	28-Nov-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Government Springs DUP	RESE-1003068	28-Nov-12	---	<0.00300	**<0.025**	0.0671	<0.0020	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	<0.0040	---	---	<0.010	0.00033 jd	<0.0050	---	<0.00100	<0.0100	SVL

MONTGOMERY & ASSOCIATES

TABLE B-2. TRACE CONSTITUENTS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	TRACE CONSTITUENTS[a] (mg/L)[b]																						ANALYTICAL LABORATORY
			Al	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	CN	Fe	Pb	Mn	Hg	Mo	Ni	Se	Ag	S	Tl	Zn	
Surface Water 3 - Mineral Creek																									
Government Springs	RESE-1003078	04-Feb-13	<0.080	<0.00300	**<0.025**	---	---	---	0.00003 j	---	<0.0060	0.00433	---	<0.060	0.000857 j	<0.0040	---	<0.008	0.00298	---	<0.000100	---	<0.00100	<0.0100	SVL
Government Springs	RESE-1003078	04-Feb-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
Government Springs	RESE-1003078	04-Feb-13	---	<0.00300	**<0.025**	0.0614	<0.0020	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	<0.0040	---	---	<0.010	0.00061 jd	<0.0050	---	<0.00100	<0.0100	SVL
Government Springs	RESE-1003099	11-Jun-13	<0.080	<0.00300	<0.0030	---	---	---	<0.00003	---	<0.0060	0.00186	---	<0.060	0.000163 j	<0.0040	---	<0.008	0.00316	---	0.000170	---	<0.00100	<0.0100	SvL
Government Springs	RESE-1003099	11-Jun-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SvL
Government Springs	RESE-1003099	11-Jun-13	---	<0.00300	<0.0030	0.0667	<0.0020	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	<0.0040	---	---	<0.010	0.00139 jd	<0.0050	---	<0.00100	<0.0100	SvL
LF 0.2 C	RESE-1002039	13-Nov-08	<0.080	<0.00300	**<0.025**	0.0436	<0.00200	---	<0.000200	---	<0.0060	0.00287	---	<0.060	<0.00300	0.0272	<0.00020	<0.0080	<0.010	---	<0.000100	---	<0.00100	<0.0100	SVL
LF 0.2 C	RESE-1002039	13-Nov-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
LF 0.2 C	RESE-1002039	13-Nov-08	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	0.011	---	---	<0.00300	0.0282	---	---	<0.010	<0.00300	<0.0050	---	<0.00100	<0.0100	SVL
LF 0.2 C	RESE-1002072	05-Mar-09	<0.080	<0.00300	**<0.025**	0.0310	<0.00200	---	<0.000042	---	<0.0060	0.00704	---	<0.060	<0.000017	<0.0040	---	<0.0080	<0.00100	---	<0.000100	---	<0.00100	<0.0100	SVL
LF 0.2 C	RESE-1002072	05-Mar-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
LF 0.2 C	RESE-1002072	05-Mar-09	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	0.011	---	---	<0.00300	<0.0040	---	---	<0.010	0.00056 jd	<0.0050	---	<0.00100	<0.0100	SVL
LF 0.2 C	RESE-1002093	14-May-09	<0.0141	0.00023 j	<0.0066	---	<0.00036	---	<0.000024	---	<0.00065	0.0045	---	<0.0202	<0.000053	0.0035 j	---	0.0072 j	0.0013	---	<0.000019	---	<0.000023	<0.0019	SVL
LF 0.2 C	RESE-1002093	14-May-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00006	---	---	---	---	---	---	---	SVL
LF 0.2 C	RESE-1002093	14-May-09	---	<0.00055	0.0042 j	0.0351	<0.00018	0.0225	<0.00048	<0.0005	---	0.0065	---	---	<0.000132	<0.00065	---	---	<0.0011	<0.0006	<0.00021	---	<0.000058	0.0019 j	SVL
LF 0.2 C	RESE-1002106	06-Aug-09	<0.0192	<0.00022	**0.0146 j**	0.0365	<0.00024	---	<0.000024	---	<0.00085	0.0023	---	0.0742 j	<0.000054	0.0172	---	0.0048 j	0.0018	---	<0.000019	---	<0.000023	<0.0026	SVL
LF 0.2 C	RESE-1002106	06-Aug-09	---	<0.00028	<0.0028	---	<0.00012	0.027	<0.00024	<0.0004	---	0.0177	---	---	0.0021 j	0.0243	---	---	<0.00095	0.00052 j	<0.00024	---	<0.000029	0.0028 j	SVL
LF 0.2 C	RESE-1002111	15-Dec-09	<0.080	<0.00300	**<0.025**	0.0338	---	---	<0.000024	---	<0.0060	0.00524	---	<0.060	<0.000053	0.0128	---	<0.0080	0.00145	---	<0.000100	---	<0.00100	<0.0100	SVL
LF 0.2 C	RESE-1002111	15-Dec-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
LF 0.2 C	RESE-1002111	15-Dec-09	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0074	---	---	<0.010	0.00068 jd	<0.0050	---	<0.00100	<0.0100	SVL
LF 0.2 C	RESE-1002124	15-Feb-10	<0.080	<0.00300	**<0.025**	0.0244	---	---	<0.000024	---	<0.0060	0.00922	---	<0.060	<0.000053	<0.0040	---	<0.0080	<0.00100	---	<0.000100	---	<0.00100	<0.0100	SVL
LF 0.2 C	RESE-1002124	15-Feb-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
LF 0.2 C	RESE-1002124	15-Feb-10	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	0.013	---	---	<0.00300	<0.0040	---	---	<0.010	0.00069 jd	<0.0050	---	<0.00100	<0.0100	SVL
LF 0.2 C	RESE-1002149	04-Nov-10	<0.080	<0.00300	**<0.025**	0.0426	---	---	<0.000024	---	<0.0060	0.00197	---	*0.330*	<0.000019	0.0468	---	<0.0080	0.00341	---	<0.000100	---	<0.00100	<0.0100	SVL
LF 0.2 C	RESE-1002149	04-Nov-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
LF 0.2 C	RESE-1002149	04-Nov-10	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0474	---	---	<0.010	0.00110 jd	<0.0050	---	<0.00100	<0.0100	SVL
LF 0.2 C	RESE-1002165	24-Feb-11	<0.080	<0.00300	**<0.025**	---	---	---	<0.000036	---	<0.0060	0.00215	---	<0.060	<0.000019	<0.0040	---	<0.008	0.00230	---	<0.000100	---	<0.00100	<0.0100	SVL
LF 0.2 C	RESE-1002165	24-Feb-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
LF 0.2 C	RESE-1002165	24-Feb-11	---	<0.00300	**<0.025**	0.0355	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	<0.0040	---	---	<0.010	0.00069 jd	<0.0050	---	<0.00100	<0.0100	SVL
LF 0.2 C	RESE-1002174	31-May-11	<0.080	<0.00300	**<0.025**	---	---	---	<0.000026	---	<0.0060	0.00184	---	<0.060	<0.000042	0.0054	---	<0.008	<0.00100	---	<0.000100	---	<0.00100	<0.0100	SVL
LF 0.2 C	RESE-1002174	31-May-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
LF 0.2 C	RESE-1002174	31-May-11	---	<0.00300	**<0.025**	0.0406	<0.0020	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0086	---	---	<0.010	<0.00108	<0.0050	---	<0.00100	<0.0100	SVL
LF 0.2 C	RESE-1002182	29-Aug-11	<0.080	<0.00300	**<0.025**	---	---	---	<0.000026	---	<0.0060	0.00192	---	0.145	0.000102 j	*0.213*	---	<0.008	0.00286	---	<0.000100	---	<0.00100	<0.0100	SVL
LF 0.2 C	RESE-1002182	29-Aug-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
LF 0.2 C	RESE-1002182	29-Aug-11	---	<0.00300	**<0.025**	0.0688	<0.0020	<0.040	<0.0020	<0.0060	---	0.034	---	---	0.00731	*0.456*	---	---	<0.010	<0.00070	<0.0050	---	<0.00100	0.0270	SVL
LF 0.2 C DUP	RESE-1002183	29-Aug-11	<0.080	<0.00300	**<0.025**	---	---	---	<0.000026	---	<0.0060	0.00188	---	0.154	0.000139 j	*0.212*	---	<0.008	0.00263	---	<0.000100	---	<0.00100	<0.0100	SVL
LF 0.2 C DUP	RESE-1002183	29-Aug-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
LF 0.2 C DUP	RESE-1002183	29-Aug-11	---	<0.00300	**<0.025**	0.0619	<0.0020	<0.040	<0.0020	<0.0060	---	0.024	---	---	0.00485	*0.391*	---	---	<0.010	<0.00070	<0.0050	---	<0.00100	0.0168	SVL
LF 0.2 C	RESE-1002245	08-May-12	<0.0222	<0.003	<0.0067	---	---	---	<0.000014	---	<0.0014	0.0018	---	0.0333 j	<0.000059	0.0116	---	<0.0081	0.0024	---	<0.000014	---	<0.000008	<0.0026	SVL
LF 0.2 C	RESE-1002245	08-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.000054	---	---	---	---	---	---	---	SVL
LF 0.2 C	RESE-1002245	08-May-12	---	<0.00015	<0.0033	0.0368	<0.00031	0.0265	<0.00029	0.0022 j	---	0.0029 j	---	---	<0.000072	0.0097	---	---	<0.002	<0.00028	<0.0007	---	<0.000009	<0.005	SVL

MONTGOMERY & ASSOCIATES

TABLE B-2. TRACE CONSTITUENTS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	TRACE CONSTITUENTS[a] (mg/L)[b]																						ANALYTICAL LABORATORY
			Al	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	CN	Fe	Pb	Mn	Hg	Mo	Ni	Se	Ag	S	Tl	Zn	
Surface Water 3 - Mineral Creek																									
MC 3.3 C (Lower Mineral)	RESE-1002040	13-Nov-08	<0.080	<0.00300	**<0.025**	0.0352	<0.00200	---	<0.000200	---	<0.0060	0.00182	---	<0.060	<0.00300	0.0137	<0.00020	<0.0080	<0.010	---	<0.000100	---	<0.00100	<0.0100	SVL
MC 3.3 C (Lower Mineral)	RESE-1002040	13-Nov-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
MC 3.3 C (Lower Mineral)	RESE-1002040	13-Nov-08	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0254	---	---	<0.010	<0.00300	<0.0050	---	<0.00100	<0.0100	SVL
MC 3.3 C (Lower Mineral)	RESE-1002074	05-Mar-09	<0.080	<0.00300	**<0.025**	0.0346	<0.00200	---	<0.000042	---	<0.0060	0.00247	---	<0.060	<0.000017	0.0131	---	<0.0080	<0.00100	---	<0.000100	---	<0.00100	<0.0100	SVL
MC 3.3 C (Lower Mineral)	RESE-1002074	05-Mar-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
MC 3.3 C (Lower Mineral)	RESE-1002074	05-Mar-09	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0177	---	---	<0.010	<0.00030	<0.0050	---	<0.00100	<0.0100	SVL
MC 3.3 C (Lower Mineral)	RESE-1002095	14-May-09	<0.0141	0.00028 j	**0.0126 j**	---	<0.00036	---	<0.000024	---	0.0012 j	0.0022	---	<0.0202	<0.000053	0.0075 j	---	0.0059 j	0.0011	---	<0.000019	---	<0.000023	<0.0019	SVL
MC 3.3 C (Lower Mineral)	RESE-1002095	14-May-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00006	---	---	---	---	---	---	---	SVL
MC 3.3 C (Lower Mineral)	RESE-1002095	14-May-09	---	<0.00055	0.0047 j	0.0409	<0.00018	0.0186 j	<0.00048	0.00059 j	---	<0.002	---	---	<0.000132	<0.0157	---	---	<0.0011	<0.0006	<0.00021	---	<0.000058	0.0026 j	SVL
MC 3.3 C (Lower Mineral)	RESE-1002104	06-Aug-09	<0.0192	<0.00022	**0.0162 j**	0.0292	<0.00024	---	<0.000024	---	<0.00085	0.0019 j	---	0.0653 j	<0.000054	*0.083*	---	0.0041 j	0.0012 j	---	<0.000019	---	<0.000023	<0.0026	SVL
MC 3.3 C (Lower Mineral)	RESE-1002104	06-Aug-09	---	<0.00028	0.0051 j	---	<0.00012	0.0208	<0.00024	<0.0004	---	0.0081	---	---	0.0012 j	*0.614*	---	---	<0.0059	0.00047 j	0.0004 j	---	<0.000029	<0.0013	SVL
MC 3.3 C (Lower Mineral)	RESE-1002114	15-Dec-09	<0.080	<0.00300	**<0.025**	0.0367	---	---	<0.000024	---	<0.0060	0.00214	---	0.071	<0.000053	0.0380	---	<0.0080	0.00136	---	<0.000100	---	<0.00100	<0.0100	SVL
MC 3.3 C (Lower Mineral)	RESE-1002114	15-Dec-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
MC 3.3 C (Lower Mineral)	RESE-1002114	15-Dec-09	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0404	---	---	<0.010	<0.00030	<0.0050	---	<0.00100	<0.0100	SVL
MC 3.3 C (Lower Mineral)	RESE-1002121	15-Feb-10	<0.080	<0.00300	**<0.025**	0.0290	---	---	<0.000024	---	<0.0060	0.00444	---	<0.060	<0.000053	0.0109	---	<0.0080	0.00109	---	<0.000100	---	<0.00100	<0.0100	SVL
MC 3.3 C (Lower Mineral)	RESE-1002121	15-Feb-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
MC 3.3 C (Lower Mineral)	RESE-1002121	15-Feb-10	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0116	---	---	<0.010	0.00068 jd	<0.0050	---	<0.00100	<0.0100	SVL
MC 3.3 C (Lower Mineral)	RESE-1002150	04-Nov-10	<0.080	<0.00300	**<0.025**	0.0350	---	---	<0.000024	---	<0.0060	0.00137	---	<0.060	0.000019 j	0.0096	---	<0.0080	0.00244	---	<0.000100	---	<0.00100	<0.0100	SVL
MC 3.3 C (Lower Mineral)	RESE-1002150	04-Nov-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
MC 3.3 C (Lower Mineral)	RESE-1002150	04-Nov-10	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0176	---	---	<0.010	0.00204 jd	<0.0050	---	<0.00100	<0.0100	SVL
MC 3.3 C (Lower Mineral)	RESE-1002163	24-Feb-11	<0.080	<0.00300	**<0.025**	---	---	---	<0.000036	---	<0.0060	0.00139	---	<0.060	<0.000019	0.0041	---	<0.008	0.00172	---	<0.000100	---	<0.00100	<0.0100	SVL
MC 3.3 C (Lower Mineral)	RESE-1002163	24-Feb-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
MC 3.3 C (Lower Mineral)	RESE-1002163	24-Feb-11	---	<0.00300	**<0.025**	0.0321	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0051	---	---	<0.010	<0.00034	<0.0050	---	<0.00100	<0.0100	SVL
MC 3.3 C (Lower Mineral)	RESE-1002172	31-May-11	<0.080	<0.00300	**<0.025**	---	---	---	<0.000026	---	<0.0060	0.00122	---	<0.060	<0.000042	<0.0040	---	<0.008	<0.00100	---	<0.000100	---	<0.00100	<0.0100	SVL
MC 3.3 C (Lower Mineral)	RESE-1002172	31-May-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
MC 3.3 C (Lower Mineral)	RESE-1002172	31-May-11	---	<0.00300	**<0.025**	0.0291	<0.0020	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0159	---	---	<0.010	<0.00108	<0.0050	---	<0.00100	<0.0100	SVL
MC 3.3 C (Lower Mineral)	RESE-1002186	29-Aug-11	<0.080	<0.00300	**<0.025**	---	---	---	<0.000026	---	<0.0060	0.00139	---	0.184	0.000139 j	*0.136*	---	<0.008	0.00179	---	<0.000100	---	<0.00100	<0.0100	SVL
MC 3.3 C (Lower Mineral)	RESE-1002186	29-Aug-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
MC 3.3 C (Lower Mineral)	RESE-1002186	29-Aug-11	---	<0.00300	**<0.025**	0.0307	<0.0020	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	*0.147*	---	---	<0.010	<0.00070	<0.0050	---	<0.00100	<0.0100	SVL
MC 3.3 C (Lower Mineral)	RESE-1002243	08-May-12	<0.0222	<0.003	<0.0067	---	---	---	<0.000014	---	0.0016 j	0.0013	---	<0.0222	<0.000059	0.0103	---	<0.0021	0.0017	---	<0.000014	---	<0.000008	<0.0026	SVL
MC 3.3 C (Lower Mineral)	RESE-1002243	08-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.000054	---	---	---	---	---	---	---	SVL
MC 3.3 C (Lower Mineral)	RESE-1002243	08-May-12	---	<0.00015	<0.0033	0.0344	<0.00031	0.0199 j	<0.00029	0.0019 j	---	0.0019 j	---	---	<0.000072	0.0289	---	---	<0.002	<0.00028	<0.0007	---	<0.000009	<0.005	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002041	13-Nov-08	<0.080	<0.00300	**<0.025**	0.0180	<0.00200	---	<0.000200	---	<0.0060	<0.001	---	<0.060	<0.00300	<0.0040	<0.00020	<0.0080	<0.010	---	<0.000100	---	<0.00100	<0.0100	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002041	13-Nov-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002041	13-Nov-08	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0078	---	---	<0.010	<0.00300	<0.0050	---	<0.00100	<0.0100	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002073	05-Mar-09	<0.080	<0.00300	**<0.025**	0.0148	<0.00200	---	<0.000042	---	<0.0060	<0.00100	---	<0.060	<0.000017	<0.0040	---	<0.0080	<0.00100	---	<0.000100	---	<0.00100	<0.0100	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002073	05-Mar-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002073	05-Mar-09	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	<0.0040	---	---	<0.010	<0.00030	<0.0050	---	<0.00100	<0.0100	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002094	14-May-09	<0.0141	<0.00022	0.0067 j	---	<0.00036	---	<0.000024	---	<0.00065	0.000601 j	---	<0.0202	<0.000053	<0.0013	---	0.0045 j	0.000363 j	---	<0.000019	---	<0.000023	<0.0019	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002094	14-May-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00006	---	---	---	---	---	---	---	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002094	14-May-09	---	<0.00055	0.0056 j	0.0151	<0.00018	0.01 j	<0.00048	<0.0005	---	<0.002	---	---	<0.000132	<0.00065	---	---	<0.0011	<0.0006	<0.00021	---	<0.000058	0.0019 j	SVL

MONTGOMERY & ASSOCIATES

TABLE B-2. TRACE CONSTITUENTS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	TRACE CONSTITUENTS[a] (mg/L)[b]																						ANALYTICAL LABORATORY
			Al	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	CN	Fe	Pb	Mn	Hg	Mo	Ni	Se	Ag	S	Tl	Zn	
Surface Water 3 - Mineral Creek																									
MC 3.4 W (Wet Leg Spring)	RESE-1002105	06-Aug-09	<0.0192	<0.00022	0.0098 j	0.0167	<0.00024	---	<0.000024	---	<0.00085	0.000666 j	---	0.0276 j	<0.000054	0.0042	---	0.003 j	0.000871 j	---	<0.000019	---	<0.000023	<0.0026	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002105	06-Aug-09	---	<0.00028	<0.0028	---	<0.00012	0.0117 j	<0.00024	0.00044 j	---	0.0049 j	---	---	0.000436 j	0.0319	---	---	<0.005	0.00047 j	0.00046 j	---	<0.000029	<0.0013	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002113	15-Dec-09	<0.080	<0.00300	**<0.025**	0.0163	---	---	<0.000024	---	<0.0060	<0.00100	---	<0.060	<0.000053	<0.0040	---	<0.0080	<0.00100	---	<0.000100	---	<0.00100	<0.0100	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002113	15-Dec-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002113	15-Dec-09	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0045	---	---	<0.010	<0.00030	<0.0050	---	<0.00100	<0.0100	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002122	15-Feb-10	<0.080	<0.00300	**<0.025**	0.0154	---	---	<0.000024	---	<0.0060	<0.00100	---	<0.060	<0.000053	<0.0040	---	<0.0080	<0.00100	---	<0.000100	---	<0.00100	<0.0100	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002122	15-Feb-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002122	15-Feb-10	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0040	---	---	<0.010	<0.00030	<0.0050	---	<0.00100	<0.0100	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002151	04-Nov-10	<0.080	<0.00300	**<0.025**	0.0160	---	---	<0.000024	---	<0.0060	<0.00100	---	<0.060	<0.000019	<0.0040	---	<0.0080	0.00201	---	<0.000100	---	<0.00100	<0.0100	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002151	04-Nov-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002151	04-Nov-10	---	<0.00300	**<0.025**	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	<0.0040	---	---	<0.010	0.00080 jd	<0.0050	---	<0.00100	<0.0100	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002164	24-Feb-11	<0.080	<0.00300	**<0.025**	---	---	---	<0.000036	---	<0.0060	<0.00100	---	<0.060	<0.000019	<0.0040	---	<0.008	<0.00100	---	<0.000100	---	<0.00100	<0.0100	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002164	24-Feb-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002164	24-Feb-11	---	<0.00300	**<0.025**	0.0156	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	<0.0040	---	---	<0.010	<0.00034	<0.0050	---	<0.00100	<0.0100	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002173	31-May-11	<0.080	<0.00300	**<0.025**	---	---	---	<0.000026	---	<0.0060	<0.00100	---	<0.060	<0.000042	<0.0040	---	<0.008	<0.00100	---	<0.000100	---	<0.00100	<0.0100	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002173	31-May-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002173	31-May-11	---	<0.00300	**<0.025**	0.0163	<0.0020	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	<0.0040	---	---	<0.010	<0.00108	<0.0050	---	<0.00100	<0.0100	SVL
MC 3.4 W (Wet Leg Spring) SP	RESE-1002173	31-May-11	<0.20	<0.0030	0.0028	0.016	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	<0.0010	---	<0.050	<0.0010	<0.010	<0.00020	<0.0010	0.0019	<0.0020	<0.0010	---	<0.0010	<0.010	TestAmerica
MC 3.4 W (Wet Leg Spring) SP	RESE-1002173	31-May-11	<0.20	**<0.015**	<0.0050	0.016	<0.0010	<0.20	<0.0050	<0.0050	<0.0050	<0.0050	<0.0080	<0.050	<0.0050	<0.010	<0.00020	<0.0050	<0.0050	<0.010	<0.0050	<0.050	**<0.0050**	<0.050	TestAmerica
MC 3.4 W (Wet Leg Spring)	RESE-1002185	29-Aug-11	<0.080	<0.00300	**<0.025**	---	---	---	<0.000026	---	<0.0060	<0.00100	---	<0.060	<0.000042	<0.0040	---	<0.008	<0.00100	---	<0.000100	---	<0.00100	<0.0100	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002185	29-Aug-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002185	29-Aug-11	---	<0.00300	**<0.025**	0.0205	<0.0020	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0156	---	---	<0.010	<0.00070	<0.0050	---	<0.00100	<0.0100	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002244	08-May-12	<0.0222	<0.003	<0.0067	---	---	---	<0.000014	---	<0.0014	0.00049 j	---	<0.0222	<0.000059	<0.0014	---	<0.0021	0.0011	---	<0.000014	---	<0.000008	<0.0026	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002244	08-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.000054	---	---	---	---	---	---	---	SVL
MC 3.4 W (Wet Leg Spring)	RESE-1002244	08-May-12	---	<0.00015	<0.0033	0.015	<0.00031	0.0149 j	<0.00029	0.0013 j	---	<0.0016	---	---	<0.000072	<0.0007	---	---	<0.002	<0.00028	<0.0007	---	<0.000009	<0.005	SVL
MC 5.2 C	RESE-1002171	31-May-11	<0.080	<0.00300	**<0.025**	---	---	---	<0.000026	---	<0.0060	0.00111	---	<0.060	<0.000042	<0.0040	---	<0.008	<0.00100	---	<0.000100	---	<0.00100	<0.0100	SVL
MC 5.2 C	RESE-1002171	31-May-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
MC 5.2 C	RESE-1002171	31-May-11	---	<0.00300	**<0.025**	0.0336	<0.0020	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0047	---	---	<0.010	<0.00108	<0.0050	---	<0.00100	<0.0100	SVL
MC 5.2 C SP	RESE-1002171	31-May-11	<0.20	<0.0030	0.0022	0.032	<0.0010	<0.20	<0.0010	<0.0010	<0.0010	0.0014	---	<0.050	<0.0010	<0.010	<0.00020	0.0013	0.0037	<0.0020	<0.0010	---	<0.0010	<0.010	TestAmerica
MC 5.2 C SP	RESE-1002171	31-May-11	<0.20	**<0.015**	<0.0050	0.038	<0.0010	<0.20	<0.0050	<0.0050	<0.0050	0.0052	<0.0080	0.054	<0.0050	0.023	<0.00020	<0.0050	<0.0050	<0.010	<0.0050	<0.050	**<0.0050**	<0.050	TestAmerica
MC 5.2 C	RESE-1002184	29-Aug-11	<0.080	<0.00300	**<0.025**	---	---	---	<0.000026	---	<0.0060	<0.00100	---	<0.060	<0.000042	*0.0937*	---	<0.008	0.00153	---	<0.000100	---	<0.00100	<0.0100	SVL
MC 5.2 C	RESE-1002184	29-Aug-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
MC 5.2 C	RESE-1002184	29-Aug-11	---	<0.00300	**<0.025**	0.0373	<0.0020	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	*0.127*	---	---	<0.010	<0.00070	<0.0050	---	<0.00100	<0.0100	SVL
MC 5.2 C	RESE-1002201	08-Dec-11	<0.080	<0.00300	**<0.025**	---	---	---	<0.000026	---	<0.0060	<0.00100	---	<0.060	<0.000042	0.0336	---	0.008	0.00270	---	<0.000100	---	<0.00100	<0.0100	SVL
MC 5.2 C	RESE-1002201	08-Dec-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
MC 5.2 C	RESE-1002201	08-Dec-11	---	<0.00300	**<0.025**	0.0359	<0.0020	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0342	---	---	<0.010	<0.00070	<0.0050	---	<0.00100	<0.0100	SVL
MC 5.2 C	RESE-1002210	28-Feb-12	<0.080	<0.00300	**<0.025**	---	---	---	0.00003 j	---	<0.0060	0.00155	---	<0.060	<0.000013	<0.0040	---	<0.008	0.00177	---	<0.000100	---	<0.00100	<0.0100	SVL
MC 5.2 C	RESE-1002210	28-Feb-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
MC 5.2 C	RESE-1002210	28-Feb-12	---	<0.00300	**<0.025**	0.0379	<0.0020	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0049	---	---	<0.010	<0.00028	<0.0050	---	<0.00100	<0.0100	SVL
MC 5.2 C	RESE-1002242	08-May-12	<0.0222	<0.003	<0.0067	---	---	---	<0.000014	---	<0.0014	0.0015	---	<0.0222	<0.000059	0.0049	---	<0.0081	0.0022	---	<0.000014	---	<0.000008	<0.0026	SVL
MC 5.2 C	RESE-1002242	08-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.000054	---	---	---	---	---	---	---	SVL
MC 5.2 C	RESE-1002242	08-May-12	---	<0.00015	<0.0033	0.0383	<0.00031	0.0217	<0.00029	0.0018 j	---	0.002 j	---	---	<0.000072	0.0058	---	---	<0.002	<0.00028	<0.0007	---	<0.000009	<0.005	SVL

MONTGOMERY & ASSOCIATES

TABLE B-2. TRACE CONSTITUENTS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	TRACE CONSTITUENTS[a] (mg/L)[b]																						ANALYTICAL LABORATORY
			Al	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	CN	Fe	Pb	Mn	Hg	Mo	Ni	Se	Ag	S	Tl	Zn	
Surface Water 3 - Mineral Creek																									
MC 5.2 C	RESE-1003059	22-Aug-12	0.118	<0.00300	<0.025	---	---	---	0.00002 j	---	<0.0060	0.0133	---	0.086	0.000322 j	0.0084	---	0.012	0.00290	---	<0.000100	---	<0.00100	<0.0100	SVL
MC 5.2 C	RESE-1003059	22-Aug-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.00026	---	---	---	---	---	---	---	SVL
MC 5.2 C	RESE-1003059	22-Aug-12	---	<0.00300	0.043	0.857	0.0051	0.073	0.0041	0.0580	---	0.702	---	---	0.222	8.23	---	---	0.114	0.00178 jd	<0.0050	---	<0.00100	0.784	SVL
MC 5.2 C	RESE-1003069	28-Nov-12	<0.080	<0.00300	<0.025	---	---	---	<0.000014	---	<0.0060	<0.00100	---	<0.060	<0.000058	0.0499	---	<0.008	<0.00100	---	<0.000100	---	<0.00100	<0.0100	SVL
MC 5.2 C	RESE-1003069	28-Nov-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
MC 5.2 C	RESE-1003069	28-Nov-12	---	<0.00300	<0.025	0.0384	<0.0020	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0693	---	---	<0.010	<0.00028	<0.0050	---	<0.00100	<0.0100	SVL
MC 5.2 C	RESE-1003079	04-Feb-13	<0.080	<0.00300	<0.025	---	---	---	<0.000014	---	<0.0060	0.00574	---	<0.060	0.000165 j	0.0182	---	<0.008	0.00246	---	<0.000100	---	<0.00100	<0.0100	SVL
MC 5.2 C	RESE-1003079	04-Feb-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
MC 5.2 C	RESE-1003079	04-Feb-13	---	<0.00300	<0.025	0.0392	<0.0020	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0255	---	---	<0.010	0.00050 jd	<0.0050	---	<0.00100	<0.0100	SVL
MC 5.2 C	RESE-1003100	11-Jun-13	<0.080	<0.00300	<0.0030	---	---	---	<0.00003	---	<0.0060	0.00137	---	<0.060	0.000062 j	0.0195	---	<0.008	0.00249	---	<0.000100	---	<0.00100	<0.0100	SvL
MC 5.2 C	RESE-1003100	11-Jun-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SvL
MC 5.2 C	RESE-1003100	11-Jun-13	---	<0.00300	<0.0030	0.0367	<0.0020	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0209	---	---	<0.010	0.00071 jd	<0.0050	---	<0.00100	<0.0100	SvL
MC 5.2 C	RESE-1001120	12-Aug-13	<0.080	<0.00300	0.0037	---	---	---	<0.00003	---	<0.0060	0.00121	---	<0.060	<0.000048	0.113	---	<0.008	0.00305	---	<0.000100	---	<0.00100	<0.0100	SVL
MC 5.2 C	RESE-1001120	12-Aug-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
MC 5.2 C	RESE-1001120	12-Aug-13	---	<0.00300	0.0039	0.0437	<0.0020	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.298	---	---	<0.010	<0.00032	<0.0050	---	<0.00100	<0.0100	SVL
MC 8.4 C	RESE-1002038	13-Nov-08	<0.080	<0.00300	0.037	0.0464	<0.00200	---	<0.000200	---	<0.0060	0.00159	---	<0.060	<0.00300	<0.0040	<0.00020	<0.0080	<0.010	---	<0.000100	---	<0.00100	<0.0100	SVL
MC 8.4 C	RESE-1002038	13-Nov-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
MC 8.4 C	RESE-1002038	13-Nov-08	---	<0.00300	<0.025	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	<0.0040	---	---	<0.010	<0.00300	<0.0050	---	<0.00100	<0.0100	SVL
MC 8.4 C	RESE-1002071	05-Mar-09	<0.080	<0.00300	<0.025	0.0430	<0.00200	---	0.000047 j	---	<0.0060	0.00116	---	<0.060	<0.000017	<0.0040	---	<0.0080	0.00123	---	<0.000100	---	<0.00100	<0.0100	SVL
MC 8.4 C	RESE-1002071	05-Mar-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
MC 8.4 C	RESE-1002071	05-Mar-09	---	<0.00300	<0.025	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	<0.0040	---	---	<0.010	0.00074 jd	<0.0050	---	<0.00100	<0.0100	SVL
MC 8.4 C	RESE-1002090	14-May-09	<0.0141	0.00027 j	0.0167 j	---	<0.00036	---	<0.000024	---	<0.00065	0.0015	---	<0.0202	<0.000053	0.0098 j	---	0.0063 j	0.0012	---	<0.000019	---	<0.000023	<0.0019	SVL
MC 8.4 C	RESE-1002090	14-May-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00006	---	---	---	---	---	---	---	SVL
MC 8.4 C	RESE-1002090	14-May-09	---	<0.00055	0.0035 j	0.0523	<0.00018	0.0288	<0.00048	<0.0005	---	<0.002	---	---	<0.000132	<0.0107	---	---	<0.0011	<0.0006	<0.00021	---	<0.000058	0.0015 j	SVL
MC 8.4 C DUP	RESE-1002091	14-May-09	<0.0141	<0.00022	0.0143 j	---	<0.00036	---	<0.000024	---	<0.00065	0.0014	---	<0.0202	<0.000053	0.0099 j	---	0.0073 j	0.0012	---	<0.000019	---	<0.000023	<0.0019	SVL
MC 8.4 C DUP	RESE-1002091	14-May-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00006	---	---	---	---	---	---	---	SVL
MC 8.4 C DUP	RESE-1002091	14-May-09	---	<0.00055	0.0042 j	0.0527	<0.00018	0.0287	<0.00048	<0.0005	---	<0.002	---	---	<0.000132	<0.0112	---	---	<0.0011	<0.0006	<0.00021	---	<0.000058	0.0013 j	SVL
MC 8.4 C	RESE-1002107	06-Aug-09	<0.0192	<0.00022	0.0301	0.0499	<0.00024	---	<0.000024	---	<0.00085	0.0014	---	<0.0182	<0.000054	0.0054	---	0.0036 j	0.0026	---	<0.000019	---	<0.000023	<0.0026	SVL
MC 8.4 C	RESE-1002107	06-Aug-09	---	<0.00028	<0.0028	---	<0.00012	0.0329	<0.00024	<0.0004	---	0.0038 j	---	---	<0.000066	0.0052	---	---	<0.00095	<0.0003	<0.00024	---	<0.000029	<0.0013	SVL
MC 8.4 C DUP	RESE-1002108	06-Aug-09	<0.0192	<0.00022	0.0229 j	0.0494	<0.00024	---	<0.000024	---	<0.00085	0.0014	---	<0.0182	<0.000054	0.005	---	0.0036 j	0.0023	---	<0.000019	---	<0.000023	<0.0026	SVL
MC 8.4 C DUP	RESE-1002108	06-Aug-09	---	<0.00028	<0.0028	---	<0.00012	0.0334	<0.00024	<0.0004	---	0.0033 j	---	---	<0.000066	0.0052	---	---	<0.00095	0.00035 j	<0.00024	---	<0.000029	<0.0013	SVL
MC 8.4 C	RESE-1002110	15-Dec-09	<0.080	<0.00300	<0.025	0.0431	---	---	<0.000024	---	<0.0060	0.00165	---	<0.060	<0.000053	<0.0040	---	<0.0080	0.00180	---	<0.000100	---	<0.00100	<0.0100	SVL
MC 8.4 C	RESE-1002110	15-Dec-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
MC 8.4 C	RESE-1002110	15-Dec-09	---	<0.00300	<0.025	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	<0.0040	---	---	<0.010	0.00067 jd	<0.0050	---	<0.00100	<0.0100	SVL
MC 8.4 C	RESE-1002123	15-Feb-10	<0.080	<0.00300	<0.025	0.0295	---	---	<0.000024	---	<0.0060	0.00269	---	<0.060	0.000058 j	<0.0040	---	<0.0080	0.00122	---	<0.000100	---	<0.00100	<0.0100	SVL
MC 8.4 C	RESE-1002123	15-Feb-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
MC 8.4 C	RESE-1002123	15-Feb-10	---	<0.00300	<0.025	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	<0.0040	---	---	<0.010	0.00111 jd	<0.0050	---	<0.00100	<0.0100	SVL
MC 8.4 C	RESE-1002148	04-Nov-10	<0.080	<0.00300	<0.025	0.0468	---	---	<0.000024	---	<0.0060	0.00136	---	<0.060	0.00003 j	<0.0040	---	<0.0080	0.00386	---	<0.000100	---	<0.00100	<0.0100	SVL
MC 8.4 C	RESE-1002148	04-Nov-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
MC 8.4 C	RESE-1002148	04-Nov-10	---	<0.00300	<0.025	---	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0161	---	---	<0.010	0.00079 jd	<0.0050	---	<0.00100	<0.0100	SVL

MONTGOMERY & ASSOCIATES

TABLE B-2. TRACE CONSTITUENTS
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	TRACE CONSTITUENTS[a] (mg/L)[b]																						ANALYTICAL LABORATORY
			Al	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	CN	Fe	Pb	Mn	Hg	Mo	Ni	Se	Ag	S	Tl	Zn	
Surface Water 3 - Mineral Creek																									
MC 8.4 C	RESE-1002166	24-Feb-11	<0.080	<0.00300	**<0.025**	---	---	---	<0.000036	---	<0.0060	0.00103	---	<0.060	0.000023 j	<0.0040	---	<0.008	0.00231	---	<0.000100	---	<0.00100	<0.0100	SVL
MC 8.4 C	RESE-1002166	24-Feb-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
MC 8.4 C	RESE-1002166	24-Feb-11	---	<0.00300	**<0.025**	0.0409	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0112	---	---	<0.010	0.00059 jd	<0.0050	---	<0.00100	<0.0100	SVL
MC 8.4 C DUP	RESE-1002162	24-Feb-11	<0.080	<0.00300	**<0.025**	---	---	---	<0.000036	---	<0.0060	0.00106	---	<0.060	<0.000019	<0.0040	---	<0.008	0.00251	---	<0.000100	---	<0.00100	<0.0100	SVL
MC 8.4 C DUP	RESE-1002162	24-Feb-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
MC 8.4 C DUP	RESE-1002162	24-Feb-11	---	<0.00300	**<0.025**	0.0404	<0.00200	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0043	---	---	<0.010	0.00052 jd	<0.0050	---	<0.00100	<0.0100	SVL
MC 8.4 C	RESE-1002169	31-May-11	<0.080	<0.00300	**<0.025**	---	---	---	<0.000026	---	<0.0060	<0.00100	---	<0.060	0.000049 j	<0.0040	---	<0.008	<0.00100	---	<0.000100	---	<0.00100	<0.0100	SVL
MC 8.4 C	RESE-1002169	31-May-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
MC 8.4 C	RESE-1002169	31-May-11	---	<0.00300	**<0.025**	0.0432	<0.0020	0.054	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	<0.0040	---	---	<0.010	<0.00108	<0.0050	---	<0.00100	<0.0100	SVL
MC 8.4 C DUP	RESE-1002170	31-May-11	<0.080	<0.00300	**<0.025**	---	---	---	<0.000026	---	<0.0060	<0.00100	---	<0.060	<0.000042	<0.0040	---	<0.008	<0.00100	---	<0.000100	---	<0.00100	<0.0100	SVL
MC 8.4 C DUP	RESE-1002170	31-May-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
MC 8.4 C DUP	RESE-1002170	31-May-11	---	<0.00300	**<0.025**	0.0419	<0.0020	0.045	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0042	---	---	<0.010	<0.00108	<0.0050	---	<0.00100	<0.0100	SVL
MC 8.4 C	RESE-1002200	08-Dec-11	<0.080	<0.00300	**<0.025**	---	---	---	<0.000026	---	<0.0060	0.00158	---	<0.060	<0.000042	0.0372	---	0.008	0.00396	---	<0.000100	---	<0.00100	<0.0100	SVL
MC 8.4 C	RESE-1002200	08-Dec-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00020	---	---	---	---	---	---	---	SVL
MC 8.4 C	RESE-1002200	08-Dec-11	---	<0.00300	**<0.025**	0.0627	<0.0020	<0.040	<0.0020	<0.0060	---	<0.010	---	---	<0.00300	0.0397	---	---	<0.010	0.00072 jd	<0.0050	---	<0.00100	<0.0100	SVL
MC 8.4 C	RESE-1002240	08-May-12	<0.0222	<0.003	<0.0067	---	---	---	<0.000014	---	<0.0014	0.0012	---	<0.0222	<0.000059	0.0027 j	---	<0.0081	0.0029	---	<0.000014	---	<0.000008	<0.0026	SVL
MC 8.4 C	RESE-1002240	08-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.000054	---	---	---	---	---	---	---	SVL
MC 8.4 C	RESE-1002240	08-May-12	---	<0.00015	<0.0033	0.0495	<0.00031	0.0329	<0.00029	0.0027 j	---	0.0034 j	---	---	0.00076 j,d	0.0169 j	---	---	<0.002	0.00058 j,d	<0.0007	---	<0.000009	<0.005	SVL
MC 8.4 C DUP	RESE-1002241	08-May-12	<0.0222	<0.003	<0.0067	---	---	---	<0.000014	---	<0.0014	0.0012	---	<0.0222	<0.000059	0.0021 j	---	<0.0081	0.0028	---	<0.000014	---	<0.000008	<0.0026	SVL
MC 8.4 C DUP	RESE-1002241	08-May-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.000054	---	---	---	---	---	---	---	SVL
MC 8.4 C DUP	RESE-1002241	08-May-12	---	<0.00015	<0.0033	0.0516	<0.00031	0.0371	<0.00029	0.0029 j	---	0.0042 j	---	---	0.0011 j,d	0.0214 j	---	---	<0.002	0.00056 j,d	<0.0007	---	<0.000009	<0.005	SVL
U.S EPA National Primary Drinking Water Regulations			---	0.006	0.010	2	0.004	---	0.005	0.1	---	1.3	0.20	---	0.015	---	0.002	---	---	0.05	---	---	0.002	---	
U.S EPA National Secondary Drinking Water Regulations			0.05 to 0.2	---	---	---	---	---	---	---	---	1.0	---	0.3	---	0.050	---	---	---	---	0.1	---	---	5	
Arizona Numeric Aquifer Water Quality Standards			---	0.006	0.05	2.0	0.004	---	0.005	0.1	---	---	0.20	---	0.05	---	0.002	---	0.1	0.05	---	---	0.002	---	

Values in bold red are out of compliance with EPA primary water quality standards

Values in red italics are out of compliance with EPA secondary water quality standards

Values in red underline are out of compliance with Arizona numeric water quality standards

Values in blue indicate that detection limit exceeds standard

--- = Not available, not applicable

-- = Not calculated due to non-detect

Shading indicates dissolved results
Shading indicates total results
Shading indicates total recoverable results
Shading indicates unknown filtration or no filtration method provided for analyses

a
Al = Aluminum
Sb = Antimony
As = Arsenic
Ba = Barium
Be = Beryllium
B = Boron
Cd = Cadmium
Cr = Chromium (total)
Co = Cobalt
Cu = Copper
CN = Cyanide (amenable)
Fe = Iron
Pb = Lead
Mn = Manganese
Hg = Mercury
Mo = Molybdenum
Ni = Nickel
Se = Selenium
Ag = Silver
S = Sulfide
Tl = Thallium
Zn = Zinc

b
mg/L = milligrams per liter

Explanation of Codes

Absent = Analyte not present
ge = Greater than or equal to reported value
i = Insufficient sample
j = Estimated value
j+ = Estimated value, high bias
j- = Estimated value, low bias
Lost = Sample lost in processing
n = Not measured
na = Not available
ND = Not Detected
np = Analyte not applicable
Present = Analyte was detected
q = Uncertain value
r = Unusable data
< = Less than reported detection limit
> = Greater than reported value
d = Diluted. Diluted samples are indicated only when value is estimated.
DUP = Field Duplicate
LD = Laboratory duplicate
SP = Split sample
SPD = Split-Duplicate

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TABLE B-3. RADIOLOGICAL DATA
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	RADIOLOGICAL CONSTITUENTS [a]							ANALYTICAL LABORATORY
			Gross Alpha (pCi/L) [b]	Gross Beta (pCi/L)	Ra-226 (pCi/L)	Ra-228 (pCi/L)	Ra-226 + Ra-228 (pCi/L)	Total U (pCi/L)	Total U (mg/L) [c]	
Surface Water 1 - Queen Creek										
Blue Spring	RESE-1001087	26-May-04	3.03 ± 0	<4.10	<0.70	<1.4	ND	---	0.0004 j	ACZ
Blue Spring	RESE-1002009	19-Aug-08	3.8 ± 1.6	<3.3	<0.19	<1.2	ND	1.1 ± 0.5	0.0006	Energy Labs
Blue Spring DUP	RESE-1002010	19-Aug-08	5.8 ± 1.8	<3.3	<0.20	<1.2	ND	0.7 ± 0.4	0.0006	Energy Labs
Blue Spring	RESE-1003165	17-Jul-10	<2.1	<4.0	<0.35	<1.30	ND	---	0.0007	ACZ
Bored Spring	RESE-1001088	26-May-04	<2.90	11.2 ± 0	<0.90	<1.40	ND	---	<0.0003	ACZ
Boulder Hole (QC 23.6 C)	RESE-1001008	22-May-03	<2.40	<3.60	<0.90	<1.50	ND	---	0.00129	ACZ
Boulder Hole (QC 23.6 C)	RESE-1001083	24-May-04	<2.80	4.93 ± 0	<0.40	<1.50	ND	---	0.0011	ACZ
Boulder Hole (QC 23.6 C)	RESE-1002006	06-Aug-08	<2.5	<3.1	<0.23	<1.2	ND	2.5 ± 0.6	0.0017	Energy Labs
Boulder Hole (QC 23.6 C)	RESE-1002167	16-May-11	<2.3	6.2 ± 3	<0.41	1.1 ± 0.41	1.10	---	0.0017	ACZ
Hidden Spring	RESE-1001003	15-May-03	<2.50	<3.50	<1.00	<1.4	ND	---	0.00067	ACZ
Hidden Spring	RESE-1001082	24-May-04	<2.90	<4.30	<0.60	<1.5	ND	---	0.0007 j	ACZ
Hidden Spring	RESE-1002008	19-Aug-08	3.7 ± 2.4	<4.2	<0.19	<1.2	ND	0.7 ± 0.4	0.0005	Energy Labs
Hidden Spring	RESE-1003163	17-Jul-10	4.2 ± 2.9	<4.1	<0.34	<1.20	ND	---	0.0006	ACZ
Kane Spring	RESE-1001002	15-May-03	<2.5	<3.50	<1.00	<1.4	ND	---	0.00039	ACZ
Kane Spring	RESE-1002022	29-Aug-08	8.4 ± 2.7	<3.4	<0.20	<1.2	ND	2.4 ± 0.6	0.0004	Energy Labs
Kane Spring	RESE-1003164	17-Jul-10	<2.30	<4.10	<0.34	<1.30	ND	---	0.0013	ACZ
Number 9 Wash	RESE-1002020	28-Aug-08	3.8 ± 1.1	<3.2	<0.22	<1.2	ND	<0.2	<0.0003	Energy Labs
Oak Flat Wash	RESE-1002016	27-Aug-08	4.0 ± 1.1	<3.2	<0.20	<1.2	ND	<0.2	<0.0003	Energy Labs
Pump Station Spring (QC 30.7 C)	RESE-1001001	15-May-03	<2.4	<3.60	<0.80	<1.40	ND	---	0.00071	ACZ
Pump Station Spring (QC 30.7 C) DUP	RESE-1001085	25-May-04	<3.80	<5.40	<0.50	<1.4	ND	---	0.0013	ACZ
Pump Station Spring (QC 30.7 C)	RESE-1001084	25-May-04	4.02 ± 0	<5.70	4.3 ± 0	<1.40	4.3	---	0.0013	ACZ
Pump Station Spring (QC 30.7 C)	RESE-1002001	05-Aug-08	<3.5	<4.1	<0.18	<1.2	ND	1.2 ± 0.4	0.0011	Energy Labs
Pump Station Spring (QC 30.7 C)	RESE-1002168	17-May-11	<2.4	<4.1	<0.26	<0.92	ND	---	0.0016	ACZ
QC 19.7 C	RESE-1002021	28-Aug-08	5.9 ± 1.8	4.2 ± 2	<0.21	<1.2	ND	0.4 ± 0.4	<0.0003	Energy Labs
QC 21.7 C (Magma Avenue)	RESE-1002018	28-Aug-08	4.7 ± 1.5	<3.3	<0.20	<1.2	ND	<0.2	<0.0003	Energy Labs
QC 22.6 E (Karst Spring)	RESE-1002017	28-Aug-08	9.1 ± 2.5	<3.4	<0.21	<1.2	ND	1.5 ± 0.5	<0.0003	Energy Labs
QC 27.3 C	RESE-1002002	05-Aug-08	<1.9	2.9 ± 1.7	0.87 ± 0.62	<1.2	0.87	<0.2	0.0003	Energy Labs
Surface Water 2 - Devils Canyon										
DC 10.9 C	RESE-1001004	16-May-03	<1.60	<3.30	<1.00	<1.50	ND	---	<0.00005	ACZ
DC 10.9 C	RESE-1001091	27-May-04	2.16 ± 0	5.83 ± 0	<0.5	<1.40	ND	---	<0.0003	ACZ
DC 13.5 C DUP	RESE-1001012	30-May-03	<1.60	<4.00	<0.60	<1.50	ND	---	<0.00005	ACZ
DC 13.5 C	RESE-1001011	30-May-03	<1.60	<4.00	<0.30	<1.40	ND	---	<0.00005	ACZ
DC 13.5 C	RESE-1001086	26-May-04	<1.6	<4.00	<0.40	<1.4	ND	---	<0.0003	ACZ
DC 13.5 C	RESE-1002014	21-Aug-08	5.1 ± 1.3	<3.2	<0.22	<1.2	ND	<0.2	<0.0003	Energy Labs
DC 14.7 C	RESE-1002015	27-Aug-08	**20.8 ± 2.7**	18.4 ± 2.3	<0.19	<1.2	ND	0.6 ± 0.5	<0.0003	Energy Labs
DC 15.5 C	RESE-1002003	05-Aug-08	<1.0	<2.6	<0.19	1.4 ± 0.79	1.40	<0.2	<0.0003	Energy Labs
DC 4.1 E	RESE-1001007	21-May-03	<2.30	<3.40	<1.10	<1.40	ND	---	0.00024 j	ACZ
DC 5.5 C	RESE-1001076	20-May-04	<2.0	<4.1	<0.30	<1.40	ND	---	0.0001 j	ACZ
DC 6.1 E	RESE-1001077	20-May-04	<2.00	<3.9	<0.30	<1.4	ND	---	0.0006	ACZ
DC 6.1 E	RESE-1002007	07-Aug-08	<1.6	<2.7	<0.18	<1.2	ND	1.2 ± 0.5	0.0005	Energy Labs
DC 6.14 C	RESE-1002013	20-Aug-08	3.9 ± 1.3	<3.2	<0.24	<1.2	ND	<0.2	<0.0003	Energy Labs
DC 6.6 W (DCT 6.6 W)	RESE-1001010	29-May-03	<2.70	<4.30	<0.60	<1.40	ND	---	0.00009 j	ACZ
DC 6.6 W (DCT 6.6 W)	RESE-1001074	05-May-04	<2.10	<3.60	<0.50	1.42 ± 0.7	1.42	---	0.0000 j	ACZ
DC 7.1 C	RESE-1001009	29-May-03	<2.5	<4.30	<0.40	<1.4	ND	---	0.00018 j	ACZ
DC 7.1 C	RESE-1001075	05-May-04	<1.80	<4.00	<0.40	<1.4	ND	---	<0.00005	ACZ

MONTGOMERY & ASSOCIATES

TABLE B-3. RADIOLOGICAL DATA
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	RADIOLOGICAL CONSTITUENTS [a]							ANALYTICAL LABORATORY
			Gross Alpha (pCi/L) [b]	Gross Beta (pCi/L)	Ra-226 (pCi/L)	Ra-228 (pCi/L)	Ra-226 + Ra-228 (pCi/L)	Total U (pCi/L)	Total U (mg/L) [c]	
Surface Water 2 - Devils Canyon										
DC 8.1 C	RESE-1002005	06-Aug-08	<1.5	<2.7	<0.20	<1.2	ND	1.2 ± 0.5	<0.0003	Energy Labs
DC 8.2 W	RESE-1001006	20-May-03	<2.3	<3.40	<1.10	<1.40	ND	---	0.00050	ACZ
DC 8.2 W	RESE-1001079	21-May-04	<2.10	<4.20	<0.30	<1.40	ND	---	0.0005	ACZ
DC 8.2 W	RESE-1000260	19-Feb-08	2.9 ± 0.8	<2.5	<0.1	<1.3	ND	1.1 ± 0.3	0.0006	Energy Labs
DC 8.2 W	RESE-1003002	27-May-08	<1.6	<2.7	<0.12	1.1 ± 0.56	1.10	1.3 ± 0.4	0.0005	Energy Labs
DC 8.2 W	RESE-1002004	06-Aug-08	<1.4	<2.7	<0.18	1.4 ± 0.79	1.40	1.0 ± 0.4	0.0005	Energy Labs
DC 8.2 W	RESE-1003023	02-Dec-08	<1.5	<2.6	<0.15	<1.2	ND	0.7 ± 0.4	0.0004	Energy Labs
DC 8.8 C	RESE-1001005	20-May-03	<2.10	<3.40	<1.10	<1.5	ND	---	0.00014 j	ACZ
DC 8.8 C	RESE-1001078	21-May-04	2.6 ± 2.4	<4.30	<0.30	<1.50	ND	---	0.0001 j	ACZ
H 0.1 C	RESE-1002011	19-Aug-08	3.4 ± 1.2	<3.2	<0.20	<1.2	ND	<0.2	<0.0003	Energy Labs
IC 1.0 C	RESE-1002019	28-Aug-08	**18.2 ± 2**	23.8 ± 2.3	<0.21	<1.2	ND	<0.2	<0.0003	Energy Labs
RR 1.5 C	RESE-1002012	19-Aug-08	1.9 ± 1	<3.2	<0.28	<1.2	ND	<0.2	<0.0003	Energy Labs
Surface Water 3 - Mineral Creek										
Government Springs	RESE-1002130	18-Mar-10	5.1 ± 2.4	3.5 ± 1.7	<0.23	<1.20	ND	3.7	0.0032	Energy Labs
Government Springs	RESE-1002181	29-Aug-11	3.5 ± 3.4	9.3 ± 3.3	<0.24	<1.20	ND	---	0.0033	ACZ
LF 0.2 C	RESE-1002093	14-May-09	4.9 ± 1.8	<2.7	<0.20	<1.2	ND	3.4 ± 0.5	0.0041	Energy Labs
LF 0.2 C	RESE-1002133	18-Mar-10	1.7 ± 1.6	<1.6	<0.20	<1.10	ND	1.6	0.0024	Energy Labs
MC 3.3 C (Lower Mineral)	RESE-1002095	14-May-09	<2.4	<2.6	<0.20	<1.2	ND	0.3 ± 0.2	<0.0003	Energy Labs
MC 3.3 C (Lower Mineral)	RESE-1002131	18-Mar-10	2.0 ± 1.6	2.6 ± 1.6	<0.21	<1.10	ND	2.3	0.0023	Energy Labs
MC 3.4 W (Wet Leg Spring)	RESE-1002094	14-May-09	<2.5	<2.7	<0.19	<1.1	ND	2.7 ± 0.4	0.0022	Energy Labs
MC 3.4 W (Wet Leg Spring)	RESE-1002132	18-Mar-10	<1.3	2.6 ± 1.6	<0.22	<1.20	ND	0.3	<0.0003	Energy Labs
MC 3.4 W (Wet Leg Spring)	RESE-1002173	31-May-11	2 ± 2.1	<4.10	<0.23	<1.20	ND	---	0.0006	ACZ
MC 5.2 C	RESE-1002171	31-May-11	4.8 ± 2.7	5 ± 2.9	<0.22	<1.00	ND	---	0.0021	ACZ
MC 5.2 C	RESE-1002184	29-Aug-11	7.5 ± 3.5	8.1 ± 3.3	<0.26	<1.5	ND	---	0.0015	ACZ
MC 8.4 C	RESE-1002090	14-May-09	<3.6	<3.0	<0.21	1.3 ± 0.79	1.30	3.3 ± 0.5	0.0037	Energy Labs
MC 8.4 C DUP	RESE-1002091	14-May-09	<3.7	<3.5	<0.20	<1.2	ND	3.7 ± 0.7	0.0037	Energy Labs
MC 8.4 C	RESE-1002134	18-Mar-10	<1.7	<1.6	<0.21	<1.10	ND	1.7	0.0019	Energy Labs
U.S.EPA National Primary Drinking Water Regulations			15 pCi/L	50 pCi/L [d]	---	---	5 pCi/L	---	0.03 mg/L	
Arizona Numeric Aquifer Water Quality Standards			15 pCi/L	50 pCi/L	---	---	5 pCi/L	---	---	

Values in bold red are out of compliance with EPA primary water quality standards

Values in red italics are out of compliance with Arizona numeric water quality standards

Values in blue indicate that detection limit exceeds standard

[a] Ra-226 = Radium 226
Ra-228 = Radium 228
U = Uranium

< = Less than reported detection limit
--- = Not available, not applicable
-- = Not calculated due to non-detect

[b] pCi/L = picocuries per liter

[c] mg/L = milligrams per liter

[d] pCi/L alert level for EPA and Arizona Numeric Standard of 4 mrem/year (milliroentgen equivalent man per year)

Explanation of Codes

Absent = Analyte not present
ge = Greater than or equal to reported value
i = Insufficient sample
j = Estimated value
j+ = Estimated value, high bias
j- = Estimated value, low bias
Lost = Sample lost in processing
n = Not measured
na = Not available
ND = Not Detected
np = Analyte not applicable

Present = Analyte was detected
q = Uncertain value
r = Unusable data
< = Less than reported detection limit
> = Greater than reported value
d = Diluted. Diluted samples are indicated only when value is estimated.
DUP = Field Duplicate
LD = Laboratory duplicate
SP = Split sample
SPD = Split-Duplicate

MONTGOMERY & ASSOCIATES

TABLE B-4. STABLE ISOTOPE DATA
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	ISOTOPES					ANALYTICAL LABORATORY
			$\delta^{18}O$ [a] (‰)	δD [b] (‰)	$\delta^{13}C$ in DIC [c] (‰)	$\delta^{34}S$ [d] (‰)	$\delta^{18}O$ in SO_4 [e] (‰)	
Surface Water 1 - Queen Creek								
Blue Spring	RESE-1002009	19-Aug-08	-9.7	-67	---	4.5	17.7	University of Arizona
Blue Spring DUP	RESE-1002010	19-Aug-08	-9.7	-67	---	4.7	17.8	University of Arizona
Blue Spring	RESE-1002052	12-Feb-09	-7.9	-54	---	3.7	4.9	University of Arizona
Blue Spring	RESE-1002088	13-May-09	-9.8	-67	---	8.2	7.8	University of Arizona
Blue Spring	RESE-1003165	17-Jul-10	---	---	-15.5	---	---	Beta Analytic
Blue Spring	RESE-1003165	17-Jul-10	-9.74	-69.0	---	4.4	1.0	Isotech
Blue Spring	RESE-1002237	07-May-12	---	---	-14.7	---	---	Beta Analytic
Blue Spring	RESE-1002237	07-May-12	-9.54	-67.6	---	3.7	3.2	Isotech
Bored Spring	RESE-1002051	12-Feb-09	-6.8	-56	---	7.7	6.4	University of Arizona
Bored Spring	RESE-1002089	13-May-09	-4.7	-49	---	7.6	6.3	University of Arizona
Bored Spring	RESE-1002238	07-May-12	---	---	-8.5	---	---	Beta Analytic
Bored Spring	RESE-1002238	07-May-12	-3.94	-48.7	---	3.0	1.4	Isotech
Boulder Hole (QC 23.6 C)	RESE-1002006	06-Aug-08	-11.0	-81	---	15.9	14.8	University of Arizona
Boulder Hole (QC 23.6 C)	RESE-1002060	19-Feb-09	-7.8	-50	---	0.2	3.3	University of Arizona
Boulder Hole (QC 23.6 C)	RESE-1002082	07-May-09	-7.4	-53	---	17.8	9.8	University of Arizona
Boulder Hole (QC 23.6 C)	RESE-1002167	16-May-11	---	---	-13.4	---	---	Beta Analytic
Boulder Hole (QC 23.6 C)	RESE-1002167	16-May-11	-7.59	-61.0	---	21.7	-1.3	Isotech
Boulder Hole (QC 23.6 C)	RESE-1002227	02-May-12	---	---	-16.0	---	---	Beta Analytic
Boulder Hole (QC 23.6 C)	RESE-1002227	02-May-12	-8.70	-60.8	---	14.5	6.1	Isotech
Hidden Spring	RESE-1002008	19-Aug-08	-9.4	-68	---	0.2	5.9	University of Arizona
Hidden Spring	RESE-1002045	10-Feb-09	-9.5	-68	---	-0.3	4.6	University of Arizona
Hidden Spring	RESE-1002086	12-May-09	-9.7	-68	---	0.0	4.4	University of Arizona
Hidden Spring	RESE-1003163	17-Jul-10	---	---	-14.4	---	---	Beta Analytic
Hidden Spring	RESE-1003163	17-Jul-10	-8.88	-64.8	---	1.2	1.1	Isotech
Kane Spring	RESE-1002022	29-Aug-08	-10.2	-73	---	3.9	9.9	University of Arizona
Kane Spring	RESE-1002046	10-Feb-09	-9.9	-69	---	4.2	5.3	University of Arizona
Kane Spring	RESE-1002087	13-May-09	-10.3	-71	---	4.8	5.6	University of Arizona
Kane Spring	RESE-1003164	17-Jul-10	---	---	-13.1	---	---	Beta Analytic
Kane Spring	RESE-1003164	17-Jul-10	-10.01	-71.8	---	2.6	1.6	Isotech
Kane Spring	RESE-1002236	07-May-12	---	---	-12.3	---	---	Beta Analytic
Kane Spring	RESE-1002236	07-May-12	-10.01	-70.4	---	3.7	1.4	Isotech
Number 9 Wash	RESE-1002020	28-Aug-08	-12.8	-98	---	-0.5	6.7	University of Arizona
Number 9 Wash	RESE-1002058	19-Feb-09	-7.5	-47	---	0.9	6.2	University of Arizona
Number 9 Wash DUP	RESE-1002059	19-Feb-09	-7.6	-47	---	0.5	6.3	University of Arizona
Number 9 Wash	RESE-1002077	05-May-09	-3.5	-36	---	15.0	10.4	University of Arizona

TABLE B-4. STABLE ISOTOPE DATA
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	ISOTOPES					ANALYTICAL LABORATORY
			$\delta^{18}O$ [a] (‰)	δD [b] (‰)	$\delta^{13}C$ in DIC [c] (‰)	$\delta^{34}S$ [d] (‰)	$\delta^{18}O$ in SO_4 [e] (‰)	
Surface Water 1 - Queen Creek								
Number 9 Wash	RESE-1002250	09-May-12	---	---	-11.5	---	---	Beta Analytic
Number 9 Wash	RESE-1002250	09-May-12	3.96	-11.3	---	14.2	7.5	Isotech
Oak Flat Wash	RESE-1002016	27-Aug-08	-14.1	-105	---	-0.4	6.0	University of Arizona
Oak Flat Wash	RESE-1002068	26-Feb-09	-7.0	-45	---	2.4	5.4	University of Arizona
Oak Flat Wash	RESE-1002076	05-May-09	-2.2	-30	---	10.6	11.6	University of Arizona
Pump Station Spring (QC 30.7 C)	RESE-1002001	05-Aug-08	-9.9	-67	---	-1.1	14.6	University of Arizona
Pump Station Spring (QC 30.7 C)	RESE-1002053	17-Feb-09	-7.7	-47	---	1.2	7.0	University of Arizona
Pump Station Spring (QC 30.7 C)	RESE-1002080	12-May-09	-9.5	-63	---	-0.4	6.2	University of Arizona
Pump Station Spring (QC 30.7 C) DUP	RESE-1002084	12-May-09	-9.7	-64	---	-0.1	5.6	University of Arizona
Pump Station Spring (QC 30.7 C)	RESE-1002168	17-May-11	---	---	-15.4	---	---	Beta Analytic
Pump Station Spring (QC 30.7 C)	RESE-1002168	17-May-11	-9.51	-66.3	---	-1.8	2.1	Isotech
Pump Station Spring (QC 30.7 C)	RESE-1002248	09-May-12	---	---	-15.2	---	---	Beta Analytic
Pump Station Spring (QC 30.7 C)	RESE-1002248	09-May-12	-9.51	-65.4	---	-1.8	4.2	Isotech
QC 19.7 C	RESE-1002021	28-Aug-08	-12.0	-91	---	0.1	4.4	University of Arizona
QC 19.7 C	RESE-1002048	11-Feb-09	-8.3	-54	---	0.9	7.2	University of Arizona
QC 21.7 C (Magma Avenue)	RESE-1002018	28-Aug-08	-11.9	-89	---	-1.1	4.9	University of Arizona
QC 21.7 C (Magma Avenue)	RESE-1002047	11-Feb-09	-8.4	-55	---	0.8	6.5	University of Arizona
QC 21.7 C (Magma Avenue)	RESE-1002083	07-May-09	7.5	4.0	---	10.3	13.9	University of Arizona
QC 21.7 C (Magma Avenue)	RESE-1002228	02-May-12	---	---	-12.9	---	---	Beta Analytic
QC 21.7 C (Magma Avenue)	RESE-1002228	02-May-12	2.28	-21.4	---	3.3	3.8	Isotech
QC 22.6 E (Karst Spring)	RESE-1002017	28-Aug-08	-11.1	-80	---	1.7	6.0	University of Arizona
QC 22.6 E (Karst Spring) DUP	RESE-1002050	11-Feb-09	-8.5	-56	---	0.5	4.5	University of Arizona
QC 22.6 E (Karst Spring)	RESE-1002049	11-Feb-09	-8.4	-57	---	0.7	5.3	University of Arizona
QC 27.3 C	RESE-1002002	05-Aug-08	-2.2	-48	---	12.2	11.3	University of Arizona
QC 27.3 C	RESE-1002054	17-Feb-09	-7.8	-47	---	0.8	5.3	University of Arizona
QC 27.3 C	RESE-1002079	07-May-09	-0.5	-24	---	8.9	9.1	University of Arizona
QC 27.3 C	RESE-1002249	09-May-12	---	---	-8.4	---	---	Beta Analytic
QC 27.3 C	RESE-1002249	09-May-12	-2.03	-32.0	---	4.1	5.5	Isotech
Surface Water 2 - Devils Canyon								
DC 10.9 C	RESE-1002224	27-Apr-12	---	---	-17.7	---	---	Beta Analytic
DC 10.9 C	RESE-1002224	27-Apr-12	-8.06	-57.8	---	12.6	7.0	Isotech
DC 13.5 C	RESE-1002014	21-Aug-08	-8.7	-73	---	1.6	i	University of Arizona
DC 13.5 C	RESE-1002057	19-Feb-09	-8.2	-52	---	0.8	7.4	University of Arizona
DC 13.5 C	RESE-1002103	21-May-09	-5.9	-46	---	20.7	14.6	University of Arizona

TABLE B-4. STABLE ISOTOPE DATA
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	ISOTOPES					ANALYTICAL LABORATORY
			$\delta^{18}O$ [a] (‰)	δD [b] (‰)	$\delta^{13}C$ in DIC [c] (‰)	$\delta^{34}S$ [d] (‰)	$\delta^{18}O$ in SO_4 [e] (‰)	
Surface Water 2 - Devils Canyon								
DC 13.5 C	RESE-1002223	27-Apr-12	---	---	-19.3	---	---	Beta Analytic
DC 13.5 C	RESE-1002223	27-Apr-12	-7.33	-54.1	---	6.1	6.0	Isotech
DC 14.7 C	RESE-1002015	27-Aug-08	-13.5	-99	---	-1.8	10.3	University of Arizona
DC 15.5 C	RESE-1002003	05-Aug-08	-12.1	-97	---	i	i	University of Arizona
DC 15.5 C	RESE-1002069	26-Feb-09	-8.0	-51	---	1.3	5.1	University of Arizona
DC 15.5 C	RESE-1002075	05-May-09	-6.7	-47	---	9.1	8.4	University of Arizona
DC 15.5 C	RESE-1002246	09-May-12	---	---	r	---	---	Beta Analytic
DC 15.5 C	RESE-1002246	09-May-12	-6.61	-51.9	---	9.0	4.4	Isotech
DC 15.5 C DUP	RESE-1002247	09-May-12	---	---	r	---	---	Beta Analytic
DC 15.5 C DUP	RESE-1002247	09-May-12	-6.72	-50.6	---	9.9	2.6	Isotech
DC 6.1 E	001226	05-Jun-03	-10.0	-69	---	---	---	University of Arizona
DC 6.1 E	RESE-1002007	07-Aug-08	-10.3	-70	---	1.5	6.8	University of Arizona
DC 6.1 E	RESE-1002064	25-Feb-09	-10.3	-70	---	1.5	4.2	University of Arizona
DC 6.1 E	RESE-1002099	20-May-09	-10.5	-70	---	1.6	6.9	University of Arizona
DC 6.14 C	RESE-1002013	20-Aug-08	-10.5	-82	---	6.7	13.4	University of Arizona
DC 6.14 C	RESE-1002037	12-Nov-08	-8.4	-68	---	---	---	University of Arizona
DC 6.14 C	RESE-1002056	18-Feb-09	-8.0	-50	---	0.6	7.3	University of Arizona
DC 6.14 C	RESE-1002078	06-May-09	-7.8	-55	---	15.8	i	University of Arizona
DC 6.14 C	RESE-1002235	04-May-12	---	---	-16.0	---	---	Beta Analytic
DC 6.14 C	RESE-1002235	04-May-12	-7.82	-58.7	---	---	2.4	Isotech
DC 6.6 W (DCT 6.6 W)	001227	05-Jun-03	-9.9	-68	---	---	---	University of Arizona
DC 6.6 W (DCT 6.6 W)	RESE-1002234	04-May-12	---	---	-15.6	---	---	Beta Analytic
DC 6.6 W (DCT 6.6 W)	RESE-1002234	04-May-12	-10.14	-69.7	---	8.6	2.0	Isotech
DC 7.1 C	RESE-1002233	04-May-12	---	---	-13.3	---	---	Beta Analytic
DC 7.1 C	RESE-1002233	04-May-12	-7.78	-59.2	---	14.3	2.3	Isotech
DC 8.1 C	RESE-1002005	06-Aug-08	-9.9	-71	---	5.3	16.0	University of Arizona
DC 8.1 C	RESE-1002062	24-Feb-09	-8.2	-51	---	0.6	8.5	University of Arizona
DC 8.1 C	RESE-1002098	19-May-09	-9.7	-66	---	6.3	23.3	University of Arizona
DC 8.1 C	RESE-1002232	03-May-12	---	---	-14.3	---	---	Beta Analytic
DC 8.1 C	RESE-1002232	03-May-12	-8.84	-63.8	---	---	-3.5	Isotech
DC 8.2 W	001228	05-Jun-03	-9.8	-67	---	---	---	UA
DC 8.2 W	RESE-1000260	19-Feb-08	-10.0	-68	-15.0	4.5	9.8	University of Arizona
DC 8.2 W	RESE-1003002	27-May-08	-9.8	-68	---	4.8	8.7	University of Arizona
DC 8.2 W	RESE-1002004	06-Aug-08	-10.0	-68	---	5.2	14.1	University of Arizona
DC 8.2 W	RESE-1003023	02-Dec-08	-10.1	-68	---	4.5	1.8	University of Arizona

TABLE B-4. STABLE ISOTOPE DATA
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	ISOTOPES					ANALYTICAL LABORATORY
			$\delta^{18}O$ [a] (‰)	δD [b] (‰)	$\delta^{13}C$ in DIC [c] (‰)	$\delta^{34}S$ [d] (‰)	$\delta^{18}O$ in SO_4 [e] (‰)	
Surface Water 2 - Devils Canyon								
DC 8.2 W	RESE-1002063	24-Feb-09	-9.8	-66	---	3.7	7.1	University of Arizona
DC 8.2 W	RESE-1002097	19-May-09	-10.3	-69	---	4.5	10.9	University of Arizona
DC 8.2 W	RESE-1002231	03-May-12	---	---	-18.6	---	---	Beta Analytic
DC 8.2 W	RESE-1002231	03-May-12	-9.99	-69.7	---	---	0.6	Isotech
DC 8.8 C	RESE-1002230	03-May-12	---	---	-14.7	---	---	Beta Analytic
DC 8.8 C	RESE-1002230	03-May-12	-8.32	-61.2	---	13.5	2.6	Isotech
H 0.1 C	RESE-1002011	19-Aug-08	-3.5	-46	---	8.7	13.1	University of Arizona
H 0.1 C	RESE-1002061	24-Feb-09	-7.4	-49	---	0.3	4.7	University of Arizona
H 0.1 C	RESE-1002096	19-May-09	-3.6	-43	---	3.6	5.6	University of Arizona
H 0.1 C	RESE-1002229	03-May-12	---	---	-18.4	---	---	Beta Analytic
H 0.1 C	RESE-1002229	03-May-12	-3.08	-39.3	---	3.0	3.6	Isotech
IC 1.0 C	RESE-1002019	28-Aug-08	-12.6	-93	---	-7.7	6.8	University of Arizona
IC 1.0 C	RESE-1002055	17-Feb-09	-8.3	-52	---	0.4	7.4	University of Arizona
IC 1.0 C	RESE-1002085	12-May-09	-7.6	-55	---	-0.1	9.3	University of Arizona
RR 1.5 C	RESE-1002012	19-Aug-08	-9.6	-66	---	1.0	8.4	University of Arizona
RR 1.5 C DUP	RESE-1002066	26-Feb-09	-7.7	-50	---	1.1	5.3	University of Arizona
RR 1.5 C	RESE-1002065	26-Feb-09	-7.7	-51	---	1.1	6.5	University of Arizona
RR 1.5 C	RESE-1002100	21-May-09	-8.4	-58	---	3.2	7.6	University of Arizona
RR 1.5 C DUP	RESE-1002101	21-May-09	-8.3	-58	---	3.1	7.6	University of Arizona
RR 1.5 C	RESE-1002225	27-Apr-12	---	---	-14.4	---	---	Beta Analytic
RR 1.5 C	RESE-1002225	27-Apr-12	-7.77	-56.5	---	2.3	2.7	Isotech
RR 1.5 C DUP	RESE-1002226	27-Apr-12	---	---	-14.5	---	---	Beta Analytic
RR 1.5 C DUP	RESE-1002226	27-Apr-12	-7.88	-55.1	---	1.5	3.2	Isotech
Surface Water 3 - Mineral Creek								
Government Springs	RESE-1002130	18-Mar-10	---	---	-15.4	---	---	Beta Analytic
Government Springs	RESE-1002130	18-Mar-10	-9.39	-69.6	---	0.0	4.06	Isotech
Government Springs	RESE-1002181	29-Aug-11	---	---	-14.2	---	---	Beta Analytic
Government Springs	RESE-1002181	29-Aug-11	-9.58	-69.1	---	-0.1	1.6	Isotech
Government Springs	RESE-1002239	08-May-12	---	---	-17.0	---	---	Beta Analytic
Government Springs	RESE-1002239	08-May-12	-9.52	-70.1	---	0.5	4.2	Isotech
LF 0.2 C	RESE-1002039	13-Nov-08	-9.5	-68	---	---	---	University of Arizona
LF 0.2 C	RESE-1002072	05-Mar-09	-9.1	-61	---	-2.5	5.2	University of Arizona
LF 0.2 C	RESE-1002093	14-May-09	-9.1	-62	---	-1.8	4.3	University of Arizona
LF 0.2 C	RESE-1002133	18-Mar-10	---	---	-15.6	---	---	Beta Analytic
LF 0.2 C	RESE-1002133	18-Mar-10	-7.90	-53.5	---	6.2	1.69	Isotech

TABLE B-4. STABLE ISOTOPE DATA
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	ISOTOPES					ANALYTICAL LABORATORY
			$\delta^{18}O$ [a] (‰)	δD [b] (‰)	$\delta^{13}C$ in DIC [c] (‰)	$\delta^{34}S$ [d] (‰)	$\delta^{18}O$ in SO_4 [e] (‰)	
Surface Water 3 - Mineral Creek								
LF 0.2 C	RESE-1002245	08-May-12	---	---	-17.6	---	---	Beta Analytic
LF 0.2 C	RESE-1002245	08-May-12	-9.13	-66.1	---	-1.6	3.2	Isotech
MC 3.3 C (Lower Mineral)	RESE-1002040	13-Nov-08	-9.6	-69	---	---	---	University of Arizona
MC 3.3 C (Lower Mineral)	RESE-1002074	05-Mar-09	-9.1	-64	---	-0.7	3.9	University of Arizona
MC 3.3 C (Lower Mineral)	RESE-1002095	14-May-09	-9.3	-65	---	1.6	15.9	University of Arizona
MC 3.3 C (Lower Mineral)	RESE-1002131	18-Mar-10	---	---	-14.1	---	---	Beta Analytic
MC 3.3 C (Lower Mineral)	RESE-1002131	18-Mar-10	-8.21	-56.9	---	-3.4	2.37	Isotech
MC 3.3 C (Lower Mineral)	RESE-1002243	08-May-12	---	---	-15.3	---	---	Beta Analytic
MC 3.3 C (Lower Mineral)	RESE-1002243	08-May-12	-9.39	-68.1	---	2.6	6.6	Isotech
MC 3.4 W (Wet Leg Spring)	RESE-1002041	13-Nov-08	-10.2	-71	---	---	---	University of Arizona
MC 3.4 W (Wet Leg Spring)	RESE-1002073	05-Mar-09	-10.2	-71	---	3.3	3.6	University of Arizona
MC 3.4 W (Wet Leg Spring)	RESE-1002094	14-May-09	-10.2	-70	---	7.5	19.6	University of Arizona
MC 3.4 W (Wet Leg Spring)	RESE-1002132	18-Mar-10	---	---	-16.5	---	---	Beta Analytic
MC 3.4 W (Wet Leg Spring)	RESE-1002132	18-Mar-10	-9.50	-69.2	---	0.2	0.45	Isotech
MC 3.4 W (Wet Leg Spring)	RESE-1002173	31-May-11	---	---	-15.8	---	---	Beta Analytic
MC 3.4 W (Wet Leg Spring)	RESE-1002173	31-May-11	-10.15	-72.5	---	2.9	-2.5	Isotech
MC 3.4 W (Wet Leg Spring)	RESE-1002244	08-May-12	---	---	-16.1	---	---	Beta Analytic
MC 3.4 W (Wet Leg Spring)	RESE-1002244	08-May-12	-10.35	-71.3	---	3.3	1.6	Isotech
MC 5.2 C	RESE-1002171	31-May-11	---	---	-14.1	---	---	Beta Analytic
MC 5.2 C	RESE-1002171	31-May-11	-9.05	-67.2	---	-0.3	4.6	Isotech
MC 5.2 C	RESE-1002184	29-Aug-11	---	---	-15.7	---	---	Beta Analytic
MC 5.2 C	RESE-1002184	29-Aug-11	-9.36	-67.4	---	-0.3	2.3	Isotech
MC 5.2 C	RESE-1002242	08-May-12	---	---	-14.3	---	---	Beta Analytic
MC 5.2 C	RESE-1002242	08-May-12	-9.12	-66.6	---	1.4	4.7	Isotech
MC 8.4 C	RESE-1002038	13-Nov-08	-9.6	-69	---	---	---	University of Arizona
MC 8.4 C	RESE-1002071	05-Mar-09	-9.5	-66	---	0.1	4.9	University of Arizona
MC 8.4 C	RESE-1002090	14-May-09	-9.4	-67	---	-1.0	5.8	University of Arizona
MC 8.4 C DUP	RESE-1002091	14-May-09	-9.6	-67	---	-0.8	6.1	University of Arizona
MC 8.4 C	RESE-1002134	18-Mar-10	---	---	-14.4	---	---	Beta Analytic
MC 8.4 C	RESE-1002134	18-Mar-10	-8.27	-56.9	---	-4.3	2.09	Isotech
MC 8.4 C	RESE-1002240	08-May-12	---	---	-16.0	---	---	Beta Analytic
MC 8.4 C	RESE-1002240	08-May-12	-9.26	-67.3	---	0.1	5.9	Isotech
MC 8.4 C DUP	RESE-1002241	08-May-12	---	---	-15.7	---	---	Beta Analytic
MC 8.4 C DUP	RESE-1002241	08-May-12	-9.20	-67.5	---	0.7	6.5	Isotech

TABLE B-4. STABLE ISOTOPE DATA
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	ISOTOPES					ANALYTICAL LABORATORY
			$\delta^{18}O$ [a] (‰)	δD [b] (‰)	$\delta^{13}C$ in DIC [c] (‰)	$\delta^{34}S$ [d] (‰)	$\delta^{18}O$ in SO_4 [e] (‰)	

a $\delta^{18}O$ (‰) = delta oxygen-18 (per mil)
b δD (‰) = delta deuterium (per mil)
c $\delta^{13}C$ in DIC (‰) = delta carbon-13 in dissolved inorganic carbon (per mil)
d $\delta^{34}S$ (‰) = delta sulfur-34 (per mil)
e $\delta^{18}O$ in SO_4 (‰) = delta oxygen-18 in sulfate (per mil)

--- = Not available, not applicable
-- = Not calculated due to non-detect

Explanation of Codes

Absent = Analyte not present
ge = Greater than or equal to reported value
i = Insufficient sample
j = Estimated value
j+ = Estimated value, high bias
j- = Estimated value, low bias
Lost = Sample lost in processing
n = Not measured
na = Not available
ND = Not Detected
np = Analyte not applicable

Present = Analyte was detected
q = Uncertain value
r = Unusable data
< = Less than reported detection limit
> = Greater than reported value
d = Diluted. Diluted samples are indicated only when value is estimated.
DUP = Field Duplicate
LD = Laboratory duplicate
SP = Split sample
SPD = Split-Duplicate

TABLE B-5. RADIOISOTOPE DATA
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	RADIOISOTOPE DATA								ANALYTICAL LABORATORY
			^{3}H (TU)[a]	^{14}C (pmC)[b]	Sr (ppm)[c]	$^{87}Sr/^{86}Sr$[d]	^{234}U (pCi/L)[e]	^{235}U (pCi/L)[f]	^{238}U (pCi/L)[g]	$^{234}U/^{238}U$[h]	
Surface Water 1 - Queen Creek											
Blue Spring	RESE-1002009	19-Aug-08	---	---	---	---	0.9 ± 0.4	<0.2	<0.2	---	Energy Labs
Blue Spring	RESE-1002009	19-Aug-08	---	---	0.1636	0.711123 ± 0.00001	---	---	---	---	Geochron
Blue Spring	RESE-1002009	19-Aug-08	<0.8	---	---	---	---	---	---	---	University of Arizona
Blue Spring DUP	RESE-1002010	19-Aug-08	---	---	---	---	0.5 ± 0.3	<0.2	<0.2	---	Energy Labs
Blue Spring DUP	RESE-1002010	19-Aug-08	---	---	0.1642	0.711117 ± 0.000009	---	---	---	---	Geochron
Blue Spring DUP	RESE-1002010	19-Aug-08	<0.8	---	---	---	---	---	---	---	University of Arizona
Blue Spring	RESE-1002088	13-May-09	0.8 ± 0.31	---	---	---	---	---	---	---	University of Arizona
Blue Spring	RESE-1003165	17-Jul-10	---	---	---	---	<1.20	<1.20	<1.20	---	ACZ
Blue Spring	RESE-1003165	17-Jul-10	---	78.64 ± 0.38	---	---	---	---	---	---	Beta Analytic
Blue Spring	RESE-1003165	17-Jul-10	---	---	0.1565	0.710825 ± 0.00001	---	---	---	---	Geochron
Blue Spring	RESE-1003165	17-Jul-10	<1.00	---	---	---	---	---	---	---	Isotech
Blue Spring	RESE-1002237	07-May-12	---	82.76 ± 0.3	---	---	---	---	---	---	Beta Analytic
Blue Spring	RESE-1002237	07-May-12	---	---	0.1533	0.710785 ± 0.000009	---	---	---	---	Geochron
Blue Spring	RESE-1002237	07-May-12	<1.00	---	---	---	---	---	---	---	Isotech
Bored Spring	RESE-1002089	13-May-09	6.6 ± 0.35	---	---	---	---	---	---	---	University of Arizona
Bored Spring	RESE-1002238	07-May-12	---	82.97 ± 0.3	---	---	---	---	---	---	Beta Analytic
Bored Spring	RESE-1002238	07-May-12	---	---	0.2101	0.709427 ± 0.000009	---	---	---	---	Geochron
Bored Spring	RESE-1002238	07-May-12	4.47 ± 0.32	---	---	---	---	---	---	---	Isotech
Boulder Hole (QC 23.6 C)	RESE-1002006	06-Aug-08	---	---	---	---	1.8 ± 0.5	<0.2	0.6 ± 0.3	3.0	Energy Labs
Boulder Hole (QC 23.6 C)	RESE-1002006	06-Aug-08	---	---	0.3099	0.709883 ± 0.000009	---	---	---	---	Geochron
Boulder Hole (QC 23.6 C)	RESE-1002006	06-Aug-08	2.7 ± 0.31	---	---	---	---	---	---	---	University of Arizona
Boulder Hole (QC 23.6 C)	RESE-1002082	07-May-09	2.2 ± 0.27	---	---	---	---	---	---	---	University of Arizona
Boulder Hole (QC 23.6 C)	RESE-1002167	16-May-11	---	---	---	---	<0.90	<0.9	<0.9	---	ACZ
Boulder Hole (QC 23.6 C)	RESE-1002167	16-May-11	---	89.51 ± 0.33	---	---	---	---	---	---	Beta Analytic
Boulder Hole (QC 23.6 C)	RESE-1002167	16-May-11	---	---	0.2985	0.709880 ± 0.00001	---	---	---	---	Geochron
Boulder Hole (QC 23.6 C)	RESE-1002167	16-May-11	1.49 ± 0.17	---	---	---	---	---	---	---	Isotech
Boulder Hole (QC 23.6 C)	RESE-1002227	02-May-12	---	89.40 ± 0.33	---	---	---	---	---	---	Beta Analytic
Boulder Hole (QC 23.6 C)	RESE-1002227	02-May-12	---	---	0.2242	0.709865 ± 0.000009	---	---	---	---	Geochron
Boulder Hole (QC 23.6 C)	RESE-1002227	02-May-12	3.46 ± 0.32	---	---	---	---	---	---	---	Isotech
Hidden Spring	RESE-1002008	19-Aug-08	---	---	---	---	0.5 ± 0.3	<0.2	0.3 ± 0.2	1.7	Energy Labs
Hidden Spring	RESE-1002008	19-Aug-08	---	---	0.1907	0.709949 ± 0.00001	---	---	---	---	Geochron
Hidden Spring	RESE-1002008	19-Aug-08	2.1 ± 0.39	---	---	---	---	---	---	---	University of Arizona
Hidden Spring	RESE-1002086	12-May-09	2.8 ± 0.33	---	---	---	---	---	---	---	University of Arizona

TABLE B-5. RADIOISOTOPE DATA
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	RADIOISOTOPE DATA								ANALYTICAL LABORATORY
			^{3}H (TU)[a]	^{14}C (pmC)[b]	Sr (ppm)[c]	$^{87}Sr/^{86}Sr$[d]	^{234}U (pCi/L)[e]	^{235}U (pCi/L)[f]	^{238}U (pCi/L)[g]	$^{234}U/^{238}U$[h]	
Surface Water 1 - Queen Creek											
Hidden Spring	RESE-1003163	17-Jul-10	---	---	---	---	<1.30	<1.30	<1.3	---	ACZ
Hidden Spring	RESE-1003163	17-Jul-10	---	101.00 ± 0.49	---	---	---	---	---	---	Beta Analytic
Hidden Spring	RESE-1003163	17-Jul-10	---	---	0.1866	0.709946 ± 0.000006	---	---	---	---	Geochron
Hidden Spring	RESE-1003163	17-Jul-10	2.27 ± 0.16	---	---	---	---	---	---	---	Isotech
Kane Spring	RESE-1002022	29-Aug-08	---	---	---	---	1.9 ± 0.5	<0.2	0.5 ± 0.3	3.8	Energy Labs
Kane Spring	RESE-1002022	29-Aug-08	---	---	0.1966	0.710588 ± 0.000014	---	---	---	---	Geochron
Kane Spring	RESE-1002022	29-Aug-08	0.9 ± 0.38	---	---	---	---	---	---	---	University of Arizona
Kane Spring	RESE-1002087	13-May-09	1.1 ± 0.31	---	---	---	---	---	---	---	University of Arizona
Kane Spring	RESE-1003164	17-Jul-10	---	---	---	---	3.1 ± 2.1	<1.30	<1.30	---	ACZ
Kane Spring	RESE-1003164	17-Jul-10	---	71.45 ± 0.35	---	---	---	---	---	---	Beta Analytic
Kane Spring	RESE-1003164	17-Jul-10	---	---	0.2148	0.710675 ± 0.000009	---	---	---	---	Geochron
Kane Spring	RESE-1003164	17-Jul-10	0.97 ± 0.17	---	---	---	---	---	---	---	Isotech
Kane Spring	RESE-1002236	07-May-12	---	64.60 ± 0.24	---	---	---	---	---	---	Beta Analytic
Kane Spring	RESE-1002236	07-May-12	---	---	0.1746	0.710606 ± 0.000009	---	---	---	---	Geochron
Kane Spring	RESE-1002236	07-May-12	<1.00	---	---	---	---	---	---	---	Isotech
Number 9 Wash	RESE-1002020	28-Aug-08	---	---	---	---	<0.2	<0.2	<0.2	---	Energy Labs
Number 9 Wash	RESE-1002020	28-Aug-08	---	---	0.0484	0.710144 ± 0.000007	---	---	---	---	Geochron
Number 9 Wash	RESE-1002020	28-Aug-08	4.6 ± 0.35	---	---	---	---	---	---	---	University of Arizona
Number 9 Wash	RESE-1002077	05-May-09	6.0 ± 0.32	---	---	---	---	---	---	---	University of Arizona
Number 9 Wash	RESE-1002250	09-May-12	---	98.89 ± 0.36	---	---	---	---	---	---	Beta Analytic
Number 9 Wash	RESE-1002250	09-May-12	---	---	0.0806	0.710214 ± 0.000009	---	---	---	---	Geochron
Number 9 Wash	RESE-1002250	09-May-12	5.33 ± 0.32	---	---	---	---	---	---	---	Isotech
Oak Flat Wash	RESE-1002016	27-Aug-08	---	---	---	---	<0.2	<0.2	<0.2	---	Energy Labs
Oak Flat Wash	RESE-1002016	27-Aug-08	---	---	0.0479	0.710010 ± 0.000014	---	---	---	---	Geochron
Oak Flat Wash	RESE-1002016	27-Aug-08	4.5 ± 0.4	---	---	---	---	---	---	---	University of Arizona
Oak Flat Wash	RESE-1002076	05-May-09	5.0 ± 0.34	---	---	---	---	---	---	---	University of Arizona
Pump Station Spring (QC 30.7 C)	RESE-1002001	05-Aug-08	---	---	---	---	0.7 ± 0.3	<0.2	0.4 ± 0.2	1.8	Energy Labs
Pump Station Spring (QC 30.7 C)	RESE-1002001	05-Aug-08	---	---	0.2190	0.710048 ± 0.000011	---	---	---	---	Geochron
Pump Station Spring (QC 30.7 C)	RESE-1002001	05-Aug-08	3.4 ± 0.33	---	---	---	---	---	---	---	University of Arizona
Pump Station Spring (QC 30.7 C)	RESE-1002080	12-May-09	3.1 ± 0.29	---	---	---	---	---	---	---	University of Arizona
Pump Station Spring (QC 30.7 C) DUP	RESE-1002084	12-May-09	4.8 ± 0.37	---	---	---	---	---	---	---	University of Arizona
Pump Station Spring (QC 30.7 C)	RESE-1002168	17-May-11	---	---	---	---	<0.95	<0.95	0.98 ± 0.76	---	ACZ
Pump Station Spring (QC 30.7 C)	RESE-1002168	17-May-11	---	96.69 ± 0.35	---	---	---	---	---	---	Beta Analytic
Pump Station Spring (QC 30.7 C)	RESE-1002168	17-May-11	---	---	0.3291	0.709997 ± 0.000011	---	---	---	---	Geochron
Pump Station Spring (QC 30.7 C)	RESE-1002168	17-May-11	2.38 ± 0.17	---	---	---	---	---	---	---	Isotech

TABLE B-5. RADIOISOTOPE DATA
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	RADIOISOTOPE DATA								ANALYTICAL LABORATORY
			^{3}H (TU)[a]	^{14}C (pmC)[b]	Sr (ppm)[c]	$^{87}Sr/^{86}Sr$[d]	^{234}U (pCi/L)[e]	^{235}U (pCi/L)[f]	^{238}U (pCi/L)[g]	$^{234}U/^{238}U$[h]	
Surface Water 1 - Queen Creek											
Pump Station Spring (QC 30.7 C)	RESE-1002248	09-May-12	---	102.65 ± 0.25	---	---	---	---	---	---	Beta Analytic
Pump Station Spring (QC 30.7 C)	RESE-1002248	09-May-12	---	---	0.1579	0.710019 ± 0.000009	---	---	---	---	Geochron
Pump Station Spring (QC 30.7 C)	RESE-1002248	09-May-12	2.70 ± 0.27	---	---	---	---	---	---	---	Isotech
QC 19.7 C	RESE-1002021	28-Aug-08	---	---	---	---	0.3 ± 0.3	<0.2	<0.2	---	Energy Labs
QC 19.7 C	RESE-1002021	28-Aug-08	---	---	0.2038	0.710345 ± 0.000007	---	---	---	---	Geochron
QC 19.7 C	RESE-1002021	28-Aug-08	4.2 ± 0.4	---	---	---	---	---	---	---	University of Arizona
QC 21.7 C (Magma Avenue)	RESE-1002018	28-Aug-08	---	---	---	---	0.3 ± 0.3	<0.2	<0.2	---	Energy Labs
QC 21.7 C (Magma Avenue)	RESE-1002018	28-Aug-08	---	---	0.1602	0.710004 ± 0.00001	---	---	---	---	Geochron
QC 21.7 C (Magma Avenue)	RESE-1002018	28-Aug-08	4.6 ± 0.39	---	---	---	---	---	---	---	University of Arizona
QC 21.7 C (Magma Avenue) LD	RESE-1002018	28-Aug-08	---	---	0.1599	0.710004 ± 0.000009	---	---	---	---	Geochron
QC 21.7 C (Magma Avenue)	RESE-1002083	07-May-09	6.7 ± 0.36	---	---	---	---	---	---	---	University of Arizona
QC 21.7 C (Magma Avenue)	RESE-1002228	02-May-12	---	98.52 ± 0.36	---	---	---	---	---	---	Beta Analytic
QC 21.7 C (Magma Avenue)	RESE-1002228	02-May-12	---	---	0.1358	0.710510 ± 0.000009	---	---	---	---	Geochron
QC 21.7 C (Magma Avenue)	RESE-1002228	02-May-12	4.90 ± 0.3	---	---	---	---	---	---	---	Isotech
QC 22.6 E (Karst Spring)	RESE-1002017	28-Aug-08	---	---	---	---	0.9 ± 0.4	<0.2	0.6 ± 0.3	1.5	Energy Labs
QC 22.6 E (Karst Spring)	RESE-1002017	28-Aug-08	---	---	0.2477	0.709858 ± 0.0007	---	---	---	---	Geochron
QC 22.6 E (Karst Spring)	RESE-1002017	28-Aug-08	3.2 ± 0.36	---	---	---	---	---	---	---	University of Arizona
QC 27.3 C	RESE-1002002	05-Aug-08	---	---	---	---	<0.2	<0.2	<0.2	---	Energy Labs
QC 27.3 C	RESE-1002002	05-Aug-08	---	---	0.2046	0.710052 ± 0.000009	---	---	---	---	Geochron
QC 27.3 C	RESE-1002002	05-Aug-08	6.7 ± 0.39	---	---	---	---	---	---	---	University of Arizona
QC 27.3 C	RESE-1002079	07-May-09	5.8 ± 0.31	---	---	---	---	---	---	---	University of Arizona
QC 27.3 C	RESE-1002249	09-May-12	---	100.88 ± 0.36	---	---	---	---	---	---	Beta Analytic
QC 27.3 C	RESE-1002249	09-May-12	---	---	0.1401	0.710083 ± 0.000007	---	---	---	---	Geochron
QC 27.3 C	RESE-1002249	09-May-12	4.82 ± 0.21	---	---	---	---	---	---	---	Isotech
Surface Water 2 - Devils Canyon											
DC 10.9 C	RESE-1002224	27-Apr-12	---	102.39 ± 0.25	---	---	---	---	---	---	Beta Analytic
DC 10.9 C	RESE-1002224	27-Apr-12	---	---	0.0455	0.710193 ± 0.00001	---	---	---	---	Geochron
DC 10.9 C	RESE-1002224	27-Apr-12	4.54 ± 0.34	---	---	---	---	---	---	---	Isotech
DC 13.5 C	RESE-1002014	21-Aug-08	---	---	---	---	<0.2	<0.2	<0.2	---	Energy Labs
DC 13.5 C	RESE-1002014	21-Aug-08	---	---	0.0998	0.710162 ± 0.000014	---	---	---	---	Geochron
DC 13.5 C	RESE-1002014	21-Aug-08	3.9 ± 0.4	---	---	---	---	---	---	---	University of Arizona
DC 13.5 C	RESE-1002103	21-May-09	4.0 ± 0.31	---	---	---	---	---	---	---	University of Arizona
DC 13.5 C	RESE-1002223	27-Apr-12	---	99.13 ± 0.37	---	---	---	---	---	---	Beta Analytic
DC 13.5 C	RESE-1002223	27-Apr-12	---	---	0.0656	0.710226 ± 0.000009	---	---	---	---	Geochron
DC 13.5 C	RESE-1002223	27-Apr-12	4.35 ± 0.34	---	---	---	---	---	---	---	Isotech

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TABLE B-5. RADIOISOTOPE DATA
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	RADIOISOTOPE DATA								ANALYTICAL LABORATORY
			^{3}H (TU)[a]	^{14}C (pmC)[b]	Sr (ppm)[c]	$^{87}Sr/^{86}Sr$[d]	^{234}U (pCi/L)[e]	^{235}U (pCi/L)[f]	^{238}U (pCi/L)[g]	$^{234}U/^{238}U$[h]	
Surface Water 2 - Devils Canyon											
DC 14.7 C	RESE-1002015	27-Aug-08	---	---	---	---	0.4 ± 0.4	<0.2	<0.2	---	Energy Labs
DC 14.7 C	RESE-1002015	27-Aug-08	---	---	0.0482	0.710313 ± 0.00001	---	---	---	---	Geochron
DC 14.7 C	RESE-1002015	27-Aug-08	3.9 ± 0.41	---	---	---	---	---	---	---	University of Arizona
DC 15.5 C	RESE-1002003	05-Aug-08	---	---	---	---	<0.2	<0.2	<0.2	---	Energy Labs
DC 15.5 C	RESE-1002003	05-Aug-08	---	---	0.0257	0.710171 ± 0.00001	---	---	---	---	Geochron
DC 15.5 C	RESE-1002003	05-Aug-08	4.8 ± 0.4	---	---	---	---	---	---	---	University of Arizona
DC 15.5 C	RESE-1002075	05-May-09	5.1 ± 0.38	---	---	---	---	---	---	---	University of Arizona
DC 15.5 C	RESE-1002246	09-May-12	---	r ± 0.26	---	---	---	---	---	---	Beta Analytic
DC 15.5 C	RESE-1002246	09-May-12	---	---	0.0250	0.710157 ± 0.000009	---	---	---	---	Geochron
DC 15.5 C	RESE-1002246	09-May-12	4.70 ± 0.31	---	---	---	---	---	---	---	Isotech
DC 15.5 C DUP	RESE-1002247	09-May-12	---	r ± 0.29	---	---	---	---	---	---	Beta Analytic
DC 15.5 C DUP	RESE-1002247	09-May-12	---	---	0.0250	0.710175 ± 0.000007	---	---	---	---	Geochron
DC 15.5 C DUP	RESE-1002247	09-May-12	5.19 ± 0.27	---	---	---	---	---	---	---	Isotech
DC 6.1 E	RESE-1002007	07-Aug-08	---	---	---	---	1.1 ± 0.4	<0.2	<0.2	---	Energy Labs
DC 6.1 E	RESE-1002007	07-Aug-08	---	---	0.1573	0.710261 ± 0.00001	---	---	---	---	Geochron
DC 6.1 E	RESE-1002007	07-Aug-08	<0.9	---	---	---	---	---	---	---	University of Arizona
DC 6.1 E LD	RESE-1002007	07-Aug-08	---	---	0.1574	0.710281 ± 0.000011	---	---	---	---	Geochron
DC 6.1 E	RESE-1002099	20-May-09	<1.0	---	---	---	---	---	---	---	University of Arizona
DC 6.14 C	RESE-1002013	20-Aug-08	---	---	---	---	<0.2	<0.2	<0.2	---	Energy Labs
DC 6.14 C	RESE-1002013	20-Aug-08	---	---	0.1557	0.710040 ± 0.00001	---	---	---	---	Geochron
DC 6.14 C	RESE-1002013	20-Aug-08	3.8 ± 0.36	---	---	---	---	---	---	---	University of Arizona
DC 6.14 C	RESE-1002078	06-May-09	2.8 ± 0.35	---	---	---	---	---	---	---	University of Arizona
DC 6.14 C	RESE-1002235	04-May-12	---	102.27 ± 0.25	---	---	---	---	---	---	Beta Analytic
DC 6.14 C	RESE-1002235	04-May-12	---	---	0.1160	0.710011 ± 0.000026	---	---	---	---	Geochron
DC 6.14 C	RESE-1002235	04-May-12	2.32 ± 0.15	---	---	---	---	---	---	---	Isotech
DC 6.6 W (DCT 6.6 W)	RESE-1002234	04-May-12	---	95.86 ± 0.35	---	---	---	---	---	---	Beta Analytic
DC 6.6 W (DCT 6.6 W)	RESE-1002234	04-May-12	---	---	0.1787	0.709715 ± 0.000009	---	---	---	---	Geochron
DC 6.6 W (DCT 6.6 W)	RESE-1002234	04-May-12	<1.00	---	---	---	---	---	---	---	Isotech
DC 7.1 C	RESE-1002233	04-May-12	---	100.50 ± 0.37	---	---	---	---	---	---	Beta Analytic
DC 7.1 C	RESE-1002233	04-May-12	---	---	0.1236	0.710065 ± 0.000009	---	---	---	---	Geochron
DC 7.1 C	RESE-1002233	04-May-12	2.01 ± 0.17	---	---	---	---	---	---	---	Isotech
DC 8.1 C	RESE-1002005	06-Aug-08	---	---	---	---	0.7 ± 0.3	<0.2	0.4 ± 0.3	1.8	Energy Labs
DC 8.1 C	RESE-1002005	06-Aug-08	---	---	0.1613	0.710015 ± 0.000014	---	---	---	---	Geochron
DC 8.1 C	RESE-1002005	06-Aug-08	1.7 ± 0.33	---	---	---	---	---	---	---	University of Arizona
DC 8.1 C	RESE-1002098	19-May-09	1.2 ± 0.27	---	---	---	---	---	---	---	University of Arizona

TABLE B-5. RADIOISOTOPE DATA
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	RADIOISOTOPE DATA								ANALYTICAL LABORATORY
			^{3}H (TU)[a]	^{14}C (pmC)[b]	Sr (ppm)[c]	$^{87}Sr/^{86}Sr$[d]	^{234}U (pCi/L)[e]	^{235}U (pCi/L)[f]	^{238}U (pCi/L)[g]	$^{234}U/^{238}U$[h]	
Surface Water 2 - Devils Canyon											
DC 8.1 C	RESE-1002232	03-May-12	---	89.96 ± 0.33	---	---	---	---	---	---	Beta Analytic
DC 8.1 C	RESE-1002232	03-May-12	---	---	0.1159	0.710056 ± 0.000007	---	---	---	---	Geochron
DC 8.1 C	RESE-1002232	03-May-12	1.91 ± 0.16	---	---	---	---	---	---	---	Isotech
DC 8.2 W	RESE-1000260	19-Feb-08	---	---	---	---	0.9 ± 0.3	<0.2	0.2 ± 0.1	4.5	Energy Labs
DC 8.2 W	RESE-1000260	19-Feb-08	---	---	0.1553	0.709962 ± 0.000014	---	---	---	---	Geochron
DC 8.2 W	RESE-1000260	19-Feb-08	0.6 ± 0.24	72.8 ± 1.7	---	---	---	---	---	---	University of Arizona
DC 8.2 W	RESE-1003002	27-May-08	---	---	---	---	1.1 ± 0.3	<0.2	0.2 ± 0.2	5.5	Energy Labs
DC 8.2 W	RESE-1003002	27-May-08	---	---	0.1542	0.709959 ± 0.000009	---	---	---	---	Geochron
DC 8.2 W	RESE-1003002	27-May-08	0.9 ± 0.21	---	---	---	---	---	---	---	University of Arizona
DC 8.2 W	RESE-1002004	06-Aug-08	---	---	---	---	0.7 ± 0.3	<0.2	0.2 ± 0.2	3.5	Energy Labs
DC 8.2 W	RESE-1002004	06-Aug-08	---	---	0.1540	0.709962 ± 0.00001	---	---	---	---	Geochron
DC 8.2 W	RESE-1002004	06-Aug-08	<0.7	---	---	---	---	---	---	---	University of Arizona
DC 8.2 W	RESE-1003023	02-Dec-08	---	---	---	---	0.6 ± 0.3	<0.2	<0.2	---	Energy Labs
DC 8.2 W	RESE-1003023	02-Dec-08	---	---	0.1550	0.709973 ± 0.000007	---	---	---	---	Geochron
DC 8.2 W	RESE-1003023	02-Dec-08	<0.5	---	---	---	---	---	---	---	University of Arizona
DC 8.2 W	RESE-1002097	19-May-09	0.7 ± 0.28	---	---	---	---	---	---	---	University of Arizona
DC 8.2 W	RESE-1002231	03-May-12	---	70.83 ± 0.26	---	---	---	---	---	---	Beta Analytic
DC 8.2 W	RESE-1002231	03-May-12	---	---	0.1390	0.709934 ± 0.000013	---	---	---	---	Geochron
DC 8.2 W	RESE-1002231	03-May-12	<1.00	---	---	---	---	---	---	---	Isotech
DC 8.8 C	RESE-1002230	03-May-12	---	87.97 ± 0.32	---	---	---	---	---	---	Beta Analytic
DC 8.8 C	RESE-1002230	03-May-12	---	---	0.0910	0.710208 ± 0.00001	---	---	---	---	Geochron
DC 8.8 C	RESE-1002230	03-May-12	2.77 ± 0.28	---	---	---	---	---	---	---	Isotech
H 0.1 C	RESE-1002011	19-Aug-08	---	---	---	---	<0.2	<0.2	<0.2	---	Energy Labs
H 0.1 C	RESE-1002011	19-Aug-08	---	---	0.1256	0.709784 ± 0.00002	---	---	---	---	Geochron
H 0.1 C	RESE-1002011	19-Aug-08	6.6 ± 0.38	---	---	---	---	---	---	---	University of Arizona
H 0.1 C	RESE-1002096	19-May-09	2.1 ± 0.26	---	---	---	---	---	---	---	University of Arizona
H 0.1 C	RESE-1002229	03-May-12	---	101.38 ± 0.25	---	---	---	---	---	---	Beta Analytic
H 0.1 C	RESE-1002229	03-May-12	---	---	0.0832	709806 ± 0.00001	---	---	---	---	Geochron
H 0.1 C	RESE-1002229	03-May-12	4.41 ± 0.19	---	---	---	---	---	---	---	Isotech
IC 1.0 C	RESE-1002019	28-Aug-08	---	---	---	---	<0.2	<0.2	<0.2	---	Energy Labs
IC 1.0 C	RESE-1002019	28-Aug-08	---	---	0.2035	0.710503 ± 0.000009	---	---	---	---	Geochron
IC 1.0 C	RESE-1002019	28-Aug-08	4.5 ± 0.35	---	---	---	---	---	---	---	University of Arizona
IC 1.0 C	RESE-1002085	12-May-09	4.6 ± 0.42	---	---	---	---	---	---	---	University of Arizona

TABLE B-5. RADIOISOTOPE DATA
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	RADIOISOTOPE DATA								ANALYTICAL LABORATORY
			^{3}H (TU)[a]	^{14}C (pmC)[b]	Sr (ppm)[c]	$^{87}Sr/^{86}Sr$[d]	^{234}U (pCi/L)[e]	^{235}U (pCi/L)[f]	^{238}U (pCi/L)[g]	$^{234}U/^{238}U$[h]	
Surface Water 2 - Devils Canyon											
RR 1.5 C	RESE-1002012	19-Aug-08	---	---	---	---	<0.2	<0.2	<0.2	---	Energy Labs
RR 1.5 C	RESE-1002012	19-Aug-08	---	---	0.1530	0.709789 ± 0.000011	---	---	---	---	Geochron
RR 1.5 C	RESE-1002012	19-Aug-08	3.7 ± 0.37	---	---	---	---	---	---	---	University of Arizona
RR 1.5 C	RESE-1002100	21-May-09	4.0 ± 0.34	---	---	---	---	---	---	---	University of Arizona
RR 1.5 C DUP	RESE-1002101	21-May-09	4.1 ± 0.33	---	---	---	---	---	---	---	University of Arizona
RR 1.5 C	RESE-1002225	27-Apr-12	---	106.16 ± 0.26	---	---	---	---	---	---	Beta Analytic
RR 1.5 C	RESE-1002225	27-Apr-12	---	---	0.0993	0.709823 ± 0.00001	---	---	---	---	Geochron
RR 1.5 C	RESE-1002225	27-Apr-12	3.93 ± 0.31	---	---	---	---	---	---	---	Isotech
RR 1.5 C DUP	RESE-1002226	27-Apr-12	---	102.14 ± 0.25	---	---	---	---	---	---	Beta Analytic
RR 1.5 C DUP	RESE-1002226	27-Apr-12	---	---	0.1008	0.709829 ± 0.000009	---	---	---	---	Geochron
RR 1.5 C DUP	RESE-1002226	27-Apr-12	3.83 ± 0.31	---	---	---	---	---	---	---	Isotech
Surface Water 3 - Mineral Creek											
Government Springs	RESE-1002130	18-Mar-10	---	93.73 ± 0.46	---	---	---	---	---	---	Beta Analytic
Government Springs	RESE-1002130	18-Mar-10	---	---	---	---	2.5 ± 0.3	<0.1	1 ± 0.2	2.5	Energy Labs
Government Springs	RESE-1002130	18-Mar-10	---	---	0.293	0.712608 ± 0.000009	---	---	---	---	Geochron
Government Springs	RESE-1002130	18-Mar-10	1.71 ± 0.27	---	---	---	---	---	---	---	Isotech
Government Springs	RESE-1002181	29-Aug-11	---	---	---	---	2.8 ± 1.7	<0.95	<0.95	---	ACZ
Government Springs	RESE-1002181	29-Aug-11	---	97.78 ± 0.36	---	---	---	---	---	---	Beta Analytic
Government Springs	RESE-1002181	29-Aug-11	---	---	0.278	0.712603 ± 0.000007	---	---	---	---	Geochron
Government Springs	RESE-1002181	29-Aug-11	2.31 ± 0.3	---	---	---	---	---	---	---	Isotech
Government Springs	RESE-1002239	08-May-12	---	97.06 ± 0.36	---	---	---	---	---	---	Beta Analytic
Government Springs	RESE-1002239	08-May-12	---	---	0.2692	0.712590 ± 0.000009	---	---	---	---	Geochron
Government Springs	RESE-1002239	08-May-12	1.79 ± 0.27	---	---	---	---	---	---	---	Isotech
LF 0.2 C	RESE-1002093	14-May-09	---	---	---	---	1.9 ± 0.4	<0.1	1.4 ± 0.3	1.4	Energy Labs
LF 0.2 C	RESE-1002093	14-May-09	---	---	0.3723	0.722708 ± 0.000007	---	---	---	---	Geochron
LF 0.2 C	RESE-1002093	14-May-09	3.3 ± 0.35	---	---	---	---	---	---	---	University of Arizona
LF 0.2 C	RESE-1002133	18-Mar-10	---	102.9 ± 0.5	---	---	---	---	---	---	Beta Analytic
LF 0.2 C	RESE-1002133	18-Mar-10	---	---	---	---	0.9 ± 0.2	<0.10	0.7 ± 0.2	1.3	Energy Labs
LF 0.2 C	RESE-1002133	18-Mar-10	---	---	0.312	0.730685 ± 0.000007	---	---	---	---	Geochron
LF 0.2 C	RESE-1002133	18-Mar-10	3.16 ± 0.29	---	---	---	---	---	---	---	Isotech
LF 0.2 C	RESE-1002245	08-May-12	---	101.38 ± 0.37	---	---	---	---	---	---	Beta Analytic
LF 0.2 C	RESE-1002245	08-May-12	---	---	0.3021	0.720447 ± 0.00001	---	---	---	---	Geochron
LF 0.2 C	RESE-1002245	08-May-12	2.44 ± 0.28	---	---	---	---	---	---	---	Isotech

TABLE B-5. RADIOISOTOPE DATA
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	RADIOISOTOPE DATA								ANALYTICAL LABORATORY
			^{3}H (TU)[a]	^{14}C (pmC)[b]	Sr (ppm)[c]	$^{87}Sr/^{86}Sr$[d]	^{234}U (pCi/L)[e]	^{235}U (pCi/L)[f]	^{238}U (pCi/L)[g]	$^{234}U/^{238}U$[h]	
Surface Water 3 - Mineral Creek											
MC 3.3 C (Lower Mineral)	RESE-1002095	14-May-09	---	---	---	---	0.3 ± 0.2	<0.2	<0.2	---	Energy Labs
MC 3.3 C (Lower Mineral)	RESE-1002095	14-May-09	---	---	0.2660	0.716595 ± 0.00001	---	---	---	---	Geochron
MC 3.3 C (Lower Mineral)	RESE-1002095	14-May-09	2.6 ± 0.29	---	---	---	---	---	---	---	University of Arizona
MC 3.3 C (Lower Mineral)	RESE-1002131	18-Mar-10	---	99.01 ± 0.48	---	---	---	---	---	---	Beta Analytic
MC 3.3 C (Lower Mineral)	RESE-1002131	18-Mar-10	---	---	---	---	1.4 ± 0.2	<0.10	0.8 ± 0.2	1.8	Energy Labs
MC 3.3 C (Lower Mineral)	RESE-1002131	18-Mar-10	---	---	0.260	0.723783 ± 0.00001	---	---	---	---	Geochron
MC 3.3 C (Lower Mineral)	RESE-1002131	18-Mar-10	2.83 ± 0.28	---	---	---	---	---	---	---	Isotech
MC 3.3 C (Lower Mineral)	RESE-1002243	08-May-12	---	95.62 ± 0.35	---	---	---	---	---	---	Beta Analytic
MC 3.3 C (Lower Mineral)	RESE-1002243	08-May-12	---	---	0.1864	0.714372 ± 0.000009	---	---	---	---	Geochron
MC 3.3 C (Lower Mineral)	RESE-1002243	08-May-12	0.96 ± 0.25	---	---	---	---	---	---	---	Isotech
MC 3.4 W (Wet Leg Spring)	RESE-1002094	14-May-09	---	---	---	---	1.6 ± 0.3	<0.2	1.0 ± 0.3	1.6	Energy Labs
MC 3.4 W (Wet Leg Spring)	RESE-1002094	14-May-09	---	---	0.1361	0.710308 ± 0.000009	---	---	---	---	Geochron
MC 3.4 W (Wet Leg Spring)	RESE-1002094	14-May-09	1.8 ± 0.33	---	---	---	---	---	---	---	University of Arizona
MC 3.4 W (Wet Leg Spring)	RESE-1002132	18-Mar-10	---	83.59 ± 0.41	---	---	---	---	---	---	Beta Analytic
MC 3.4 W (Wet Leg Spring)	RESE-1002132	18-Mar-10	---	---	---	---	0.2 ± 0.1	<0.10	<0.09	---	Energy Labs
MC 3.4 W (Wet Leg Spring)	RESE-1002132	18-Mar-10	---	---	0.124	0.710317 ± 0.000006	---	---	---	---	Geochron
MC 3.4 W (Wet Leg Spring)	RESE-1002132	18-Mar-10	<1.05	---	---	---	---	---	---	---	Isotech
MC 3.4 W (Wet Leg Spring)	RESE-1002173	31-May-11	---	---	---	---	2.5 ± 2.1	<1.00	<1.00	---	ACZ
MC 3.4 W (Wet Leg Spring)	RESE-1002173	31-May-11	---	72.17 ± 0.26	---	---	---	---	---	---	Beta Analytic
MC 3.4 W (Wet Leg Spring)	RESE-1002173	31-May-11	---	---	0.1255	0.710293 ± 0.00001	---	---	---	---	Geochron
MC 3.4 W (Wet Leg Spring)	RESE-1002173	31-May-11	<1.00	---	---	---	---	---	---	---	Isotech
MC 3.4 W (Wet Leg Spring)	RESE-1002244	08-May-12	---	83.17 ± 0.3	---	---	---	---	---	---	Beta Analytic
MC 3.4 W (Wet Leg Spring)	RESE-1002244	08-May-12	---	---	0.1140	0.710304 ± 0.000009	---	---	---	---	Geochron
MC 3.4 W (Wet Leg Spring)	RESE-1002244	08-May-12	<1.00	---	---	---	---	---	---	---	Isotech
MC 5.2 C	RESE-1002171	31-May-11	---	---	---	---	2.2 ± 1.7	<1.00	1.29 ± 1.5	1.7	ACZ
MC 5.2 C	RESE-1002171	31-May-11	---	91.88 ± 0.34	---	---	---	---	---	---	Beta Analytic
MC 5.2 C	RESE-1002171	31-May-11	---	---	0.2808	0.714971 ± 0.000007	---	---	---	---	Geochron
MC 5.2 C	RESE-1002171	31-May-11	1.32 ± 0.15	---	---	---	---	---	---	---	Isotech
MC 5.2 C	RESE-1002184	29-Aug-11	---	---	---	---	1.2 ± 1.6	<0.91	<0.91	---	ACZ
MC 5.2 C	RESE-1002184	29-Aug-11	---	92.34 ± 0.34	---	---	---	---	---	---	Beta Analytic
MC 5.2 C	RESE-1002184	29-Aug-11	---	---	0.225	0.714251 ± 0.000007	---	---	---	---	Geochron
MC 5.2 C	RESE-1002184	29-Aug-11	1.92 ± 0.26	---	---	---	---	---	---	---	Isotech
MC 5.2 C	RESE-1002242	08-May-12	---	101.0 ± 0.37	---	---	---	---	---	---	Beta Analytic
MC 5.2 C	RESE-1002242	08-May-12	---	---	0.2414	0.715186 ± 0.000009	---	---	---	---	Geochron
MC 5.2 C	RESE-1002242	08-May-12	1.38 ± 0.28	---	---	---	---	---	---	---	Isotech

TABLE B-5. RADIOISOTOPE DATA
FOR SURFACE WATER SAMPLES OBTAINED IN UPPER QUEEN CREEK/DEVILS CANYON STUDY AREA

SAMPLE LOCATION	SAMPLE IDENTIFIER/ DESCRIPTION	SAMPLE DATE	RADIOISOTOPE DATA								ANALYTICAL LABORATORY
			^{3}H (TU)[a]	^{14}C (pmC)[b]	Sr (ppm)[c]	$^{87}Sr/^{86}Sr$[d]	^{234}U (pCi/L)[e]	^{235}U (pCi/L)[f]	^{238}U (pCi/L)[g]	$^{234}U/^{238}U$[h]	
Surface Water 3 - Mineral Creek											
MC 8.4 C	RESE-1002090	14-May-09	---	---	---	---	2.2 ± 0.4	<0.2	1.0 ± 0.3	2.2	Energy Labs
MC 8.4 C	RESE-1002090	14-May-09	---	---	0.3690	0.716685 ± 0.000013	---	---	---	---	Geochron
MC 8.4 C	RESE-1002090	14-May-09	1.7 ± 0.32	---	---	---	---	---	---	---	University of Arizona
MC 8.4 C DUP	RESE-1002091	14-May-09	---	---	---	---	2.3 ± 0.5	<0.3	1.1 ± 0.4	2.1	Energy Labs
MC 8.4 C DUP	RESE-1002091	14-May-09	---	---	0.3689	0.716685 ± 0.000009	---	---	---	---	Geochron
MC 8.4 C DUP	RESE-1002091	14-May-09	1.6 ± 0.27	---	---	---	---	---	---	---	University of Arizona
MC 8.4 C	RESE-1002134	18-Mar-10	---	101.13 ± 0.49	---	---	---	---	---	---	Beta Analytic
MC 8.4 C	RESE-1002134	18-Mar-10	---	---	---	---	0.9 ± 0.2	<0.10	0.7 ± 0.2	1.3	Energy Labs
MC 8.4 C	RESE-1002134	18-Mar-10	---	---	0.231	0.718324 ± 0.000006	---	---	---	---	Geochron
MC 8.4 C	RESE-1002134	18-Mar-10	2.97 ± 0.28	---	---	---	---	---	---	---	Isotech
MC 8.4 C	RESE-1002240	08-May-12	---	94.55 ± 0.35	---	---	---	---	---	---	Beta Analytic
MC 8.4 C	RESE-1002240	08-May-12	---	---	0.2935	0.716660 ± 0.000009	---	---	---	---	Geochron
MC 8.4 C	RESE-1002240	08-May-12	1.04 ± 0.25	---	---	---	---	---	---	---	Isotech
MC 8.4 C DUP	RESE-1002241	08-May-12	---	94.20 ± 0.35	---	---	---	---	---	---	Beta Analytic
MC 8.4 C DUP	RESE-1002241	08-May-12	---	---	0.2937	0.716640 ± 0.000009	---	---	---	---	Geochron
MC 8.4 C DUP	RESE-1002241	08-May-12	0.92 ± 0.26	---	---	---	---	---	---	---	Isotech

a ^{3}H = Tritium; tritium unit (1 TU = 1 tritium atom per 10^{18} atoms of hydrogen)
b ^{14}C = carbon-14; pmC = percent modern carbon
c Sr = strontium; ppm = parts per million
d Mass of strontium-87 isotope divided by mass of strontium-86 isotope
e Uranium-234 isotope; pCi/L = activity in picoCuries per liter
f Uranium-235 isotope; pCi/L = activity in picoCuries per liter
g Uranium-238 isotope; pCi/L = activity in picoCuries per liter
h Activity of uranium-234 isotope divided by activity of uranium-238 isotope

--- = Not available, not applicable
-- = Not calculated due to non-detect

Explanation of Codes

Absent = Analyte not present
ge = Greater than or equal to reported value
i = Insufficient sample
j = Estimated value
j+ = Estimated value, high bias
j- = Estimated value, low bias
Lost = Sample lost in processing
n = Not measured
na = Not available
ND = Not Detected
np = Analyte not applicable
Present = Analyte was detected
q = Uncertain value
r = Unusable data
< = Less than reported detection limit
> = Greater than reported value
d = Diluted. Diluted samples are indicated only when value is estimated.
DUP = Field Duplicate
LD = Laboratory duplicates
SP = Split samples
SPD = Split-Duplicates

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Appendix C

MAJOR ION CHEMISTRY BY QUARTER – GROUNDWATER

Shallow Groundwater System (Figures C-1 through C-3)

Apache Leap Tuff Aquifer (Figures C-4 through C-22)

Deep Groundwater System (Figures C-23 through C-29)

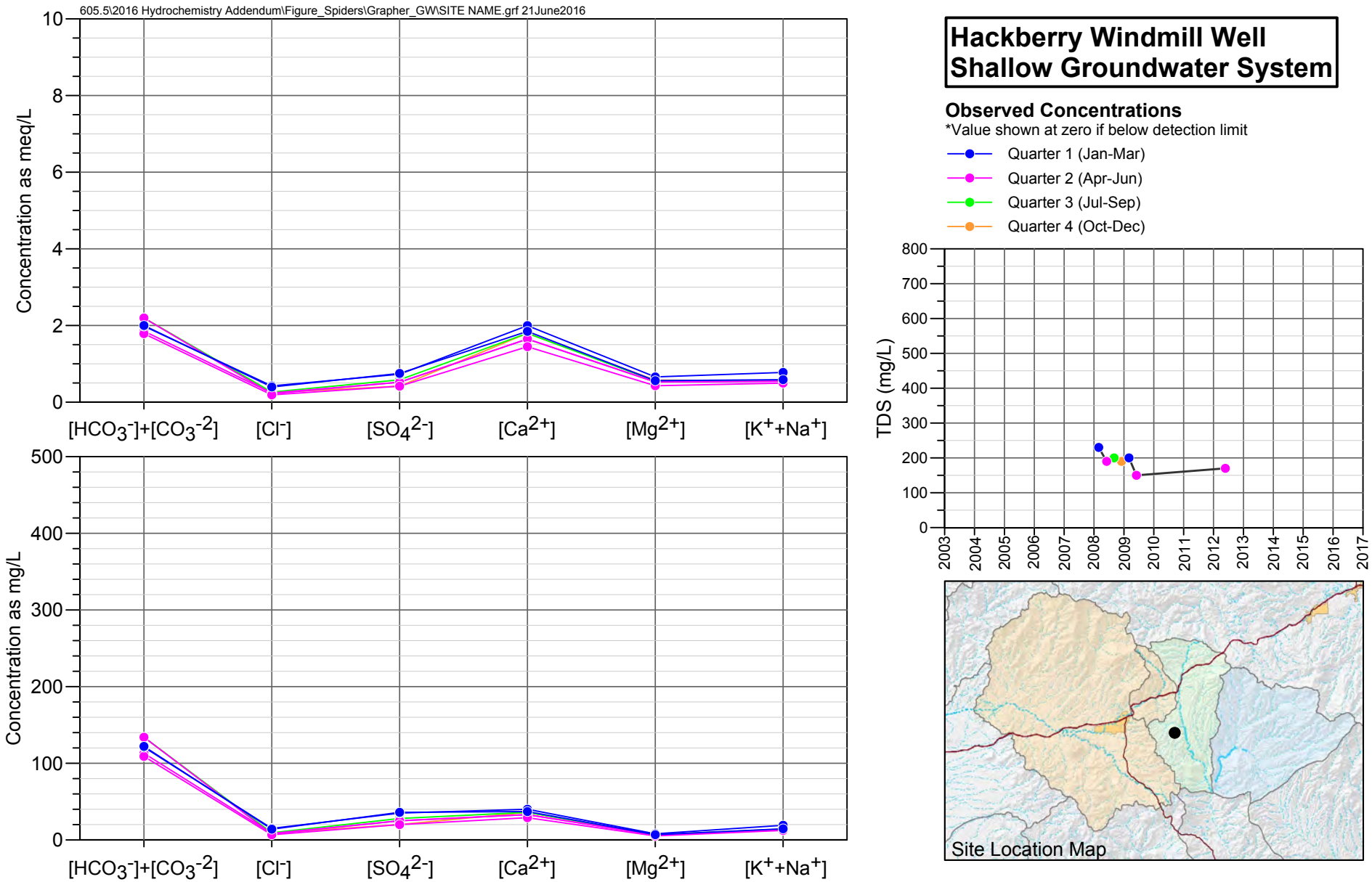

FIGURE C-01. MAJOR ION CHEMISTRY BY QUARTER FOR HACKBERRY WINDMILL WELL, SHALLOW GROUNDWATER SYSTEM

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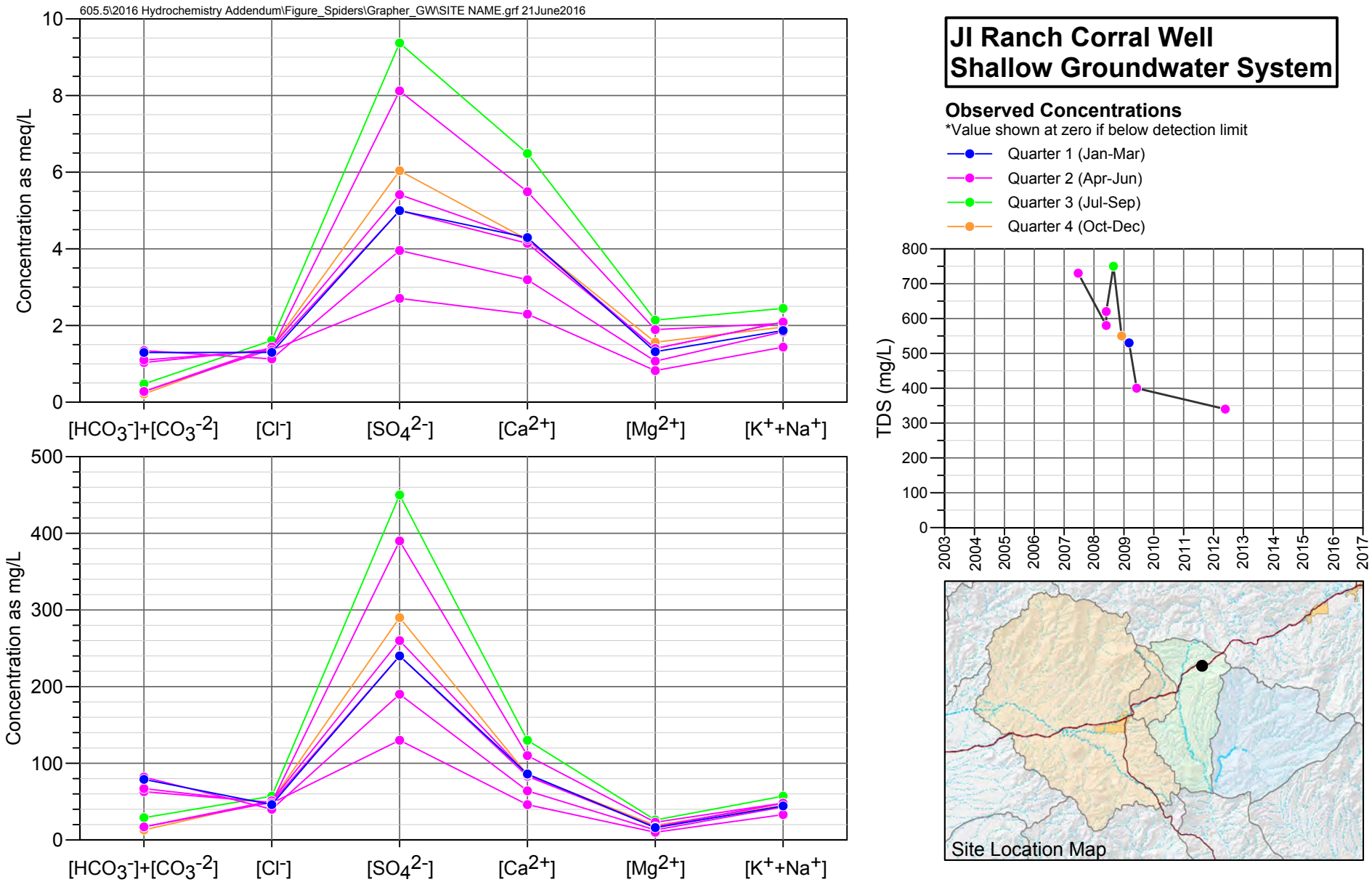

FIGURE C-02. MAJOR ION CHEMISTRY BY QUARTER FOR JI RANCH CORRAL WELL, SHALLOW GROUNDWATER SYSTEM

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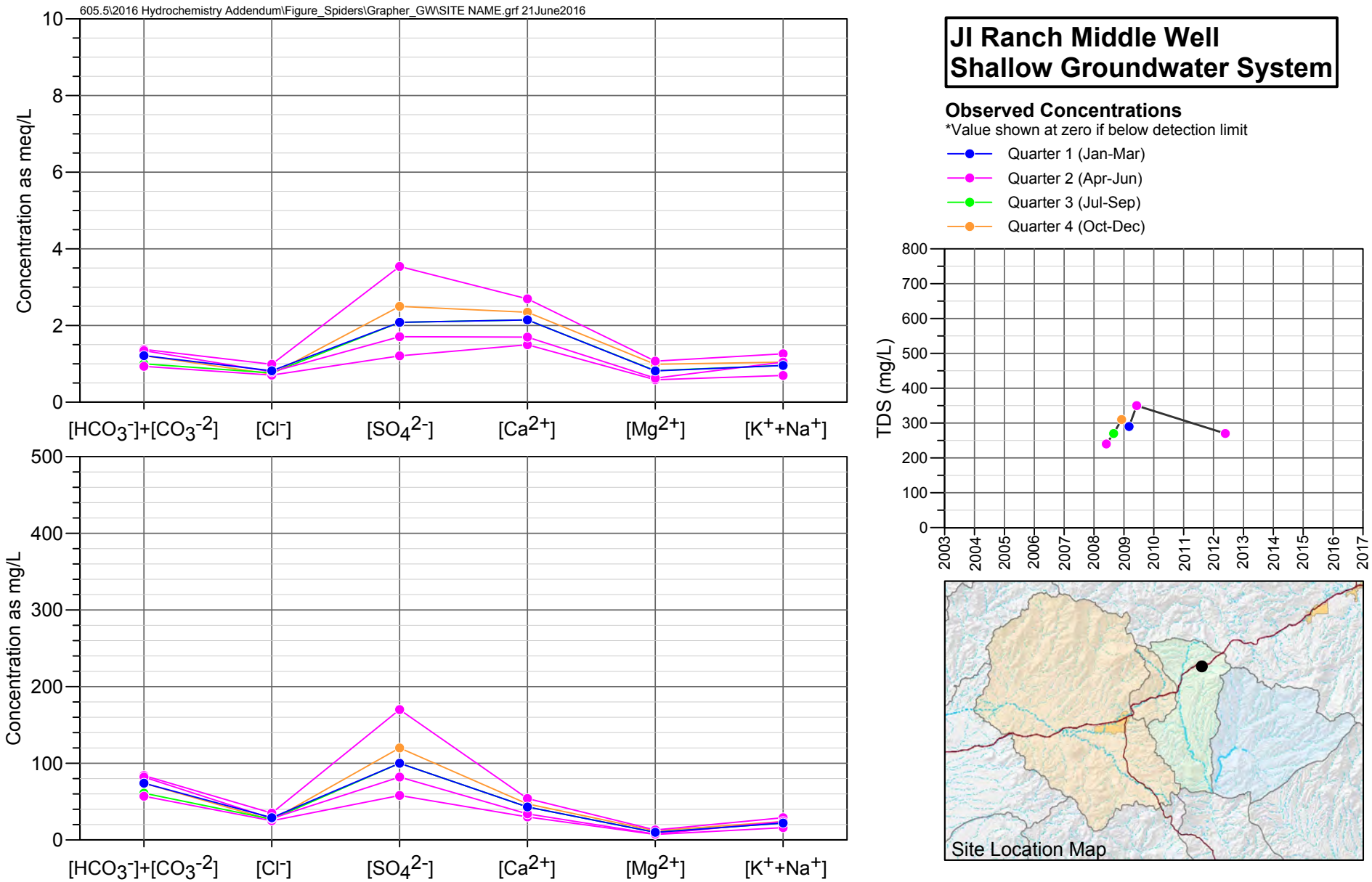

FIGURE C-03. MAJOR ION CHEMISTRY BY QUARTER FOR JI RANCH MIDDLE WELL, SHALLOW GROUNDWATER SYSTEM

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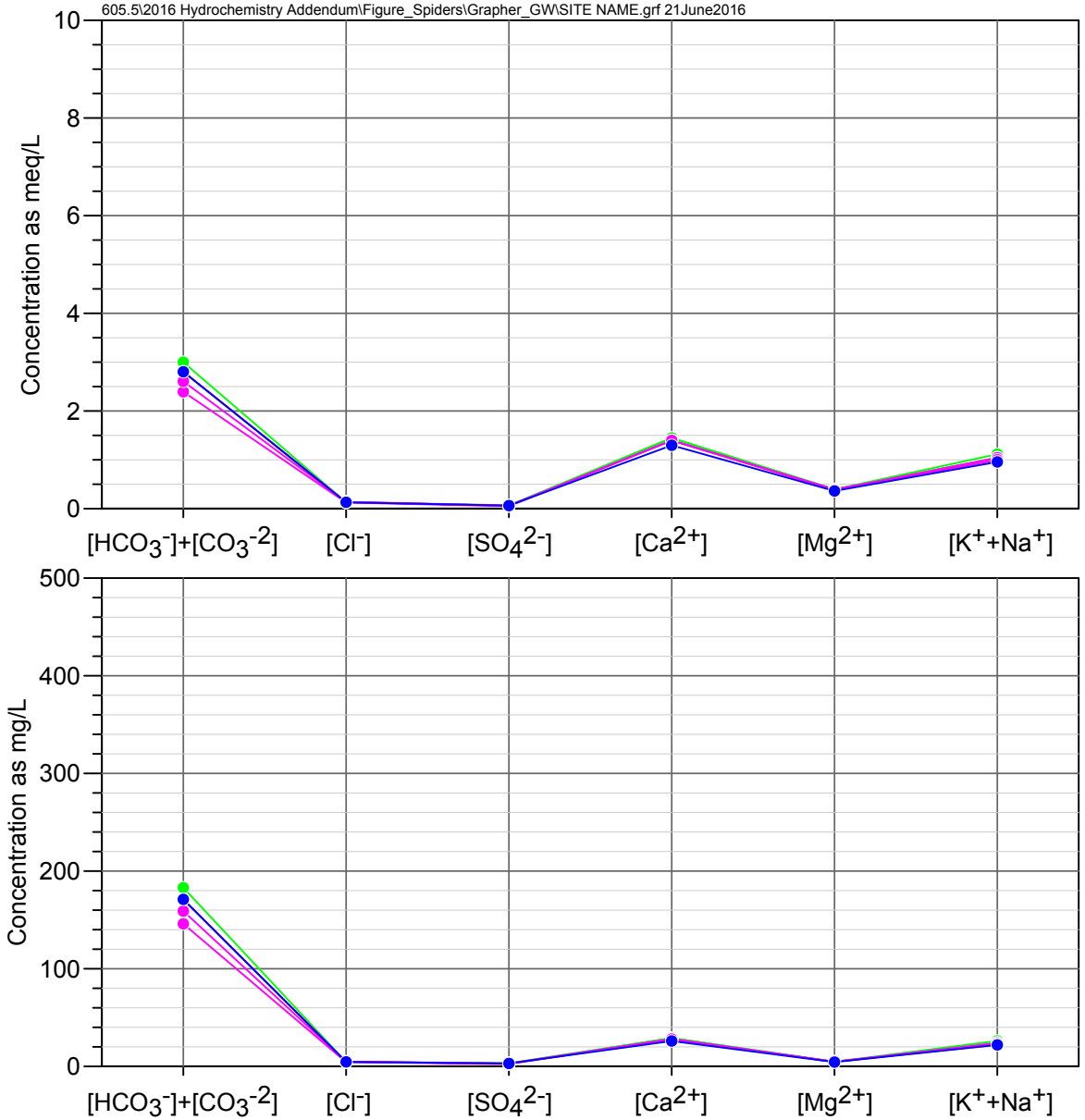
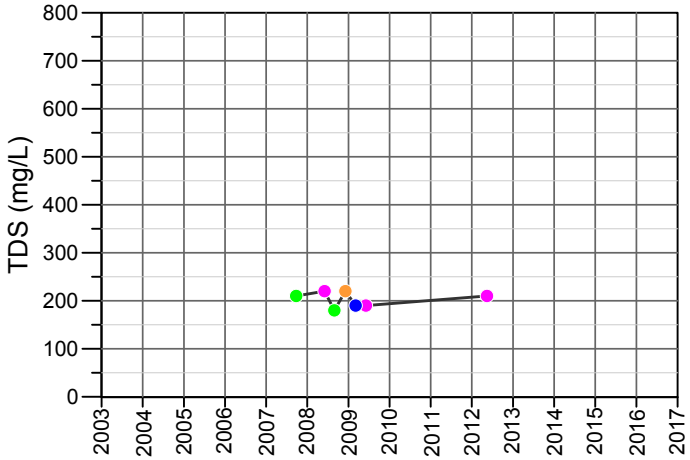


A-06
Apache Leap Tuff Aquifer

Observed Concentrations
*Value shown at zero if below detection limit

- Quarter 1 (Jan-Mar)
- Quarter 2 (Apr-Jun)
- Quarter 3 (Jul-Sep)
- Quarter 4 (Oct-Dec)



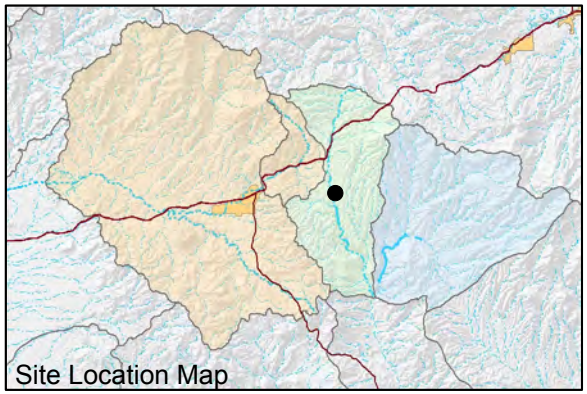


FIGURE C-04. MAJOR ION CHEMISTRY BY QUARTER FOR A-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

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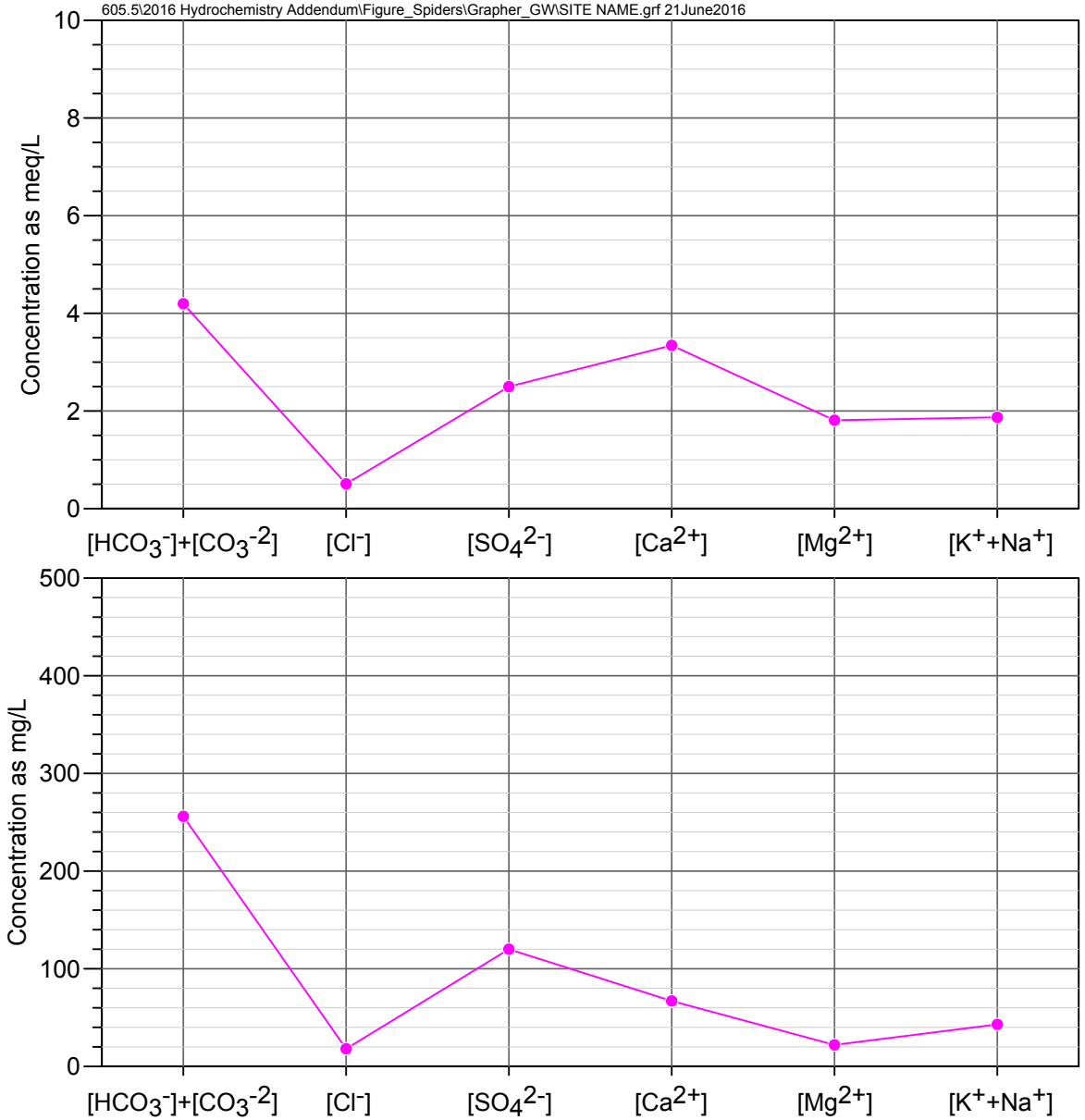
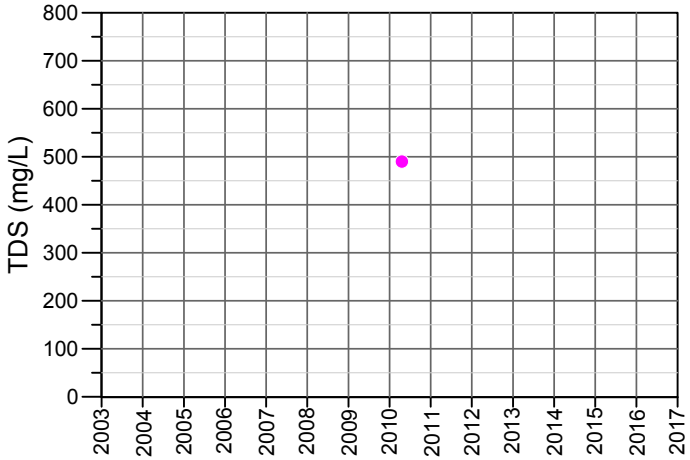


CT Well
Apache Leap Tuff Aquifer

Observed Concentrations
*Value shown at zero if below detection limit

- Quarter 1 (Jan-Mar)
- Quarter 2 (Apr-Jun)
- Quarter 3 (Jul-Sep)
- Quarter 4 (Oct-Dec)



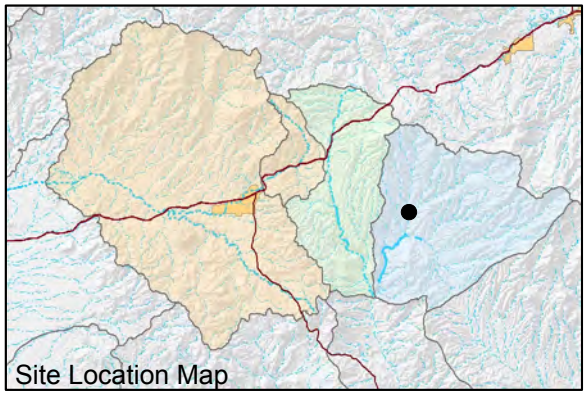


FIGURE C-05. MAJOR ION CHEMISTRY BY QUARTER FOR CT WELL, APACHE LEAP TUFF AQUIFER

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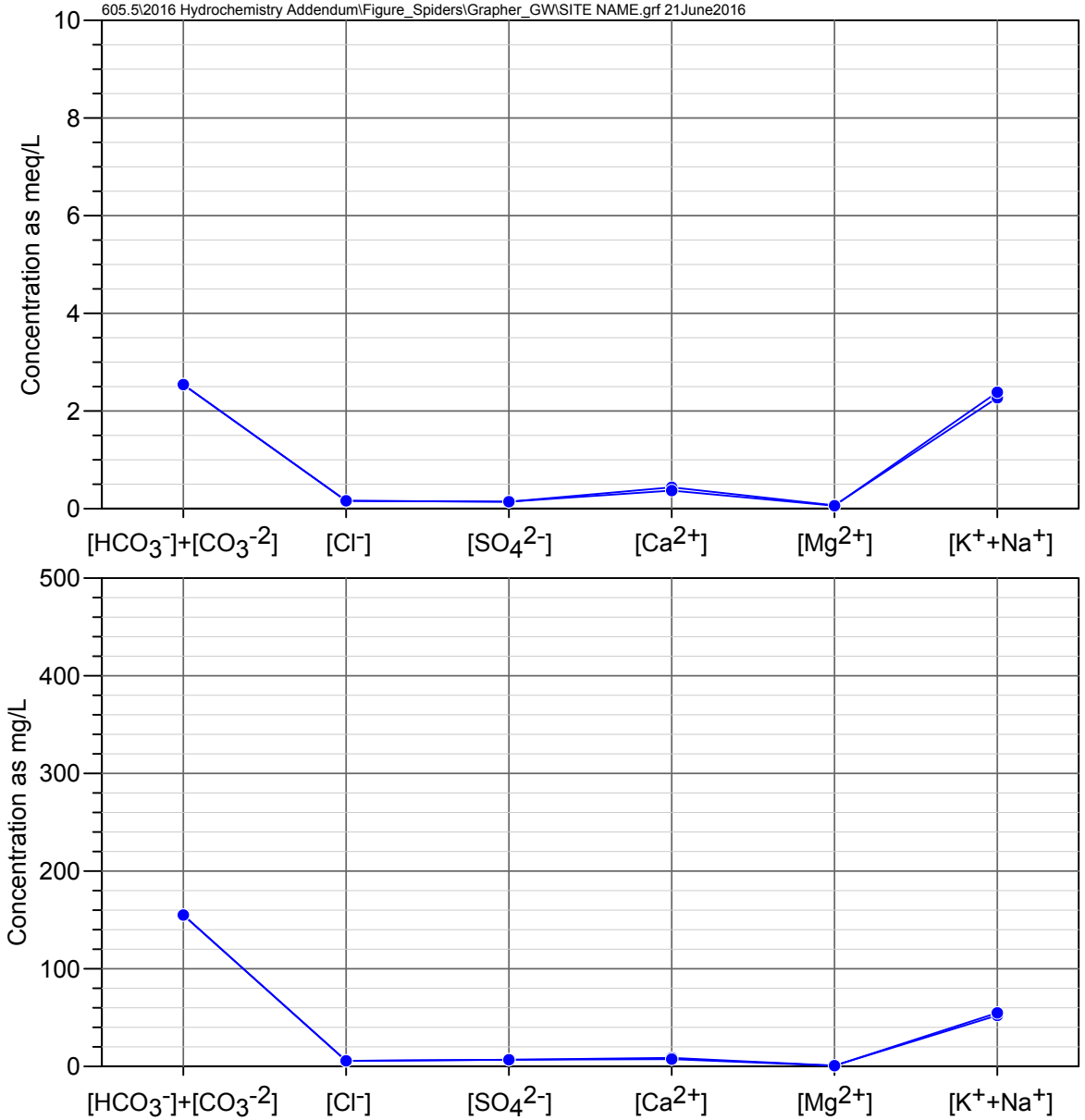
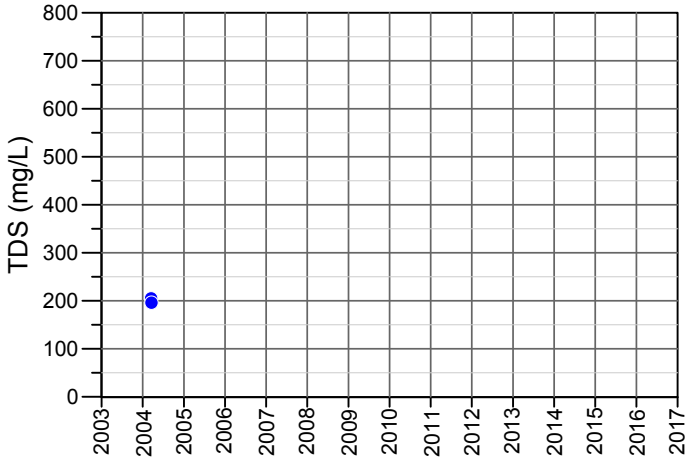


HRES-01
Apache Leap Tuff Aquifer

Observed Concentrations
*Value shown at zero if below detection limit

- Quarter 1 (Jan-Mar)
- Quarter 2 (Apr-Jun)
- Quarter 3 (Jul-Sep)
- Quarter 4 (Oct-Dec)



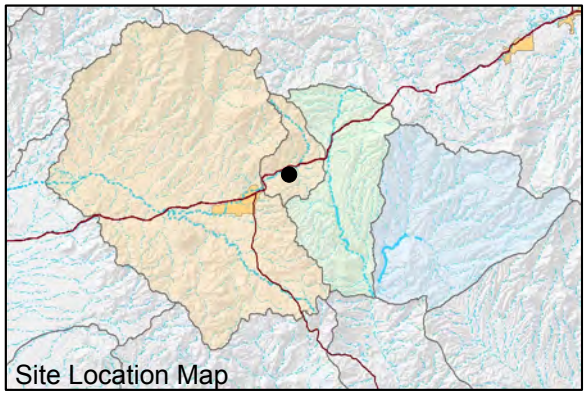


FIGURE C-06. MAJOR ION CHEMISTRY BY QUARTER FOR HRES-01, APACHE LEAP TUFF AQUIFER

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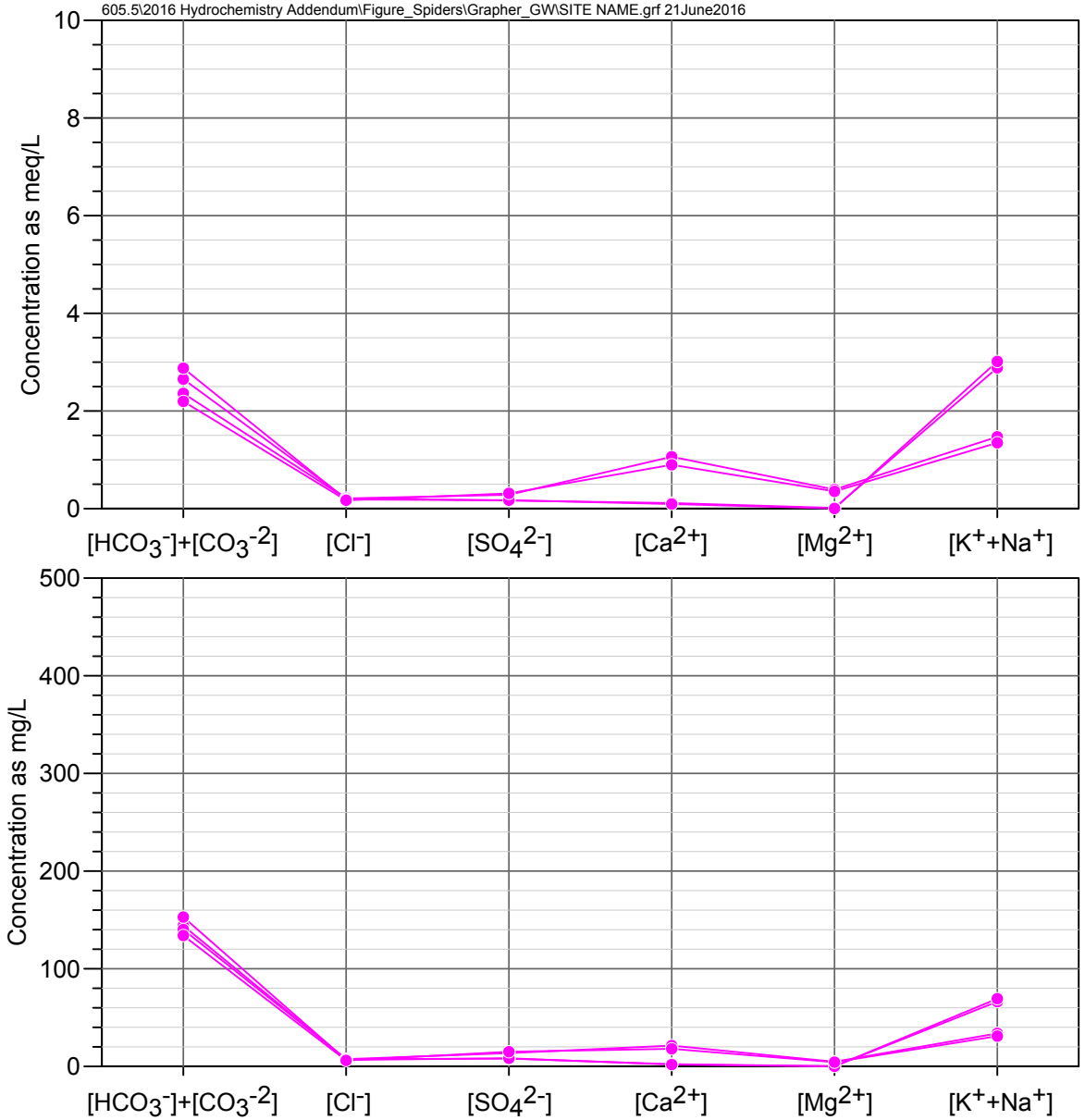
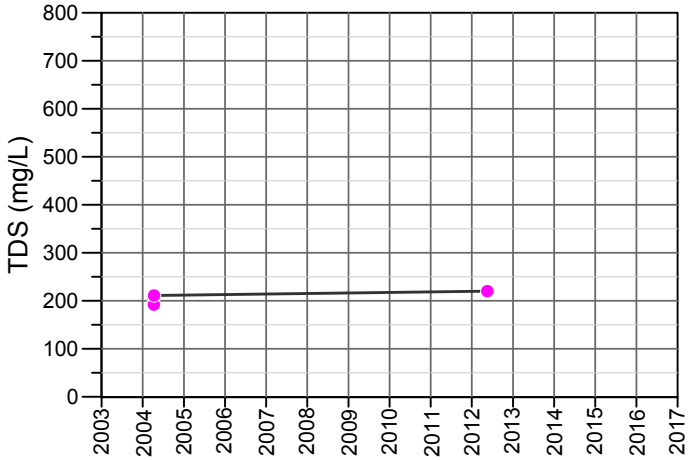
605.5\2016 Hydrochemistry Addendum\Figure_Spiders\Grapher_GW\SITE NAME.grf 21June2016



HRES-02
Apache Leap Tuff Aquifer

Observed Concentrations
*Value shown at zero if below detection limit

- Quarter 1 (Jan-Mar)
- Quarter 2 (Apr-Jun)
- Quarter 3 (Jul-Sep)
- Quarter 4 (Oct-Dec)



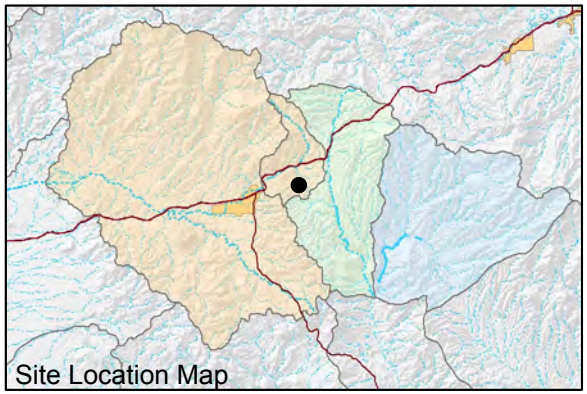


FIGURE C-07. MAJOR ION CHEMISTRY BY QUARTER FOR HRES-02, APACHE LEAP TUFF AQUIFER

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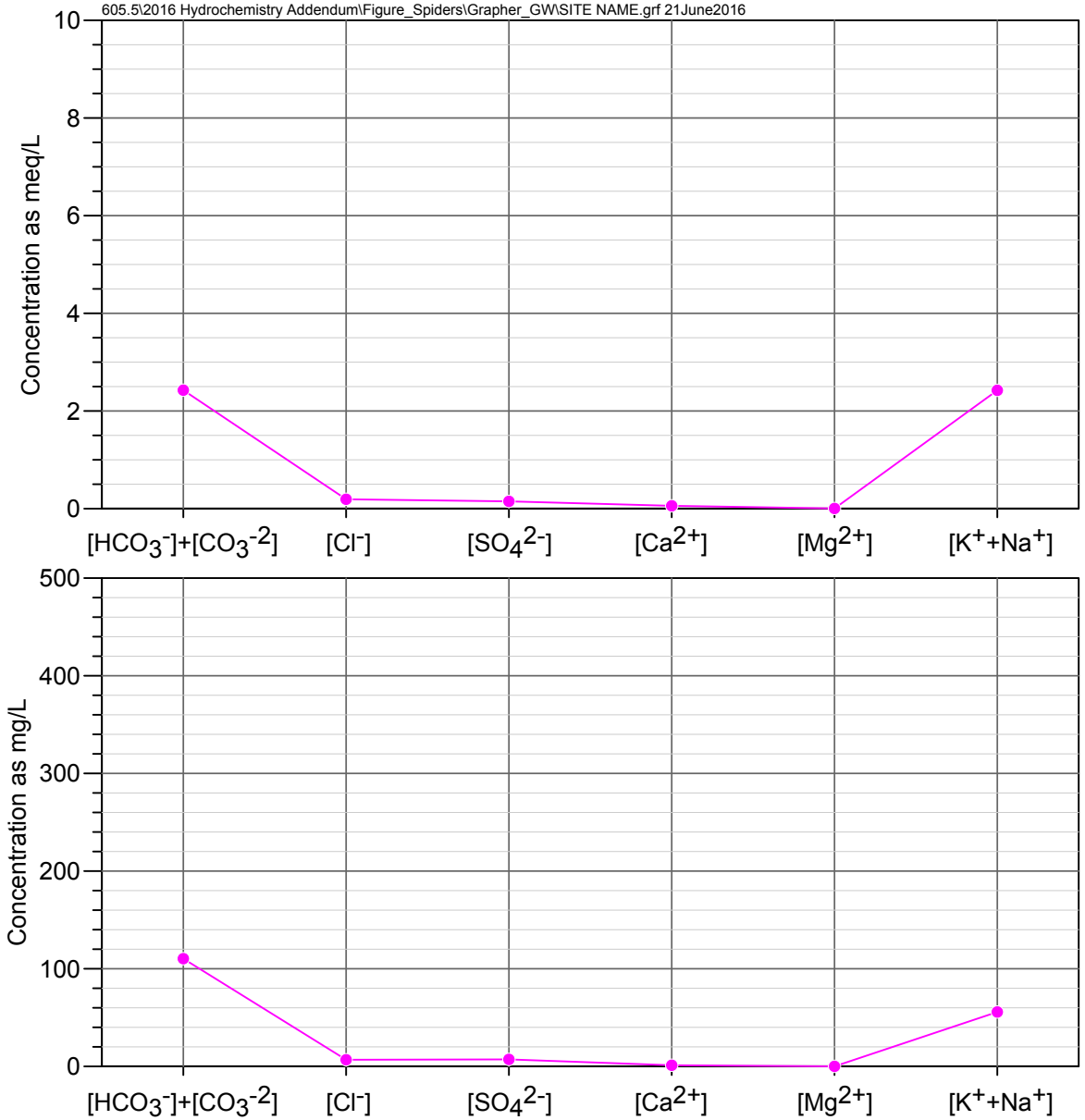
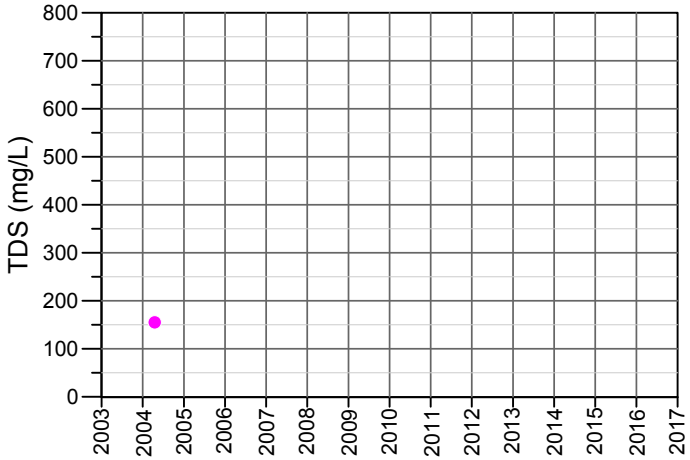


HRES-03d
Apache Leap Tuff Aquifer

Observed Concentrations
*Value shown at zero if below detection limit

- Quarter 1 (Jan-Mar)
- Quarter 2 (Apr-Jun)
- Quarter 3 (Jul-Sep)
- Quarter 4 (Oct-Dec)



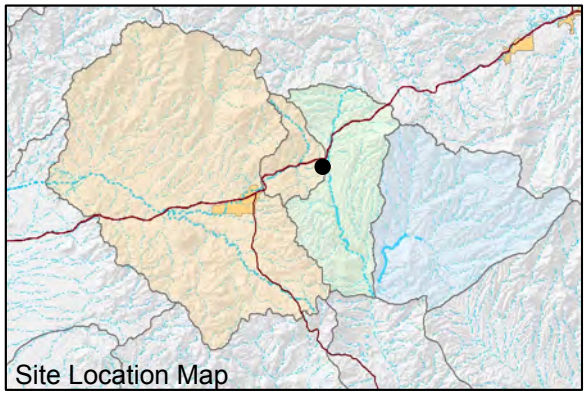


FIGURE C-08. MAJOR ION CHEMISTRY BY QUARTER FOR HRES-03D, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

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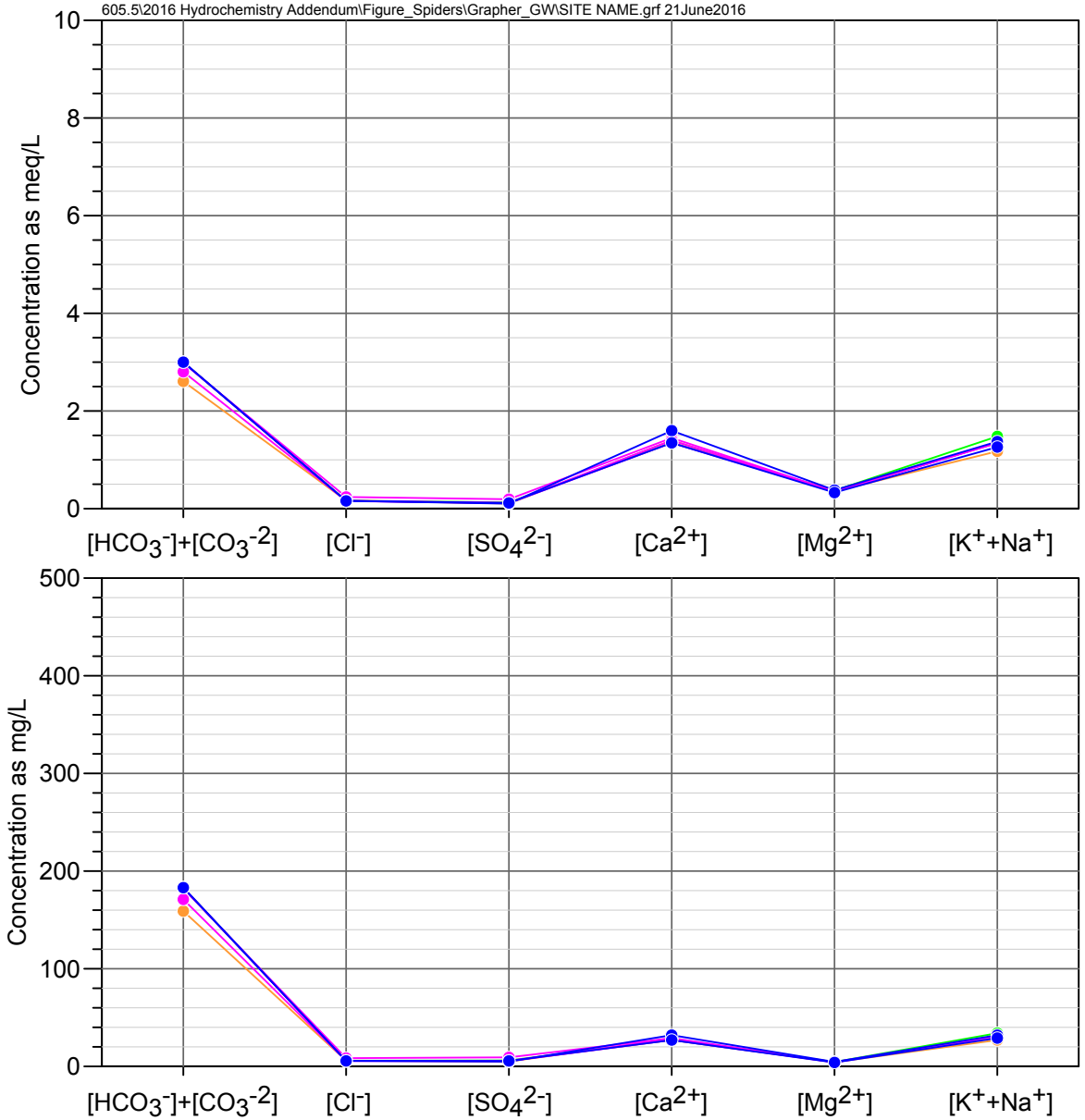
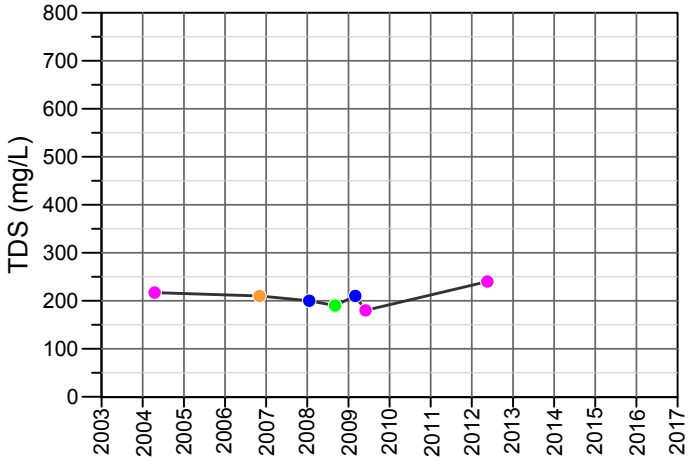
605.5\2016 Hydrochemistry Addendum\Figure_Spiders\Grapher_GW\SITE NAME.grf 21June2016



HRES-04
Apache Leap Tuff Aquifer

Observed Concentrations
*Value shown at zero if below detection limit

- Quarter 1 (Jan-Mar)
- Quarter 2 (Apr-Jun)
- Quarter 3 (Jul-Sep)
- Quarter 4 (Oct-Dec)



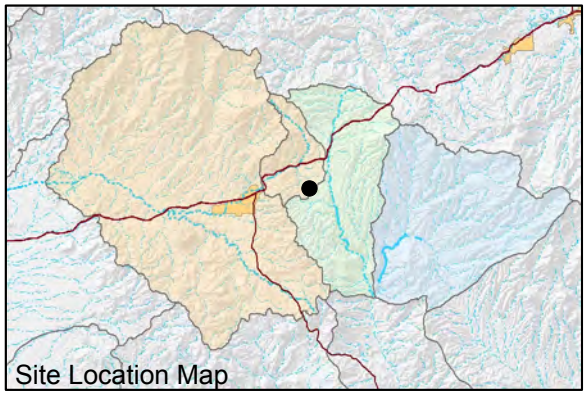
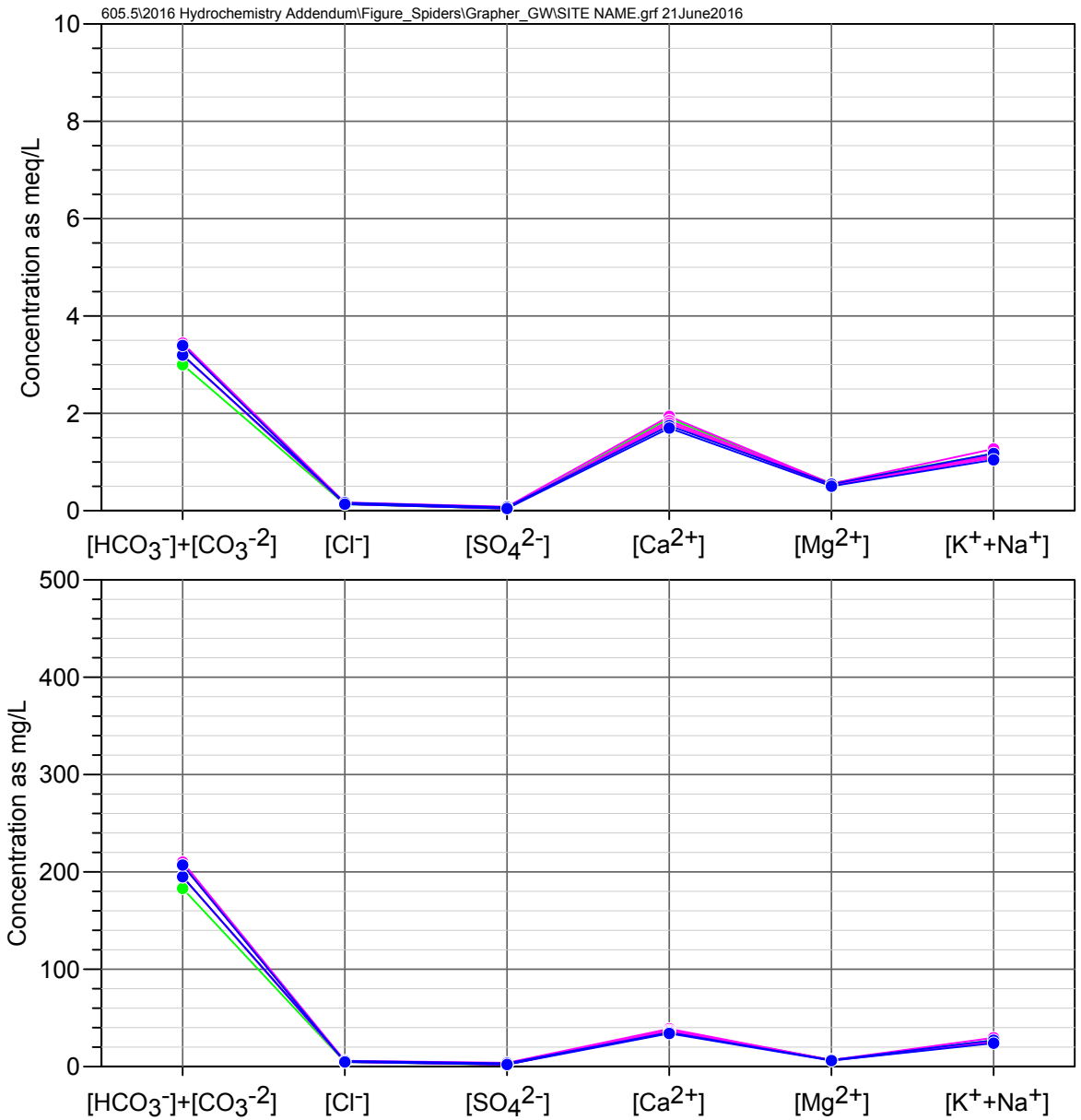


FIGURE C-09. MAJOR ION CHEMISTRY BY QUARTER FOR HRES-04, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

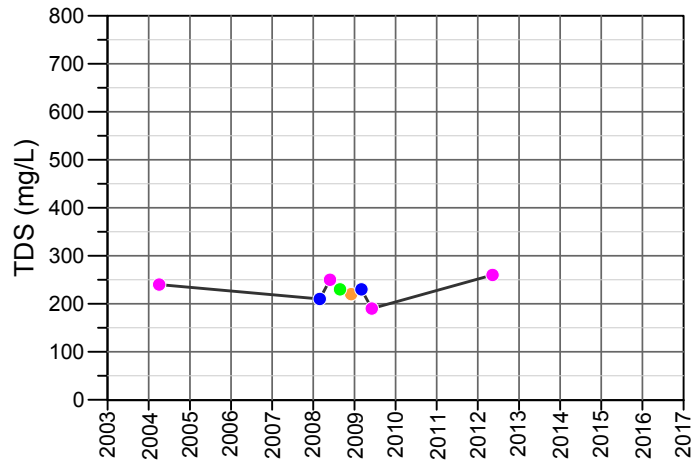
MONTGOMERY & ASSOCIATES



HRES-05
Apache Leap Tuff Aquifer

Observed Concentrations
*Value shown at zero if below detection limit

Quarter 1 (Jan-Mar)
Quarter 2 (Apr-Jun)
Quarter 3 (Jul-Sep)
Quarter 4 (Oct-Dec)



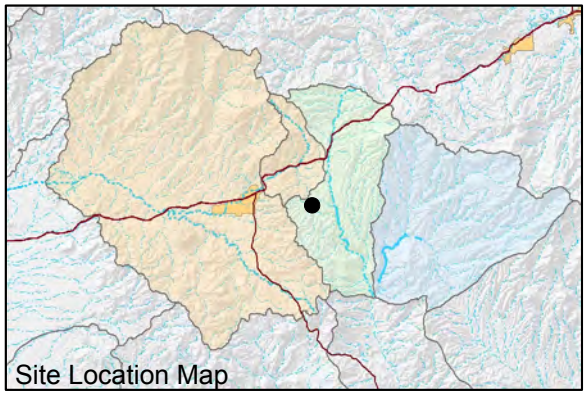
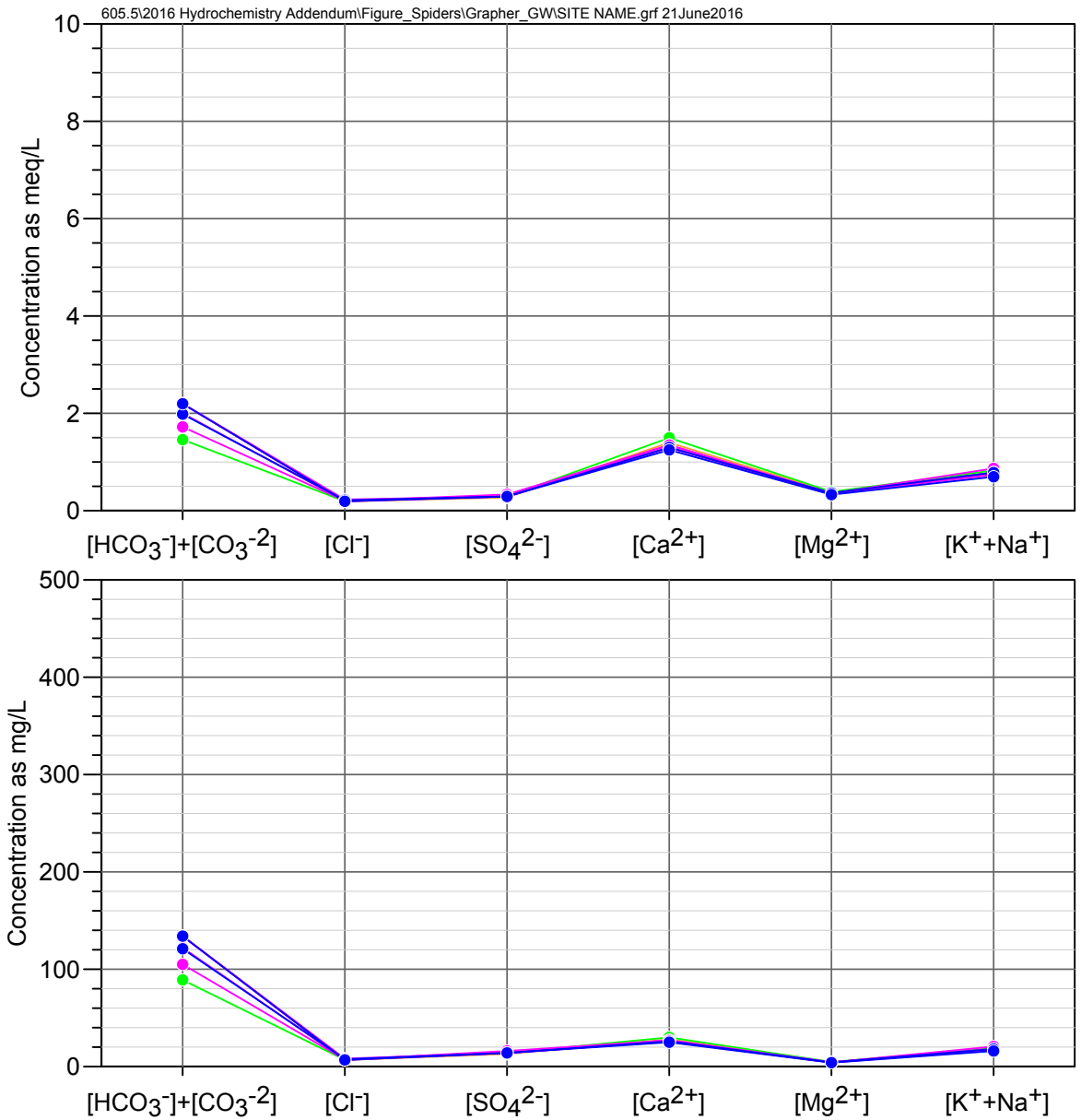


FIGURE C-10. MAJOR ION CHEMISTRY BY QUARTER FOR HRES-05, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

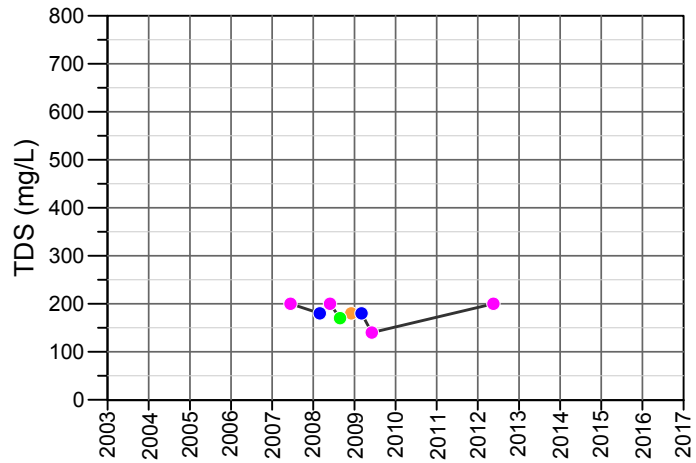
MONTGOMERY & ASSOCIATES



HRES-06
Apache Leap Tuff Aquifer

Observed Concentrations
*Value shown at zero if below detection limit

- Quarter 1 (Jan-Mar)
- Quarter 2 (Apr-Jun)
- Quarter 3 (Jul-Sep)
- Quarter 4 (Oct-Dec)



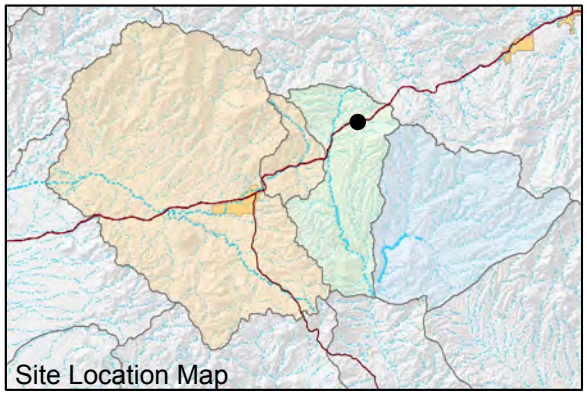


FIGURE C-11. MAJOR ION CHEMISTRY BY QUARTER FOR HRES-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES

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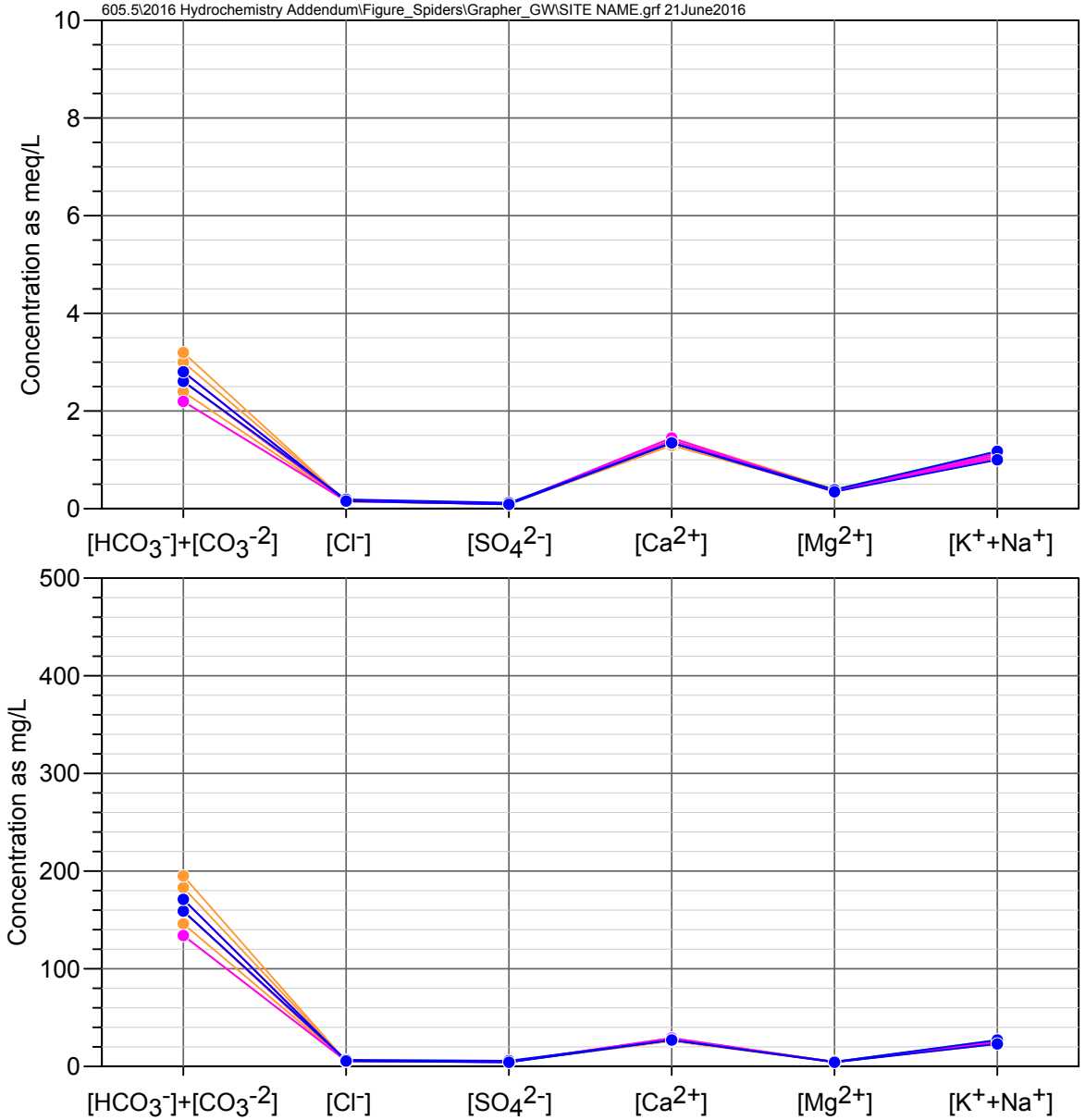
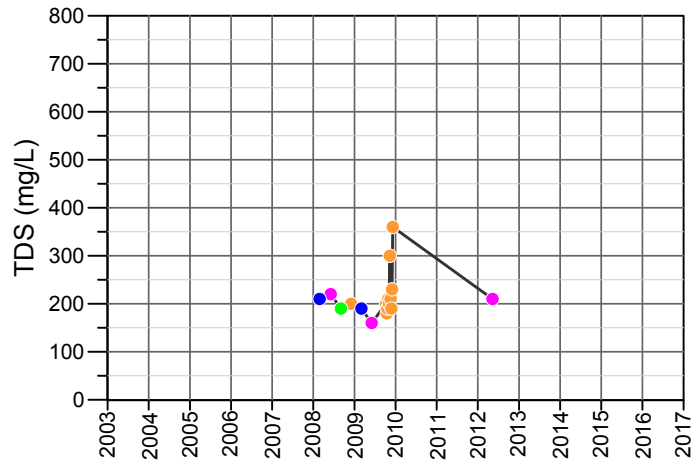


HRES-07
Apache Leap Tuff Aquifer

Observed Concentrations
*Value shown at zero if below detection limit

- Quarter 1 (Jan-Mar)
- Quarter 2 (Apr-Jun)
- Quarter 3 (Jul-Sep)
- Quarter 4 (Oct-Dec)



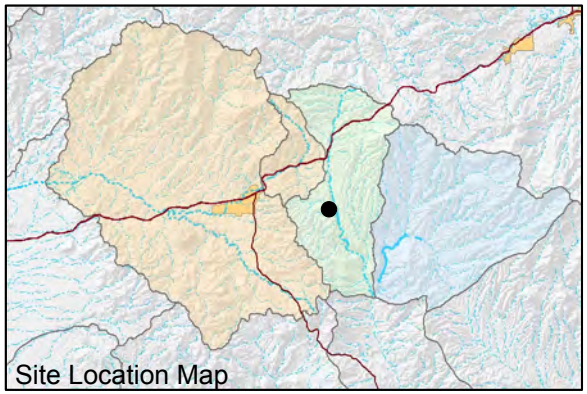
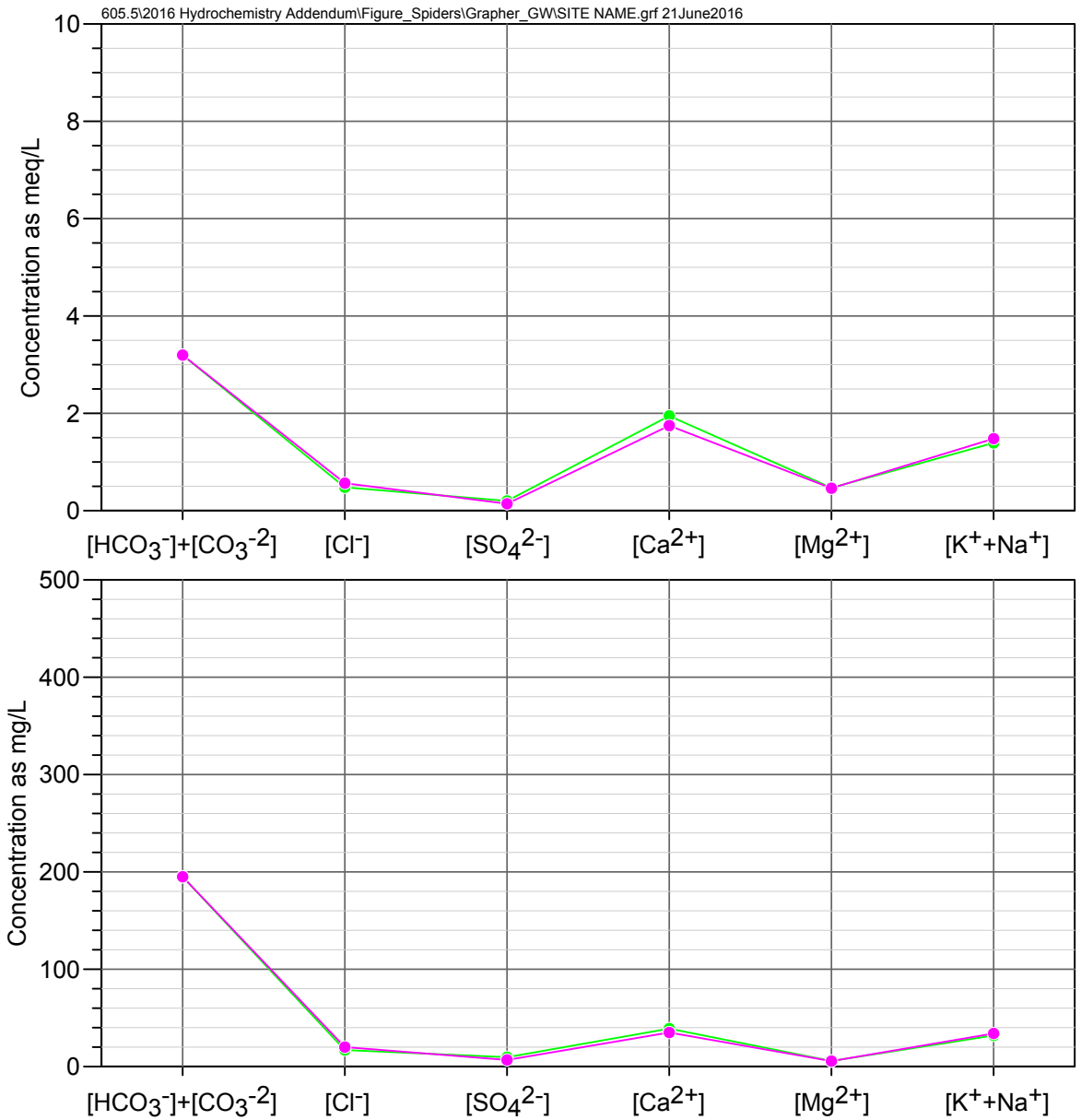


FIGURE C-12. MAJOR ION CHEMISTRY BY QUARTER FOR HRES-07, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

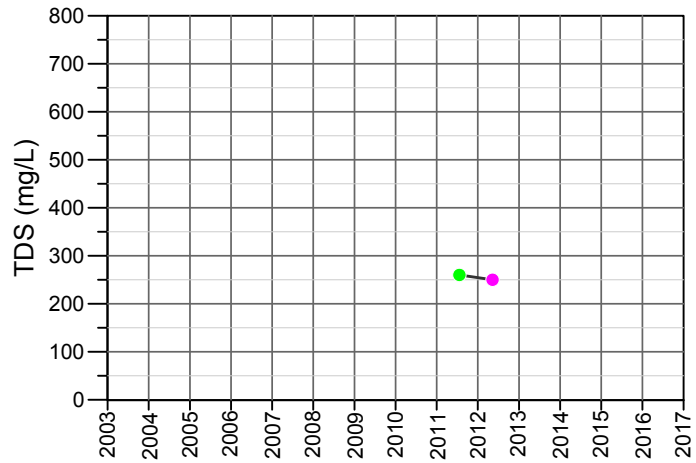
MONTGOMERY & ASSOCIATES



HRES-08
Apache Leap Tuff Aquifer

Observed Concentrations
*Value shown at zero if below detection limit

Quarter 1 (Jan-Mar)
Quarter 2 (Apr-Jun)
Quarter 3 (Jul-Sep)
Quarter 4 (Oct-Dec)



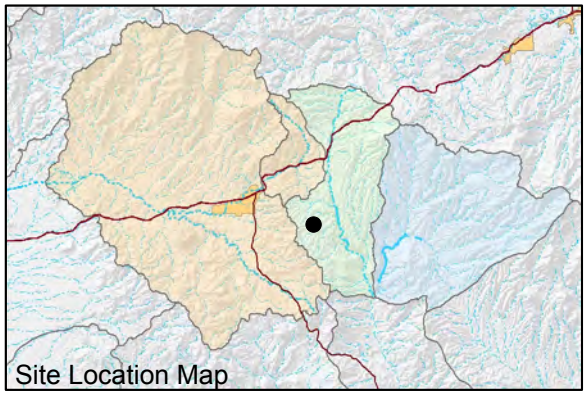


FIGURE C-13. MAJOR ION CHEMISTRY BY QUARTER FOR HRES-08, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES

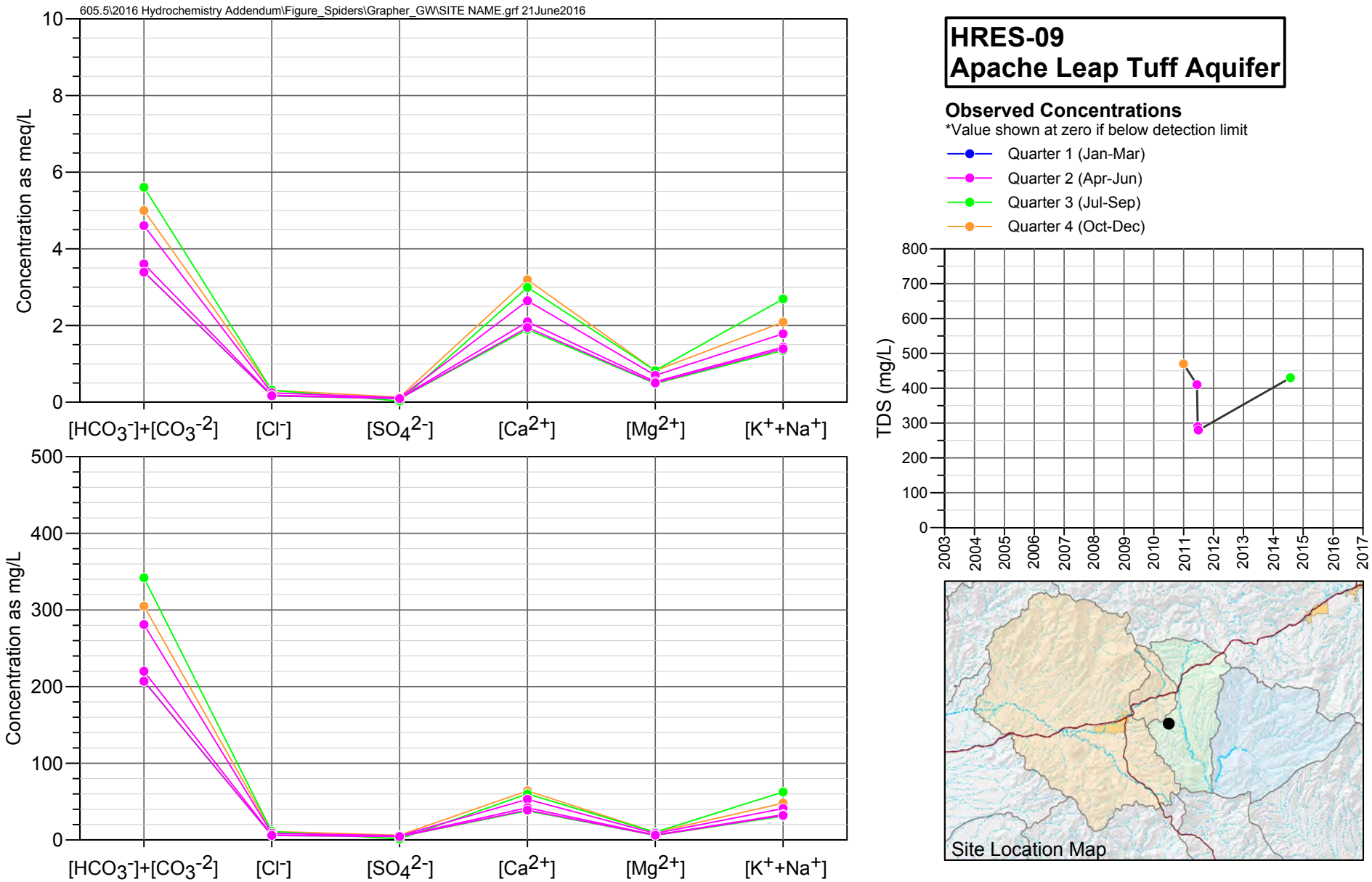
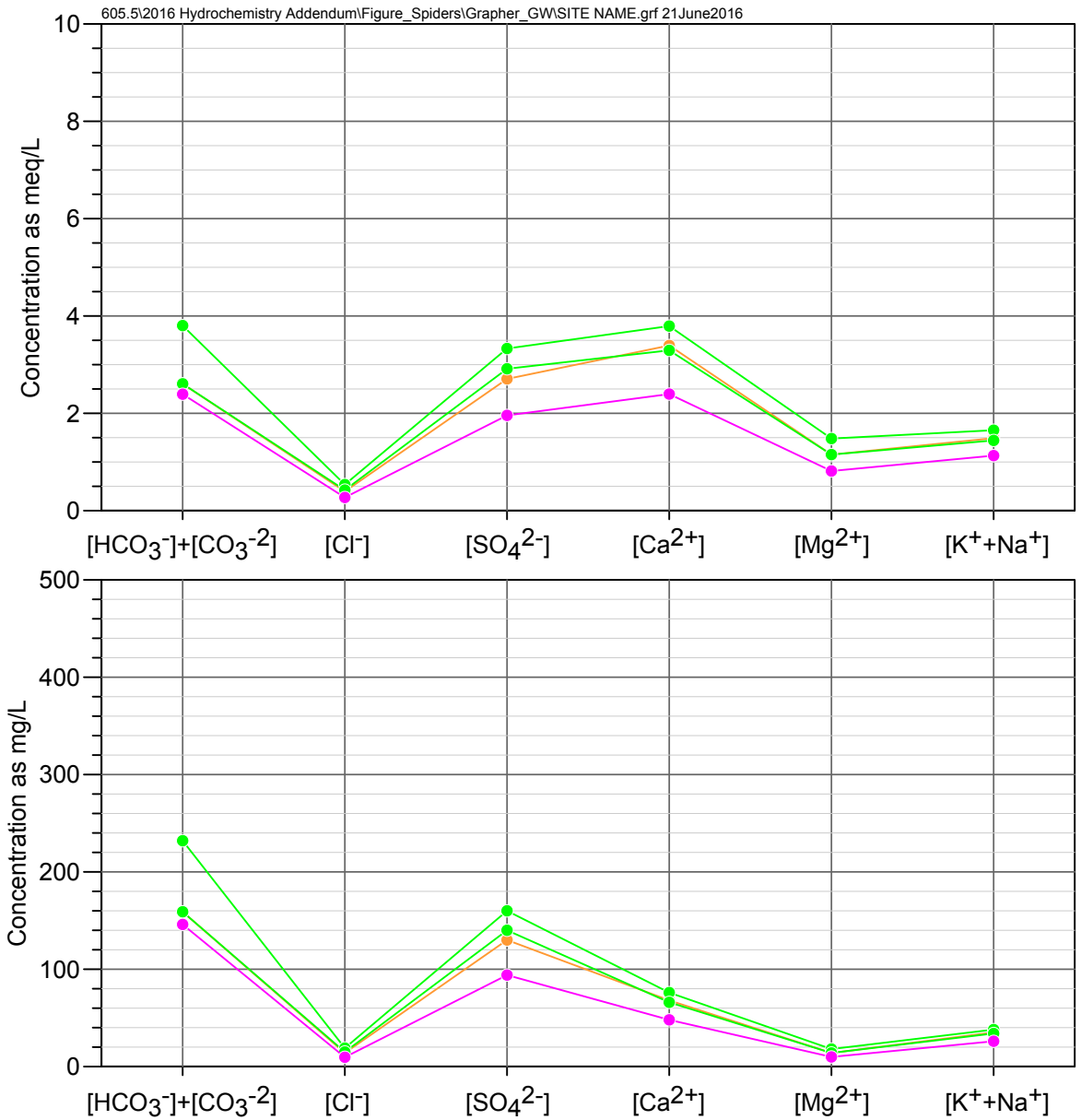


FIGURE C-14. MAJOR ION CHEMISTRY BY QUARTER FOR HRES-09, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

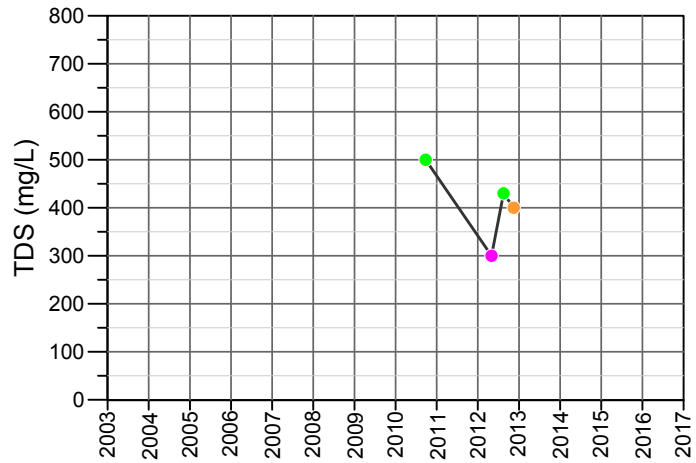
MONTGOMERY & ASSOCIATES



HRES-10
Apache Leap Tuff Aquifer

Observed Concentrations
*Value shown at zero if below detection limit

Quarter 1 (Jan-Mar)
Quarter 2 (Apr-Jun)
Quarter 3 (Jul-Sep)
Quarter 4 (Oct-Dec)



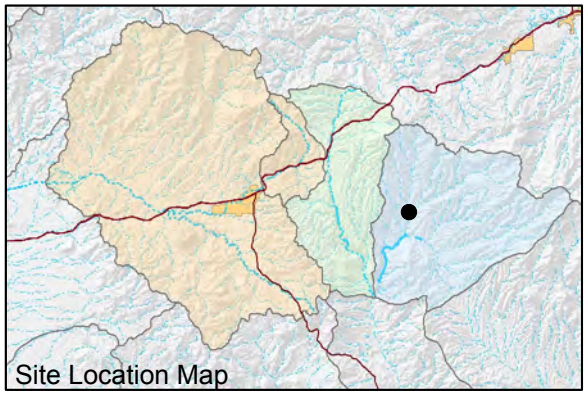
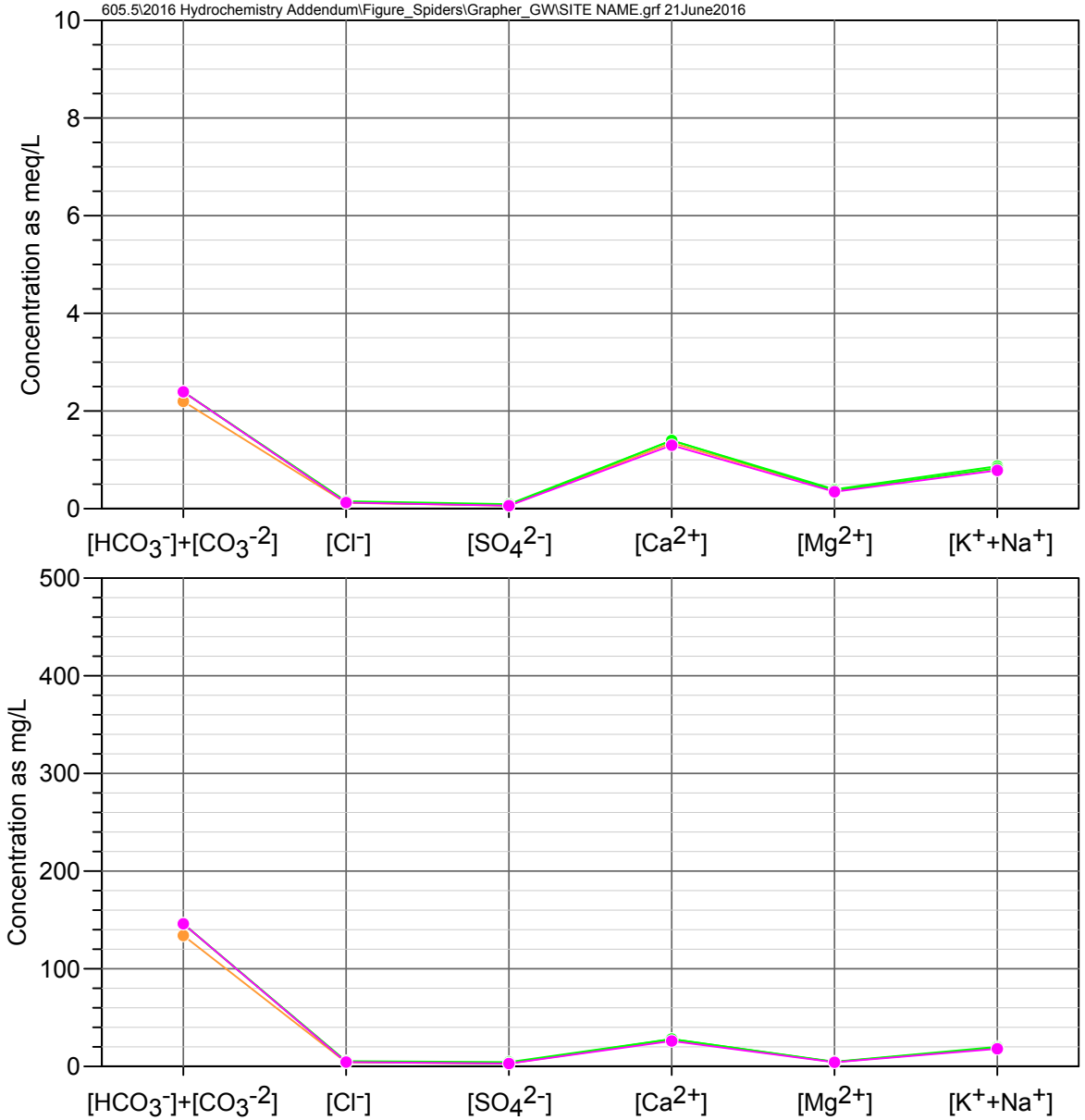


FIGURE C-15. MAJOR ION CHEMISTRY BY QUARTER FOR HRES-10, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES

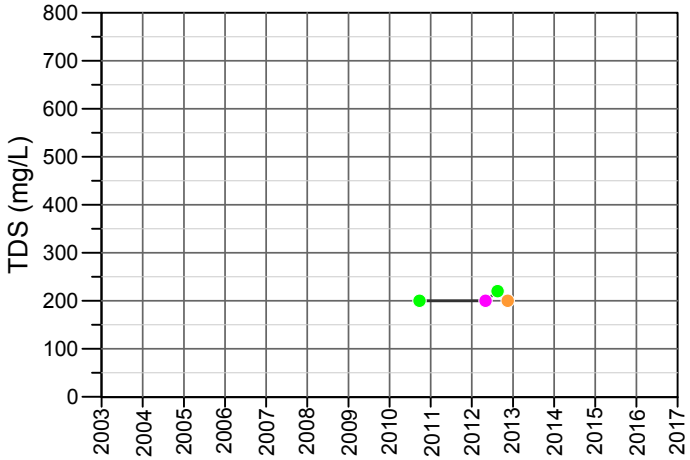
605.5\2016 Hydrochemistry Addendum\Figure_Spiders\Grapher_GW\SITE NAME.grf 21June2016



HRES-11
Apache Leap Tuff Aquifer

Observed Concentrations
*Value shown at zero if below detection limit

- Quarter 1 (Jan-Mar)
- Quarter 2 (Apr-Jun)
- Quarter 3 (Jul-Sep)
- Quarter 4 (Oct-Dec)



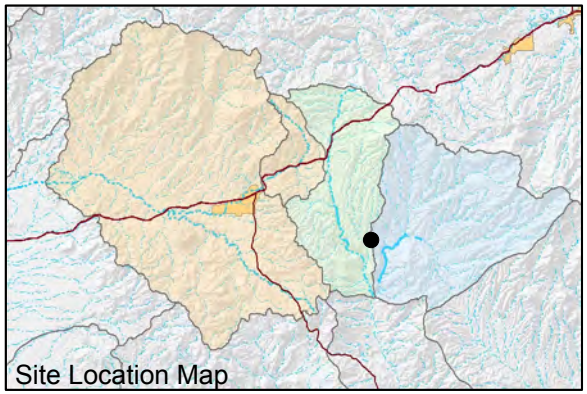
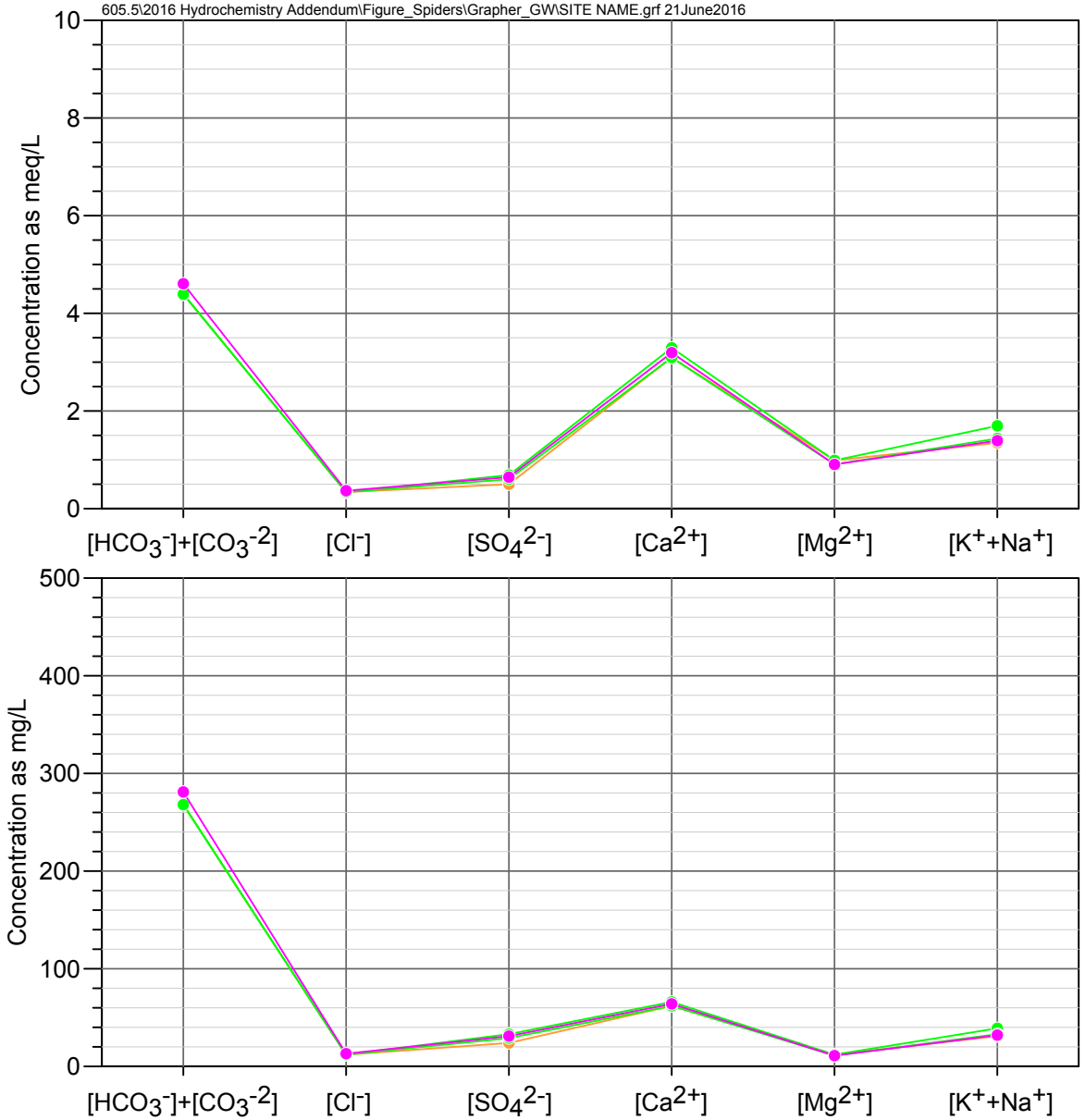


FIGURE C-16. MAJOR ION CHEMISTRY BY QUARTER FOR HRES-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES

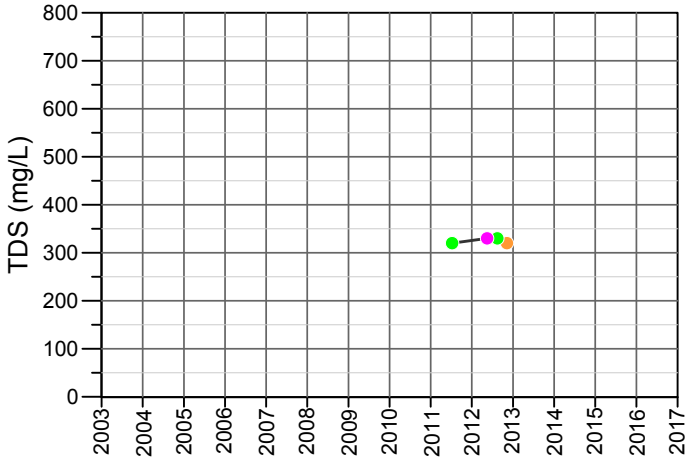
605.5\2016 Hydrochemistry Addendum\Figure_Spiders\Grapher_GW\SITE NAME.grf 21June2016



HRES-12
Apache Leap Tuff Aquifer

Observed Concentrations
*Value shown at zero if below detection limit

- Quarter 1 (Jan-Mar)
- Quarter 2 (Apr-Jun)
- Quarter 3 (Jul-Sep)
- Quarter 4 (Oct-Dec)



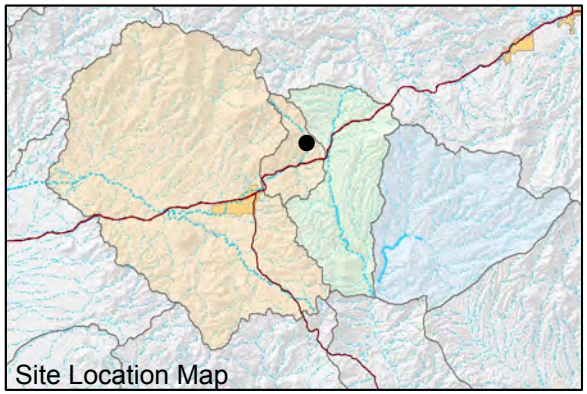
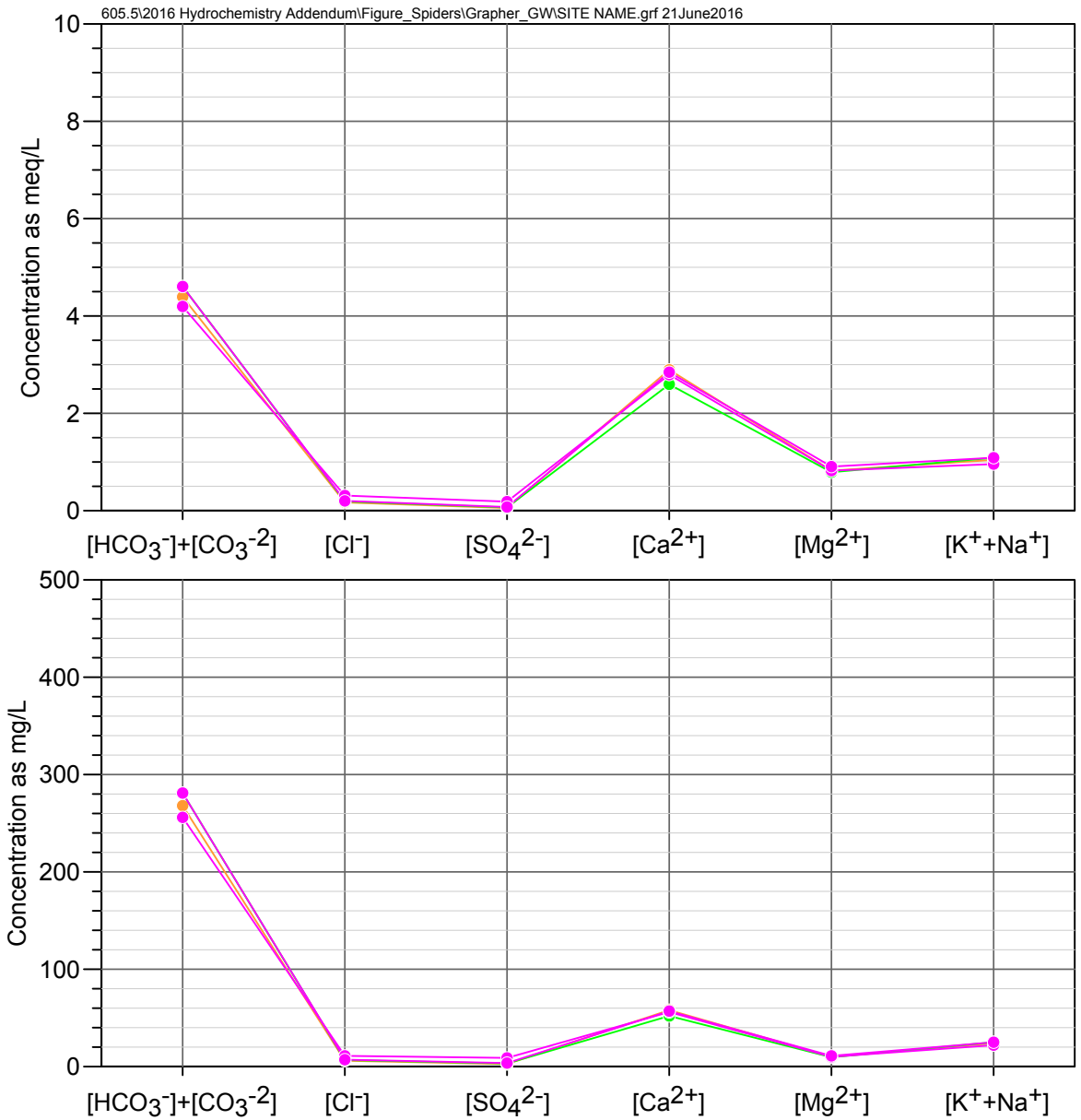


FIGURE C-17. MAJOR ION CHEMISTRY BY QUARTER FOR HRES-12, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

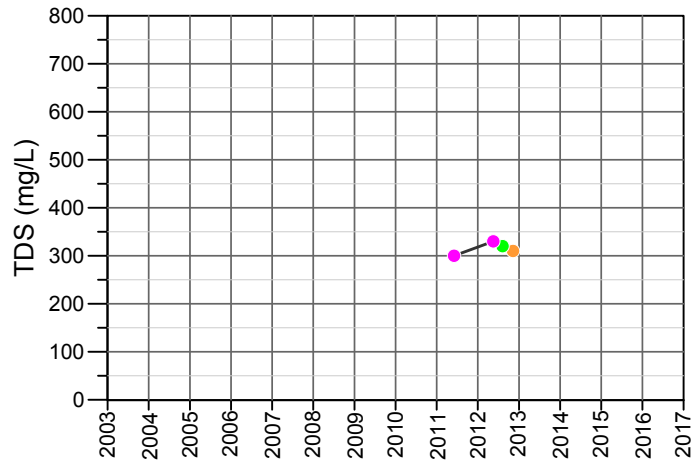
MONTGOMERY & ASSOCIATES



HRES-13
Apache Leap Tuff Aquifer

Observed Concentrations
*Value shown at zero if below detection limit

Quarter 1 (Jan-Mar)
Quarter 2 (Apr-Jun)
Quarter 3 (Jul-Sep)
Quarter 4 (Oct-Dec)



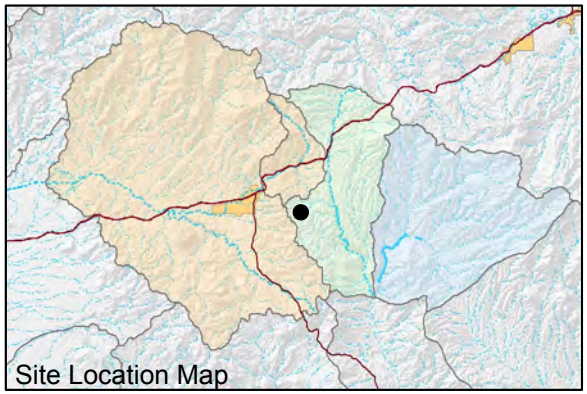
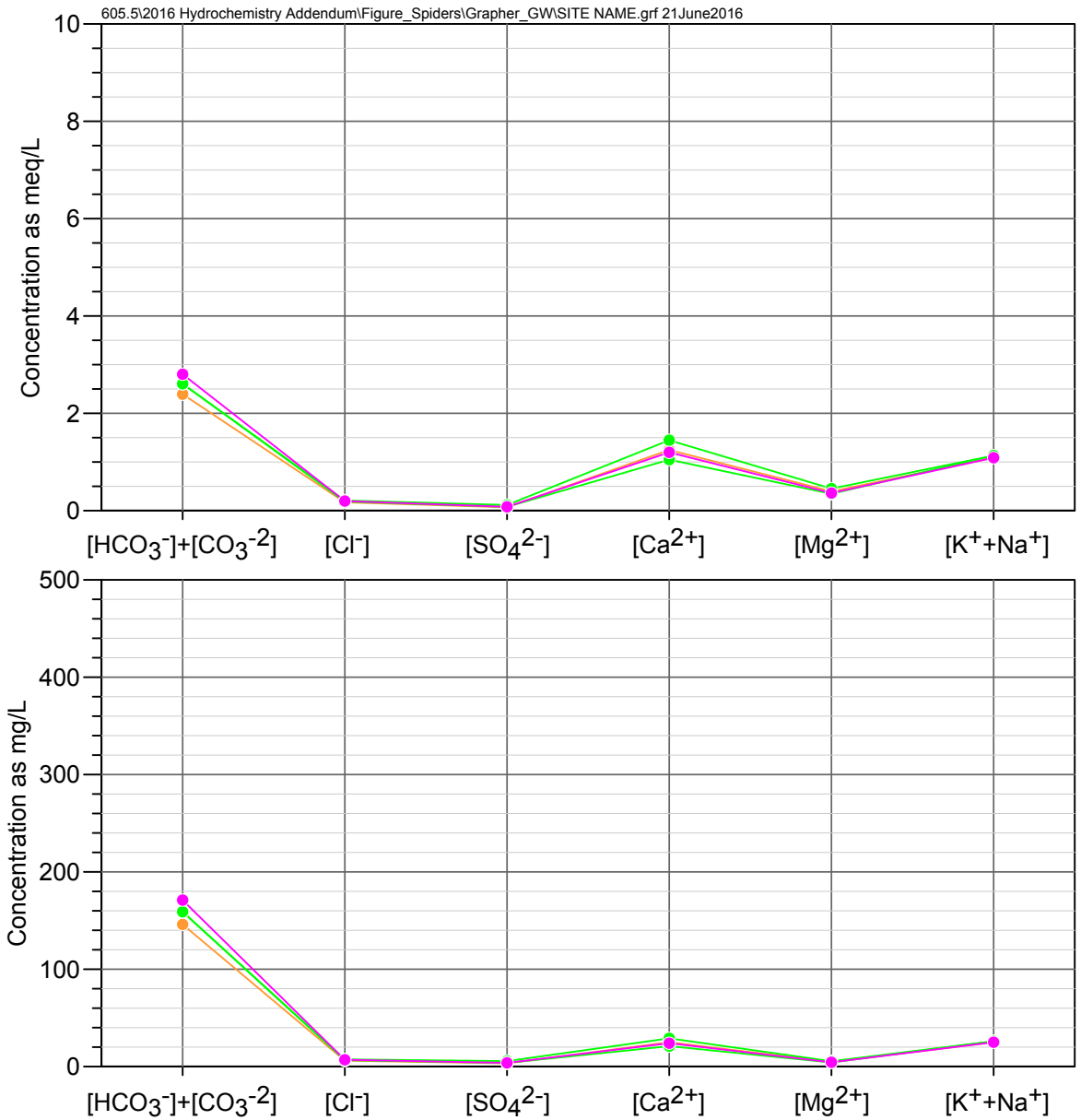


FIGURE C-18. MAJOR ION CHEMISTRY BY QUARTER FOR HRES-13, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

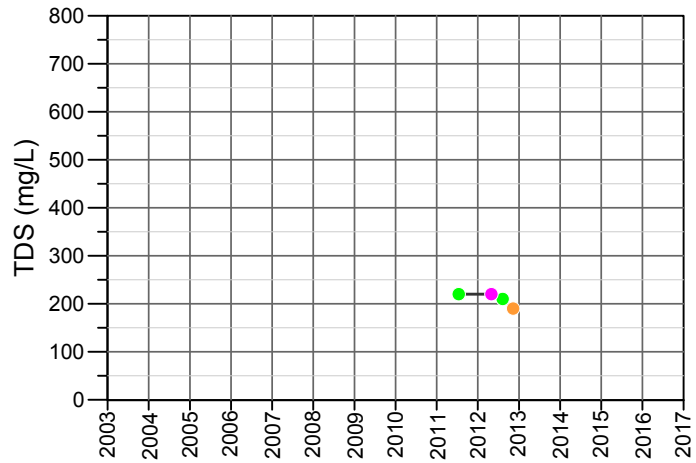
MONTGOMERY & ASSOCIATES



HRES-14
Apache Leap Tuff Aquifer

Observed Concentrations
*Value shown at zero if below detection limit

Quarter 1 (Jan-Mar)
Quarter 2 (Apr-Jun)
Quarter 3 (Jul-Sep)
Quarter 4 (Oct-Dec)



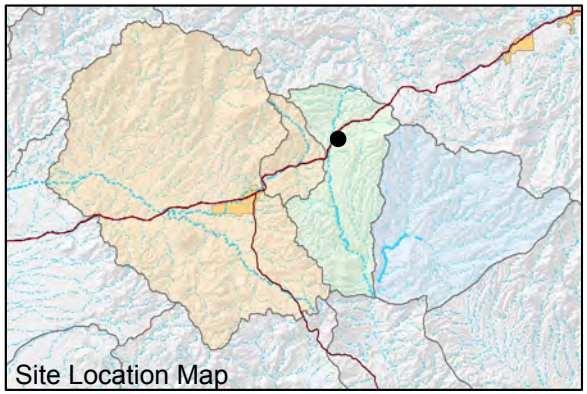
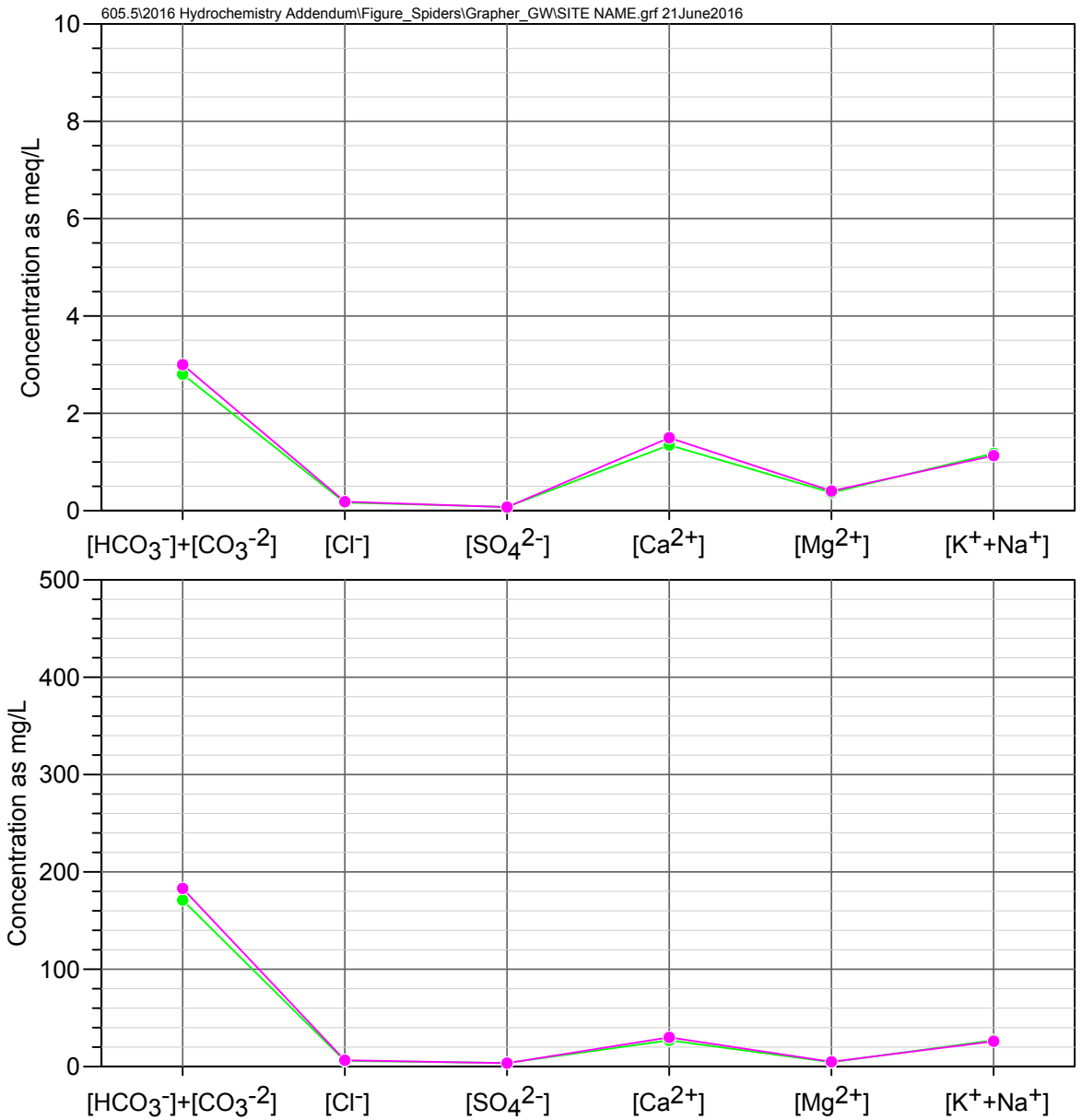


FIGURE C-19. MAJOR ION CHEMISTRY BY QUARTER FOR HRES-14, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

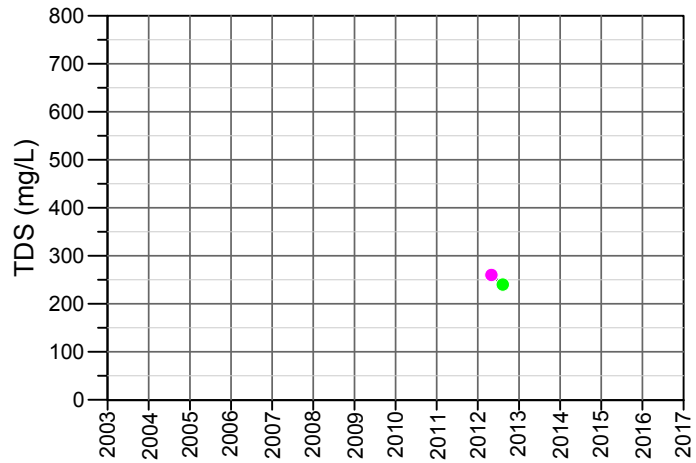
MONTGOMERY & ASSOCIATES



HRES-15
Apache Leap Tuff Aquifer

Observed Concentrations
*Value shown at zero if below detection limit

Quarter 1 (Jan-Mar)
Quarter 2 (Apr-Jun)
Quarter 3 (Jul-Sep)
Quarter 4 (Oct-Dec)



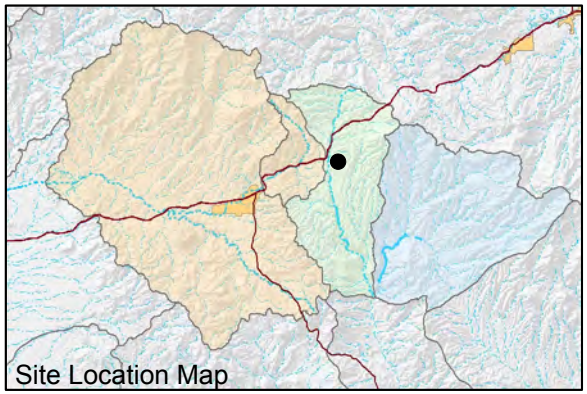
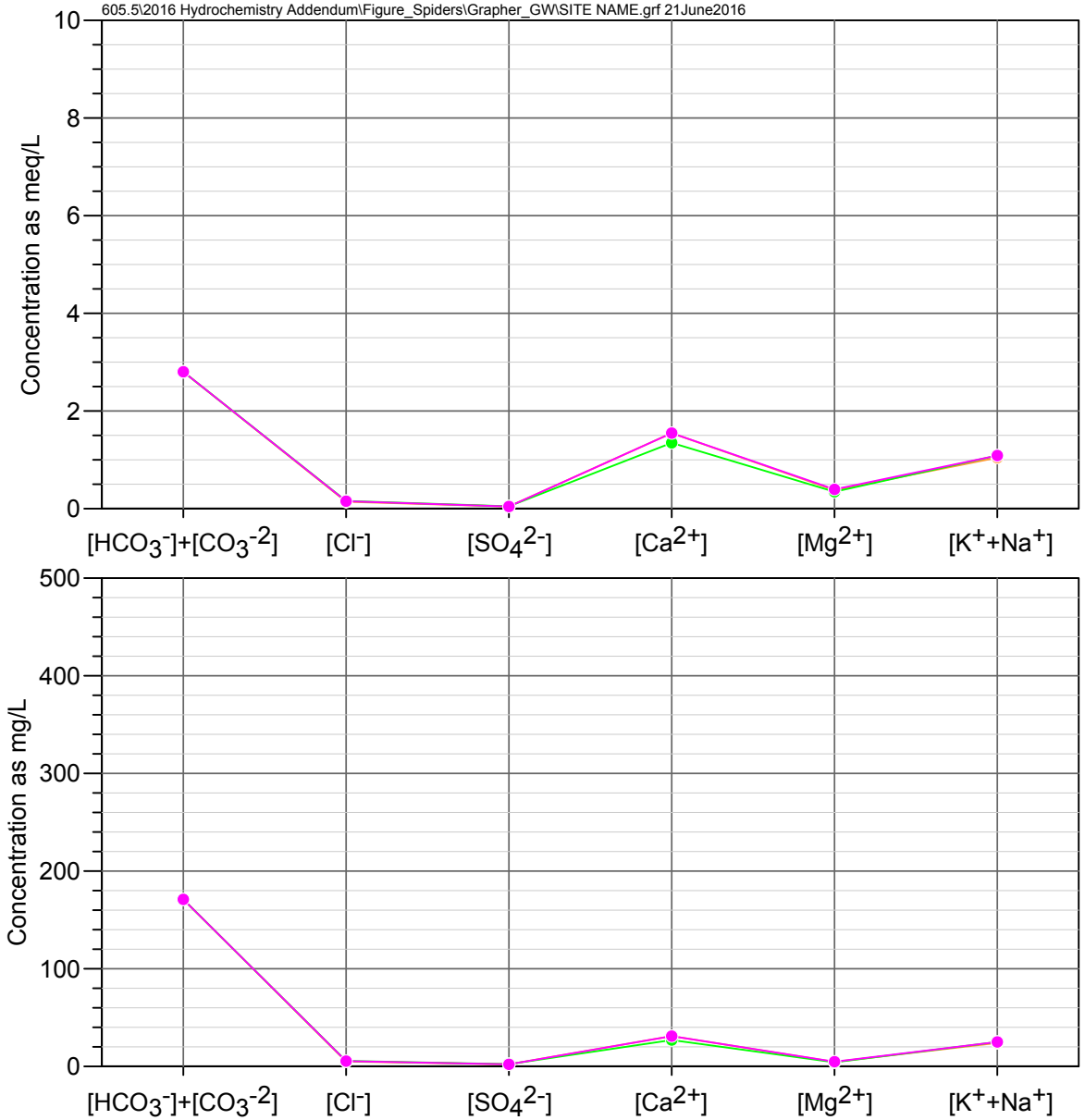


FIGURE C-20. MAJOR ION CHEMISTRY BY QUARTER FOR HRES-15, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

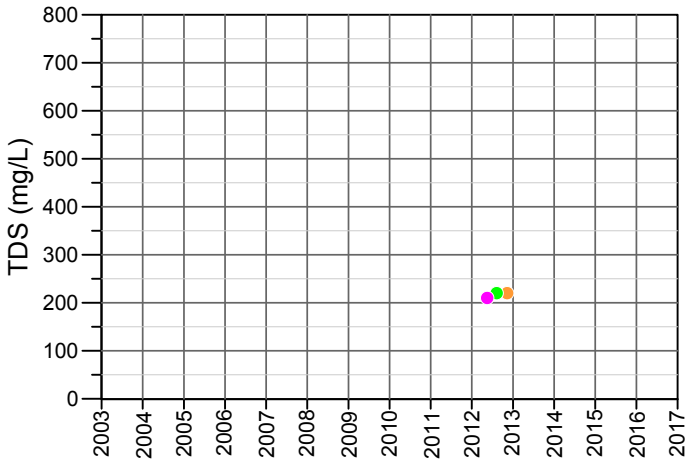
MONTGOMERY & ASSOCIATES

605.5\2016 Hydrochemistry Addendum\Figure_Spiders\Grapher_GW\SITE NAME.grf 21June2016



HRES-17
Apache Leap Tuff Aquifer

Observed Concentrations
*Value shown at zero if below detection limit



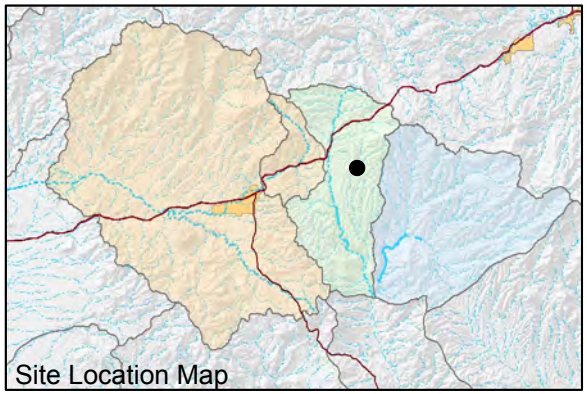
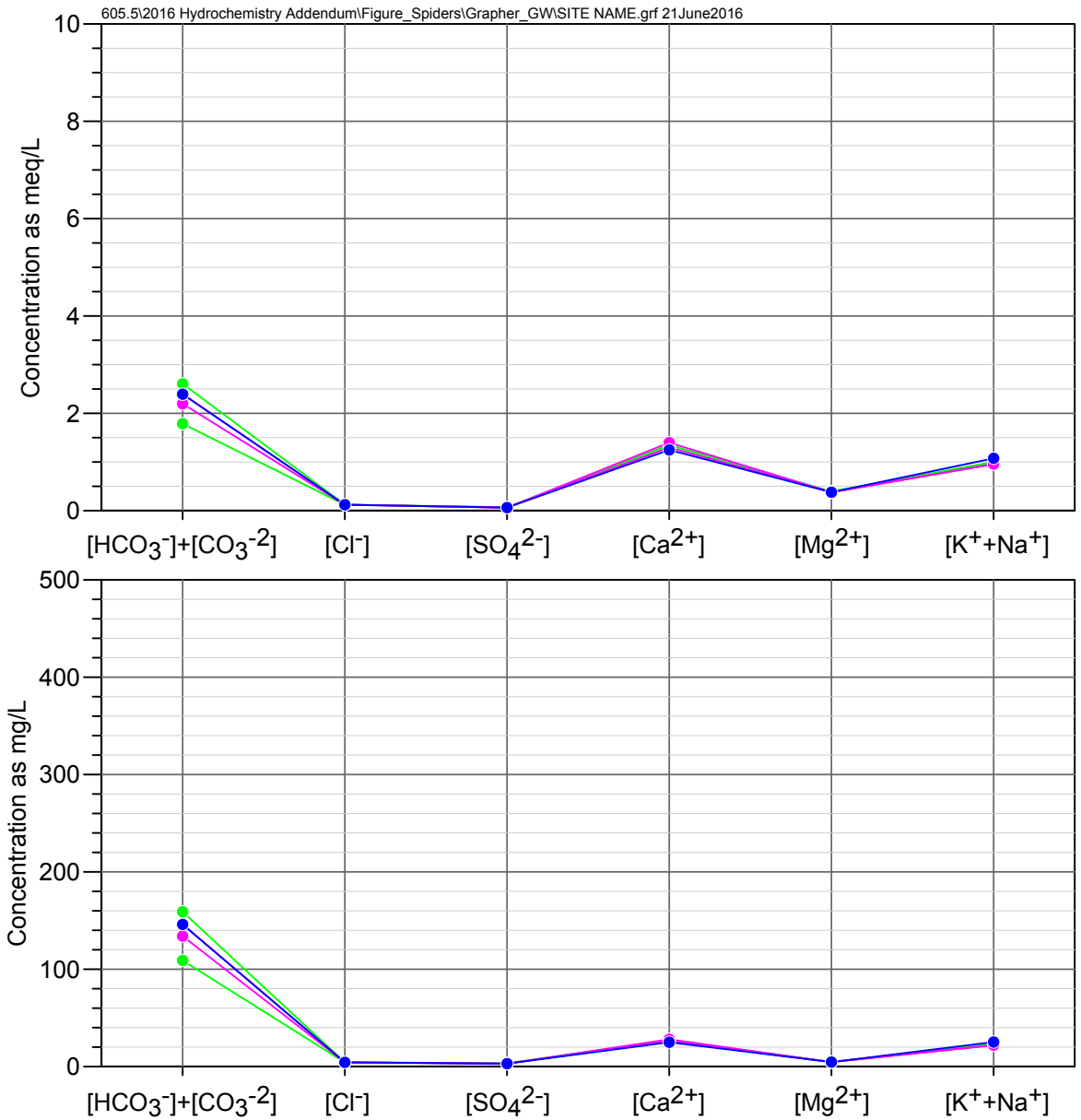


FIGURE C-21. MAJOR ION CHEMISTRY BY QUARTER FOR HRES-17, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

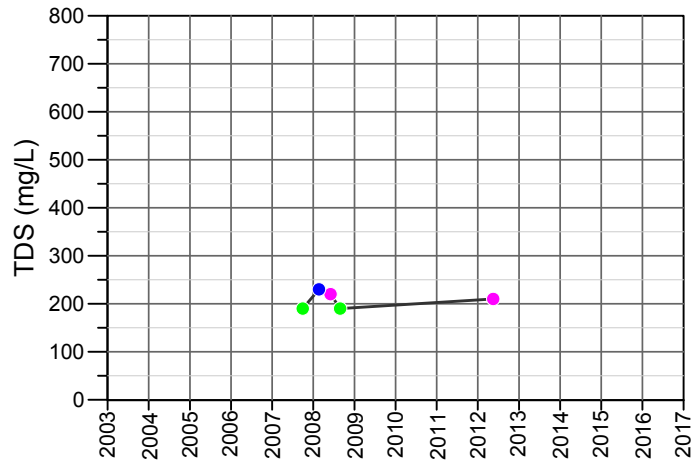
MONTGOMERY & ASSOCIATES



MJ-11
Apache Leap Tuff Aquifer

Observed Concentrations
*Value shown at zero if below detection limit

Quarter 1 (Jan-Mar)
Quarter 2 (Apr-Jun)
Quarter 3 (Jul-Sep)
Quarter 4 (Oct-Dec)



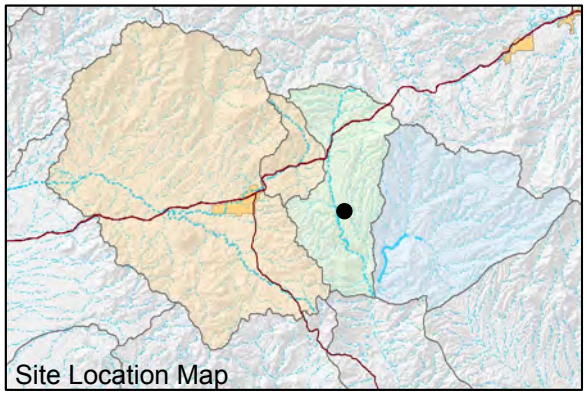
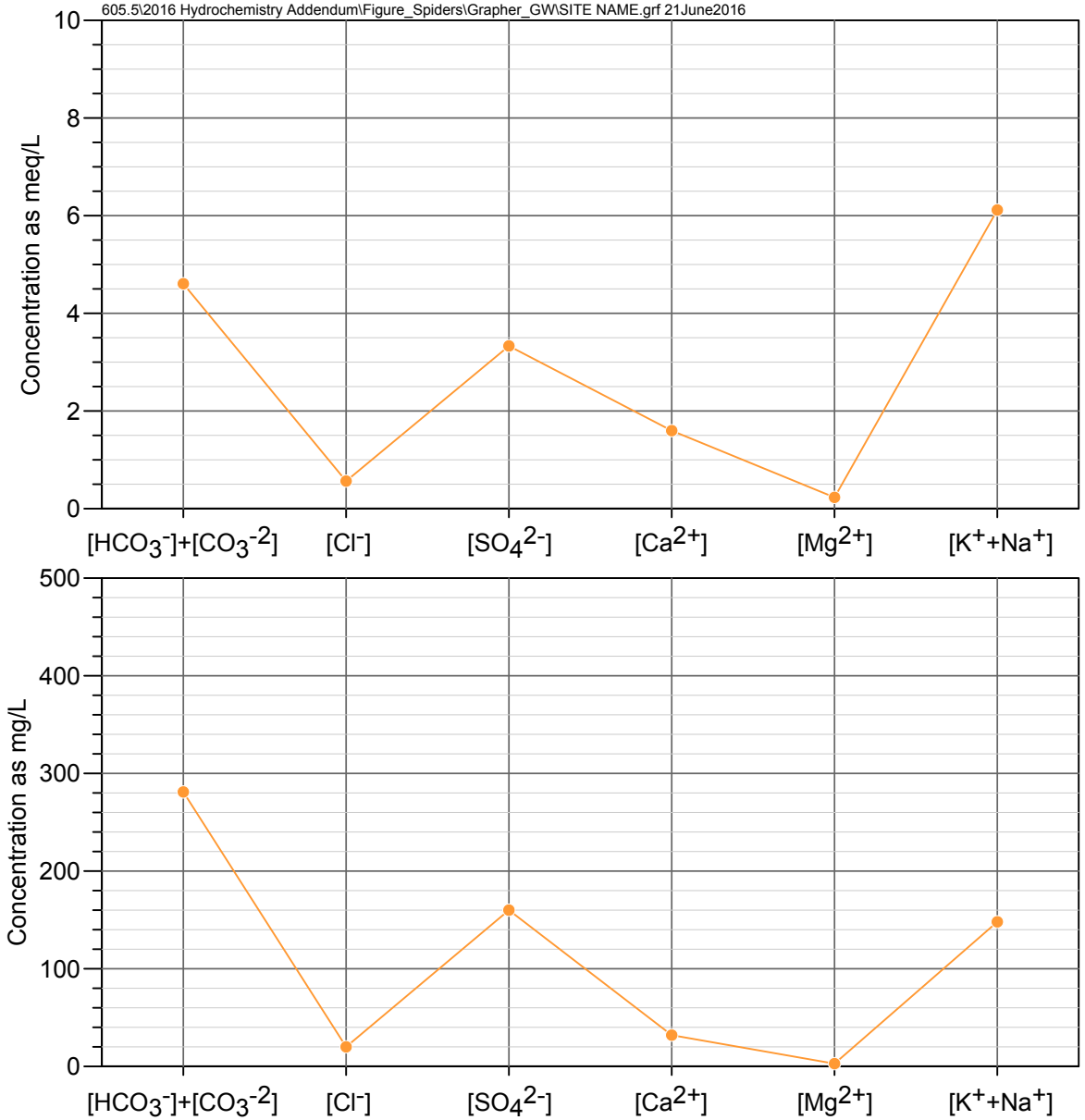


FIGURE C-22. MAJOR ION CHEMISTRY BY QUARTER FOR MJ-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES

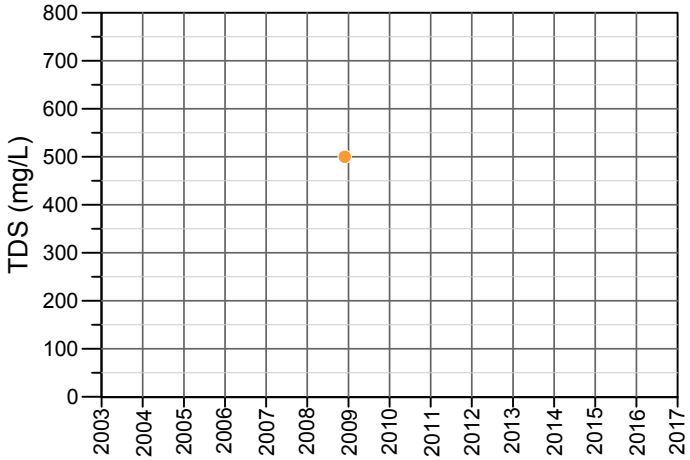
605.5\2016 Hydrochemistry Addendum\Figure_Spiders\Grapher_GW\SITE NAME.grf 21June2016



DHRES-01
Deep Groundwater System

Observed Concentrations
*Value shown at zero if below detection limit

- Quarter 1 (Jan-Mar)
- Quarter 2 (Apr-Jun)
- Quarter 3 (Jul-Sep)
- Quarter 4 (Oct-Dec)



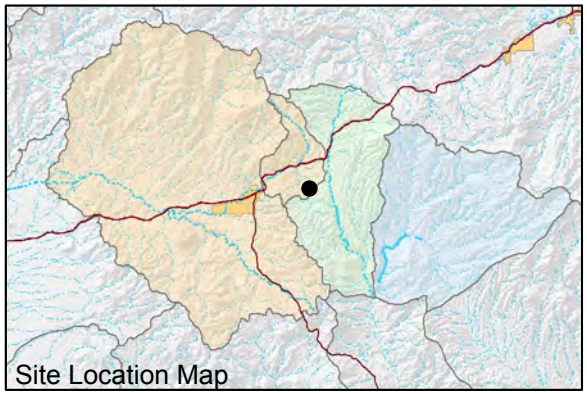
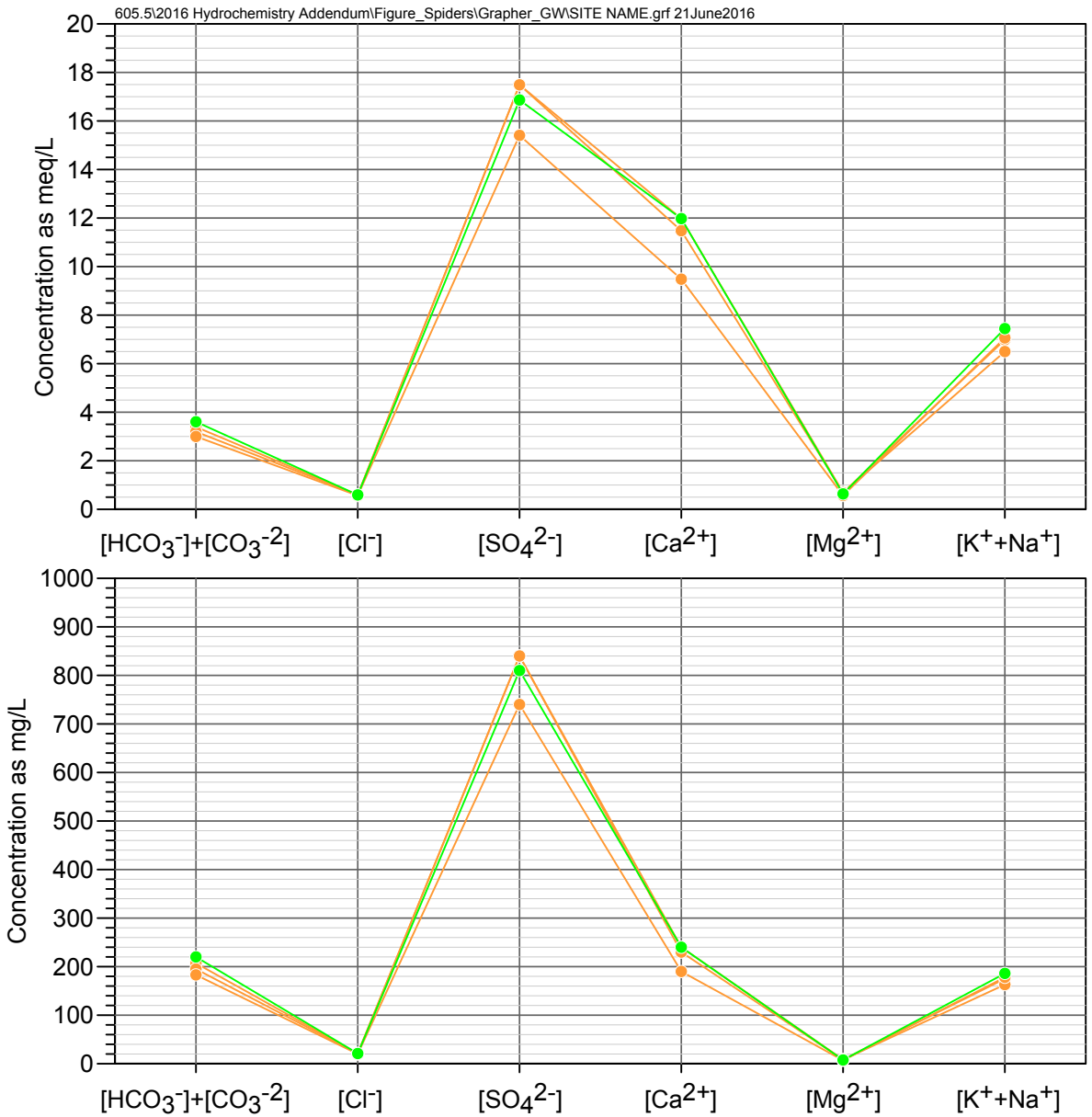


FIGURE C-23. MAJOR ION CHEMISTRY BY QUARTER FOR DHRES-01, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

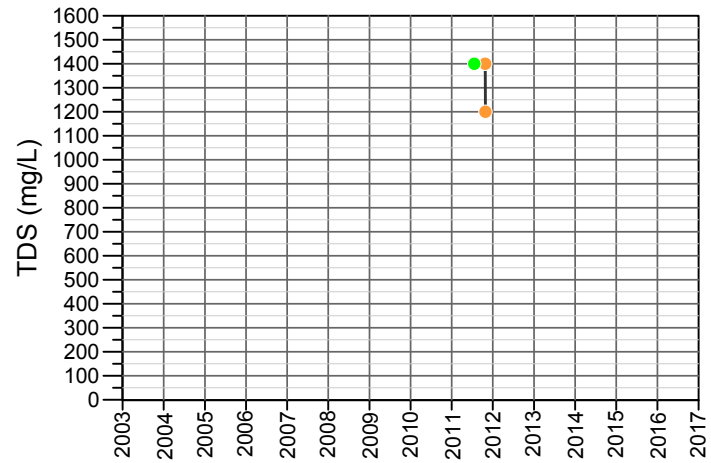
MONTGOMERY & ASSOCIATES



DHRES-02
Deep Groundwater System

Observed Concentrations
*Value shown at zero if below detection limit

Quarter 1 (Jan-Mar)
Quarter 2 (Apr-Jun)
Quarter 3 (Jul-Sep)
Quarter 4 (Oct-Dec)



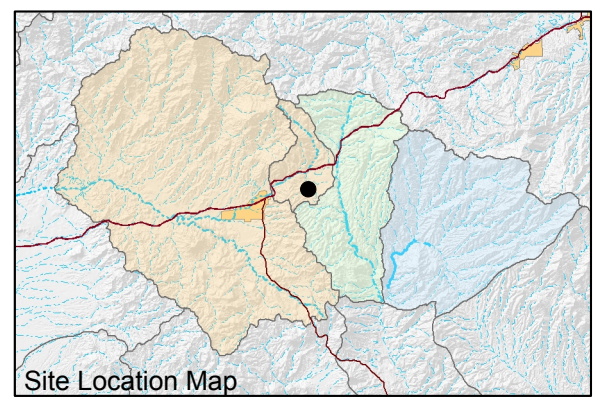
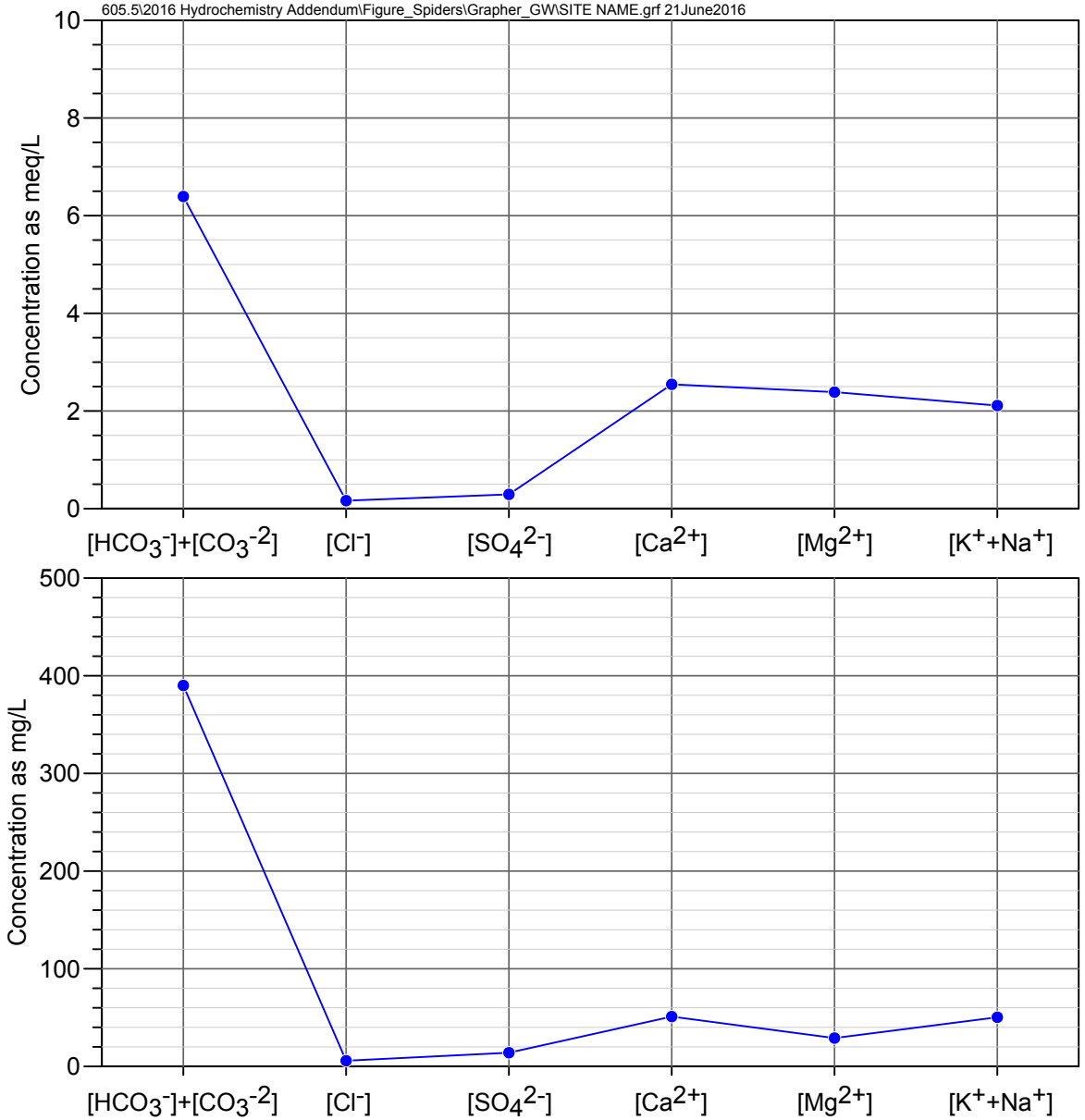


FIGURE C-24. MAJOR ION CHEMISTRY BY QUARTER FOR DHRES-02, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES

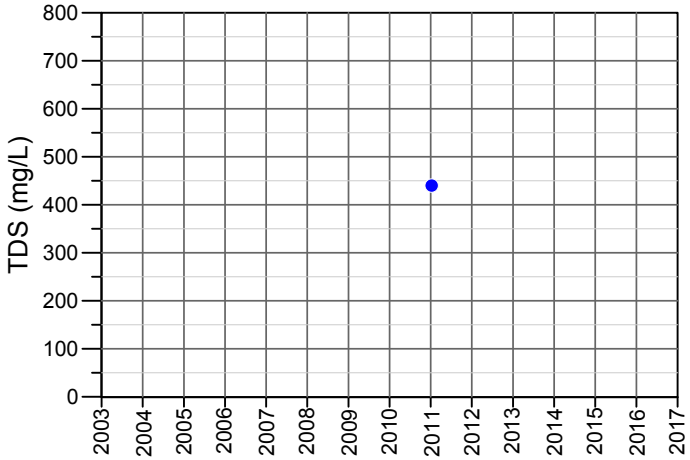
605.5\2016 Hydrochemistry Addendum\Figure_Spiders\Grapher_GW\SITE NAME.grf 21June2016



DHRES-06
Deep Groundwater System

Observed Concentrations
*Value shown at zero if below detection limit

- Quarter 1 (Jan-Mar)
- Quarter 2 (Apr-Jun)
- Quarter 3 (Jul-Sep)
- Quarter 4 (Oct-Dec)



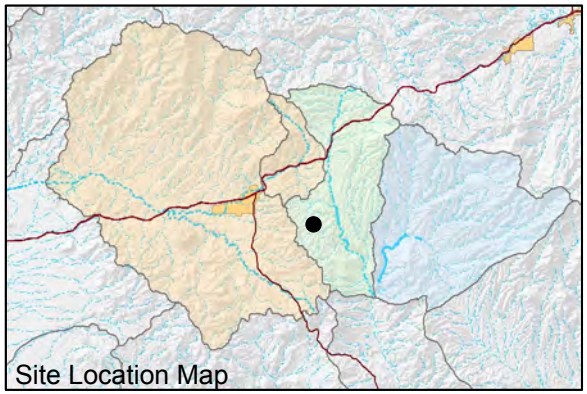
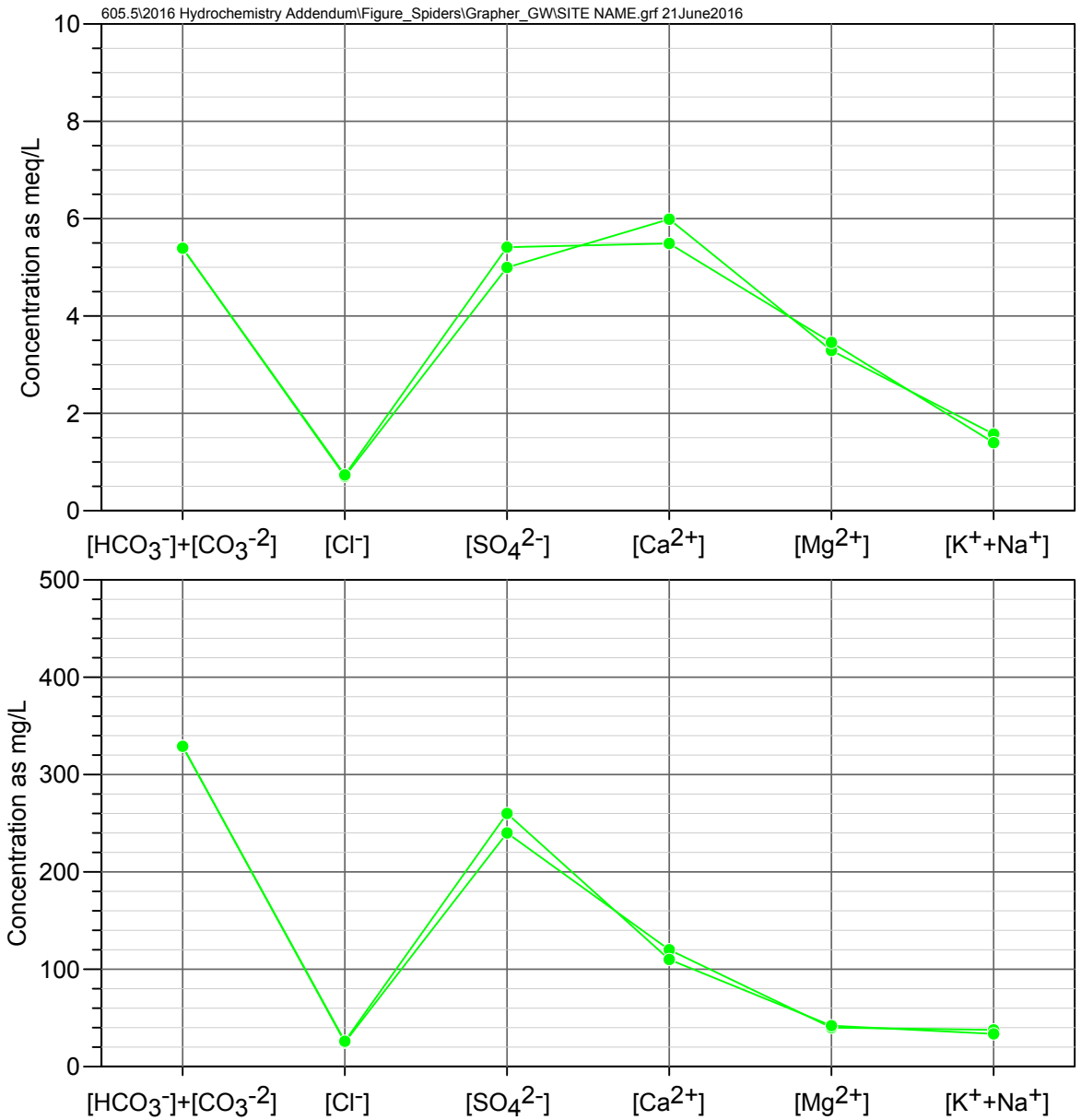


FIGURE C-25. MAJOR ION CHEMISTRY BY QUARTER FOR DHRES-06, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

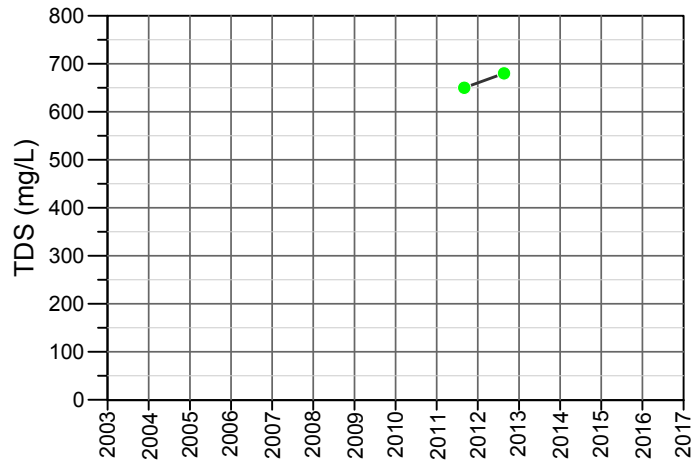
MONTGOMERY & ASSOCIATES



DHRES-09
Deep Groundwater System

Observed Concentrations
*Value shown at zero if below detection limit

Quarter 1 (Jan-Mar)
Quarter 2 (Apr-Jun)
Quarter 3 (Jul-Sep)
Quarter 4 (Oct-Dec)



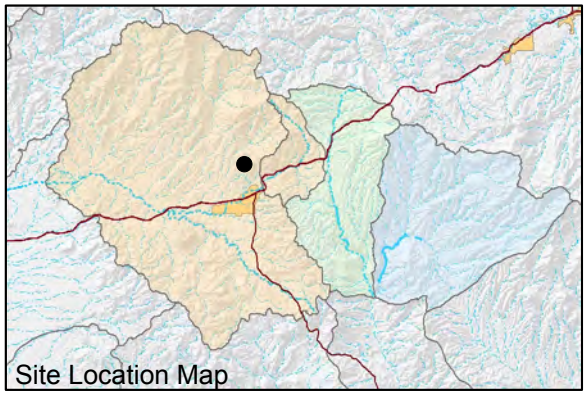


FIGURE C-26. MAJOR ION CHEMISTRY BY QUARTER FOR DHRES-09, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES

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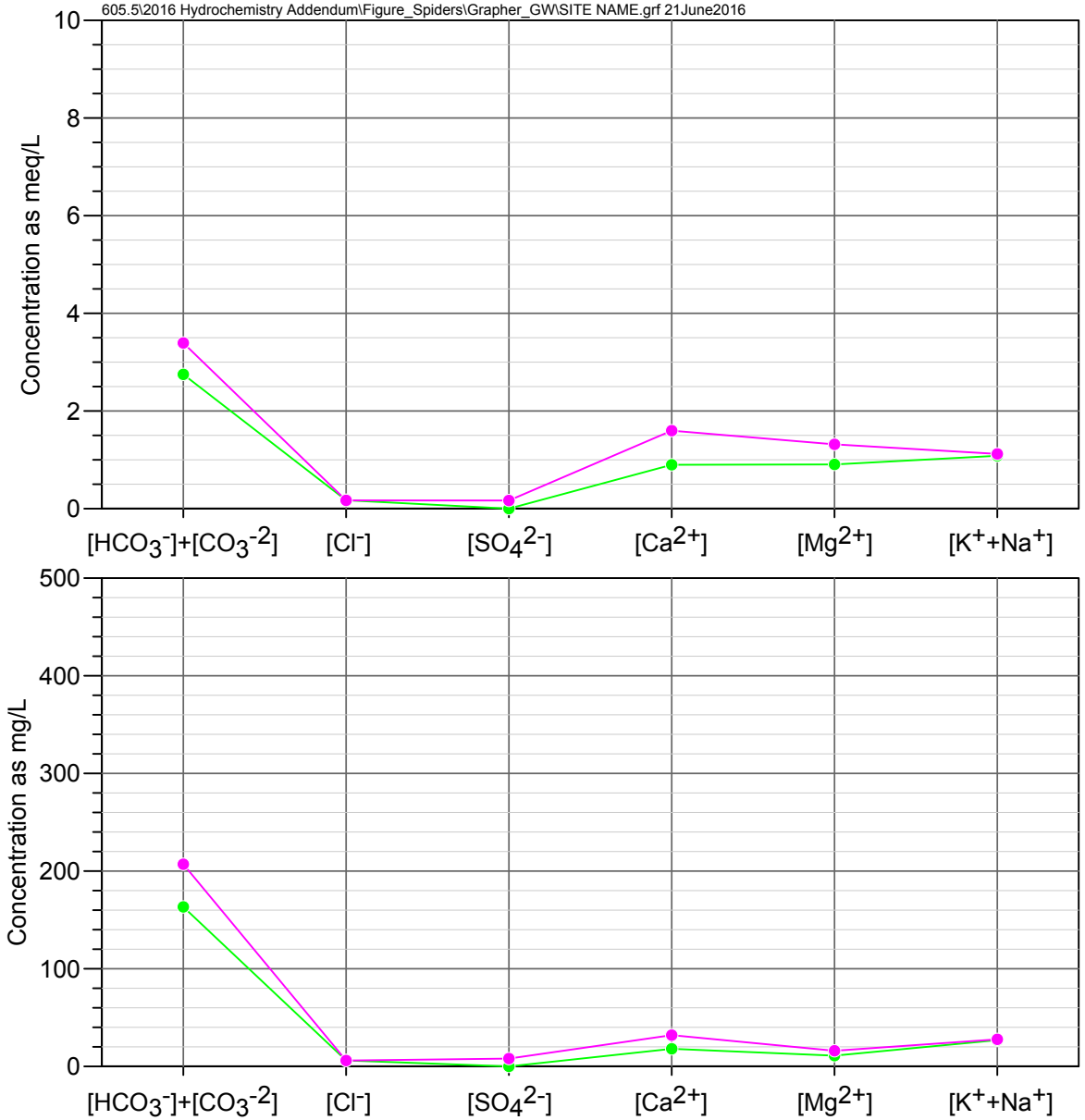
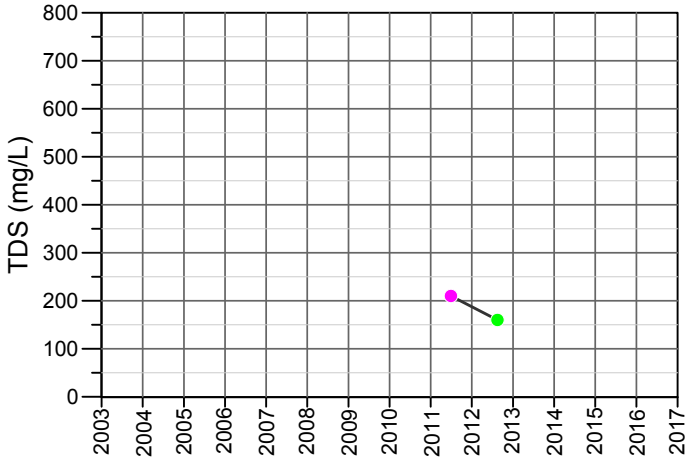


DHRES-11
Deep Groundwater System

Observed Concentrations
*Value shown at zero if below detection limit

- Quarter 1 (Jan-Mar)
- Quarter 2 (Apr-Jun)
- Quarter 3 (Jul-Sep)
- Quarter 4 (Oct-Dec)



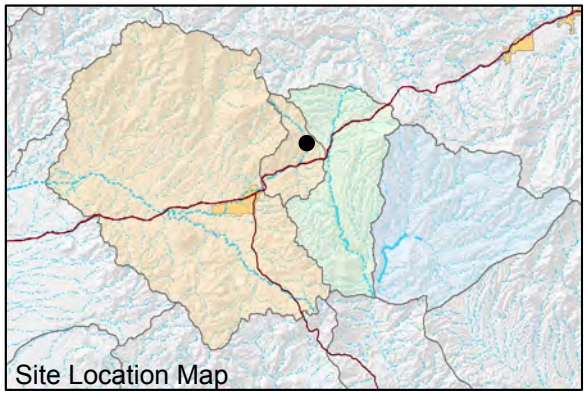
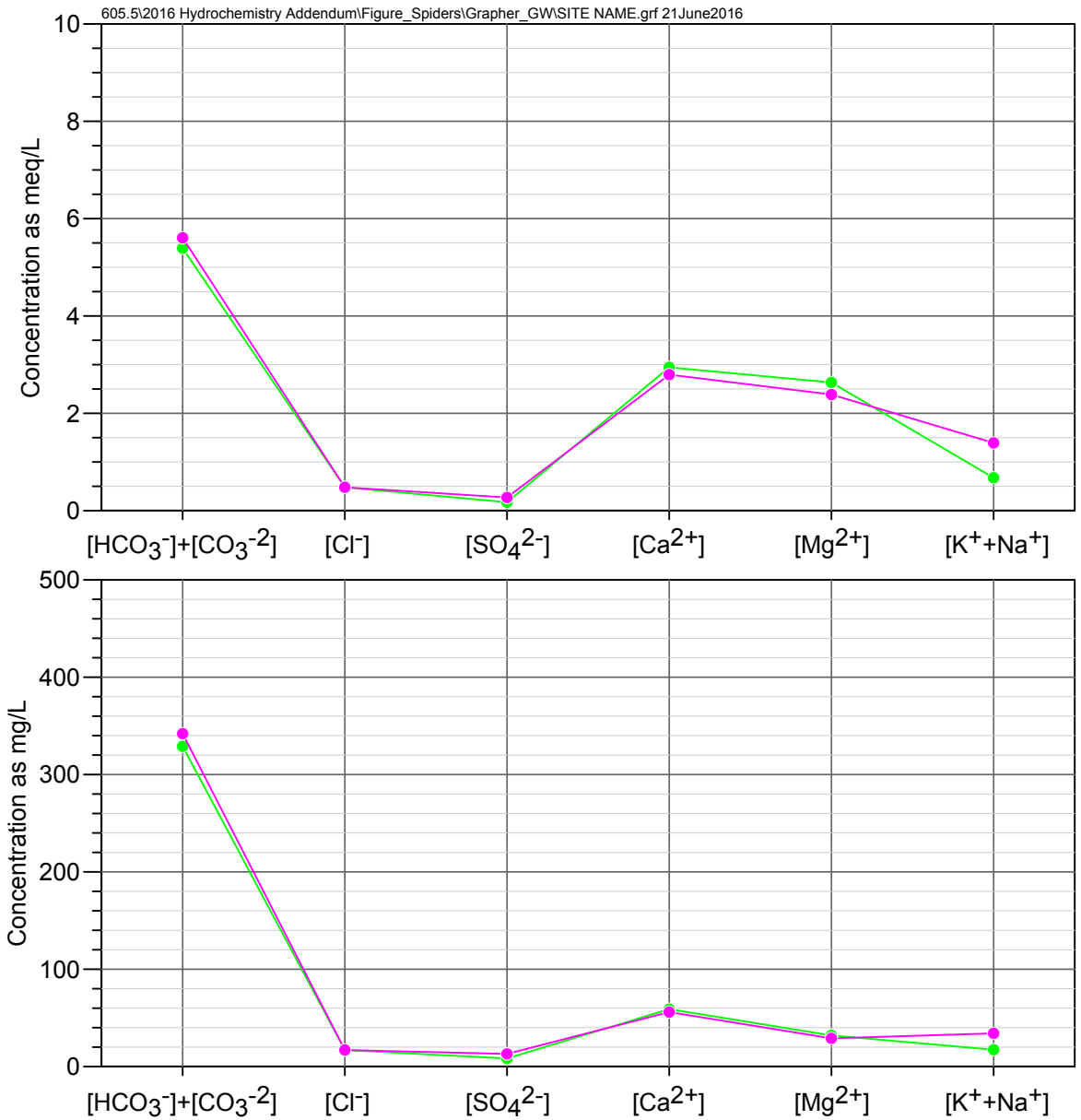


FIGURE C-27. MAJOR ION CHEMISTRY BY QUARTER FOR DHRES-11, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

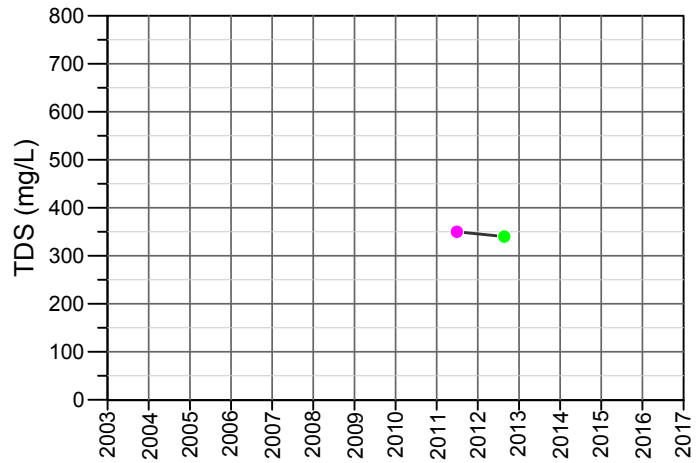
MONTGOMERY & ASSOCIATES



DHRES-13
Deep Groundwater System

Observed Concentrations
*Value shown at zero if below detection limit

Quarter 1 (Jan-Mar)
Quarter 2 (Apr-Jun)
Quarter 3 (Jul-Sep)
Quarter 4 (Oct-Dec)



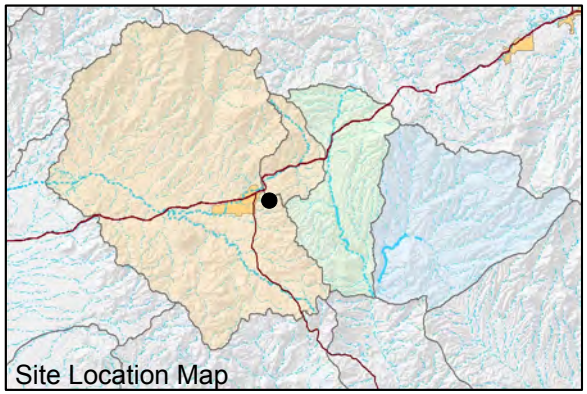


FIGURE C-28. MAJOR ION CHEMISTRY BY QUARTER FOR DHRES-13, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

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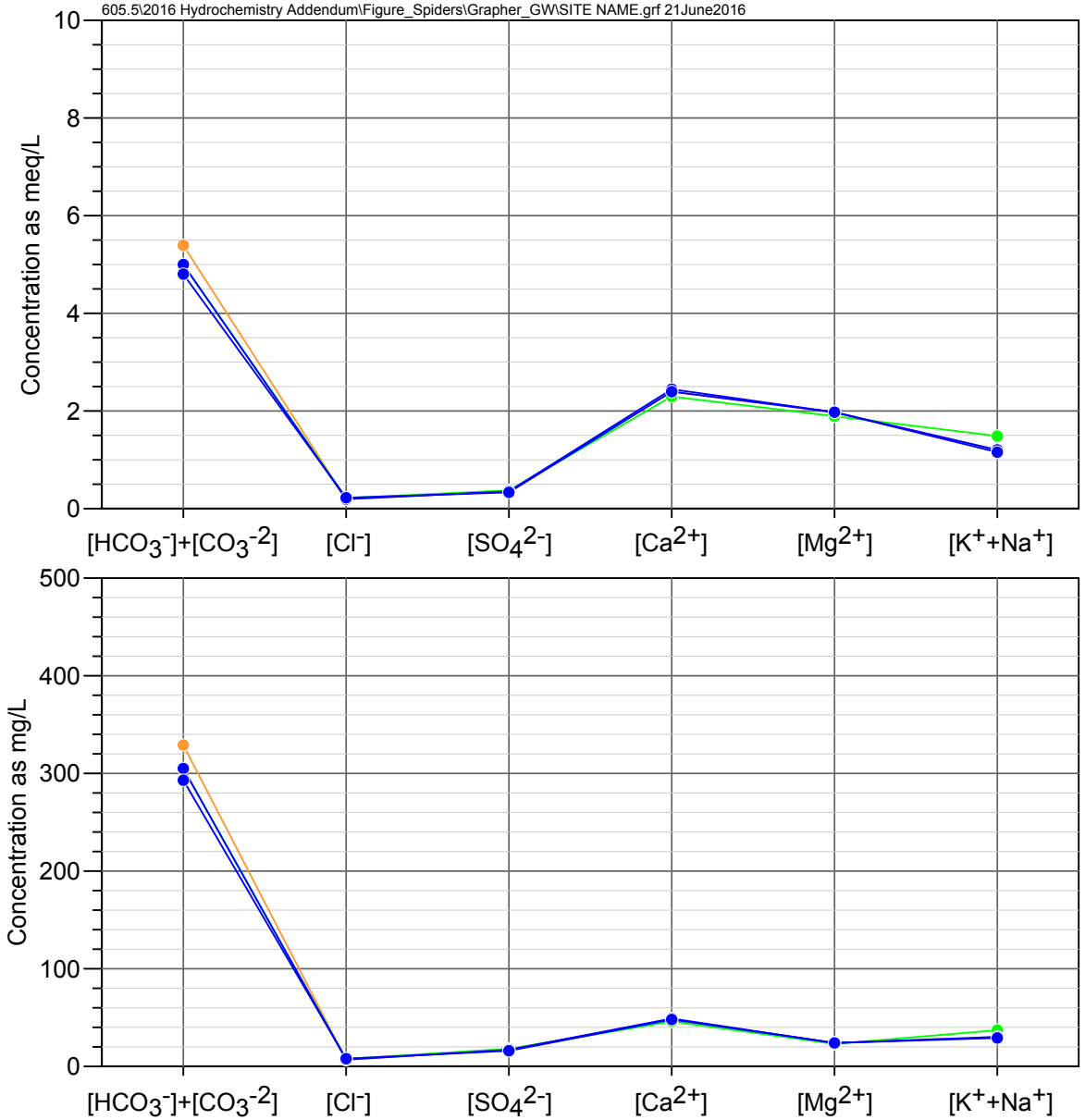
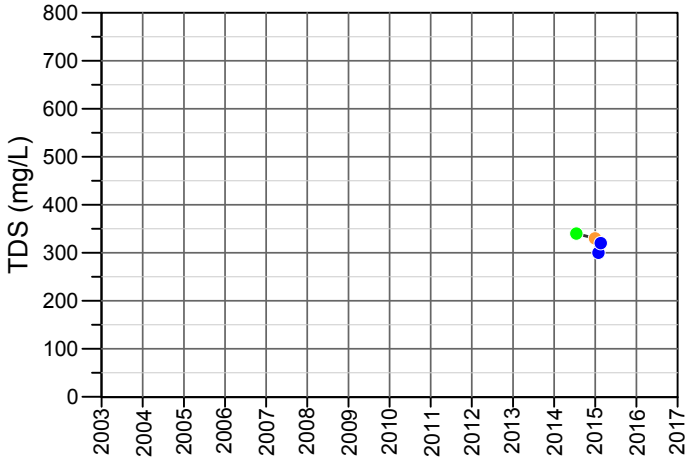


DHRES-15
Deep Groundwater System

Observed Concentrations
*Value shown at zero if below detection limit

- Quarter 1 (Jan-Mar)
- Quarter 2 (Apr-Jun)
- Quarter 3 (Jul-Sep)
- Quarter 4 (Oct-Dec)



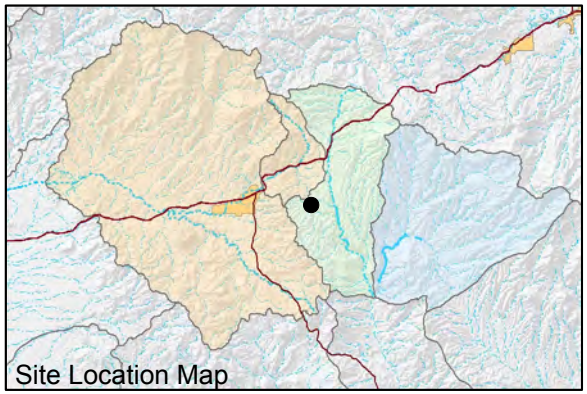


FIGURE C-29. MAJOR ION CHEMISTRY BY QUARTER FOR DHRES-15, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

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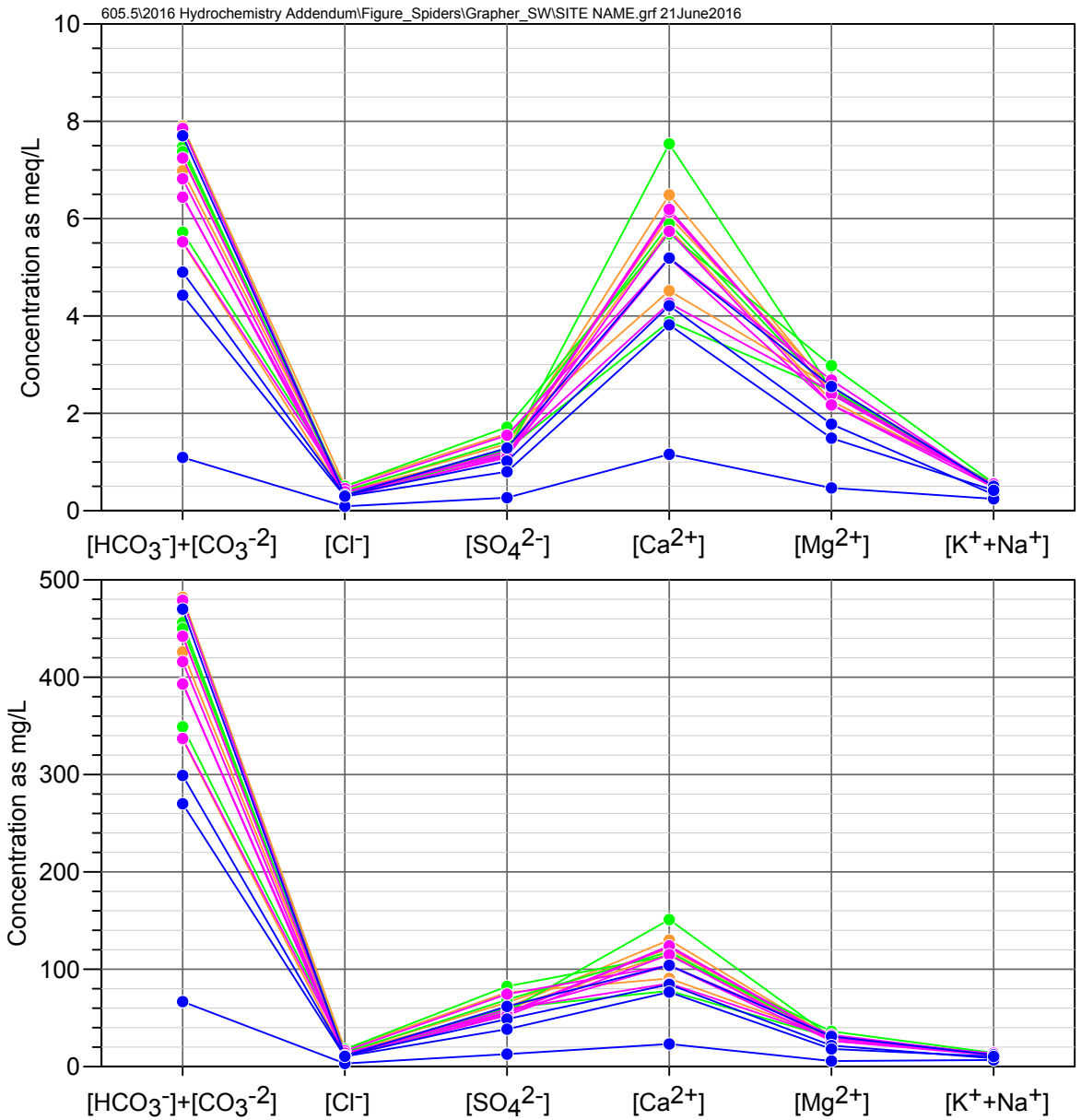
Appendix D

MAJOR ION CHEMISTRY BY QUARTER – SURFACE WATER

Upper Queen Creek Watershed (Figures D-1 through D-12)

Devils Canyon Watershed (Figures D-13 through D-29)

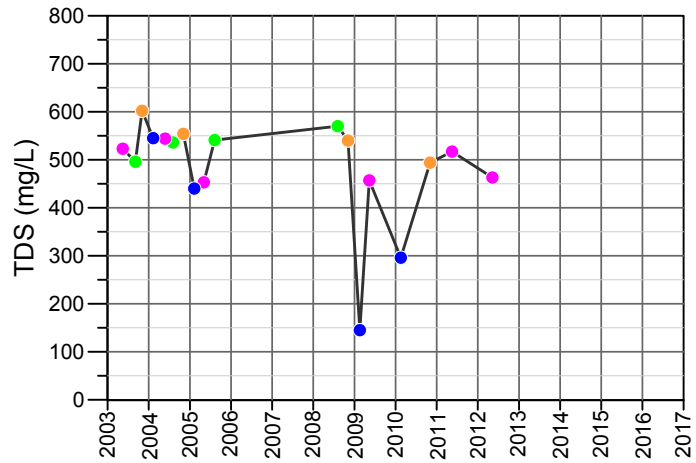
Mineral Creek Watershed (Figures D-30 through D-35)



Pump Station Spring (QC 30.7 C)
Queen Creek Watershed

Observed Concentrations
*Value shown at zero if below detection limit

- Quarter 1 (Jan-Mar)
- Quarter 2 (Apr-Jun)
- Quarter 3 (Jul-Sep)
- Quarter 4 (Oct-Dec)



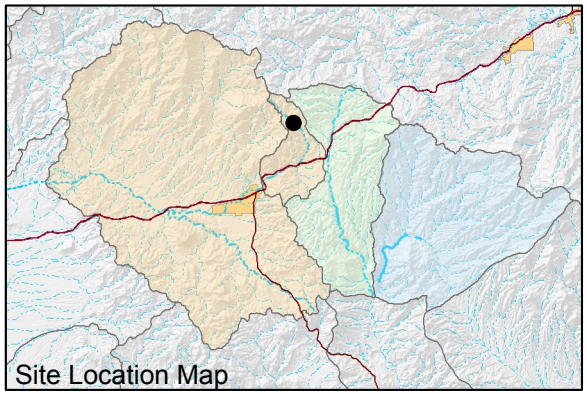


FIGURE D-01. MAJOR ION CHEMISTRY BY QUARTER FOR PUMP STATION SPRING (QC 30.7 C), QUEEN CREEK WATERSHED

Resolution Copper Mining

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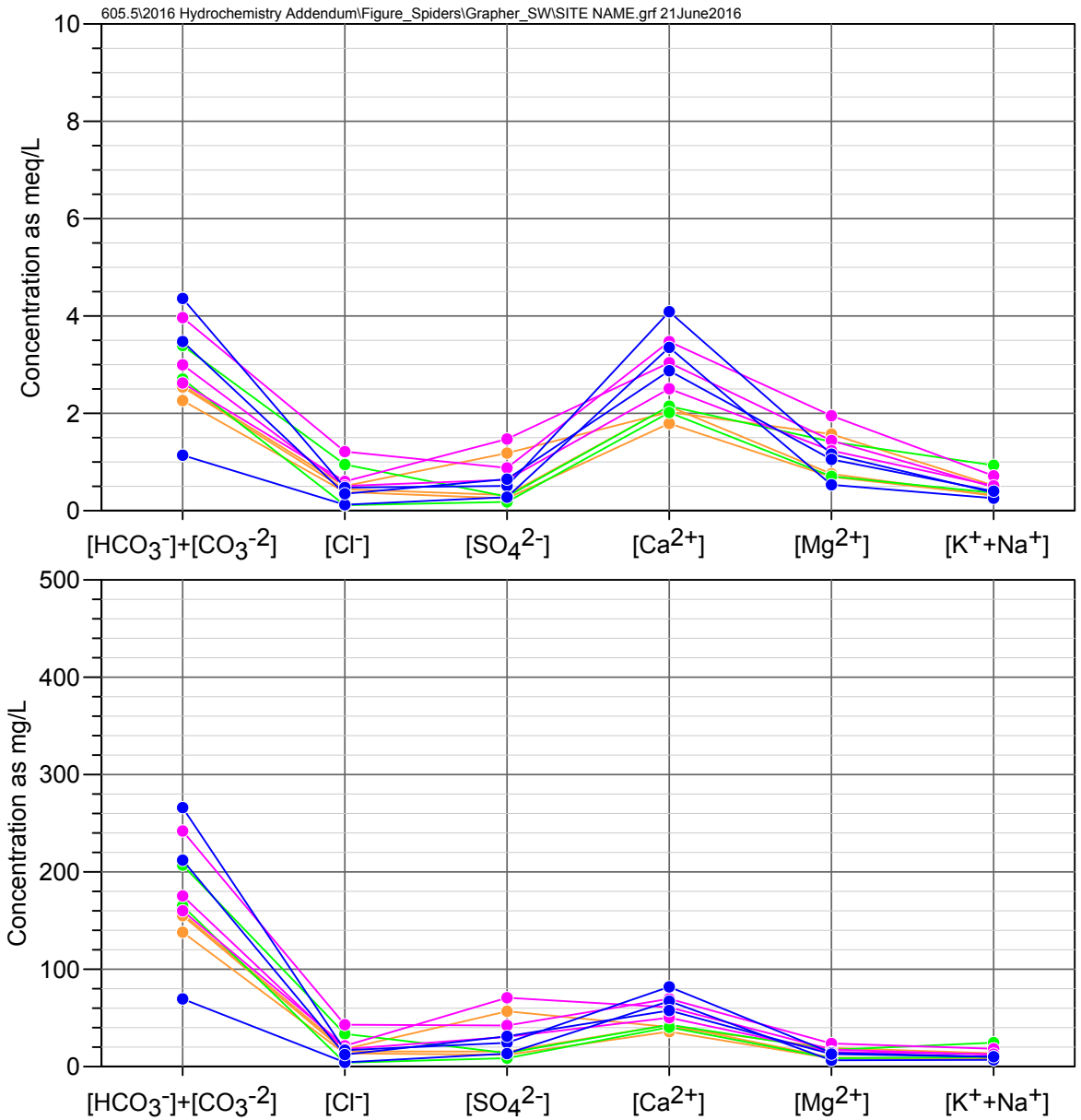
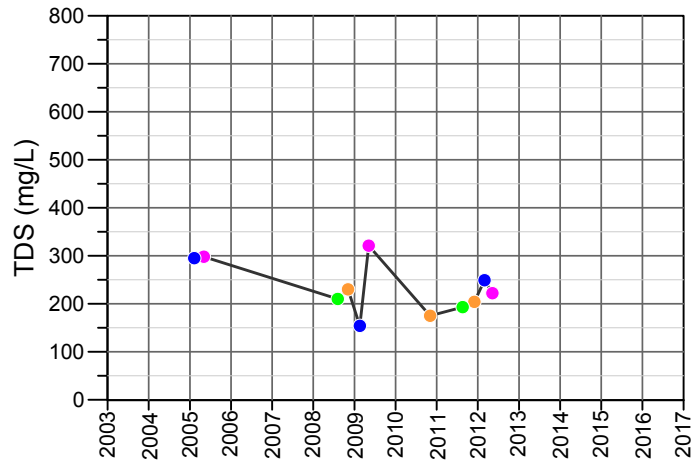


QC 27.3 C
Queen Creek Watershed

Observed Concentrations
*Value shown at zero if below detection limit

- Quarter 1 (Jan-Mar)
- Quarter 2 (Apr-Jun)
- Quarter 3 (Jul-Sep)
- Quarter 4 (Oct-Dec)



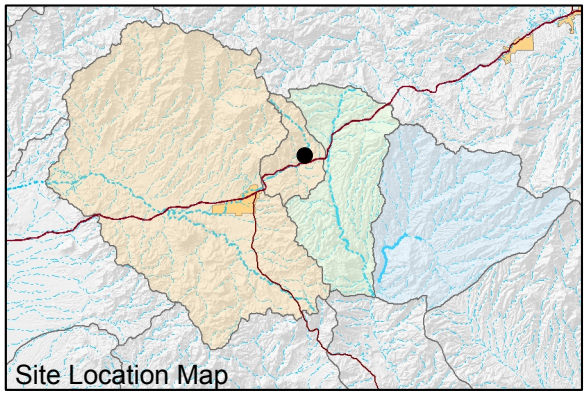
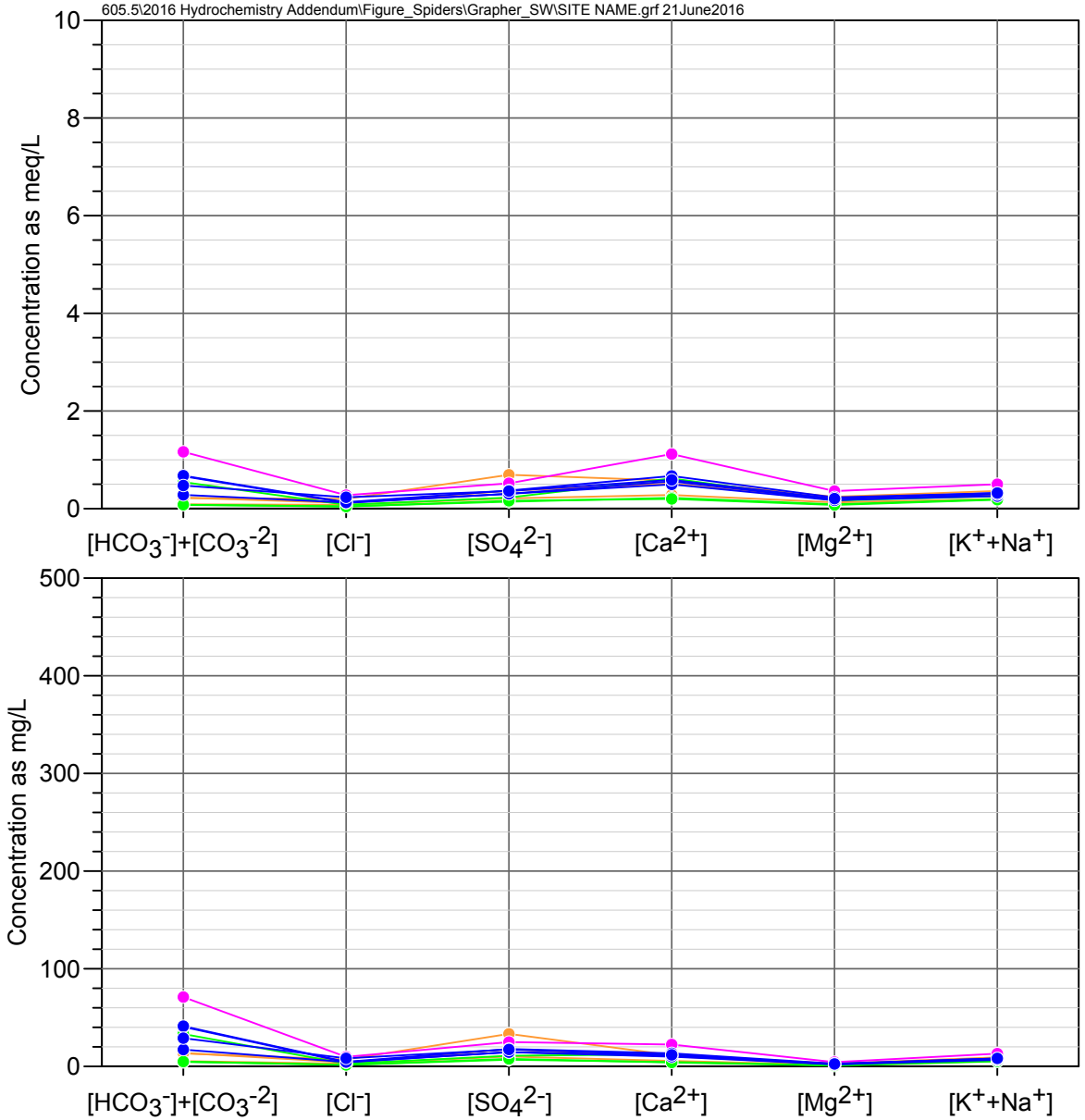


FIGURE D-02. MAJOR ION CHEMISTRY BY QUARTER FOR QC 27.3 C, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES

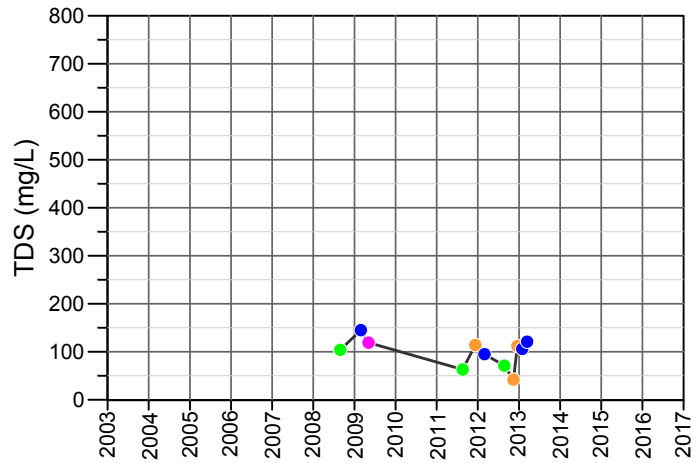
605.5\2016 Hydrochemistry Addendum\Figure_Spiders\Grapher_SW\SITE NAME.grf 21June2016



Oak Flat Wash
Queen Creek Watershed

Observed Concentrations
*Value shown at zero if below detection limit

- Quarter 1 (Jan-Mar)
- Quarter 2 (Apr-Jun)
- Quarter 3 (Jul-Sep)
- Quarter 4 (Oct-Dec)



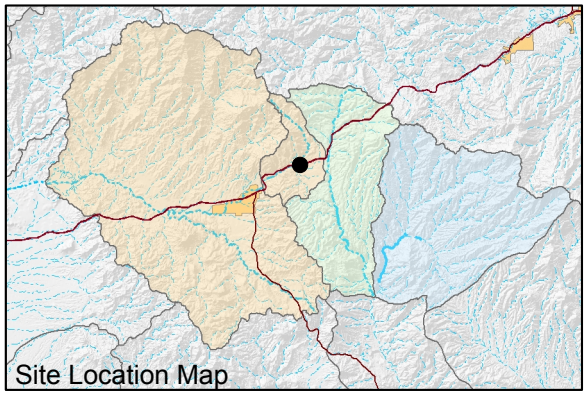
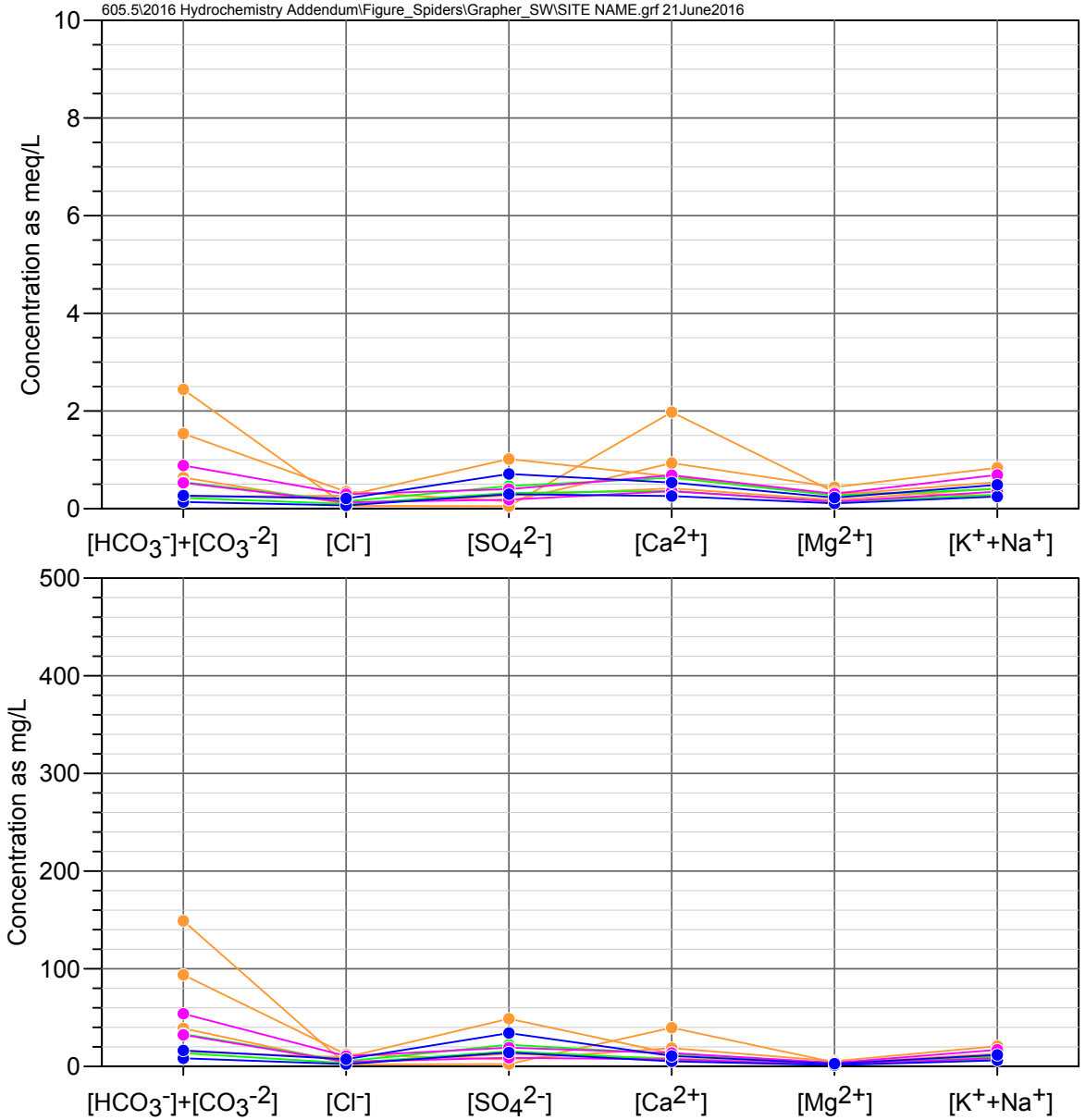


FIGURE D-03. MAJOR ION CHEMISTRY BY QUARTER FOR OAK FLAT WASH, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES

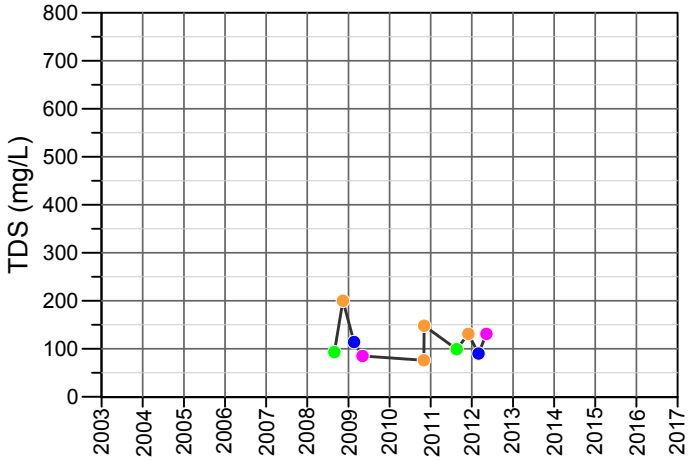
605.5\2016 Hydrochemistry Addendum\Figure_Spiders\Grapher_SW\SITE NAME.grf 21June2016



Number 9 Wash
Queen Creek Watershed

Observed Concentrations
*Value shown at zero if below detection limit

- Quarter 1 (Jan-Mar)
- Quarter 2 (Apr-Jun)
- Quarter 3 (Jul-Sep)
- Quarter 4 (Oct-Dec)



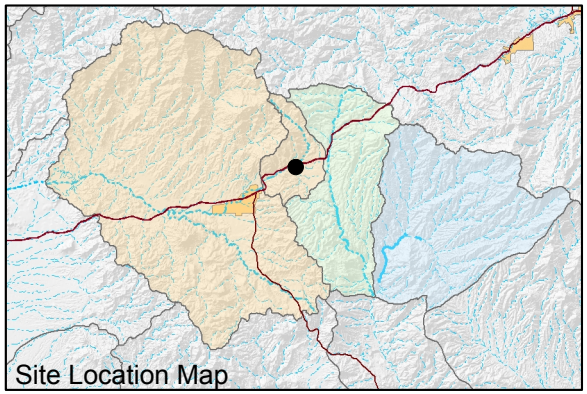


FIGURE D-04. MAJOR ION CHEMISTRY BY QUARTER FOR NUMBER 9 WASH, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES

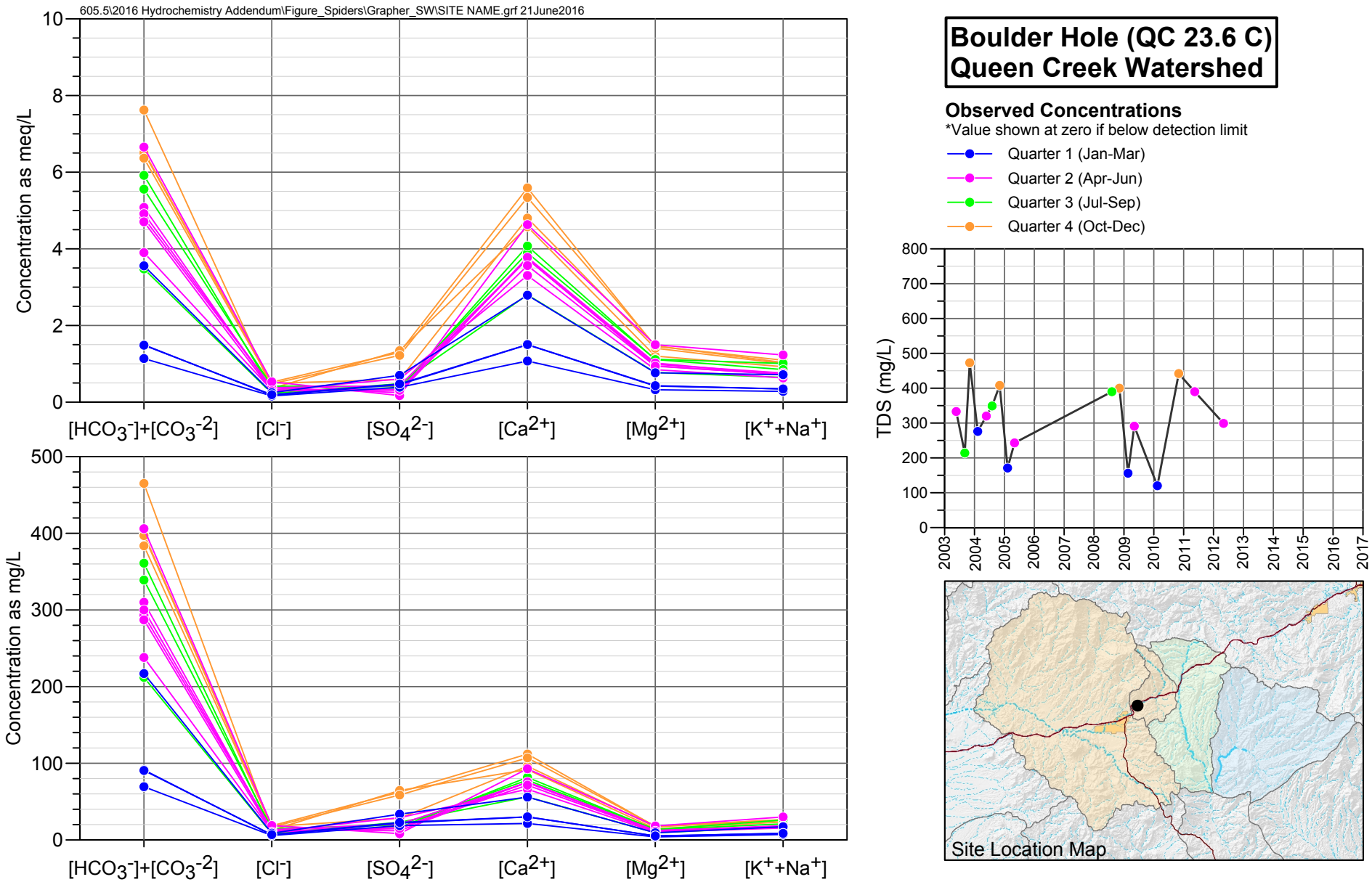
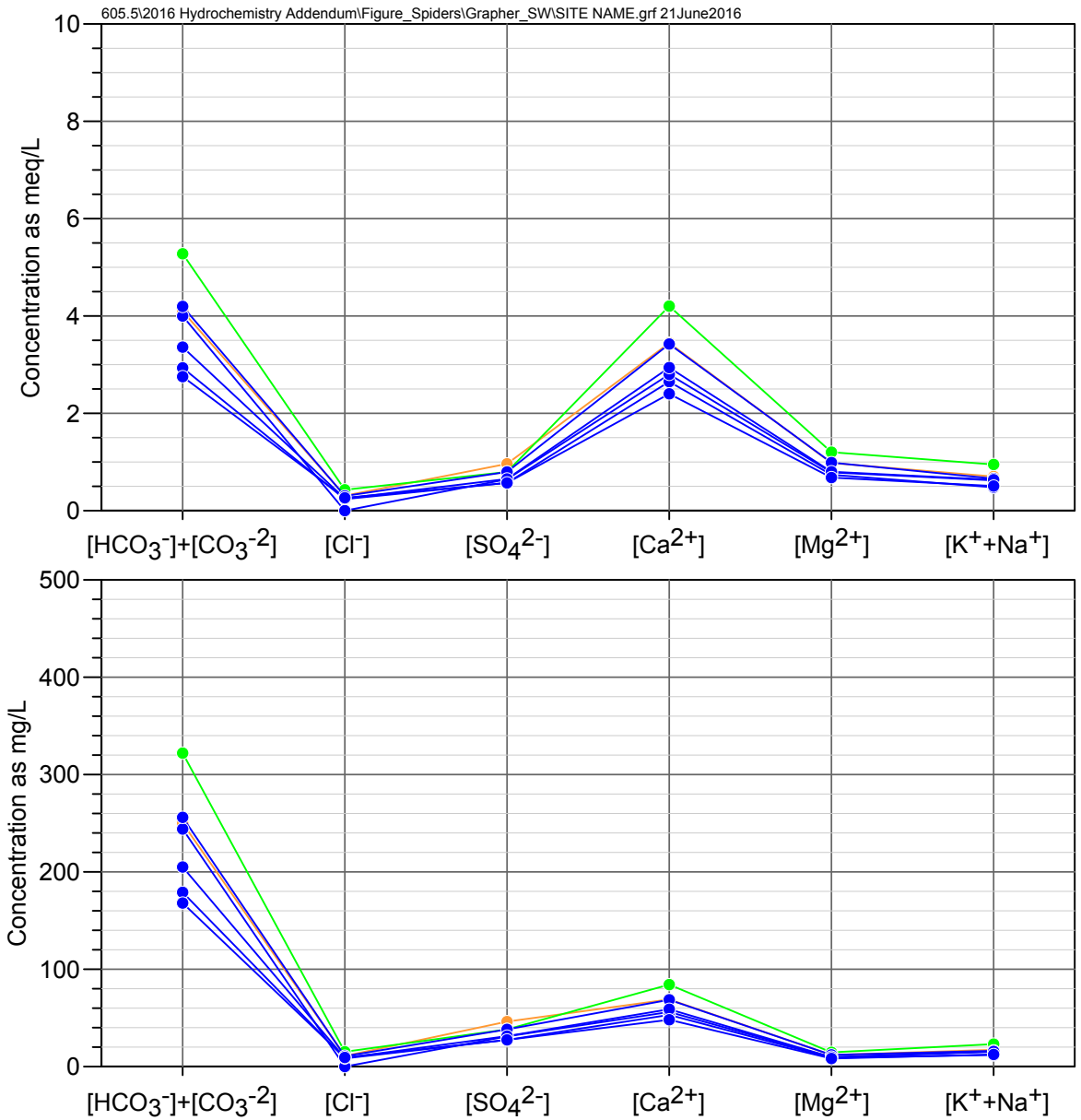


FIGURE D-05. MAJOR ION CHEMISTRY BY QUARTER FOR BOULDER HOLE (QC 23.6 C), QUEEN CREEK WATERSHED

Resolution Copper Mining

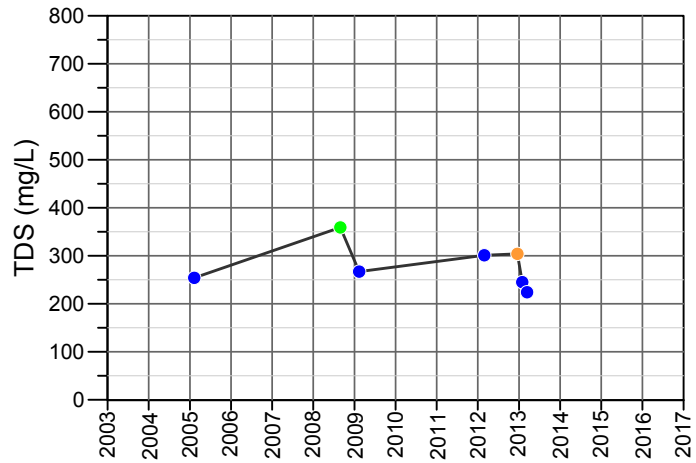
MONTGOMERY & ASSOCIATES



QC 22.6 E
Queen Creek Watershed

Observed Concentrations
*Value shown at zero if below detection limit

- Quarter 1 (Jan-Mar)
- Quarter 2 (Apr-Jun)
- Quarter 3 (Jul-Sep)
- Quarter 4 (Oct-Dec)



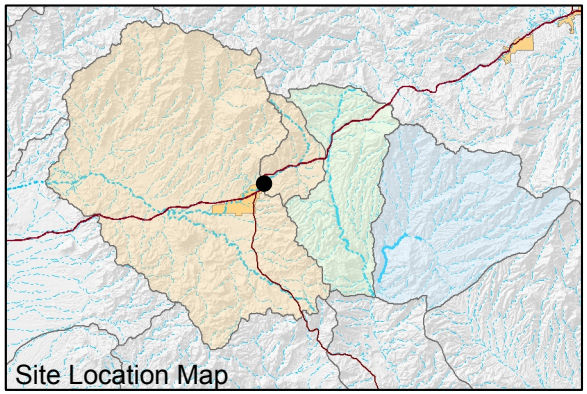
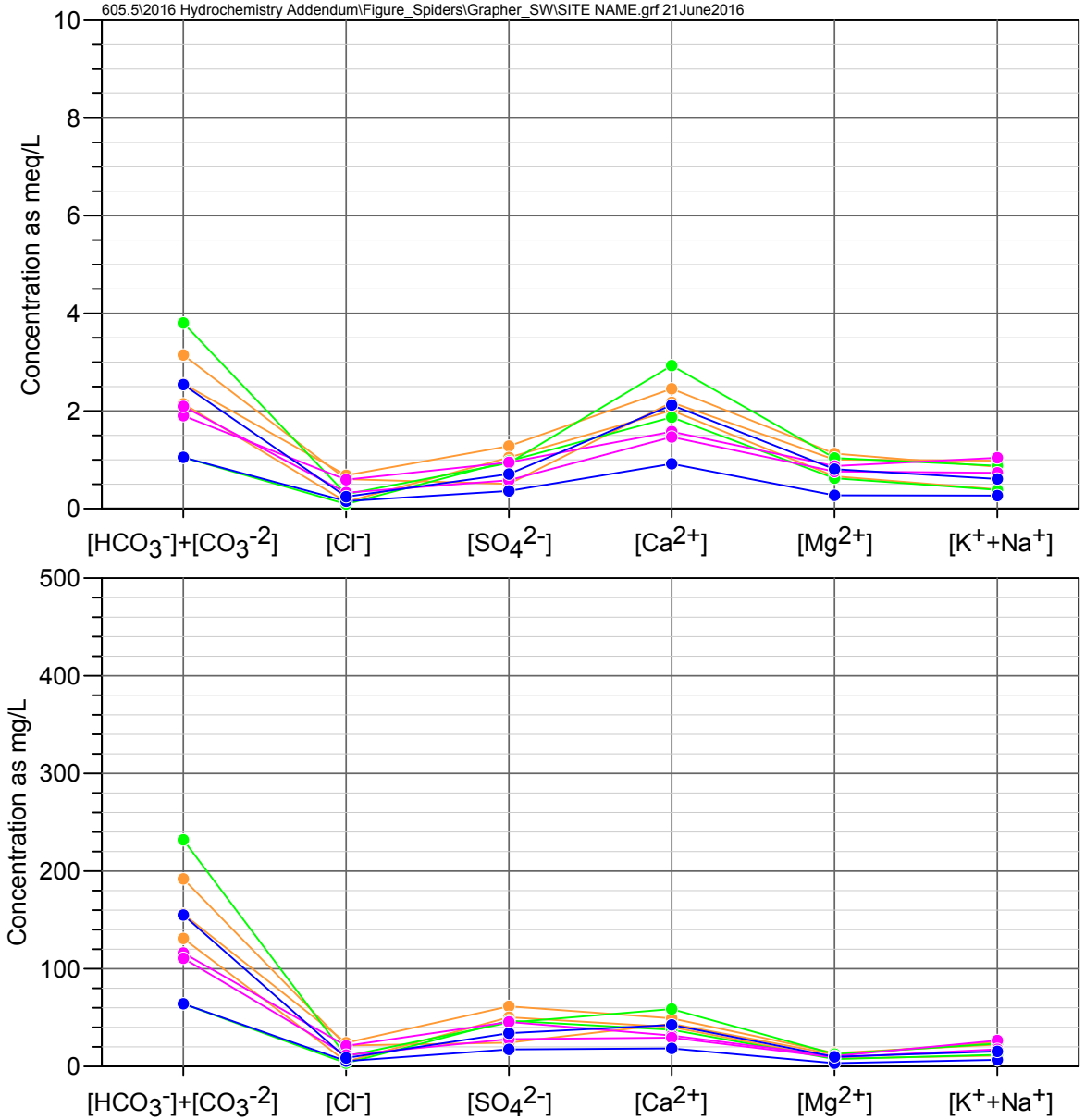


FIGURE D-06. MAJOR ION CHEMISTRY BY QUARTER FOR QC 22.6 E, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES

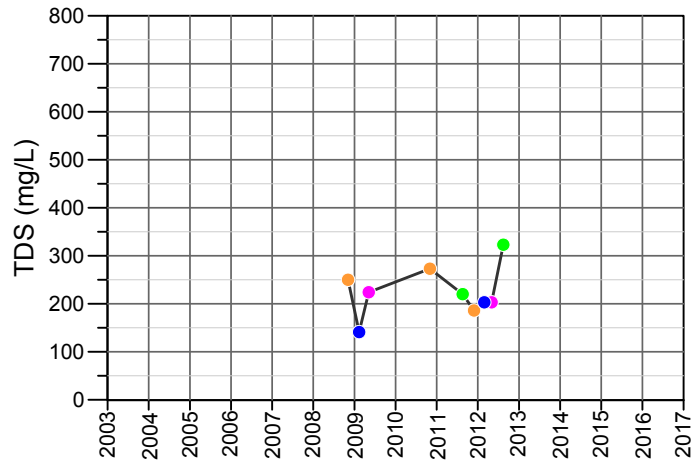
605.5\2016 Hydrochemistry Addendum\Figure_Spiders\Grapher_SW\SITE NAME.grf 21June2016



QC 21.7 C
Queen Creek Watershed

Observed Concentrations
*Value shown at zero if below detection limit

- Quarter 1 (Jan-Mar)
- Quarter 2 (Apr-Jun)
- Quarter 3 (Jul-Sep)
- Quarter 4 (Oct-Dec)



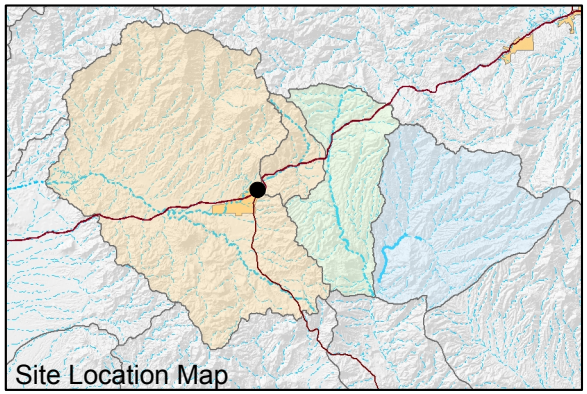
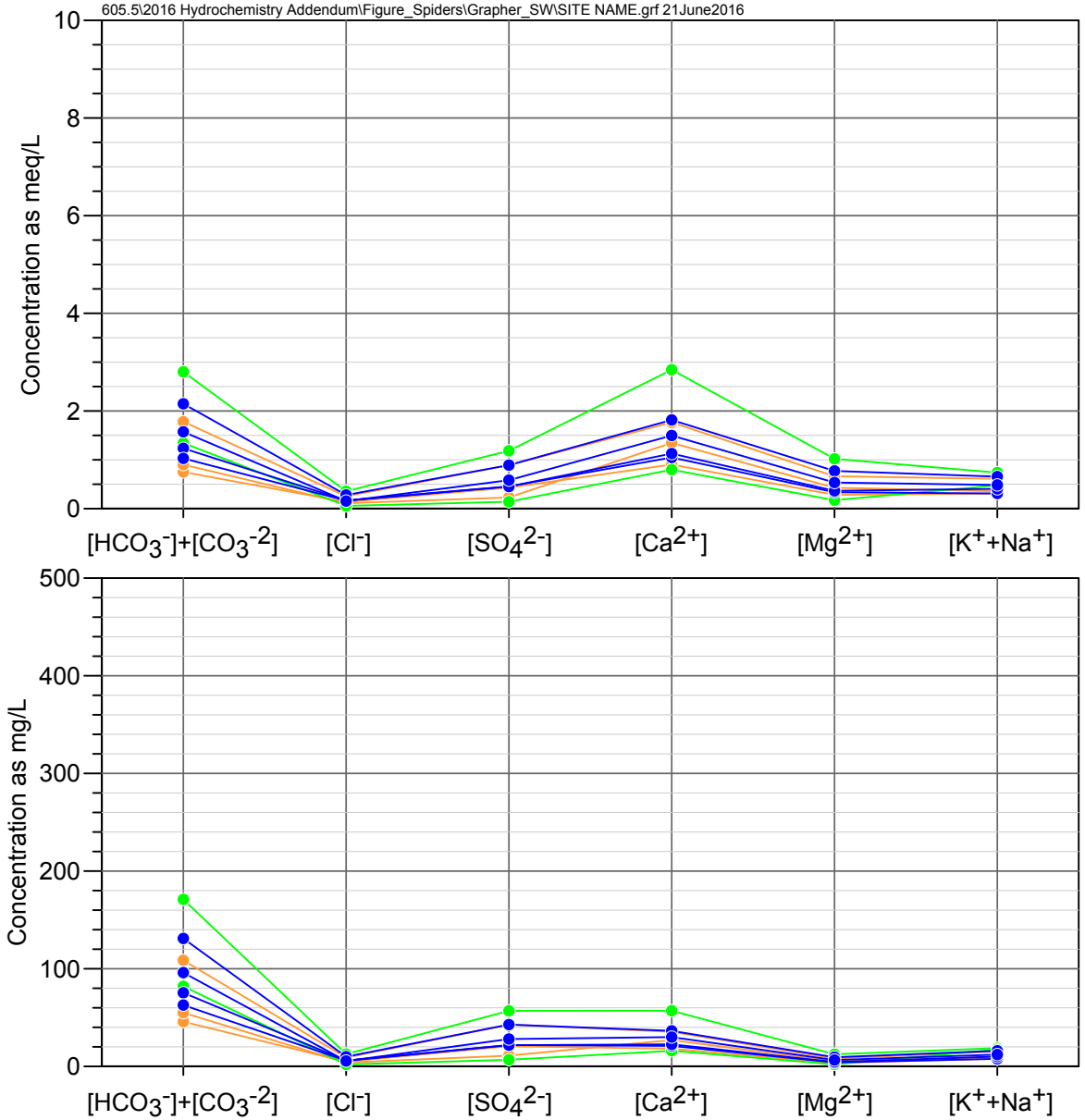


FIGURE D-07. MAJOR ION CHEMISTRY BY QUARTER FOR QC 21.7 C, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES

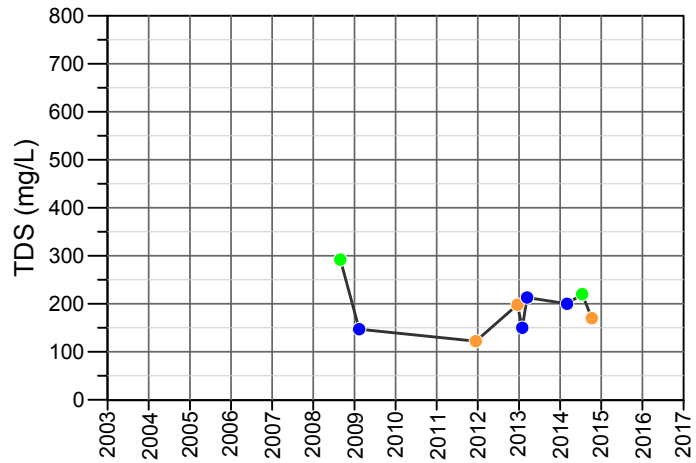
605.5\2016 Hydrochemistry Addendum\Figure_Spiders\Grapher_SW\SITE NAME.grf 21June2016



QC 19.7 C
Queen Creek Watershed

Observed Concentrations
*Value shown at zero if below detection limit

- Quarter 1 (Jan-Mar)
- Quarter 2 (Apr-Jun)
- Quarter 3 (Jul-Sep)
- Quarter 4 (Oct-Dec)



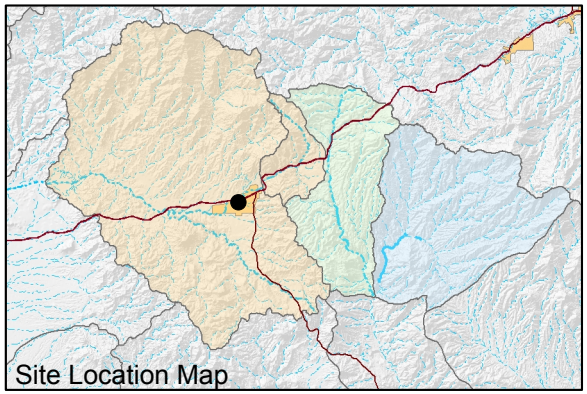


FIGURE D-08. MAJOR ION CHEMISTRY BY QUARTER FOR QC 19.7 C, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES

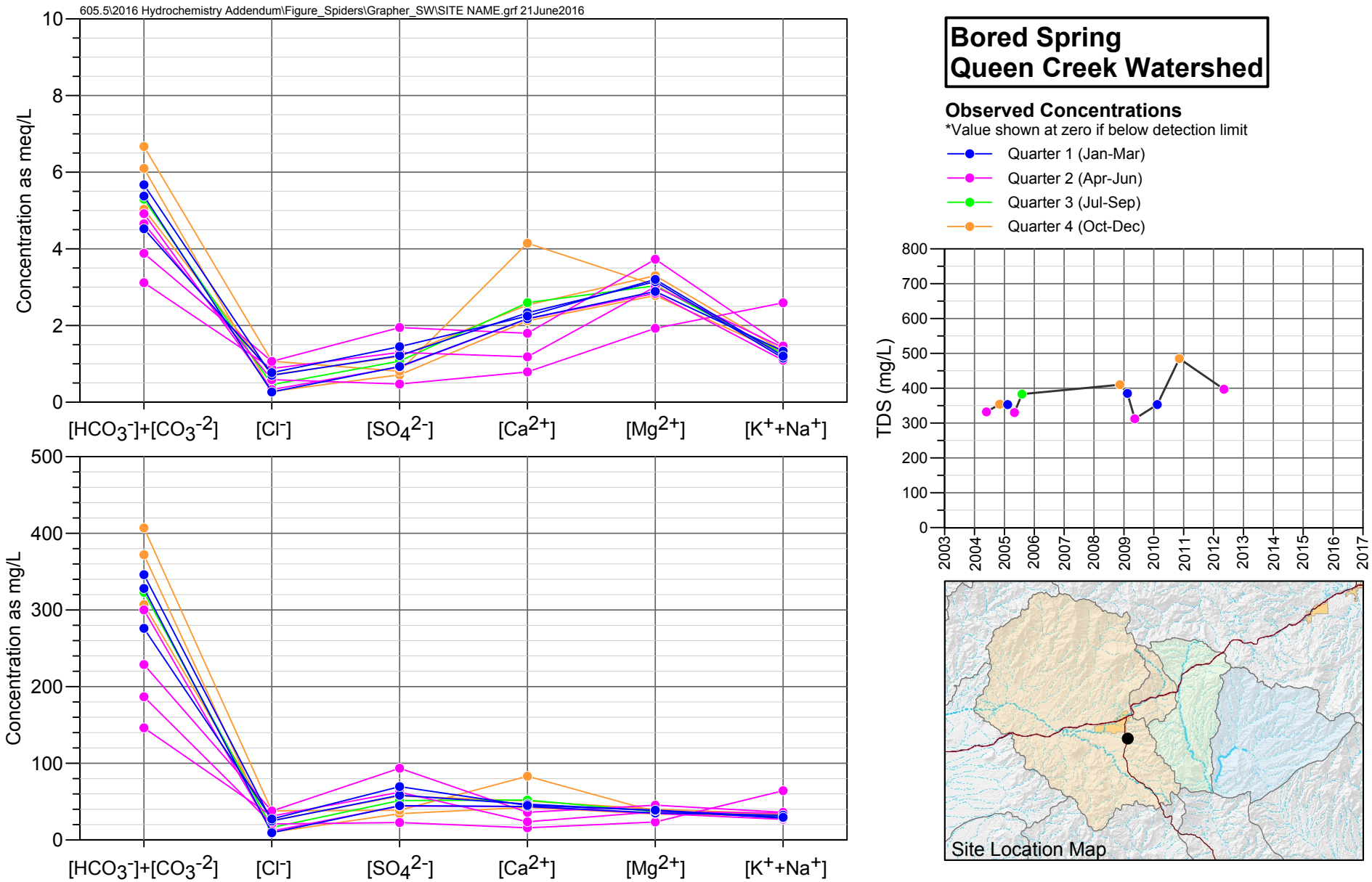
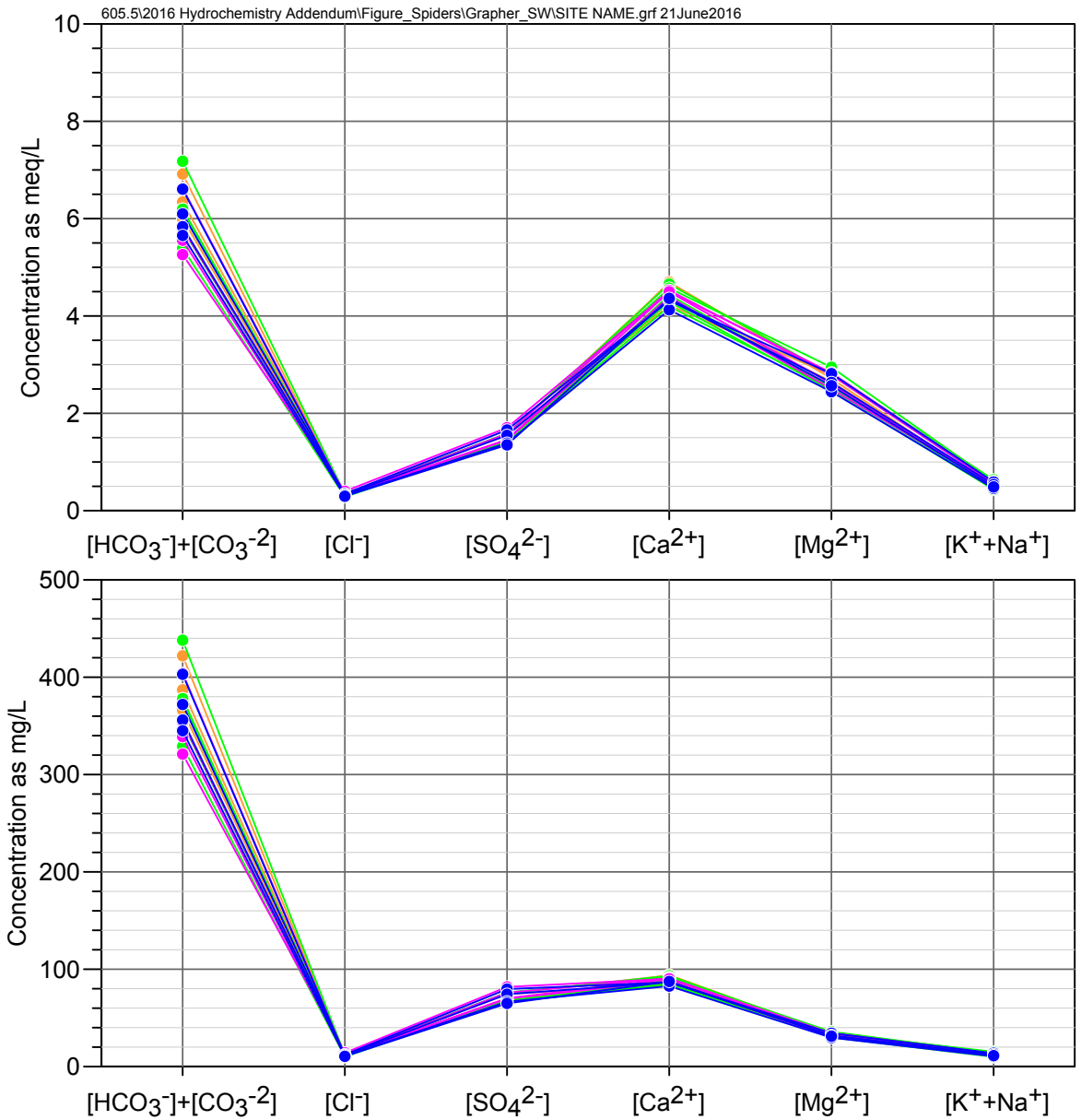


FIGURE D-09. MAJOR ION CHEMISTRY BY QUARTER FOR BORED SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

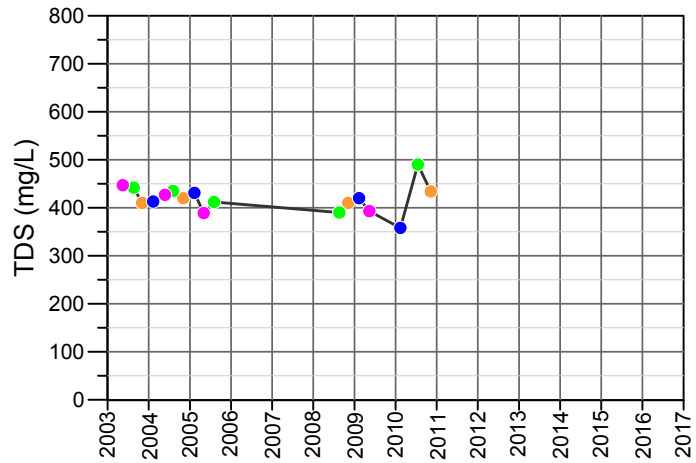
MONTGOMERY & ASSOCIATES



Hidden Spring
Queen Creek Watershed

Observed Concentrations
*Value shown at zero if below detection limit

- Quarter 1 (Jan-Mar)
- Quarter 2 (Apr-Jun)
- Quarter 3 (Jul-Sep)
- Quarter 4 (Oct-Dec)



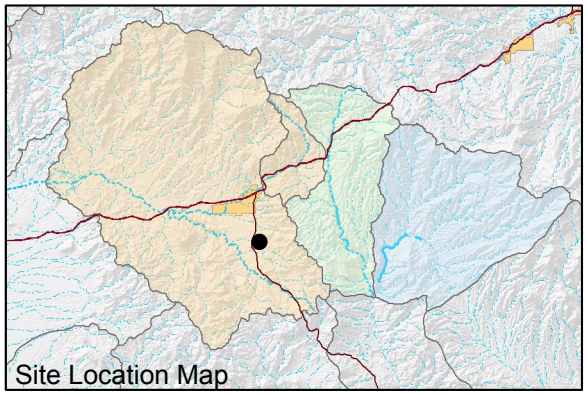
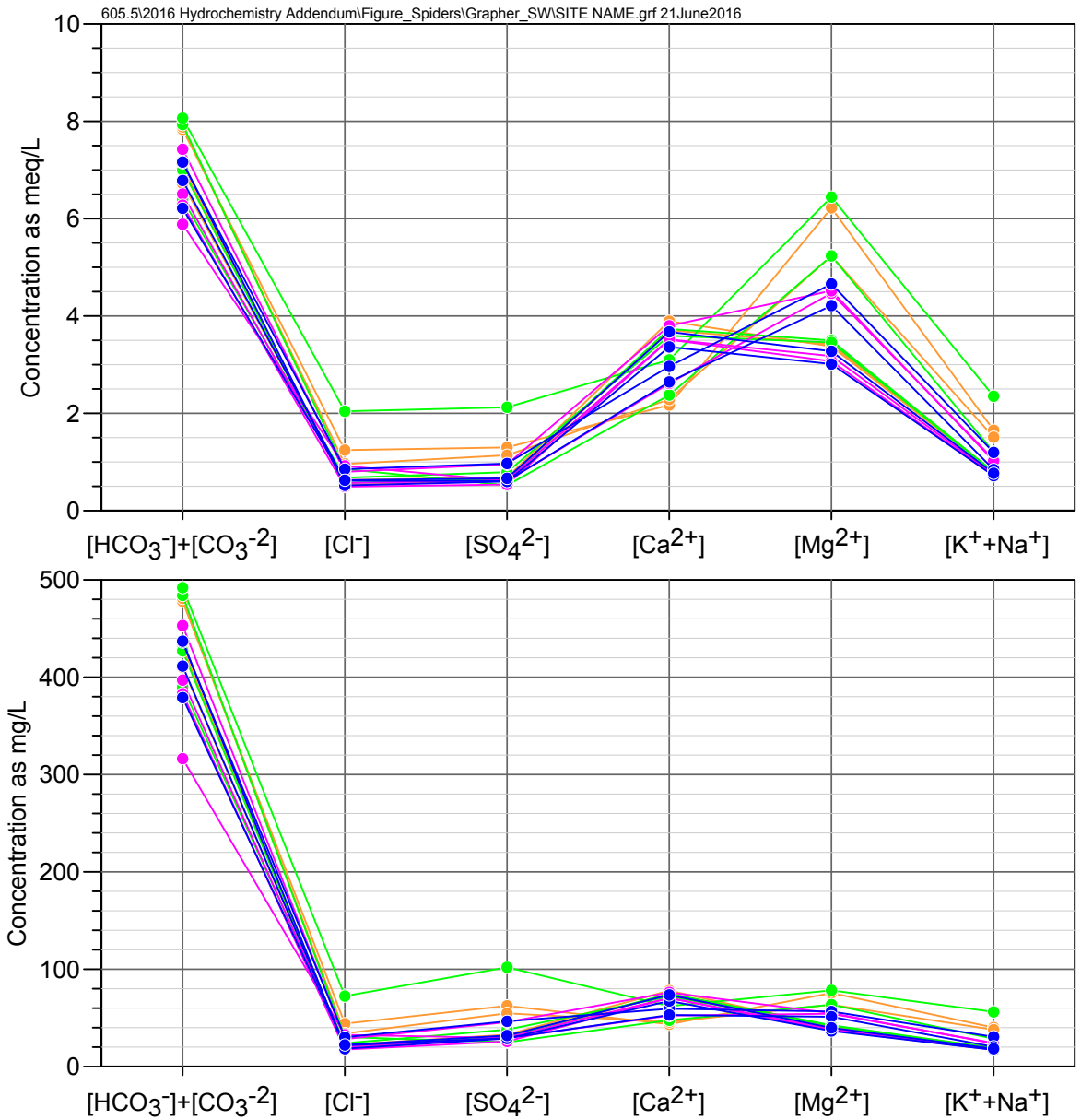


FIGURE D-10. MAJOR ION CHEMISTRY BY QUARTER FOR HIDDEN SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

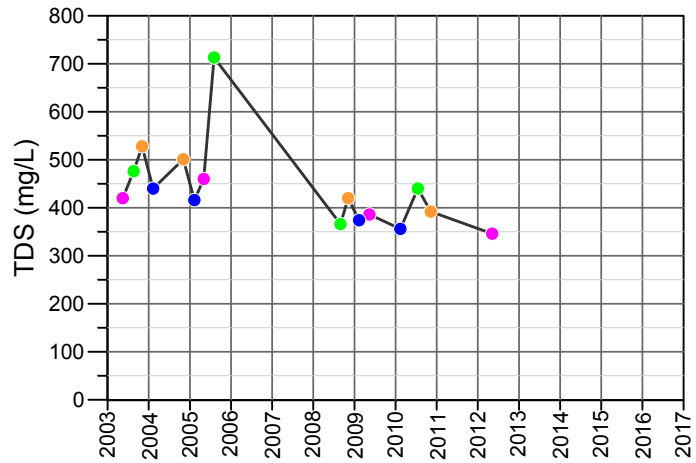
MONTGOMERY & ASSOCIATES



Kane Spring
Queen Creek Watershed

Observed Concentrations
*Value shown at zero if below detection limit

- Quarter 1 (Jan-Mar)
- Quarter 2 (Apr-Jun)
- Quarter 3 (Jul-Sep)
- Quarter 4 (Oct-Dec)



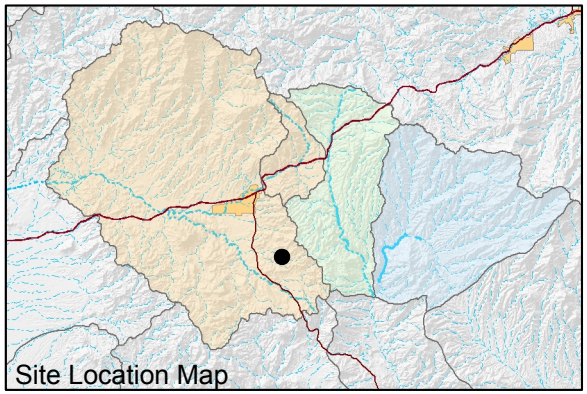
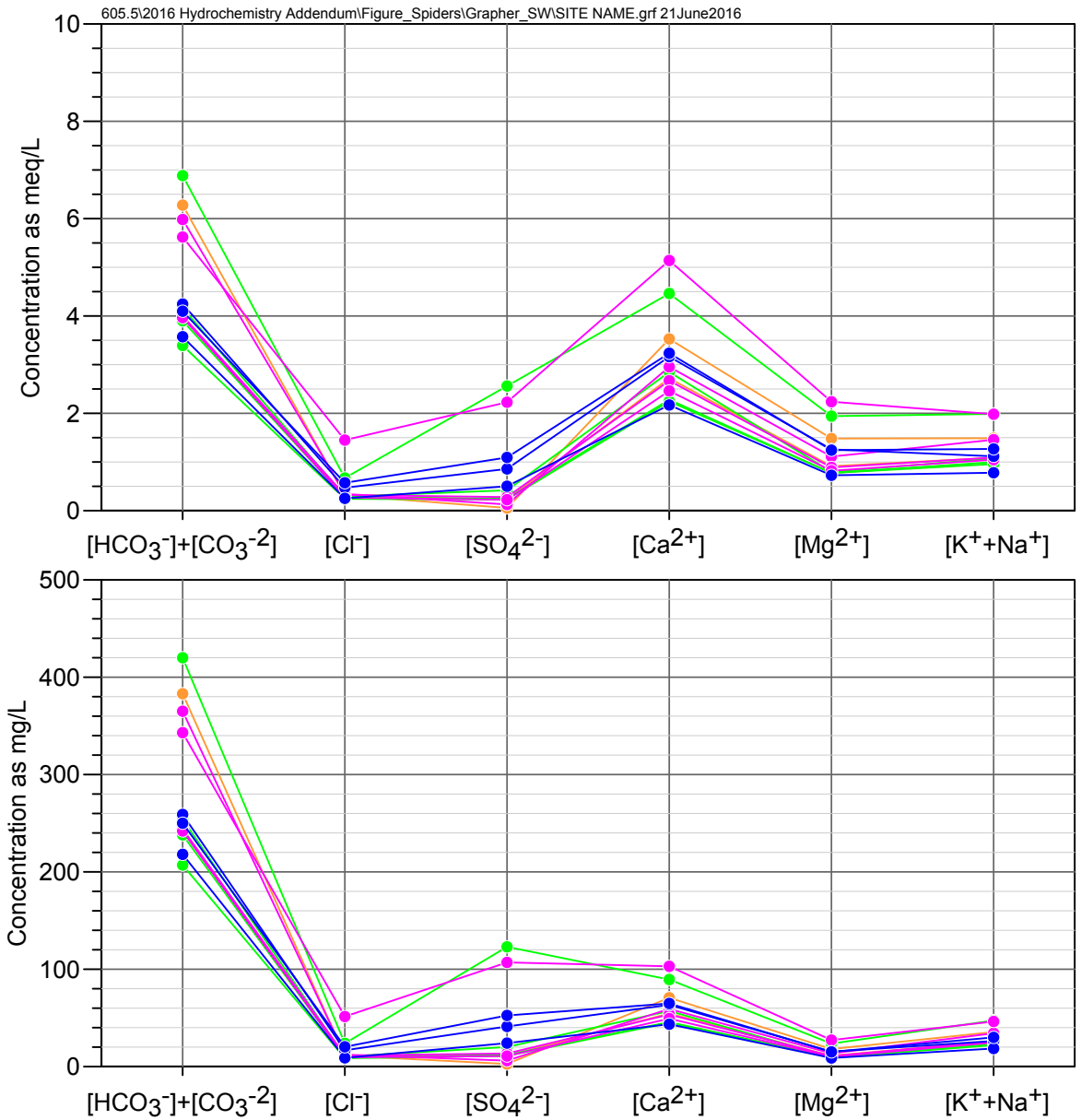


FIGURE D-11. MAJOR ION CHEMISTRY BY QUARTER FOR KANE SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

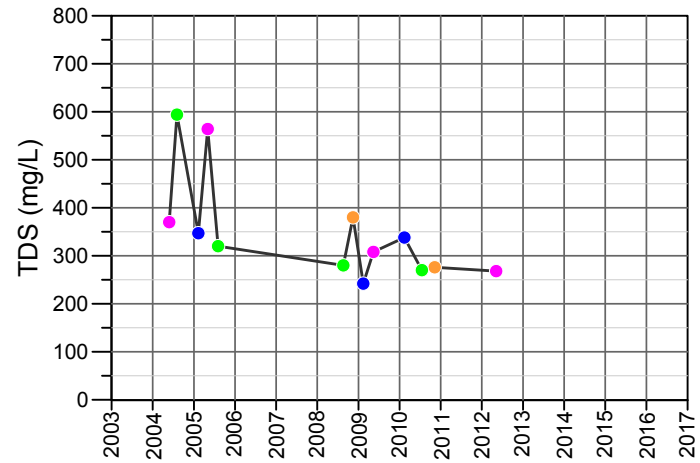
MONTGOMERY & ASSOCIATES



Blue Spring
Queen Creek Watershed

Observed Concentrations
*Value shown at zero if below detection limit

Quarter 1 (Jan-Mar)
Quarter 2 (Apr-Jun)
Quarter 3 (Jul-Sep)
Quarter 4 (Oct-Dec)



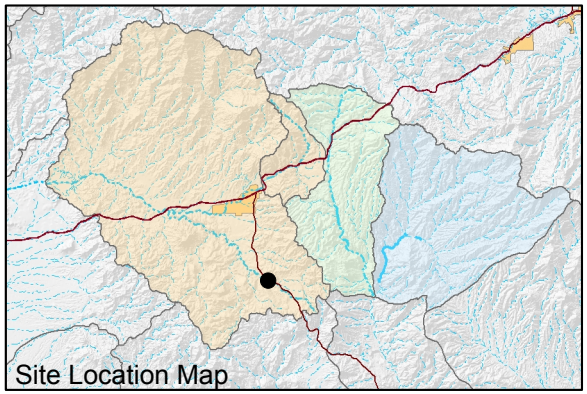


FIGURE D-12. MAJOR ION CHEMISTRY BY QUARTER FOR BLUE SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES

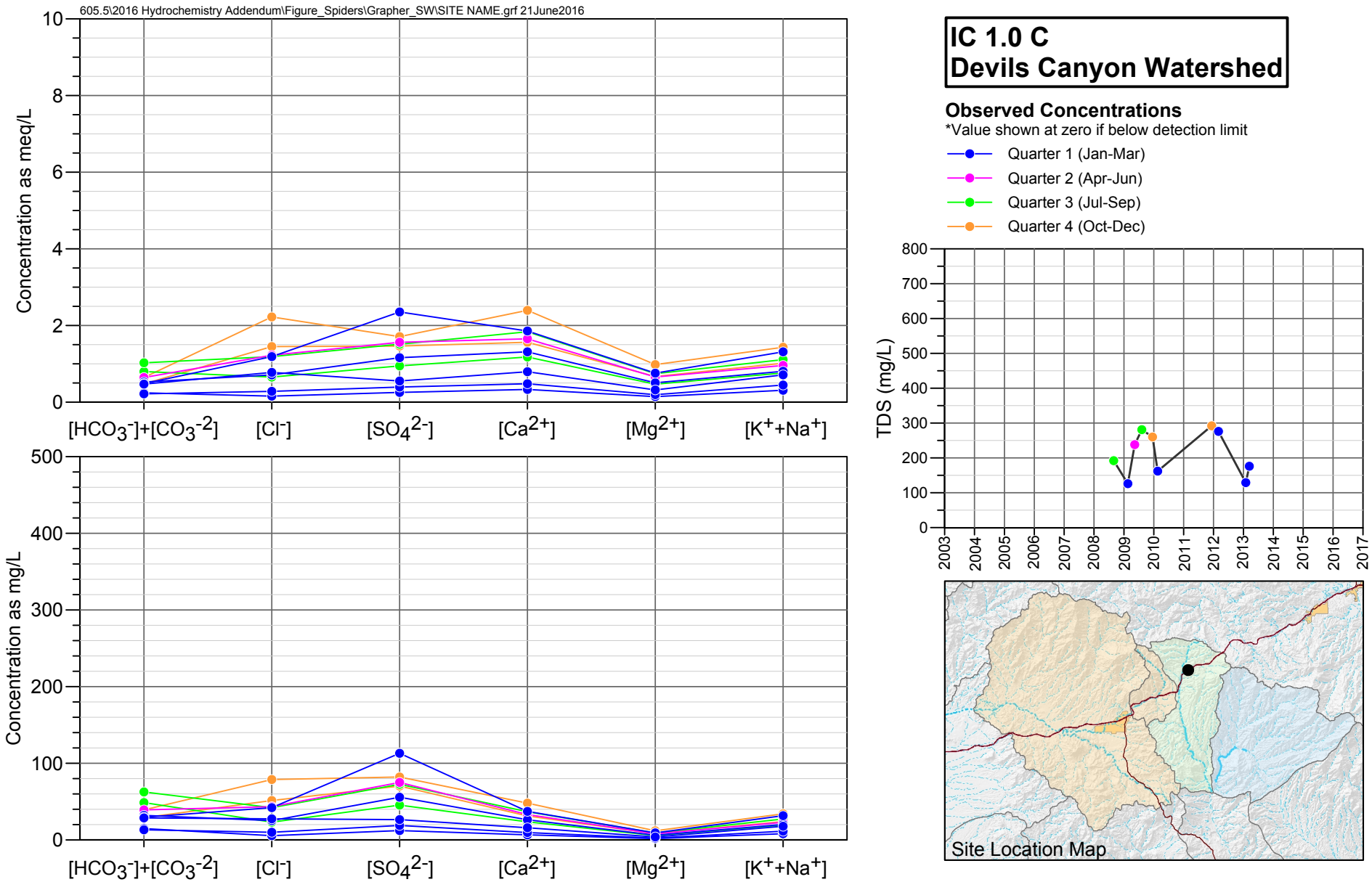
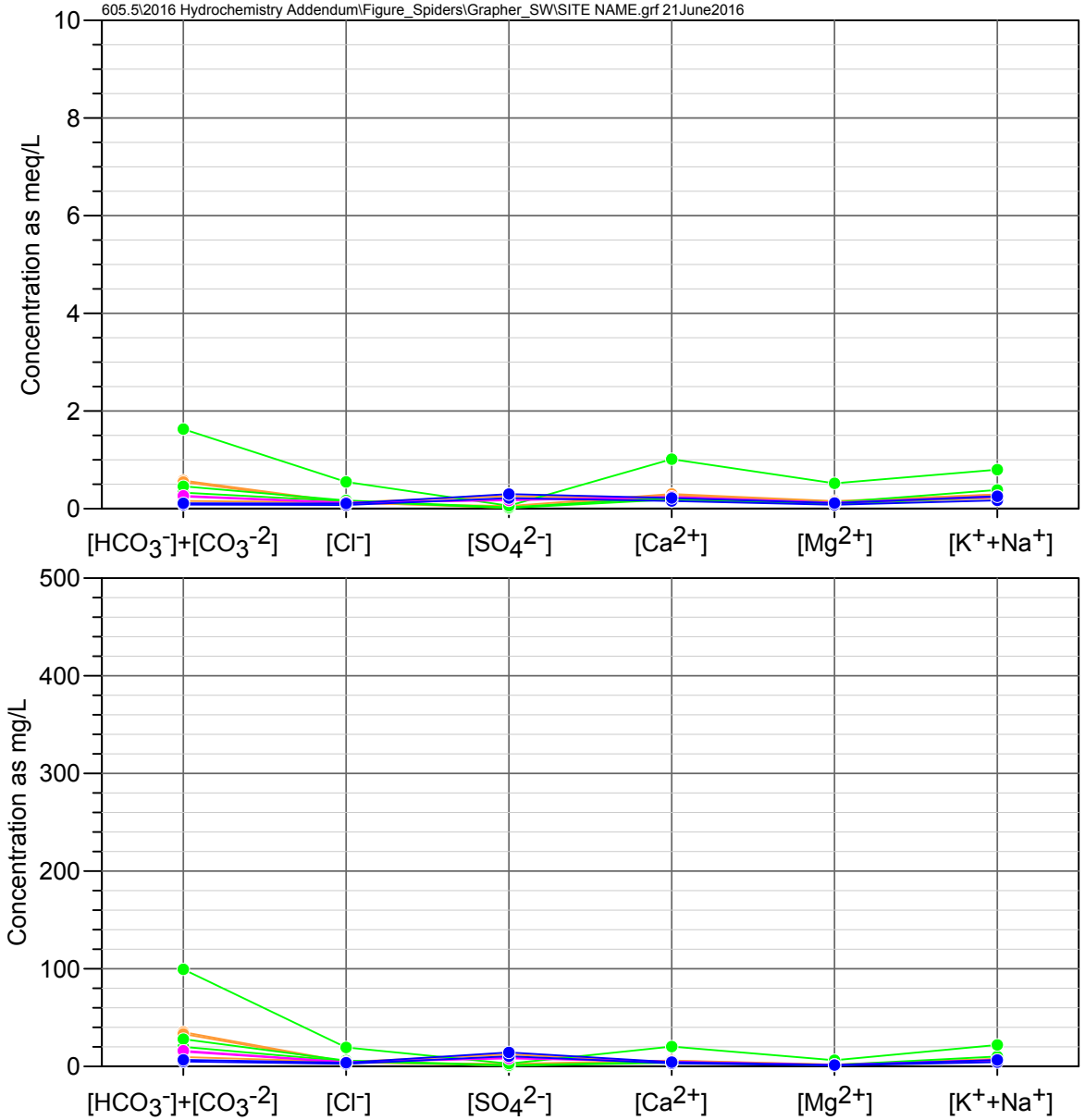


FIGURE D-13. MAJOR ION CHEMISTRY BY QUARTER FOR IC 1.0 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES

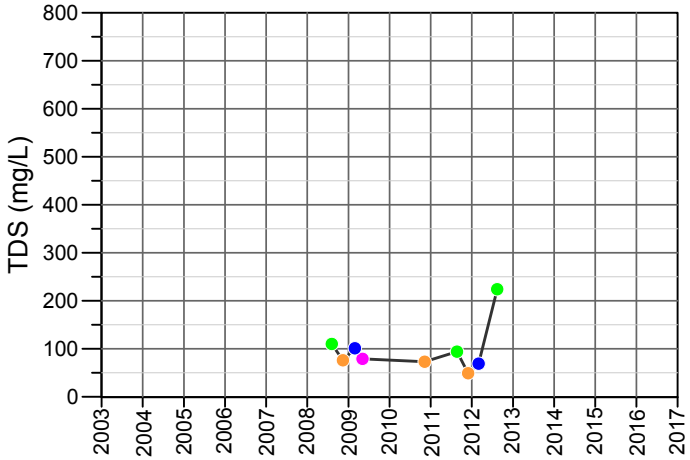
605.5\2016 Hydrochemistry Addendum\Figure_Spiders\Grapher_SW\SITE NAME.grf 21June2016



DC 15.5 C
Devils Canyon Watershed

Observed Concentrations
*Value shown at zero if below detection limit

- Quarter 1 (Jan-Mar)
- Quarter 2 (Apr-Jun)
- Quarter 3 (Jul-Sep)
- Quarter 4 (Oct-Dec)



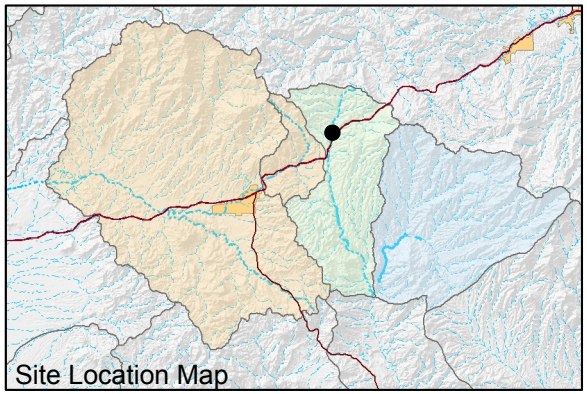
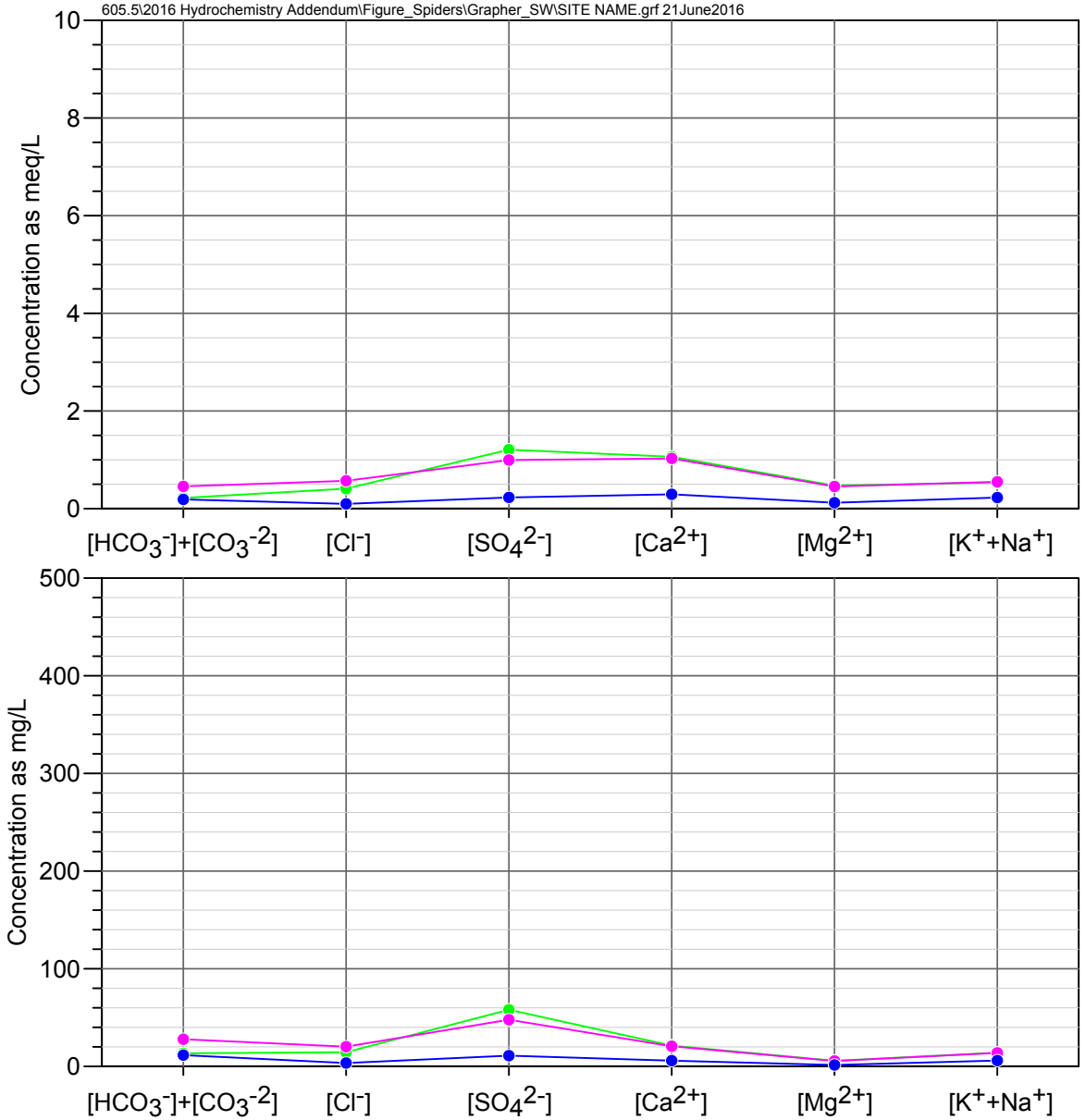


FIGURE D-14. MAJOR ION CHEMISTRY BY QUARTER FOR DC 15.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES

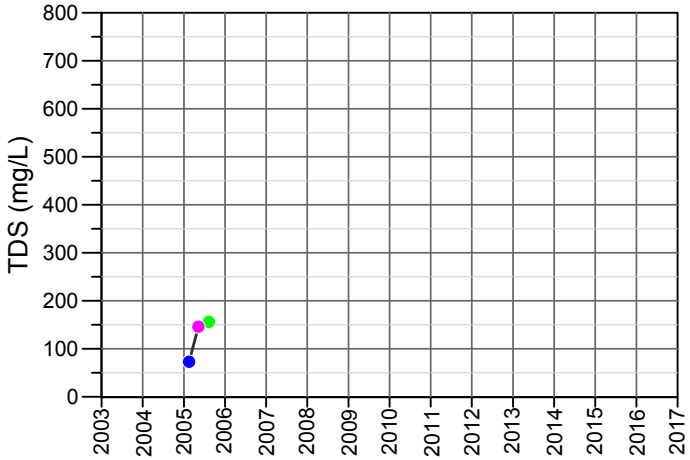
605.5\2016 Hydrochemistry Addendum\Figure_Spiders\Grapher_SW\SITE NAME.grf 21June2016



DC 15.2 C
Devils Canyon Watershed

Observed Concentrations
*Value shown at zero if below detection limit

- Quarter 1 (Jan-Mar)
- Quarter 2 (Apr-Jun)
- Quarter 3 (Jul-Sep)
- Quarter 4 (Oct-Dec)



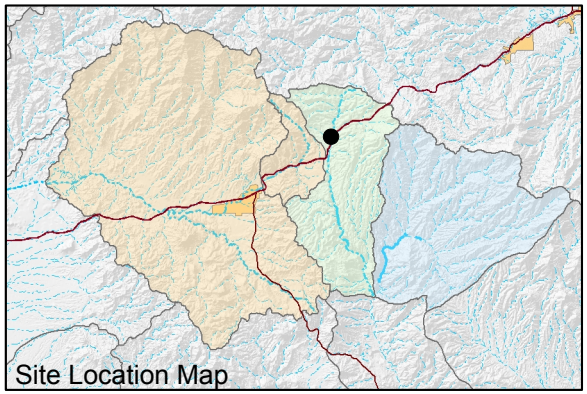
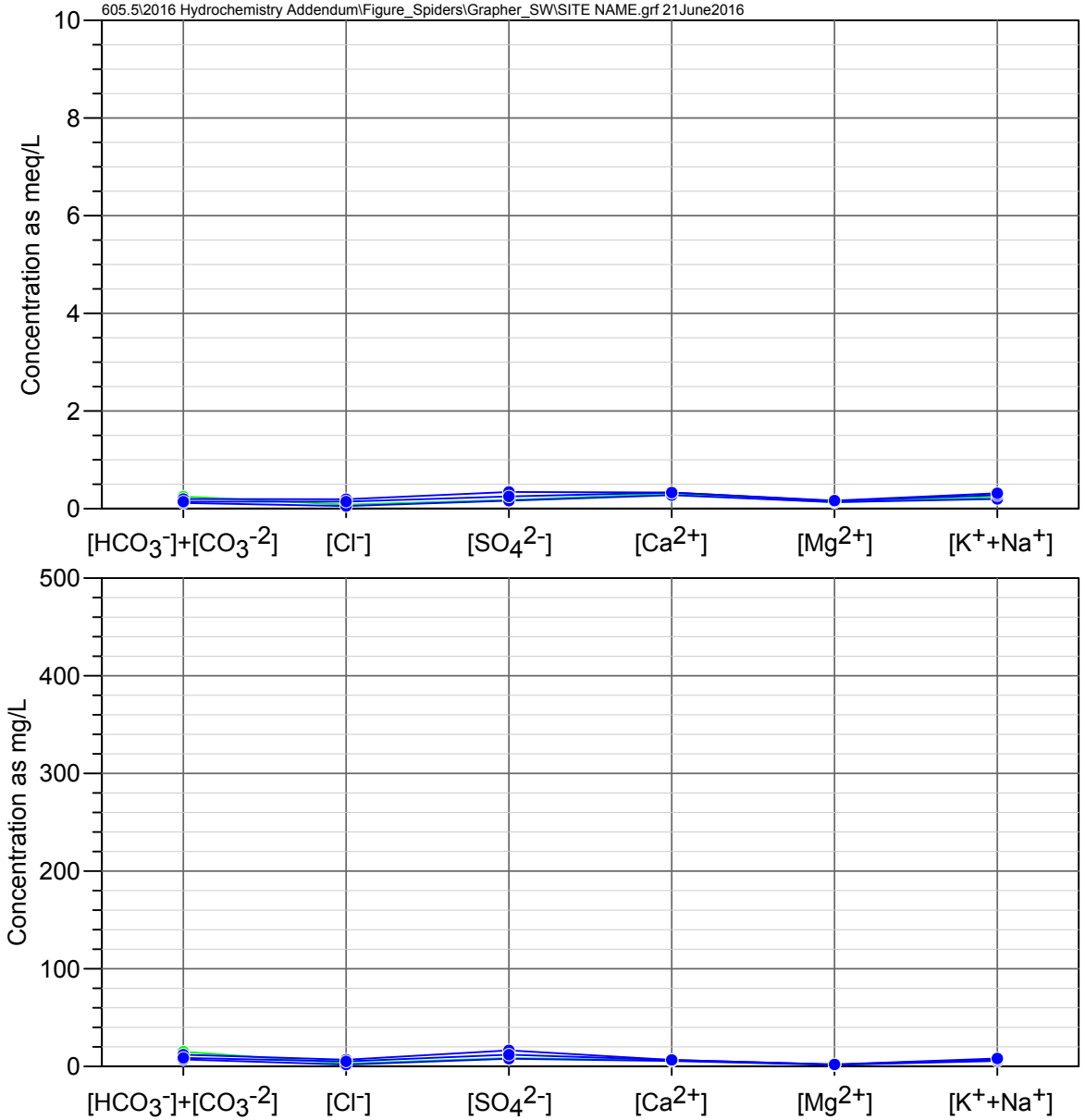


FIGURE D-15. MAJOR ION CHEMISTRY BY QUARTER FOR DC 15.2 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES

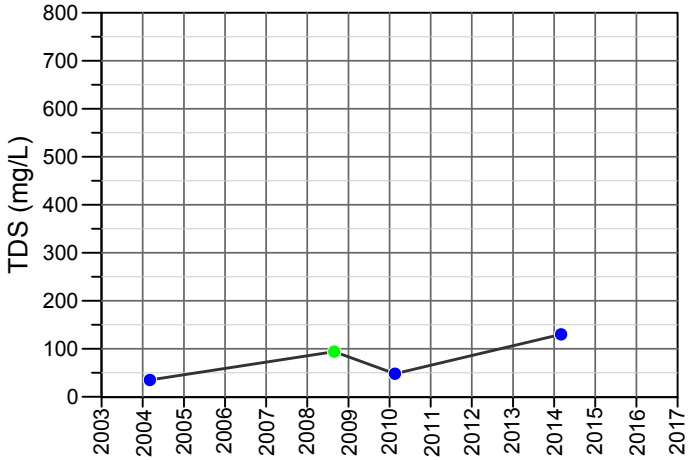
605.5\2016 Hydrochemistry Addendum\Figure_Spiders\Grapher_SW\SITE NAME.grf 21June2016



DC 14.7 C
Devils Canyon Watershed

Observed Concentrations
*Value shown at zero if below detection limit

- Quarter 1 (Jan-Mar)
- Quarter 2 (Apr-Jun)
- Quarter 3 (Jul-Sep)
- Quarter 4 (Oct-Dec)



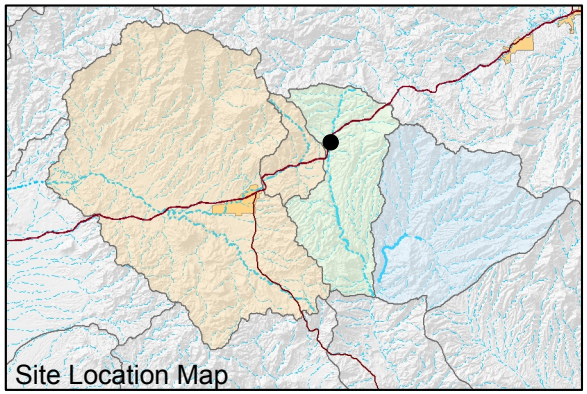
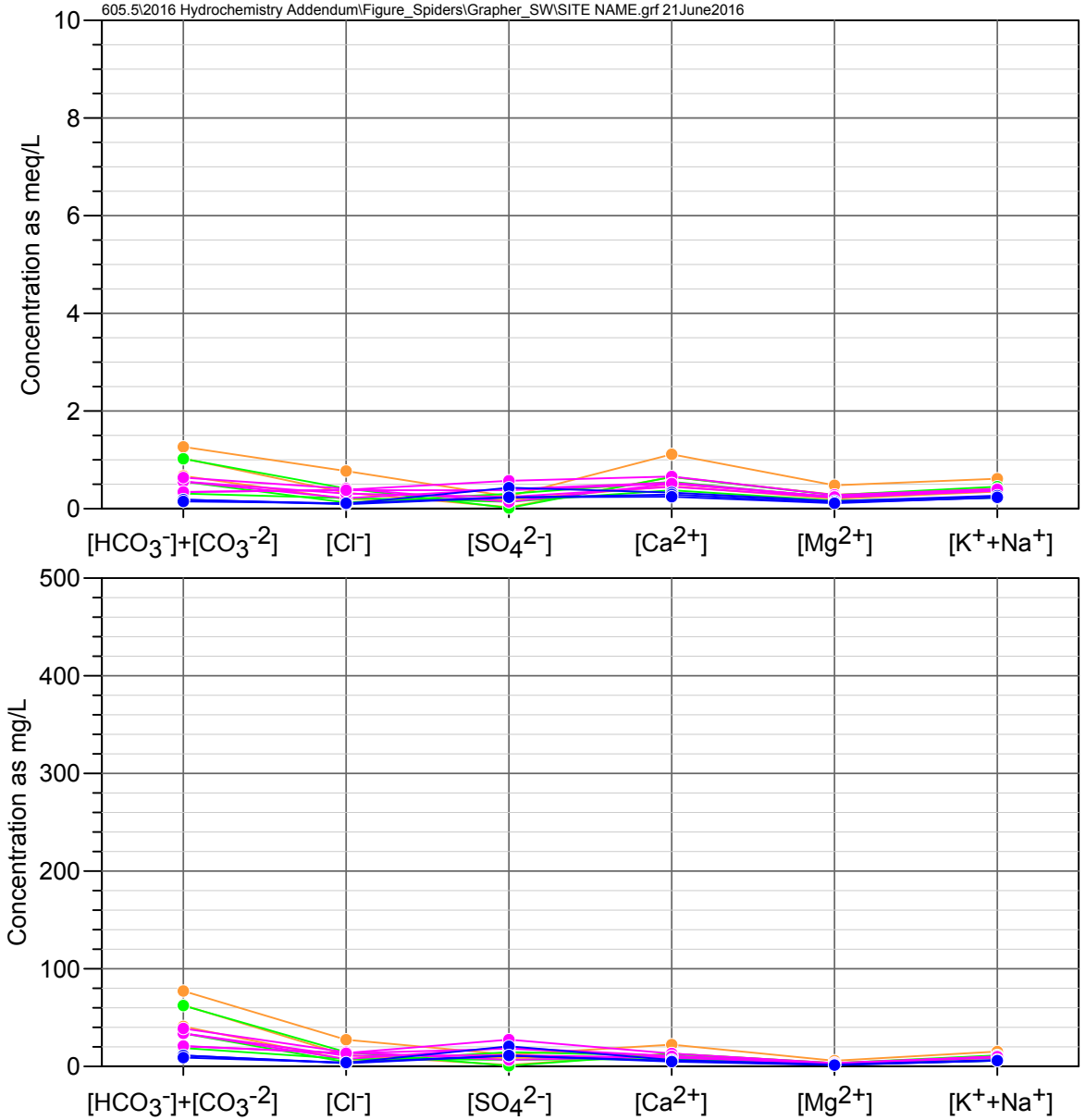


FIGURE D-16. MAJOR ION CHEMISTRY BY QUARTER FOR DC 14.7 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES

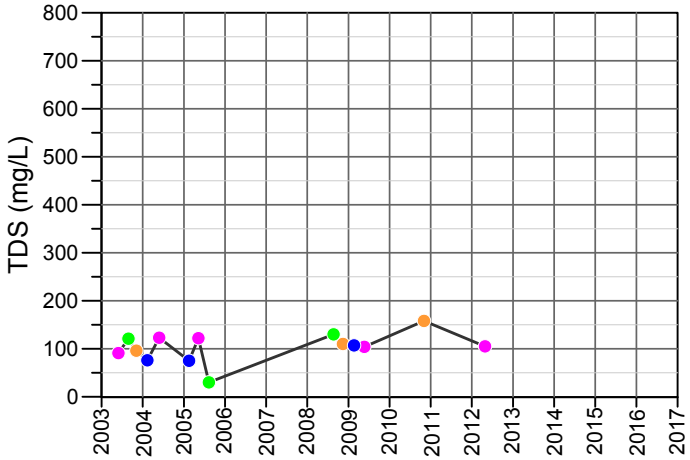
605.5\2016 Hydrochemistry Addendum\Figure_Spiders\Grapher_SW\SITE NAME.grf 21June2016



DC 13.5 C
Devils Canyon Watershed

Observed Concentrations
*Value shown at zero if below detection limit

- Quarter 1 (Jan-Mar)
- Quarter 2 (Apr-Jun)
- Quarter 3 (Jul-Sep)
- Quarter 4 (Oct-Dec)



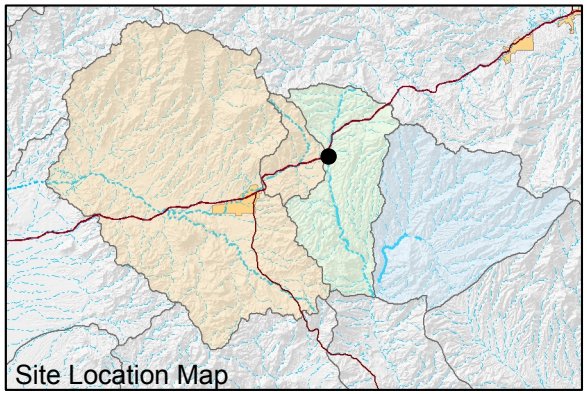
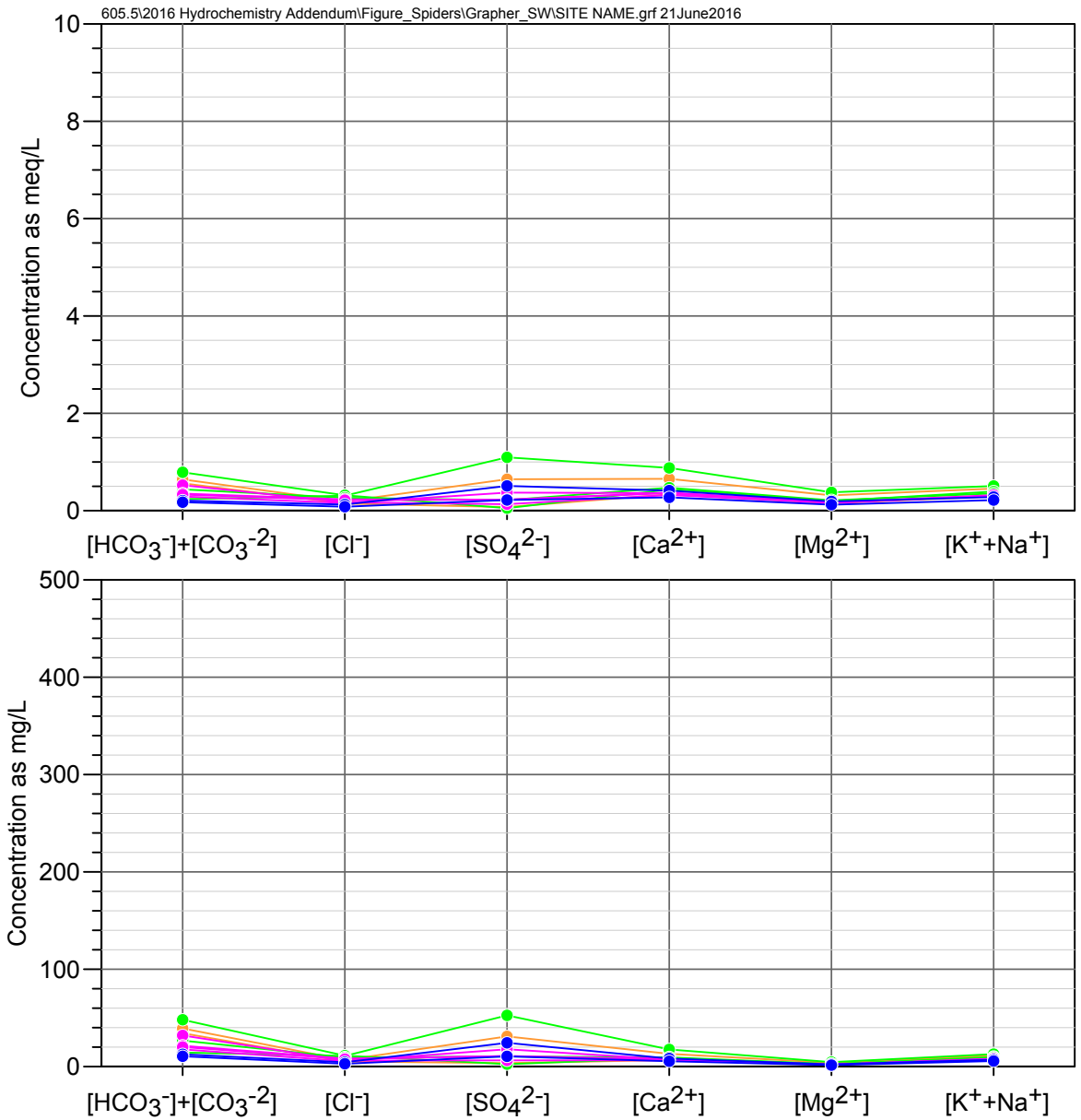


FIGURE D-17. MAJOR ION CHEMISTRY BY QUARTER FOR DC 13.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

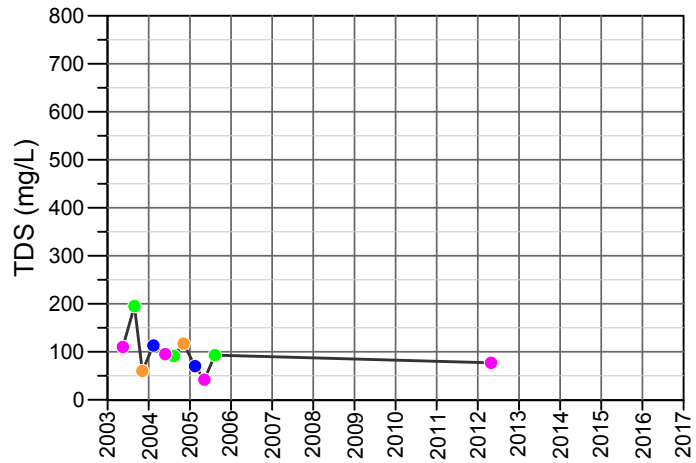
MONTGOMERY & ASSOCIATES



DC 10.9 C
Devils Canyon Watershed

Observed Concentrations
*Value shown at zero if below detection limit

Quarter 1 (Jan-Mar)
Quarter 2 (Apr-Jun)
Quarter 3 (Jul-Sep)
Quarter 4 (Oct-Dec)



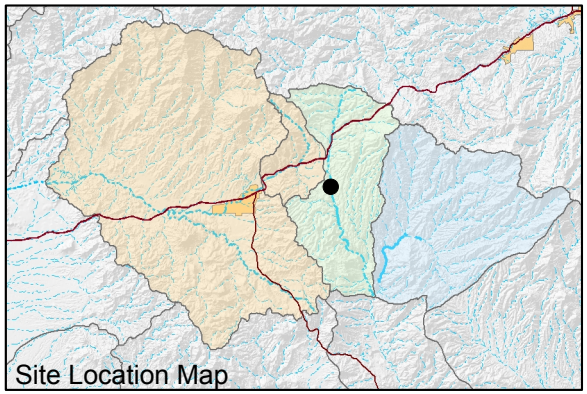
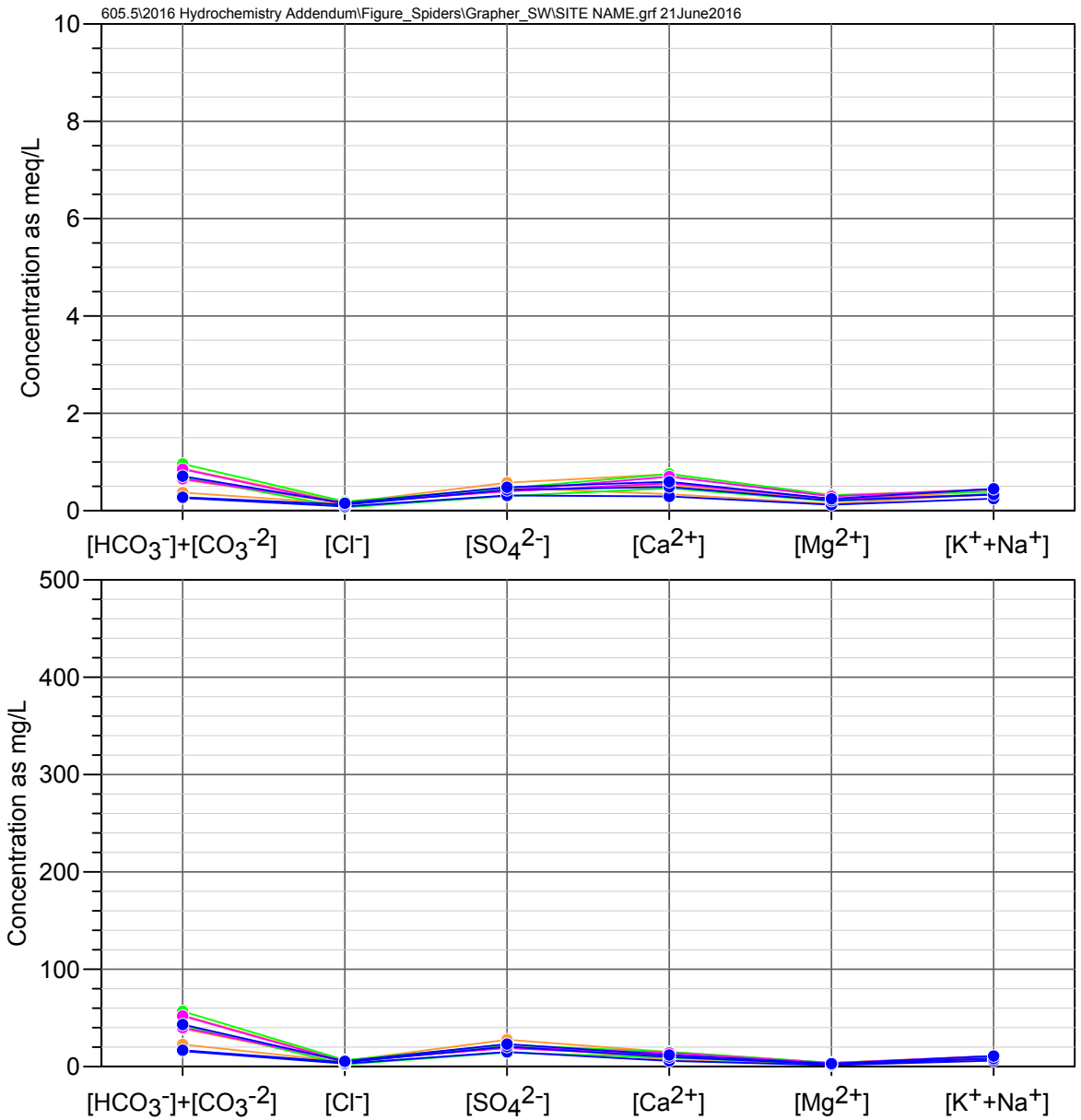


FIGURE D-18. MAJOR ION CHEMISTRY BY QUARTER FOR DC 10.9 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

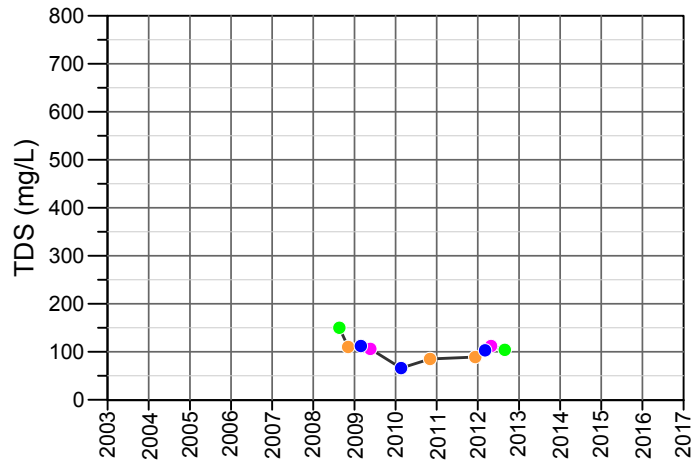
MONTGOMERY & ASSOCIATES



RR 1.5 C
Devils Canyon Watershed

Observed Concentrations
*Value shown at zero if below detection limit

Quarter 1 (Jan-Mar)
Quarter 2 (Apr-Jun)
Quarter 3 (Jul-Sep)
Quarter 4 (Oct-Dec)



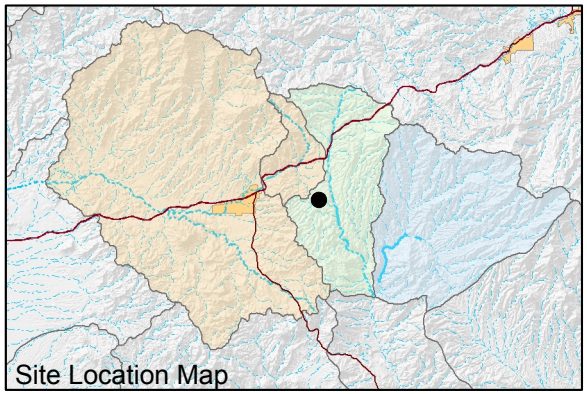


FIGURE D-19. MAJOR ION CHEMISTRY BY QUARTER FOR RR 1.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES

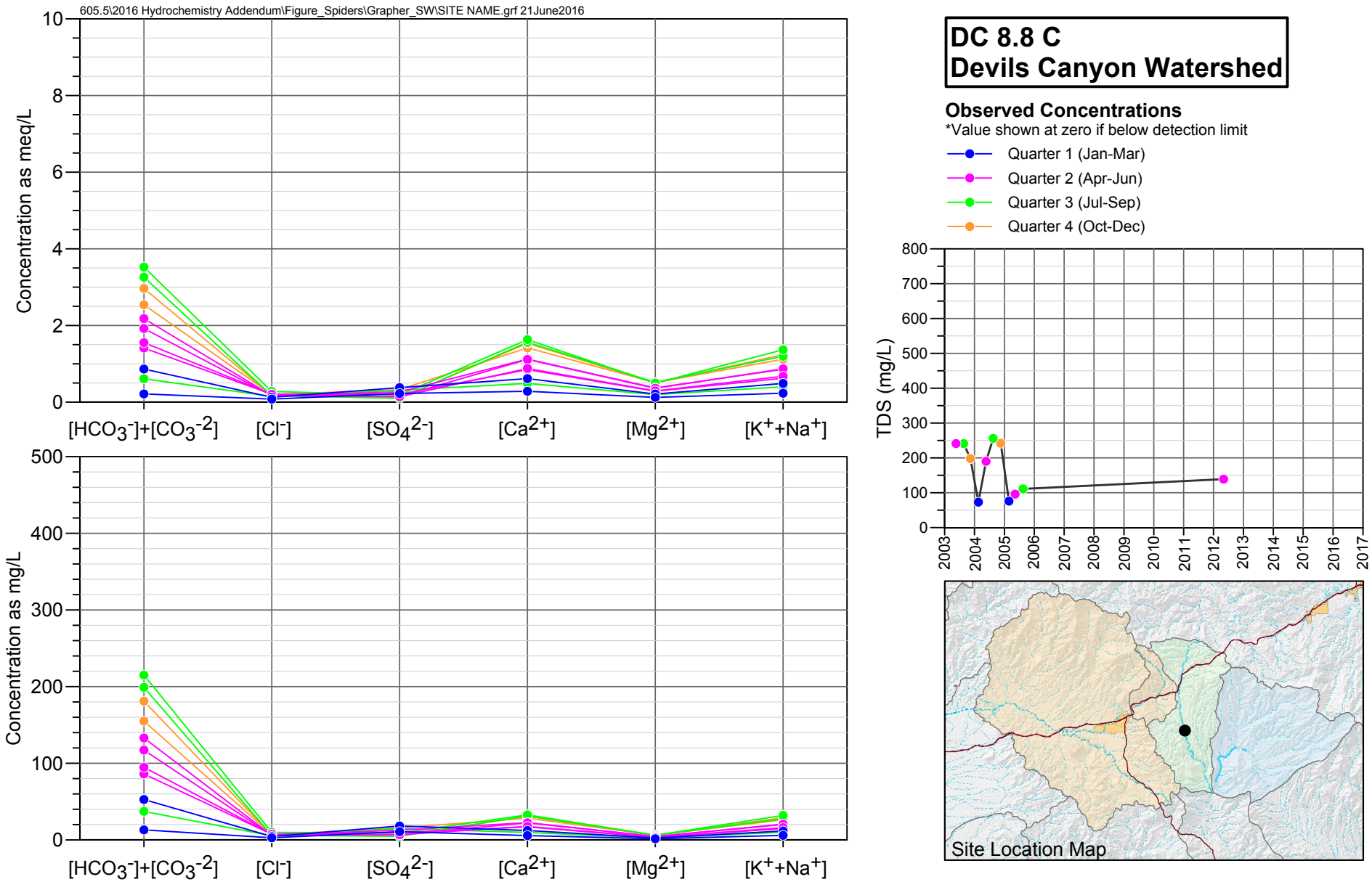
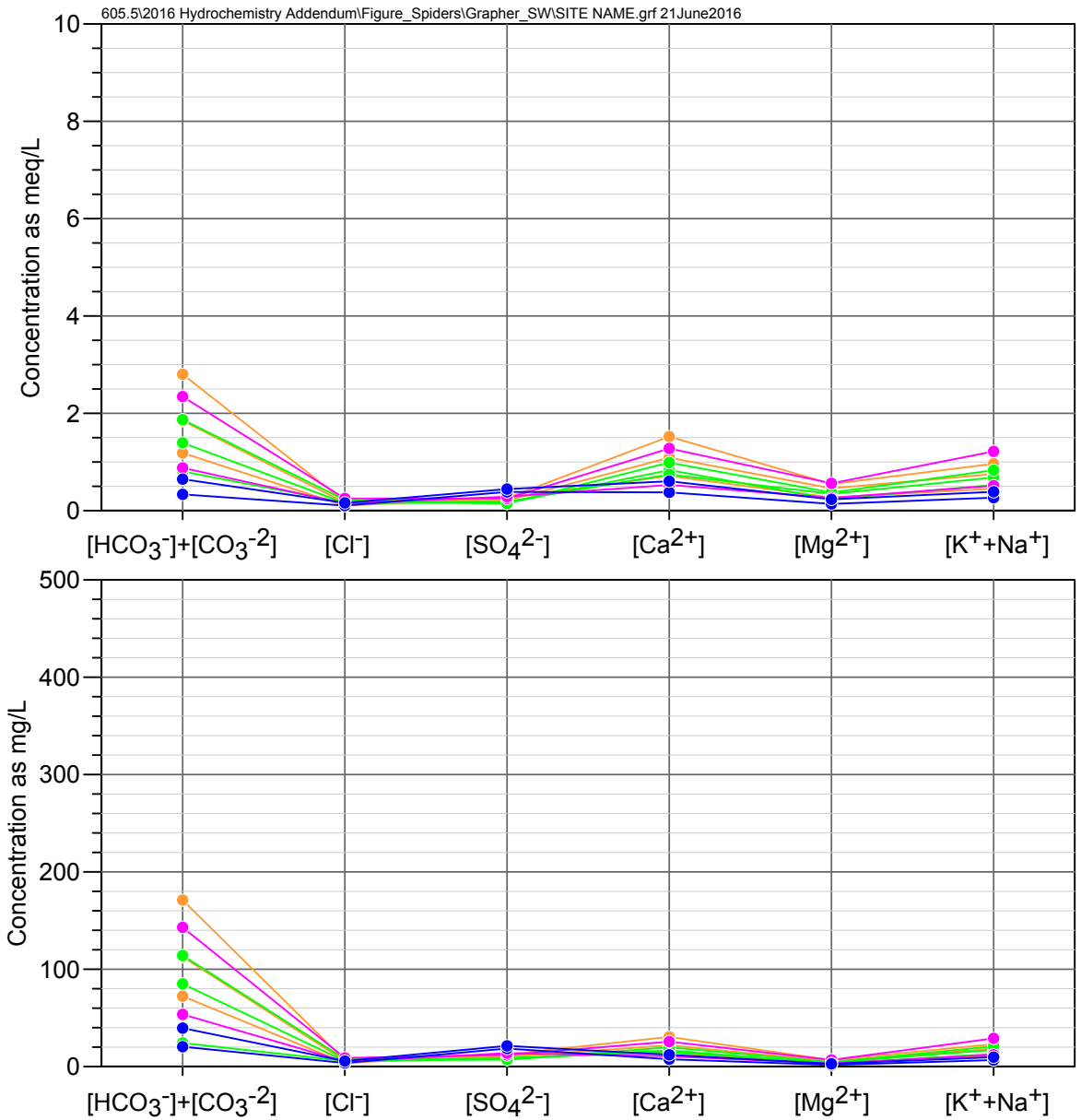


FIGURE D-20. MAJOR ION CHEMISTRY BY QUARTER FOR DC 8.8 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

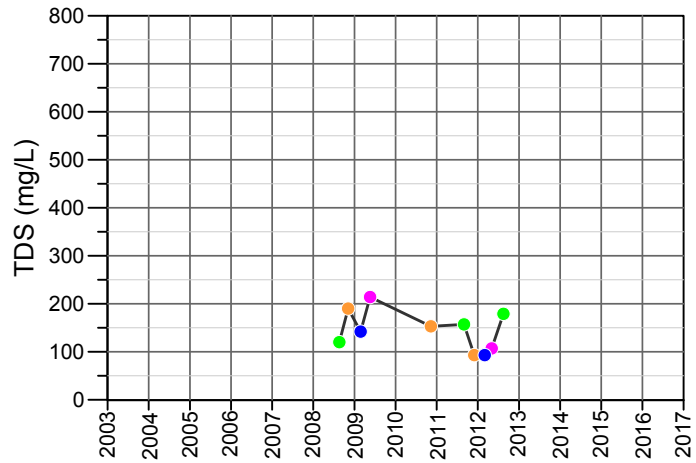
MONTGOMERY & ASSOCIATES



H 0.1 C
Devils Canyon Watershed

Observed Concentrations
*Value shown at zero if below detection limit

- Quarter 1 (Jan-Mar)
- Quarter 2 (Apr-Jun)
- Quarter 3 (Jul-Sep)
- Quarter 4 (Oct-Dec)



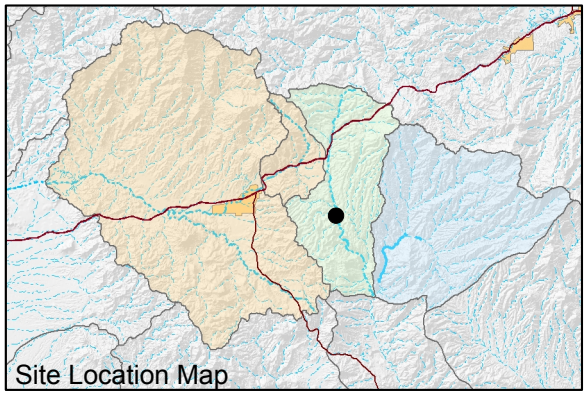
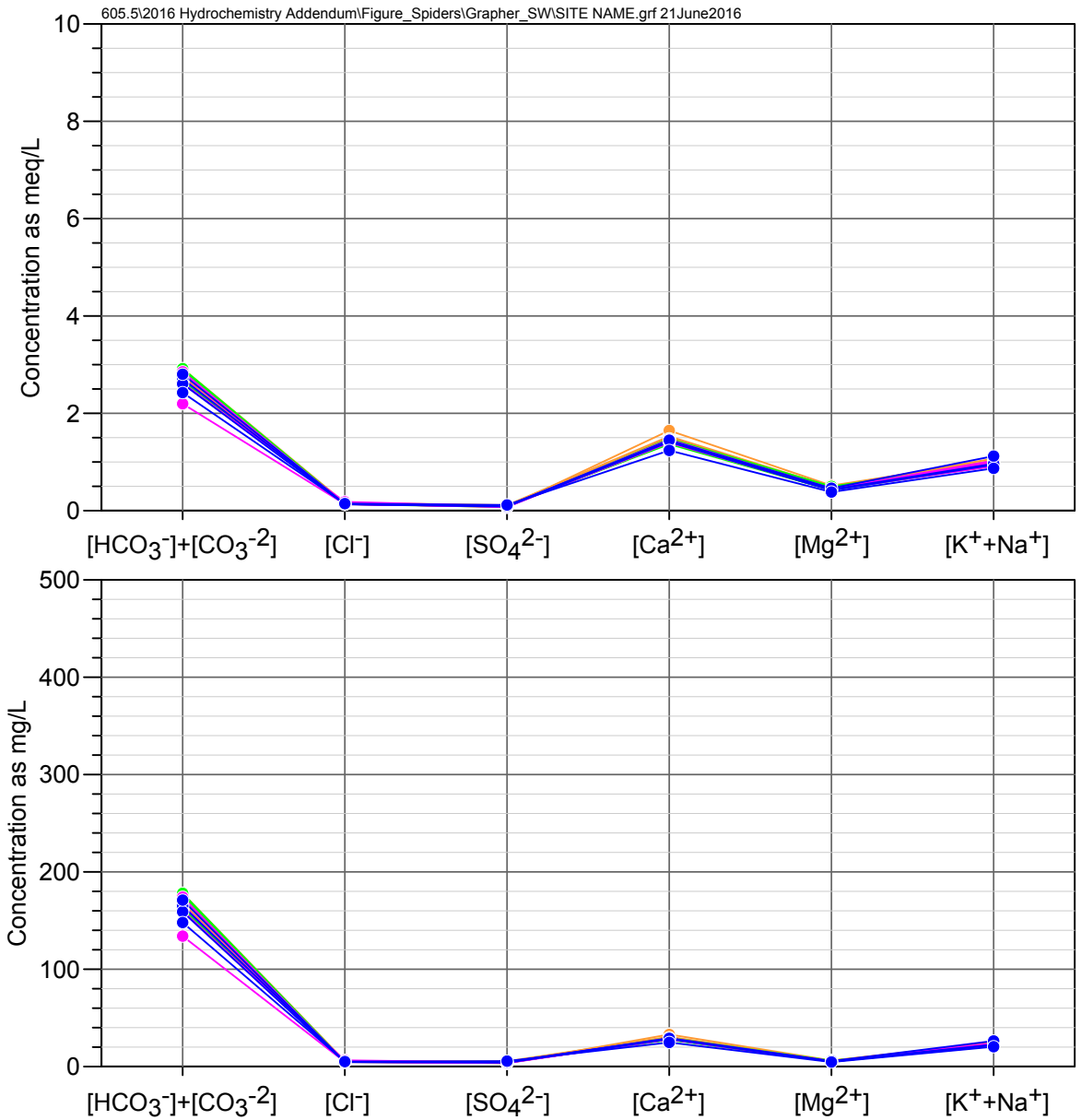


FIGURE D-21. MAJOR ION CHEMISTRY BY QUARTER FOR H 0.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

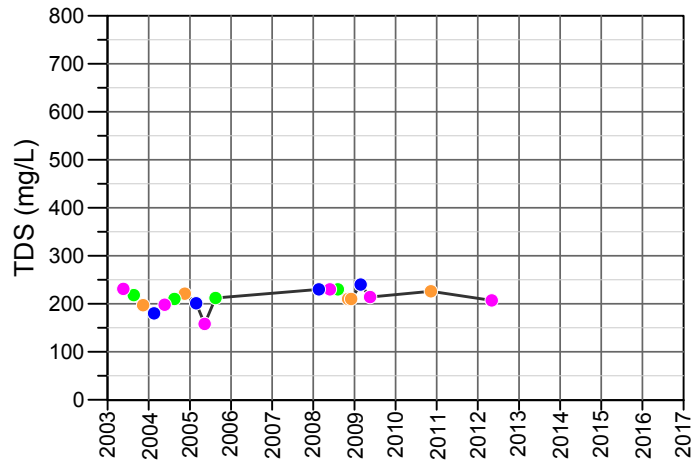
MONTGOMERY & ASSOCIATES



DC 8.2 W
Devils Canyon Watershed

Observed Concentrations
*Value shown at zero if below detection limit

Quarter 1 (Jan-Mar)
Quarter 2 (Apr-Jun)
Quarter 3 (Jul-Sep)
Quarter 4 (Oct-Dec)



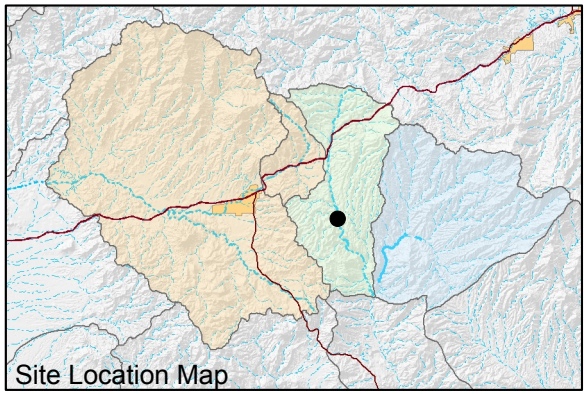
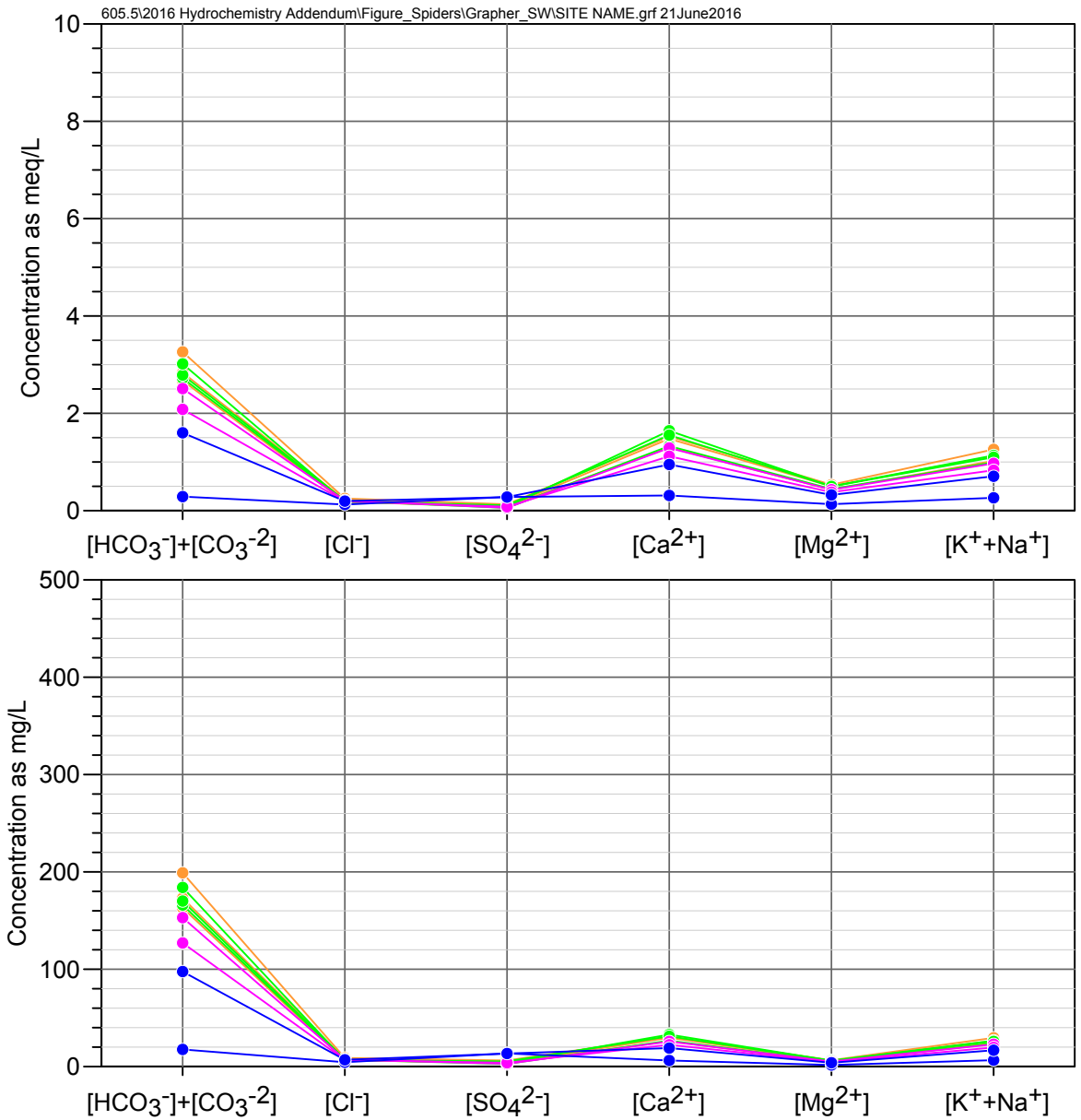


FIGURE D-22. MAJOR ION CHEMISTRY BY QUARTER FOR DC 8.2 W, DEVILS CANYON WATERSHED

Resolution Copper Mining

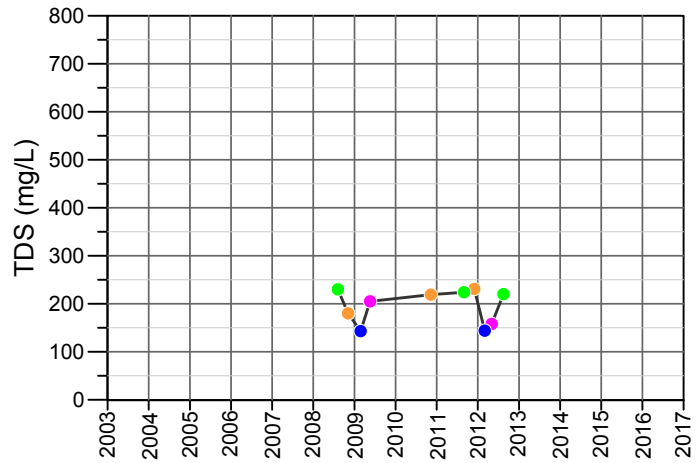
MONTGOMERY & ASSOCIATES



DC 8.1 C
Devils Canyon Watershed

Observed Concentrations
*Value shown at zero if below detection limit

- Quarter 1 (Jan-Mar)
- Quarter 2 (Apr-Jun)
- Quarter 3 (Jul-Sep)
- Quarter 4 (Oct-Dec)



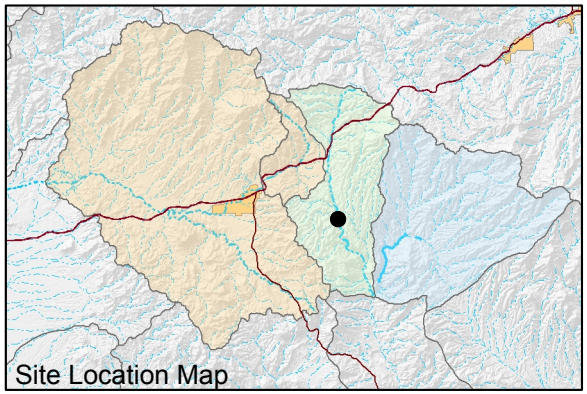
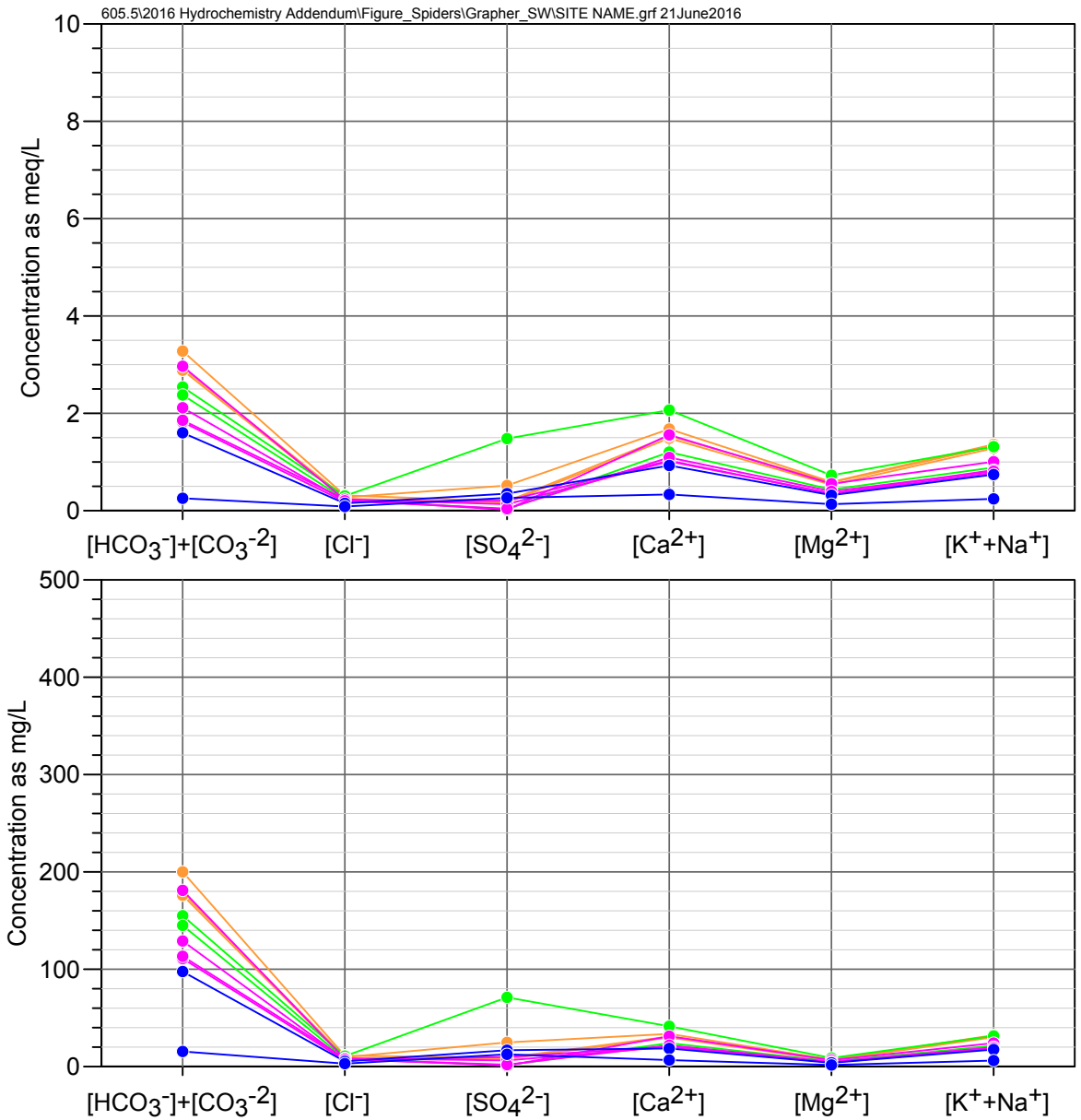


FIGURE D-23. MAJOR ION CHEMISTRY BY QUARTER FOR DC 8.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

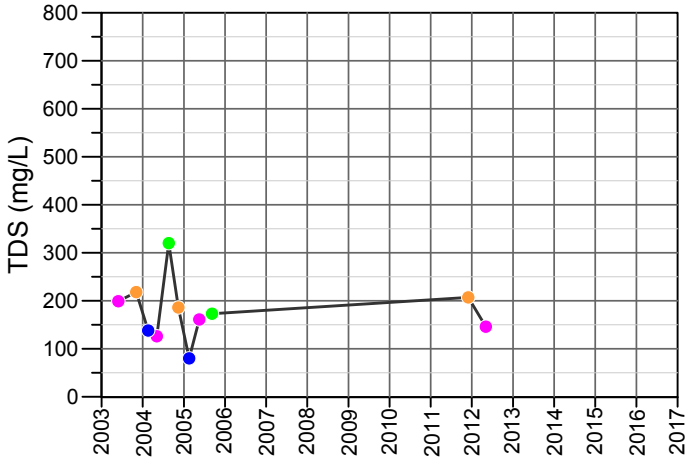
MONTGOMERY & ASSOCIATES



DC 7.1 C
Devils Canyon Watershed

Observed Concentrations
*Value shown at zero if below detection limit

- Quarter 1 (Jan-Mar)
- Quarter 2 (Apr-Jun)
- Quarter 3 (Jul-Sep)
- Quarter 4 (Oct-Dec)



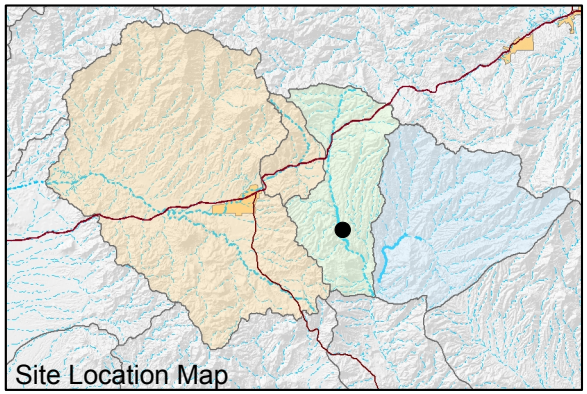
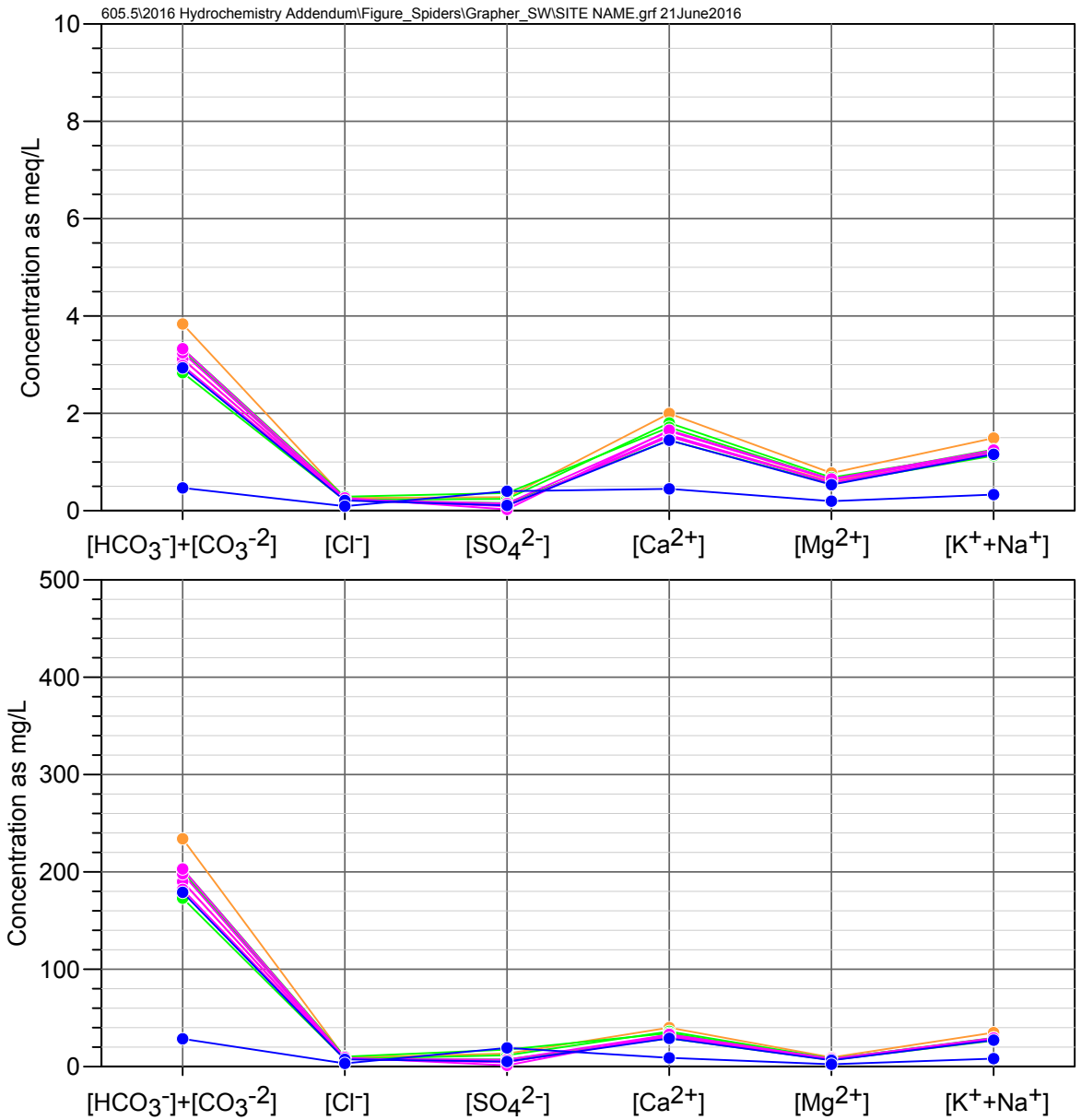


FIGURE D-24. MAJOR ION CHEMISTRY BY QUARTER FOR DC 7.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

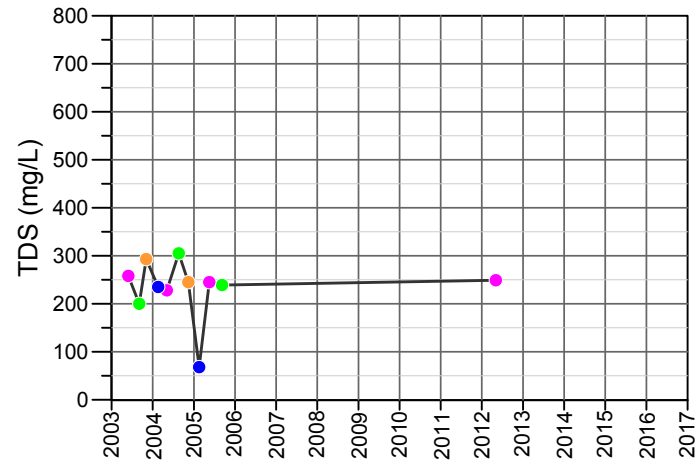
MONTGOMERY & ASSOCIATES



DC 6.6 W (DCT 6.6 W)
Devils Canyon Watershed

Observed Concentrations
*Value shown at zero if below detection limit

- Quarter 1 (Jan-Mar)
- Quarter 2 (Apr-Jun)
- Quarter 3 (Jul-Sep)
- Quarter 4 (Oct-Dec)



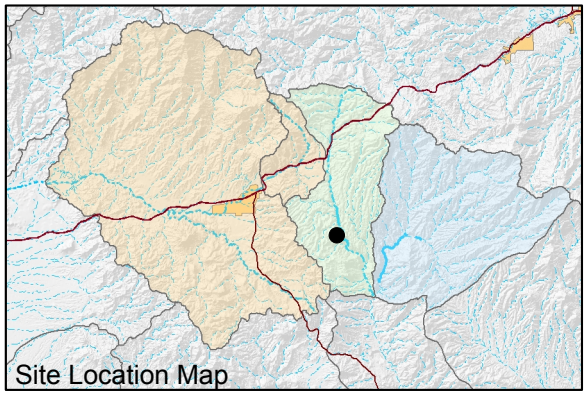
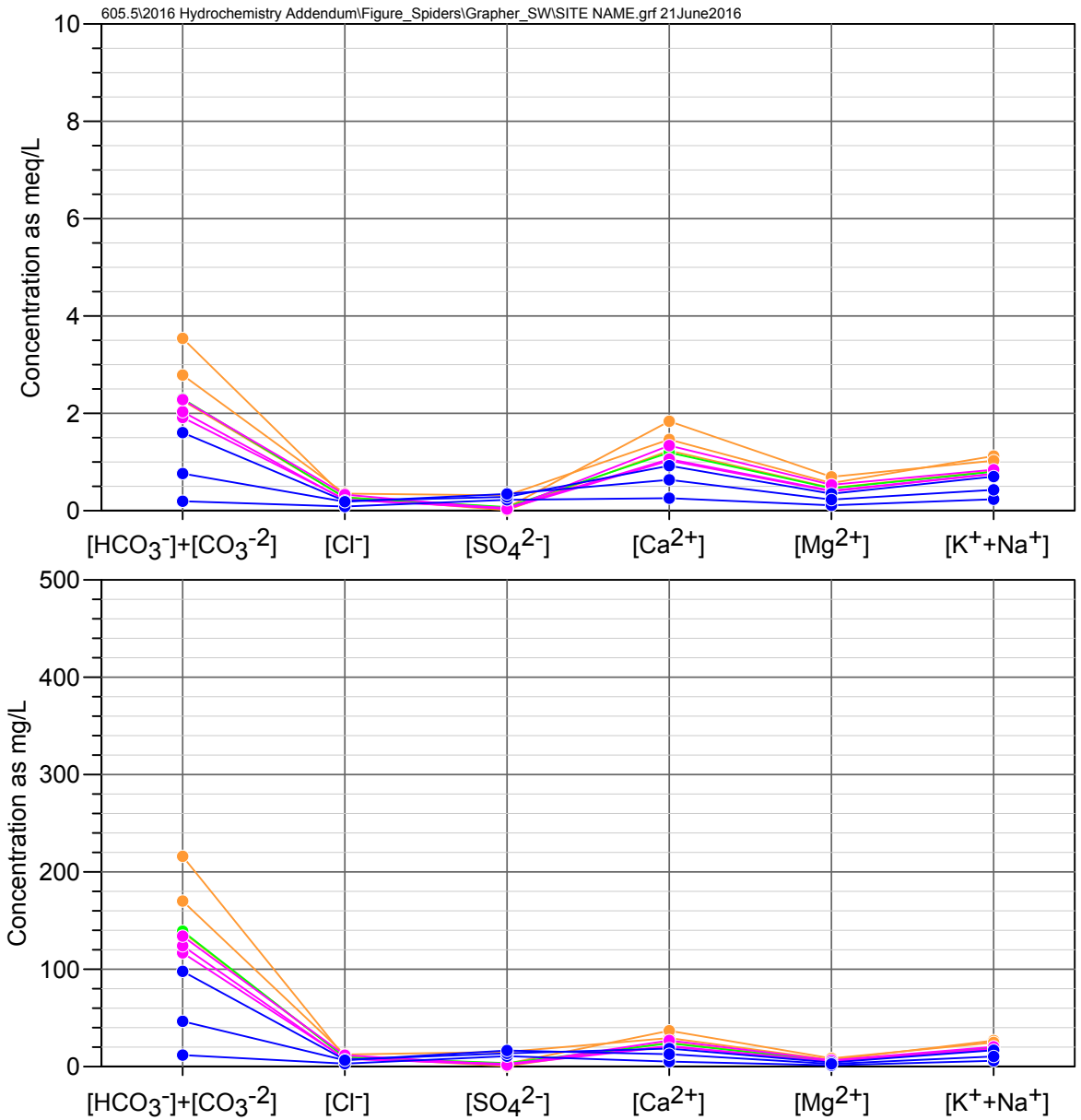


FIGURE D-25. MAJOR ION CHEMISTRY BY QUARTER FOR DC 6.6 W (DCT 6.6 W), DEVILS CANYON WATERSHED

Resolution Copper Mining

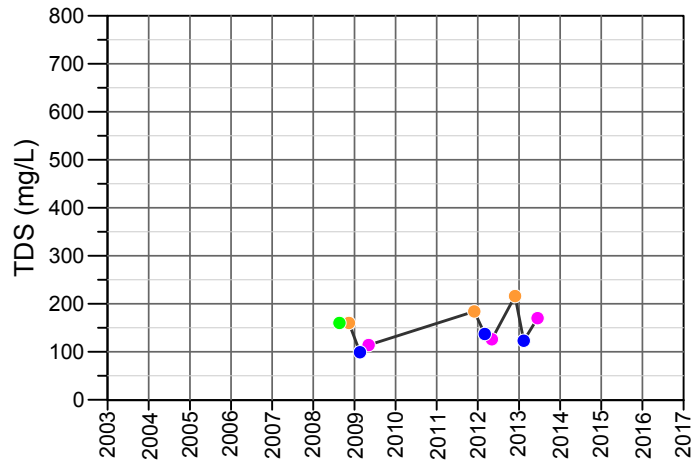
MONTGOMERY & ASSOCIATES



DC 6.14 C
Devils Canyon Watershed

Observed Concentrations
*Value shown at zero if below detection limit

Quarter 1 (Jan-Mar)
Quarter 2 (Apr-Jun)
Quarter 3 (Jul-Sep)
Quarter 4 (Oct-Dec)



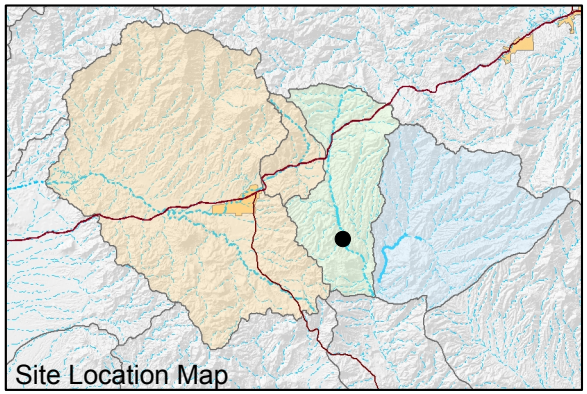
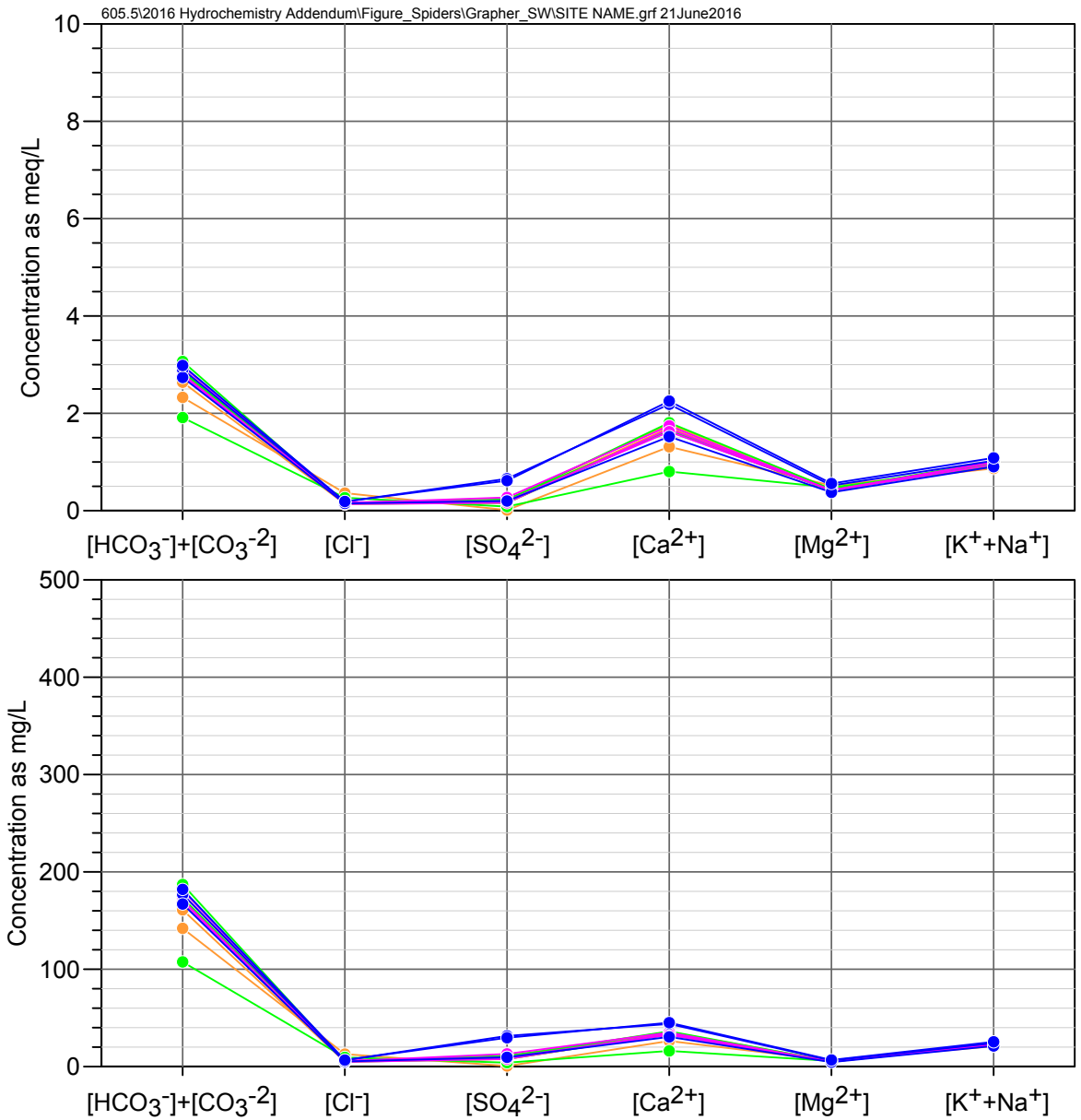


FIGURE D-26. MAJOR ION CHEMISTRY BY QUARTER FOR DC 6.14 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

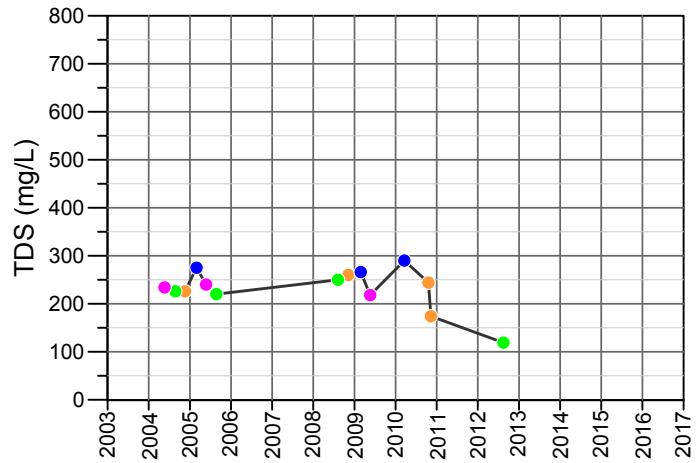
MONTGOMERY & ASSOCIATES



DC 6.1 E
Devils Canyon Watershed

Observed Concentrations
*Value shown at zero if below detection limit

Quarter 1 (Jan-Mar)
Quarter 2 (Apr-Jun)
Quarter 3 (Jul-Sep)
Quarter 4 (Oct-Dec)



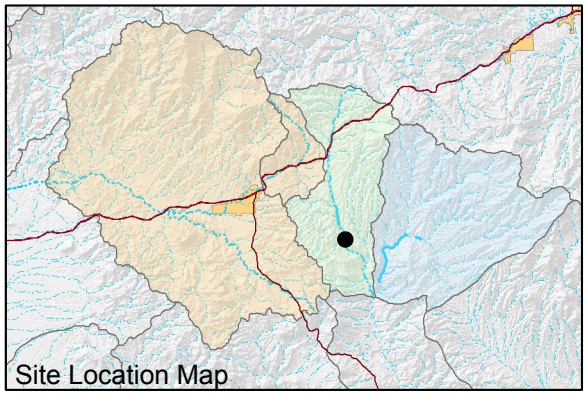
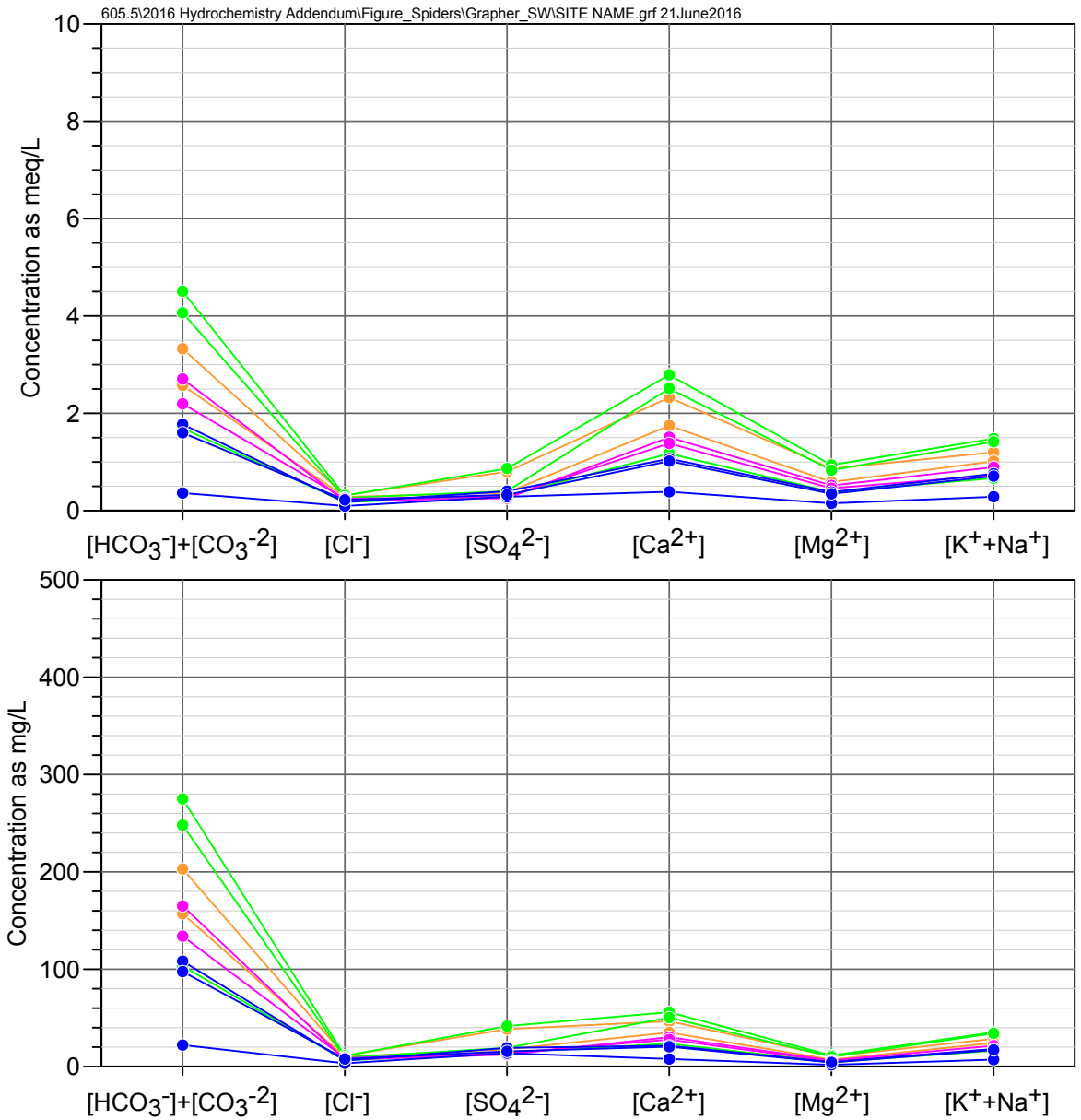


FIGURE D-27. MAJOR ION CHEMISTRY BY QUARTER FOR DC 6.1 E, DEVILS CANYON WATERSHED

Resolution Copper Mining

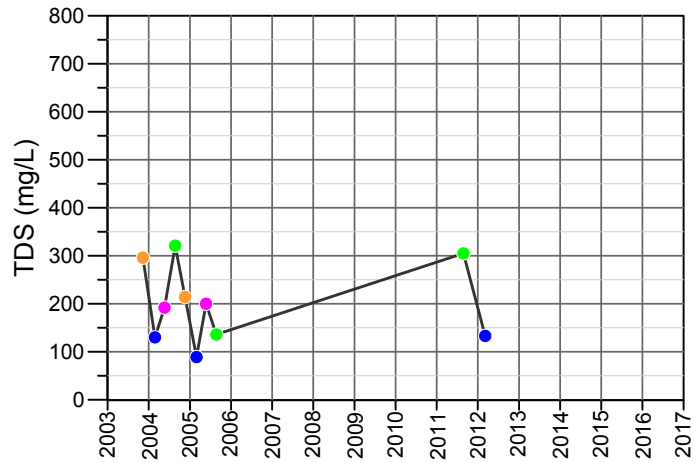
MONTGOMERY & ASSOCIATES



DC 5.5 C
Devils Canyon Watershed

Observed Concentrations
*Value shown at zero if below detection limit

- Quarter 1 (Jan-Mar)
- Quarter 2 (Apr-Jun)
- Quarter 3 (Jul-Sep)
- Quarter 4 (Oct-Dec)



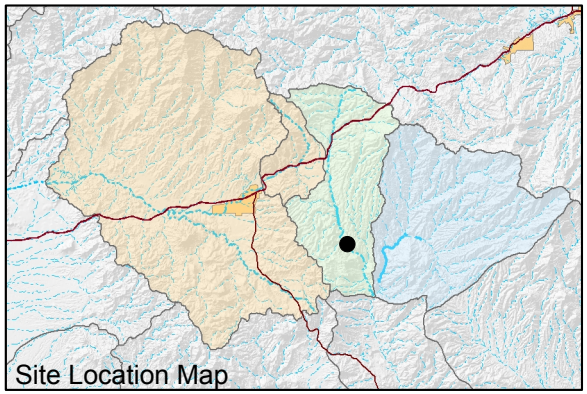
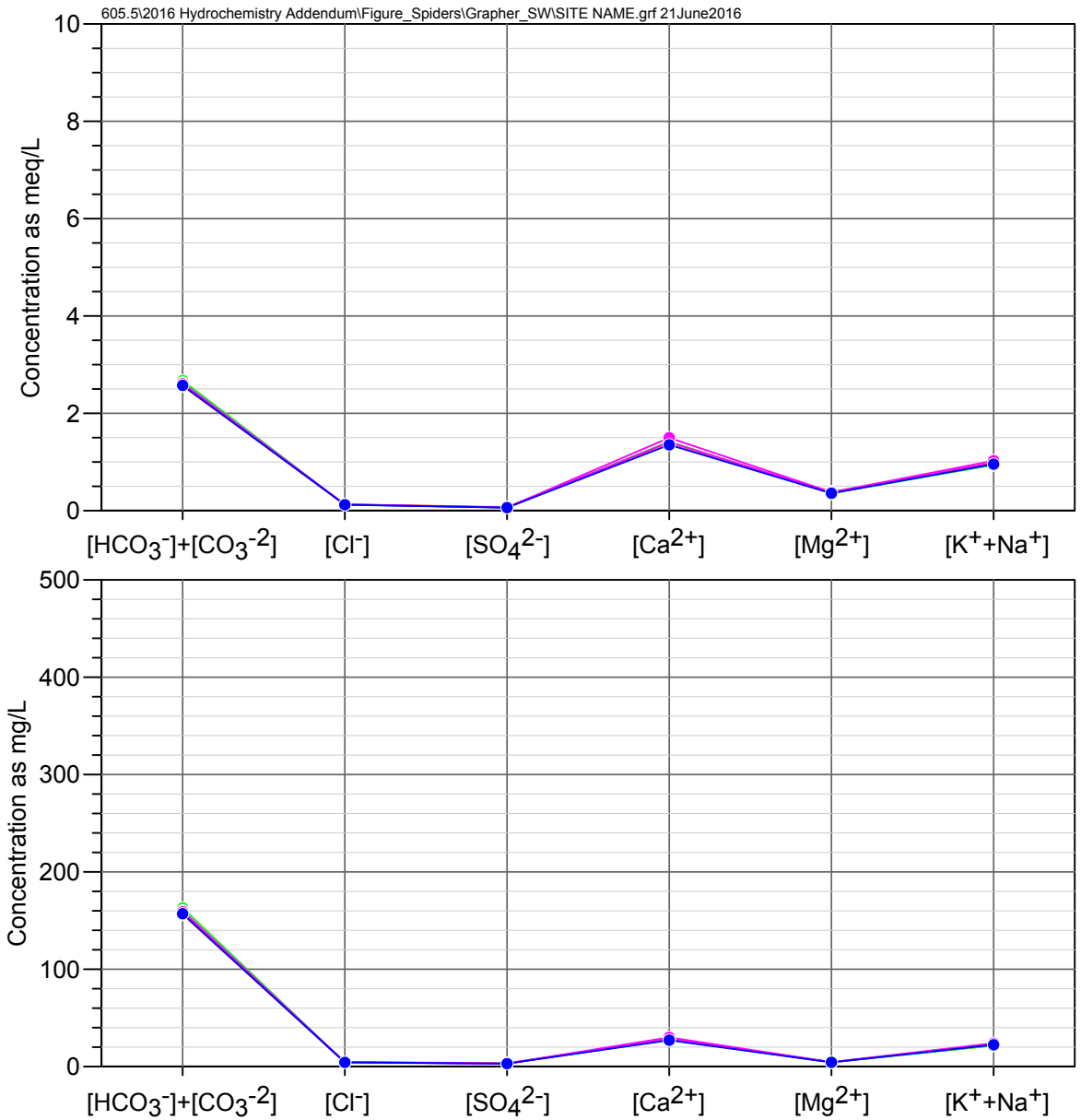


FIGURE D-28. MAJOR ION CHEMISTRY BY QUARTER FOR DC 5.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

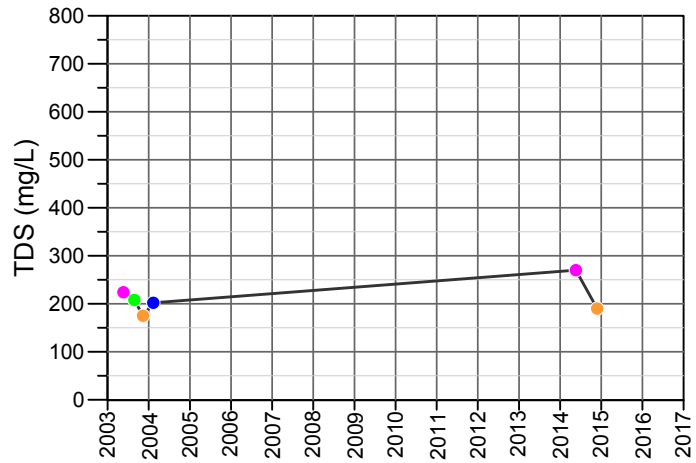
MONTGOMERY & ASSOCIATES



DC 4.1 E
Devils Canyon Watershed

Observed Concentrations
*Value shown at zero if below detection limit

Quarter 1 (Jan-Mar)
Quarter 2 (Apr-Jun)
Quarter 3 (Jul-Sep)
Quarter 4 (Oct-Dec)



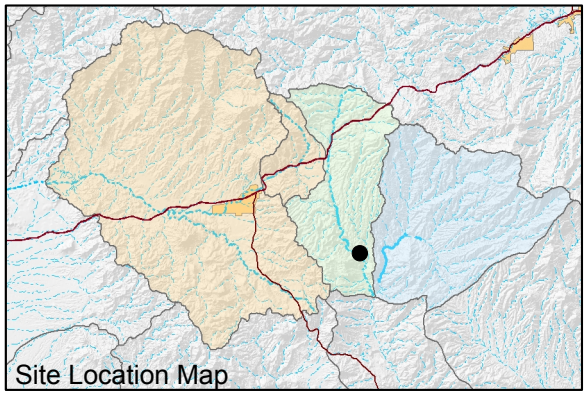


FIGURE D-29. MAJOR ION CHEMISTRY BY QUARTER FOR DC 4.1 E, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES

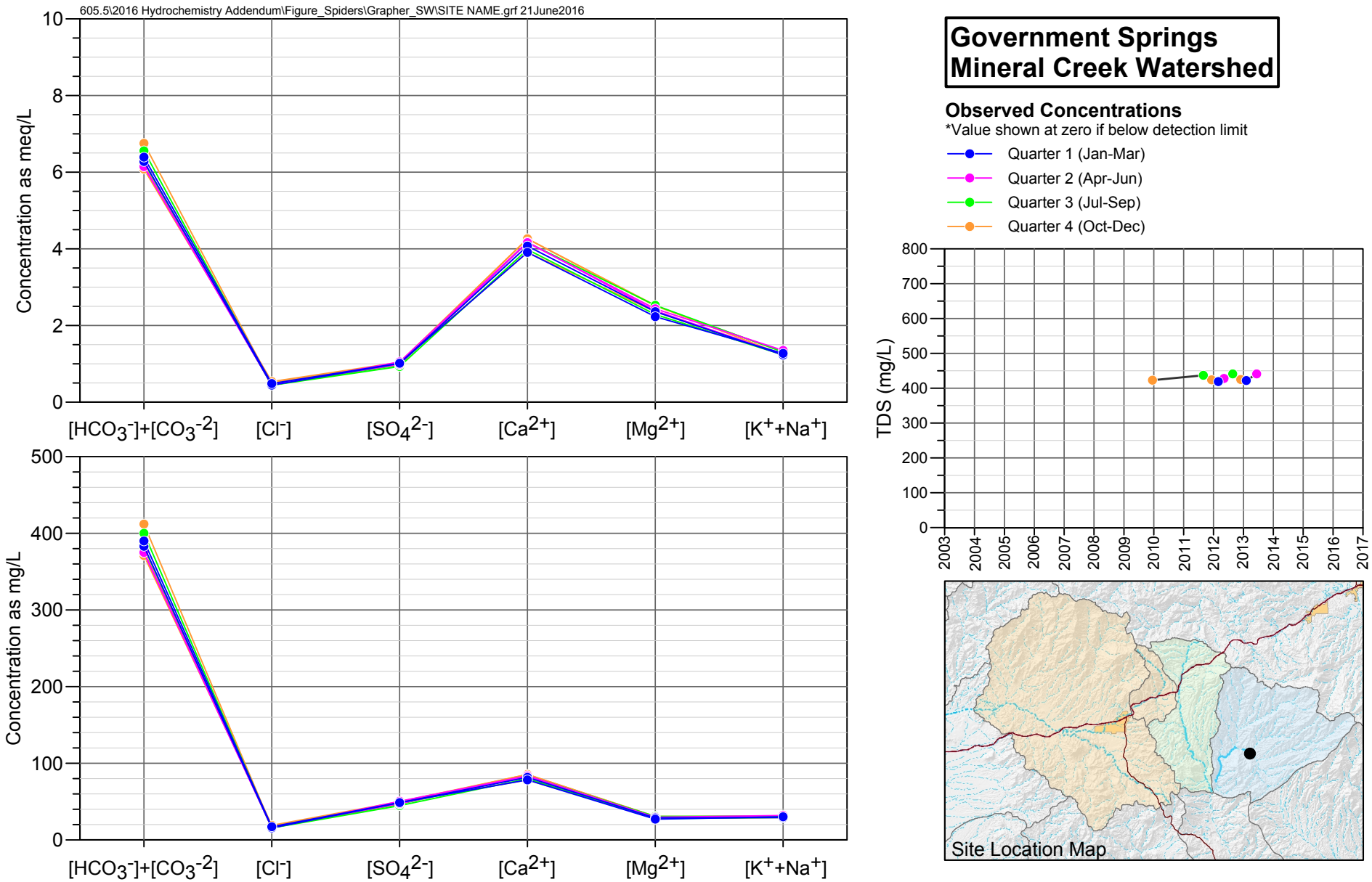
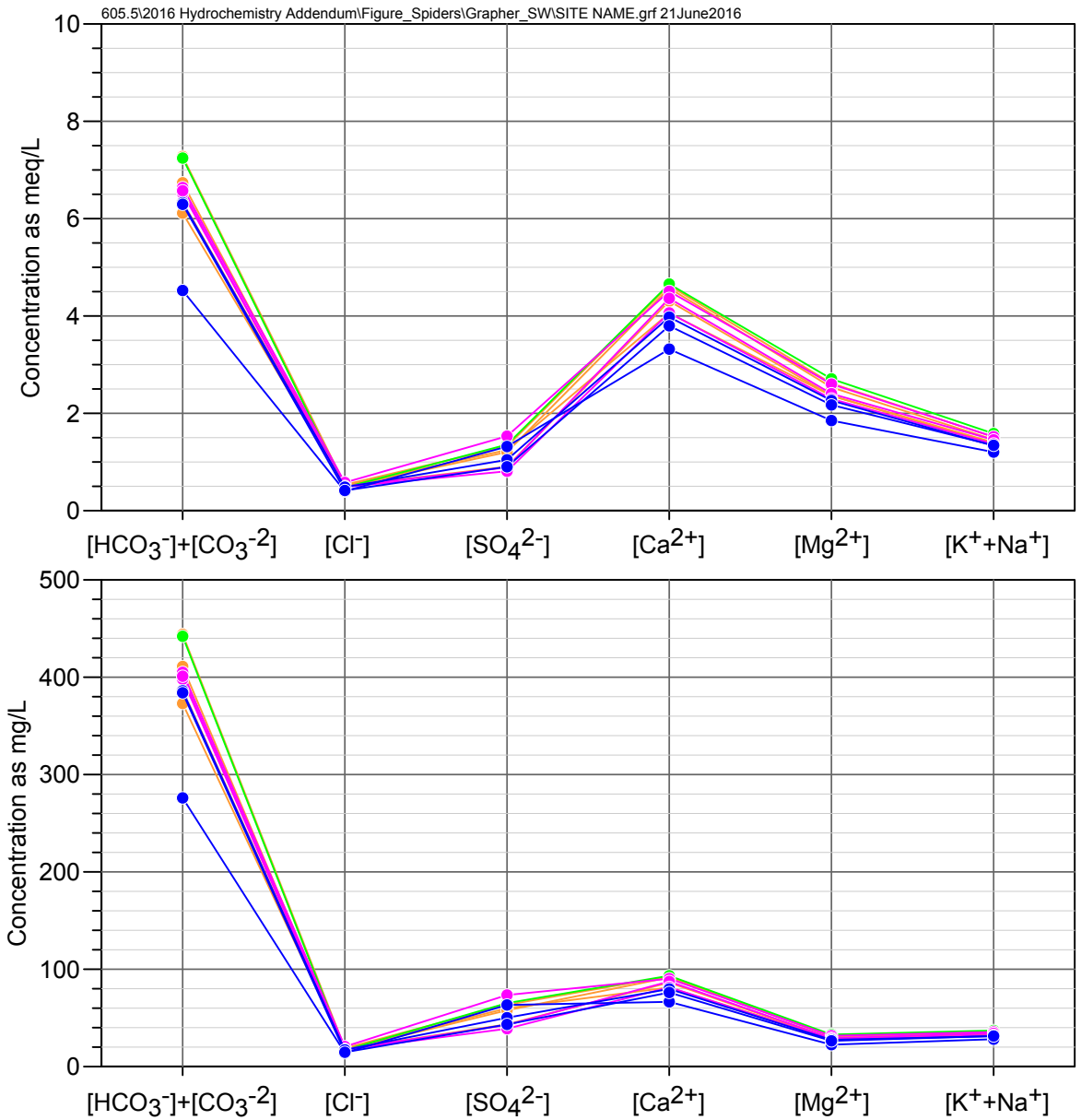


FIGURE D-30. MAJOR ION CHEMISTRY BY QUARTER FOR GOVERNMENT SPRINGS, MINERAL CREEK WATERSHED

Resolution Copper Mining

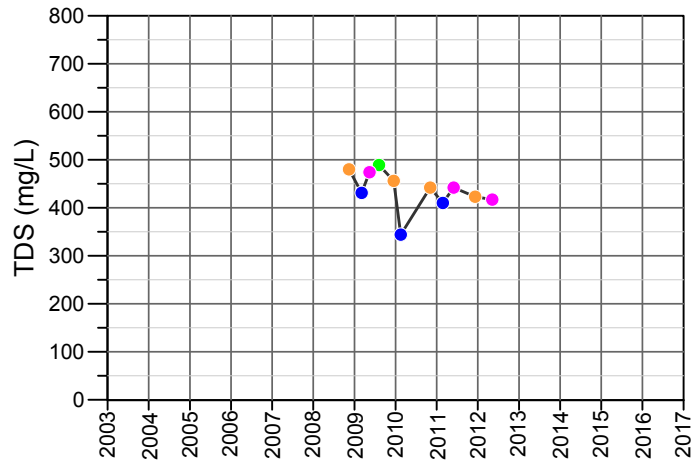
MONTGOMERY & ASSOCIATES



MC 8.4 C
Mineral Creek Watershed

Observed Concentrations
*Value shown at zero if below detection limit

Quarter 1 (Jan-Mar)
Quarter 2 (Apr-Jun)
Quarter 3 (Jul-Sep)
Quarter 4 (Oct-Dec)



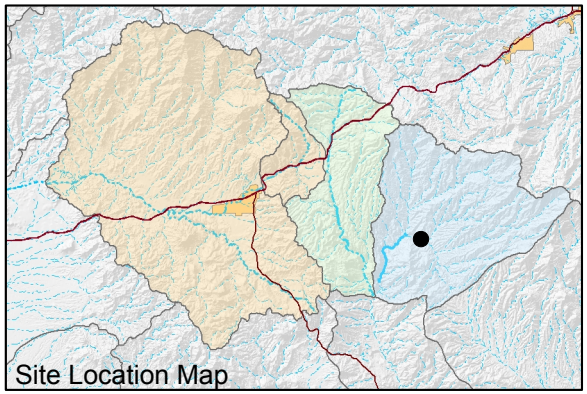
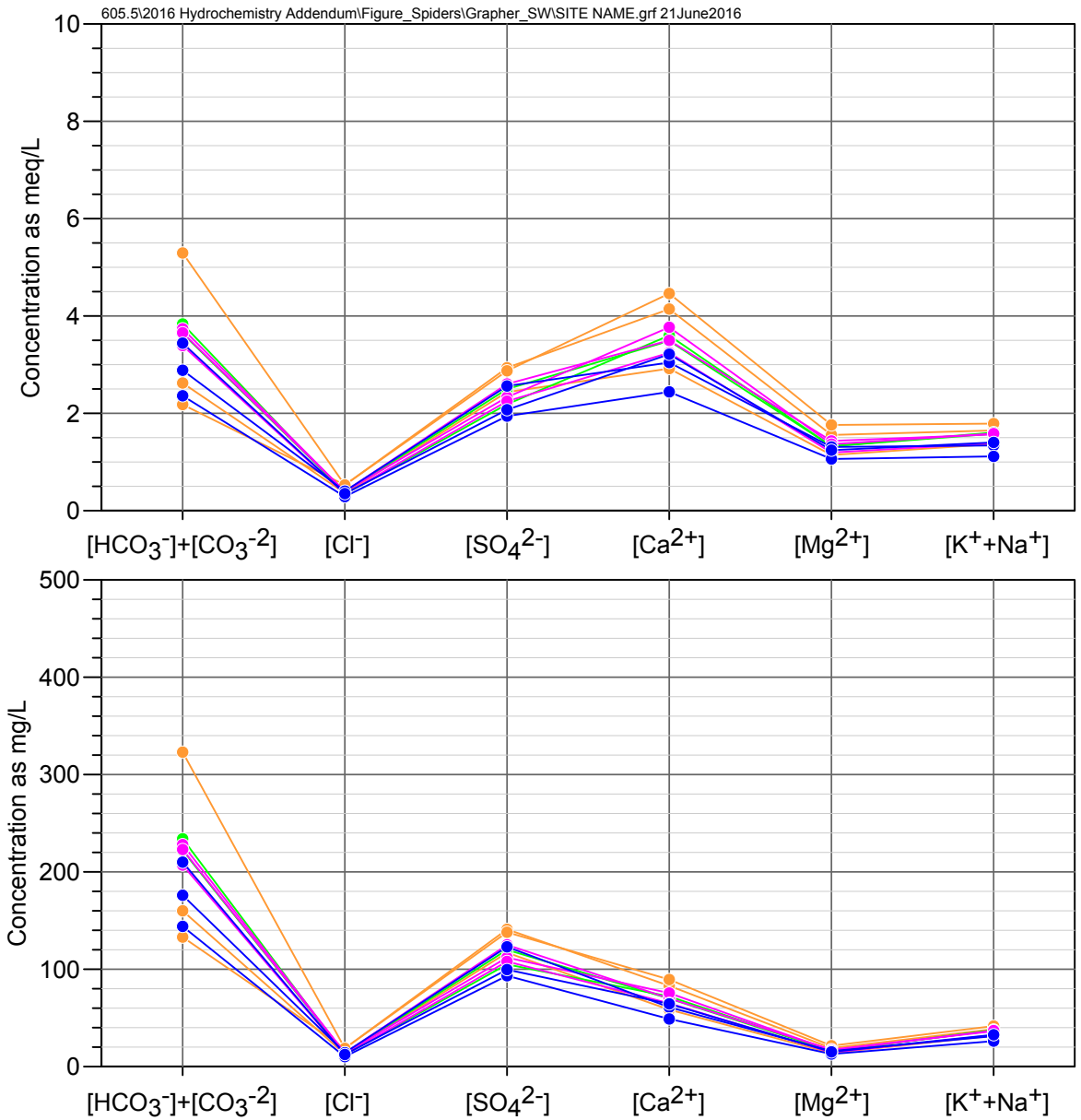


FIGURE D-31. MAJOR ION CHEMISTRY BY QUARTER FOR MC 8.4 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

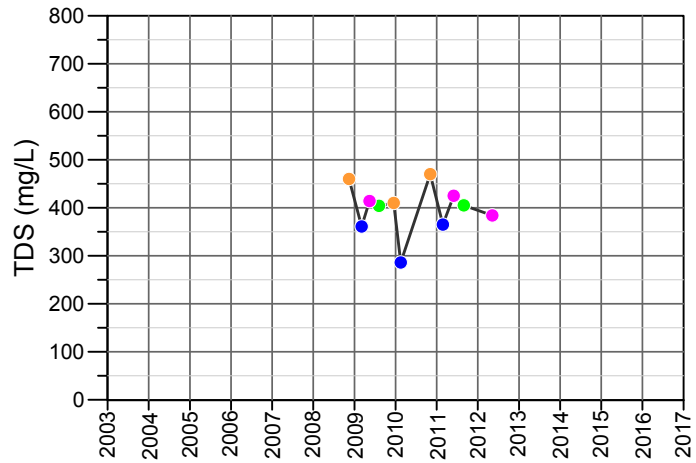
MONTGOMERY & ASSOCIATES



LF 0.2 C
Mineral Creek Watershed

Observed Concentrations
*Value shown at zero if below detection limit

- Quarter 1 (Jan-Mar)
- Quarter 2 (Apr-Jun)
- Quarter 3 (Jul-Sep)
- Quarter 4 (Oct-Dec)



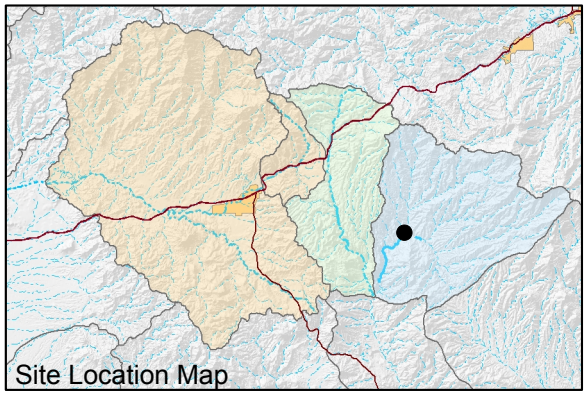
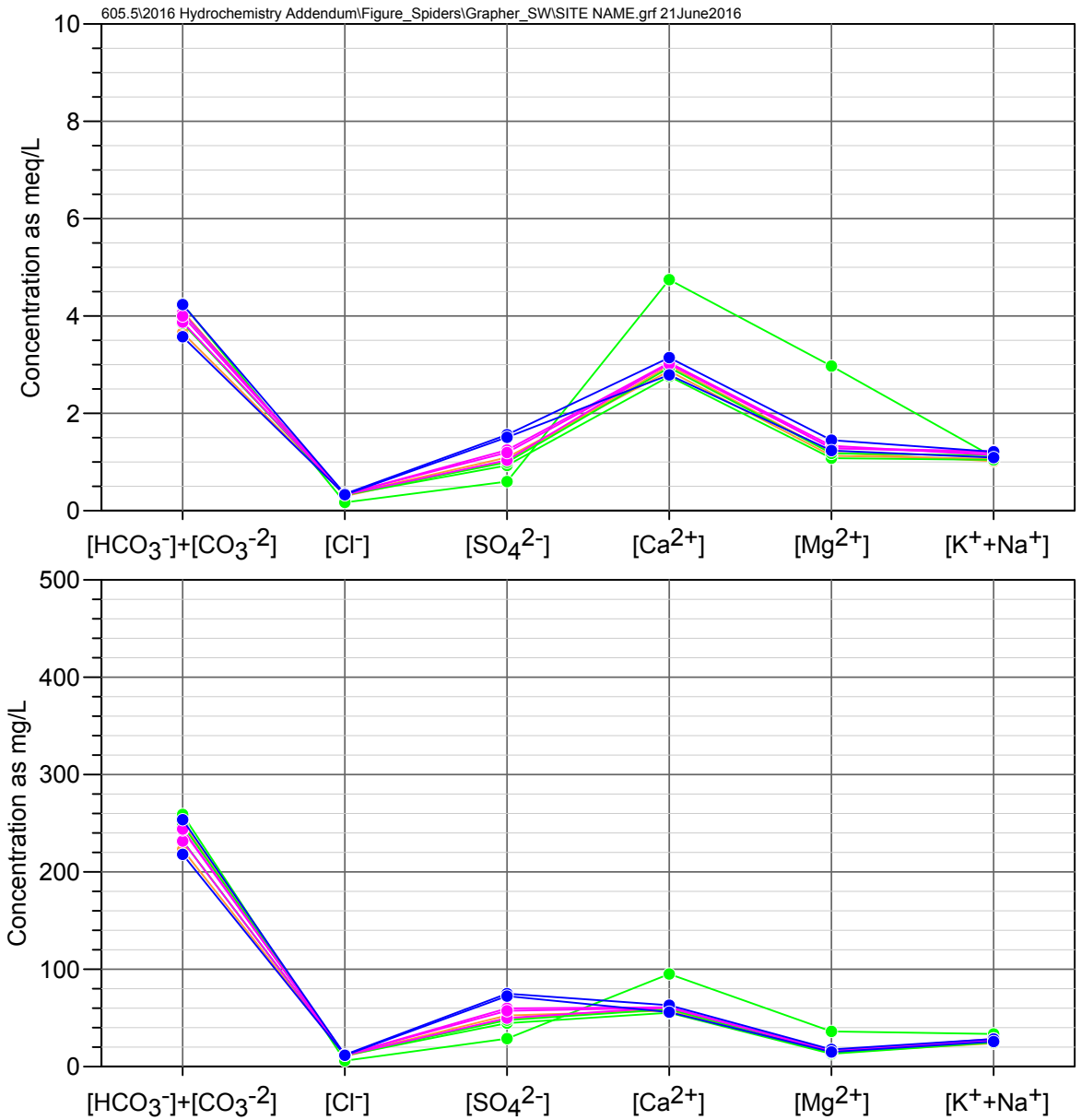


FIGURE D-32. MAJOR ION CHEMISTRY BY QUARTER FOR LF 0.2 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

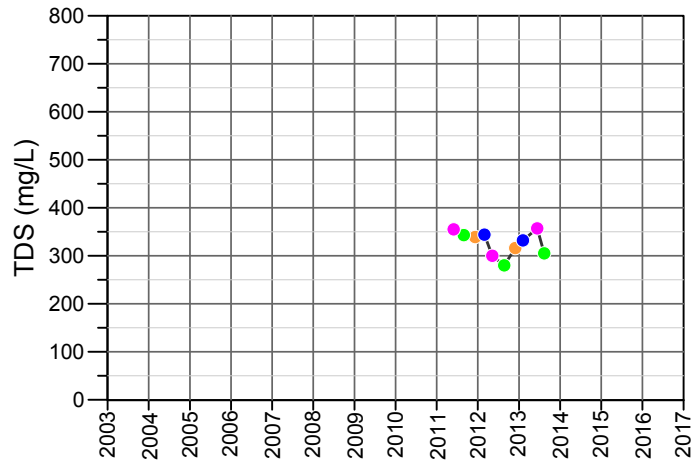
MONTGOMERY & ASSOCIATES



MC 5.2 C
Mineral Creek Watershed

Observed Concentrations
*Value shown at zero if below detection limit

Quarter 1 (Jan-Mar)
Quarter 2 (Apr-Jun)
Quarter 3 (Jul-Sep)
Quarter 4 (Oct-Dec)



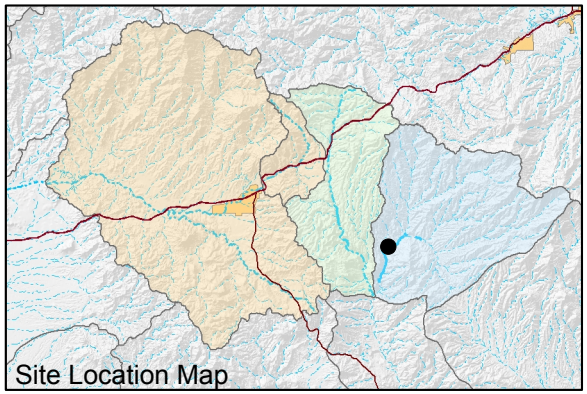
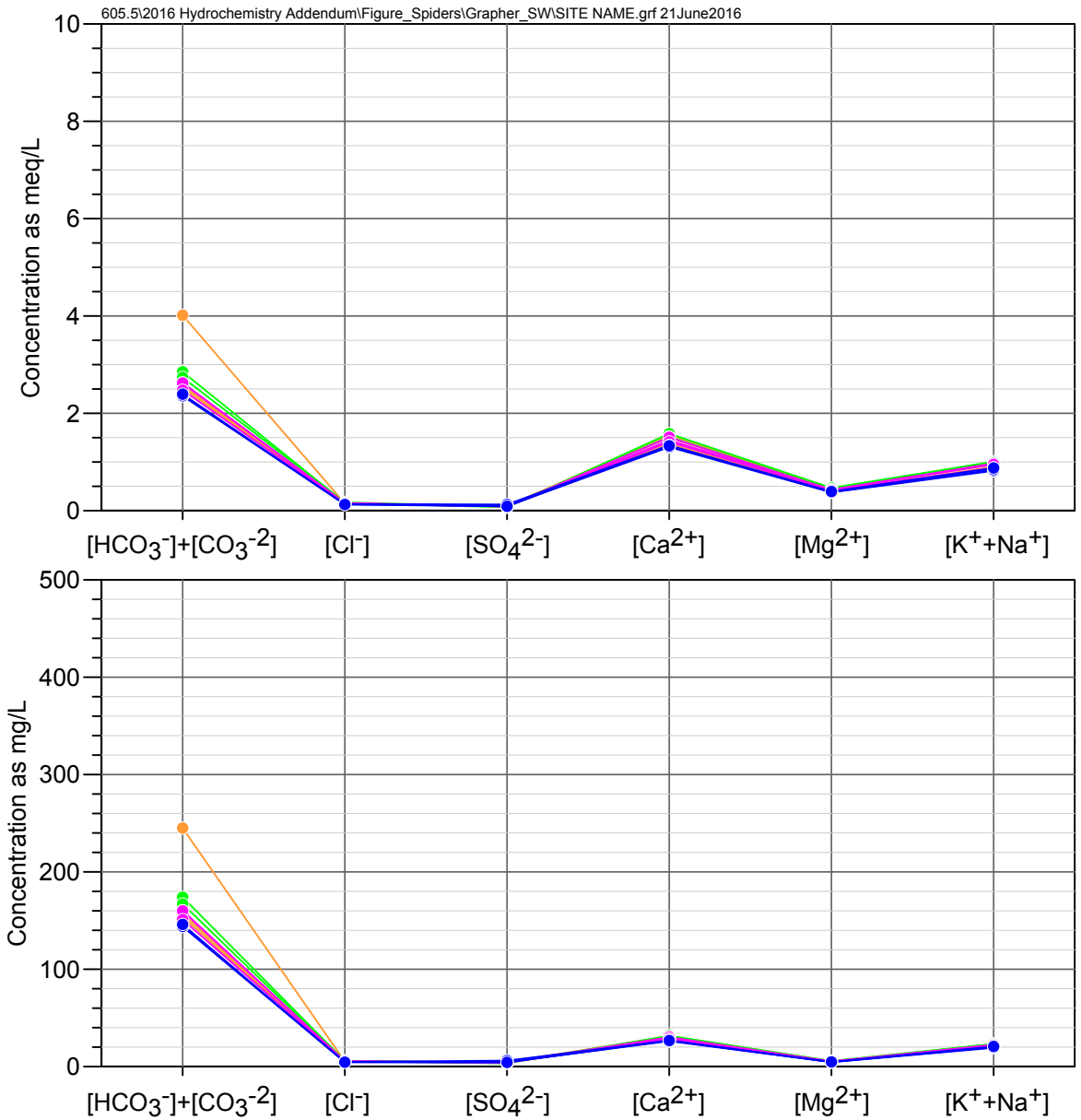


FIGURE D-33. MAJOR ION CHEMISTRY BY QUARTER FOR MC 5.2 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

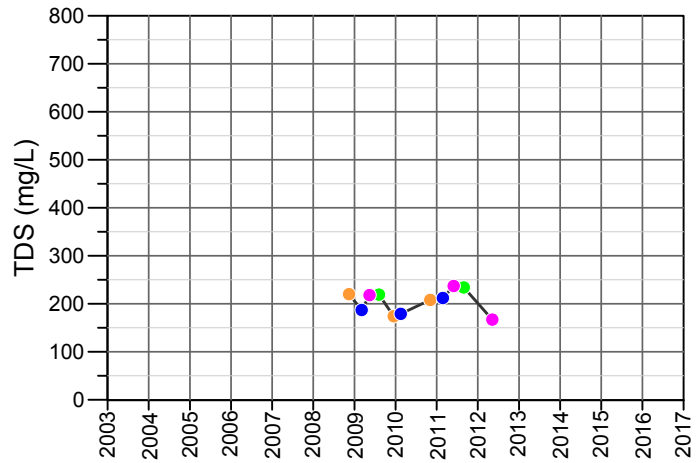
MONTGOMERY & ASSOCIATES



MC 3.4 W
Mineral Creek Watershed

Observed Concentrations
*Value shown at zero if below detection limit

Quarter 1 (Jan-Mar)
Quarter 2 (Apr-Jun)
Quarter 3 (Jul-Sep)
Quarter 4 (Oct-Dec)



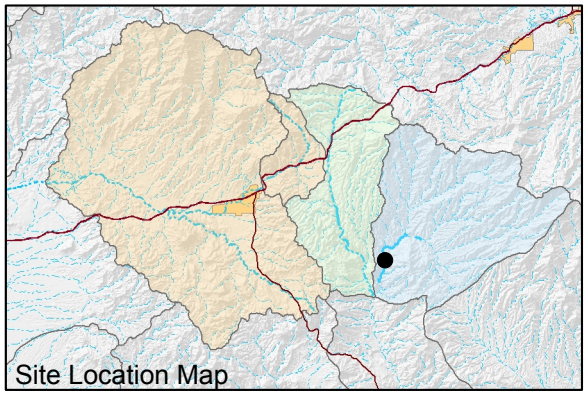


FIGURE D-34. MAJOR ION CHEMISTRY BY QUARTER FOR MC 3.4 W, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES

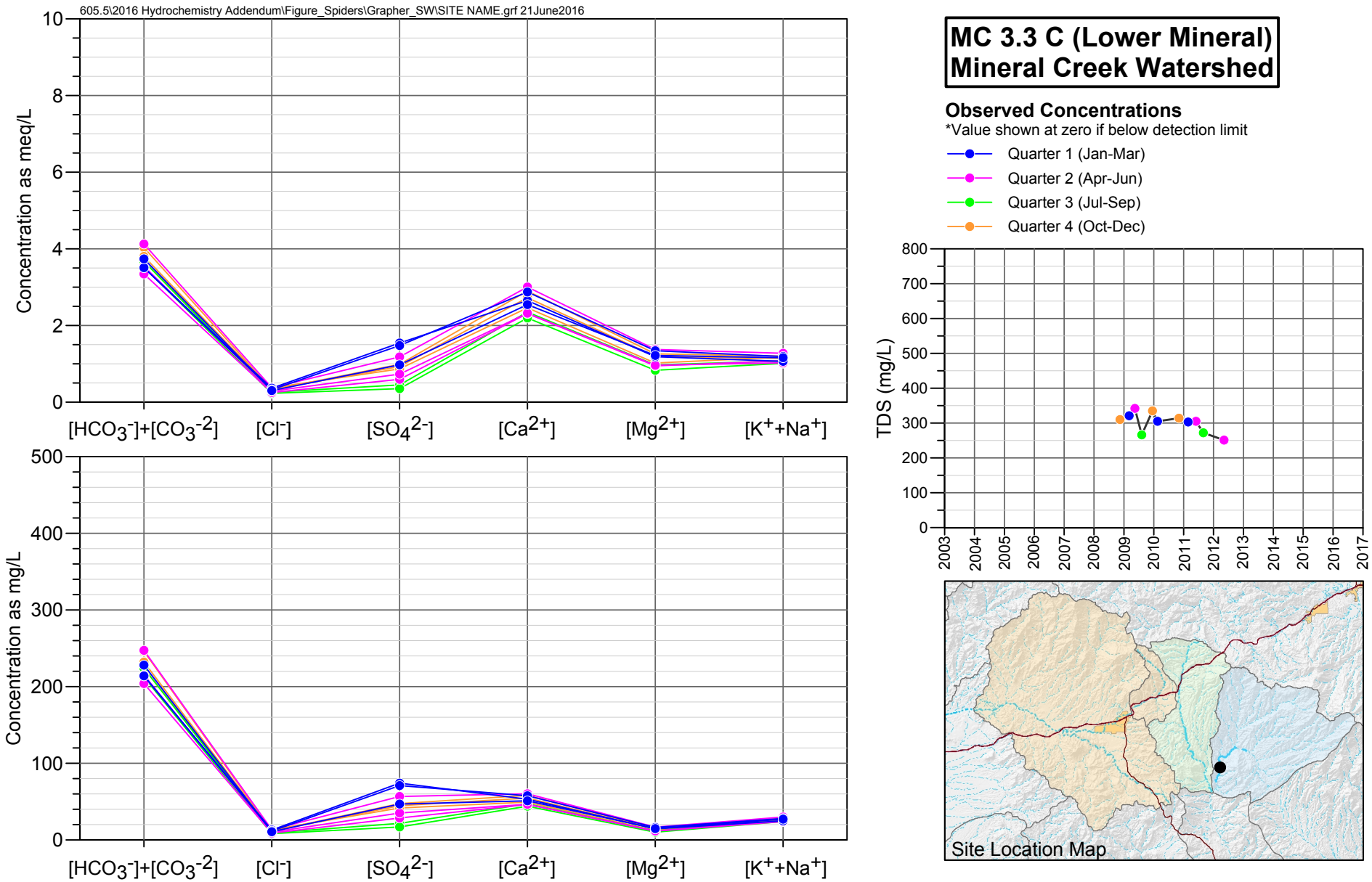


FIGURE D-35. MAJOR ION CHEMISTRY BY QUARTER FOR MC 3.3 C (LOWER MINERAL), MINERAL CREEK WATERSHED

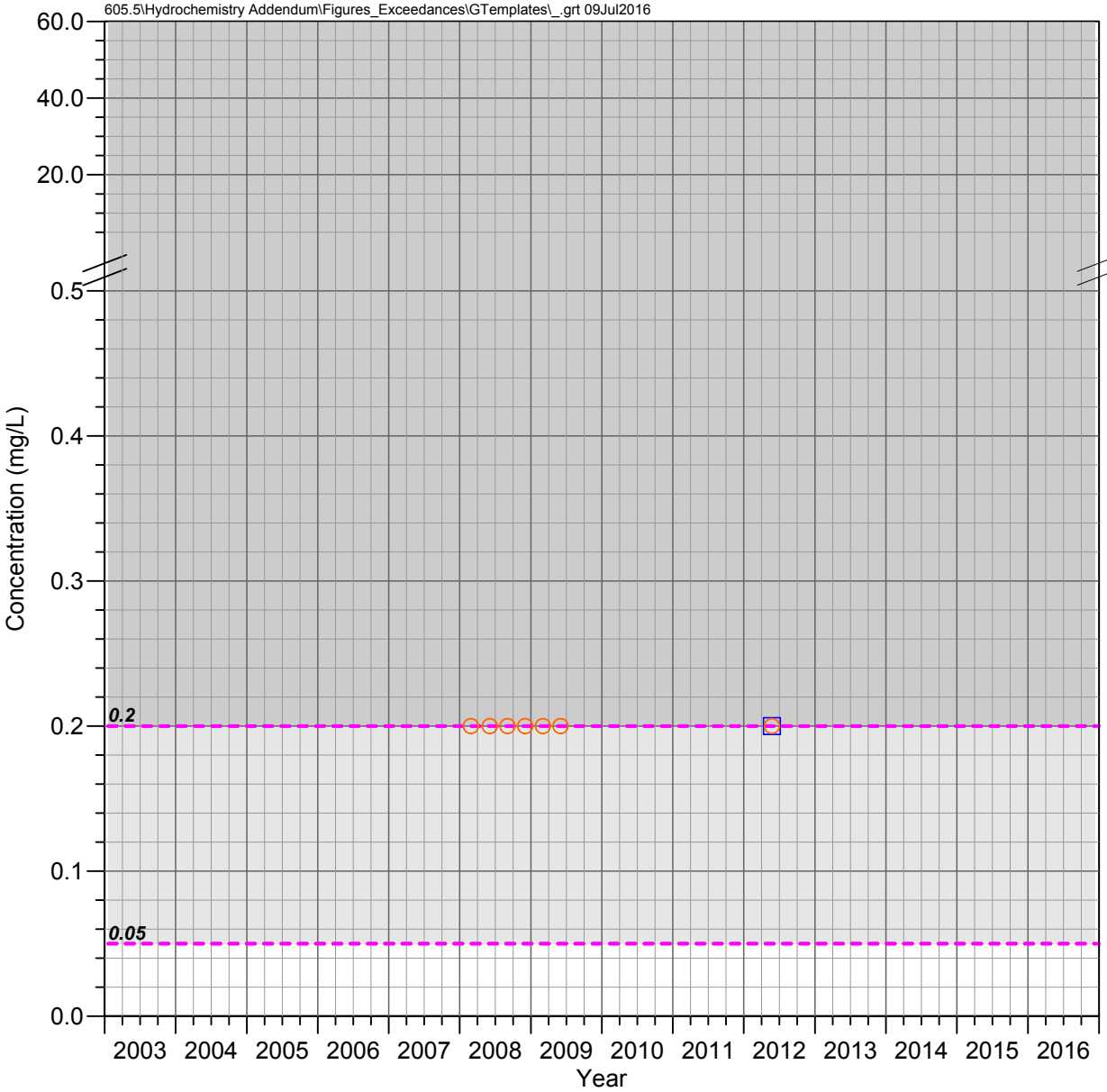
Resolution Copper Mining

MONTGOMERY & ASSOCIATES

MONTGOMERY & ASSOCIATES

Appendix E

TIME-SERIES PLOTS OF HYDROCHEMICAL RESULTS COMPARED TO REGULATORY STANDARDS – GROUNDWATER



Hackberry Windmill Well Shallow Groundwater System

ALUMINUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.05-0.2 mg/L*)

**Aluminum standard is defined as a range of 0.05 to 0.2 mg/L. EPA recommends that aluminum concentrations should be at or below 0.05 to minimize its impact on water color, but due to the usefulness of aluminum salts for water treatment, an upper maximum is given at 0.2 mg/L. For this report, we consider measurements above 0.2 mg/L as clear exceedances, but recognize that values above 0.05 mg/L may also be impacting water color.*

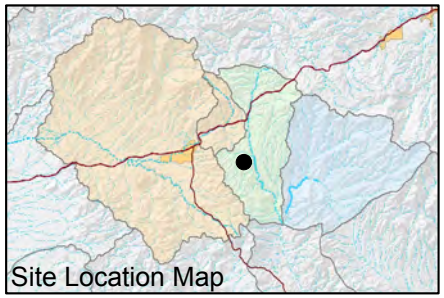
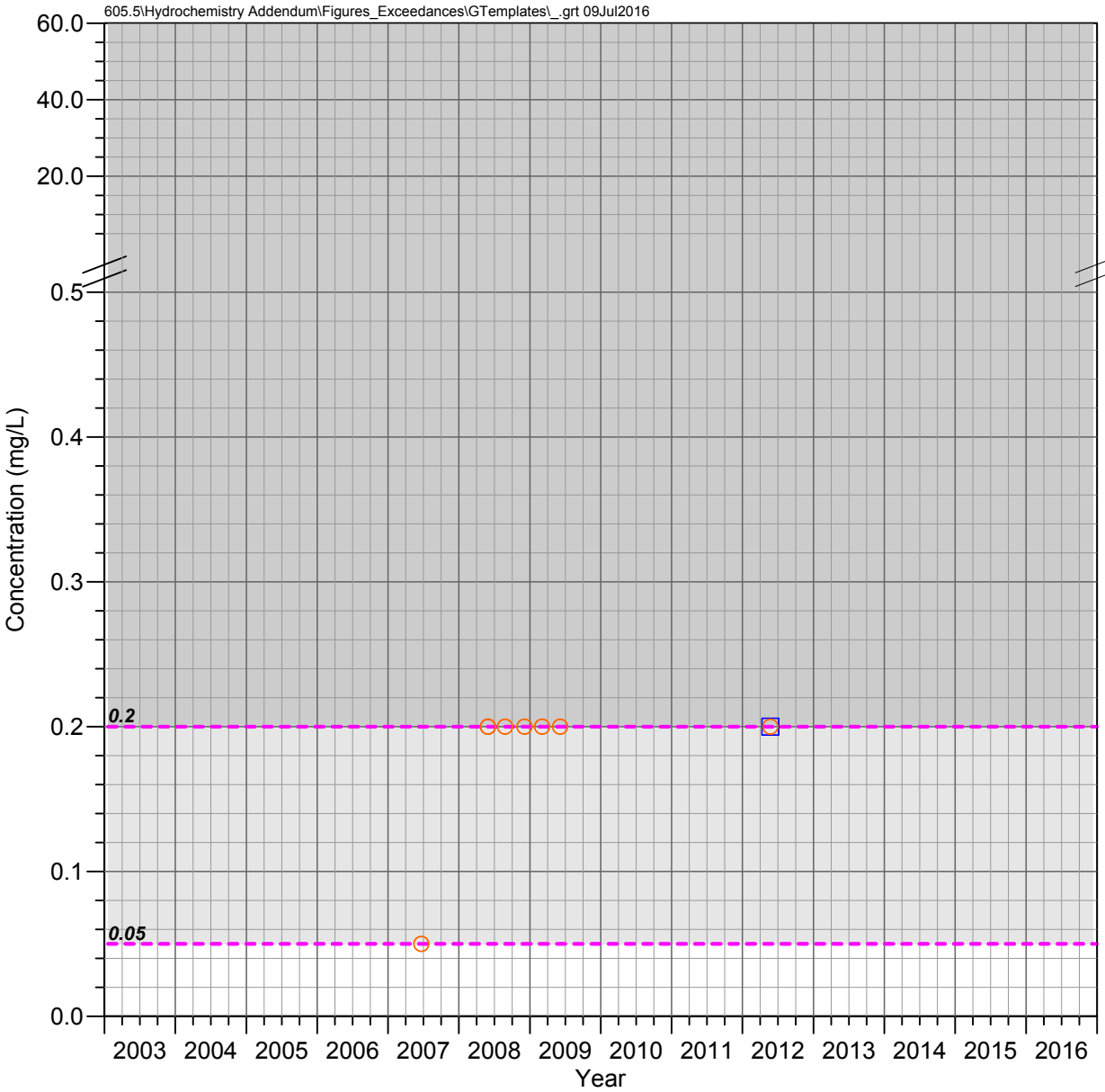


FIGURE E-001. ALUMINUM CONCENTRATIONS OBSERVED AT HACKBERRY WINDMILL WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



JI Ranch Corral Well Shallow Groundwater System

ALUMINUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.05-0.2 mg/L*)

**Aluminum standard is defined as a range of 0.05 to 0.2 mg/L. EPA recommends that aluminum concentrations should be at or below 0.05 to minimize its impact on water color, but due to the usefulness of aluminum salts for water treatment, an upper maximum is given at 0.2 mg/L. For this report, we consider measurements above 0.2 mg/L as clear exceedances, but recognize that values above 0.05 mg/L may also be impacting water color.*

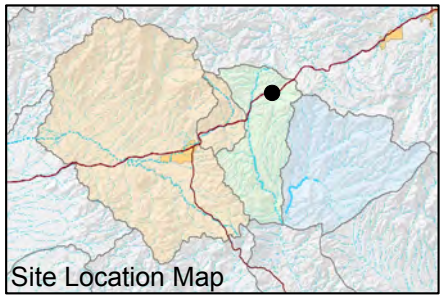
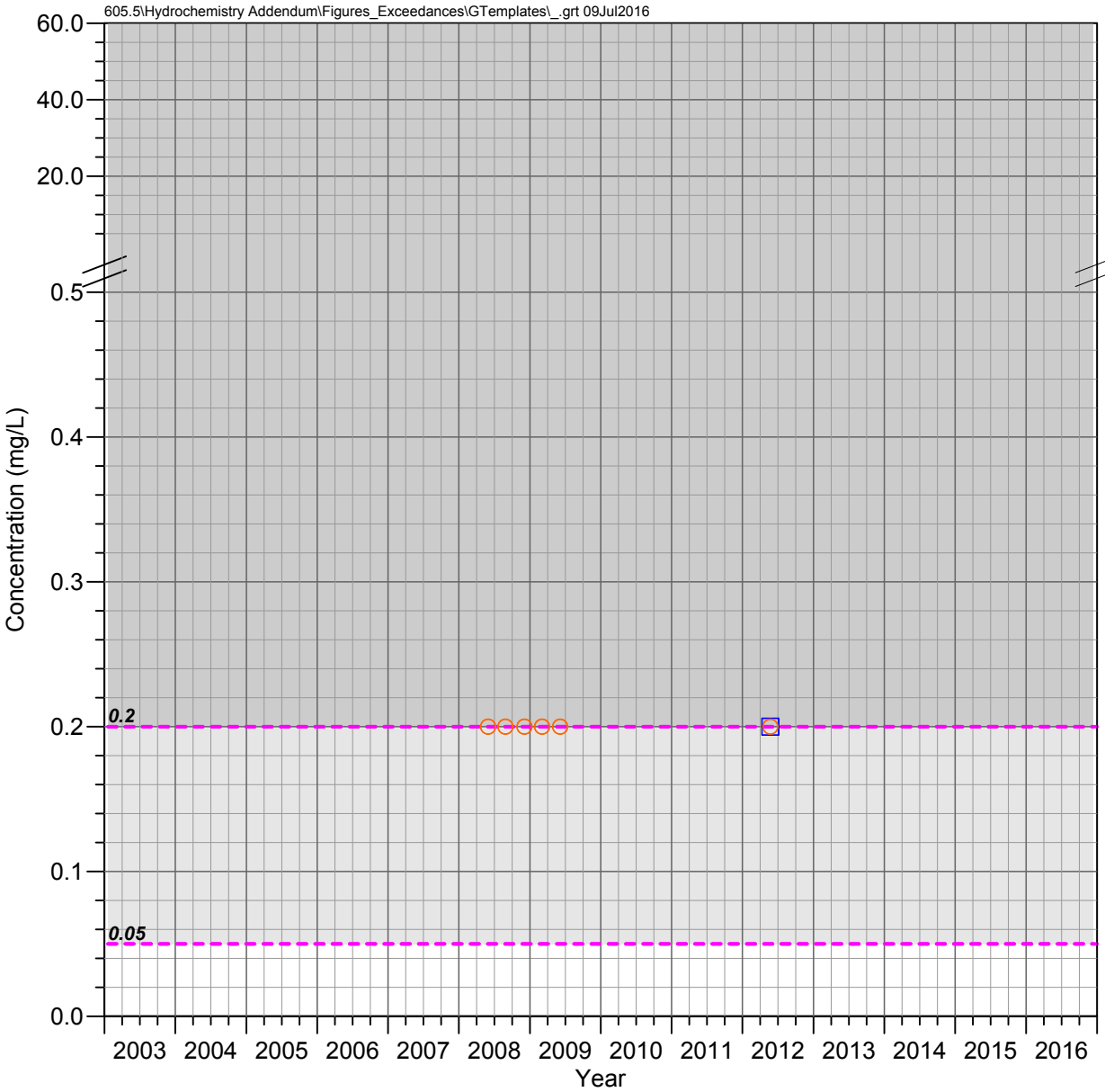


FIGURE E-002. ALUMINUM CONCENTRATIONS OBSERVED AT JI RANCH CORRAL WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



JI Ranch Middle Well Shallow Groundwater System

ALUMINUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.05-0.2 mg/L*)

**Aluminum standard is defined as a range of 0.05 to 0.2 mg/L. EPA recommends that aluminum concentrations should be at or below 0.05 to minimize its impact on water color, but due to the usefulness of aluminum salts for water treatment, an upper maximum is given at 0.2 mg/L. For this report, we consider measurements above 0.2 mg/L as clear exceedances, but recognize that values above 0.05 mg/L may also be impacting water color.*

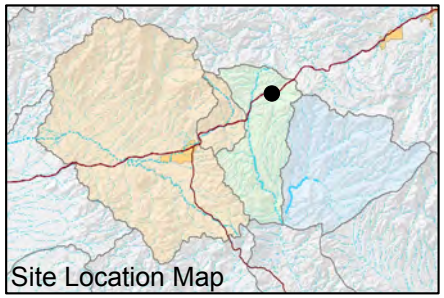
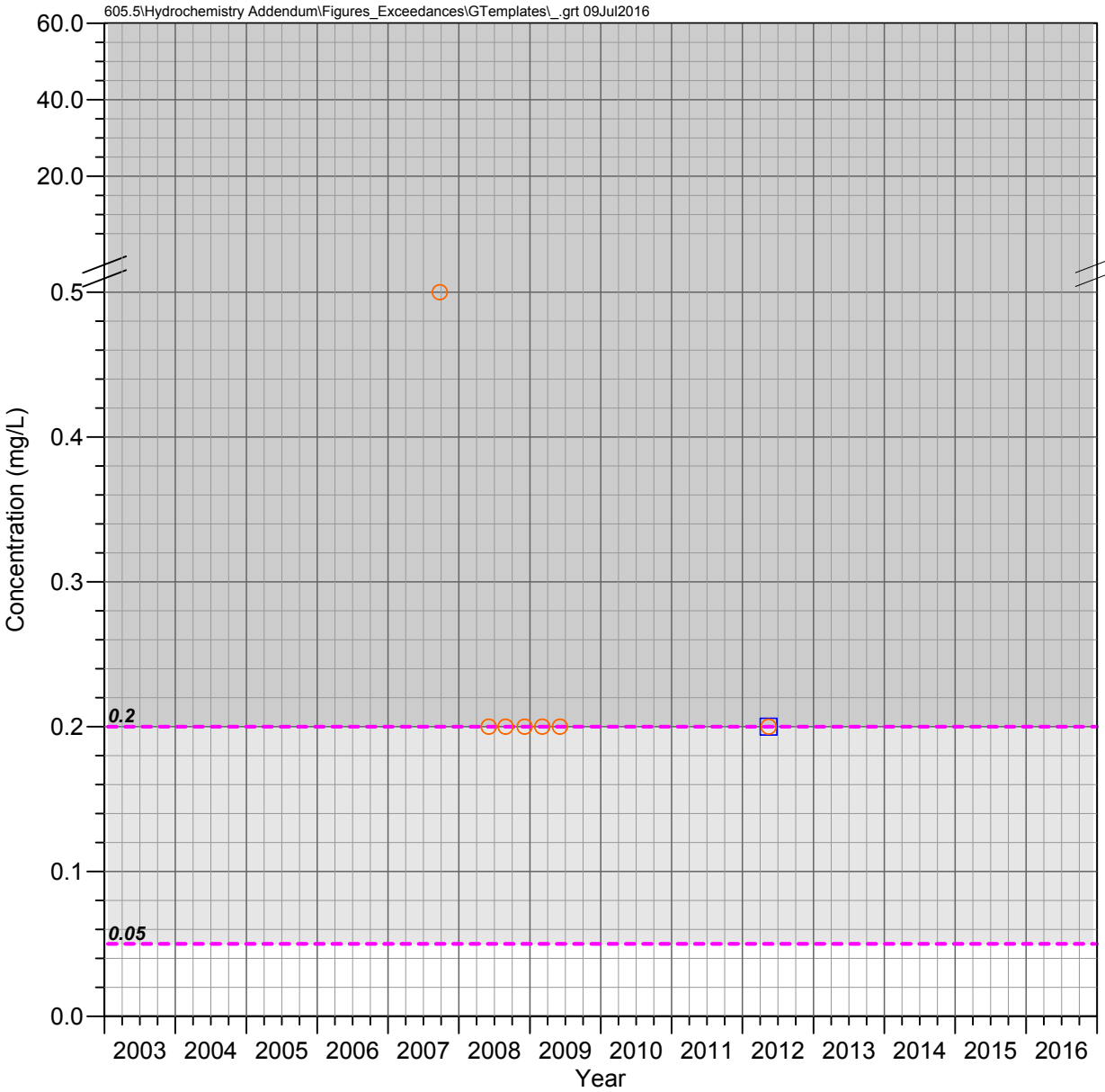


FIGURE E-003. ALUMINUM CONCENTRATIONS OBSERVED AT JI RANCH MIDDLE WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



A-06
Apache Leap Tuff Aquifer

ALUMINUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.05-0.2 mg/L*)

**Aluminum standard is defined as a range of 0.05 to 0.2 mg/L. EPA recommends that aluminum concentrations should be at or below 0.05 to minimize its impact on water color, but due to the usefulness of aluminum salts for water treatment, an upper maximum is given at 0.2 mg/L. For this report, we consider measurements above 0.2 mg/L as clear exceedances, but recognize that values above 0.05 mg/L may also be impacting water color.*

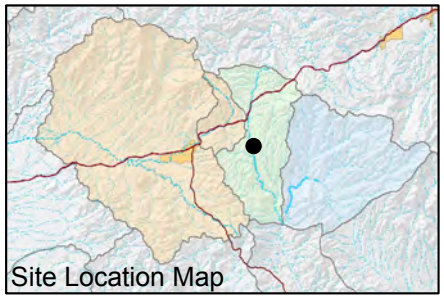
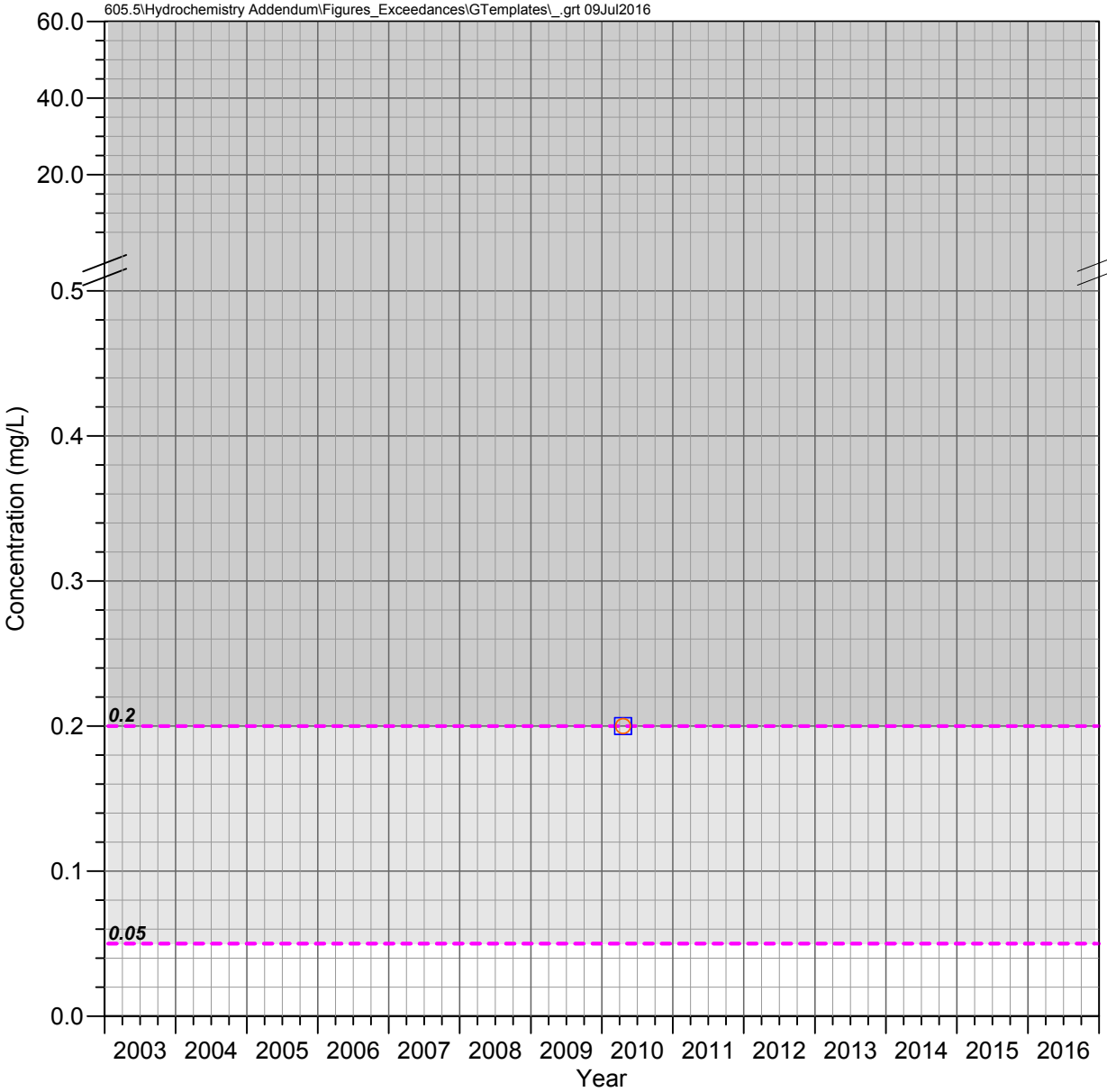


FIGURE E-004. ALUMINUM CONCENTRATIONS OBSERVED AT A-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



CT Well
Apache Leap Tuff Aquifer

ALUMINUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.05-0.2 mg/L*)

**Aluminum standard is defined as a range of 0.05 to 0.2 mg/L. EPA recommends that aluminum concentrations should be at or below 0.05 to minimize its impact on water color, but due to the usefulness of aluminum salts for water treatment, an upper maximum is given at 0.2 mg/L. For this report, we consider measurements above 0.2 mg/L as clear exceedances, but recognize that values above 0.05 mg/L may also be impacting water color.*

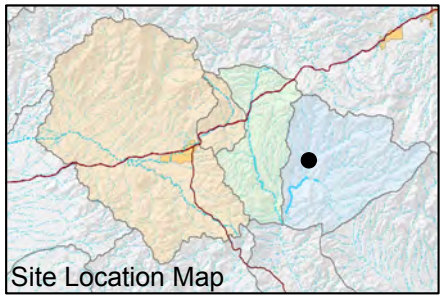
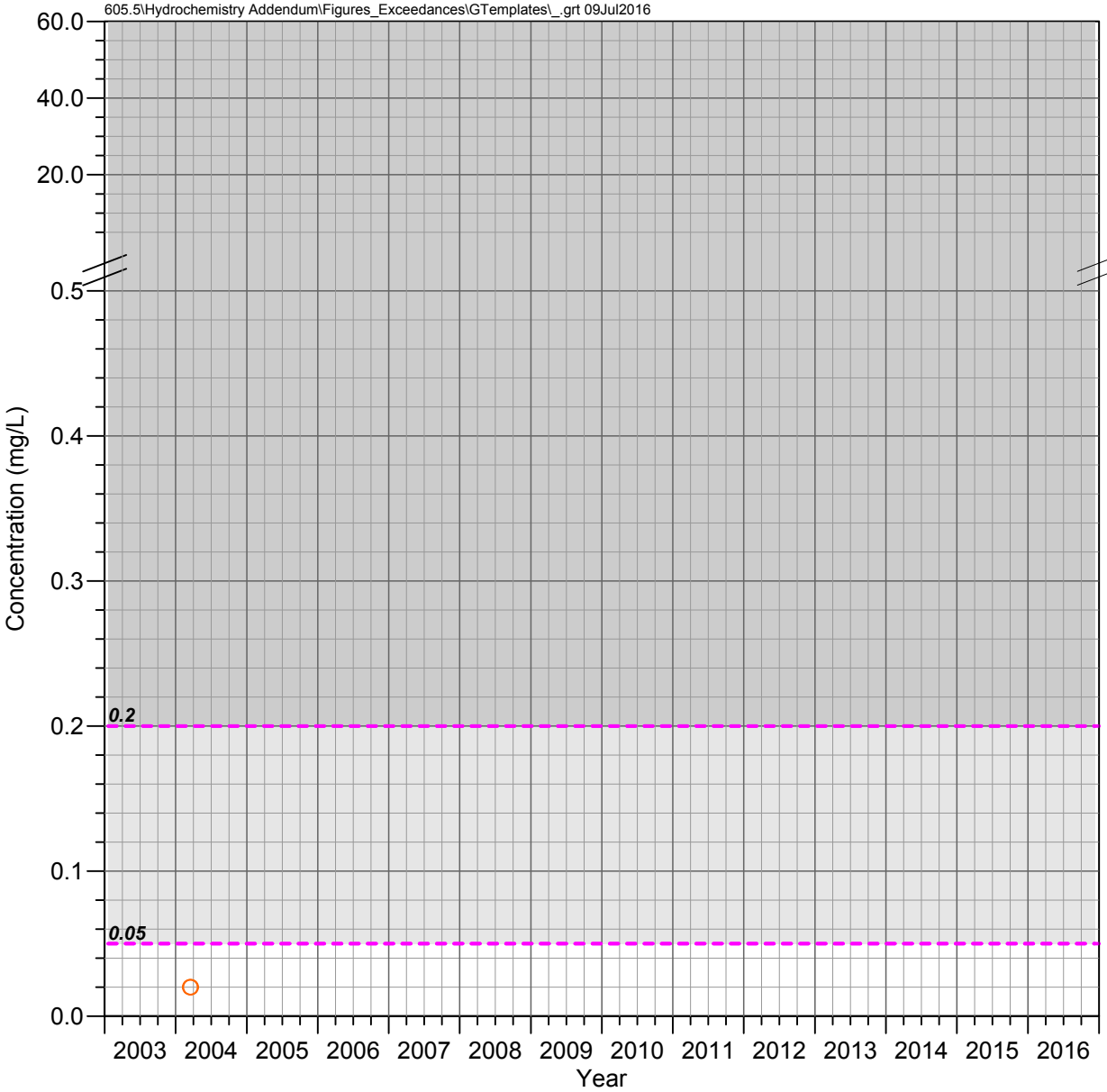


FIGURE E-005. ALUMINUM CONCENTRATIONS OBSERVED AT CT WELL, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-01
Apache Leap Tuff Aquifer

ALUMINUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.05-0.2 mg/L*)

**Aluminum standard is defined as a range of 0.05 to 0.2 mg/L. EPA recommends that aluminum concentrations should be at or below 0.05 to minimize its impact on water color, but due to the usefulness of aluminum salts for water treatment, an upper maximum is given at 0.2 mg/L. For this report, we consider measurements above 0.2 mg/L as clear exceedances, but recognize that values above 0.05 mg/L may also be impacting water color.*

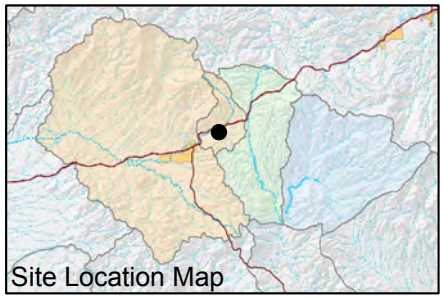
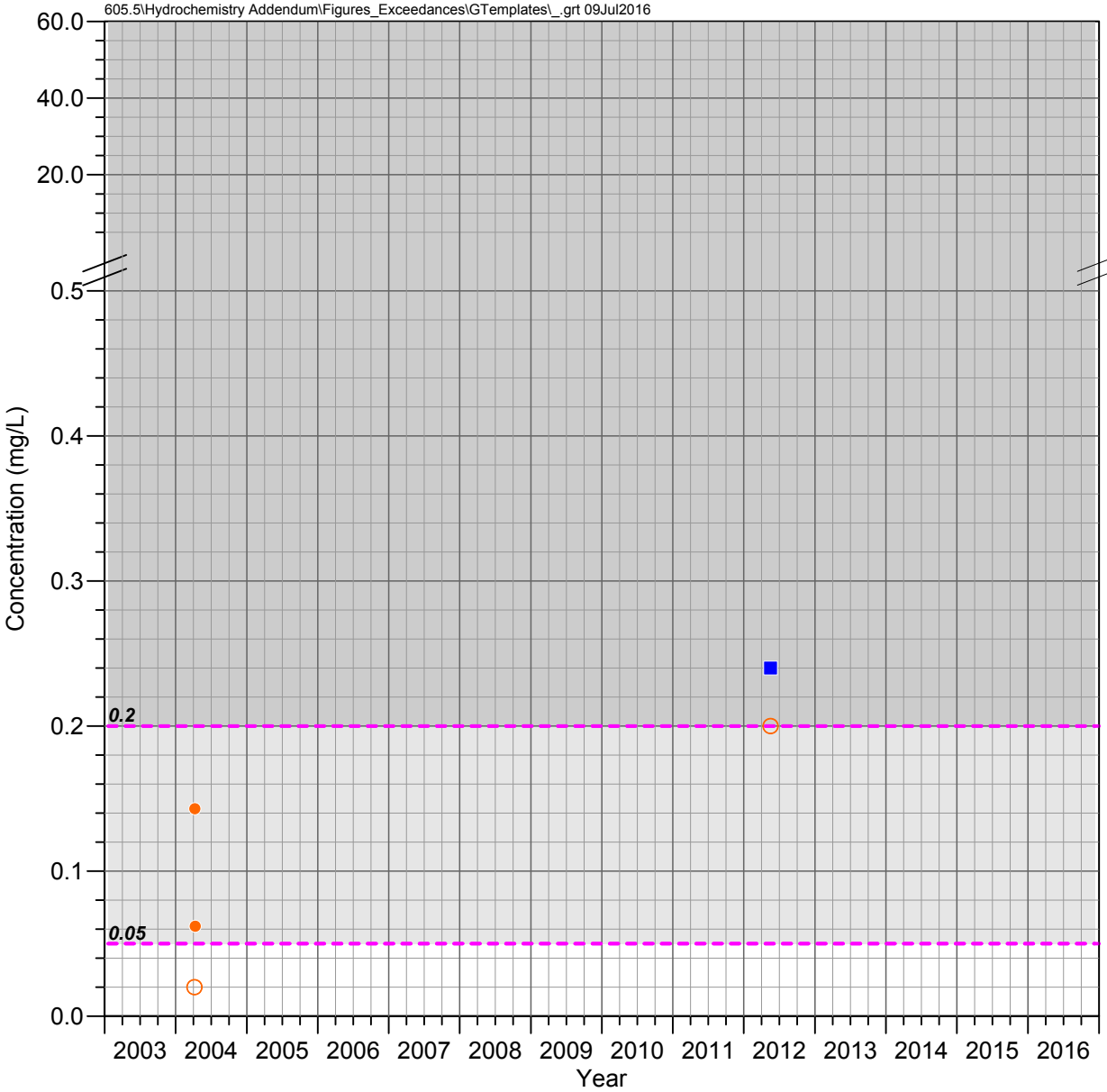


FIGURE E-006. ALUMINUM CONCENTRATIONS OBSERVED AT HRES-01, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-02
Apache Leap Tuff Aquifer

ALUMINUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.05-0.2 mg/L*)

**Aluminum standard is defined as a range of 0.05 to 0.2 mg/L. EPA recommends that aluminum concentrations should be at or below 0.05 to minimize its impact on water color, but due to the usefulness of aluminum salts for water treatment, an upper maximum is given at 0.2 mg/L. For this report, we consider measurements above 0.2 mg/L as clear exceedances, but recognize that values above 0.05 mg/L may also be impacting water color.*

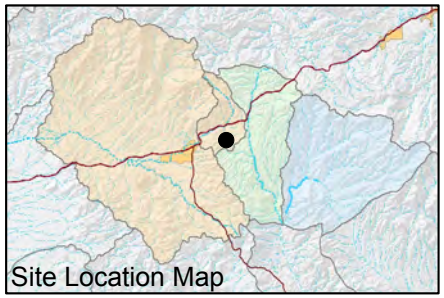
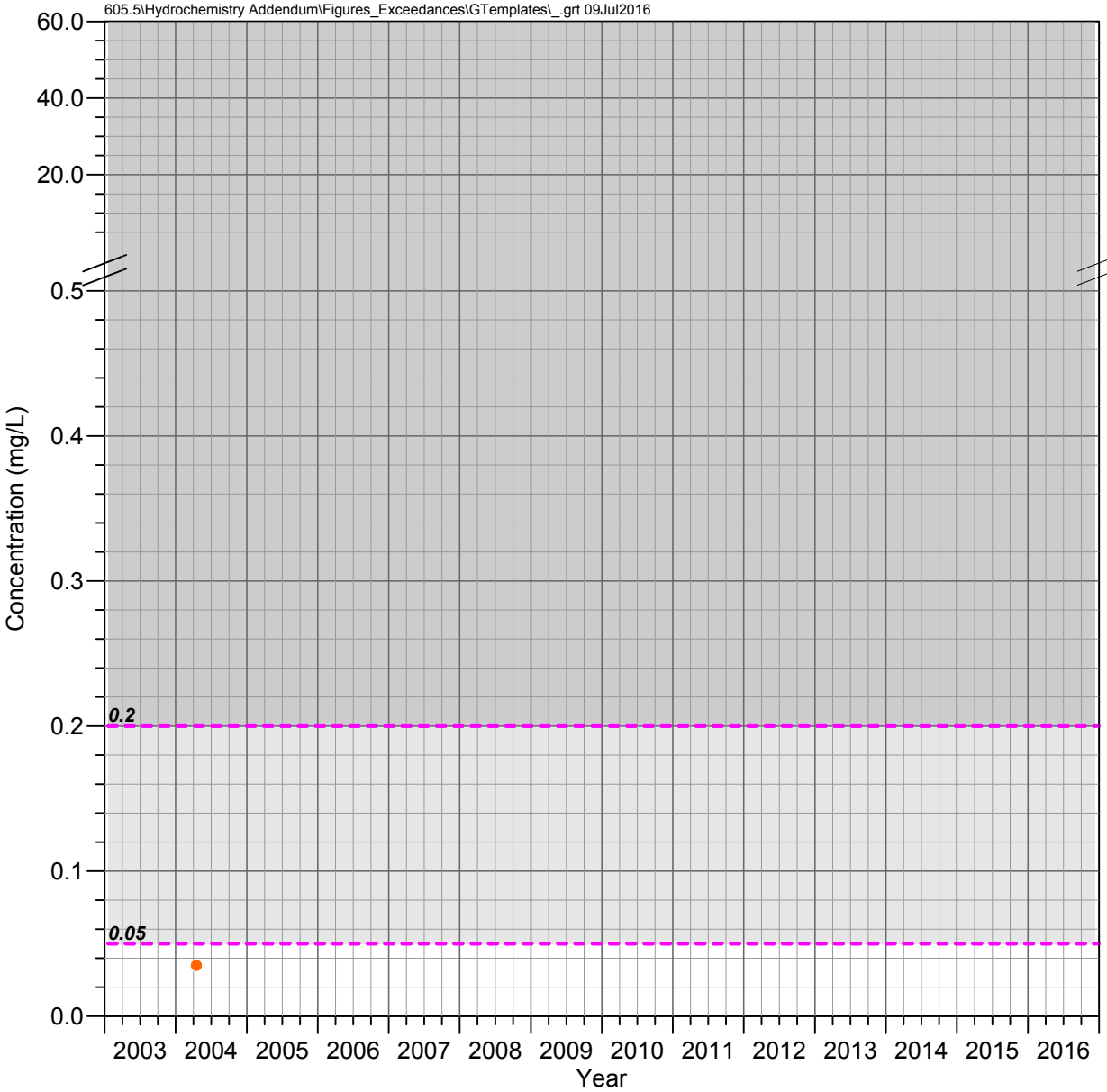


FIGURE E-007. ALUMINUM CONCENTRATIONS OBSERVED AT HRES-02, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-03d
Apache Leap Tuff Aquifer

ALUMINUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.05-0.2 mg/L*)

**Aluminum standard is defined as a range of 0.05 to 0.2 mg/L. EPA recommends that aluminum concentrations should be at or below 0.05 to minimize its impact on water color, but due to the usefulness of aluminum salts for water treatment, an upper maximum is given at 0.2 mg/L. For this report, we consider measurements above 0.2 mg/L as clear exceedances, but recognize that values above 0.05 mg/L may also be impacting water color.*

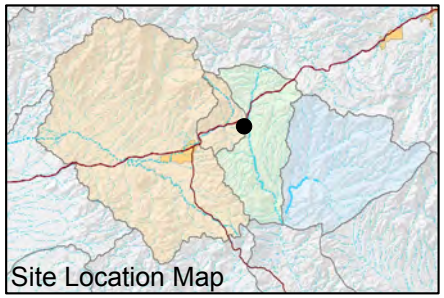
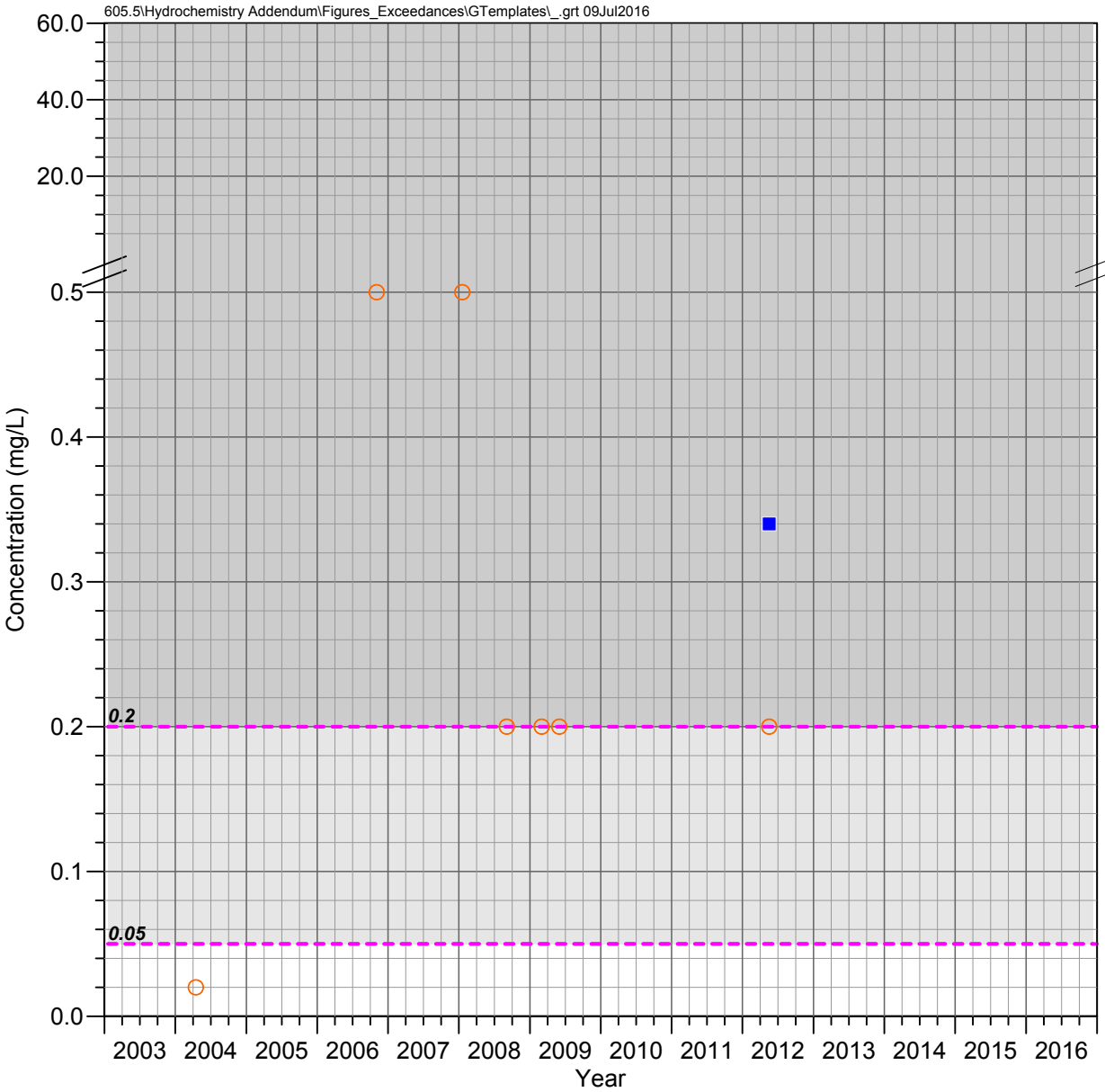


FIGURE E-008. ALUMINUM CONCENTRATIONS OBSERVED AT HRES-03D, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-04
Apache Leap Tuff Aquifer

ALUMINUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.05-0.2 mg/L*)

**Aluminum standard is defined as a range of 0.05 to 0.2 mg/L. EPA recommends that aluminum concentrations should be at or below 0.05 to minimize its impact on water color, but due to the usefulness of aluminum salts for water treatment, an upper maximum is given at 0.2 mg/L. For this report, we consider measurements above 0.2 mg/L as clear exceedances, but recognize that values above 0.05 mg/L may also be impacting water color.*

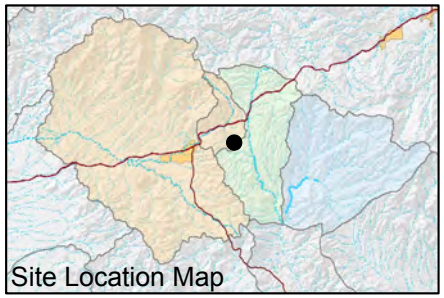
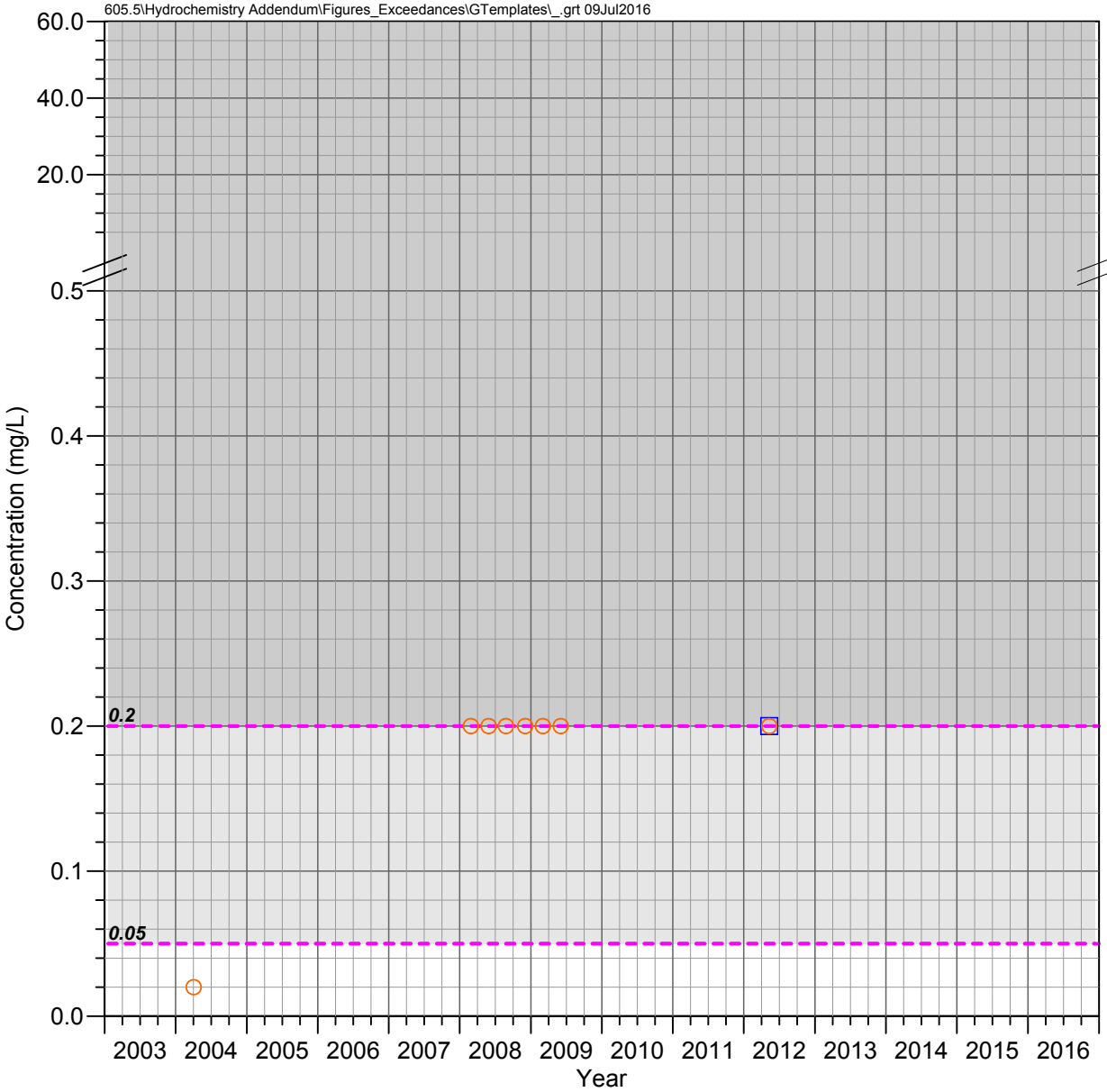


FIGURE E-009. ALUMINUM CONCENTRATIONS OBSERVED AT HRES-04, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-05
Apache Leap Tuff Aquifer

ALUMINUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.05-0.2 mg/L*)

**Aluminum standard is defined as a range of 0.05 to 0.2 mg/L. EPA recommends that aluminum concentrations should be at or below 0.05 to minimize its impact on water color, but due to the usefulness of aluminum salts for water treatment, an upper maximum is given at 0.2 mg/L. For this report, we consider measurements above 0.2 mg/L as clear exceedances, but recognize that values above 0.05 mg/L may also be impacting water color.*

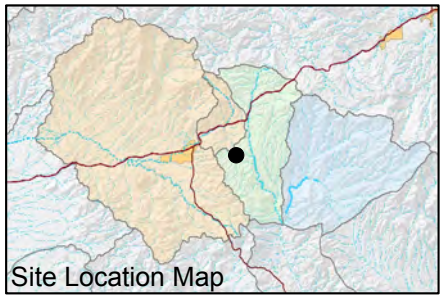
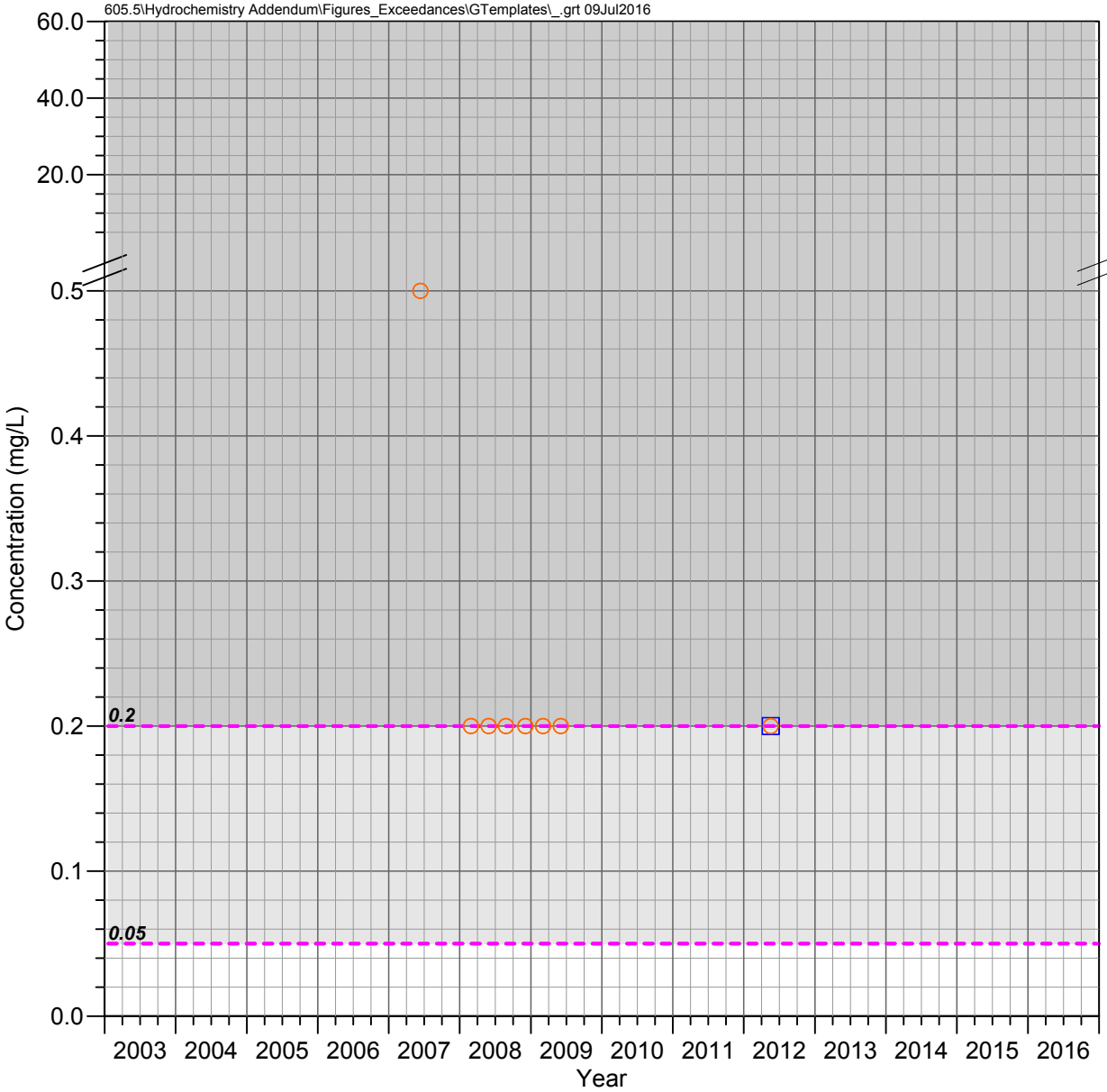


FIGURE E-010. ALUMINUM CONCENTRATIONS OBSERVED AT HRES-05, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-06
Apache Leap Tuff Aquifer

ALUMINUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.05-0.2 mg/L*)

**Aluminum standard is defined as a range of 0.05 to 0.2 mg/L. EPA recommends that aluminum concentrations should be at or below 0.05 to minimize its impact on water color, but due to the usefulness of aluminum salts for water treatment, an upper maximum is given at 0.2 mg/L. For this report, we consider measurements above 0.2 mg/L as clear exceedances, but recognize that values above 0.05 mg/L may also be impacting water color.*

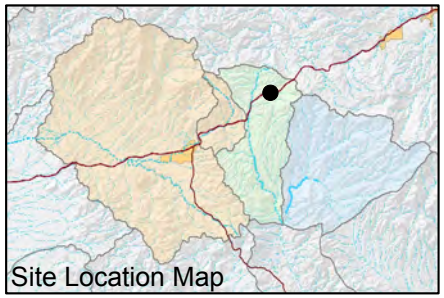
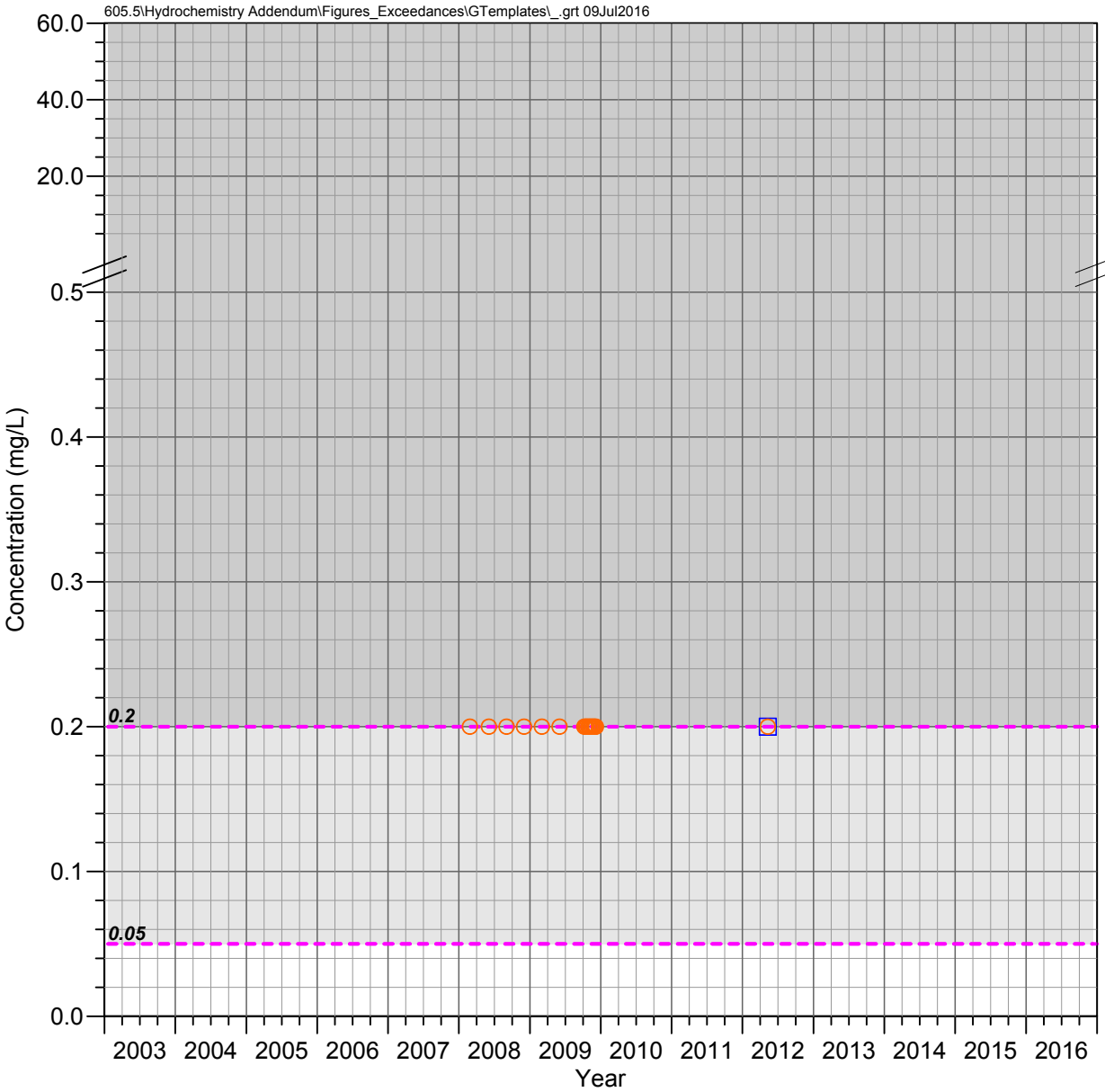


FIGURE E-011. ALUMINUM CONCENTRATIONS OBSERVED AT HRES-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-07
Apache Leap Tuff Aquifer

ALUMINUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.05-0.2 mg/L*)

**Aluminum standard is defined as a range of 0.05 to 0.2 mg/L. EPA recommends that aluminum concentrations should be at or below 0.05 to minimize its impact on water color, but due to the usefulness of aluminum salts for water treatment, an upper maximum is given at 0.2 mg/L. For this report, we consider measurements above 0.2 mg/L as clear exceedances, but recognize that values above 0.05 mg/L may also be impacting water color.*

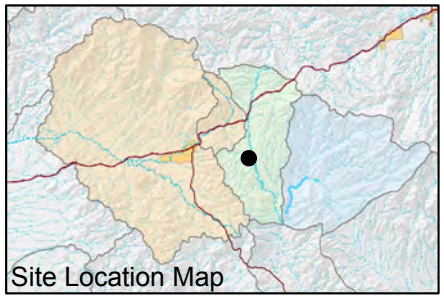
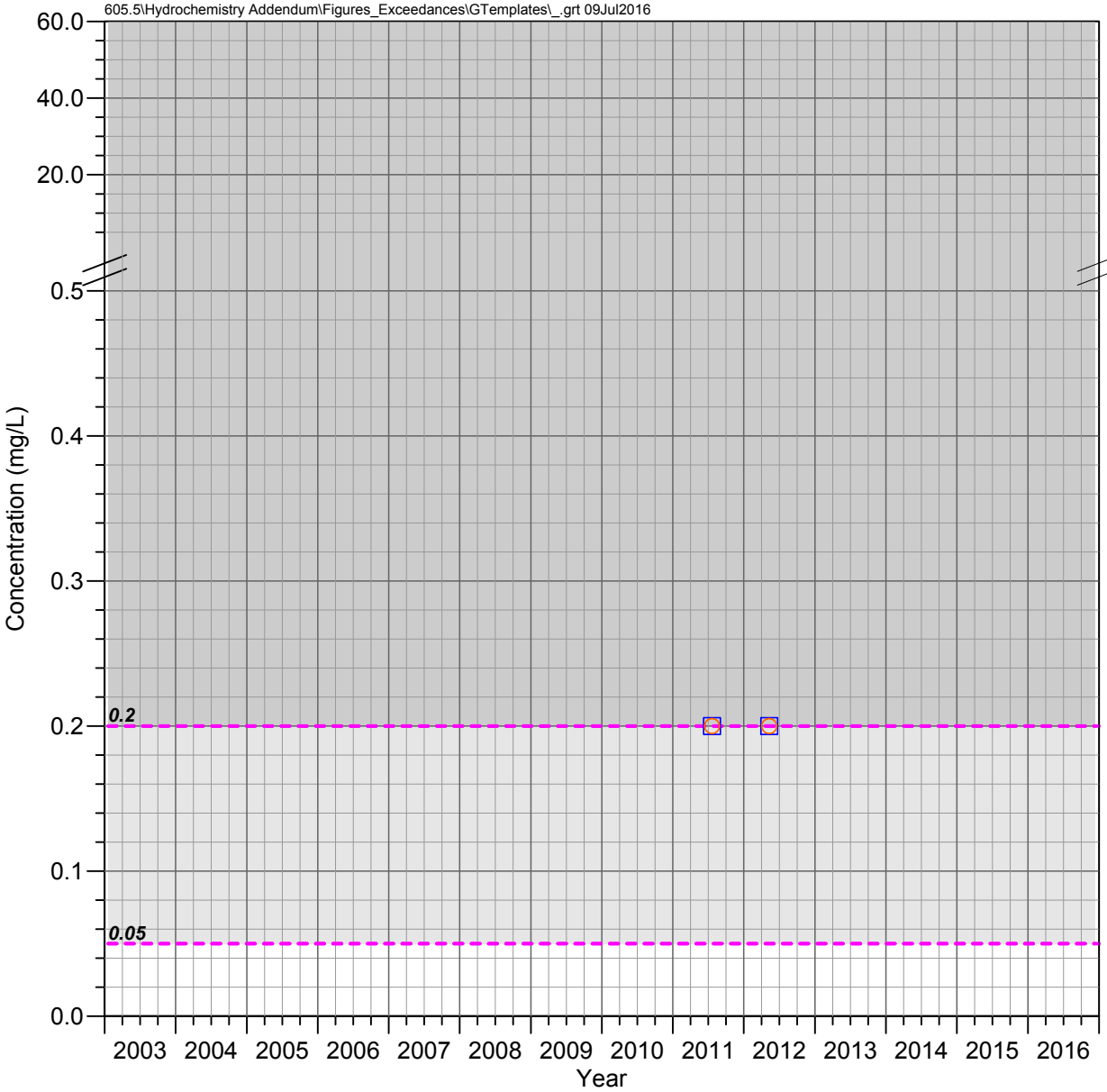


FIGURE E-012. ALUMINUM CONCENTRATIONS OBSERVED AT HRES-07, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-08
Apache Leap Tuff Aquifer

ALUMINUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.05-0.2 mg/L*)

**Aluminum standard is defined as a range of 0.05 to 0.2 mg/L. EPA recommends that aluminum concentrations should be at or below 0.05 to minimize its impact on water color, but due to the usefulness of aluminum salts for water treatment, an upper maximum is given at 0.2 mg/L. For this report, we consider measurements above 0.2 mg/L as clear exceedances, but recognize that values above 0.05 mg/L may also be impacting water color.*

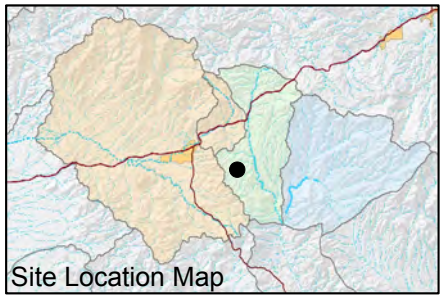
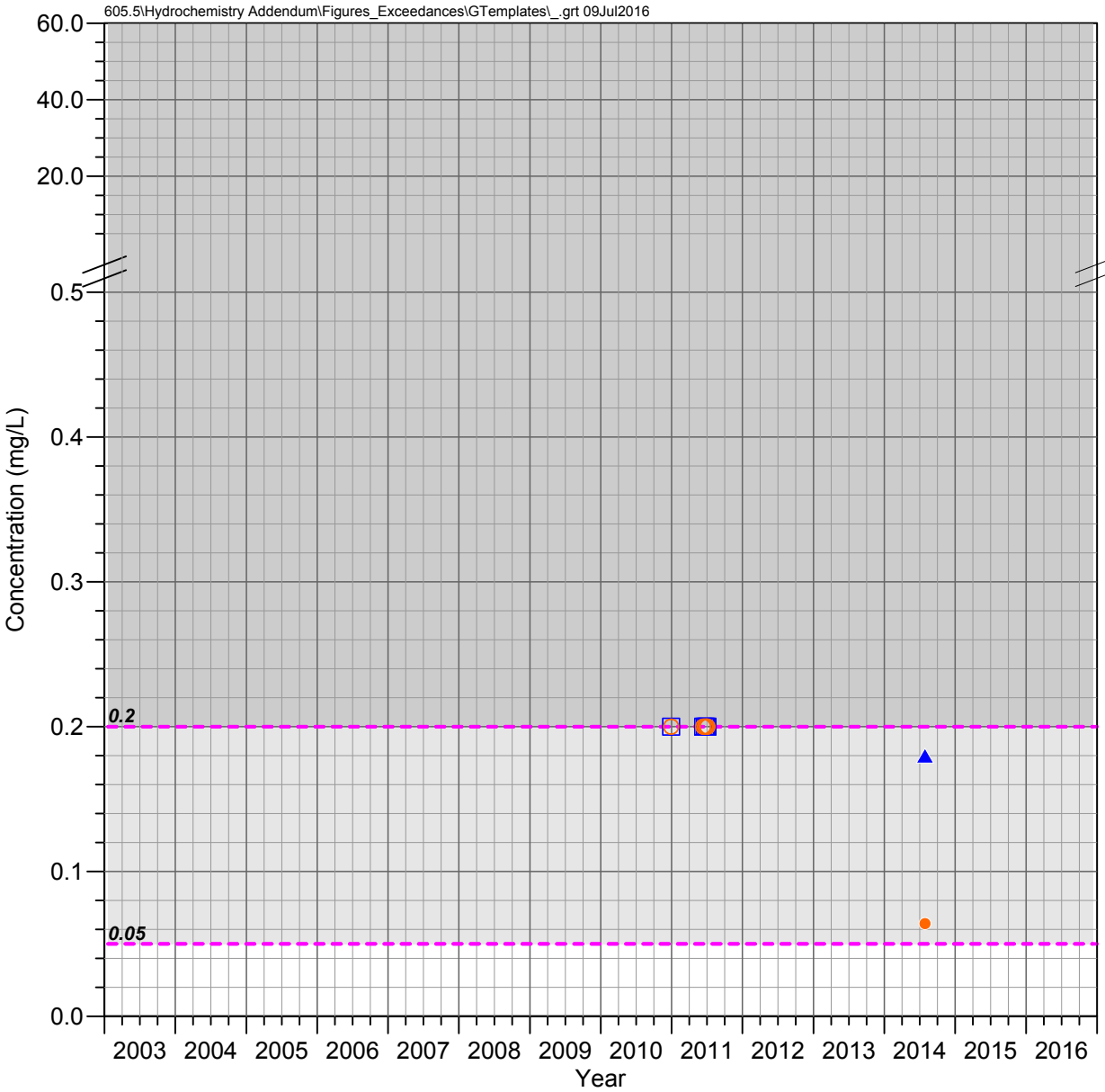


FIGURE E-013. ALUMINUM CONCENTRATIONS OBSERVED AT HRES-08, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-09
Apache Leap Tuff Aquifer

ALUMINUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.05-0.2 mg/L*)

**Aluminum standard is defined as a range of 0.05 to 0.2 mg/L. EPA recommends that aluminum concentrations should be at or below 0.05 to minimize its impact on water color, but due to the usefulness of aluminum salts for water treatment, an upper maximum is given at 0.2 mg/L. For this report, we consider measurements above 0.2 mg/L as clear exceedances, but recognize that values above 0.05 mg/L may also be impacting water color.*

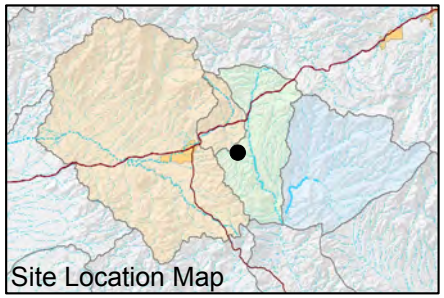
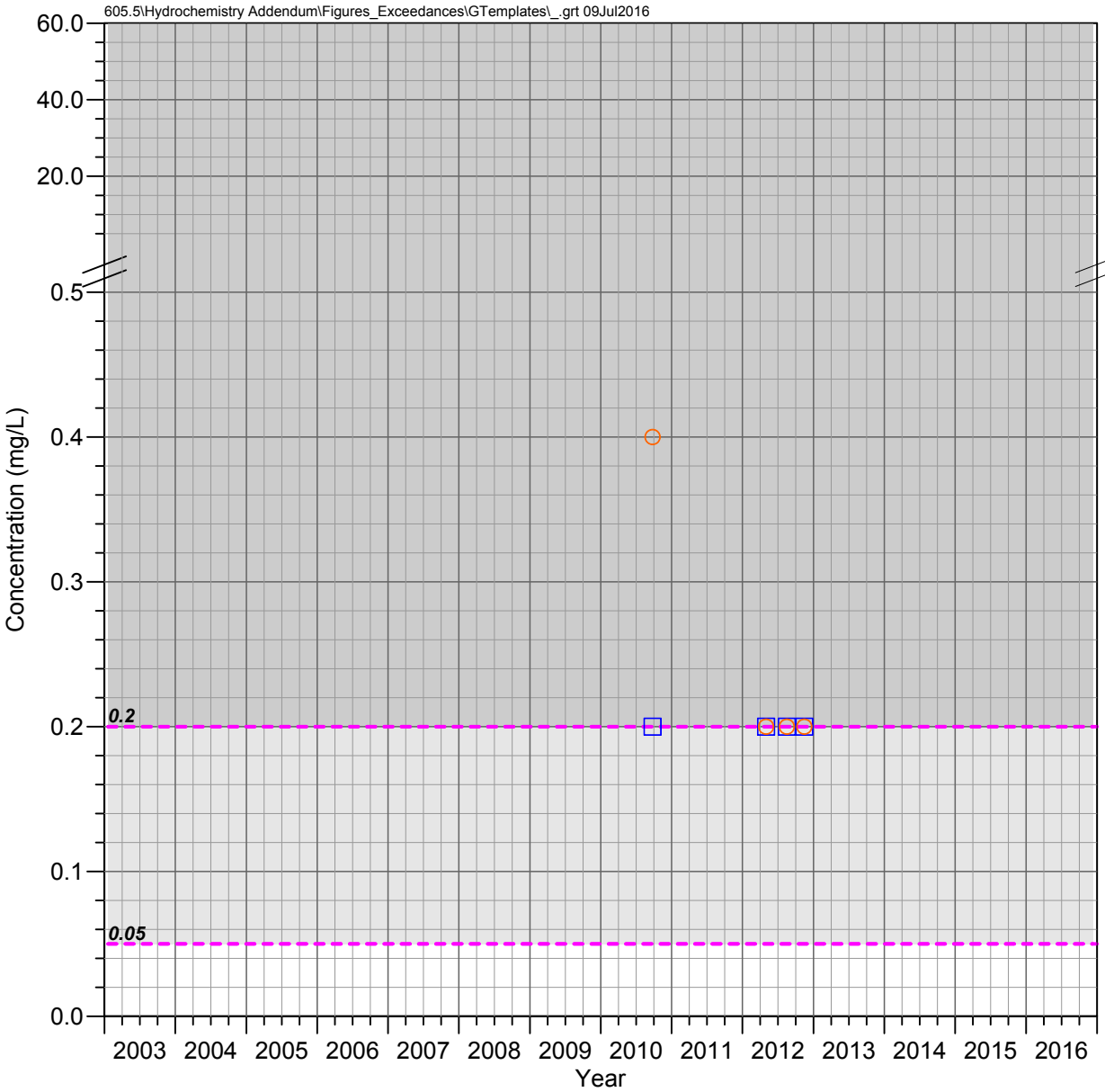


FIGURE E-014. ALUMINUM CONCENTRATIONS OBSERVED AT HRES-09, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-10
Apache Leap Tuff Aquifer

ALUMINUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.05-0.2 mg/L*)

**Aluminum standard is defined as a range of 0.05 to 0.2 mg/L. EPA recommends that aluminum concentrations should be at or below 0.05 to minimize its impact on water color, but due to the usefulness of aluminum salts for water treatment, an upper maximum is given at 0.2 mg/L. For this report, we consider measurements above 0.2 mg/L as clear exceedances, but recognize that values above 0.05 mg/L may also be impacting water color.*

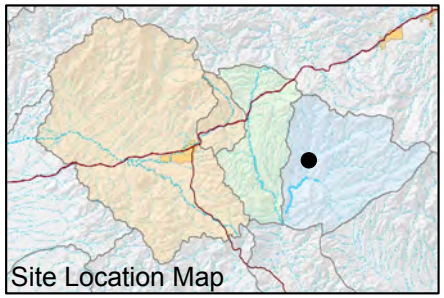
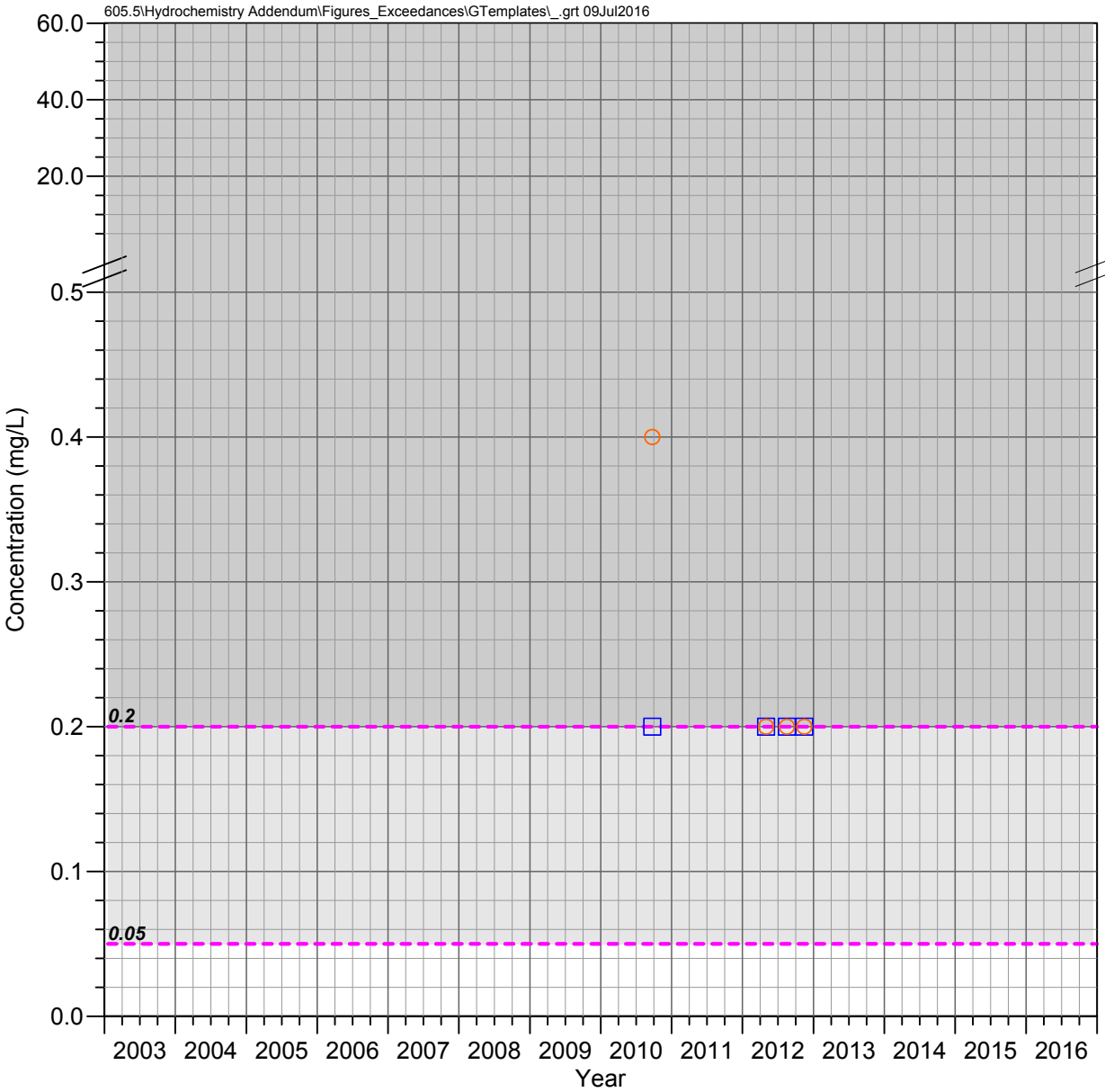


FIGURE E-015. ALUMINUM CONCENTRATIONS OBSERVED AT HRES-10, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-11
Apache Leap Tuff Aquifer

ALUMINUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.05-0.2 mg/L*)

**Aluminum standard is defined as a range of 0.05 to 0.2 mg/L. EPA recommends that aluminum concentrations should be at or below 0.05 to minimize its impact on water color, but due to the usefulness of aluminum salts for water treatment, an upper maximum is given at 0.2 mg/L. For this report, we consider measurements above 0.2 mg/L as clear exceedances, but recognize that values above 0.05 mg/L may also be impacting water color.*

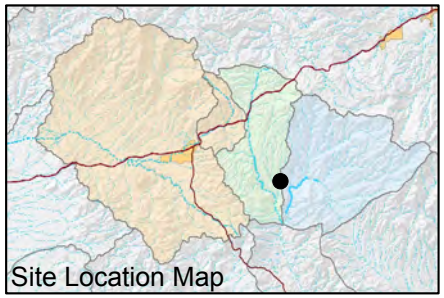
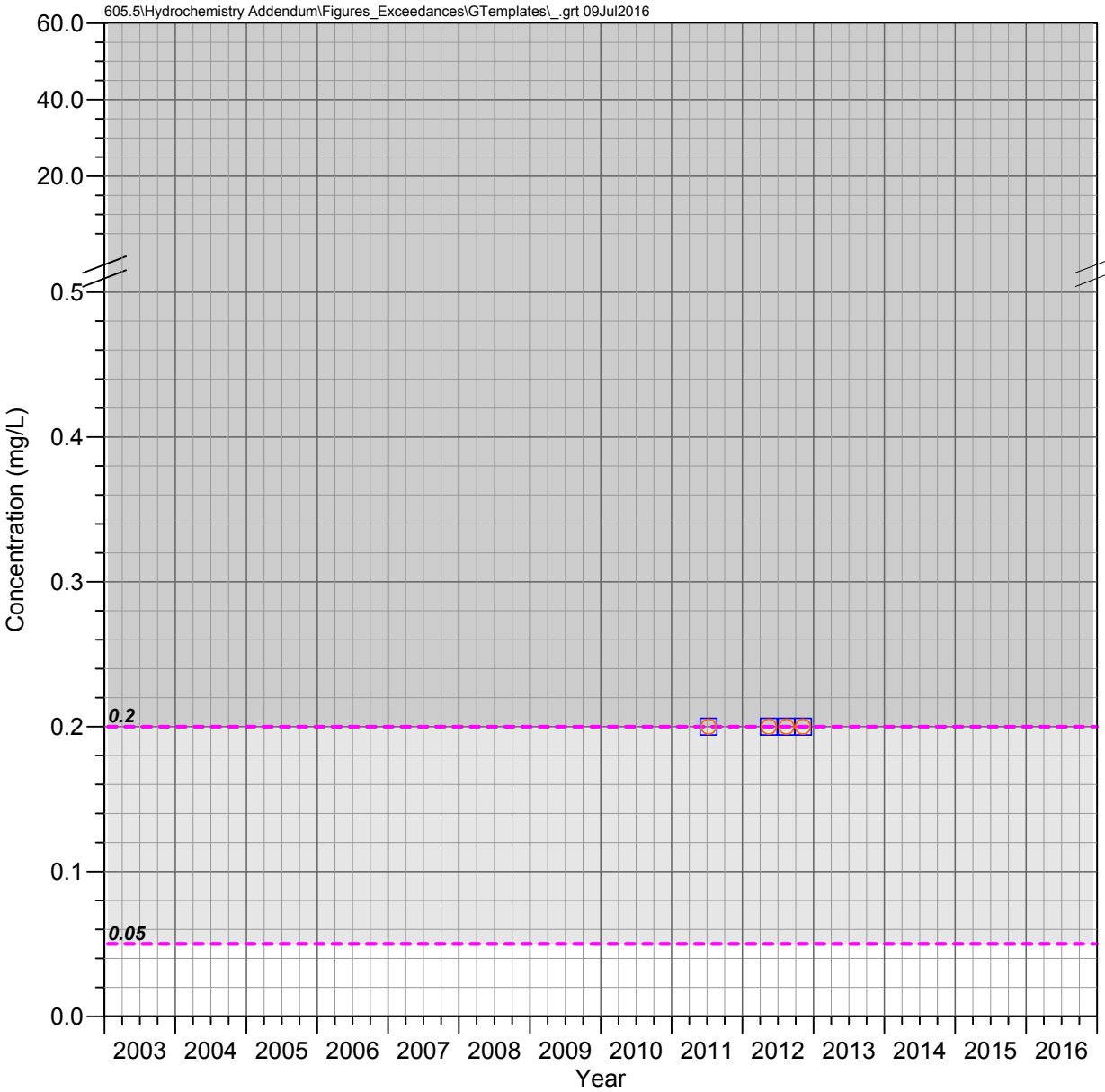


FIGURE E-016. ALUMINUM CONCENTRATIONS OBSERVED AT HRES-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-12
Apache Leap Tuff Aquifer

ALUMINUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.05-0.2 mg/L*)

**Aluminum standard is defined as a range of 0.05 to 0.2 mg/L. EPA recommends that aluminum concentrations should be at or below 0.05 to minimize its impact on water color, but due to the usefulness of aluminum salts for water treatment, an upper maximum is given at 0.2 mg/L. For this report, we consider measurements above 0.2 mg/L as clear exceedances, but recognize that values above 0.05 mg/L may also be impacting water color.*

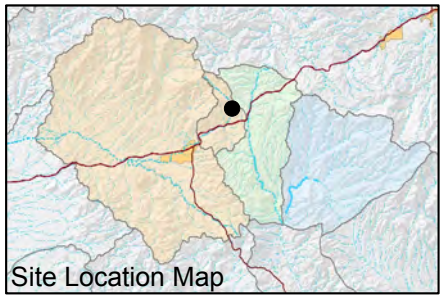
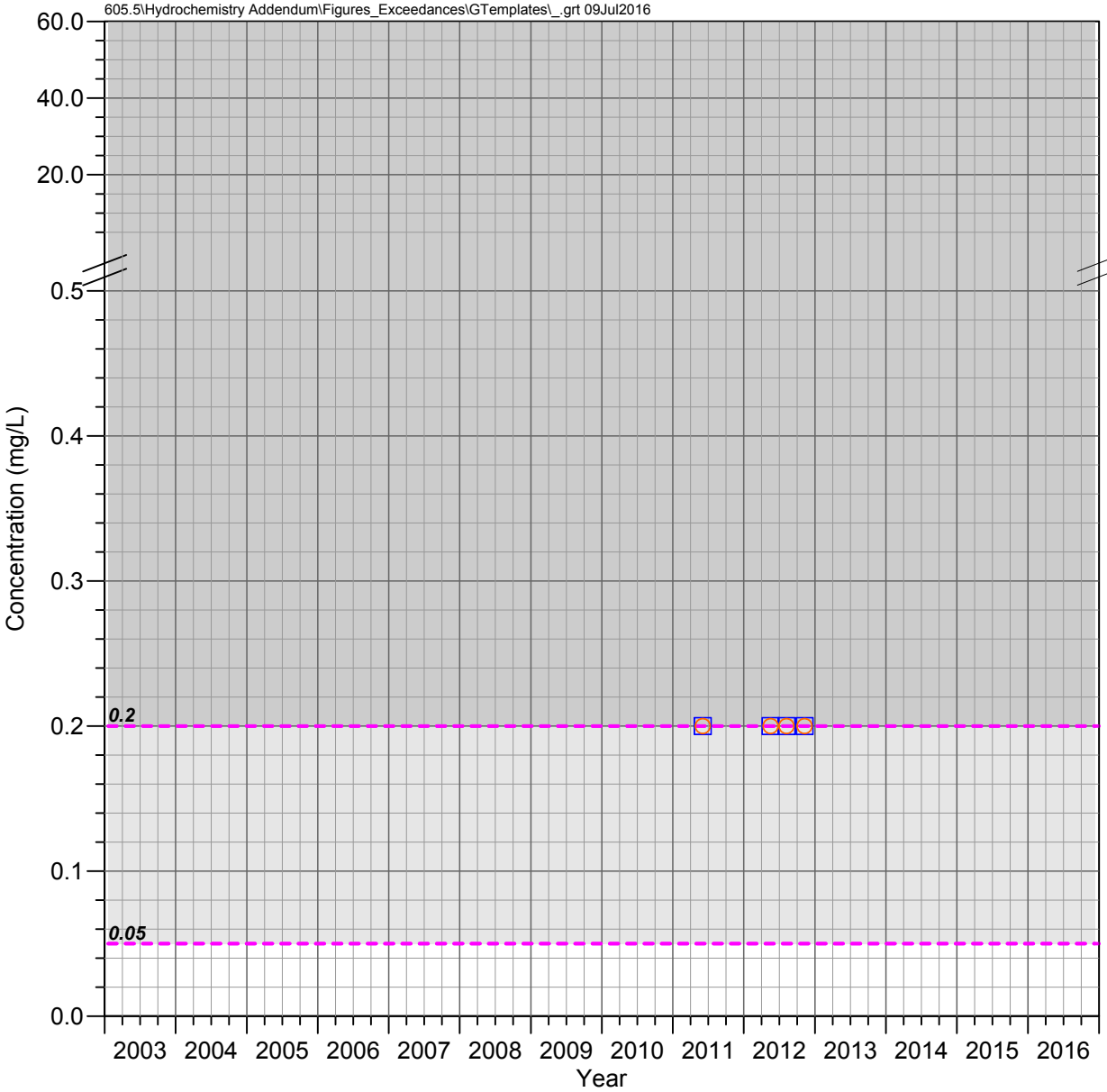


FIGURE E-017. ALUMINUM CONCENTRATIONS OBSERVED AT HRES-12, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-13
Apache Leap Tuff Aquifer

ALUMINUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.05-0.2 mg/L*)

**Aluminum standard is defined as a range of 0.05 to 0.2 mg/L. EPA recommends that aluminum concentrations should be at or below 0.05 to minimize its impact on water color, but due to the usefulness of aluminum salts for water treatment, an upper maximum is given at 0.2 mg/L. For this report, we consider measurements above 0.2 mg/L as clear exceedances, but recognize that values above 0.05 mg/L may also be impacting water color.*

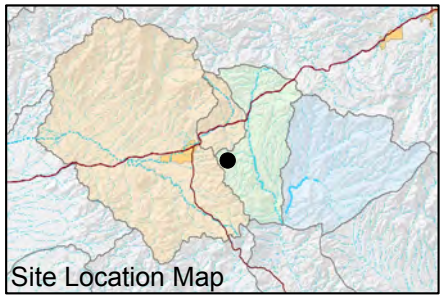
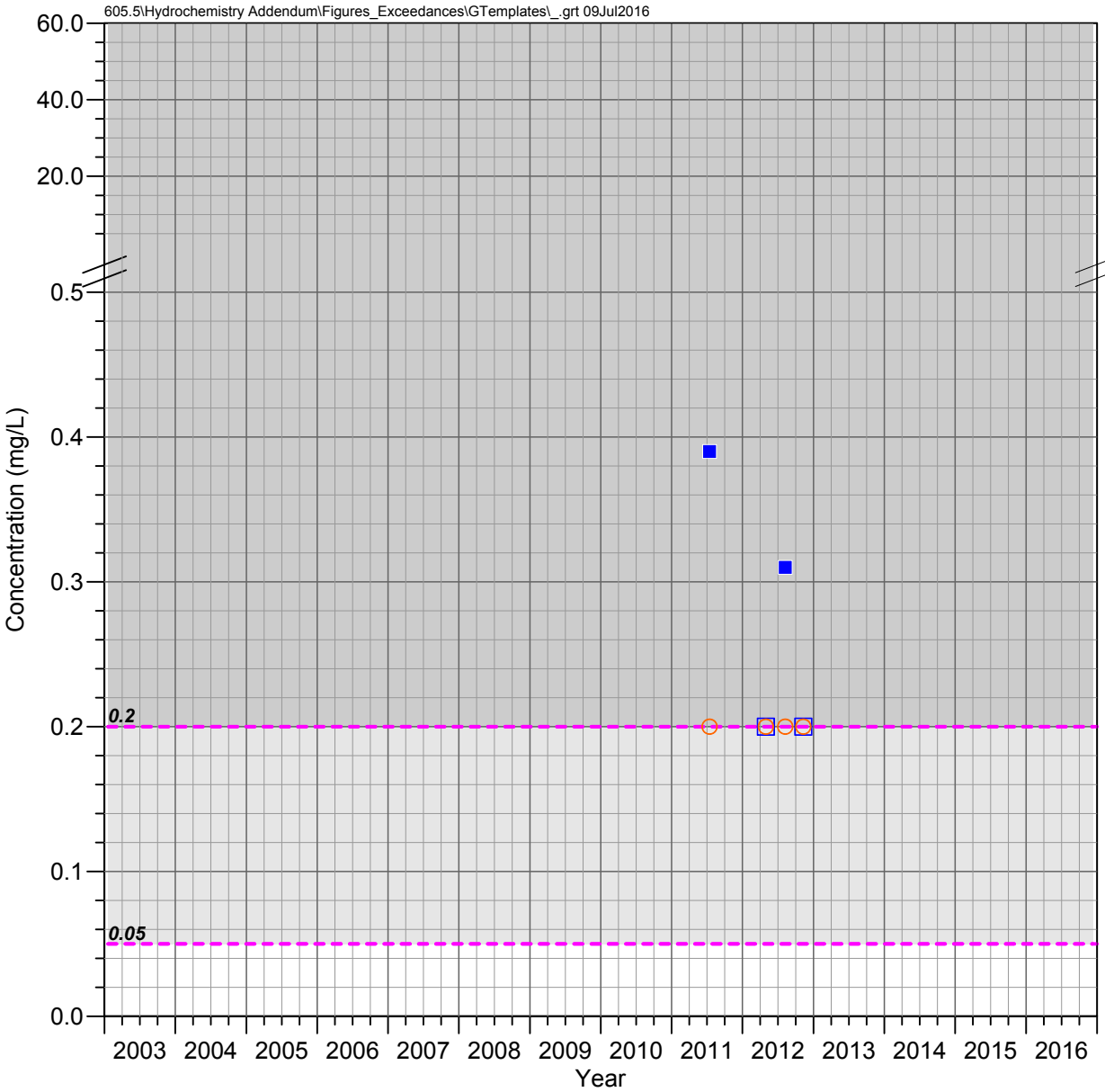


FIGURE E-018. ALUMINUM CONCENTRATIONS OBSERVED AT HRES-13, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-14
Apache Leap Tuff Aquifer

ALUMINUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.05-0.2 mg/L*)

**Aluminum standard is defined as a range of 0.05 to 0.2 mg/L. EPA recommends that aluminum concentrations should be at or below 0.05 to minimize its impact on water color, but due to the usefulness of aluminum salts for water treatment, an upper maximum is given at 0.2 mg/L. For this report, we consider measurements above 0.2 mg/L as clear exceedances, but recognize that values above 0.05 mg/L may also be impacting water color.*

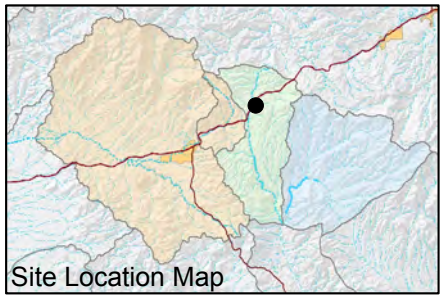
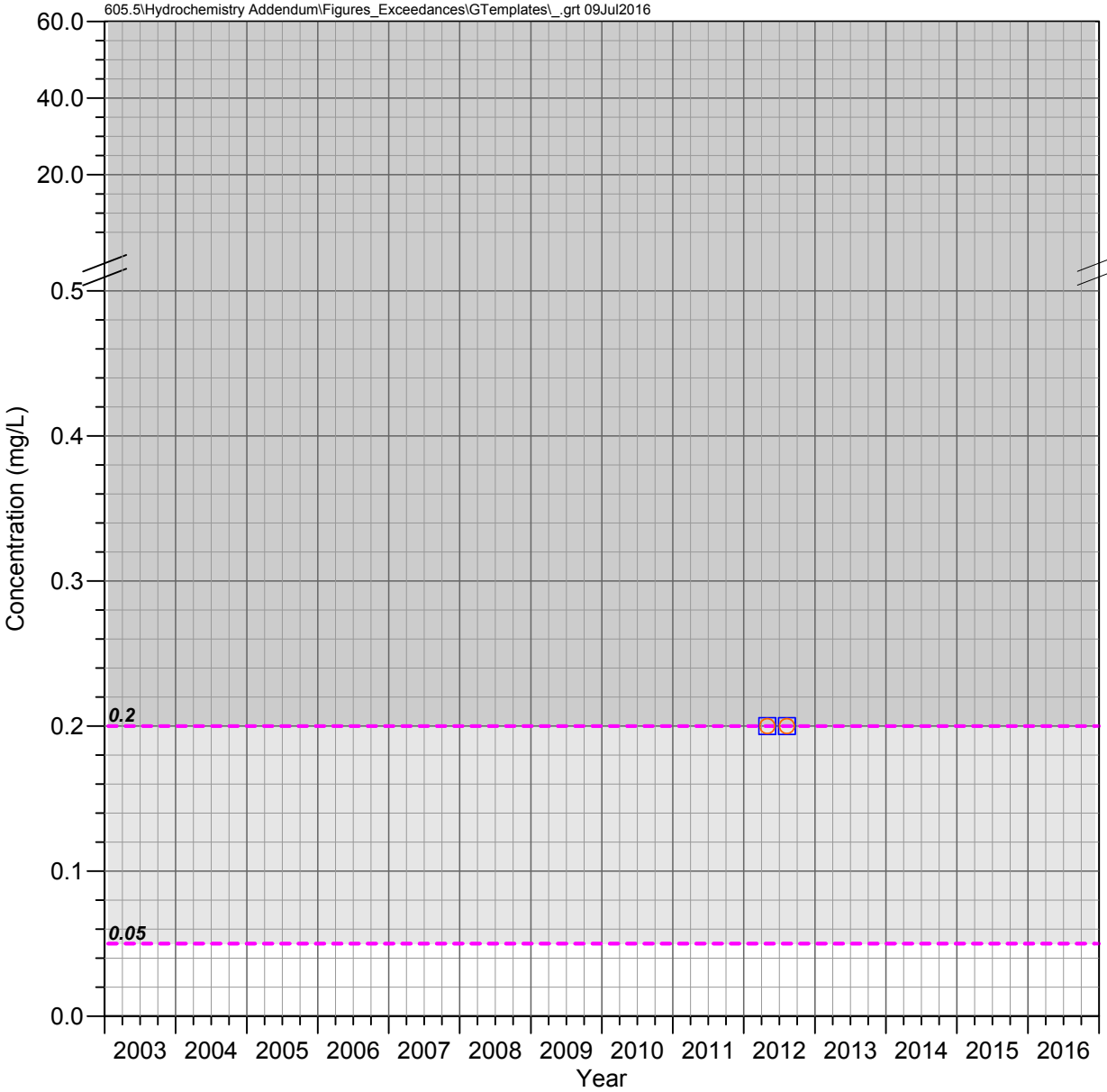


FIGURE E-019. ALUMINUM CONCENTRATIONS OBSERVED AT HRES-14, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-15
Apache Leap Tuff Aquifer

ALUMINUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.05-0.2 mg/L*)

**Aluminum standard is defined as a range of 0.05 to 0.2 mg/L. EPA recommends that aluminum concentrations should be at or below 0.05 to minimize its impact on water color, but due to the usefulness of aluminum salts for water treatment, an upper maximum is given at 0.2 mg/L. For this report, we consider measurements above 0.2 mg/L as clear exceedances, but recognize that values above 0.05 mg/L may also be impacting water color.*

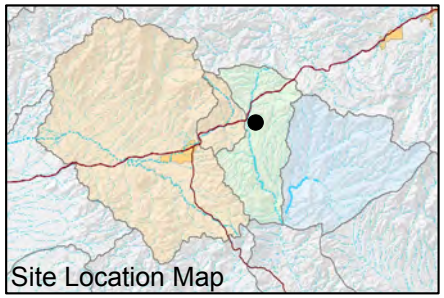
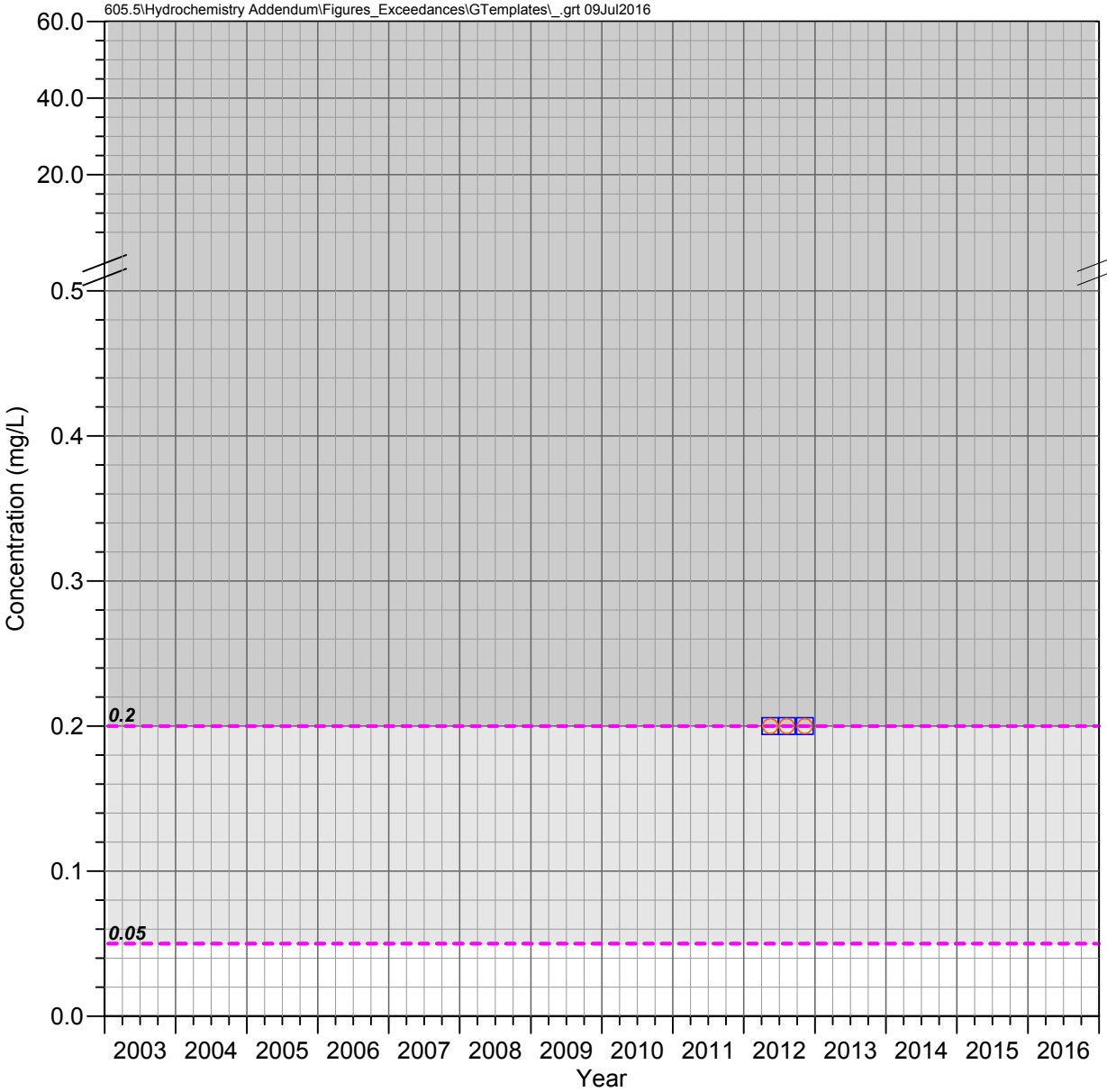


FIGURE E-020. ALUMINUM CONCENTRATIONS OBSERVED AT HRES-15, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-17
Apache Leap Tuff Aquifer

ALUMINUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.05-0.2 mg/L*)

**Aluminum standard is defined as a range of 0.05 to 0.2 mg/L. EPA recommends that aluminum concentrations should be at or below 0.05 to minimize its impact on water color, but due to the usefulness of aluminum salts for water treatment, an upper maximum is given at 0.2 mg/L. For this report, we consider measurements above 0.2 mg/L as clear exceedances, but recognize that values above 0.05 mg/L may also be impacting water color.*

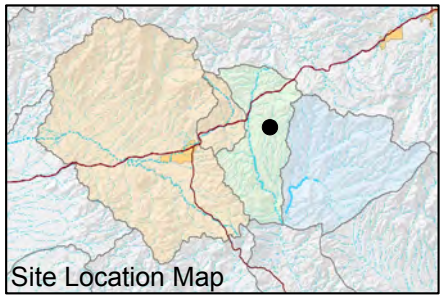
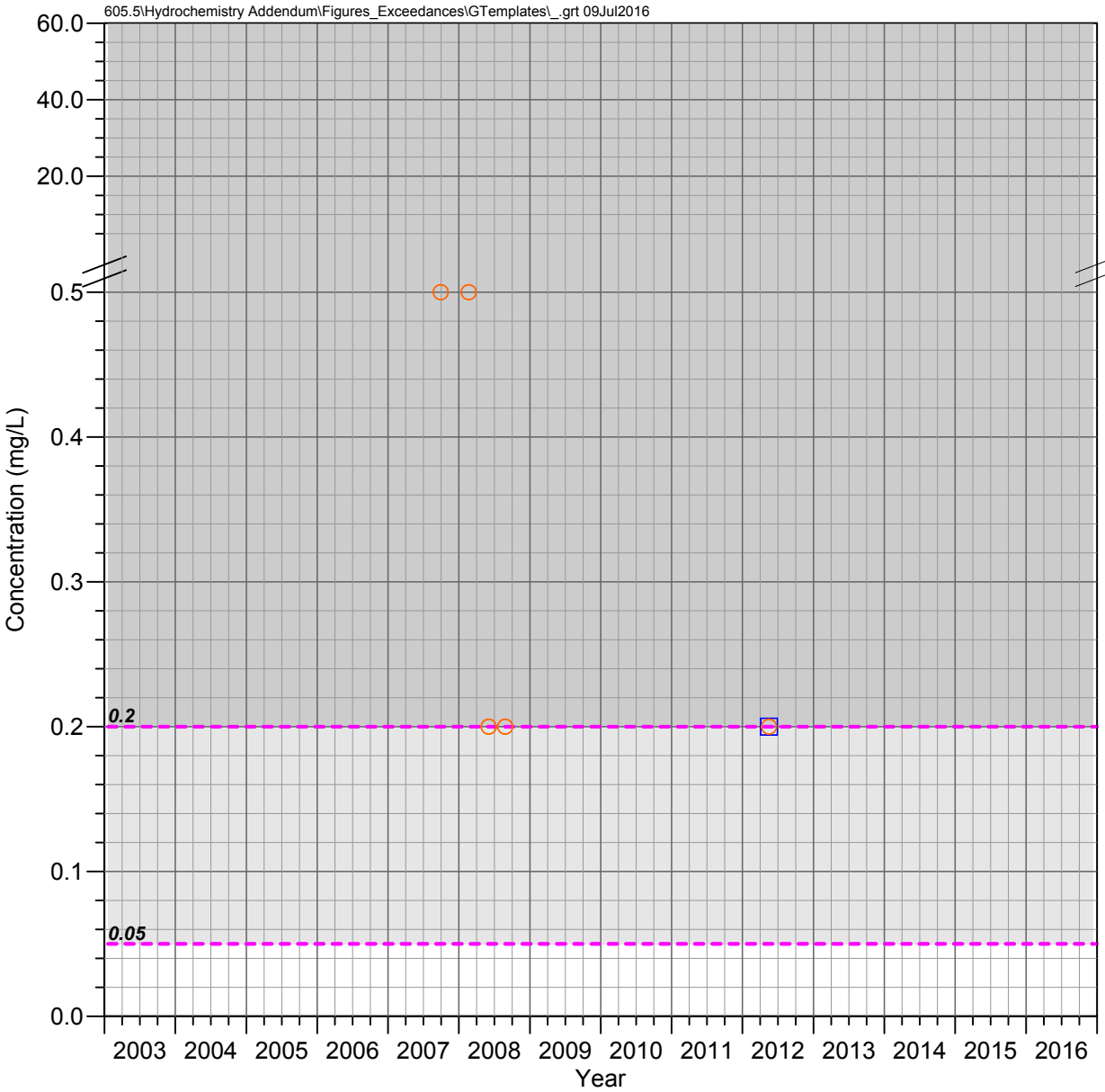


FIGURE E-021. ALUMINUM CONCENTRATIONS OBSERVED AT HRES-17, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MJ-11
Apache Leap Tuff Aquifer

ALUMINUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.05-0.2 mg/L*)

**Aluminum standard is defined as a range of 0.05 to 0.2 mg/L. EPA recommends that aluminum concentrations should be at or below 0.05 to minimize its impact on water color, but due to the usefulness of aluminum salts for water treatment, an upper maximum is given at 0.2 mg/L. For this report, we consider measurements above 0.2 mg/L as clear exceedances, but recognize that values above 0.05 mg/L may also be impacting water color.*

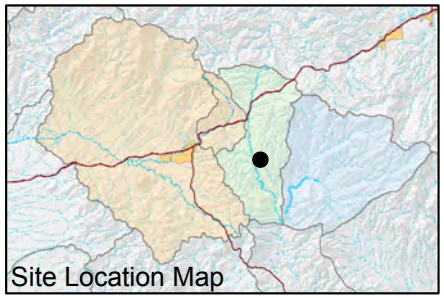
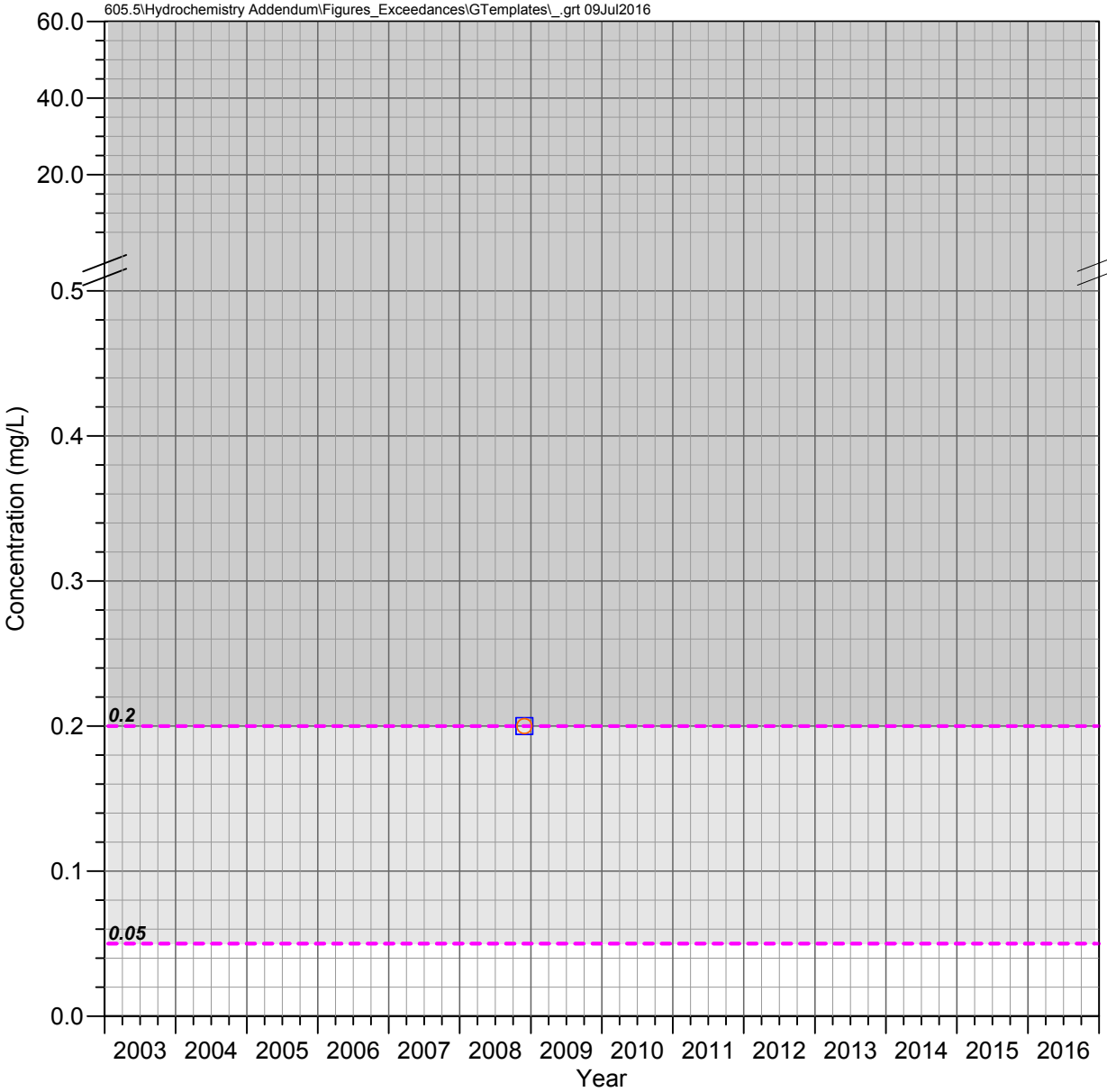


FIGURE E-022. ALUMINUM CONCENTRATIONS OBSERVED AT MJ-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-01
Deep Groundwater System

ALUMINUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.05-0.2 mg/L*)

**Aluminum standard is defined as a range of 0.05 to 0.2 mg/L. EPA recommends that aluminum concentrations should be at or below 0.05 to minimize its impact on water color, but due to the usefulness of aluminum salts for water treatment, an upper maximum is given at 0.2 mg/L. For this report, we consider measurements above 0.2 mg/L as clear exceedances, but recognize that values above 0.05 mg/L may also be impacting water color.*

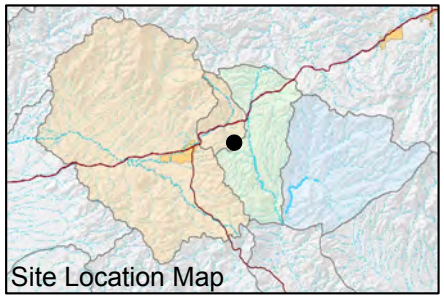
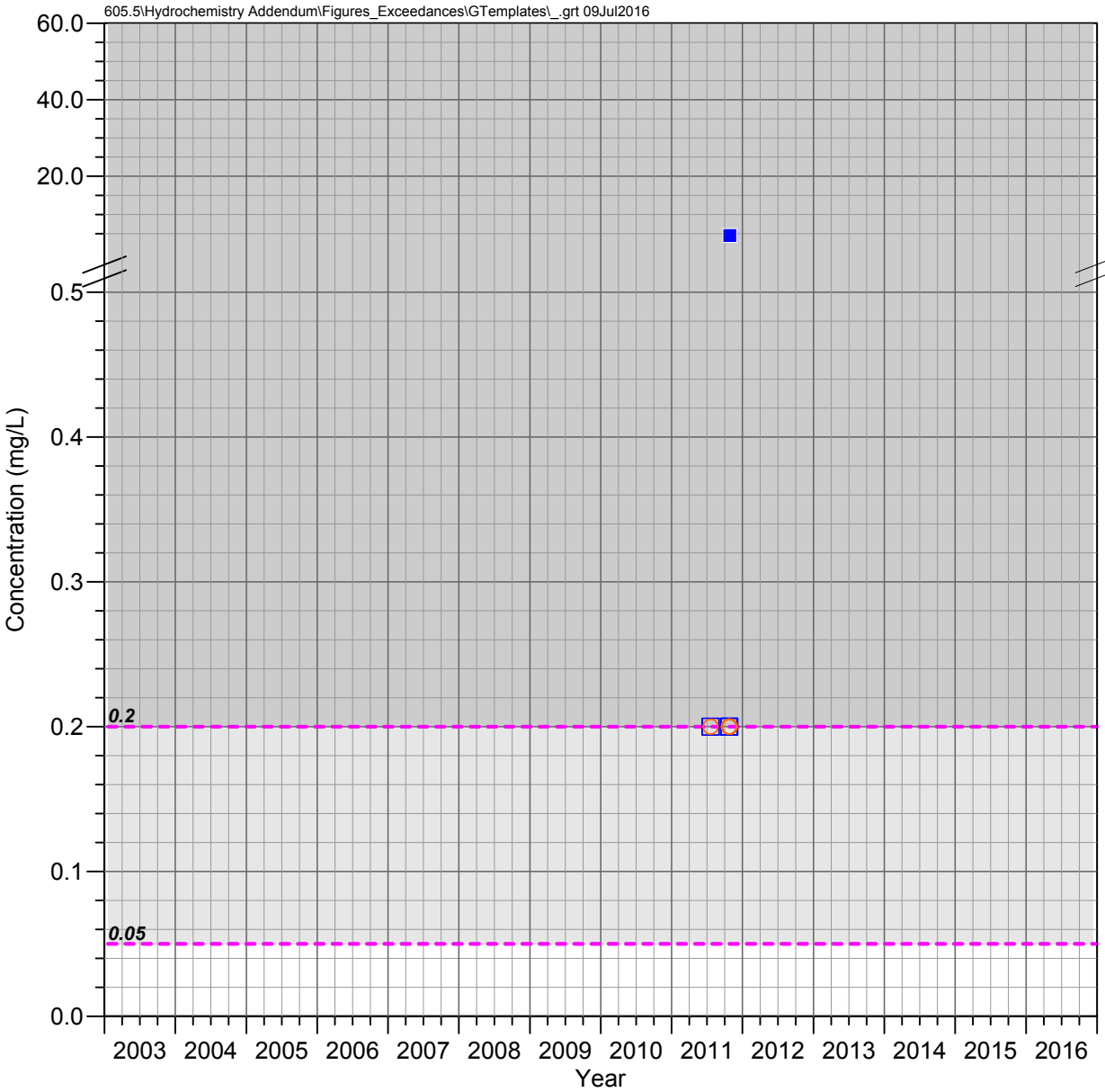


FIGURE E-023. ALUMINUM CONCENTRATIONS OBSERVED AT DHRES-01, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-02
Deep Groundwater System

ALUMINUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.05-0.2 mg/L*)

**Aluminum standard is defined as a range of 0.05 to 0.2 mg/L. EPA recommends that aluminum concentrations should be at or below 0.05 to minimize its impact on water color, but due to the usefulness of aluminum salts for water treatment, an upper maximum is given at 0.2 mg/L. For this report, we consider measurements above 0.2 mg/L as clear exceedances, but recognize that values above 0.05 mg/L may also be impacting water color.*

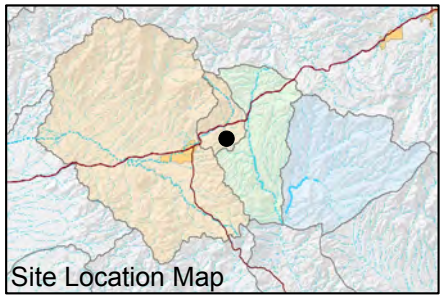
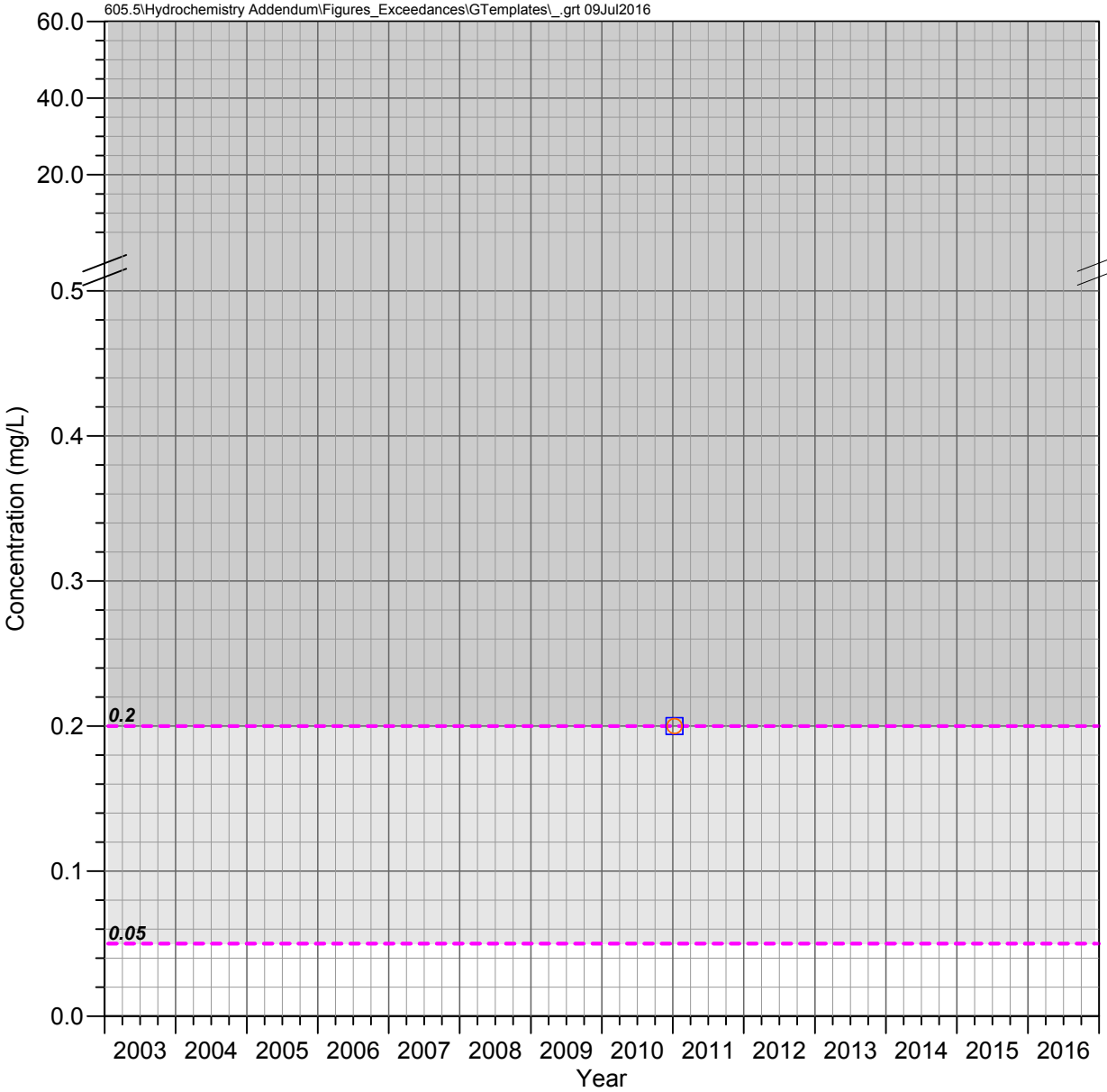


FIGURE E-024. ALUMINUM CONCENTRATIONS OBSERVED AT DHRES-02, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-06
Deep Groundwater System

ALUMINUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.05-0.2 mg/L*)

**Aluminum standard is defined as a range of 0.05 to 0.2 mg/L. EPA recommends that aluminum concentrations should be at or below 0.05 to minimize its impact on water color, but due to the usefulness of aluminum salts for water treatment, an upper maximum is given at 0.2 mg/L. For this report, we consider measurements above 0.2 mg/L as clear exceedances, but recognize that values above 0.05 mg/L may also be impacting water color.*

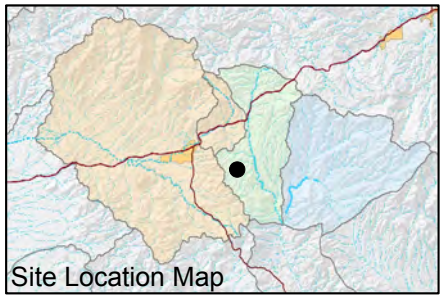
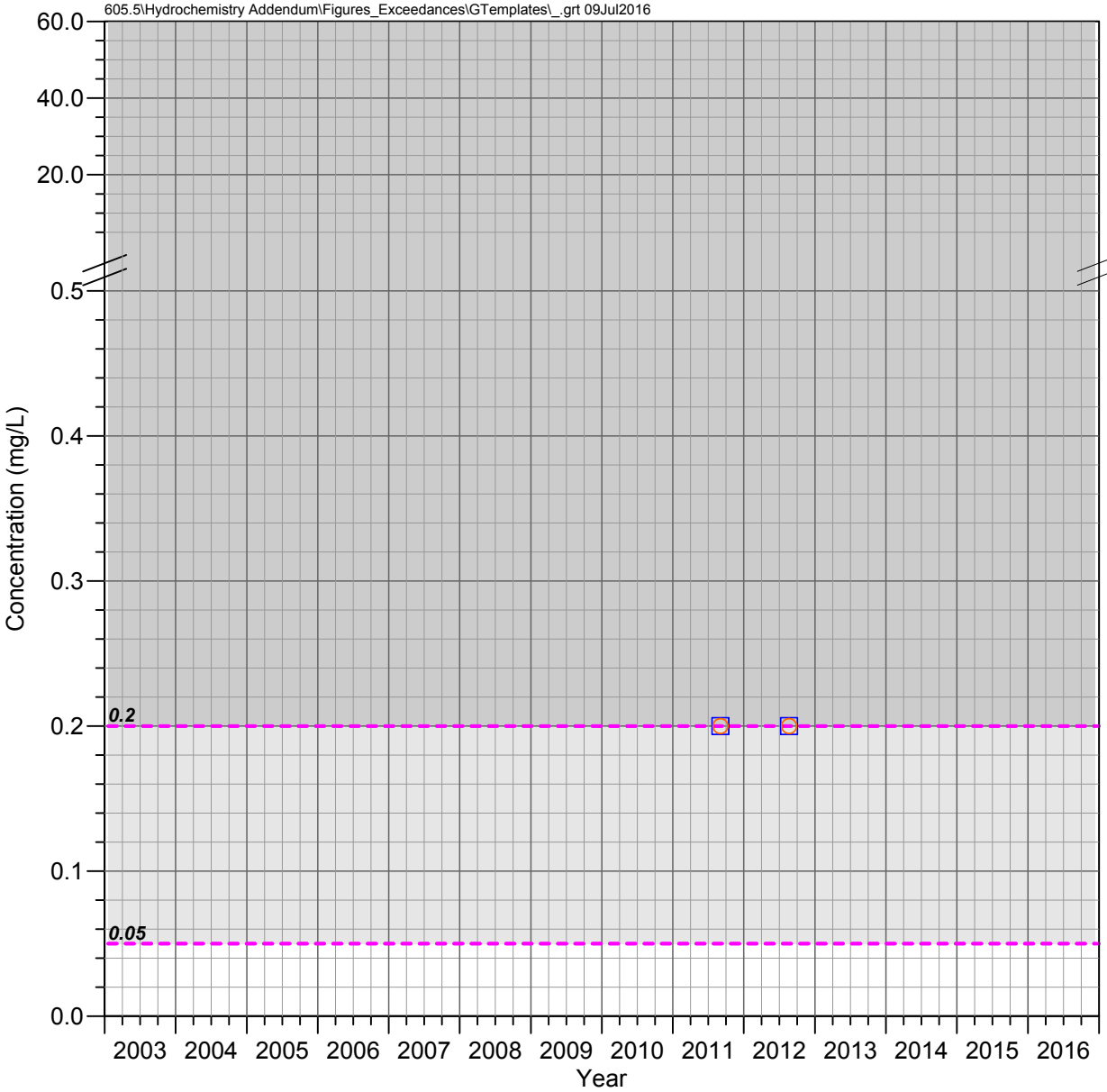


FIGURE E-025. ALUMINUM CONCENTRATIONS OBSERVED AT DHRES-06, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-09
Deep Groundwater System

ALUMINUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.05-0.2 mg/L*)

**Aluminum standard is defined as a range of 0.05 to 0.2 mg/L. EPA recommends that aluminum concentrations should be at or below 0.05 to minimize its impact on water color, but due to the usefulness of aluminum salts for water treatment, an upper maximum is given at 0.2 mg/L. For this report, we consider measurements above 0.2 mg/L as clear exceedances, but recognize that values above 0.05 mg/L may also be impacting water color.*

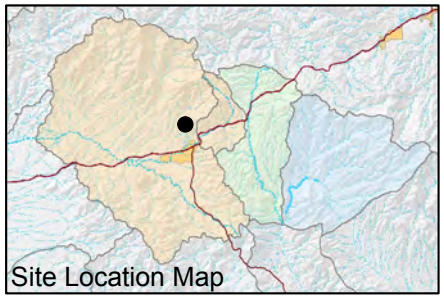
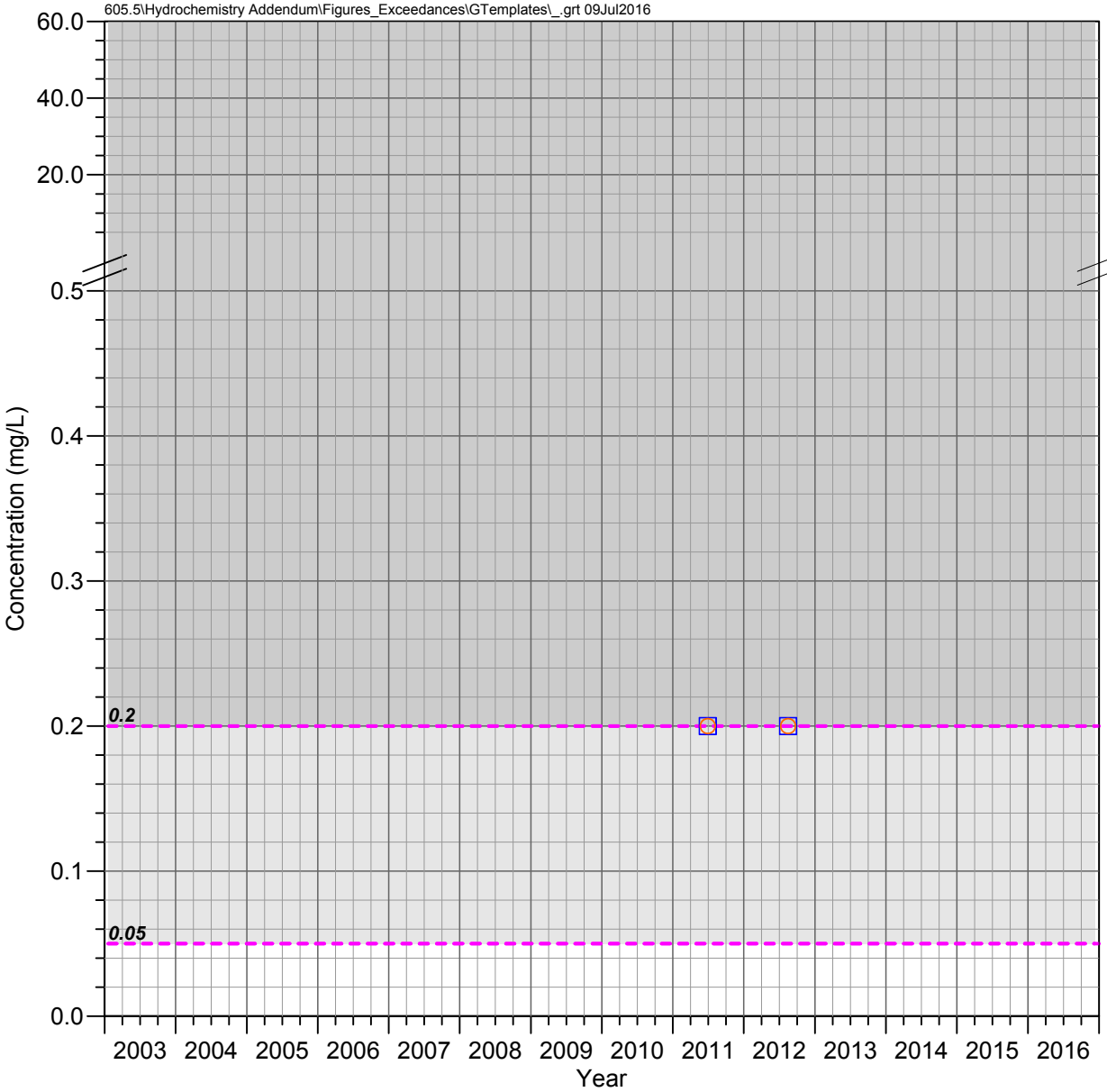


FIGURE E-026. ALUMINUM CONCENTRATIONS OBSERVED AT DHRES-09, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-11
Deep Groundwater System

ALUMINUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.05-0.2 mg/L*)

**Aluminum standard is defined as a range of 0.05 to 0.2 mg/L. EPA recommends that aluminum concentrations should be at or below 0.05 to minimize its impact on water color, but due to the usefulness of aluminum salts for water treatment, an upper maximum is given at 0.2 mg/L. For this report, we consider measurements above 0.2 mg/L as clear exceedances, but recognize that values above 0.05 mg/L may also be impacting water color.*

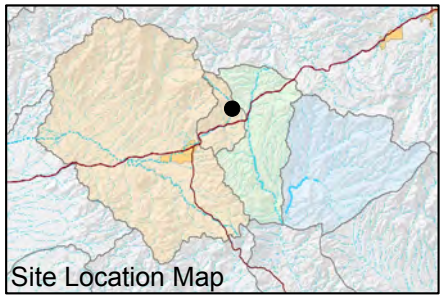
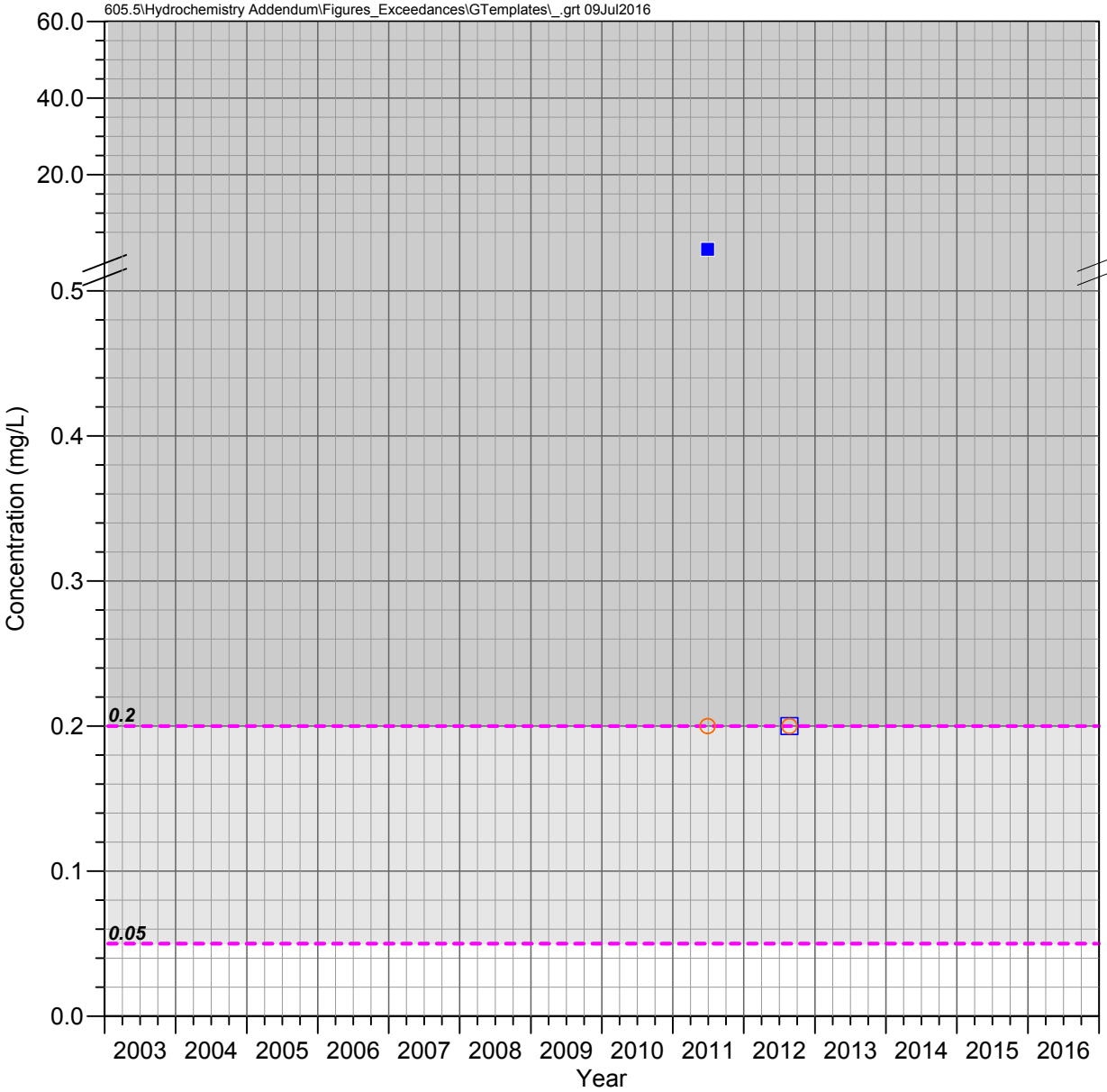


FIGURE E-027. ALUMINUM CONCENTRATIONS OBSERVED AT DHRES-11, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-13
Deep Groundwater System

ALUMINUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.05-0.2 mg/L*)

**Aluminum standard is defined as a range of 0.05 to 0.2 mg/L. EPA recommends that aluminum concentrations should be at or below 0.05 to minimize its impact on water color, but due to the usefulness of aluminum salts for water treatment, an upper maximum is given at 0.2 mg/L. For this report, we consider measurements above 0.2 mg/L as clear exceedances, but recognize that values above 0.05 mg/L may also be impacting water color.*

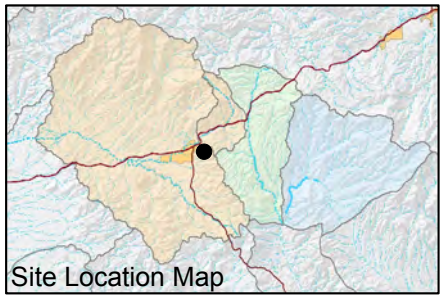
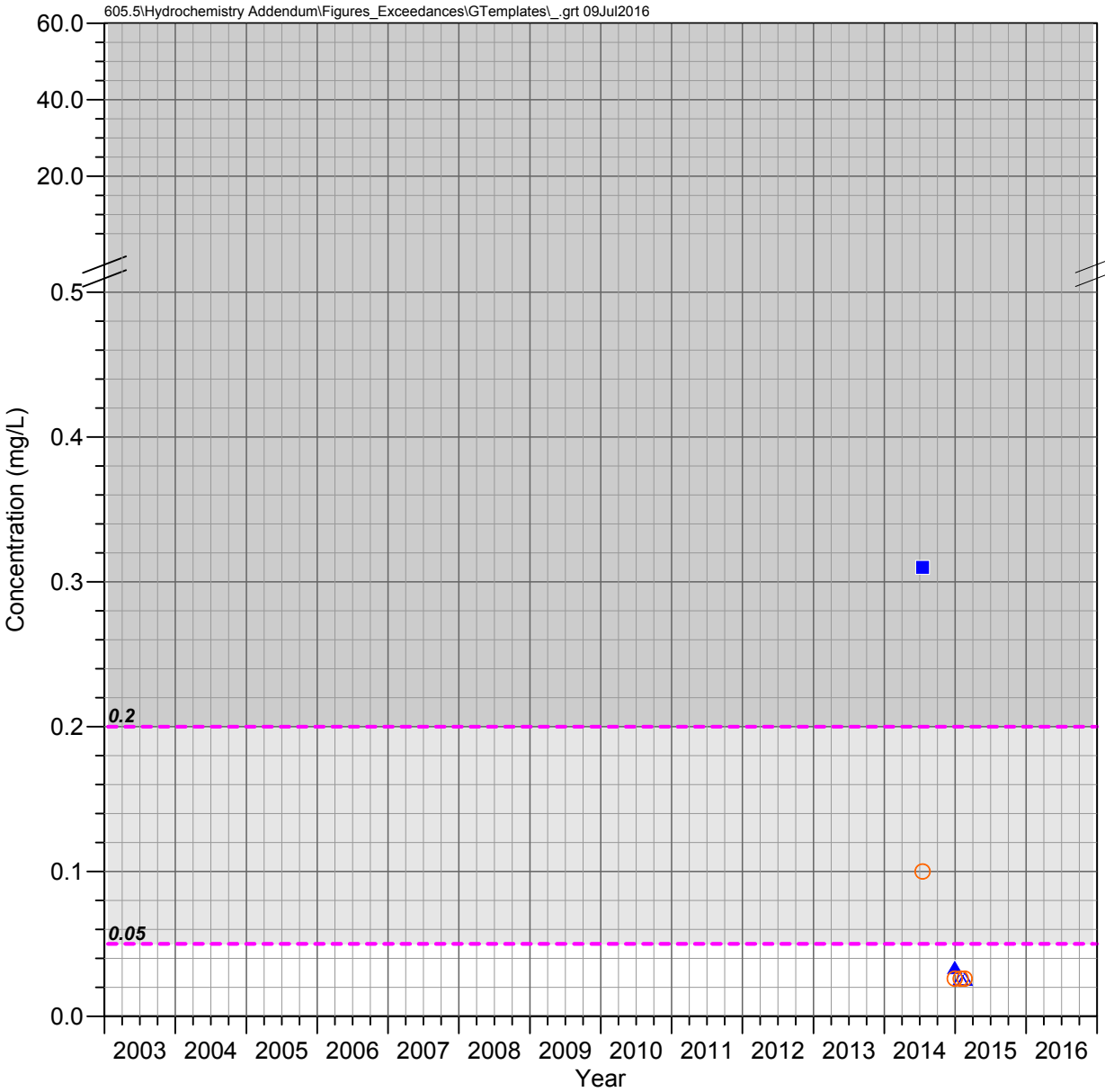


FIGURE E-028. ALUMINUM CONCENTRATIONS OBSERVED AT DHRES-13, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-15
Deep Groundwater System

ALUMINUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.05-0.2 mg/L*)

**Aluminum standard is defined as a range of 0.05 to 0.2 mg/L. EPA recommends that aluminum concentrations should be at or below 0.05 to minimize its impact on water color, but due to the usefulness of aluminum salts for water treatment, an upper maximum is given at 0.2 mg/L. For this report, we consider measurements above 0.2 mg/L as clear exceedances, but recognize that values above 0.05 mg/L may also be impacting water color.*

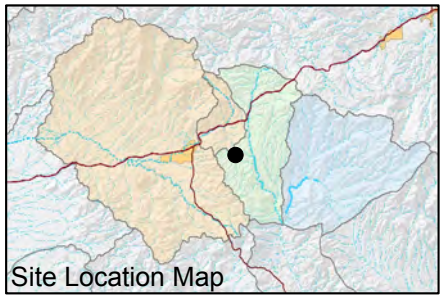
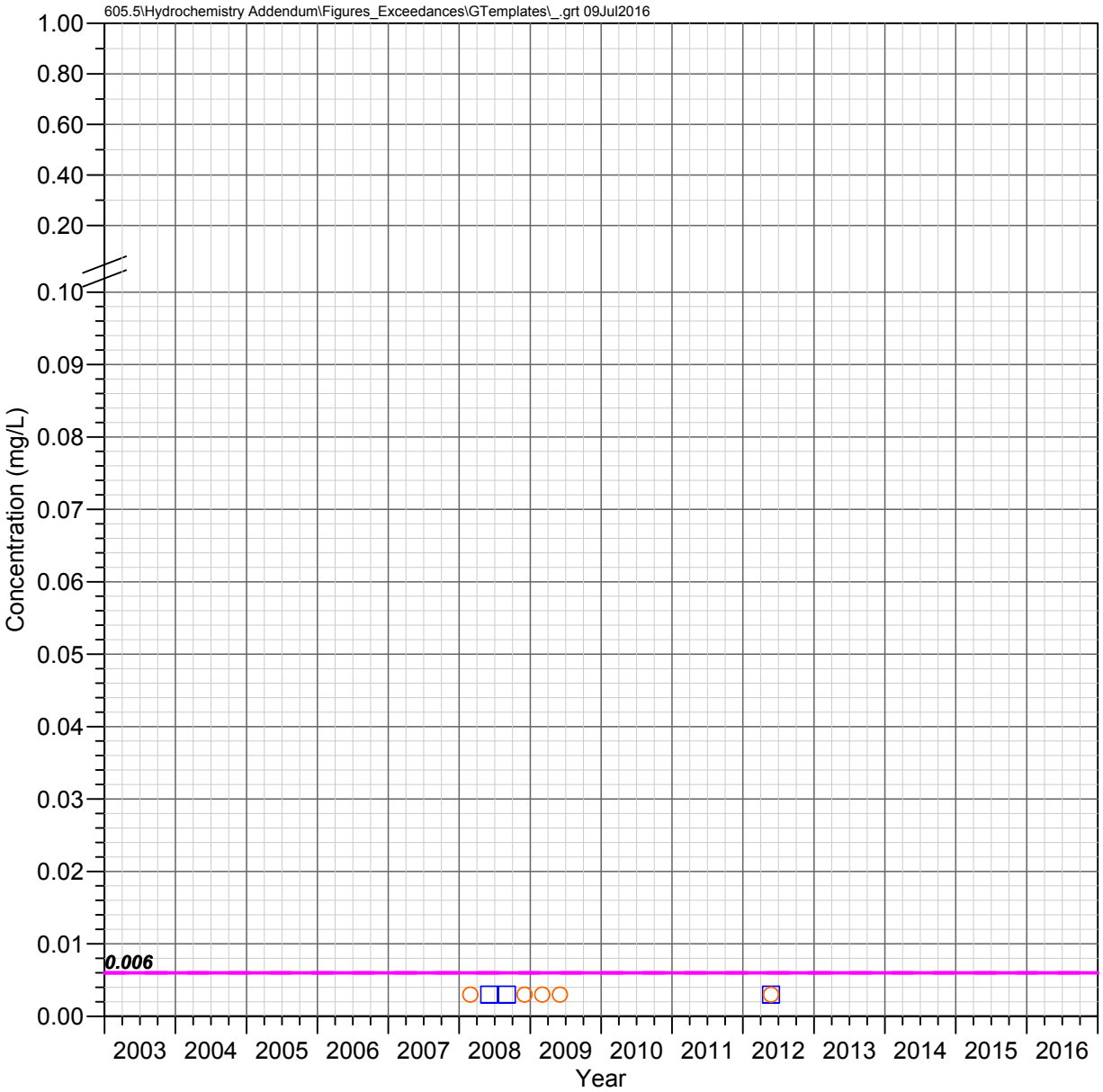


FIGURE E-029. ALUMINUM CONCENTRATIONS OBSERVED AT DHRES-15, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Hackberry Windmill Well Shallow Groundwater System

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.006 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.006 mg/L)

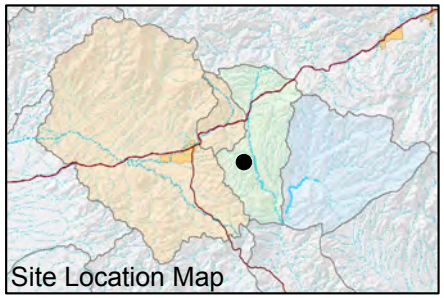
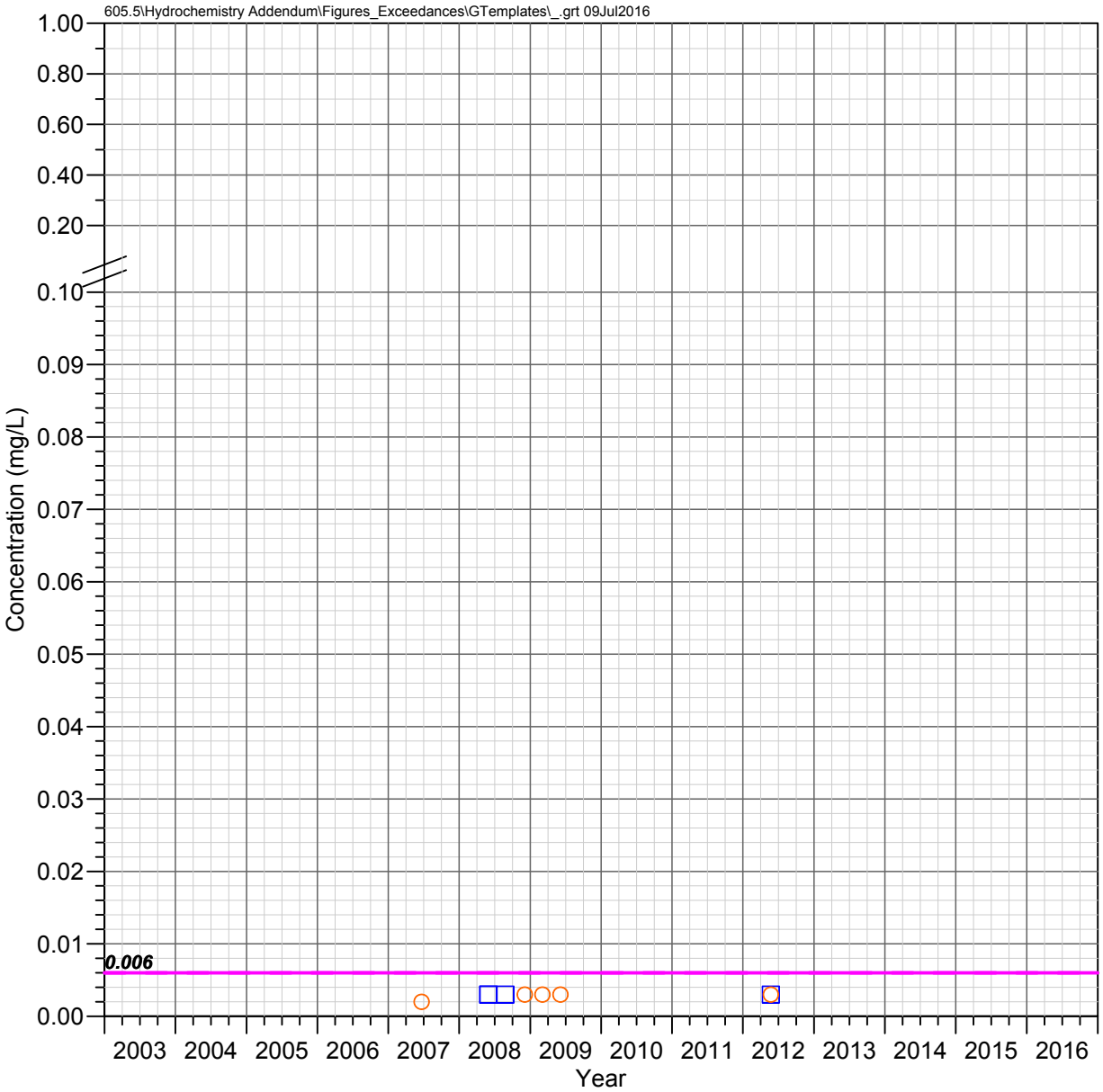


FIGURE E-030. ANTIMONY CONCENTRATIONS OBSERVED AT HACKBERRY WINDMILL WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



JI Ranch Corral Well Shallow Groundwater System

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.006 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.006 mg/L)

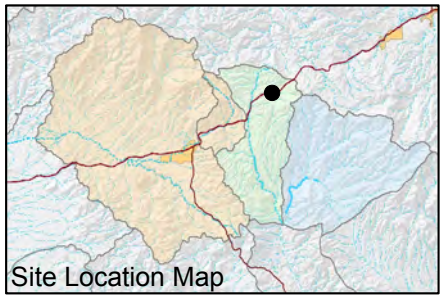
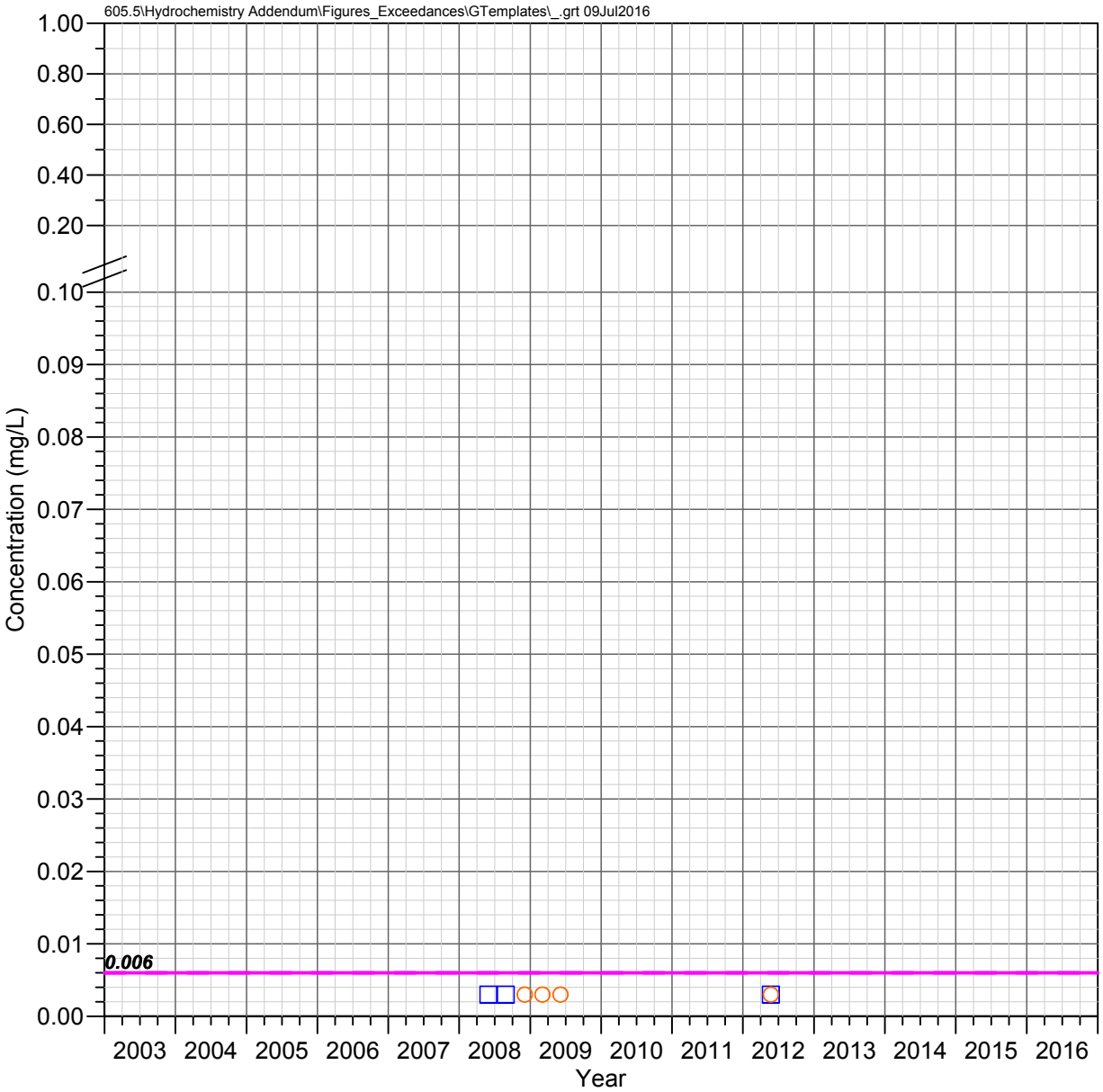


FIGURE E-031. ANTIMONY CONCENTRATIONS OBSERVED AT JI RANCH CORRAL WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



JI Ranch Middle Well Shallow Groundwater System

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.006 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.006 mg/L)

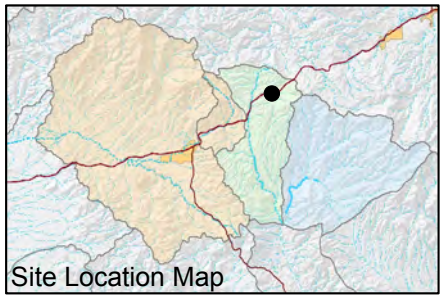
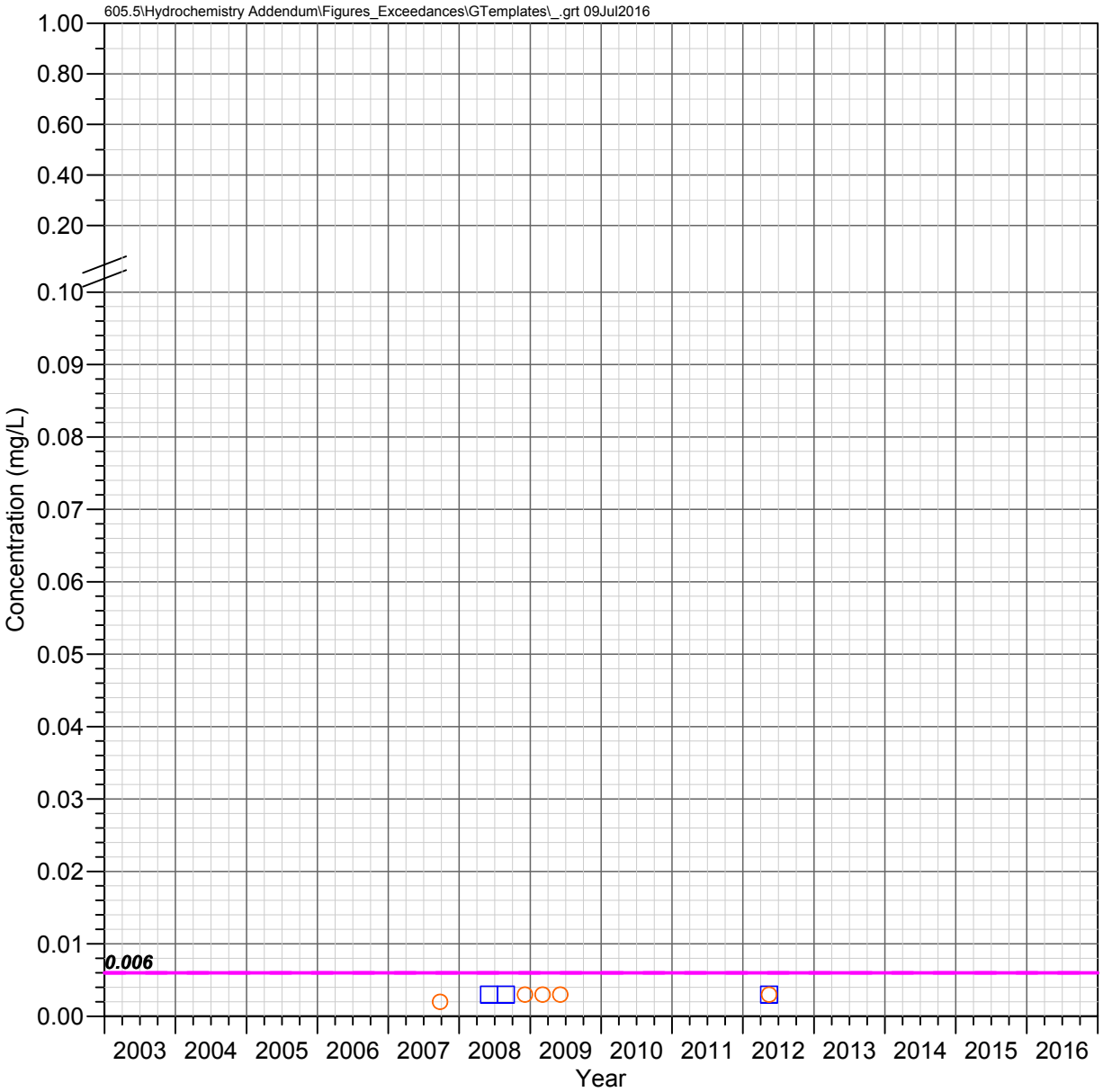


FIGURE E-032. ANTIMONY CONCENTRATIONS OBSERVED AT JI RANCH MIDDLE WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



A-06
Apache Leap Tuff Aquifer

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.006 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.006 mg/L)

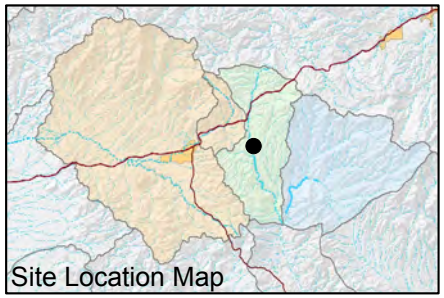
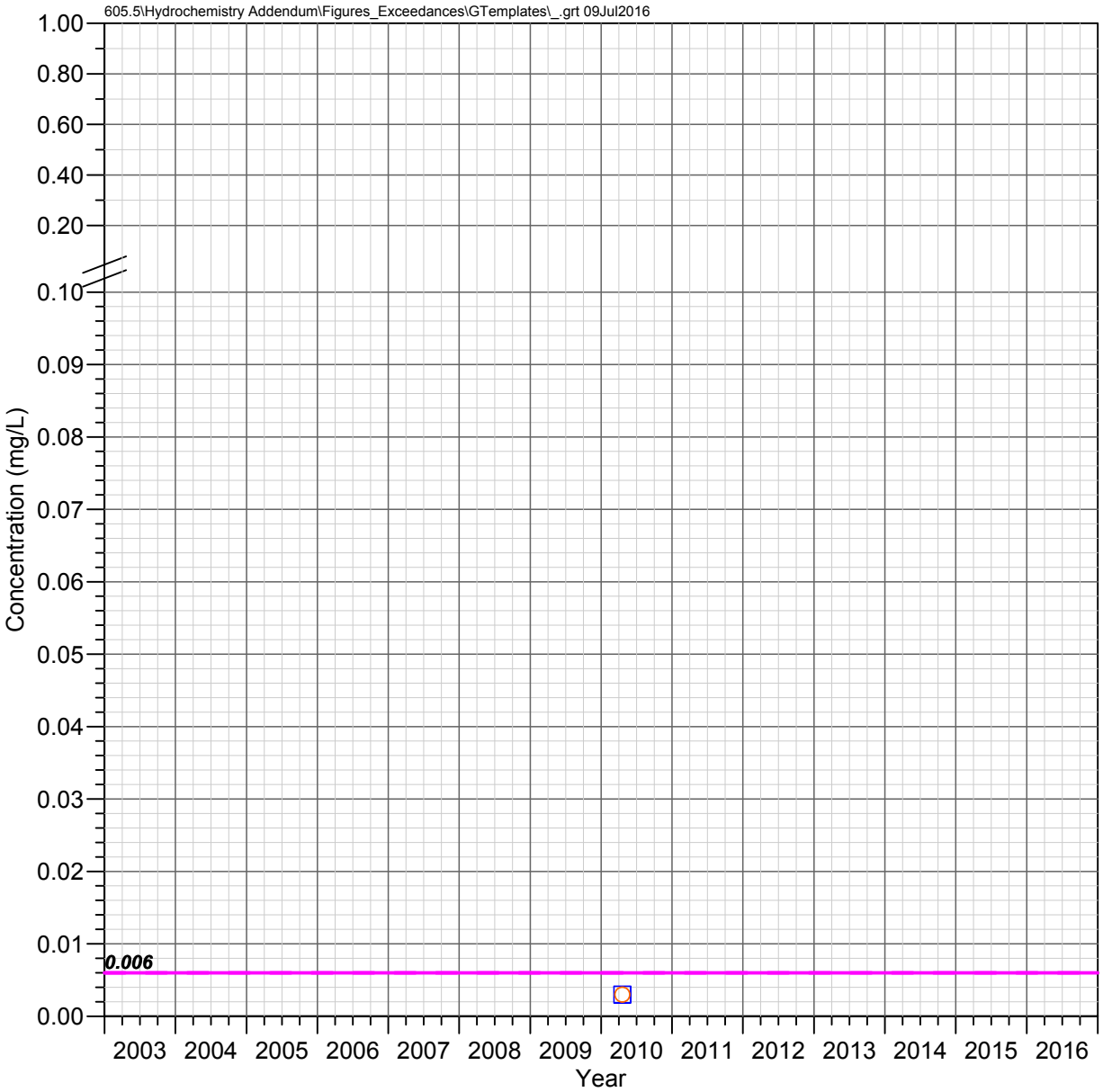


FIGURE E-033. ANTIMONY CONCENTRATIONS OBSERVED AT A-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



CT Well
Apache Leap Tuff Aquifer

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.006 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.006 mg/L)

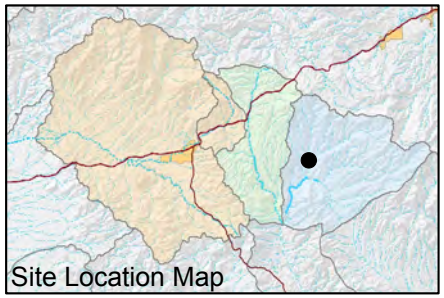
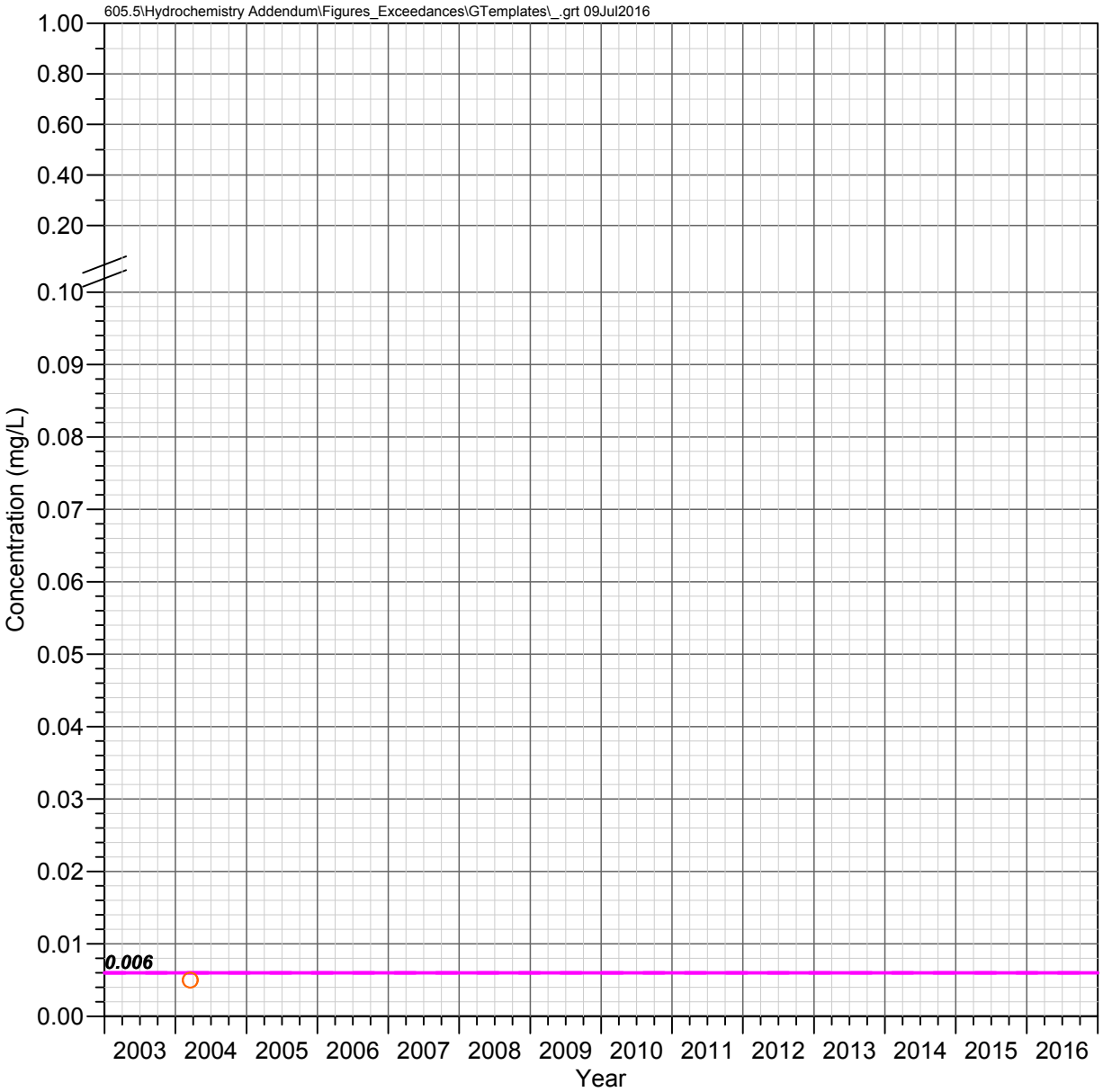


FIGURE E-034. ANTIMONY CONCENTRATIONS OBSERVED AT CT WELL, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-01
Apache Leap Tuff Aquifer

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.006 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.006 mg/L)

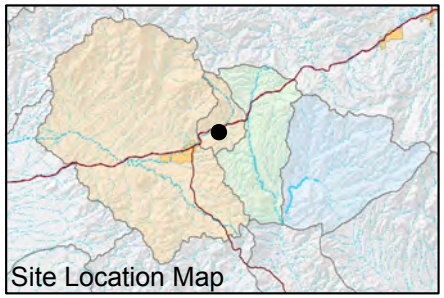
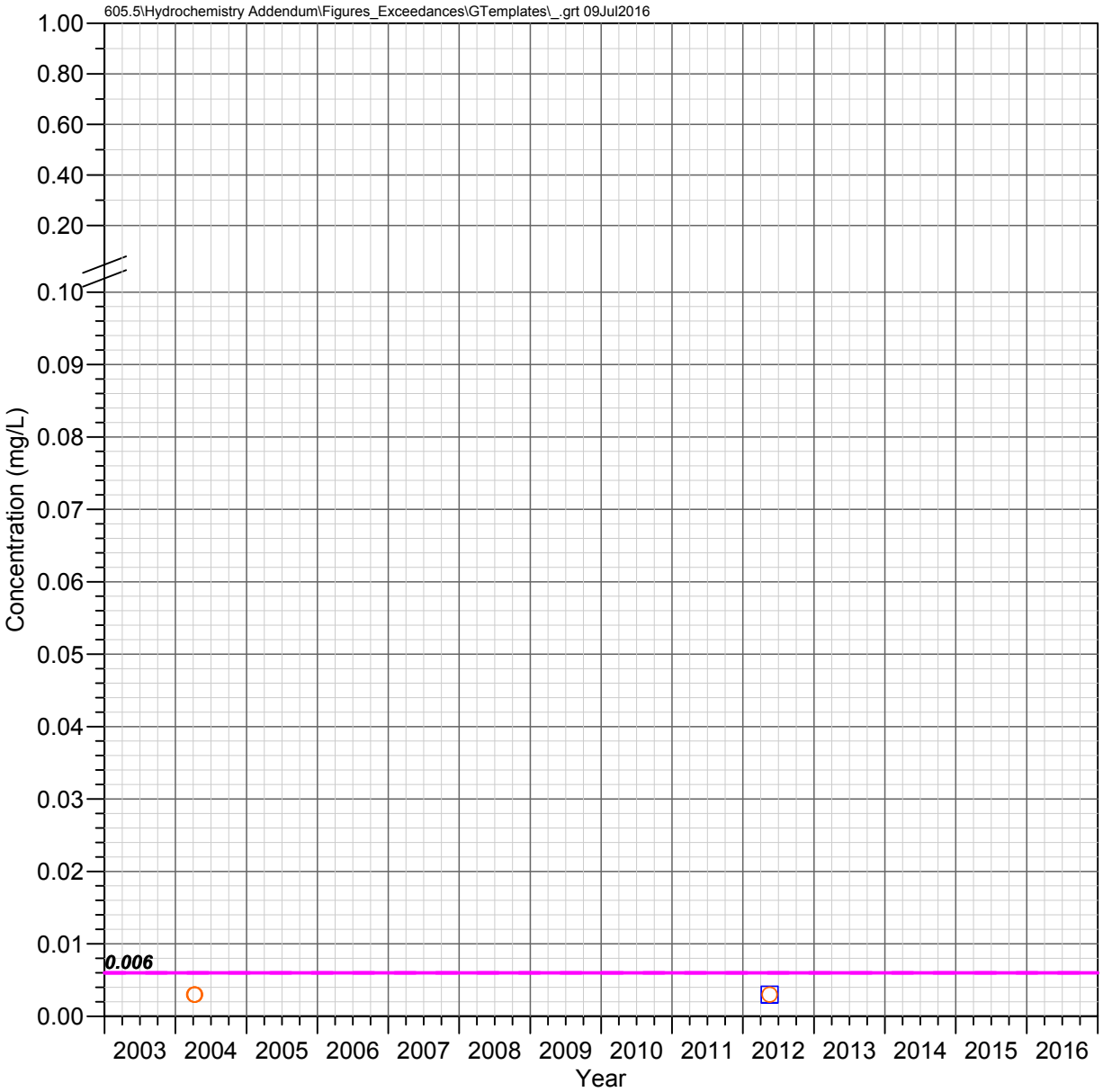


FIGURE E-035. ANTIMONY CONCENTRATIONS OBSERVED AT HRES-01, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-02
Apache Leap Tuff Aquifer

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.006 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.006 mg/L)

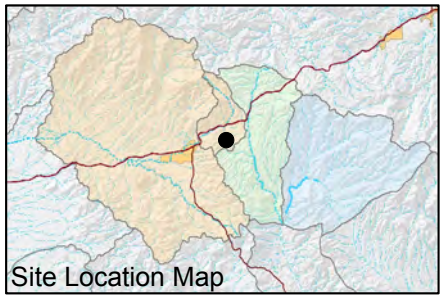
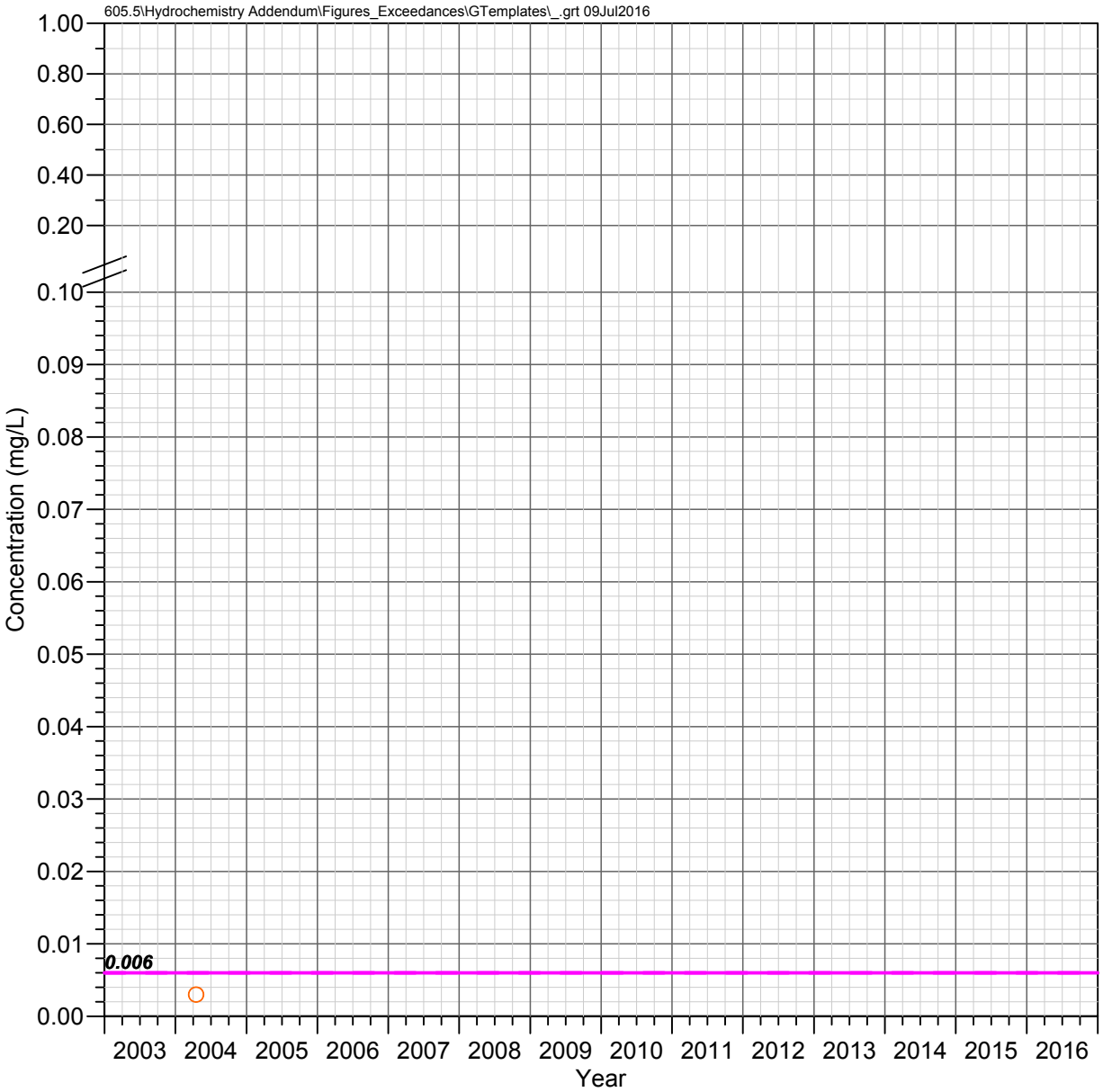


FIGURE E-036. ANTIMONY CONCENTRATIONS OBSERVED AT HRES-02, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-03d
Apache Leap Tuff Aquifer

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.006 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.006 mg/L)

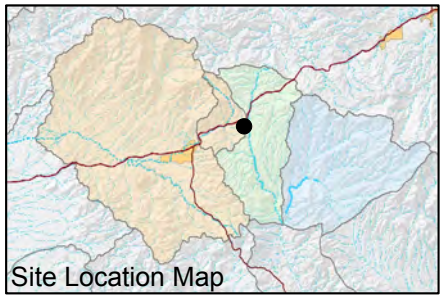
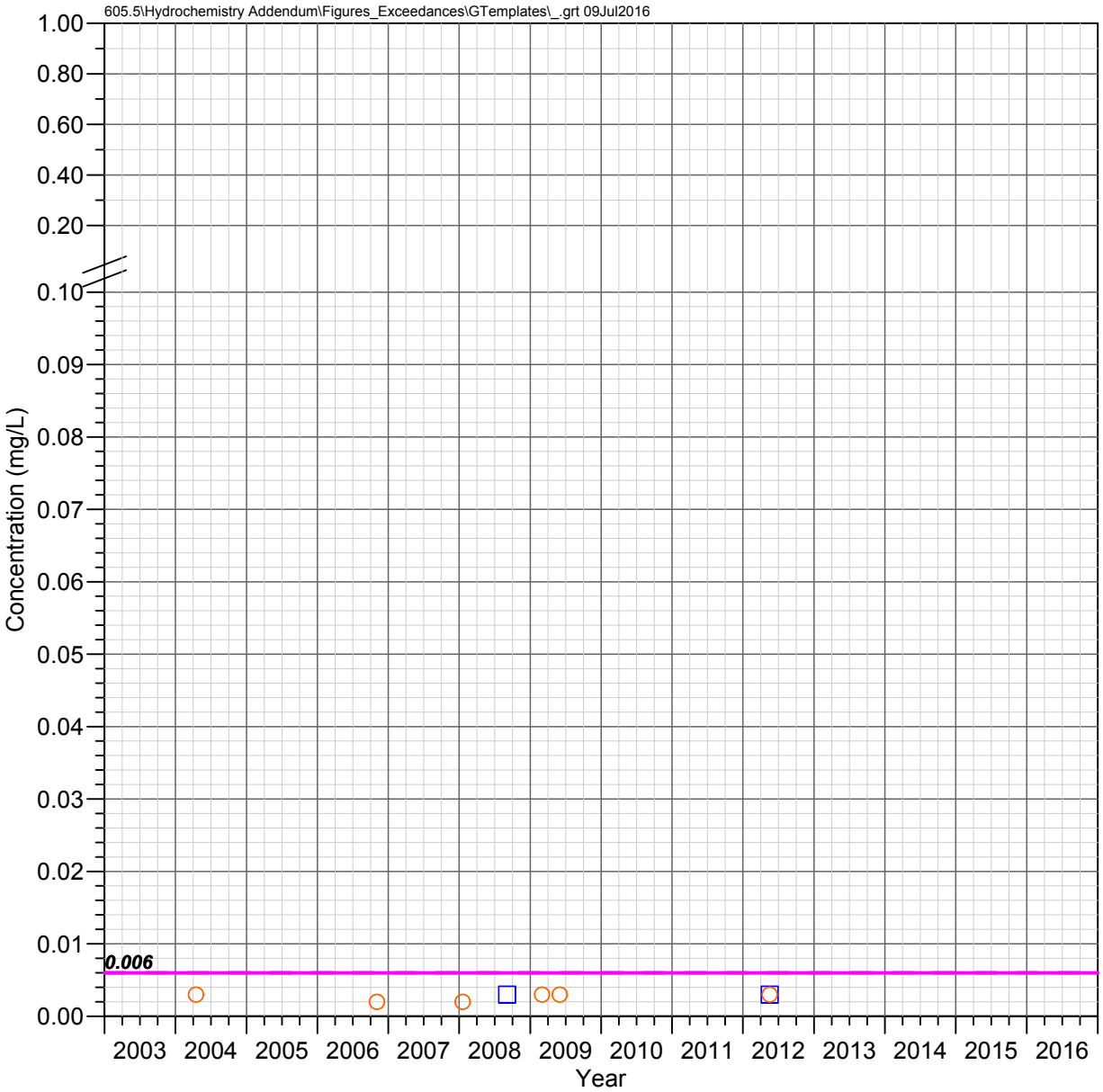


FIGURE E-037. ANTIMONY CONCENTRATIONS OBSERVED AT HRES-03D, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-04
Apache Leap Tuff Aquifer

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.006 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.006 mg/L)

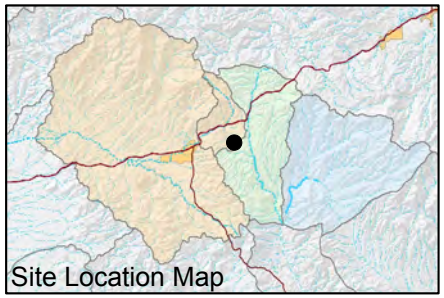
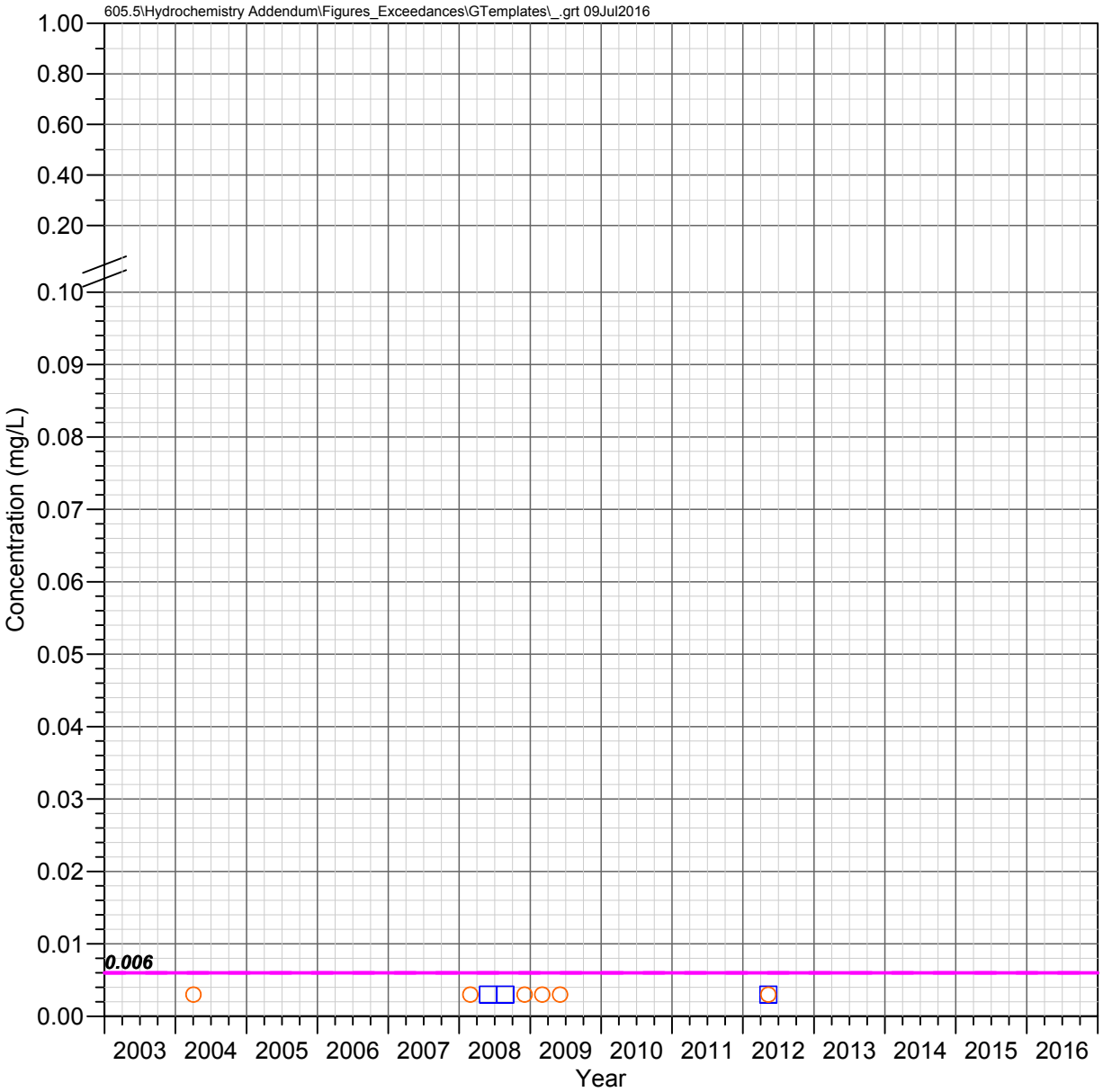


FIGURE E-038. ANTIMONY CONCENTRATIONS OBSERVED AT HRES-04, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-05
Apache Leap Tuff Aquifer

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.006 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.006 mg/L)

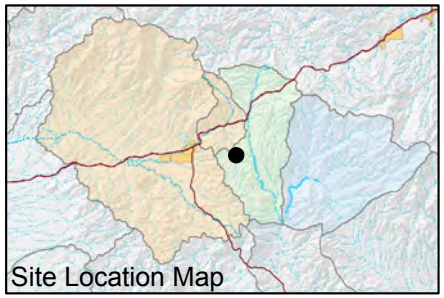
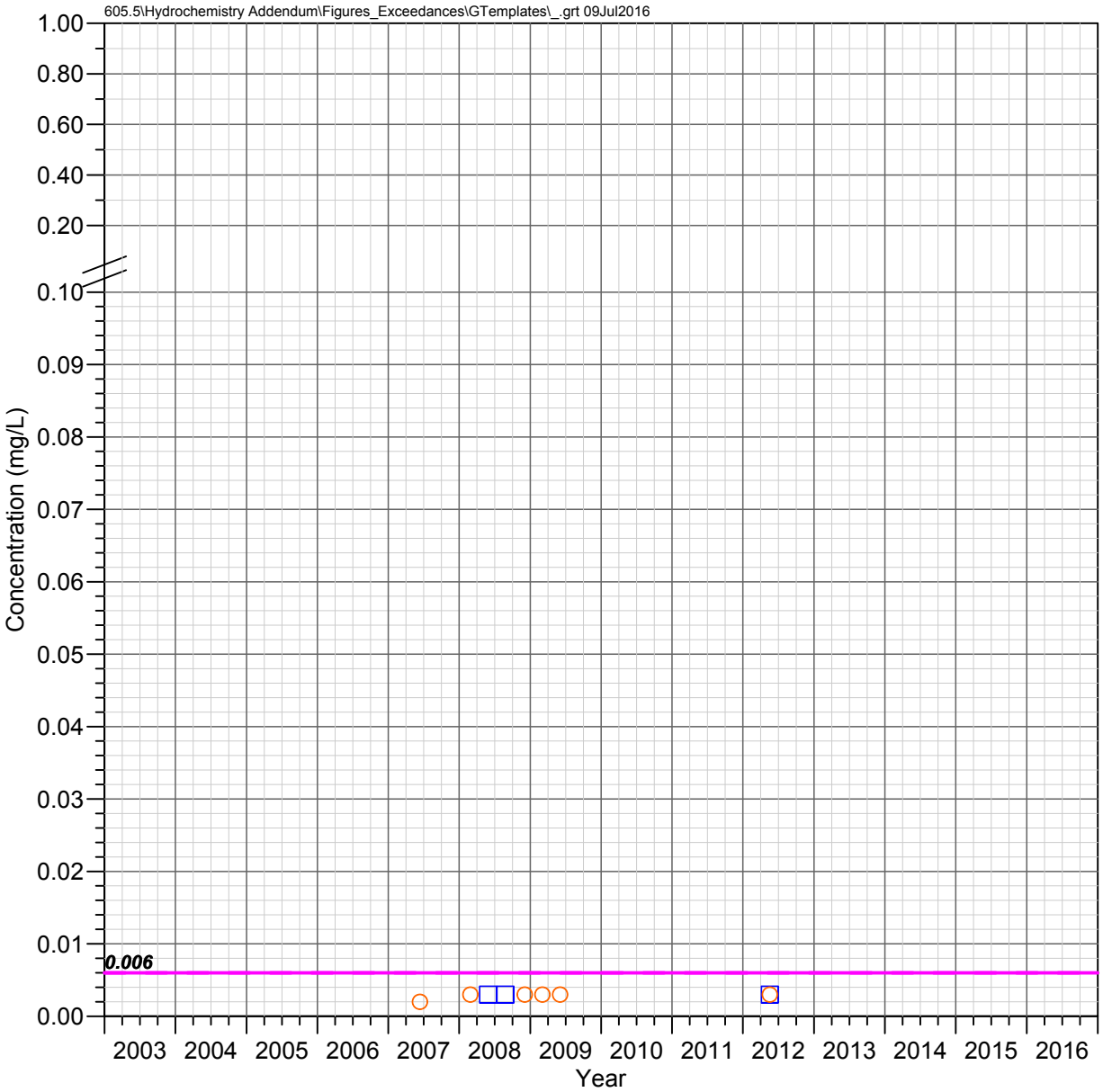


FIGURE E-039. ANTIMONY CONCENTRATIONS OBSERVED AT HRES-05, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-06
Apache Leap Tuff Aquifer

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.006 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.006 mg/L)

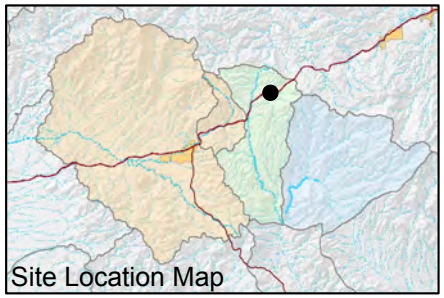
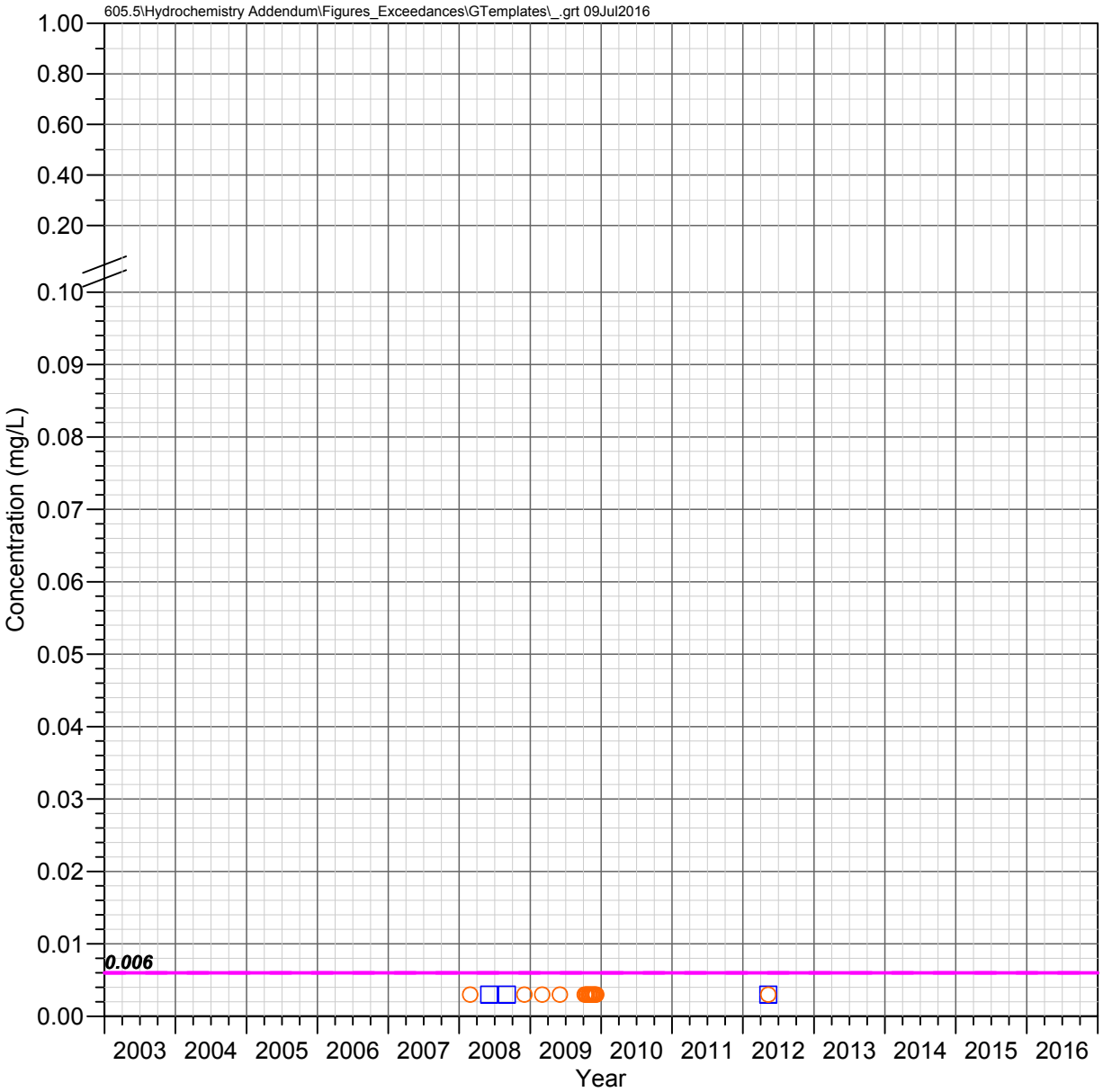


FIGURE E-040. ANTIMONY CONCENTRATIONS OBSERVED AT HRES-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-07
Apache Leap Tuff Aquifer

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.006 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.006 mg/L)

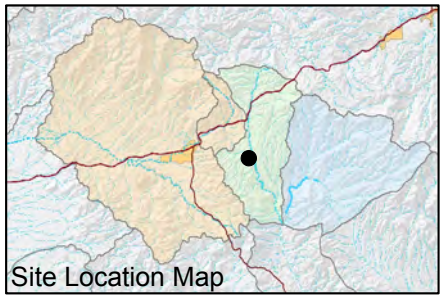
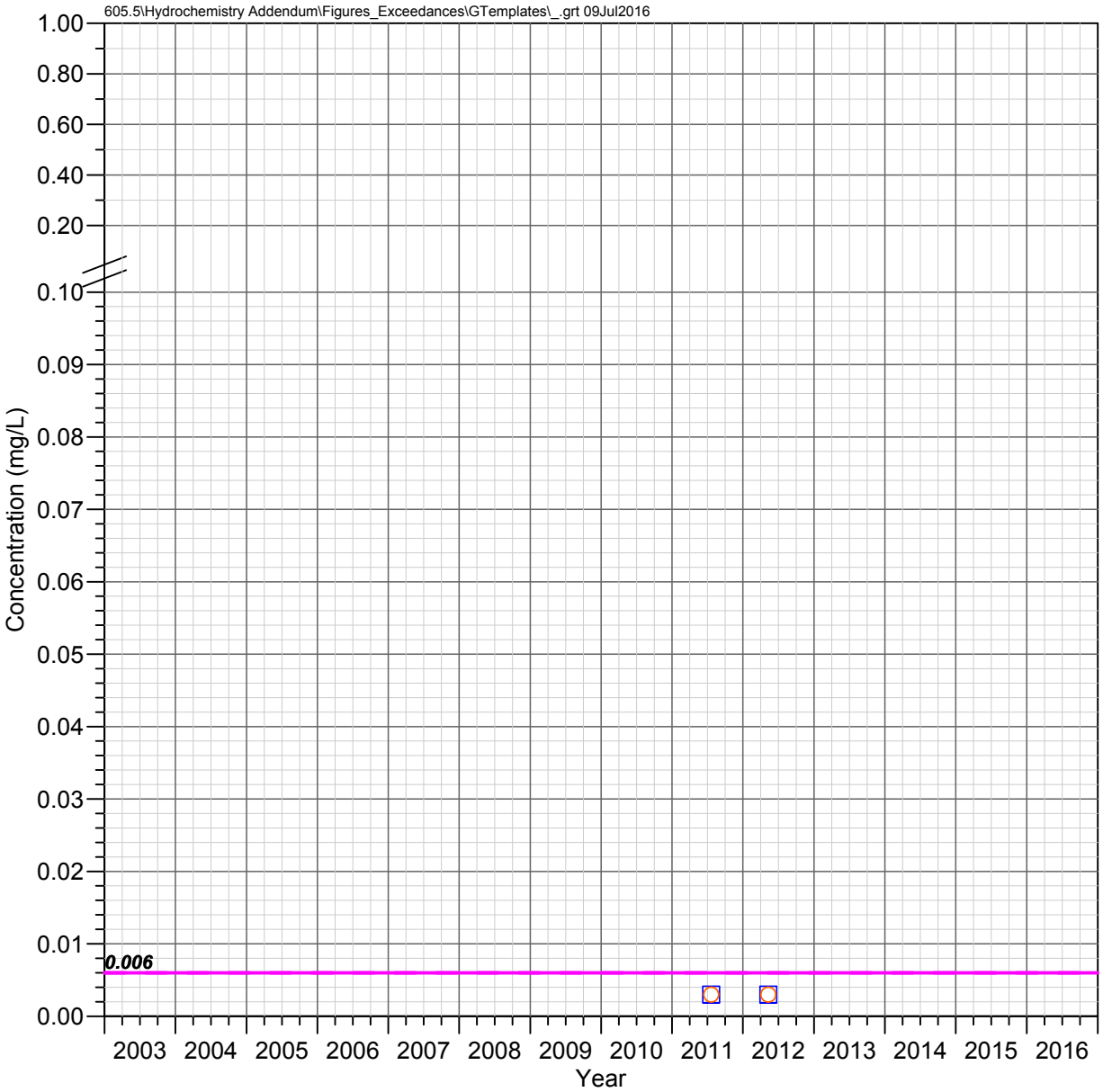


FIGURE E-041. ANTIMONY CONCENTRATIONS OBSERVED AT HRES-07, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-08
Apache Leap Tuff Aquifer

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.006 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.006 mg/L)

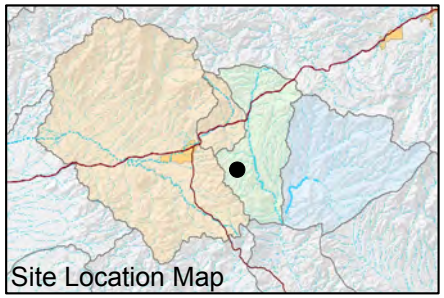
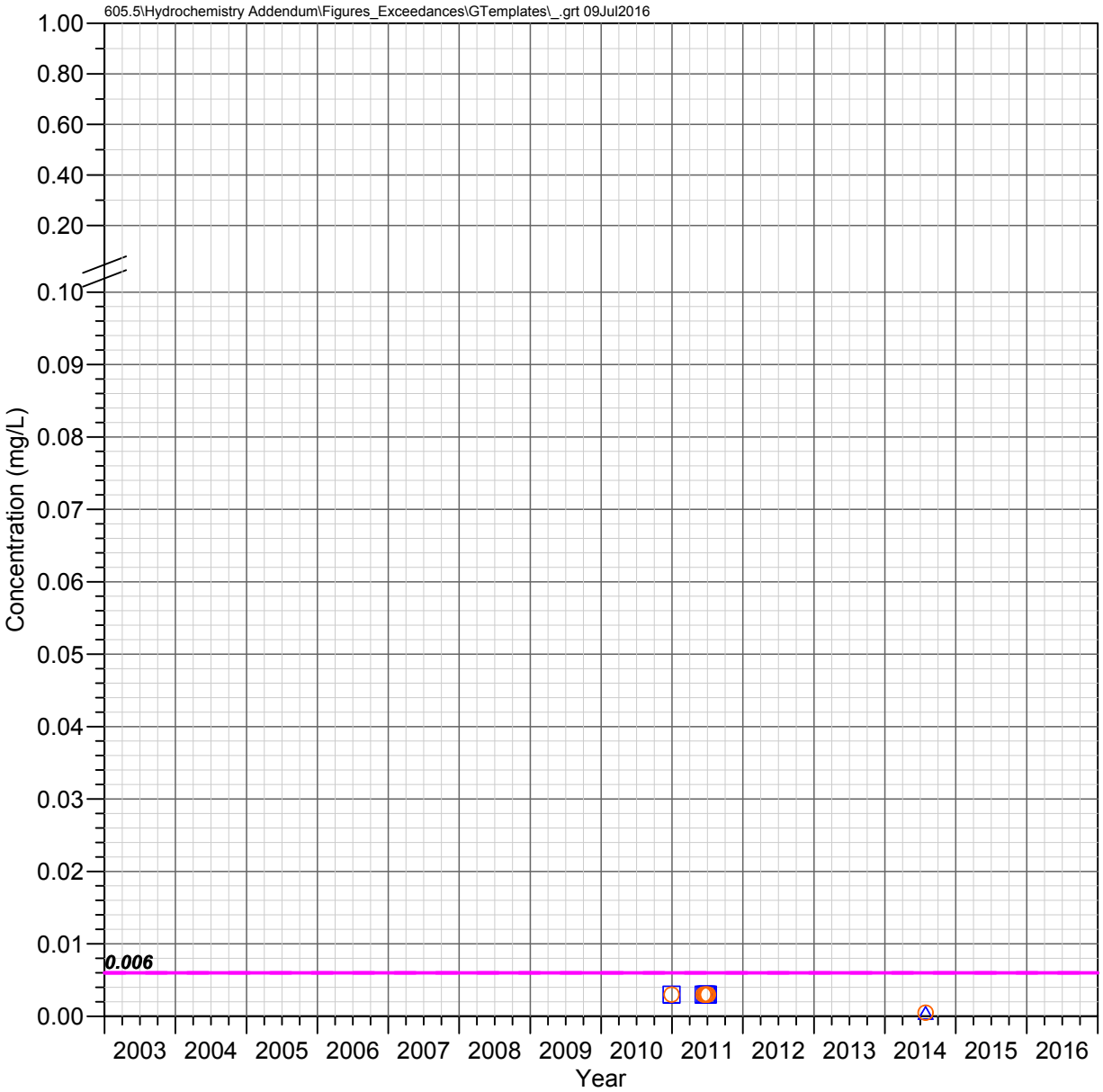


FIGURE E-042. ANTIMONY CONCENTRATIONS OBSERVED AT HRES-08, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-09
Apache Leap Tuff Aquifer

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.006 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.006 mg/L)

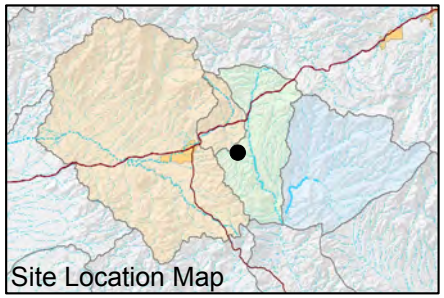
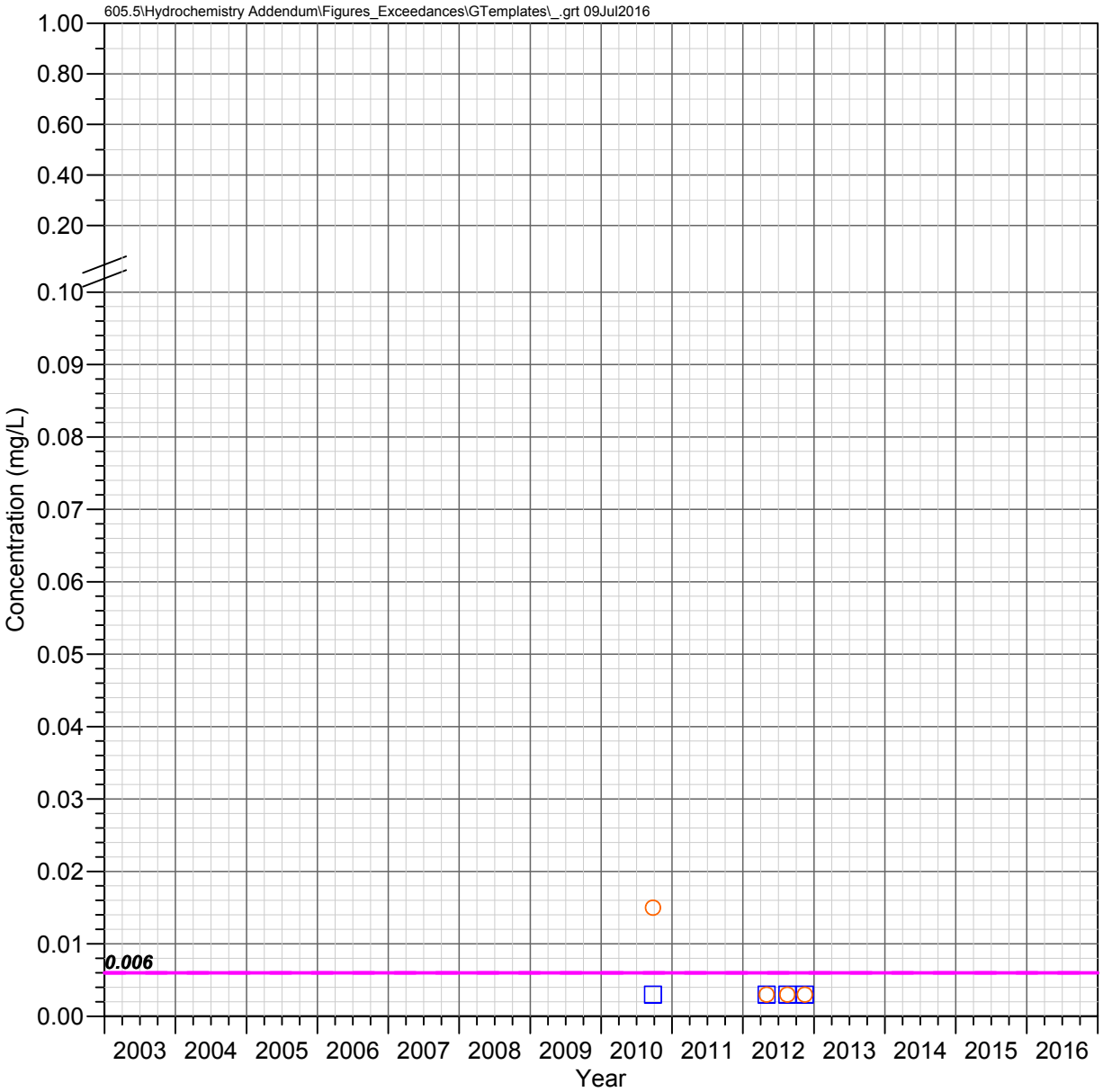


FIGURE E-043. ANTIMONY CONCENTRATIONS OBSERVED AT HRES-09, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-10
Apache Leap Tuff Aquifer

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.006 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.006 mg/L)

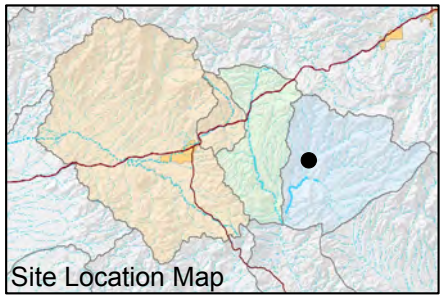
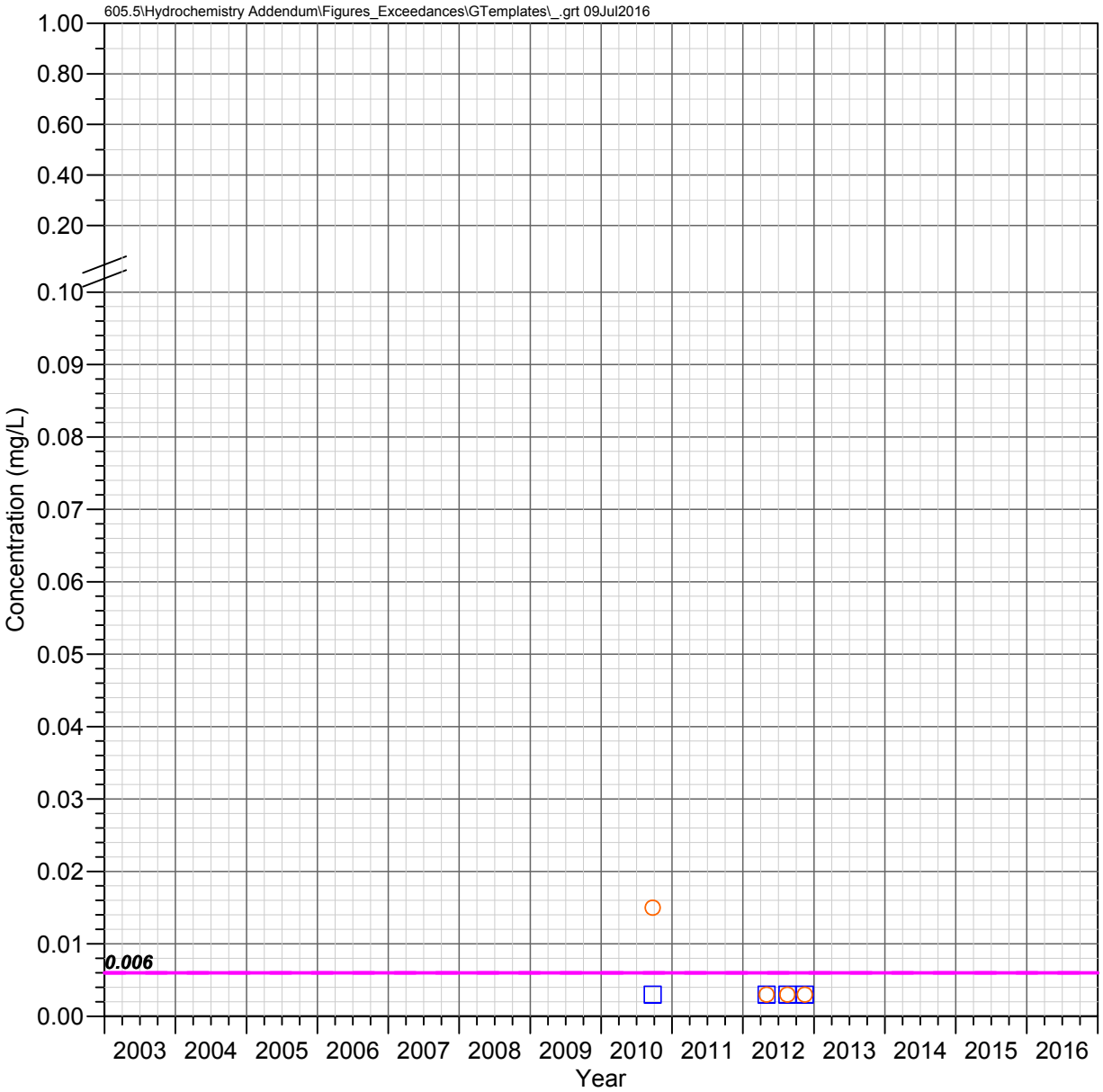


FIGURE E-044. ANTIMONY CONCENTRATIONS OBSERVED AT HRES-10, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-11
Apache Leap Tuff Aquifer

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.006 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.006 mg/L)

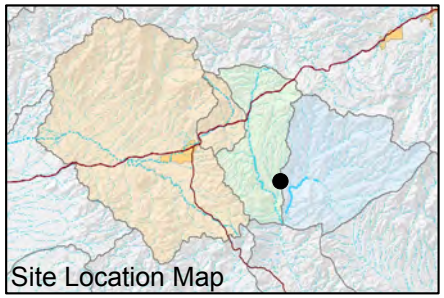
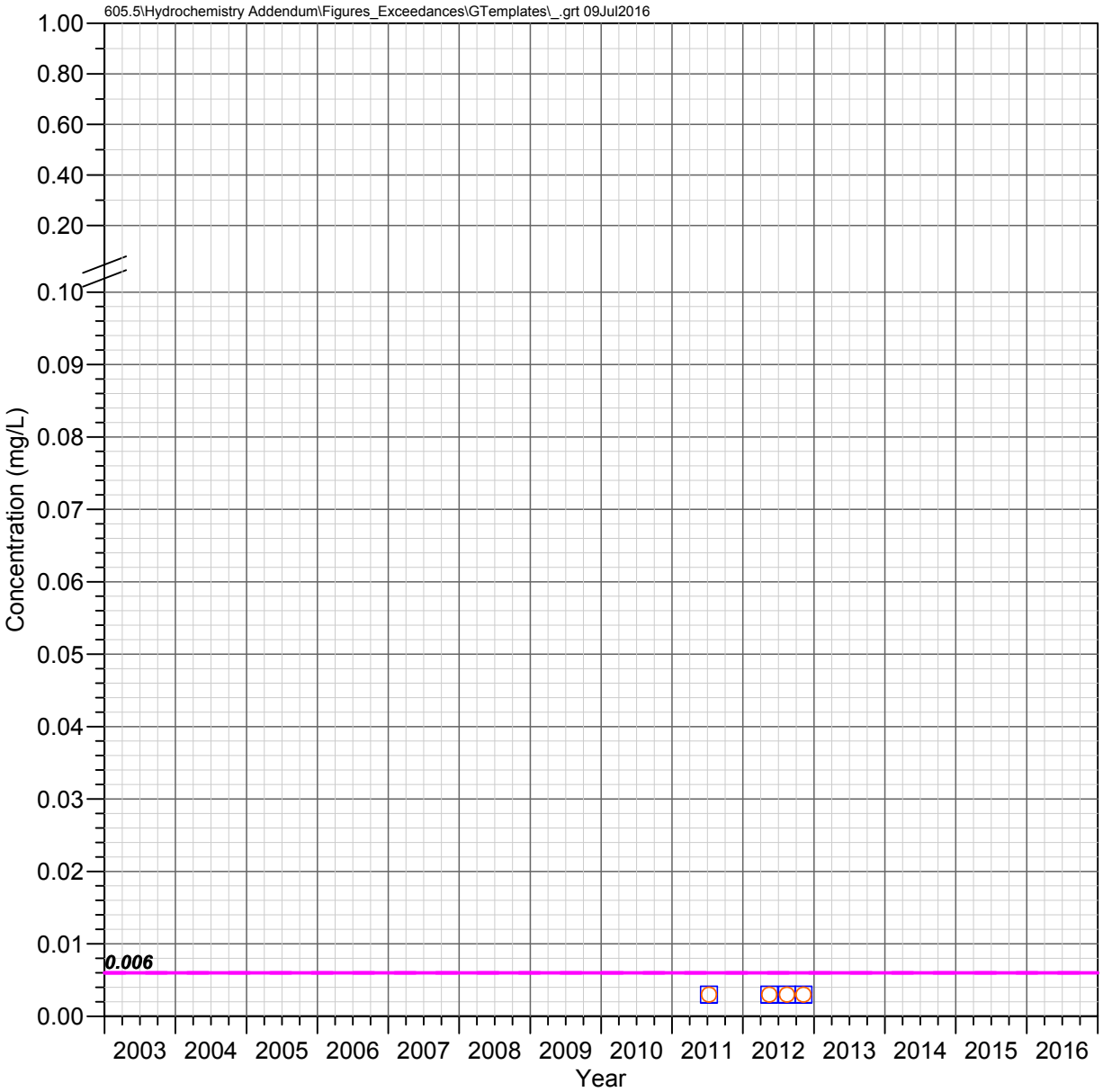


FIGURE E-045. ANTIMONY CONCENTRATIONS OBSERVED AT HRES-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-12
Apache Leap Tuff Aquifer

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.006 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.006 mg/L)

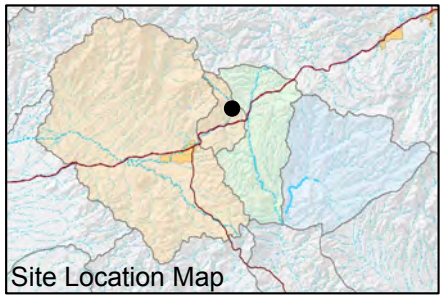
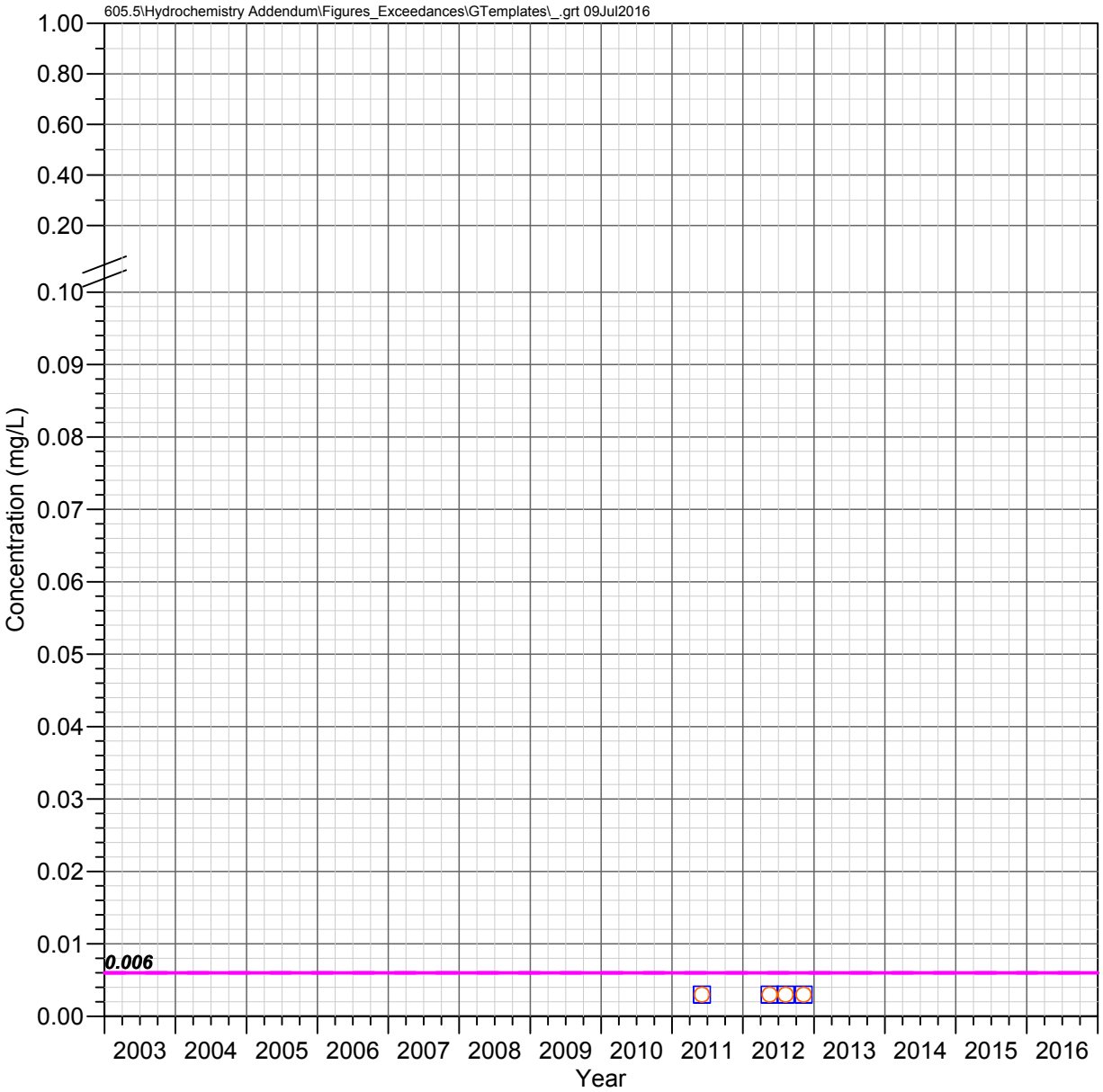


FIGURE E-046. ANTIMONY CONCENTRATIONS OBSERVED AT HRES-12, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-13
Apache Leap Tuff Aquifer

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.006 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.006 mg/L)

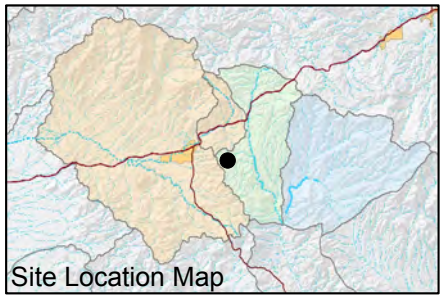
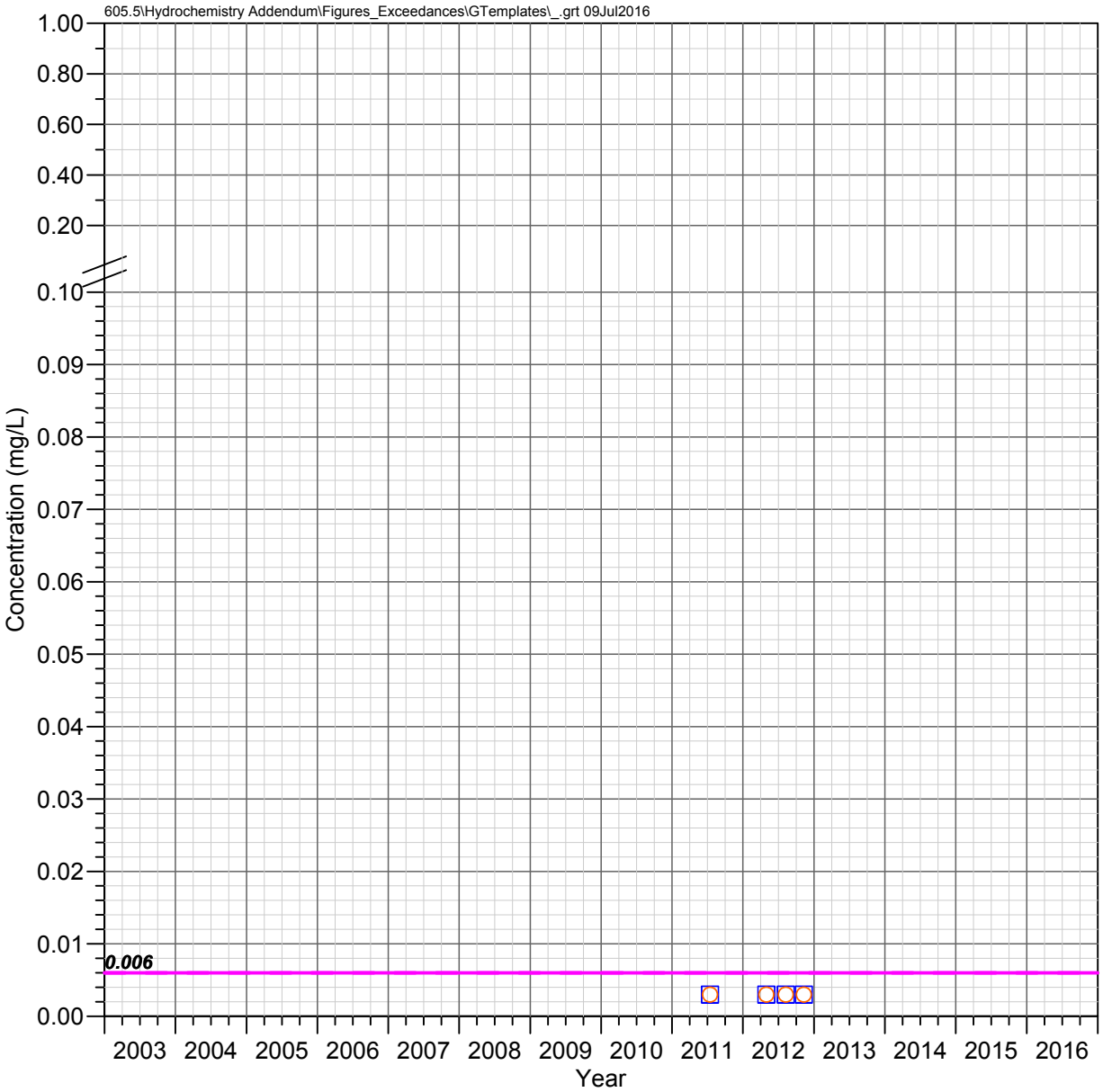


FIGURE E-047. ANTIMONY CONCENTRATIONS OBSERVED AT HRES-13, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-14
Apache Leap Tuff Aquifer

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.006 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.006 mg/L)

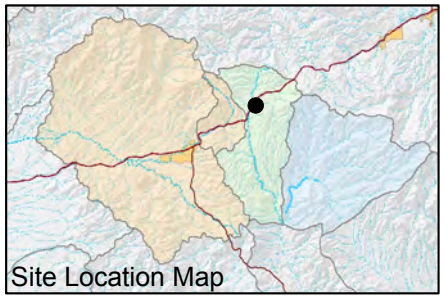
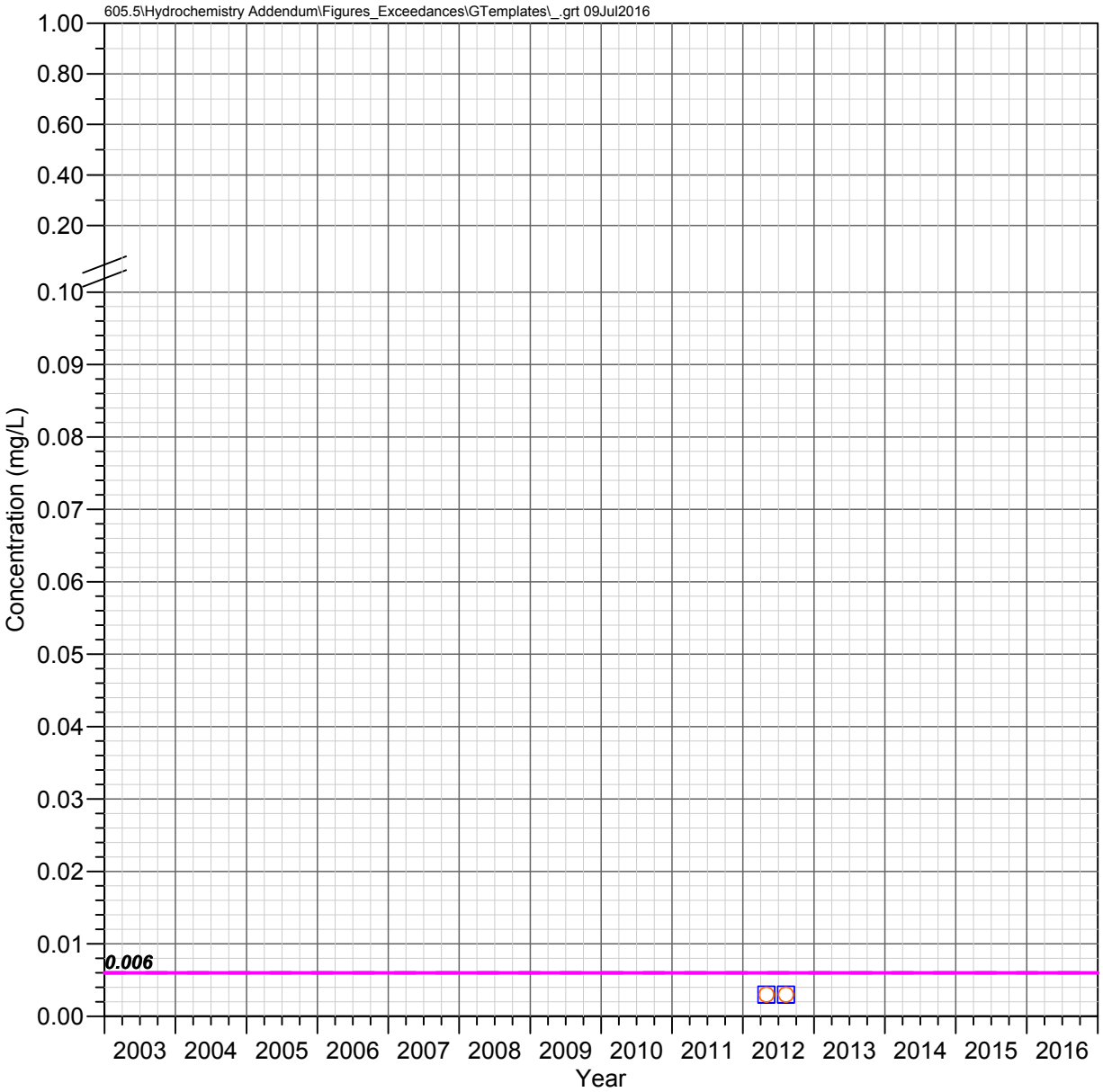


FIGURE E-048. ANTIMONY CONCENTRATIONS OBSERVED AT HRES-14, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-15
Apache Leap Tuff Aquifer

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.006 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.006 mg/L)

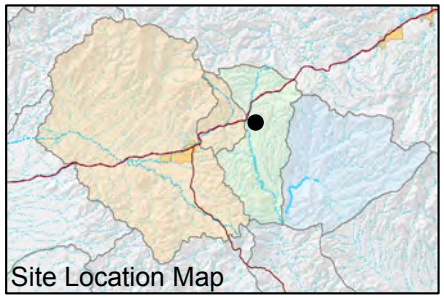
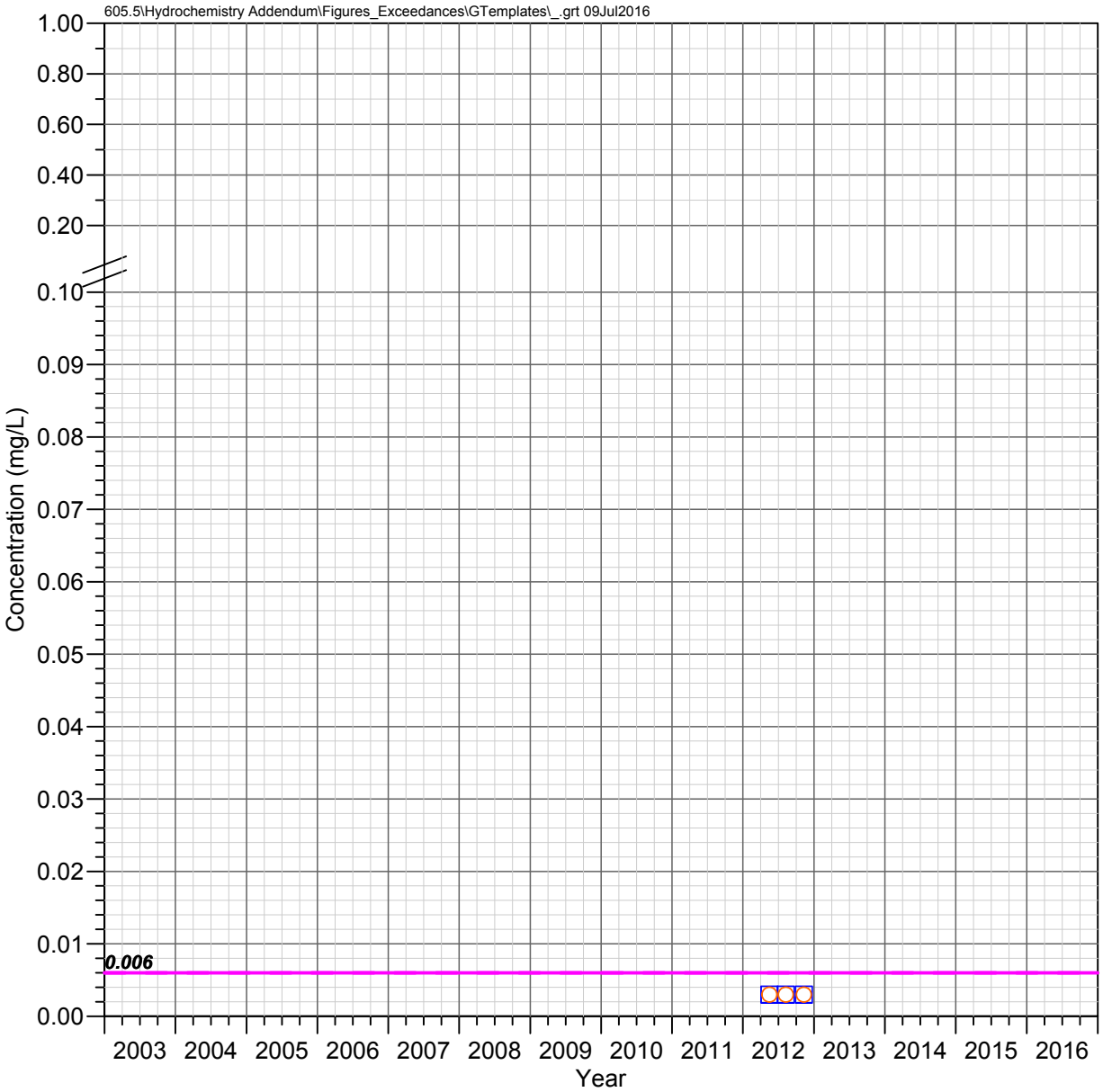


FIGURE E-049. ANTIMONY CONCENTRATIONS OBSERVED AT HRES-15, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-17
Apache Leap Tuff Aquifer

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.006 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.006 mg/L)

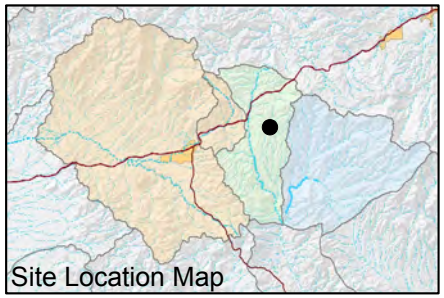
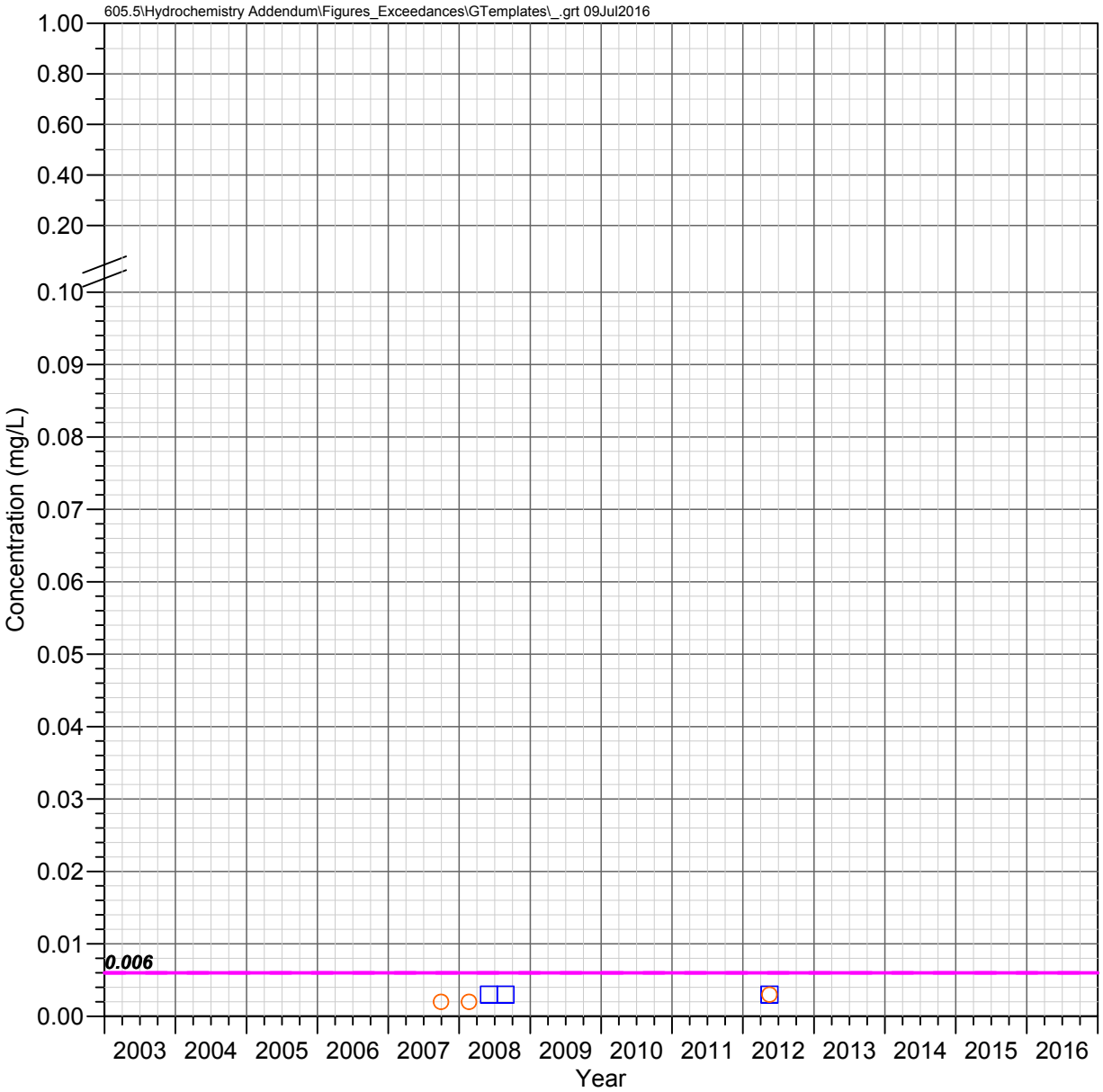


FIGURE E-050. ANTIMONY CONCENTRATIONS OBSERVED AT HRES-17, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MJ-11
Apache Leap Tuff Aquifer

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.006 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.006 mg/L)

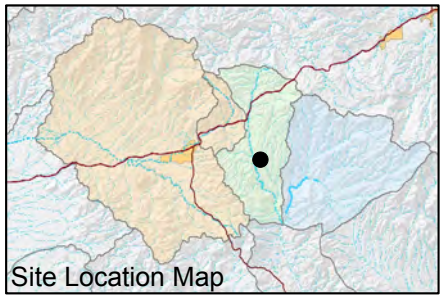
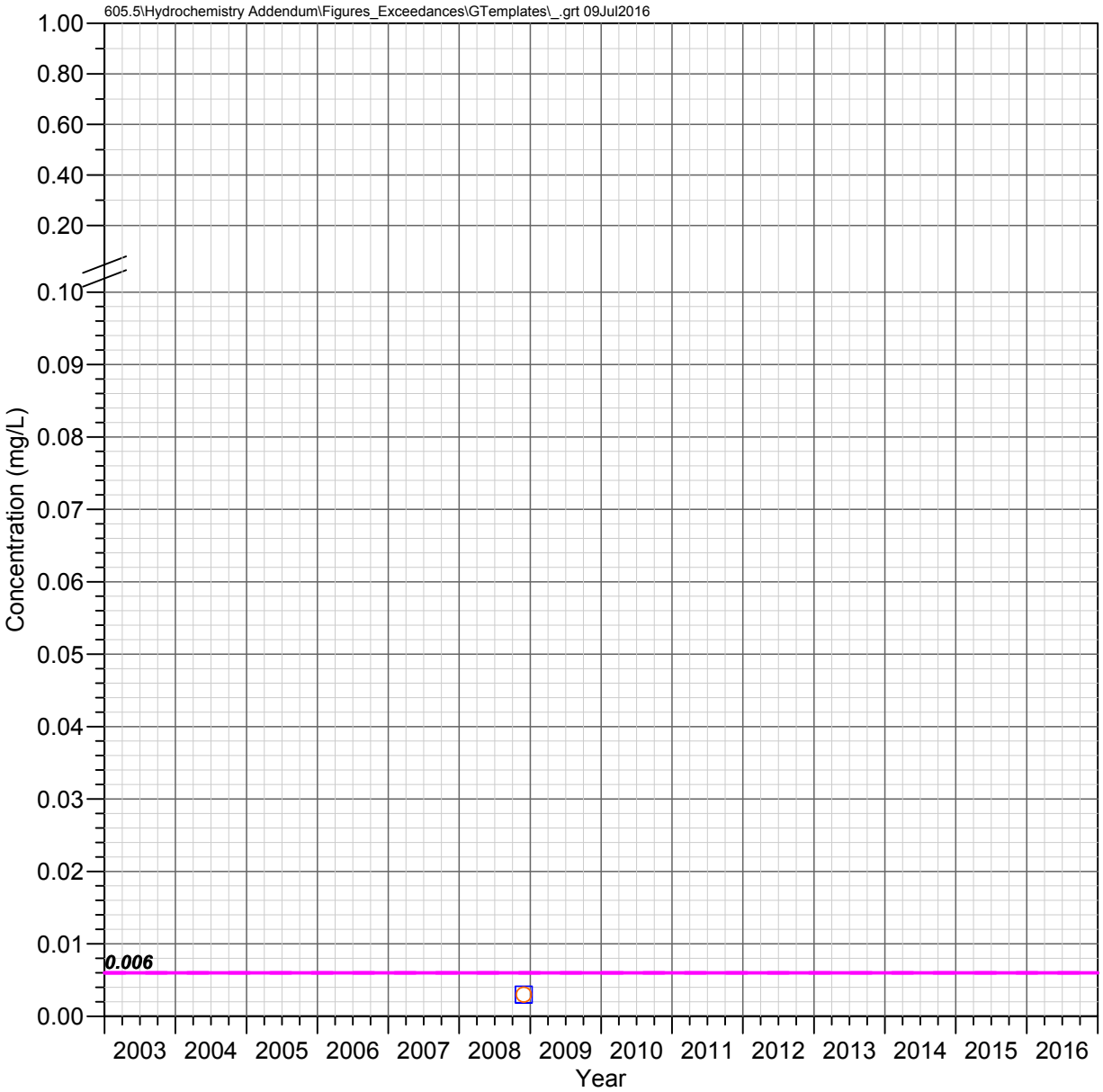


FIGURE E-051. ANTIMONY CONCENTRATIONS OBSERVED AT MJ-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-01
Deep Groundwater System

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.006 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.006 mg/L)

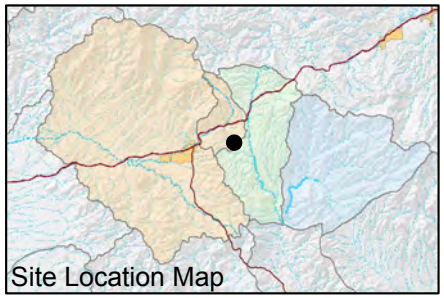
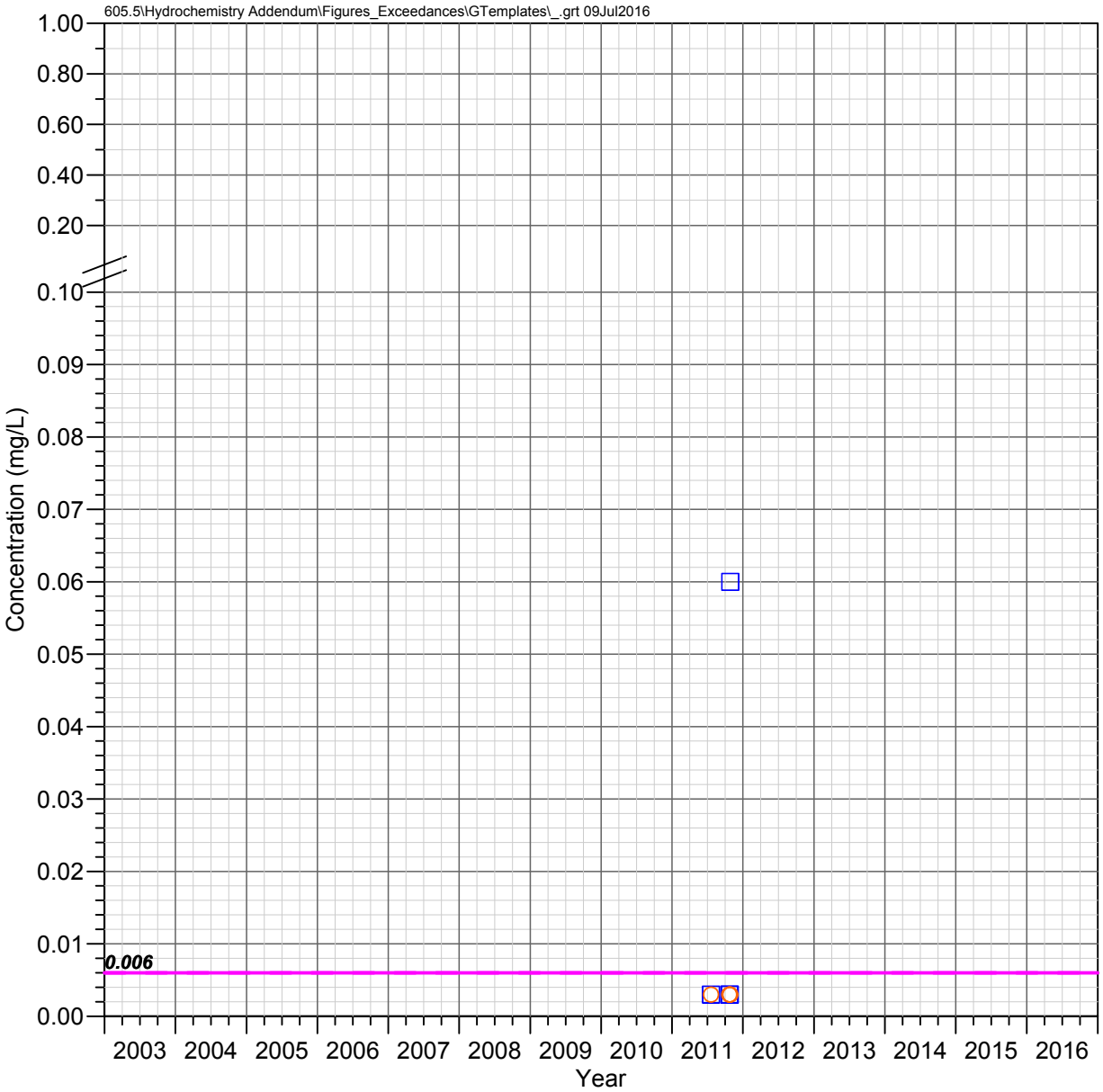


FIGURE E-052. ANTIMONY CONCENTRATIONS OBSERVED AT DHRES-01, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-02
Deep Groundwater System

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.006 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.006 mg/L)

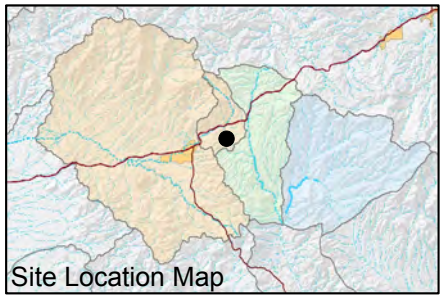
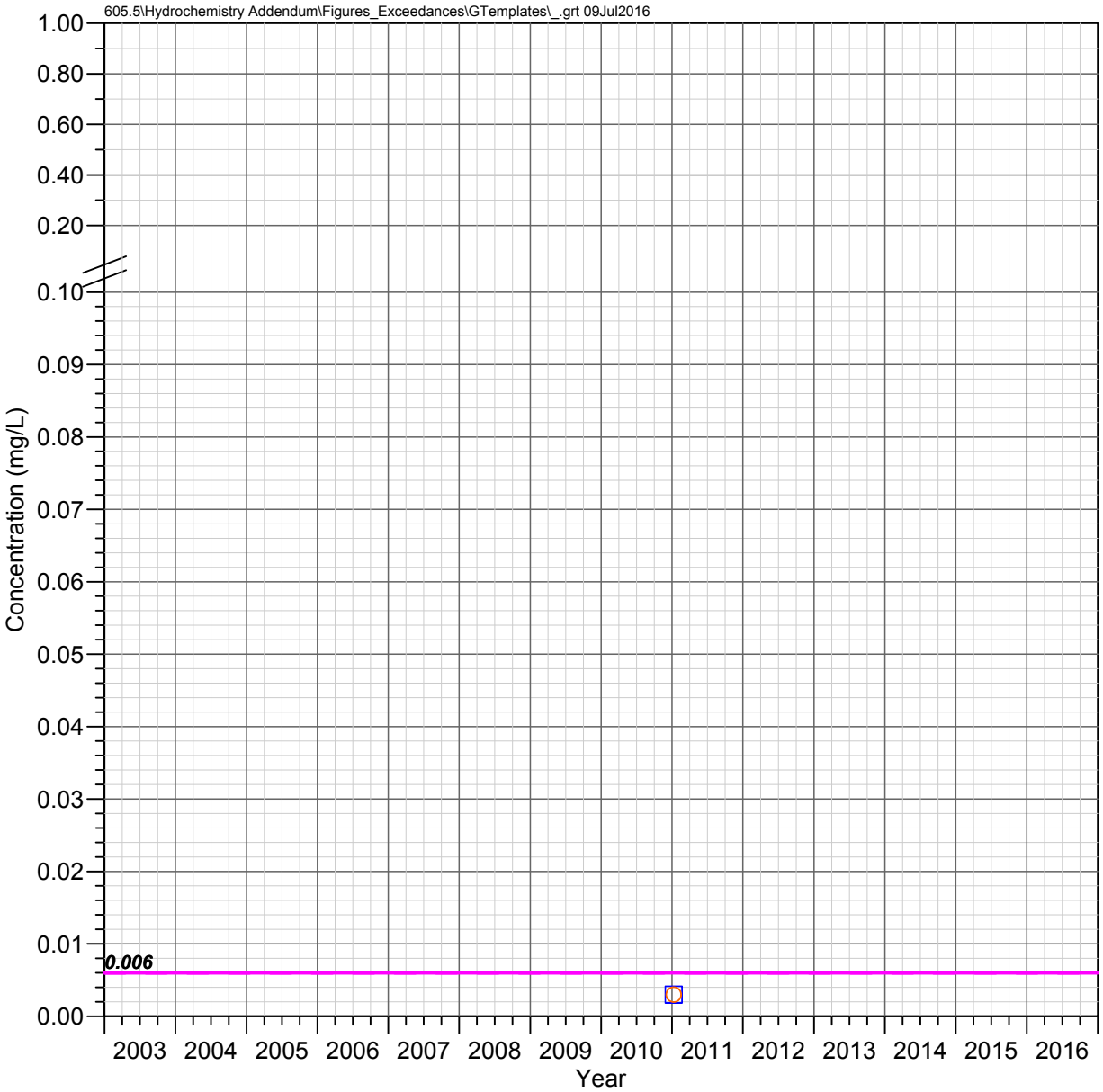


FIGURE E-053. ANTIMONY CONCENTRATIONS OBSERVED AT DHRES-02, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-06
Deep Groundwater System

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.006 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.006 mg/L)

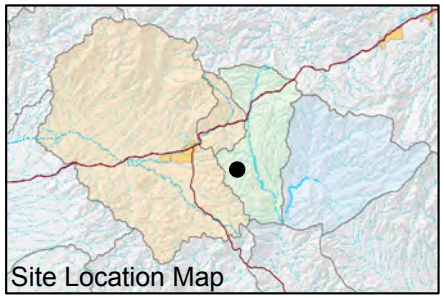
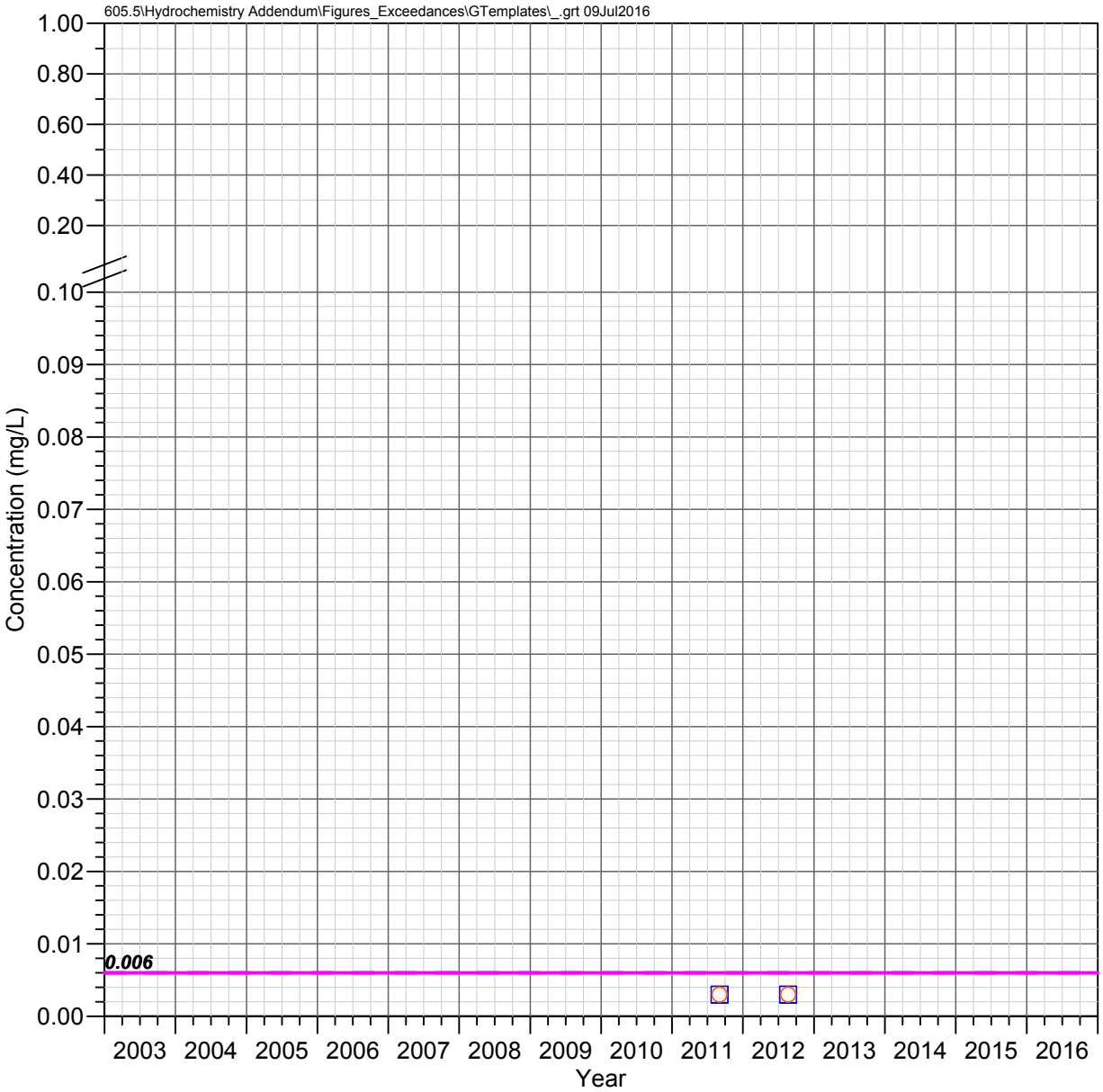


FIGURE E-054. ANTIMONY CONCENTRATIONS OBSERVED AT DHRES-06, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-09
Deep Groundwater System

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.006 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.006 mg/L)

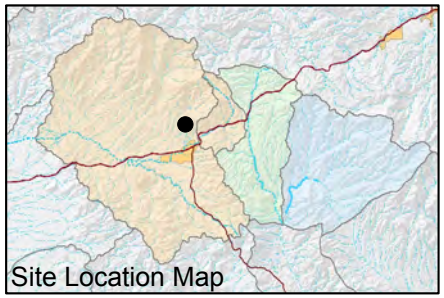
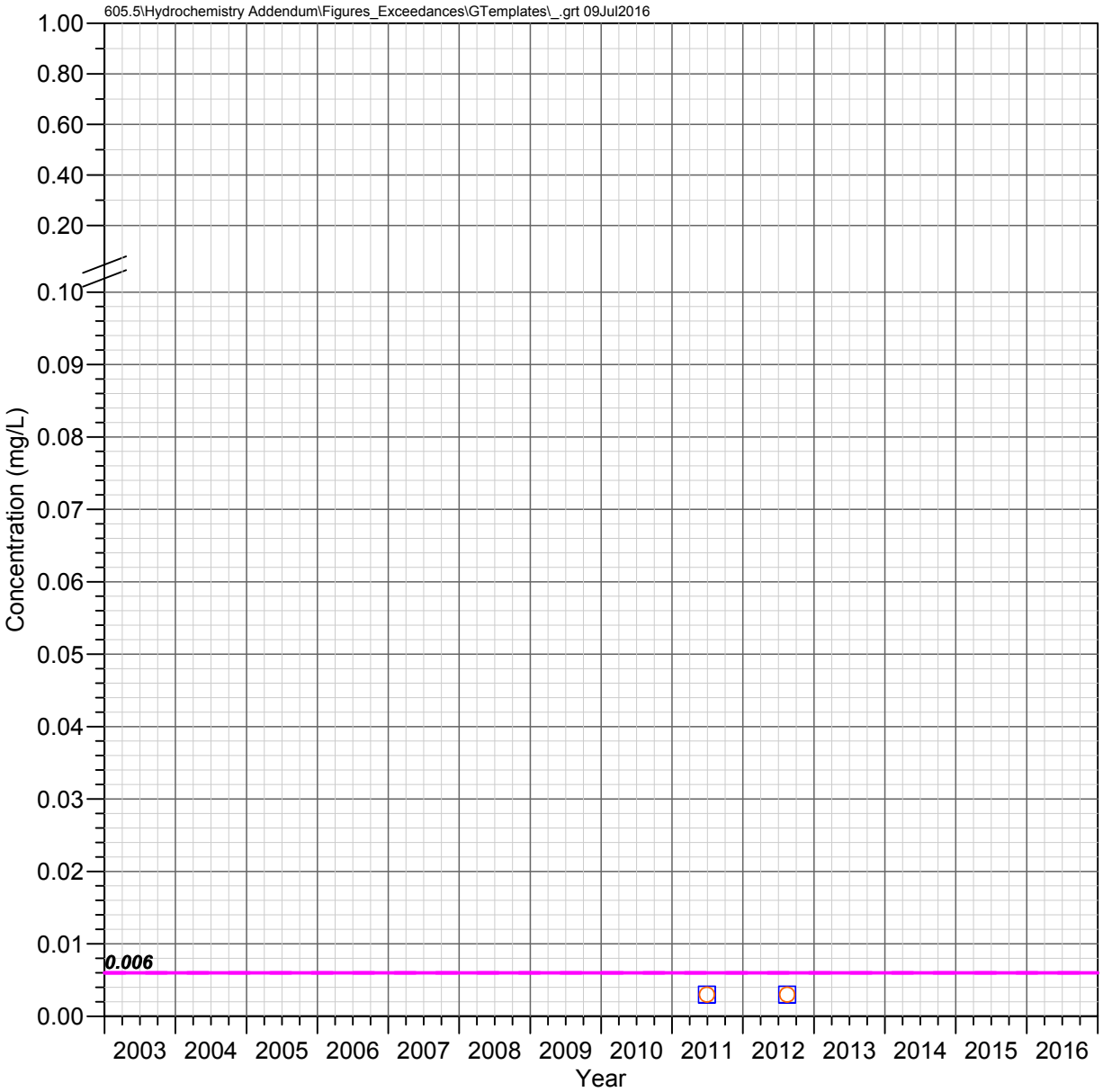


FIGURE E-055. ANTIMONY CONCENTRATIONS OBSERVED AT DHRES-09, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-11
Deep Groundwater System

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.006 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.006 mg/L)

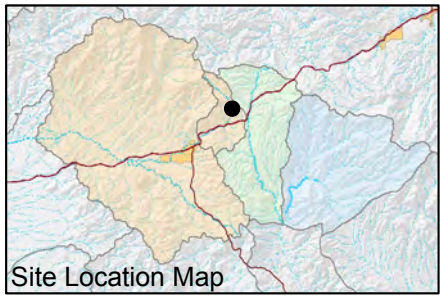
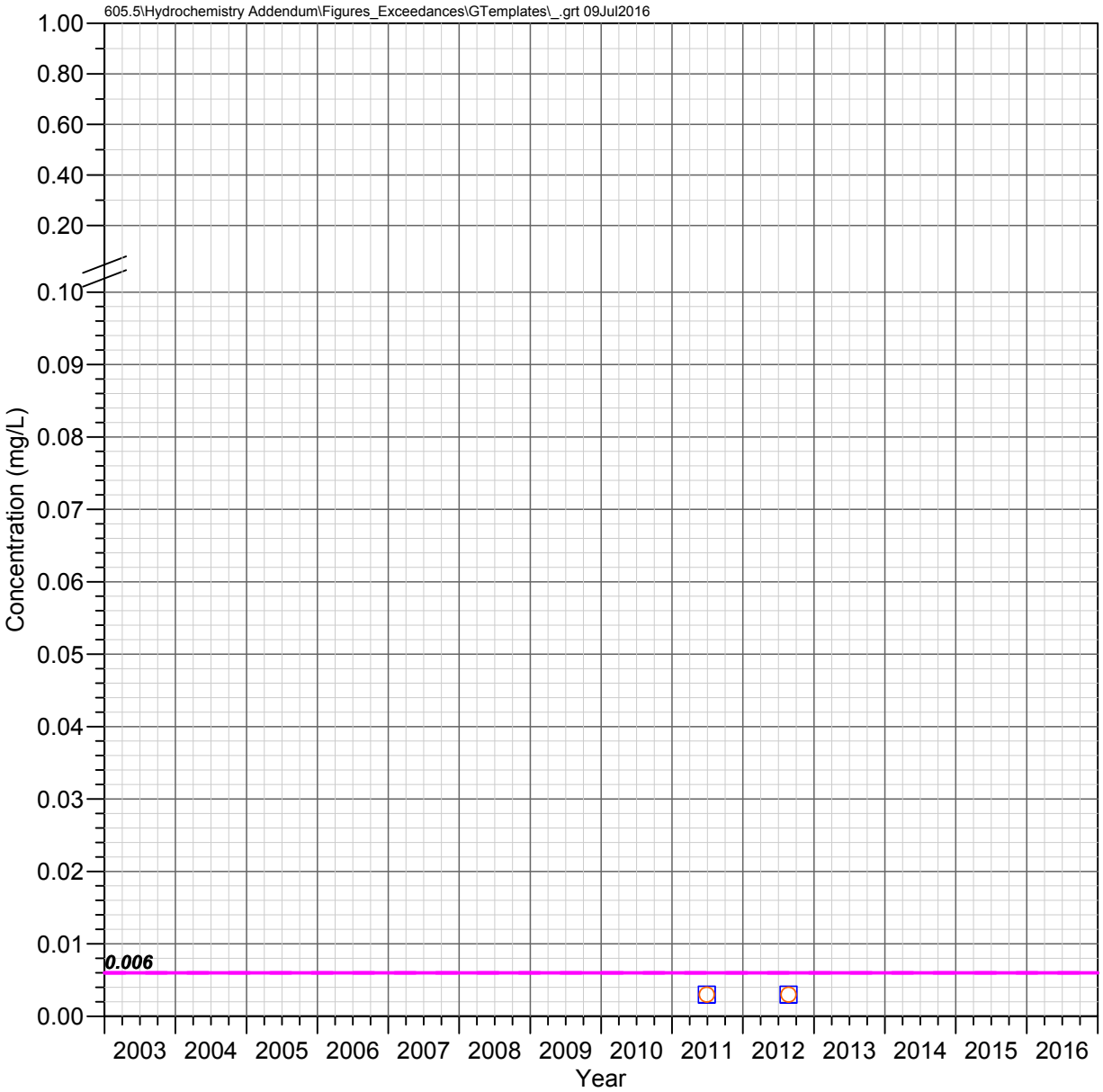


FIGURE E-056. ANTIMONY CONCENTRATIONS OBSERVED AT DHRES-11, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-13
Deep Groundwater System

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.006 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.006 mg/L)

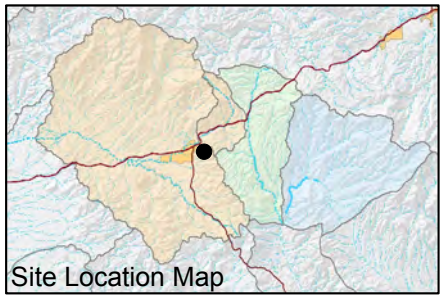
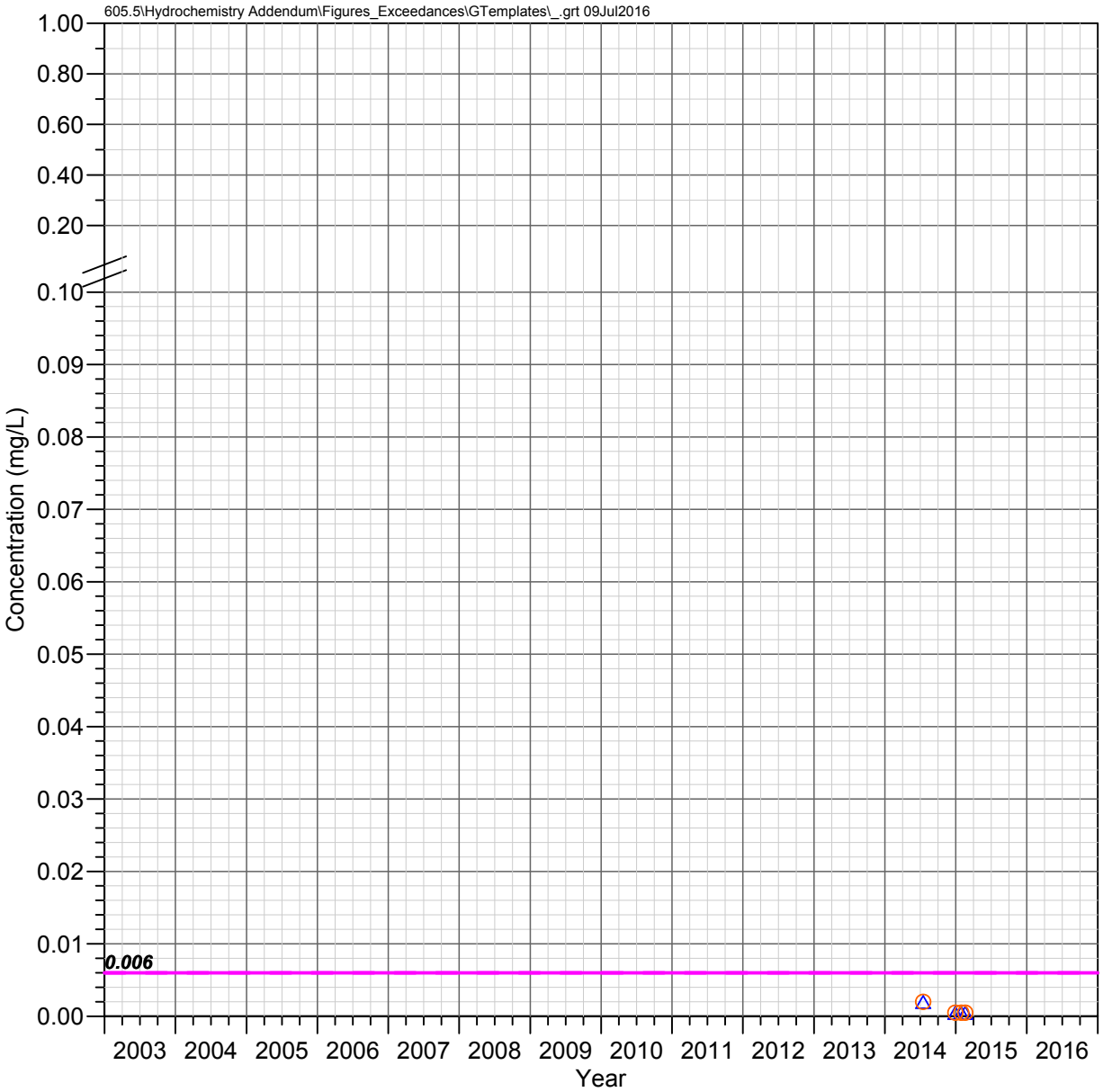


FIGURE E-057. ANTIMONY CONCENTRATIONS OBSERVED AT DHRES-13, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-15
Deep Groundwater System

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.006 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.006 mg/L)

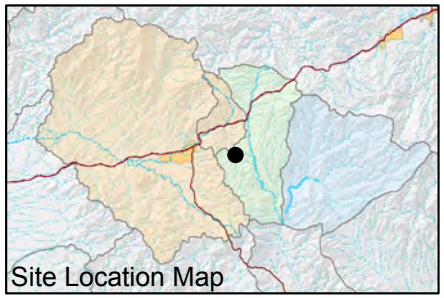
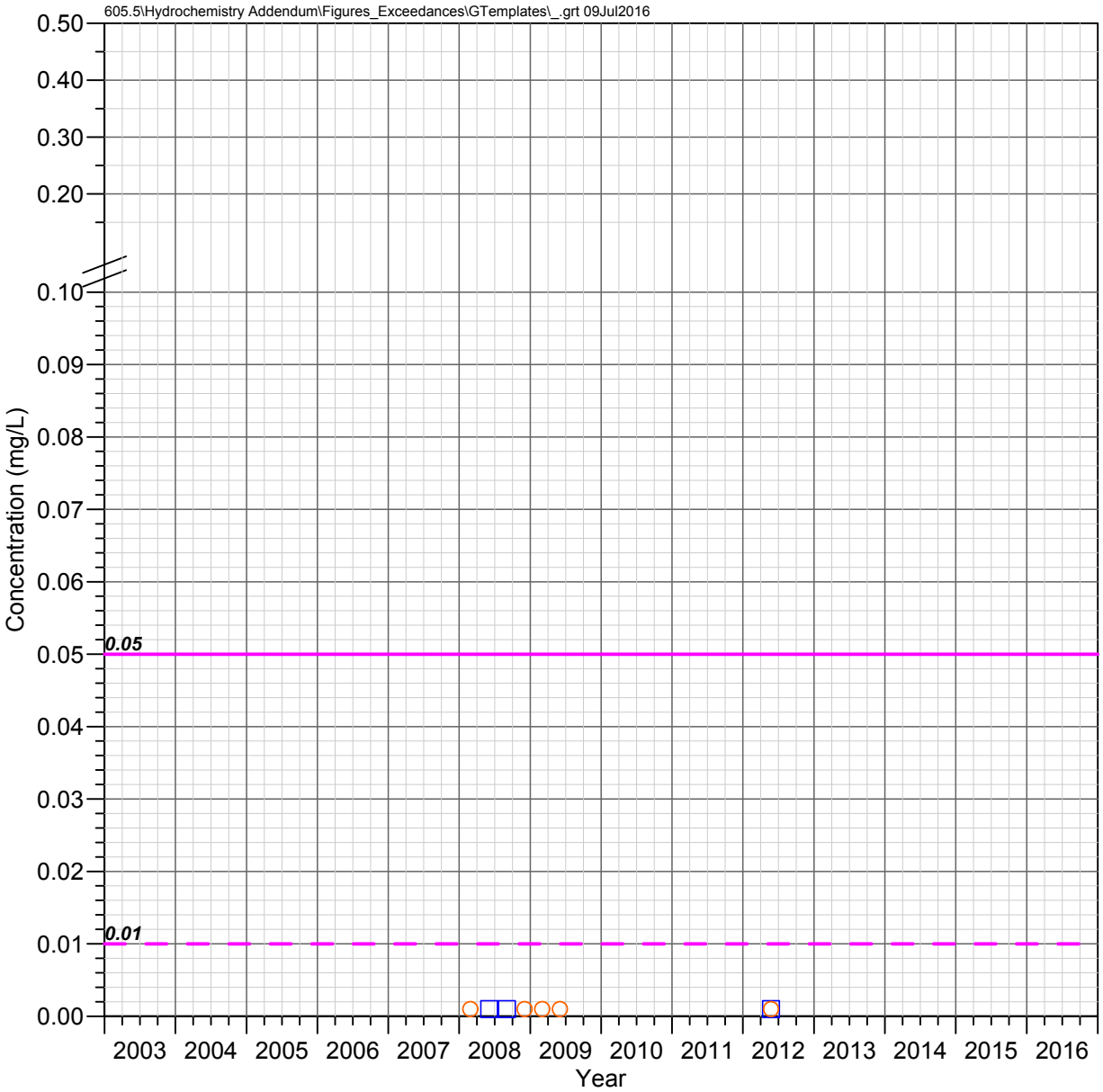


FIGURE E-058. ANTIMONY CONCENTRATIONS OBSERVED AT DHRES-15, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Hackberry Windmill Well Shallow Groundwater System

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.01 mg/L)

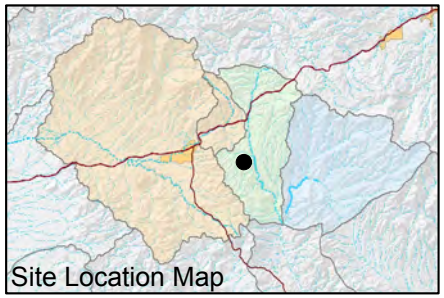
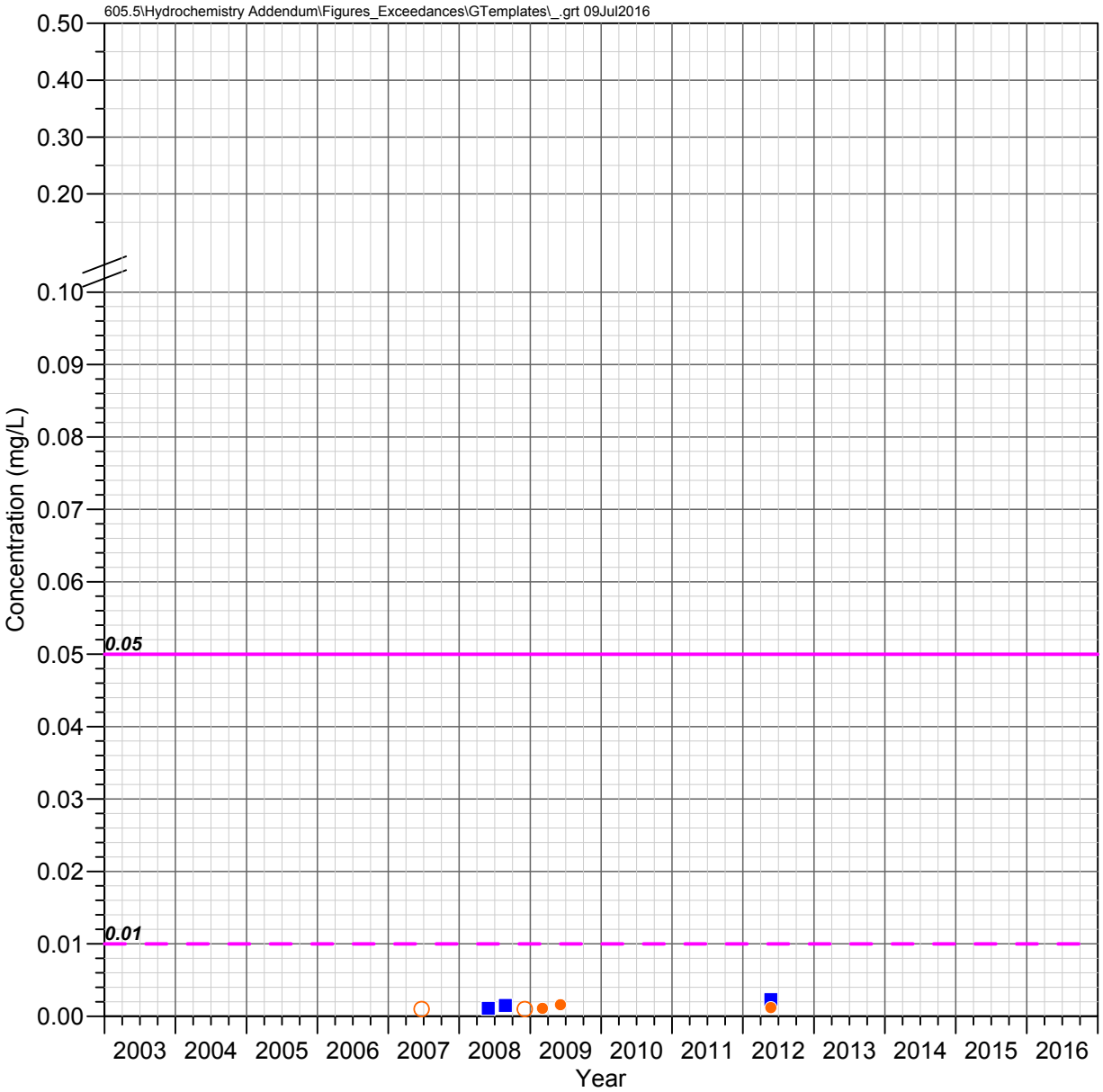


FIGURE E-059. ARSENIC CONCENTRATIONS OBSERVED AT HACKBERRY WINDMILL WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



JI Ranch Corral Well Shallow Groundwater System

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.01 mg/L)

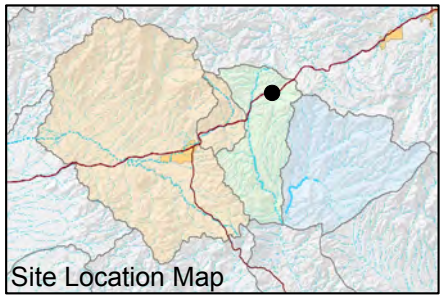
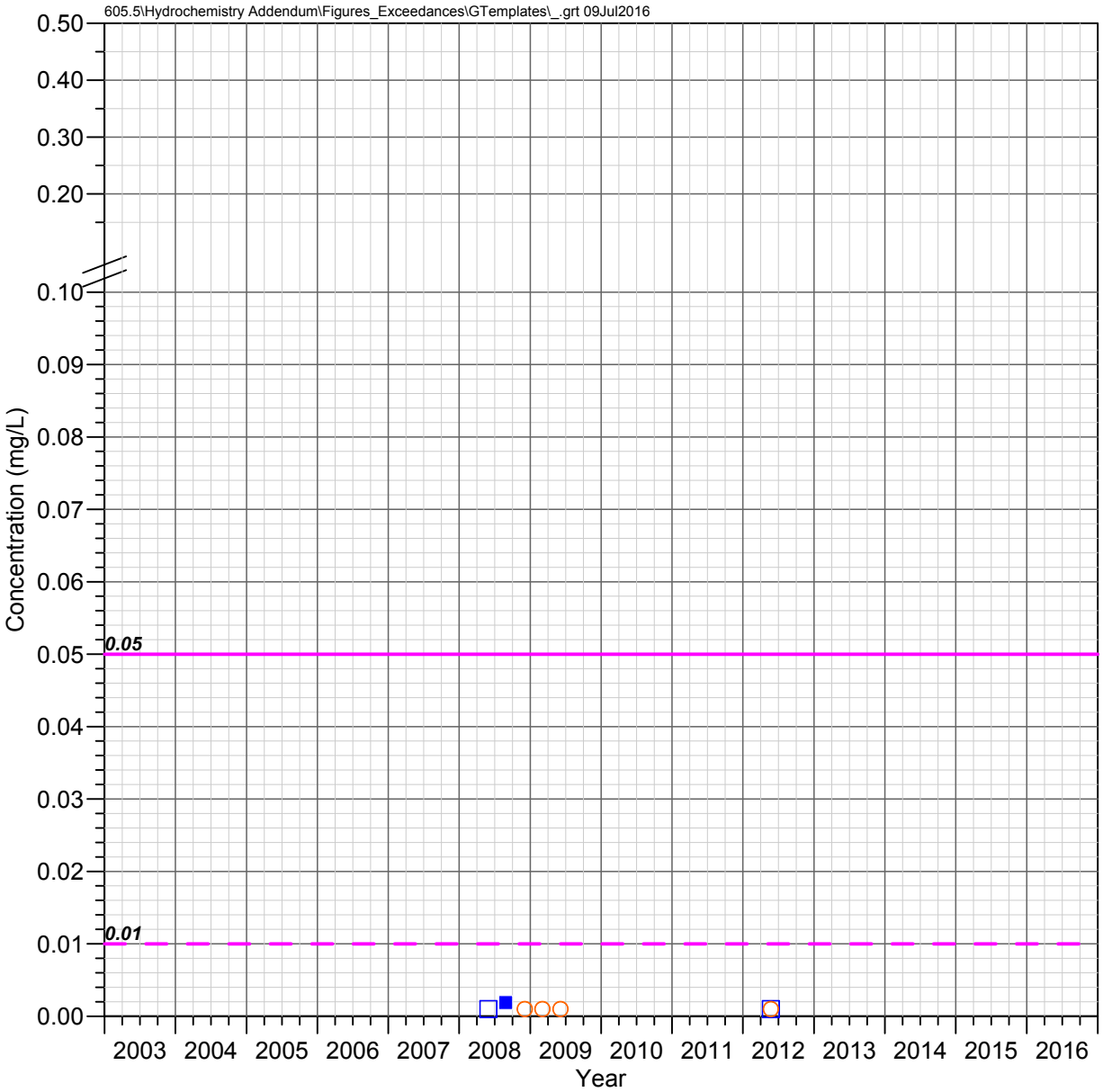


FIGURE E-060. ARSENIC CONCENTRATIONS OBSERVED AT JI RANCH CORRAL WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



JI Ranch Middle Well Shallow Groundwater System

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.01 mg/L)

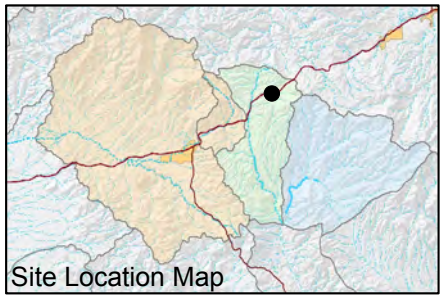
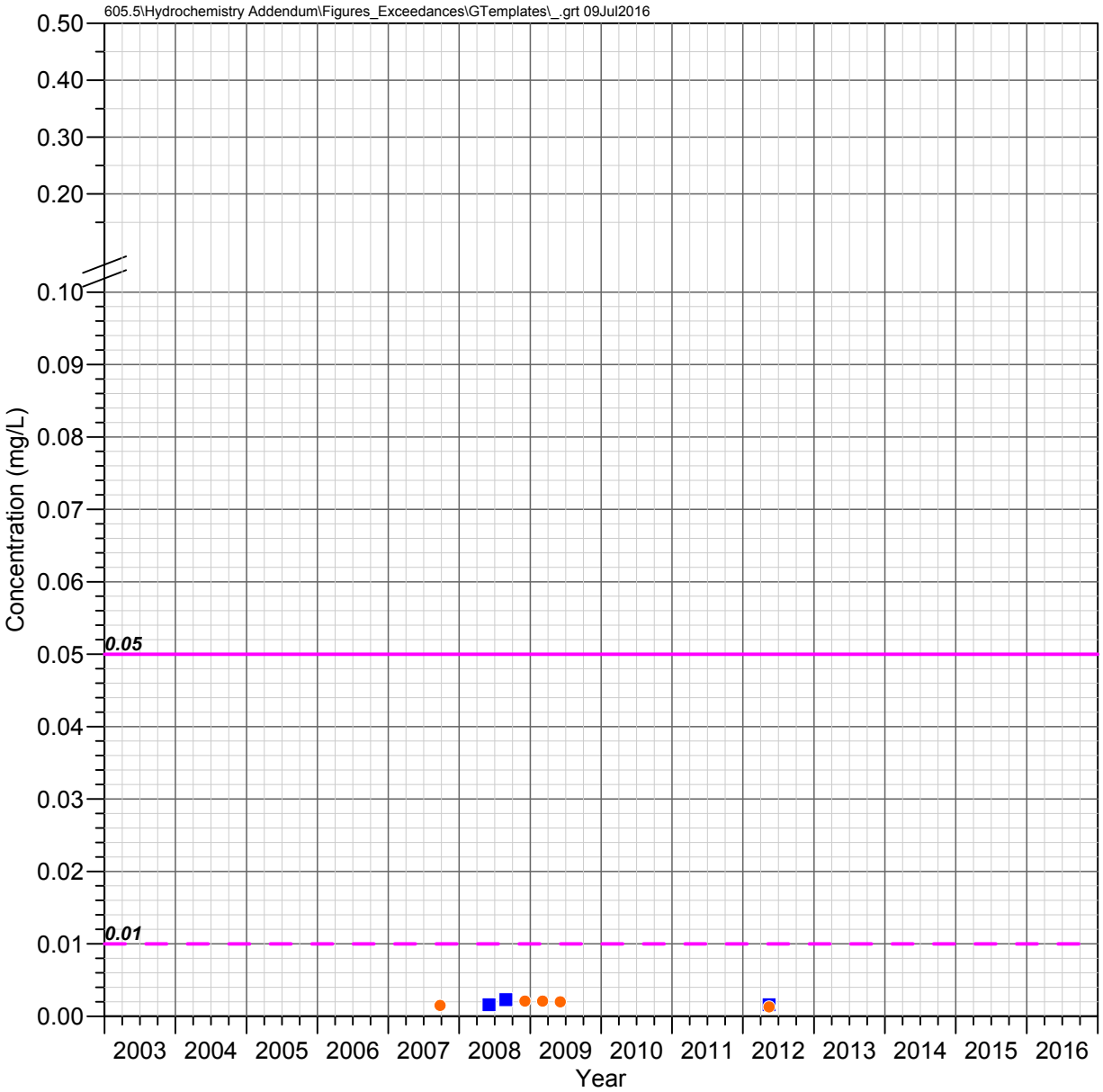


FIGURE E-061. ARSENIC CONCENTRATIONS OBSERVED AT JI RANCH MIDDLE WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



A-06
Apache Leap Tuff Aquifer

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.01 mg/L)

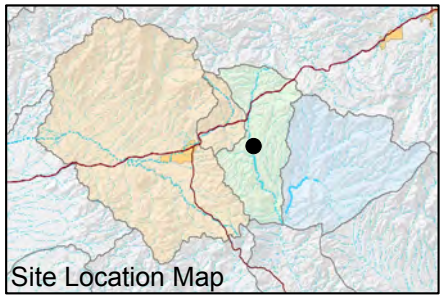
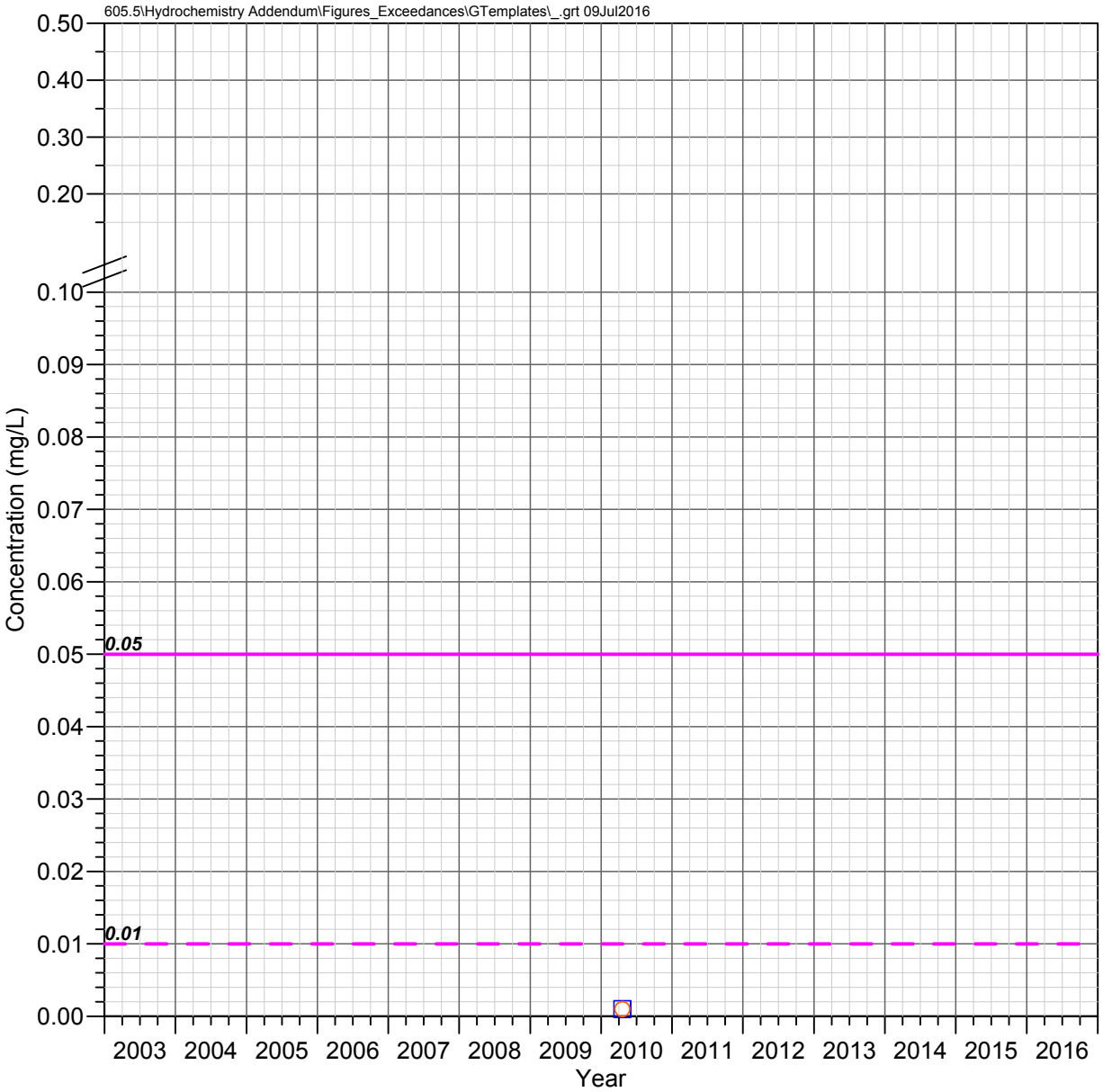


FIGURE E-062. ARSENIC CONCENTRATIONS OBSERVED AT A-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



CT Well
Apache Leap Tuff Aquifer

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.01 mg/L)

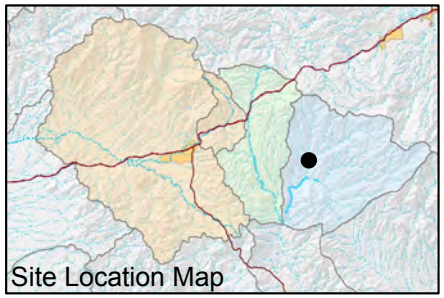
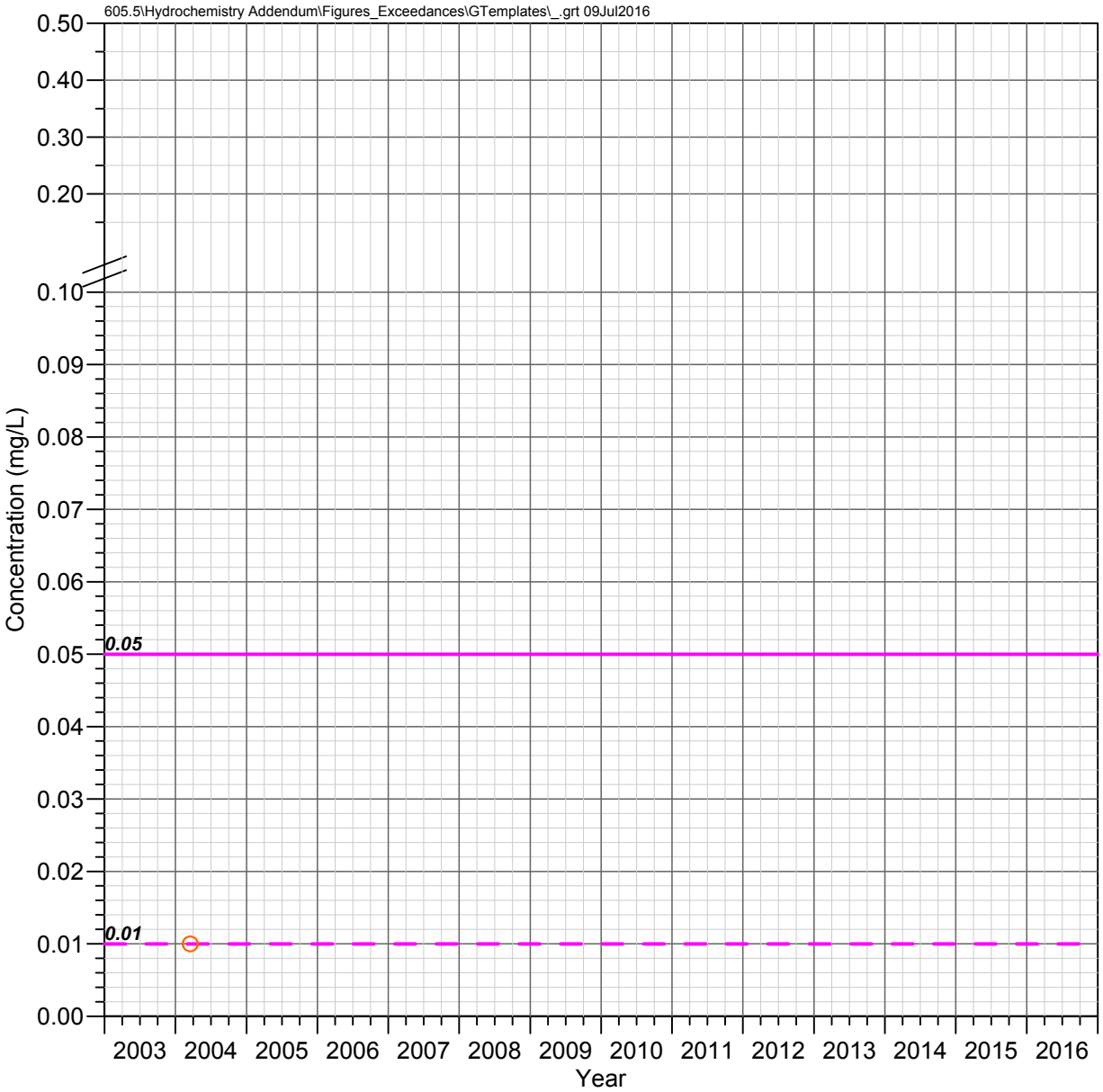


FIGURE E-063. ARSENIC CONCENTRATIONS OBSERVED AT CT WELL, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-01
Apache Leap Tuff Aquifer

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.01 mg/L)

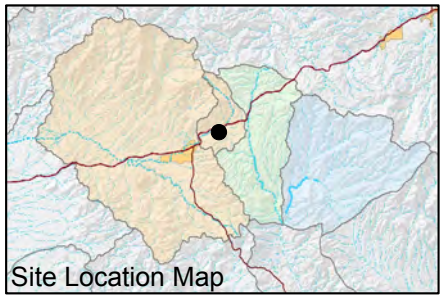
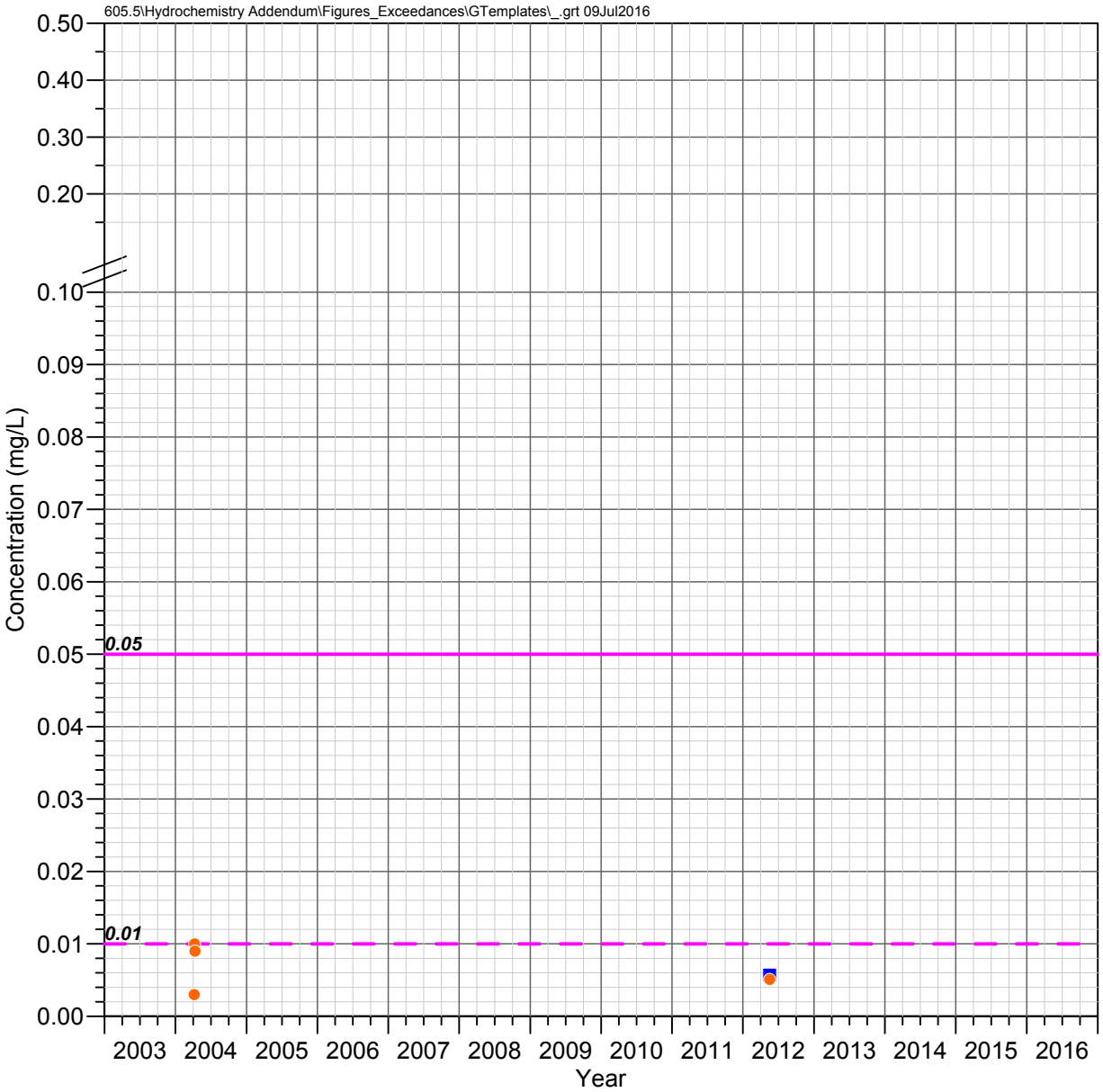


FIGURE E-064. ARSENIC CONCENTRATIONS OBSERVED AT HRES-01, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-02
Apache Leap Tuff Aquifer

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.01 mg/L)

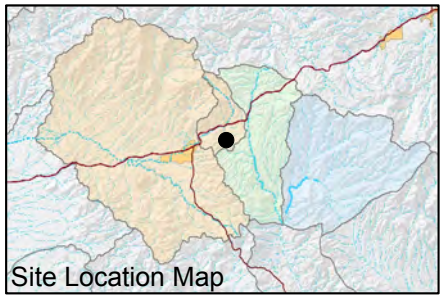
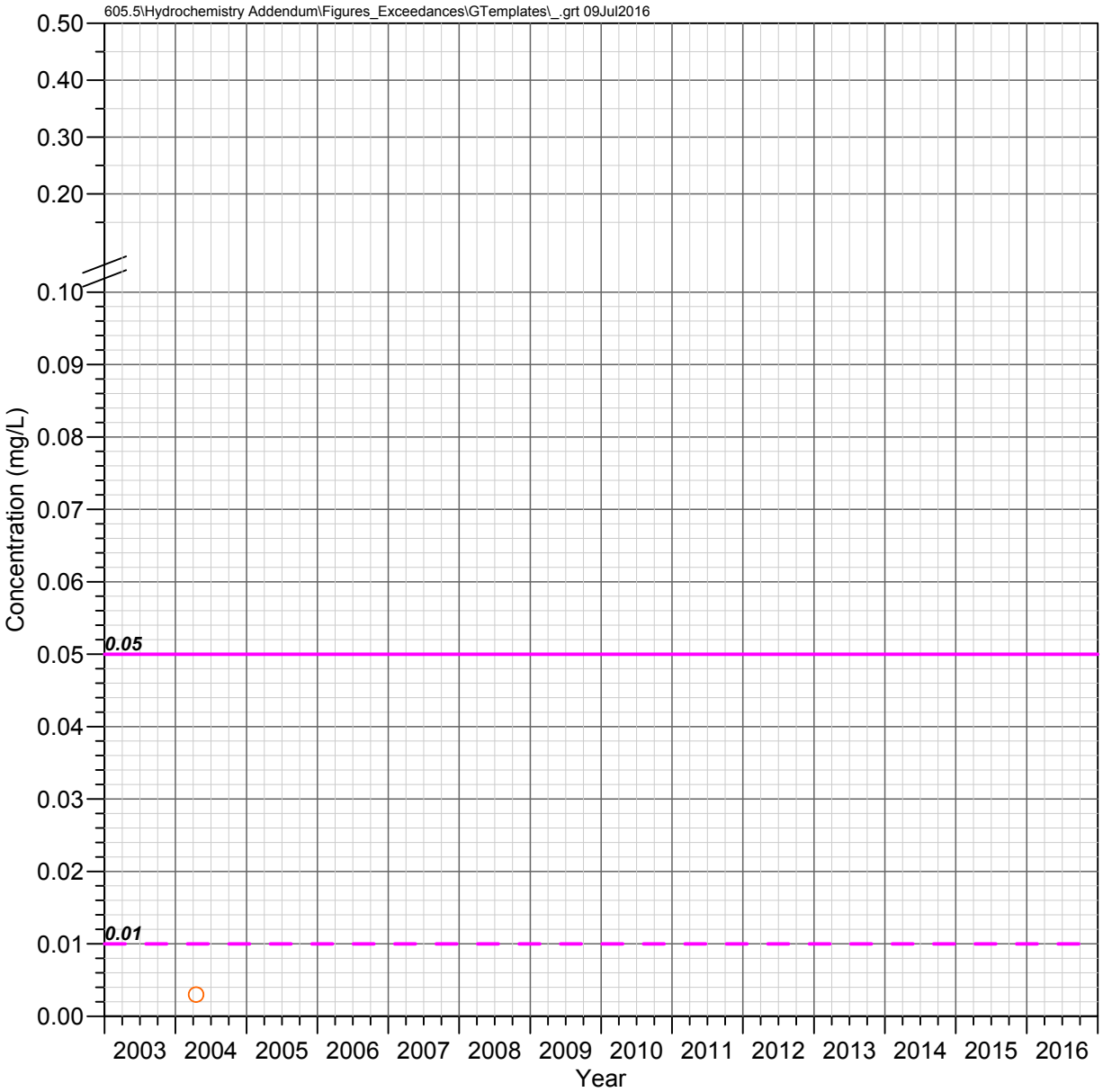


FIGURE E-065. ARSENIC CONCENTRATIONS OBSERVED AT HRES-02, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-03d
Apache Leap Tuff Aquifer

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.01 mg/L)

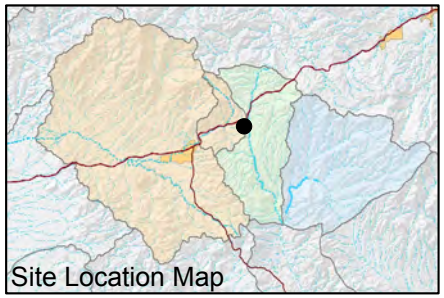
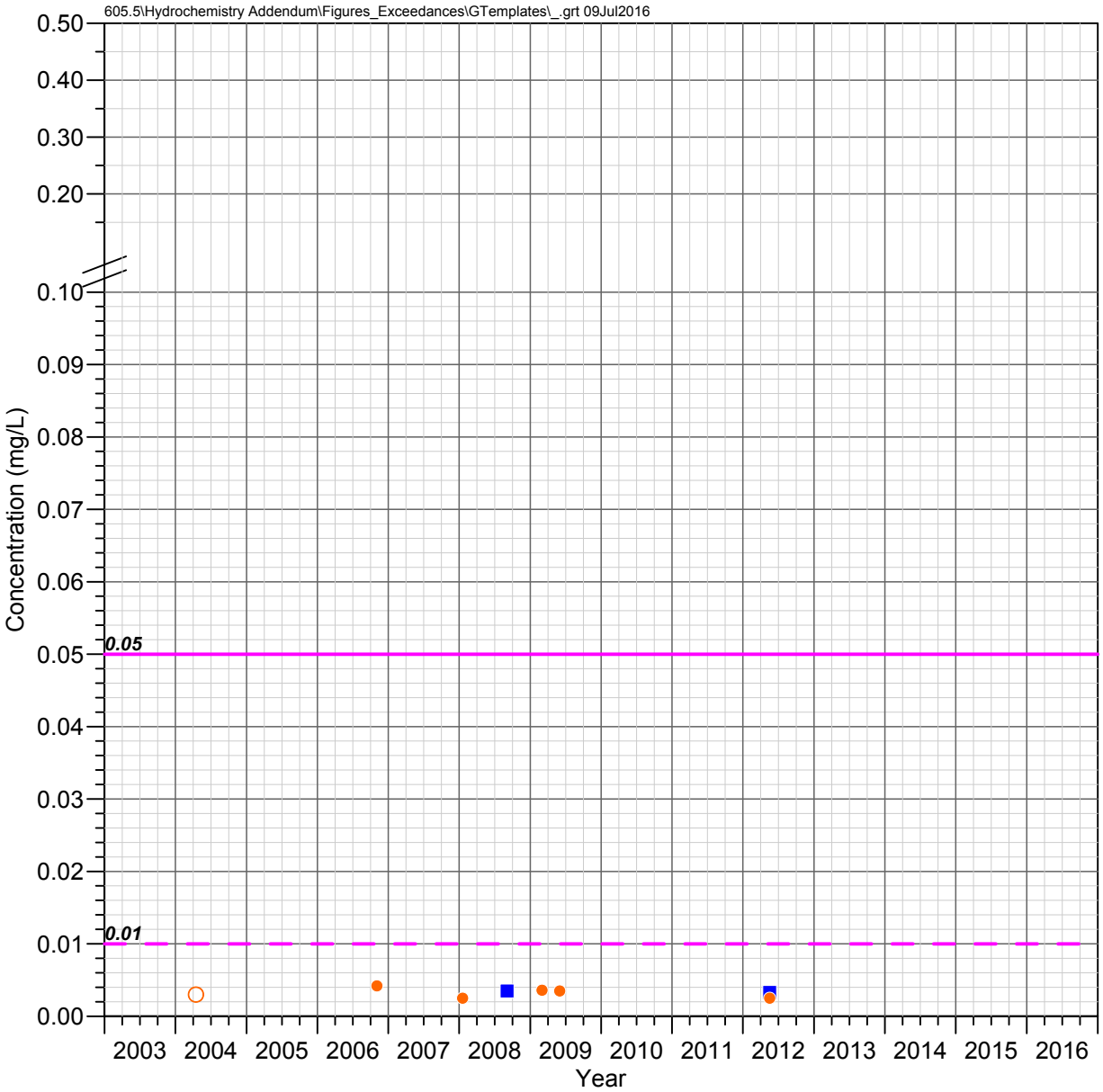


FIGURE E-066. ARSENIC CONCENTRATIONS OBSERVED AT HRES-03D, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-04
Apache Leap Tuff Aquifer

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.01 mg/L)

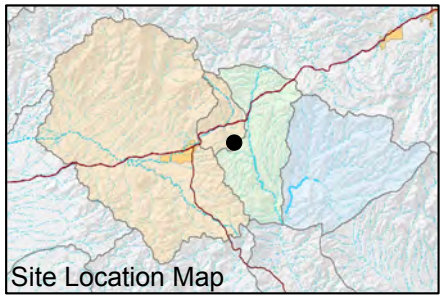
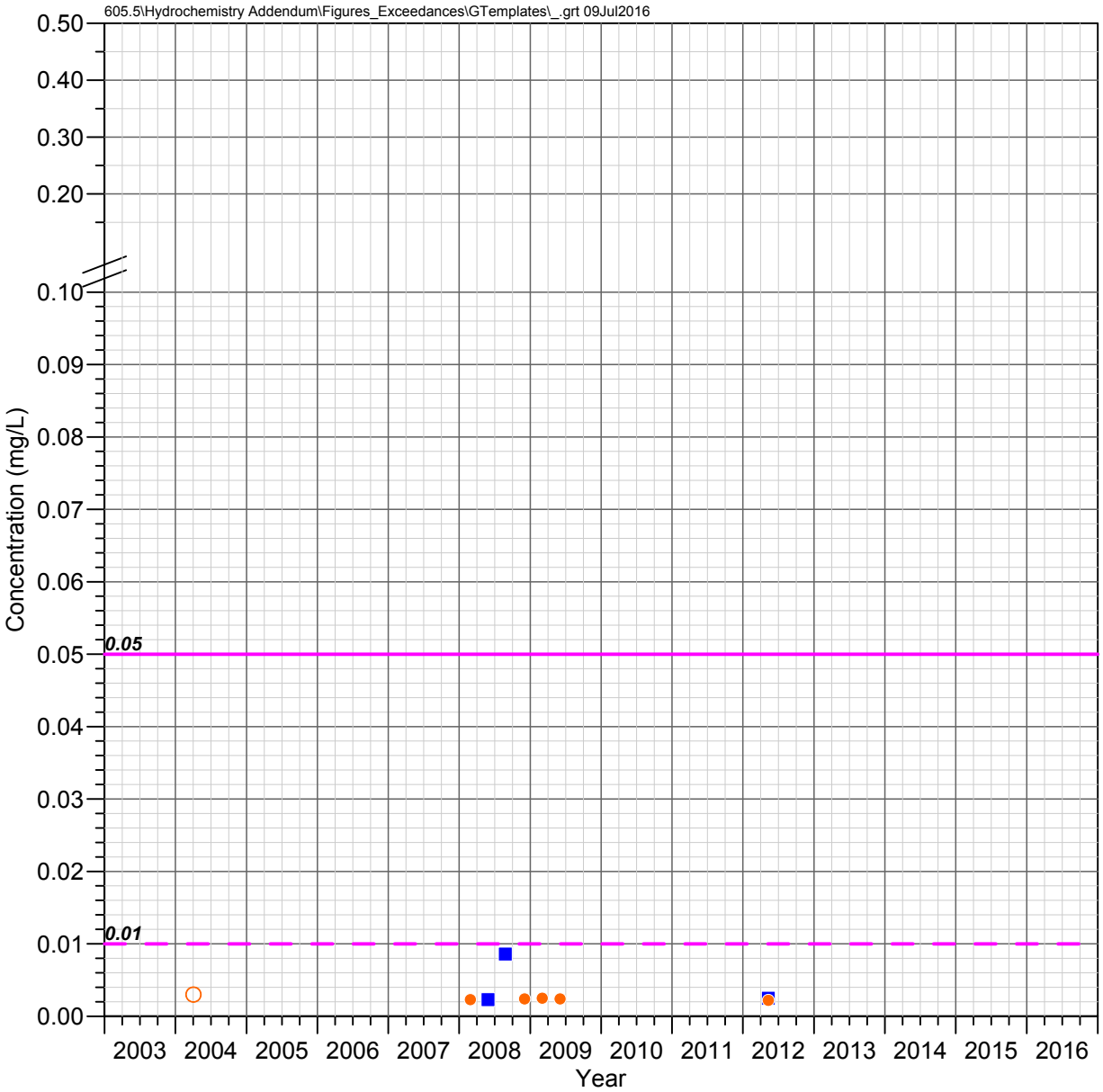


FIGURE E-067. ARSENIC CONCENTRATIONS OBSERVED AT HRES-04, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-05
Apache Leap Tuff Aquifer

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.01 mg/L)

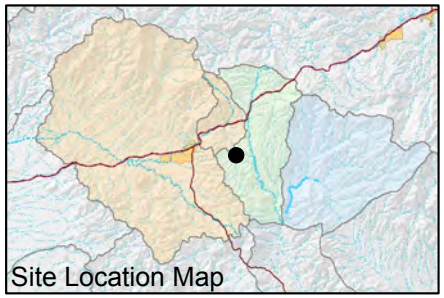
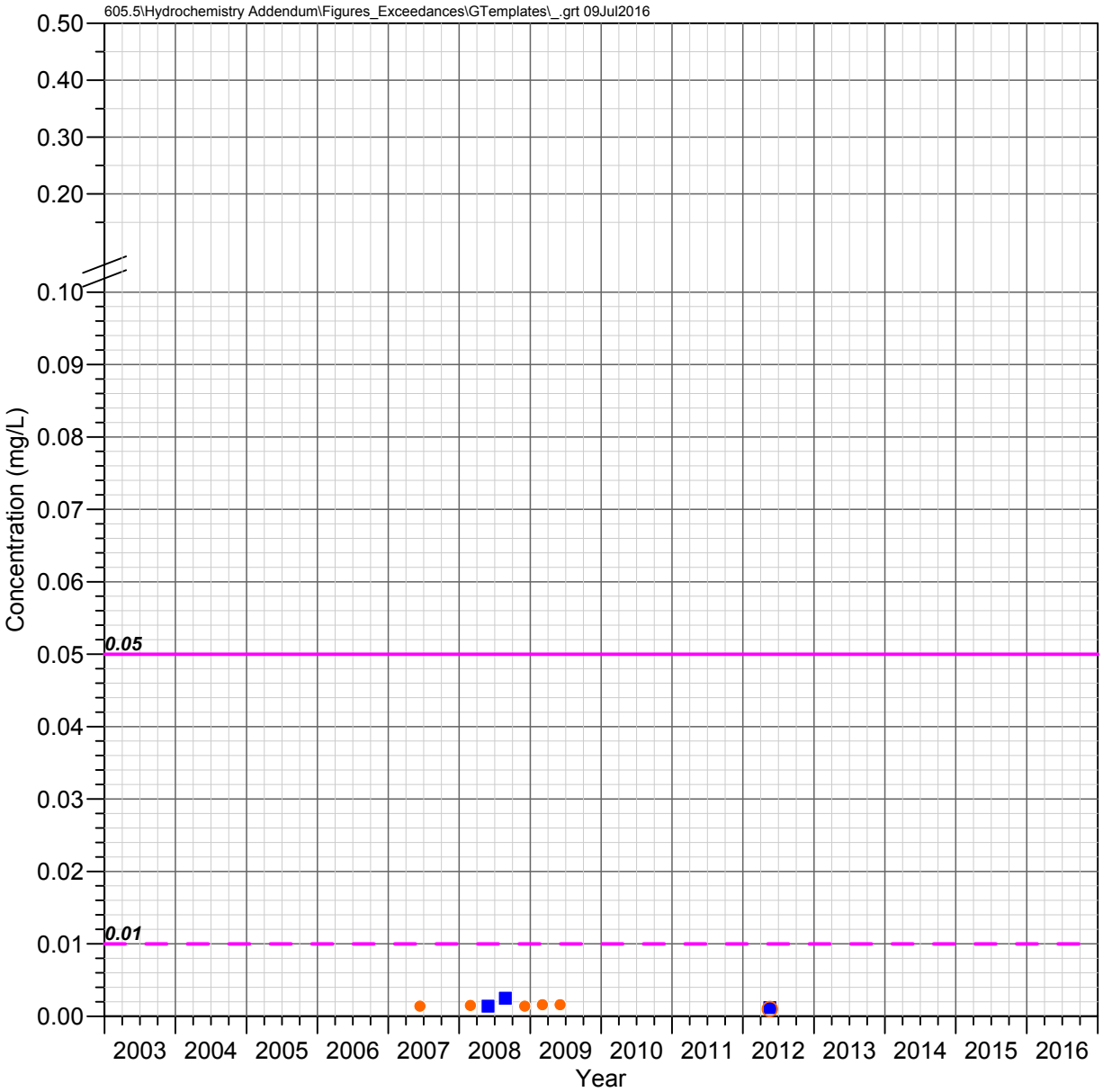


FIGURE E-068. ARSENIC CONCENTRATIONS OBSERVED AT HRES-05, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-06
Apache Leap Tuff Aquifer

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.01 mg/L)

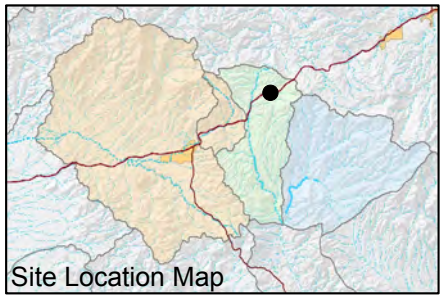
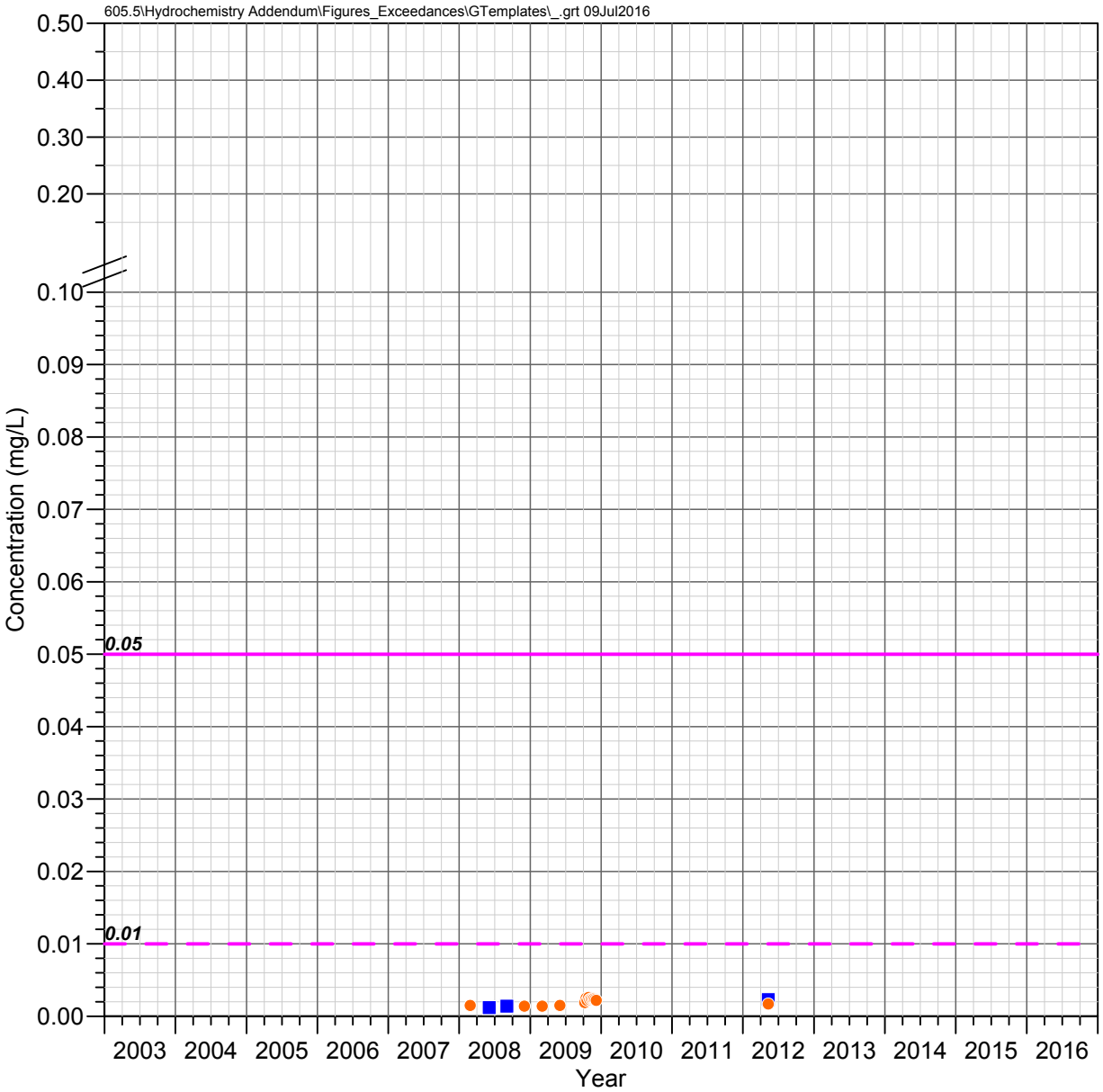


FIGURE E-069. ARSENIC CONCENTRATIONS OBSERVED AT HRES-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-07
Apache Leap Tuff Aquifer

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.01 mg/L)

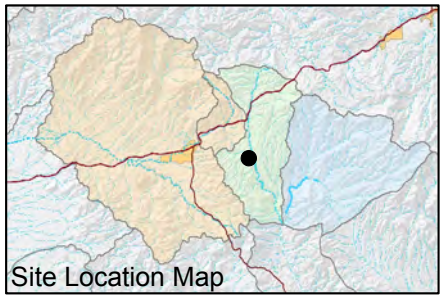
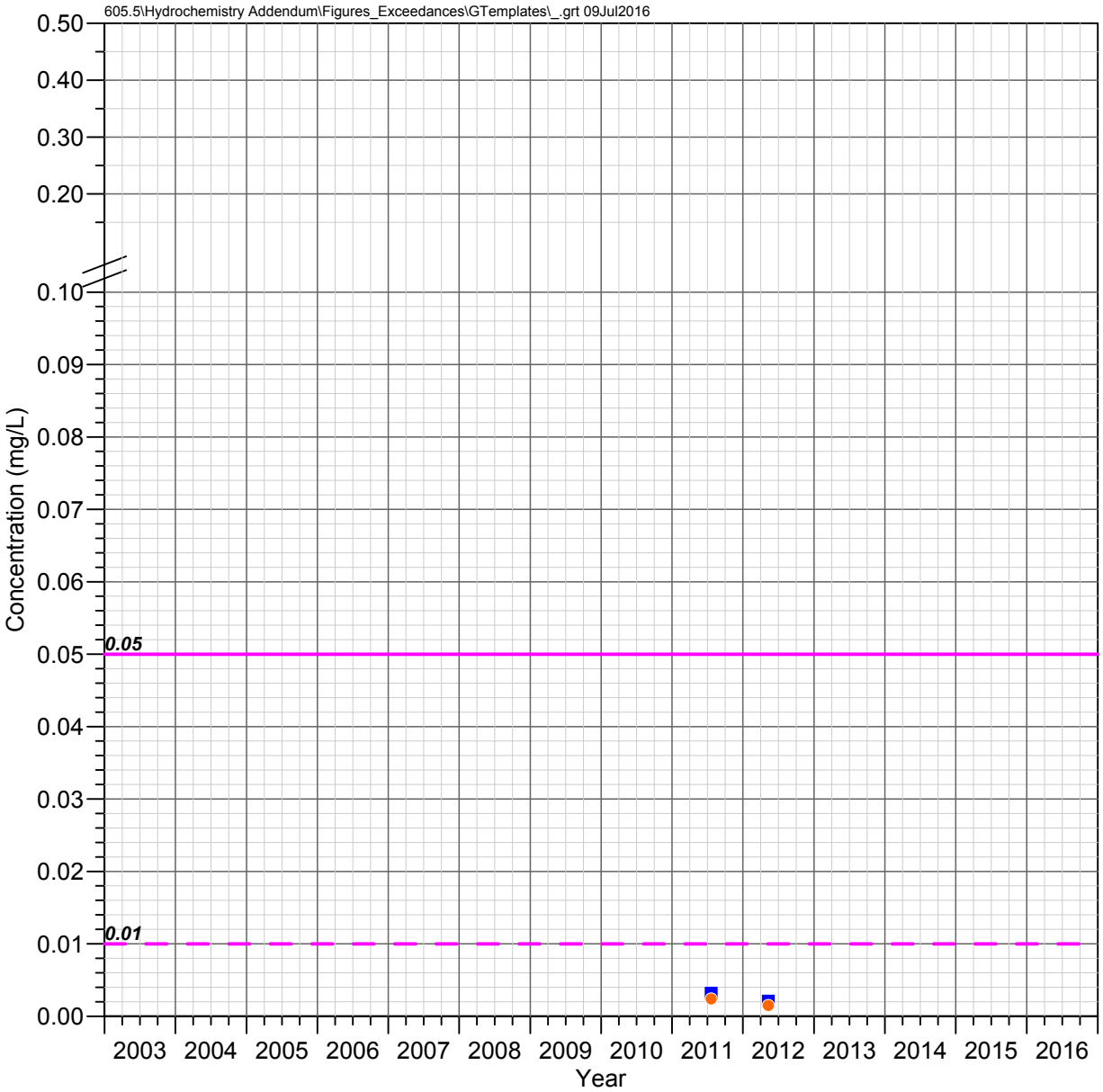


FIGURE E-070. ARSENIC CONCENTRATIONS OBSERVED AT HRES-07, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-08
Apache Leap Tuff Aquifer

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.01 mg/L)

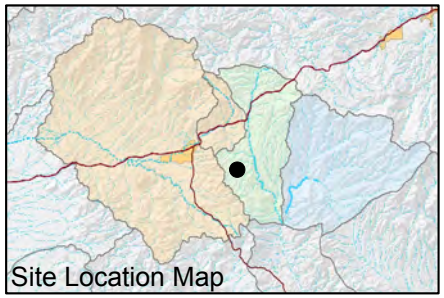
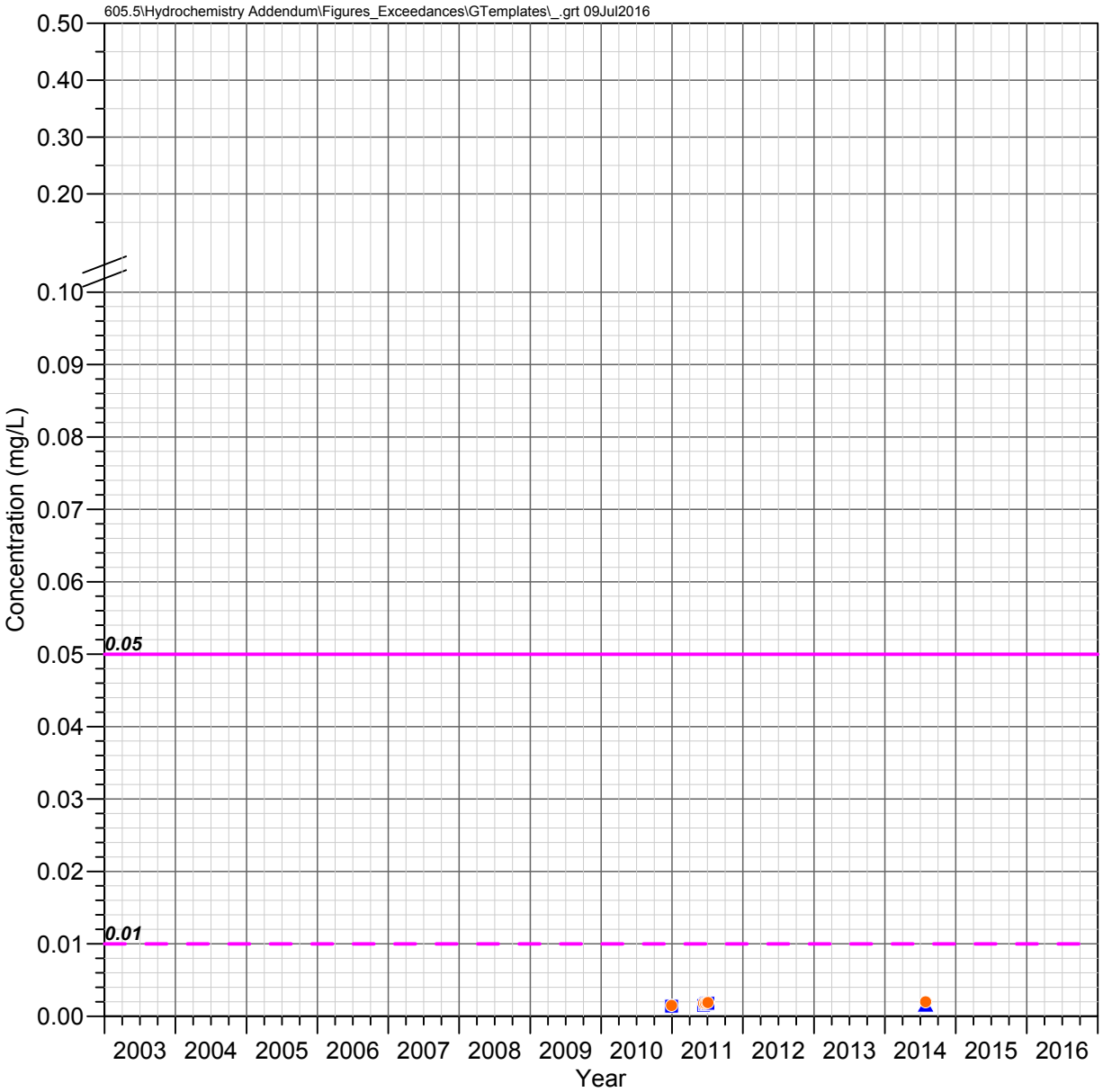


FIGURE E-071. ARSENIC CONCENTRATIONS OBSERVED AT HRES-08, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-09
Apache Leap Tuff Aquifer

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.01 mg/L)

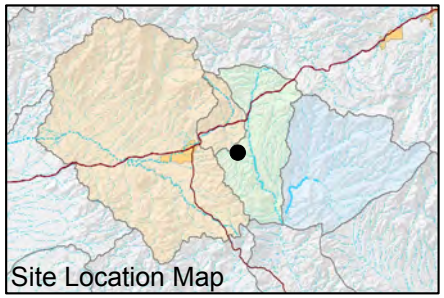
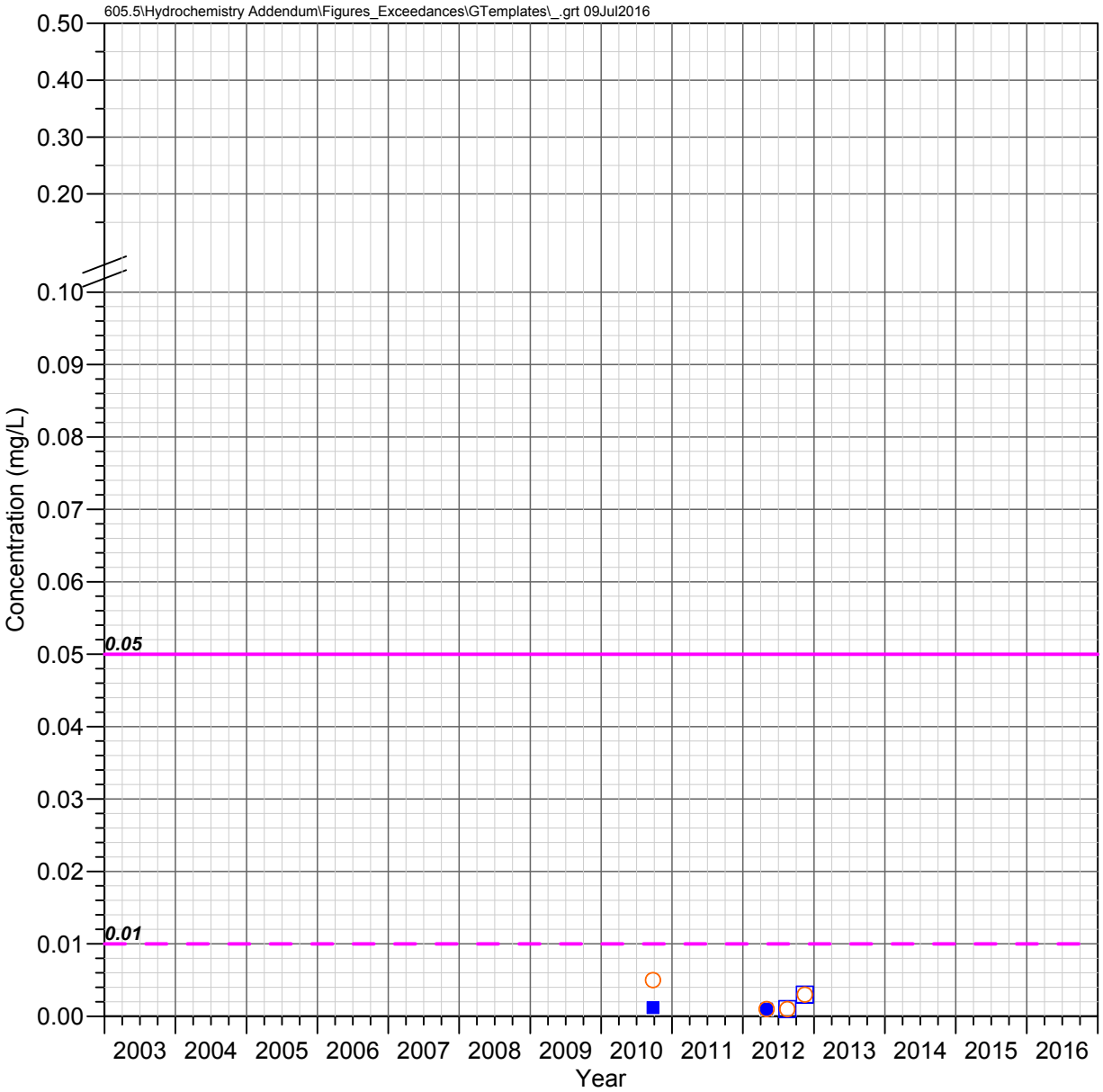


FIGURE E-072. ARSENIC CONCENTRATIONS OBSERVED AT HRES-09, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-10
Apache Leap Tuff Aquifer

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.01 mg/L)

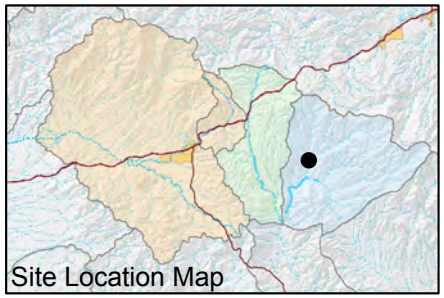
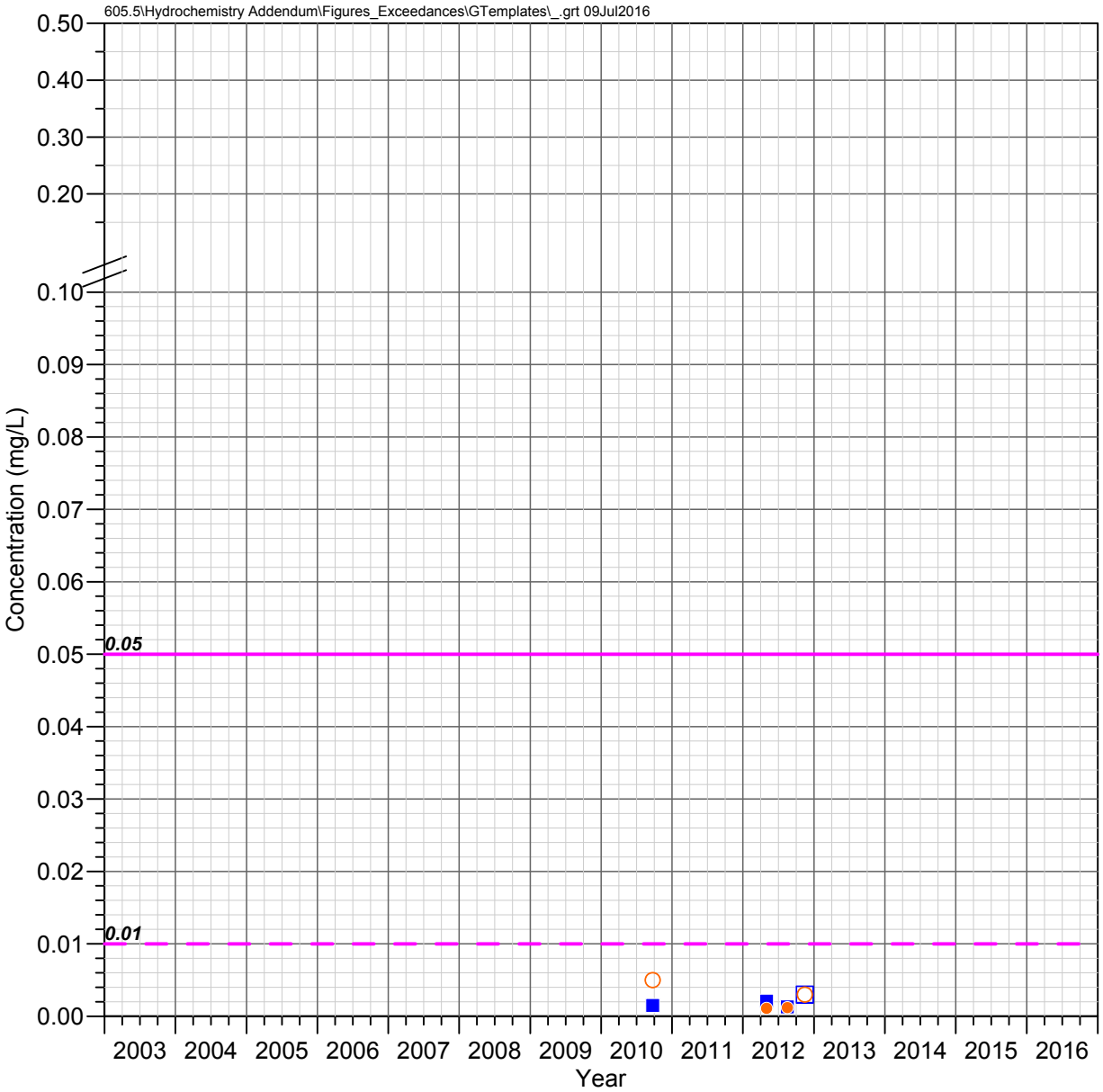


FIGURE E-073. ARSENIC CONCENTRATIONS OBSERVED AT HRES-10, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-11
Apache Leap Tuff Aquifer

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.01 mg/L)

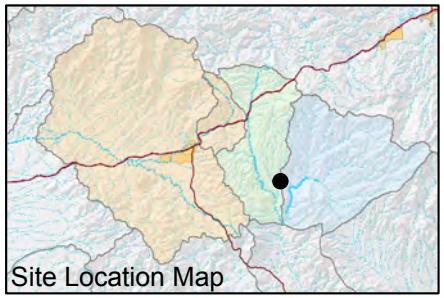
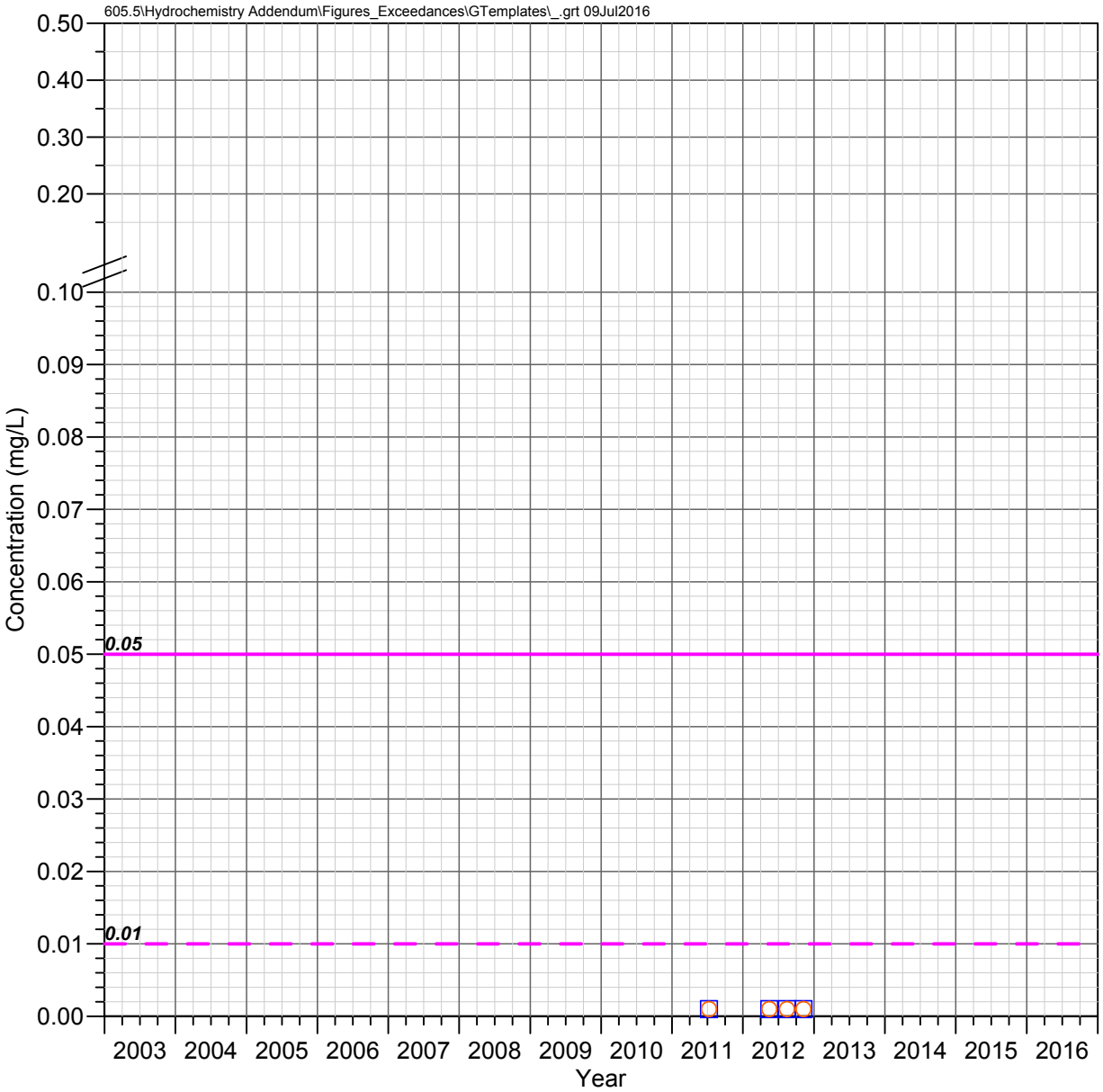


FIGURE E-074. ARSENIC CONCENTRATIONS OBSERVED AT HRES-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-12
Apache Leap Tuff Aquifer

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.01 mg/L)

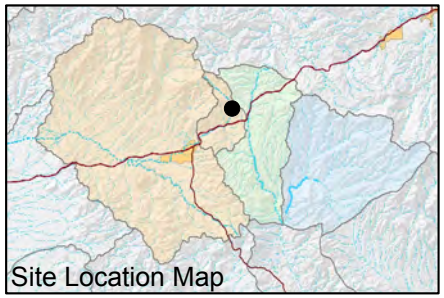
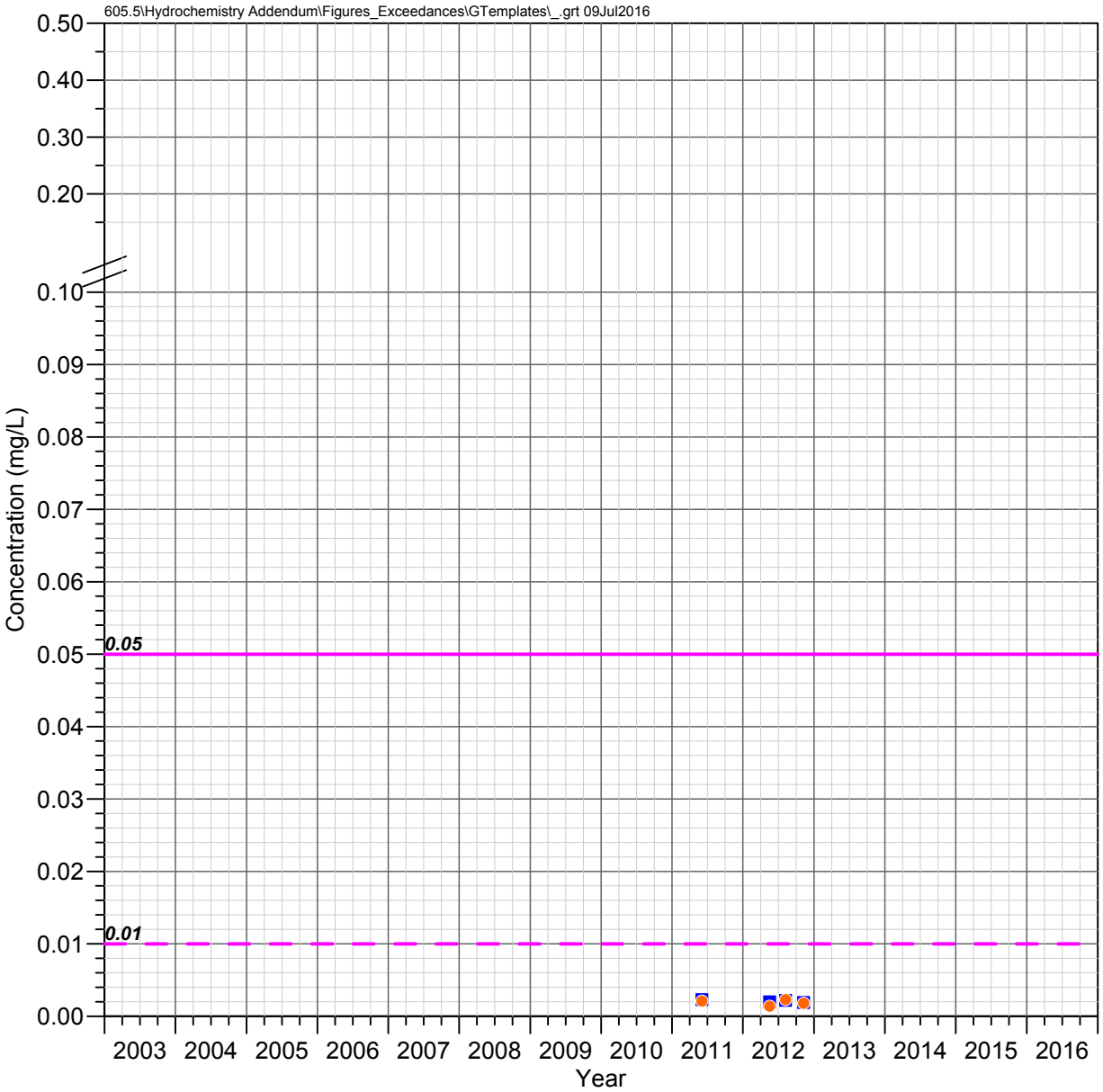


FIGURE E-075. ARSENIC CONCENTRATIONS OBSERVED AT HRES-12, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-13
Apache Leap Tuff Aquifer

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.01 mg/L)

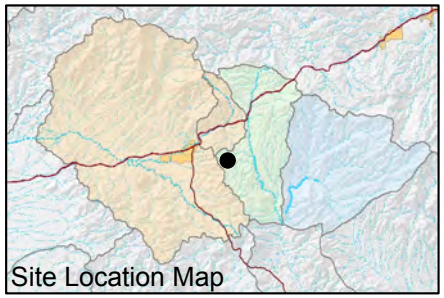
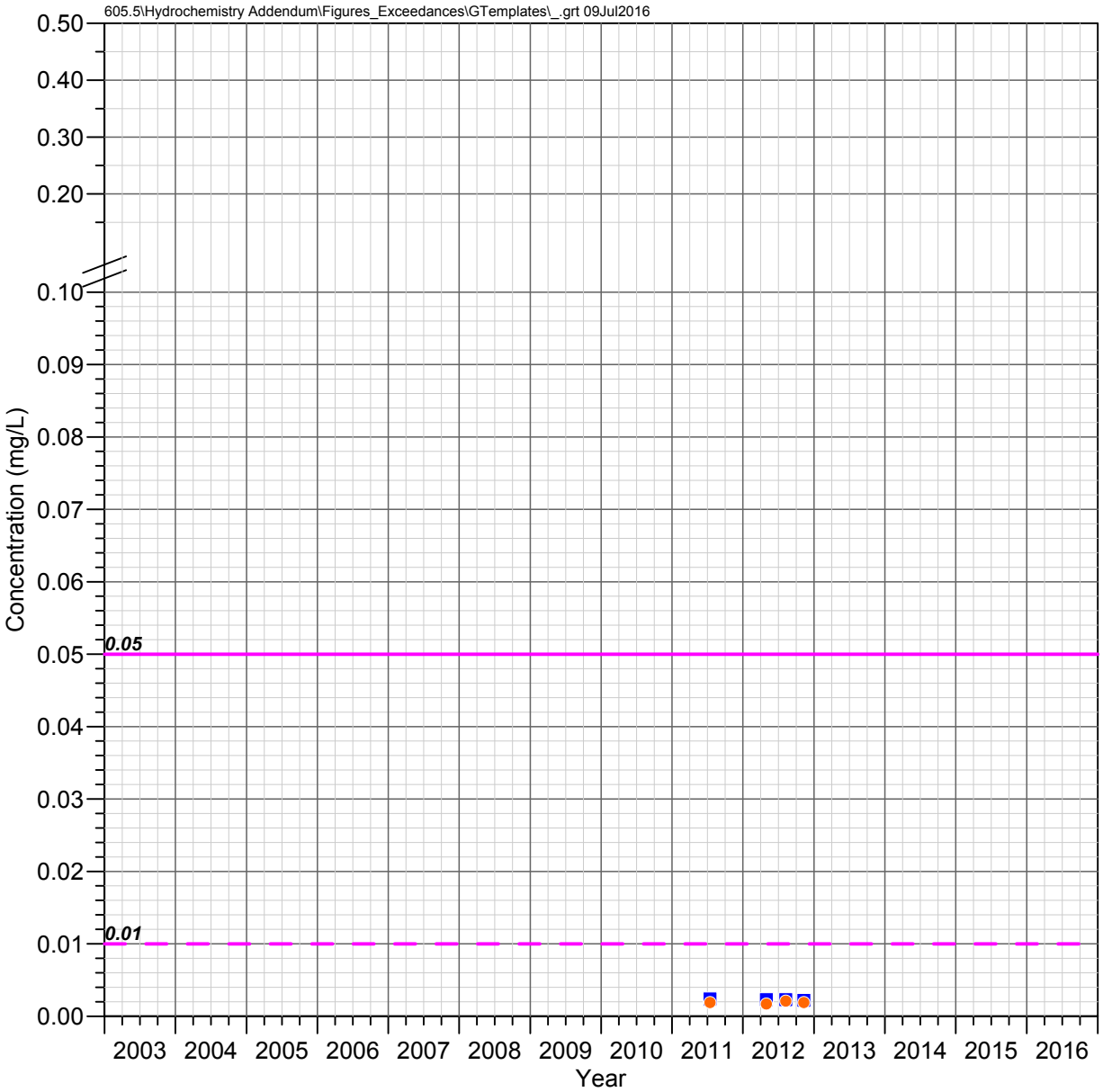


FIGURE E-076. ARSENIC CONCENTRATIONS OBSERVED AT HRES-13, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-14
Apache Leap Tuff Aquifer

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.01 mg/L)

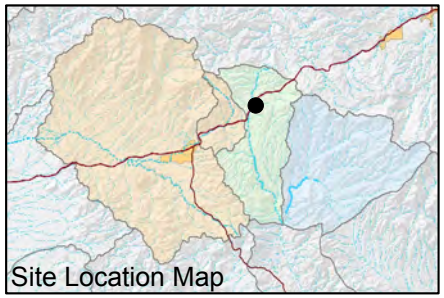
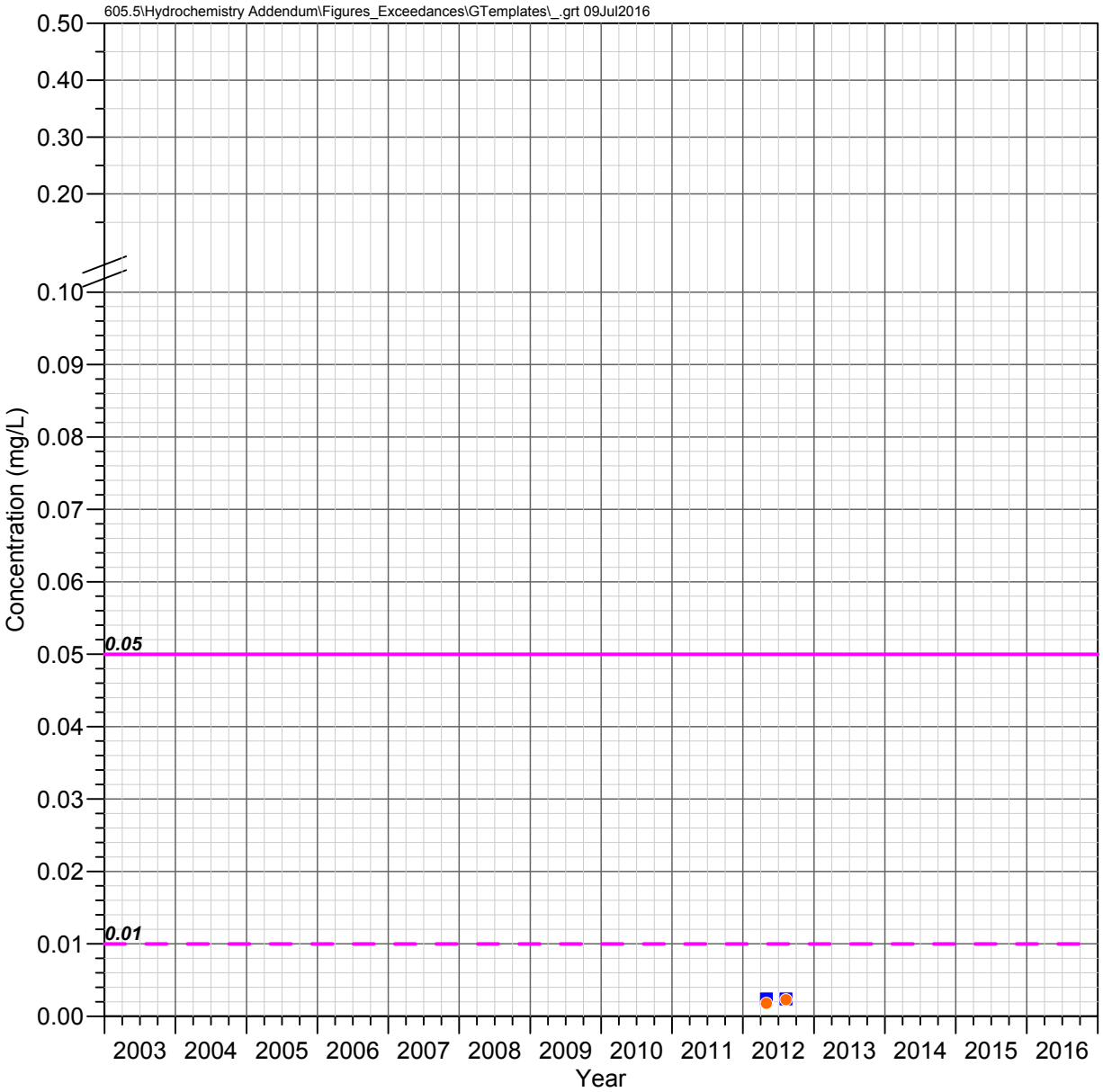


FIGURE E-077. ARSENIC CONCENTRATIONS OBSERVED AT HRES-14, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-15
Apache Leap Tuff Aquifer

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.01 mg/L)

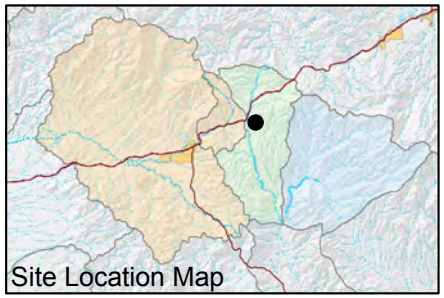
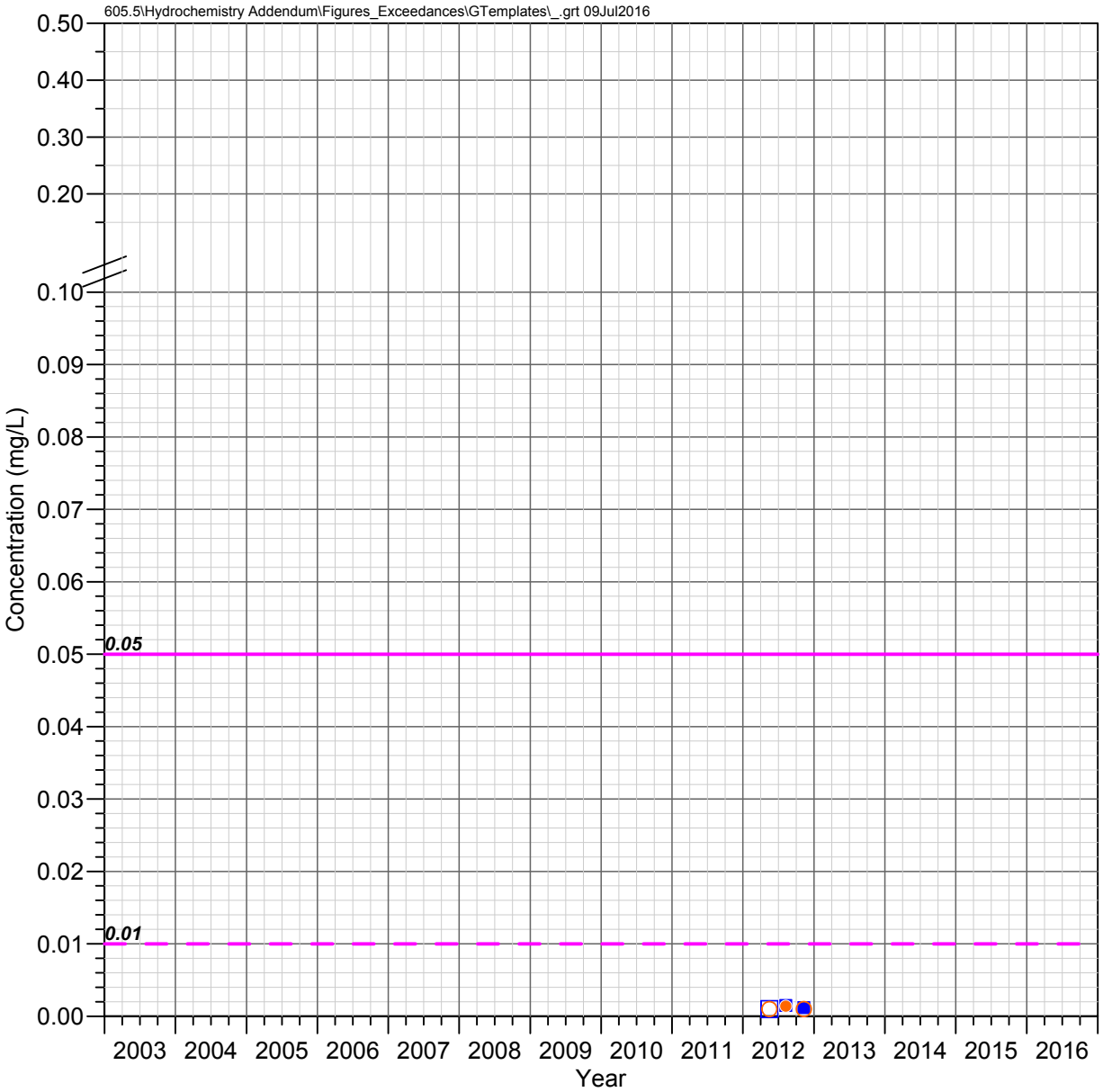


FIGURE E-078. ARSENIC CONCENTRATIONS OBSERVED AT HRES-15, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-17
Apache Leap Tuff Aquifer

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.01 mg/L)

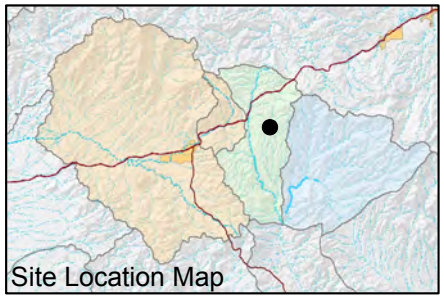
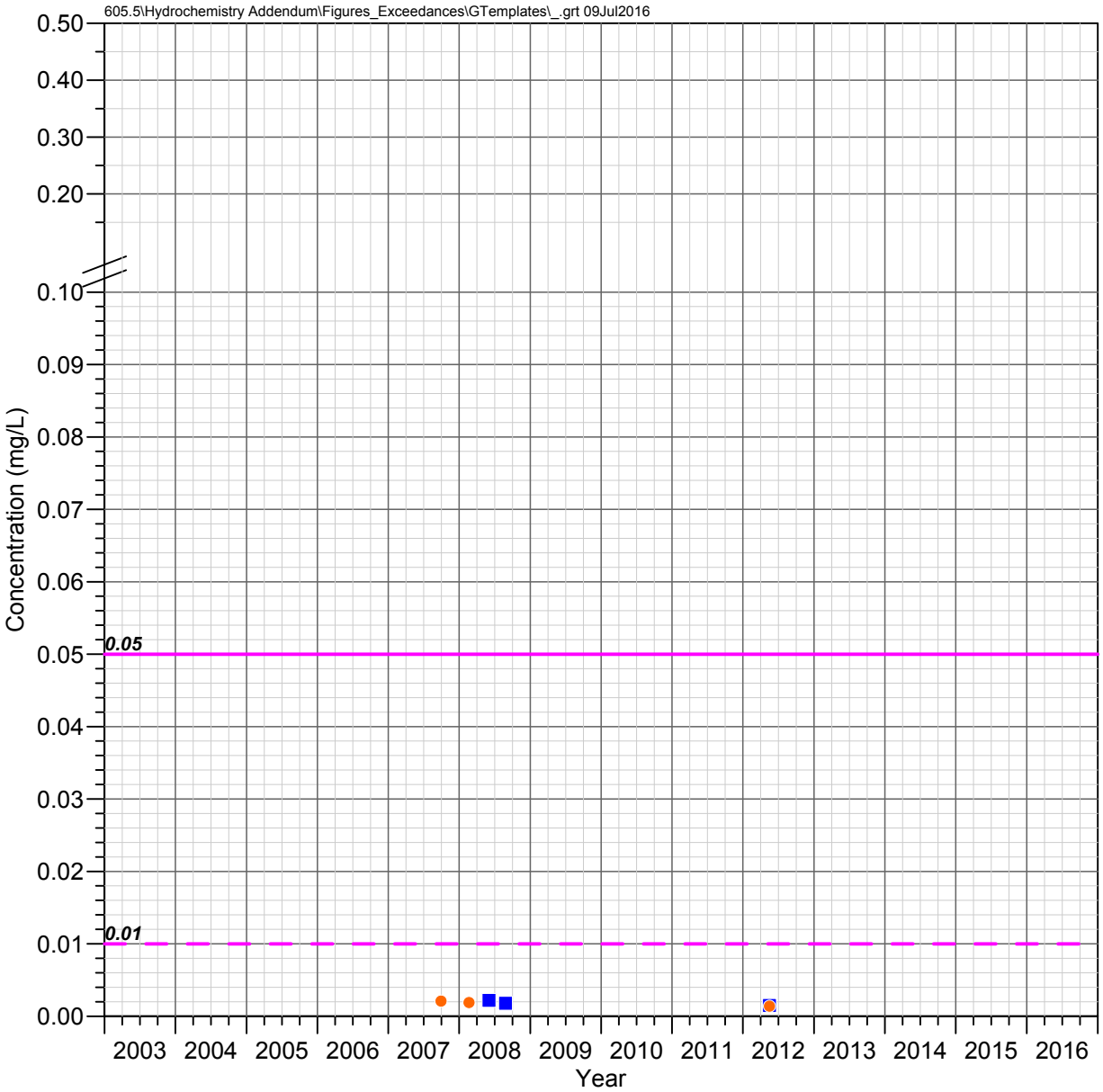


FIGURE E-079. ARSENIC CONCENTRATIONS OBSERVED AT HRES-17, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MJ-11
Apache Leap Tuff Aquifer

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.01 mg/L)

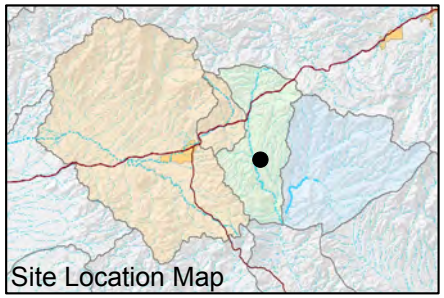
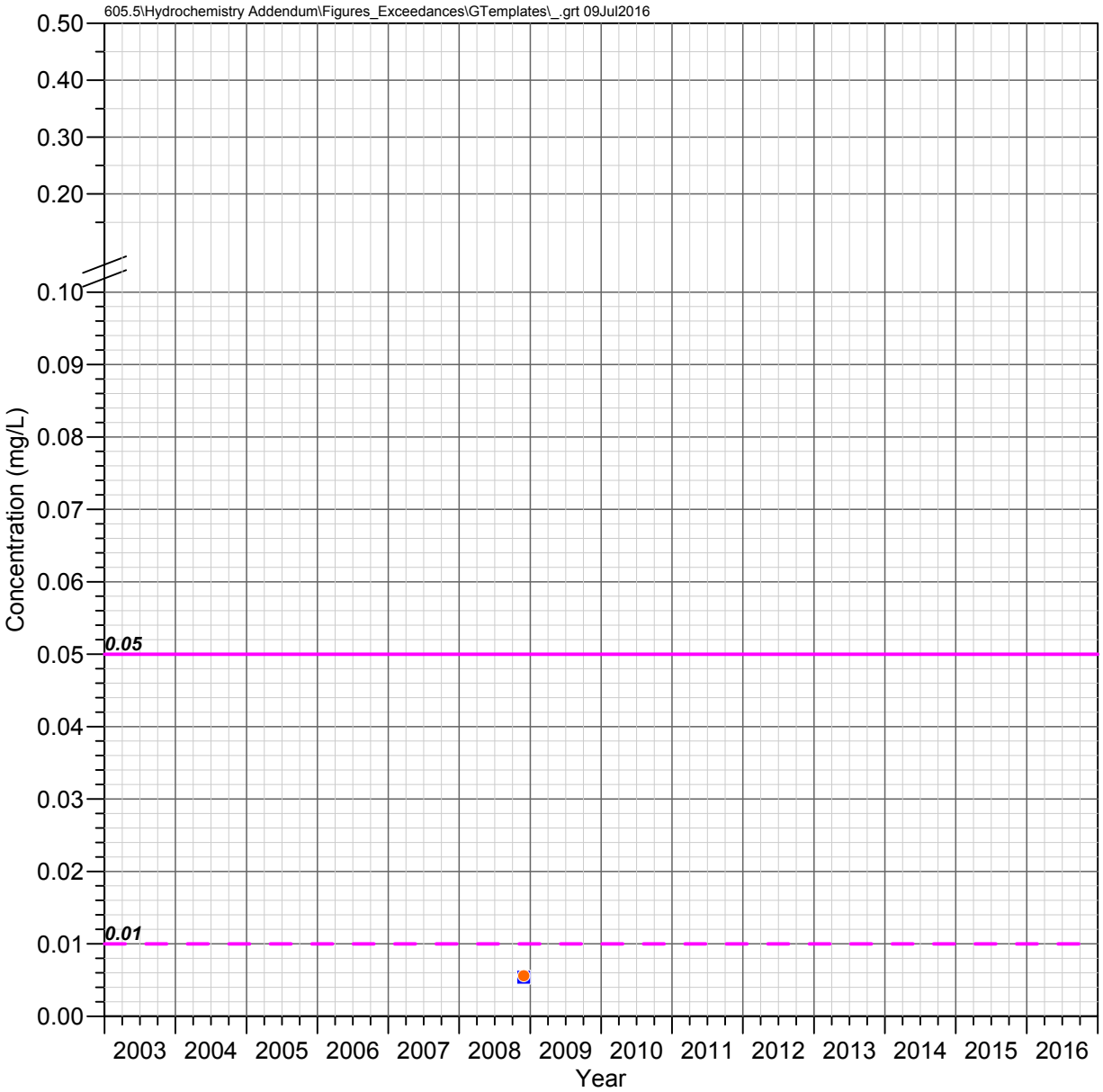


FIGURE E-080. ARSENIC CONCENTRATIONS OBSERVED AT MJ-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-01
Deep Groundwater System

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.01 mg/L)

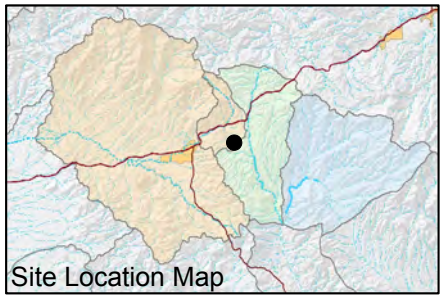
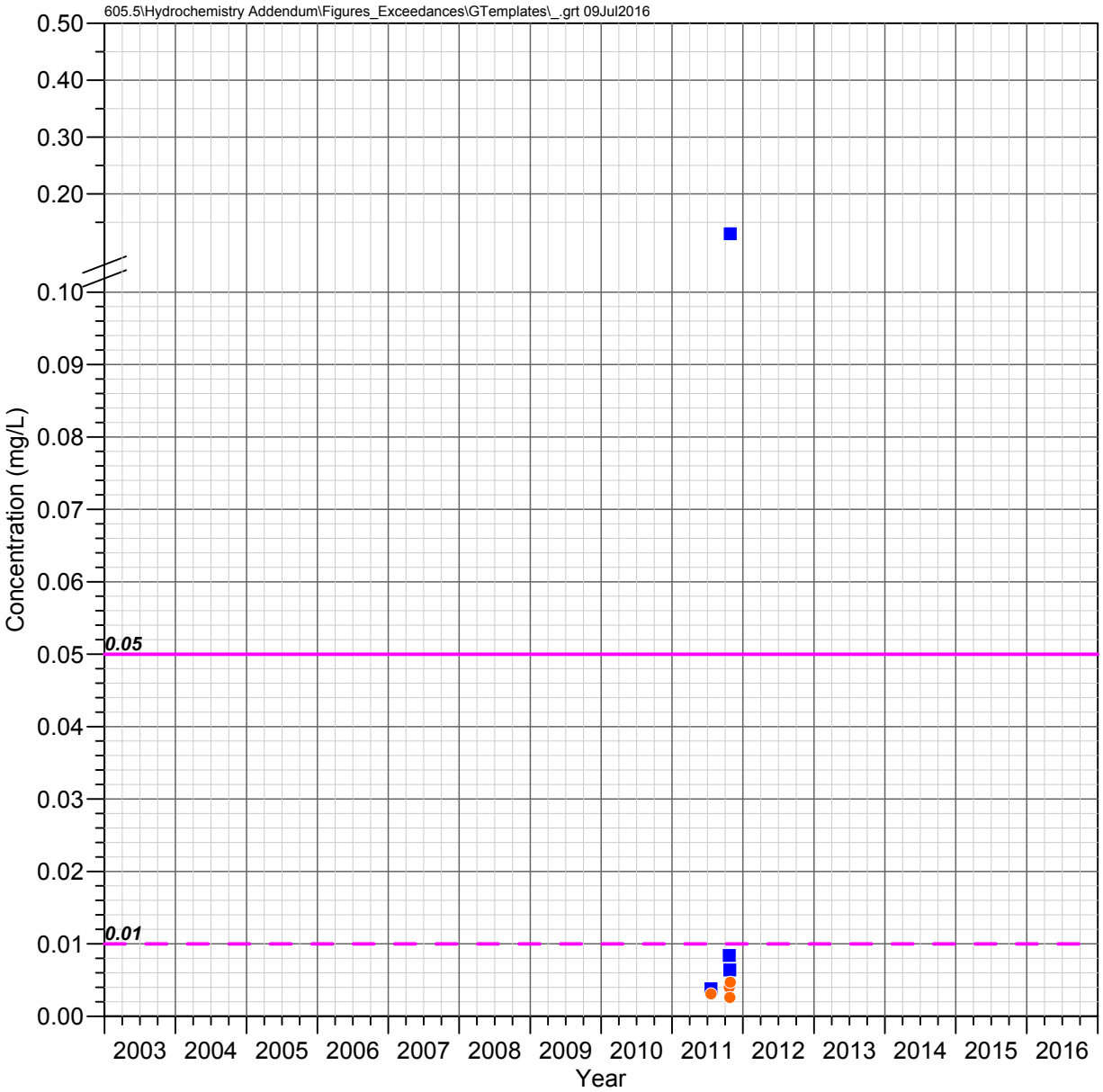


FIGURE E-081. ARSENIC CONCENTRATIONS OBSERVED AT DHRES-01, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-02
Deep Groundwater System

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.01 mg/L)

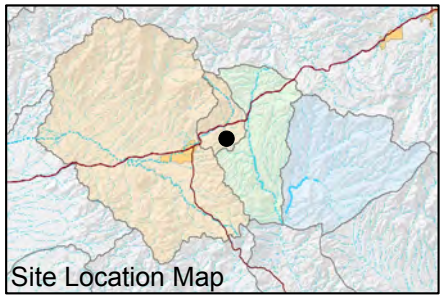
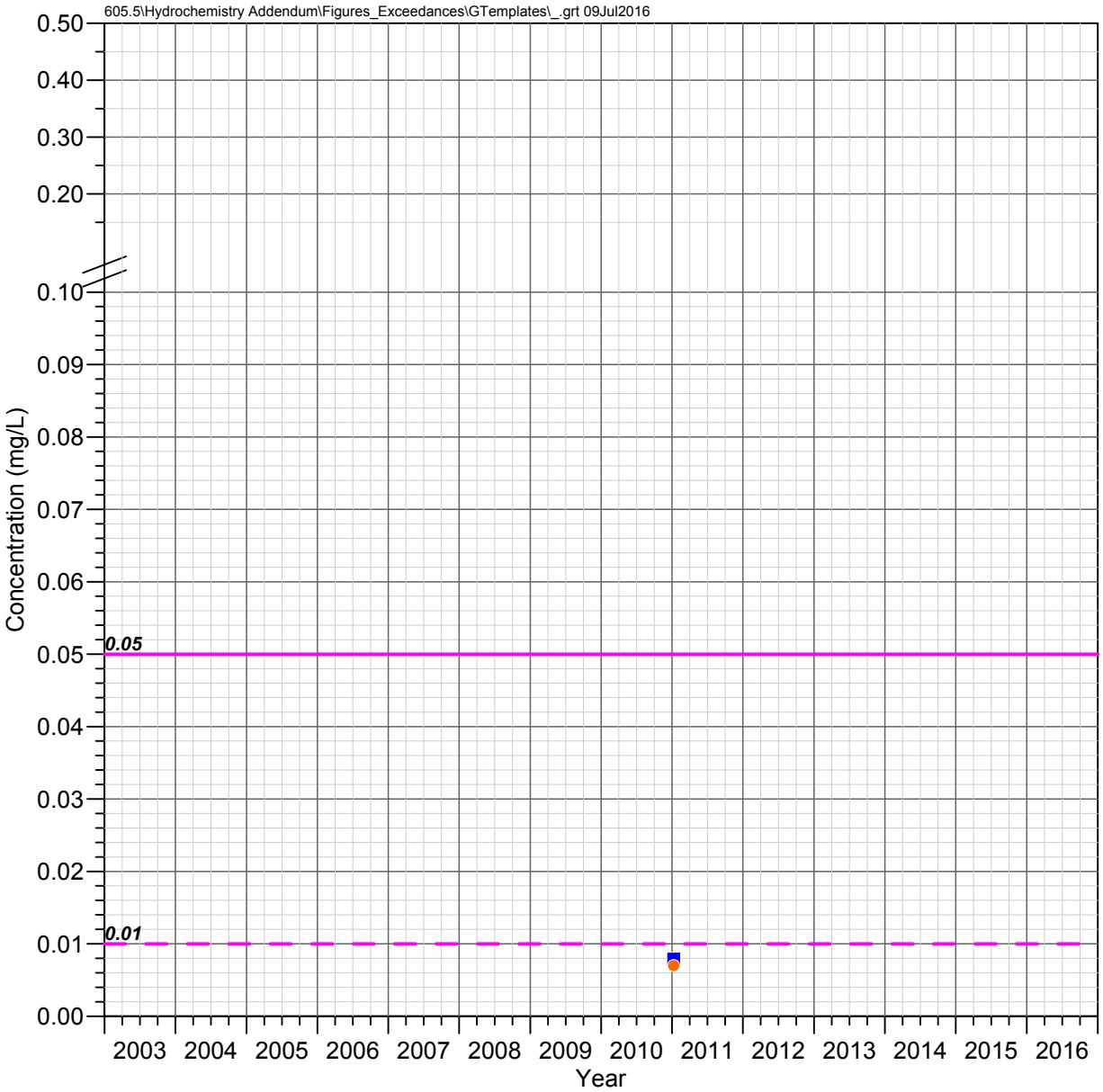


FIGURE E-082. ARSENIC CONCENTRATIONS OBSERVED AT DHRES-02, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-06
Deep Groundwater System

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.01 mg/L)

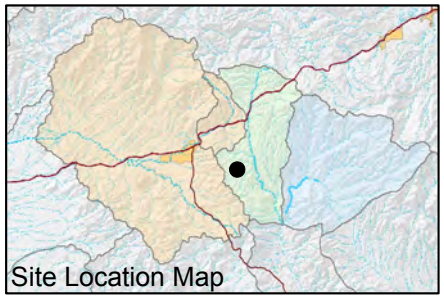
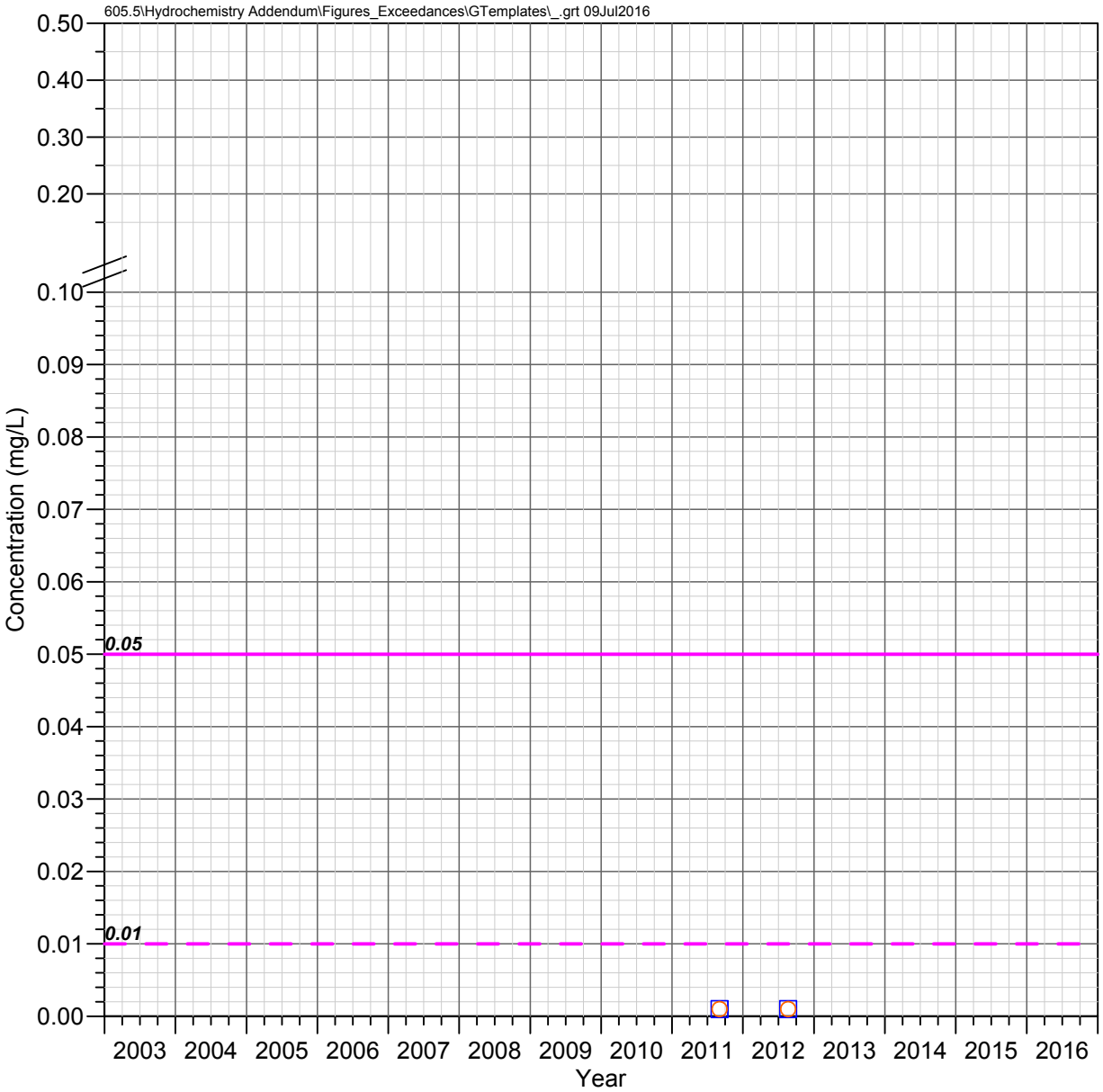


FIGURE E-083. ARSENIC CONCENTRATIONS OBSERVED AT DHRES-06, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-09
Deep Groundwater System

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.01 mg/L)

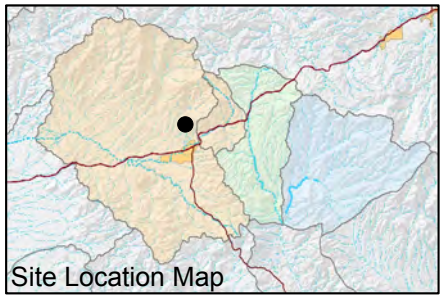
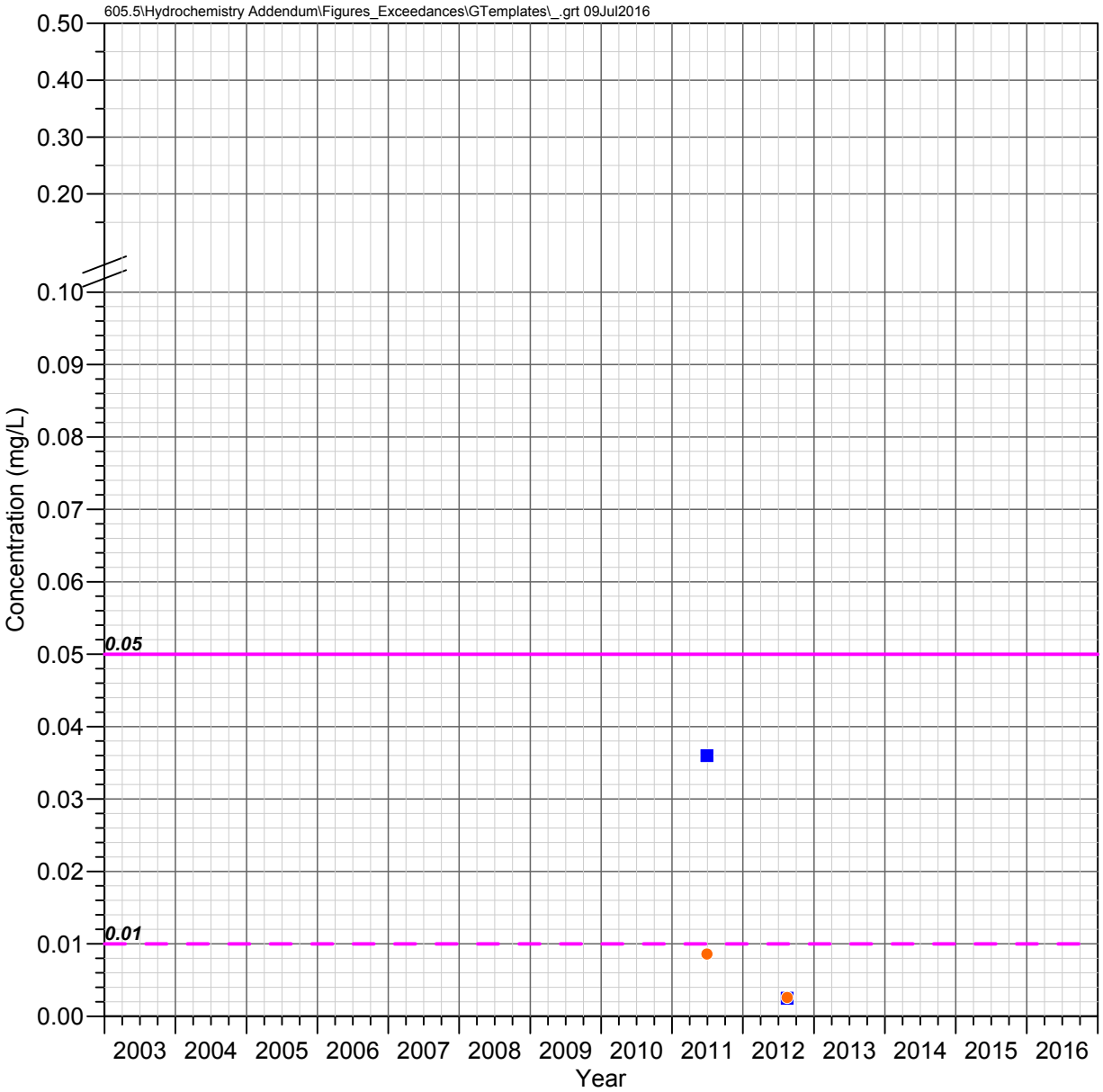


FIGURE E-084. ARSENIC CONCENTRATIONS OBSERVED AT DHRES-09, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-11
Deep Groundwater System

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.01 mg/L)

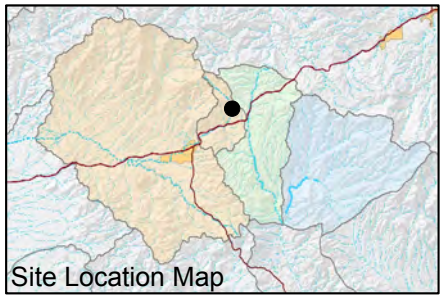
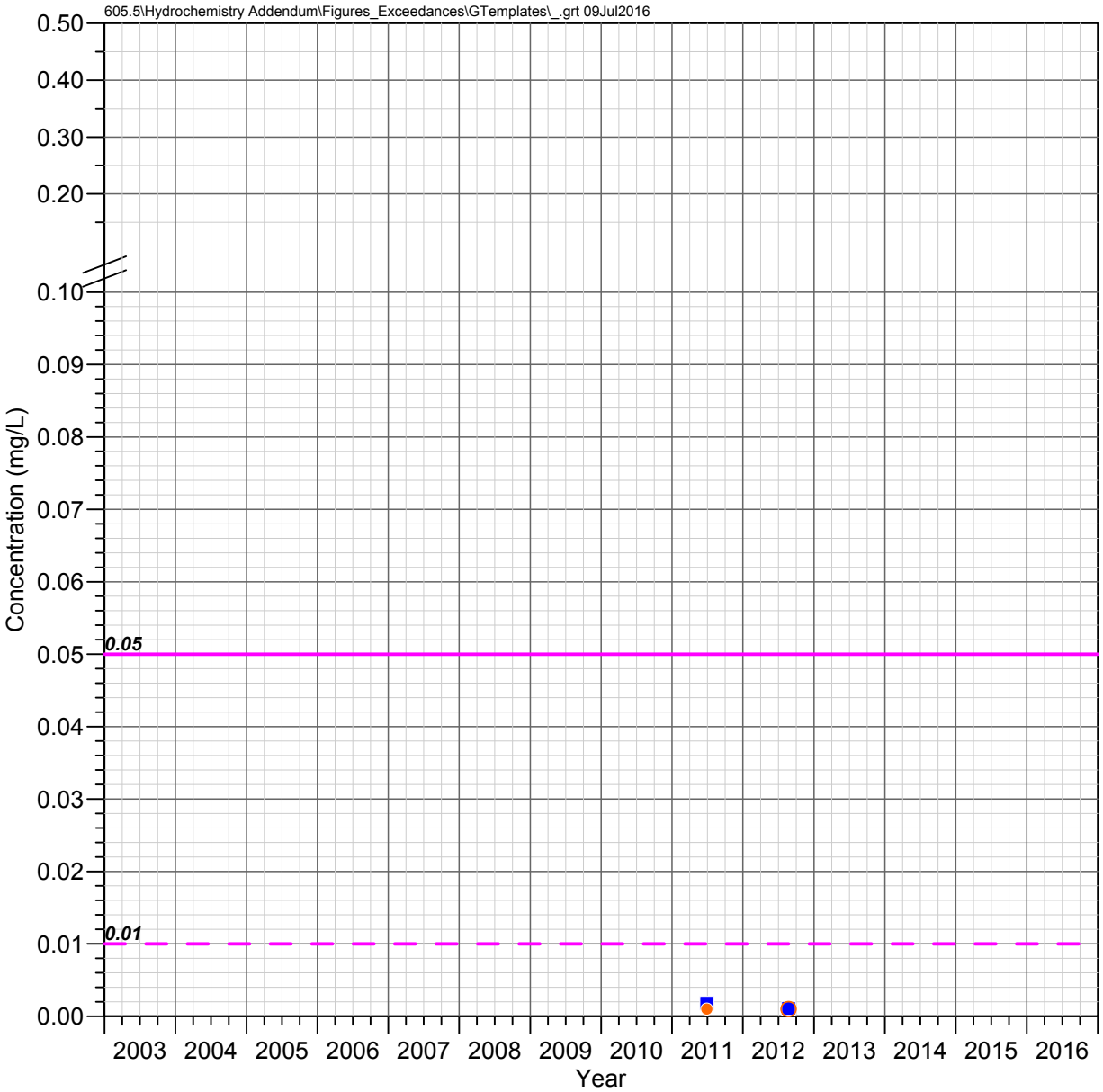


FIGURE E-085. ARSENIC CONCENTRATIONS OBSERVED AT DHRES-11, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-13
Deep Groundwater System

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.01 mg/L)

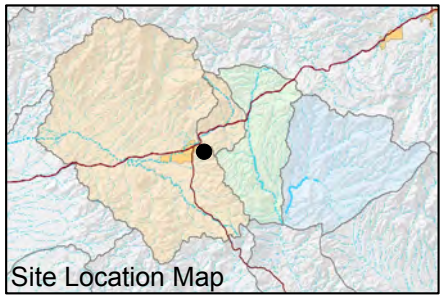
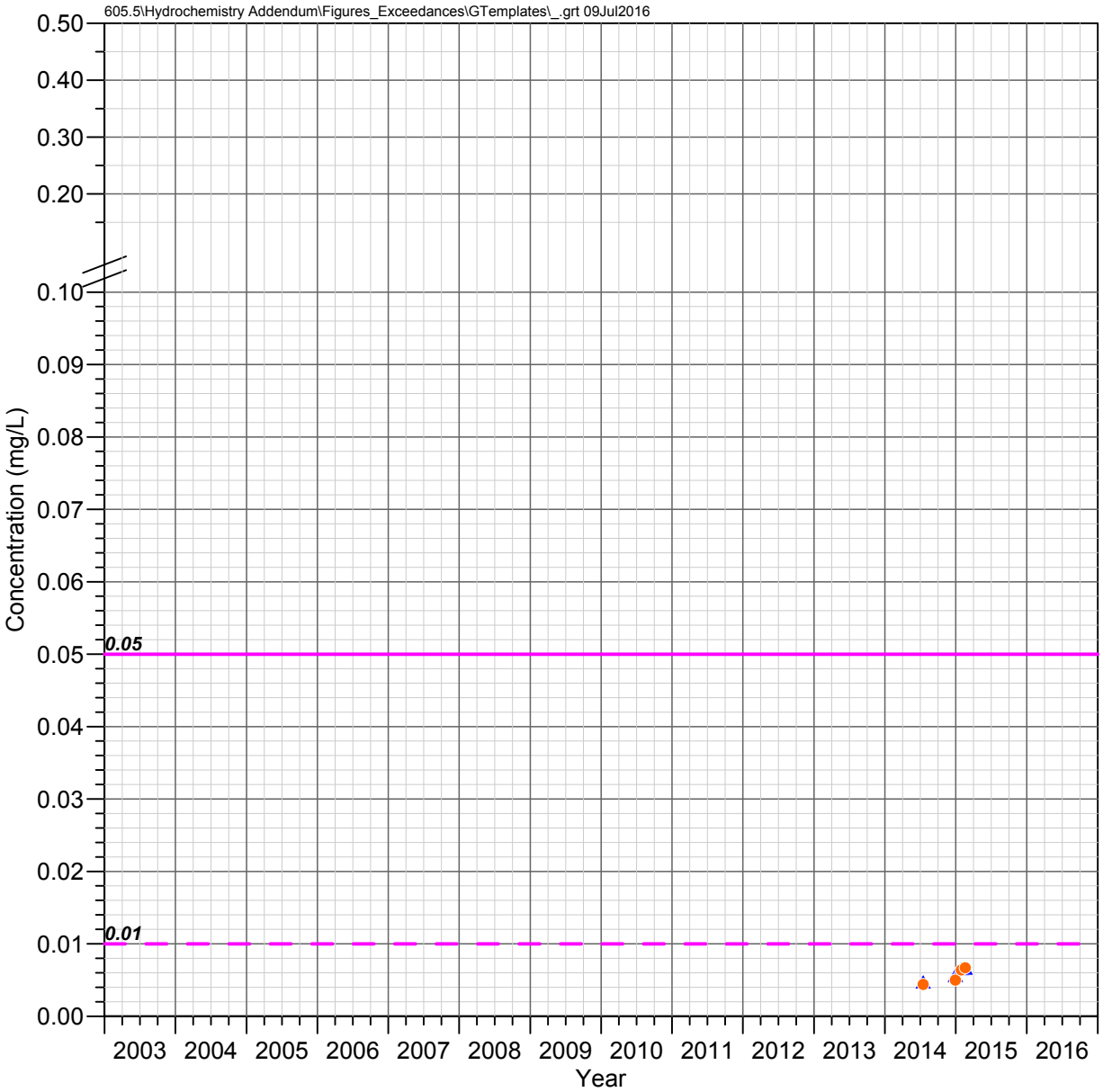


FIGURE E-086. ARSENIC CONCENTRATIONS OBSERVED AT DHRES-13, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-15
Deep Groundwater System

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.01 mg/L)

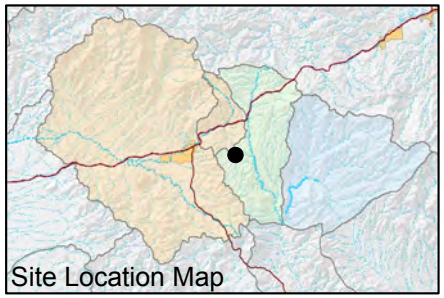
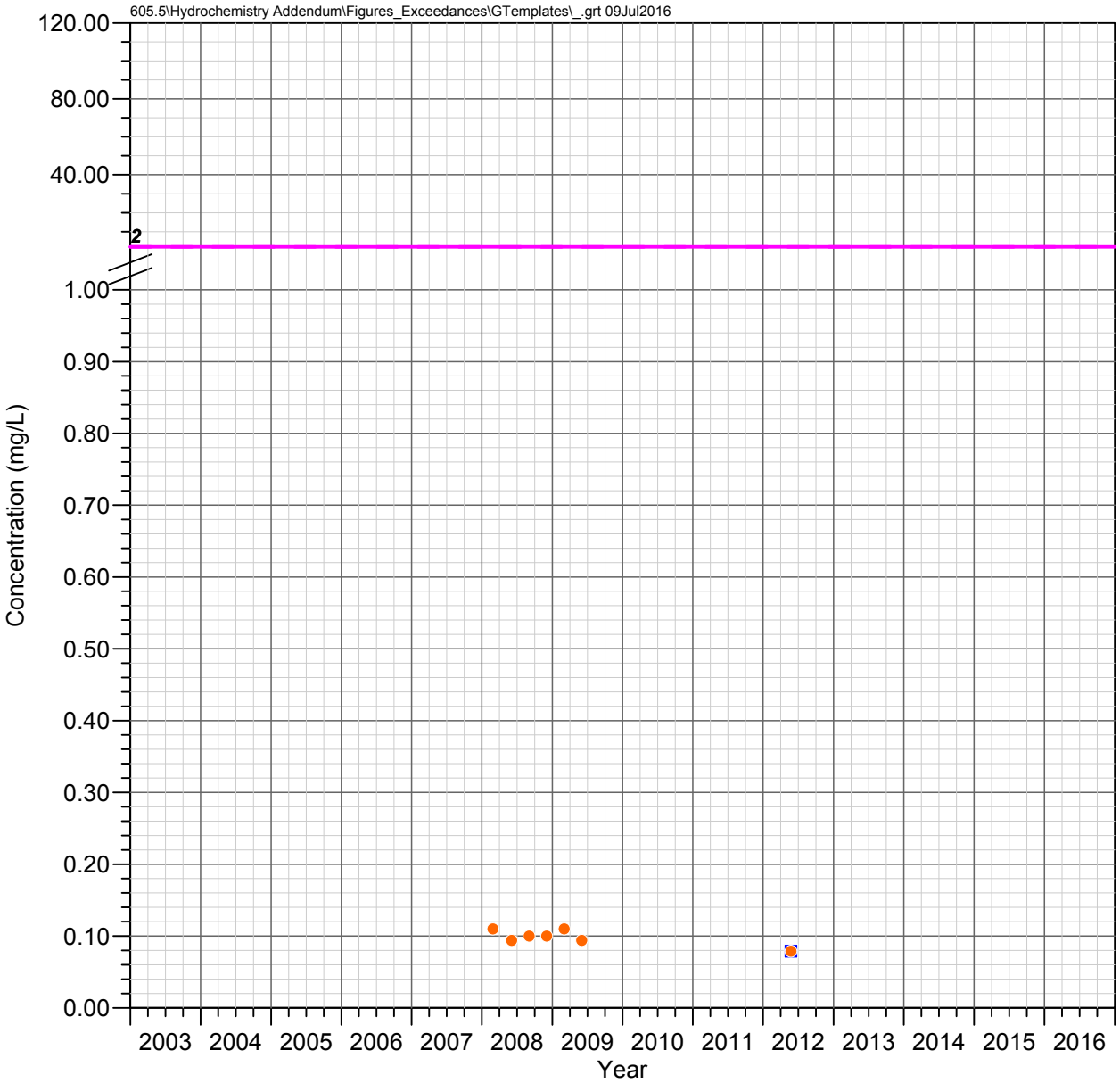


FIGURE E-087. ARSENIC CONCENTRATIONS OBSERVED AT DHRES-15, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Hackberry Windmill Well Shallow Groundwater System

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 2 mg/L)
- EPA Maximum Contaminant Levels (UNS, 2 mg/L)

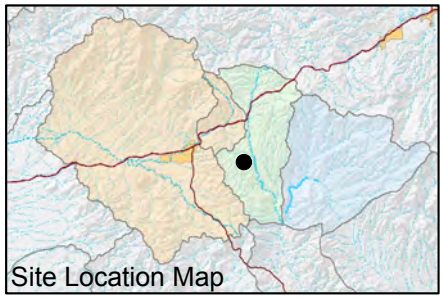
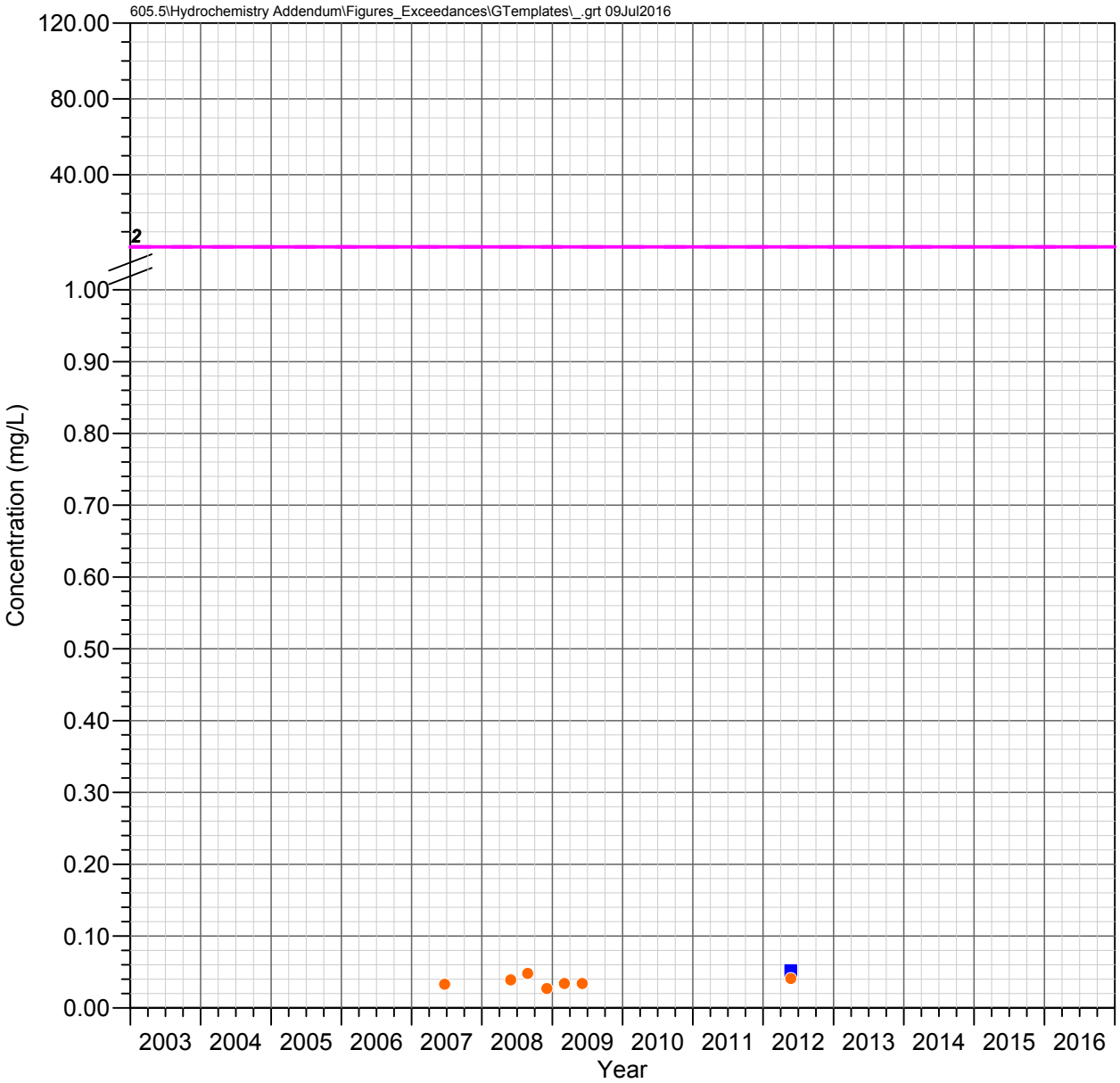


FIGURE E-088. BARIUM CONCENTRATIONS OBSERVED AT HACKBERRY WINDMILL WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



JI Ranch Corral Well Shallow Groundwater System

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 2 mg/L)
- EPA Maximum Contaminant Levels (UNS, 2 mg/L)

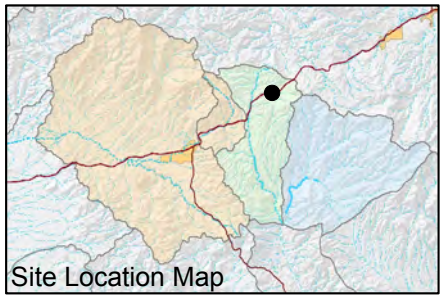
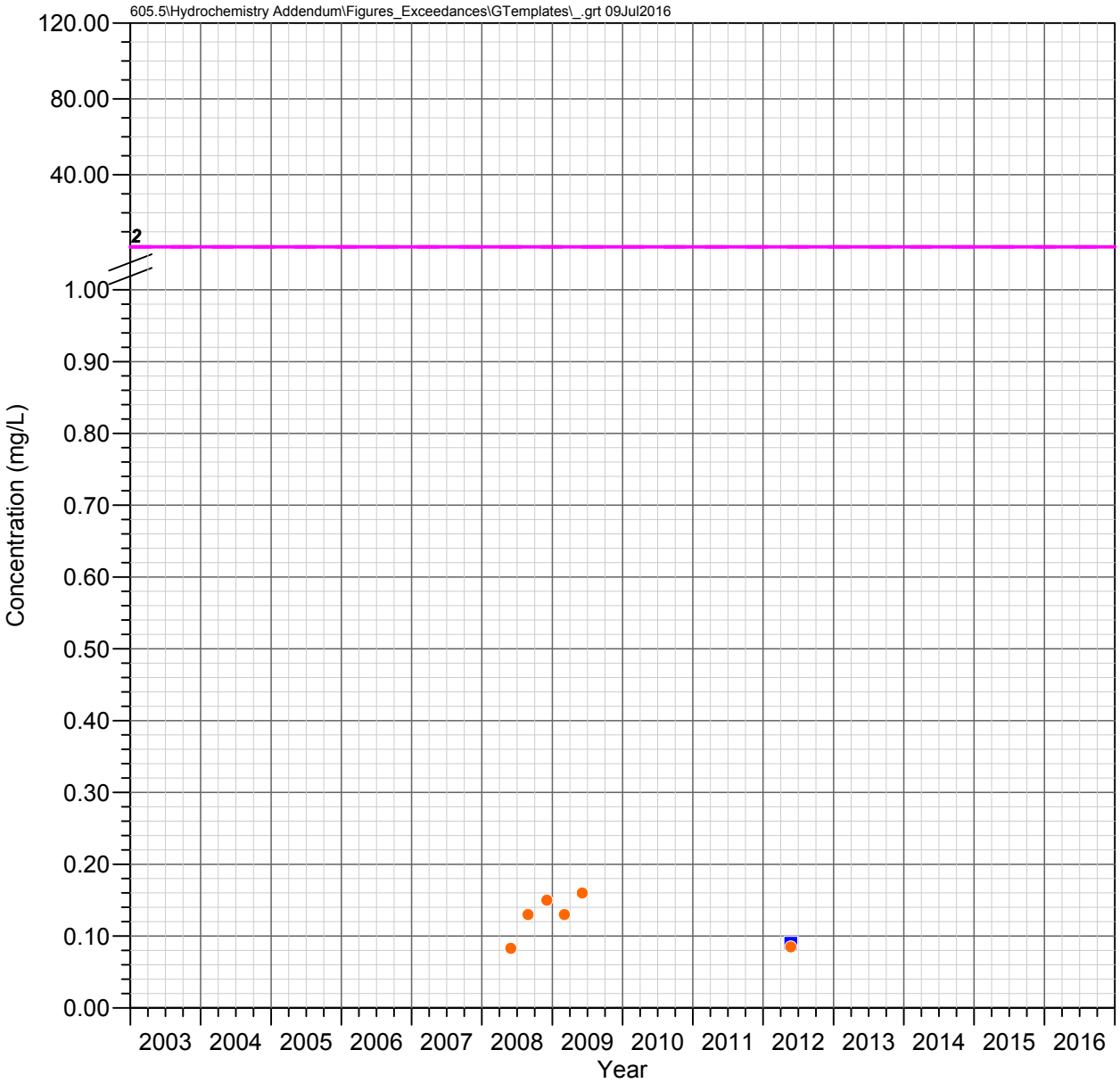


FIGURE E-089. BARIUM CONCENTRATIONS OBSERVED AT JI RANCH CORRAL WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



JI Ranch Middle Well Shallow Groundwater System

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 2 mg/L)
- EPA Maximum Contaminant Levels (UNS, 2 mg/L)

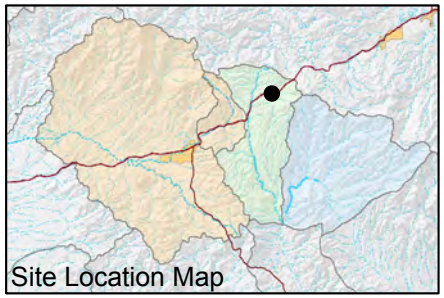
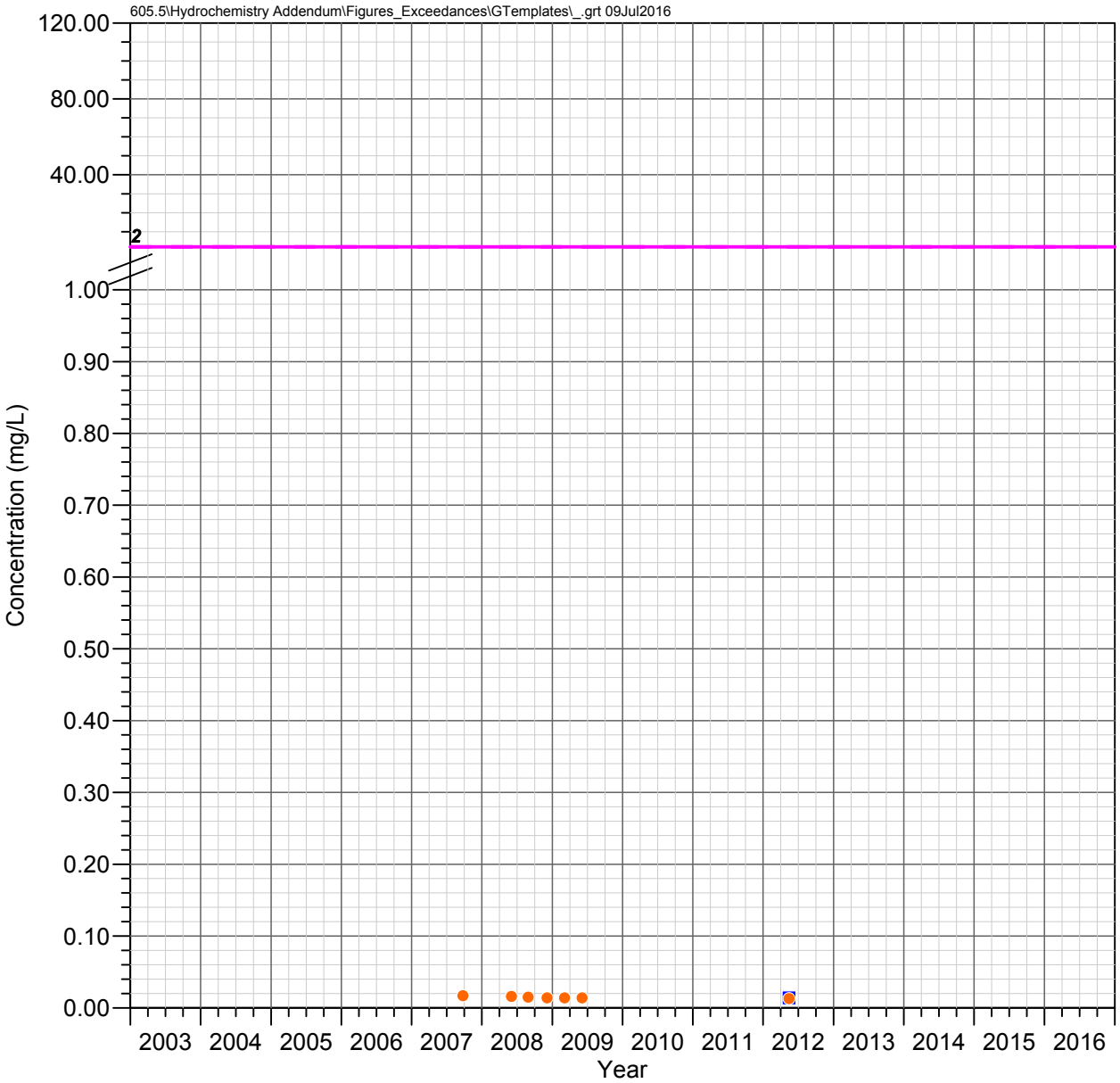


FIGURE E-090. BARIUM CONCENTRATIONS OBSERVED AT JI RANCH MIDDLE WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



A-06
Apache Leap Tuff Aquifer

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 2 mg/L)
- EPA Maximum Contaminant Levels (UNS, 2 mg/L)

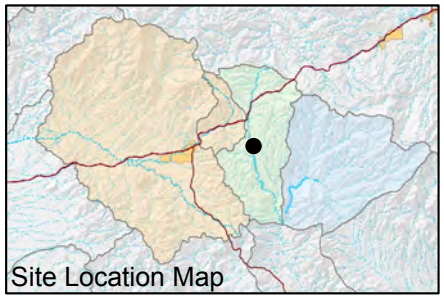
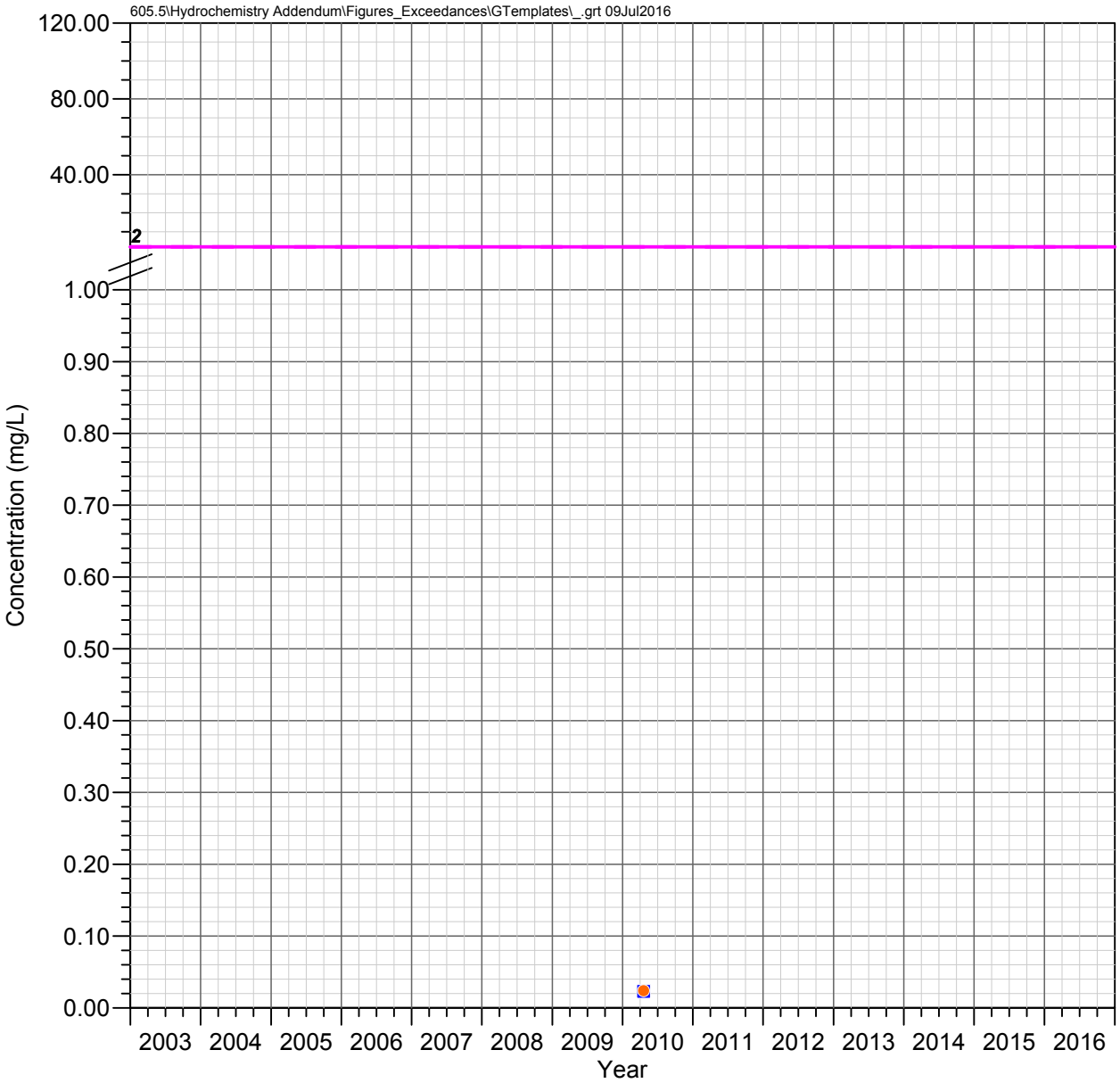


FIGURE E-091. BARIUM CONCENTRATIONS OBSERVED AT A-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



CT Well
Apache Leap Tuff Aquifer

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 2 mg/L)
- EPA Maximum Contaminant Levels (UNS, 2 mg/L)

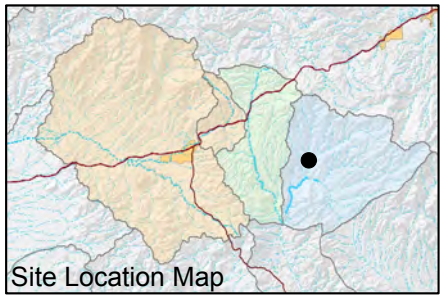
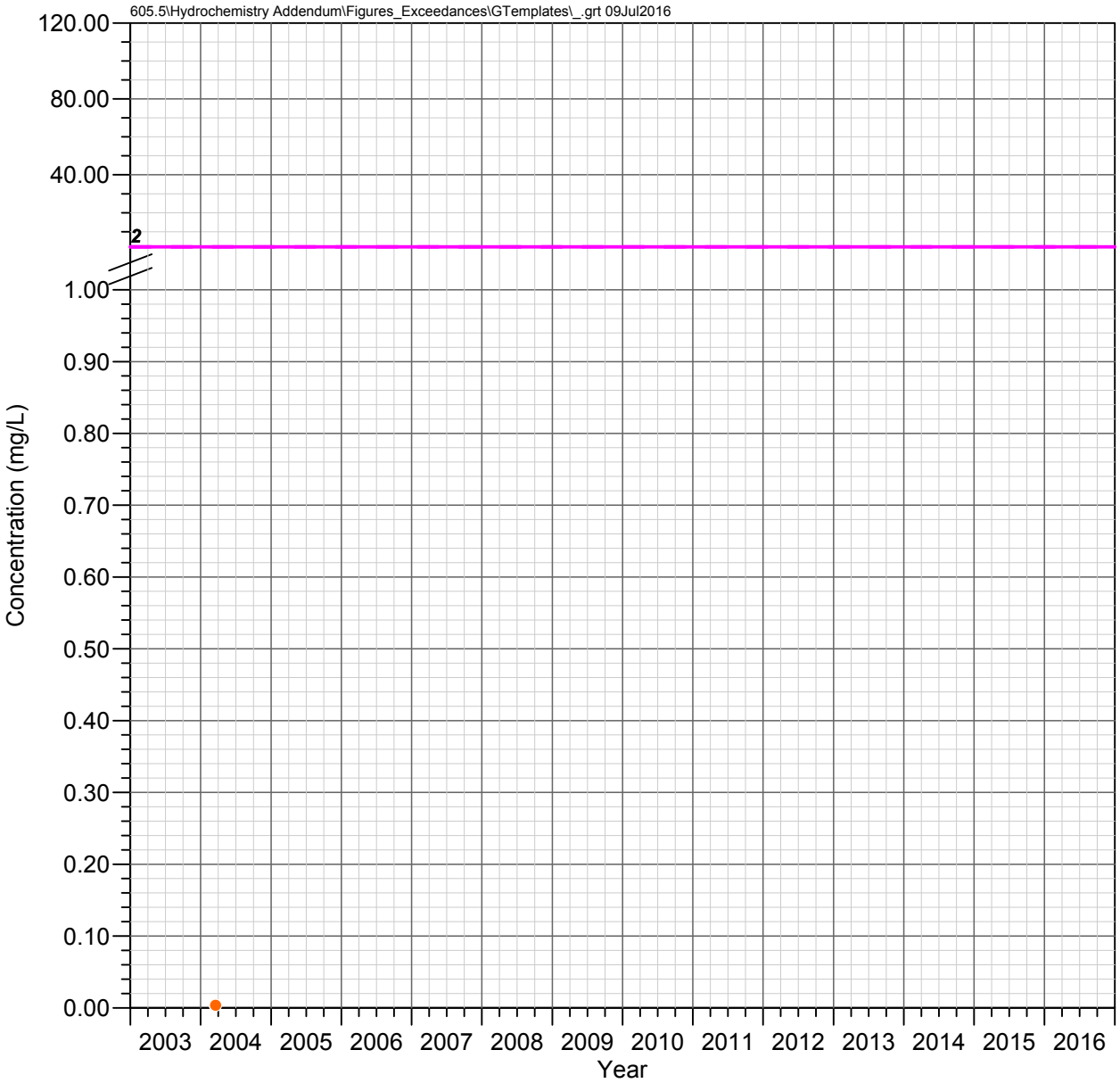


FIGURE E-092. BARIUM CONCENTRATIONS OBSERVED AT CT WELL, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-01
Apache Leap Tuff Aquifer

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 2 mg/L)
- EPA Maximum Contaminant Levels (UNS, 2 mg/L)

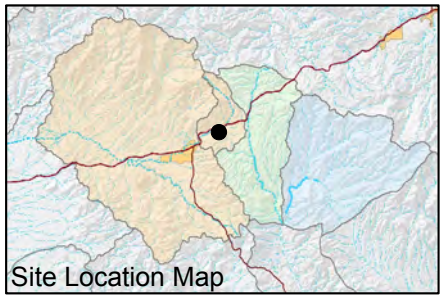
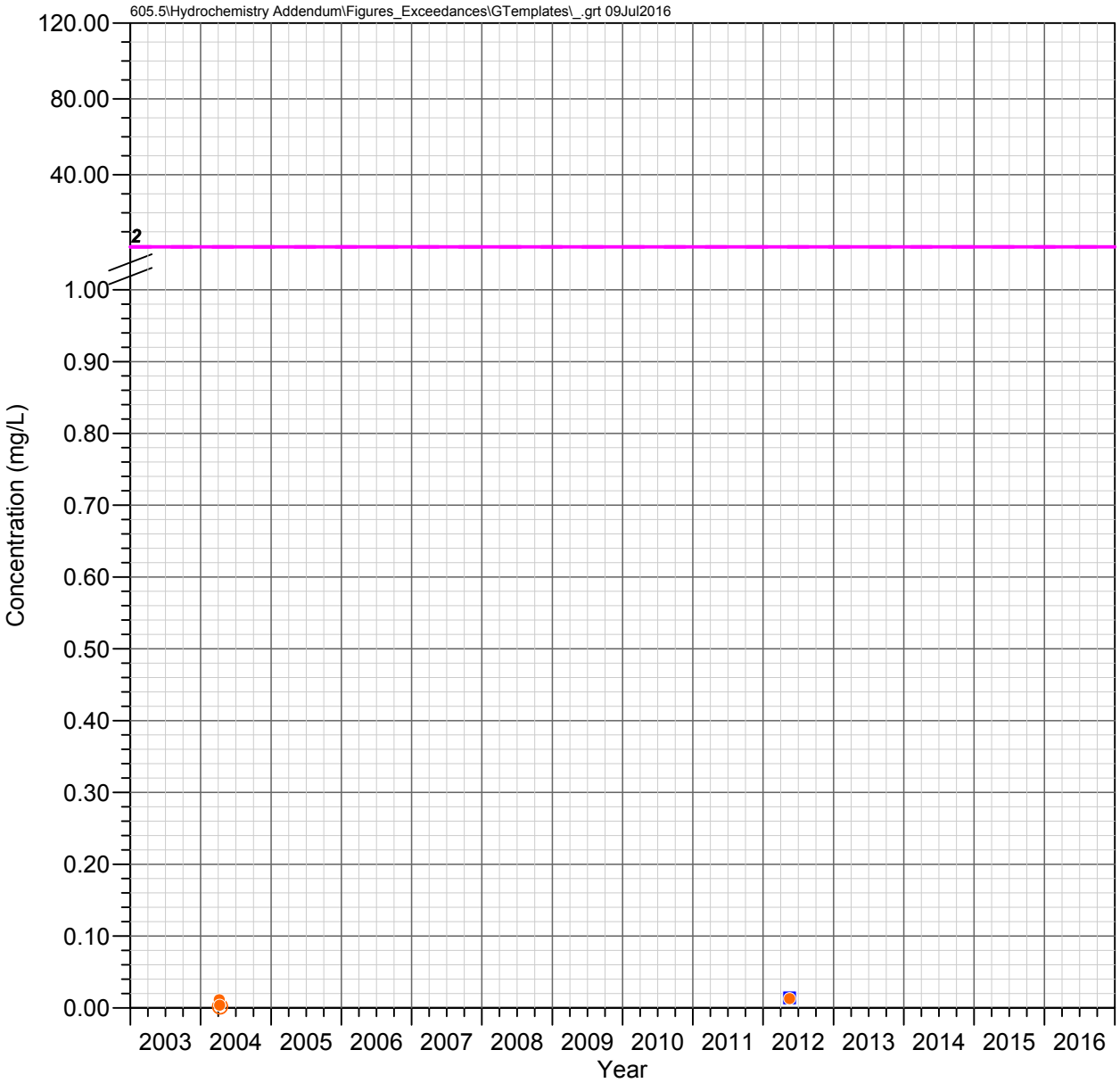


FIGURE E-093. BARIUM CONCENTRATIONS OBSERVED AT HRES-01, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-02
Apache Leap Tuff Aquifer

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 2 mg/L)
- EPA Maximum Contaminant Levels (UNS, 2 mg/L)

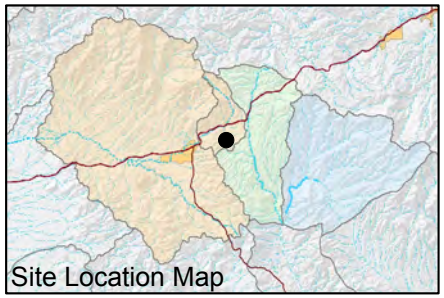
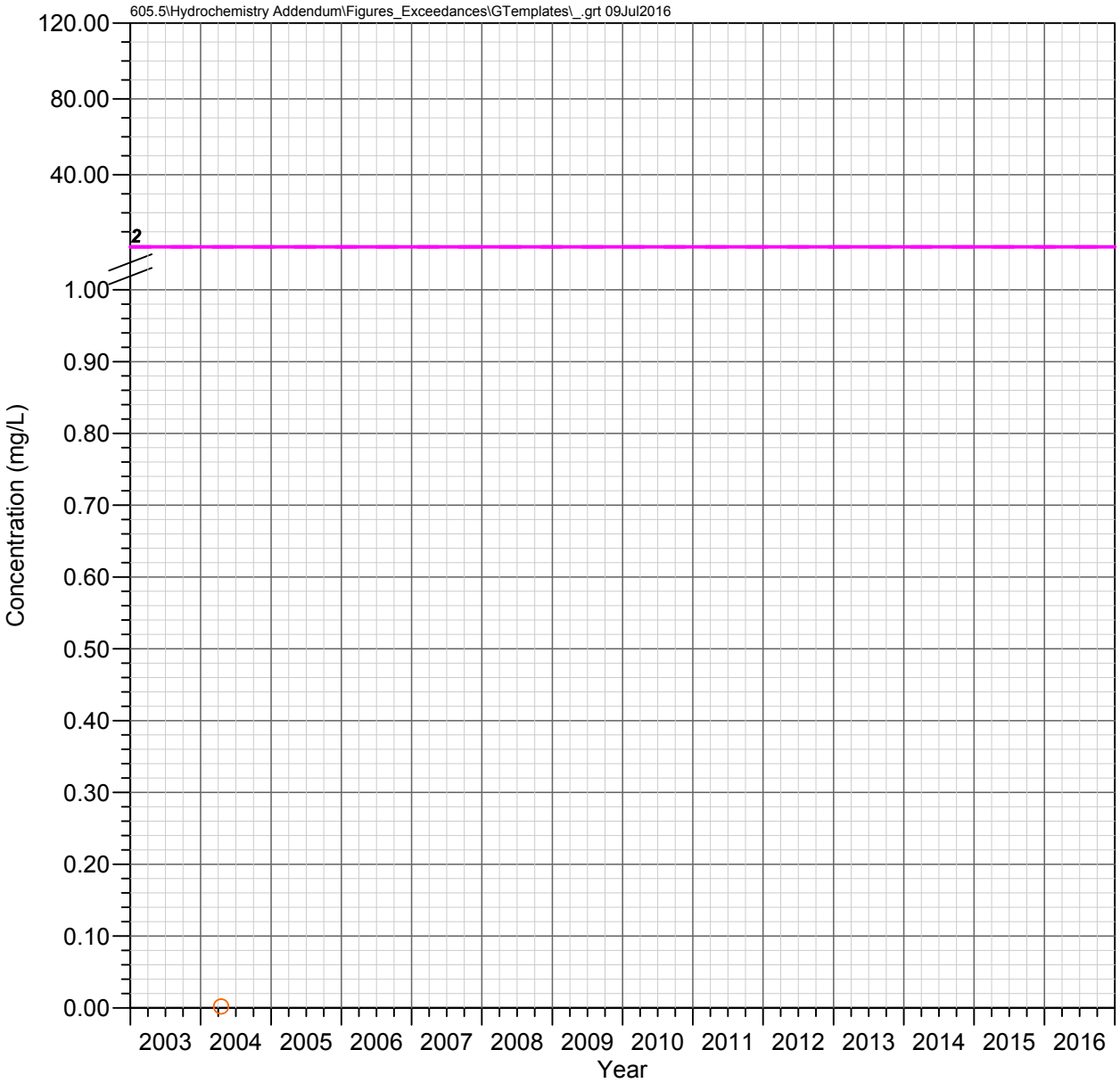


FIGURE E-094. BARIUM CONCENTRATIONS OBSERVED AT HRES-02, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-03d
Apache Leap Tuff Aquifer

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 2 mg/L)
- EPA Maximum Contaminant Levels (UNS, 2 mg/L)

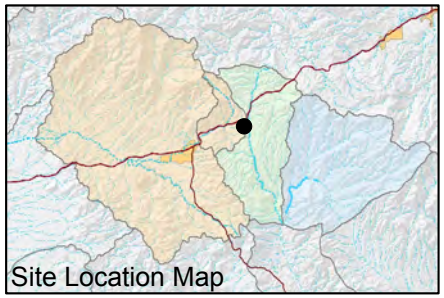
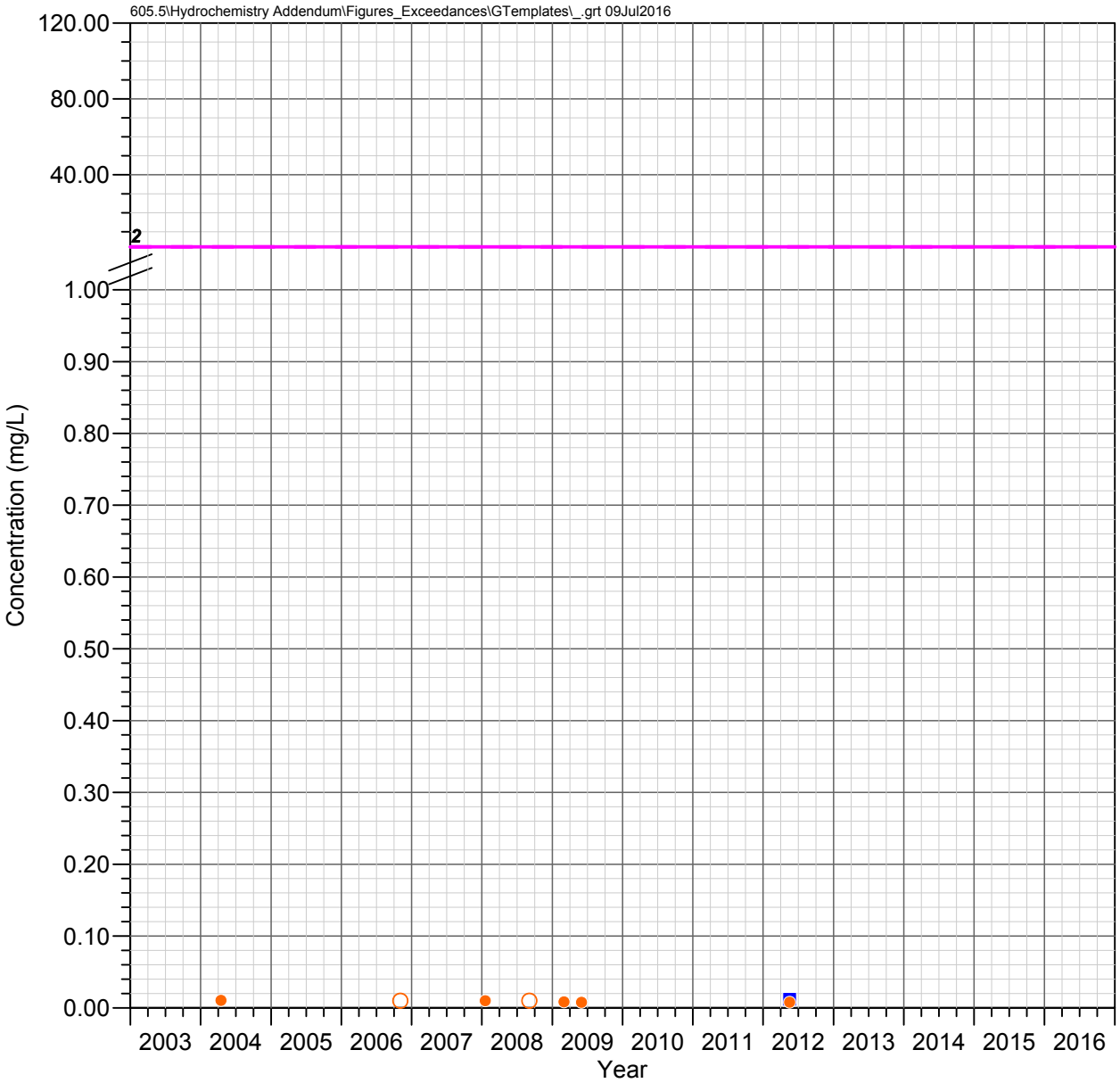


FIGURE E-095. BARIUM CONCENTRATIONS OBSERVED AT HRES-03D, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-04
Apache Leap Tuff Aquifer

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 2 mg/L)
- EPA Maximum Contaminant Levels (UNS, 2 mg/L)

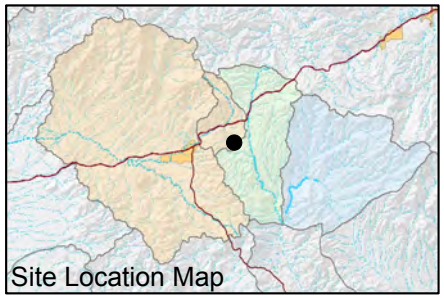
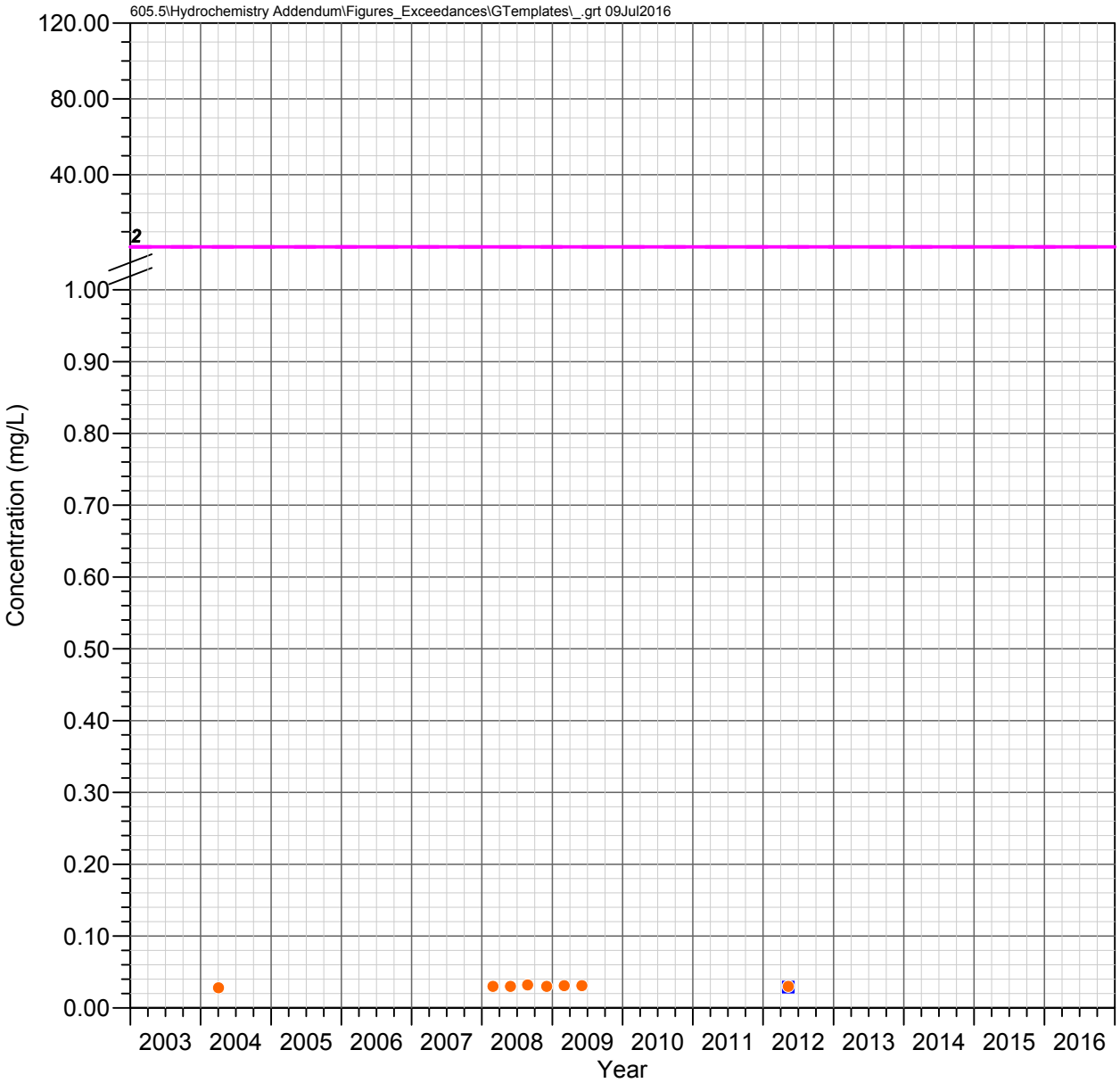


FIGURE E-096. BARIUM CONCENTRATIONS OBSERVED AT HRES-04, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-05
Apache Leap Tuff Aquifer

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 2 mg/L)
- EPA Maximum Contaminant Levels (UNS, 2 mg/L)

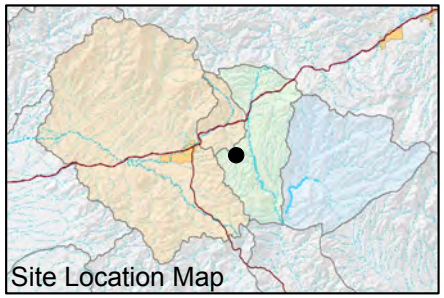
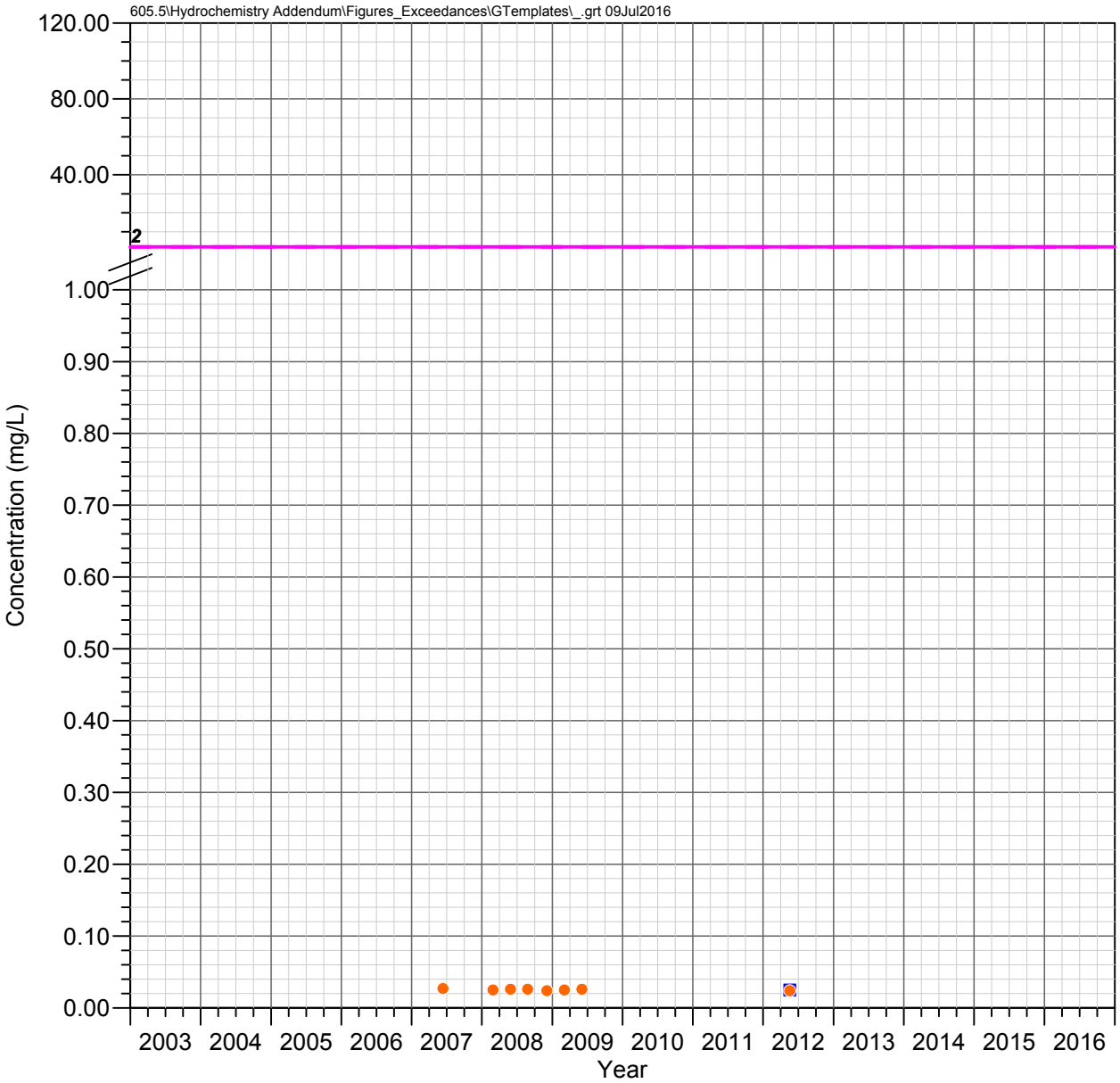


FIGURE E-097. BARIUM CONCENTRATIONS OBSERVED AT HRES-05, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-06
Apache Leap Tuff Aquifer

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 2 mg/L)
- EPA Maximum Contaminant Levels (UNS, 2 mg/L)

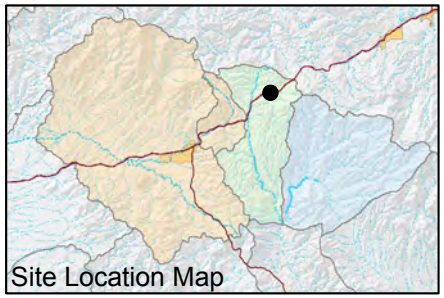
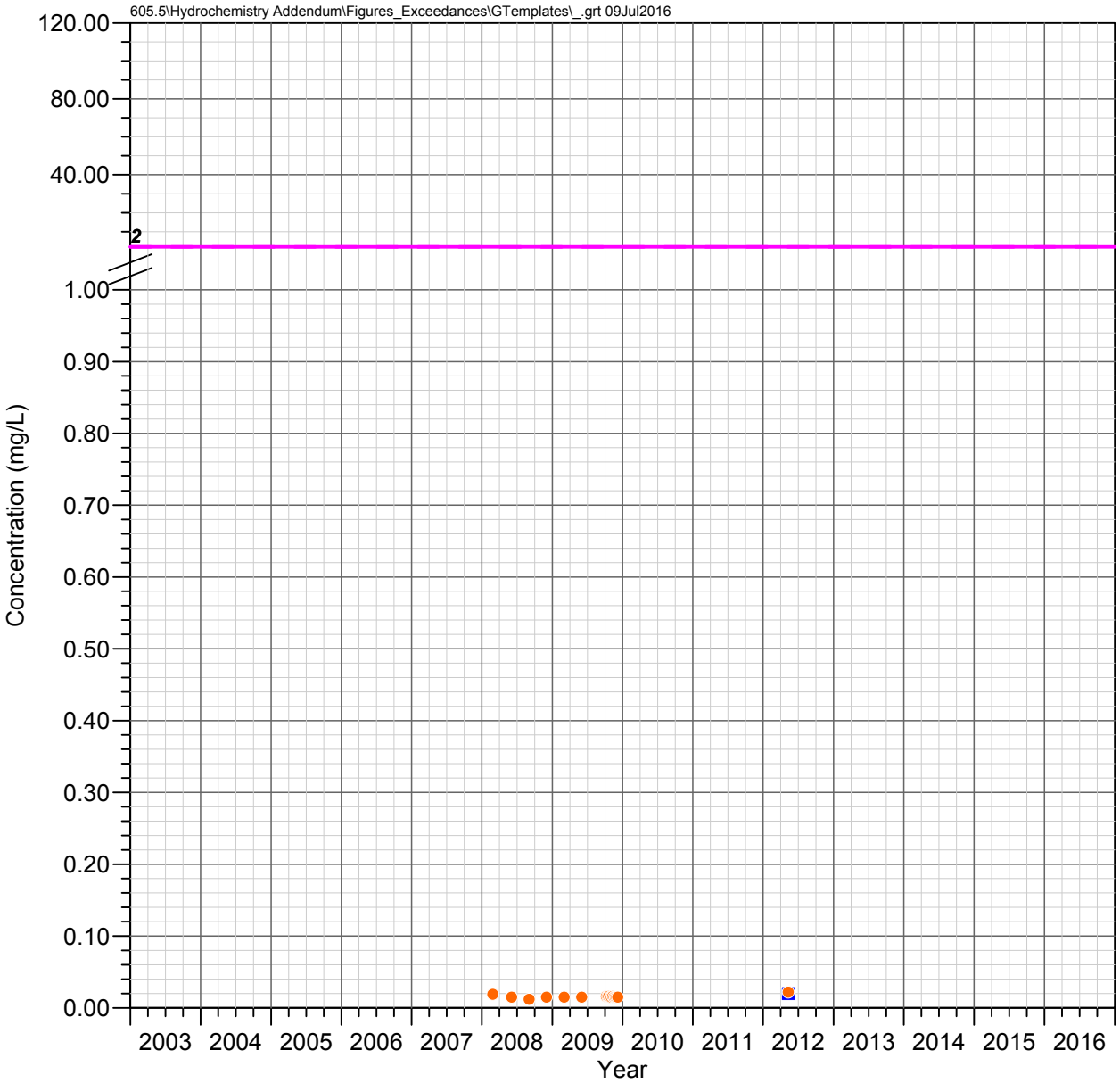


FIGURE E-098. BARIUM CONCENTRATIONS OBSERVED AT HRES-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-07
Apache Leap Tuff Aquifer

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 2 mg/L)
- EPA Maximum Contaminant Levels (UNS, 2 mg/L)

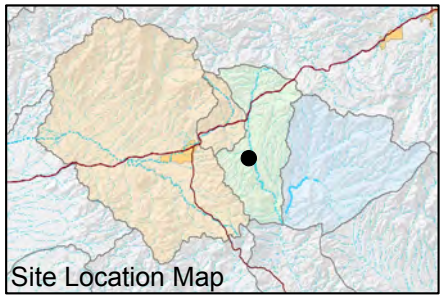
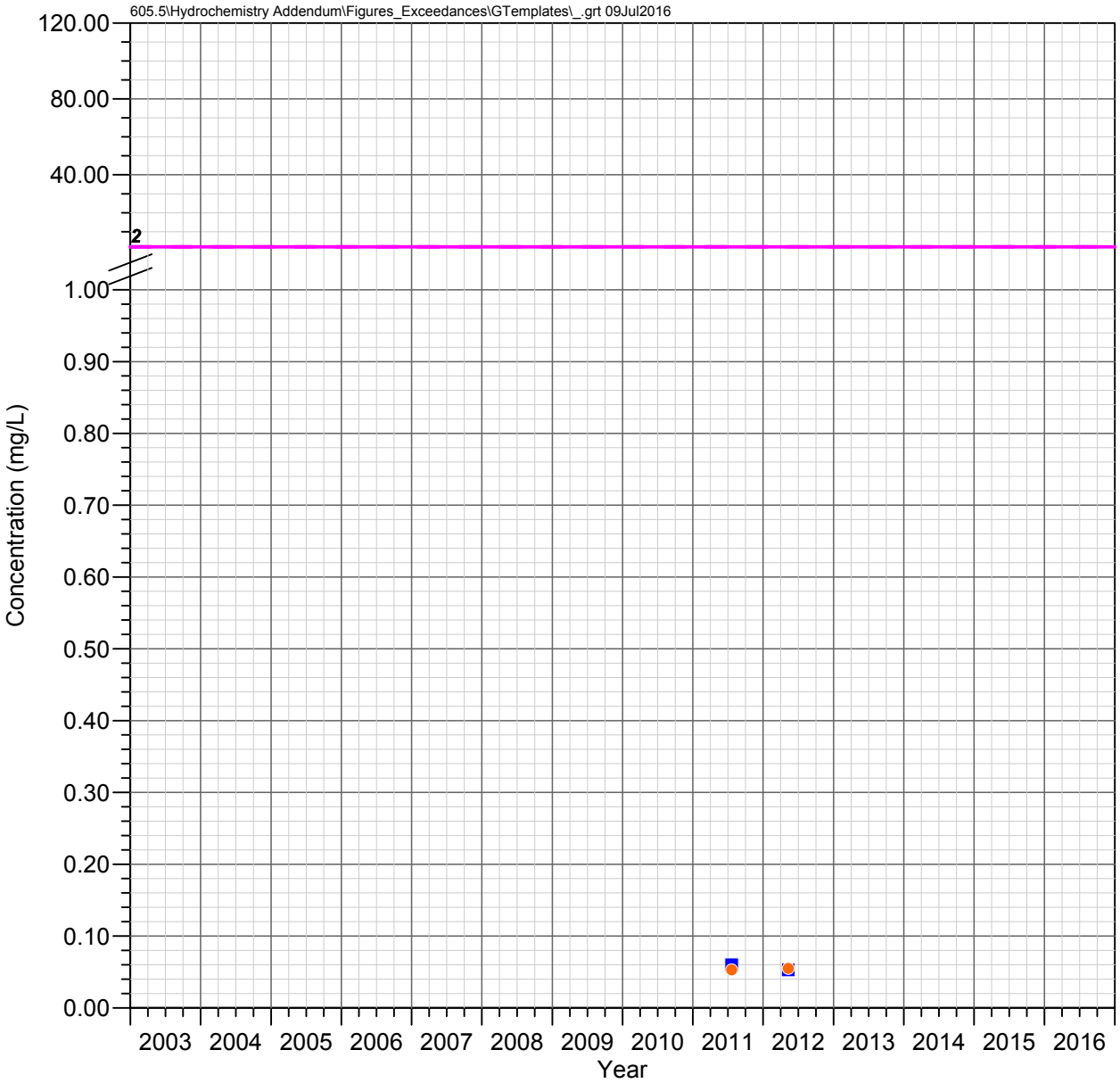


FIGURE E-099. BARIUM CONCENTRATIONS OBSERVED AT HRES-07, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-08
Apache Leap Tuff Aquifer

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 2 mg/L)
- EPA Maximum Contaminant Levels (UNS, 2 mg/L)

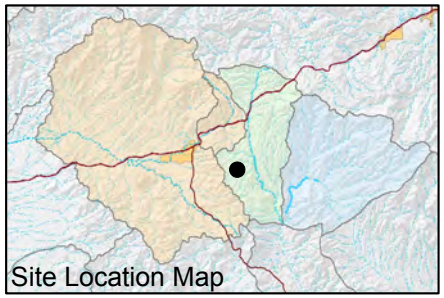
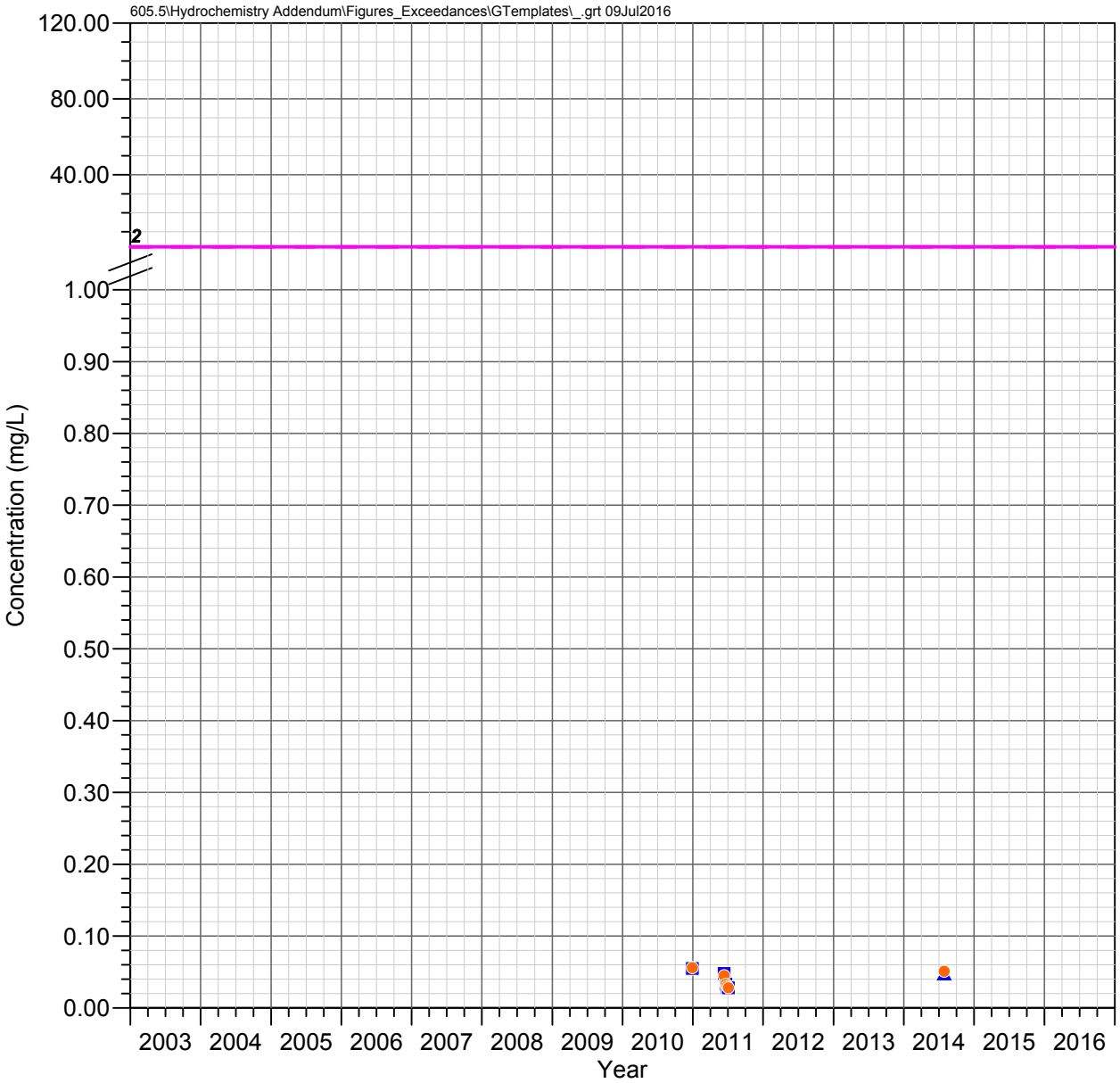


FIGURE E-100. BARIUM CONCENTRATIONS OBSERVED AT HRES-08, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-09
Apache Leap Tuff Aquifer

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 2 mg/L)
- EPA Maximum Contaminant Levels (UNS, 2 mg/L)

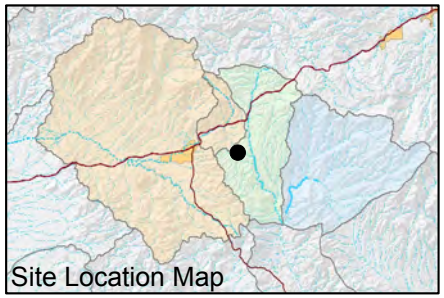
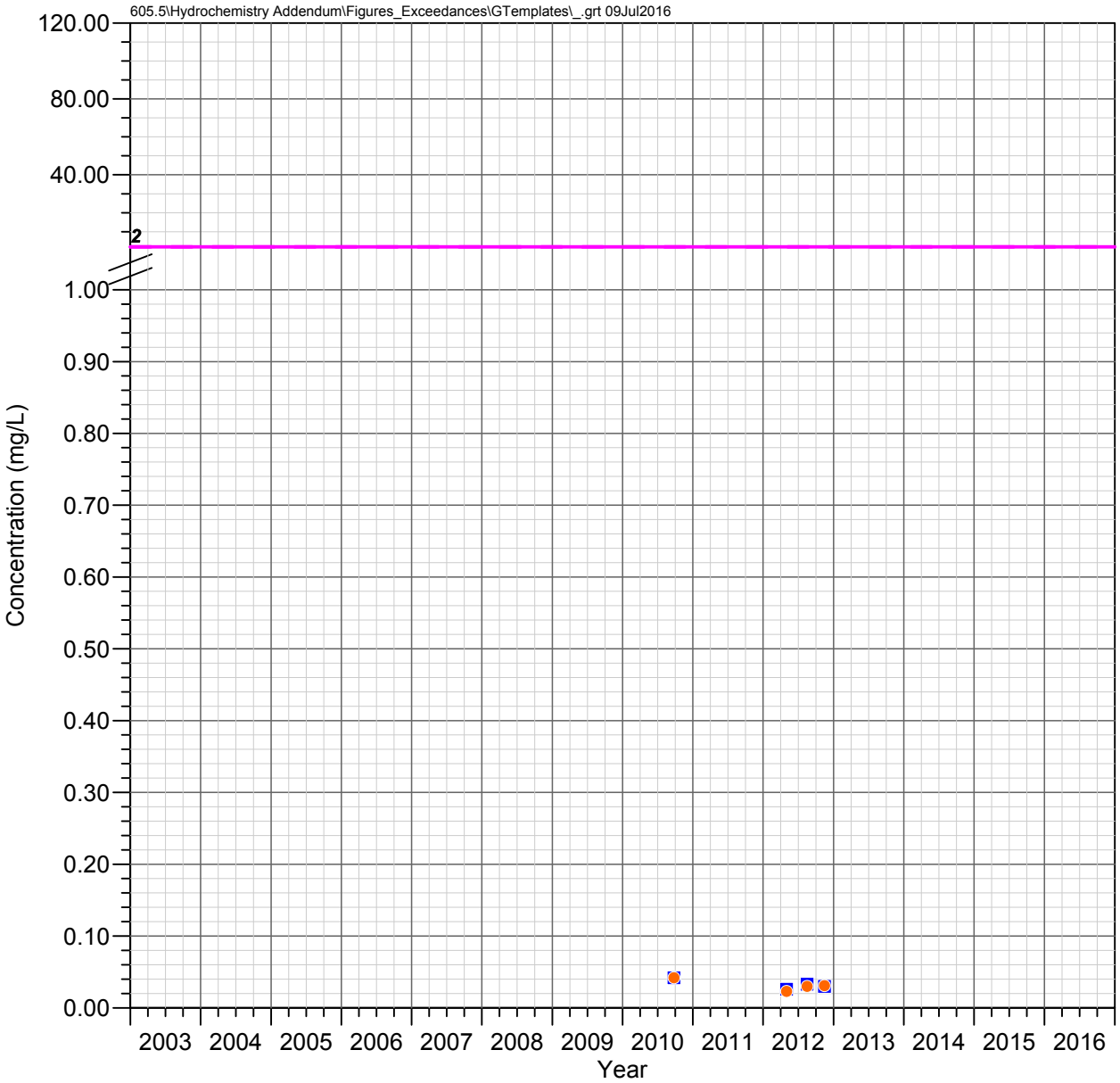


FIGURE E-101. BARIUM CONCENTRATIONS OBSERVED AT HRES-09, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-10
Apache Leap Tuff Aquifer

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 2 mg/L)
- EPA Maximum Contaminant Levels (UNS, 2 mg/L)

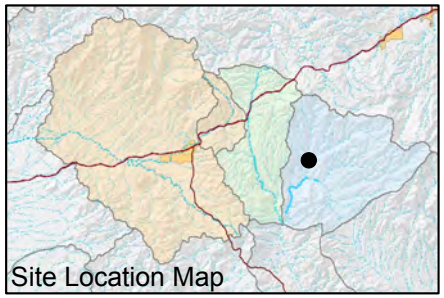
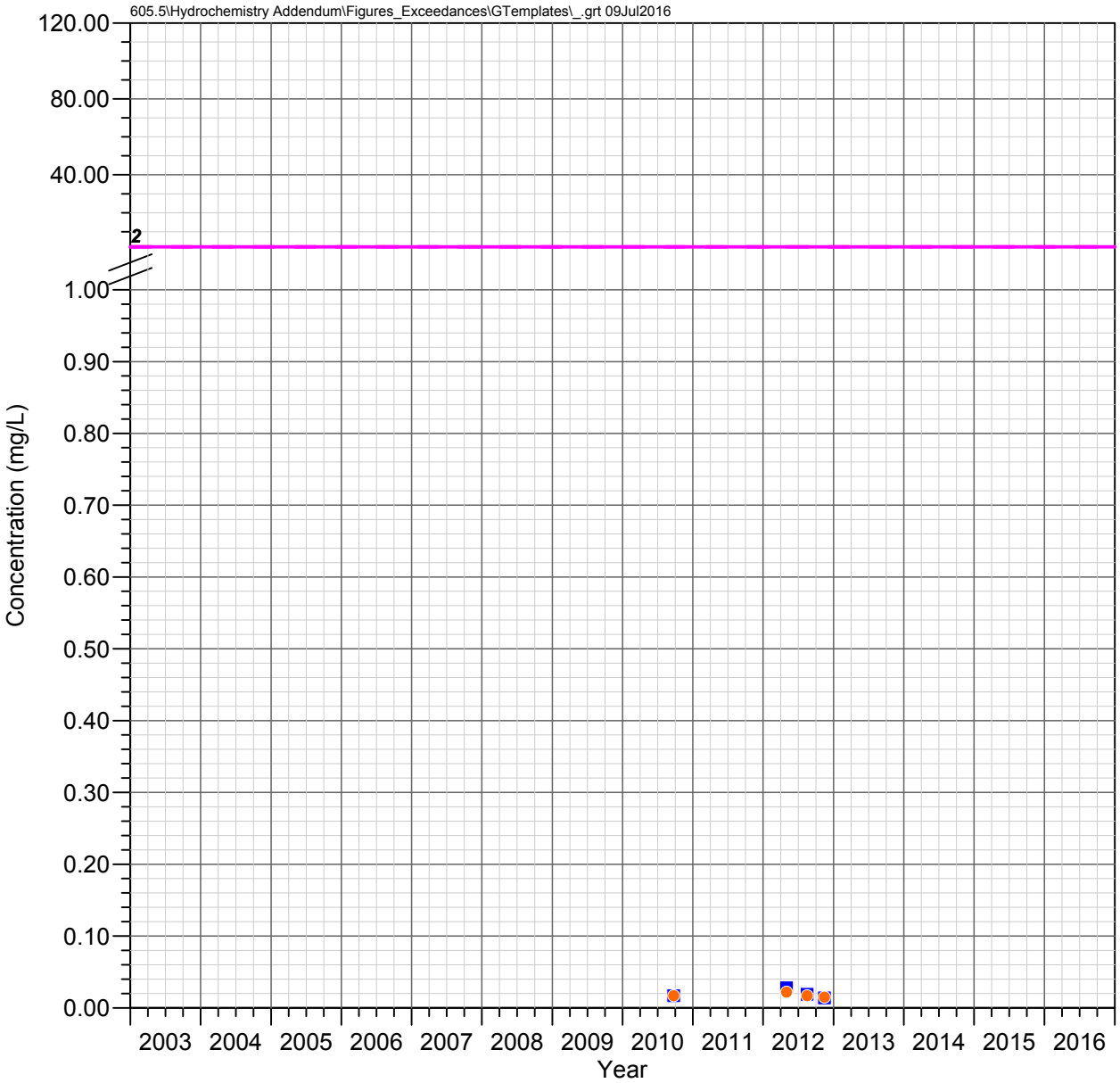


FIGURE E-102. BARIUM CONCENTRATIONS OBSERVED AT HRES-10, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-11
Apache Leap Tuff Aquifer

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 2 mg/L)
- EPA Maximum Contaminant Levels (UNS, 2 mg/L)

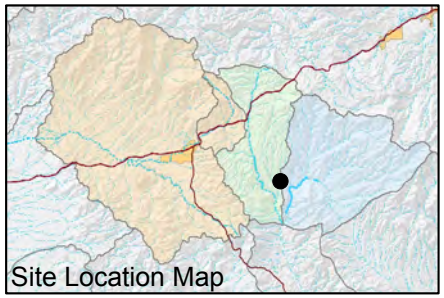
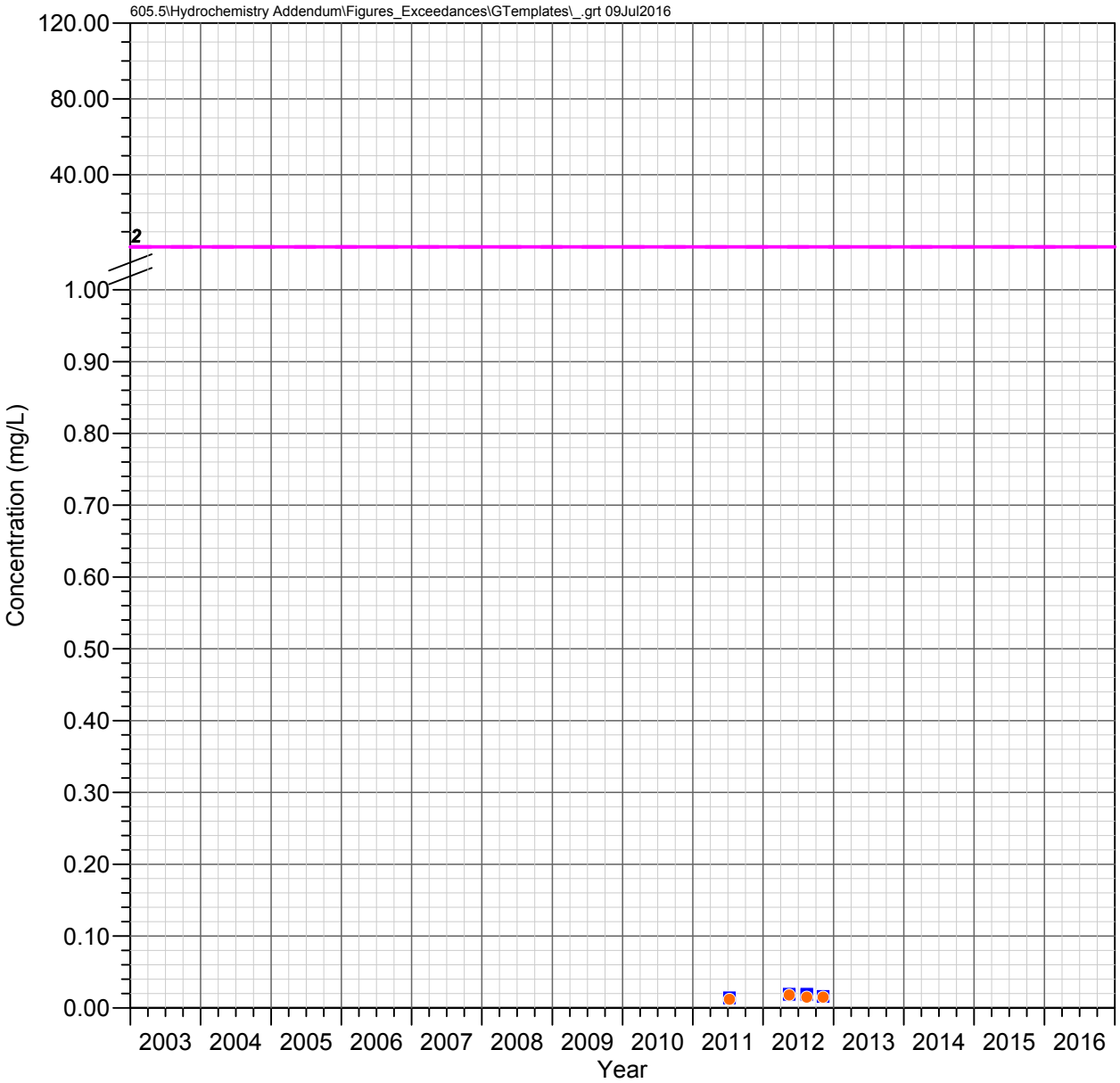


FIGURE E-103. BARIUM CONCENTRATIONS OBSERVED AT HRES-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-12
Apache Leap Tuff Aquifer

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 2 mg/L)
- EPA Maximum Contaminant Levels (UNS, 2 mg/L)

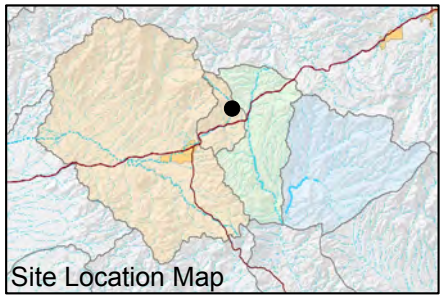
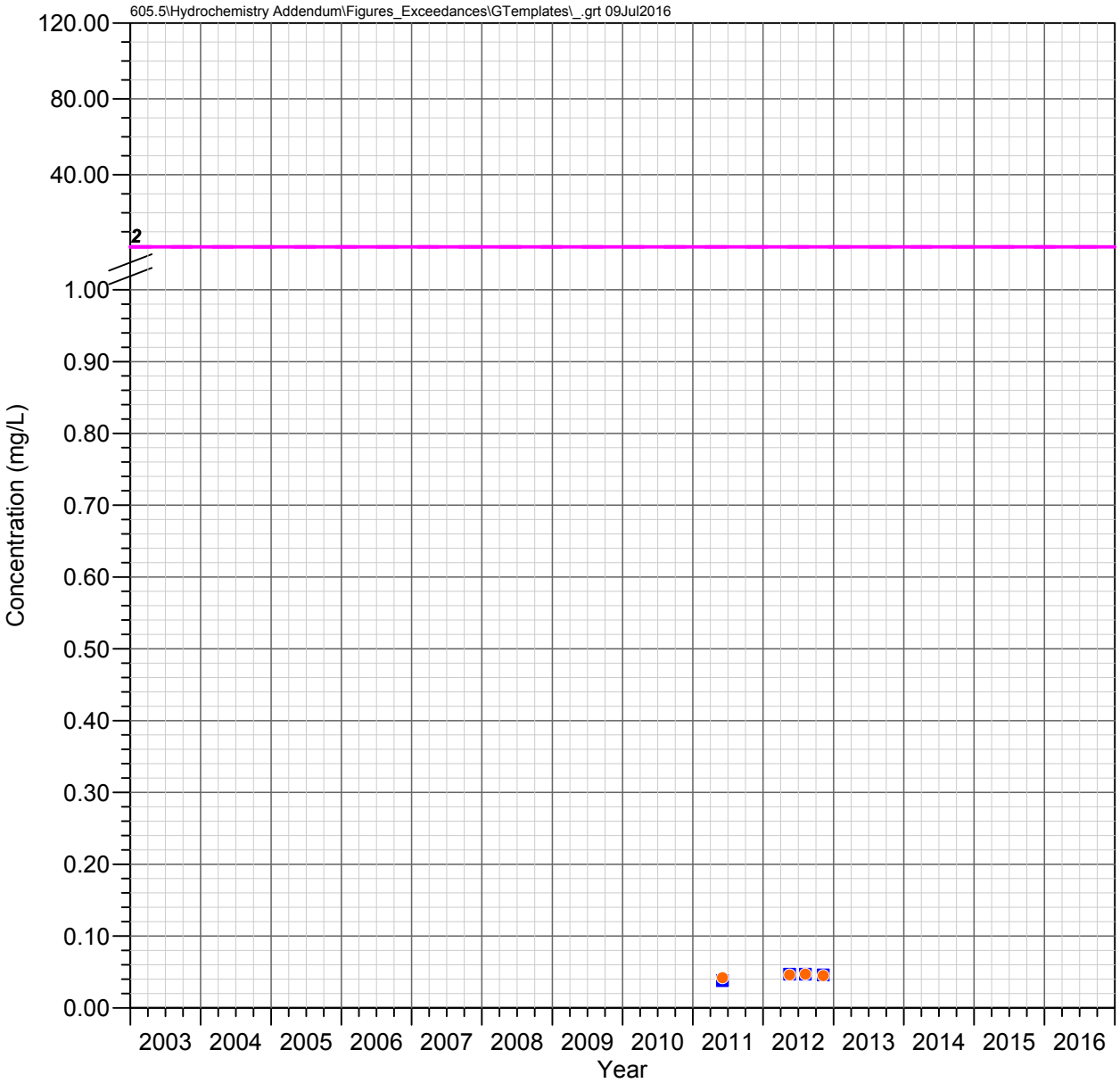


FIGURE E-104. BARIUM CONCENTRATIONS OBSERVED AT HRES-12, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-13
Apache Leap Tuff Aquifer

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 2 mg/L)
- EPA Maximum Contaminant Levels (UNS, 2 mg/L)

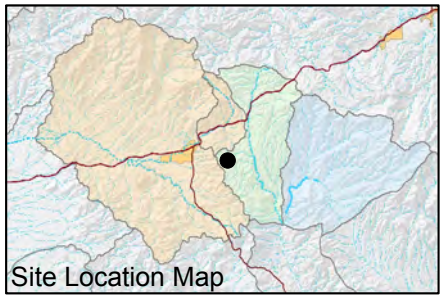
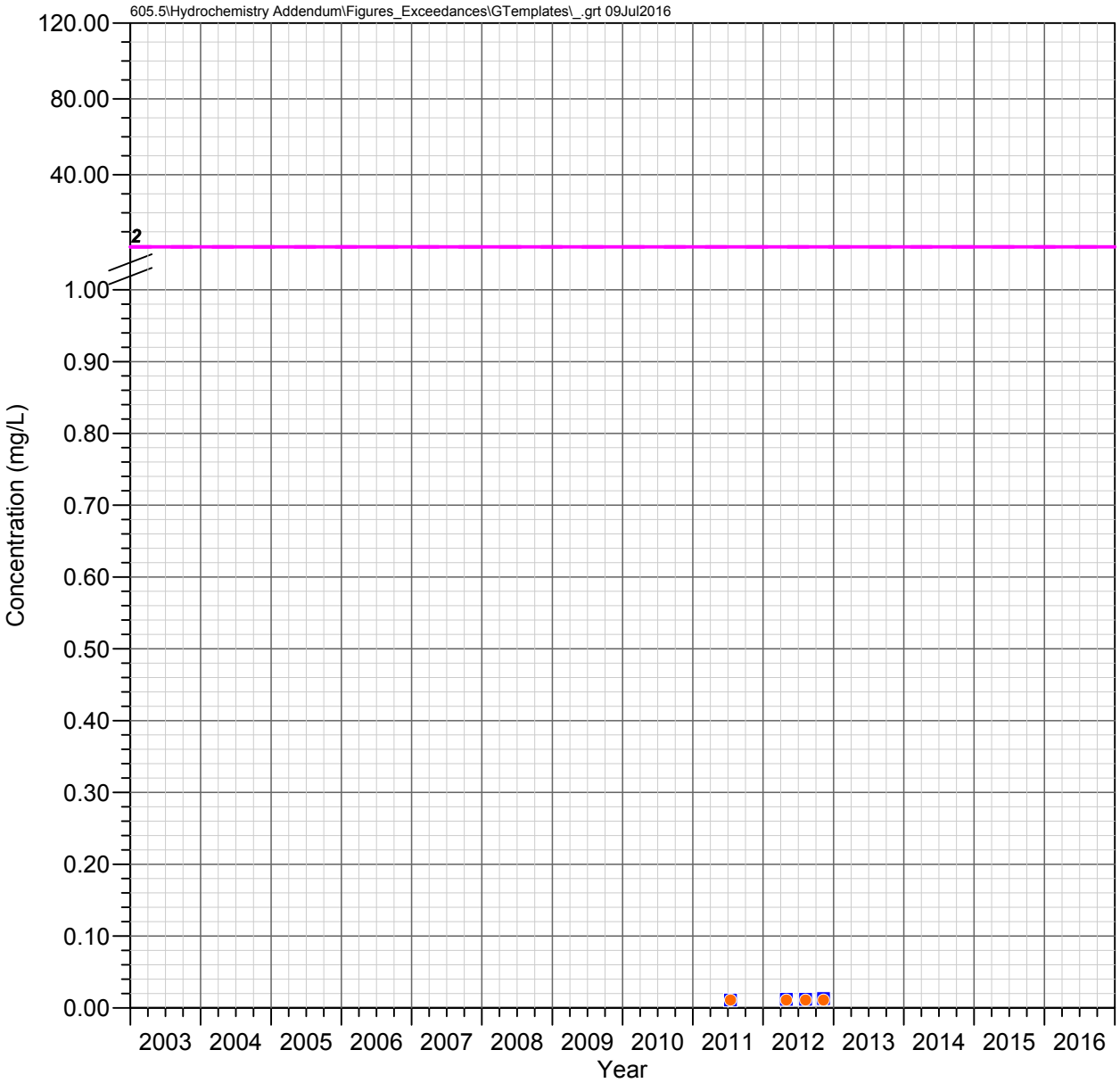


FIGURE E-105. BARIUM CONCENTRATIONS OBSERVED AT HRES-13, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-14
Apache Leap Tuff Aquifer

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 2 mg/L)
- EPA Maximum Contaminant Levels (UNS, 2 mg/L)

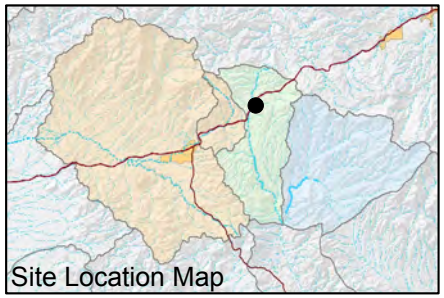
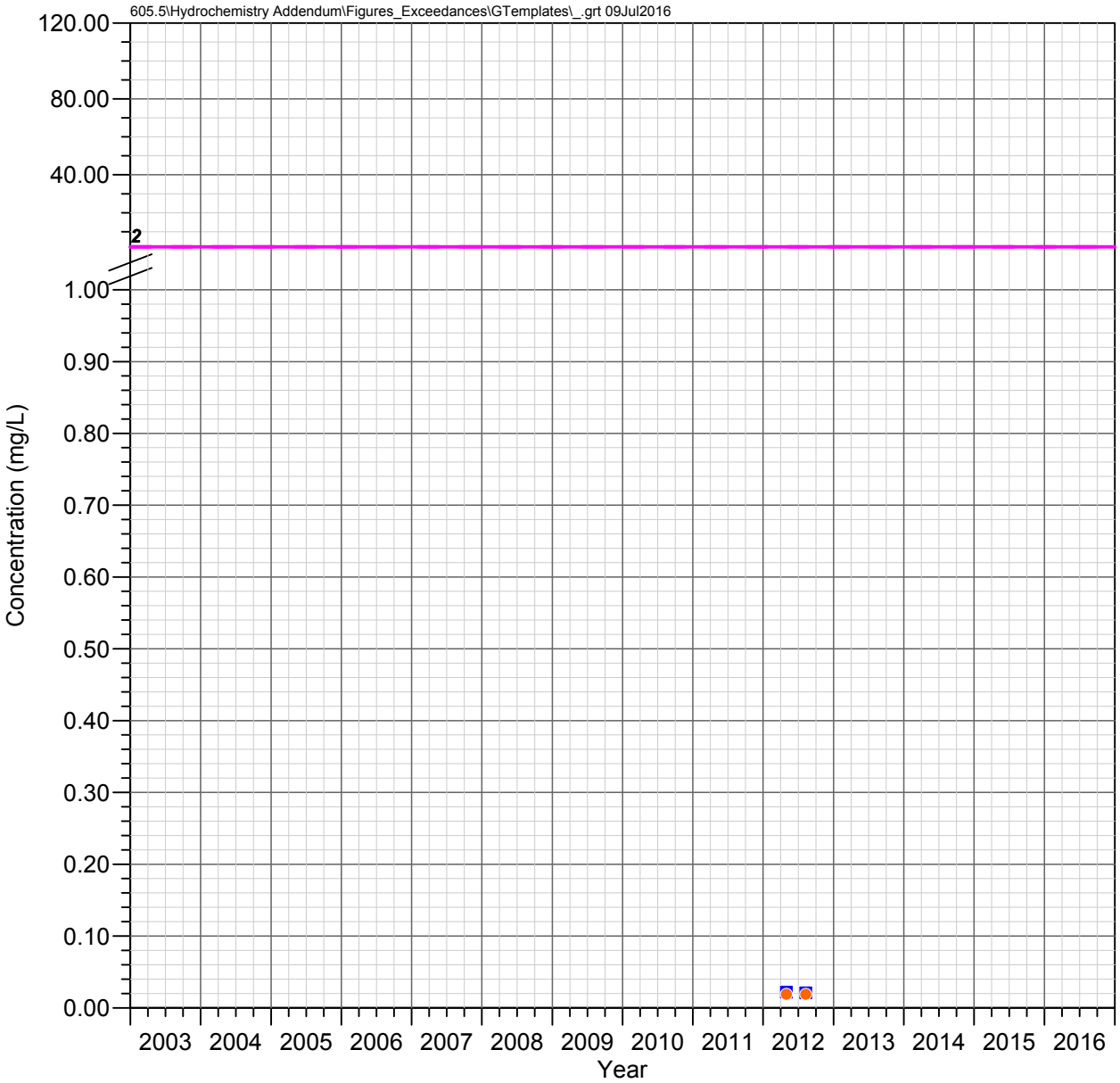


FIGURE E-106. BARIUM CONCENTRATIONS OBSERVED AT HRES-14, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-15
Apache Leap Tuff Aquifer

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 2 mg/L)
- EPA Maximum Contaminant Levels (UNS, 2 mg/L)

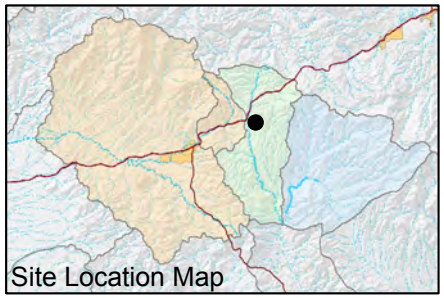
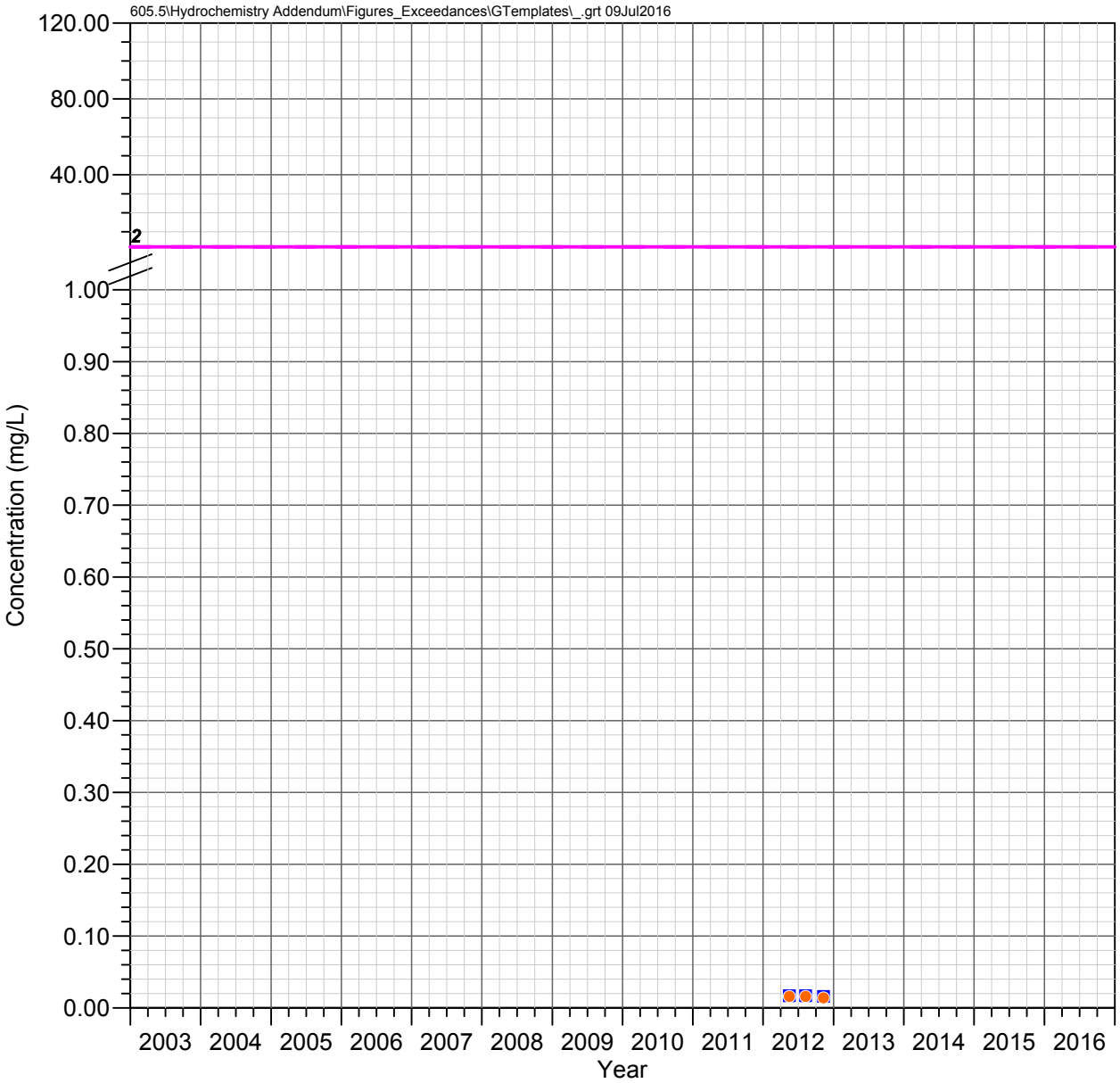


FIGURE E-107. BARIUM CONCENTRATIONS OBSERVED AT HRES-15, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-17
Apache Leap Tuff Aquifer

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 2 mg/L)
- EPA Maximum Contaminant Levels (UNS, 2 mg/L)

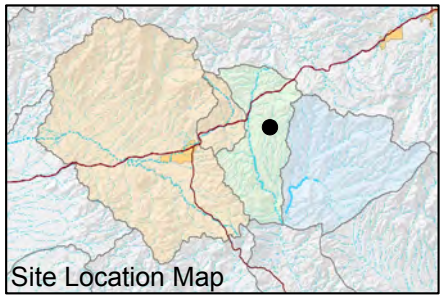
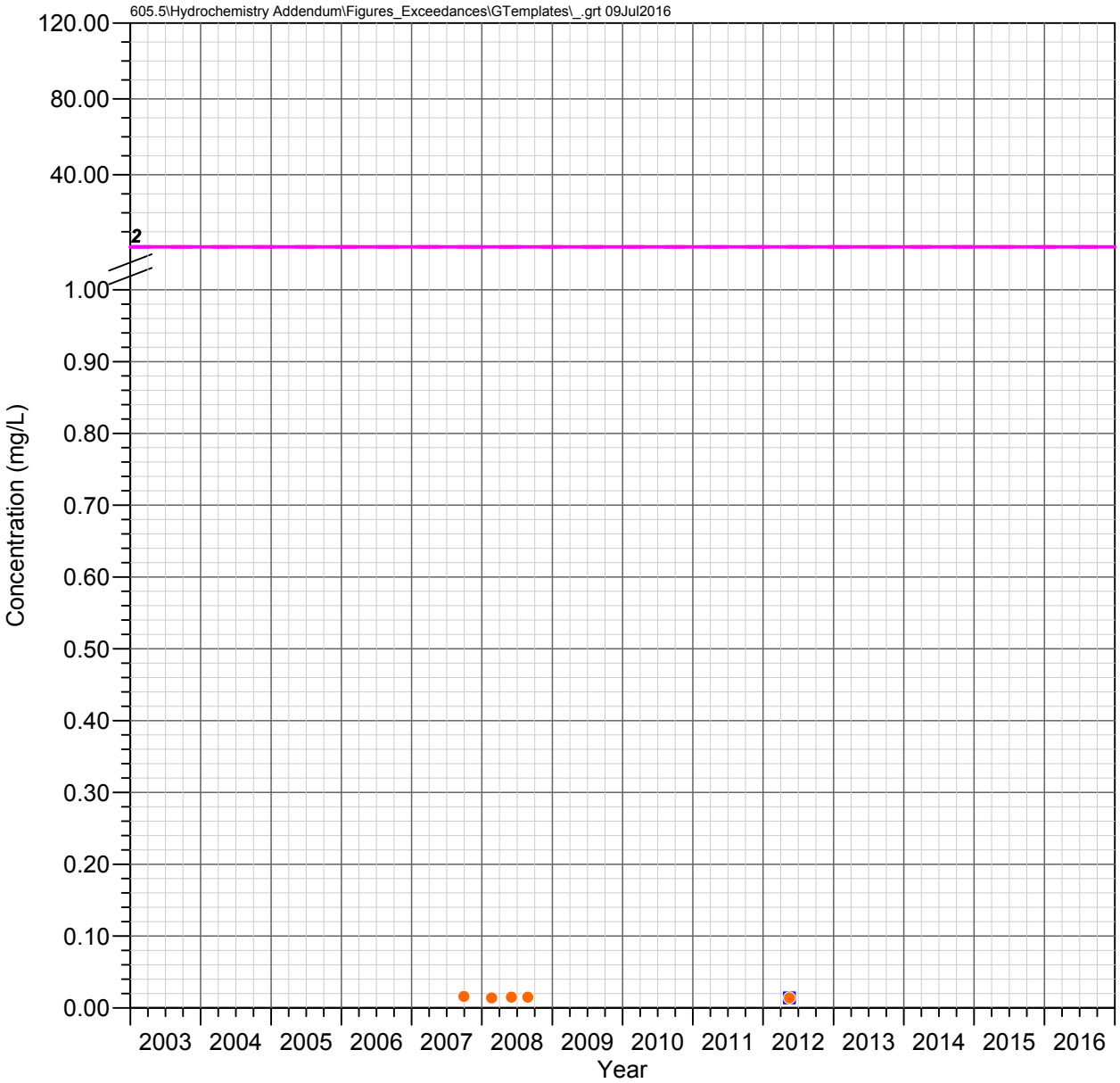


FIGURE E-108. BARIUM CONCENTRATIONS OBSERVED AT HRES-17, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MJ-11
Apache Leap Tuff Aquifer

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 2 mg/L)
- EPA Maximum Contaminant Levels (UNS, 2 mg/L)

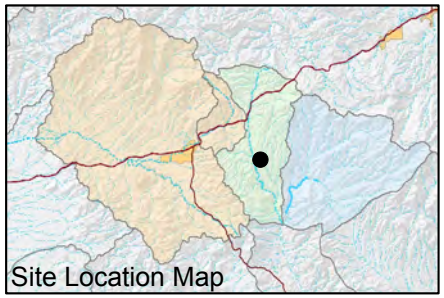
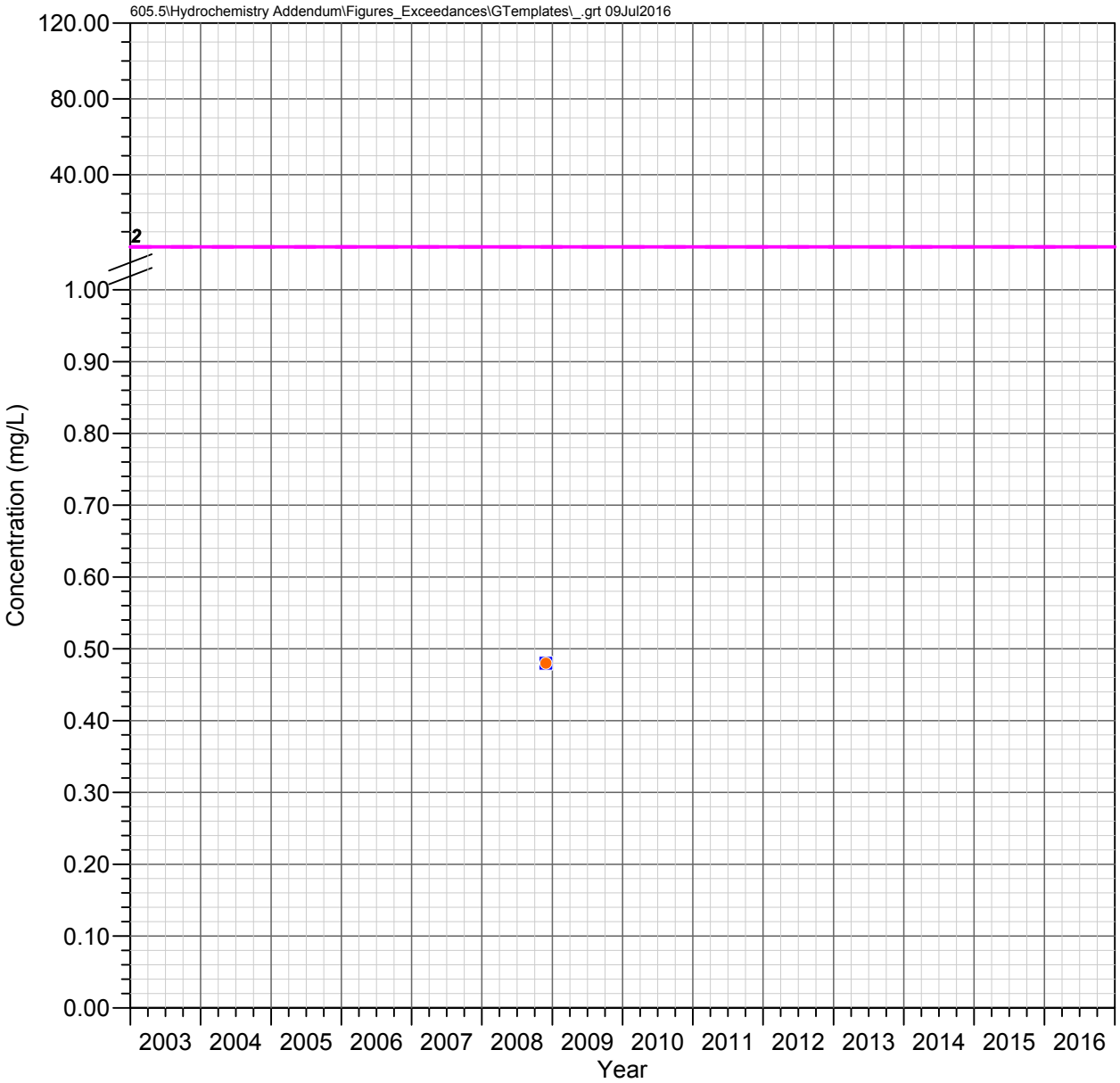


FIGURE E-109. BARIUM CONCENTRATIONS OBSERVED AT MJ-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-01
Deep Groundwater System

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 2 mg/L)
- EPA Maximum Contaminant Levels (UNS, 2 mg/L)

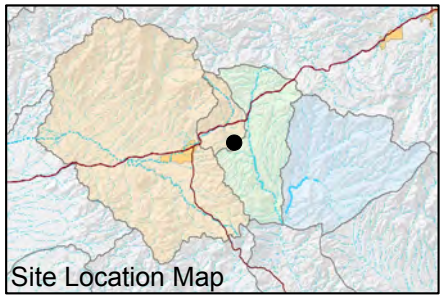
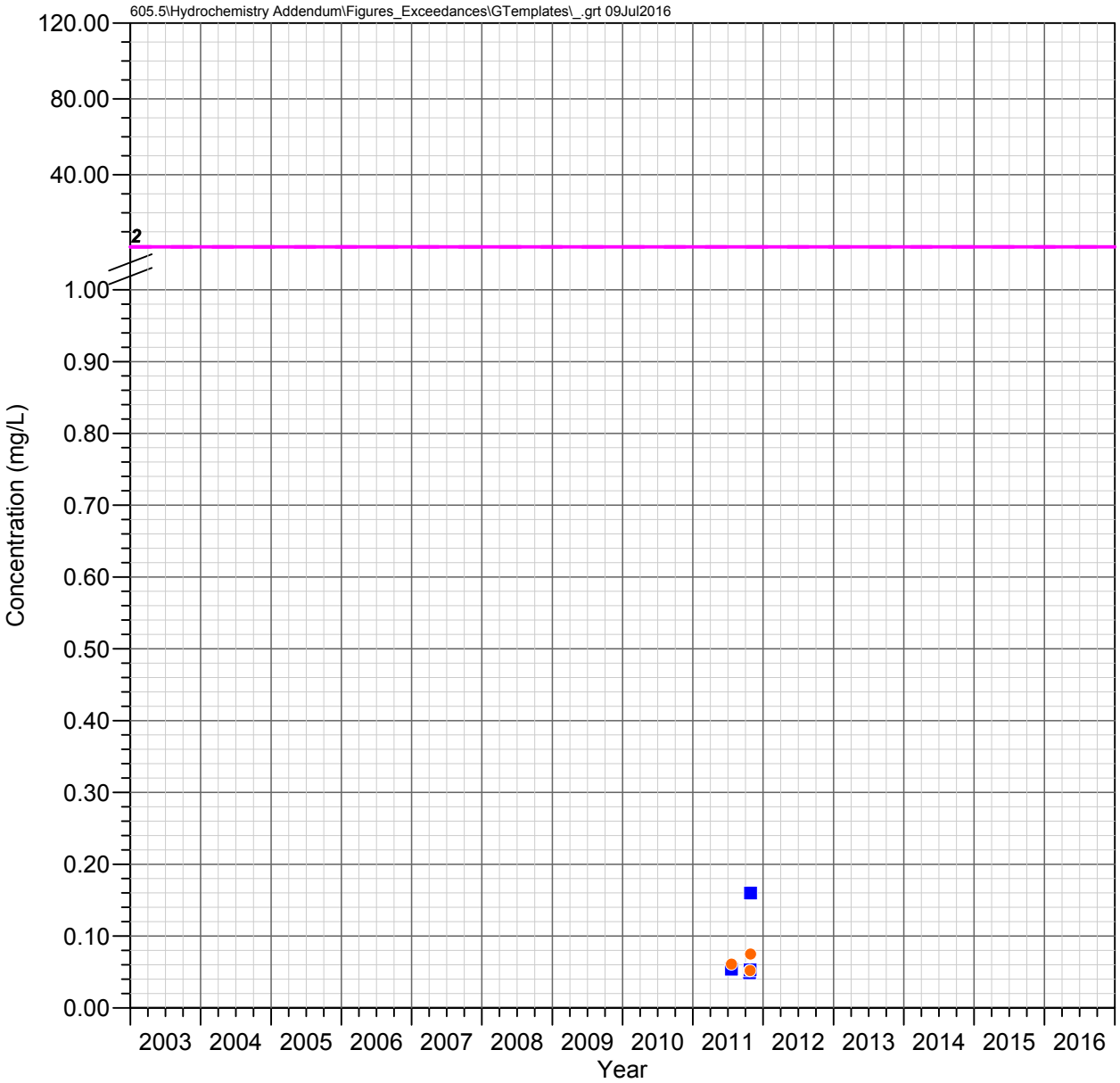


FIGURE E-110. BARIUM CONCENTRATIONS OBSERVED AT DHRES-01, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-02
Deep Groundwater System

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 2 mg/L)
- EPA Maximum Contaminant Levels (UNS, 2 mg/L)

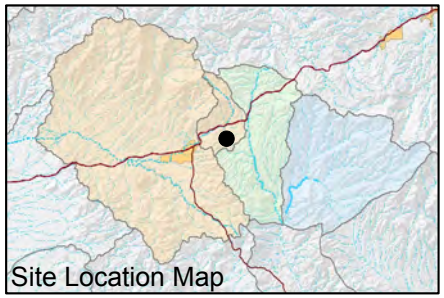
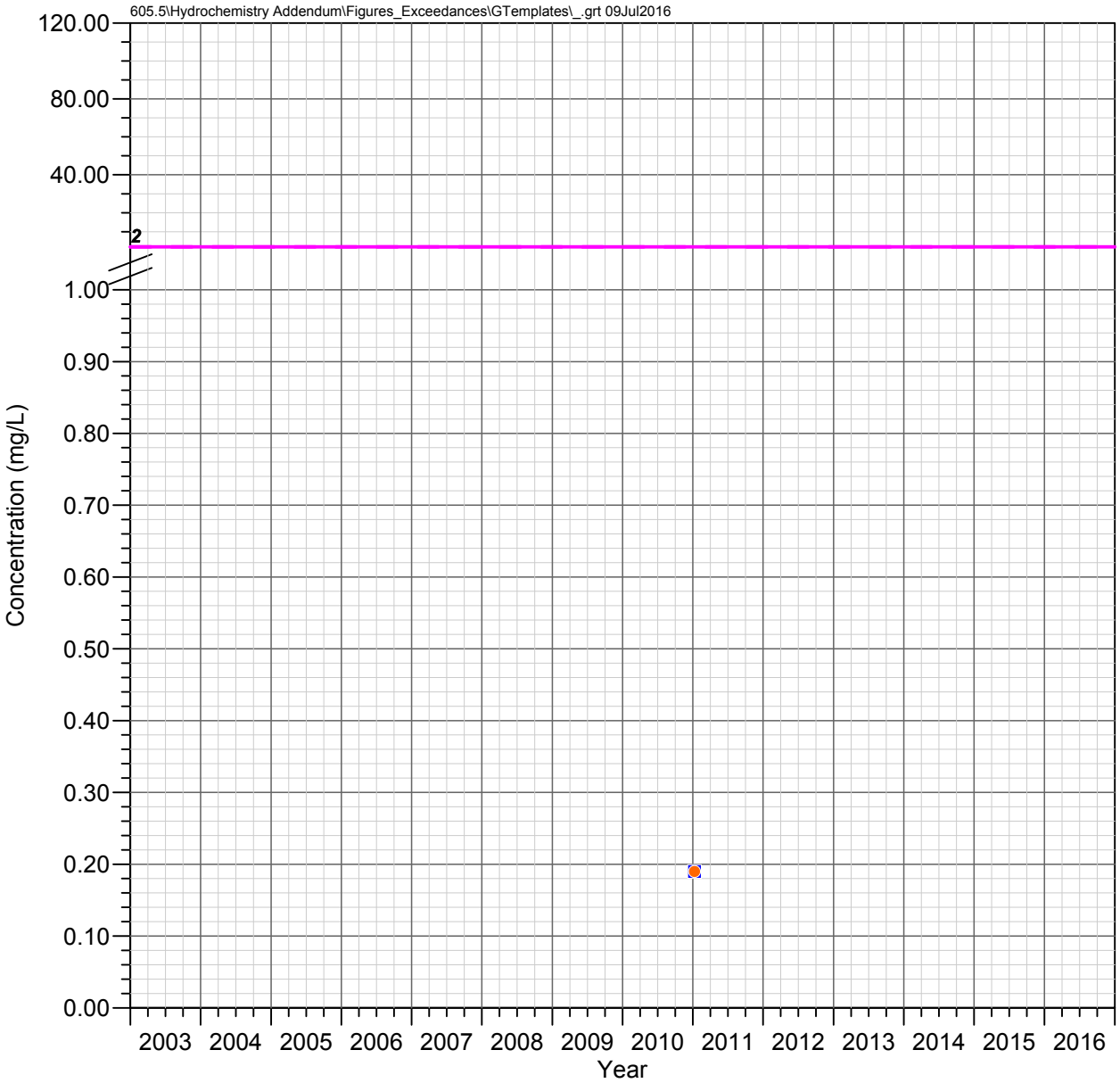


FIGURE E-111. BARIUM CONCENTRATIONS OBSERVED AT DHRES-02, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-06
Deep Groundwater System

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 2 mg/L)
- EPA Maximum Contaminant Levels (UNS, 2 mg/L)

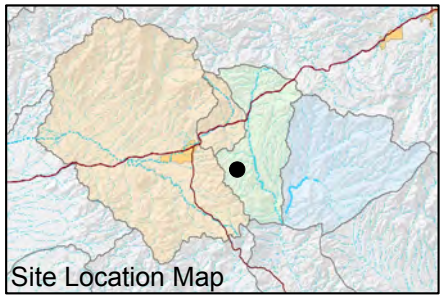
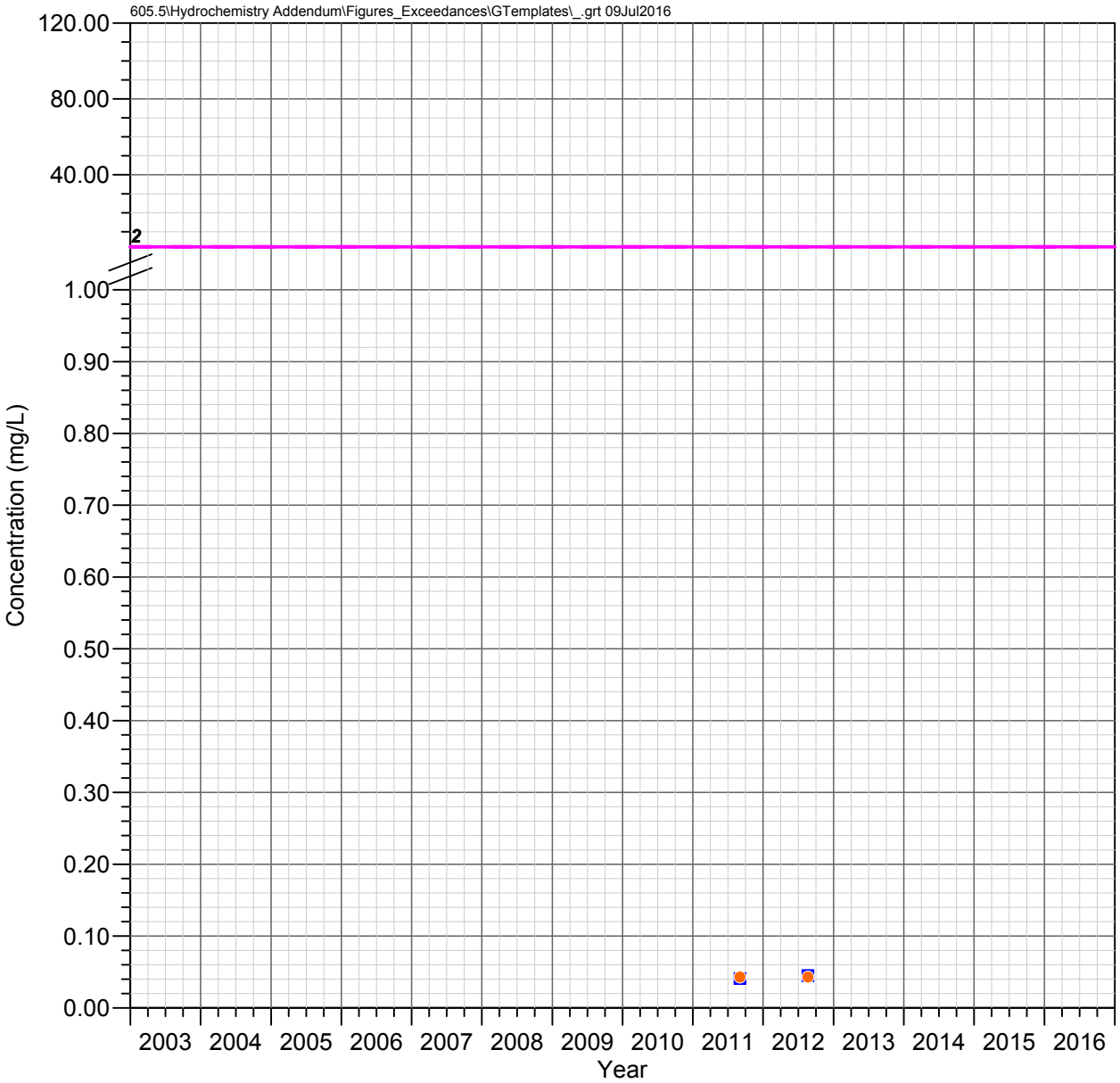


FIGURE E-112. BARIUM CONCENTRATIONS OBSERVED AT DHRES-06, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-09
Deep Groundwater System

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 2 mg/L)
- EPA Maximum Contaminant Levels (UNS, 2 mg/L)

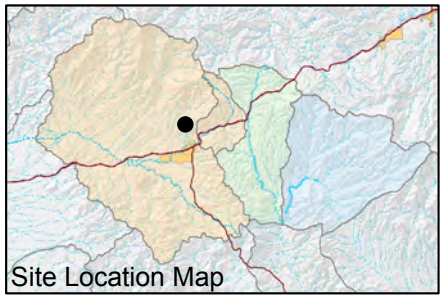
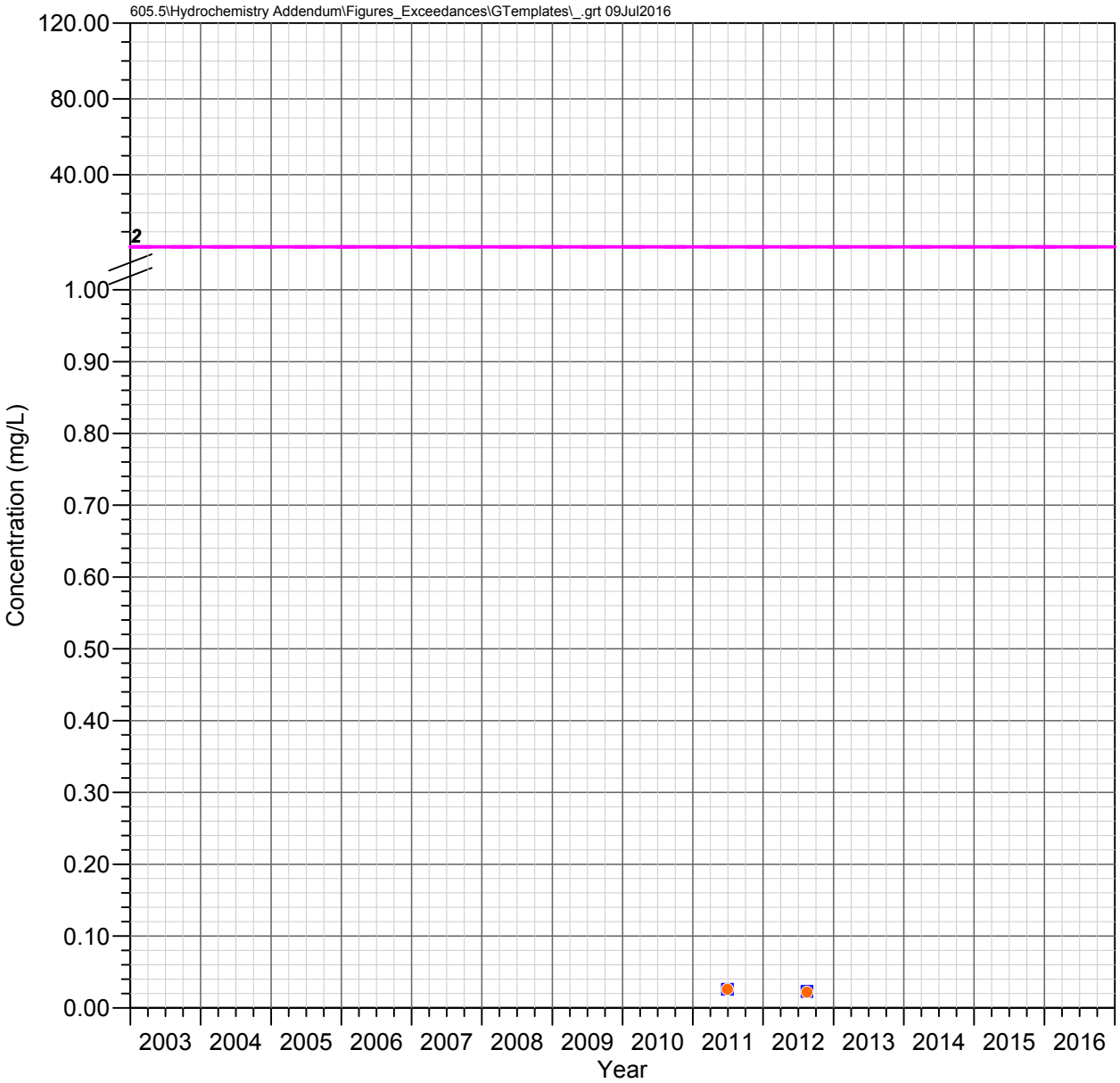


FIGURE E-113. BARIUM CONCENTRATIONS OBSERVED AT DHRES-09, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-11
Deep Groundwater System

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 2 mg/L)
- EPA Maximum Contaminant Levels (UNS, 2 mg/L)

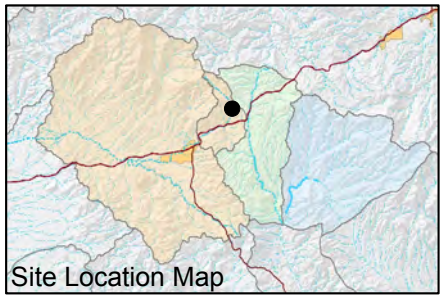
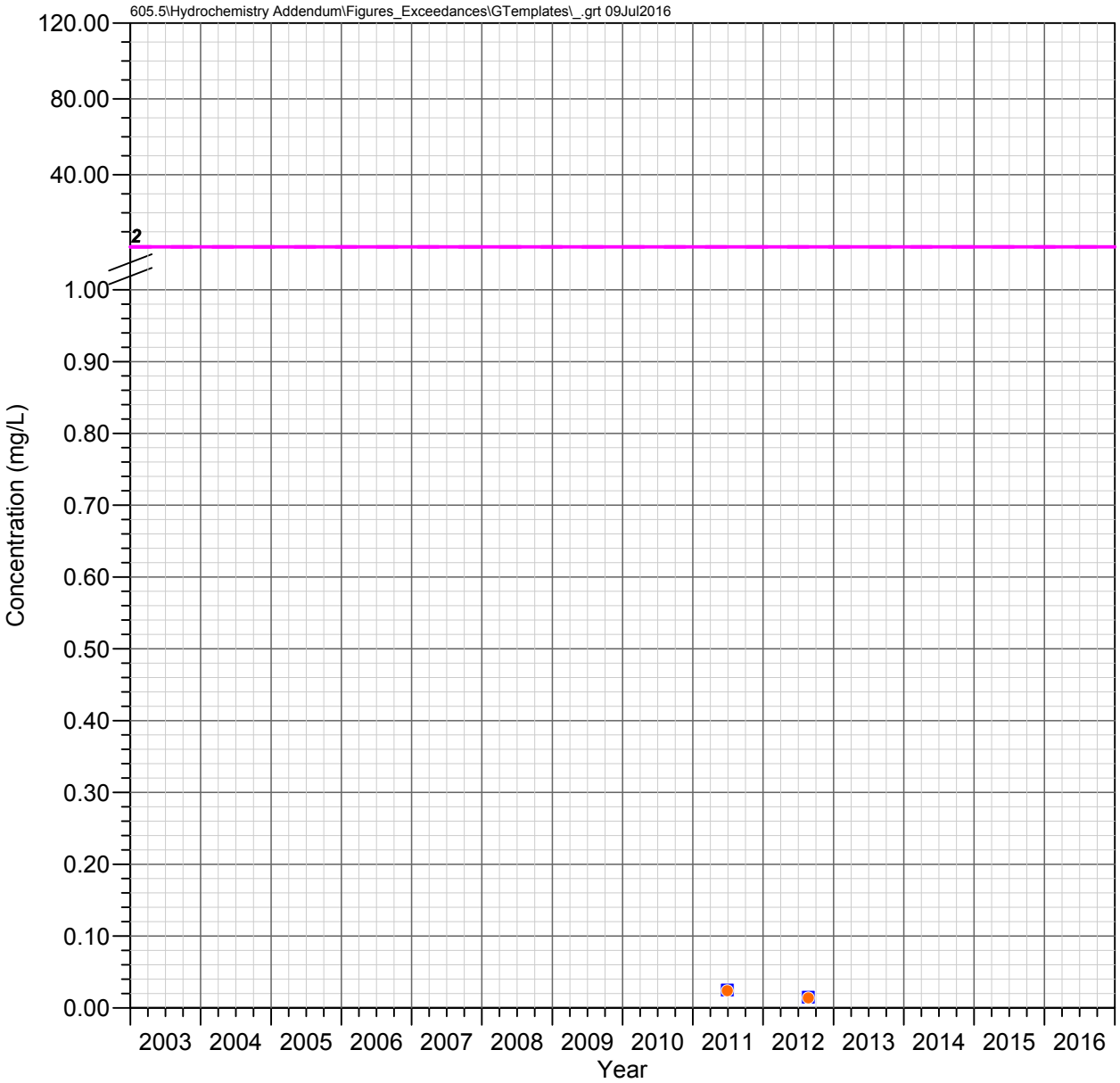


FIGURE E-114. BARIUM CONCENTRATIONS OBSERVED AT DHRES-11, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-13
Deep Groundwater System

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 2 mg/L)
- EPA Maximum Contaminant Levels (UNS, 2 mg/L)

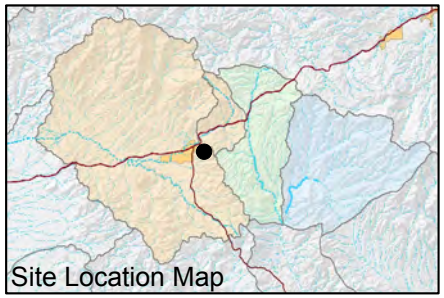
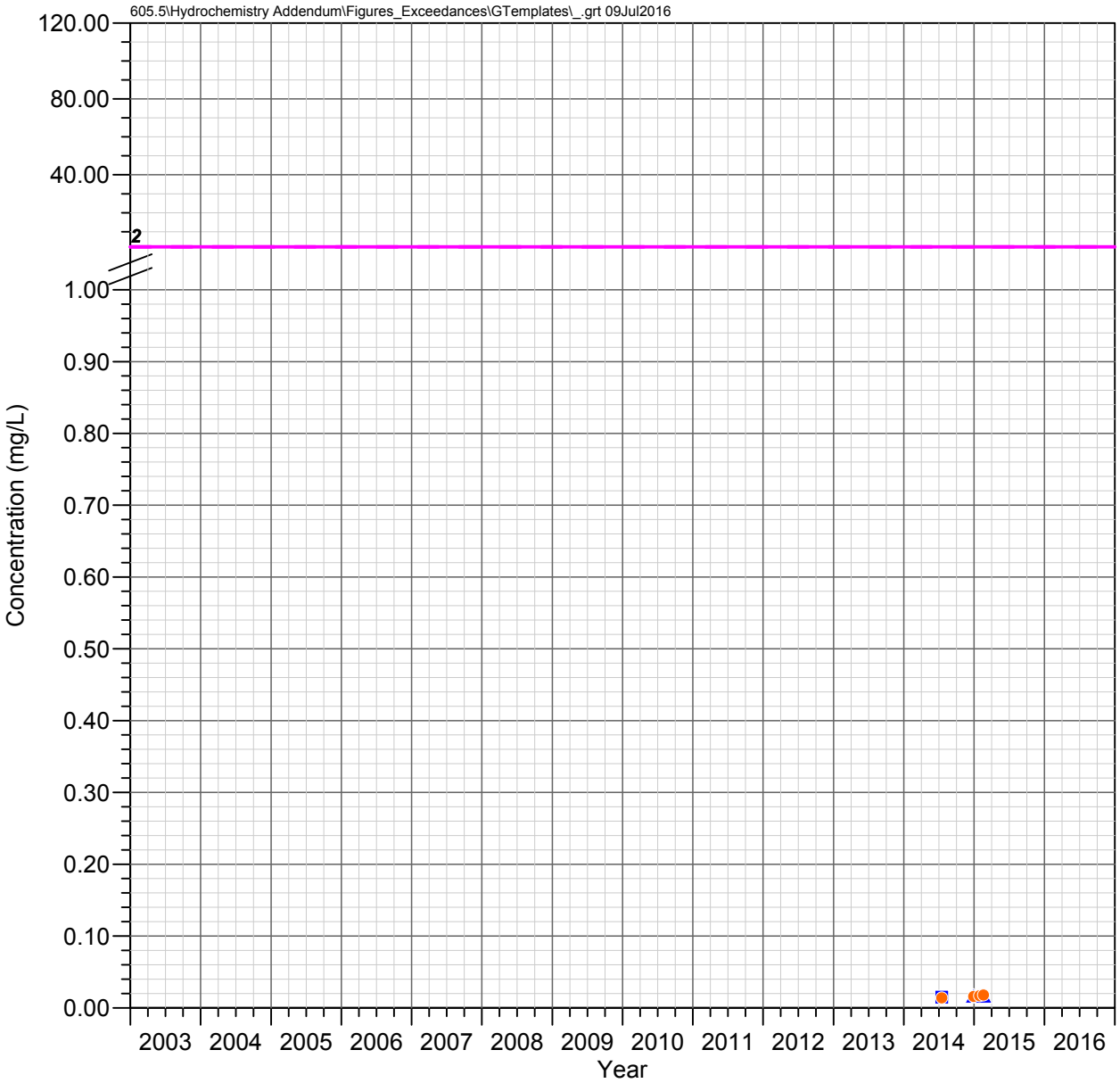


FIGURE E-115. BARIUM CONCENTRATIONS OBSERVED AT DHRES-13, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-15
Deep Groundwater System

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 2 mg/L)
- EPA Maximum Contaminant Levels (UNS, 2 mg/L)

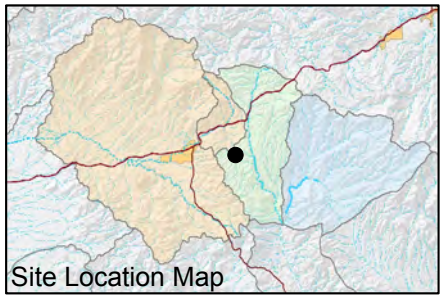
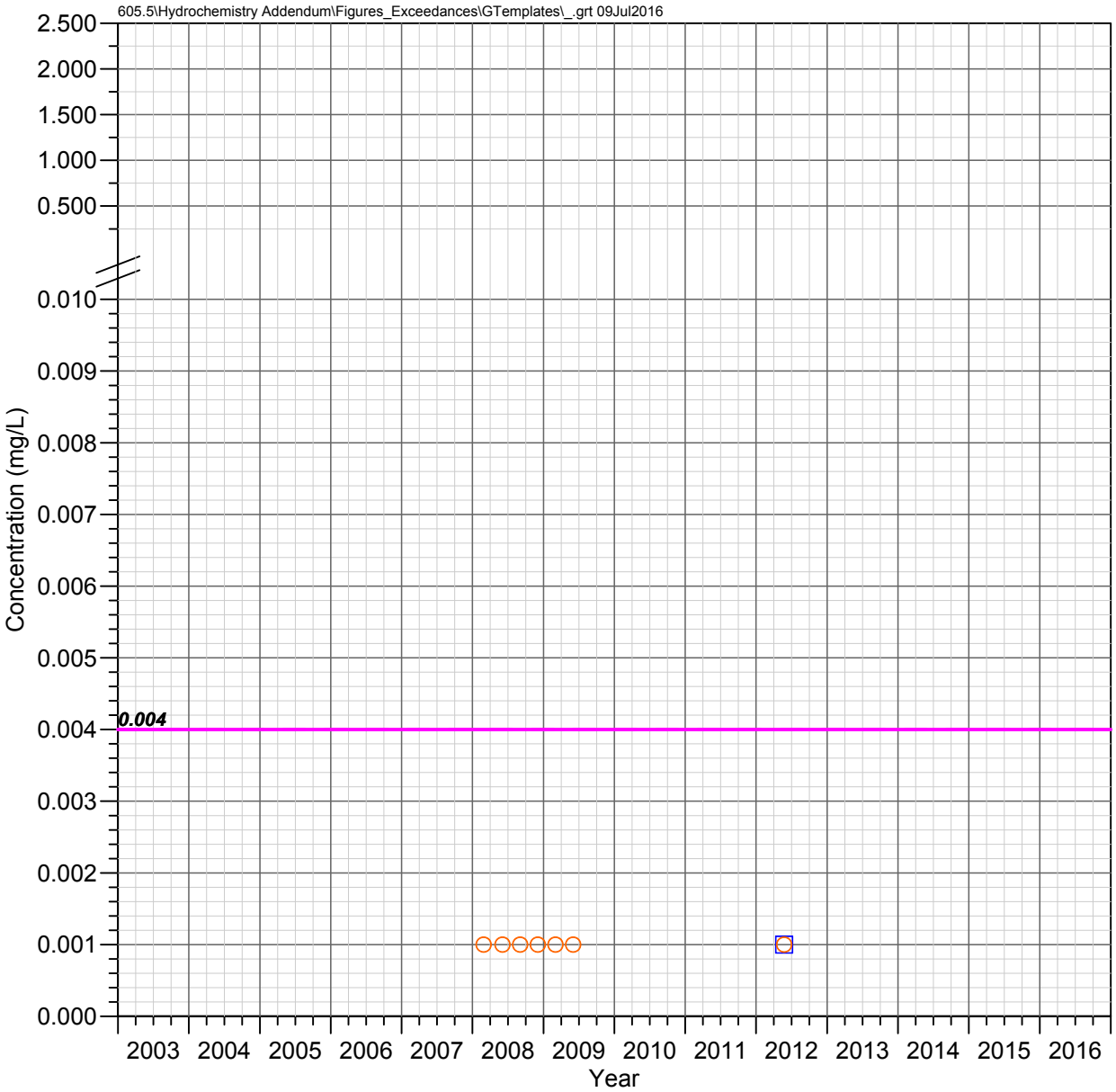


FIGURE E-116. BARIUM CONCENTRATIONS OBSERVED AT DHRES-15, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Hackberry Windmill Well Shallow Groundwater System

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.004 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.004 mg/L)

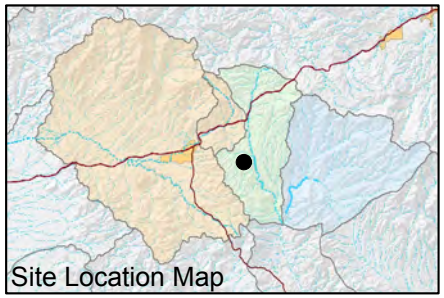
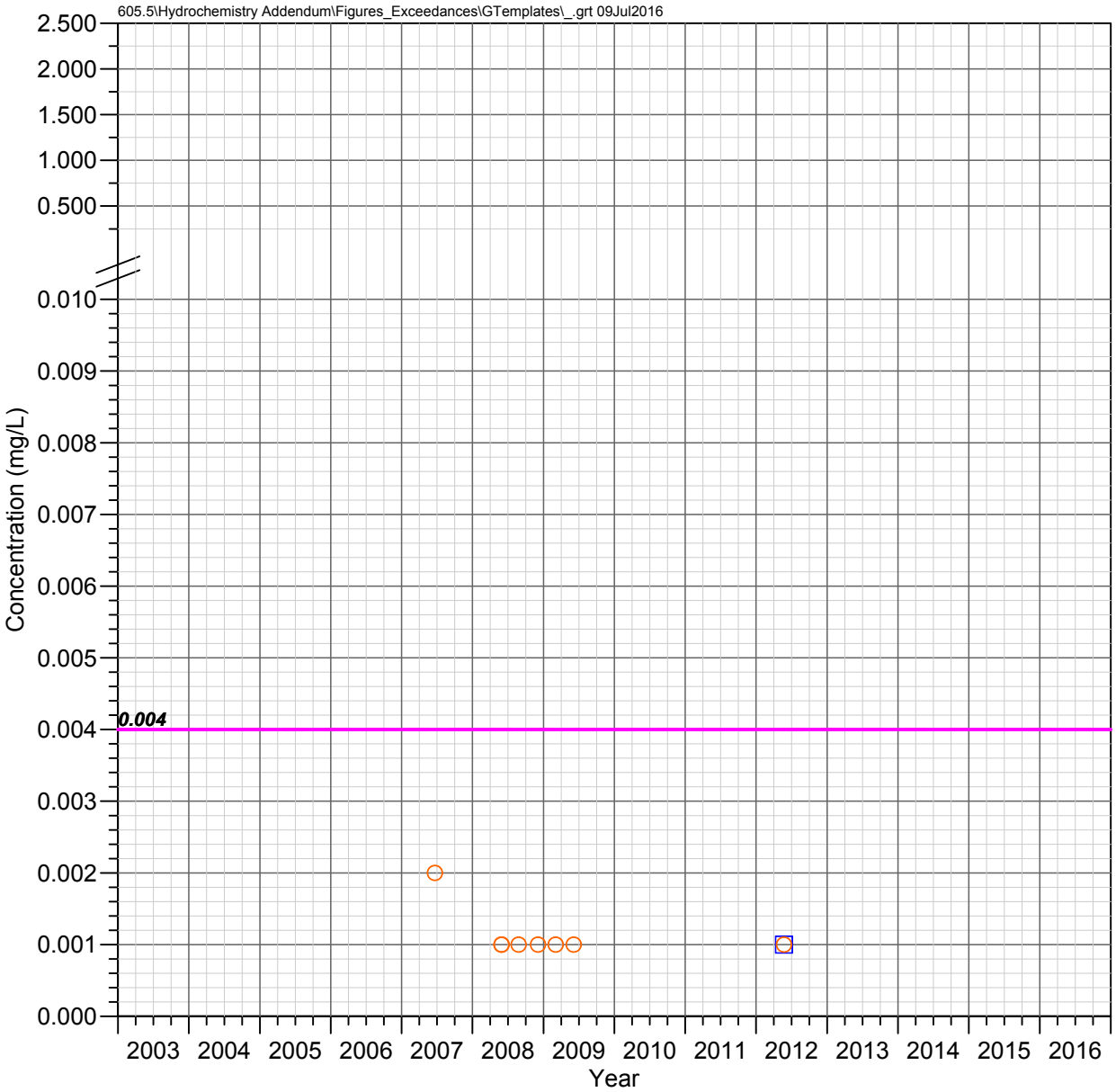


FIGURE E-117. BERYLLIUM CONCENTRATIONS OBSERVED AT HACKBERRY WINDMILL WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



JI Ranch Corral Well Shallow Groundwater System

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.004 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.004 mg/L)

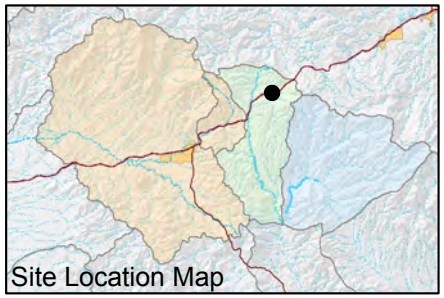
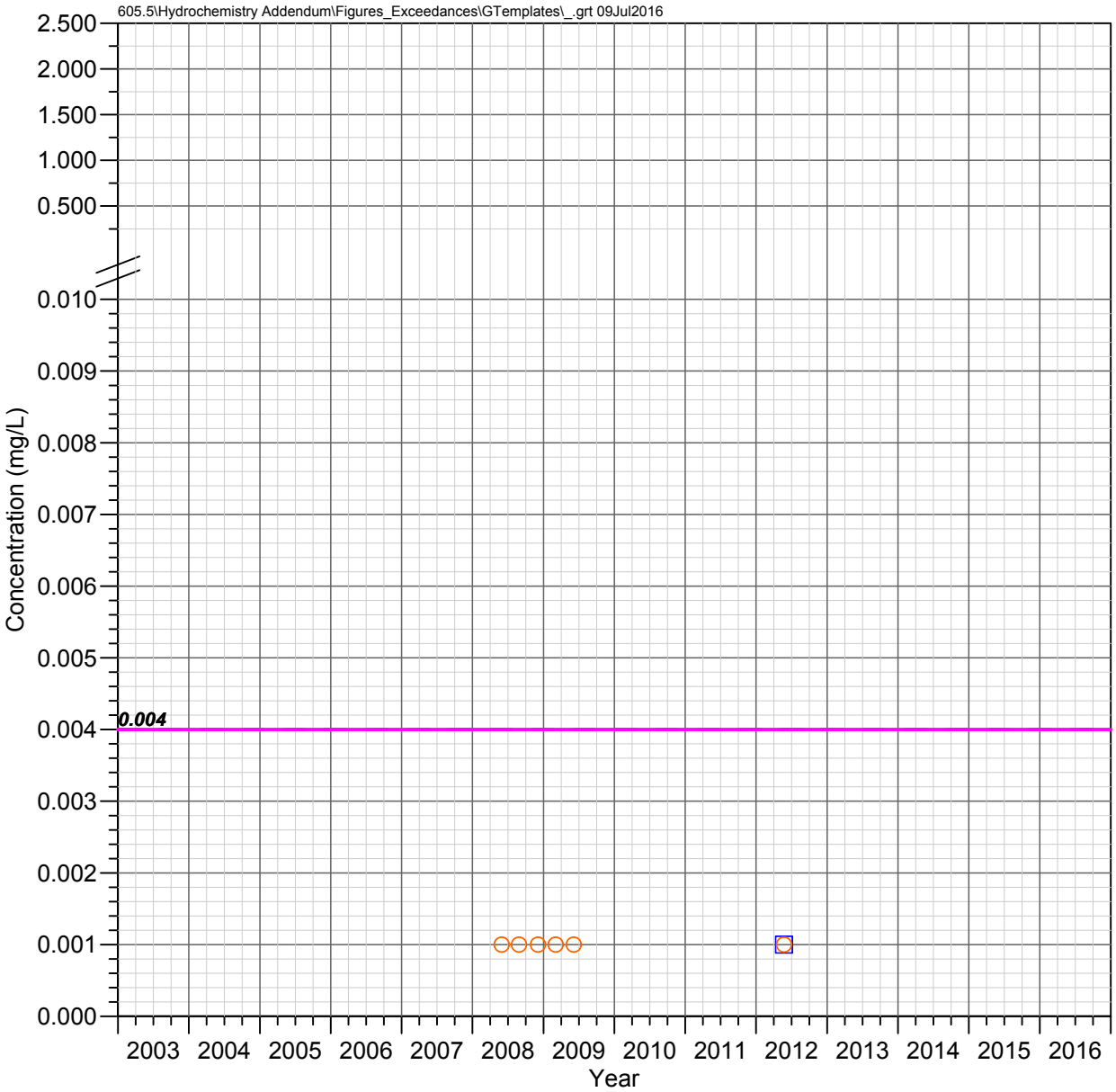


FIGURE E-118. BERYLLIUM CONCENTRATIONS OBSERVED AT JI RANCH CORRAL WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



JI Ranch Middle Well Shallow Groundwater System

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.004 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.004 mg/L)

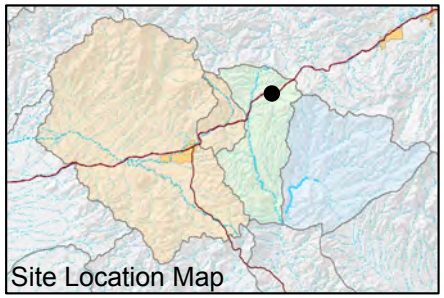
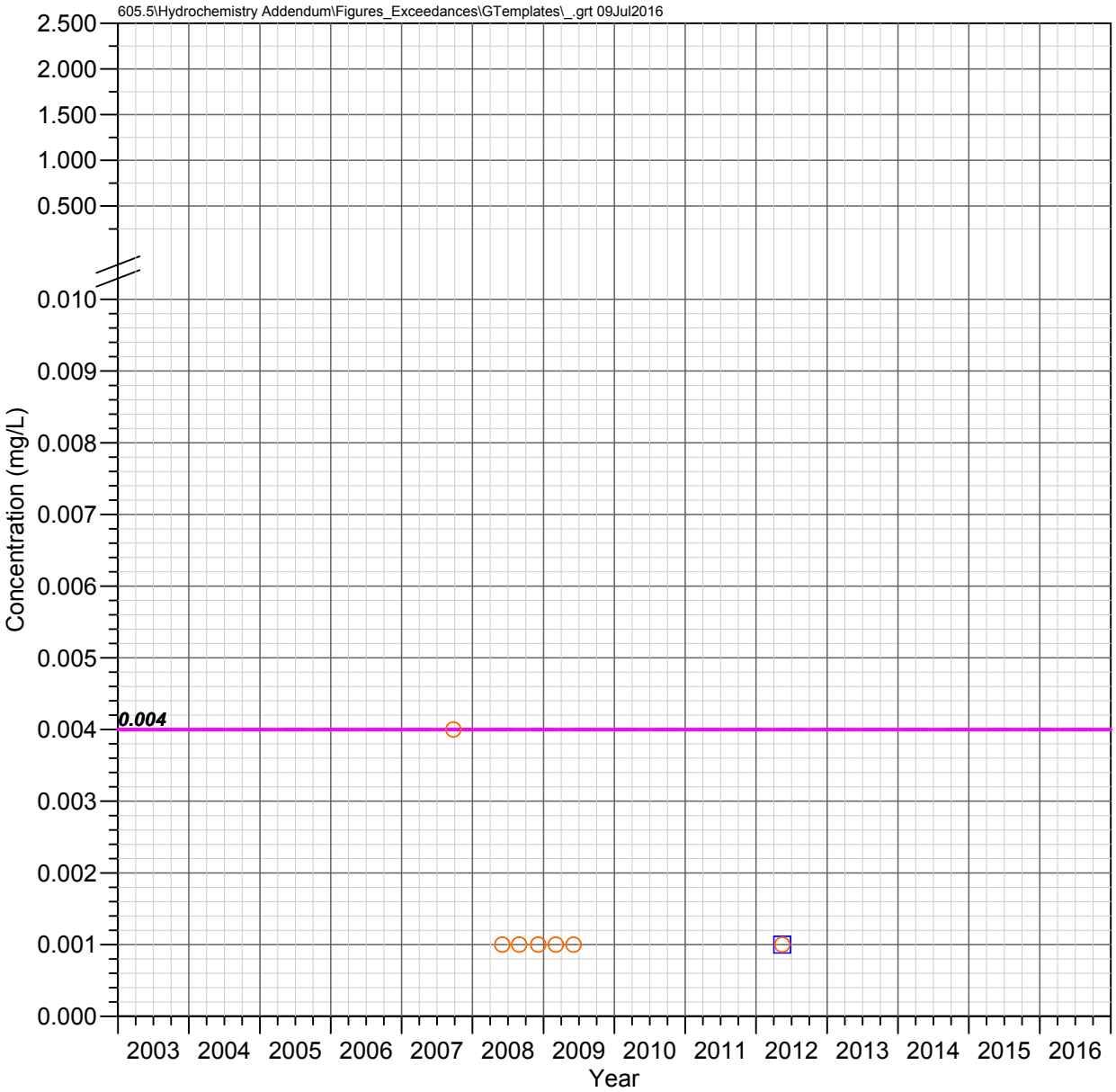


FIGURE E-119. BERYLLIUM CONCENTRATIONS OBSERVED AT JI RANCH MIDDLE WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



A-06
Apache Leap Tuff Aquifer

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.004 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.004 mg/L)

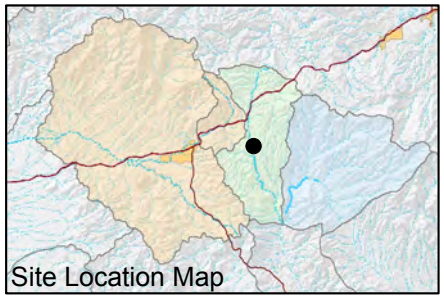
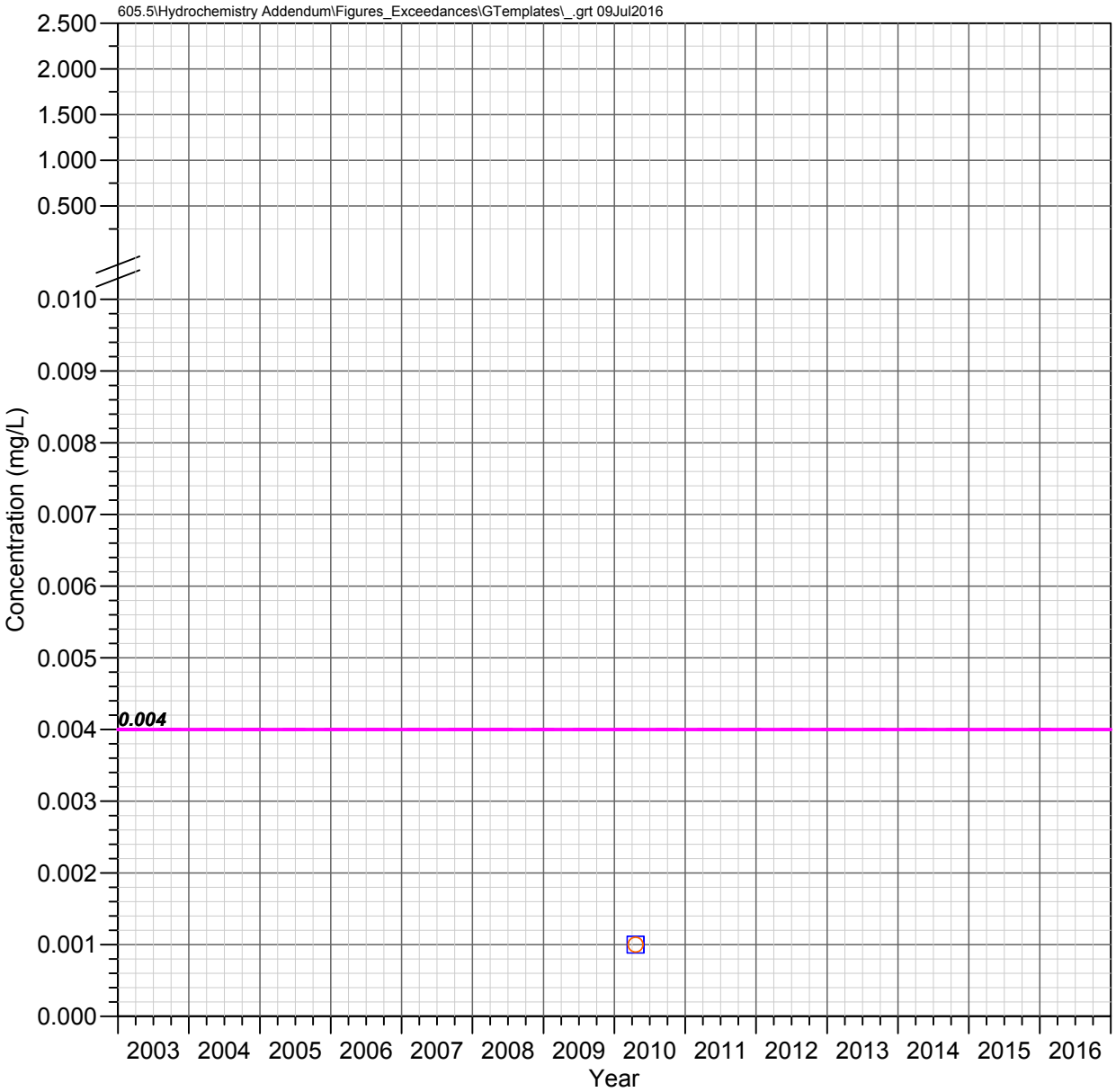


FIGURE E-120. BERYLLIUM CONCENTRATIONS OBSERVED AT A-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



CT Well
Apache Leap Tuff Aquifer

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.004 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.004 mg/L)

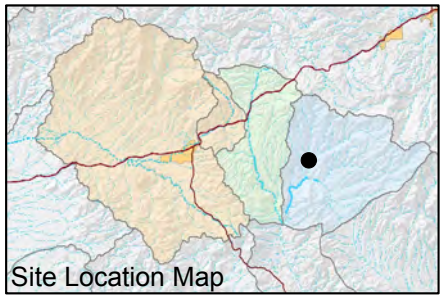
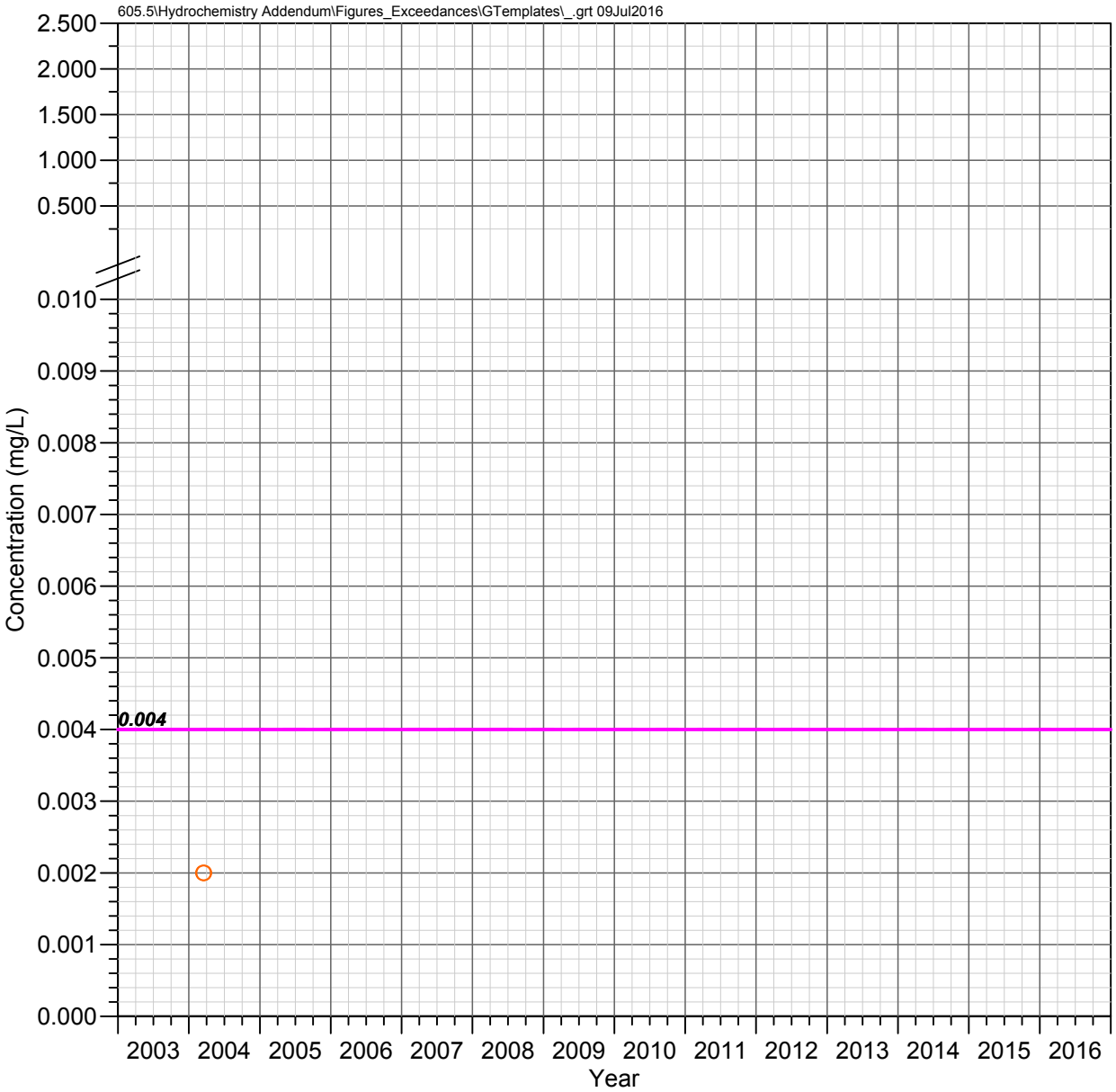


FIGURE E-121. BERYLLIUM CONCENTRATIONS OBSERVED AT CT WELL, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-01
Apache Leap Tuff Aquifer

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.004 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.004 mg/L)

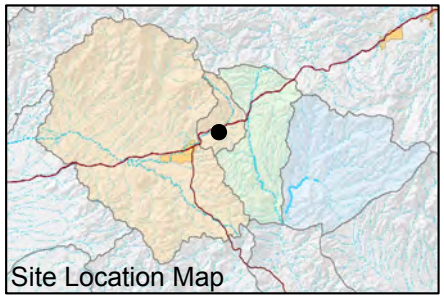
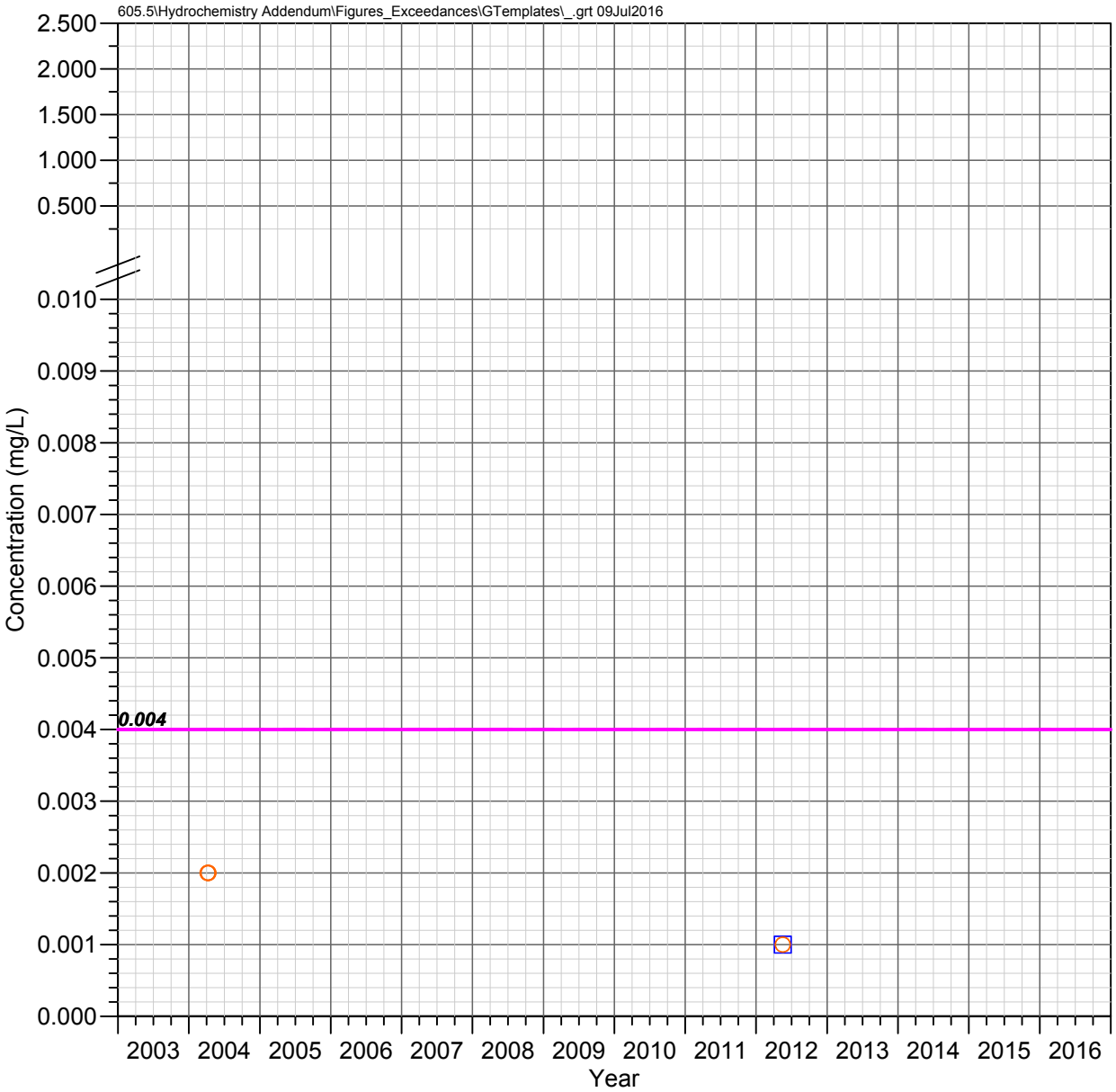


FIGURE E-122. BERYLLIUM CONCENTRATIONS OBSERVED AT HRES-01, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-02
Apache Leap Tuff Aquifer

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.004 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.004 mg/L)

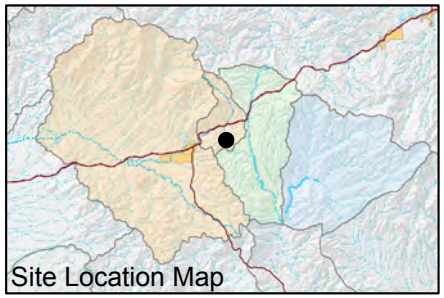
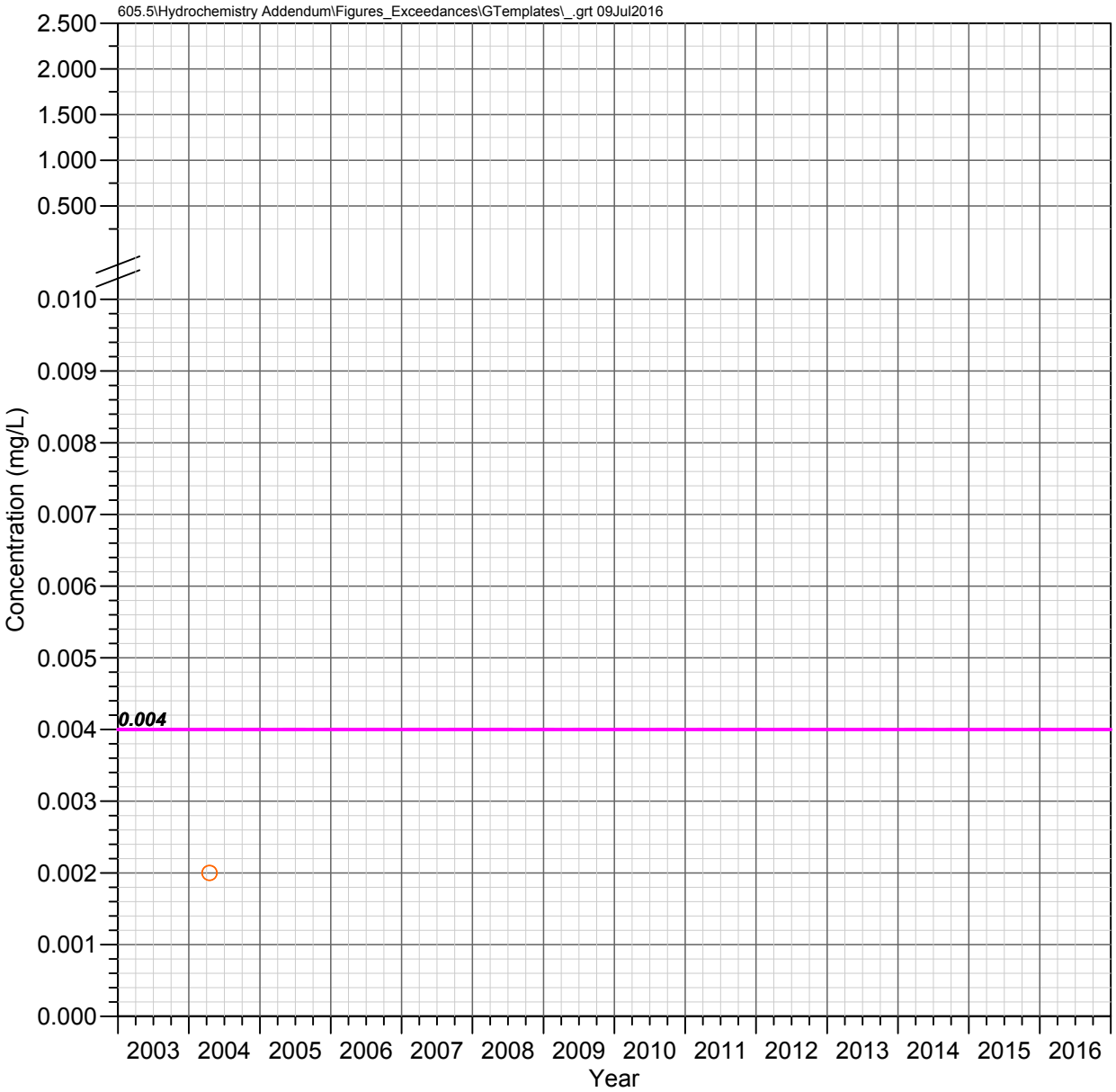


FIGURE E-123. BERYLLIUM CONCENTRATIONS OBSERVED AT HRES-02, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-03d
Apache Leap Tuff Aquifer

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.004 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.004 mg/L)

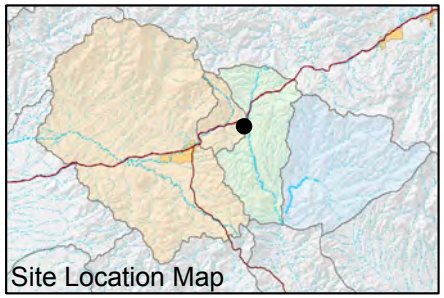
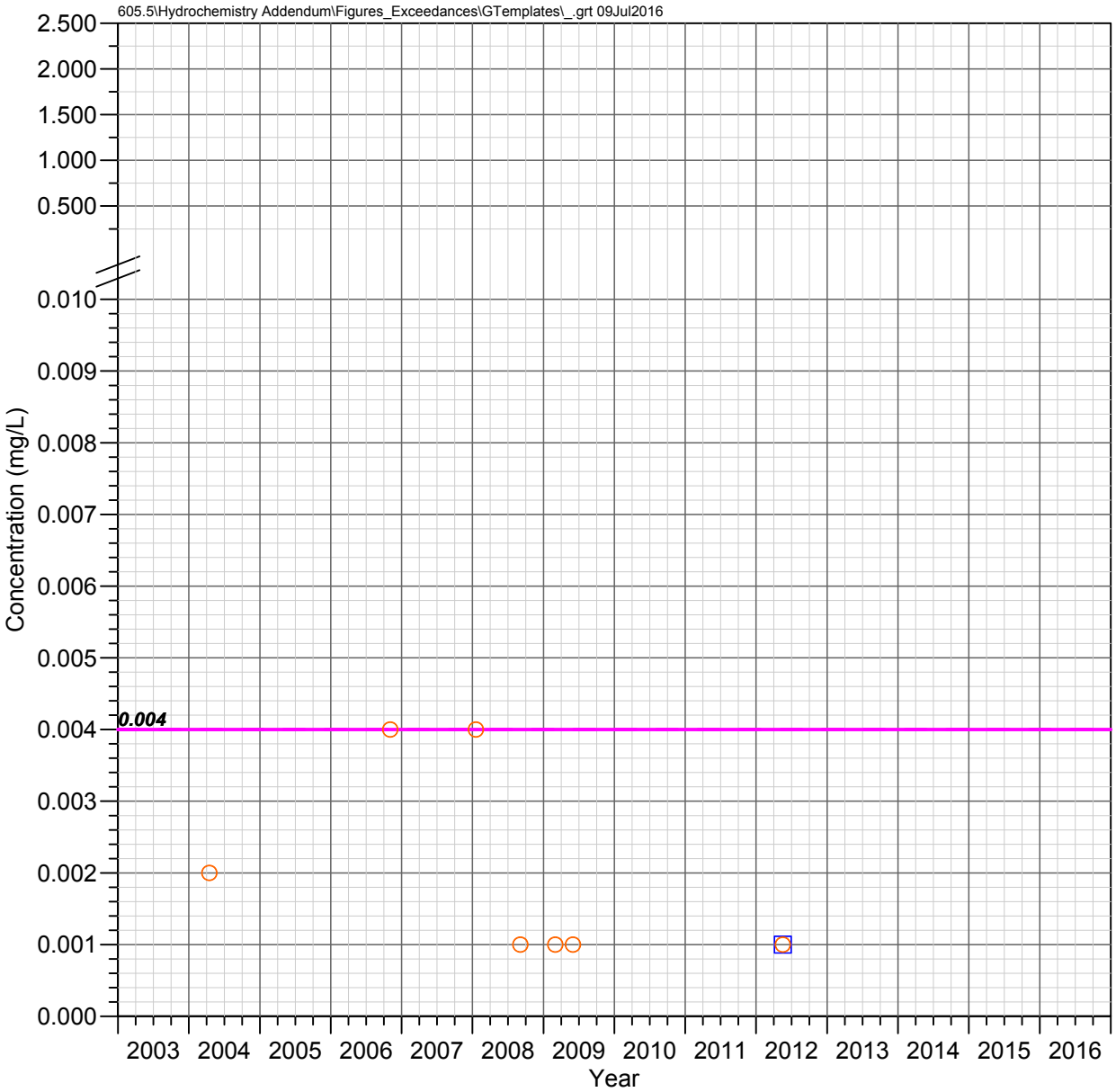


FIGURE E-124. BERYLLIUM CONCENTRATIONS OBSERVED AT HRES-03D, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-04
Apache Leap Tuff Aquifer

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.004 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.004 mg/L)

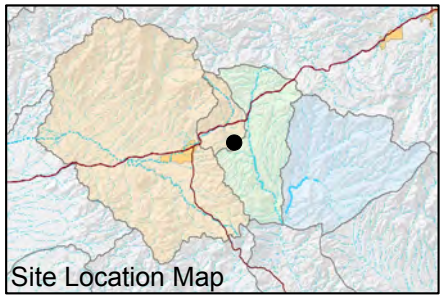
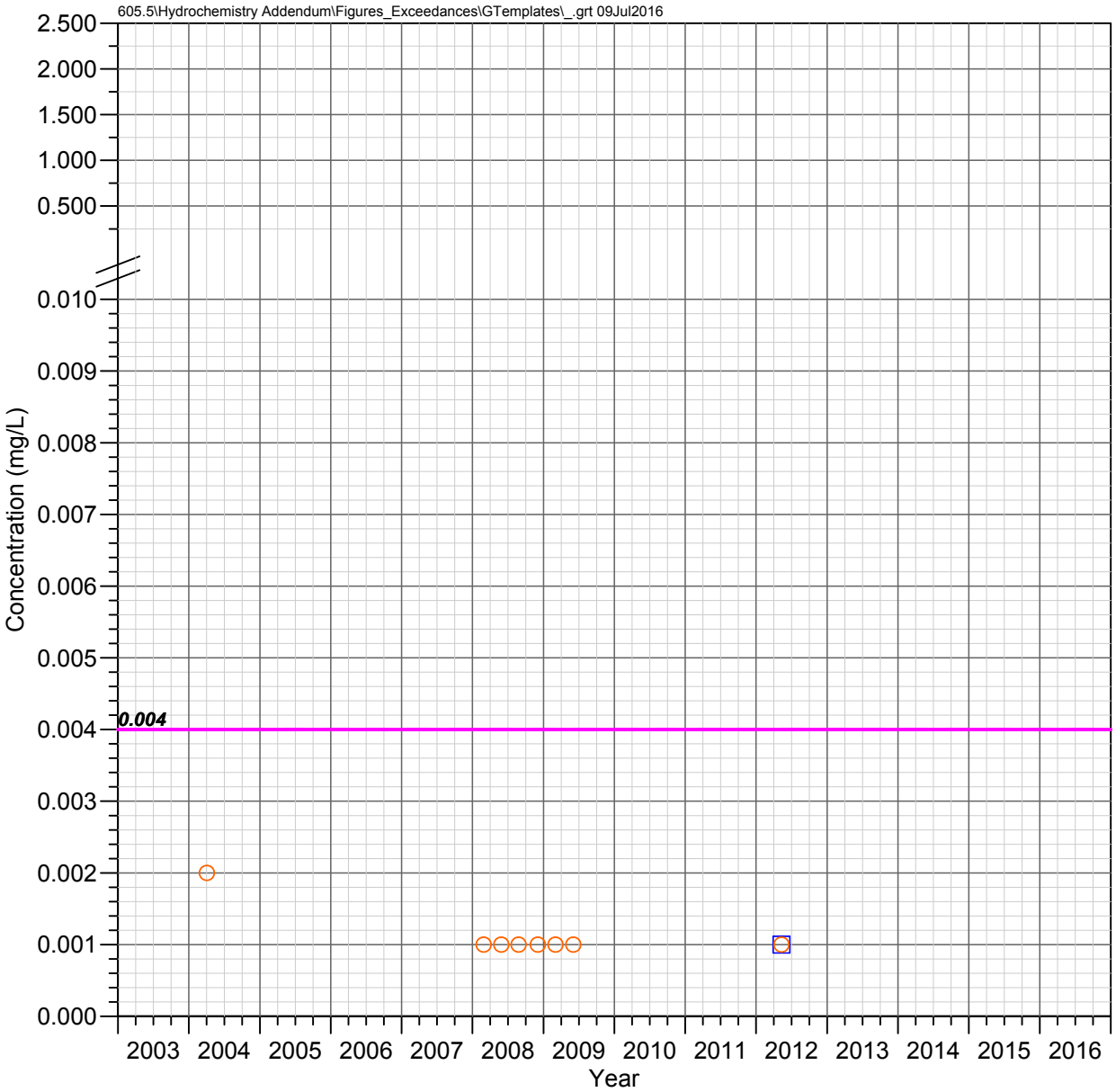


FIGURE E-125. BERYLLIUM CONCENTRATIONS OBSERVED AT HRES-04, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-05
Apache Leap Tuff Aquifer

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.004 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.004 mg/L)

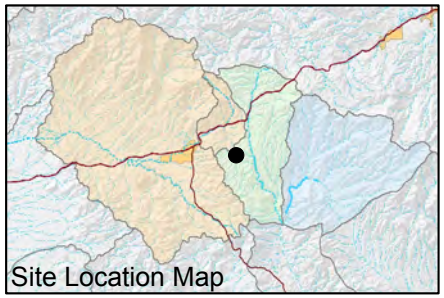
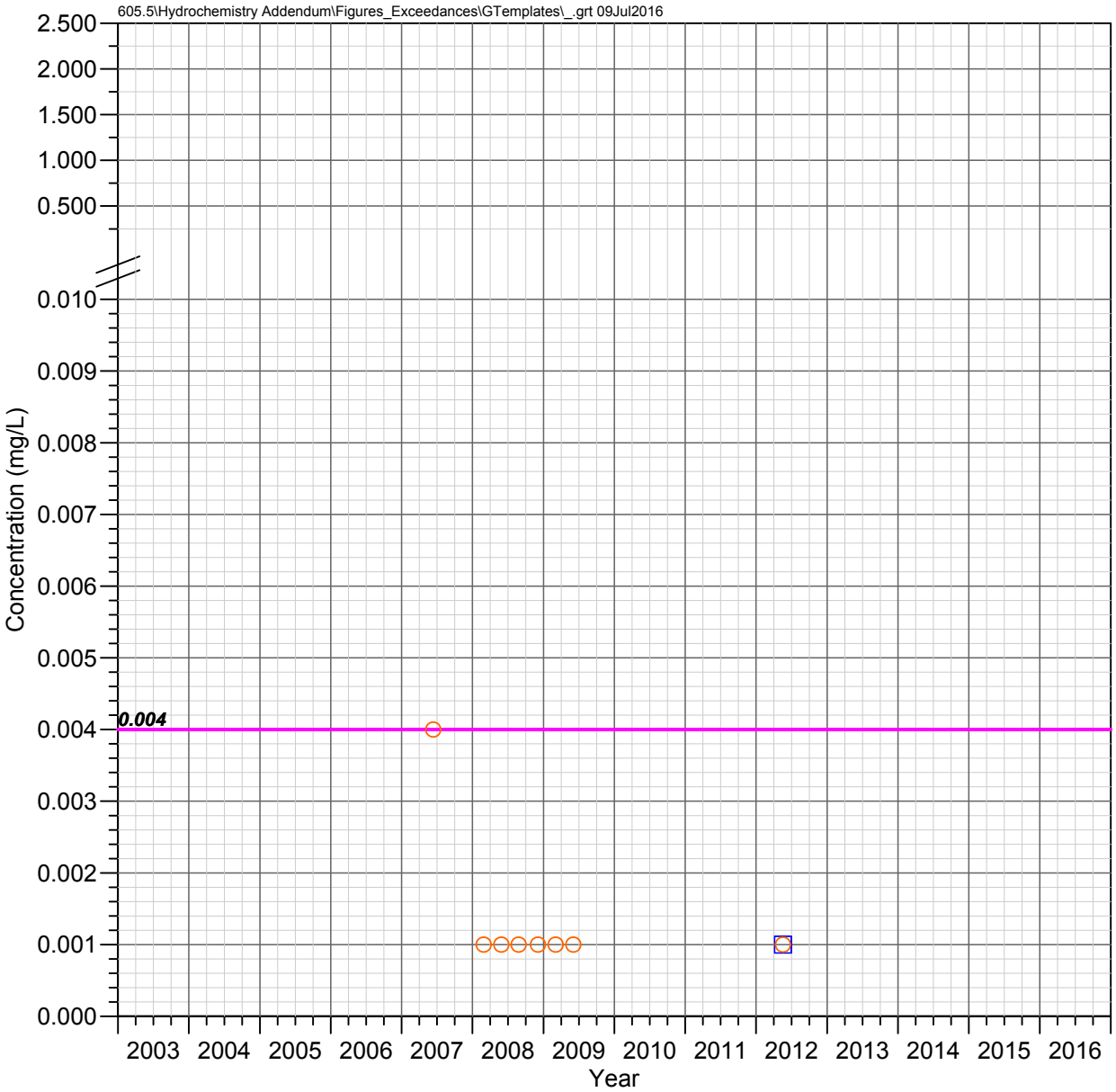


FIGURE E-126. BERYLLIUM CONCENTRATIONS OBSERVED AT HRES-05, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-06
Apache Leap Tuff Aquifer

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.004 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.004 mg/L)

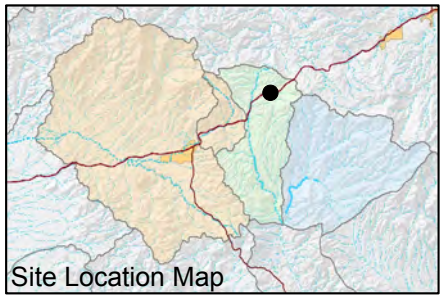
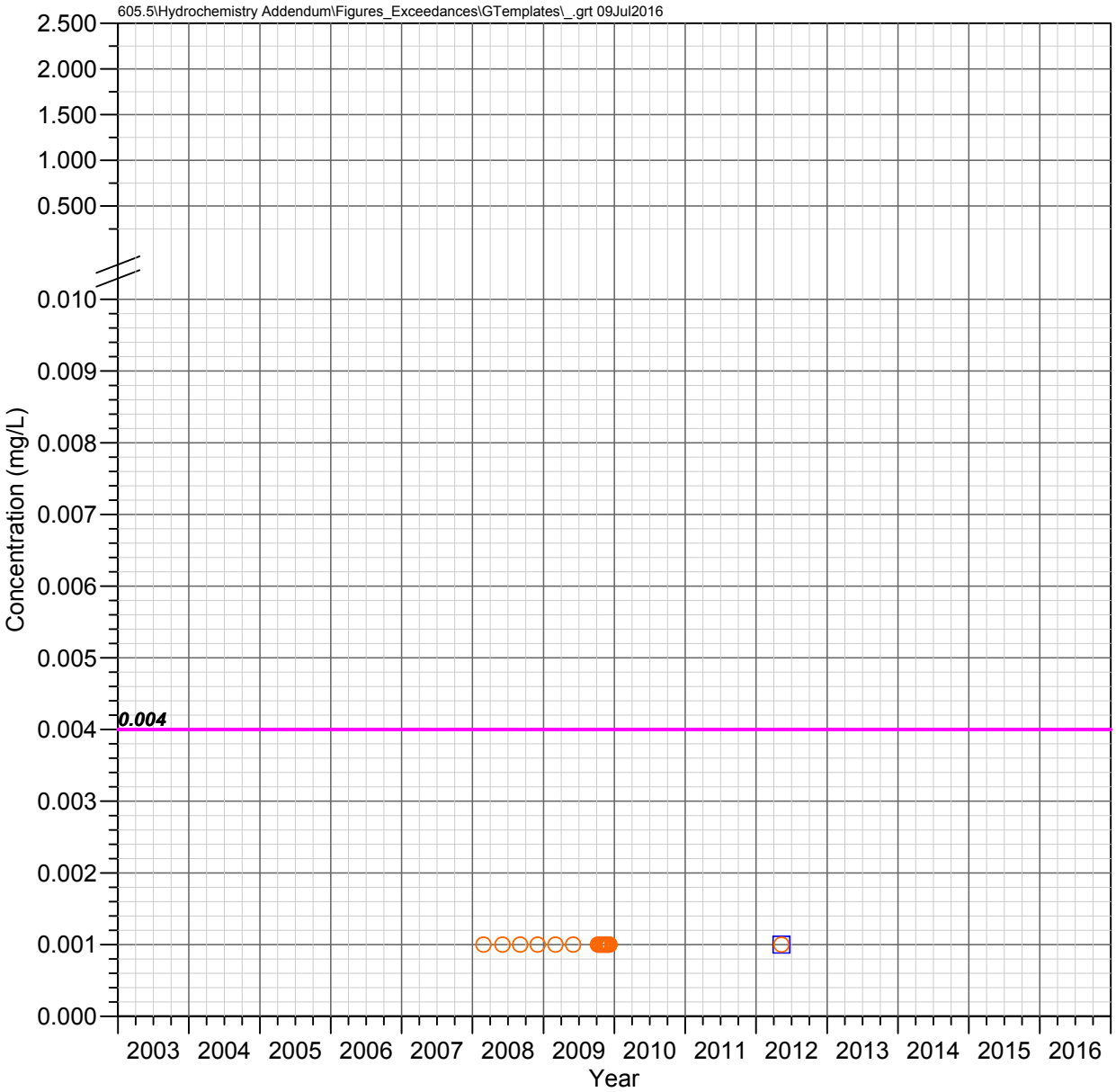


FIGURE E-127. BERYLLIUM CONCENTRATIONS OBSERVED AT HRES-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-07
Apache Leap Tuff Aquifer

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.004 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.004 mg/L)

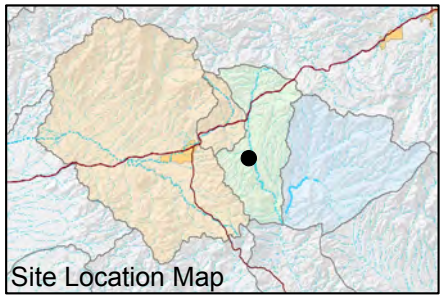
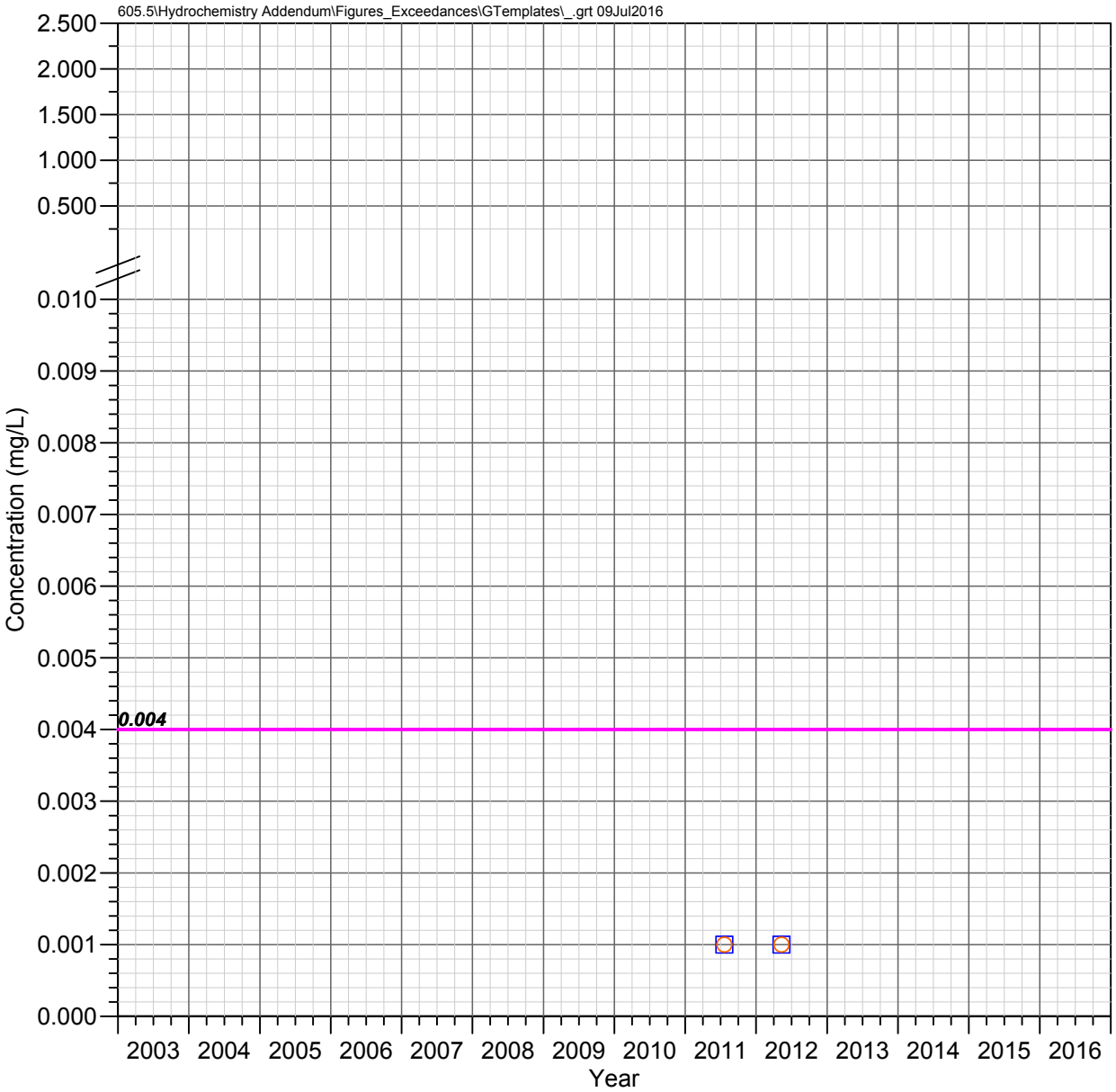


FIGURE E-128. BERYLLIUM CONCENTRATIONS OBSERVED AT HRES-07, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-08
Apache Leap Tuff Aquifer

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.004 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.004 mg/L)

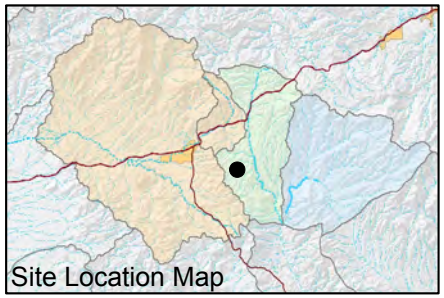
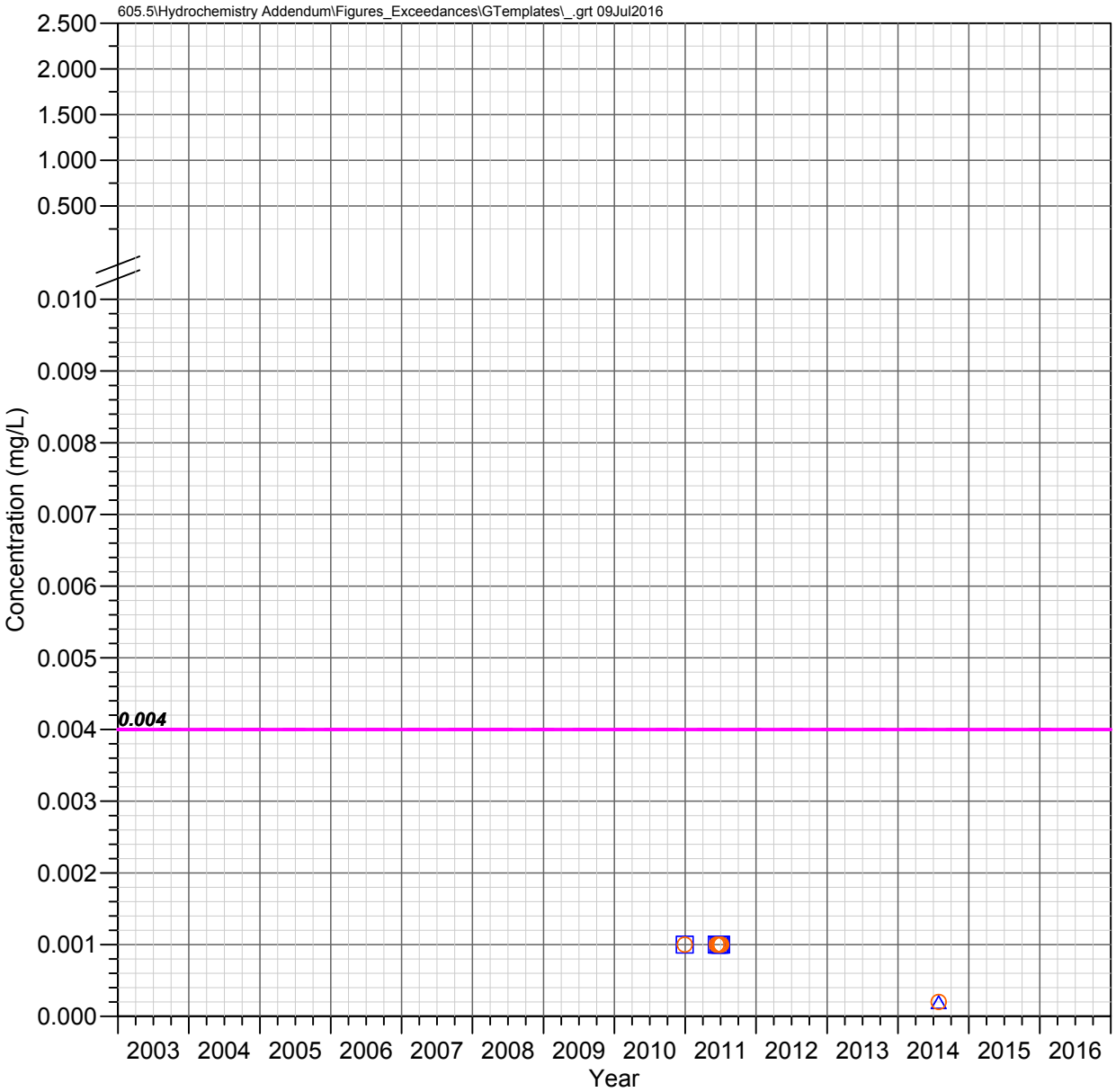


FIGURE E-129. BERYLLIUM CONCENTRATIONS OBSERVED AT HRES-08, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-09
Apache Leap Tuff Aquifer

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.004 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.004 mg/L)

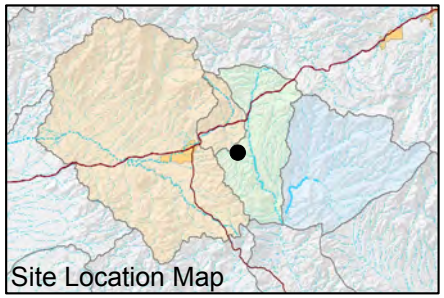
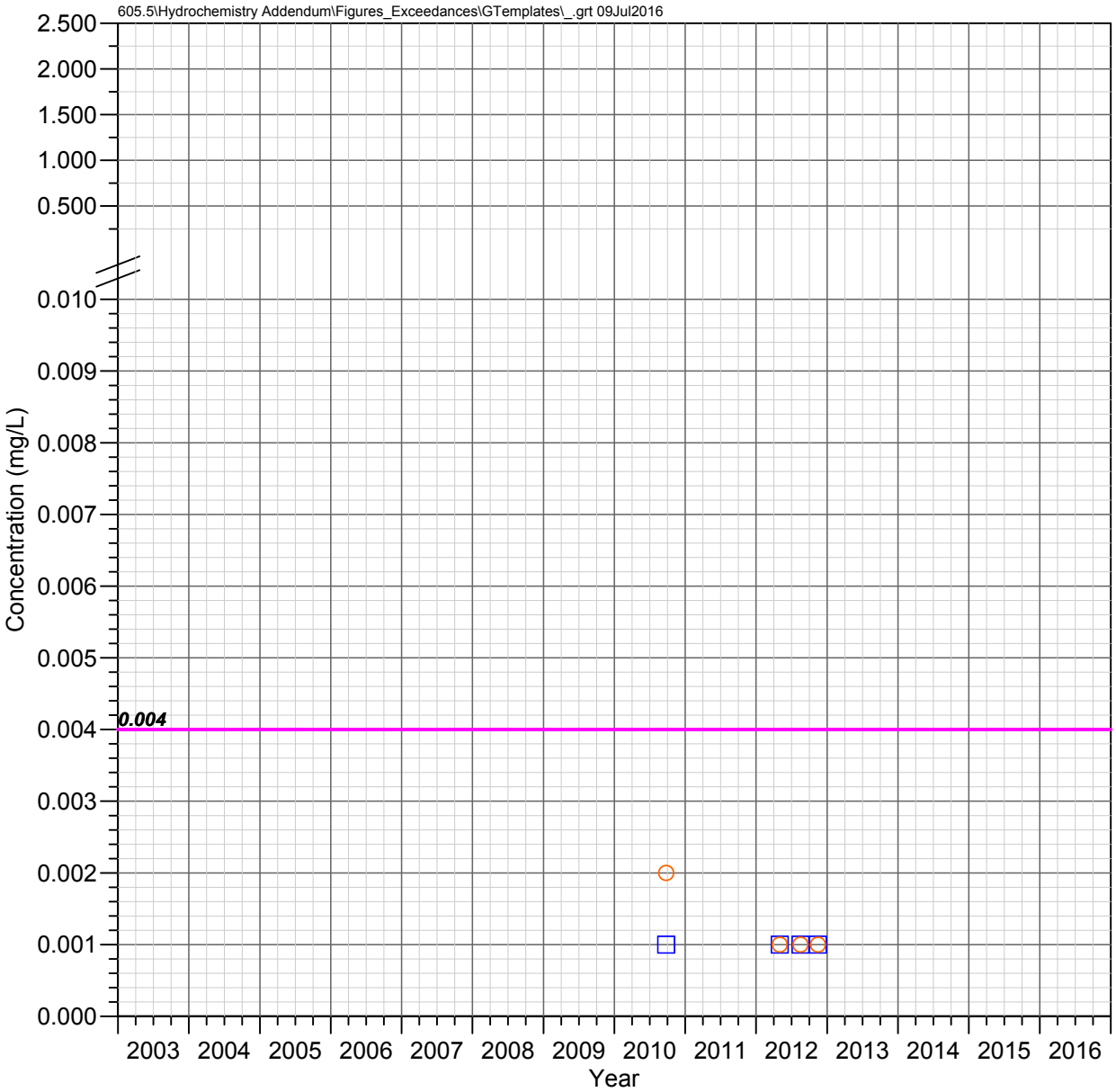


FIGURE E-130. BERYLLIUM CONCENTRATIONS OBSERVED AT HRES-09, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-10
Apache Leap Tuff Aquifer

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.004 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.004 mg/L)

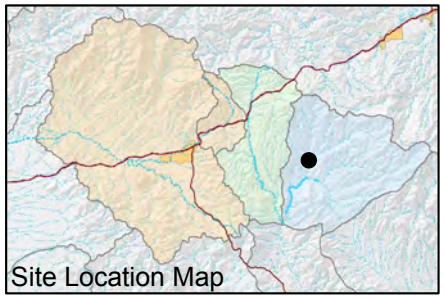
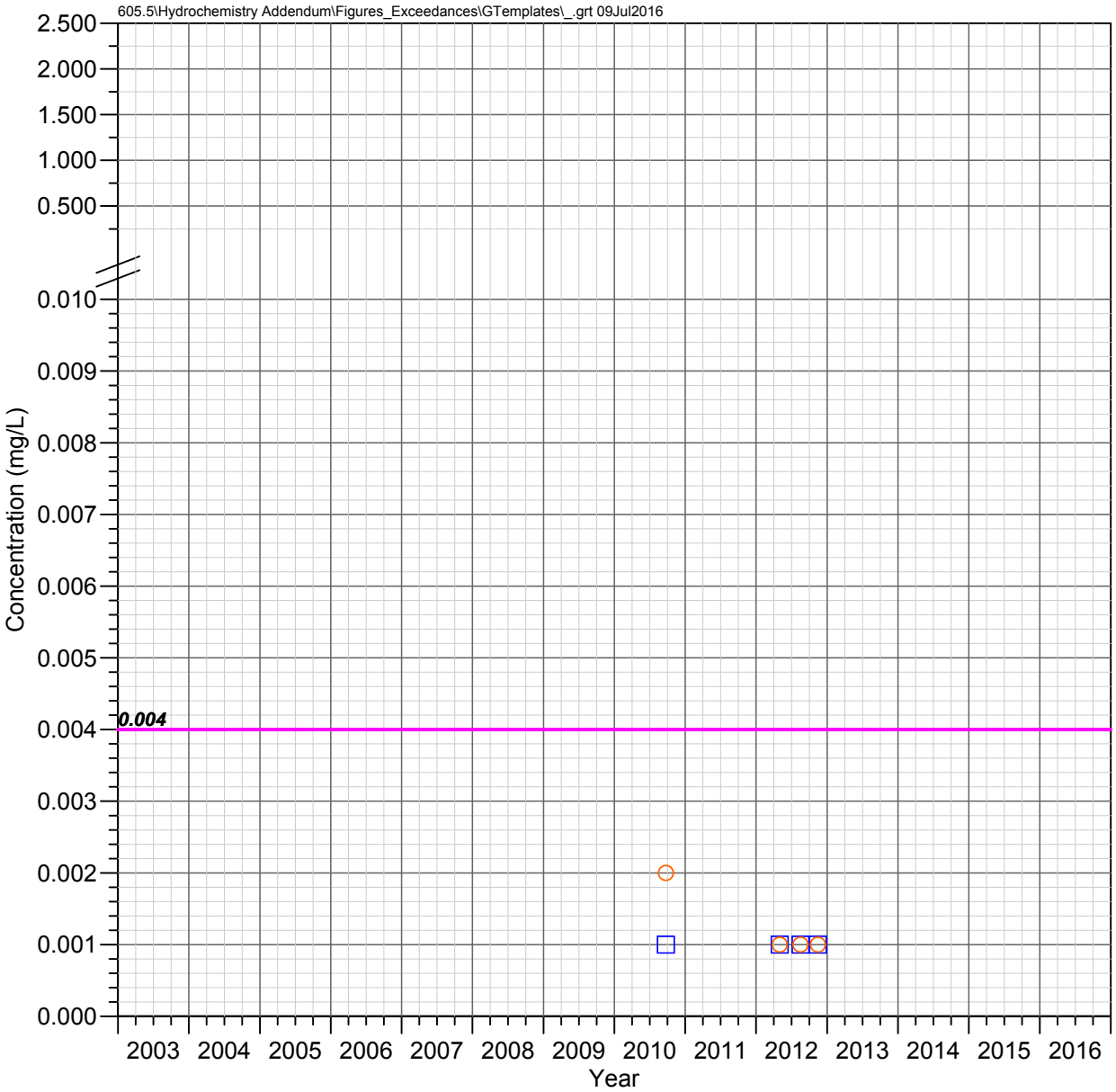


FIGURE E-131. BERYLLIUM CONCENTRATIONS OBSERVED AT HRES-10, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-11
Apache Leap Tuff Aquifer

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.004 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.004 mg/L)

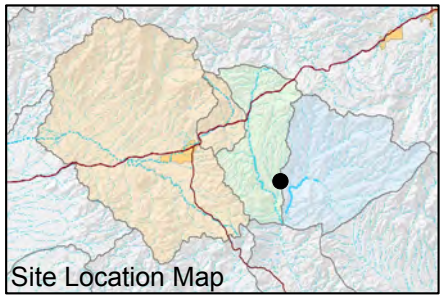
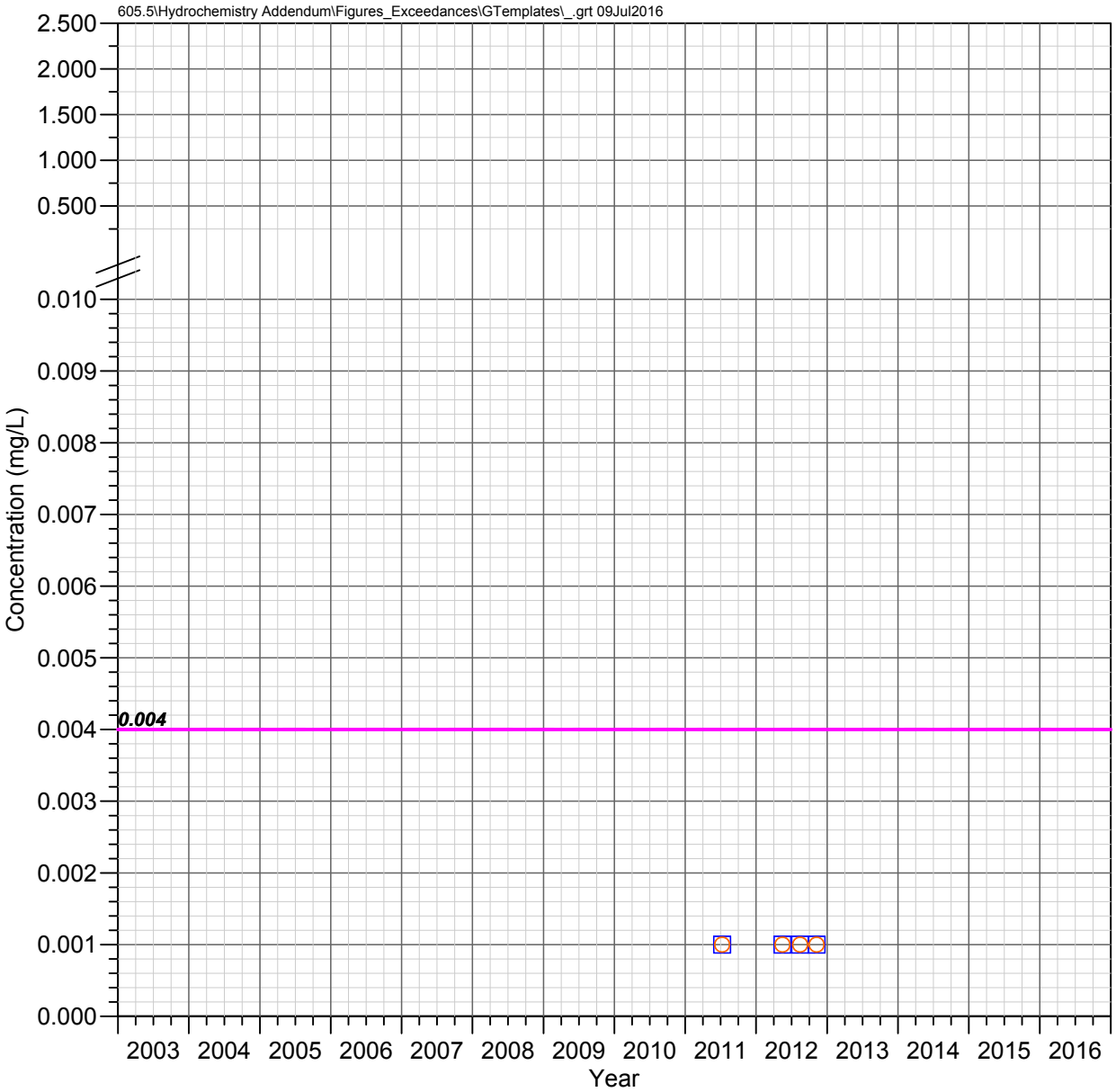


FIGURE E-132. BERYLLIUM CONCENTRATIONS OBSERVED AT HRES-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-12
Apache Leap Tuff Aquifer

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.004 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.004 mg/L)

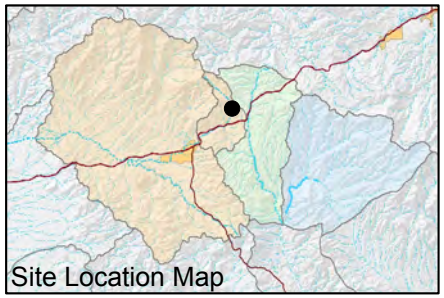
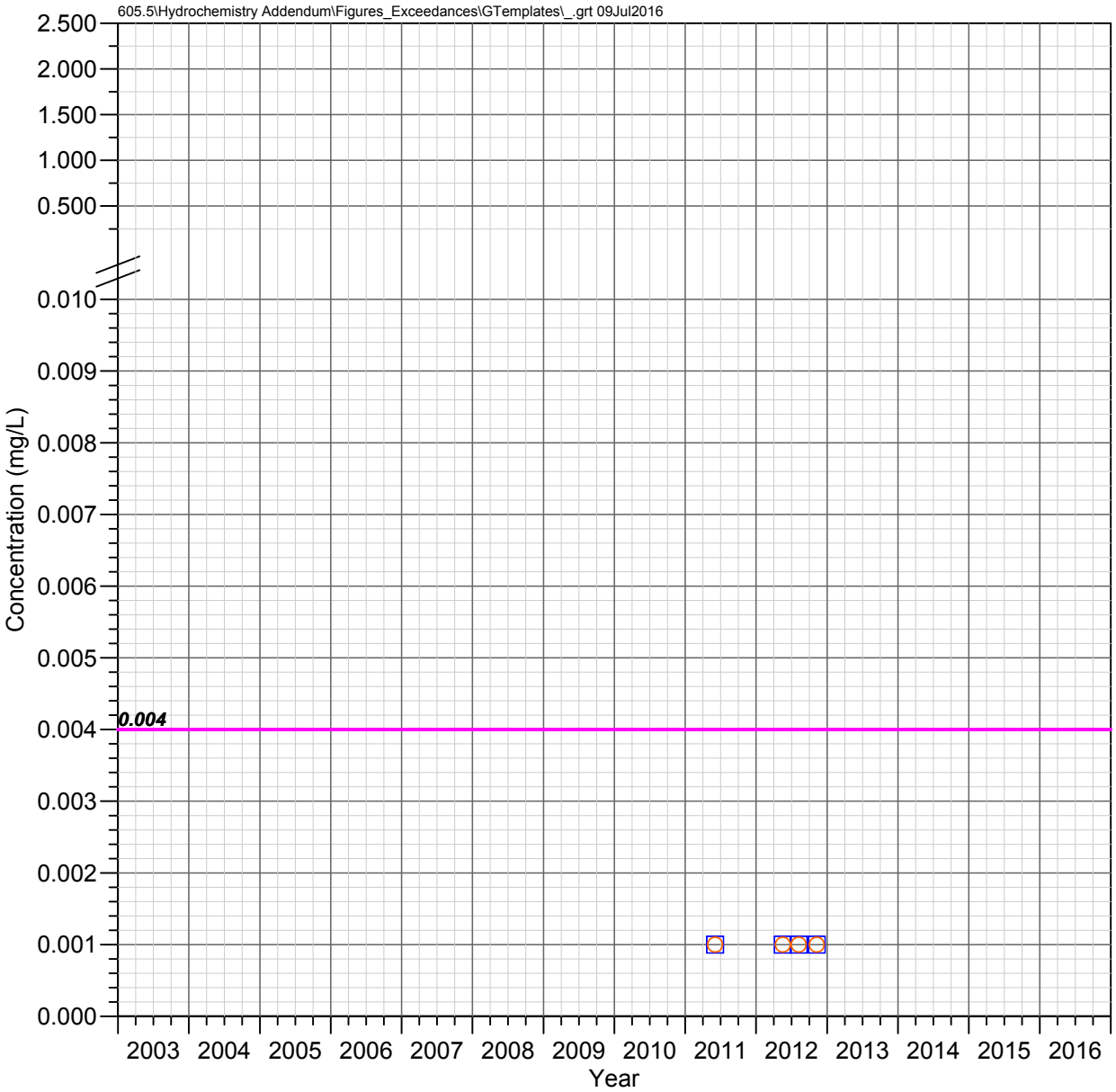


FIGURE E-133. BERYLLIUM CONCENTRATIONS OBSERVED AT HRES-12, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-13
Apache Leap Tuff Aquifer

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.004 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.004 mg/L)

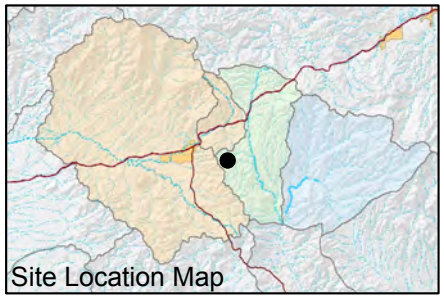
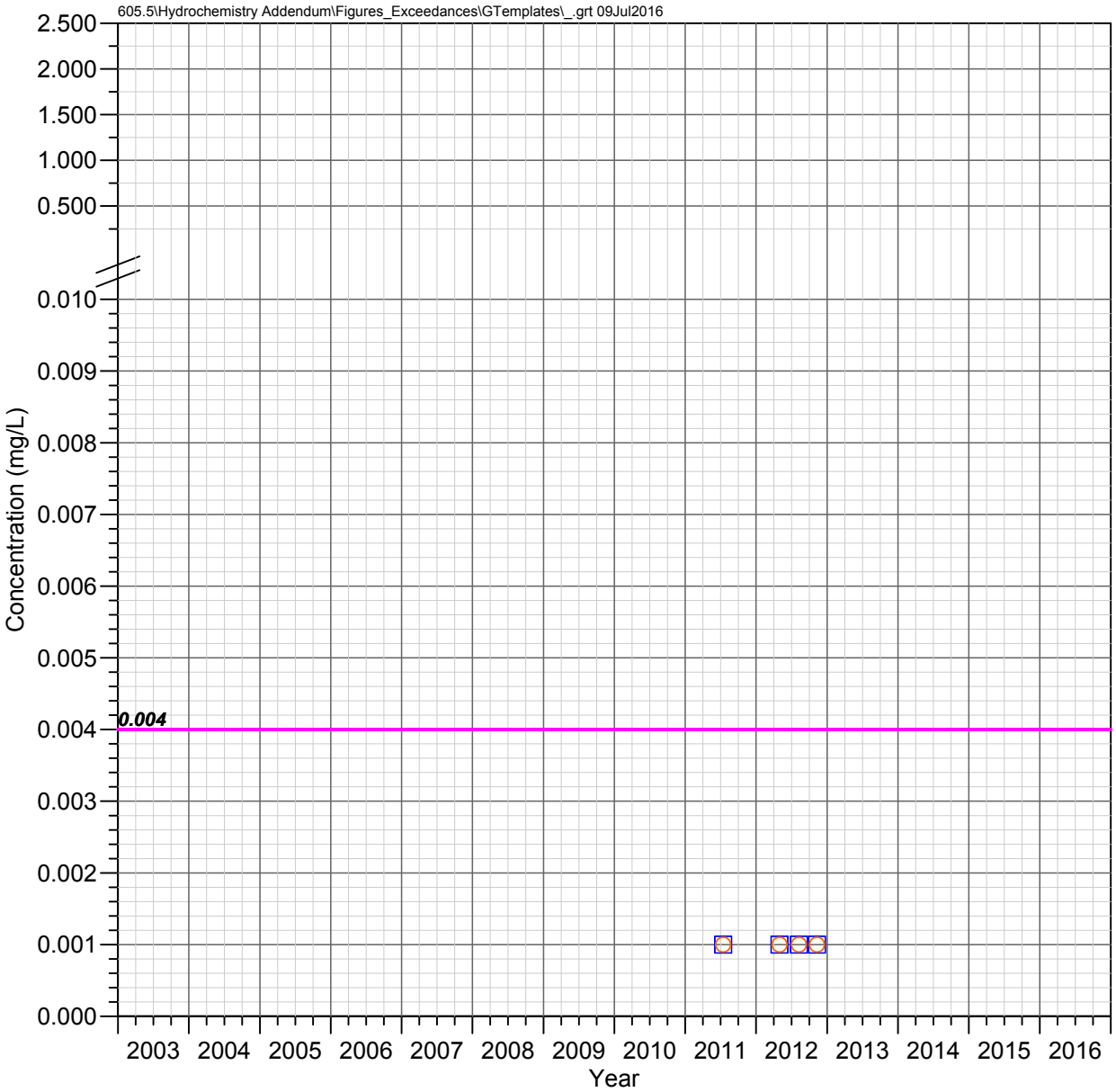


FIGURE E-134. BERYLLIUM CONCENTRATIONS OBSERVED AT HRES-13, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-14
Apache Leap Tuff Aquifer

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.004 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.004 mg/L)

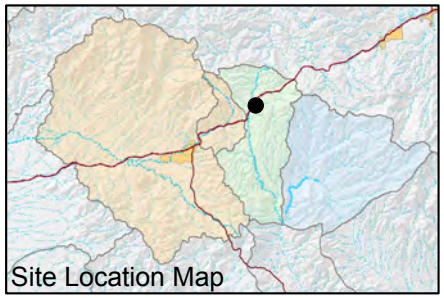
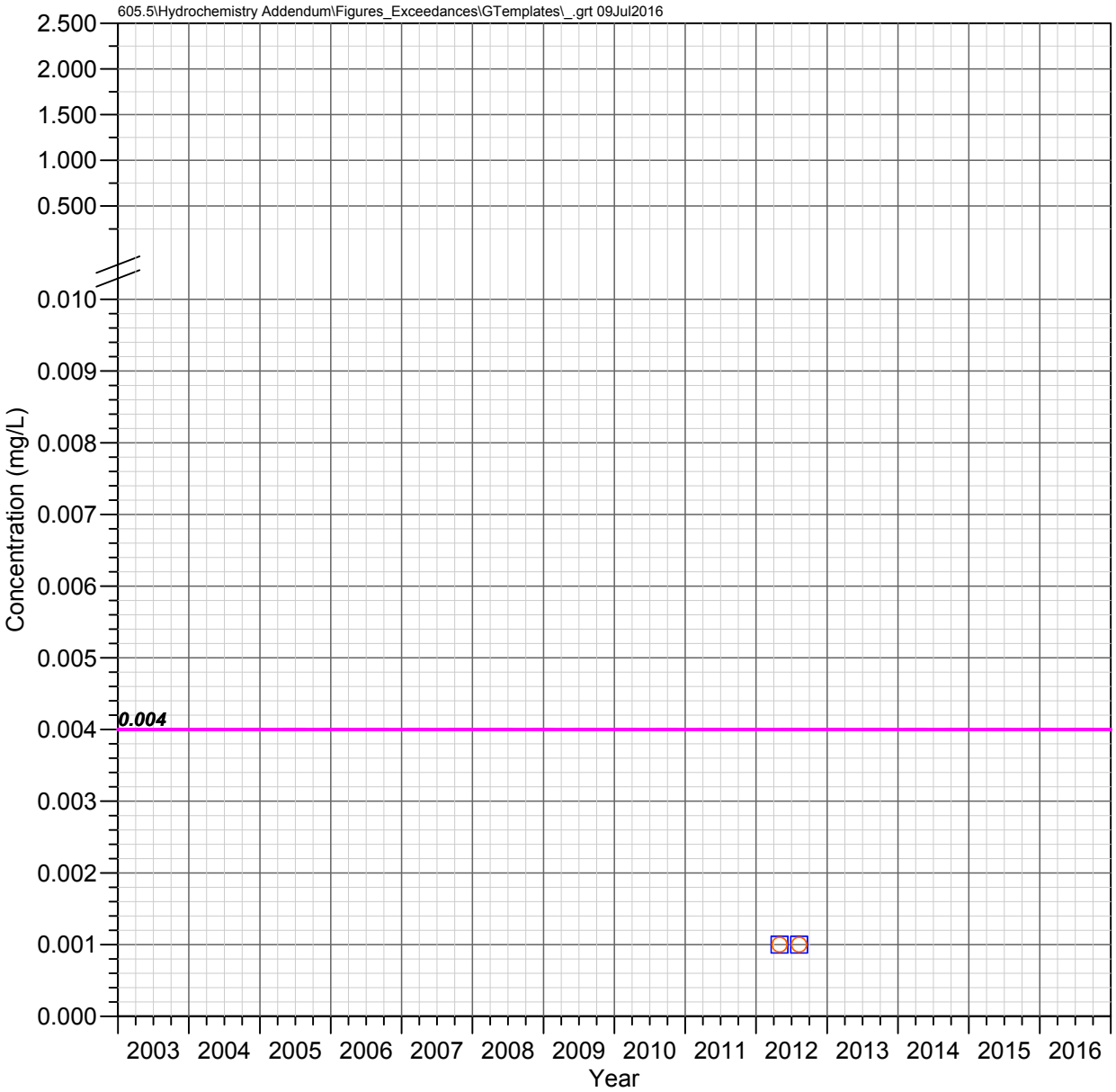


FIGURE E-135. BERYLLIUM CONCENTRATIONS OBSERVED AT HRES-14, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-15
Apache Leap Tuff Aquifer

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.004 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.004 mg/L)

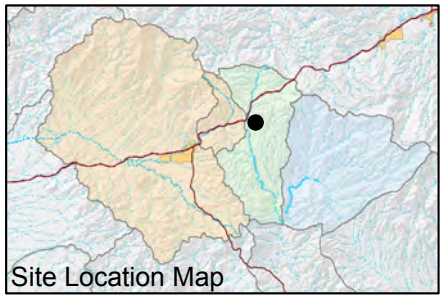
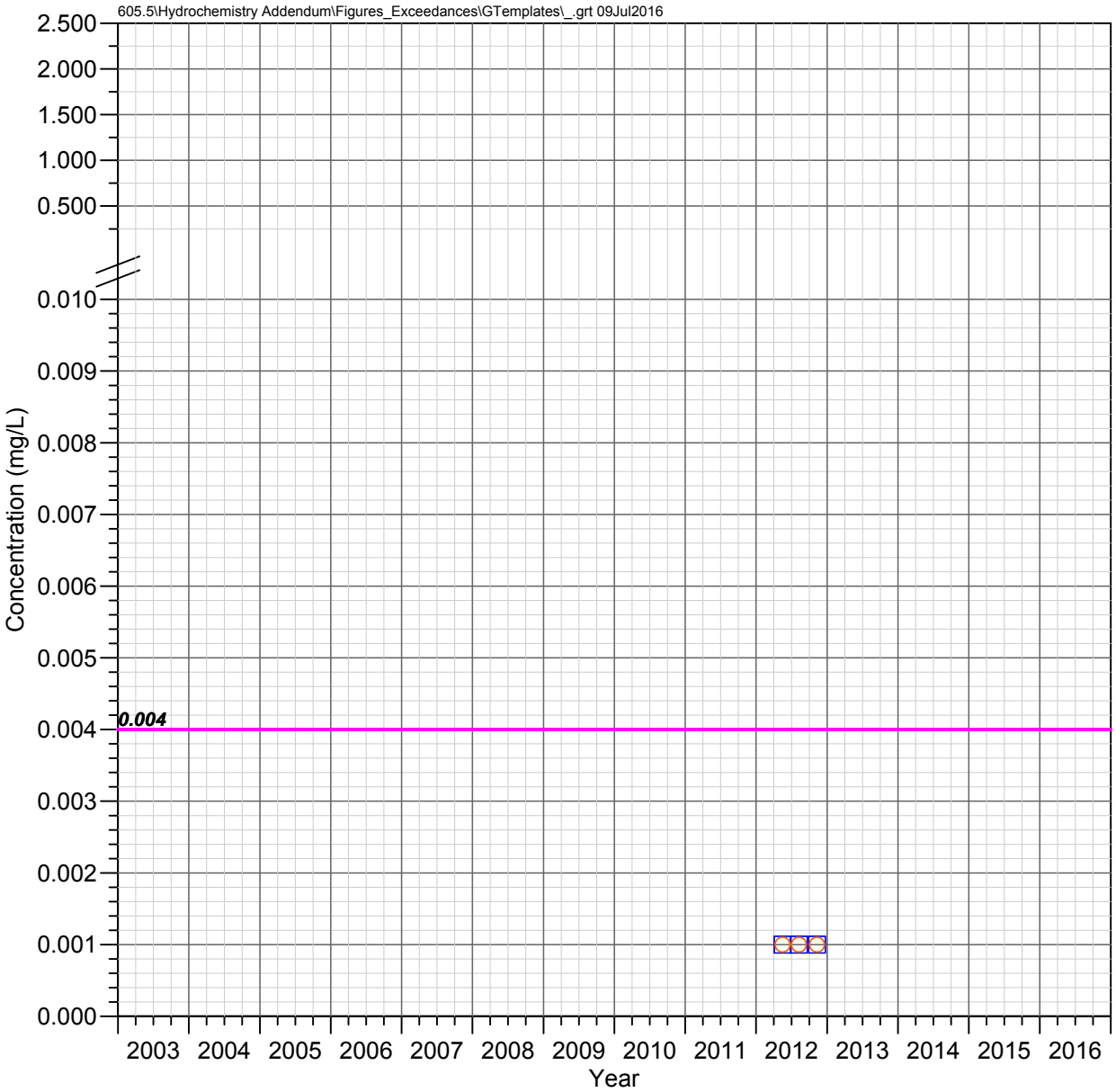


FIGURE E-136. BERYLLIUM CONCENTRATIONS OBSERVED AT HRES-15, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-17
Apache Leap Tuff Aquifer

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.004 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.004 mg/L)

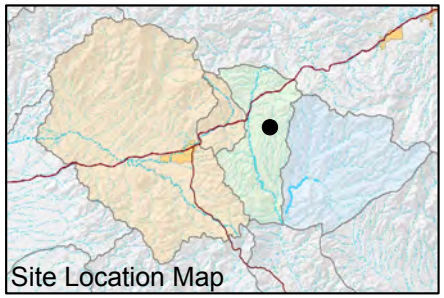
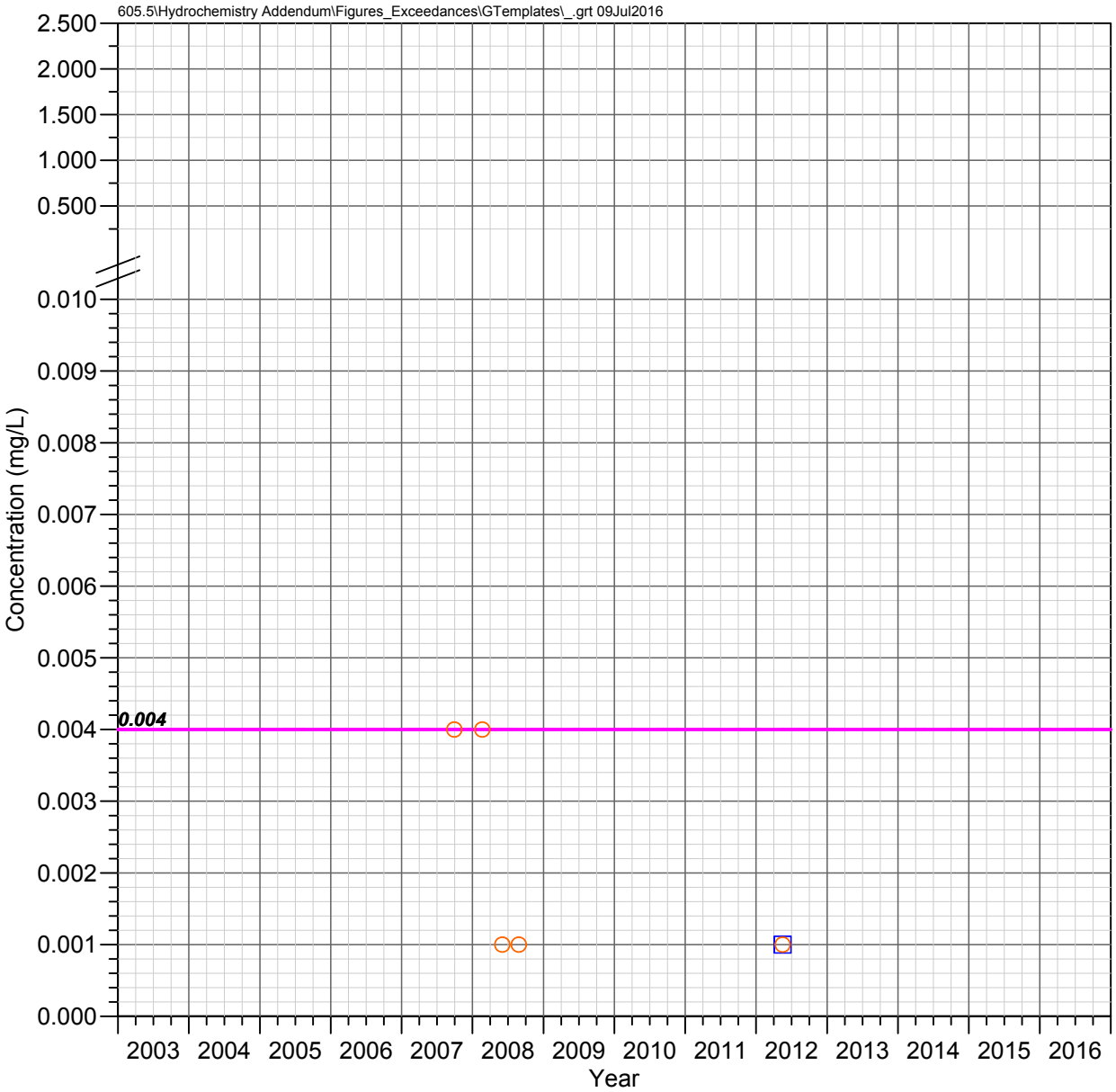


FIGURE E-137. BERYLLIUM CONCENTRATIONS OBSERVED AT HRES-17, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MJ-11
Apache Leap Tuff Aquifer

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.004 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.004 mg/L)

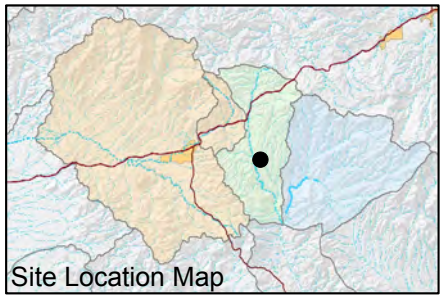
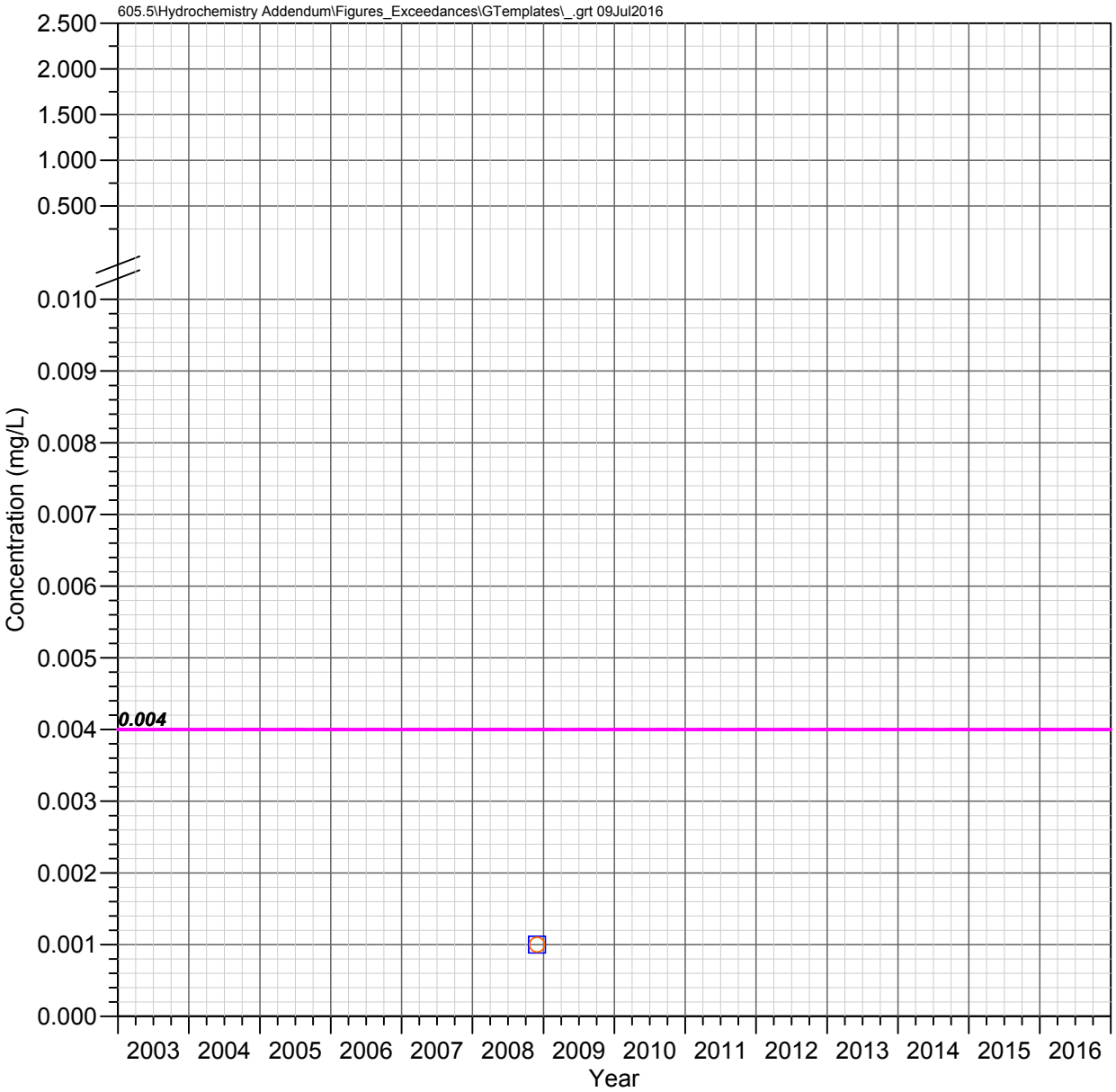


FIGURE E-138. BERYLLIUM CONCENTRATIONS OBSERVED AT MJ-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-01
Deep Groundwater System

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.004 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.004 mg/L)

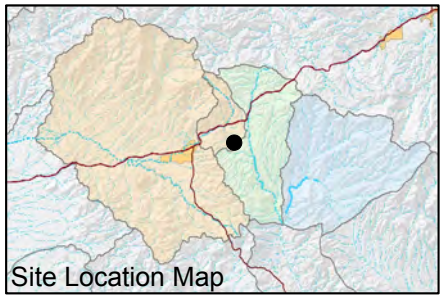
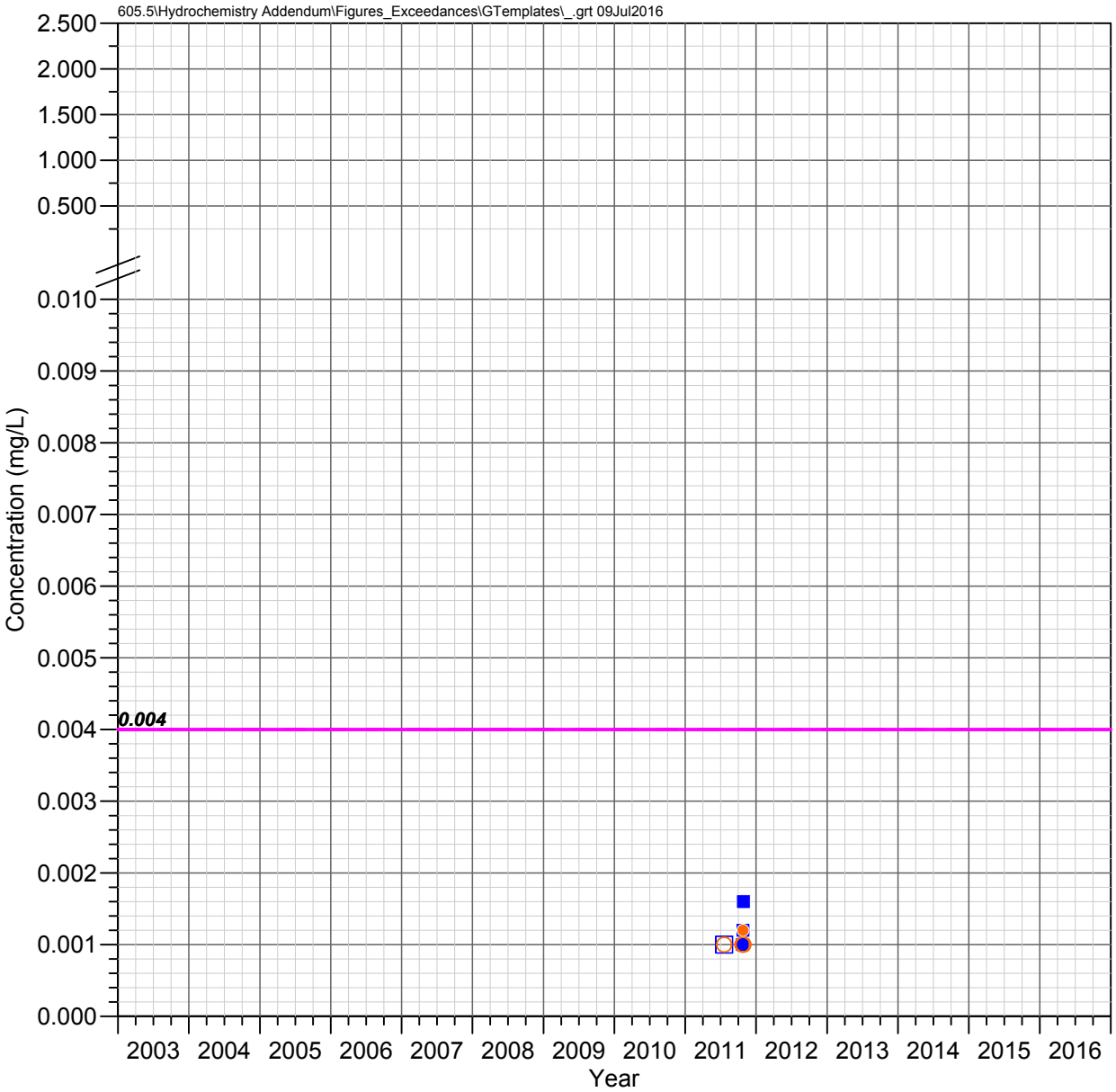


FIGURE E-139. BERYLLIUM CONCENTRATIONS OBSERVED AT DHRES-01, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-02
Deep Groundwater System

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.004 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.004 mg/L)

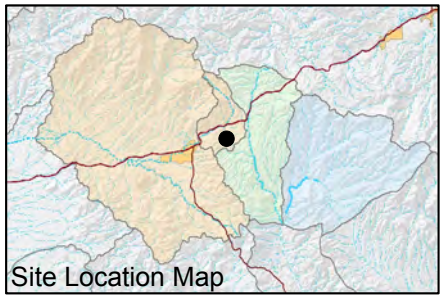
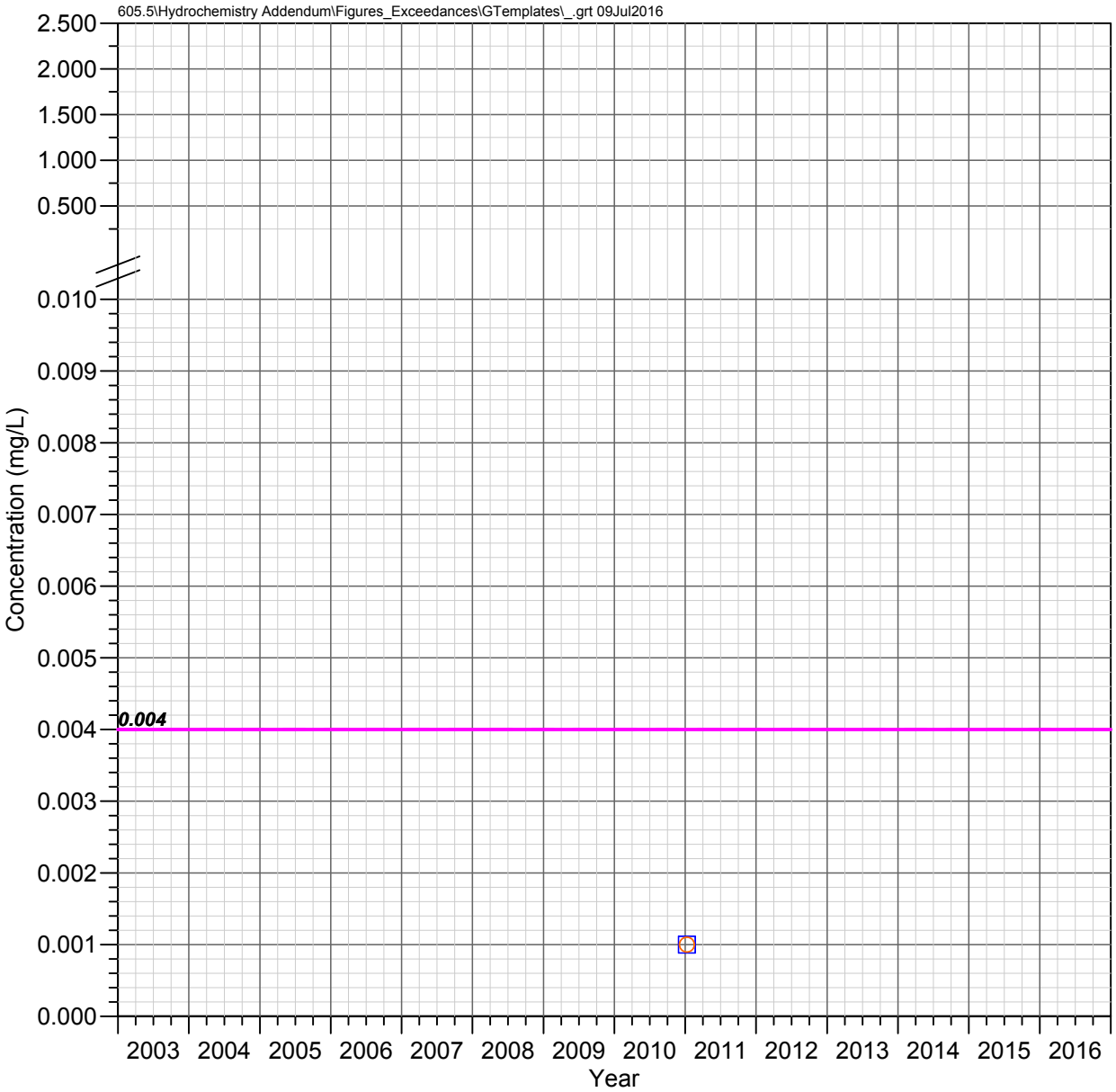


FIGURE E-140. BERYLLIUM CONCENTRATIONS OBSERVED AT DHRES-02, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-06
Deep Groundwater System

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.004 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.004 mg/L)

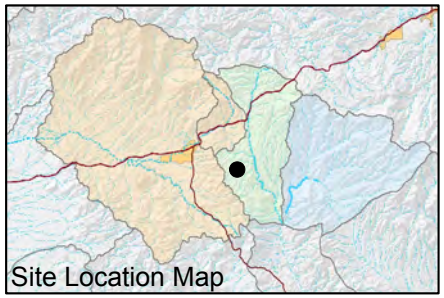
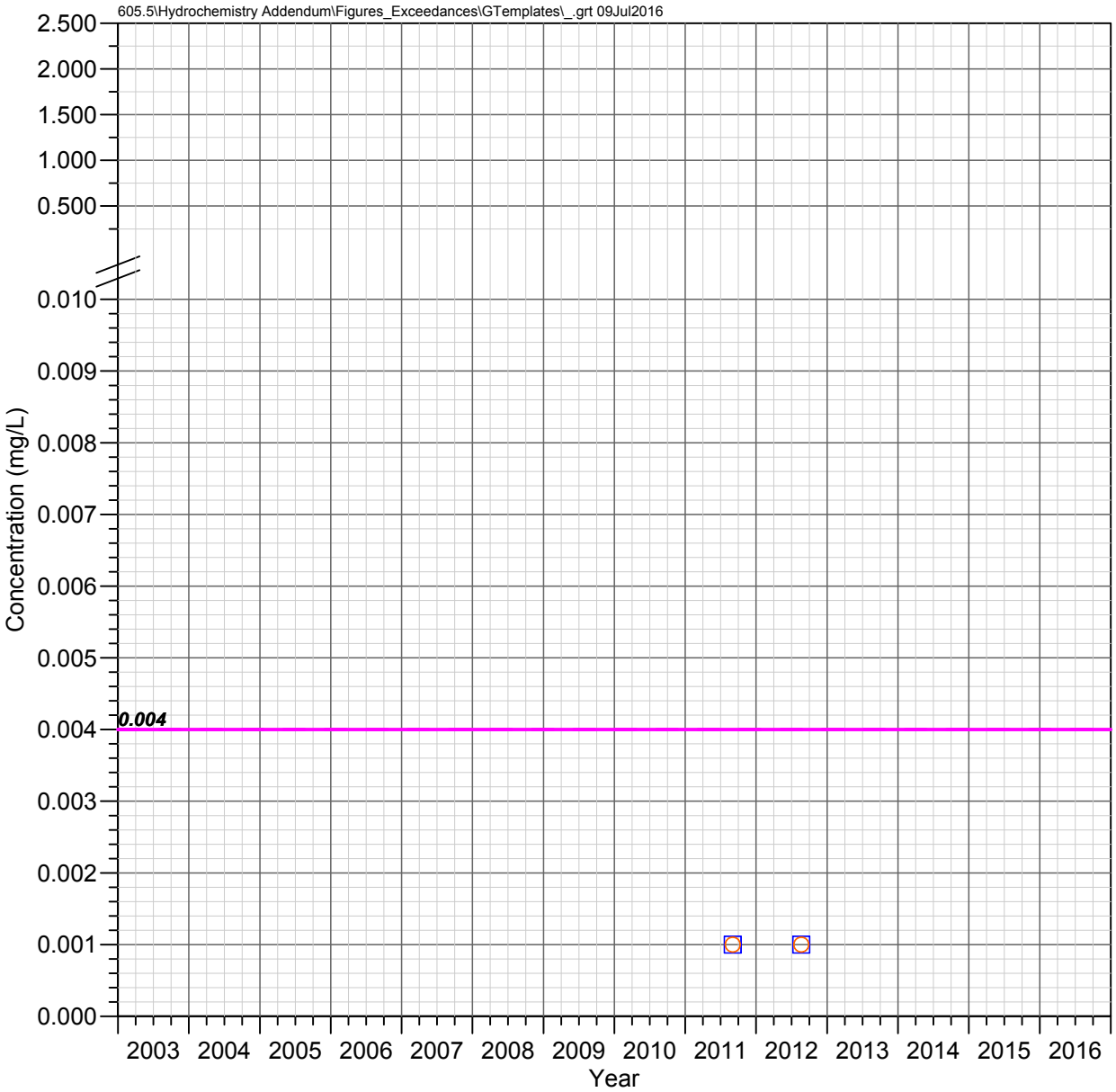


FIGURE E-141. BERYLLIUM CONCENTRATIONS OBSERVED AT DHRES-06, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-09
Deep Groundwater System

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.004 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.004 mg/L)

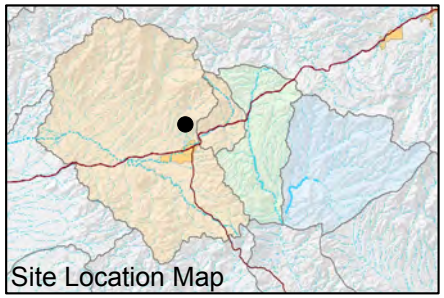
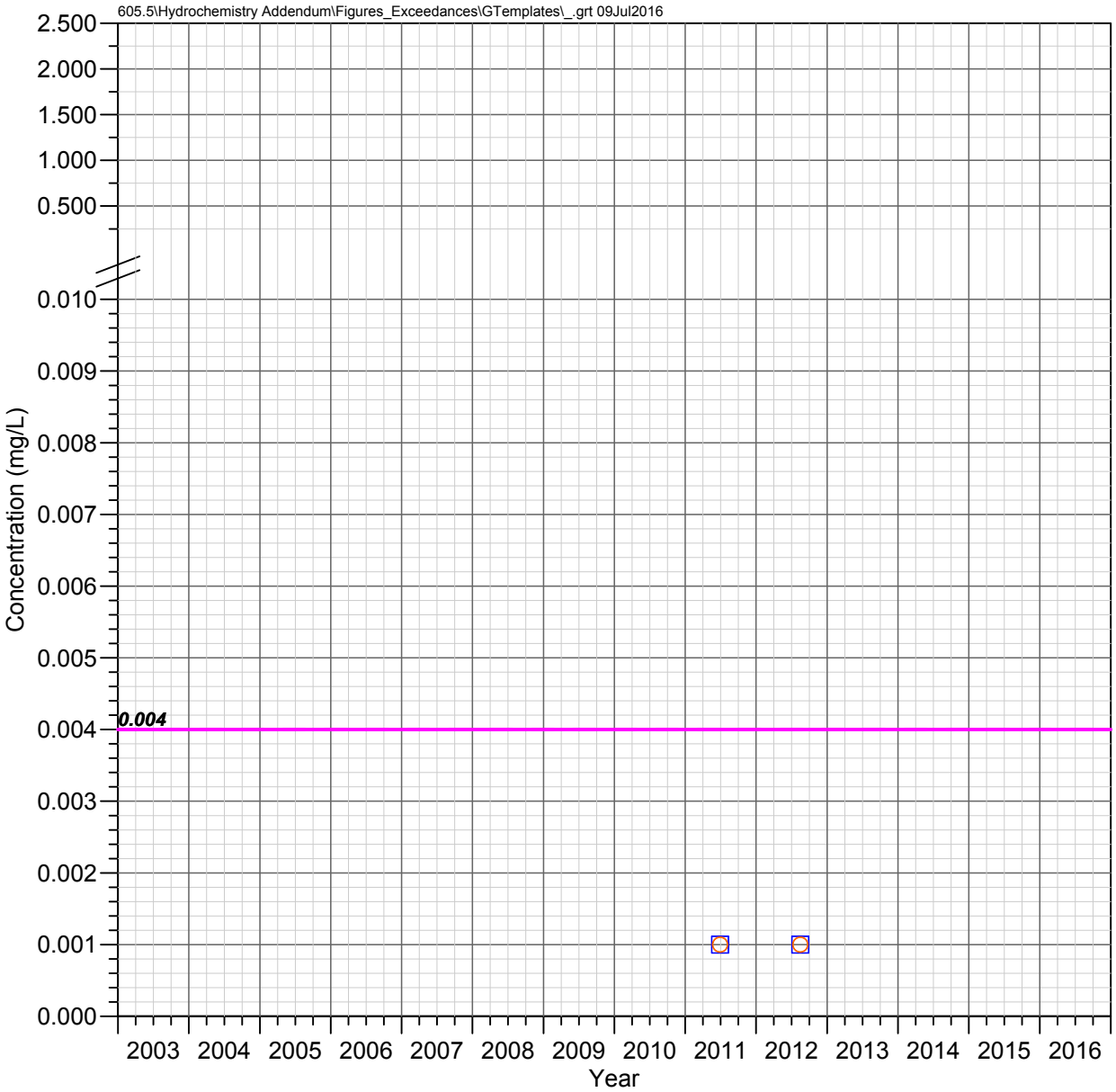


FIGURE E-142. BERYLLIUM CONCENTRATIONS OBSERVED AT DHRES-09, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-11
Deep Groundwater System

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.004 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.004 mg/L)

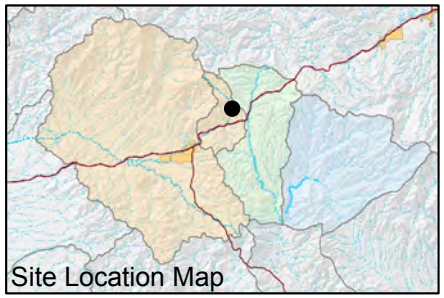
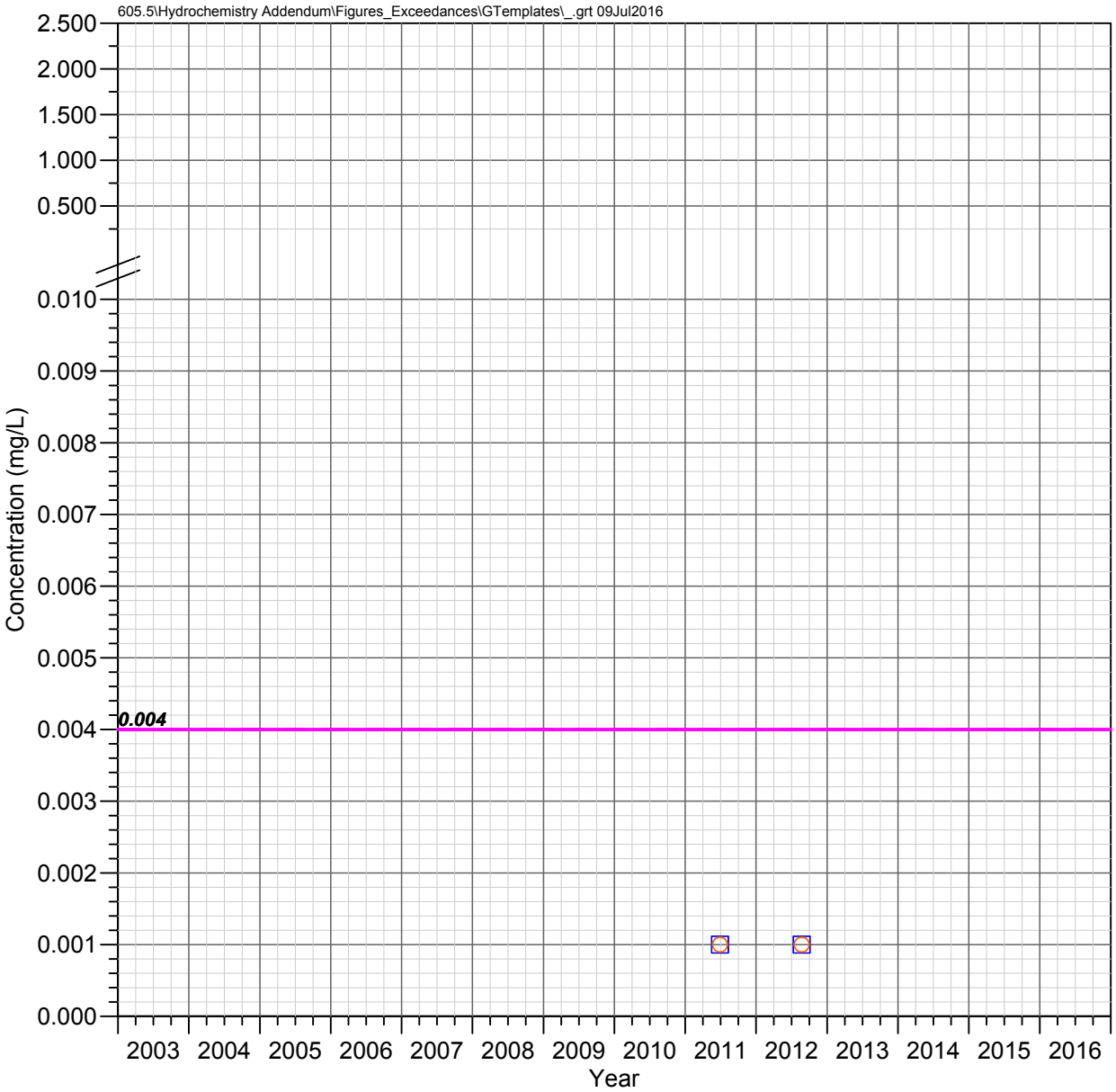


FIGURE E-143. BERYLLIUM CONCENTRATIONS OBSERVED AT DHRES-11, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-13
Deep Groundwater System

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.004 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.004 mg/L)

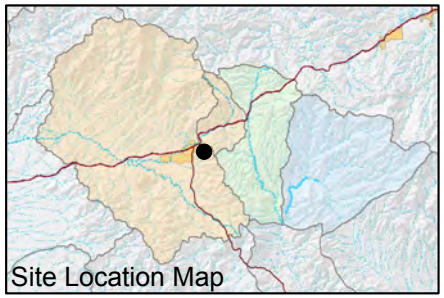
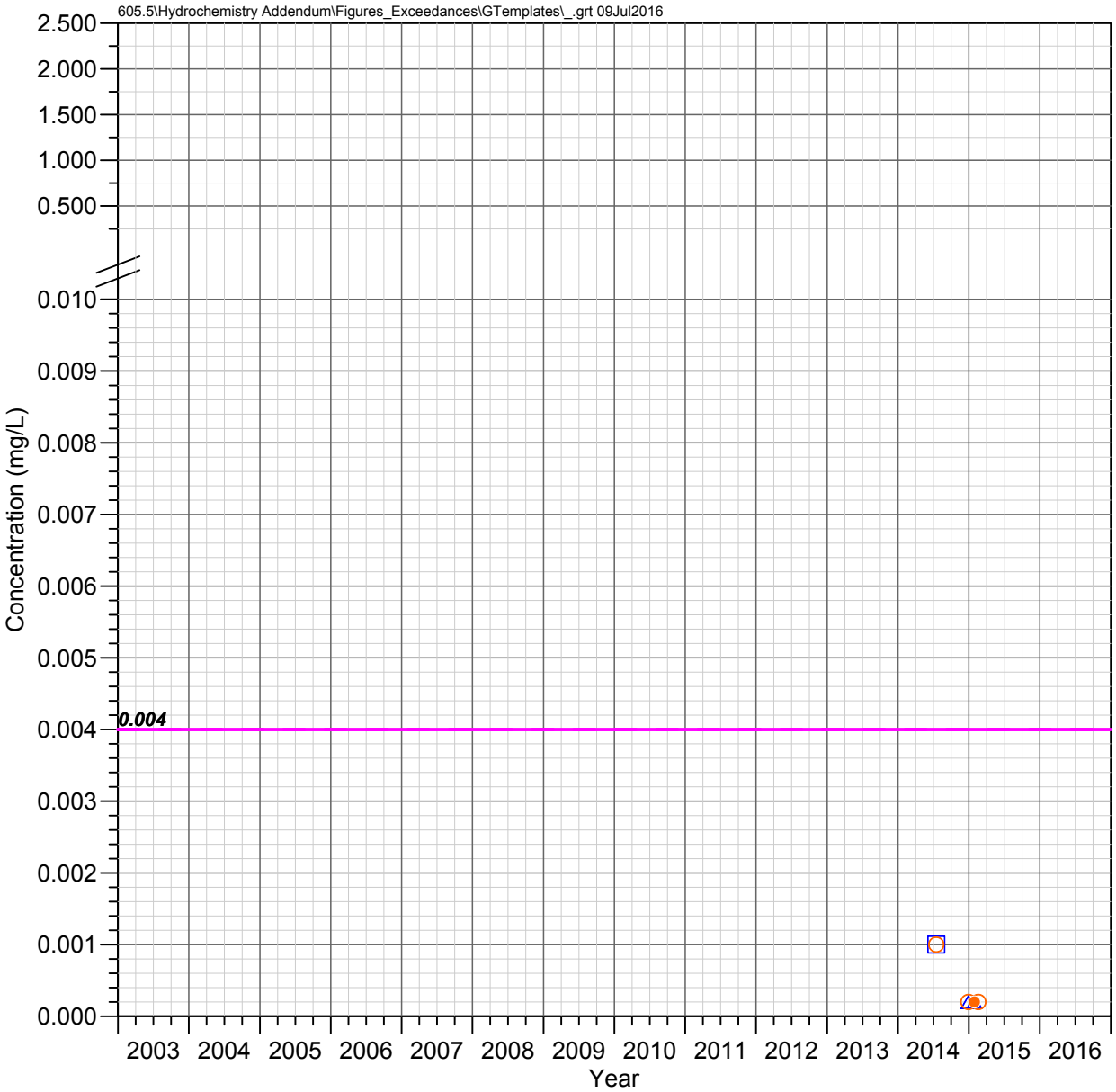


FIGURE E-144. BERYLLIUM CONCENTRATIONS OBSERVED AT DHRES-13, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-15
Deep Groundwater System

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.004 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.004 mg/L)

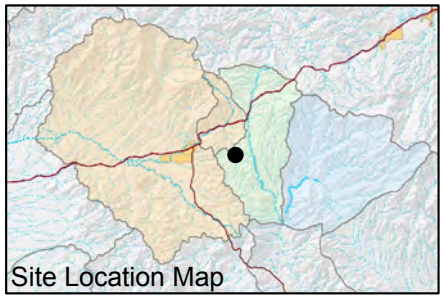
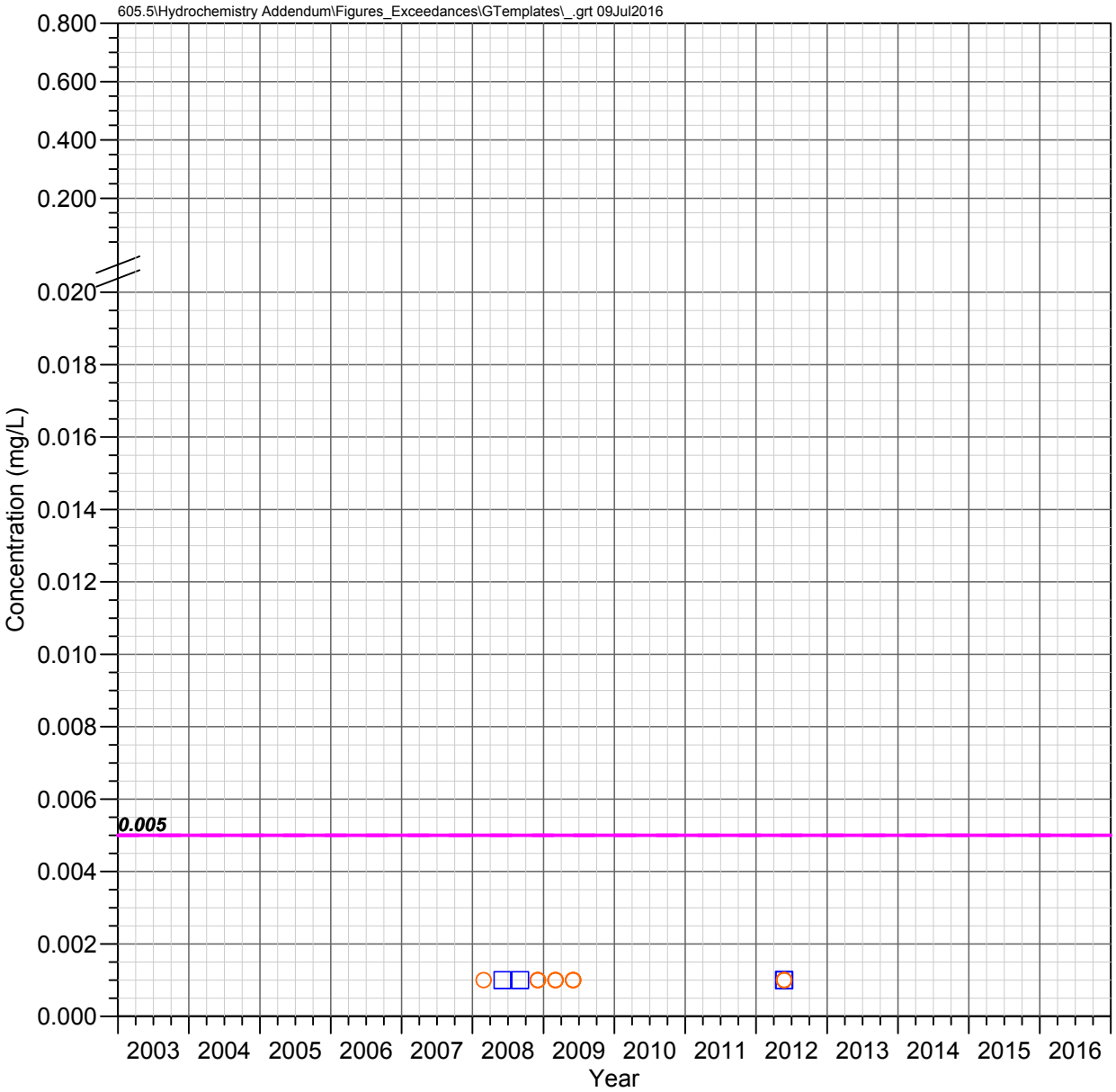


FIGURE E-145. BERYLLIUM CONCENTRATIONS OBSERVED AT DHRES-15, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Hackberry Windmill Well Shallow Groundwater System

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.005 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.005 mg/L)

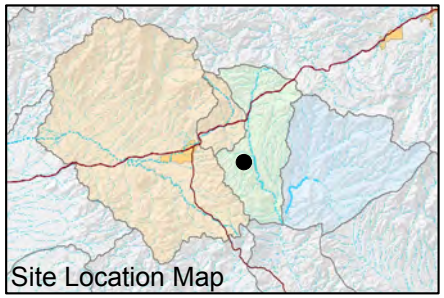
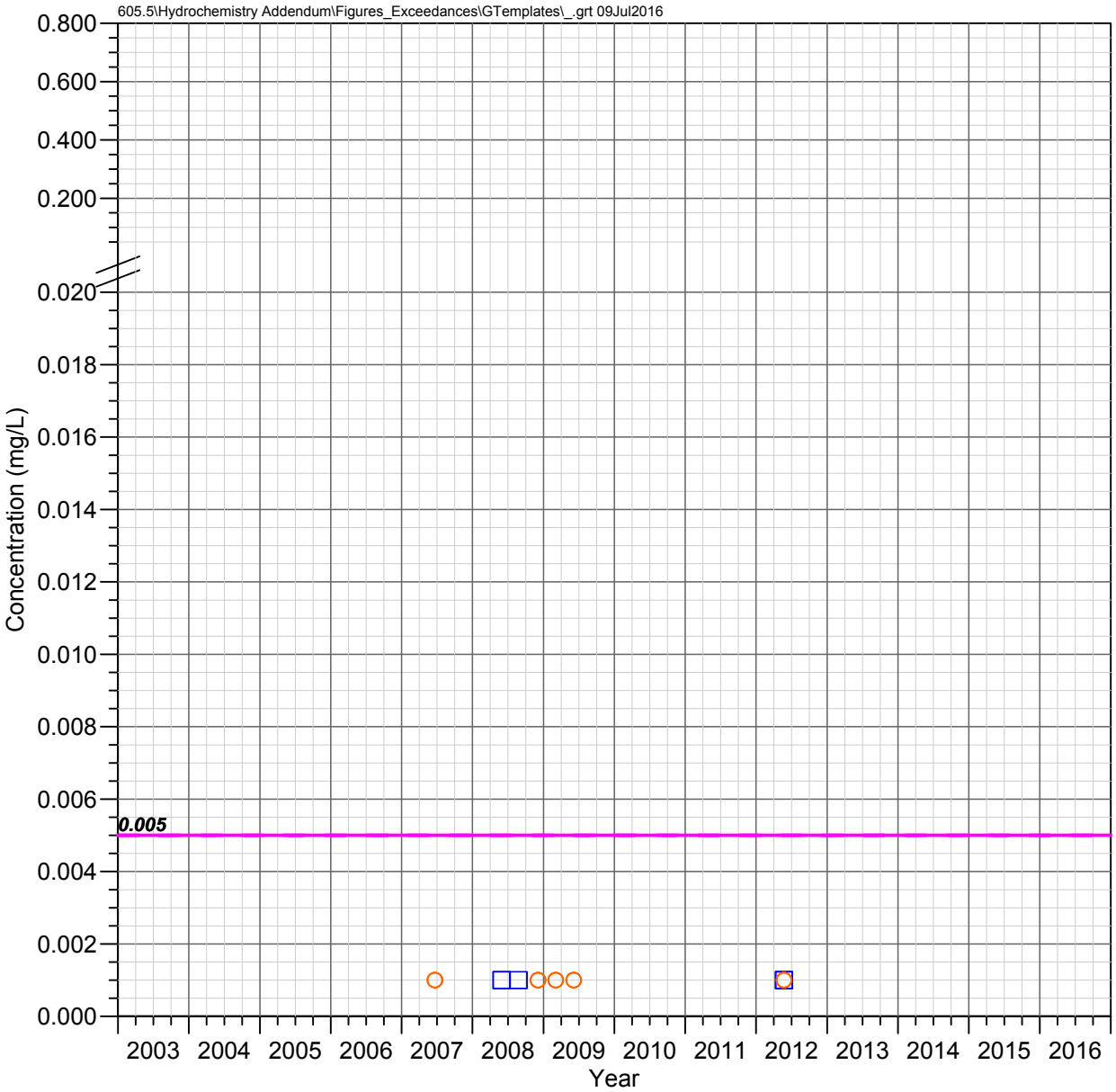


FIGURE E-146. CADMIUM CONCENTRATIONS OBSERVED AT HACKBERRY WINDMILL WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



JI Ranch Corral Well Shallow Groundwater System

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.005 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.005 mg/L)

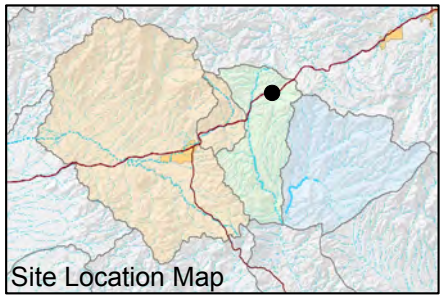
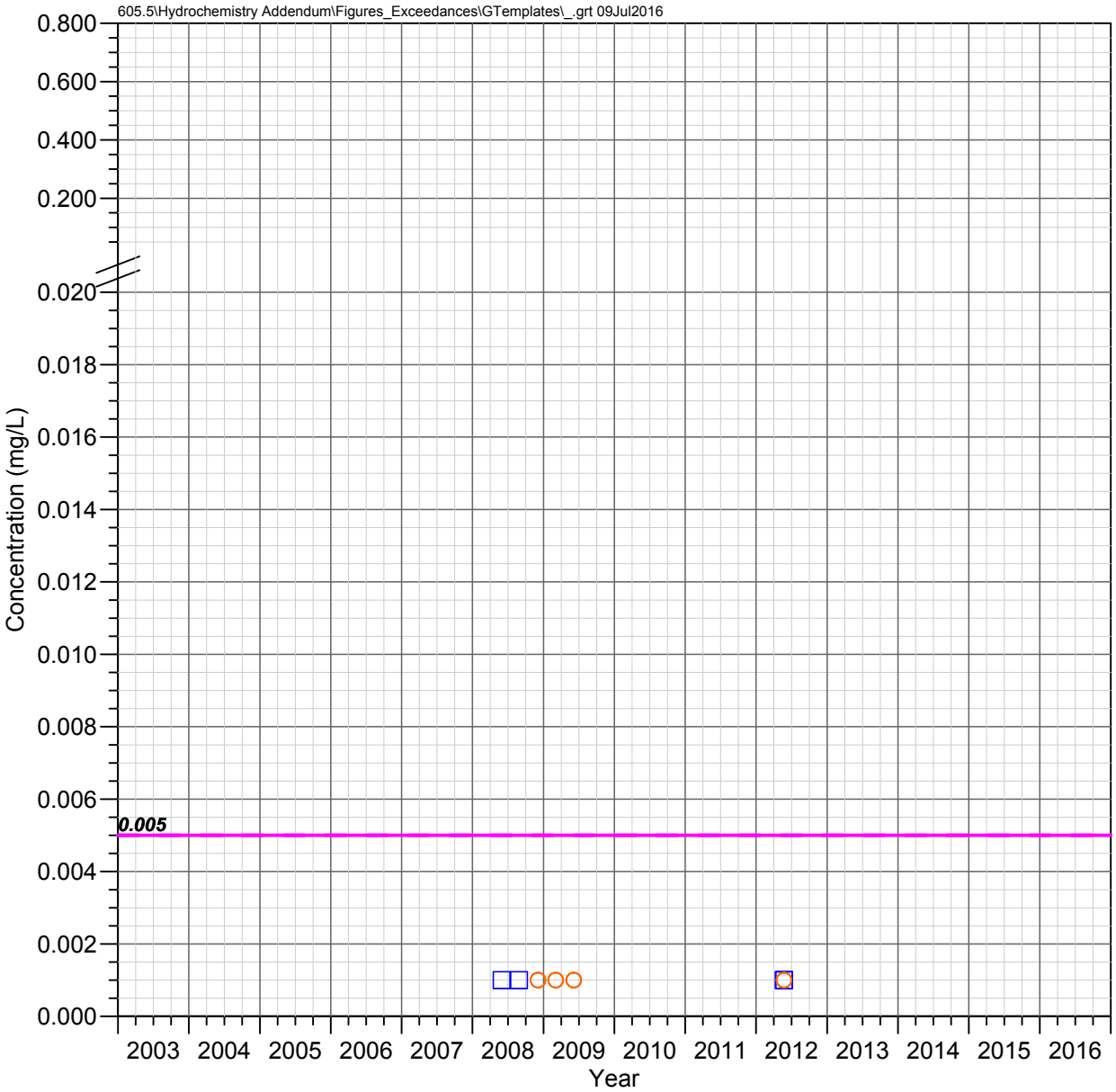


FIGURE E-147. CADMIUM CONCENTRATIONS OBSERVED AT JI RANCH CORRAL WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



JI Ranch Middle Well Shallow Groundwater System

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.005 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.005 mg/L)

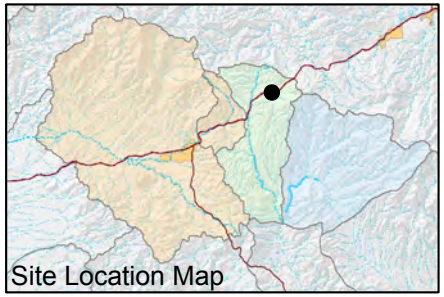
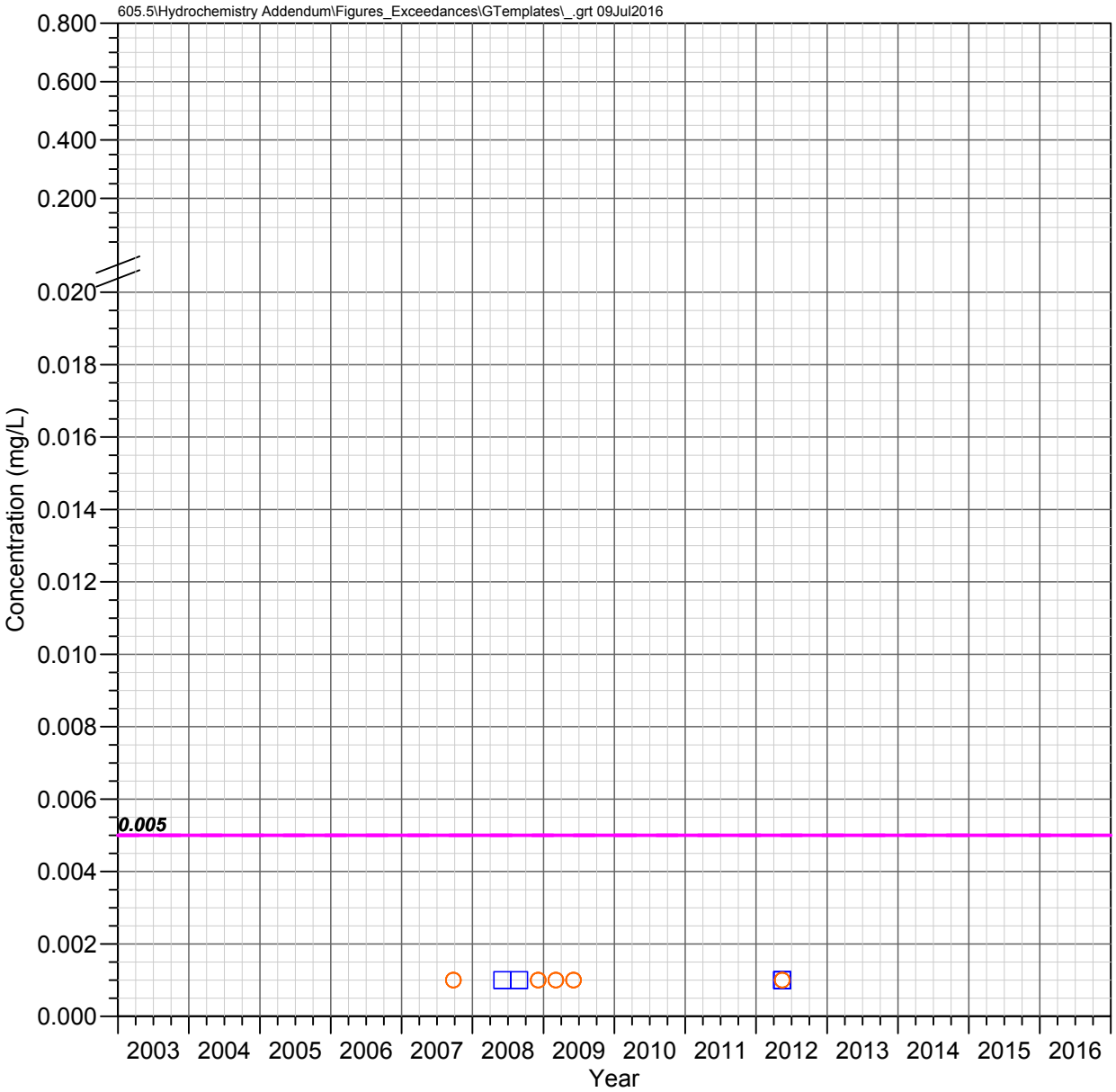


FIGURE E-148. CADMIUM CONCENTRATIONS OBSERVED AT JI RANCH MIDDLE WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



A-06
Apache Leap Tuff Aquifer

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.005 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.005 mg/L)

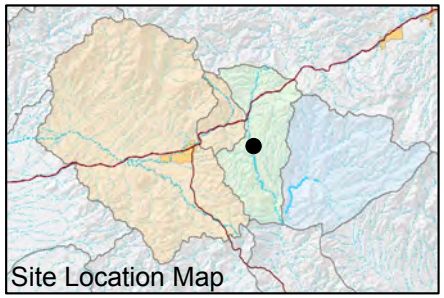
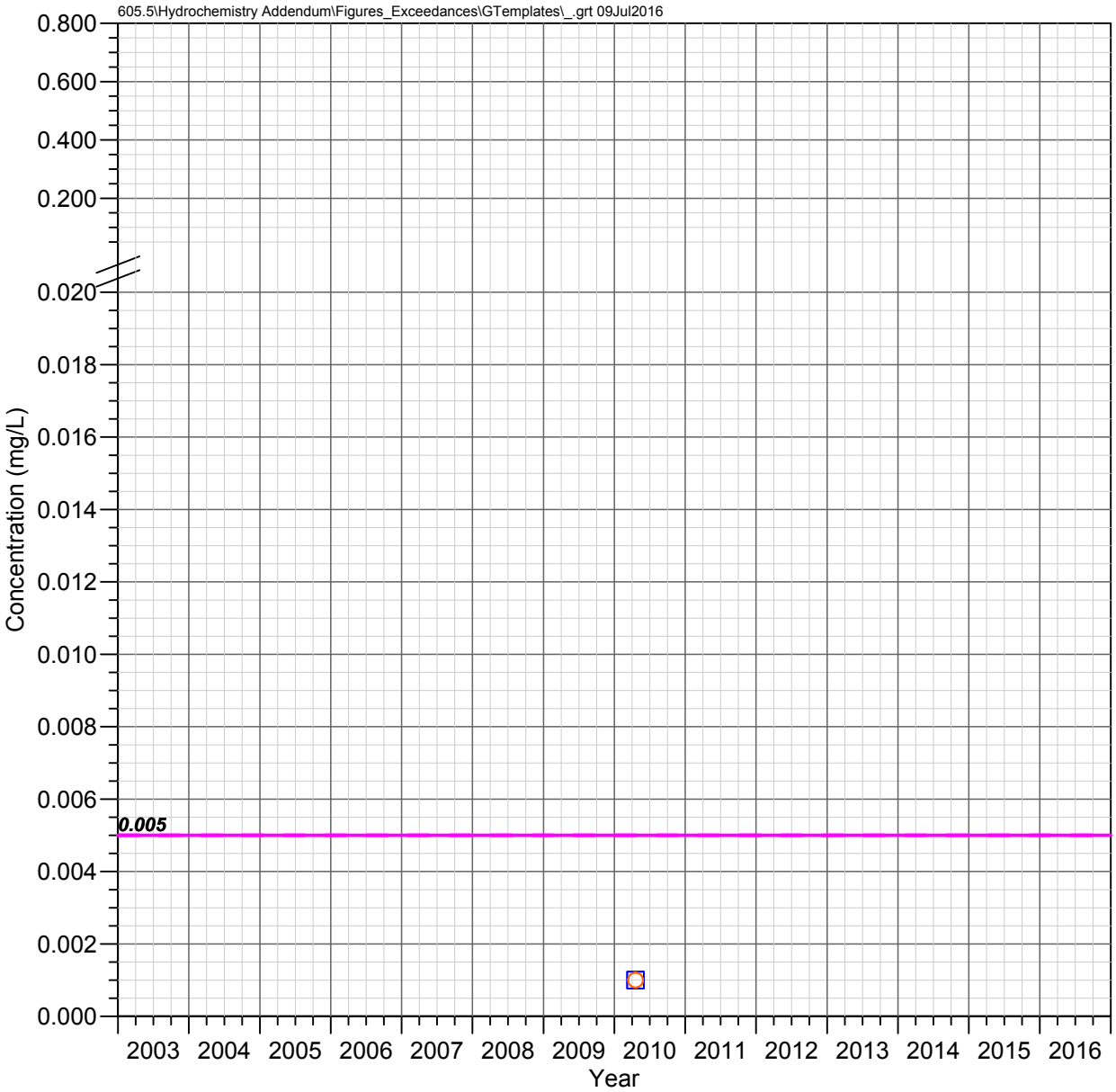


FIGURE E-149. CADMIUM CONCENTRATIONS OBSERVED AT A-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



CT Well
Apache Leap Tuff Aquifer

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.005 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.005 mg/L)

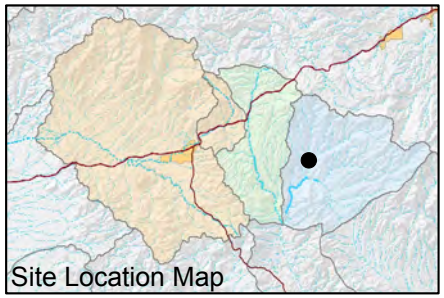
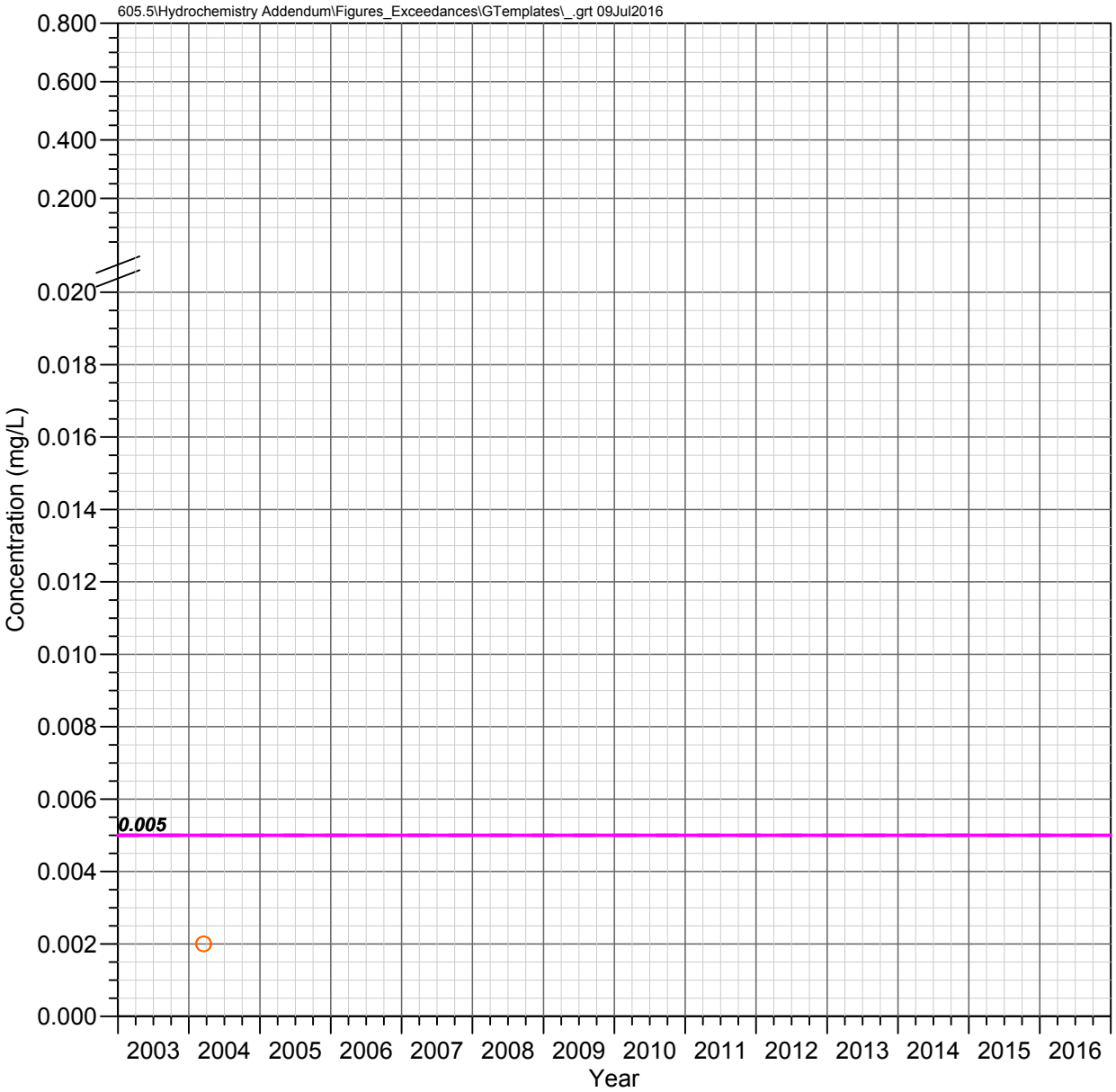


FIGURE E-150. CADMIUM CONCENTRATIONS OBSERVED AT CT WELL, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-01
Apache Leap Tuff Aquifer

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.005 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.005 mg/L)

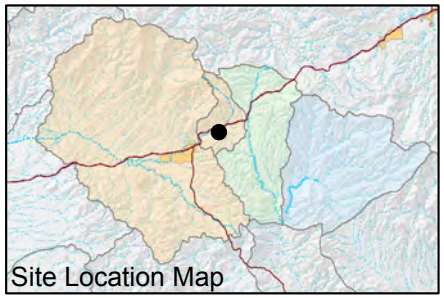
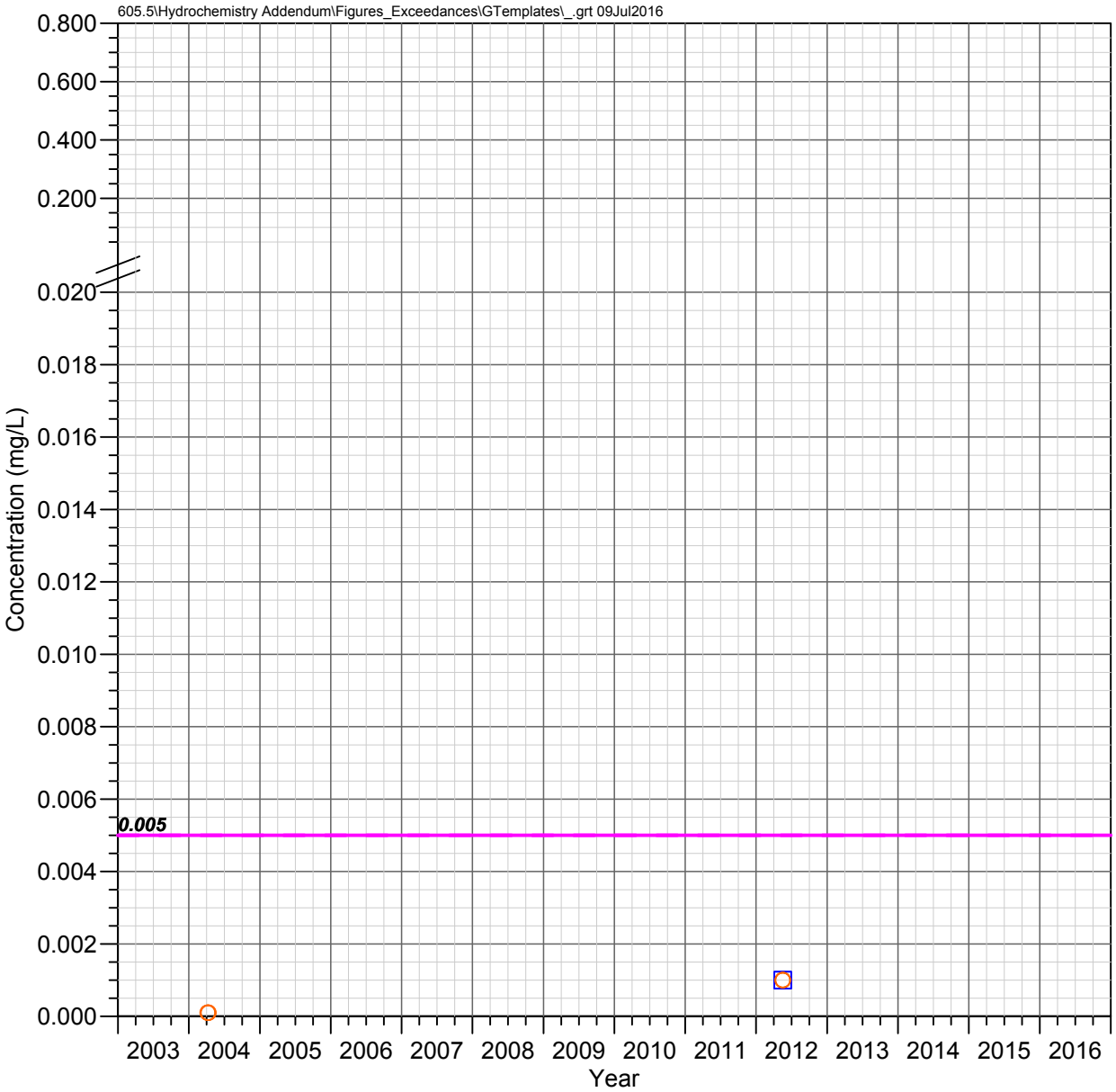


FIGURE E-151. CADMIUM CONCENTRATIONS OBSERVED AT HRES-01, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-02
Apache Leap Tuff Aquifer

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.005 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.005 mg/L)

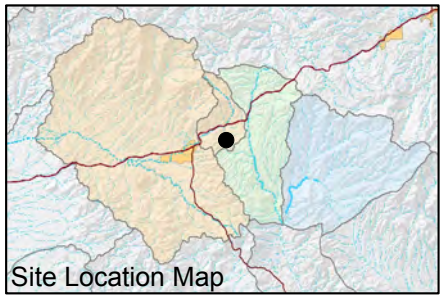


FIGURE E-152. CADMIUM CONCENTRATIONS OBSERVED AT HRES-02, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES

HRES-03d
Apache Leap Tuff Aquifer

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.005 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.005 mg/L)

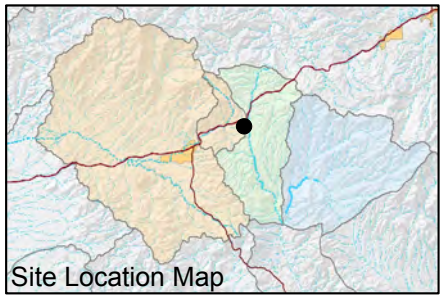
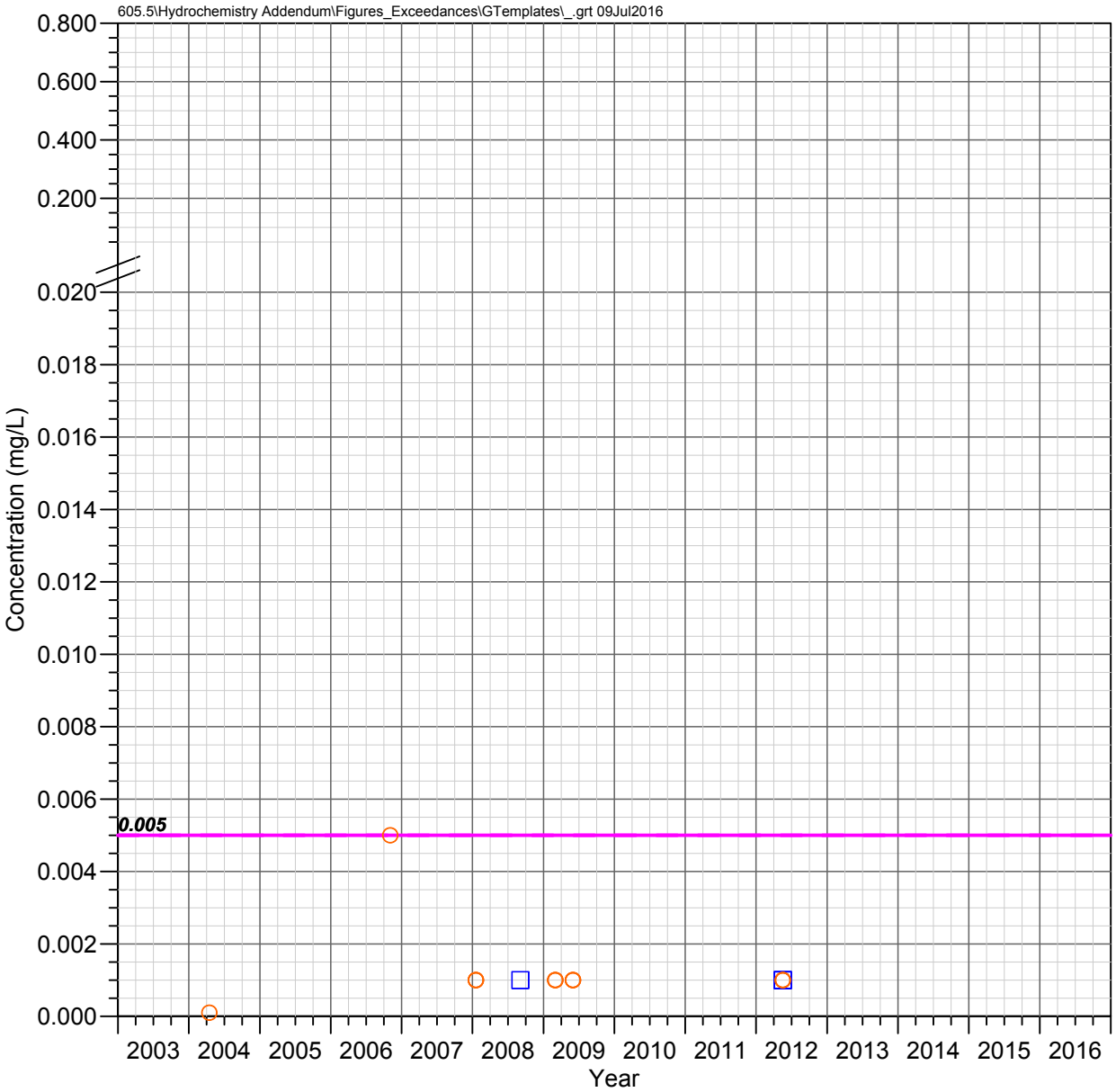


FIGURE E-153. CADMIUM CONCENTRATIONS OBSERVED AT HRES-03D, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-04
Apache Leap Tuff Aquifer

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.005 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.005 mg/L)

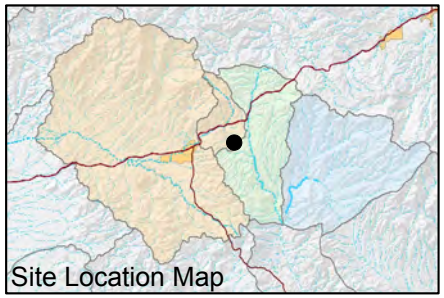
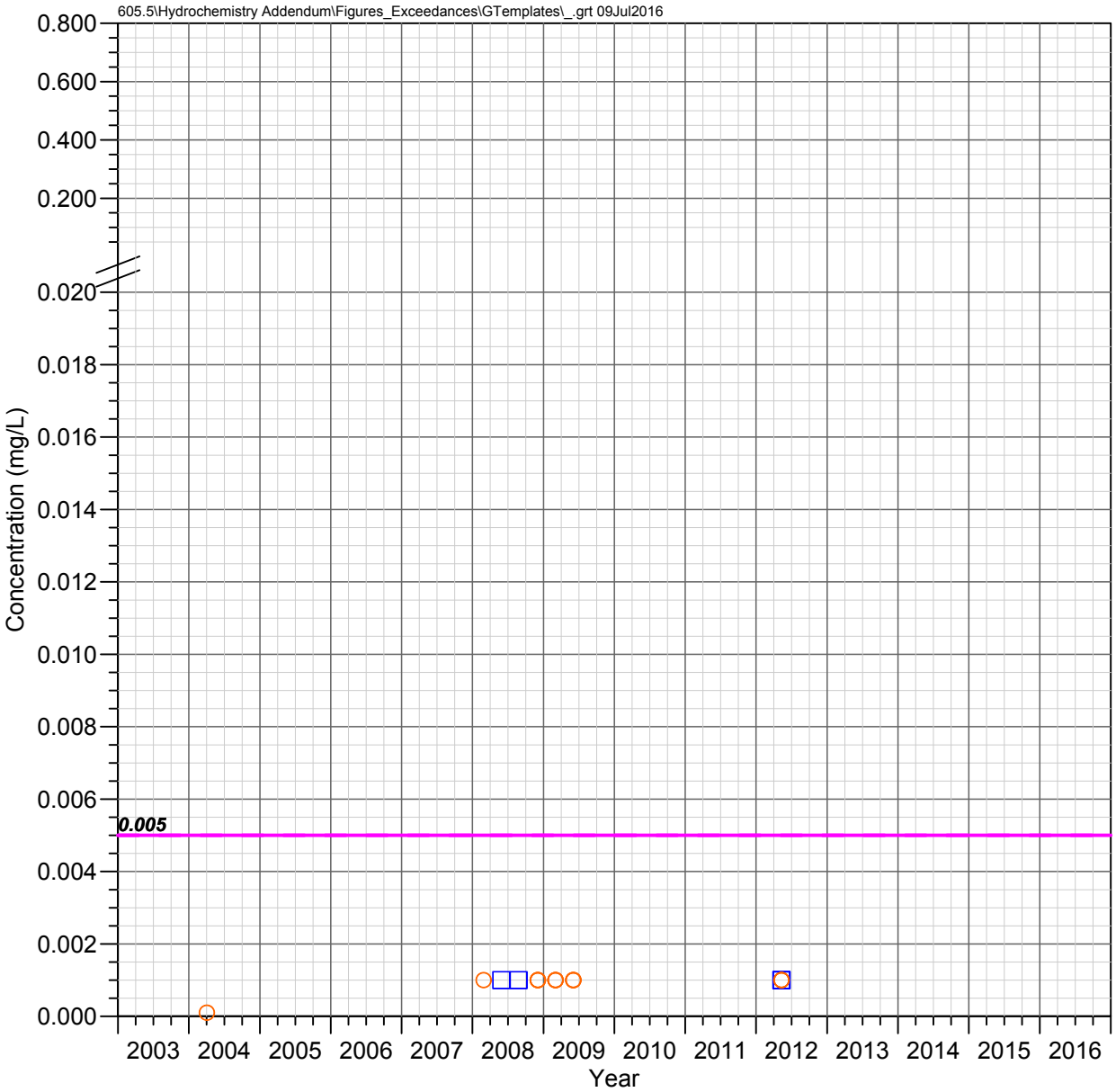


FIGURE E-154. CADMIUM CONCENTRATIONS OBSERVED AT HRES-04, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-05
Apache Leap Tuff Aquifer

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.005 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.005 mg/L)

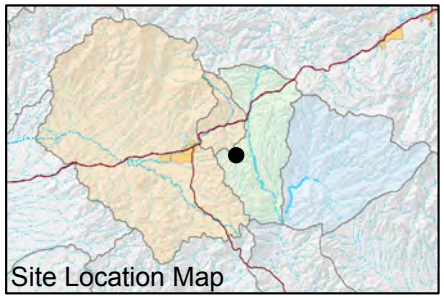
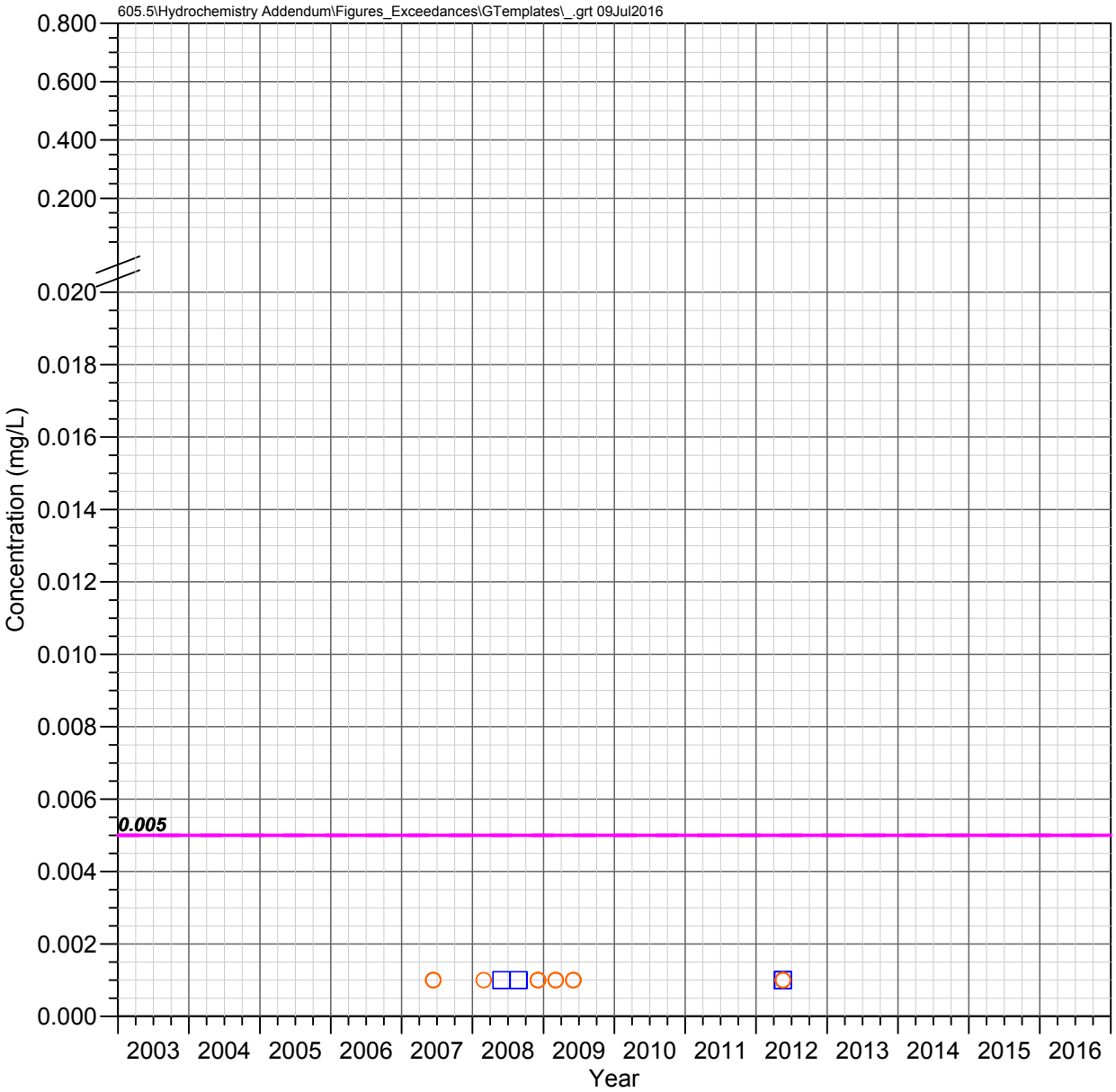


FIGURE E-155. CADMIUM CONCENTRATIONS OBSERVED AT HRES-05, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-06
Apache Leap Tuff Aquifer

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.005 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.005 mg/L)

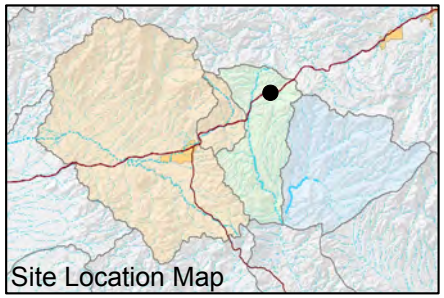
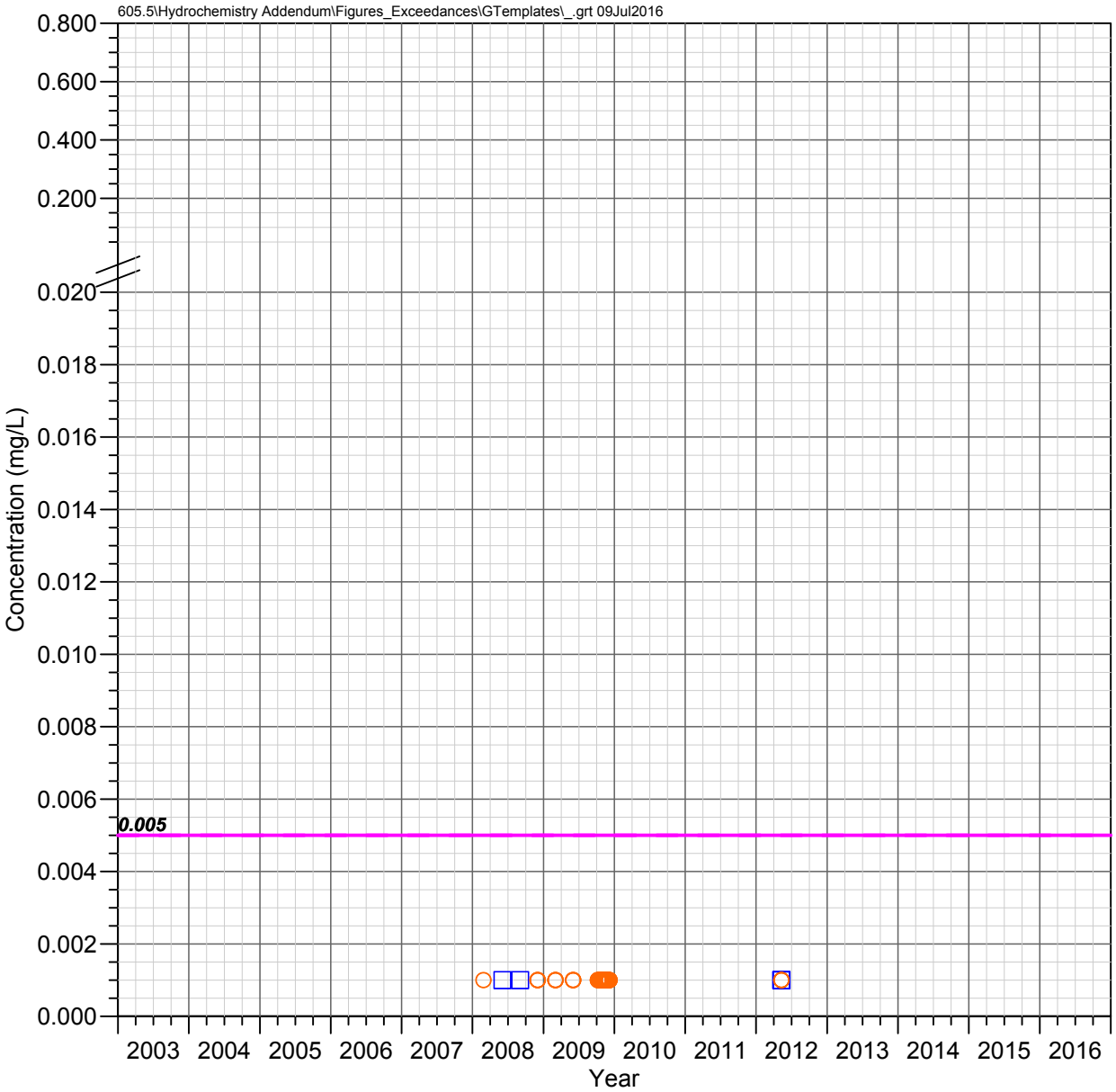


FIGURE E-156. CADMIUM CONCENTRATIONS OBSERVED AT HRES-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-07
Apache Leap Tuff Aquifer

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.005 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.005 mg/L)

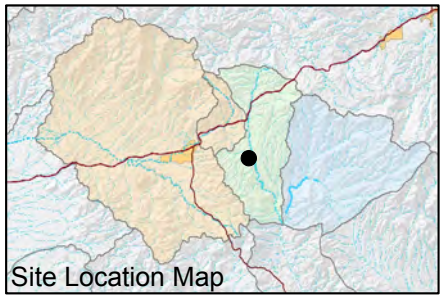
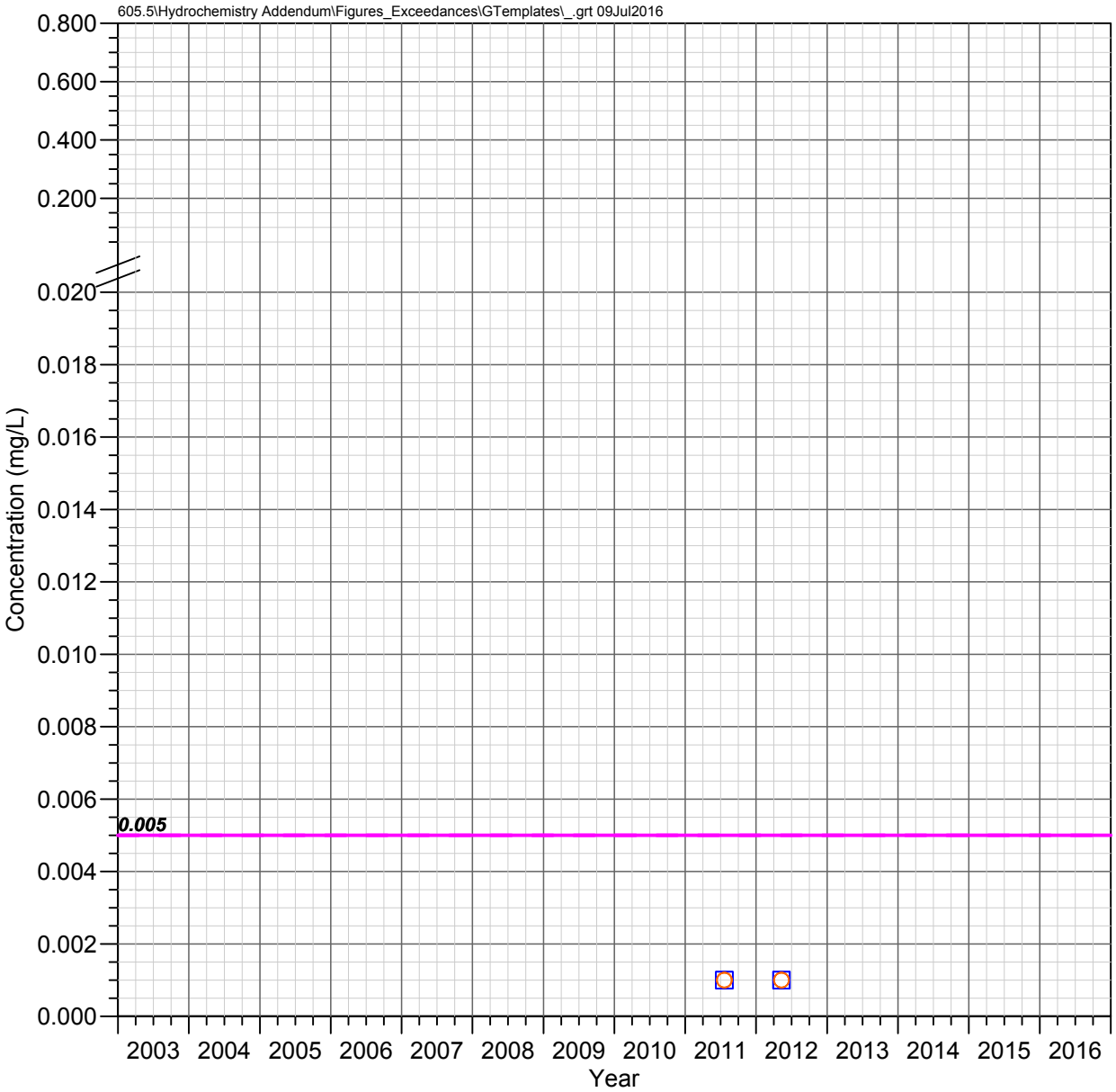


FIGURE E-157. CADMIUM CONCENTRATIONS OBSERVED AT HRES-07, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-08
Apache Leap Tuff Aquifer

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.005 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.005 mg/L)

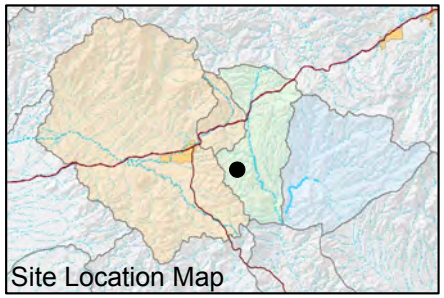
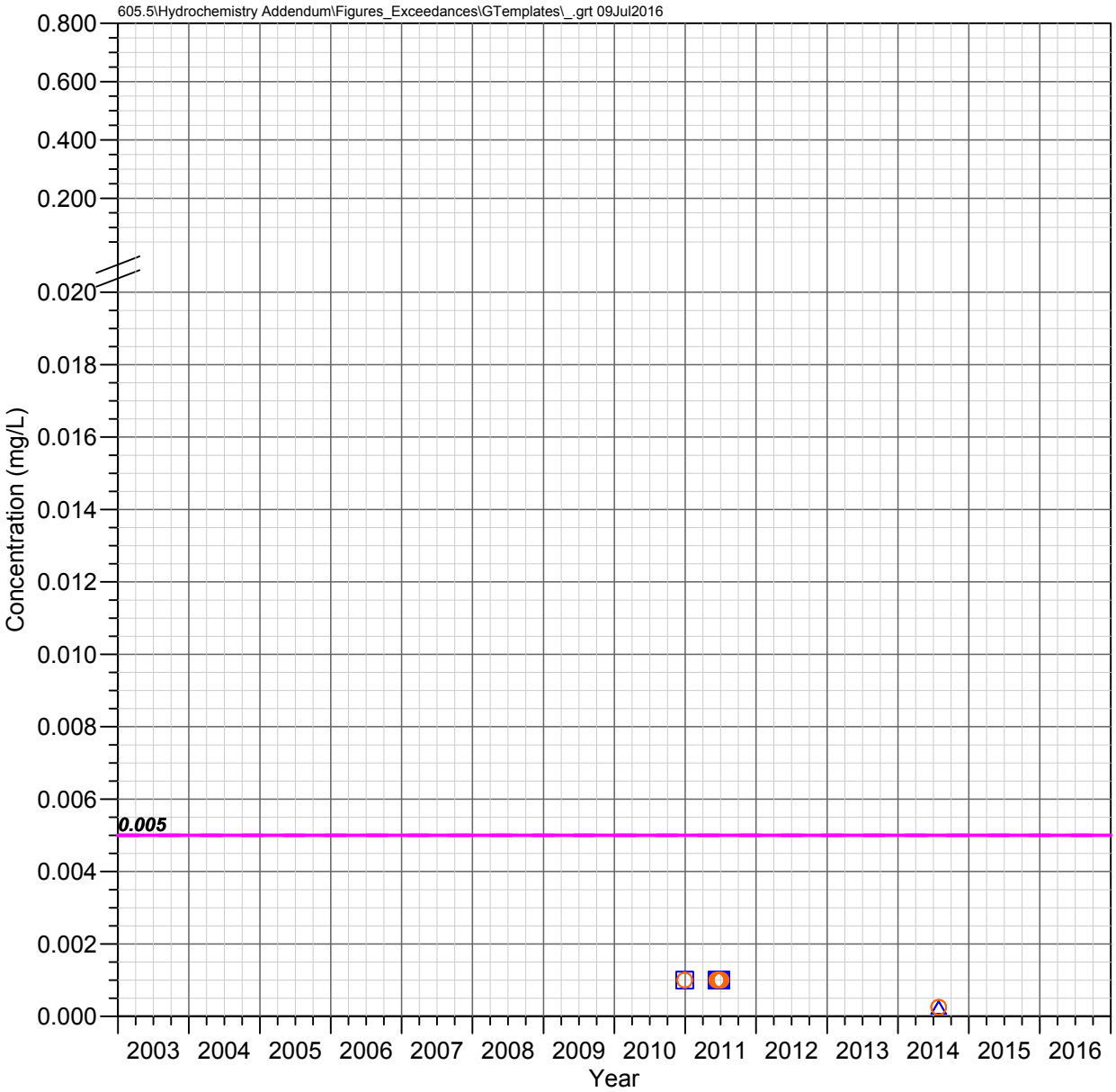


FIGURE E-158. CADMIUM CONCENTRATIONS OBSERVED AT HRES-08, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-09
Apache Leap Tuff Aquifer

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.005 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.005 mg/L)

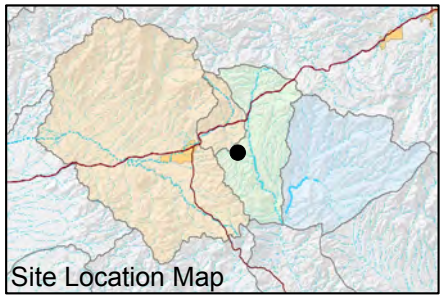
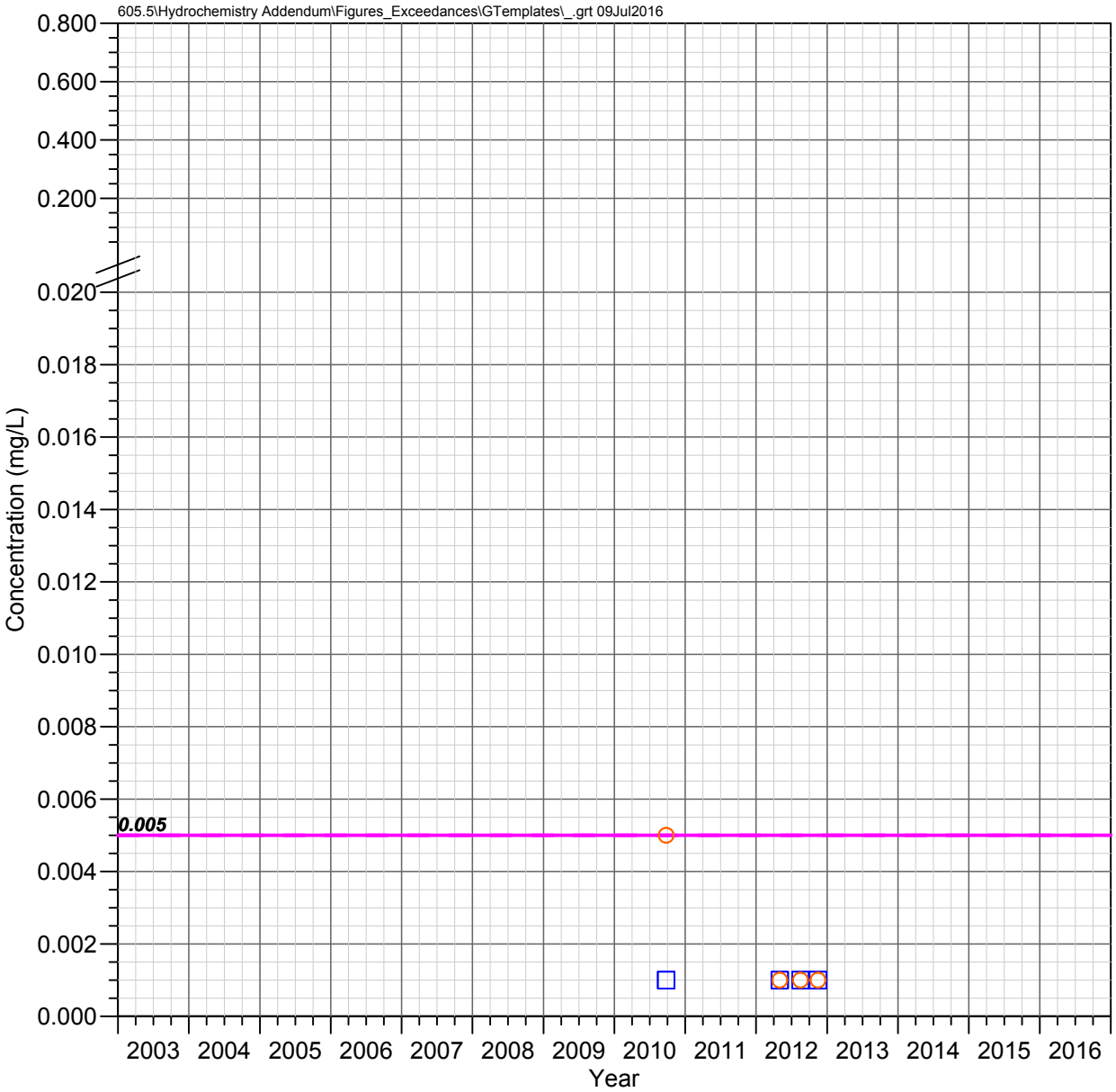


FIGURE E-159. CADMIUM CONCENTRATIONS OBSERVED AT HRES-09, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-10
Apache Leap Tuff Aquifer

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.005 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.005 mg/L)

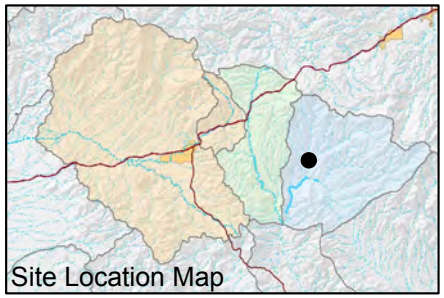
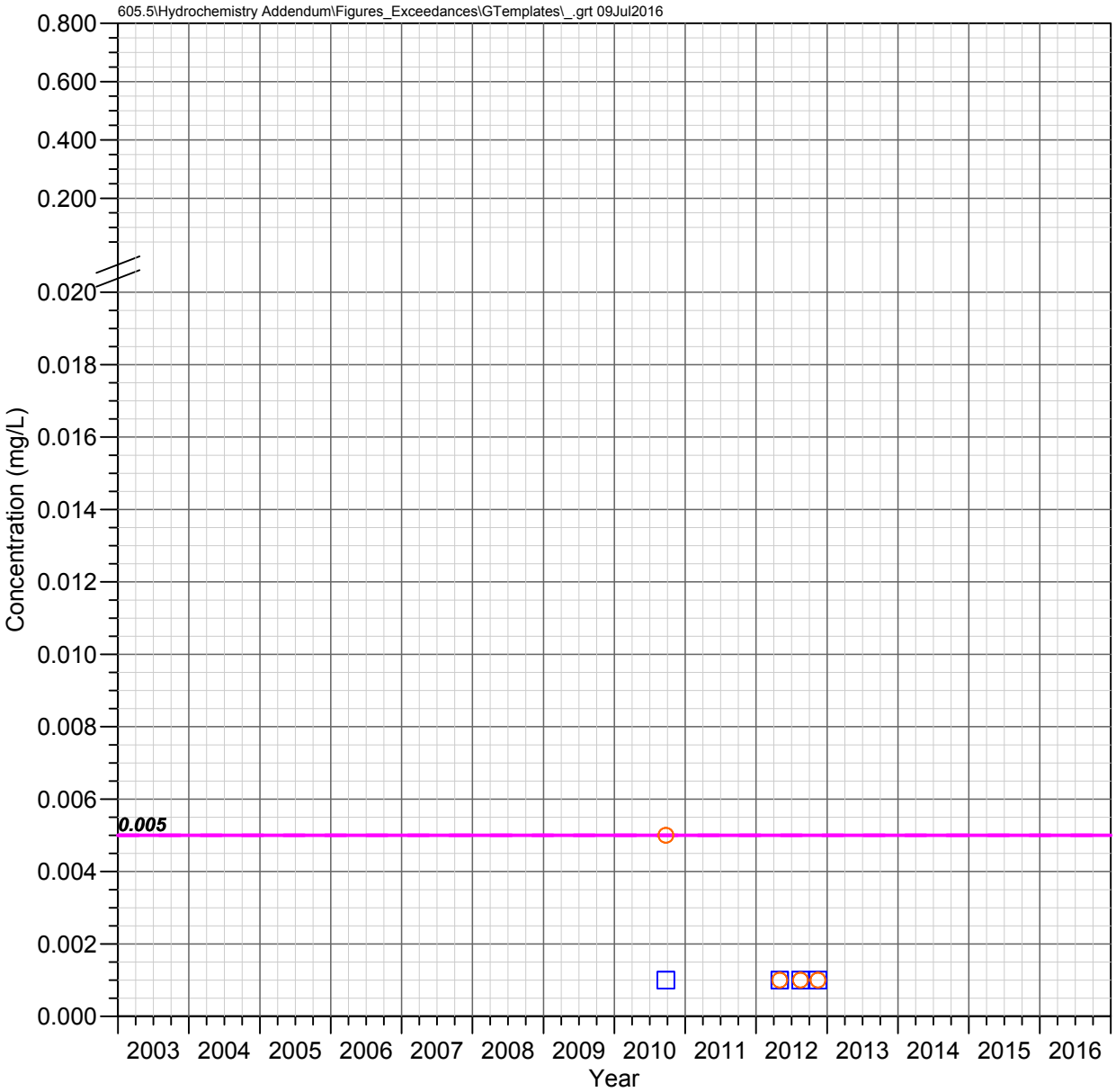


FIGURE E-160. CADMIUM CONCENTRATIONS OBSERVED AT HRES-10, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-11
Apache Leap Tuff Aquifer

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.005 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.005 mg/L)

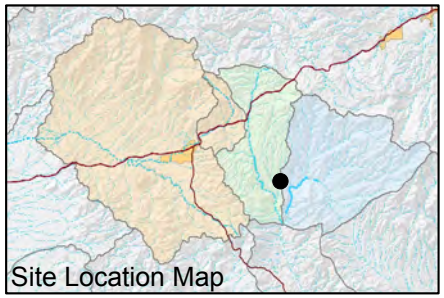
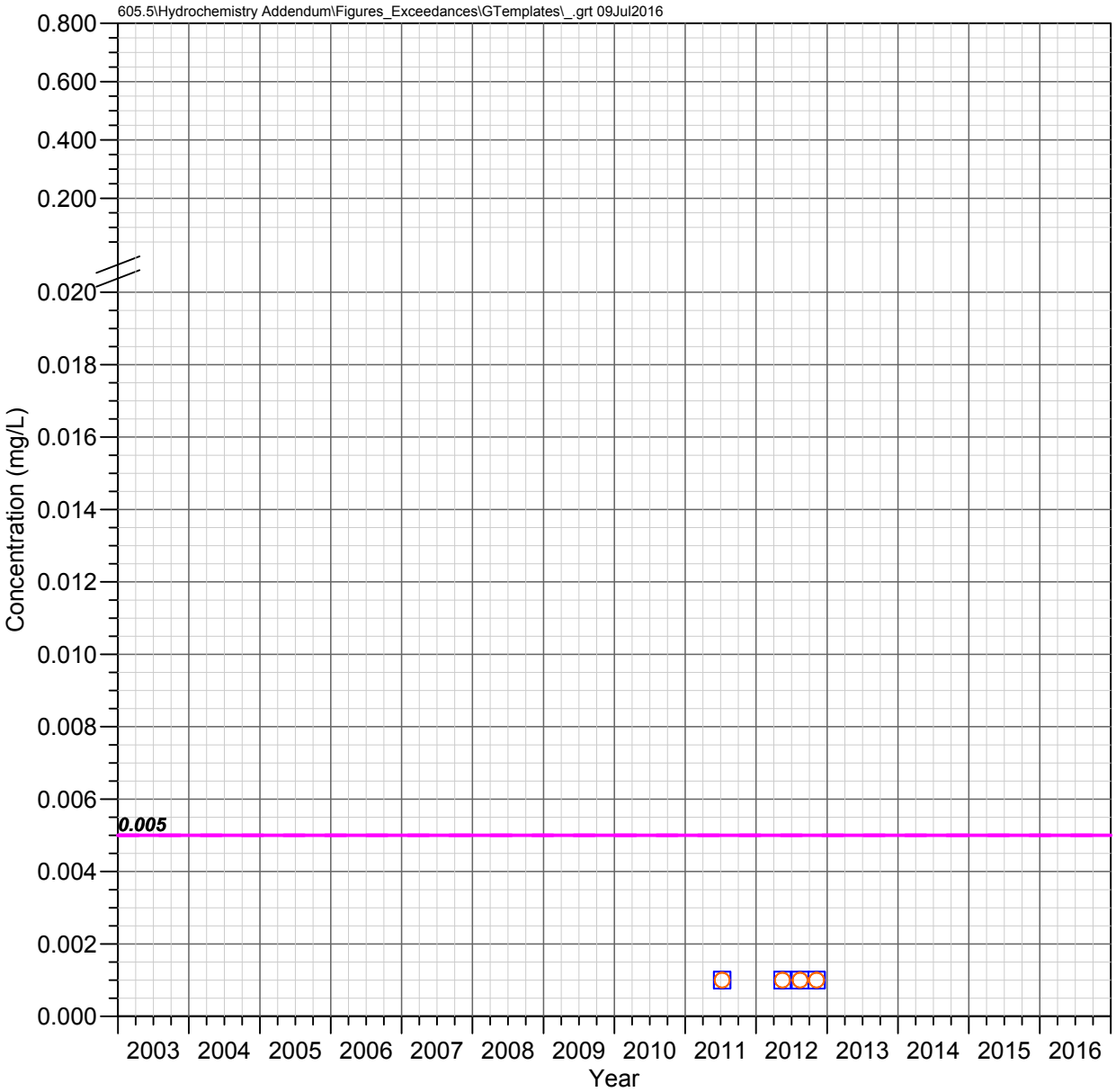


FIGURE E-161. CADMIUM CONCENTRATIONS OBSERVED AT HRES-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-12
Apache Leap Tuff Aquifer

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.005 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.005 mg/L)

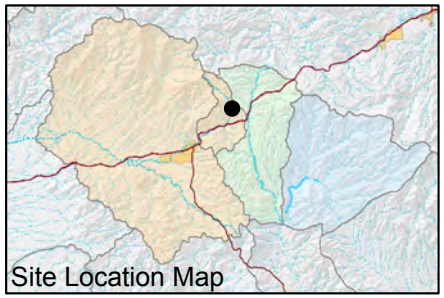
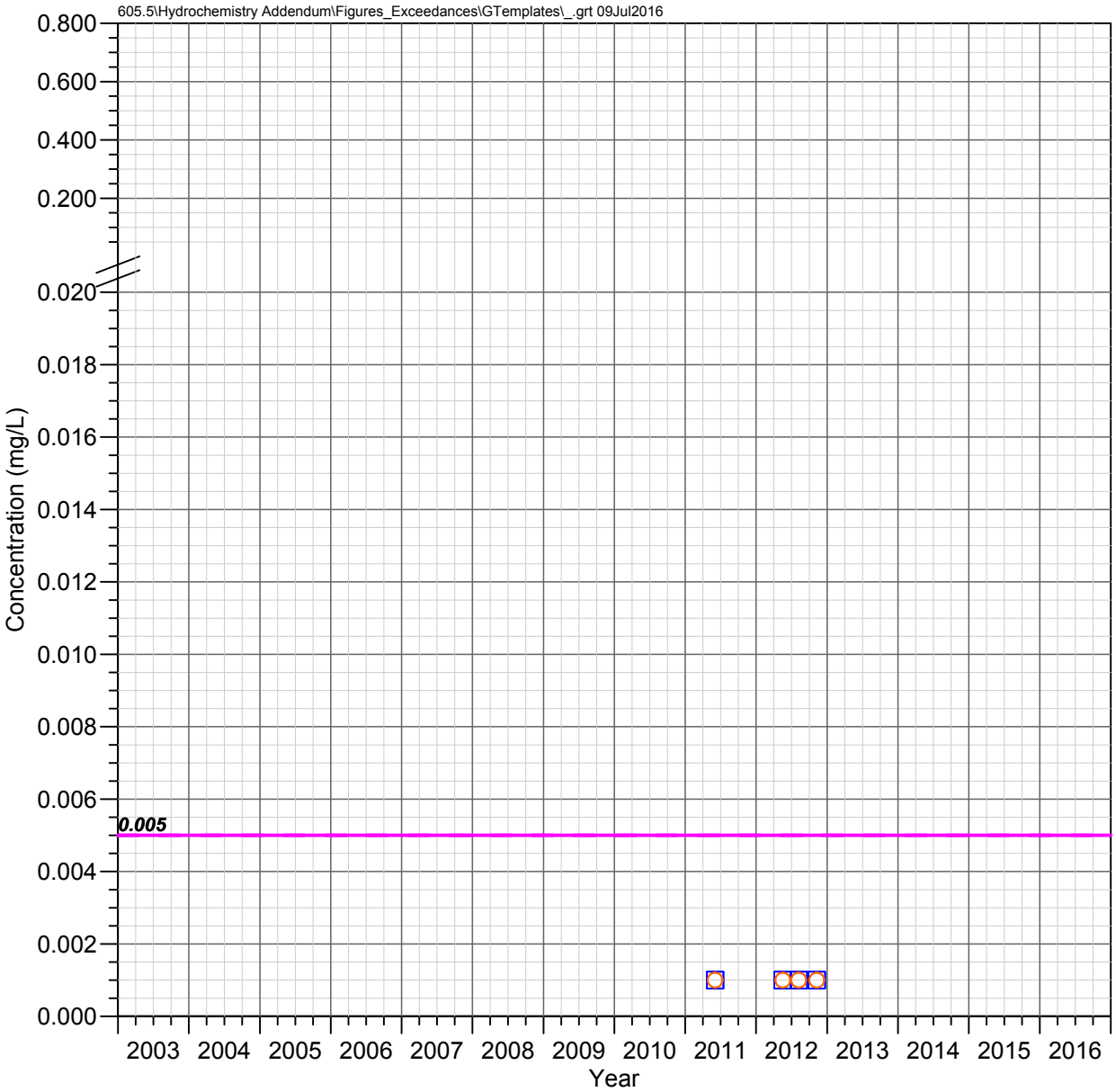


FIGURE E-162. CADMIUM CONCENTRATIONS OBSERVED AT HRES-12, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-13
Apache Leap Tuff Aquifer

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.005 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.005 mg/L)

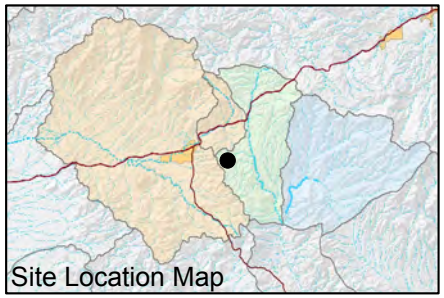
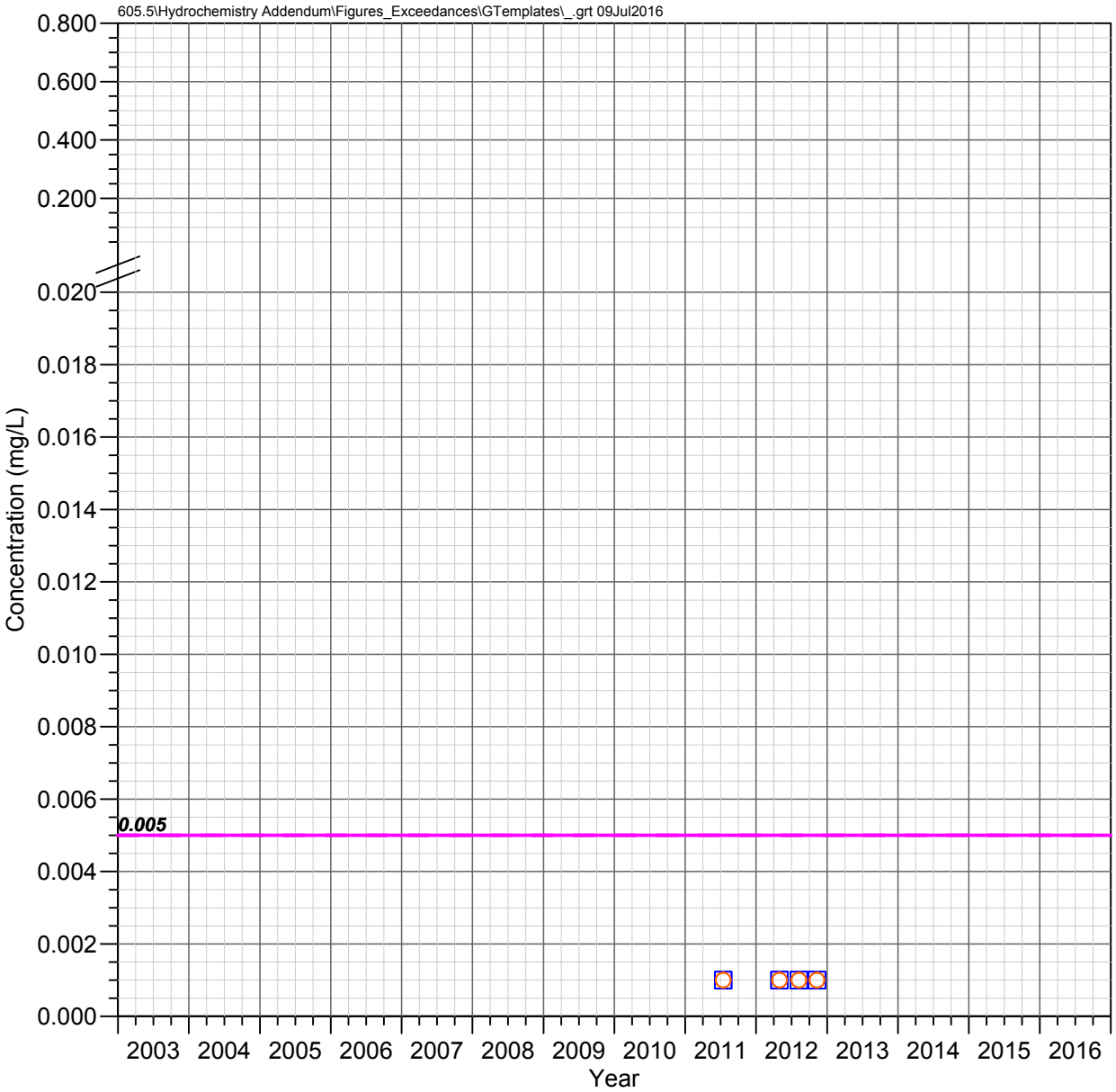


FIGURE E-163. CADMIUM CONCENTRATIONS OBSERVED AT HRES-13, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-14
Apache Leap Tuff Aquifer

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.005 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.005 mg/L)

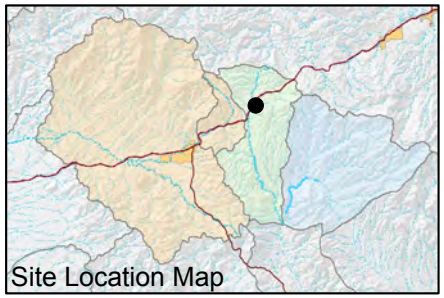
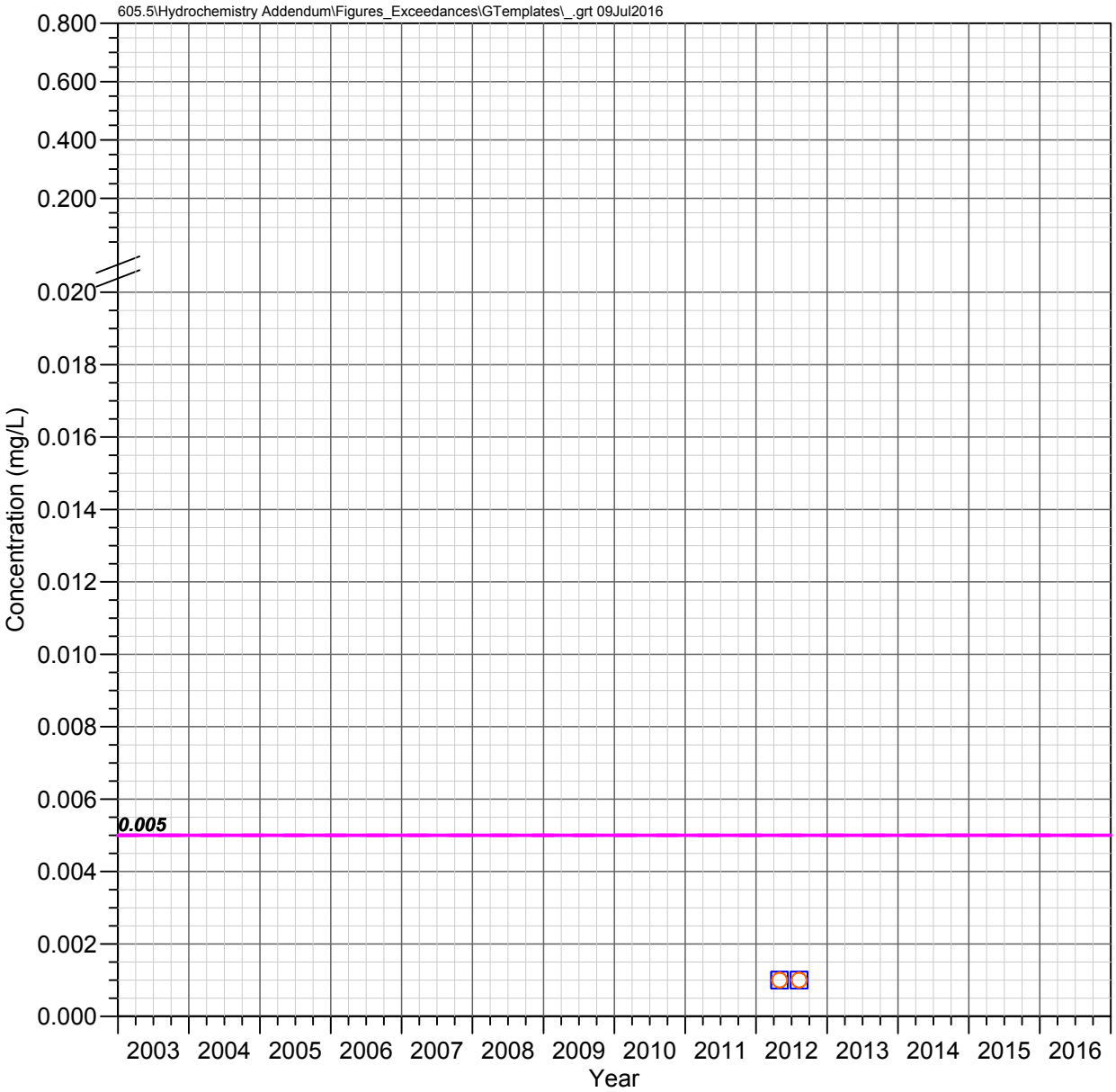


FIGURE E-164. CADMIUM CONCENTRATIONS OBSERVED AT HRES-14, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-15
Apache Leap Tuff Aquifer

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.005 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.005 mg/L)

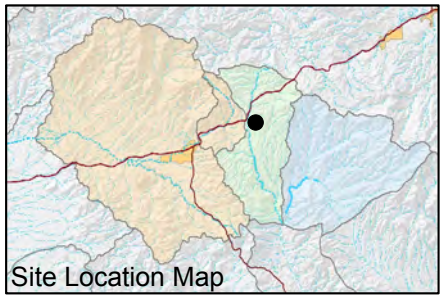


FIGURE E-165. CADMIUM CONCENTRATIONS OBSERVED AT HRES-15, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES

HRES-17
Apache Leap Tuff Aquifer

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.005 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.005 mg/L)

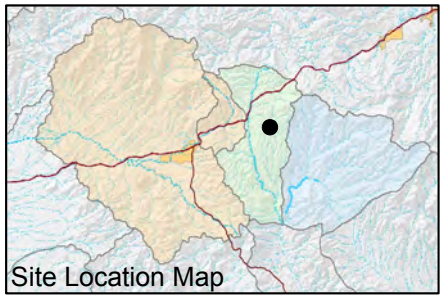
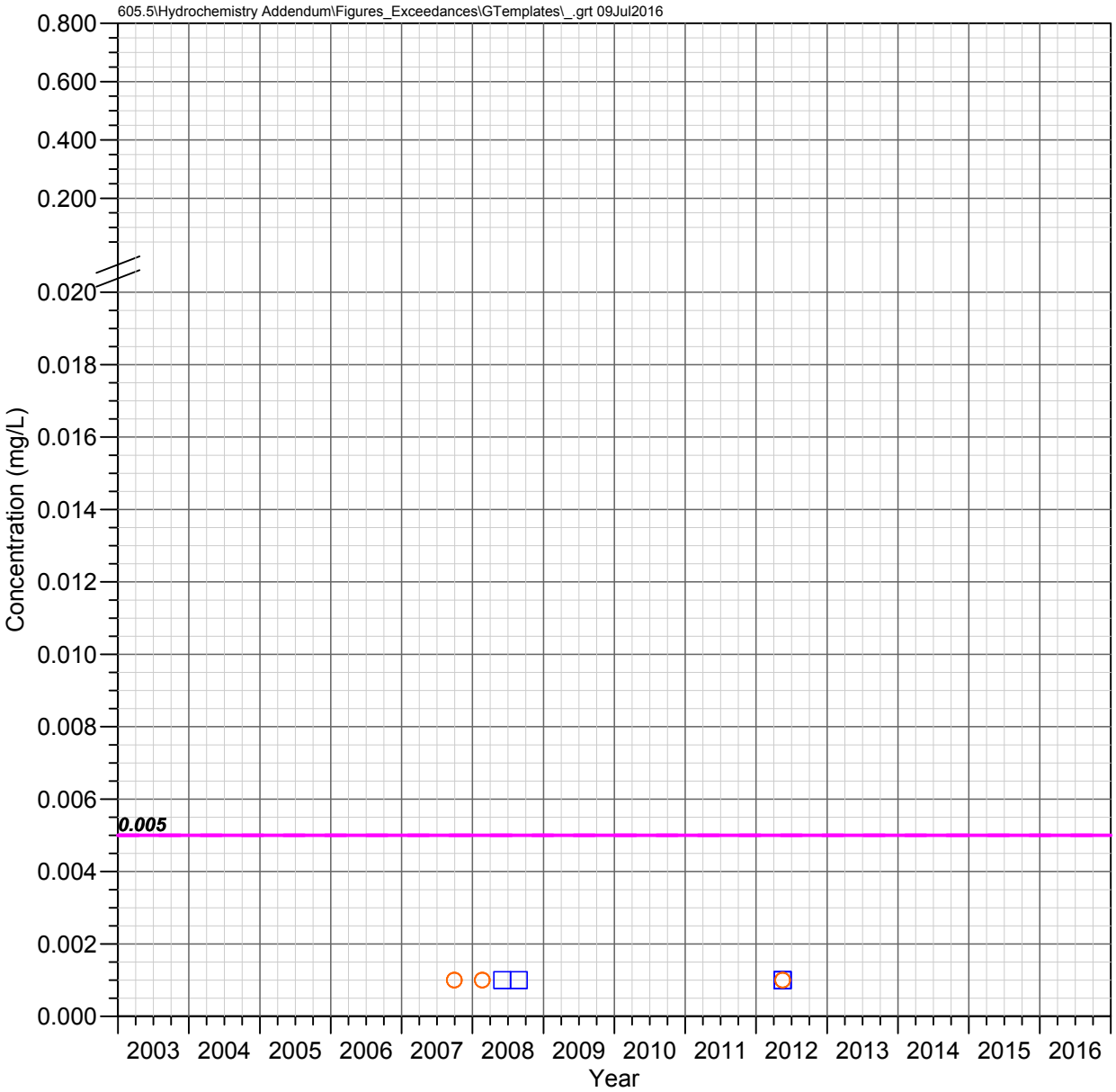


FIGURE E-166. CADMIUM CONCENTRATIONS OBSERVED AT HRES-17, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MJ-11
Apache Leap Tuff Aquifer

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.005 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.005 mg/L)

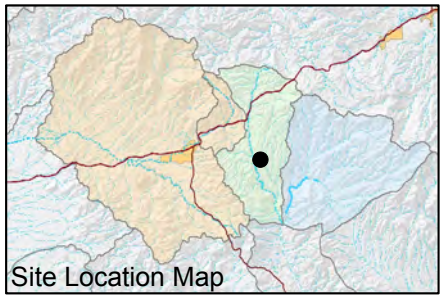
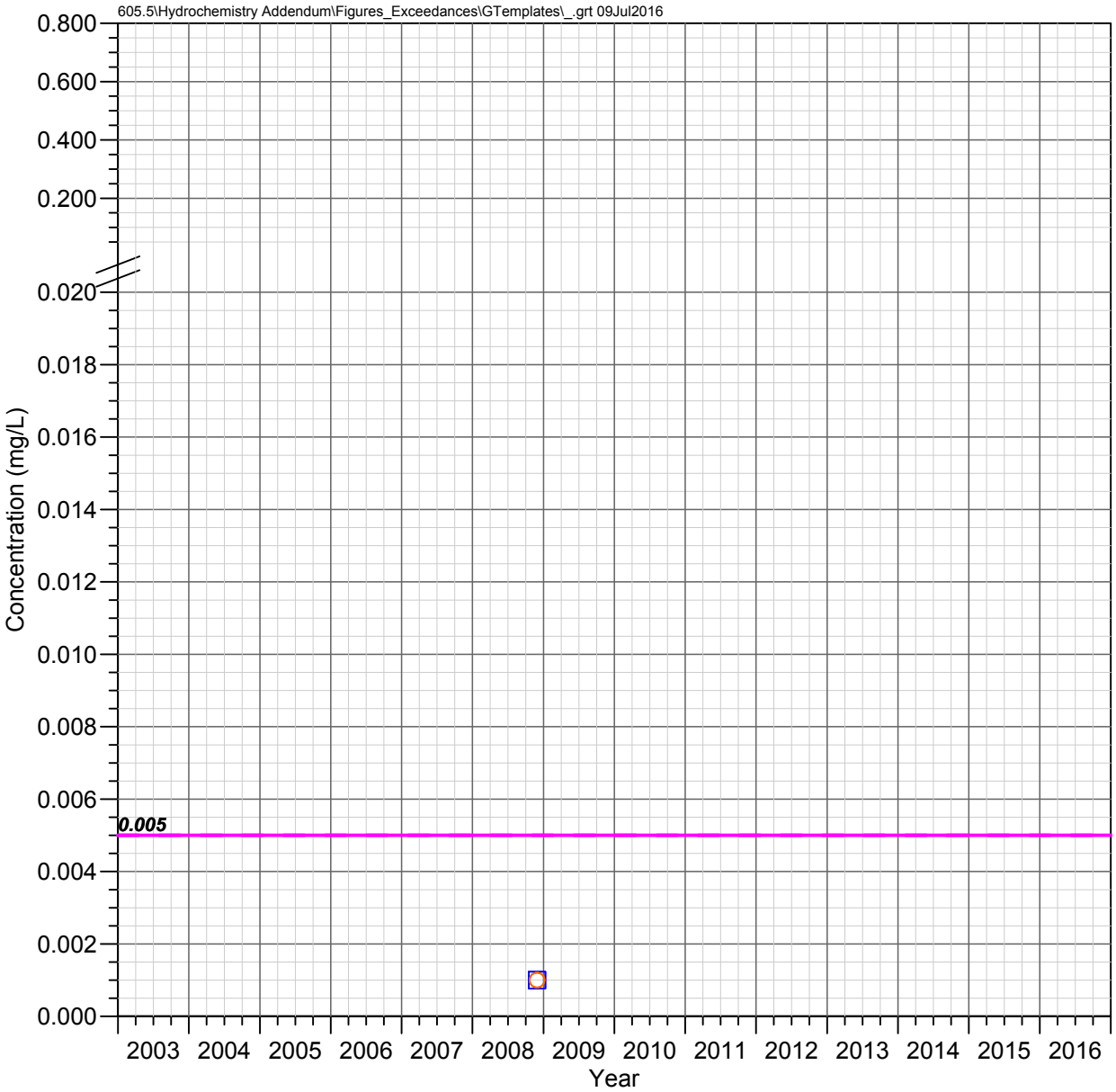


FIGURE E-167. CADMIUM CONCENTRATIONS OBSERVED AT MJ-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-01
Deep Groundwater System

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.005 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.005 mg/L)

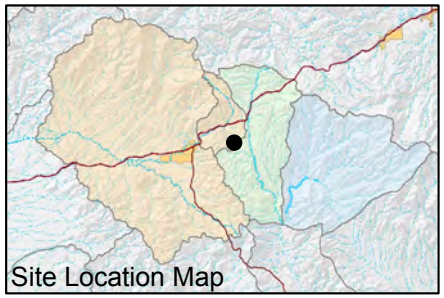
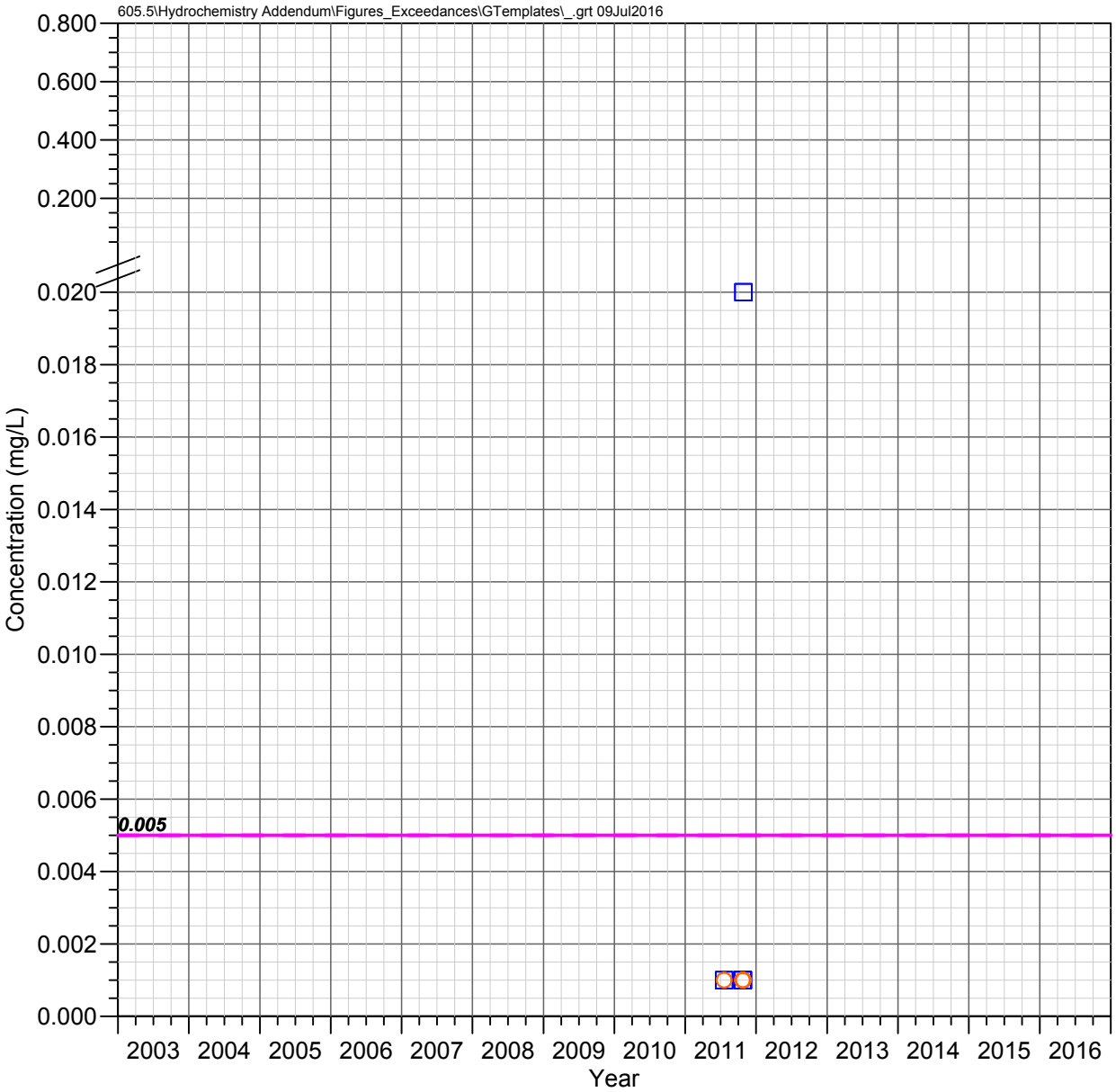


FIGURE E-168. CADMIUM CONCENTRATIONS OBSERVED AT DHRES-01, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-02
Deep Groundwater System

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.005 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.005 mg/L)

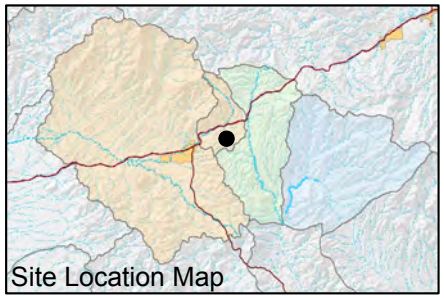
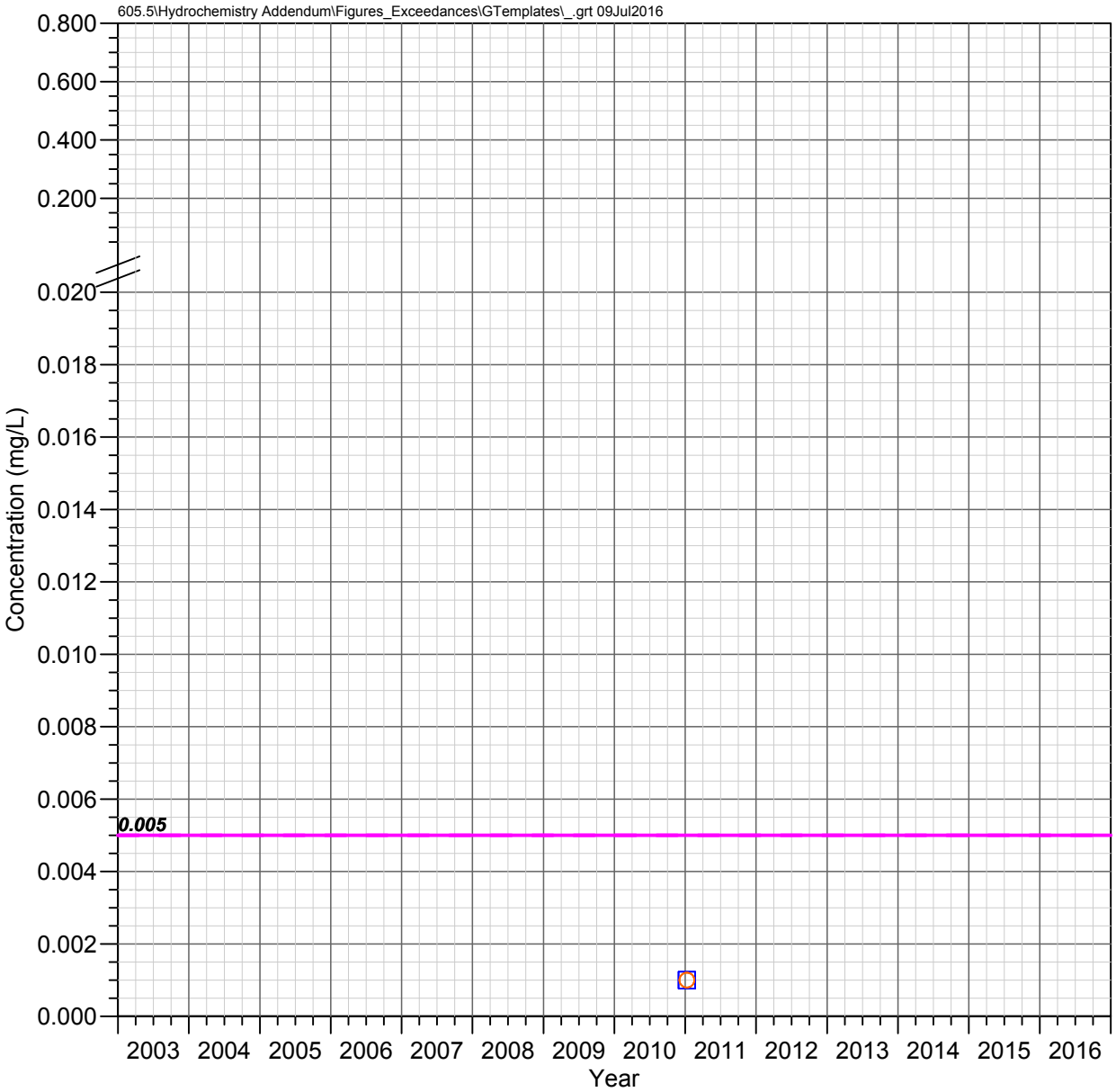


FIGURE E-169. CADMIUM CONCENTRATIONS OBSERVED AT DHRES-02, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-06
Deep Groundwater System

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.005 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.005 mg/L)

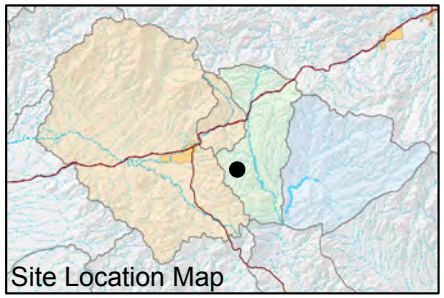
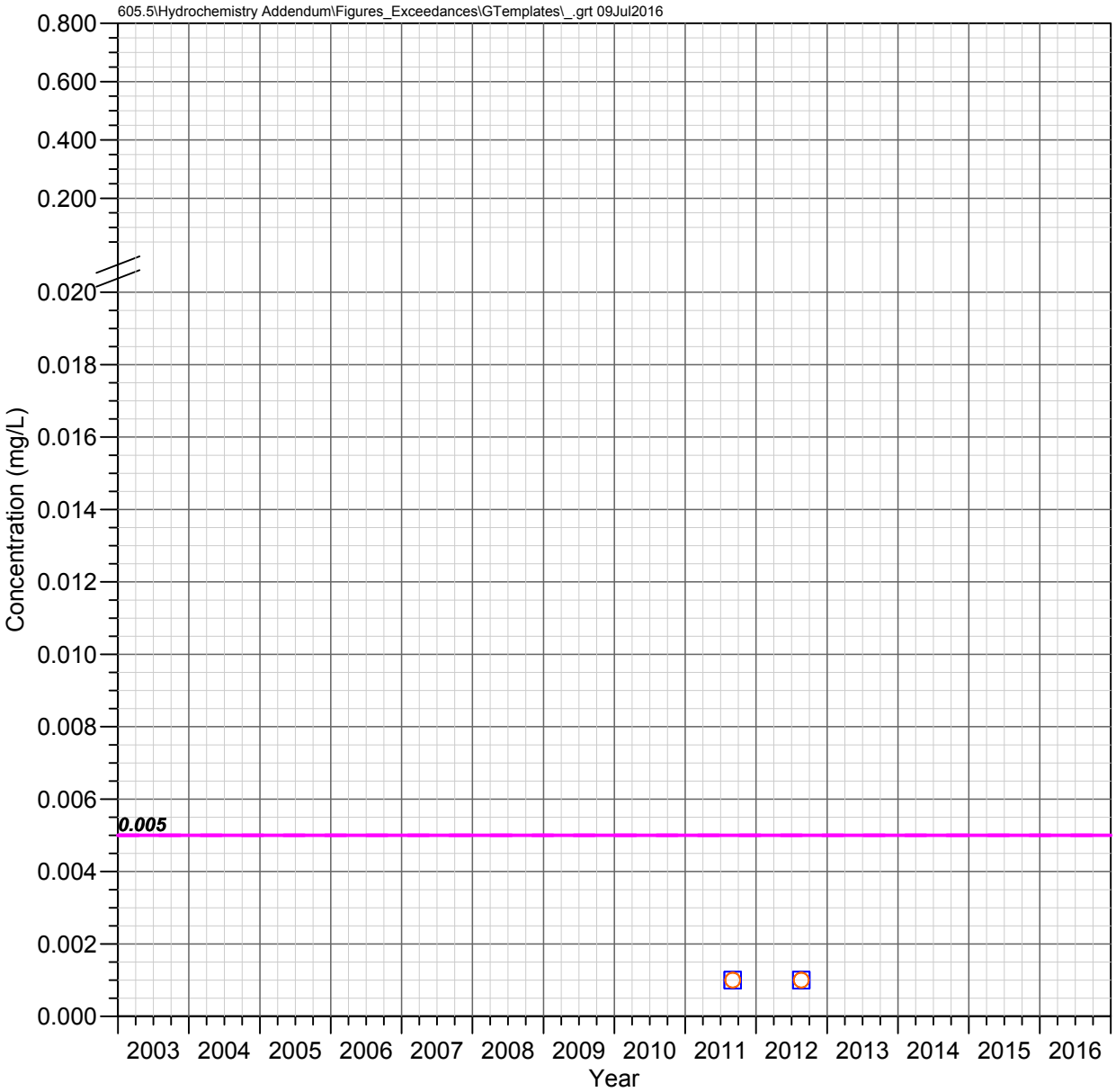


FIGURE E-170. CADMIUM CONCENTRATIONS OBSERVED AT DHRES-06, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-09
Deep Groundwater System

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.005 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.005 mg/L)

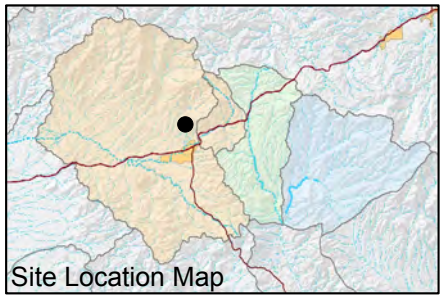
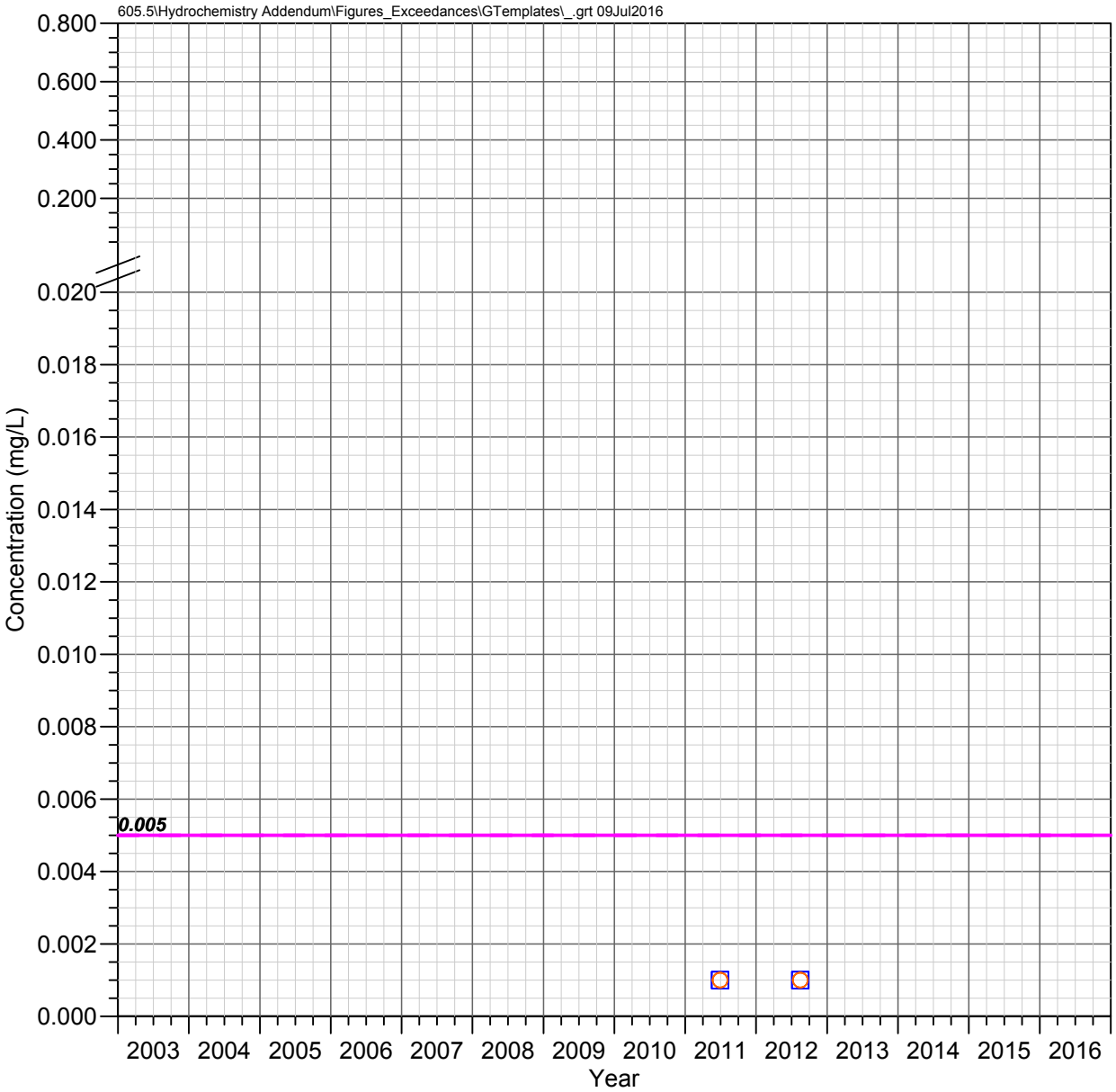


FIGURE E-171. CADMIUM CONCENTRATIONS OBSERVED AT DHRES-09, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-11
Deep Groundwater System

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.005 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.005 mg/L)

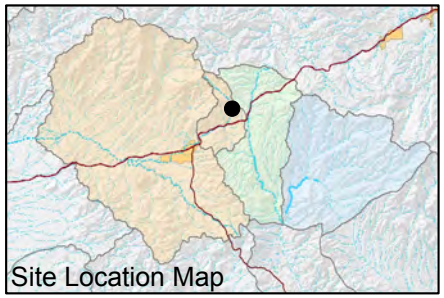
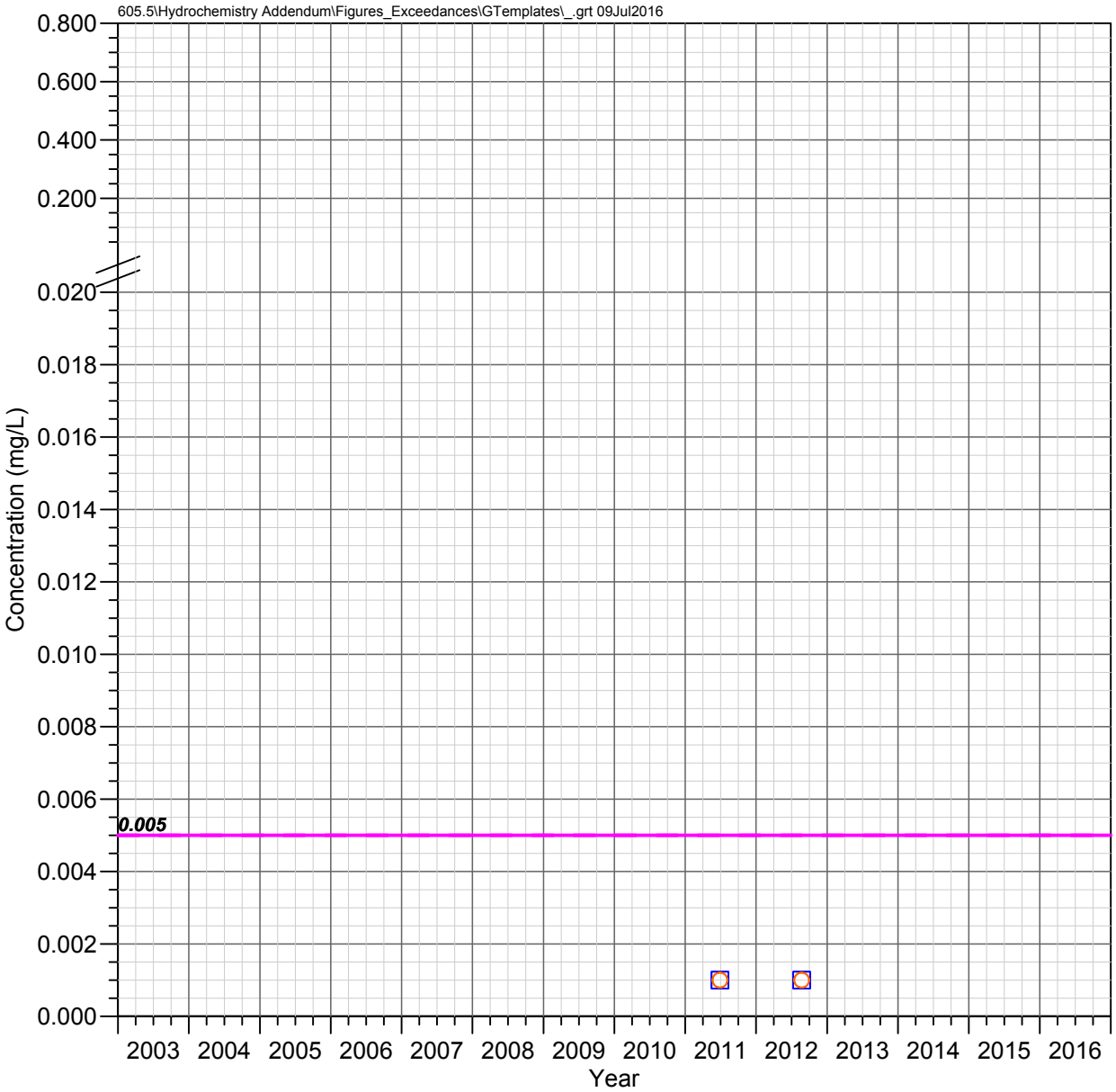


FIGURE E-172. CADMIUM CONCENTRATIONS OBSERVED AT DHRES-11, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-13
Deep Groundwater System

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.005 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.005 mg/L)

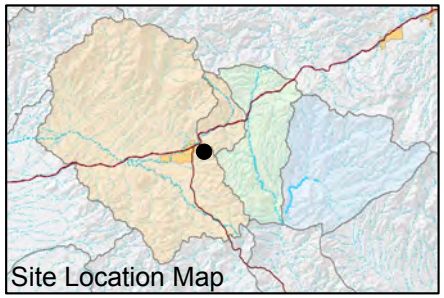
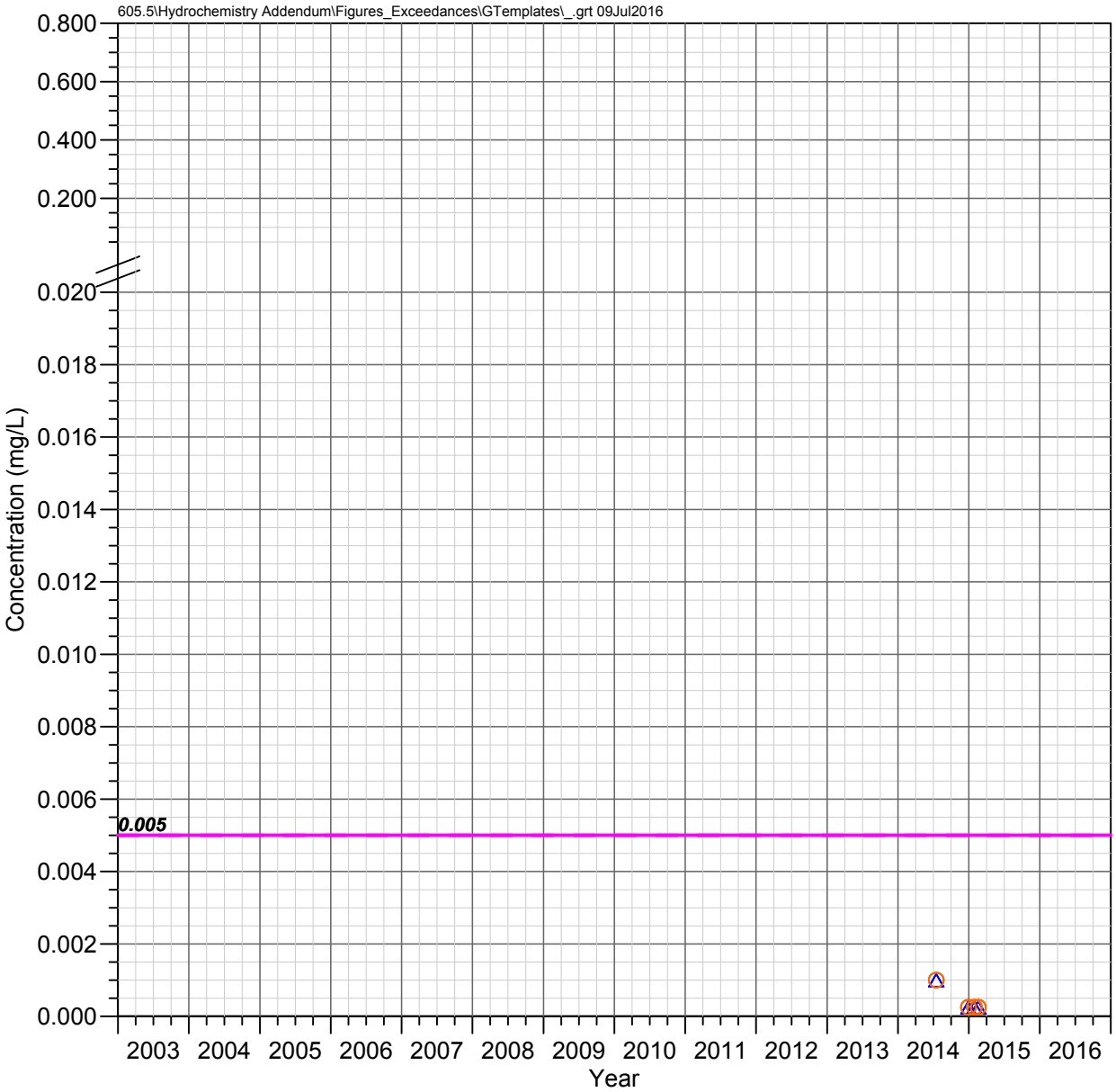


FIGURE E-173. CADMIUM CONCENTRATIONS OBSERVED AT DHRES-13, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-15
Deep Groundwater System

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.005 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.005 mg/L)

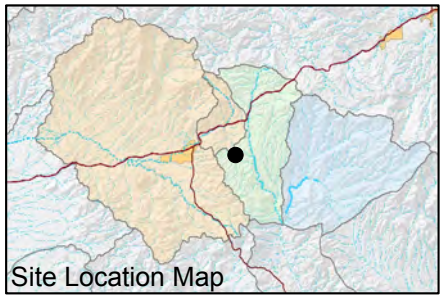
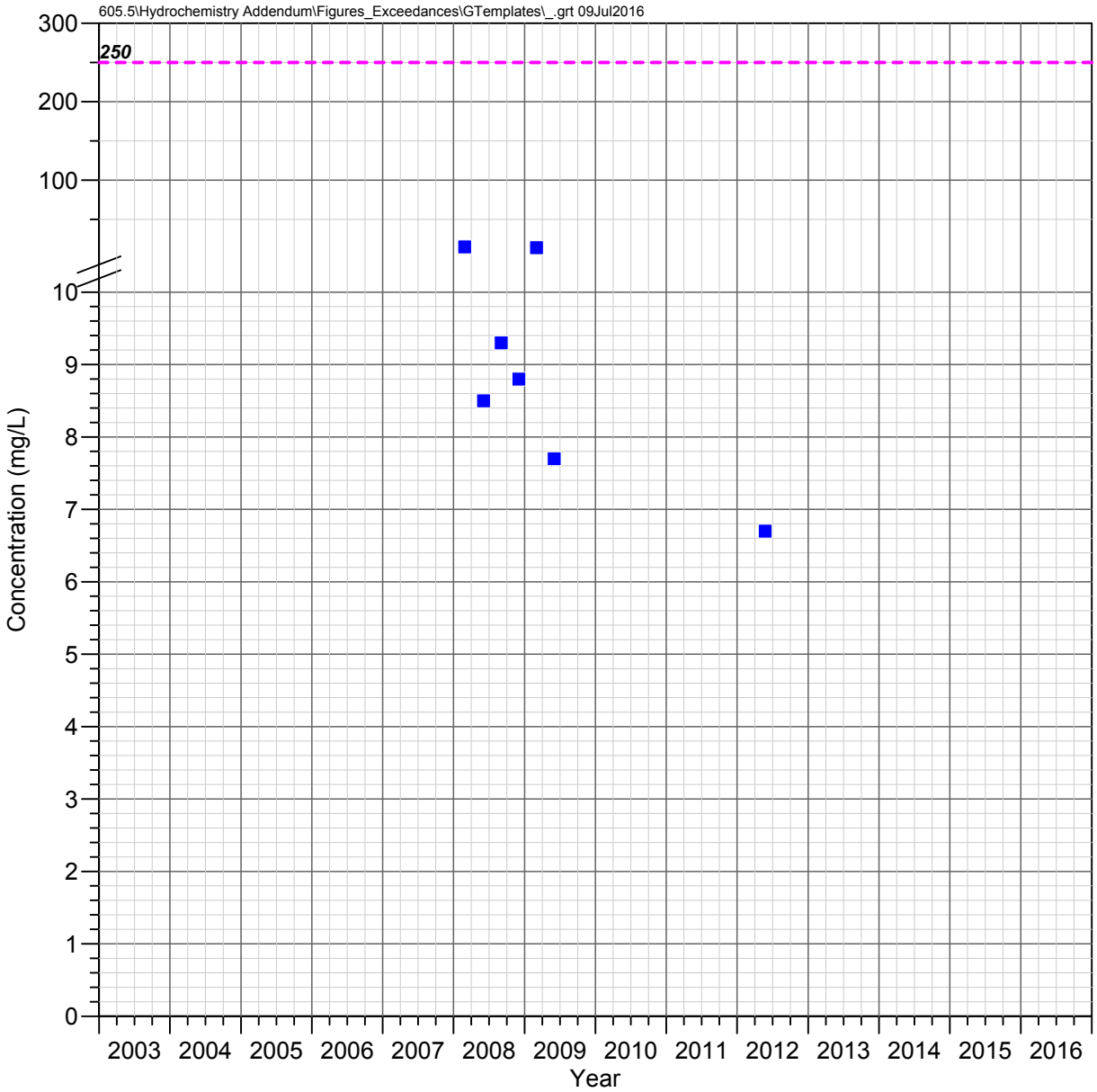


FIGURE E-174. CADMIUM CONCENTRATIONS OBSERVED AT DHRES-15, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Hackberry Windmill Well Shallow Groundwater System

CHLORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 250 mg/L)

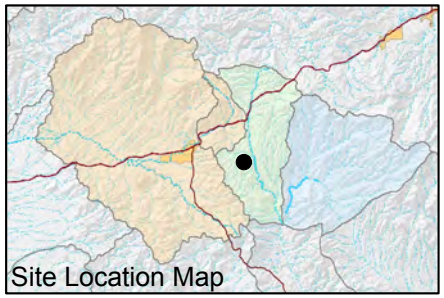
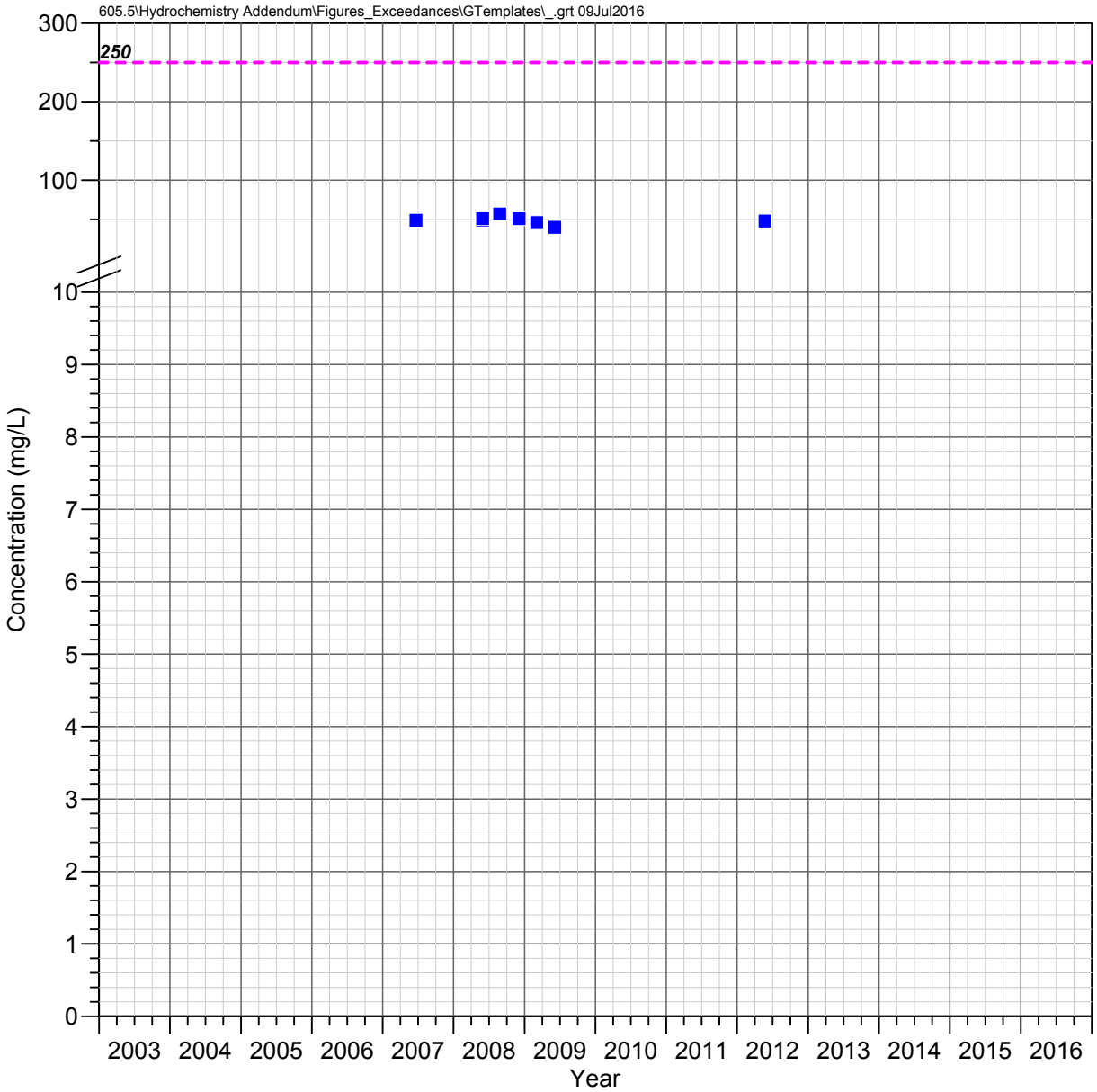


FIGURE E-175. CHLORIDE CONCENTRATIONS OBSERVED AT HACKBERRY WINDMILL WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



JI Ranch Corral Well Shallow Groundwater System

CHLORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 250 mg/L)

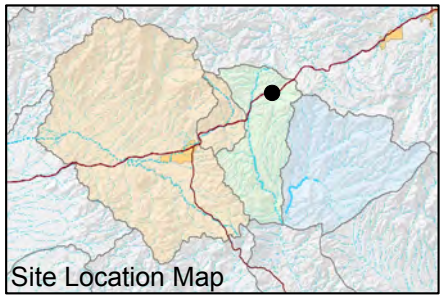
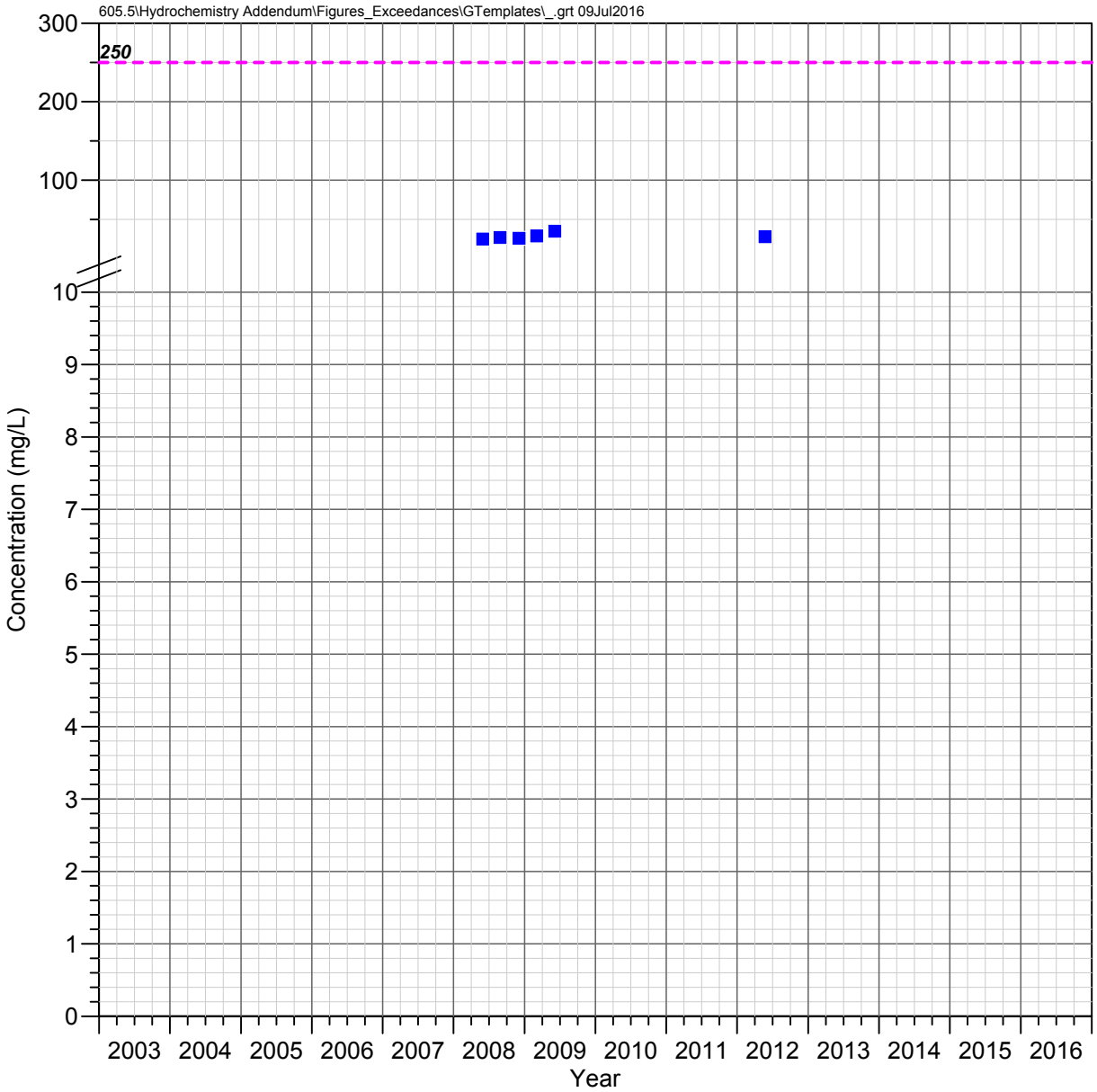


FIGURE E-176. CHLORIDE CONCENTRATIONS OBSERVED AT JI RANCH CORRAL WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



JI Ranch Middle Well Shallow Groundwater System

CHLORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 250 mg/L)

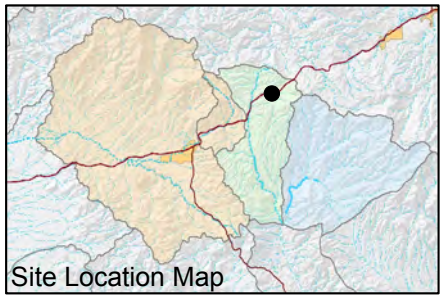
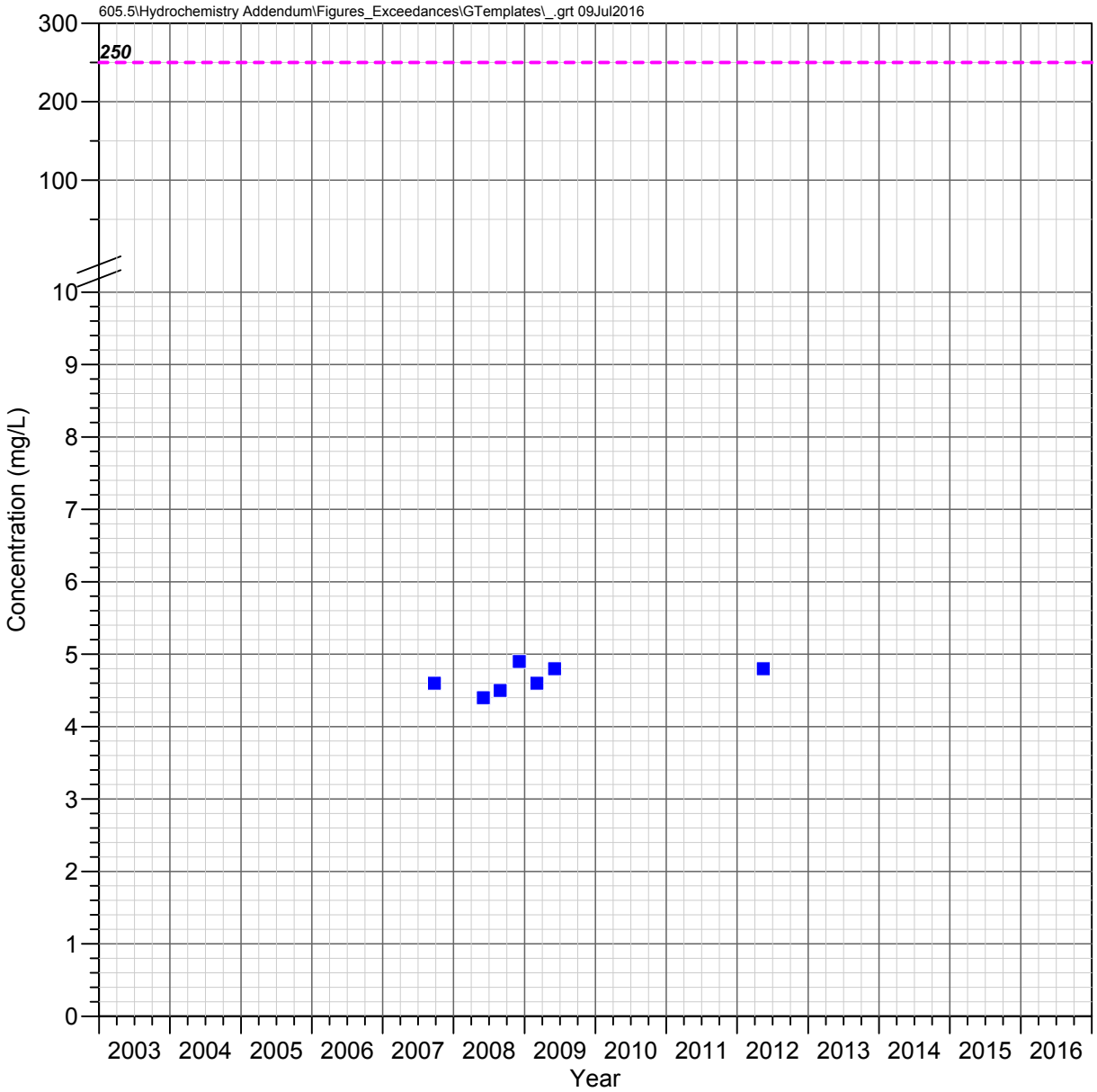


FIGURE E-177. CHLORIDE CONCENTRATIONS OBSERVED AT JI RANCH MIDDLE WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



A-06
Apache Leap Tuff Aquifer

CHLORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 250 mg/L)

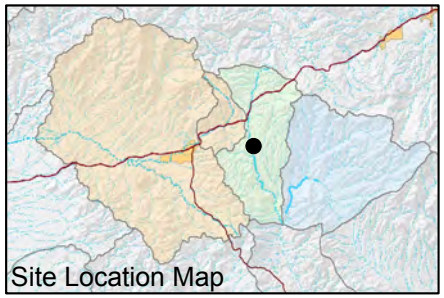
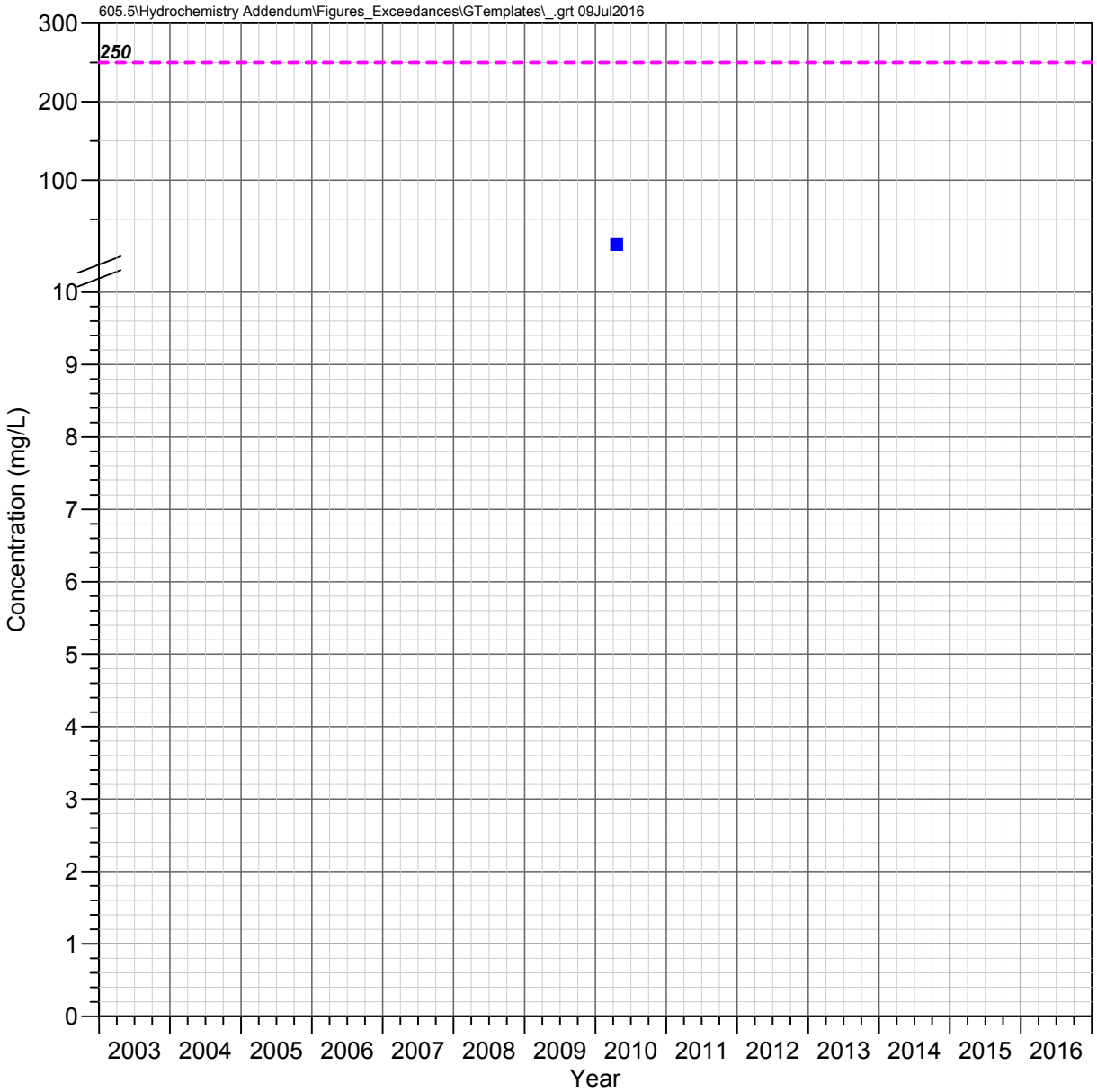


FIGURE E-178. CHLORIDE CONCENTRATIONS OBSERVED AT A-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



CT Well
Apache Leap Tuff Aquifer

CHLORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 250 mg/L)

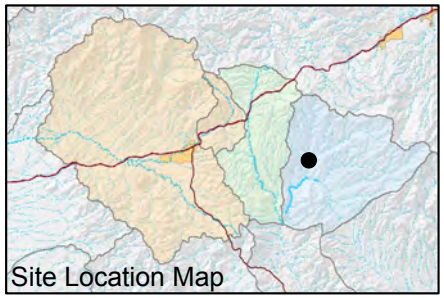
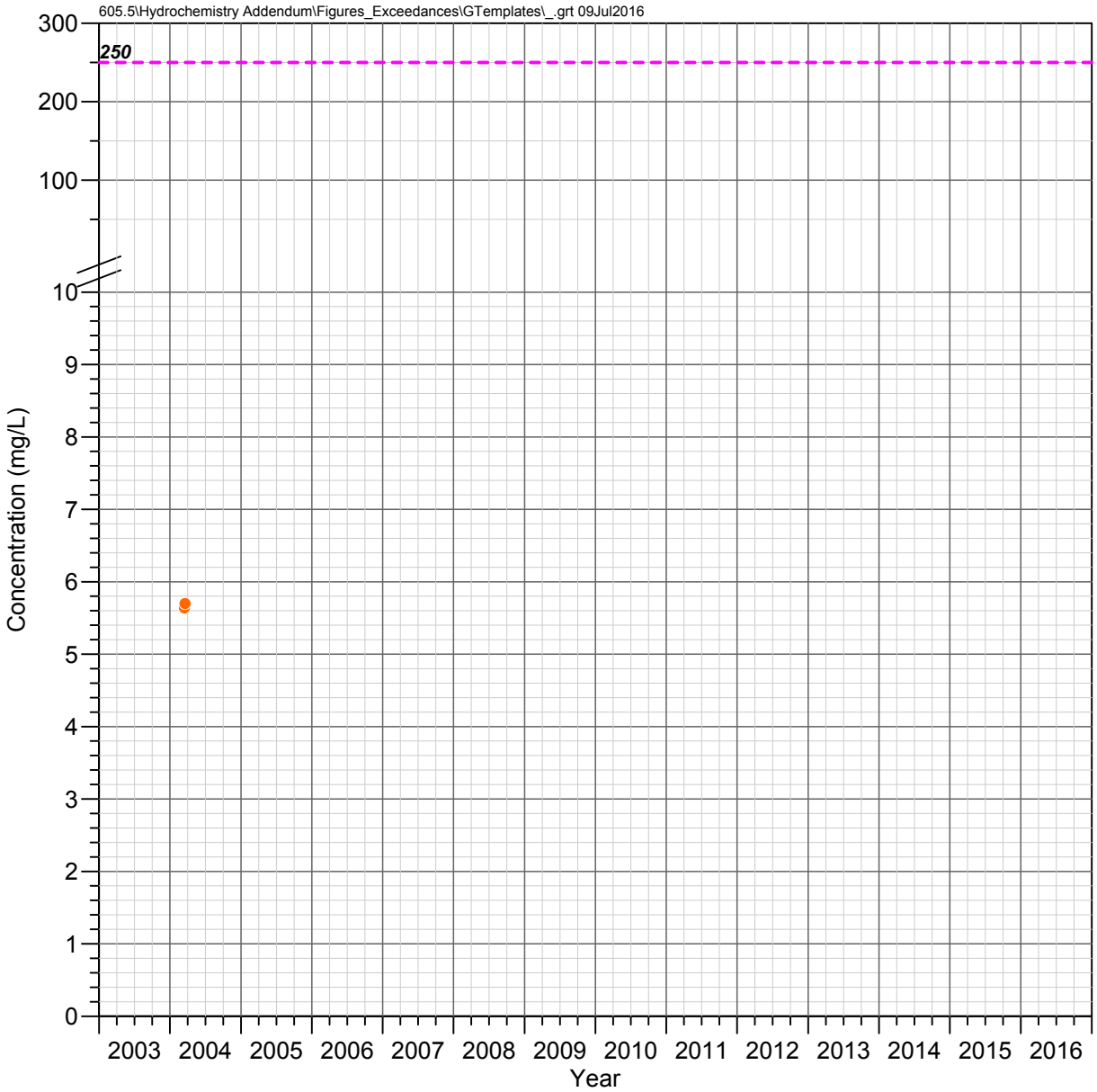


FIGURE E-179. CHLORIDE CONCENTRATIONS OBSERVED AT CT WELL, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-01
Apache Leap Tuff Aquifer

CHLORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 250 mg/L)

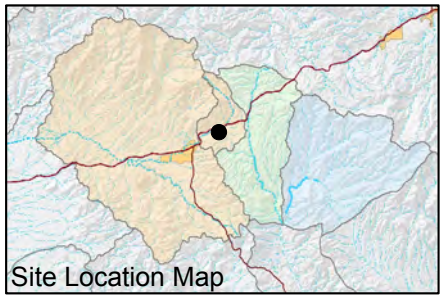
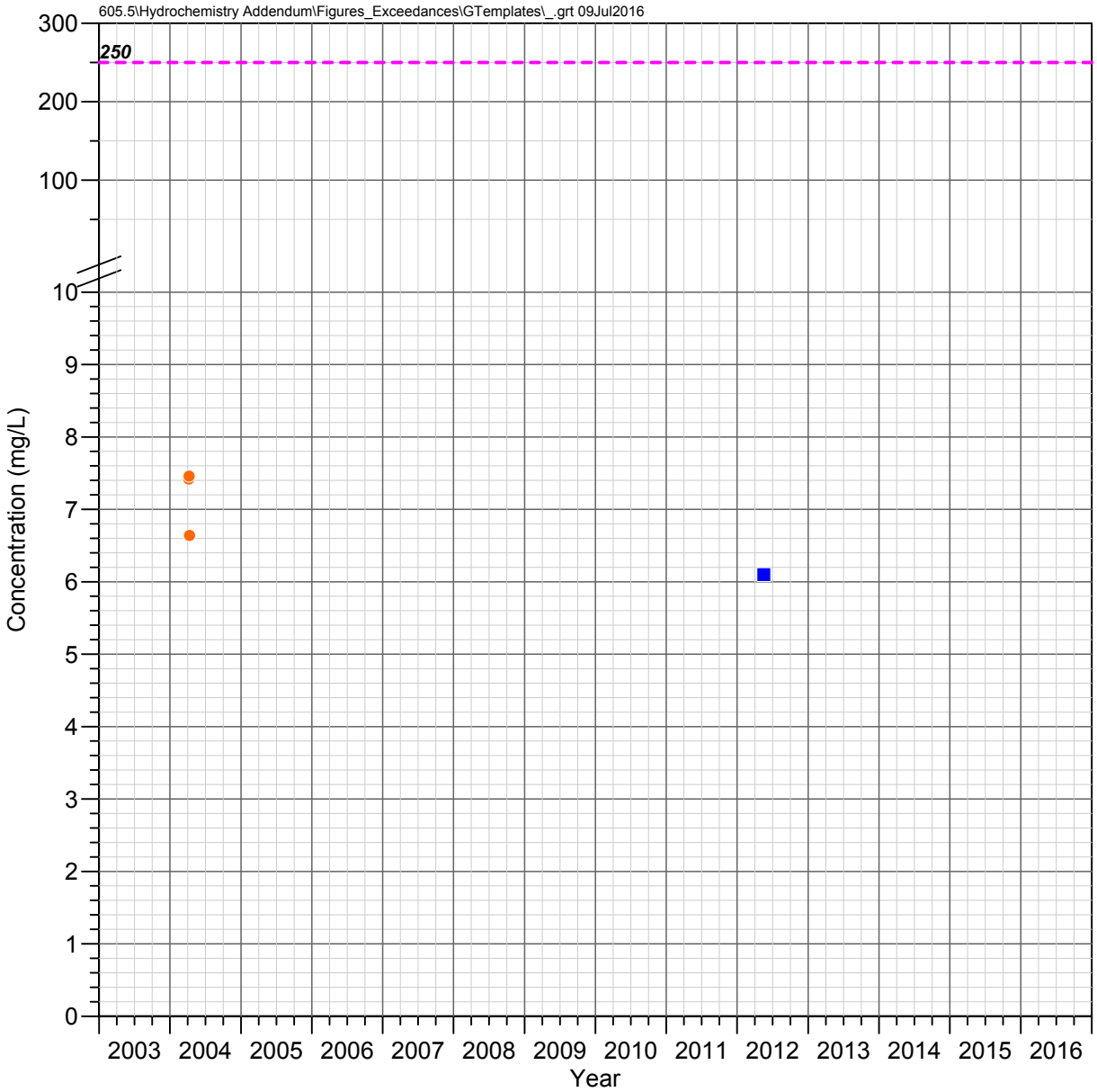


FIGURE E-180. CHLORIDE CONCENTRATIONS OBSERVED AT HRES-01, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-02
Apache Leap Tuff Aquifer

CHLORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 250 mg/L)

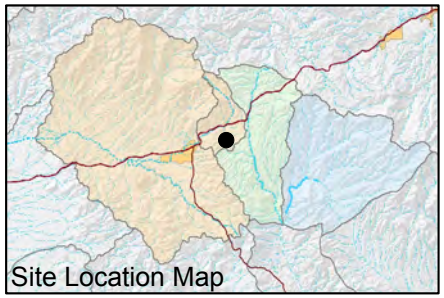
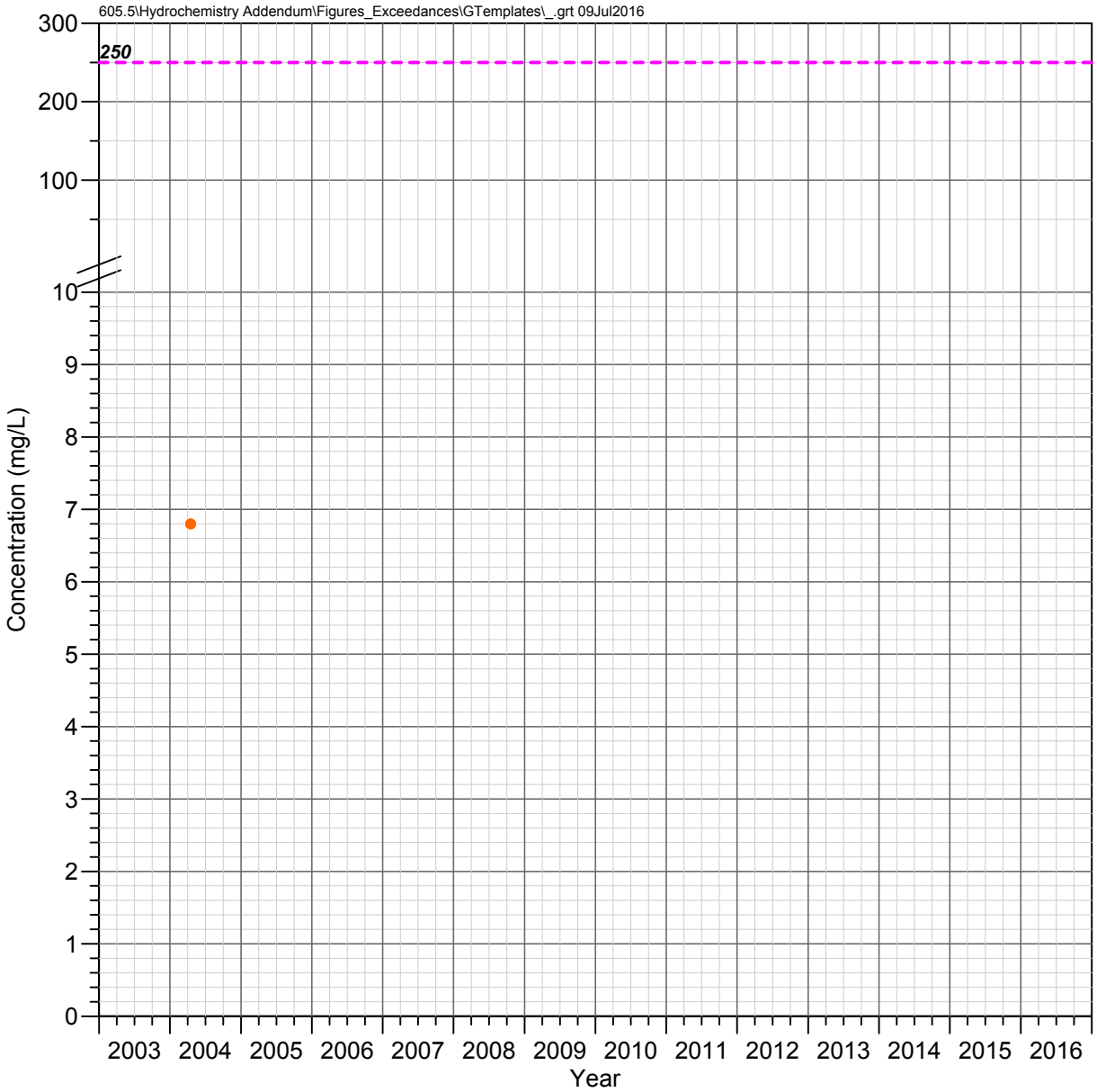


FIGURE E-181. CHLORIDE CONCENTRATIONS OBSERVED AT HRES-02, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-03d
Apache Leap Tuff Aquifer

CHLORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 250 mg/L)

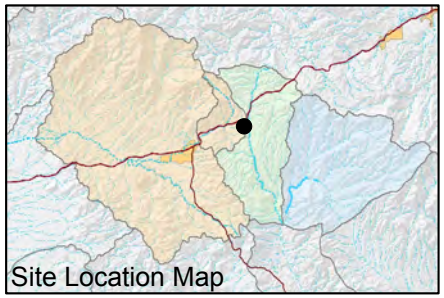
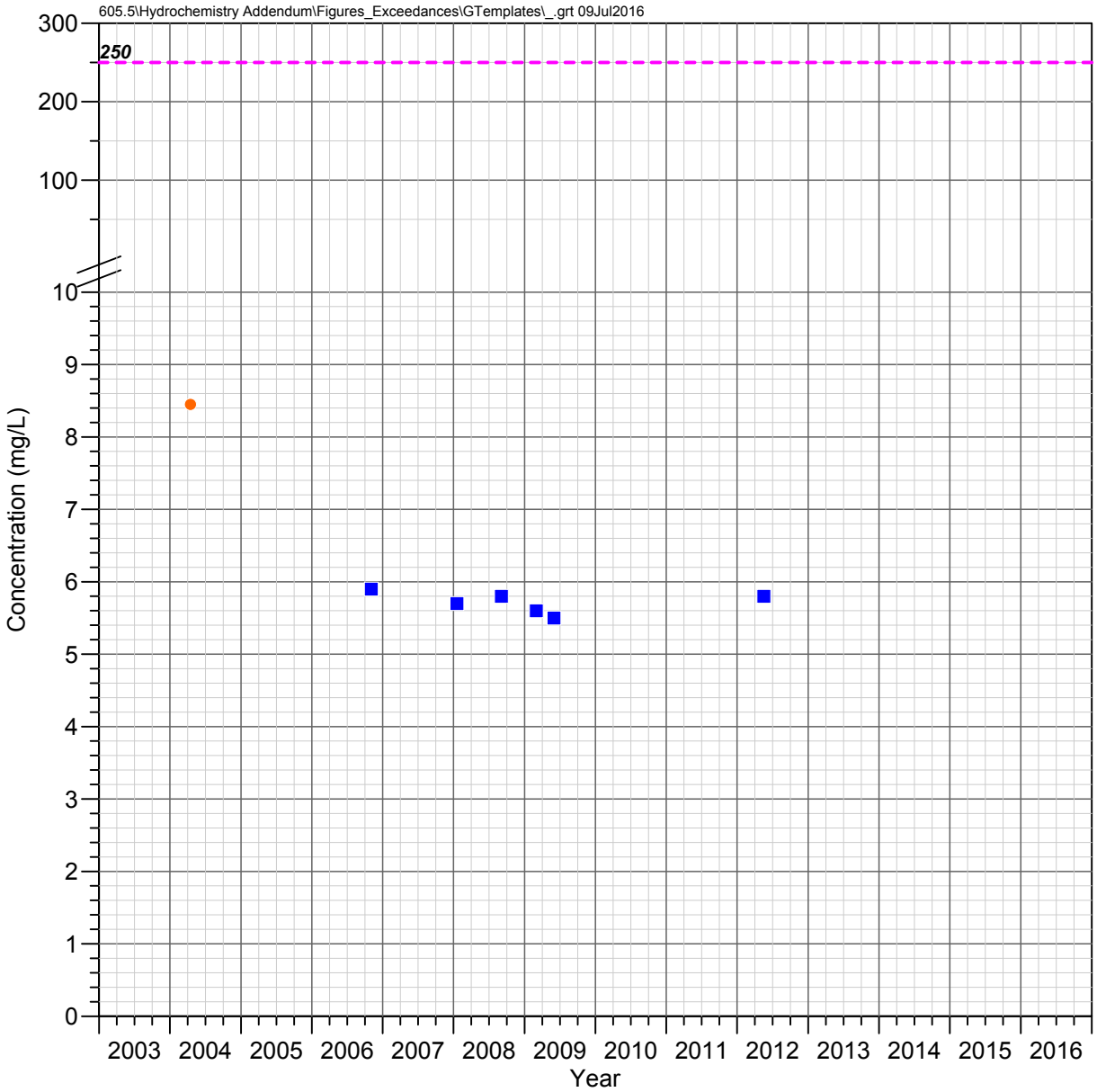


FIGURE E-182. CHLORIDE CONCENTRATIONS OBSERVED AT HRES-03D, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-04
Apache Leap Tuff Aquifer

CHLORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 250 mg/L)

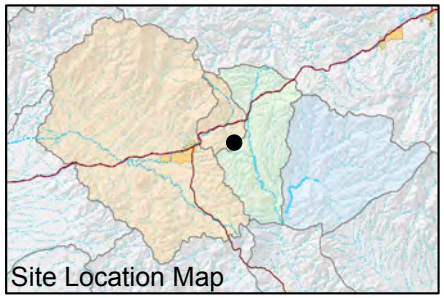
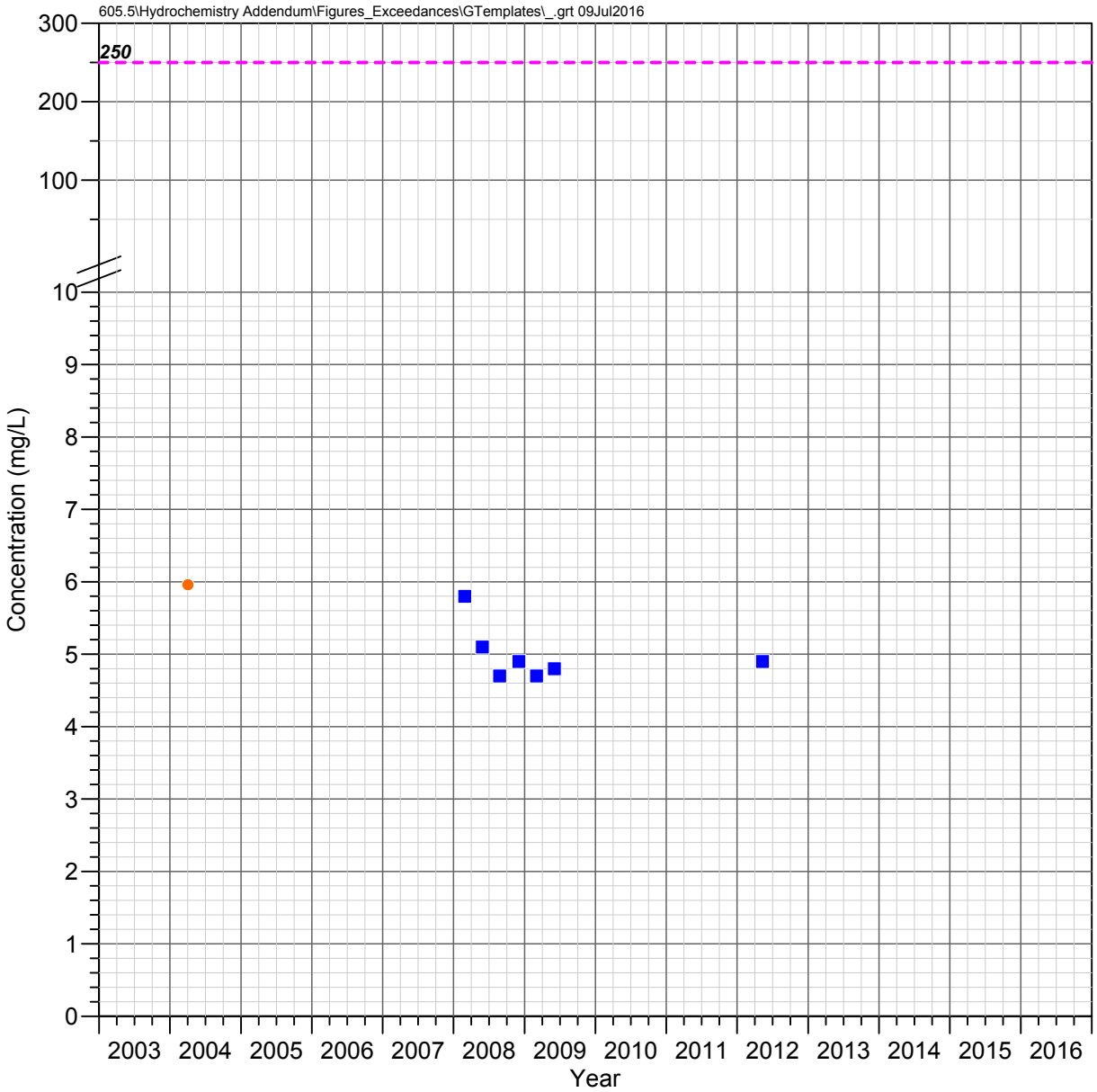


FIGURE E-183. CHLORIDE CONCENTRATIONS OBSERVED AT HRES-04, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-05
Apache Leap Tuff Aquifer

CHLORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 250 mg/L)

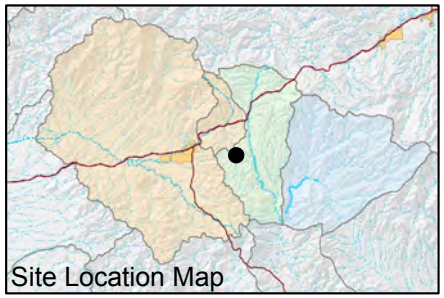
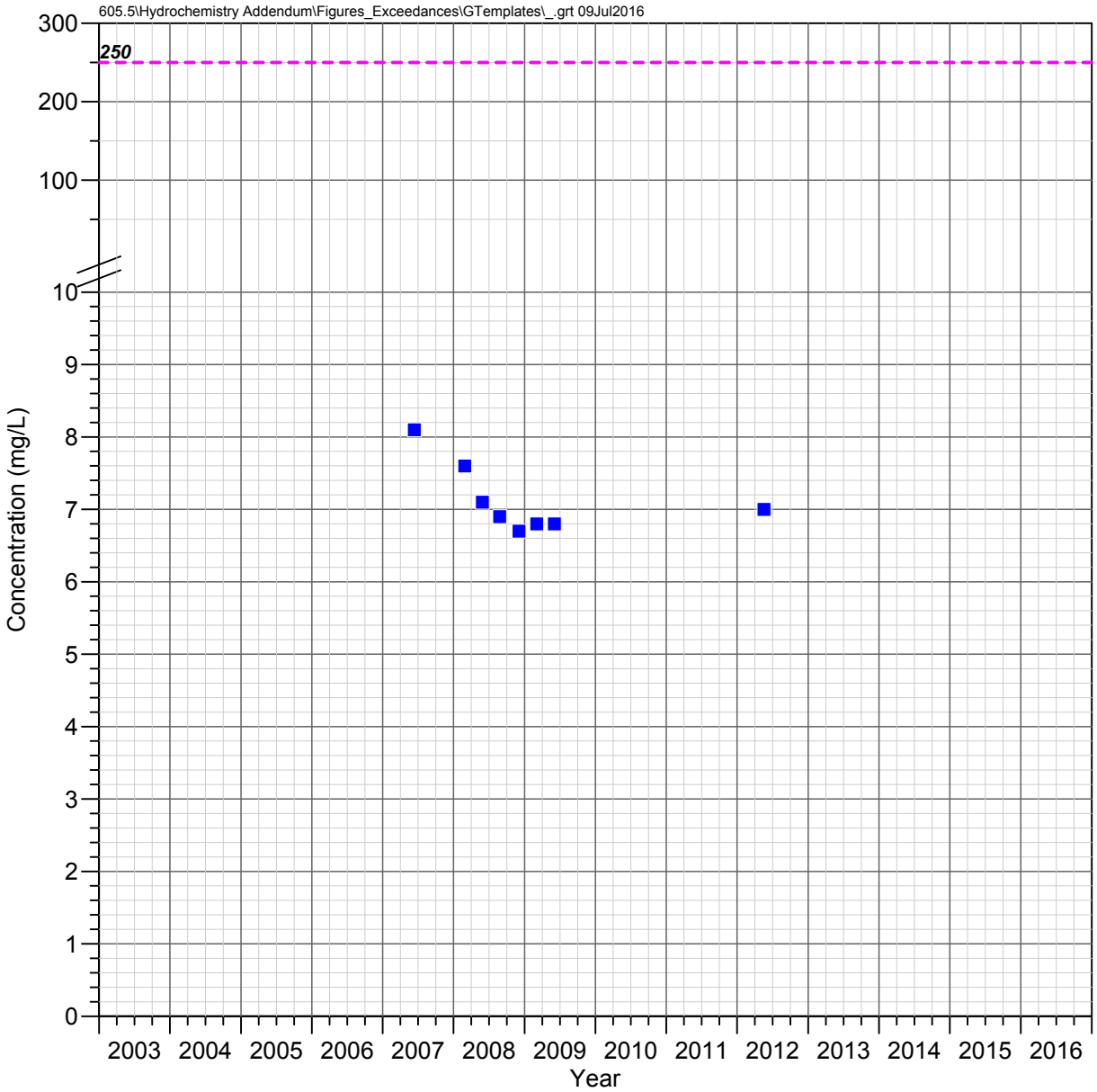


FIGURE E-184. CHLORIDE CONCENTRATIONS OBSERVED AT HRES-05, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-06
Apache Leap Tuff Aquifer

CHLORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 250 mg/L)

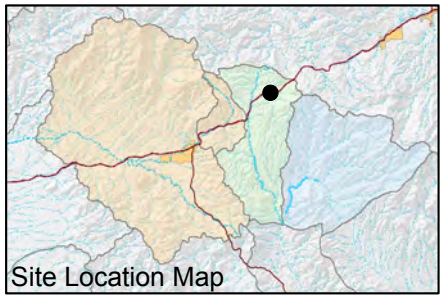
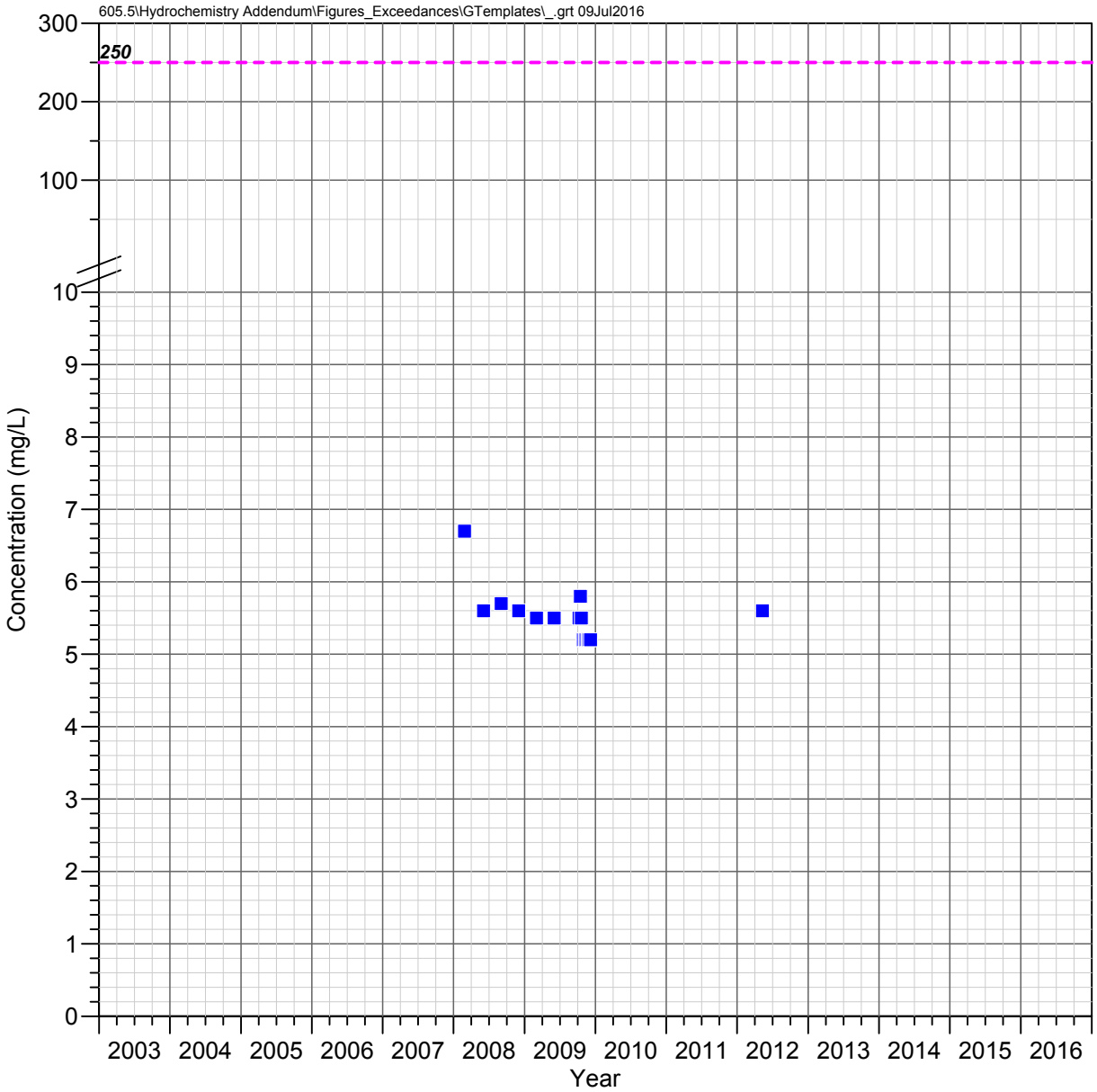


FIGURE E-185. CHLORIDE CONCENTRATIONS OBSERVED AT HRES-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-07
Apache Leap Tuff Aquifer

CHLORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 250 mg/L)

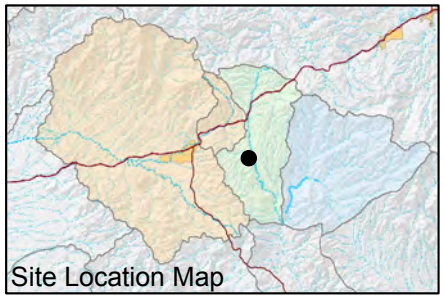
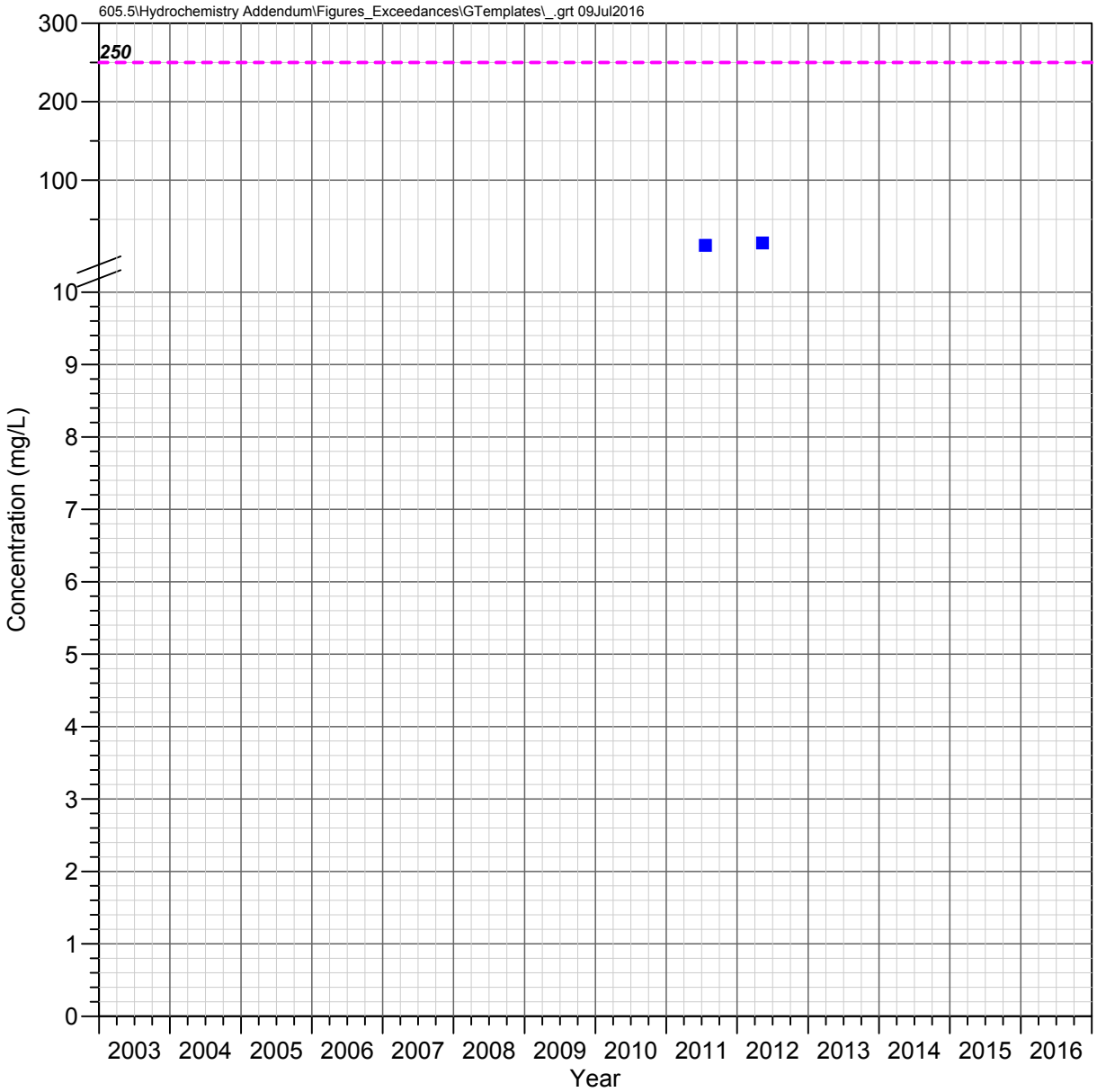


FIGURE E-186. CHLORIDE CONCENTRATIONS OBSERVED AT HRES-07, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-08
Apache Leap Tuff Aquifer

CHLORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 250 mg/L)

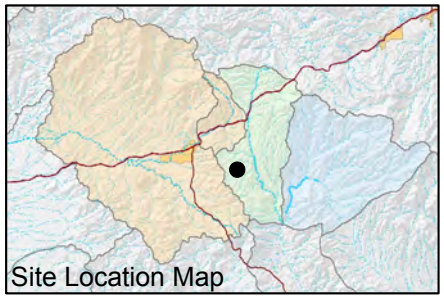
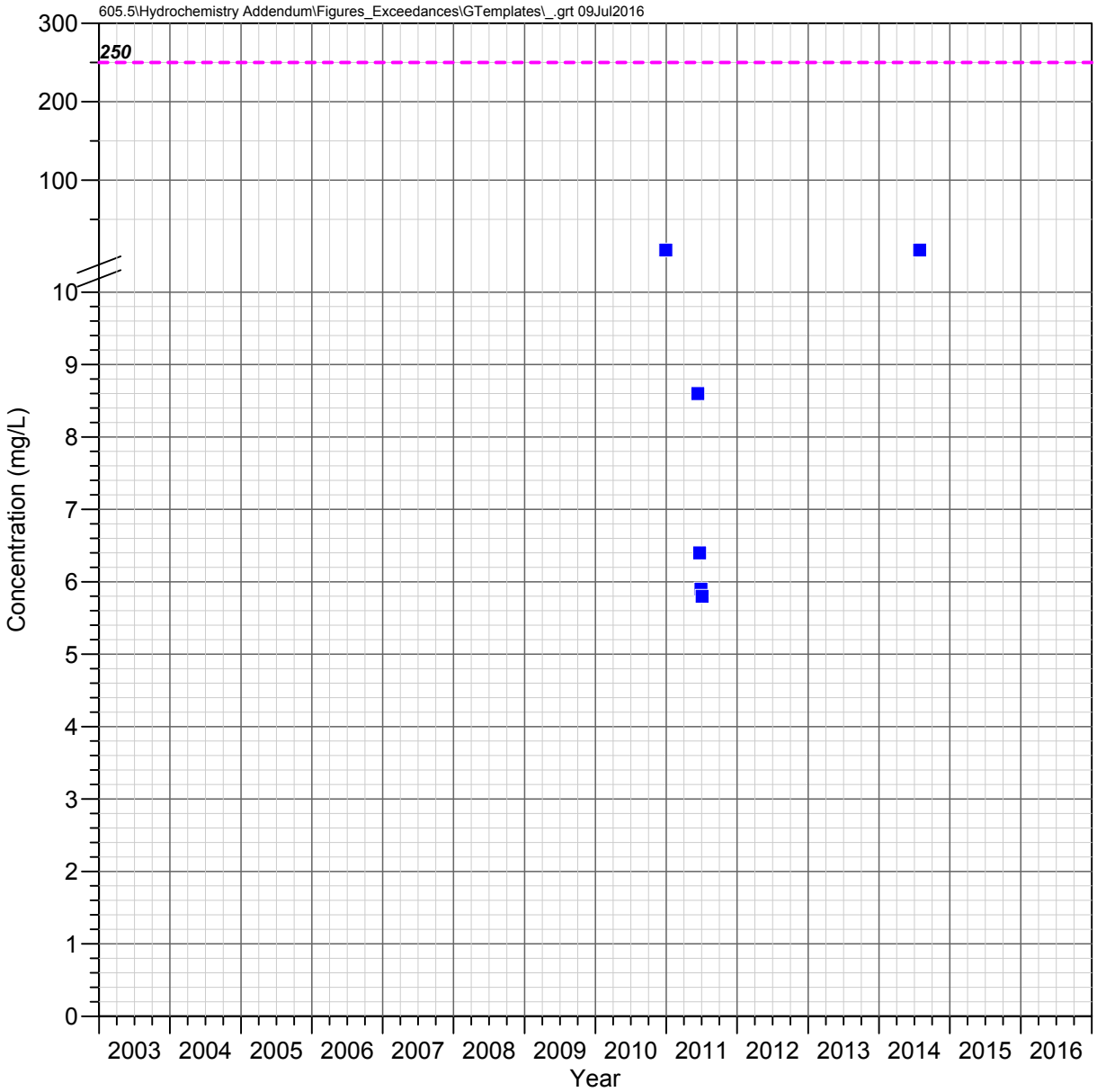


FIGURE E-187. CHLORIDE CONCENTRATIONS OBSERVED AT HRES-08, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-09
Apache Leap Tuff Aquifer

CHLORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 250 mg/L)

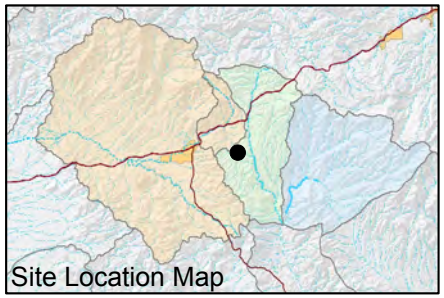
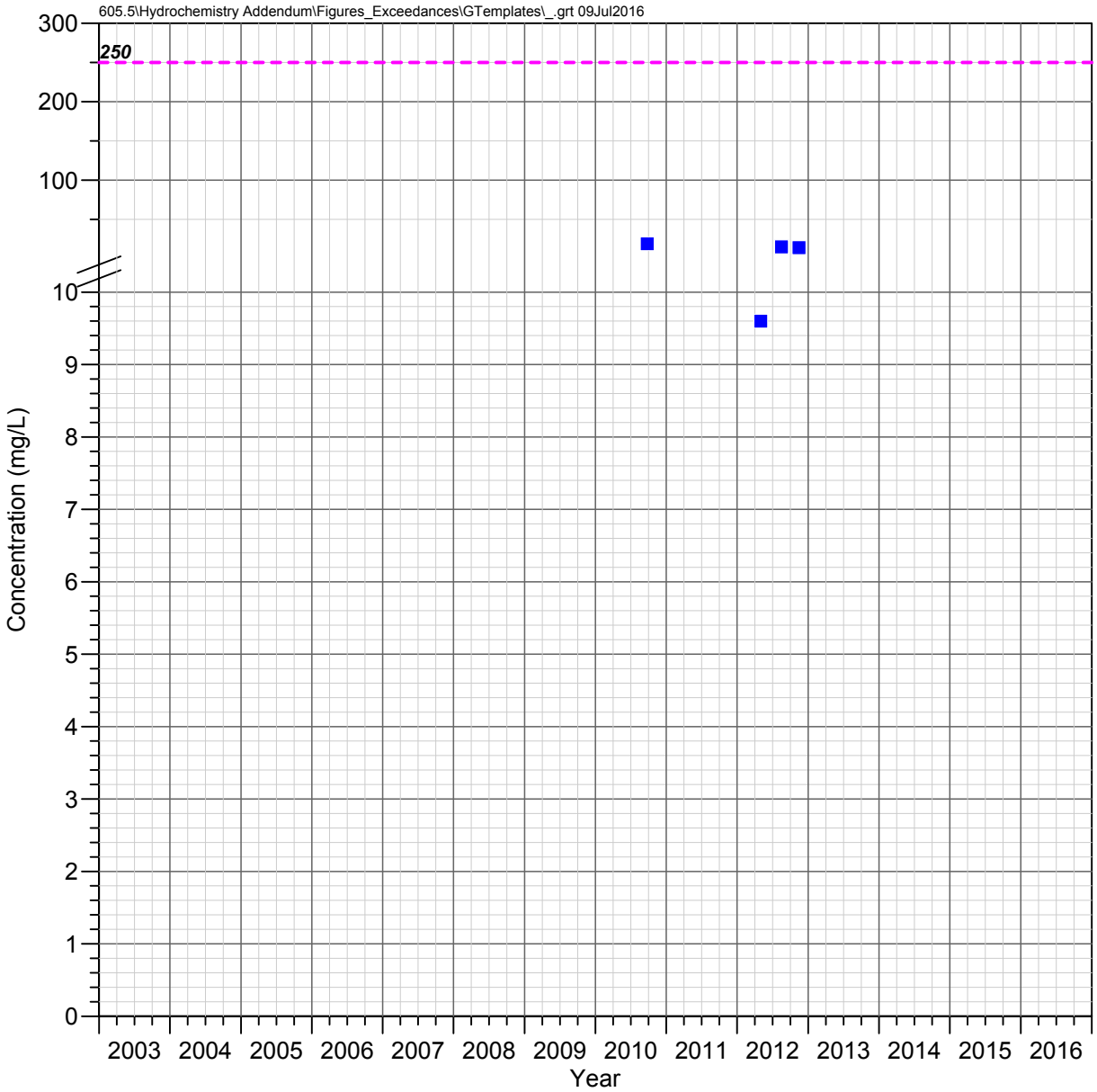


FIGURE E-188. CHLORIDE CONCENTRATIONS OBSERVED AT HRES-09, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-10
Apache Leap Tuff Aquifer

CHLORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 250 mg/L)

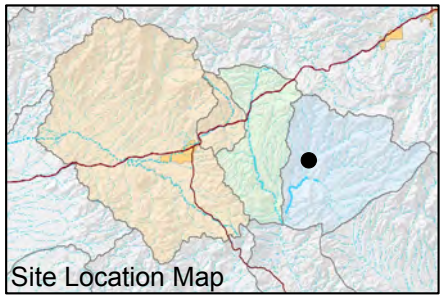
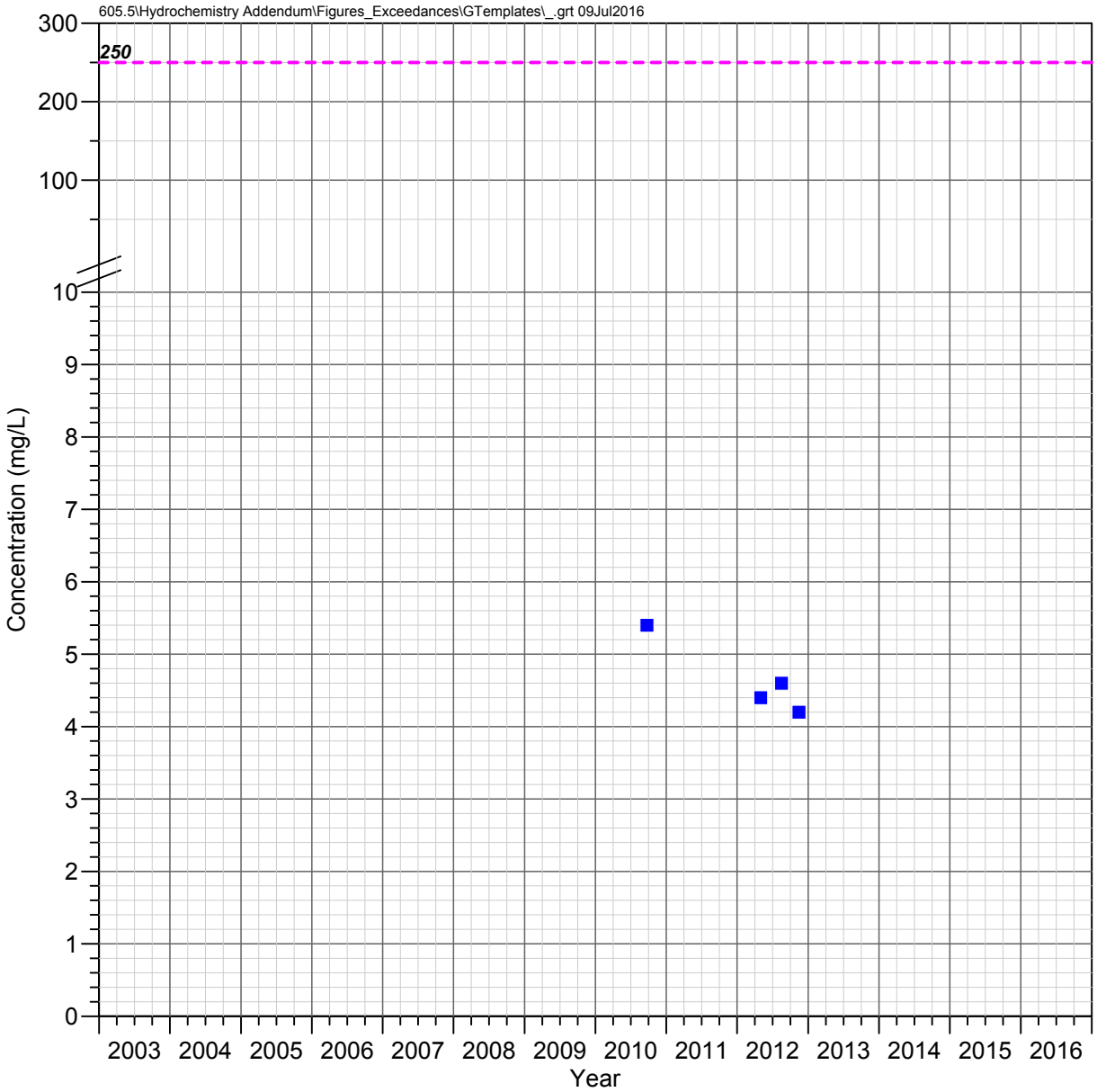


FIGURE E-189. CHLORIDE CONCENTRATIONS OBSERVED AT HRES-10, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-11
Apache Leap Tuff Aquifer

CHLORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 250 mg/L)

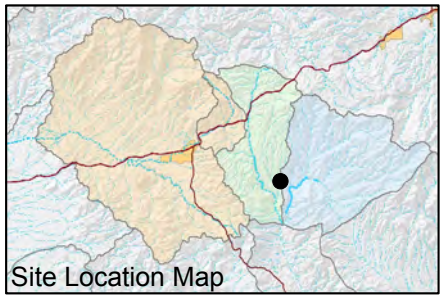
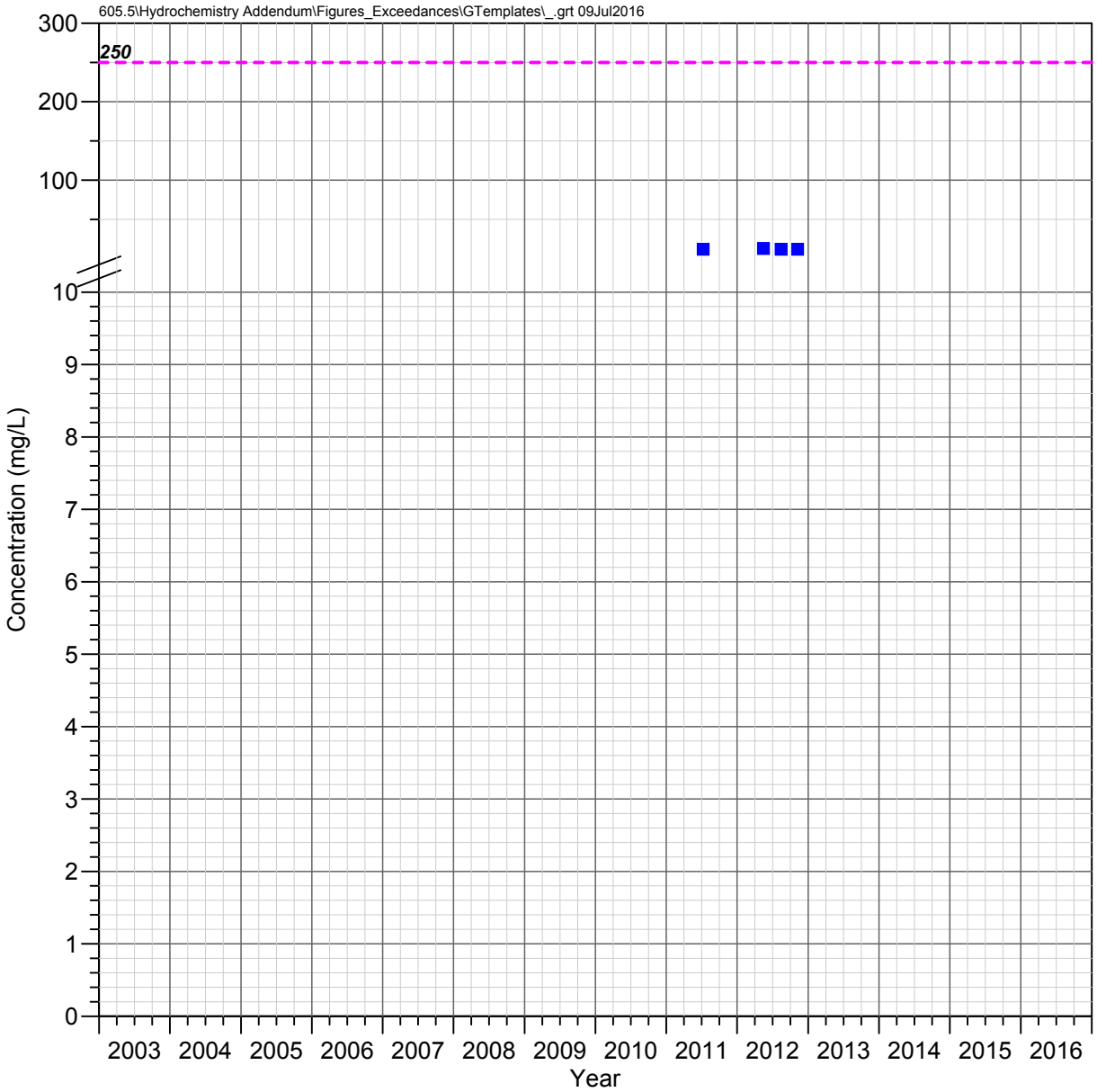


FIGURE E-190. CHLORIDE CONCENTRATIONS OBSERVED AT HRES-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-12
Apache Leap Tuff Aquifer

CHLORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 250 mg/L)

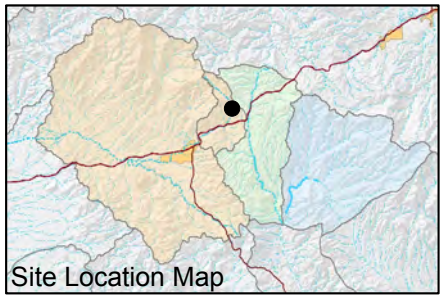
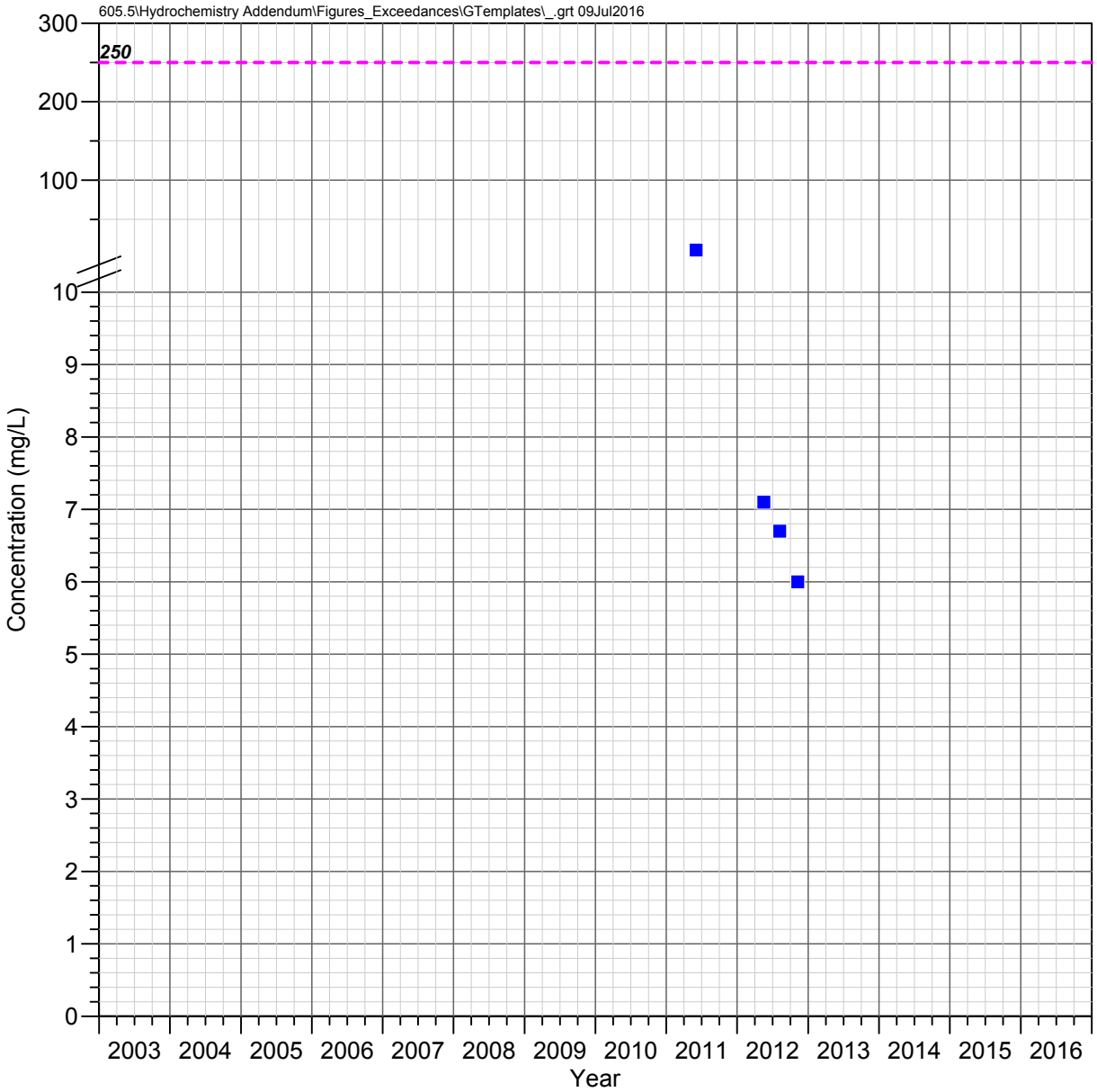


FIGURE E-191. CHLORIDE CONCENTRATIONS OBSERVED AT HRES-12, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-13
Apache Leap Tuff Aquifer

CHLORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 250 mg/L)

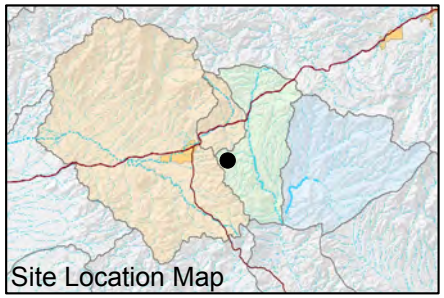
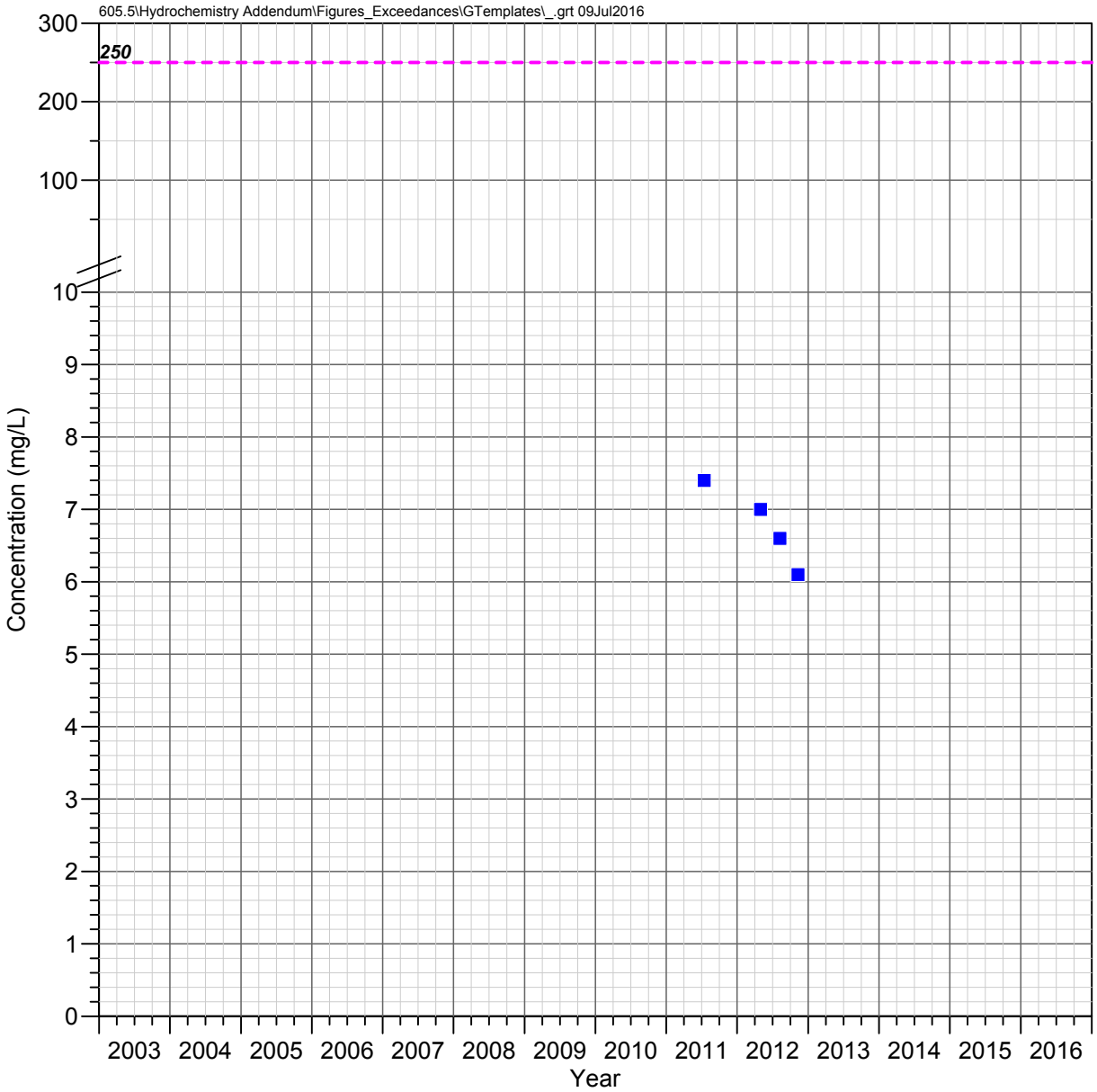


FIGURE E-192. CHLORIDE CONCENTRATIONS OBSERVED AT HRES-13, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-14
Apache Leap Tuff Aquifer

CHLORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 250 mg/L)

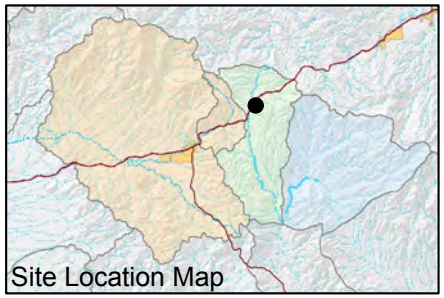
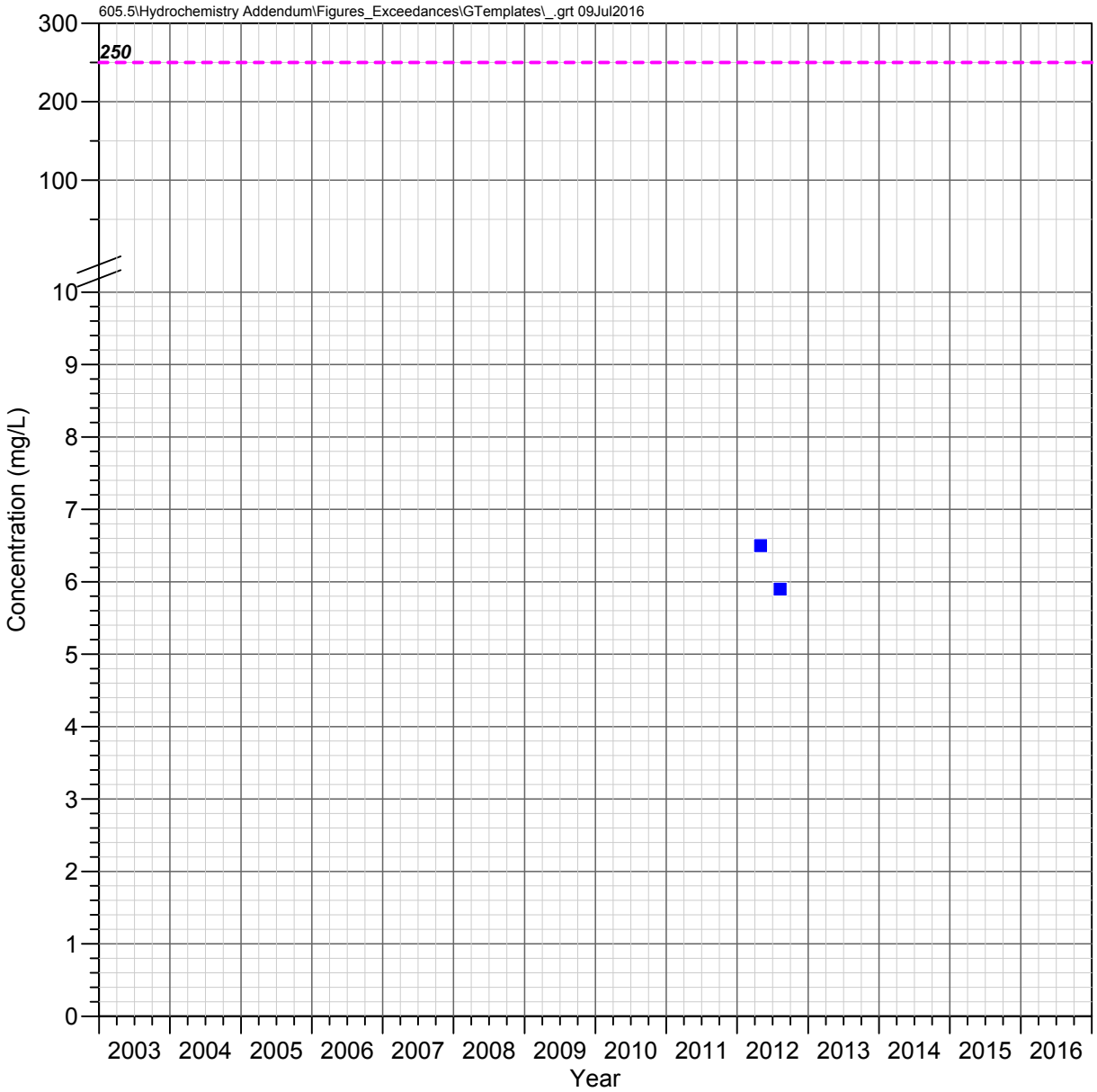


FIGURE E-193. CHLORIDE CONCENTRATIONS OBSERVED AT HRES-14, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-15
Apache Leap Tuff Aquifer

CHLORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 250 mg/L)

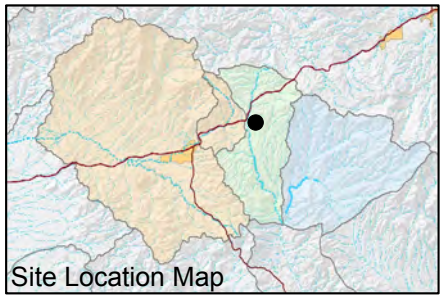
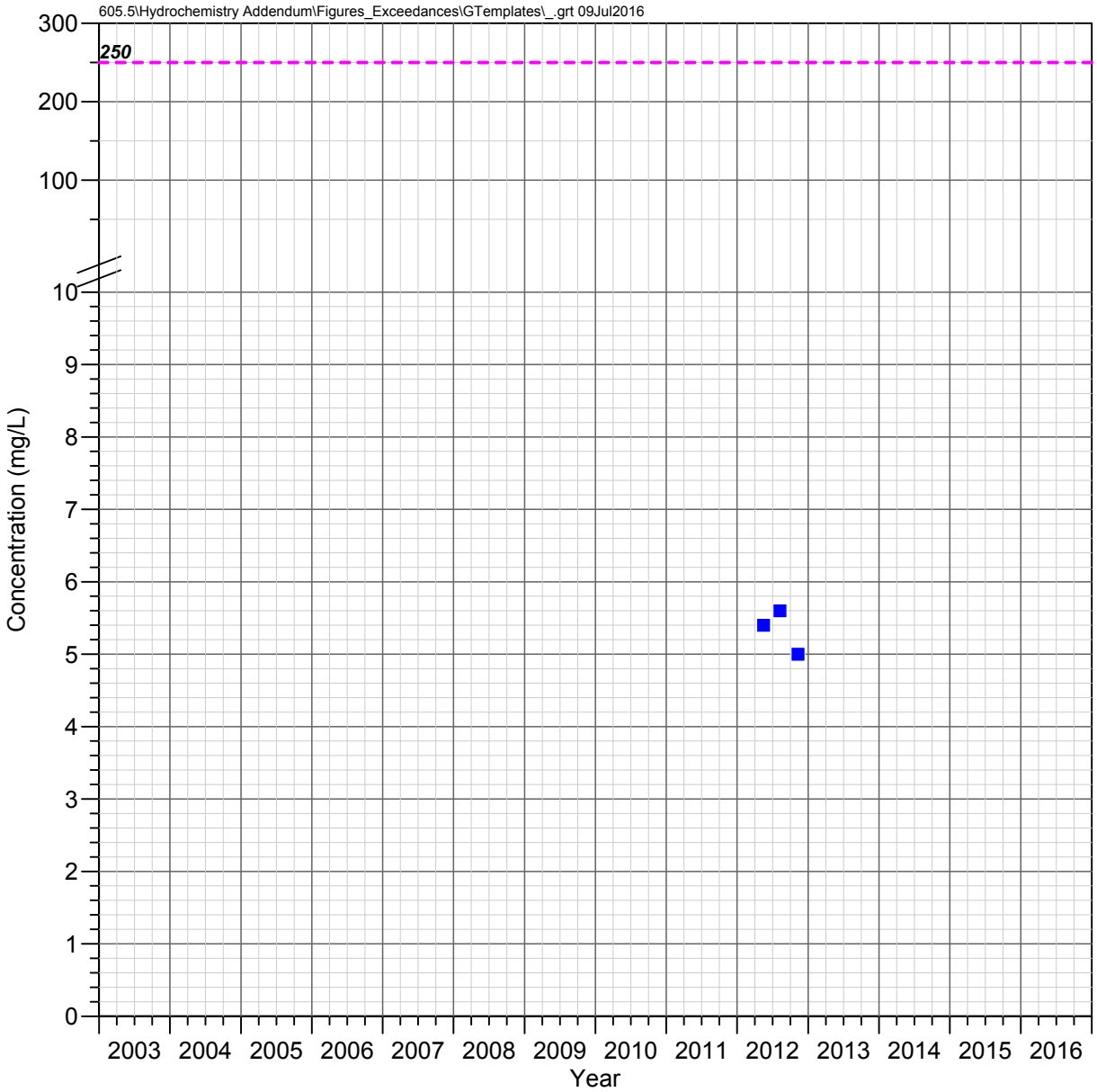


FIGURE E-194. CHLORIDE CONCENTRATIONS OBSERVED AT HRES-15, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-17
Apache Leap Tuff Aquifer

CHLORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 250 mg/L)

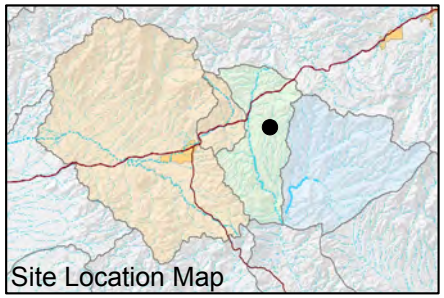
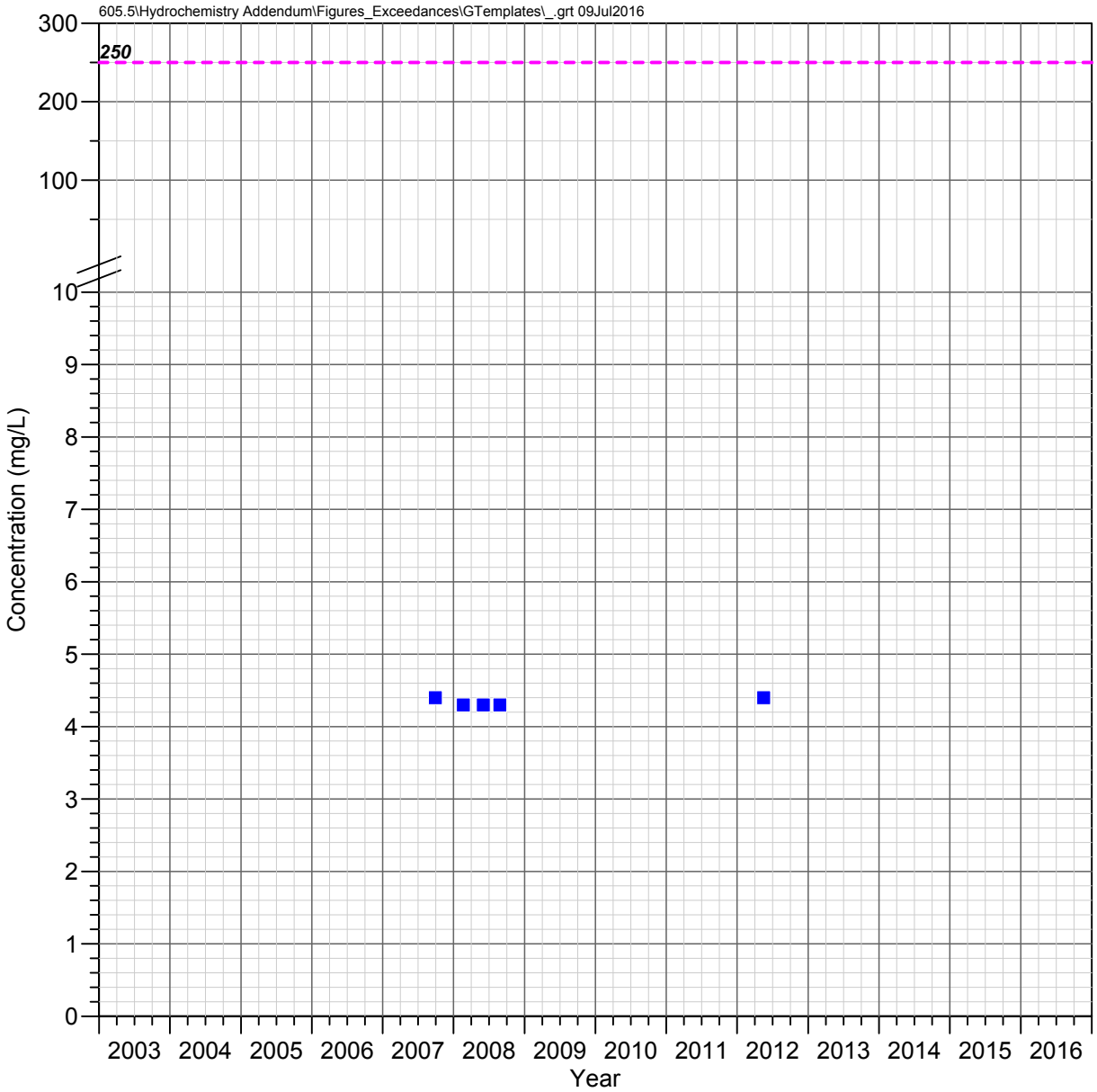


FIGURE E-195. CHLORIDE CONCENTRATIONS OBSERVED AT HRES-17, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MJ-11
Apache Leap Tuff Aquifer

CHLORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 250 mg/L)

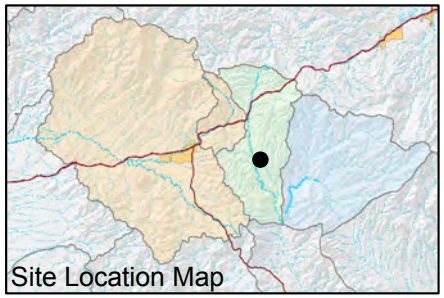
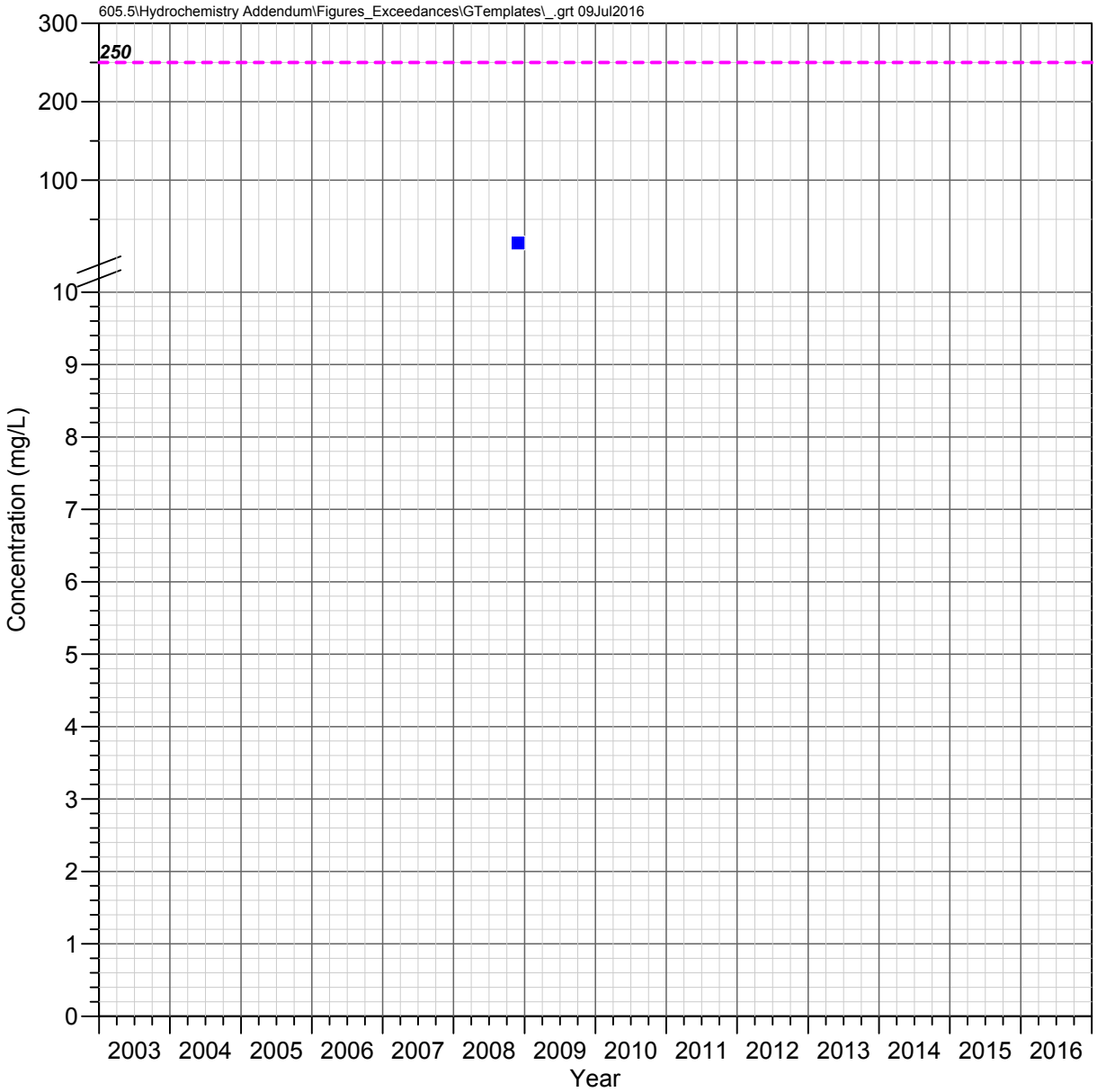


FIGURE E-196. CHLORIDE CONCENTRATIONS OBSERVED AT MJ-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-01
Deep Groundwater System

CHLORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 250 mg/L)

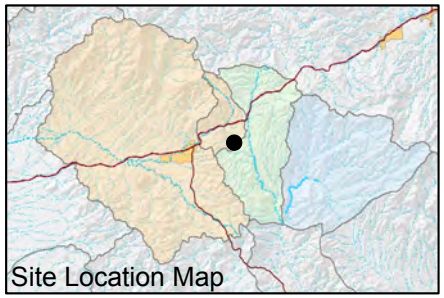
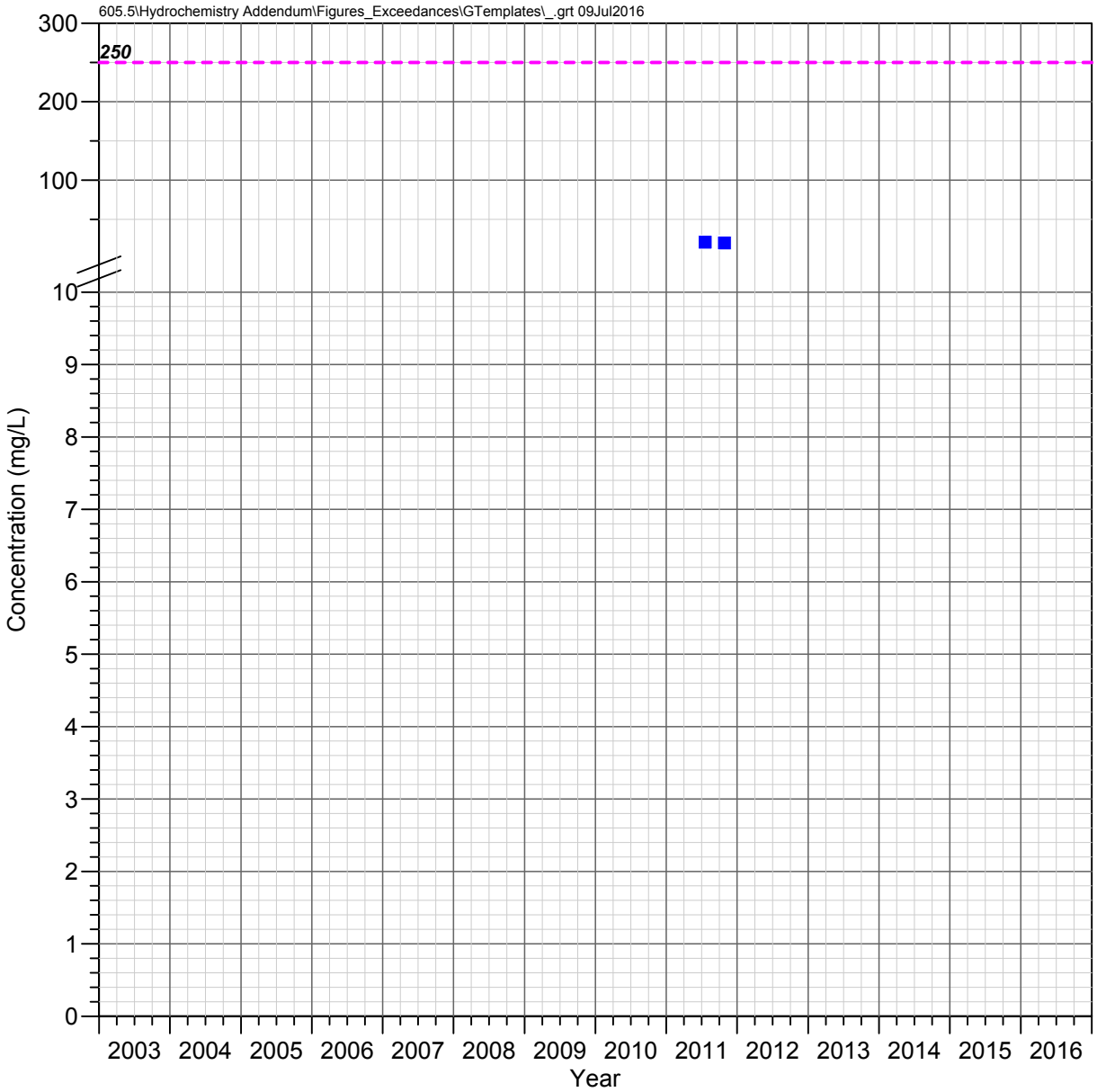


FIGURE E-197. CHLORIDE CONCENTRATIONS OBSERVED AT DHRES-01, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-02
Deep Groundwater System

CHLORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 250 mg/L)

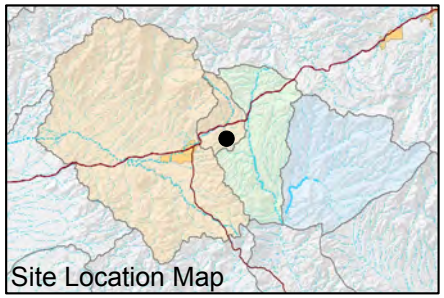
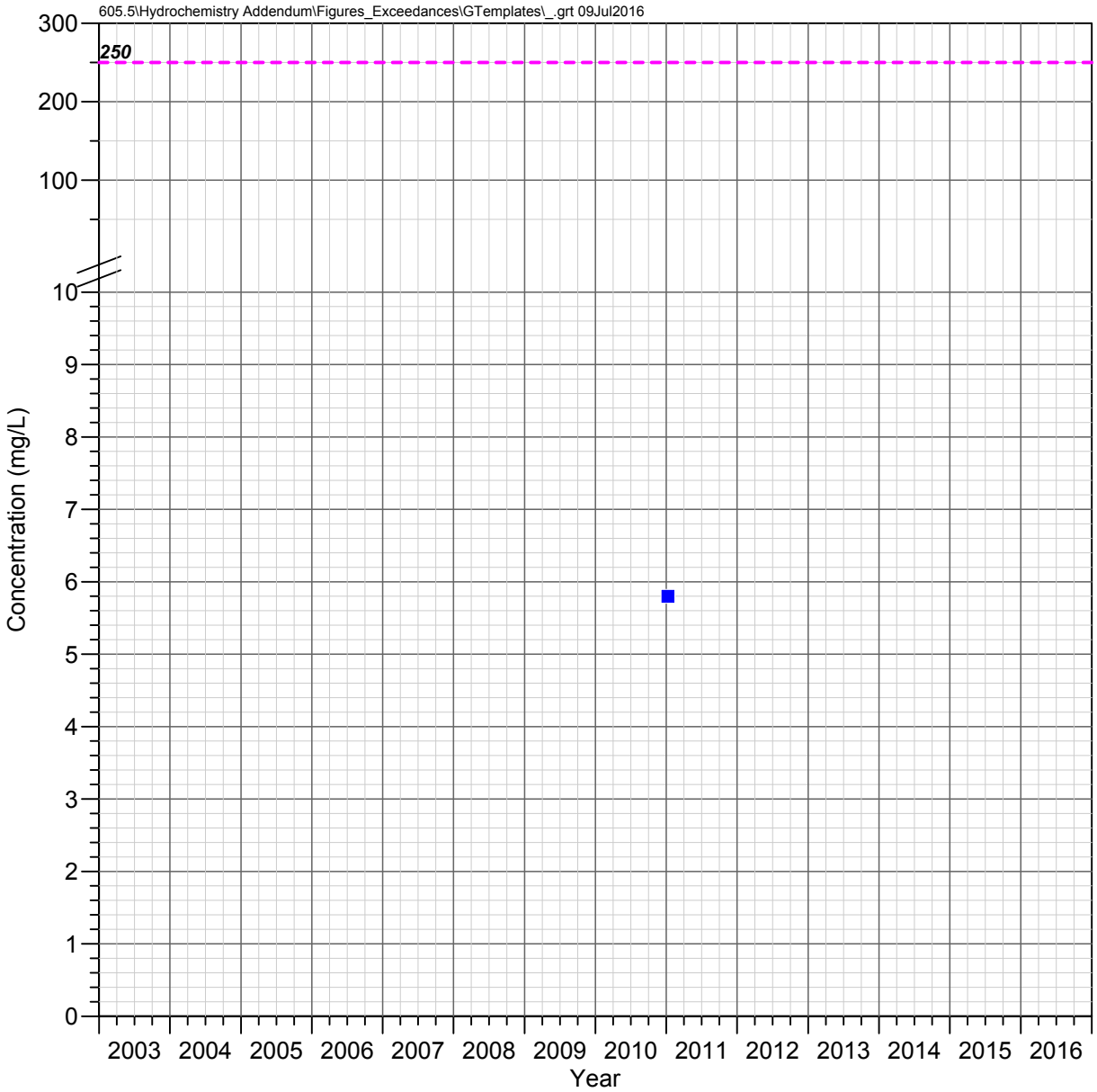


FIGURE E-198. CHLORIDE CONCENTRATIONS OBSERVED AT DHRES-02, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-06
Deep Groundwater System

CHLORIDE

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 250 mg/L)

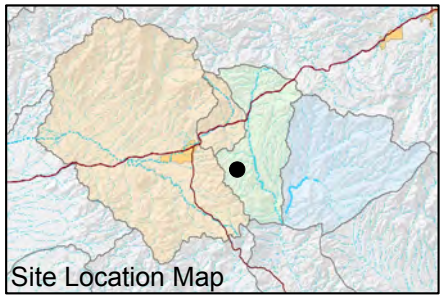
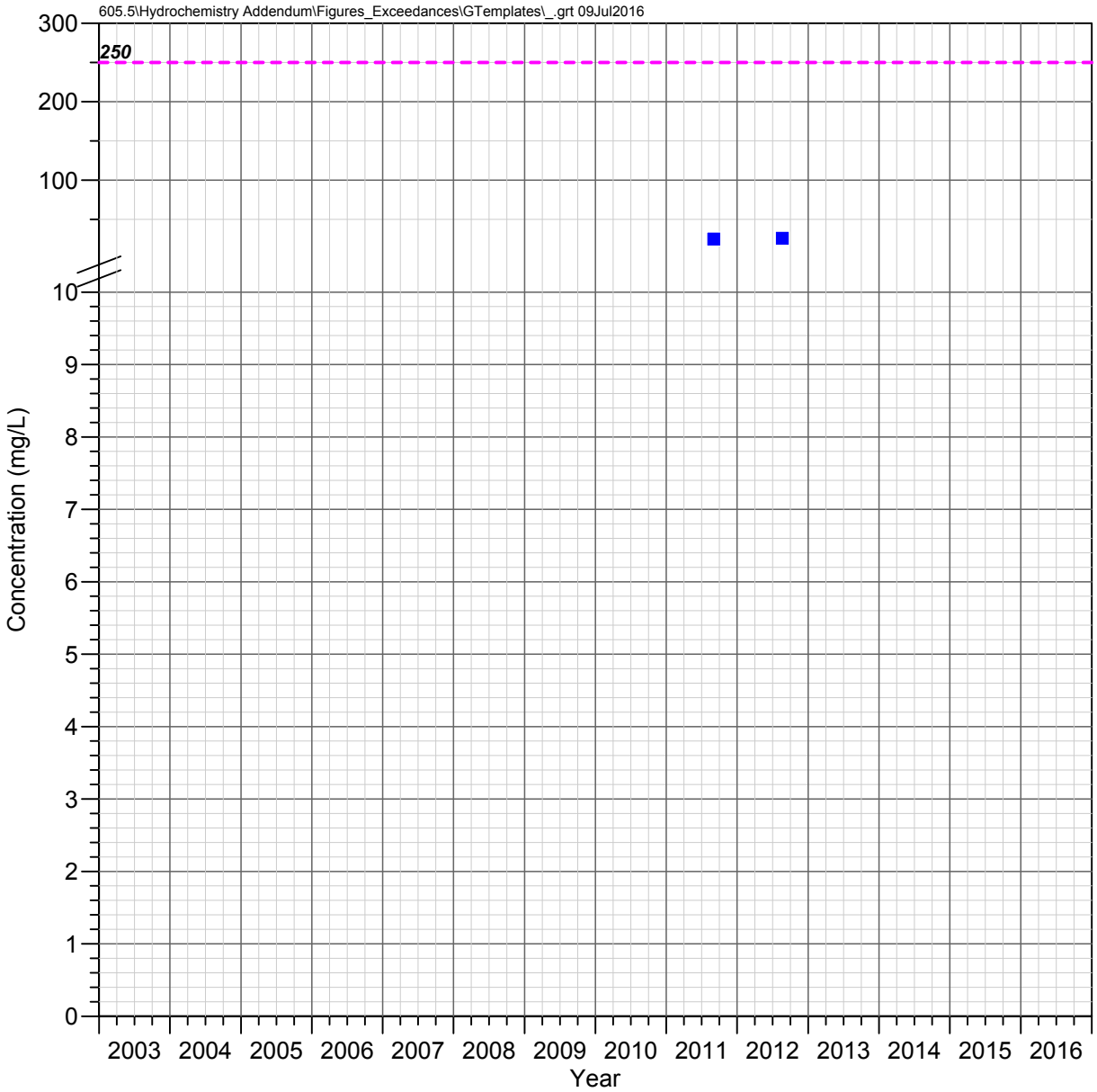


FIGURE E-199. CHLORIDE CONCENTRATIONS OBSERVED AT DHRES-06, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-09
Deep Groundwater System

CHLORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 250 mg/L)

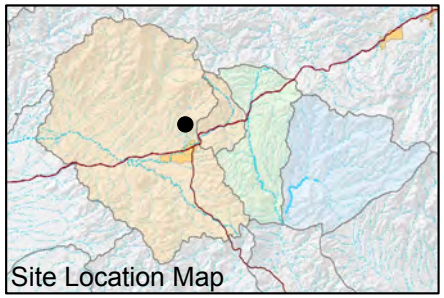
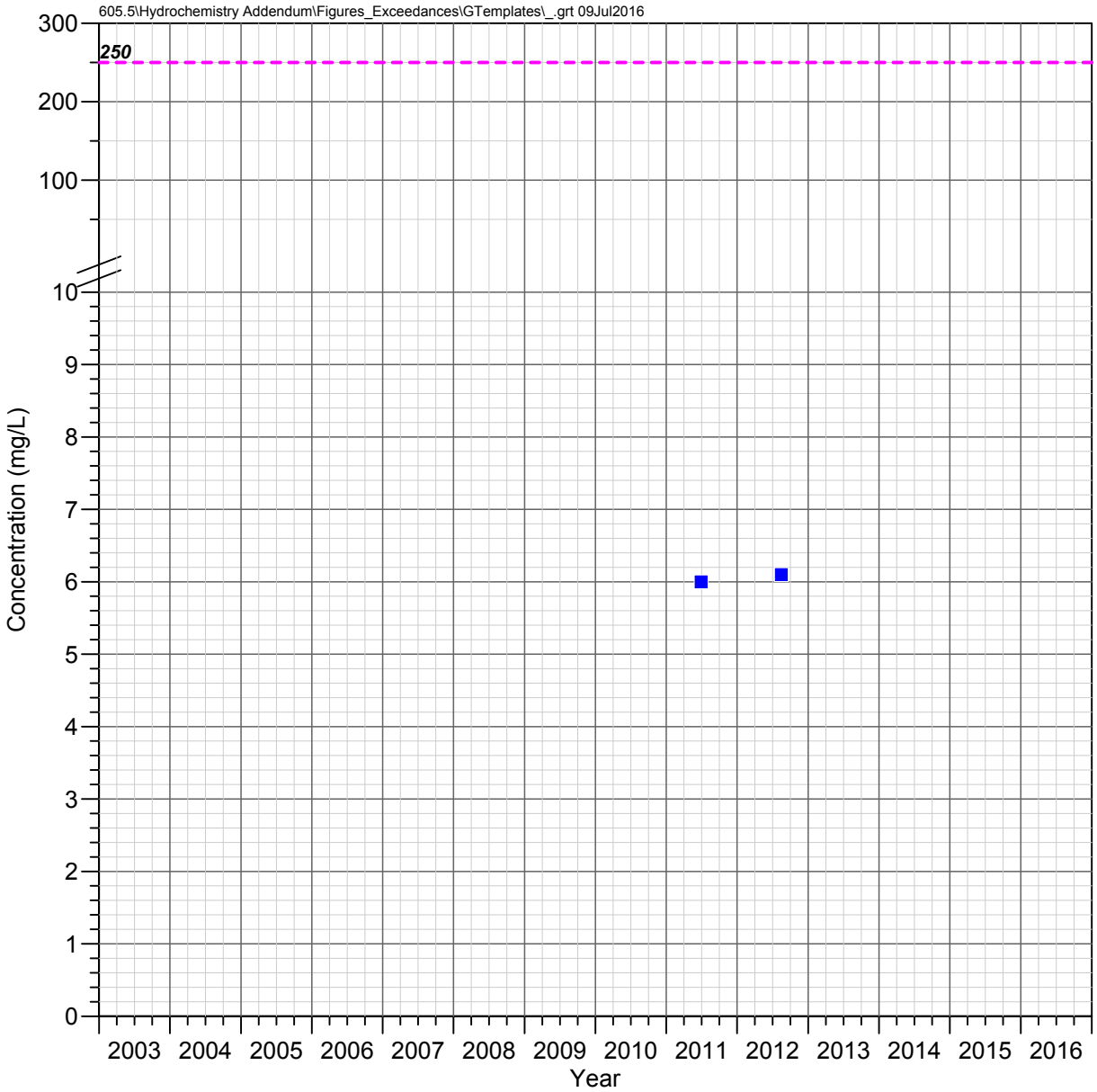


FIGURE E-200. CHLORIDE CONCENTRATIONS OBSERVED AT DHRES-09, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-11
Deep Groundwater System

CHLORIDE

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 250 mg/L)

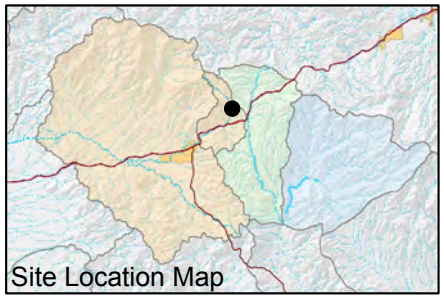
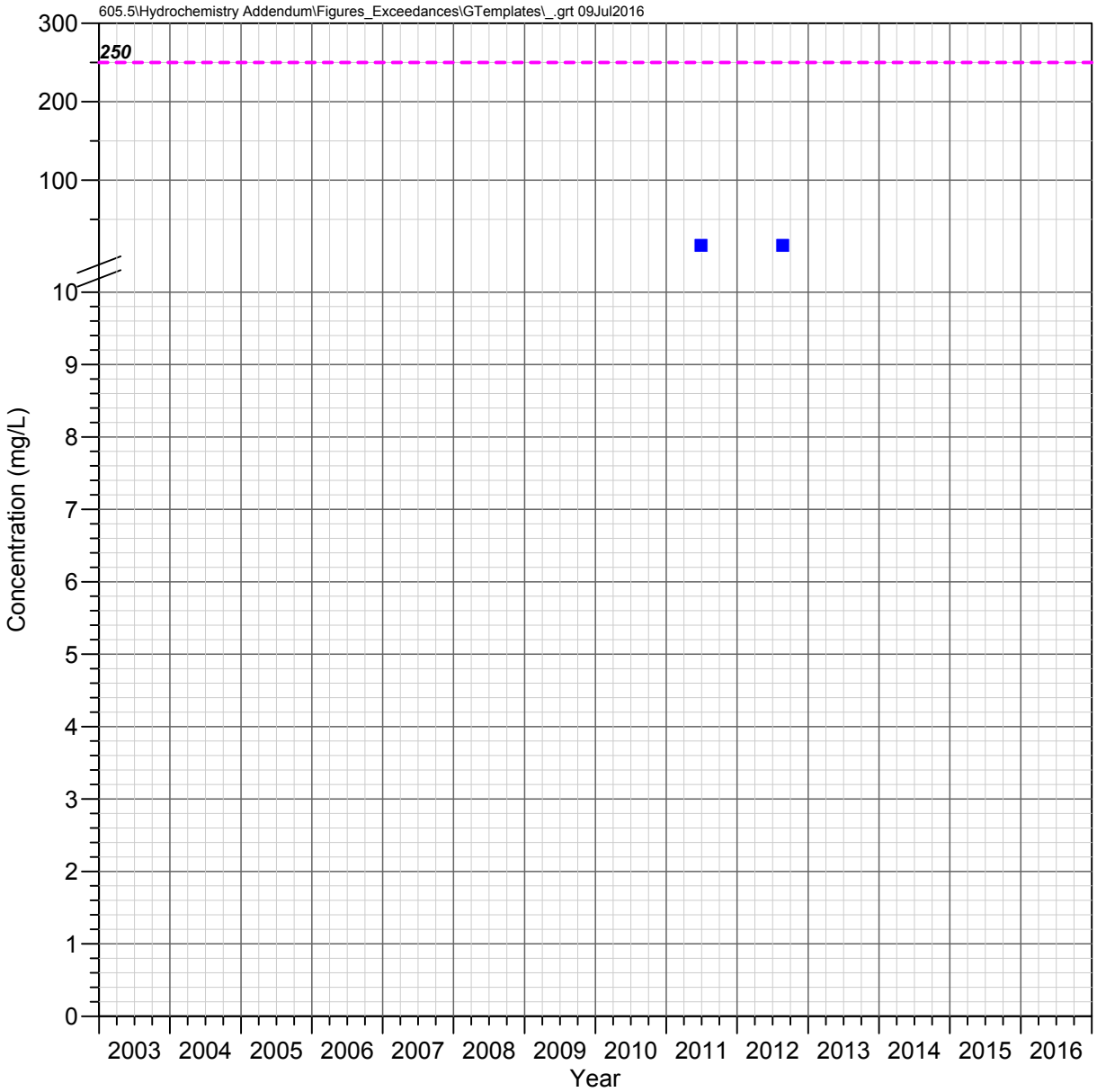


FIGURE E-201. CHLORIDE CONCENTRATIONS OBSERVED AT DHRES-11, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-13
Deep Groundwater System

CHLORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 250 mg/L)

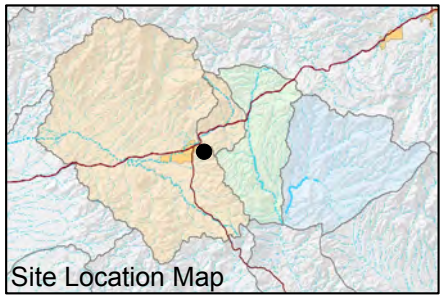
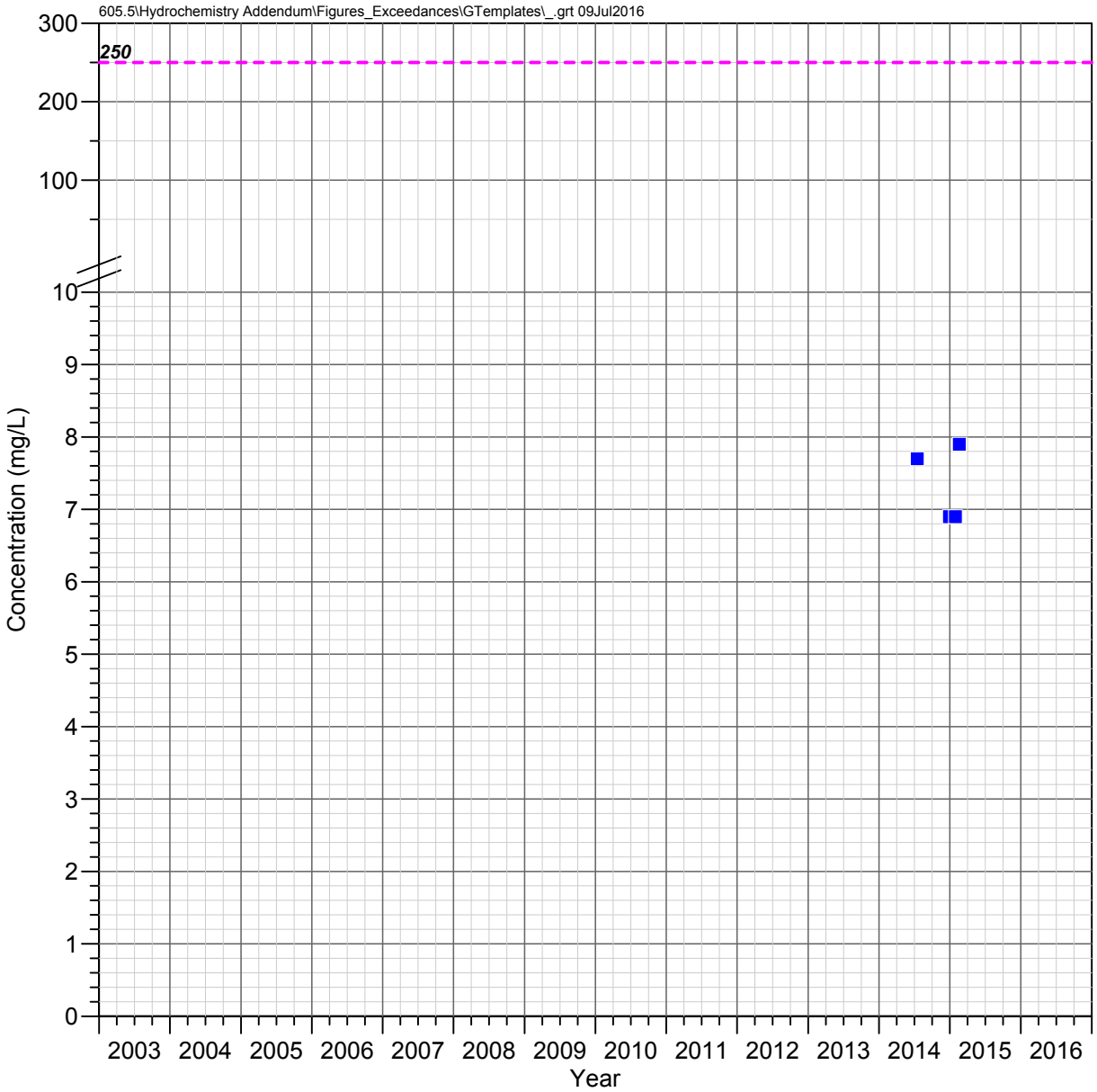


FIGURE E-202. CHLORIDE CONCENTRATIONS OBSERVED AT DHRES-13, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-15
Deep Groundwater System

CHLORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 250 mg/L)

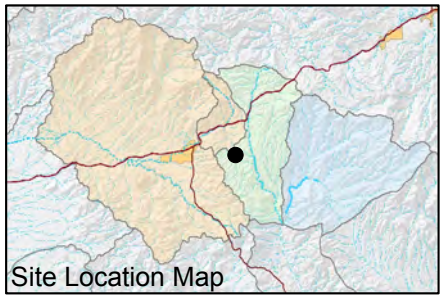
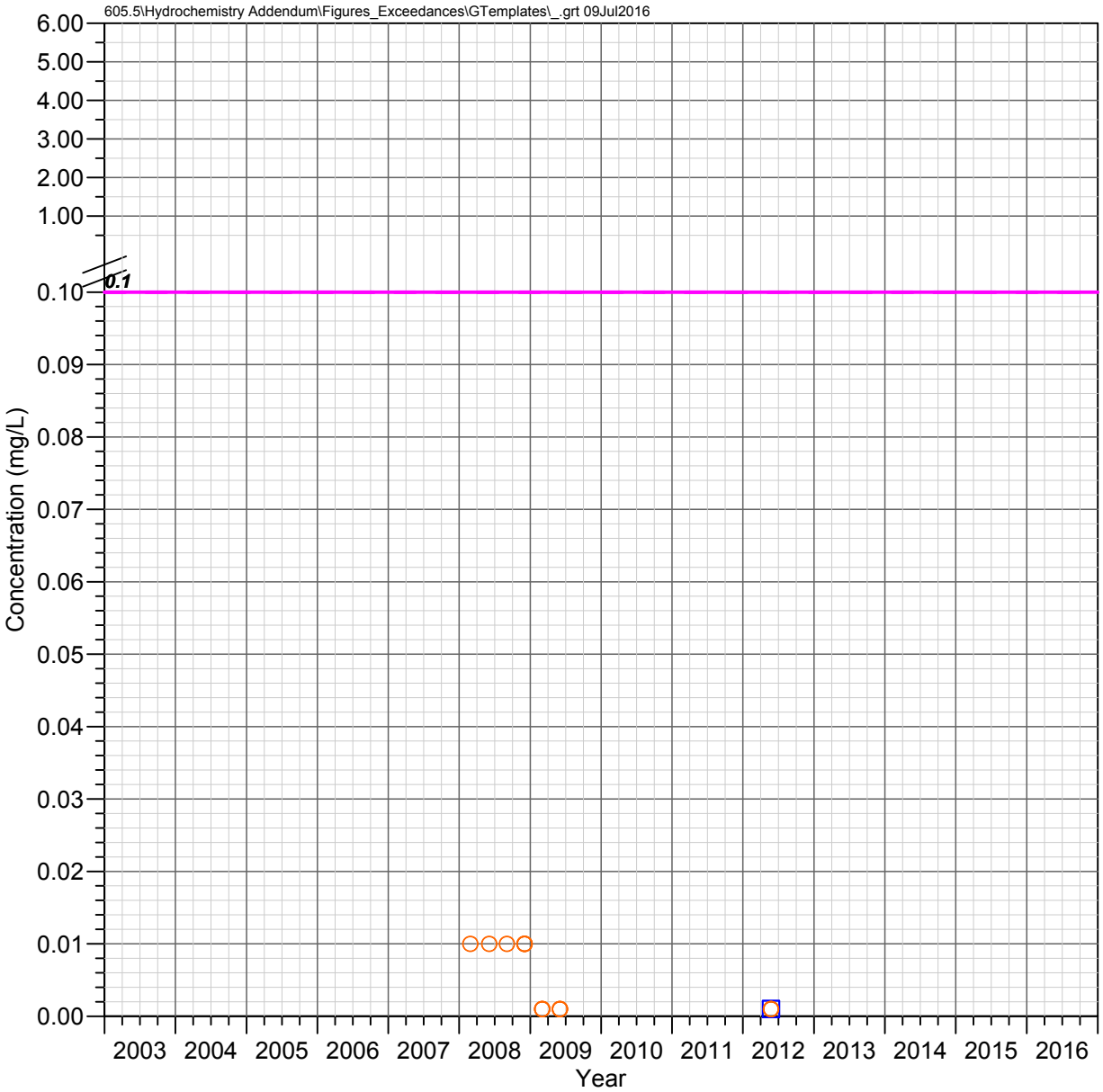


FIGURE E-203. CHLORIDE CONCENTRATIONS OBSERVED AT DHRES-15, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Hackberry Windmill Well
Shallow Groundwater System

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.1 mg/L)

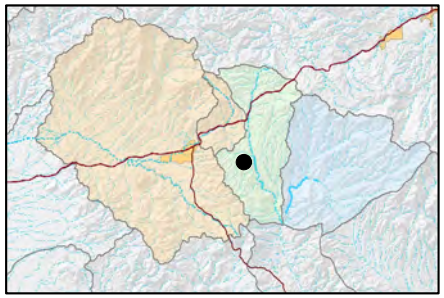
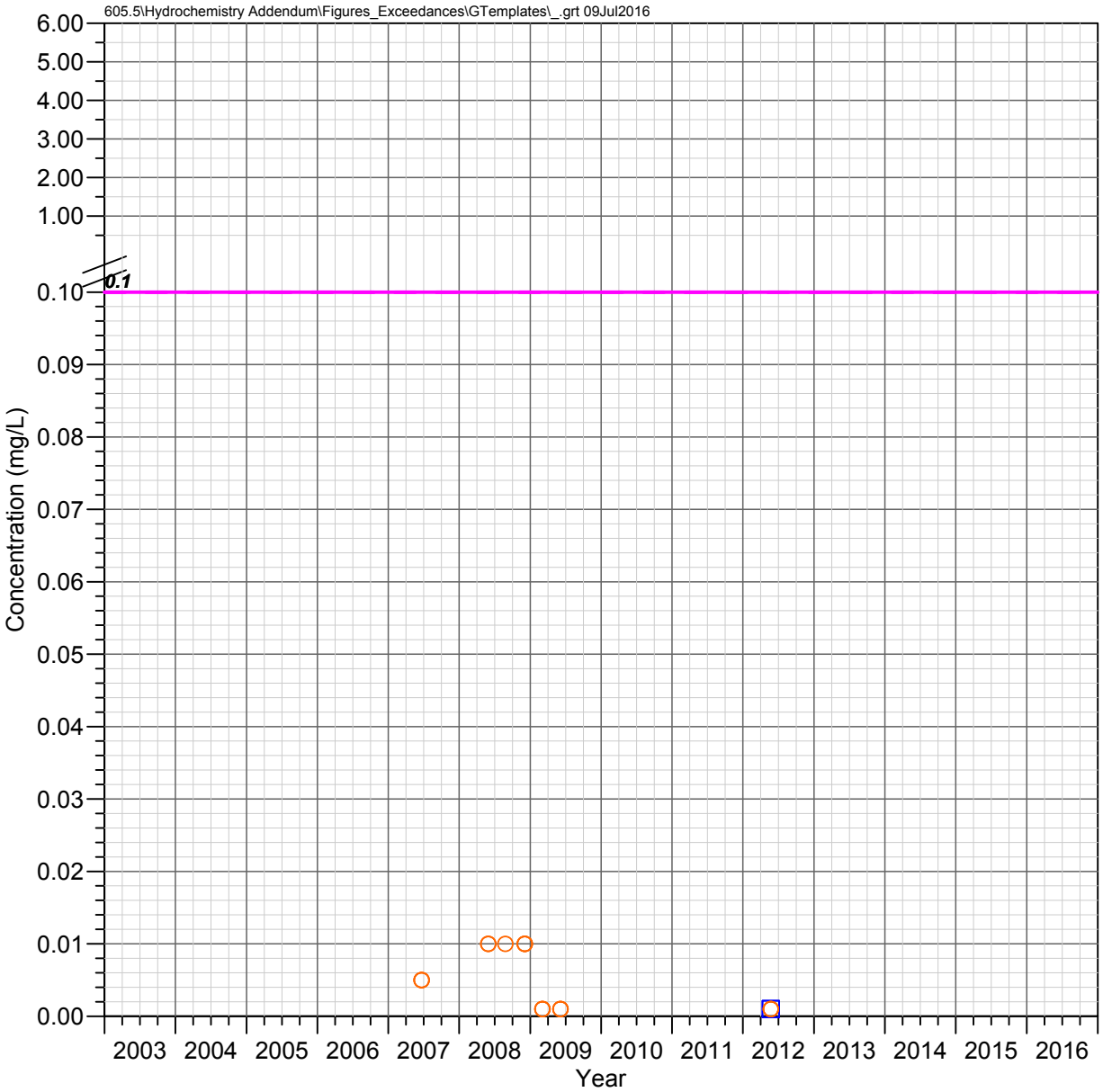


FIGURE E-204. CHROMIUM CONCENTRATIONS OBSERVED AT HACKBERRY WINDMILL WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



JI Ranch Corral Well
Shallow Groundwater System

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.1 mg/L)

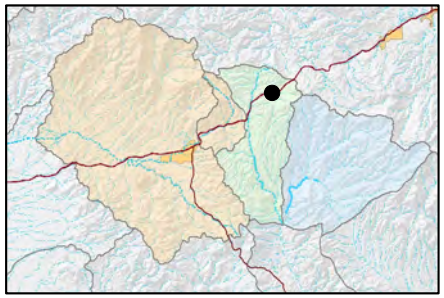
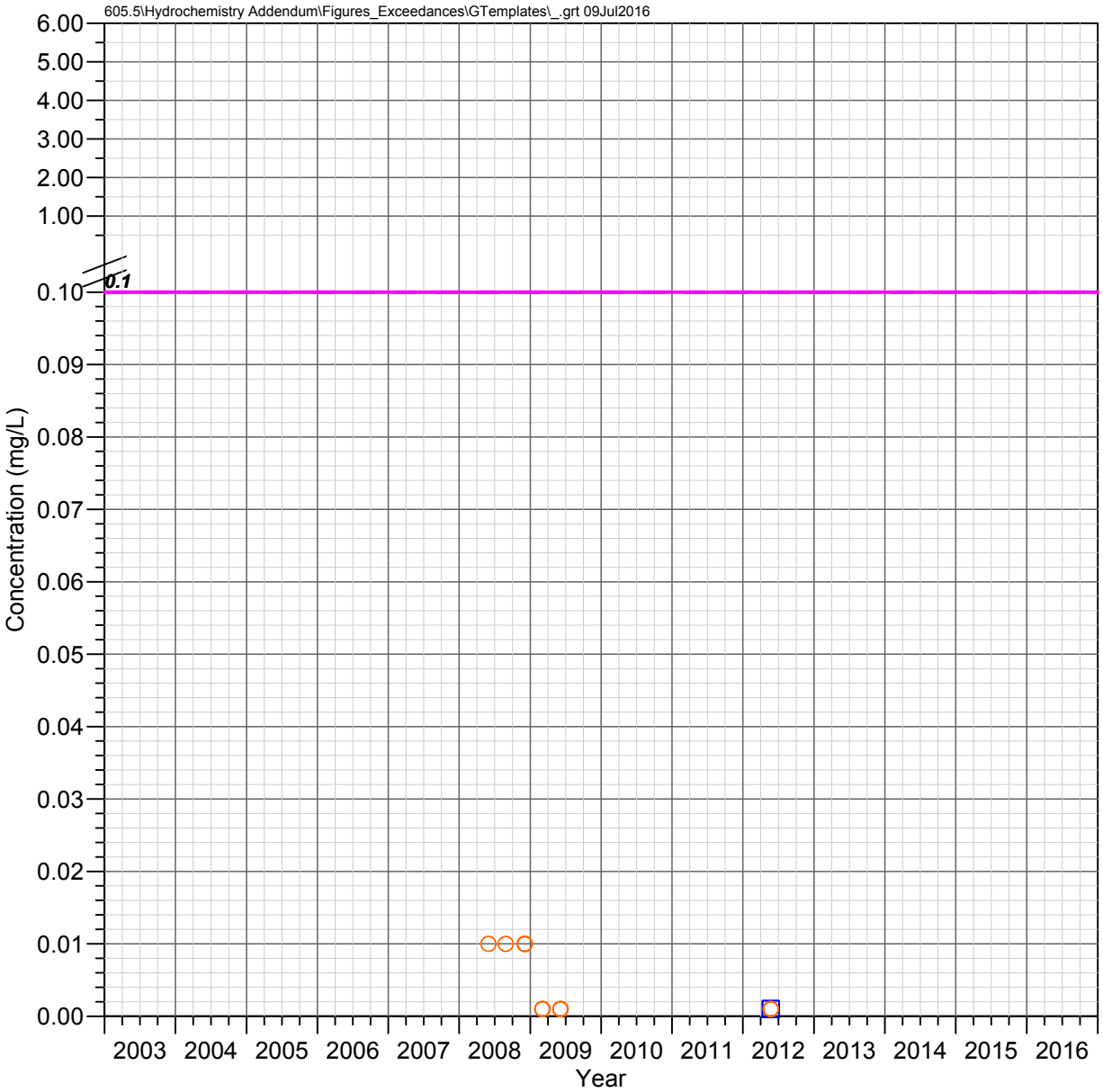


FIGURE E-205. CHROMIUM CONCENTRATIONS OBSERVED AT JI RANCH CORRAL WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



JI Ranch Middle Well Shallow Groundwater System

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.1 mg/L)

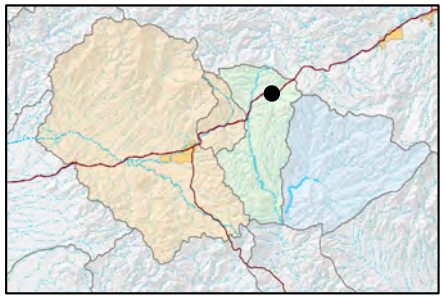
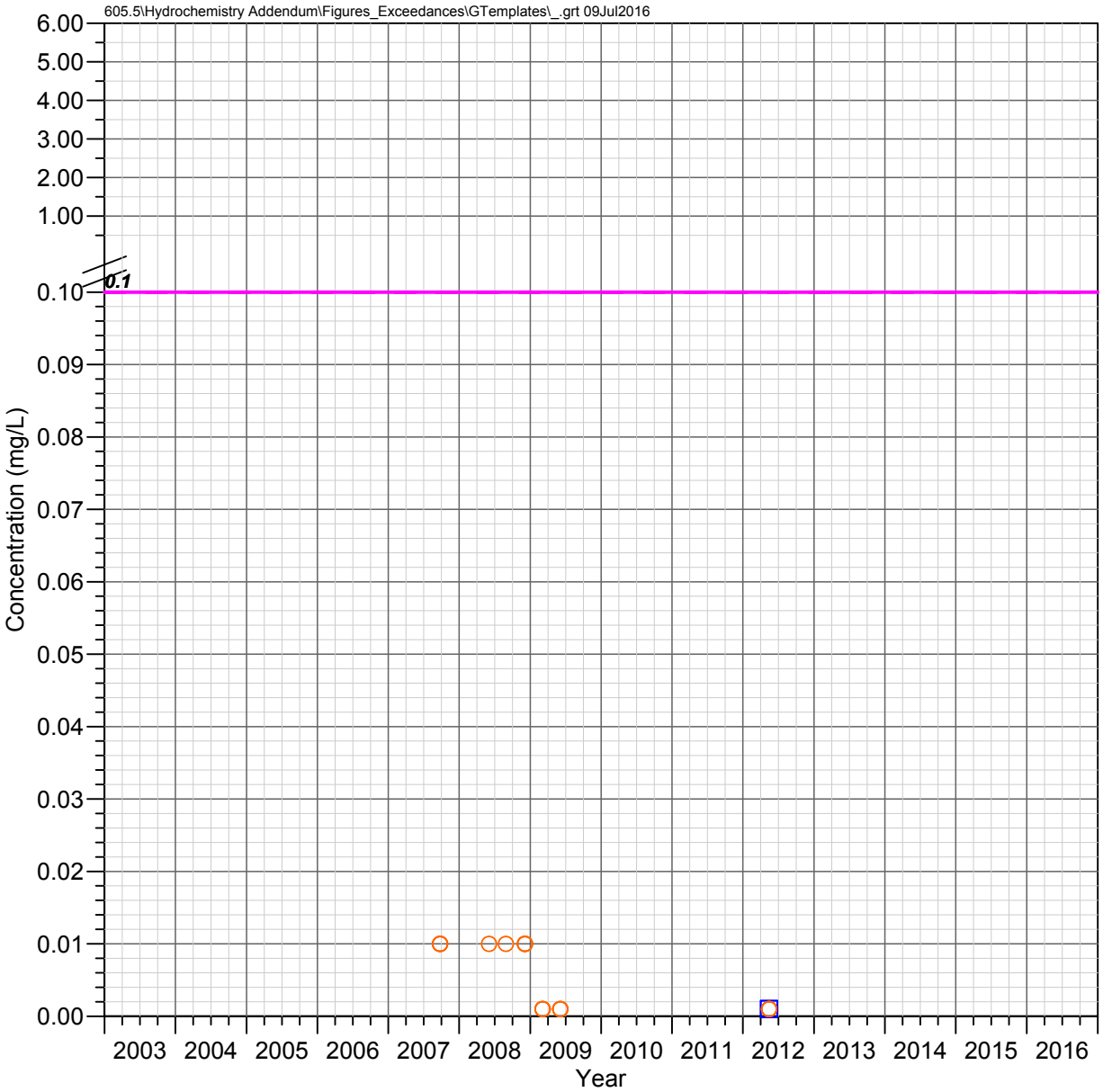


FIGURE E-206. CHROMIUM CONCENTRATIONS OBSERVED AT JI RANCH MIDDLE WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



A-06
Apache Leap Tuff Aquifer

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.1 mg/L)

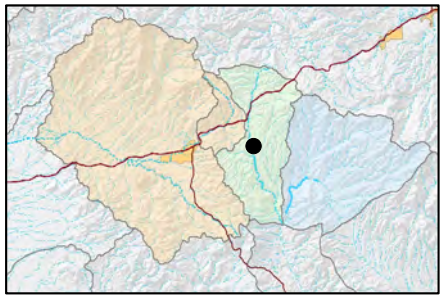
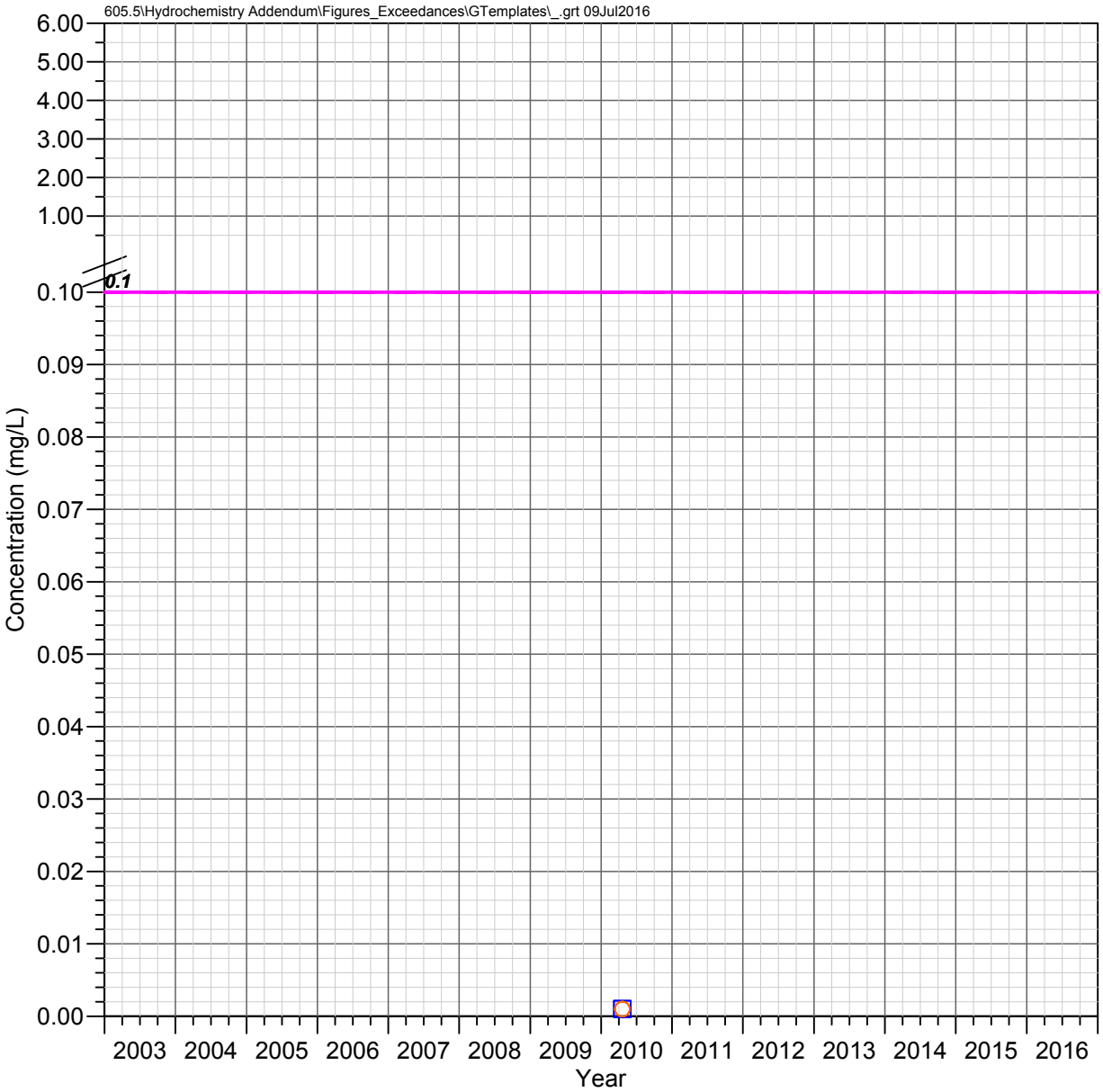


FIGURE E-207. CHROMIUM CONCENTRATIONS OBSERVED AT A-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



CT Well
Apache Leap Tuff Aquifer

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.1 mg/L)

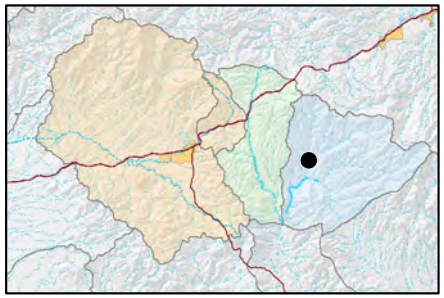
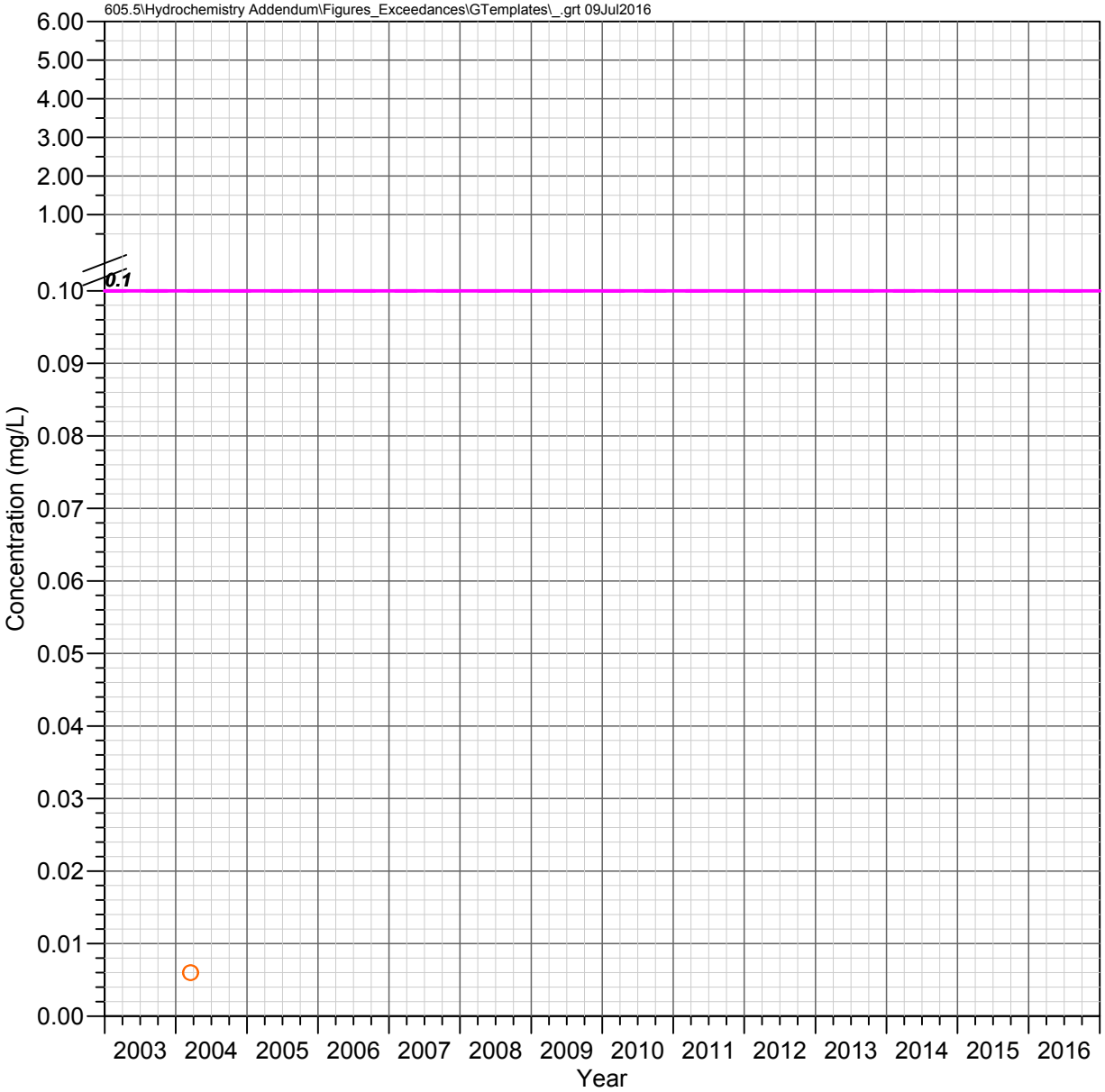


FIGURE E-208. CHROMIUM CONCENTRATIONS OBSERVED AT CT WELL, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-01
Apache Leap Tuff Aquifer

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.1 mg/L)

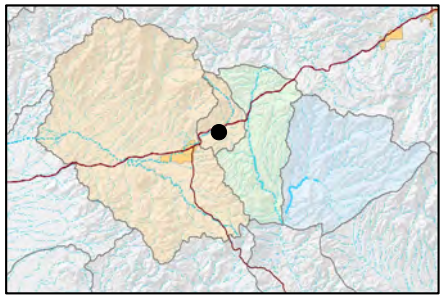
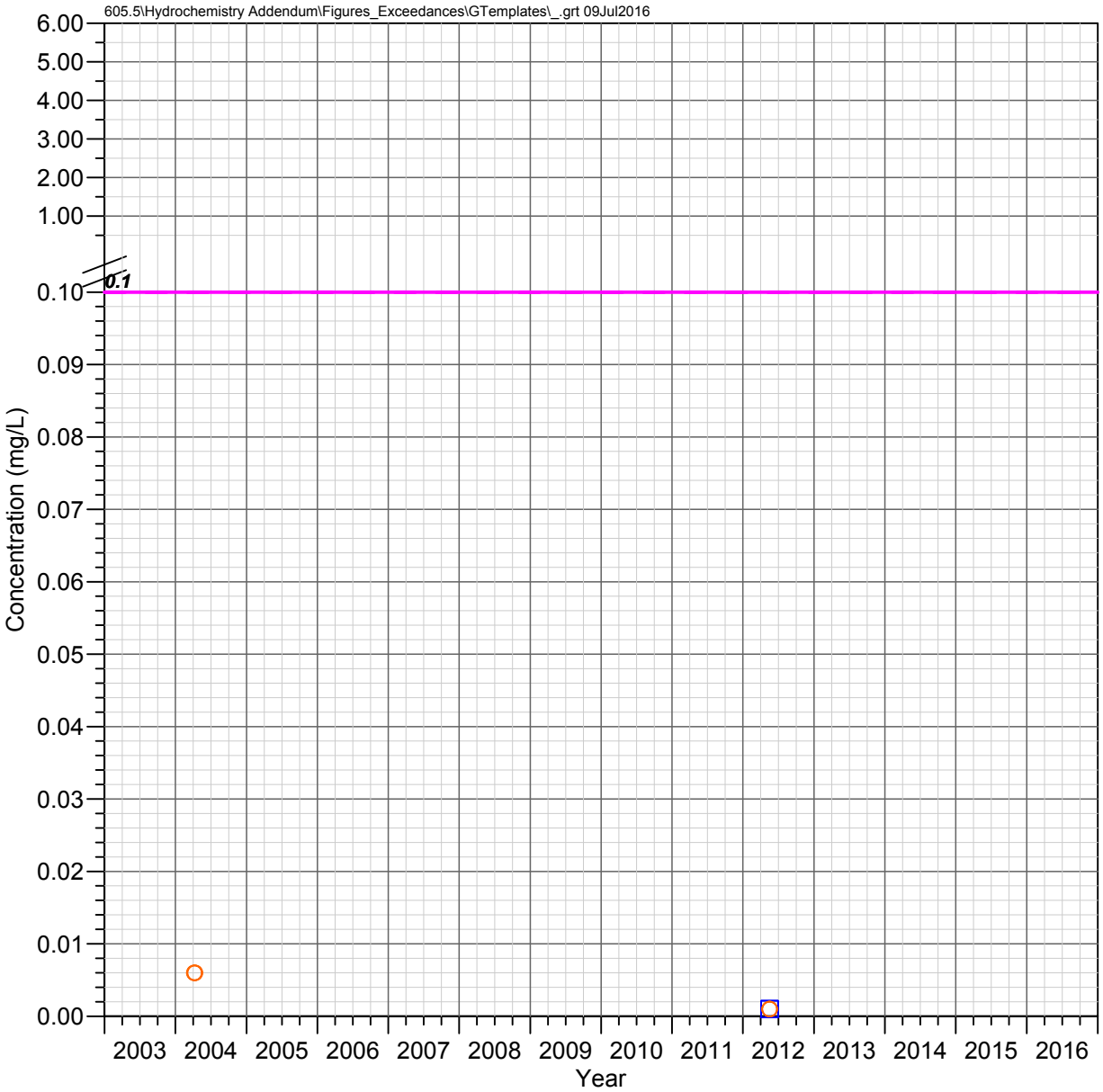


FIGURE E-209. CHROMIUM CONCENTRATIONS OBSERVED AT HRES-01, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-02
Apache Leap Tuff Aquifer

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.1 mg/L)

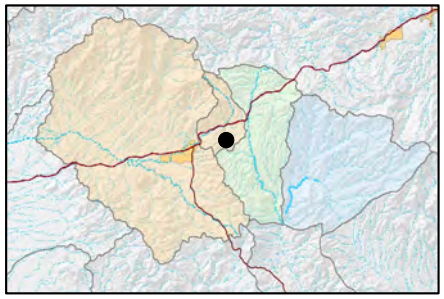
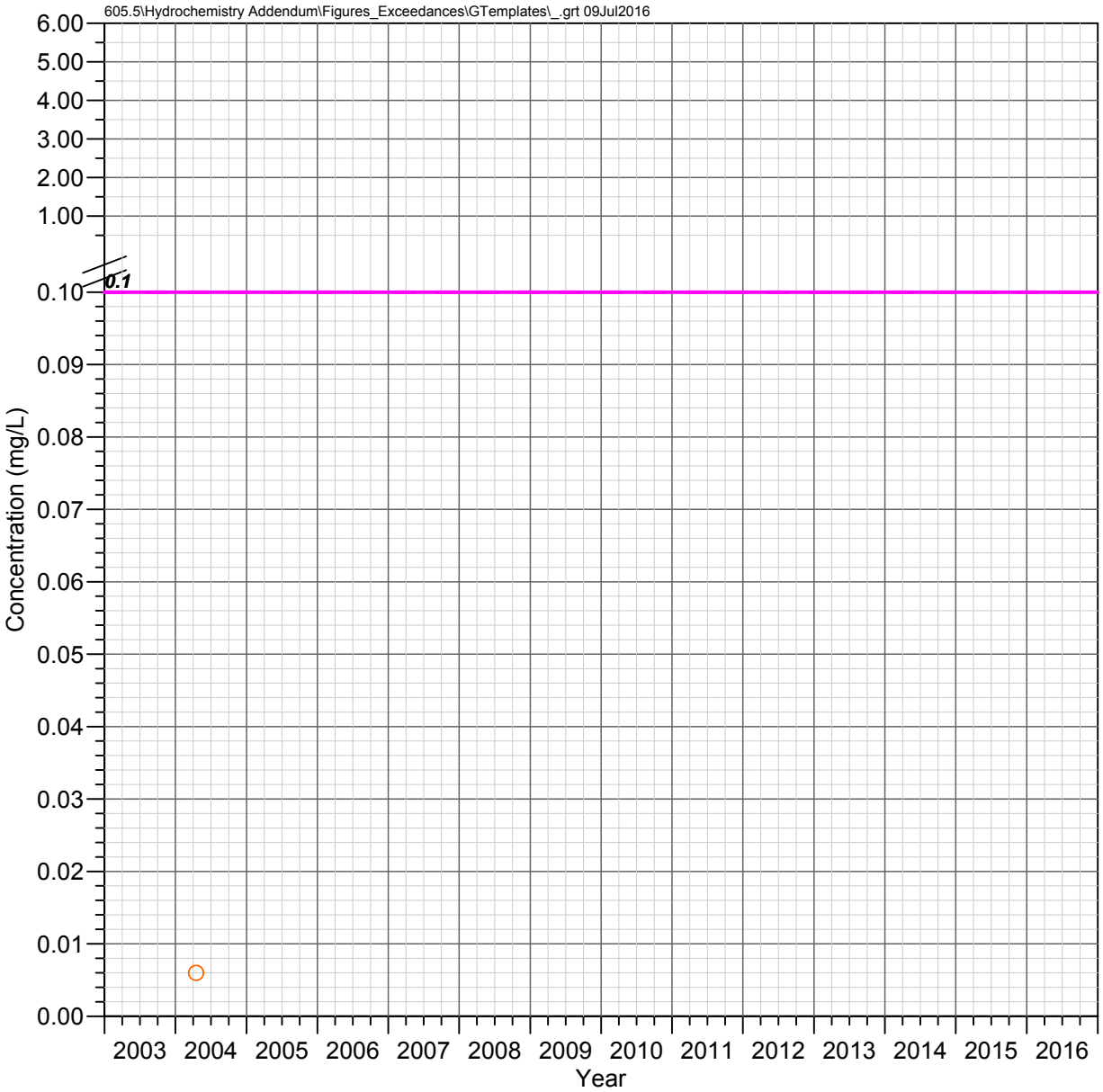


FIGURE E-210. CHROMIUM CONCENTRATIONS OBSERVED AT HRES-02, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-03d
Apache Leap Tuff Aquifer

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.1 mg/L)

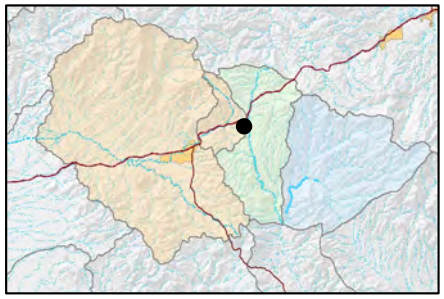
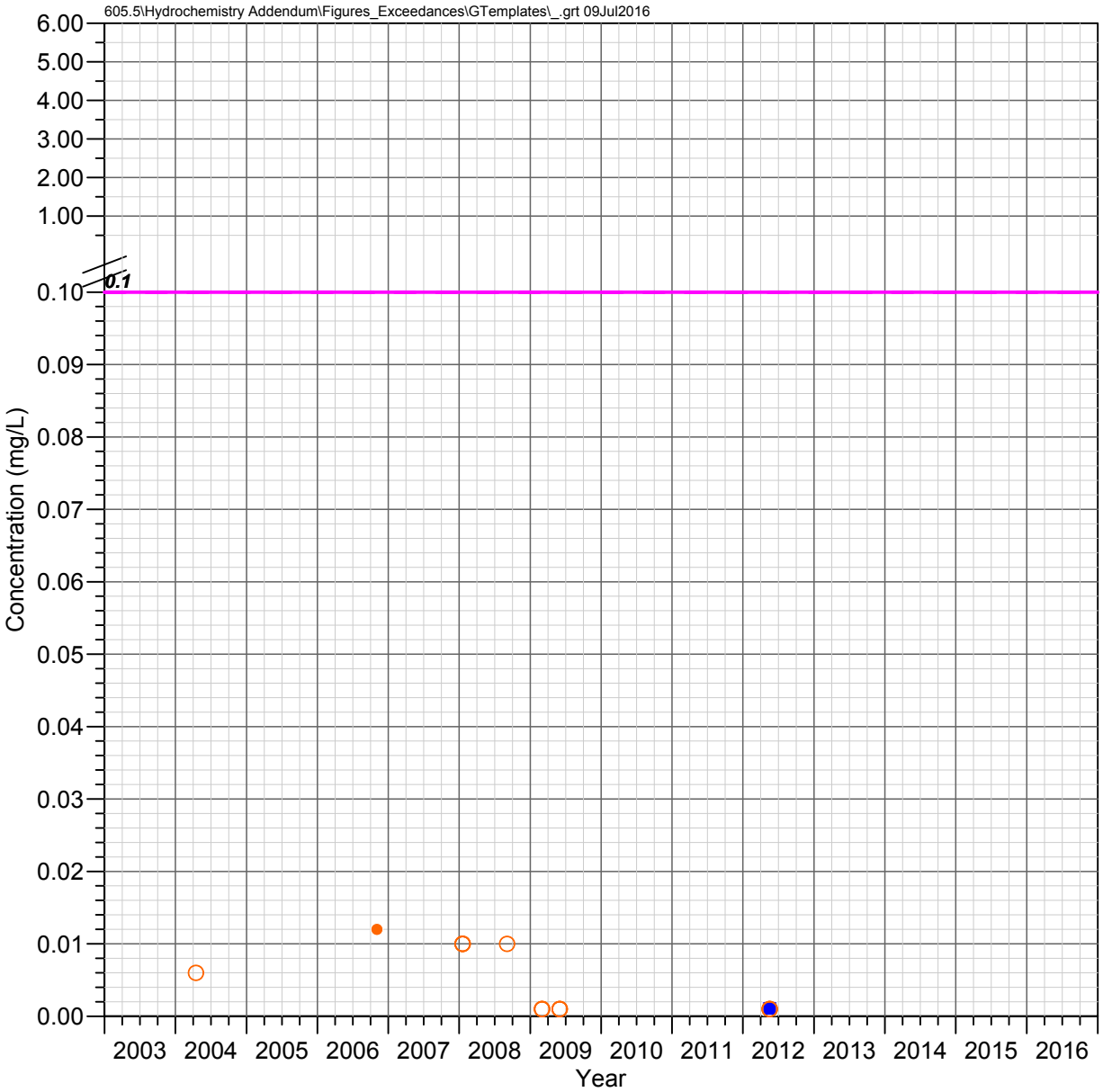


FIGURE E-211. CHROMIUM CONCENTRATIONS OBSERVED AT HRES-03D, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-04
Apache Leap Tuff Aquifer

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.1 mg/L)

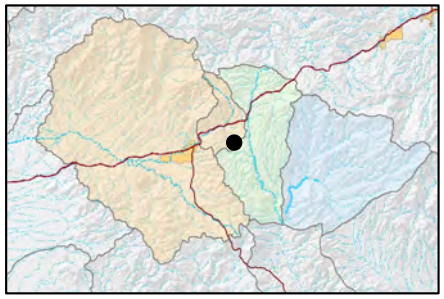
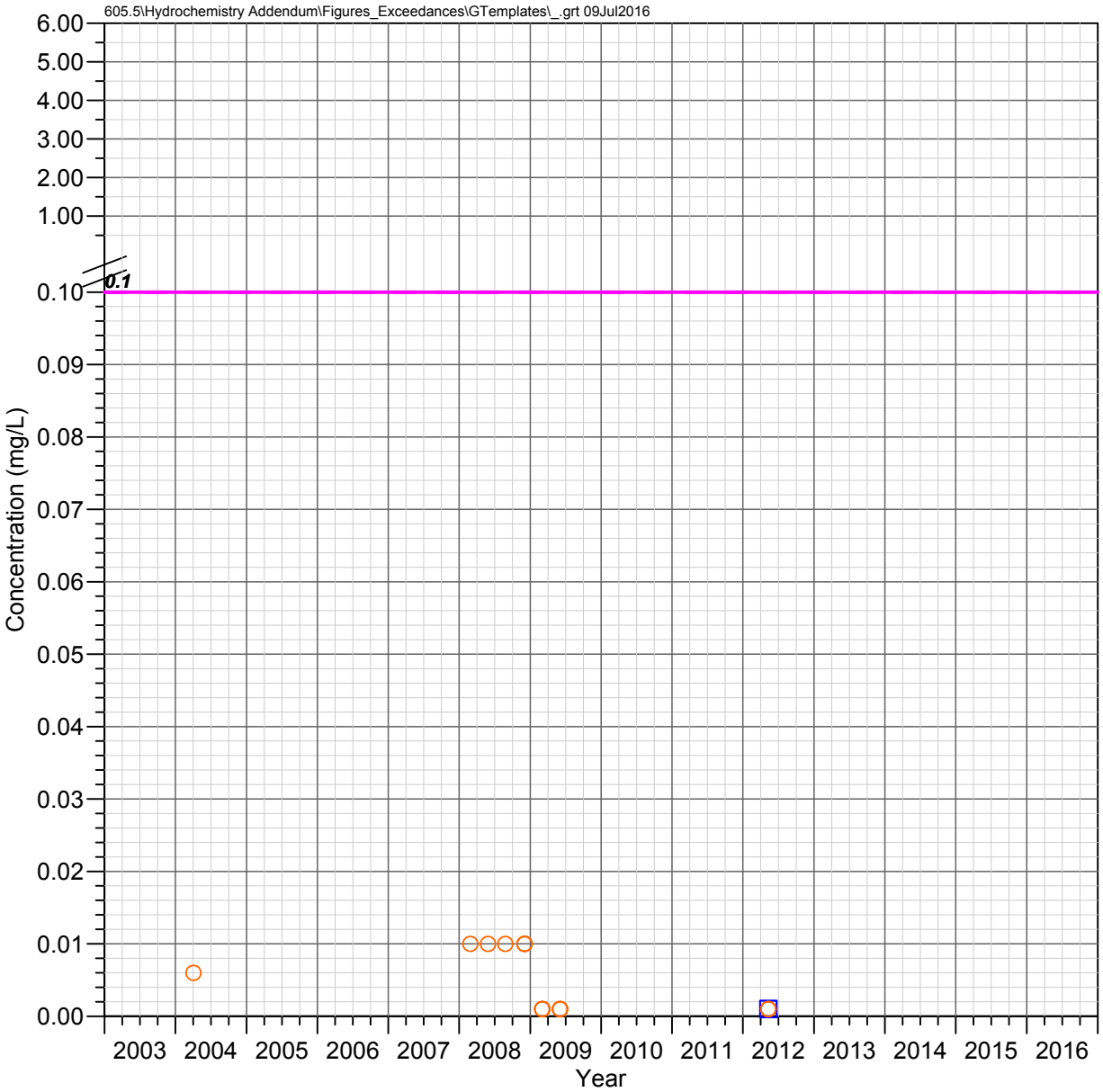


FIGURE E-212. CHROMIUM CONCENTRATIONS OBSERVED AT HRES-04, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-05
Apache Leap Tuff Aquifer

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.1 mg/L)

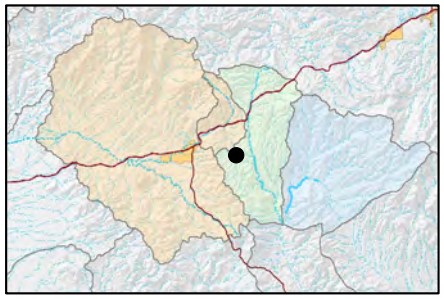
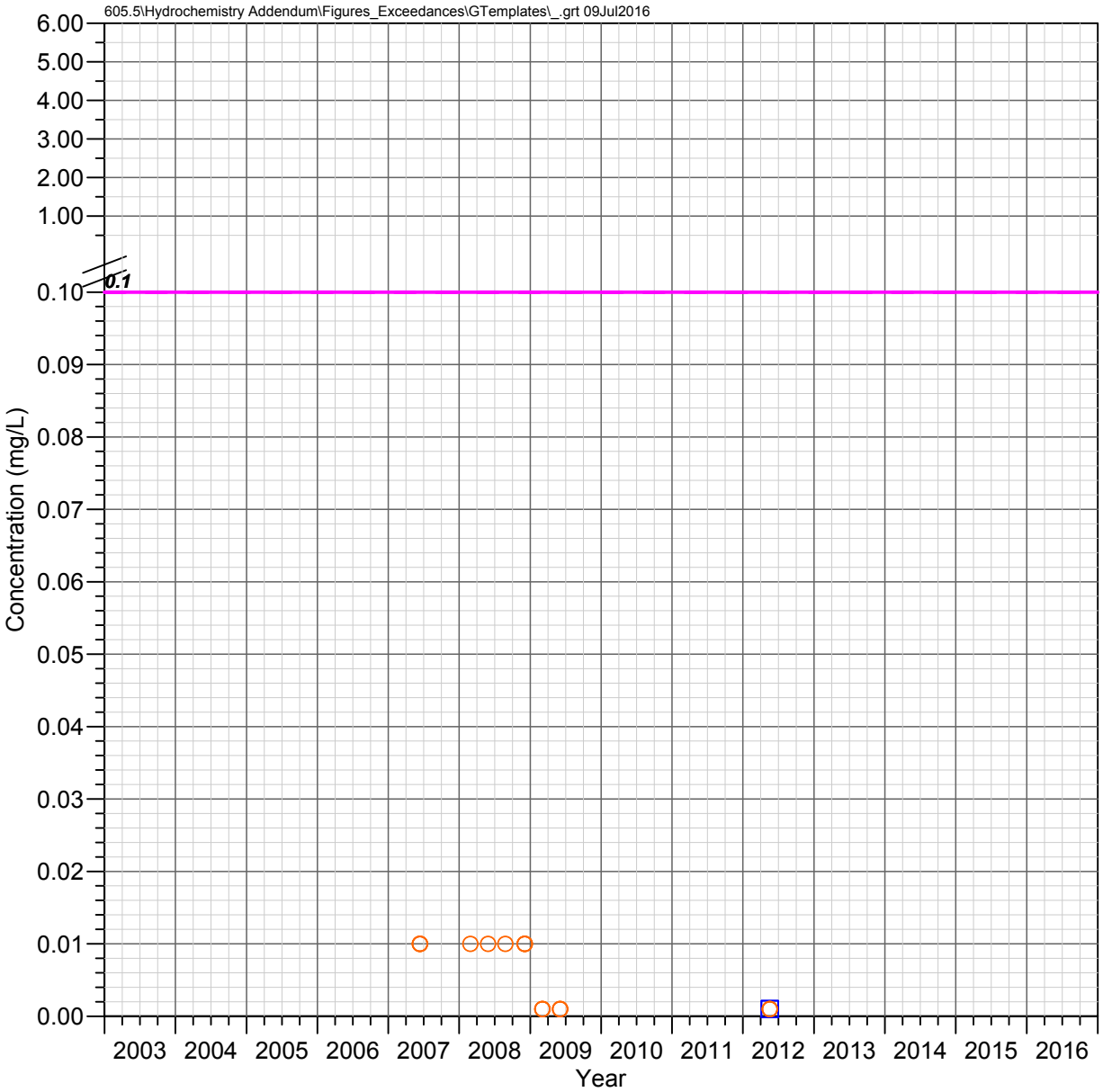


FIGURE E-213. CHROMIUM CONCENTRATIONS OBSERVED AT HRES-05, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-06
Apache Leap Tuff Aquifer

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.1 mg/L)

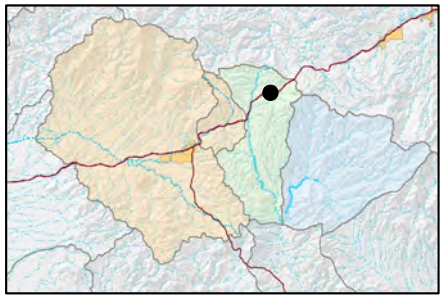
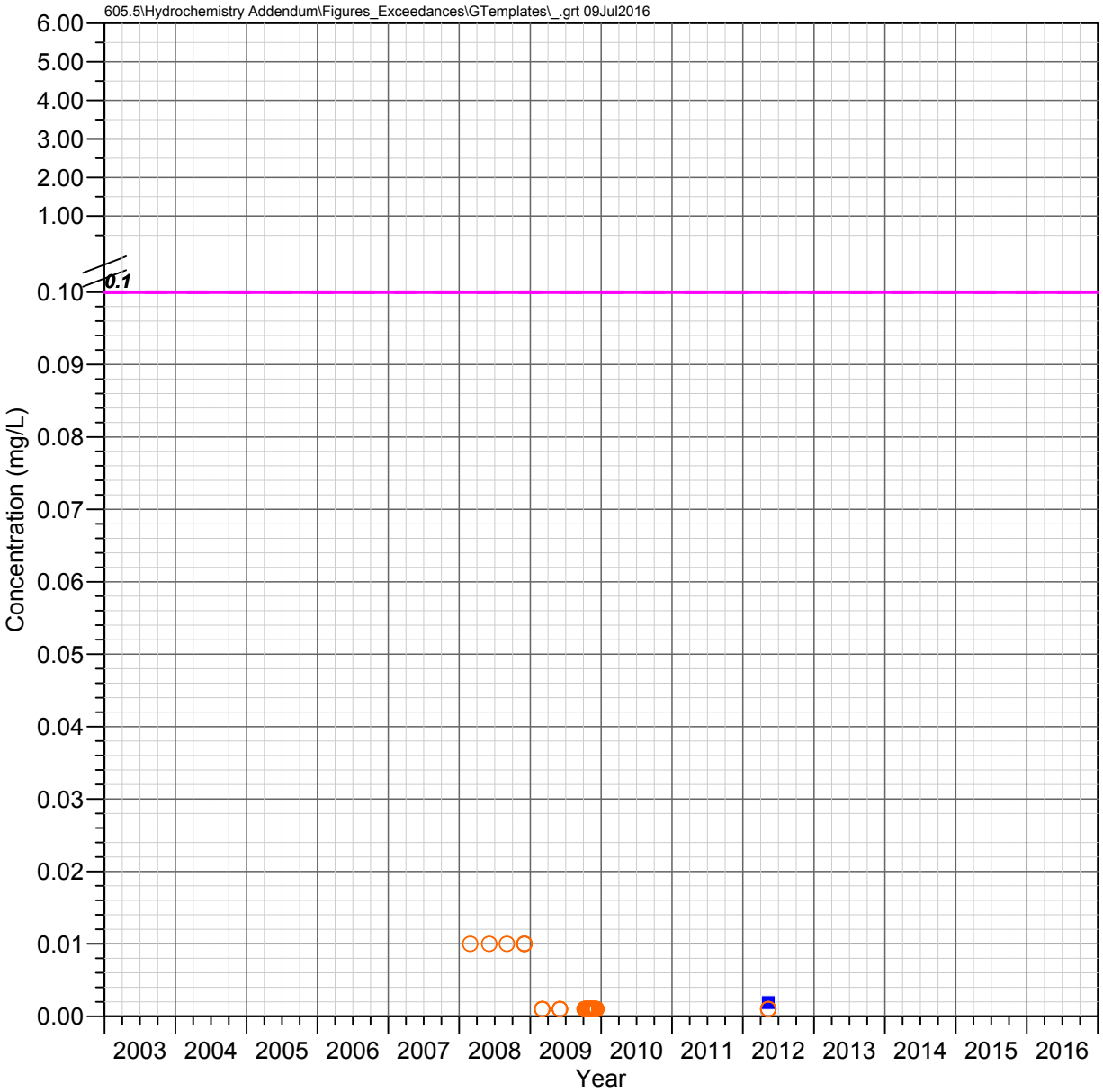


FIGURE E-214. CHROMIUM CONCENTRATIONS OBSERVED AT HRES-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-07
Apache Leap Tuff Aquifer

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.1 mg/L)

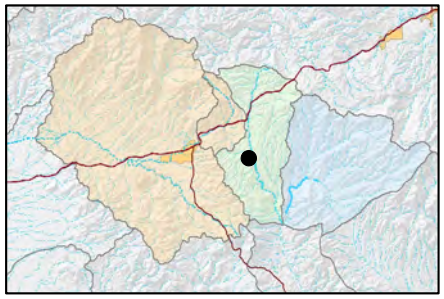
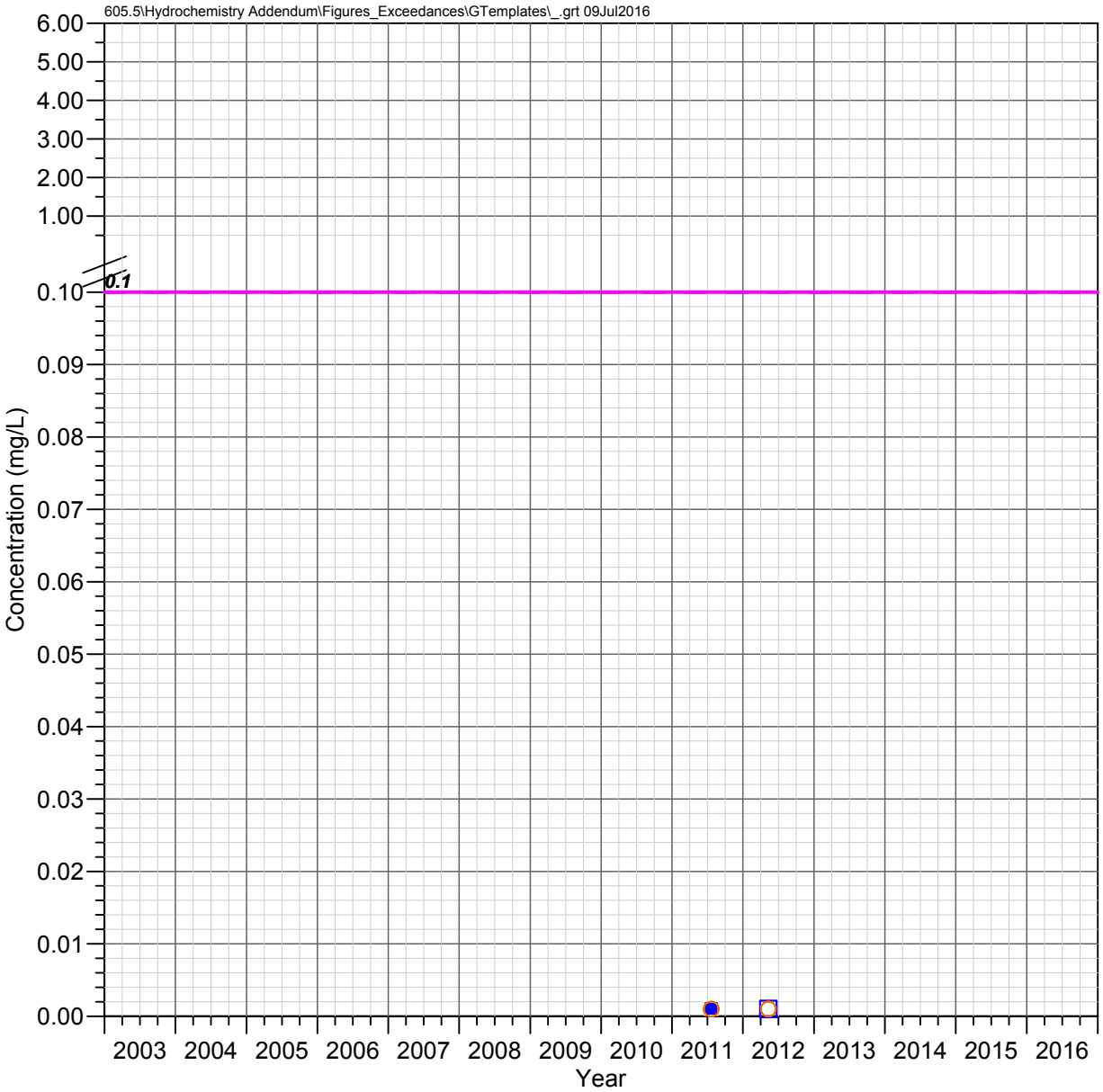


FIGURE E-215. CHROMIUM CONCENTRATIONS OBSERVED AT HRES-07, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-08
Apache Leap Tuff Aquifer

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.1 mg/L)

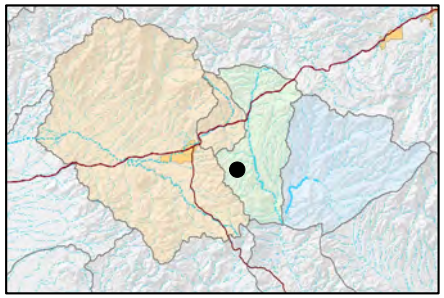
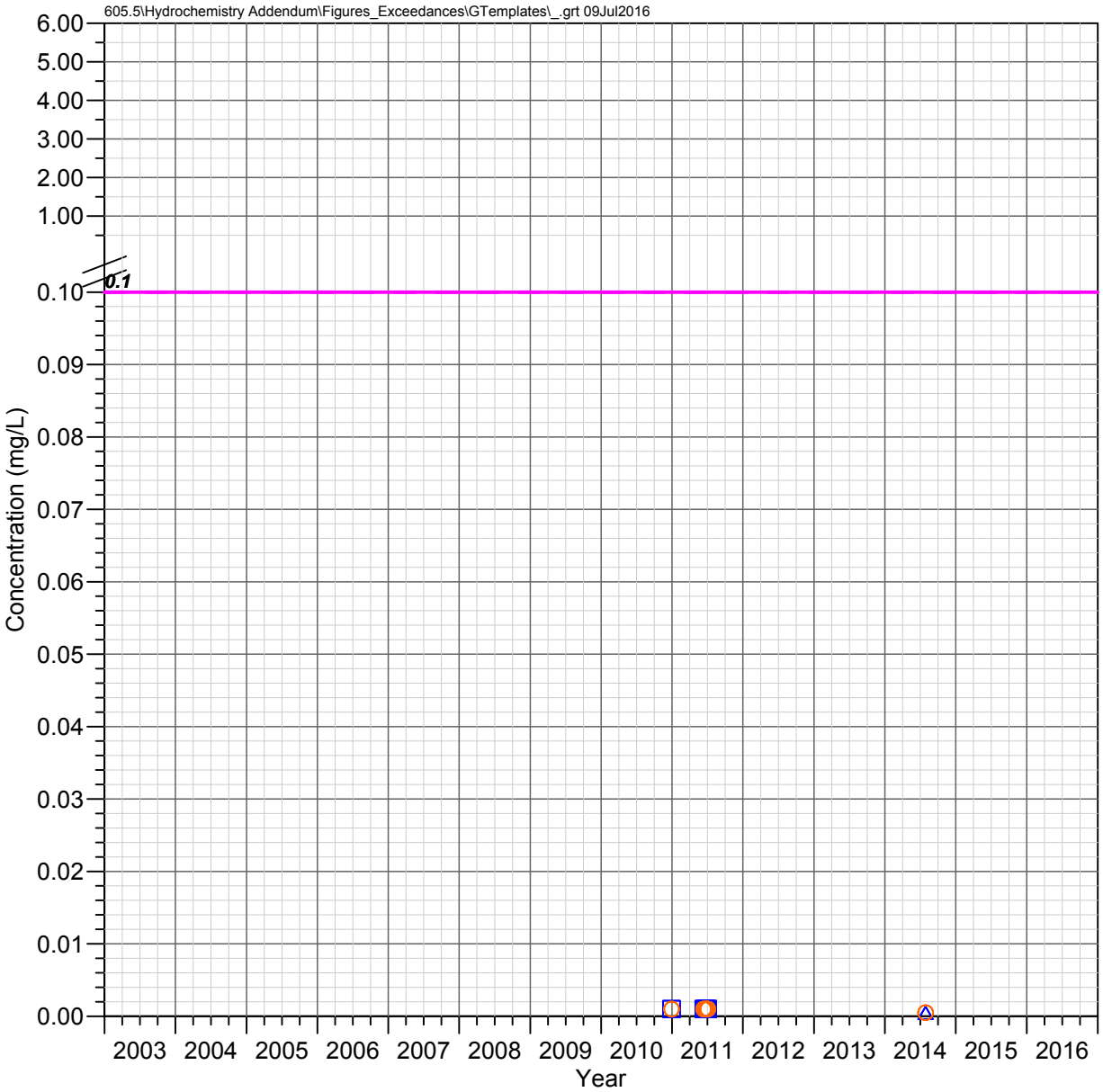


FIGURE E-216. CHROMIUM CONCENTRATIONS OBSERVED AT HRES-08, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-09
Apache Leap Tuff Aquifer

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.1 mg/L)

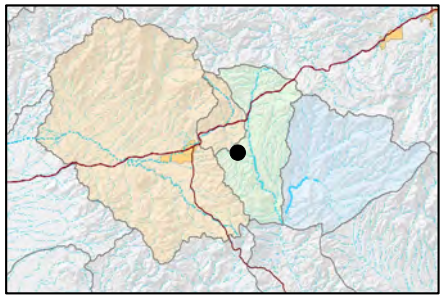
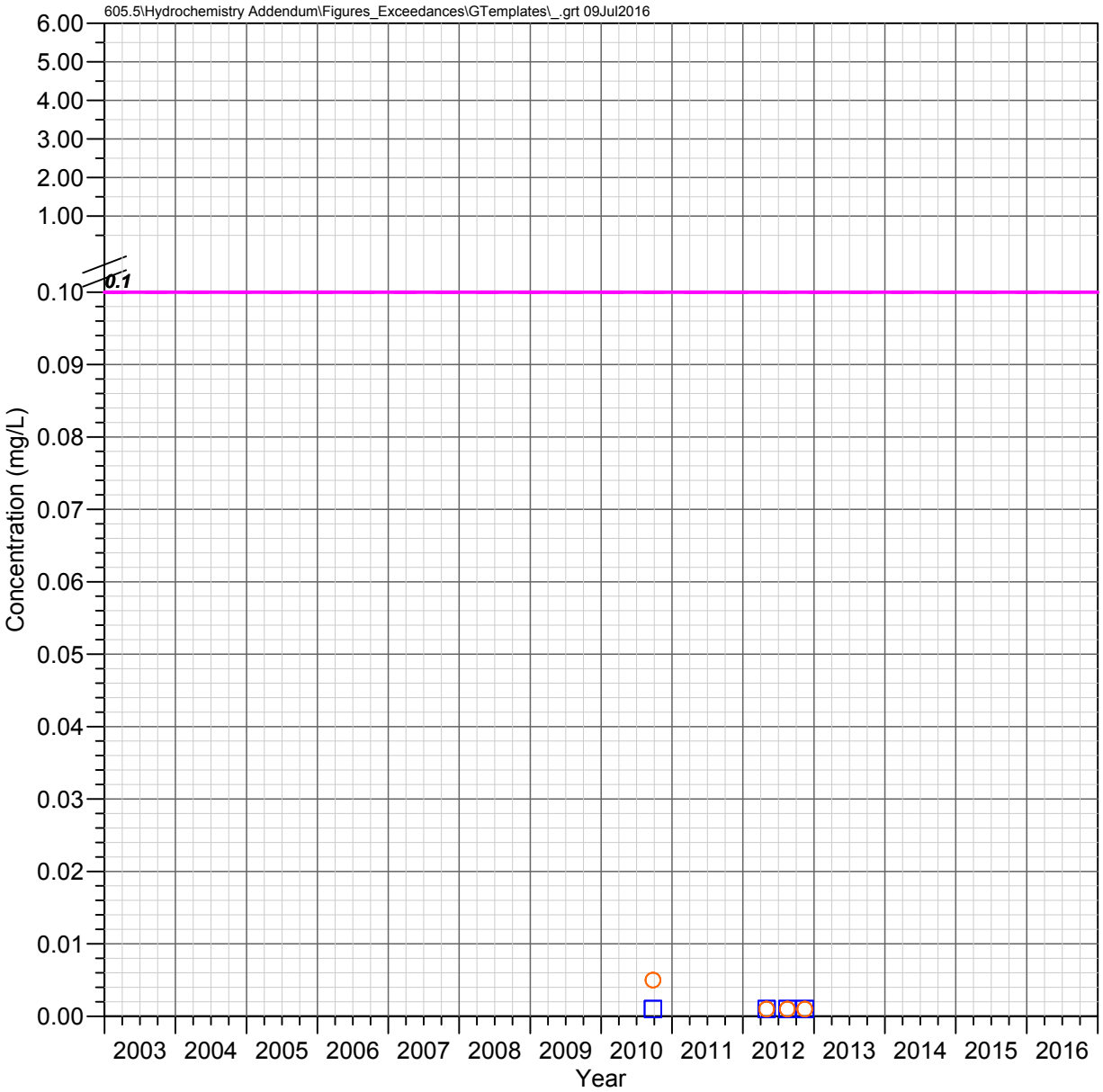


FIGURE E-217. CHROMIUM CONCENTRATIONS OBSERVED AT HRES-09, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-10
Apache Leap Tuff Aquifer

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.1 mg/L)

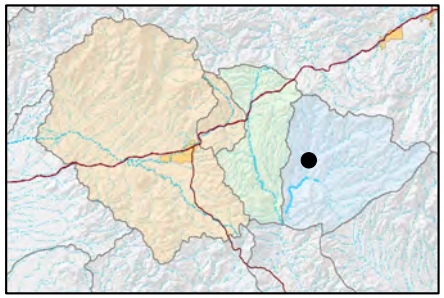
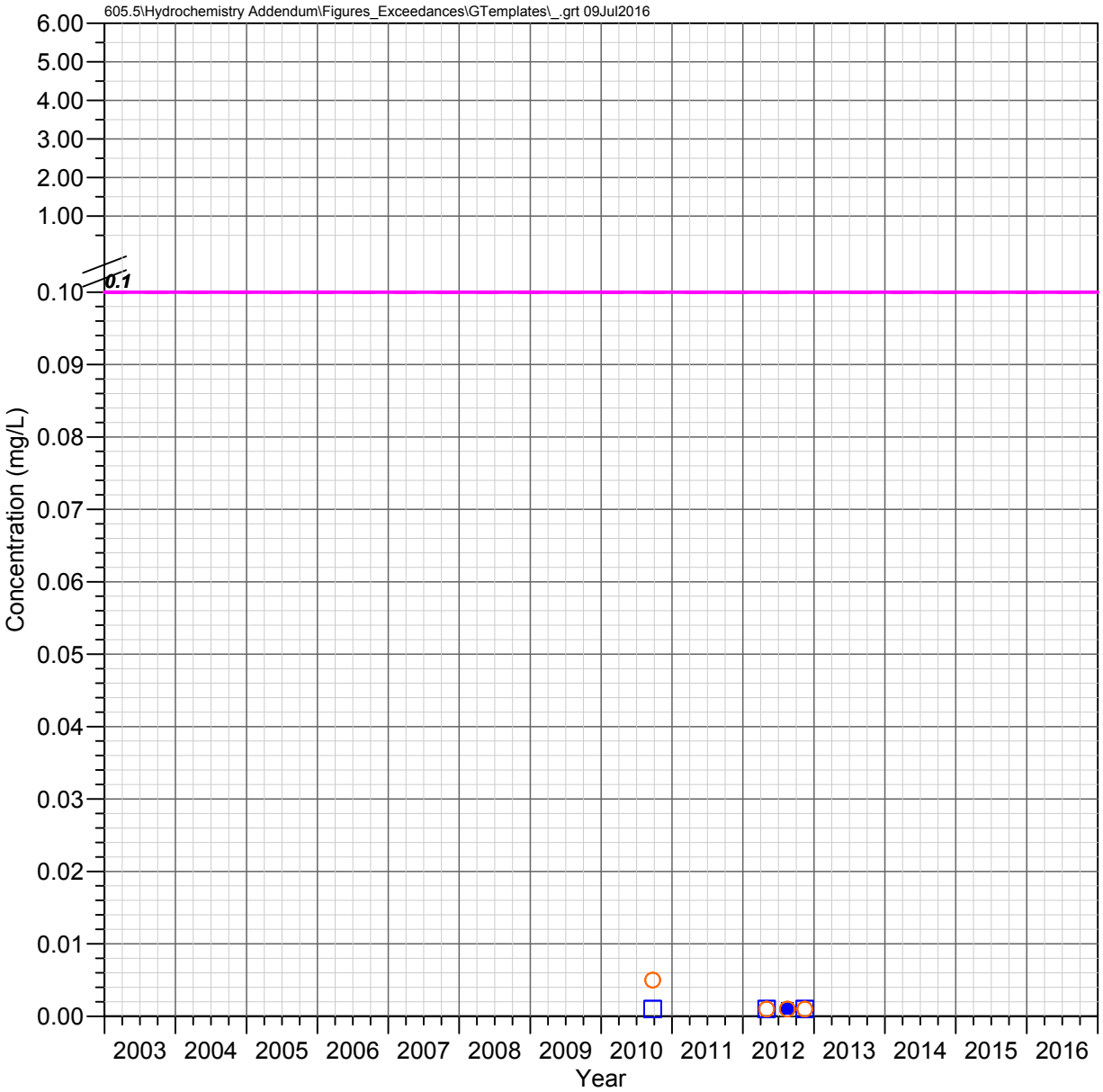


FIGURE E-218. CHROMIUM CONCENTRATIONS OBSERVED AT HRES-10, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-11
Apache Leap Tuff Aquifer

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.1 mg/L)

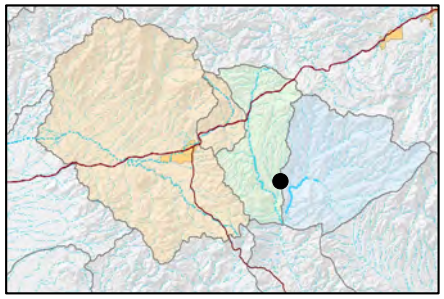
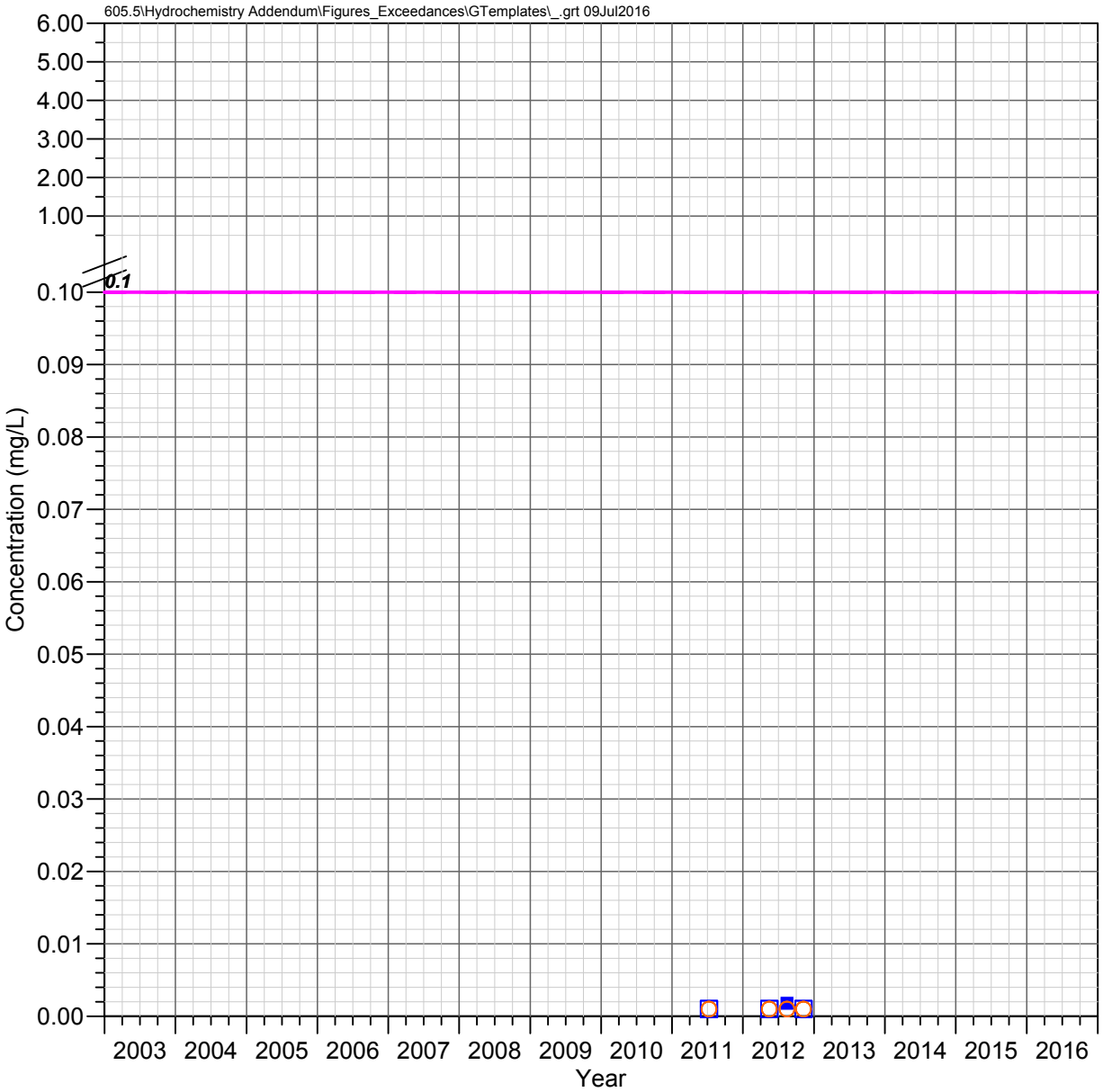


FIGURE E-219. CHROMIUM CONCENTRATIONS OBSERVED AT HRES-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-12
Apache Leap Tuff Aquifer

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.1 mg/L)

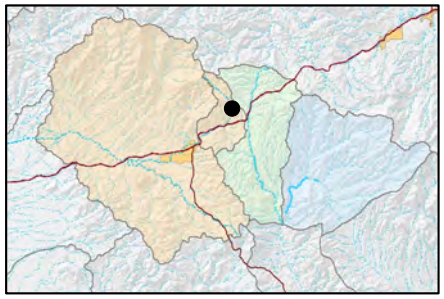
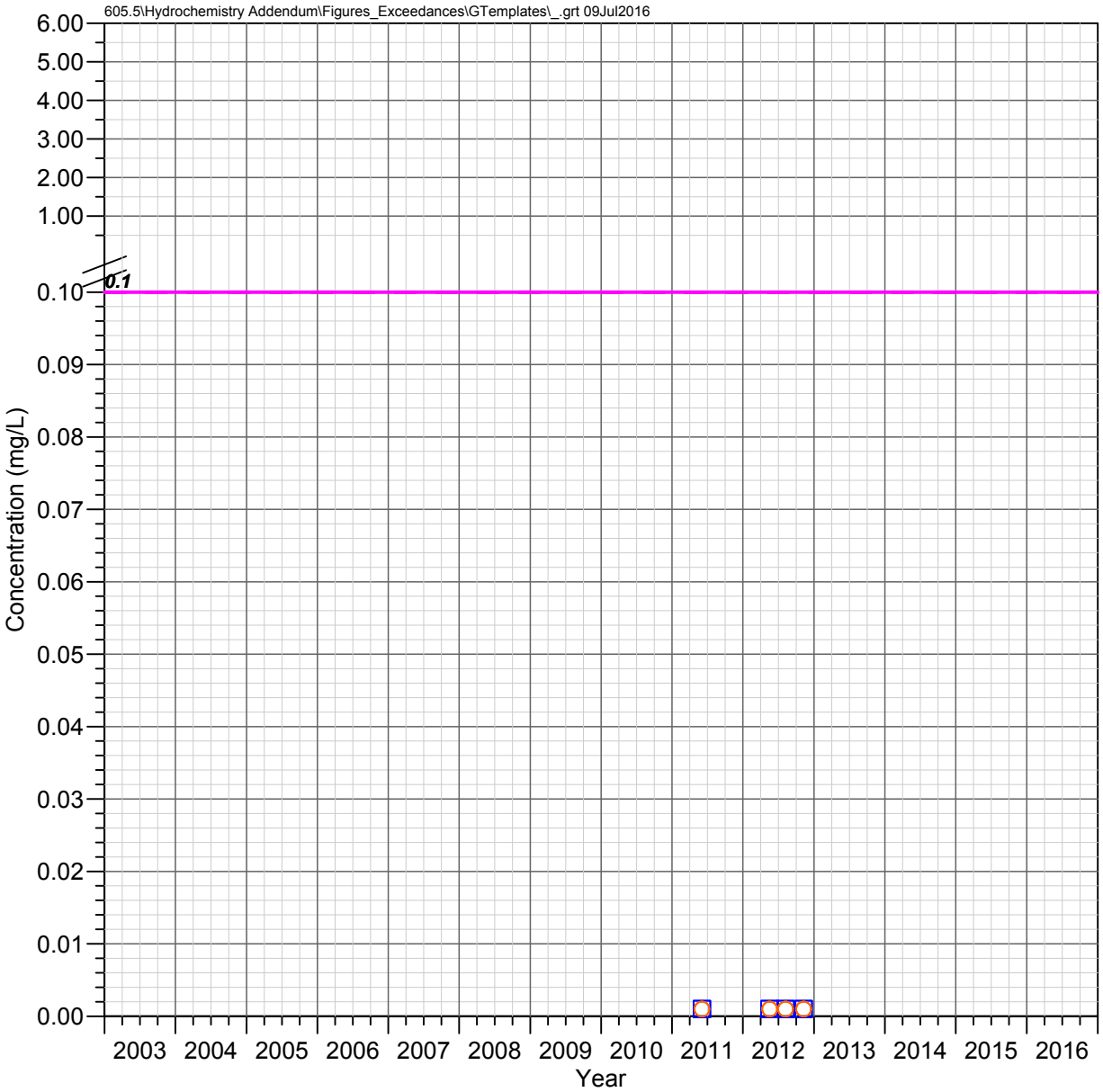


FIGURE E-220. CHROMIUM CONCENTRATIONS OBSERVED AT HRES-12, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-13
Apache Leap Tuff Aquifer

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.1 mg/L)

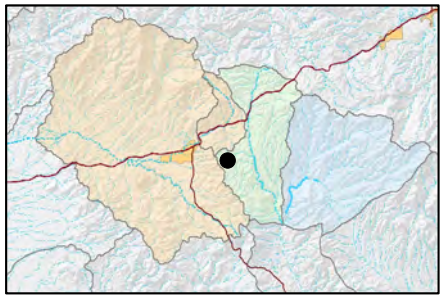
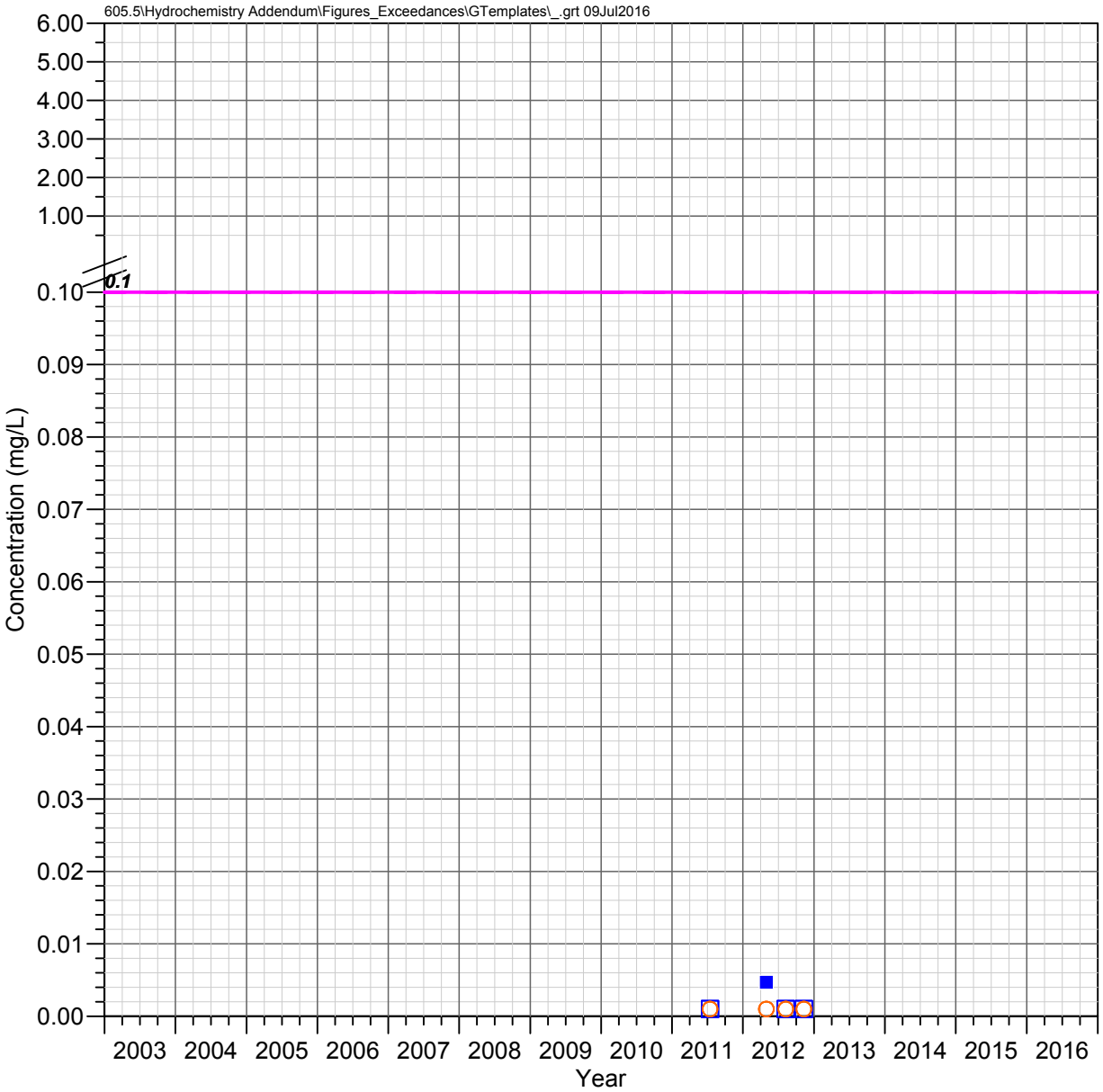


FIGURE E-221. CHROMIUM CONCENTRATIONS OBSERVED AT HRES-13, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-14
Apache Leap Tuff Aquifer

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.1 mg/L)

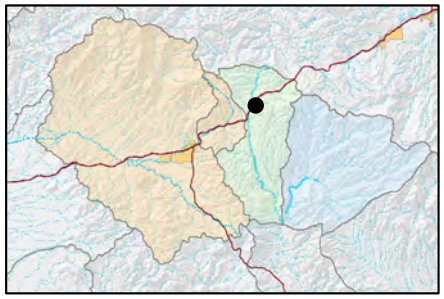
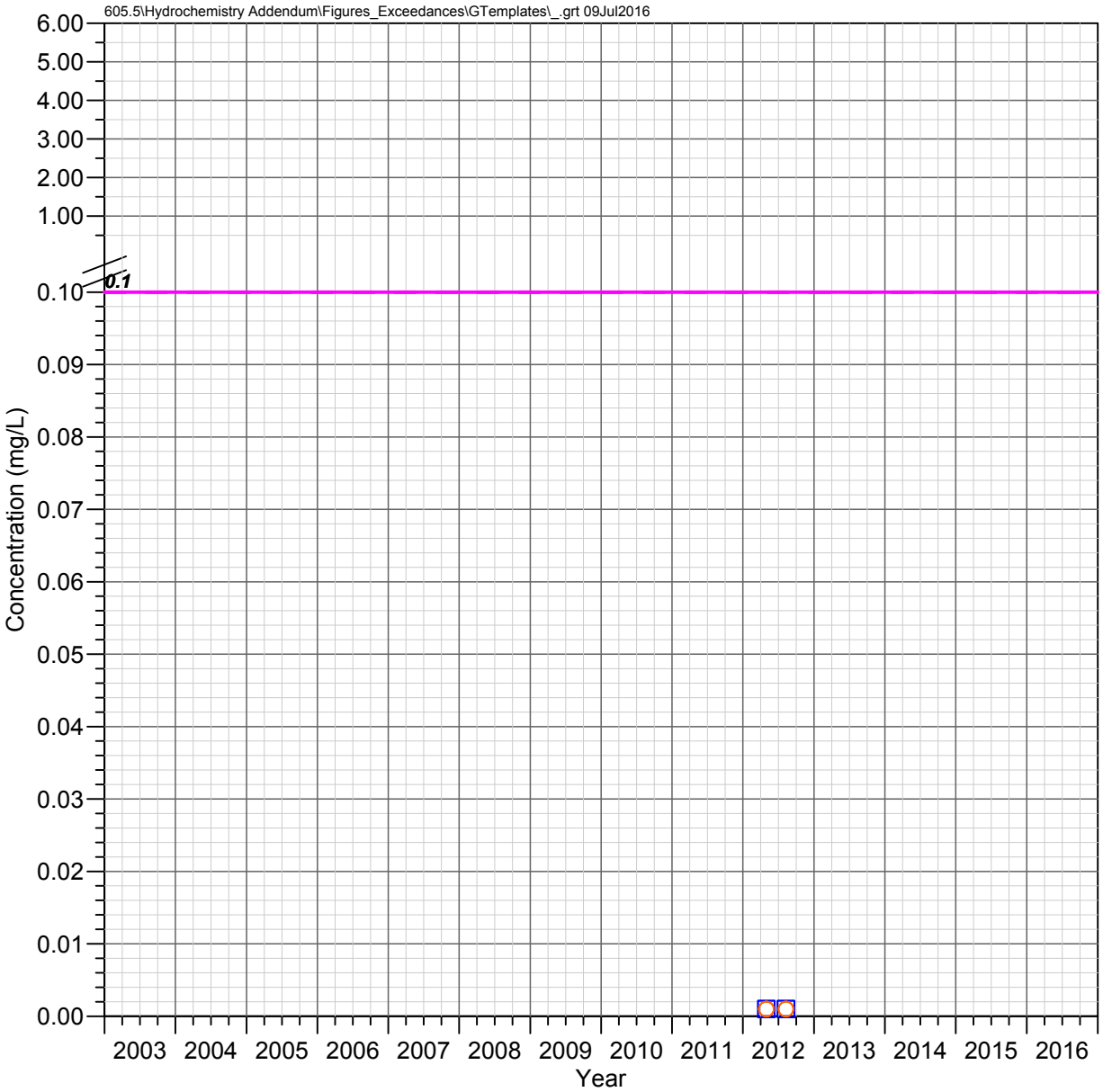


FIGURE E-222. CHROMIUM CONCENTRATIONS OBSERVED AT HRES-14, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-15
Apache Leap Tuff Aquifer

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.1 mg/L)

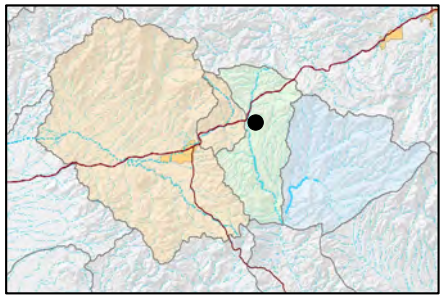
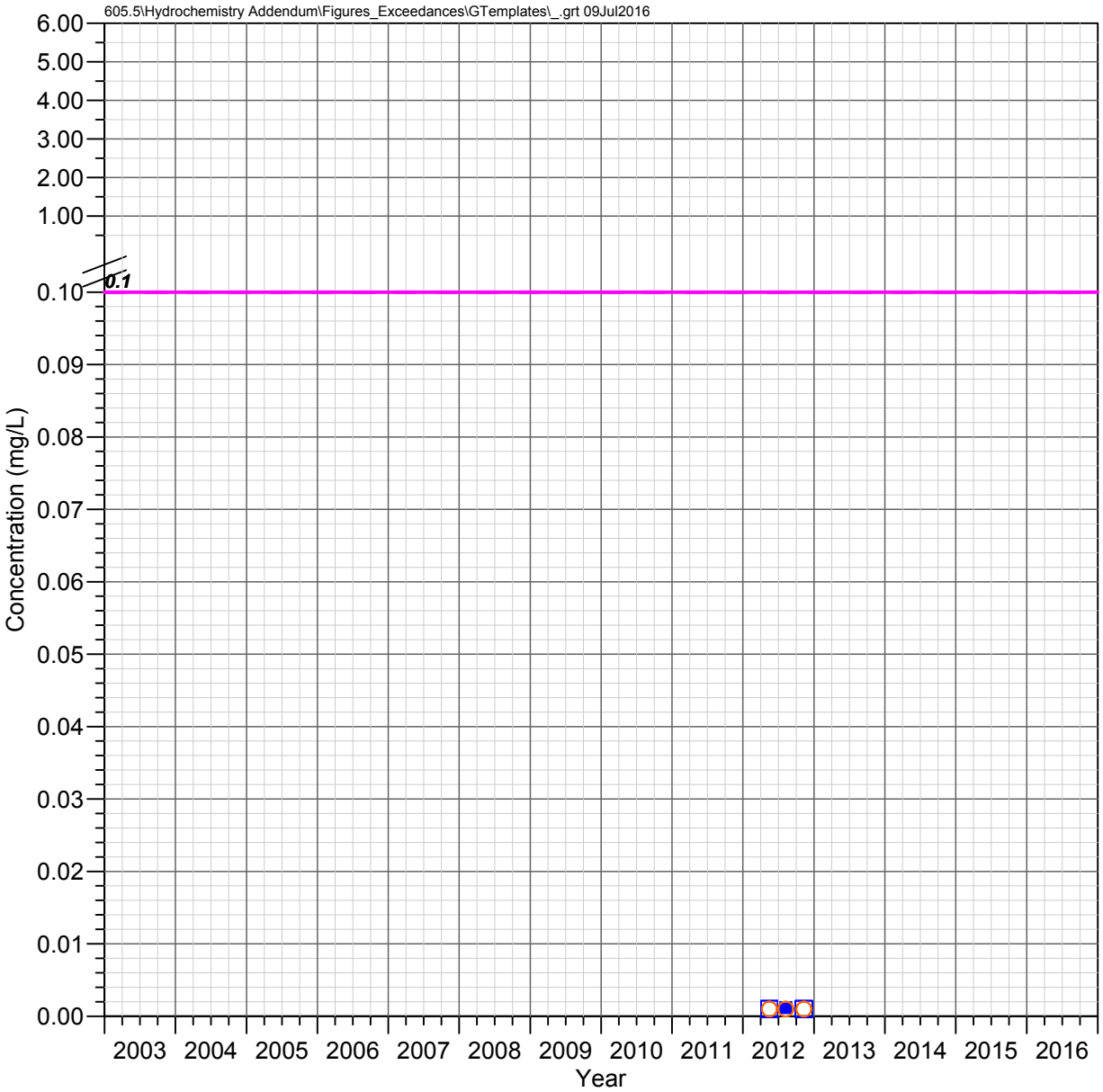


FIGURE E-223. CHROMIUM CONCENTRATIONS OBSERVED AT HRES-15, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-17
Apache Leap Tuff Aquifer

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.1 mg/L)

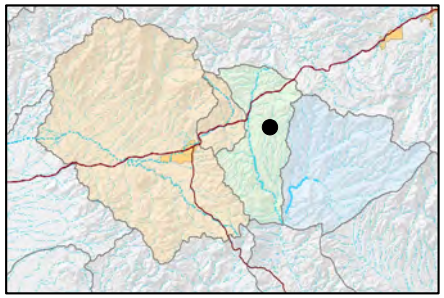
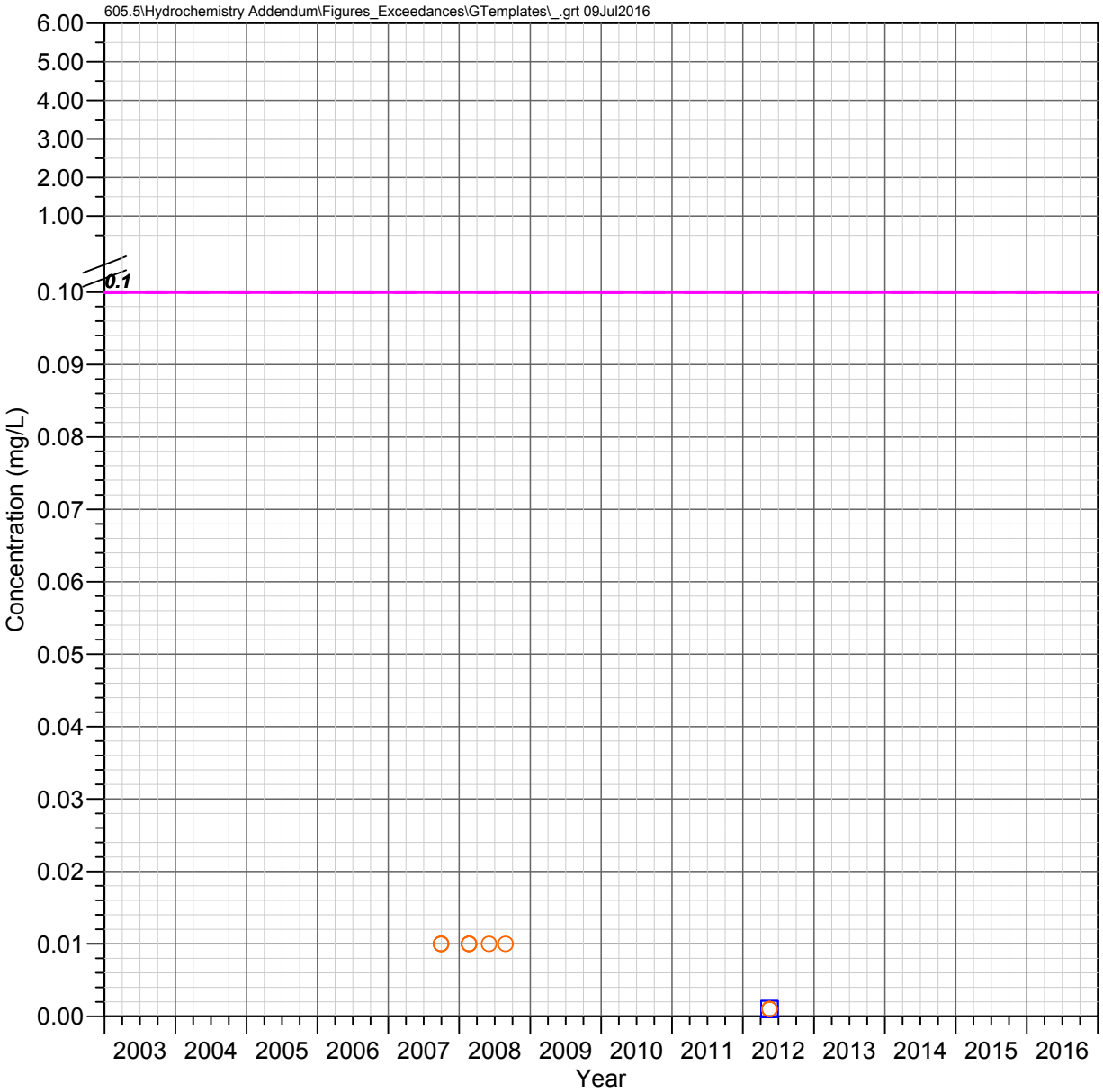


FIGURE E-224. CHROMIUM CONCENTRATIONS OBSERVED AT HRES-17, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MJ-11
Apache Leap Tuff Aquifer

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.1 mg/L)

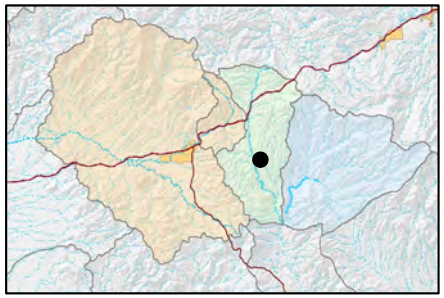
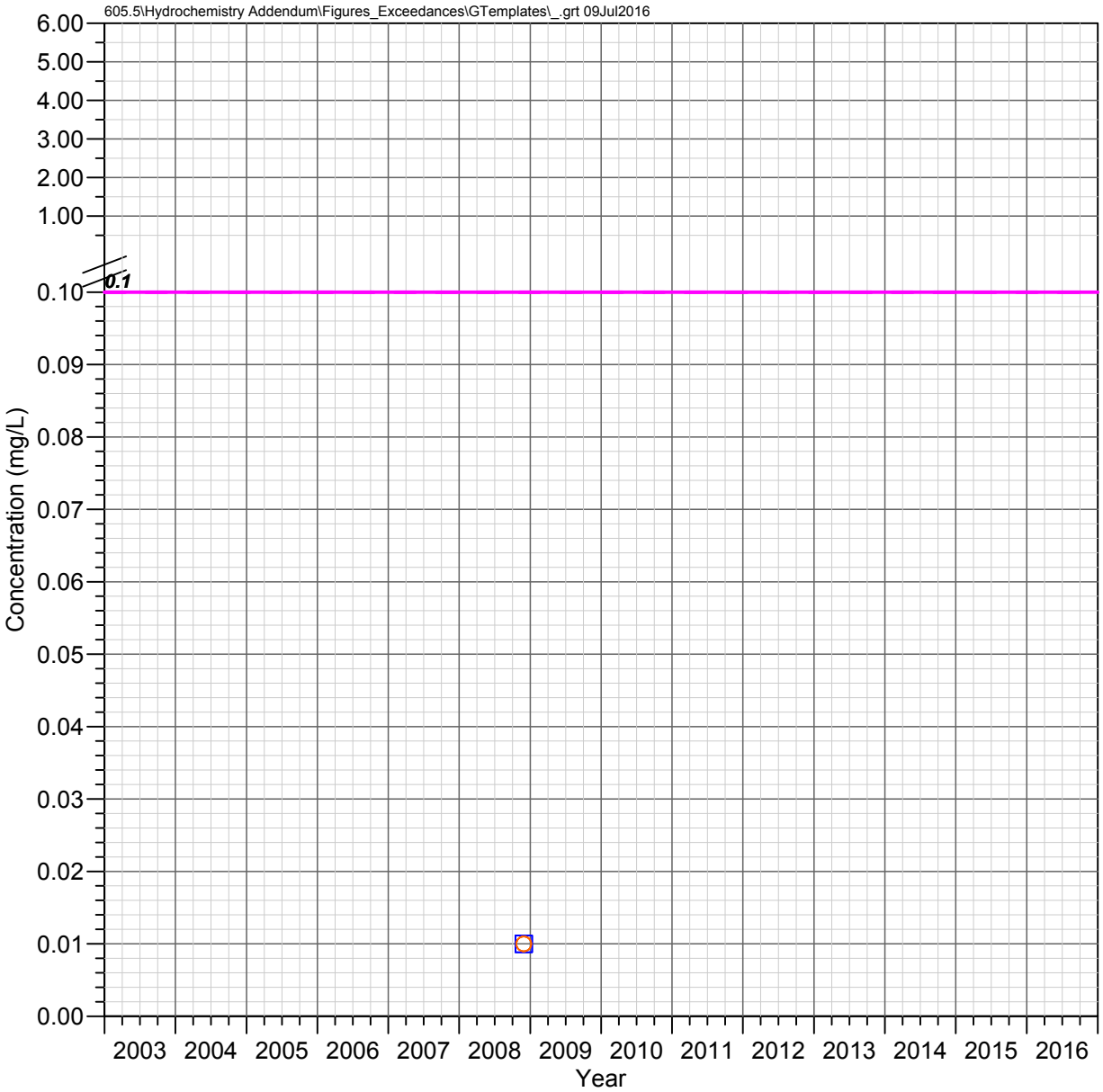


FIGURE E-225. CHROMIUM CONCENTRATIONS OBSERVED AT MJ-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-01
Deep Groundwater System

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.1 mg/L)

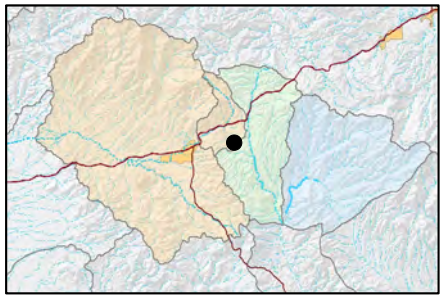
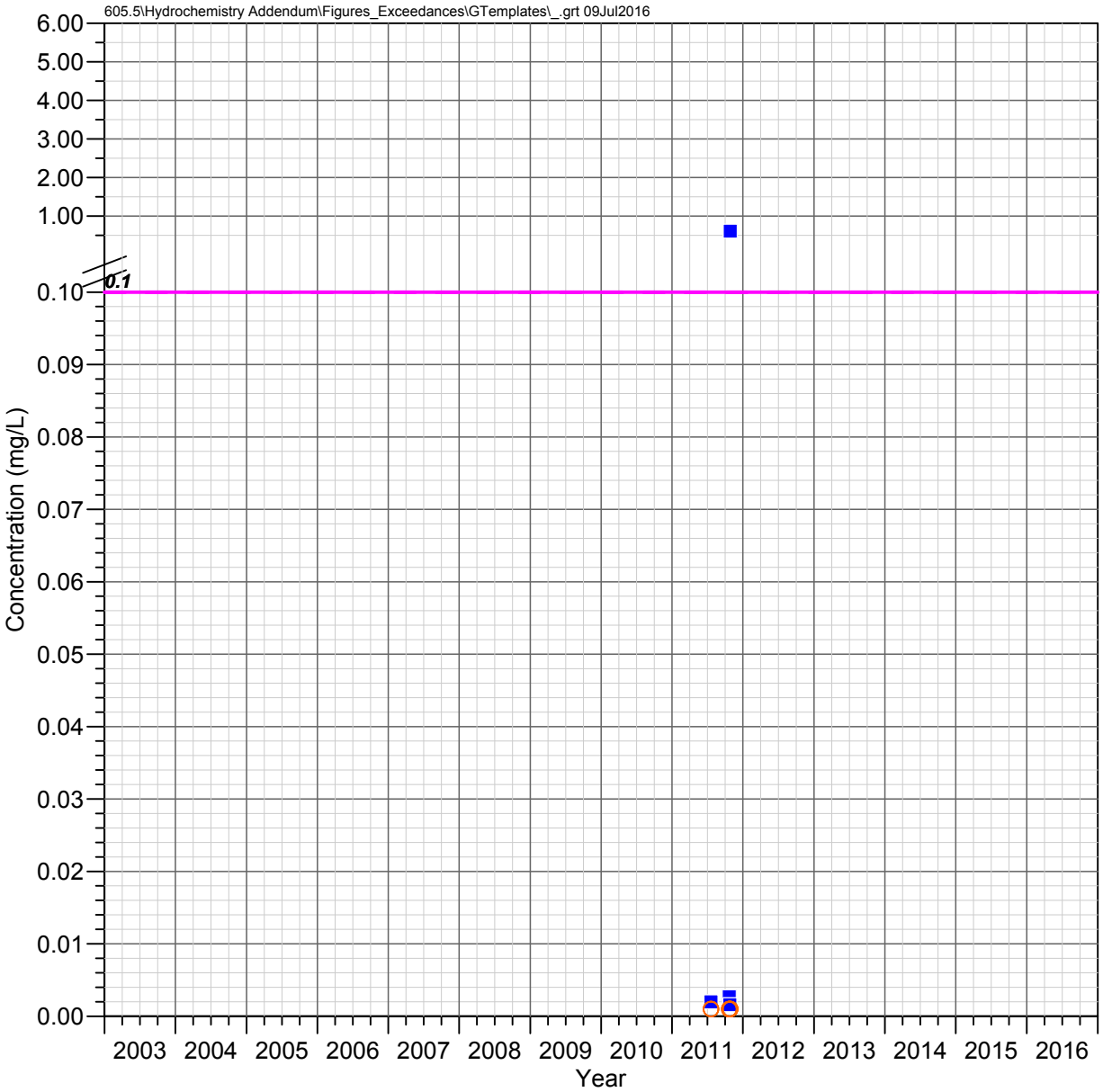


FIGURE E-226. CHROMIUM CONCENTRATIONS OBSERVED AT DHRES-01, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-02
Deep Groundwater System

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.1 mg/L)

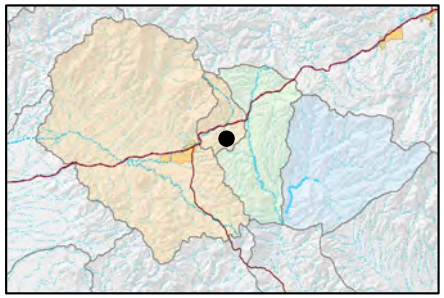
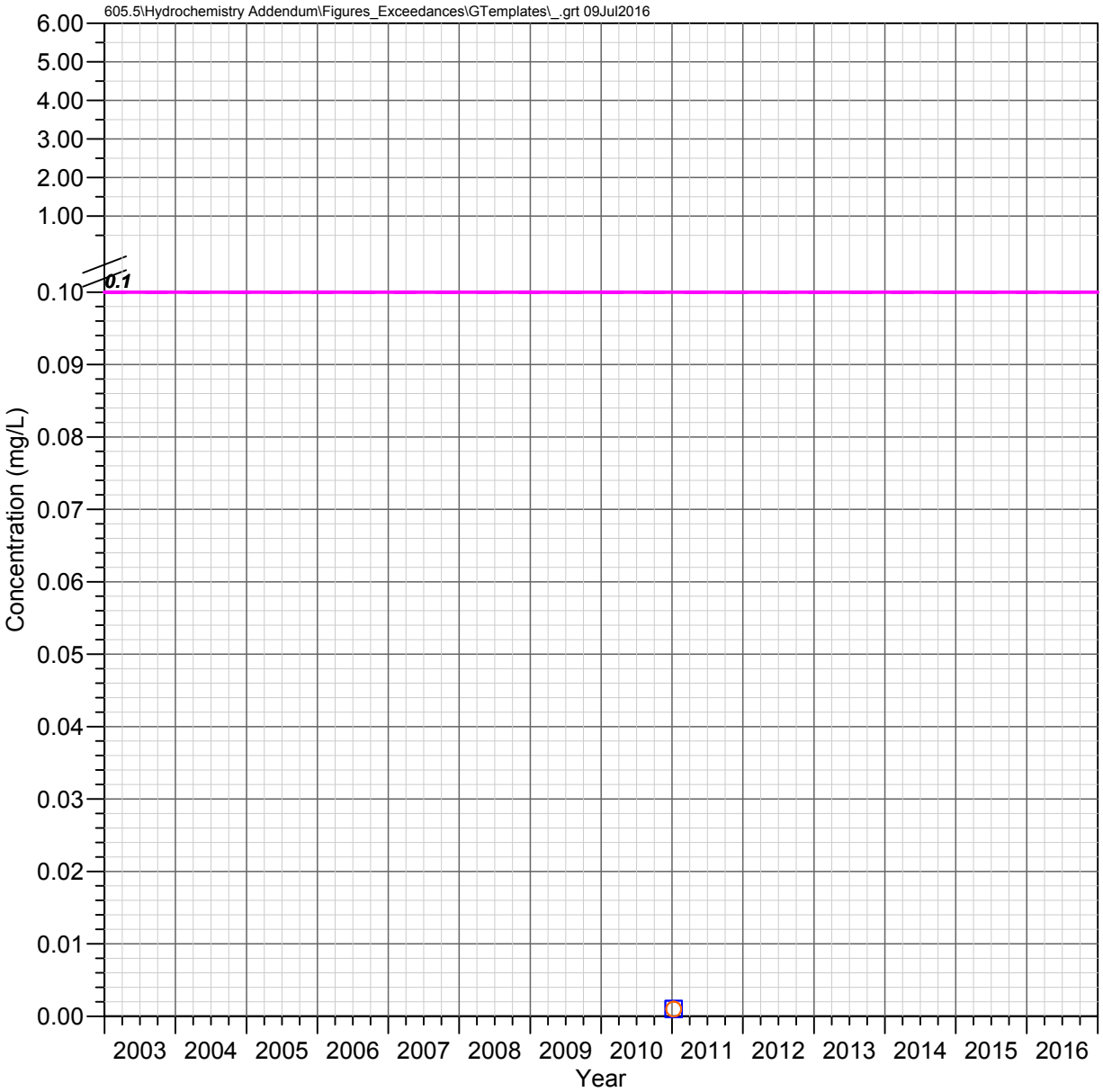


FIGURE E-227. CHROMIUM CONCENTRATIONS OBSERVED AT DHRES-02, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-06
Deep Groundwater System

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.1 mg/L)

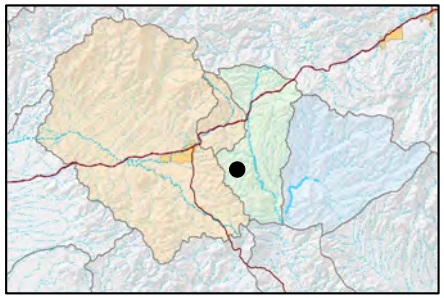
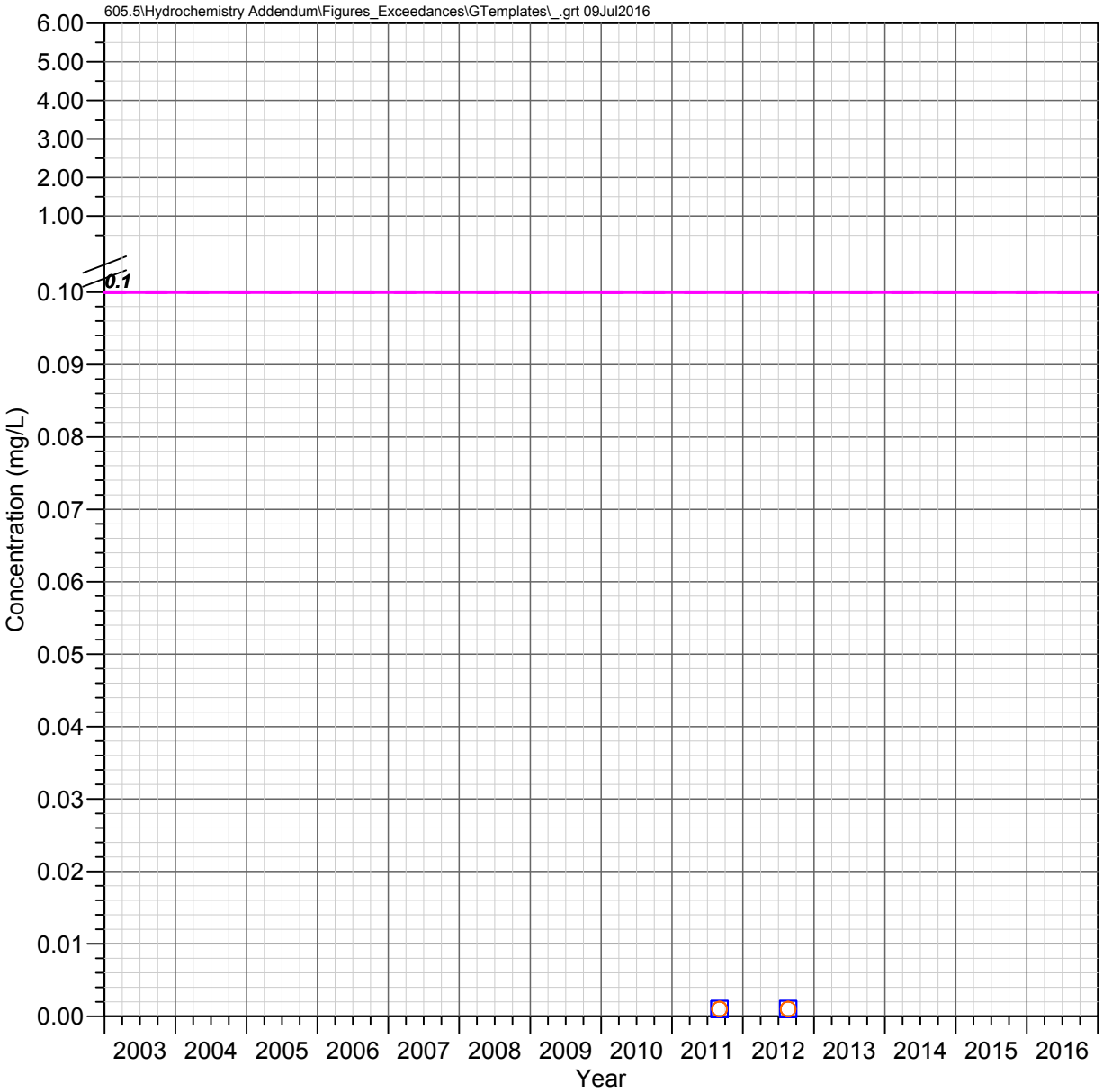


FIGURE E-228. CHROMIUM CONCENTRATIONS OBSERVED AT DHRES-06, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-09
Deep Groundwater System

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.1 mg/L)

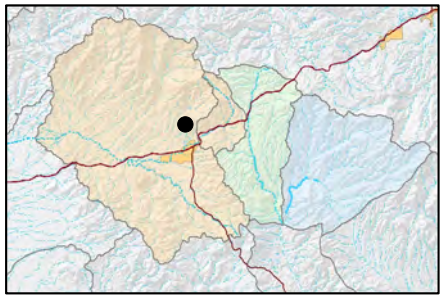
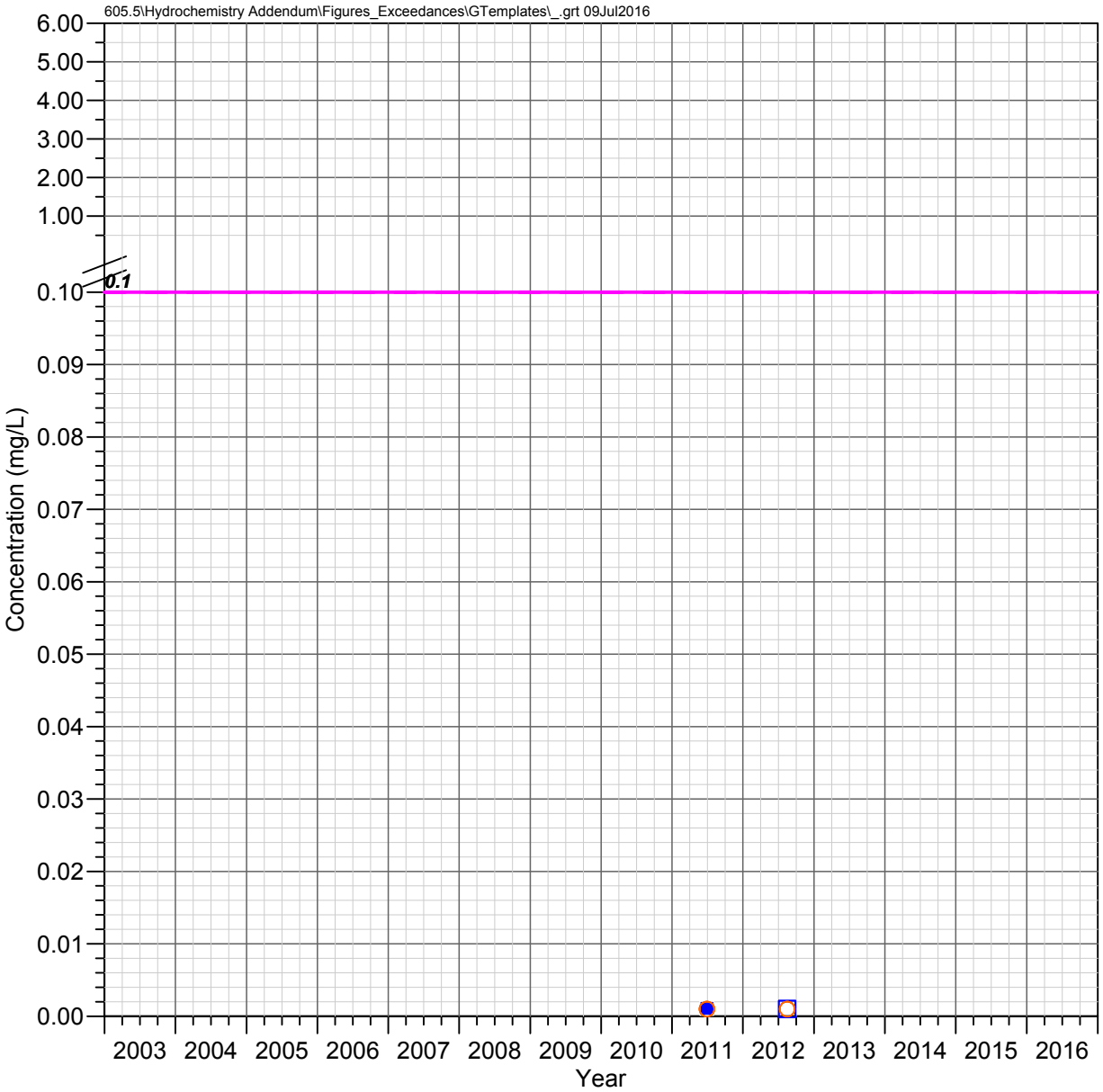


FIGURE E-229. CHROMIUM CONCENTRATIONS OBSERVED AT DHRES-09, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-11
Deep Groundwater System

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.1 mg/L)

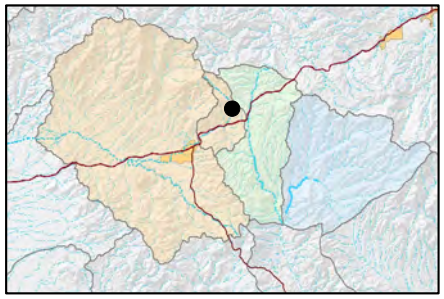
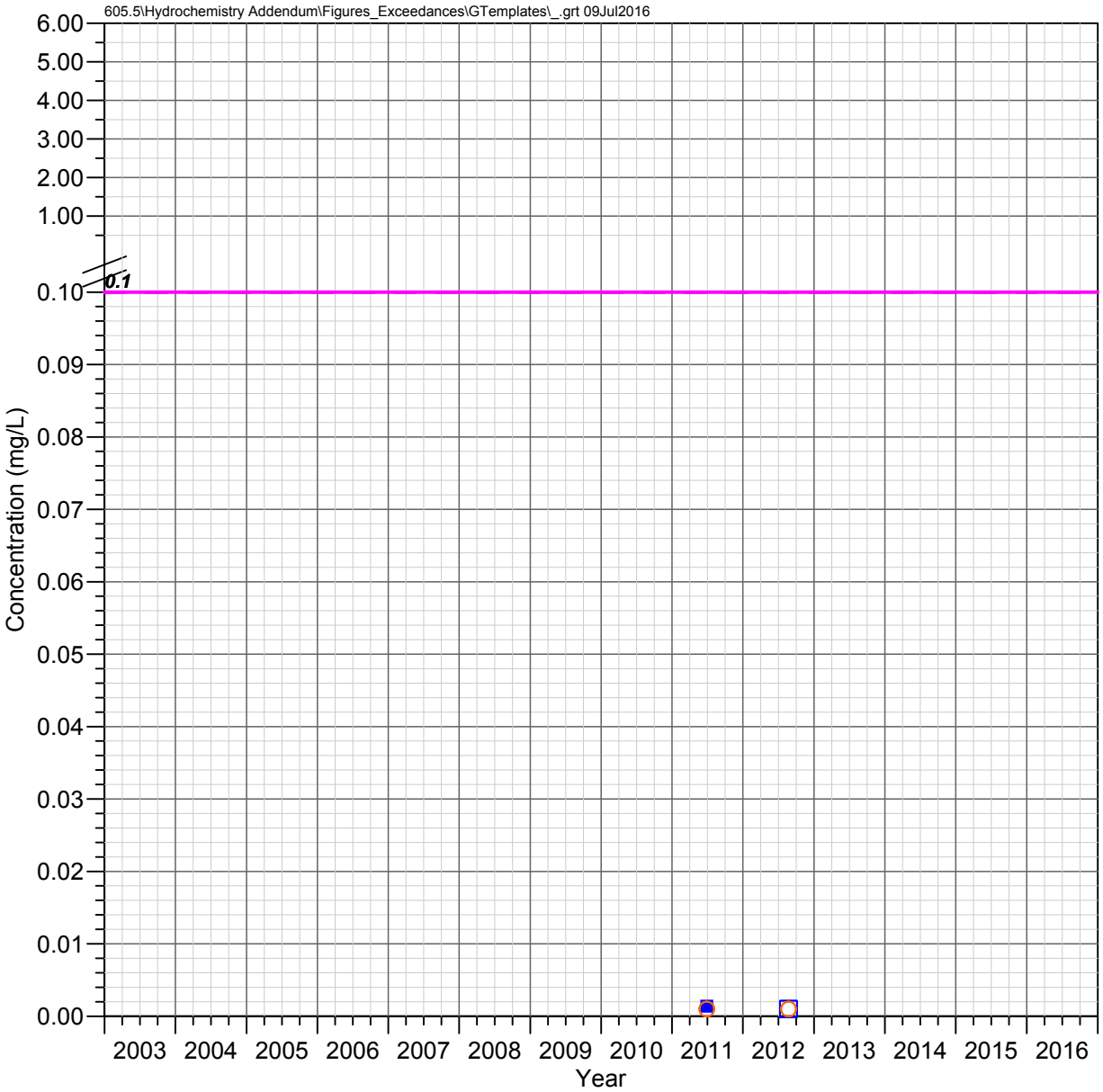


FIGURE E-230. CHROMIUM CONCENTRATIONS OBSERVED AT DHRES-11, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-13
Deep Groundwater System

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.1 mg/L)

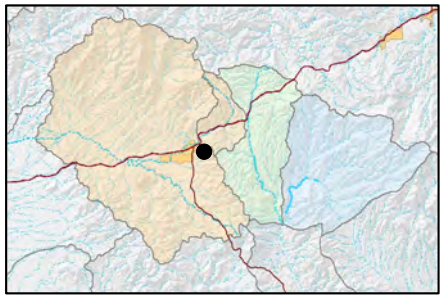
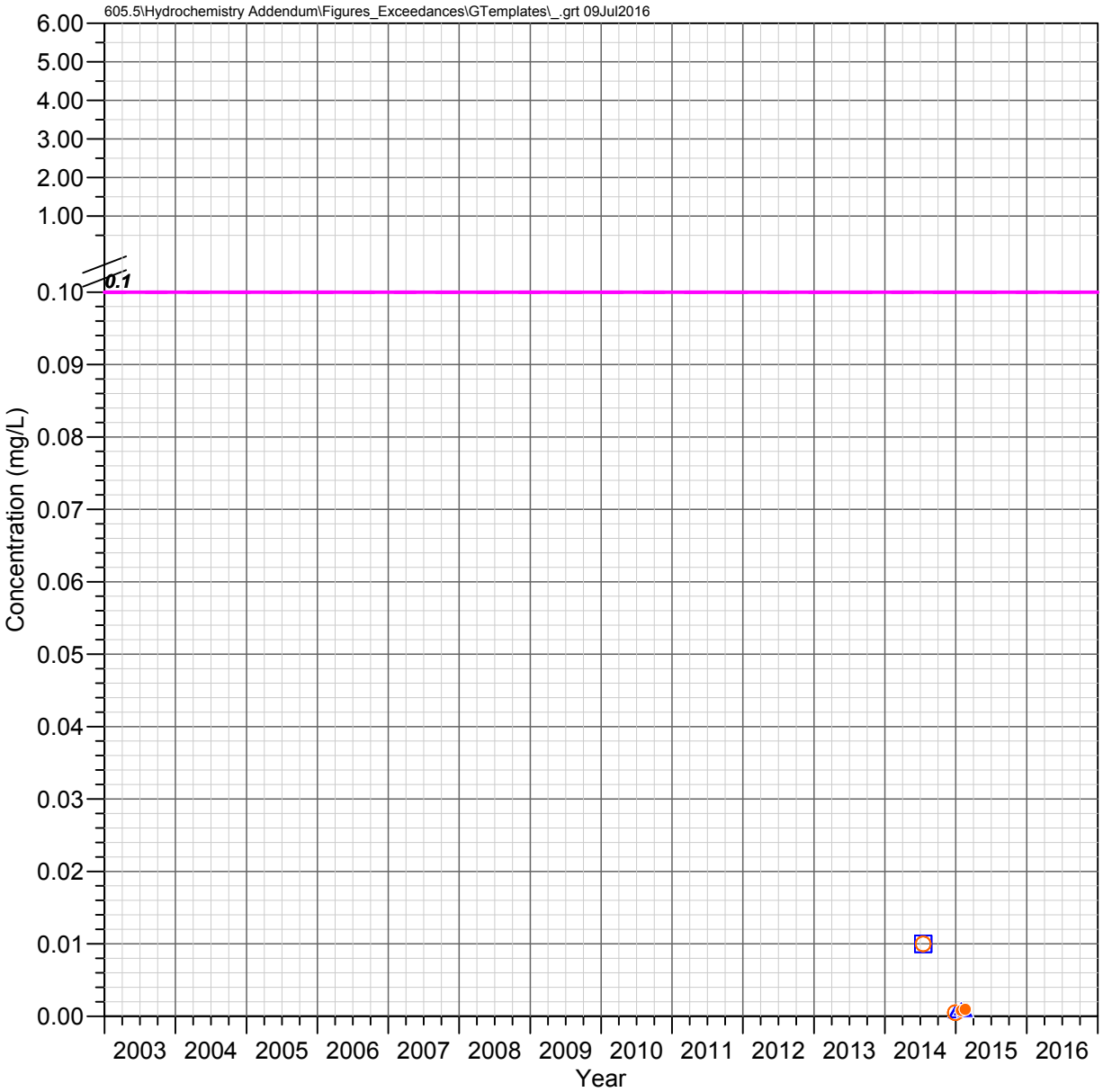


FIGURE E-231. CHROMIUM CONCENTRATIONS OBSERVED AT DHRES-13, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-15
Deep Groundwater System

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.1 mg/L)

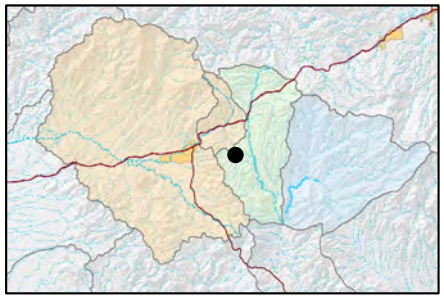
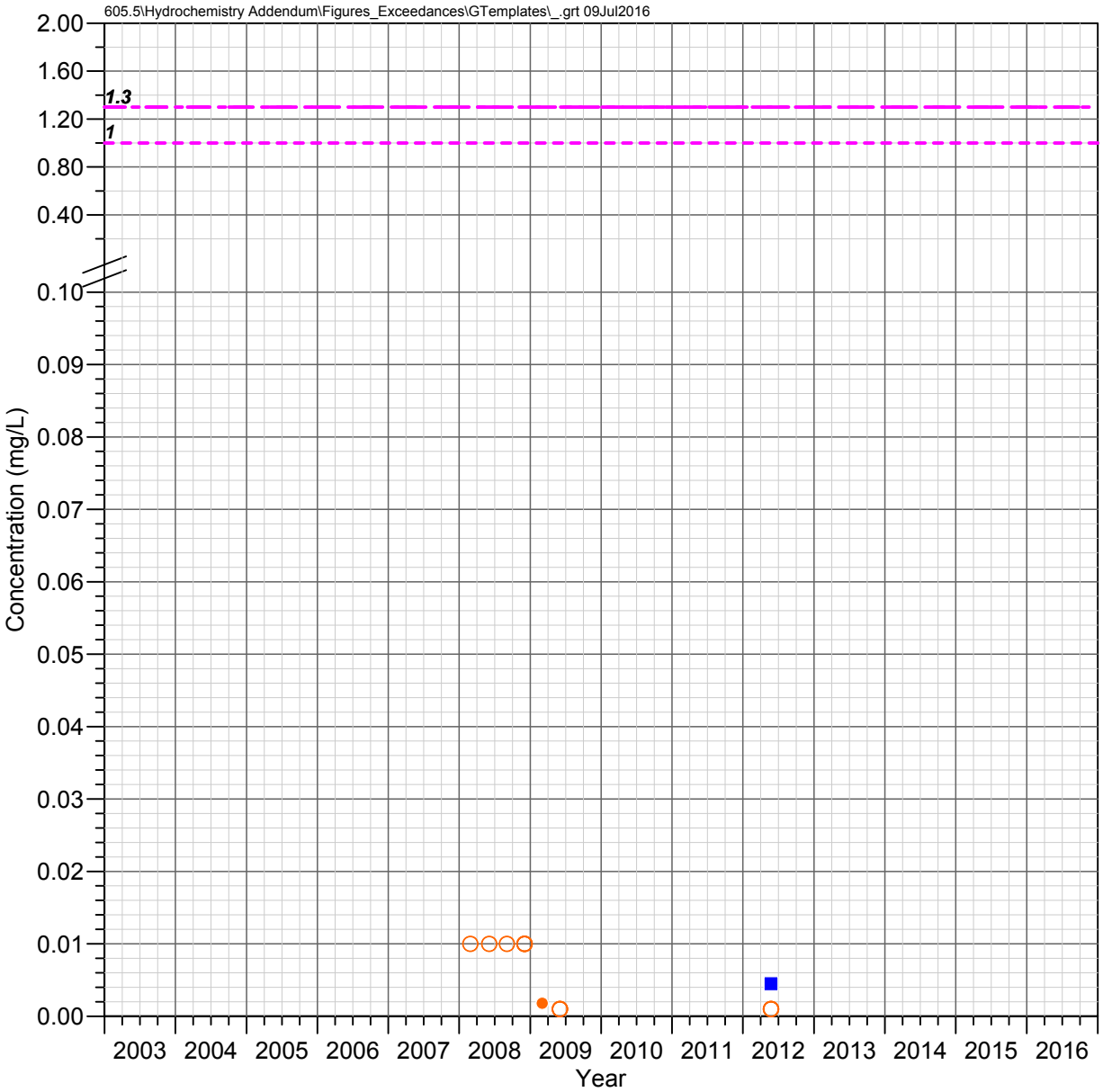


FIGURE E-232. CHROMIUM CONCENTRATIONS OBSERVED AT DHRES-15, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Hackberry Windmill Well Shallow Groundwater System

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- EPA Maximum Contaminant Levels (UNS, 1.3 mg/L)
- EPA Secondary MCL (UNS, 1 mg/L)
- EPA Treatment Technique Limit (UNS, 1.3 mg/L)

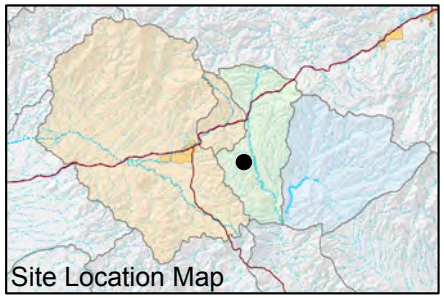
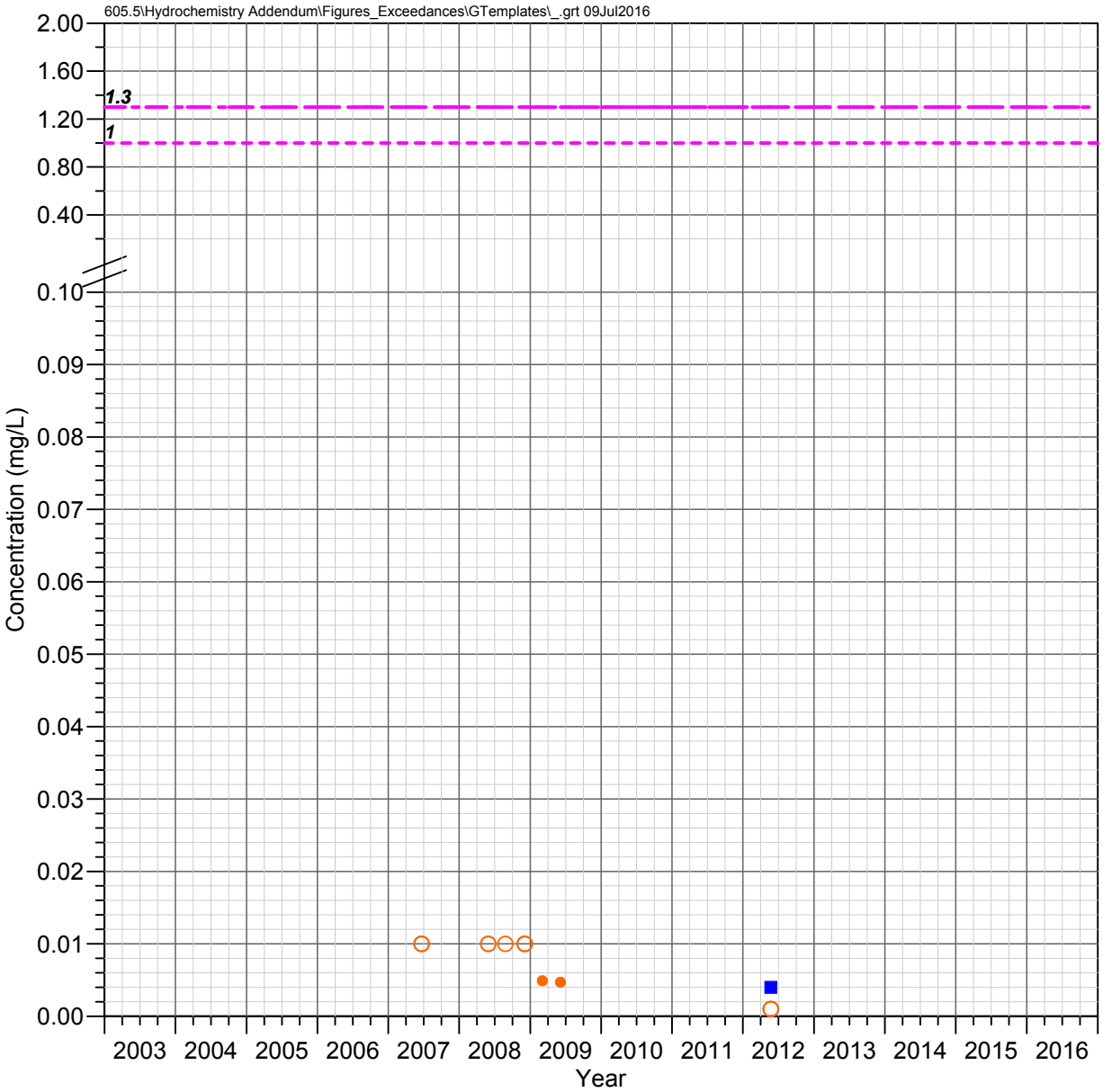


FIGURE E-233. COPPER CONCENTRATIONS OBSERVED AT HACKBERRY WINDMILL WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



JI Ranch Corral Well Shallow Groundwater System

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- EPA Maximum Contaminant Levels (UNS, 1.3 mg/L)
- EPA Secondary MCL (UNS, 1 mg/L)
- EPA Treatment Technique Limit (UNS, 1.3 mg/L)

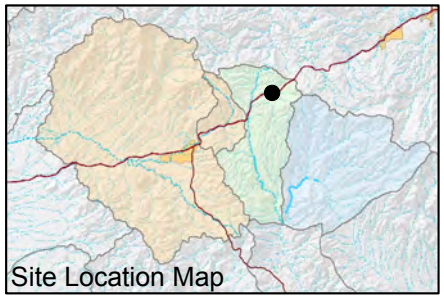
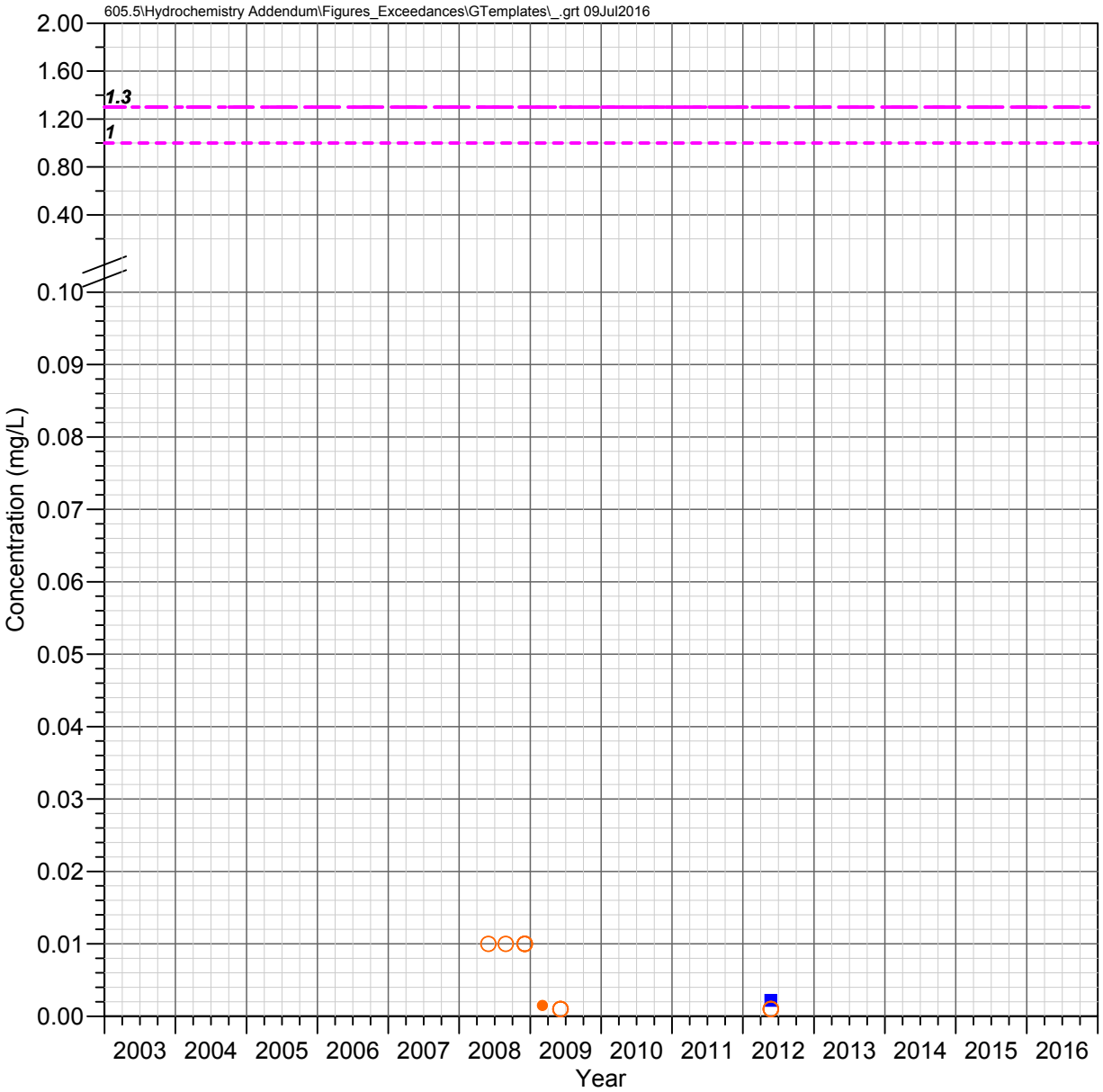


FIGURE E-234. COPPER CONCENTRATIONS OBSERVED AT JI RANCH CORRAL WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



JI Ranch Middle Well Shallow Groundwater System

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- EPA Maximum Contaminant Levels (UNS, 1.3 mg/L)
- EPA Secondary MCL (UNS, 1 mg/L)
- EPA Treatment Technique Limit (UNS, 1.3 mg/L)

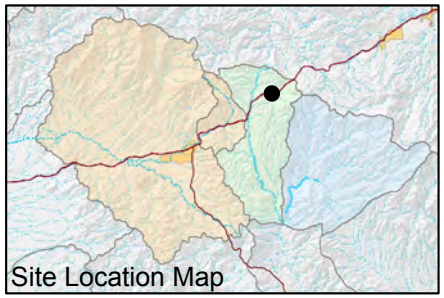
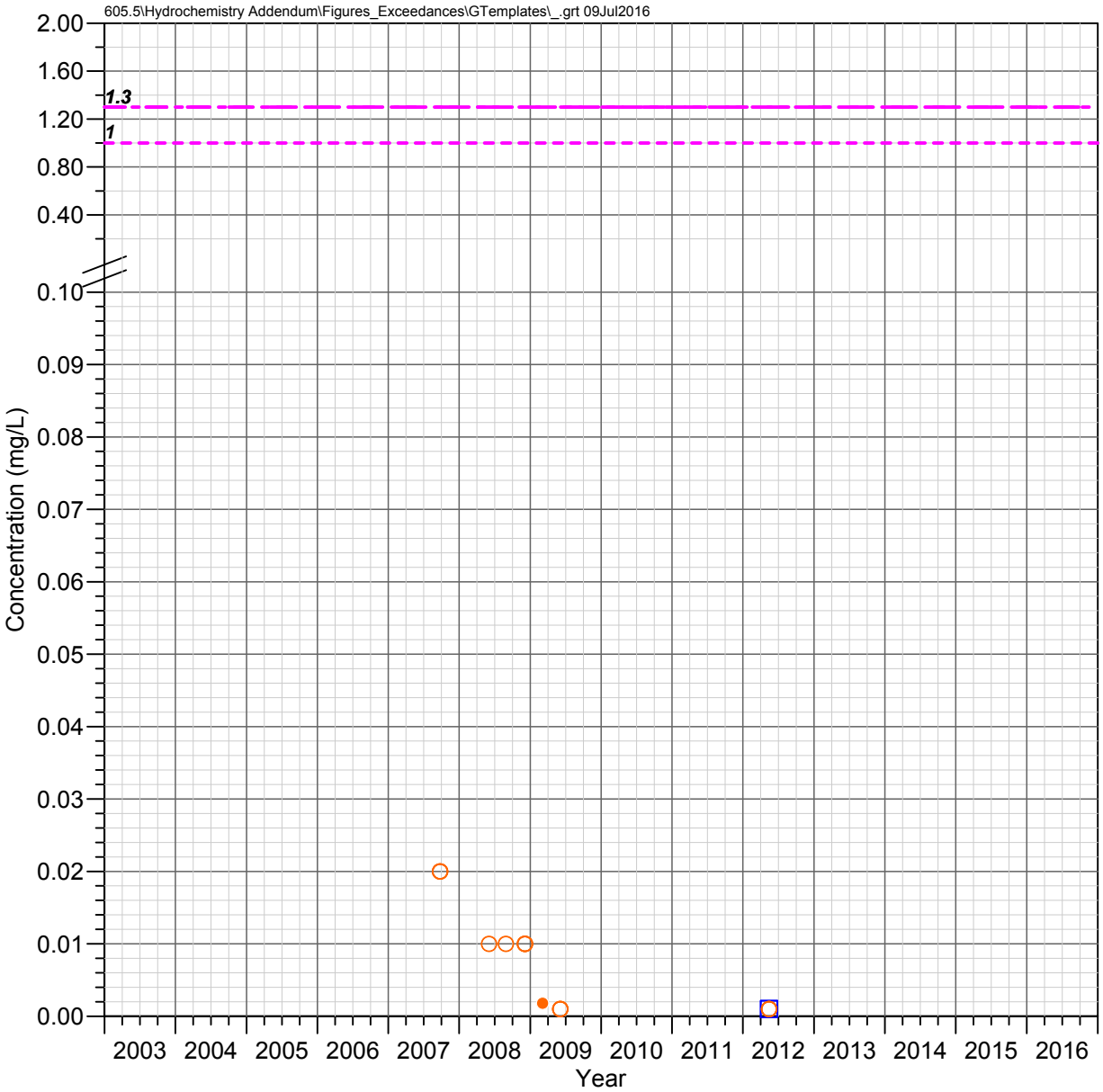


FIGURE E-235. COPPER CONCENTRATIONS OBSERVED AT JI RANCH MIDDLE WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



A-06
Apache Leap Tuff Aquifer

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- EPA Maximum Contaminant Levels (UNS, 1.3 mg/L)
- EPA Secondary MCL (UNS, 1 mg/L)
- EPA Treatment Technique Limit (UNS, 1.3 mg/L)

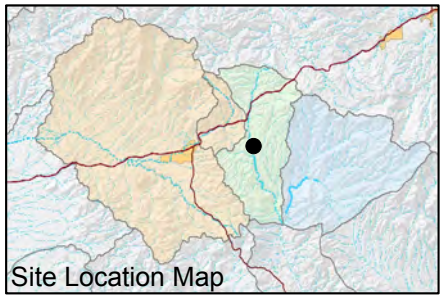
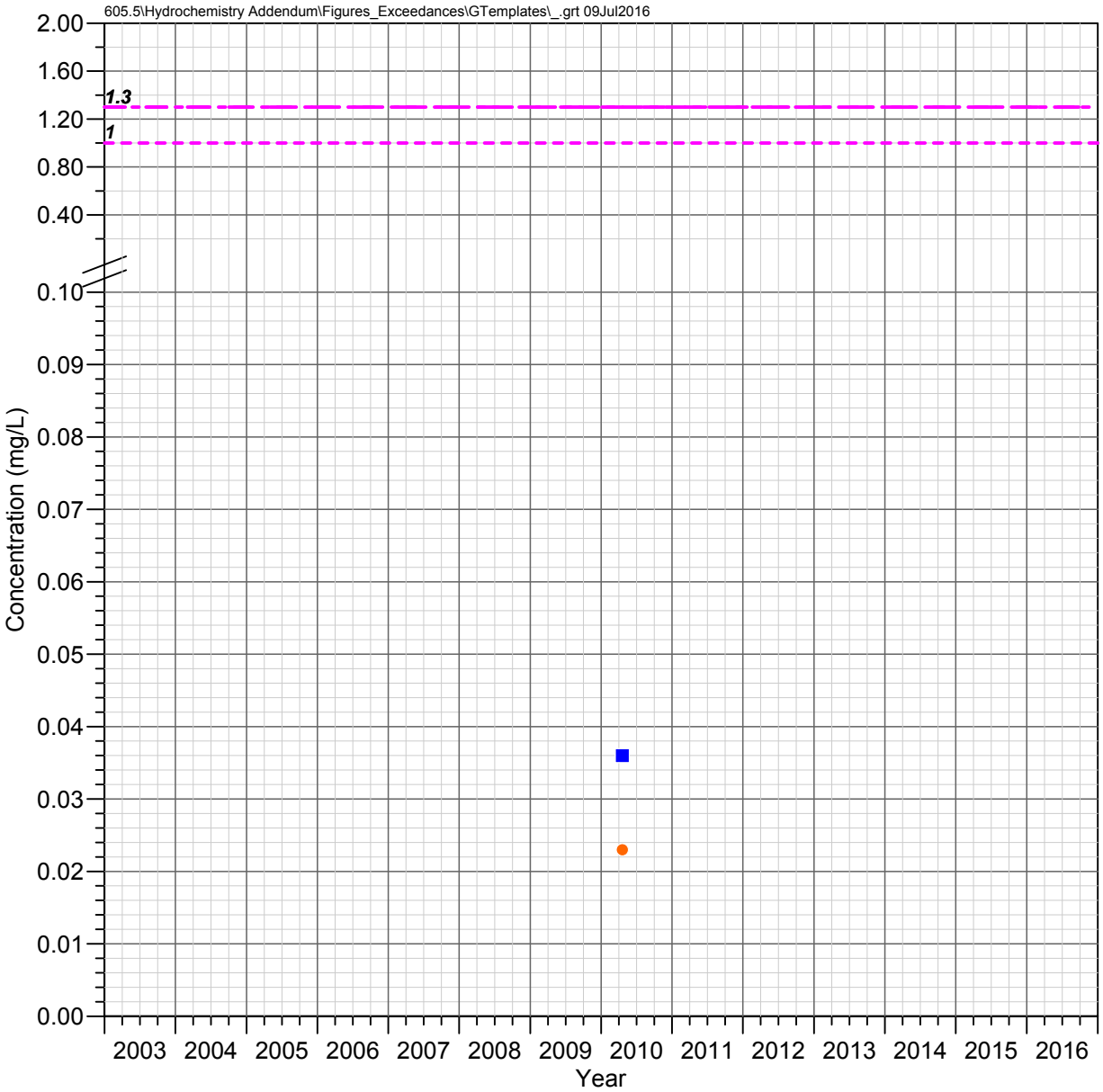


FIGURE E-236. COPPER CONCENTRATIONS OBSERVED AT A-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



CT Well
Apache Leap Tuff Aquifer

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- EPA Maximum Contaminant Levels (UNS, 1.3 mg/L)
- EPA Secondary MCL (UNS, 1 mg/L)
- EPA Treatment Technique Limit (UNS, 1.3 mg/L)

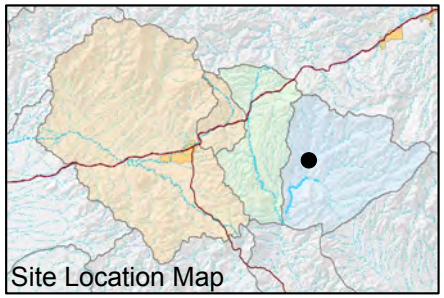
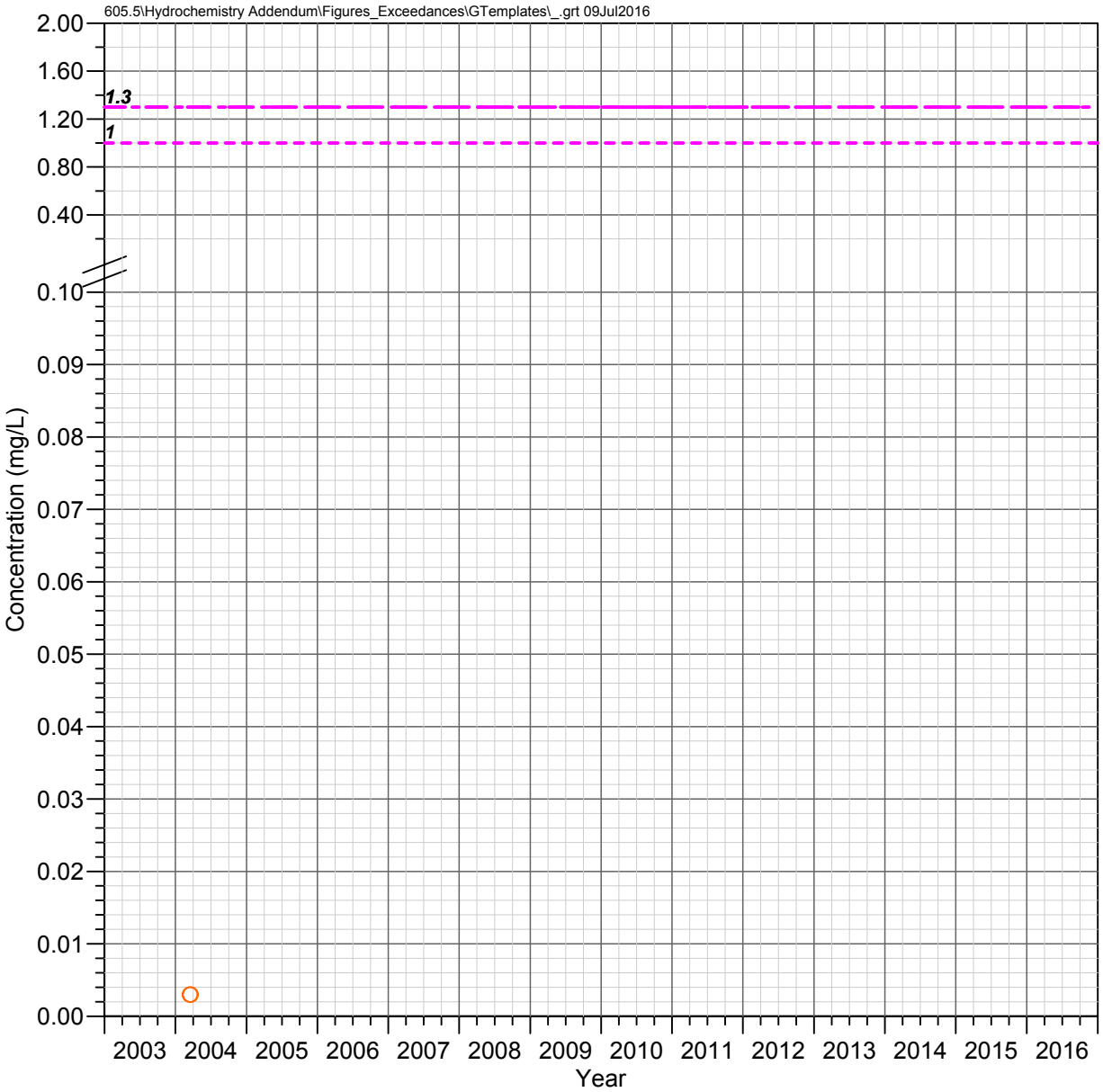


FIGURE E-237. COPPER CONCENTRATIONS OBSERVED AT CT WELL, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-01
Apache Leap Tuff Aquifer

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- EPA Maximum Contaminant Levels (UNS, 1.3 mg/L)
- EPA Secondary MCL (UNS, 1 mg/L)
- EPA Treatment Technique Limit (UNS, 1.3 mg/L)

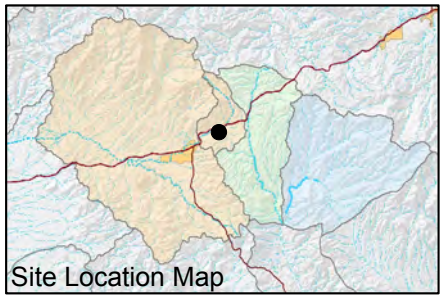
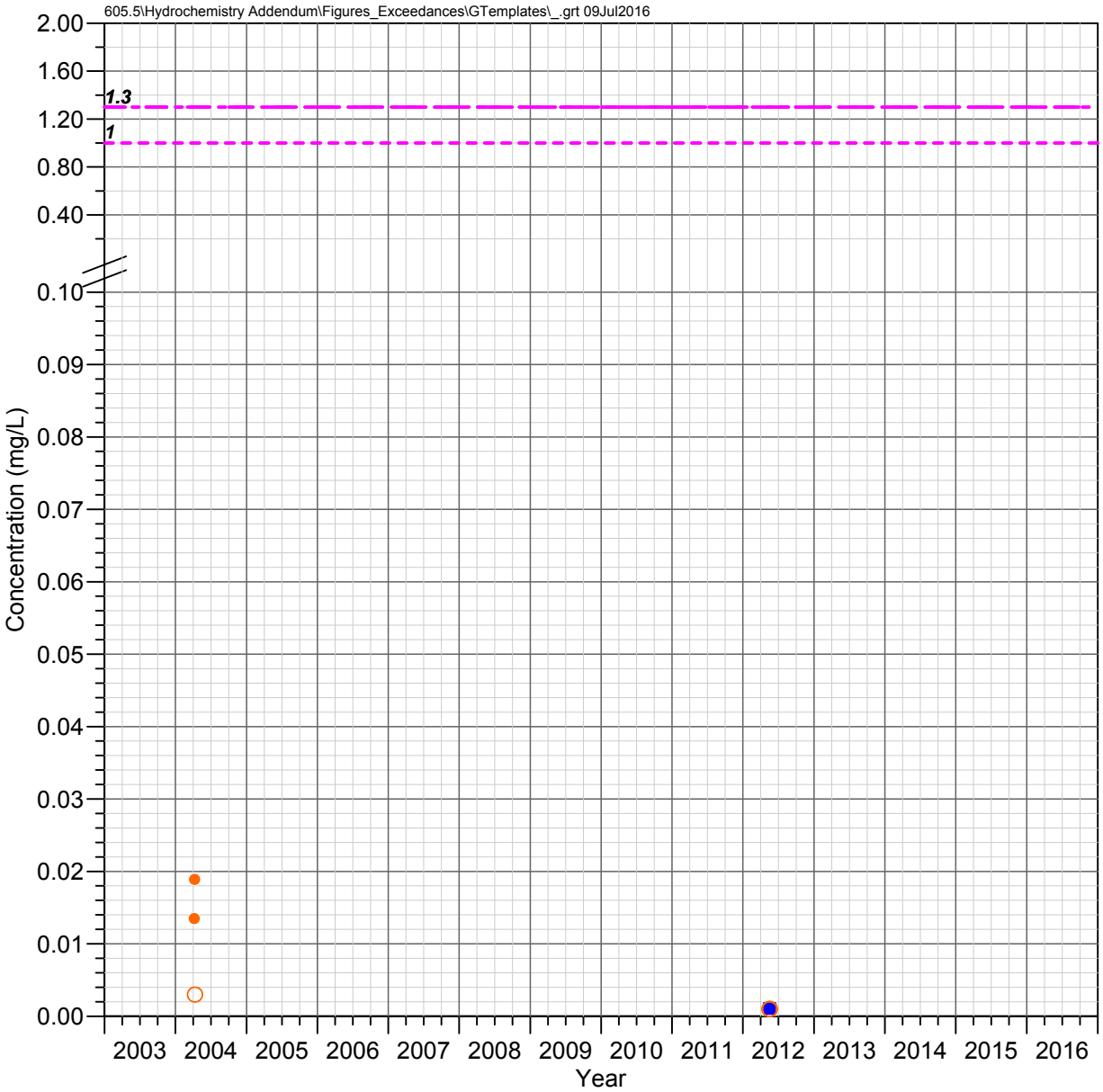


FIGURE E-238. COPPER CONCENTRATIONS OBSERVED AT HRES-01, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-02
Apache Leap Tuff Aquifer

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- EPA Maximum Contaminant Levels (UNS, 1.3 mg/L)
- EPA Secondary MCL (UNS, 1 mg/L)
- EPA Treatment Technique Limit (UNS, 1.3 mg/L)

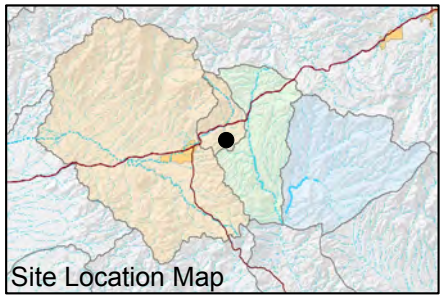
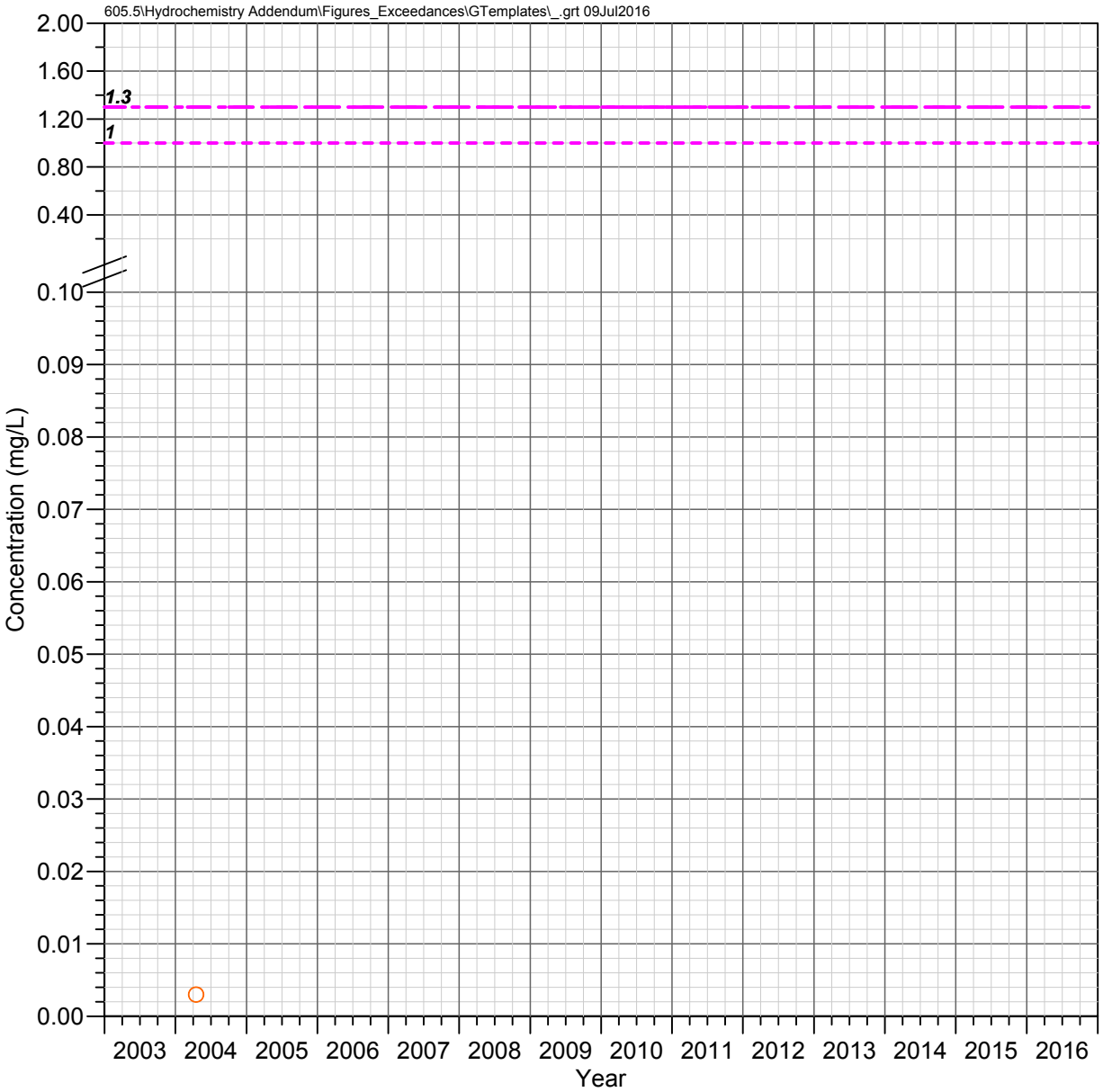


FIGURE E-239. COPPER CONCENTRATIONS OBSERVED AT HRES-02, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-03d
Apache Leap Tuff Aquifer

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- EPA Maximum Contaminant Levels (UNS, 1.3 mg/L)
- EPA Secondary MCL (UNS, 1 mg/L)
- EPA Treatment Technique Limit (UNS, 1.3 mg/L)

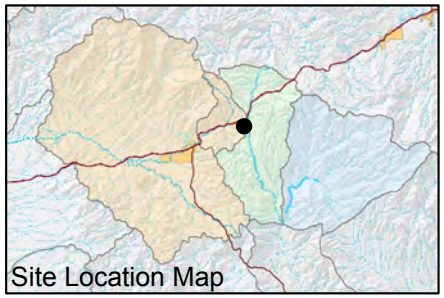
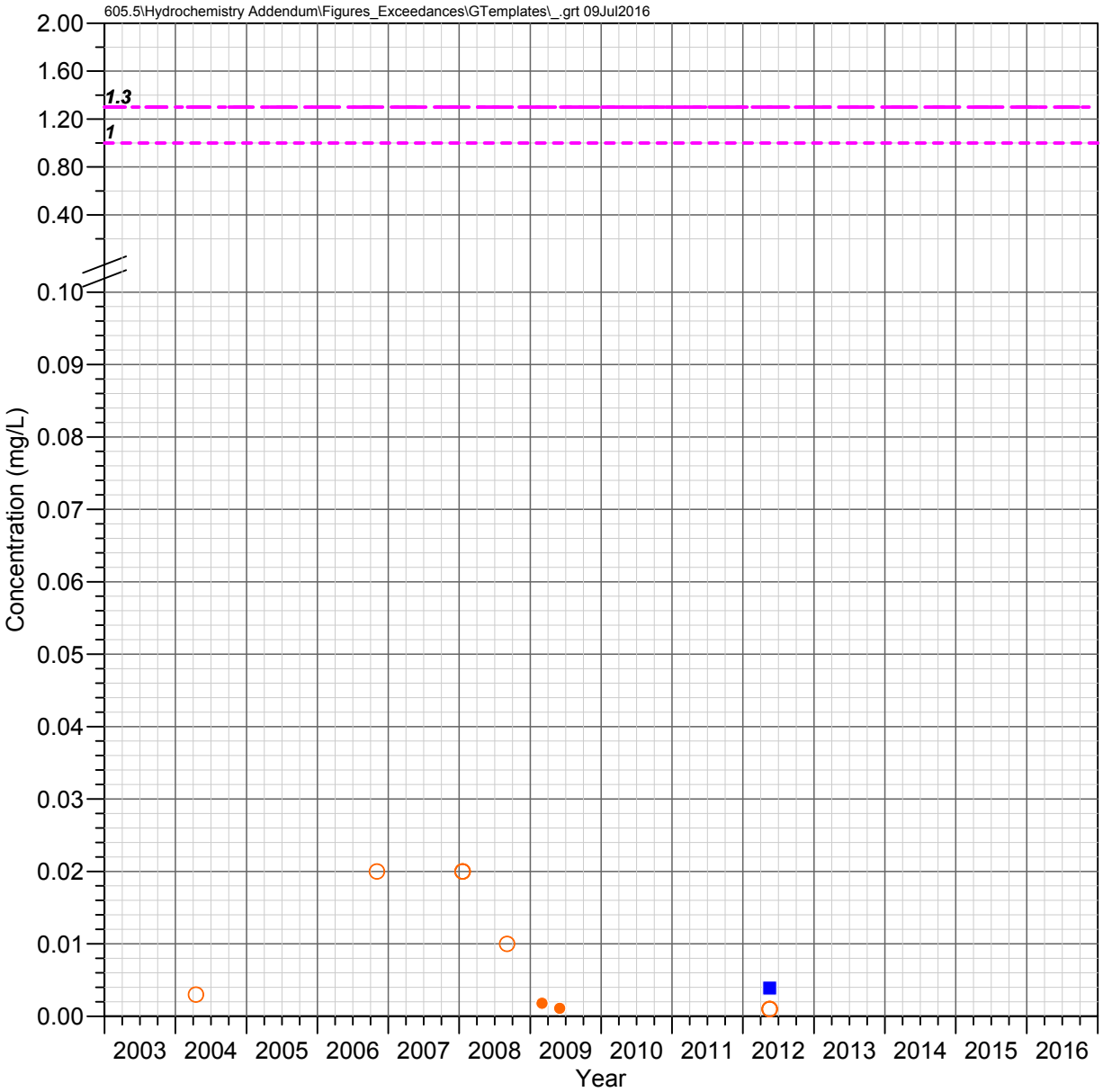


FIGURE E-240. COPPER CONCENTRATIONS OBSERVED AT HRES-03D, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-04
Apache Leap Tuff Aquifer

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- EPA Maximum Contaminant Levels (UNS, 1.3 mg/L)
- EPA Secondary MCL (UNS, 1 mg/L)
- EPA Treatment Technique Limit (UNS, 1.3 mg/L)

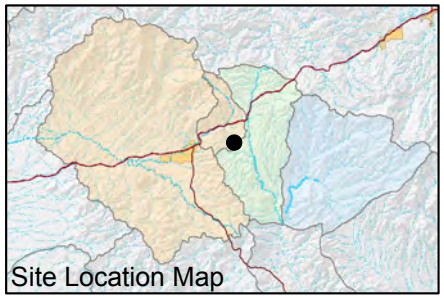
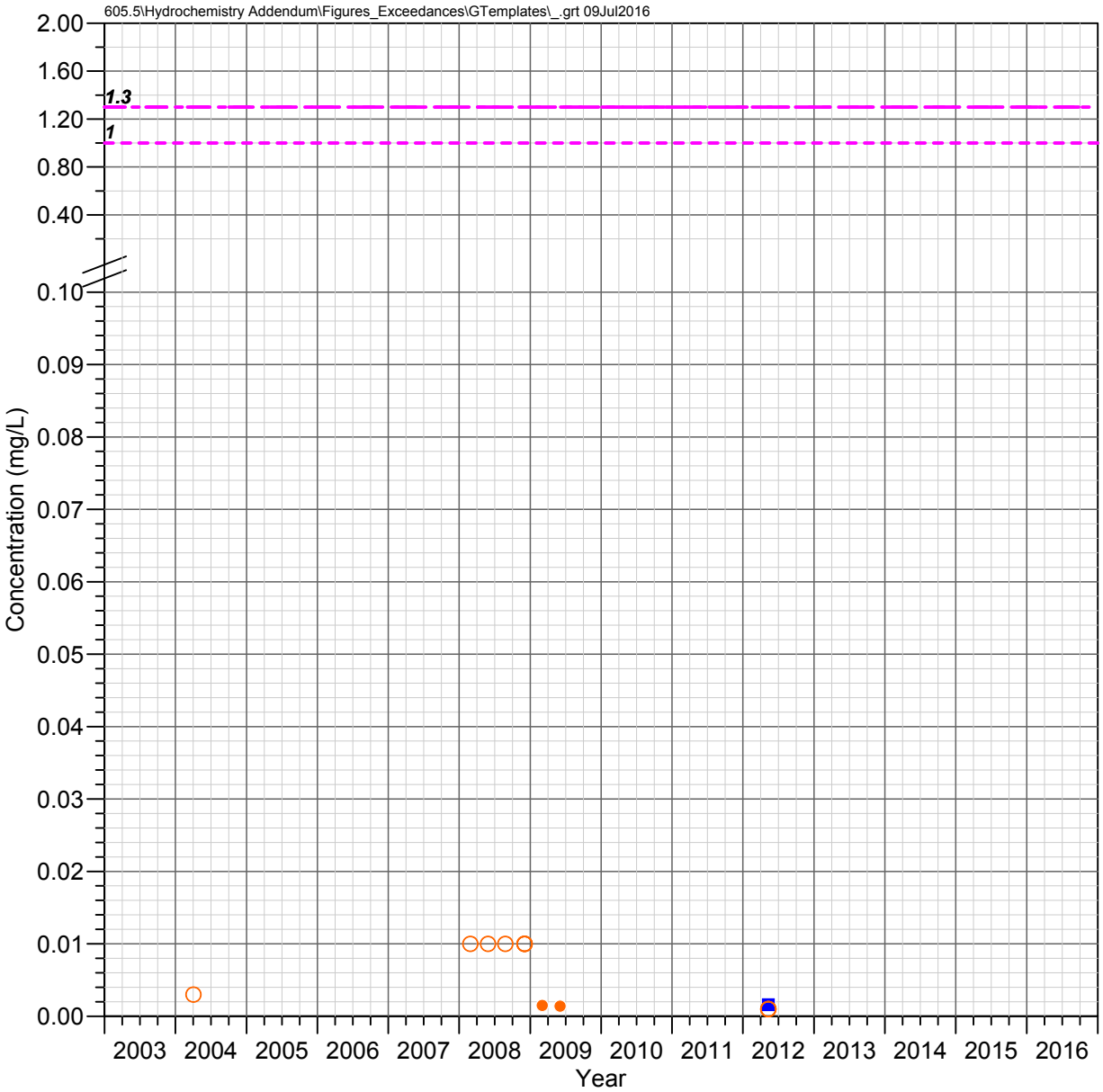


FIGURE E-241. COPPER CONCENTRATIONS OBSERVED AT HRES-04, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-05
Apache Leap Tuff Aquifer

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- EPA Maximum Contaminant Levels (UNS, 1.3 mg/L)
- EPA Secondary MCL (UNS, 1 mg/L)
- EPA Treatment Technique Limit (UNS, 1.3 mg/L)

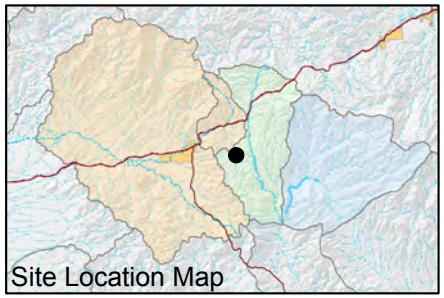
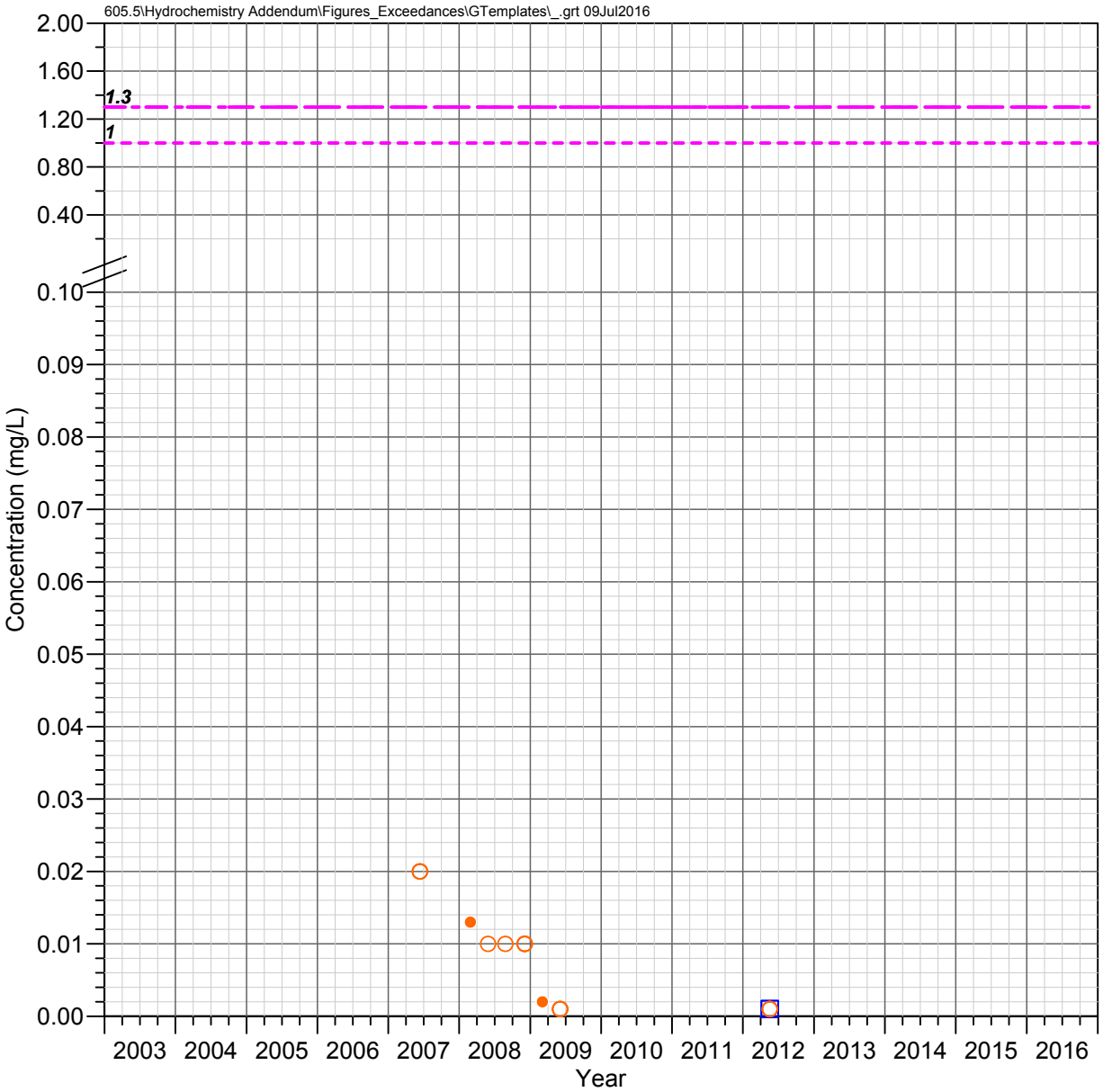


FIGURE E-242. COPPER CONCENTRATIONS OBSERVED AT HRES-05, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-06
Apache Leap Tuff Aquifer

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- EPA Maximum Contaminant Levels (UNS, 1.3 mg/L)
- EPA Secondary MCL (UNS, 1 mg/L)
- EPA Treatment Technique Limit (UNS, 1.3 mg/L)

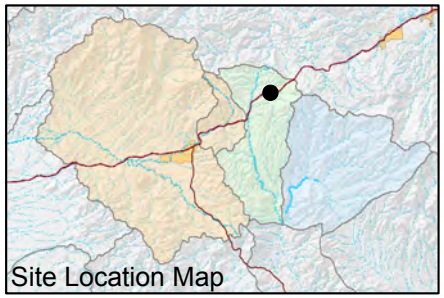
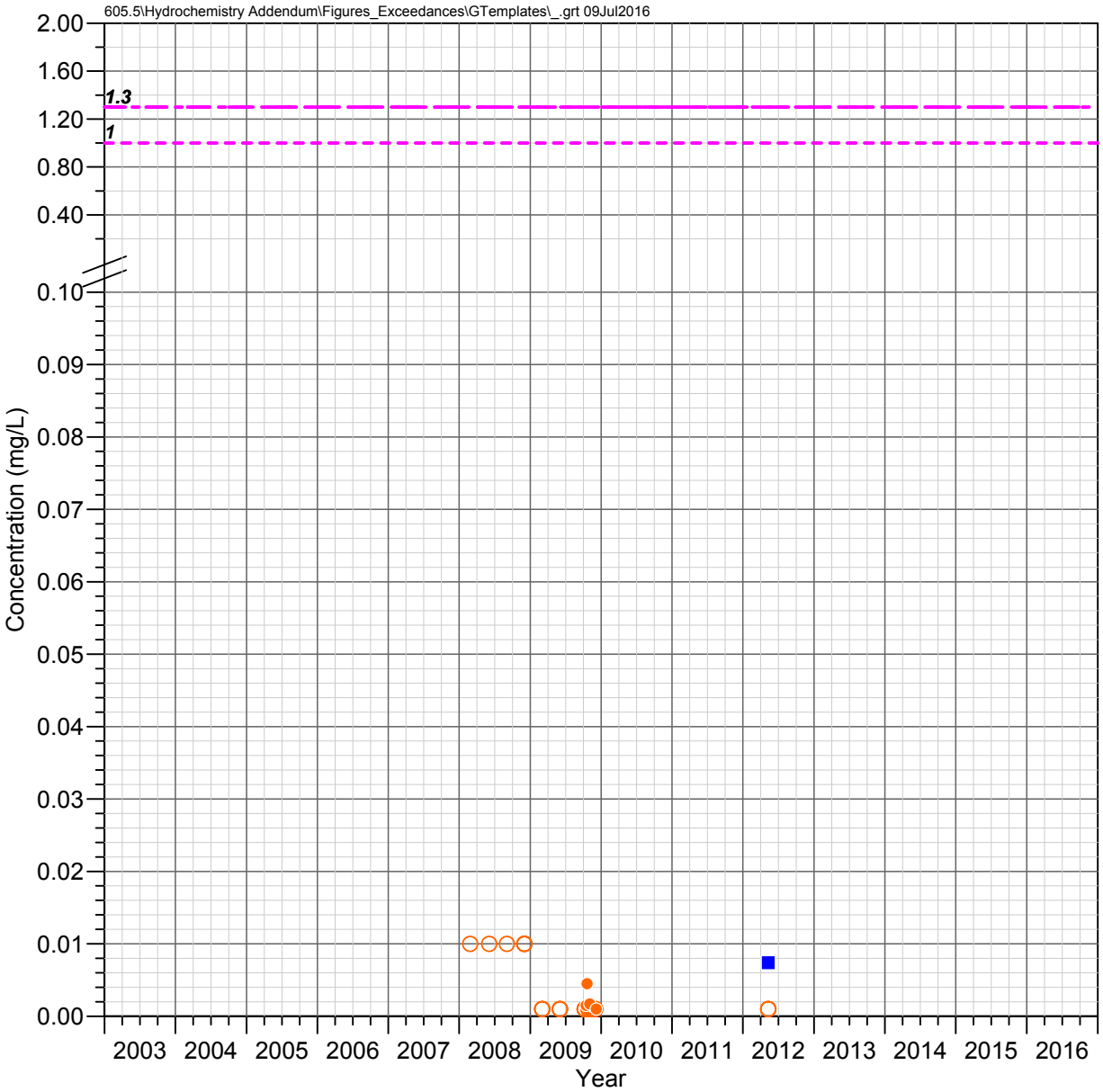


FIGURE E-243. COPPER CONCENTRATIONS OBSERVED AT HRES-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-07
Apache Leap Tuff Aquifer

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- EPA Maximum Contaminant Levels (UNS, 1.3 mg/L)
- EPA Secondary MCL (UNS, 1 mg/L)
- EPA Treatment Technique Limit (UNS, 1.3 mg/L)

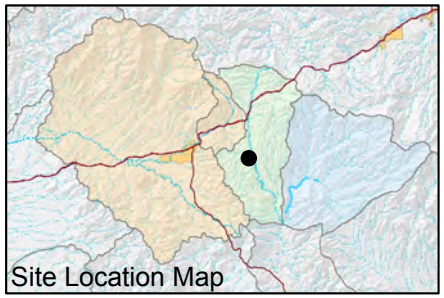
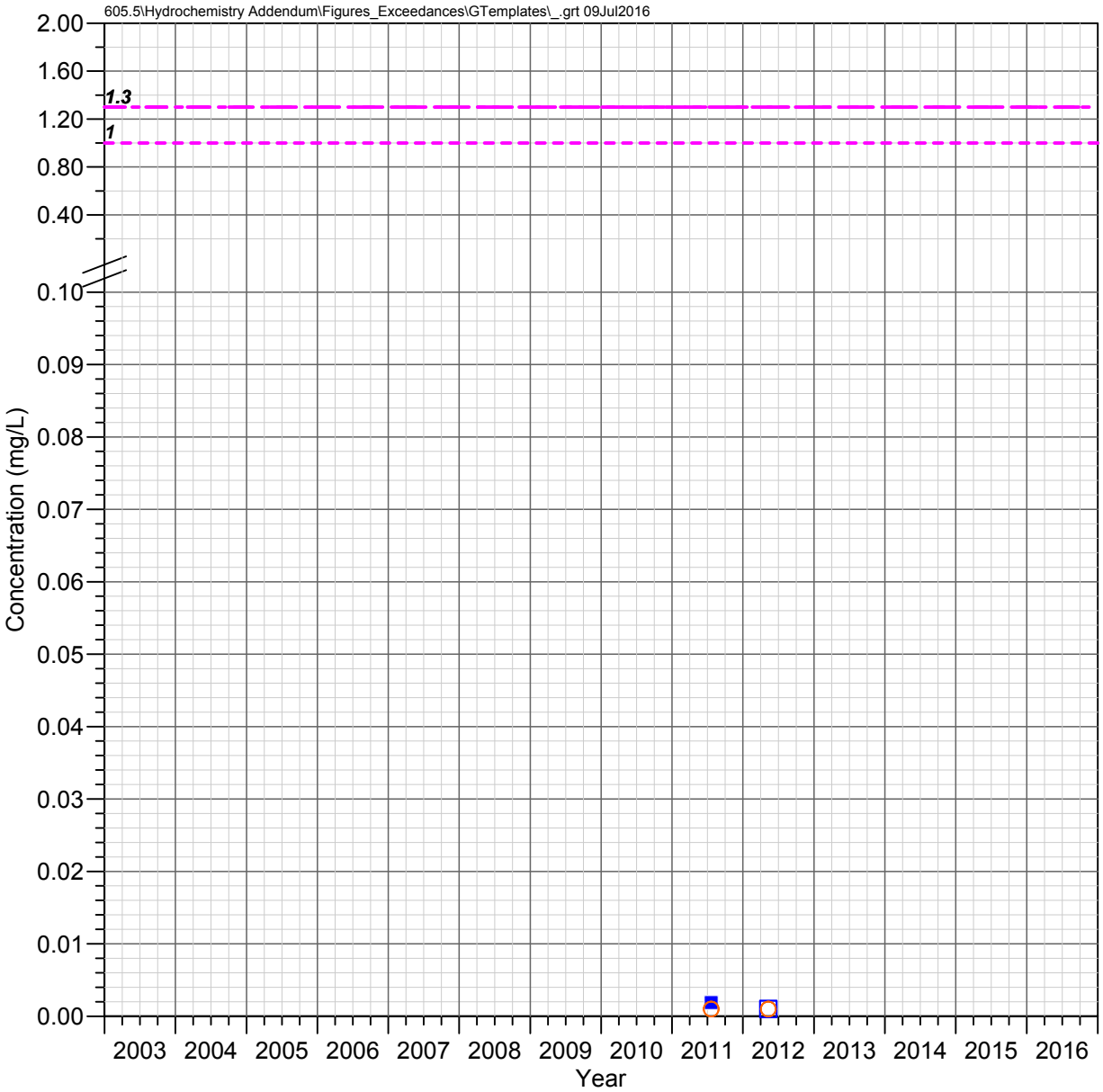


FIGURE E-244. COPPER CONCENTRATIONS OBSERVED AT HRES-07, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-08
Apache Leap Tuff Aquifer

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- EPA Maximum Contaminant Levels (UNS, 1.3 mg/L)
- EPA Secondary MCL (UNS, 1 mg/L)
- EPA Treatment Technique Limit (UNS, 1.3 mg/L)

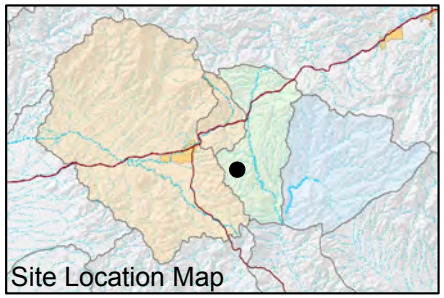
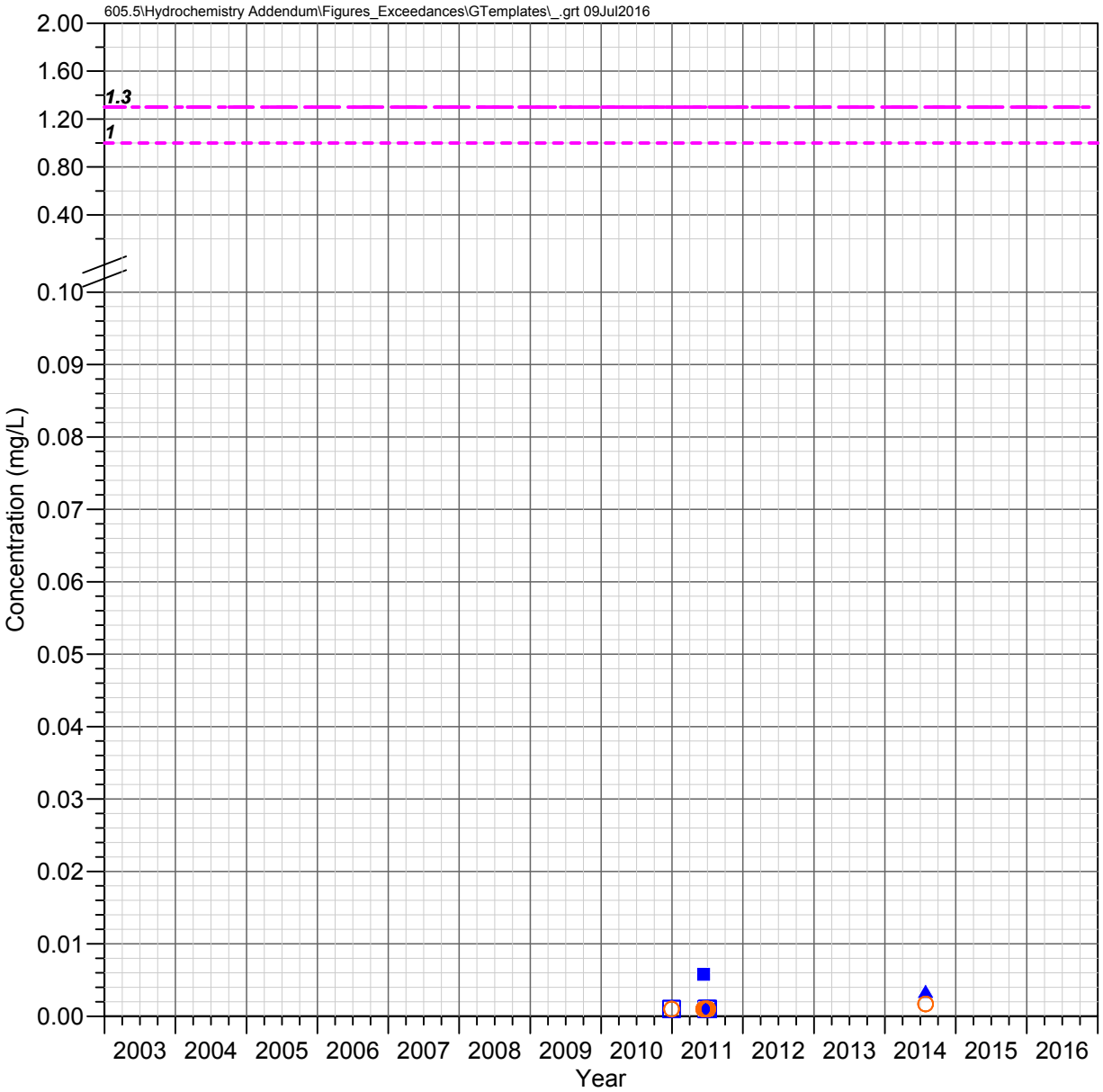


FIGURE E-245. COPPER CONCENTRATIONS OBSERVED AT HRES-08, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-09
Apache Leap Tuff Aquifer

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- EPA Maximum Contaminant Levels (UNS, 1.3 mg/L)
- EPA Secondary MCL (UNS, 1 mg/L)
- EPA Treatment Technique Limit (UNS, 1.3 mg/L)

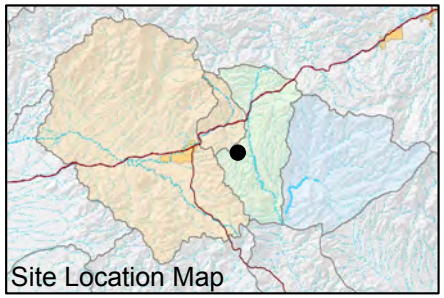
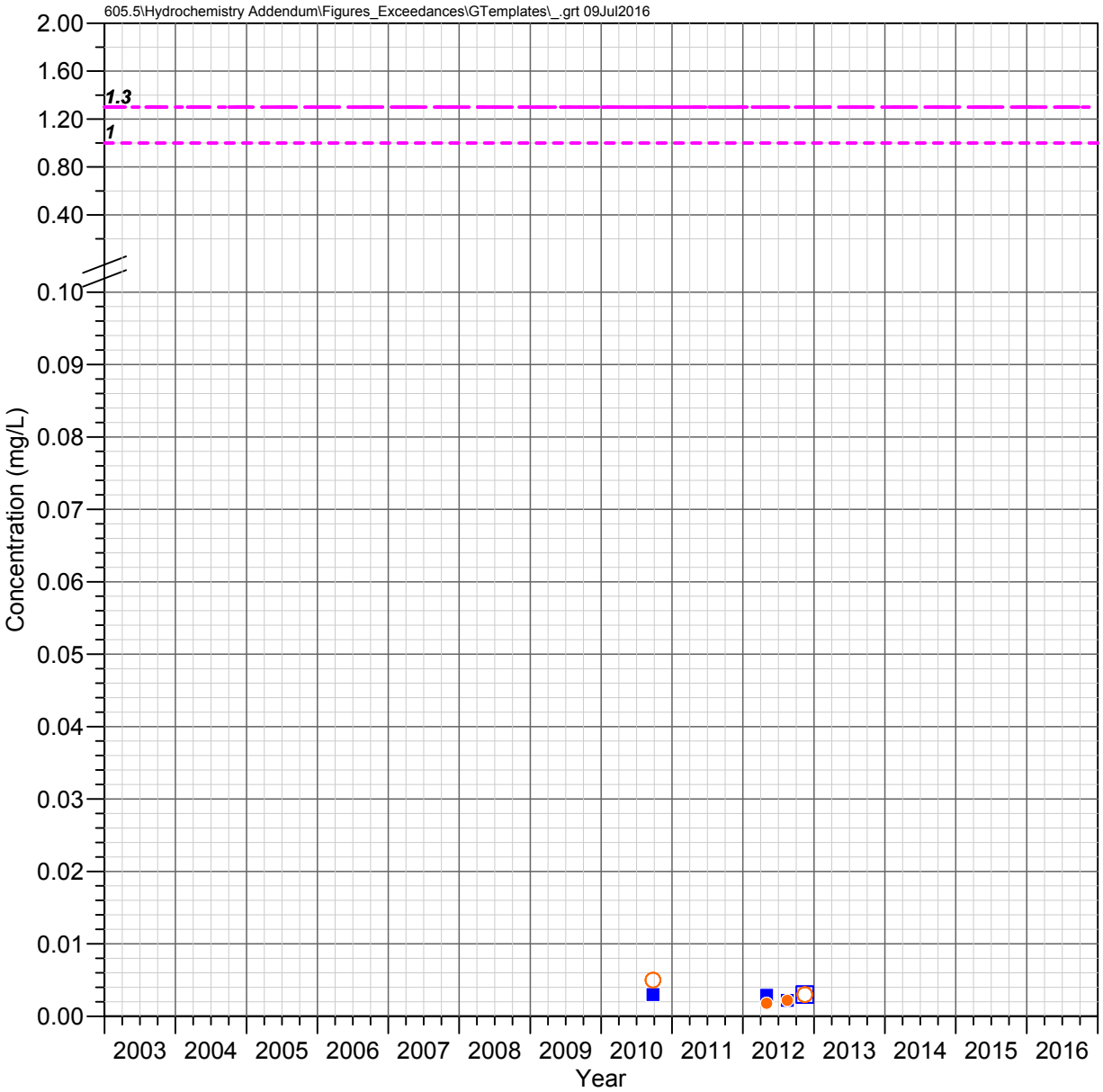


FIGURE E-246. COPPER CONCENTRATIONS OBSERVED AT HRES-09, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-10
Apache Leap Tuff Aquifer

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- EPA Maximum Contaminant Levels (UNS, 1.3 mg/L)
- EPA Secondary MCL (UNS, 1 mg/L)
- EPA Treatment Technique Limit (UNS, 1.3 mg/L)

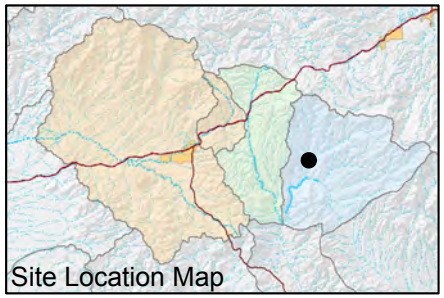
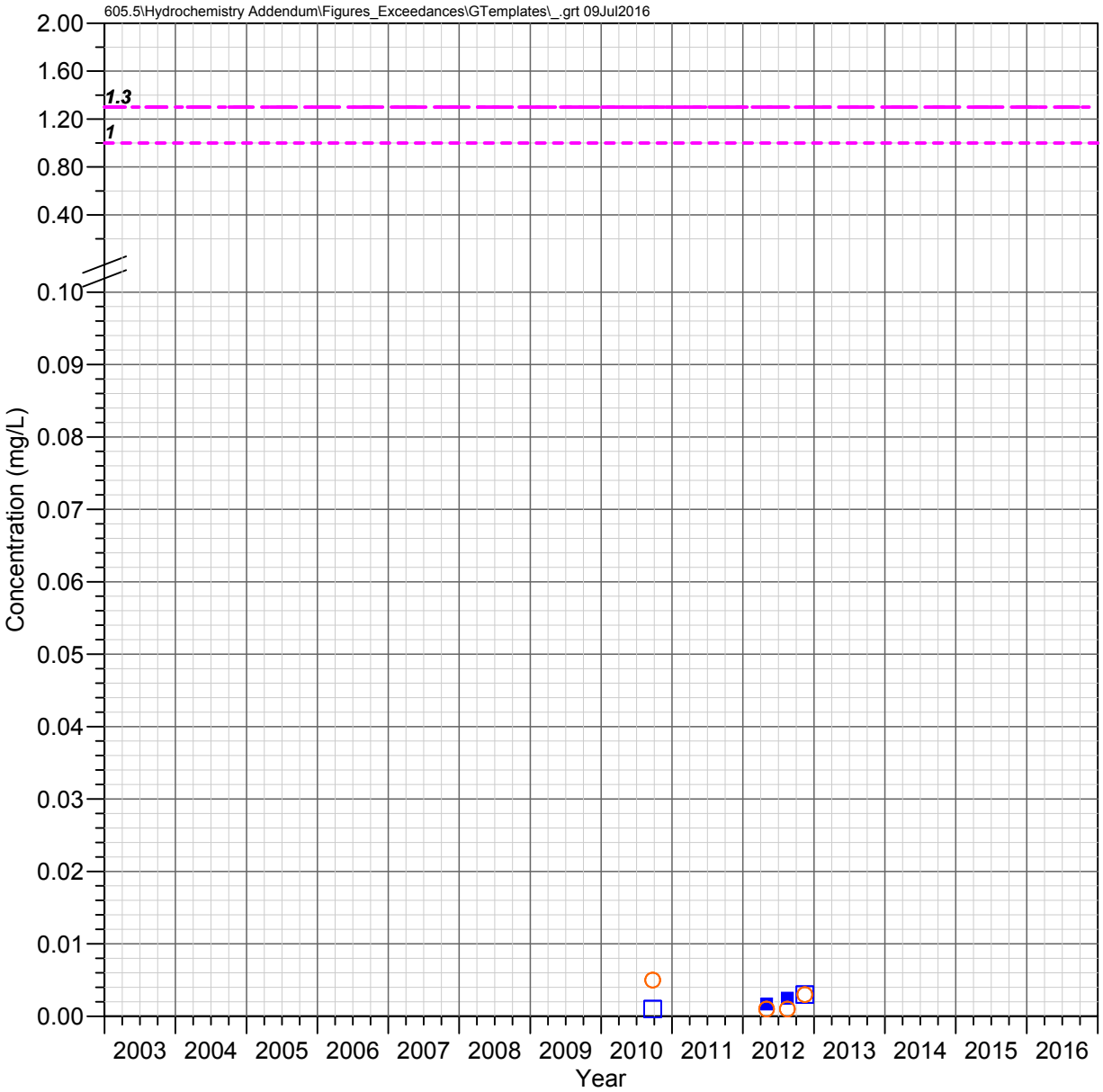


FIGURE E-247. COPPER CONCENTRATIONS OBSERVED AT HRES-10, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-11
Apache Leap Tuff Aquifer

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- EPA Maximum Contaminant Levels (UNS, 1.3 mg/L)
- EPA Secondary MCL (UNS, 1 mg/L)
- EPA Treatment Technique Limit (UNS, 1.3 mg/L)

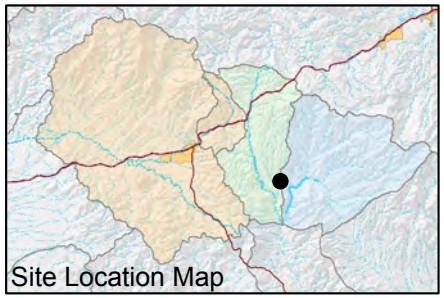
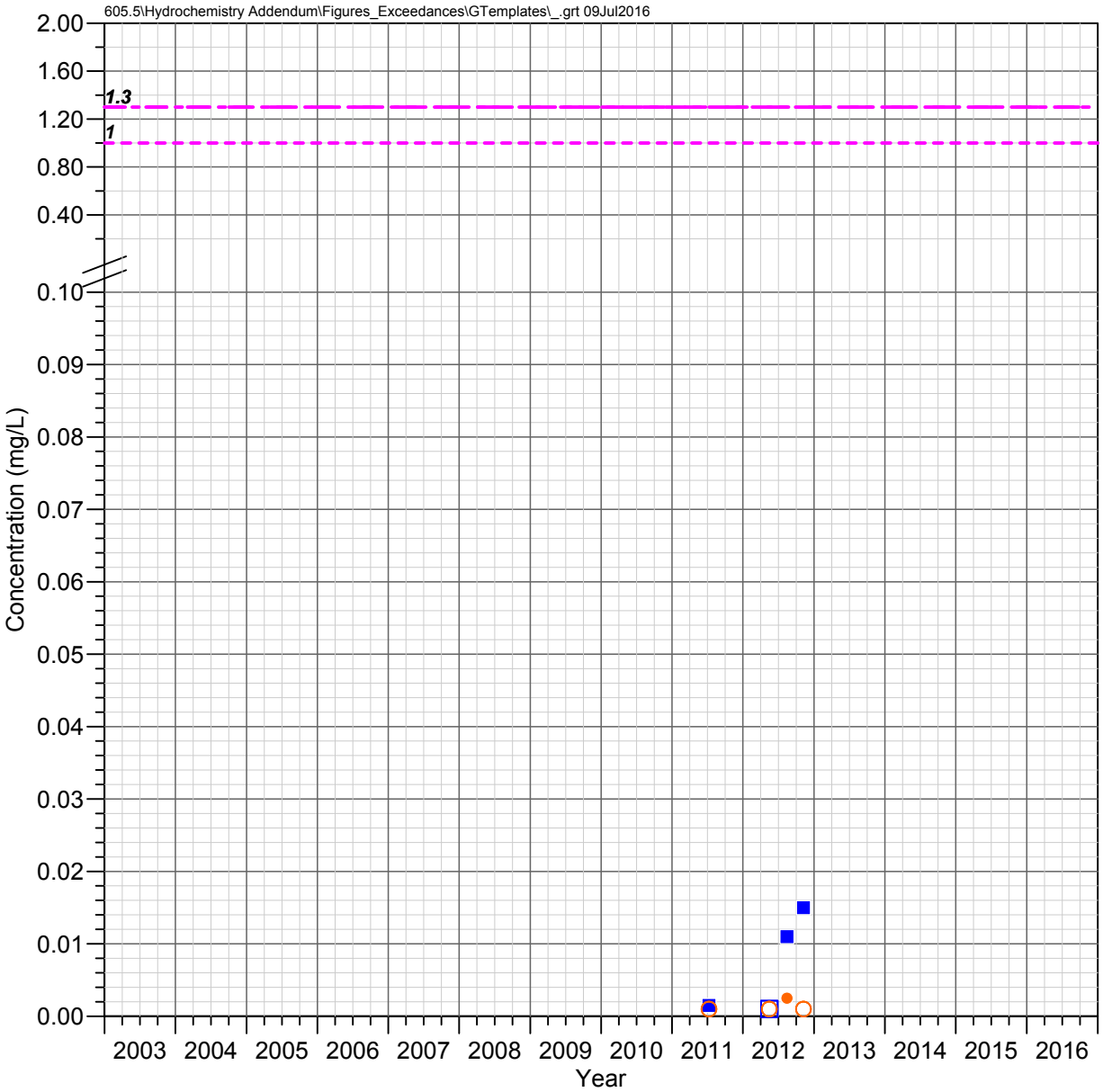


FIGURE E-248. COPPER CONCENTRATIONS OBSERVED AT HRES-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-12
Apache Leap Tuff Aquifer

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- EPA Maximum Contaminant Levels (UNS, 1.3 mg/L)
- EPA Secondary MCL (UNS, 1 mg/L)
- EPA Treatment Technique Limit (UNS, 1.3 mg/L)

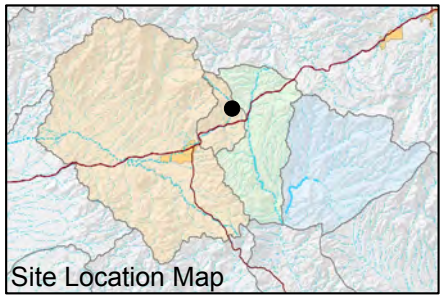
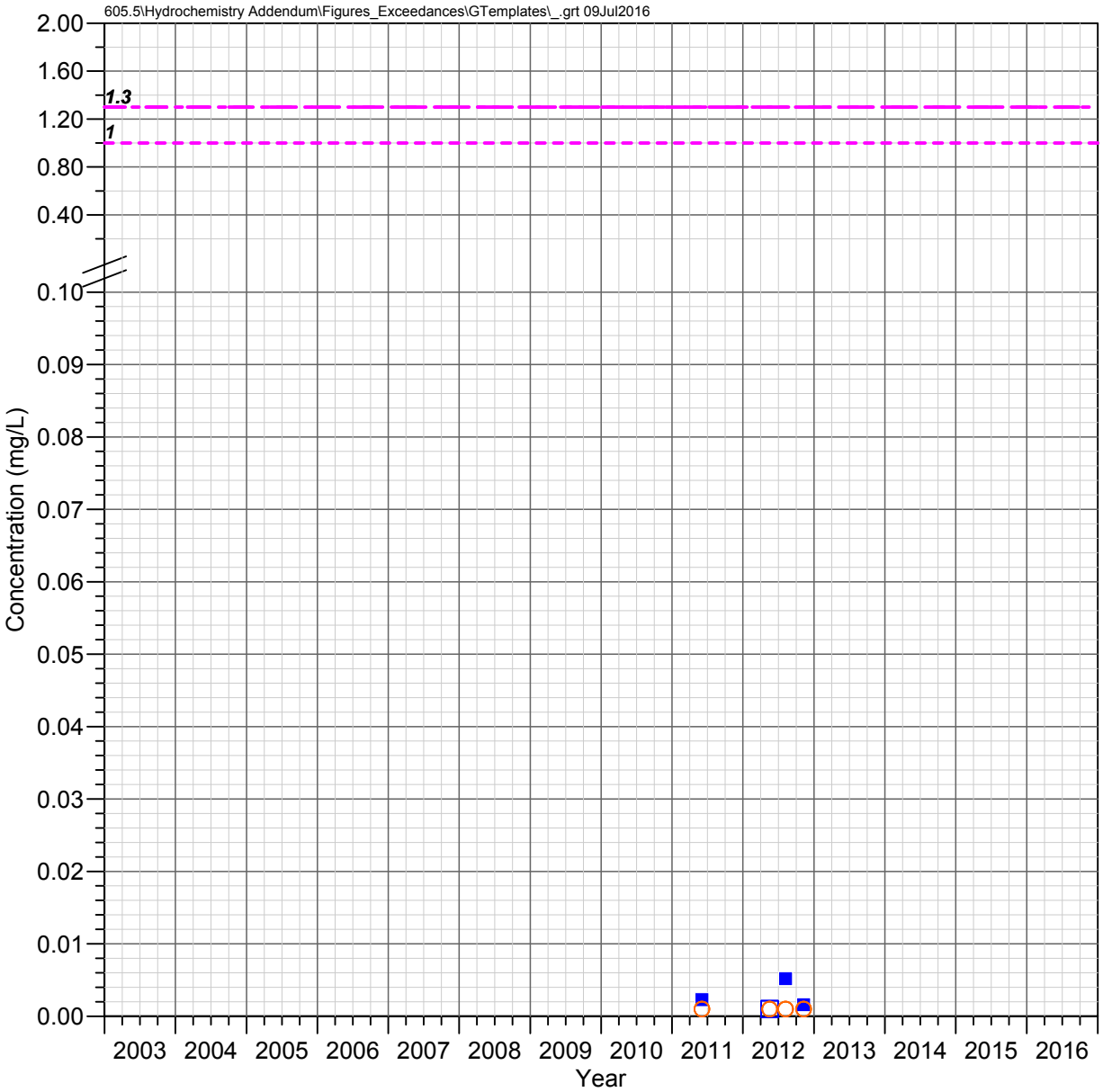


FIGURE E-249. COPPER CONCENTRATIONS OBSERVED AT HRES-12, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-13
Apache Leap Tuff Aquifer

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- EPA Maximum Contaminant Levels (UNS, 1.3 mg/L)
- EPA Secondary MCL (UNS, 1 mg/L)
- EPA Treatment Technique Limit (UNS, 1.3 mg/L)

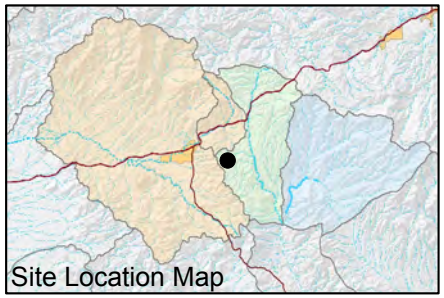
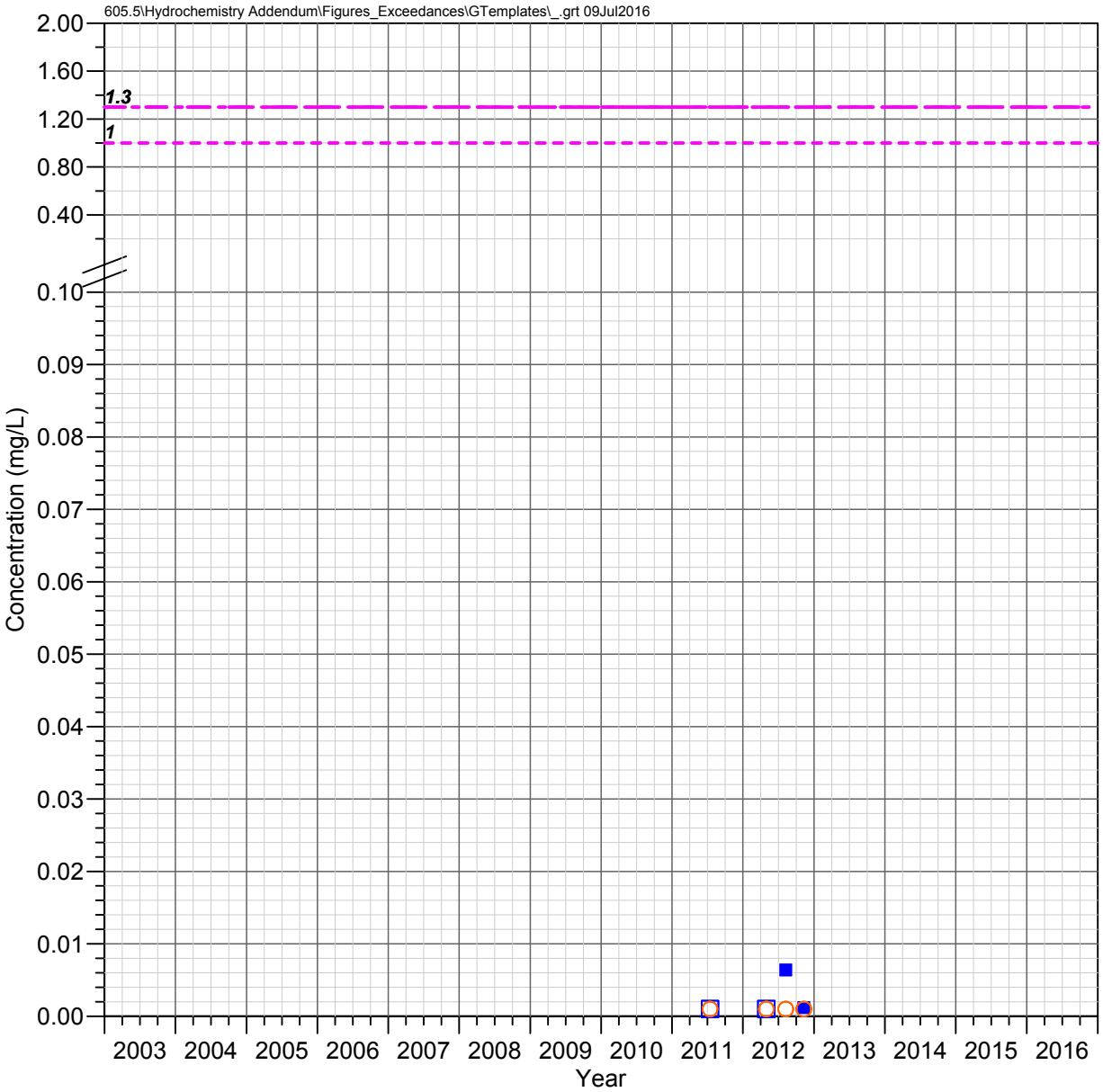


FIGURE E-250. COPPER CONCENTRATIONS OBSERVED AT HRES-13, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-14
Apache Leap Tuff Aquifer

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- EPA Maximum Contaminant Levels (UNS, 1.3 mg/L)
- EPA Secondary MCL (UNS, 1 mg/L)
- EPA Treatment Technique Limit (UNS, 1.3 mg/L)

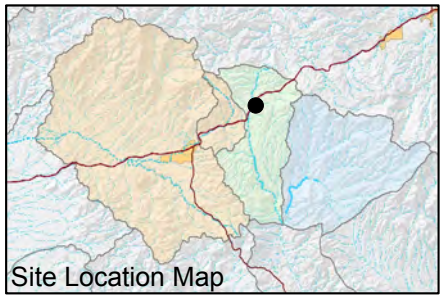
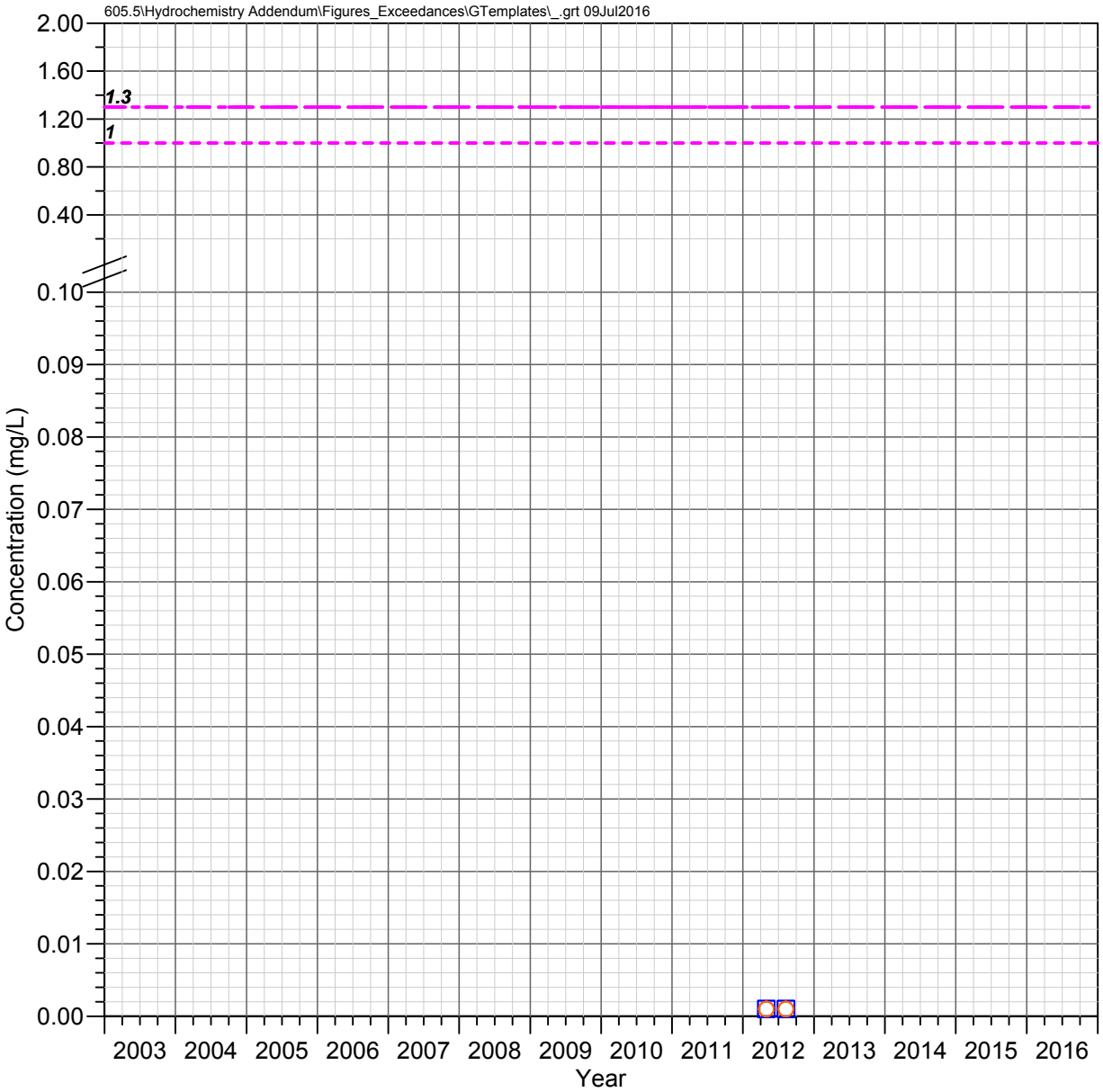


FIGURE E-251. COPPER CONCENTRATIONS OBSERVED AT HRES-14, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-15
Apache Leap Tuff Aquifer

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- EPA Maximum Contaminant Levels (UNS, 1.3 mg/L)
- EPA Secondary MCL (UNS, 1 mg/L)
- EPA Treatment Technique Limit (UNS, 1.3 mg/L)

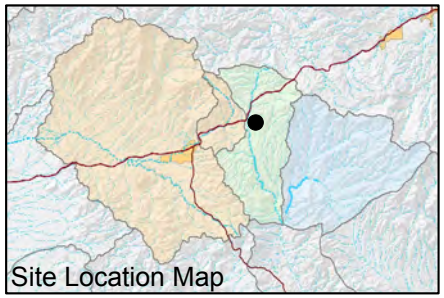
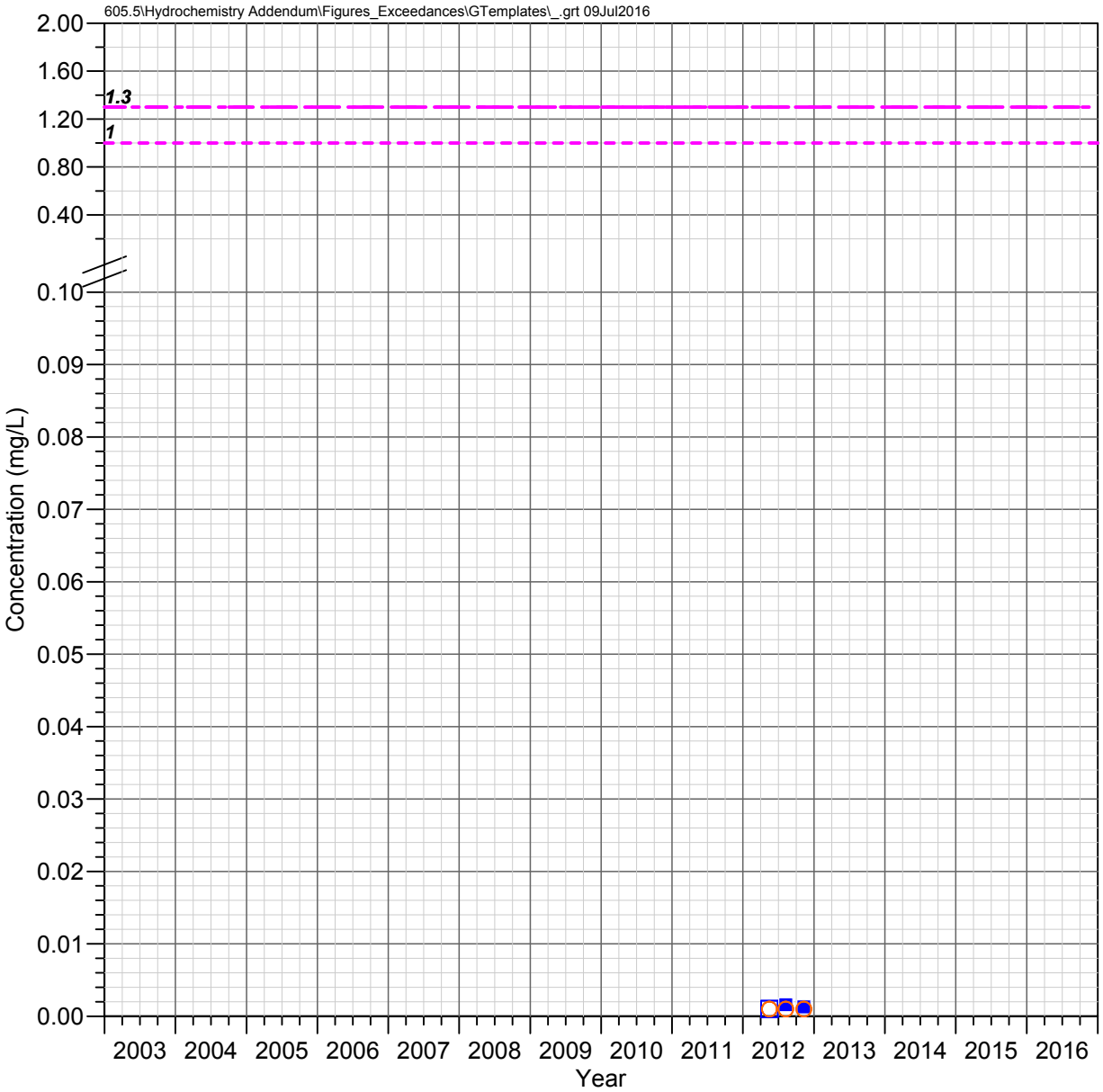


FIGURE E-252. COPPER CONCENTRATIONS OBSERVED AT HRES-15, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-17
Apache Leap Tuff Aquifer

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- EPA Maximum Contaminant Levels (UNS, 1.3 mg/L)
- EPA Secondary MCL (UNS, 1 mg/L)
- EPA Treatment Technique Limit (UNS, 1.3 mg/L)

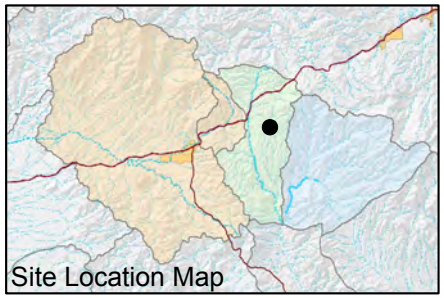
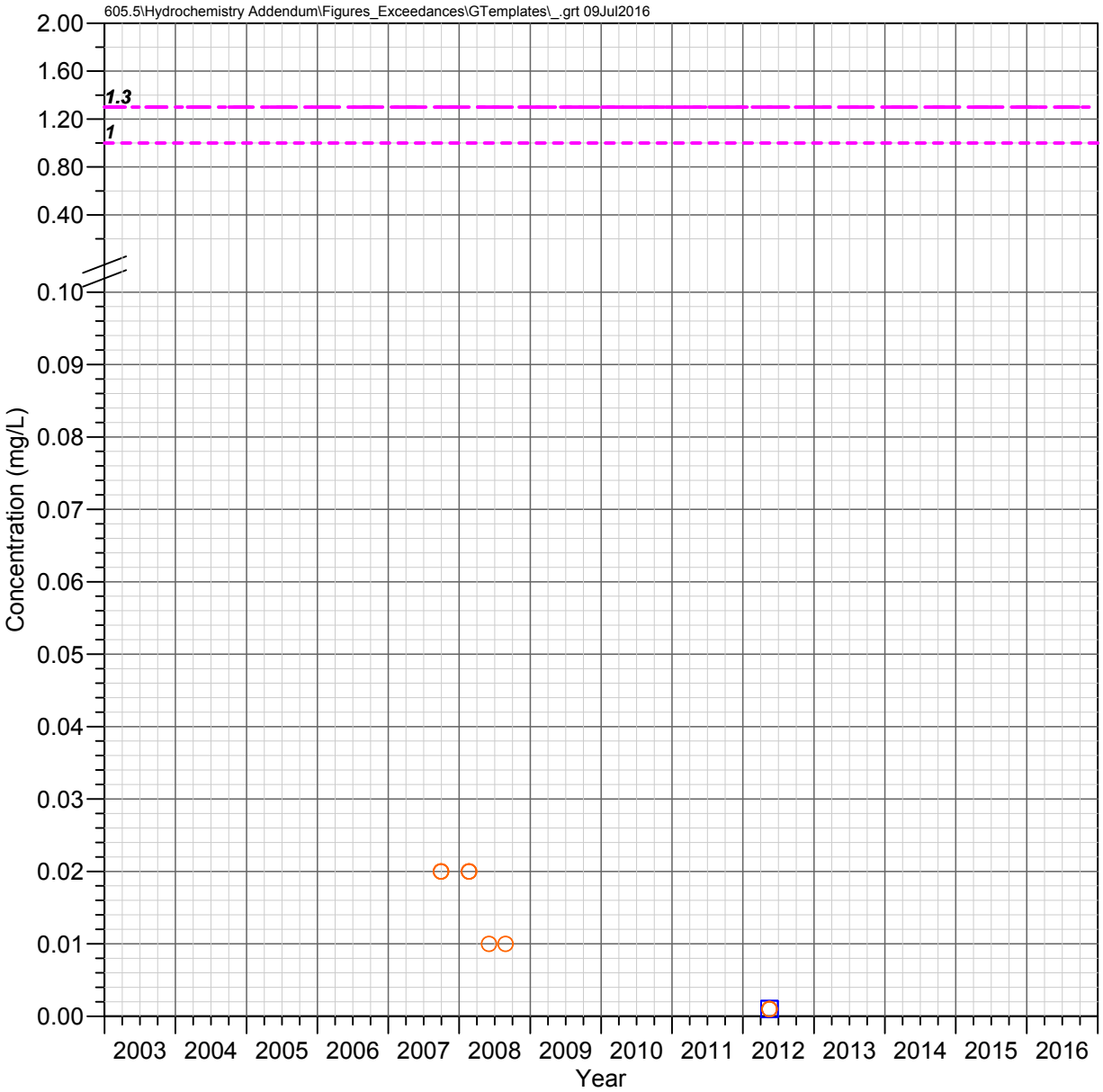


FIGURE E-253. COPPER CONCENTRATIONS OBSERVED AT HRES-17, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MJ-11
Apache Leap Tuff Aquifer

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- EPA Maximum Contaminant Levels (UNS, 1.3 mg/L)
- EPA Secondary MCL (UNS, 1 mg/L)
- EPA Treatment Technique Limit (UNS, 1.3 mg/L)

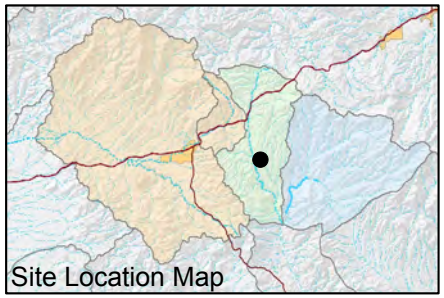
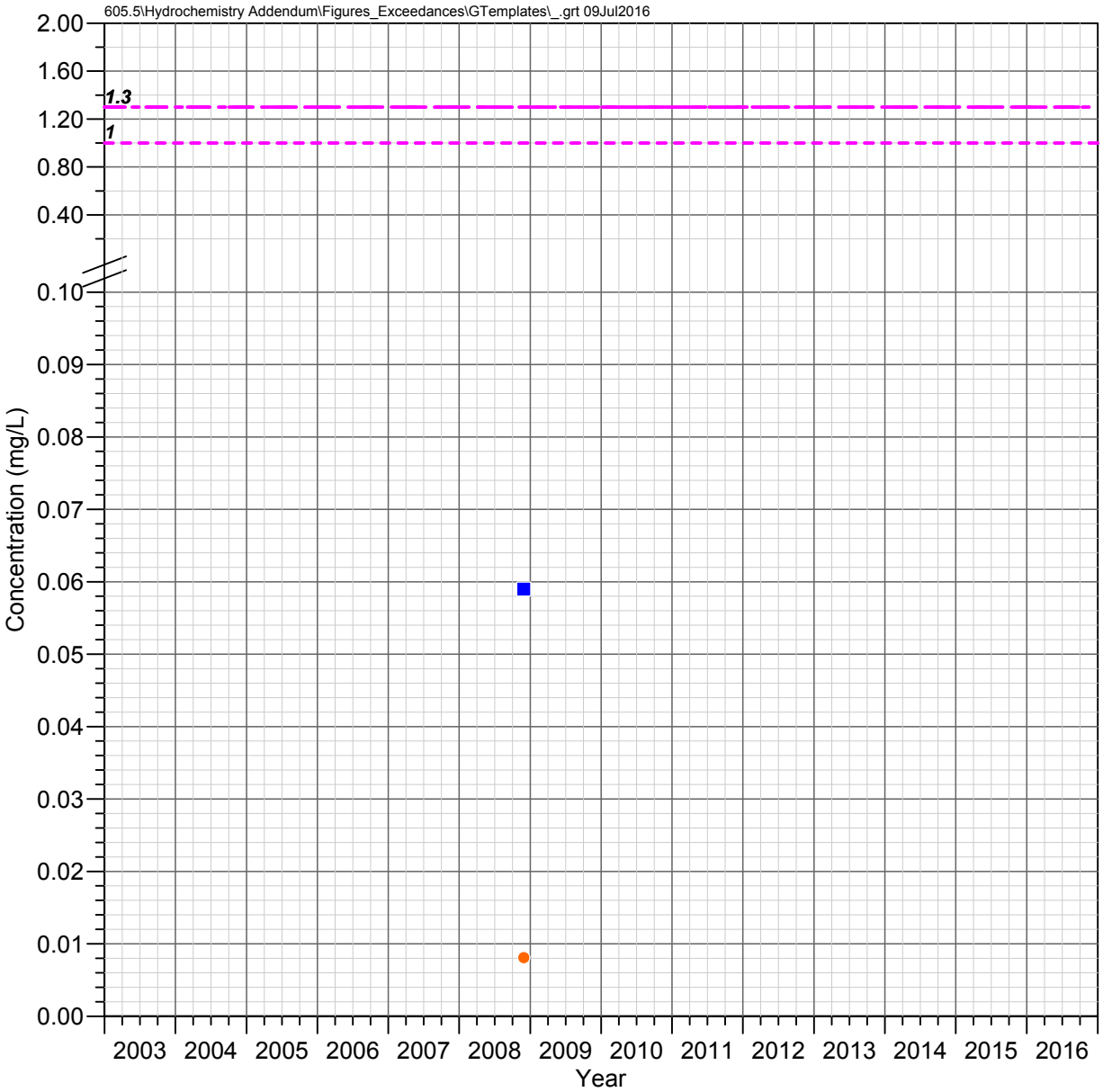


FIGURE E-254. COPPER CONCENTRATIONS OBSERVED AT MJ-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-01
Deep Groundwater System

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- EPA Maximum Contaminant Levels (UNS, 1.3 mg/L)
- EPA Secondary MCL (UNS, 1 mg/L)
- EPA Treatment Technique Limit (UNS, 1.3 mg/L)

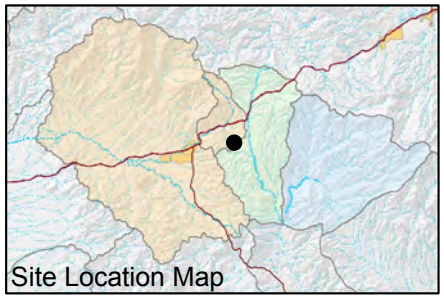
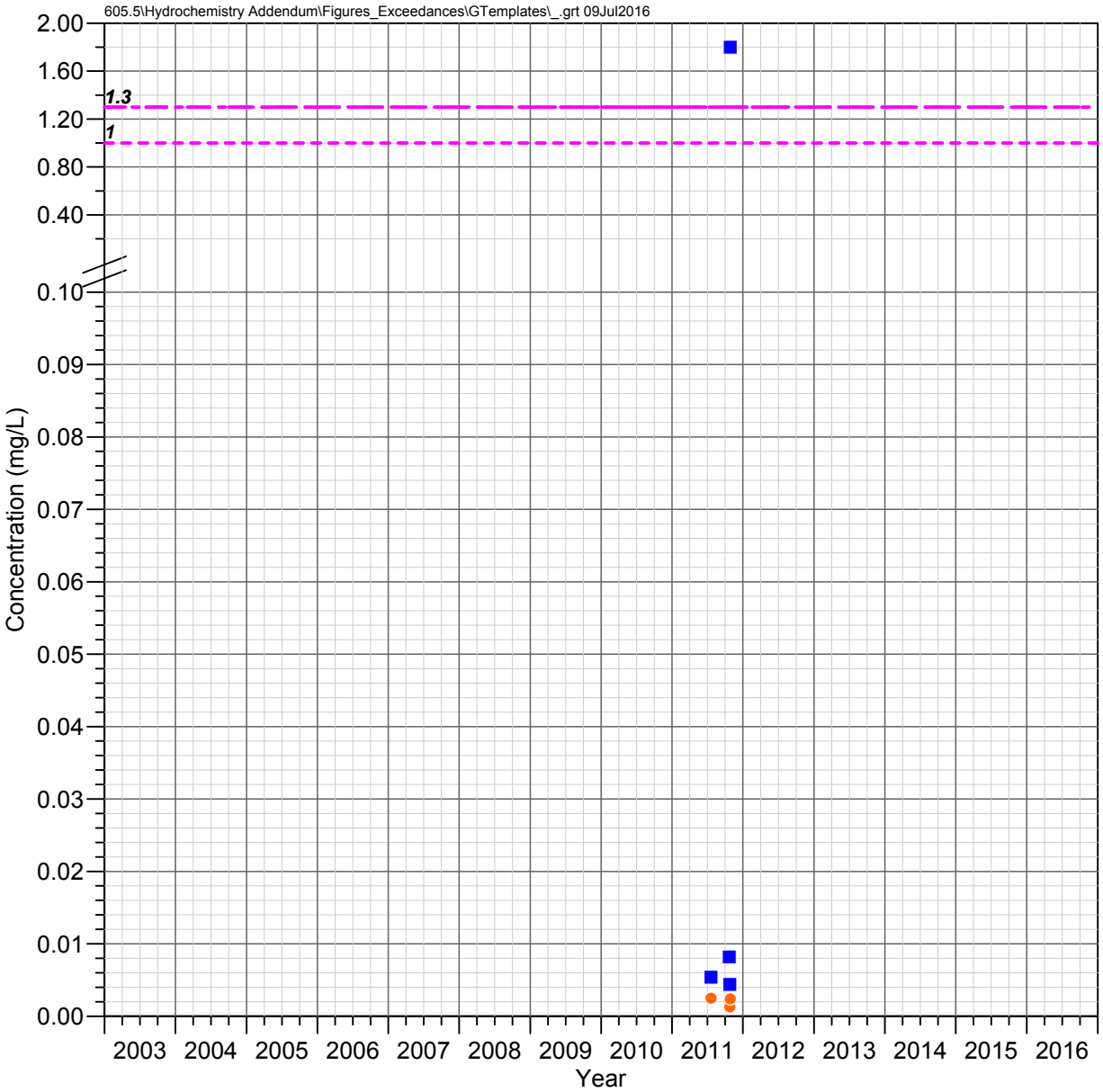


FIGURE E-255. COPPER CONCENTRATIONS OBSERVED AT DHRES-01, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-02
Deep Groundwater System

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- EPA Maximum Contaminant Levels (UNS, 1.3 mg/L)
- EPA Secondary MCL (UNS, 1 mg/L)
- EPA Treatment Technique Limit (UNS, 1.3 mg/L)

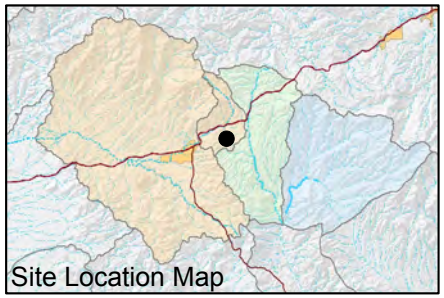
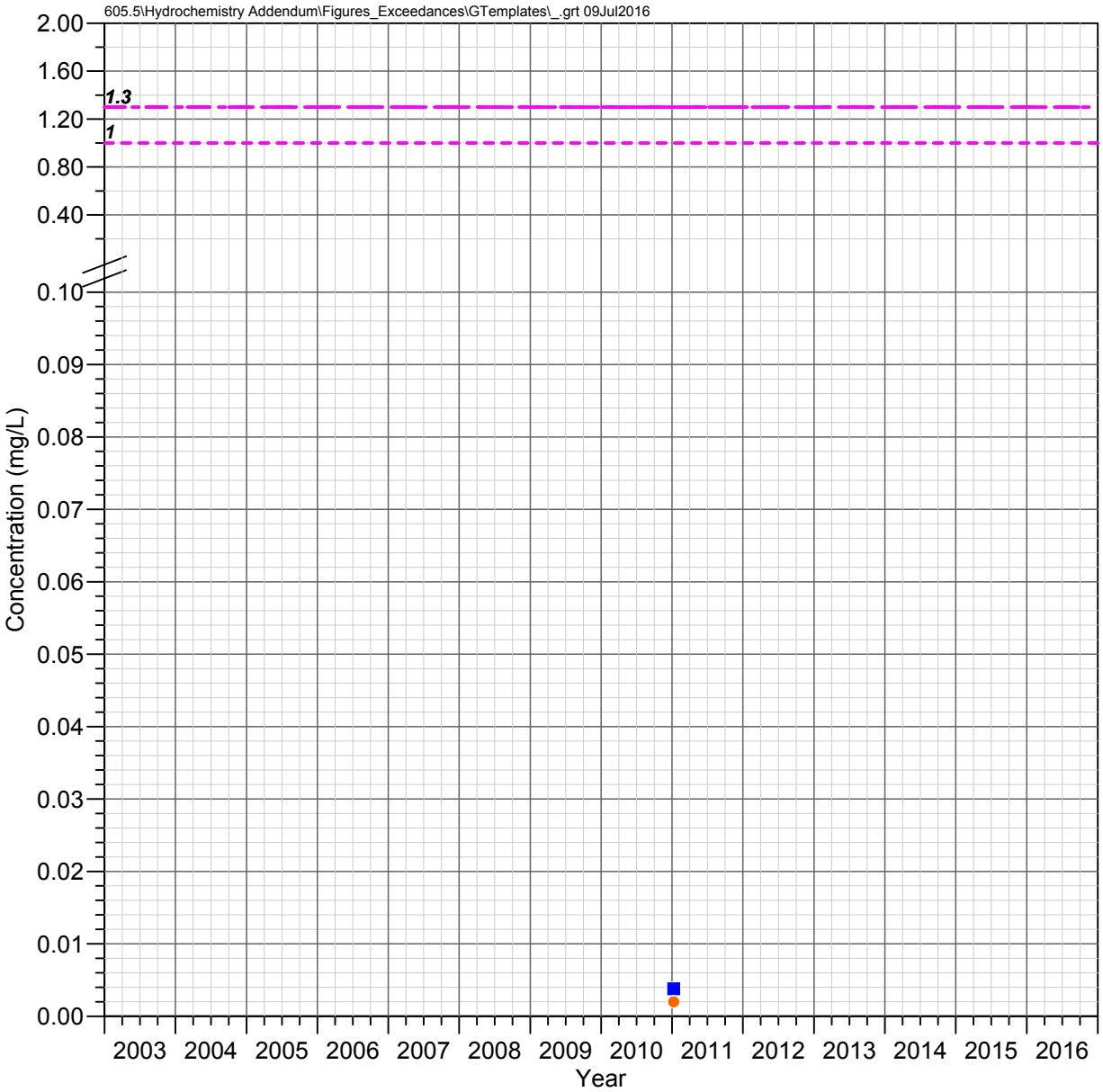


FIGURE E-256. COPPER CONCENTRATIONS OBSERVED AT DHRES-02, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-06
Deep Groundwater System

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- EPA Maximum Contaminant Levels (UNS, 1.3 mg/L)
- EPA Secondary MCL (UNS, 1 mg/L)
- EPA Treatment Technique Limit (UNS, 1.3 mg/L)

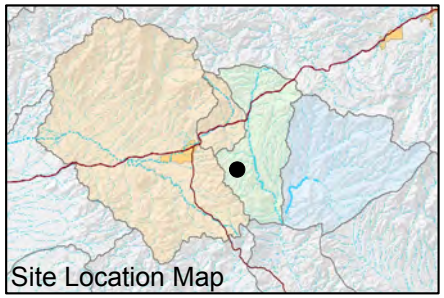
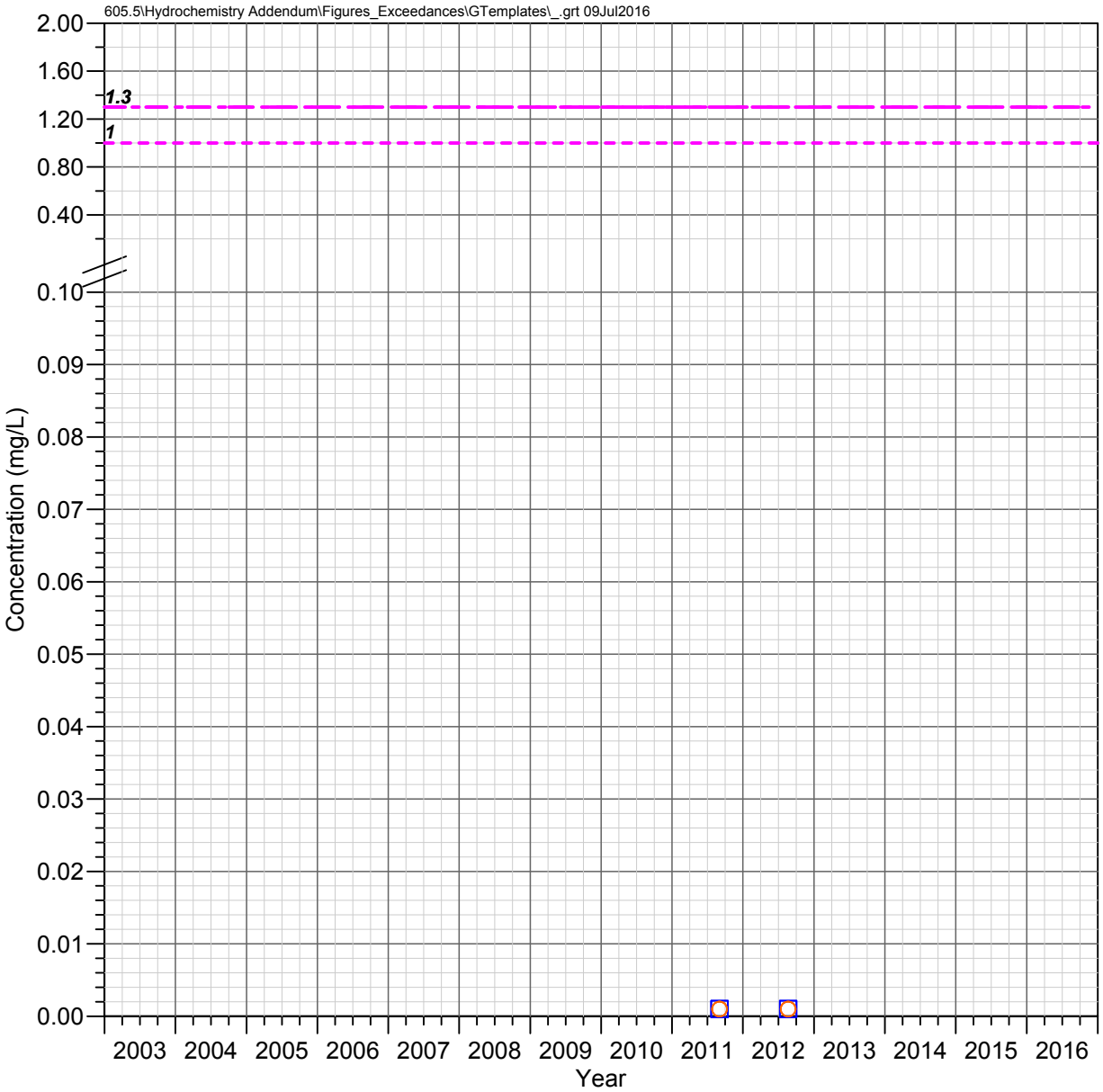


FIGURE E-257. COPPER CONCENTRATIONS OBSERVED AT DHRES-06, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-09
Deep Groundwater System

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- EPA Maximum Contaminant Levels (UNS, 1.3 mg/L)
- EPA Secondary MCL (UNS, 1 mg/L)
- EPA Treatment Technique Limit (UNS, 1.3 mg/L)

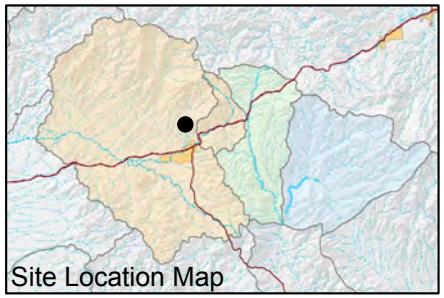
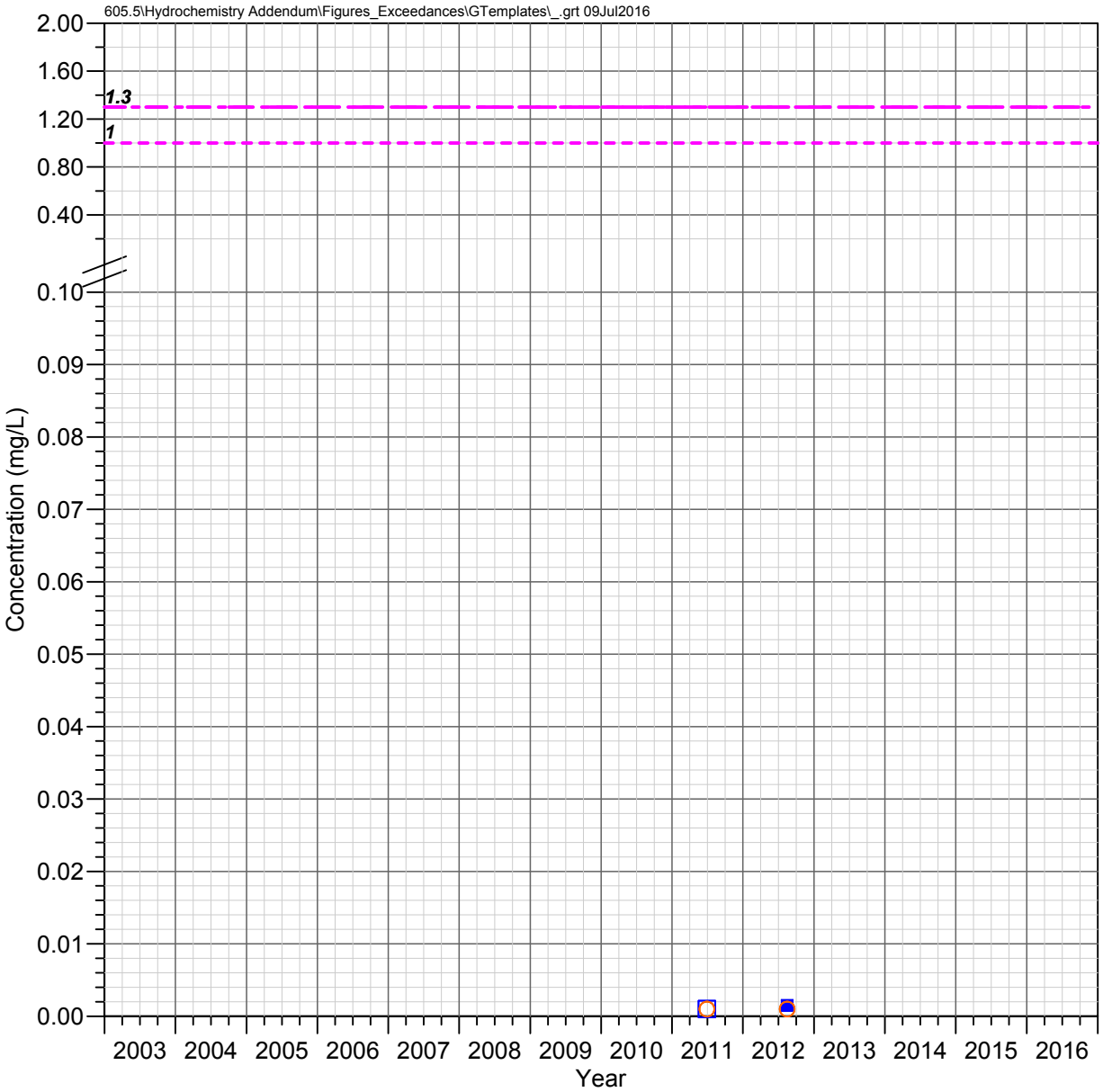


FIGURE E-258. COPPER CONCENTRATIONS OBSERVED AT DHRES-09, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-11
Deep Groundwater System

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- EPA Maximum Contaminant Levels (UNS, 1.3 mg/L)
- EPA Secondary MCL (UNS, 1 mg/L)
- EPA Treatment Technique Limit (UNS, 1.3 mg/L)

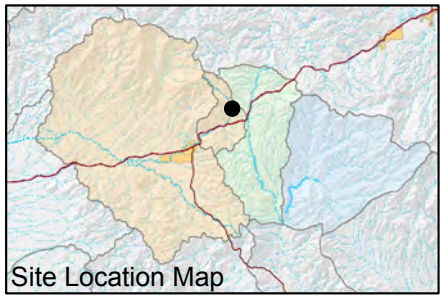
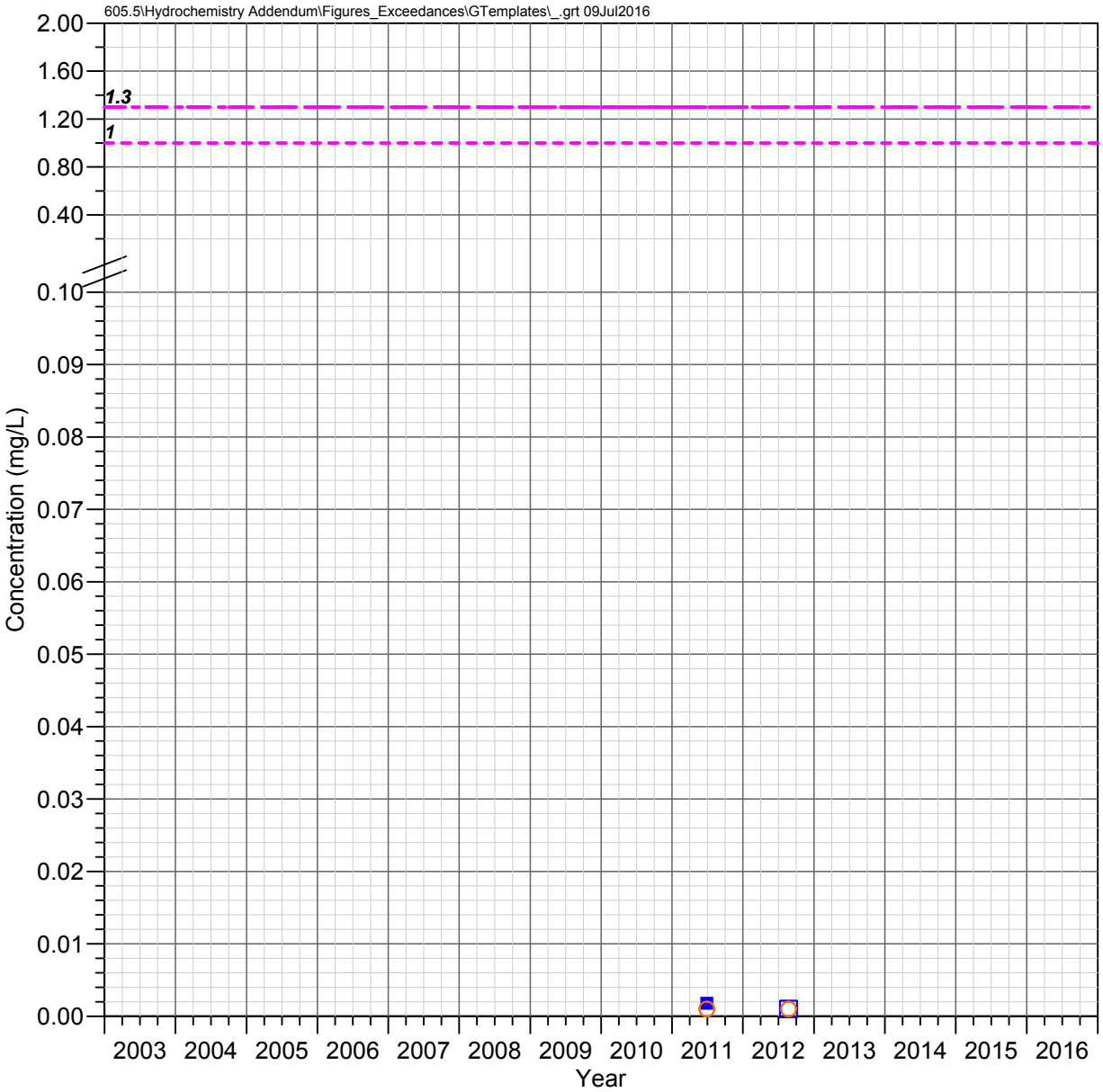


FIGURE E-259. COPPER CONCENTRATIONS OBSERVED AT DHRES-11, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-13
Deep Groundwater System

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- EPA Maximum Contaminant Levels (UNS, 1.3 mg/L)
- EPA Secondary MCL (UNS, 1 mg/L)
- EPA Treatment Technique Limit (UNS, 1.3 mg/L)

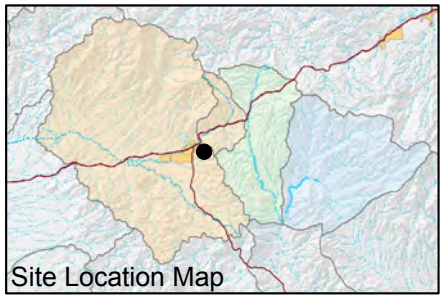
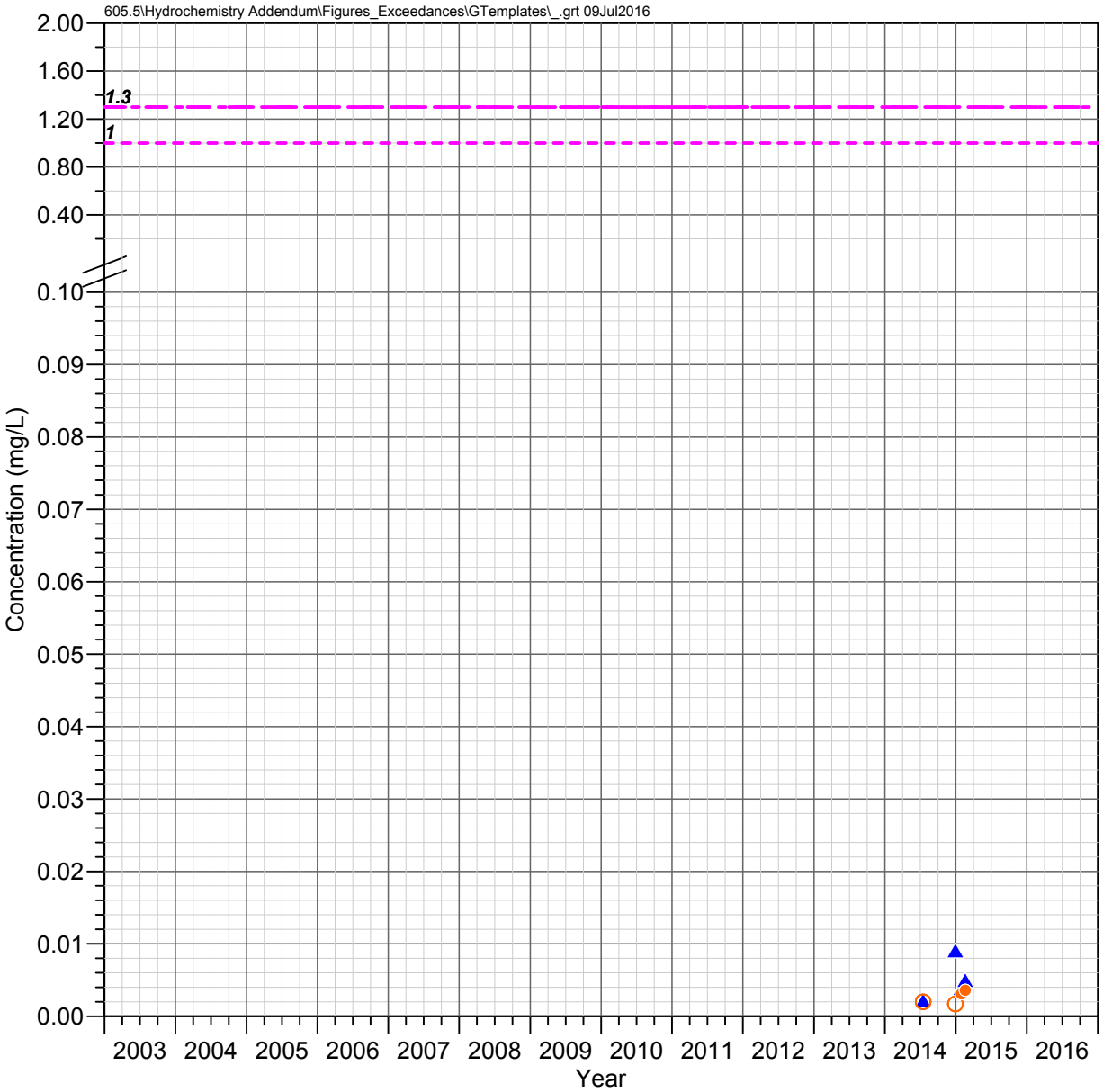


FIGURE E-260. COPPER CONCENTRATIONS OBSERVED AT DHRES-13, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-15
Deep Groundwater System

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- EPA Maximum Contaminant Levels (UNS, 1.3 mg/L)
- EPA Secondary MCL (UNS, 1 mg/L)
- EPA Treatment Technique Limit (UNS, 1.3 mg/L)

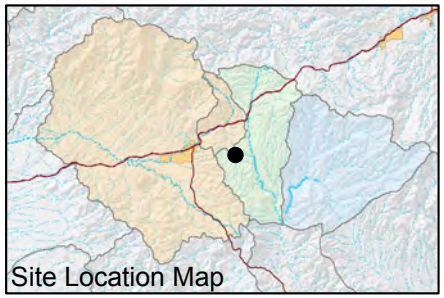
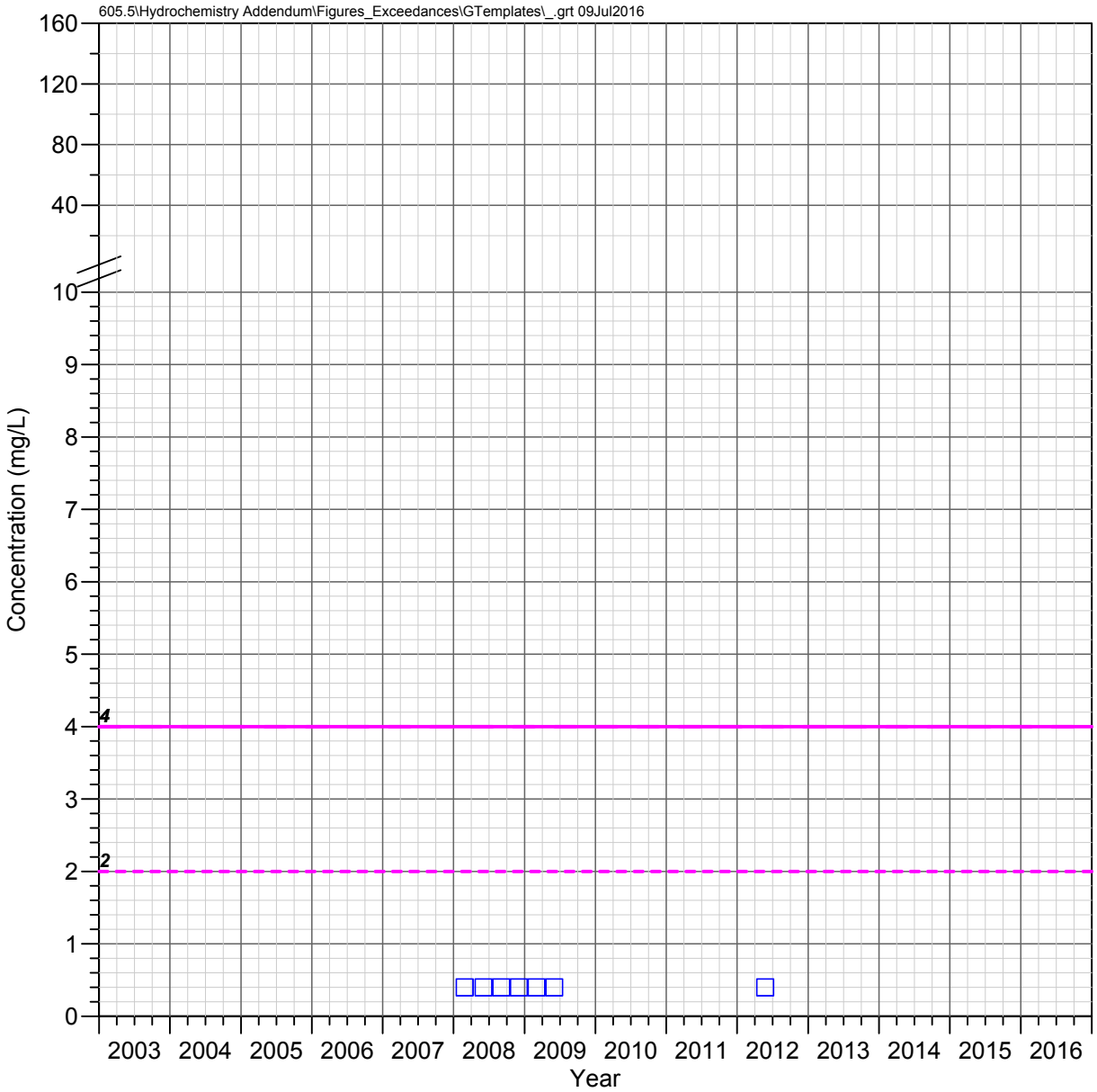


FIGURE E-261. COPPER CONCENTRATIONS OBSERVED AT DHRES-15, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Hackberry Windmill Well
Shallow Groundwater System

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 4 mg/L)
- EPA Maximum Contaminant Levels (UNS, 4 mg/L)
- EPA Secondary MCL (UNS, 2 mg/L)

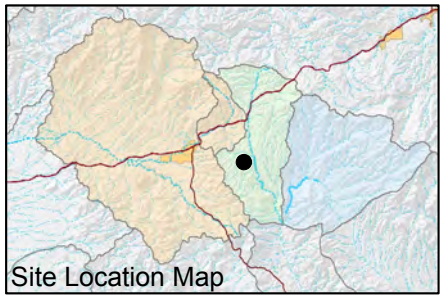
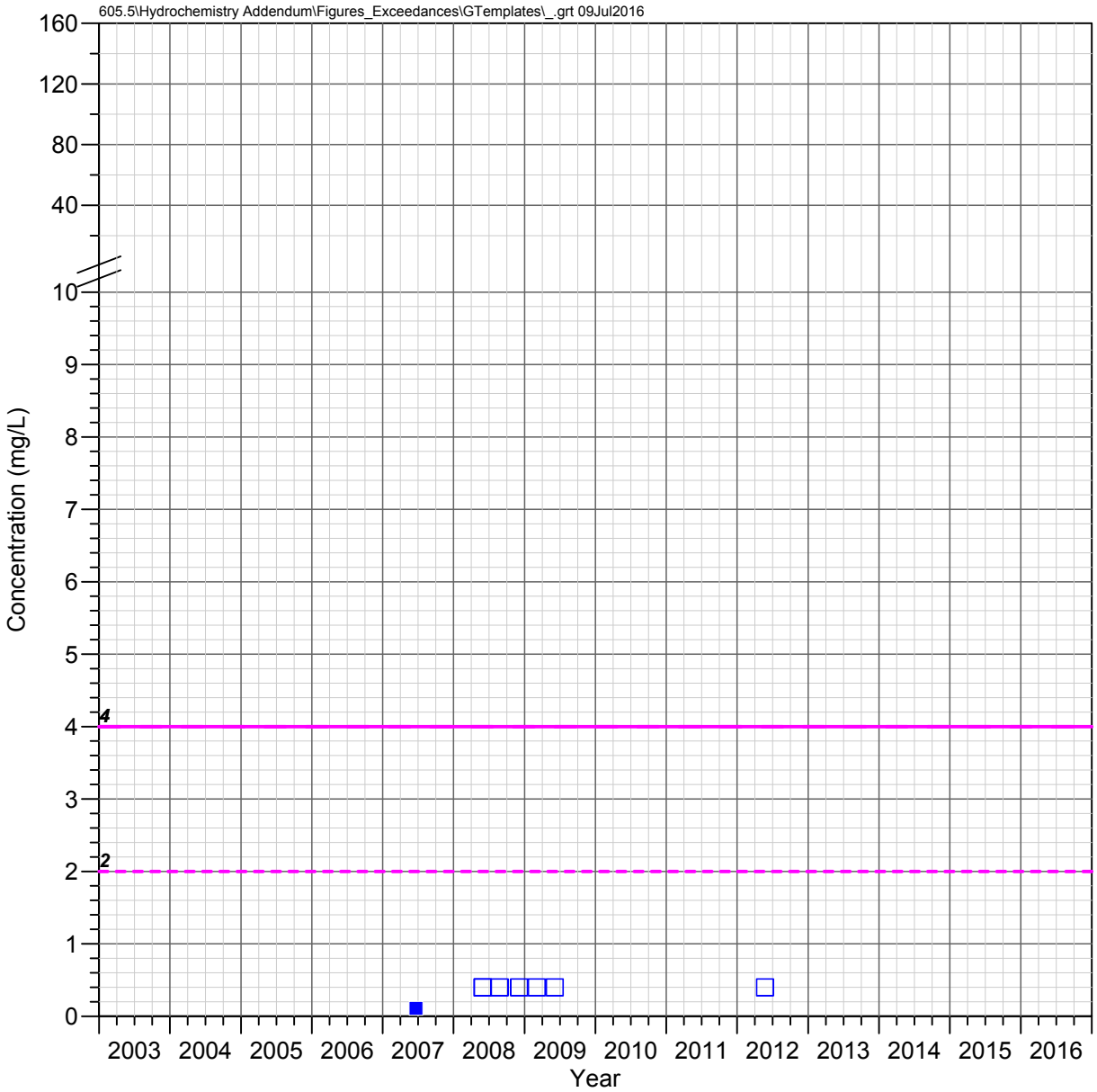


FIGURE E-262. FLUORIDE CONCENTRATIONS OBSERVED AT HACKBERRY WINDMILL WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



JI Ranch Corral Well Shallow Groundwater System

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 4 mg/L)
- EPA Maximum Contaminant Levels (UNS, 4 mg/L)
- EPA Secondary MCL (UNS, 2 mg/L)

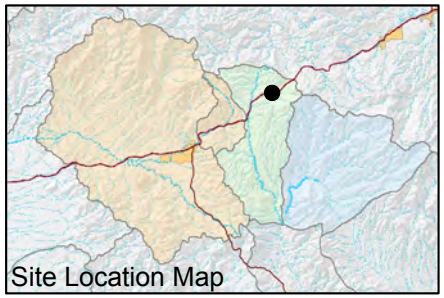
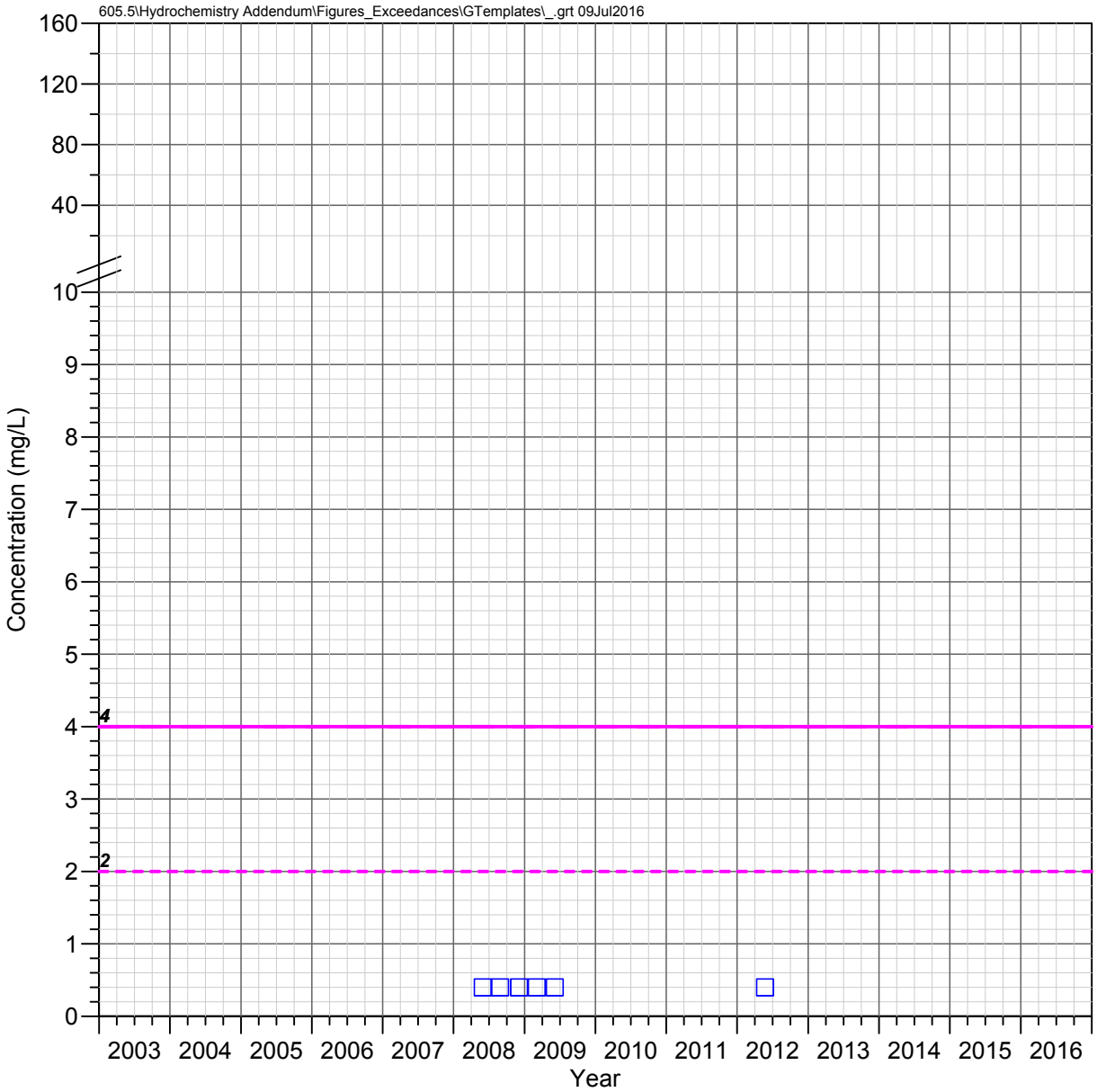


FIGURE E-263. FLUORIDE CONCENTRATIONS OBSERVED AT JI RANCH CORRAL WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



JI Ranch Middle Well Shallow Groundwater System

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 4 mg/L)
- EPA Maximum Contaminant Levels (UNS, 4 mg/L)
- EPA Secondary MCL (UNS, 2 mg/L)

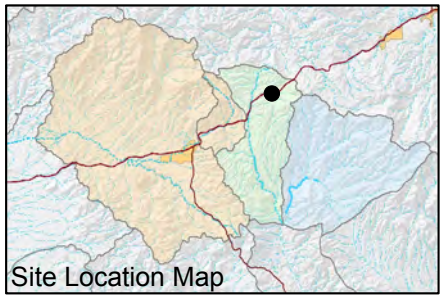
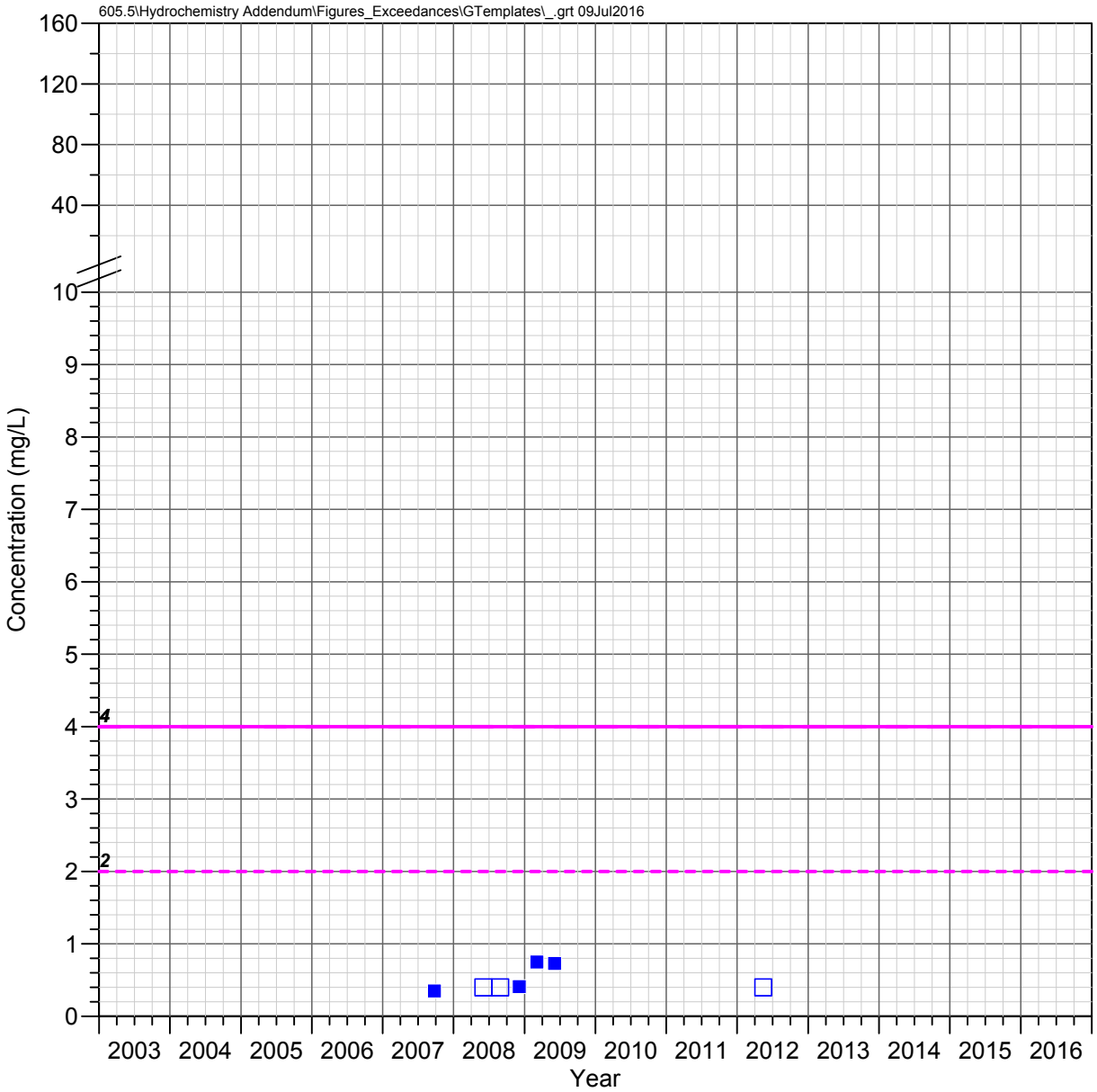


FIGURE E-264. FLUORIDE CONCENTRATIONS OBSERVED AT JI RANCH MIDDLE WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



A-06
Apache Leap Tuff Aquifer

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 4 mg/L)
- EPA Maximum Contaminant Levels (UNS, 4 mg/L)
- EPA Secondary MCL (UNS, 2 mg/L)

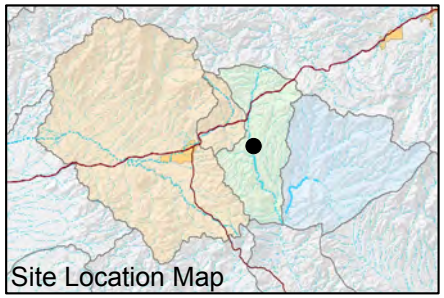
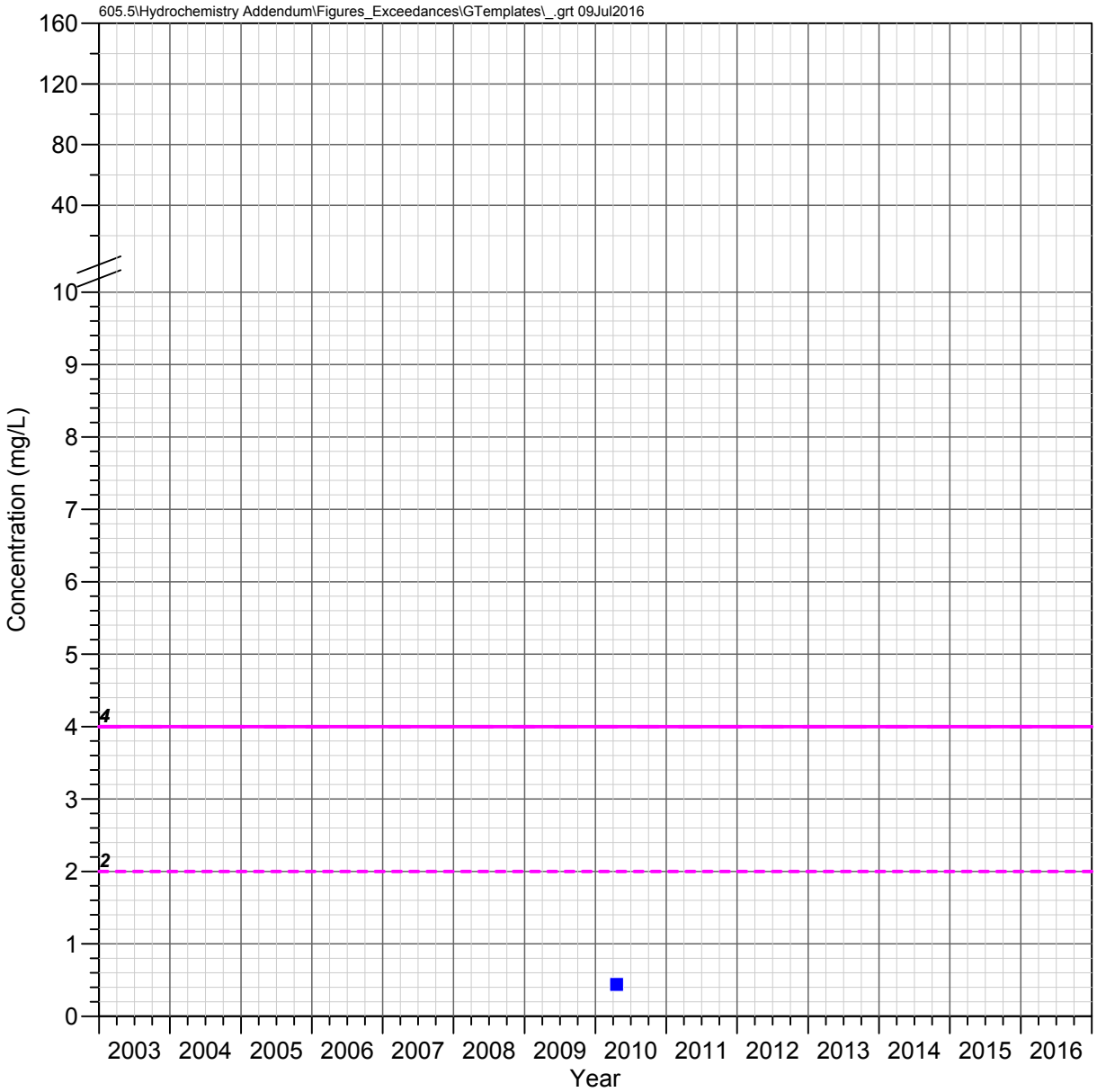


FIGURE E-265. FLUORIDE CONCENTRATIONS OBSERVED AT A-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



CT Well
Apache Leap Tuff Aquifer

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 4 mg/L)
- EPA Maximum Contaminant Levels (UNS, 4 mg/L)
- EPA Secondary MCL (UNS, 2 mg/L)

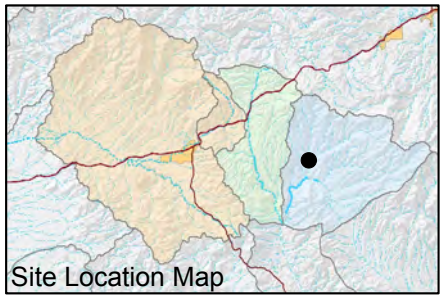
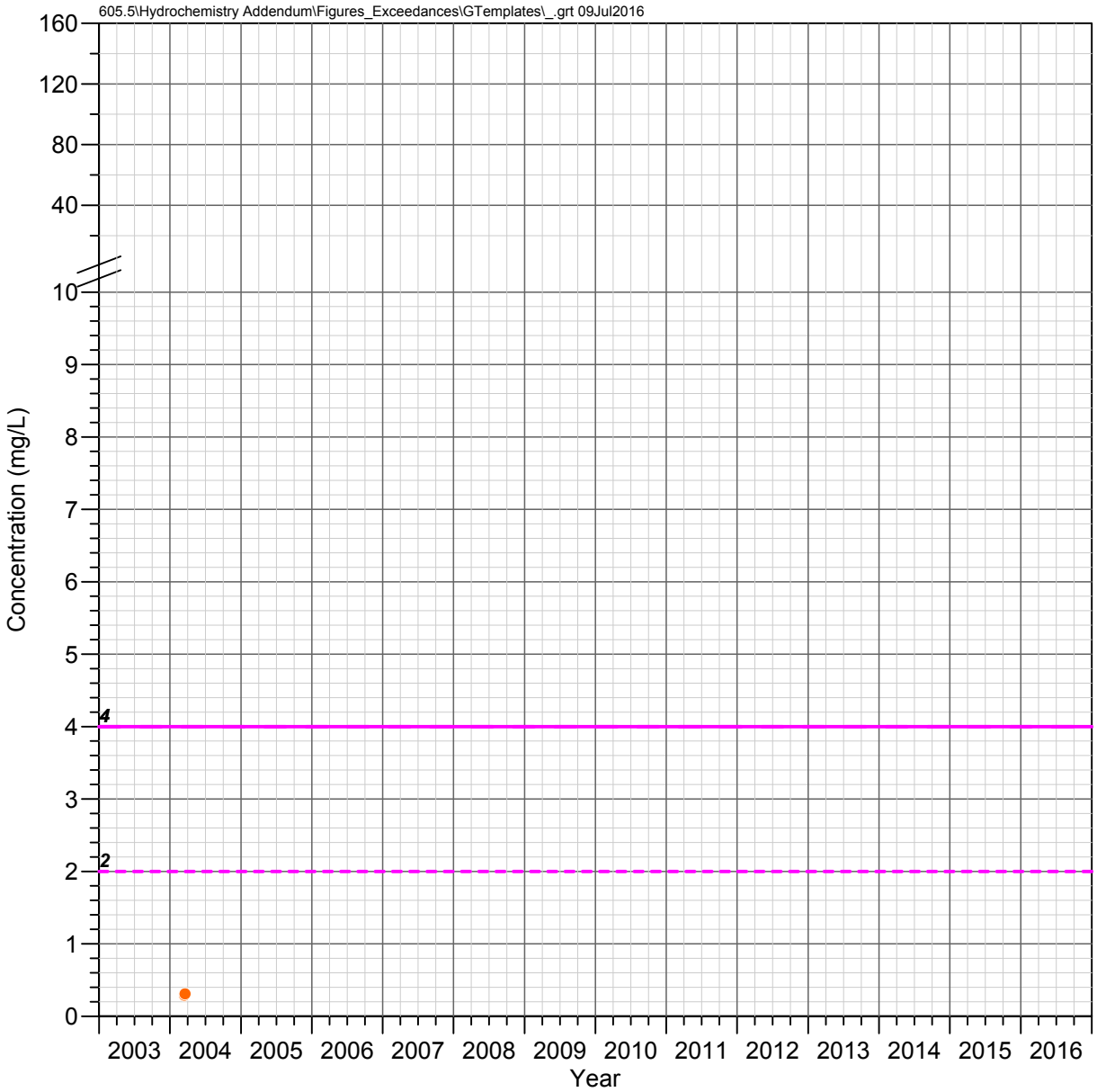


FIGURE E-266. FLUORIDE CONCENTRATIONS OBSERVED AT CT WELL, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-01
Apache Leap Tuff Aquifer

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 4 mg/L)
- EPA Maximum Contaminant Levels (UNS, 4 mg/L)
- EPA Secondary MCL (UNS, 2 mg/L)

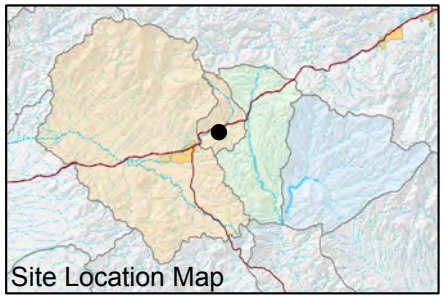
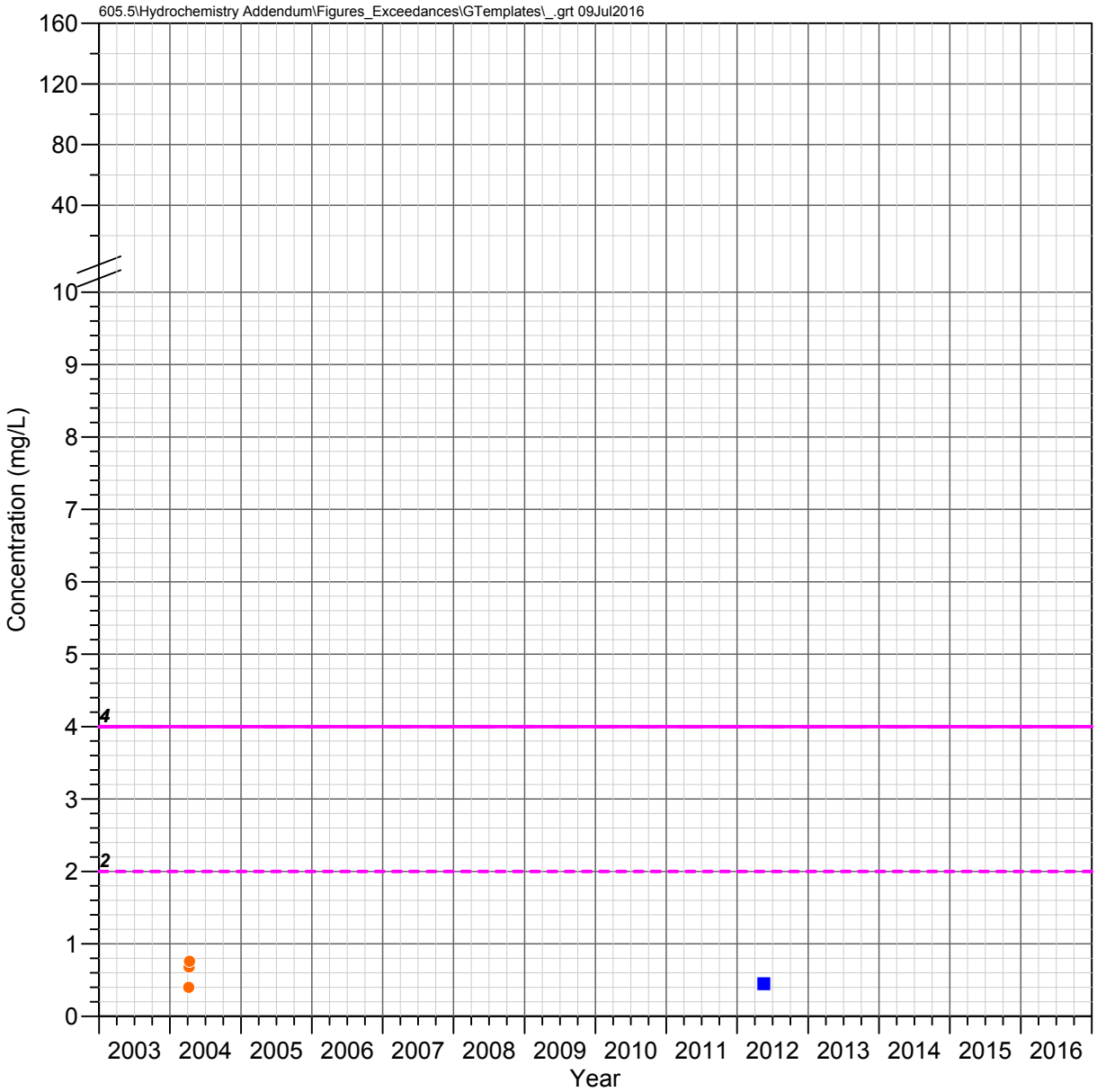


FIGURE E-267. FLUORIDE CONCENTRATIONS OBSERVED AT HRES-01, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-02
Apache Leap Tuff Aquifer

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 4 mg/L)
- EPA Maximum Contaminant Levels (UNS, 4 mg/L)
- EPA Secondary MCL (UNS, 2 mg/L)

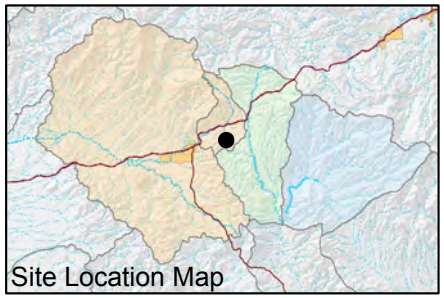
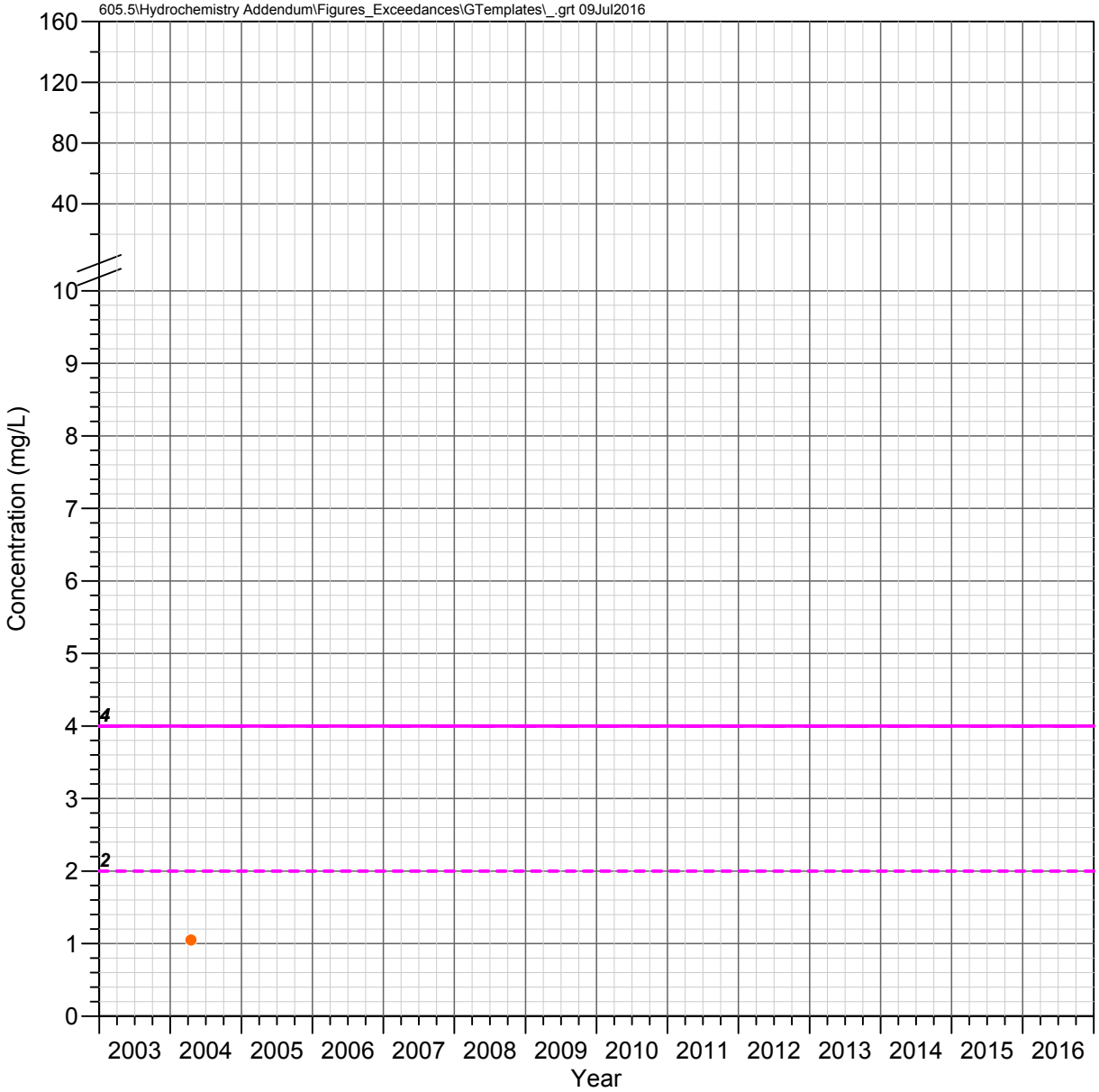


FIGURE E-268. FLUORIDE CONCENTRATIONS OBSERVED AT HRES-02, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES

605.5\Hydrochemistry Addendum\Figures_Exceedances\GTemplates_.grt 09Jul2016



HRES-03d
Apache Leap Tuff Aquifer

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 4 mg/L)
- EPA Maximum Contaminant Levels (UNS, 4 mg/L)
- EPA Secondary MCL (UNS, 2 mg/L)

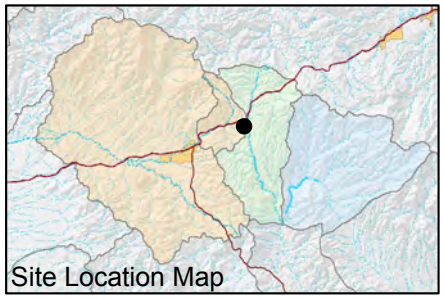
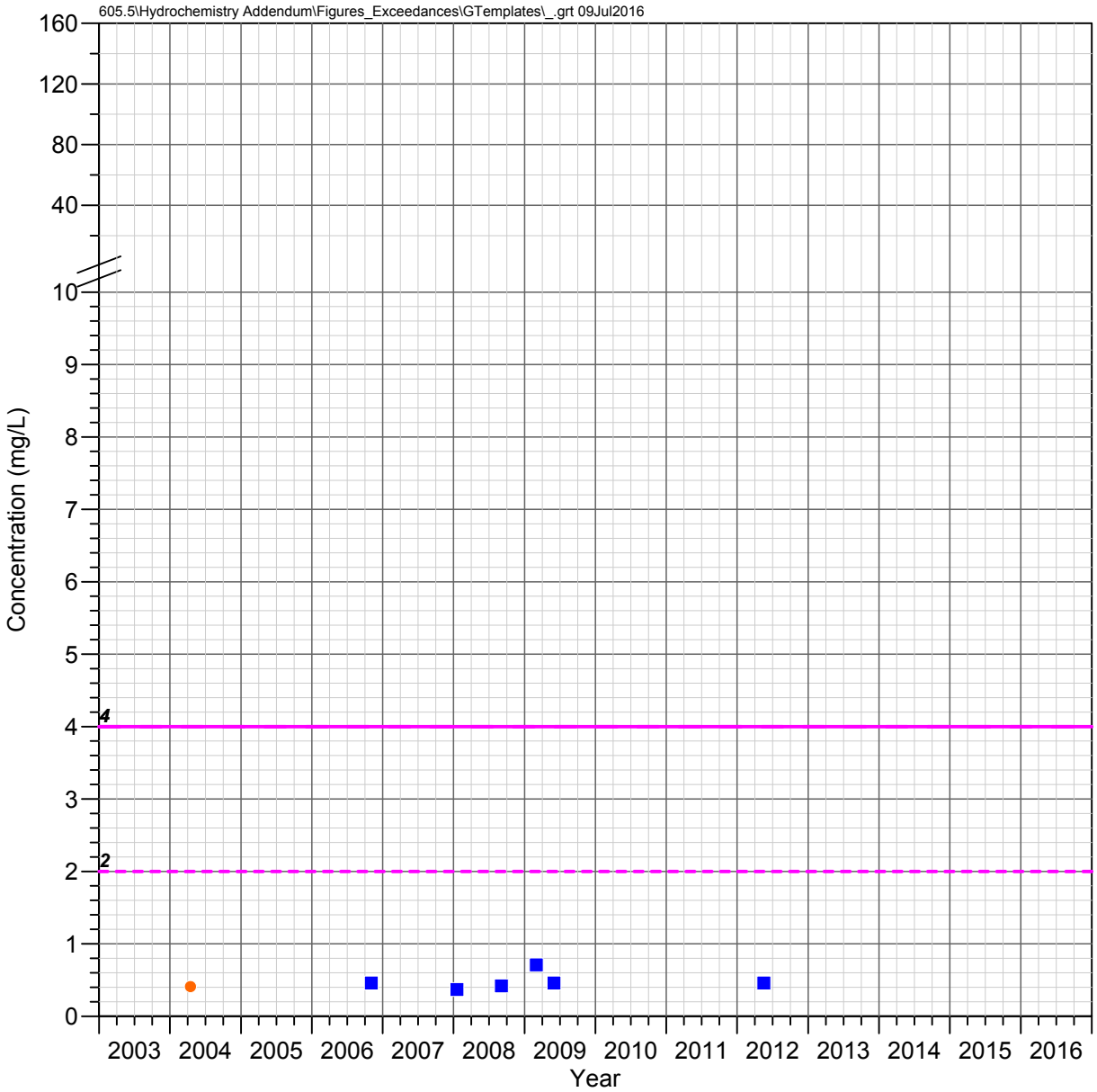


FIGURE E-269. FLUORIDE CONCENTRATIONS OBSERVED AT HRES-03D, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-04
Apache Leap Tuff Aquifer

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 4 mg/L)
- EPA Maximum Contaminant Levels (UNS, 4 mg/L)
- EPA Secondary MCL (UNS, 2 mg/L)

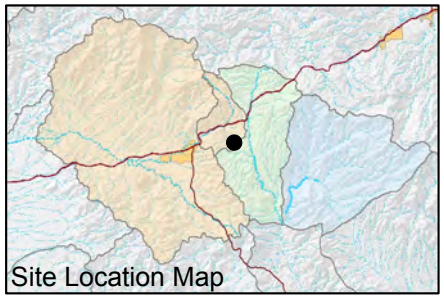
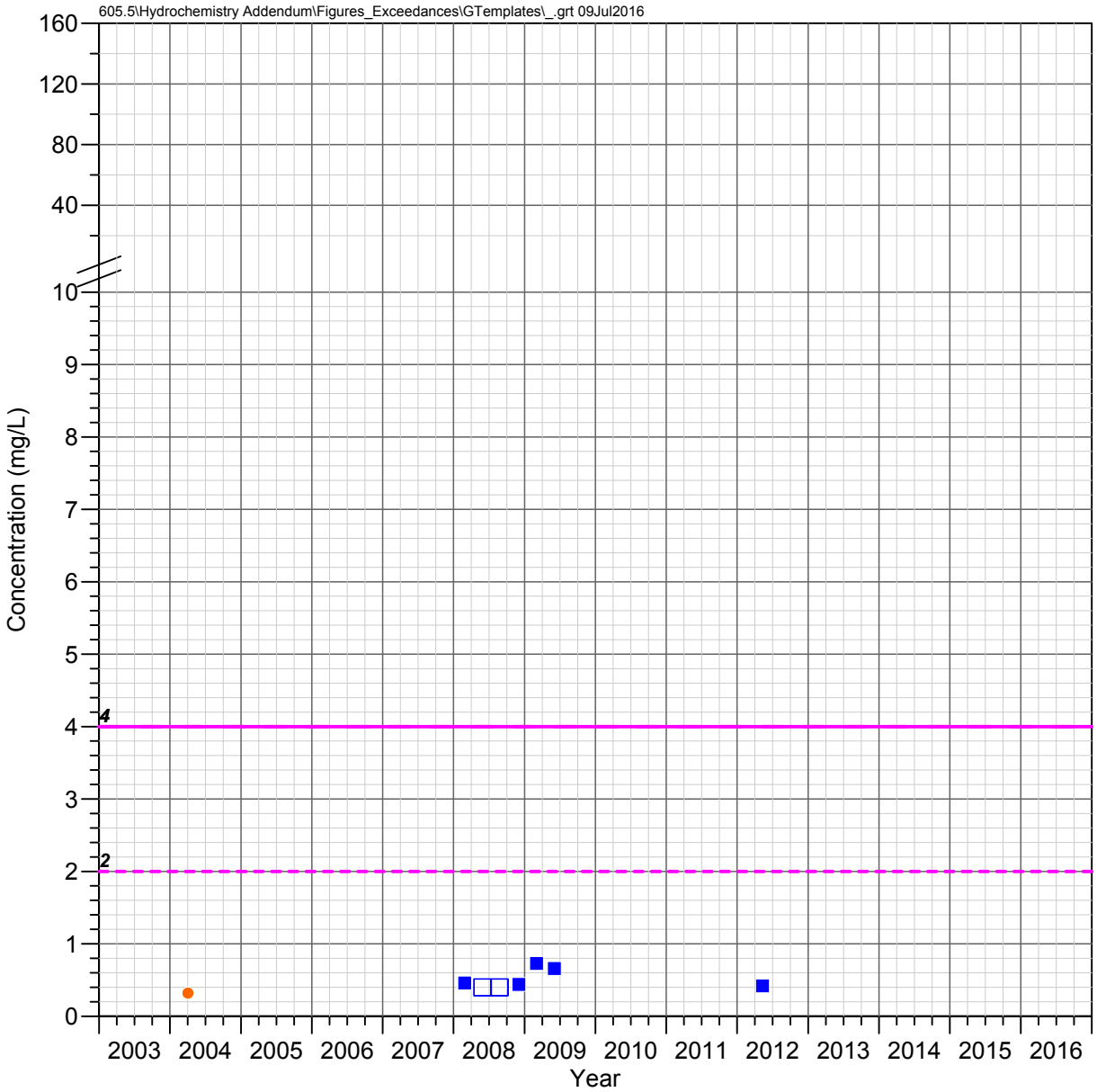


FIGURE E-270. FLUORIDE CONCENTRATIONS OBSERVED AT HRES-04, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-05
Apache Leap Tuff Aquifer

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 4 mg/L)
- EPA Maximum Contaminant Levels (UNS, 4 mg/L)
- EPA Secondary MCL (UNS, 2 mg/L)

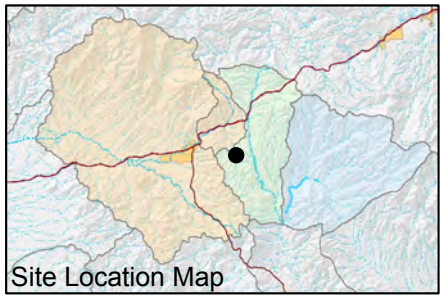
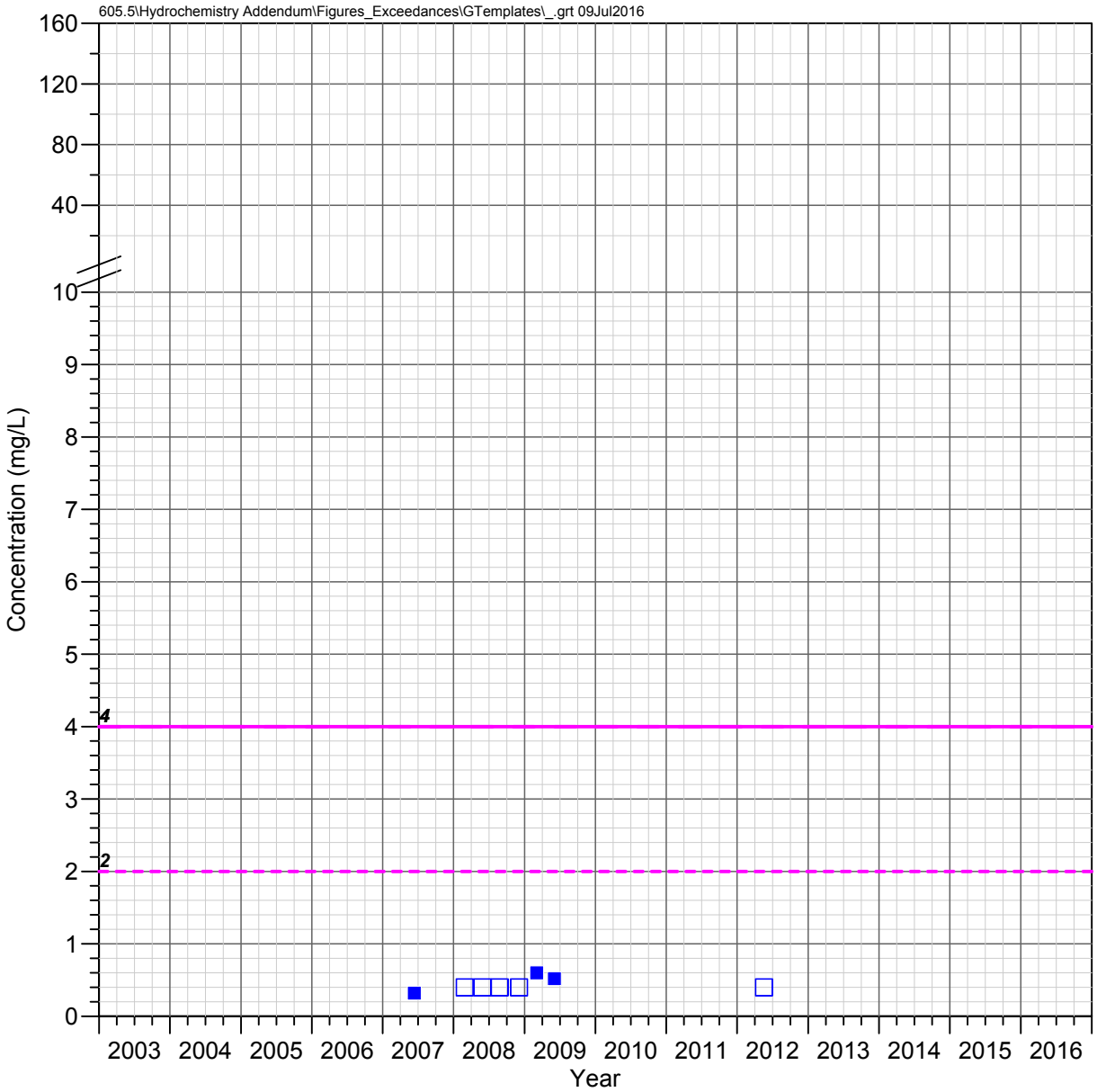


FIGURE E-271. FLUORIDE CONCENTRATIONS OBSERVED AT HRES-05, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-06
Apache Leap Tuff Aquifer

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 4 mg/L)
- EPA Maximum Contaminant Levels (UNS, 4 mg/L)
- EPA Secondary MCL (UNS, 2 mg/L)

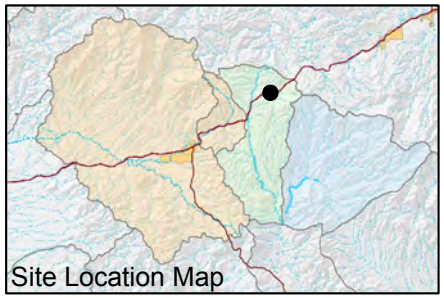
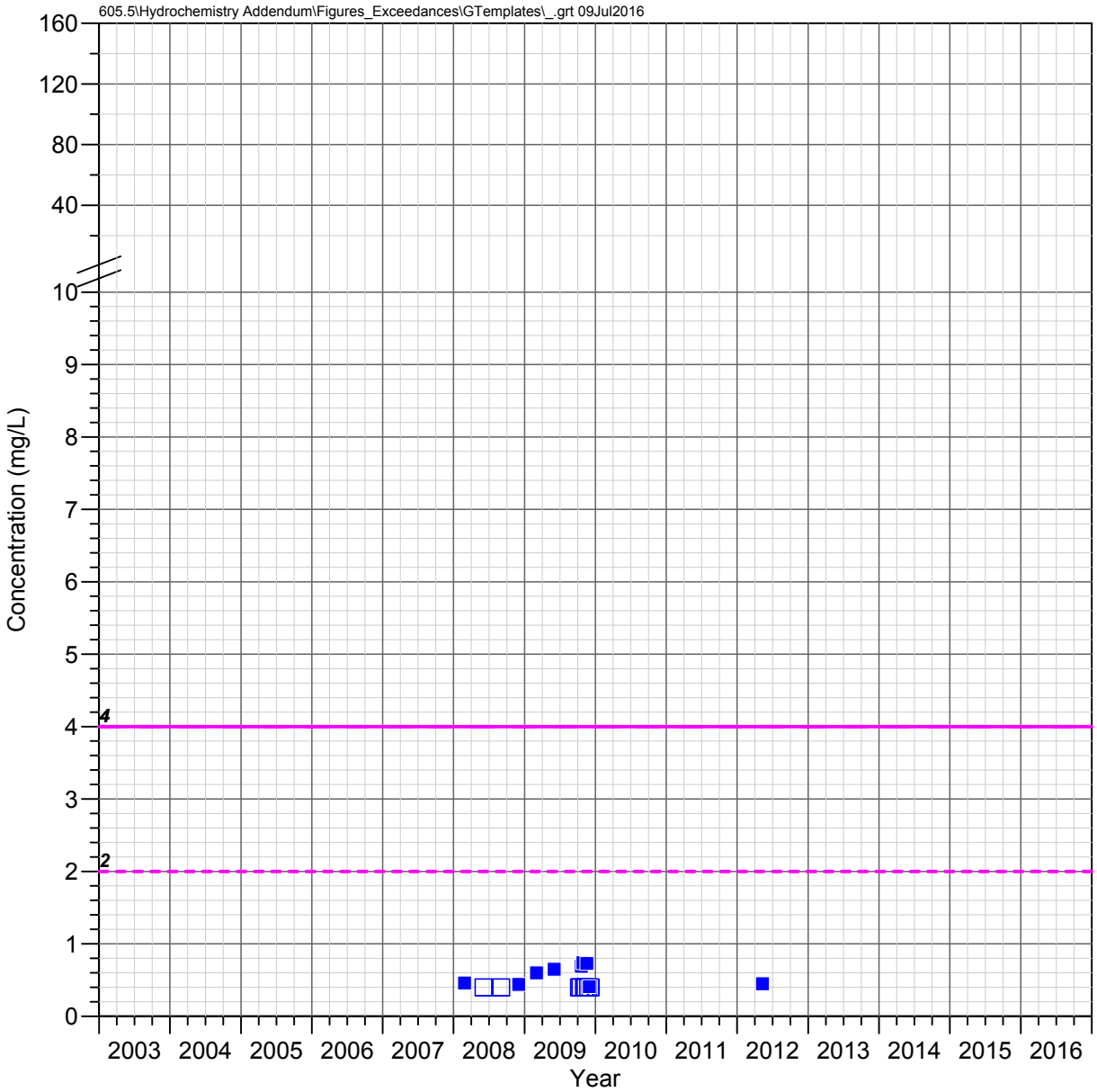


FIGURE E-272. FLUORIDE CONCENTRATIONS OBSERVED AT HRES-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-07
Apache Leap Tuff Aquifer

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 4 mg/L)
- EPA Maximum Contaminant Levels (UNS, 4 mg/L)
- EPA Secondary MCL (UNS, 2 mg/L)

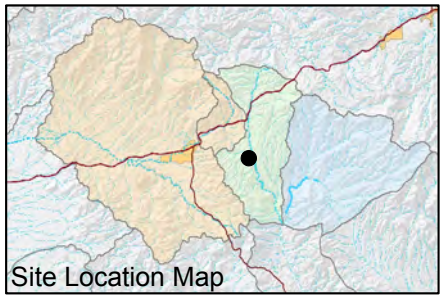
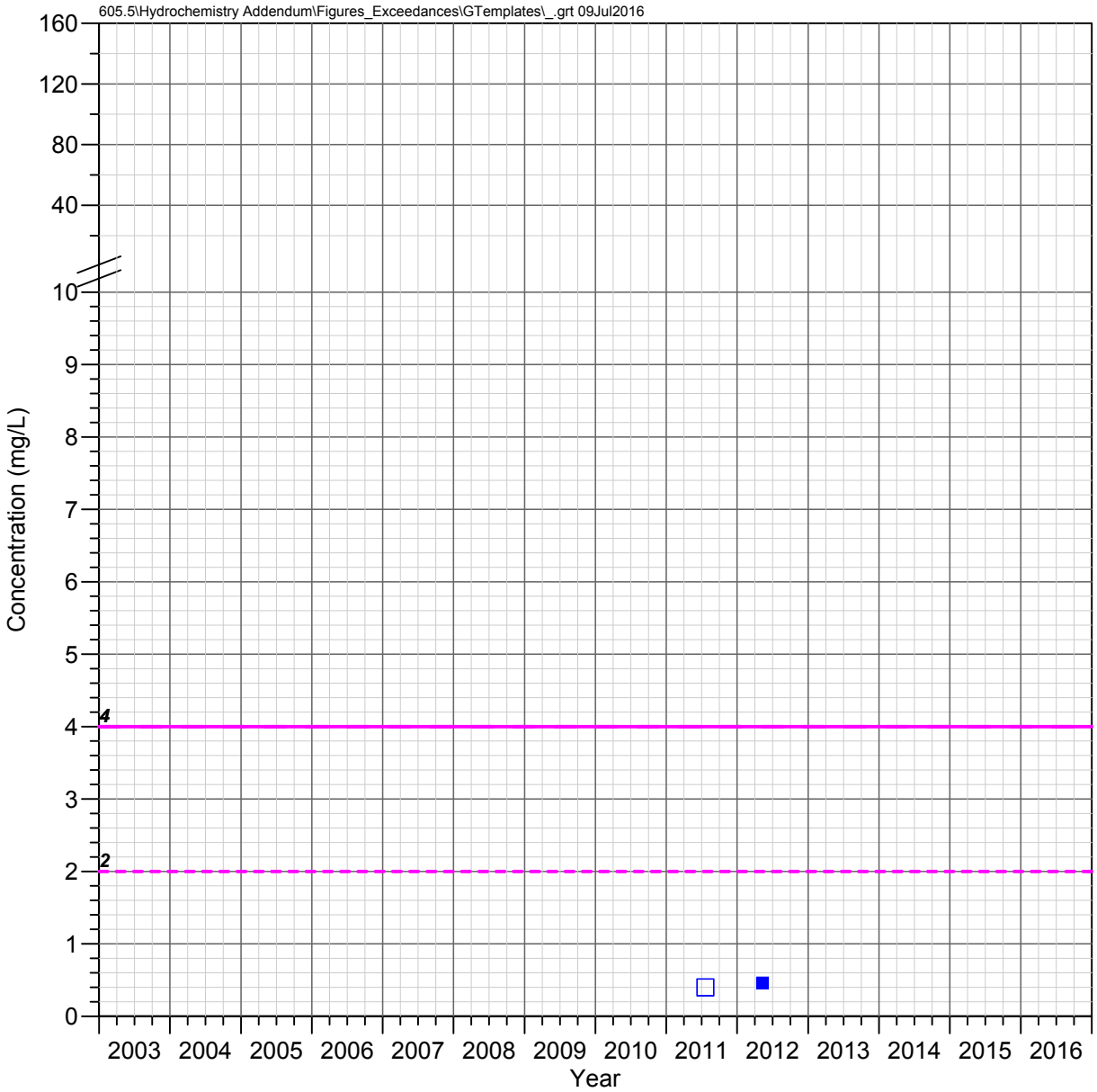


FIGURE E-273. FLUORIDE CONCENTRATIONS OBSERVED AT HRES-07, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-08
Apache Leap Tuff Aquifer

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 4 mg/L)
- EPA Maximum Contaminant Levels (UNS, 4 mg/L)
- EPA Secondary MCL (UNS, 2 mg/L)

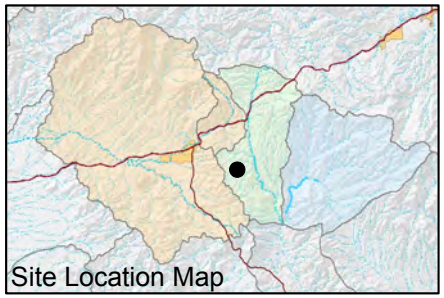
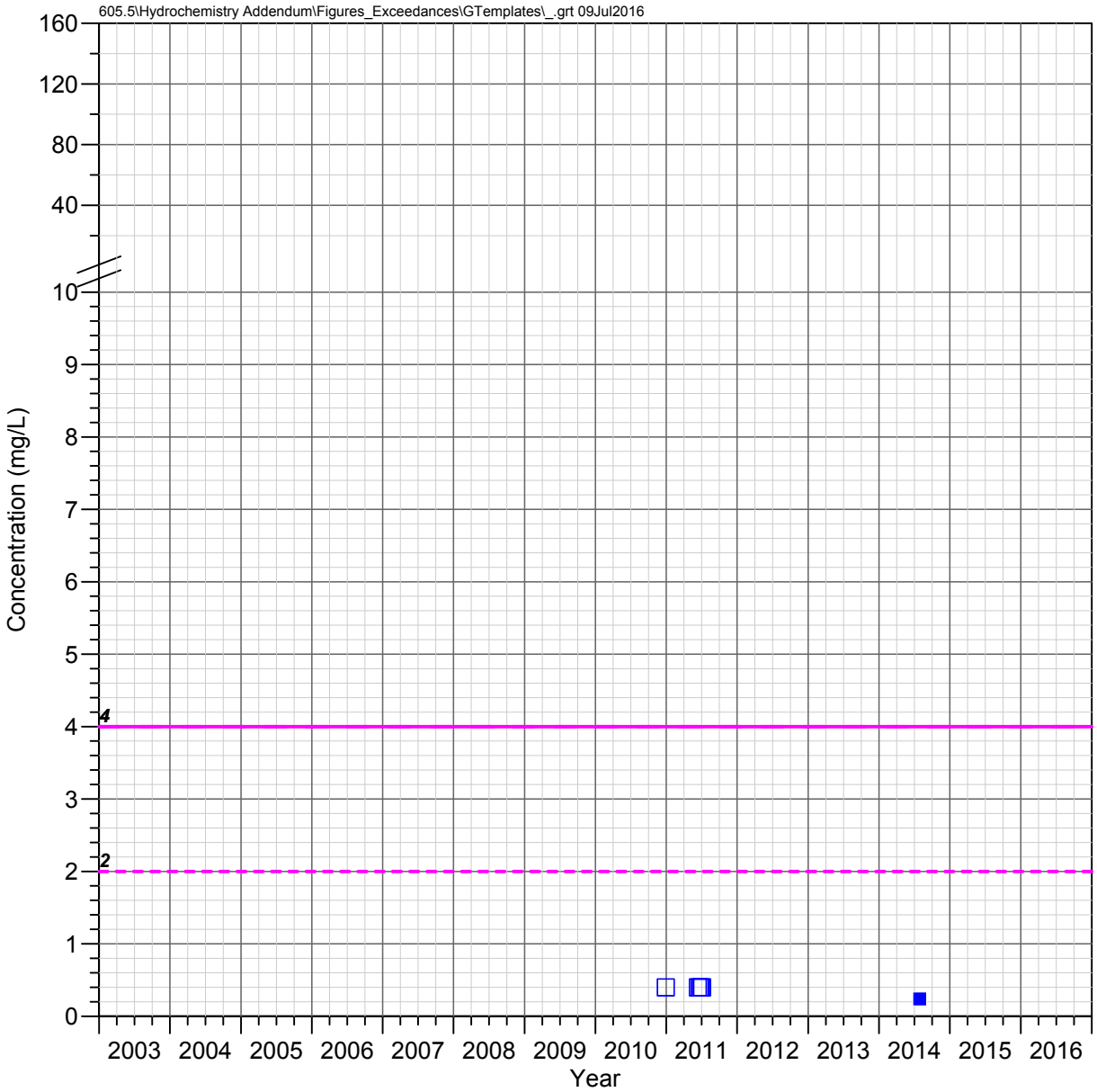


FIGURE E-274. FLUORIDE CONCENTRATIONS OBSERVED AT HRES-08, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-09
Apache Leap Tuff Aquifer

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 4 mg/L)
- EPA Maximum Contaminant Levels (UNS, 4 mg/L)
- EPA Secondary MCL (UNS, 2 mg/L)

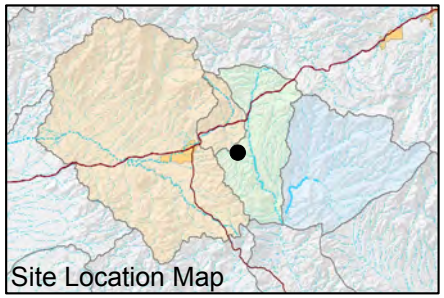
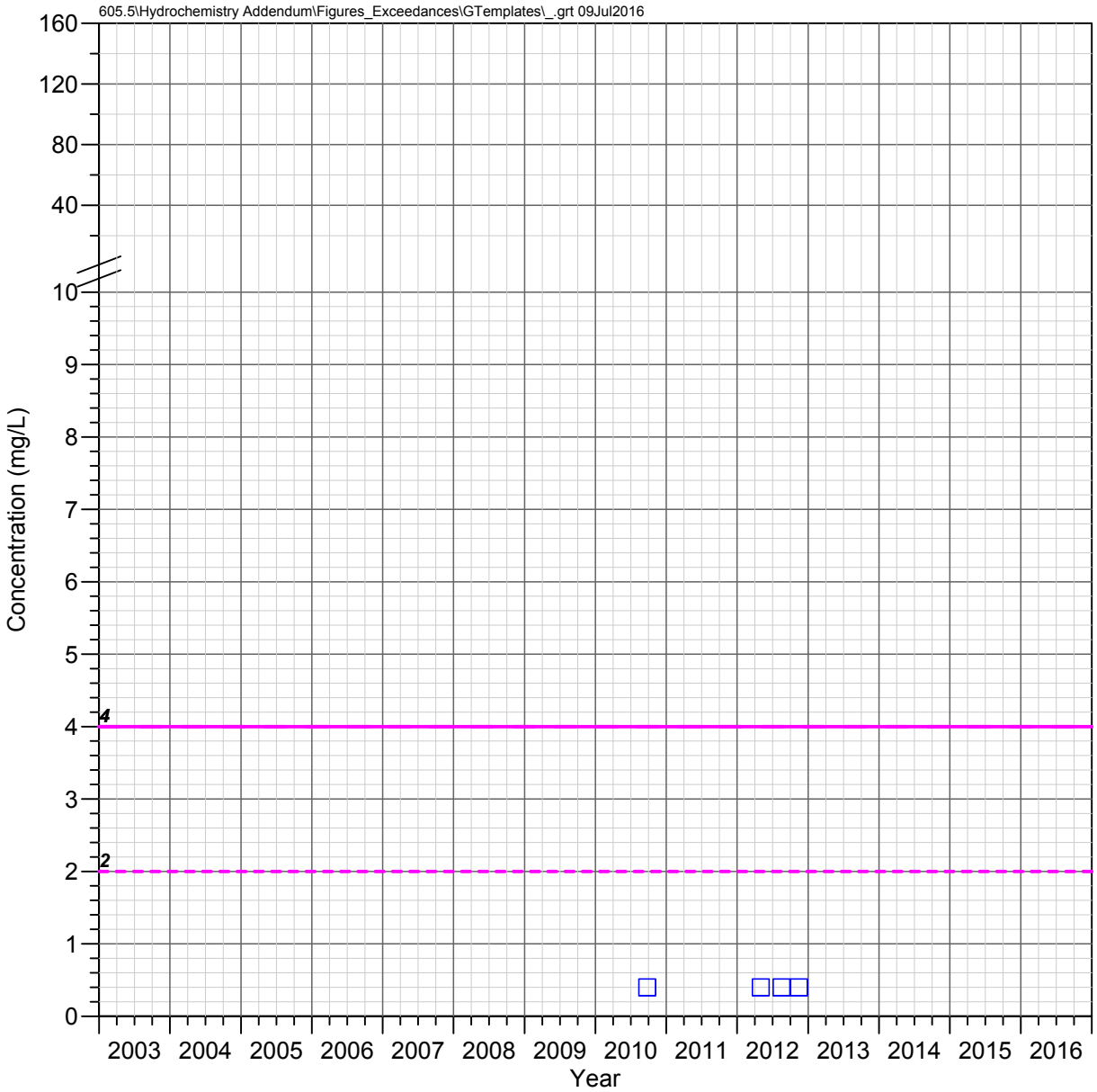


FIGURE E-275. FLUORIDE CONCENTRATIONS OBSERVED AT HRES-09, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-10
Apache Leap Tuff Aquifer

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 4 mg/L)
- EPA Maximum Contaminant Levels (UNS, 4 mg/L)
- EPA Secondary MCL (UNS, 2 mg/L)

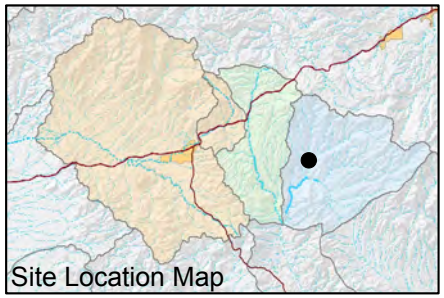
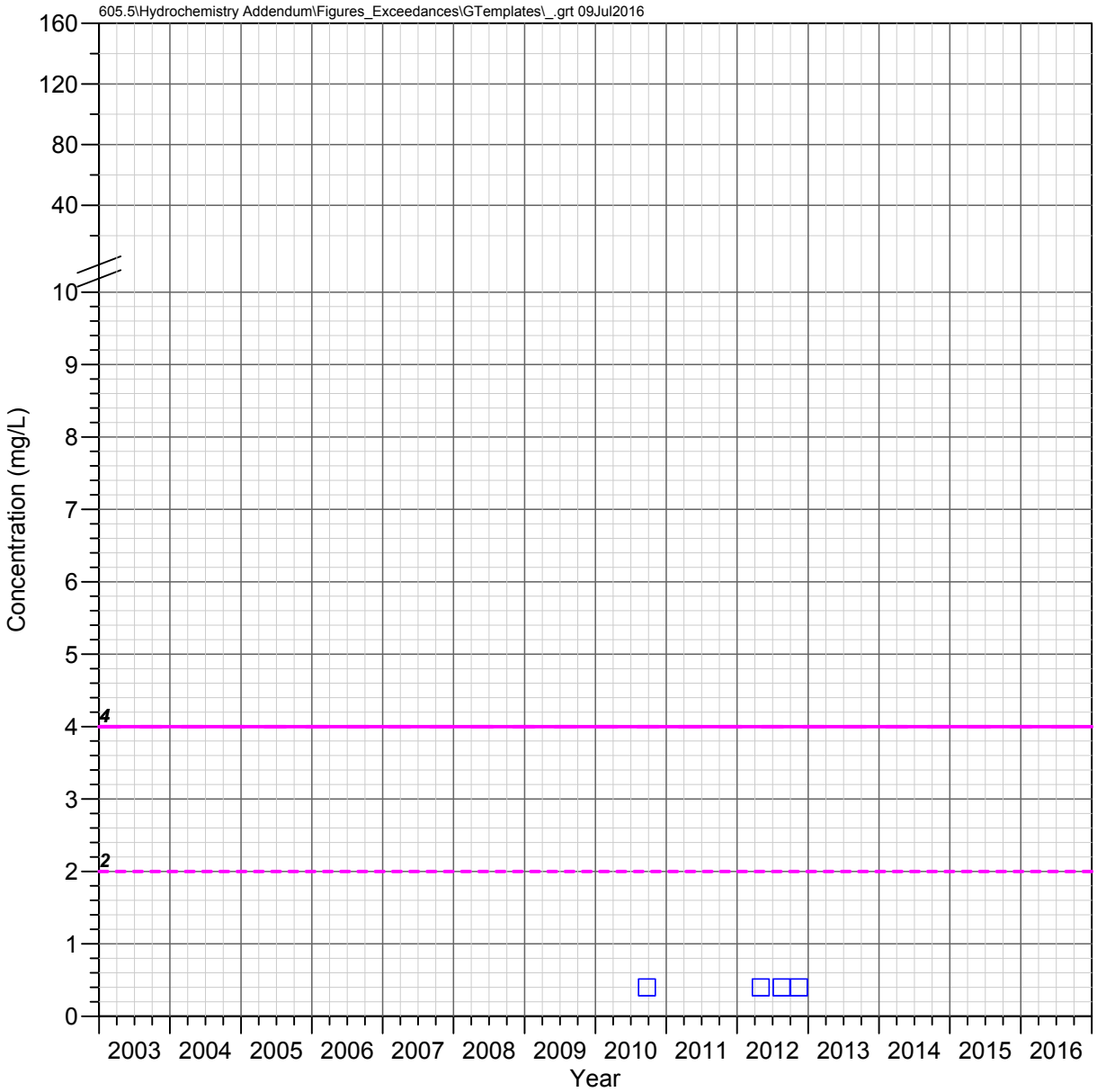


FIGURE E-276. FLUORIDE CONCENTRATIONS OBSERVED AT HRES-10, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-11
Apache Leap Tuff Aquifer

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 4 mg/L)
- EPA Maximum Contaminant Levels (UNS, 4 mg/L)
- EPA Secondary MCL (UNS, 2 mg/L)

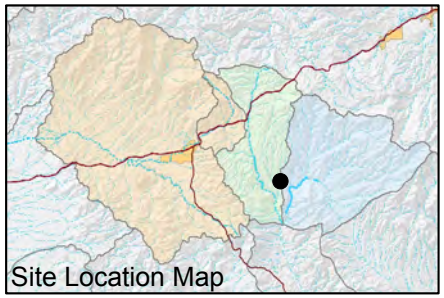
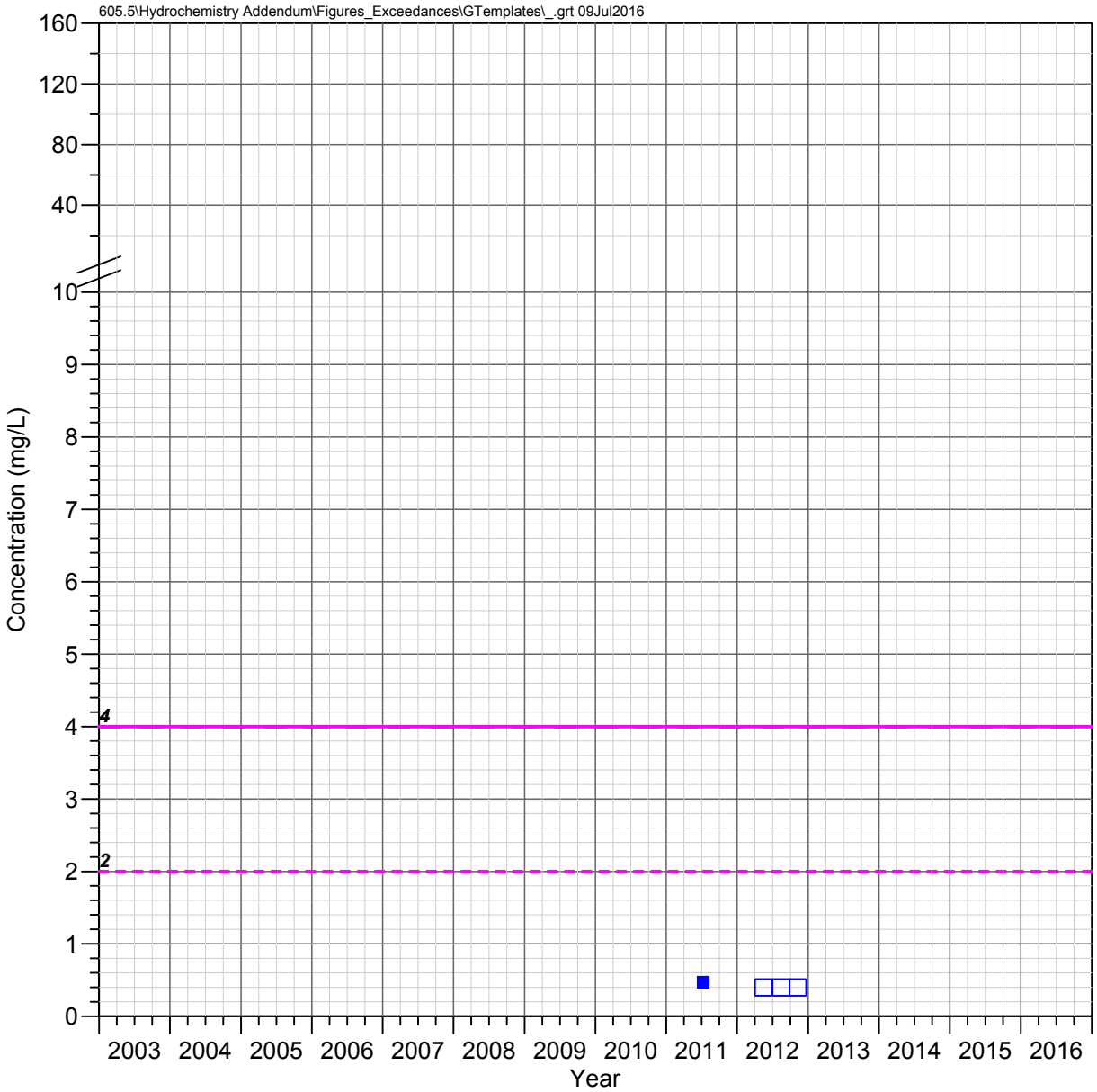


FIGURE E-277. FLUORIDE CONCENTRATIONS OBSERVED AT HRES-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-12
Apache Leap Tuff Aquifer

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 4 mg/L)
- EPA Maximum Contaminant Levels (UNS, 4 mg/L)
- EPA Secondary MCL (UNS, 2 mg/L)

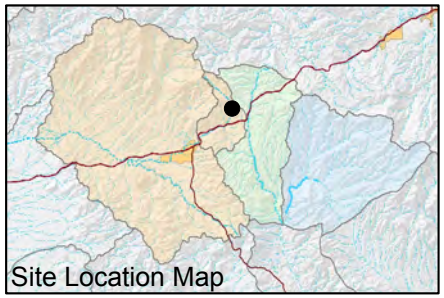
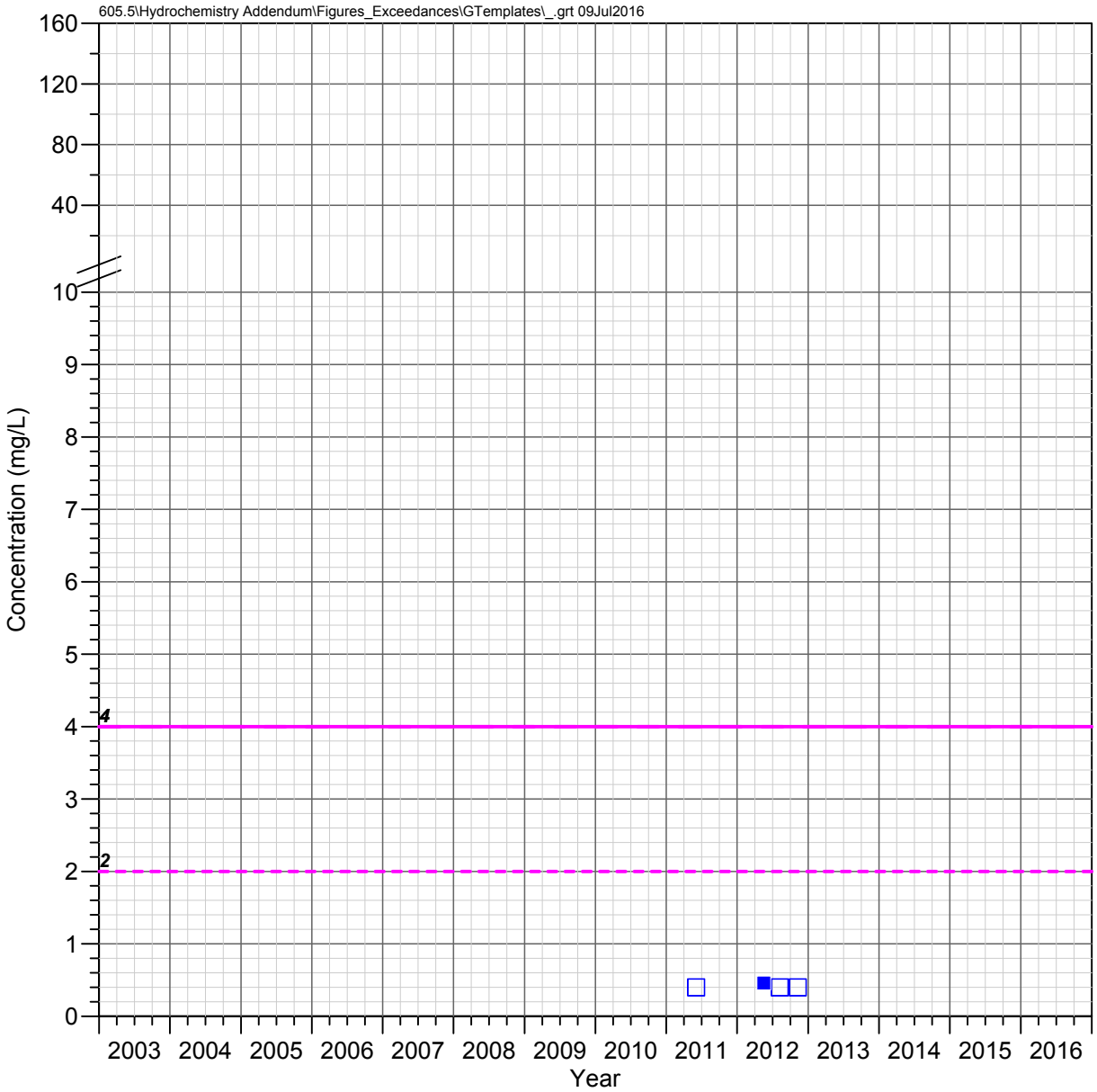


FIGURE E-278. FLUORIDE CONCENTRATIONS OBSERVED AT HRES-12, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-13
Apache Leap Tuff Aquifer

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 4 mg/L)
- EPA Maximum Contaminant Levels (UNS, 4 mg/L)
- EPA Secondary MCL (UNS, 2 mg/L)

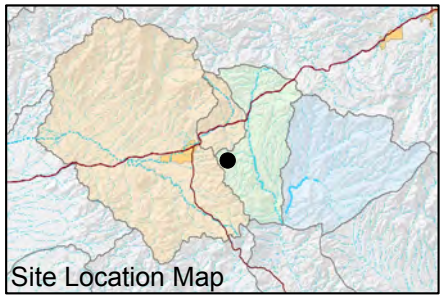
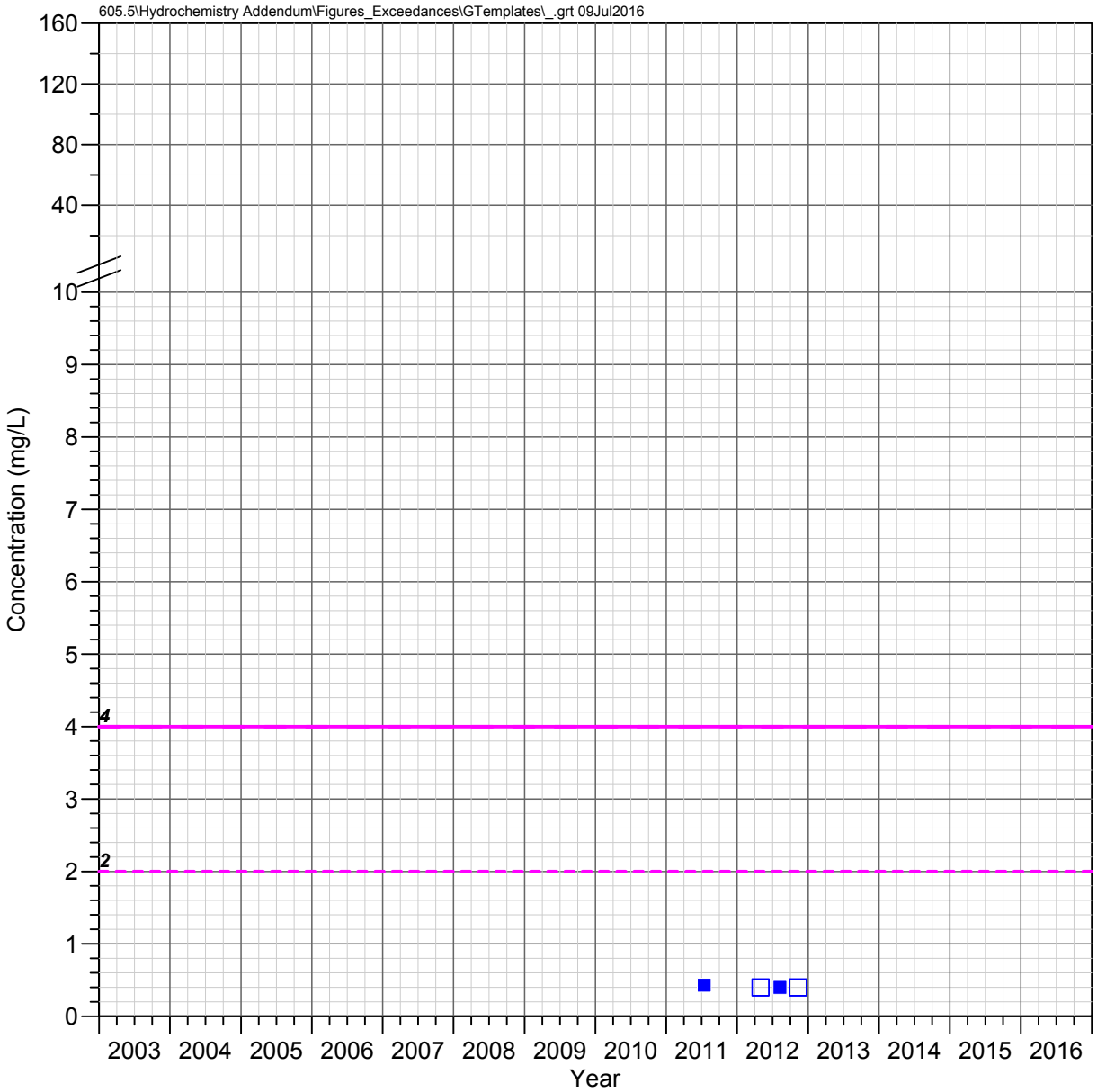


FIGURE E-279. FLUORIDE CONCENTRATIONS OBSERVED AT HRES-13, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-14
Apache Leap Tuff Aquifer

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 4 mg/L)
- EPA Maximum Contaminant Levels (UNS, 4 mg/L)
- EPA Secondary MCL (UNS, 2 mg/L)

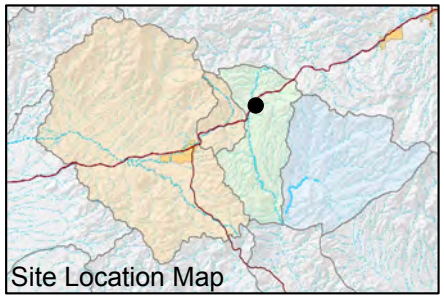
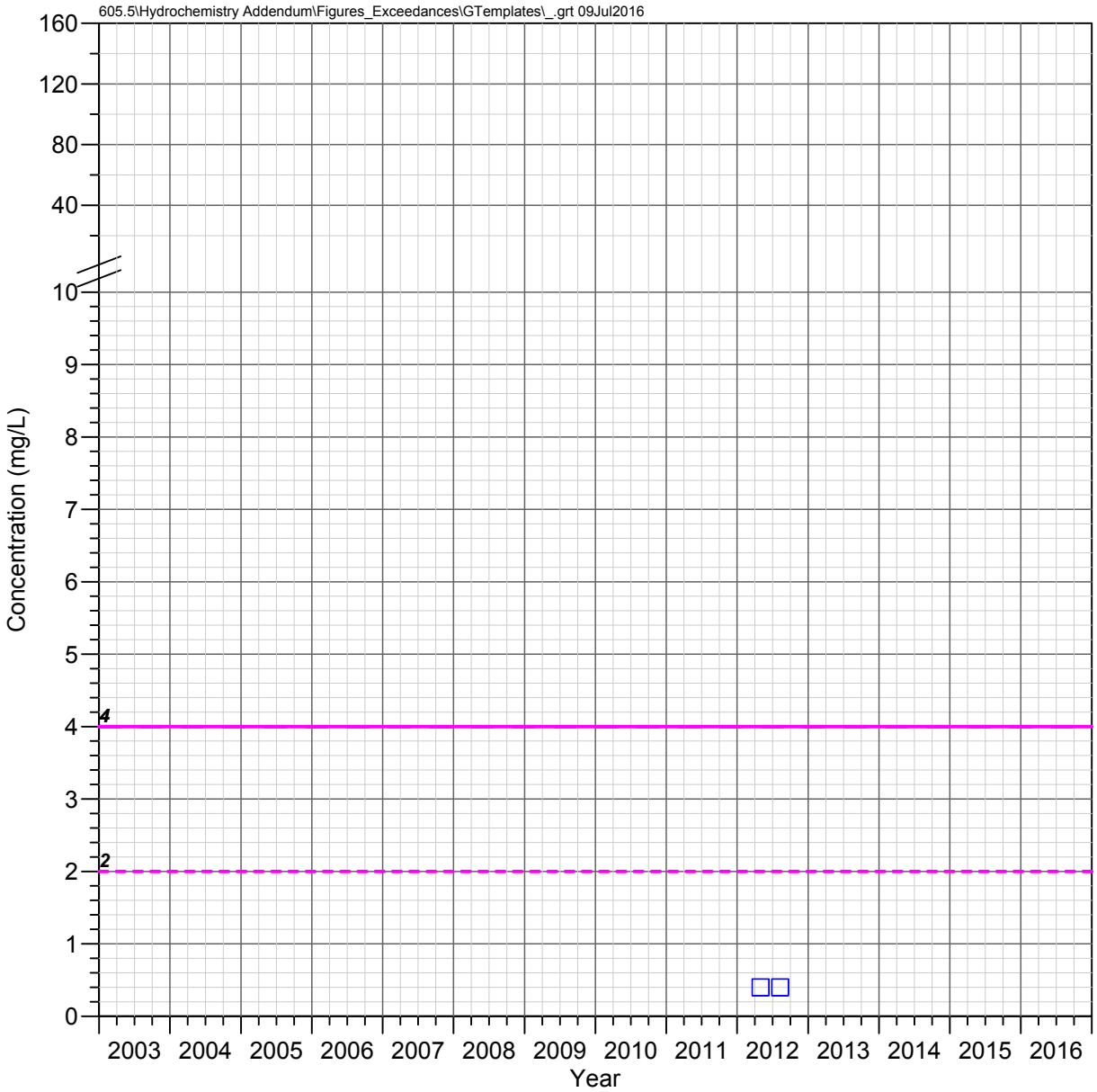


FIGURE E-280. FLUORIDE CONCENTRATIONS OBSERVED AT HRES-14, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-15
Apache Leap Tuff Aquifer

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 4 mg/L)
- EPA Maximum Contaminant Levels (UNS, 4 mg/L)
- EPA Secondary MCL (UNS, 2 mg/L)

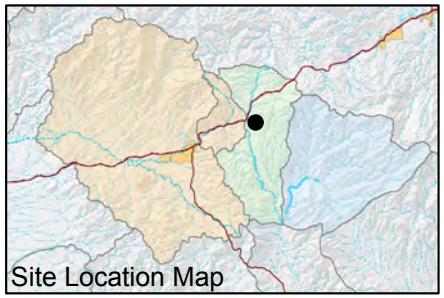
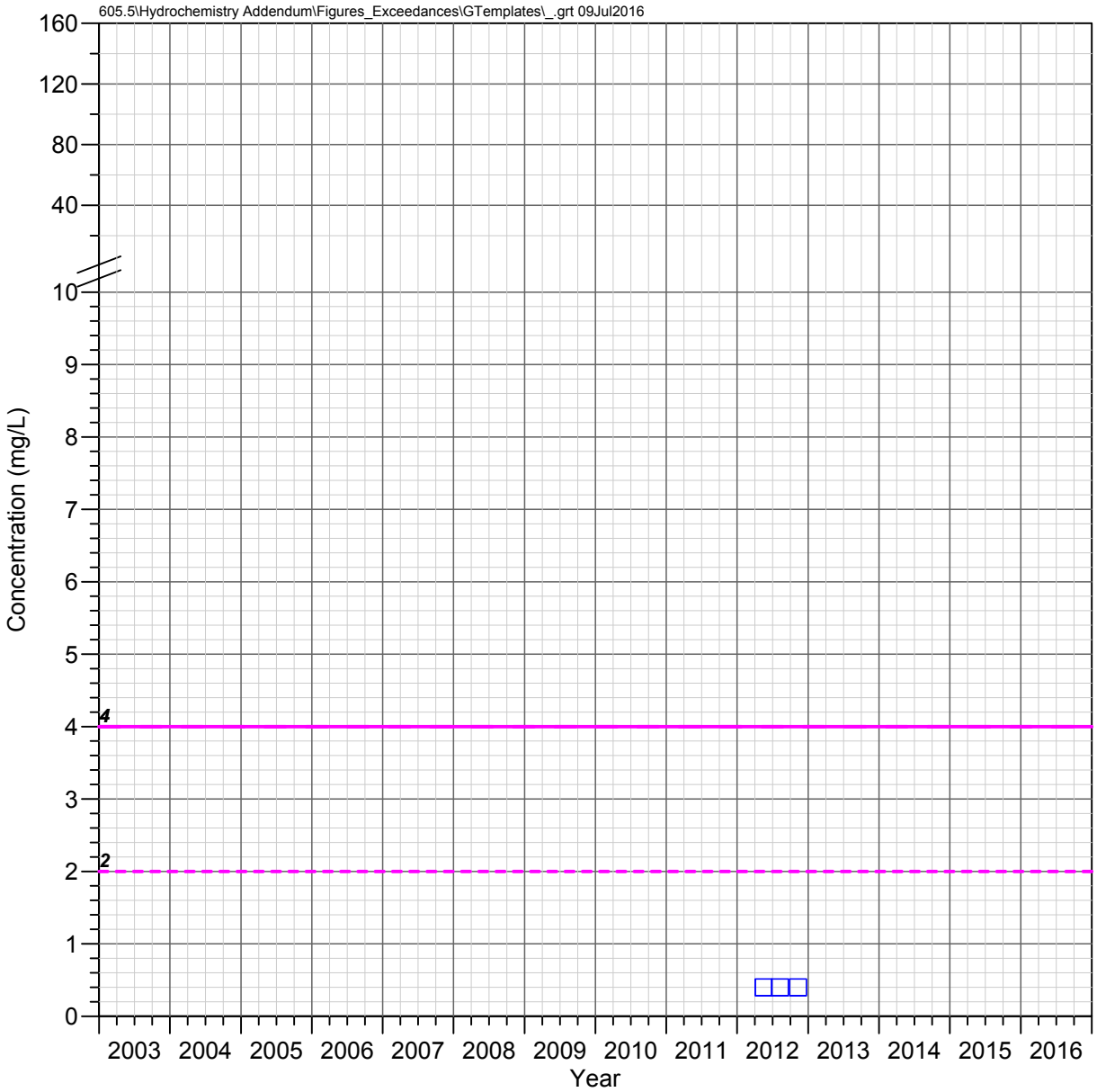


FIGURE E-281. FLUORIDE CONCENTRATIONS OBSERVED AT HRES-15, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-17
Apache Leap Tuff Aquifer

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 4 mg/L)
- EPA Maximum Contaminant Levels (UNS, 4 mg/L)
- EPA Secondary MCL (UNS, 2 mg/L)

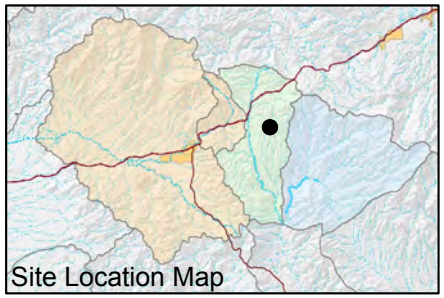
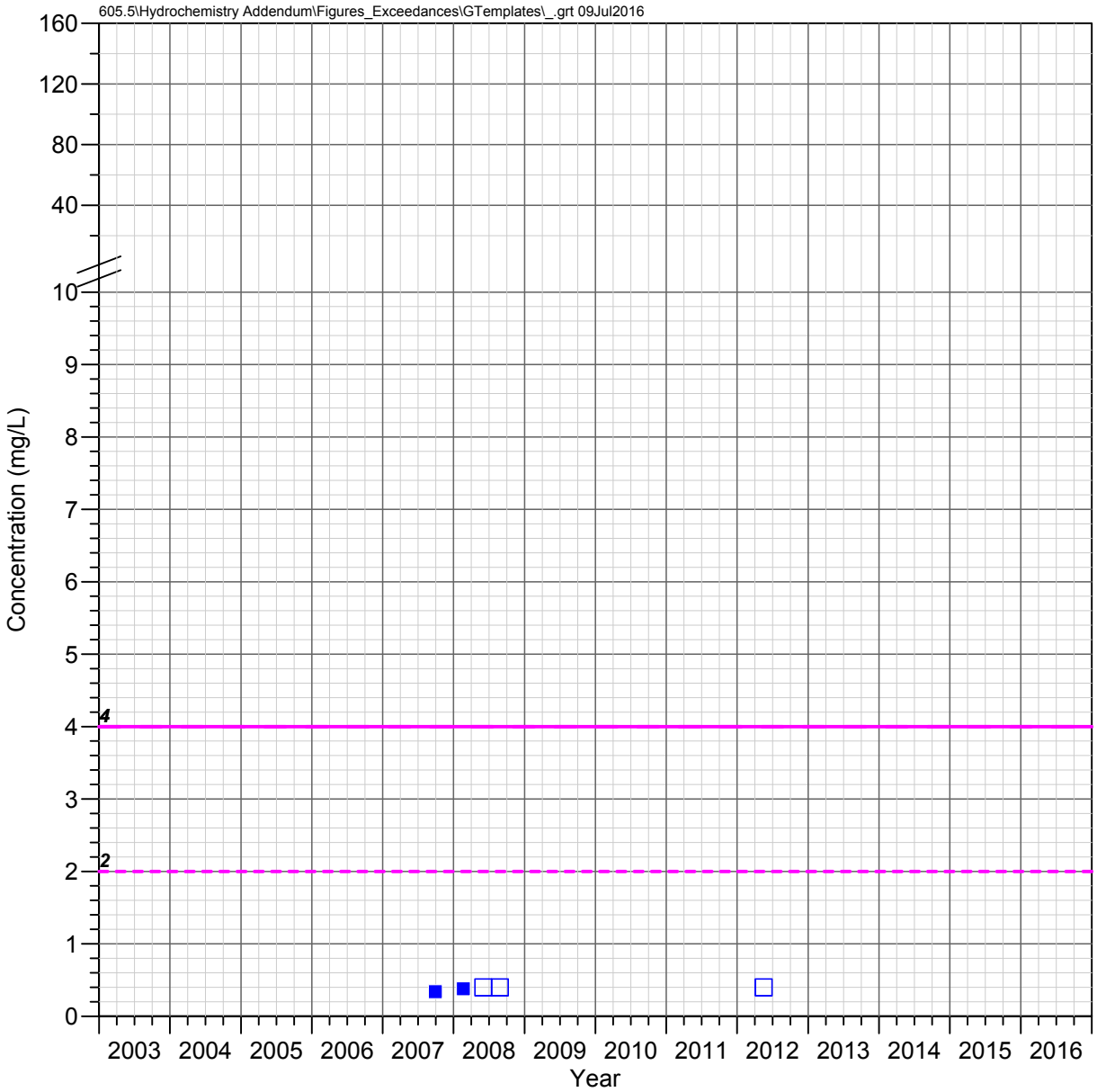


FIGURE E-282. FLUORIDE CONCENTRATIONS OBSERVED AT HRES-17, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MJ-11
Apache Leap Tuff Aquifer

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 4 mg/L)
- EPA Maximum Contaminant Levels (UNS, 4 mg/L)
- EPA Secondary MCL (UNS, 2 mg/L)

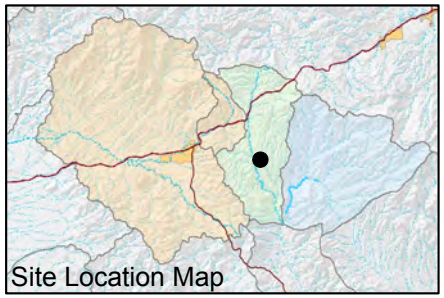
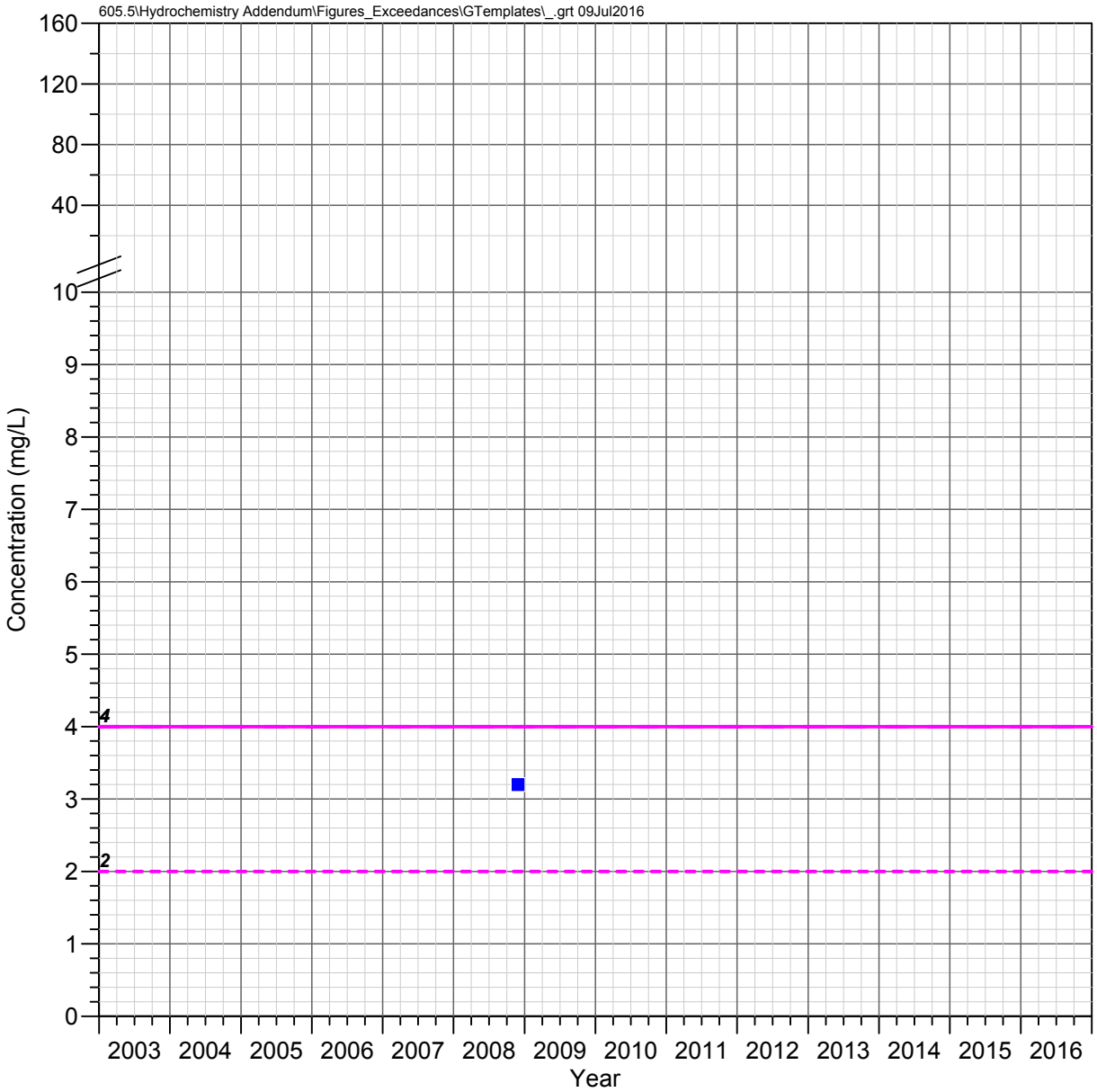


FIGURE E-283. FLUORIDE CONCENTRATIONS OBSERVED AT MJ-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-01
Deep Groundwater System

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 4 mg/L)
- EPA Maximum Contaminant Levels (UNS, 4 mg/L)
- EPA Secondary MCL (UNS, 2 mg/L)

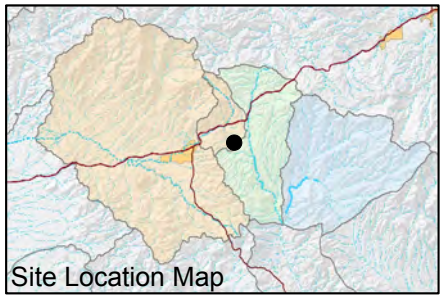
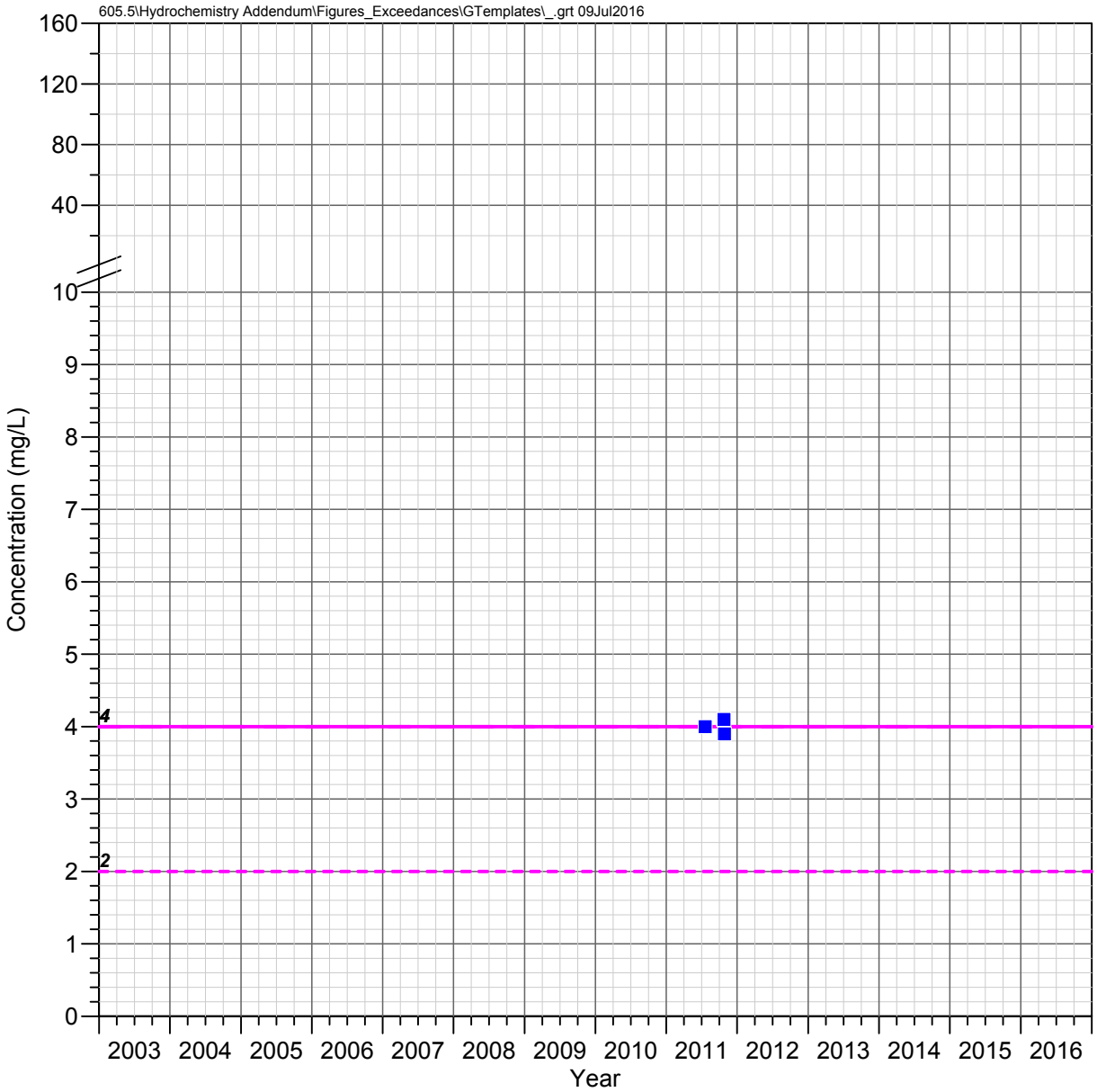


FIGURE E-284. FLUORIDE CONCENTRATIONS OBSERVED AT DHRES-01, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-02
Deep Groundwater System

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 4 mg/L)
- EPA Maximum Contaminant Levels (UNS, 4 mg/L)
- EPA Secondary MCL (UNS, 2 mg/L)

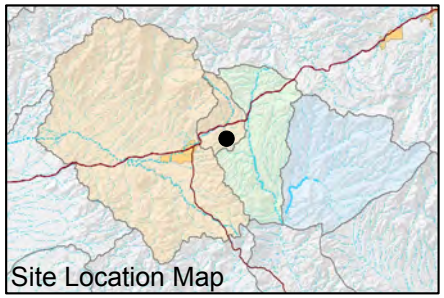
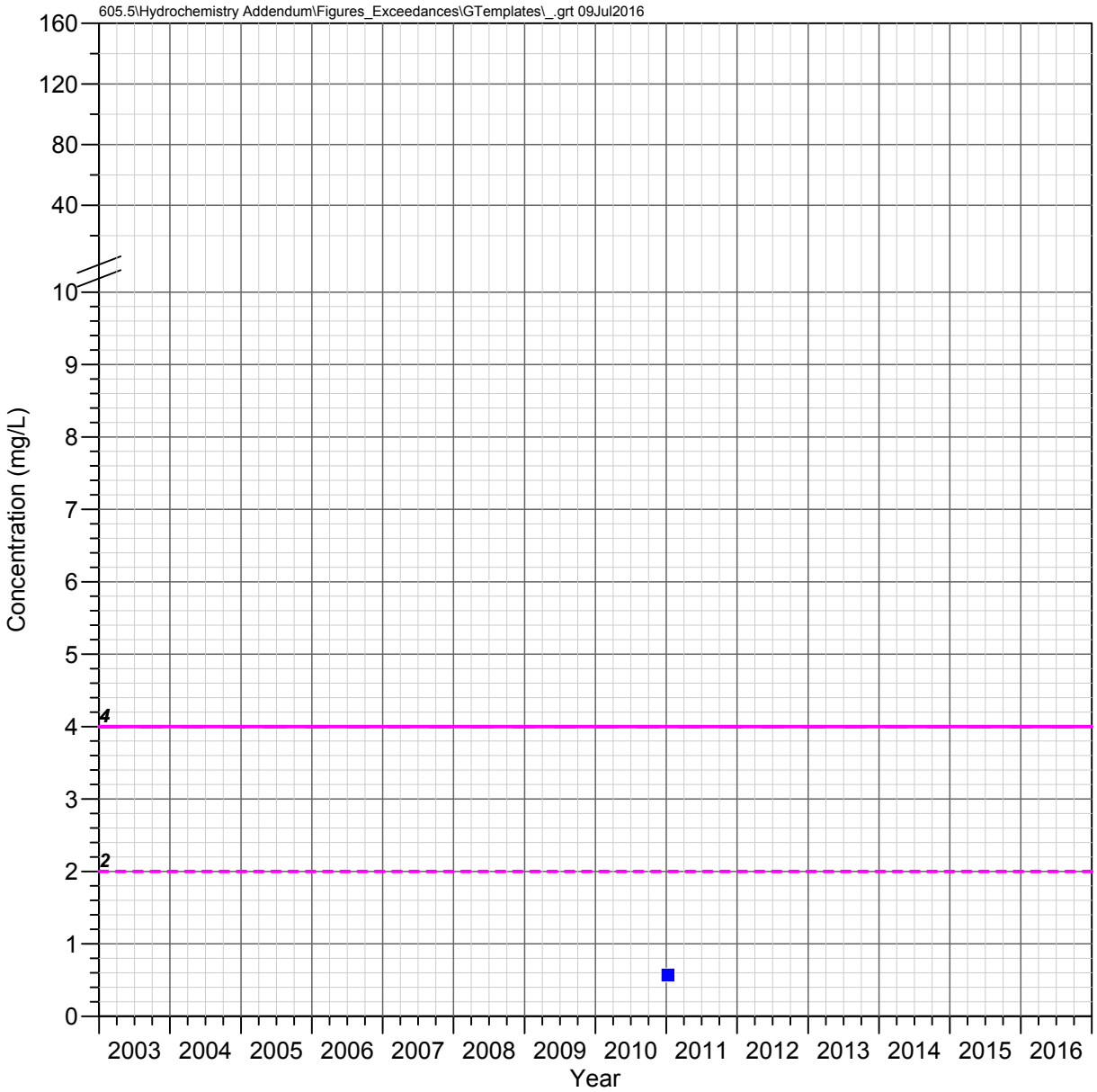


FIGURE E-285. FLUORIDE CONCENTRATIONS OBSERVED AT DHRES-02, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-06
Deep Groundwater System

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 4 mg/L)
- EPA Maximum Contaminant Levels (UNS, 4 mg/L)
- EPA Secondary MCL (UNS, 2 mg/L)

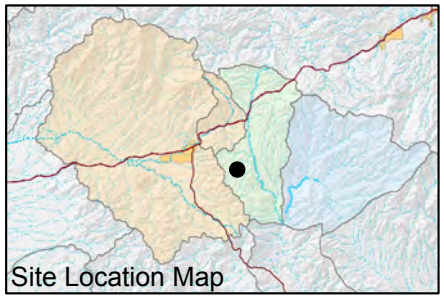
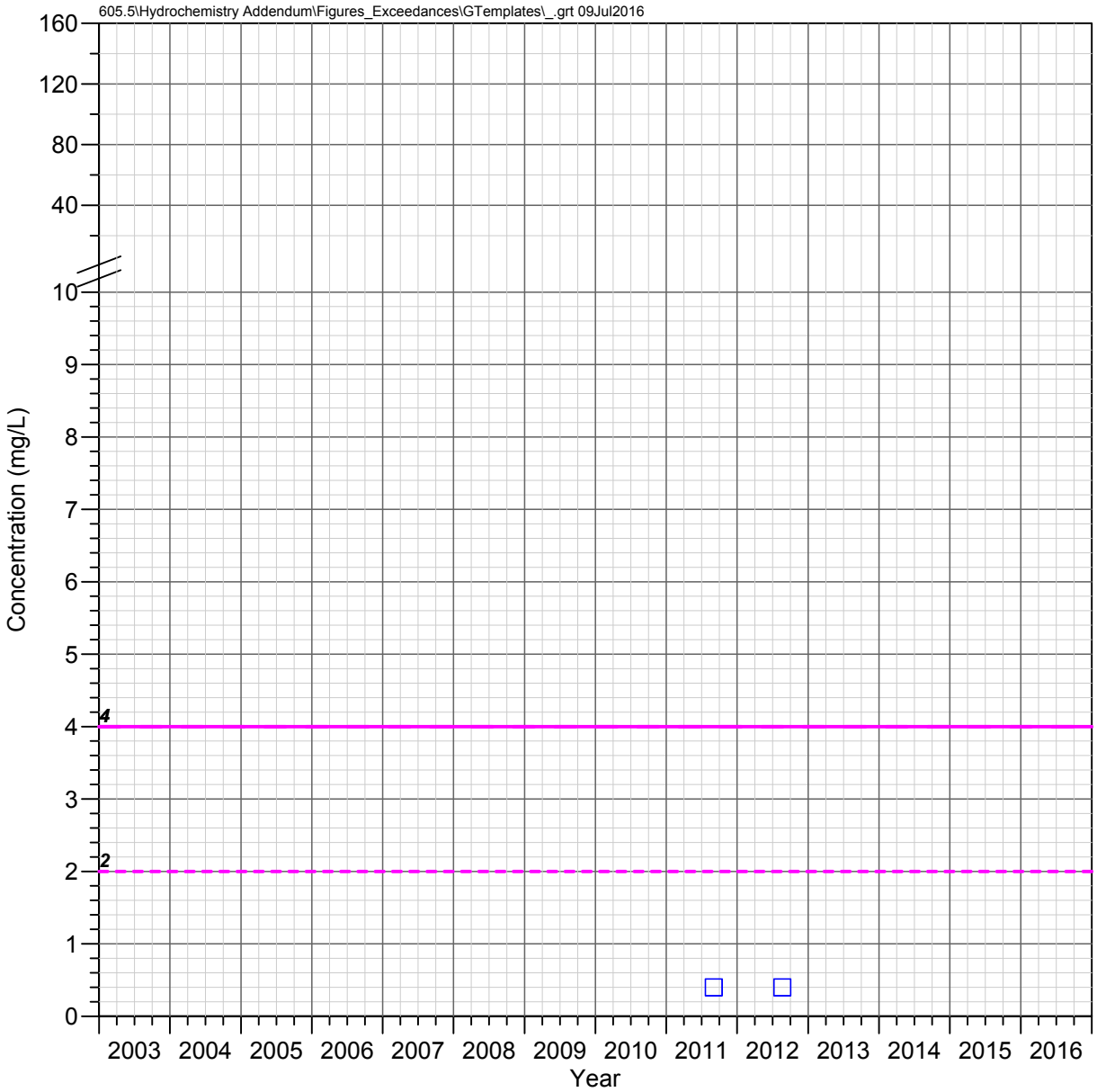


FIGURE E-286. FLUORIDE CONCENTRATIONS OBSERVED AT DHRES-06, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-09
Deep Groundwater System

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 4 mg/L)
- EPA Maximum Contaminant Levels (UNS, 4 mg/L)
- EPA Secondary MCL (UNS, 2 mg/L)

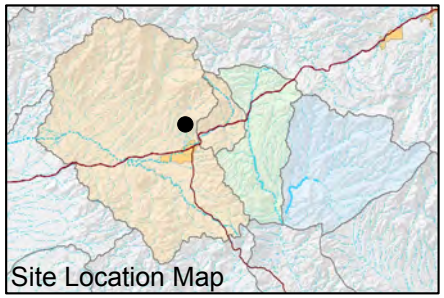
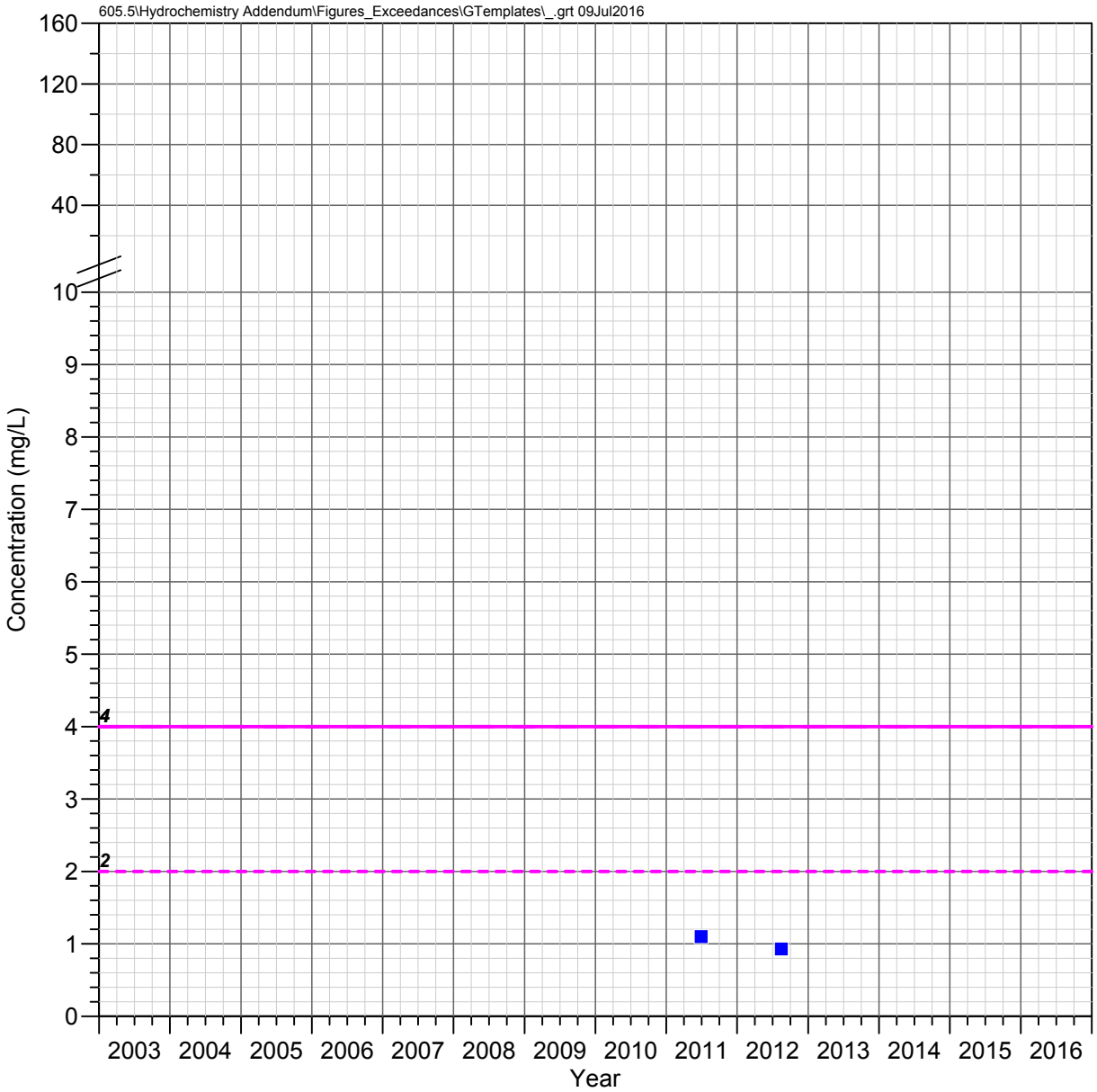


FIGURE E-287. FLUORIDE CONCENTRATIONS OBSERVED AT DHRES-09, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-11
Deep Groundwater System

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 4 mg/L)
- EPA Maximum Contaminant Levels (UNS, 4 mg/L)
- EPA Secondary MCL (UNS, 2 mg/L)

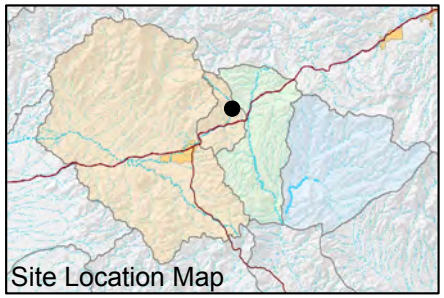
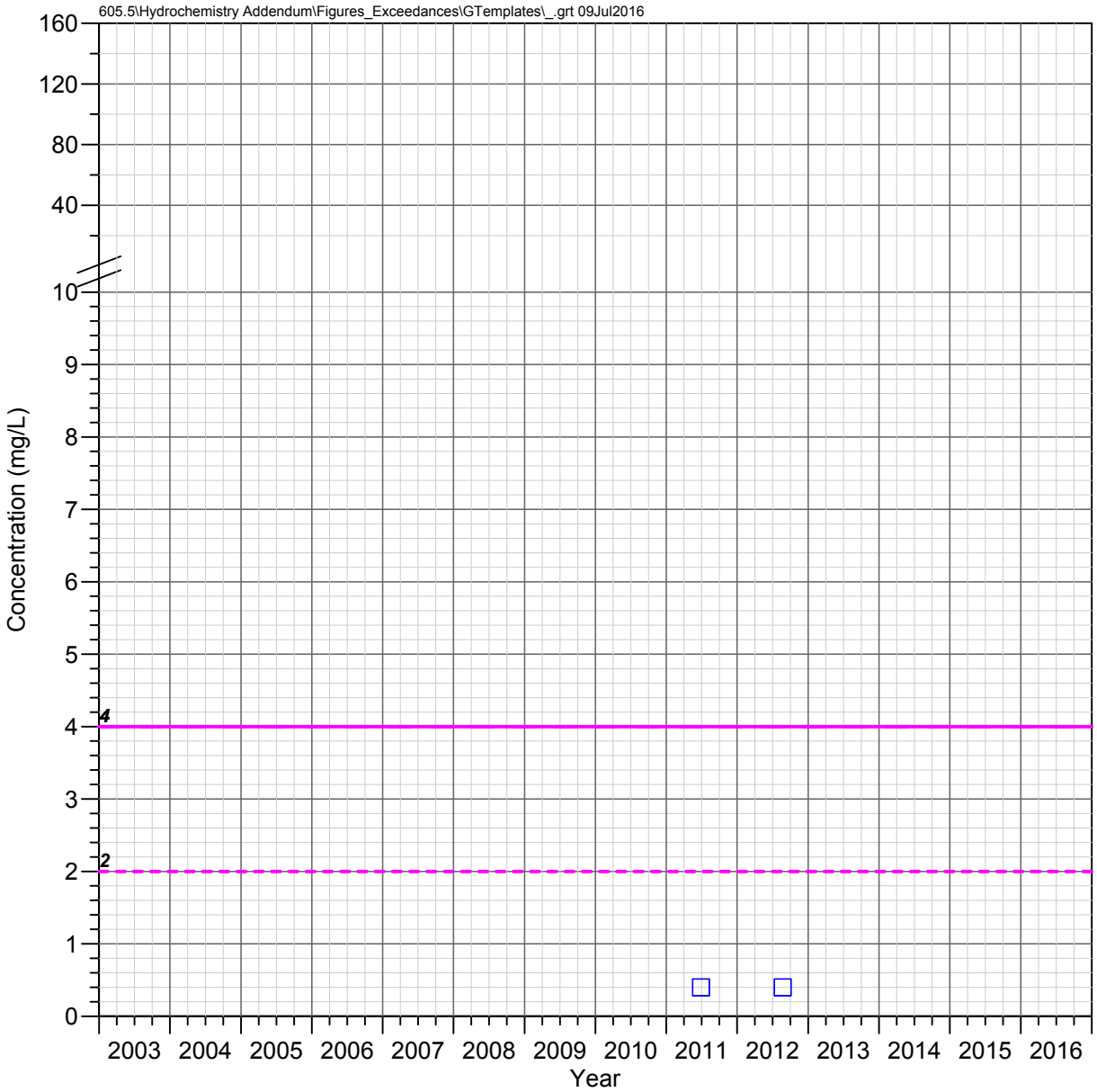


FIGURE E-288. FLUORIDE CONCENTRATIONS OBSERVED AT DHRES-11, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-13
Deep Groundwater System

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 4 mg/L)
- EPA Maximum Contaminant Levels (UNS, 4 mg/L)
- EPA Secondary MCL (UNS, 2 mg/L)

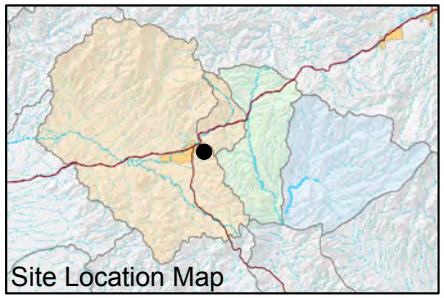
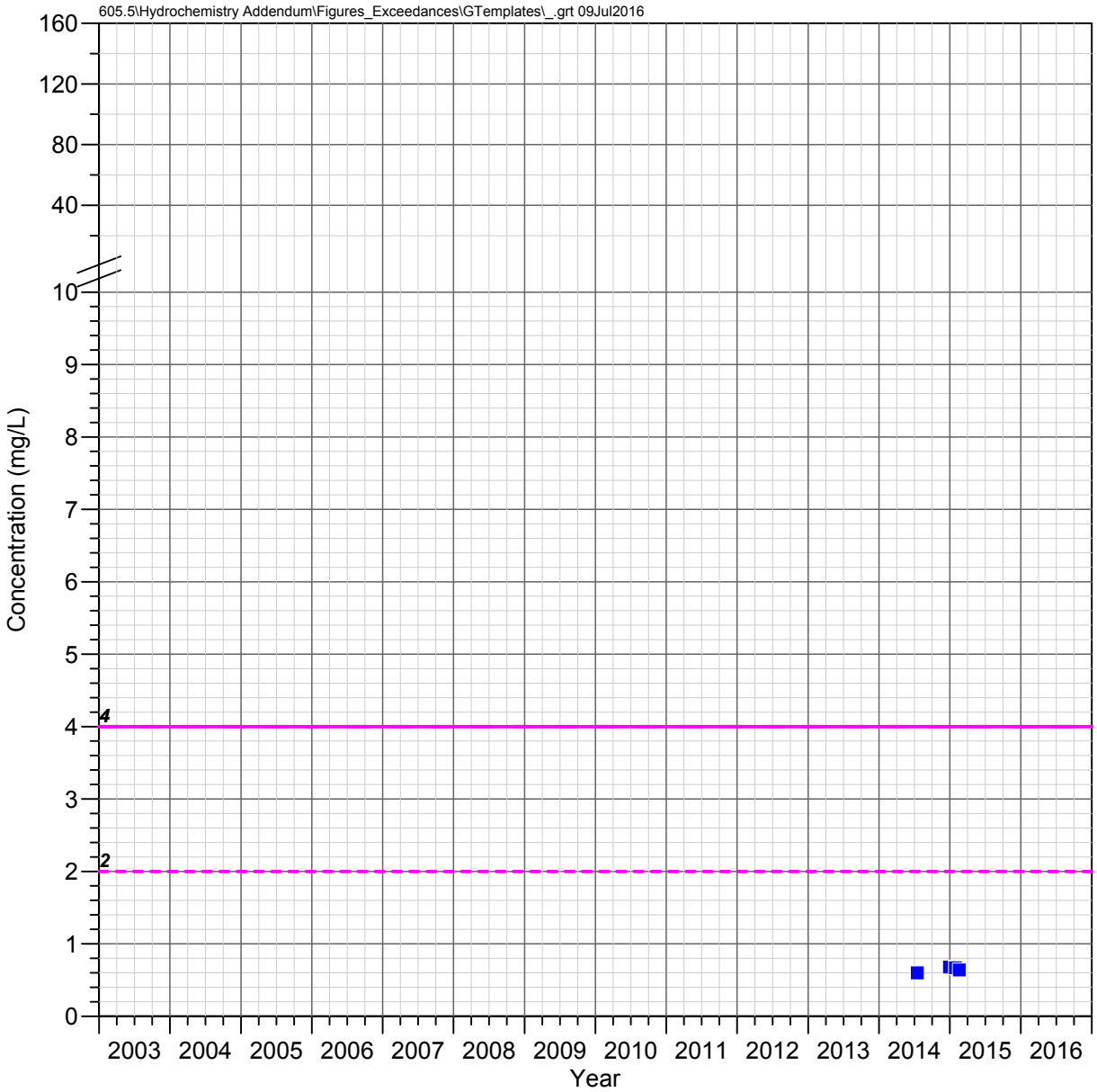


FIGURE E-289. FLUORIDE CONCENTRATIONS OBSERVED AT DHRES-13, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-15
Deep Groundwater System

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 4 mg/L)
- EPA Maximum Contaminant Levels (UNS, 4 mg/L)
- EPA Secondary MCL (UNS, 2 mg/L)

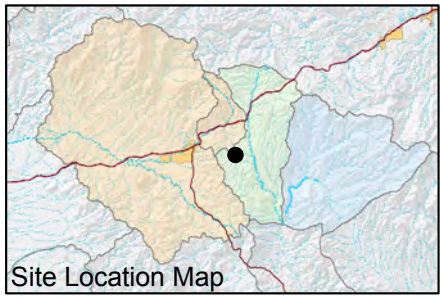
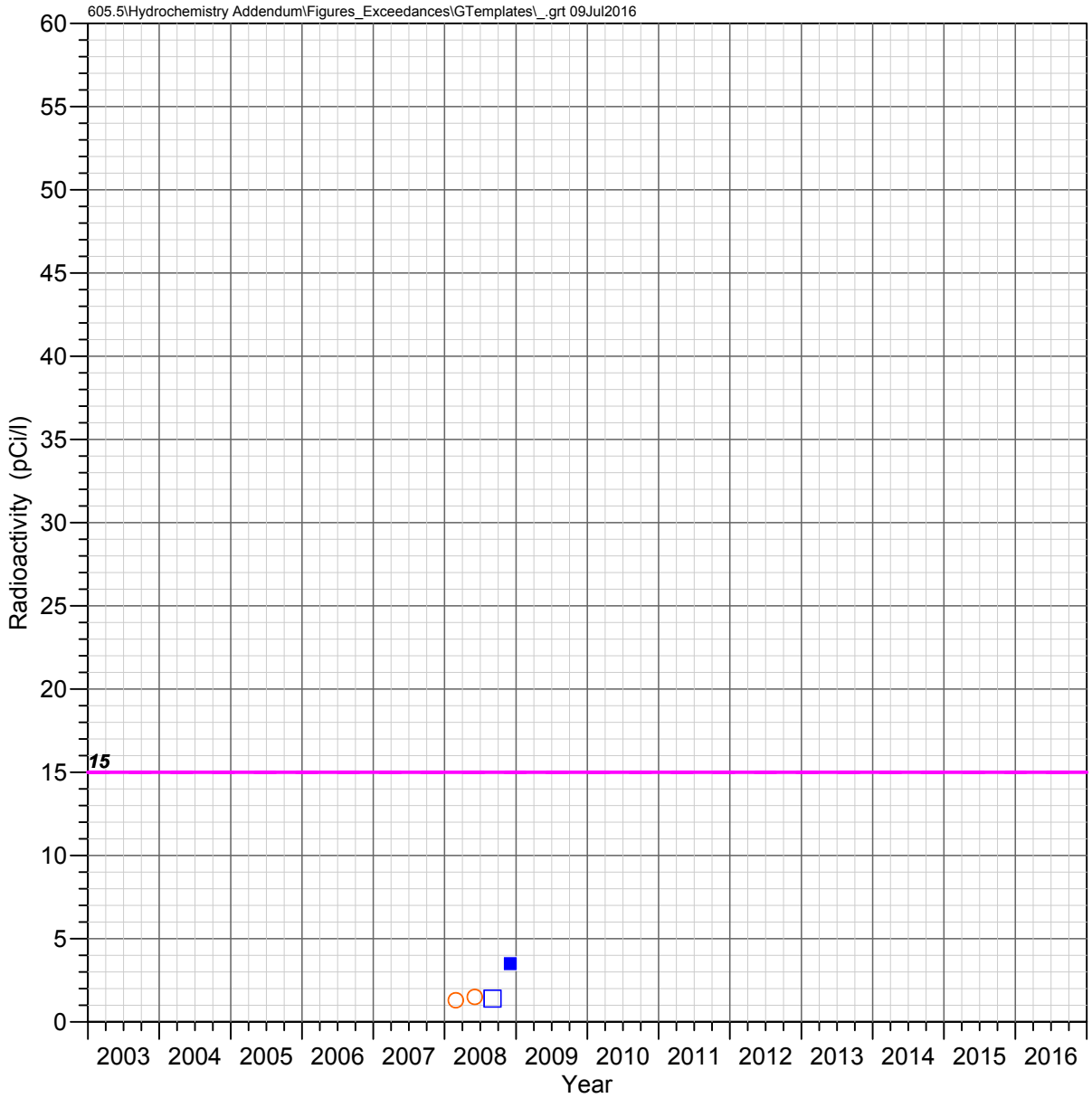


FIGURE E-290. FLUORIDE CONCENTRATIONS OBSERVED AT DHRES-15, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Hackberry Windmill Well
Shallow Groundwater System

GROSS ALPHA

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 15 pCi/l)
- EPA Maximum Contaminant Levels (UNS, 15 pCi/l)

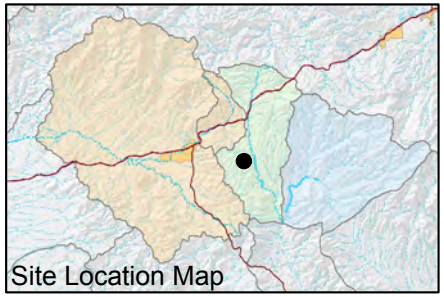
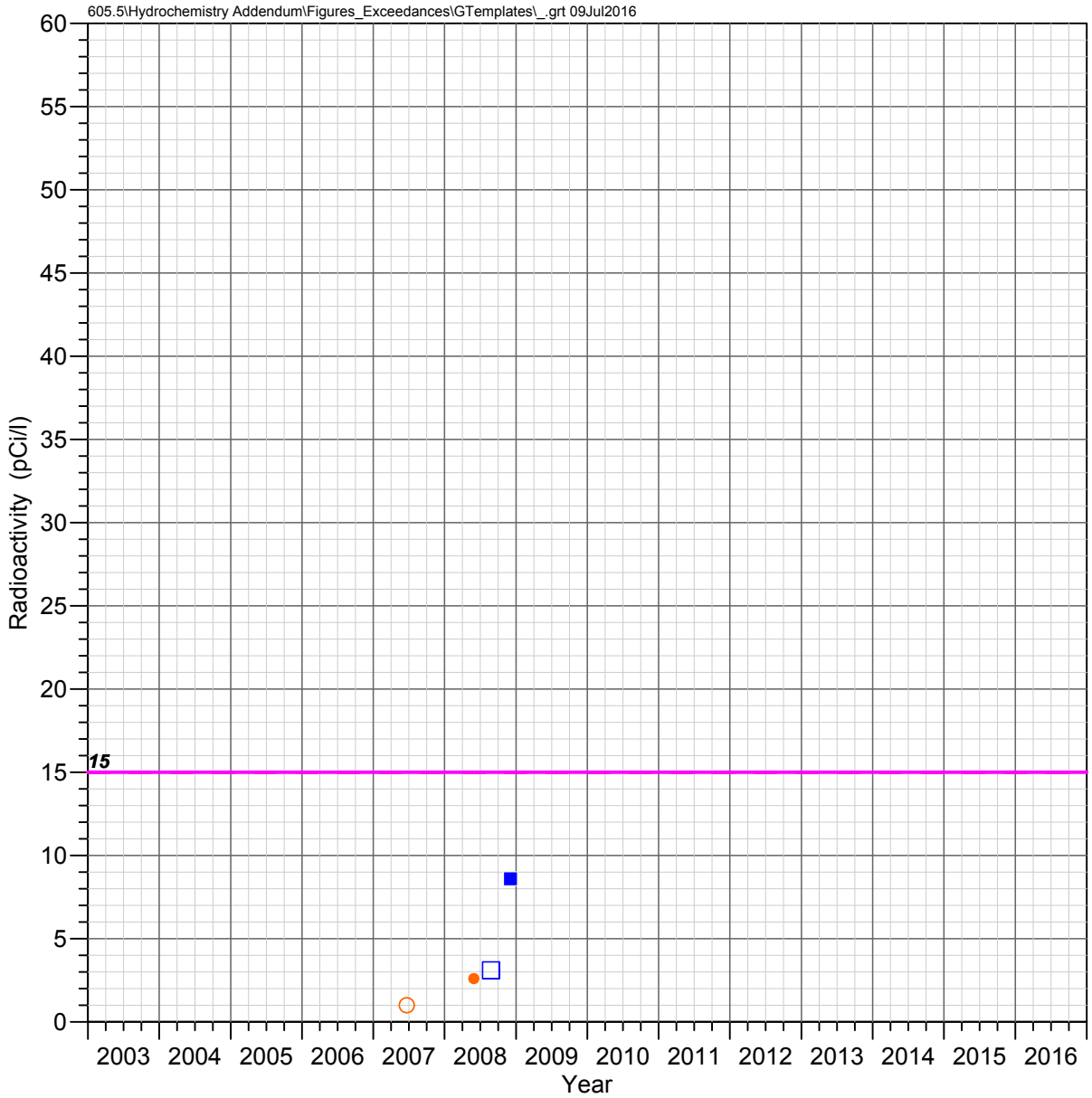


FIGURE E-291. GROSS ALPHA RADIOACTIVITY OBSERVED AT HACKBERRY WINDMILL WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



JI Ranch Corral Well
Shallow Groundwater System

GROSS ALPHA

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 15 pCi/l)
- EPA Maximum Contaminant Levels (UNS, 15 pCi/l)

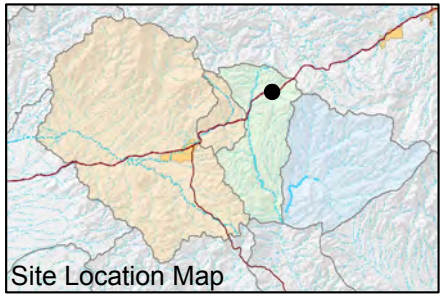
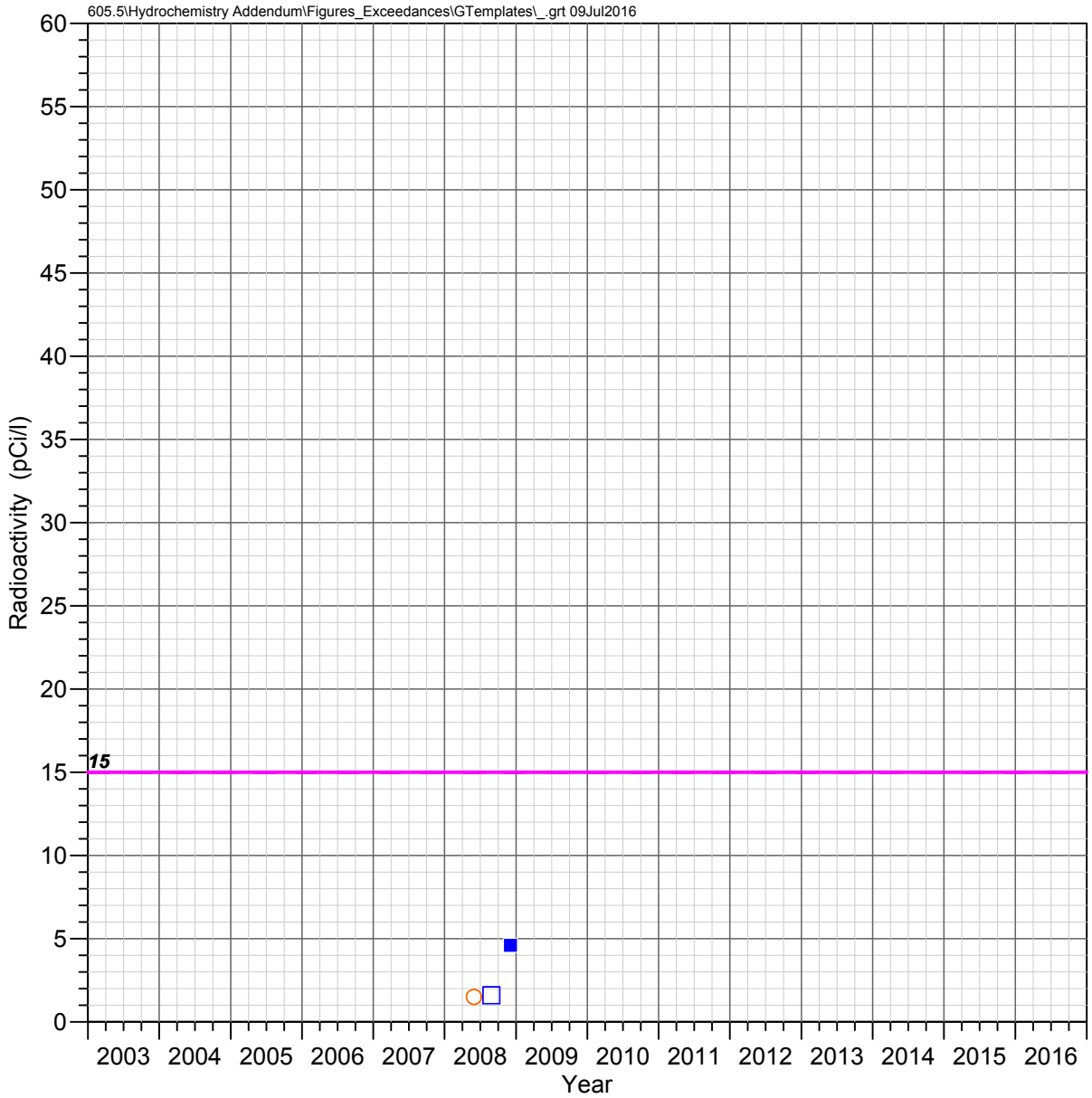


FIGURE E-292. GROSS ALPHA RADIOACTIVITY OBSERVED AT JI RANCH CORRAL WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



JI Ranch Middle Well
Shallow Groundwater System

GROSS ALPHA

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 15 pCi/l)
- EPA Maximum Contaminant Levels (UNS, 15 pCi/l)

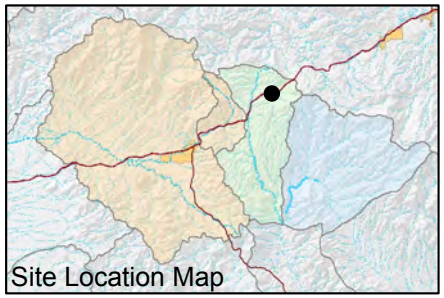
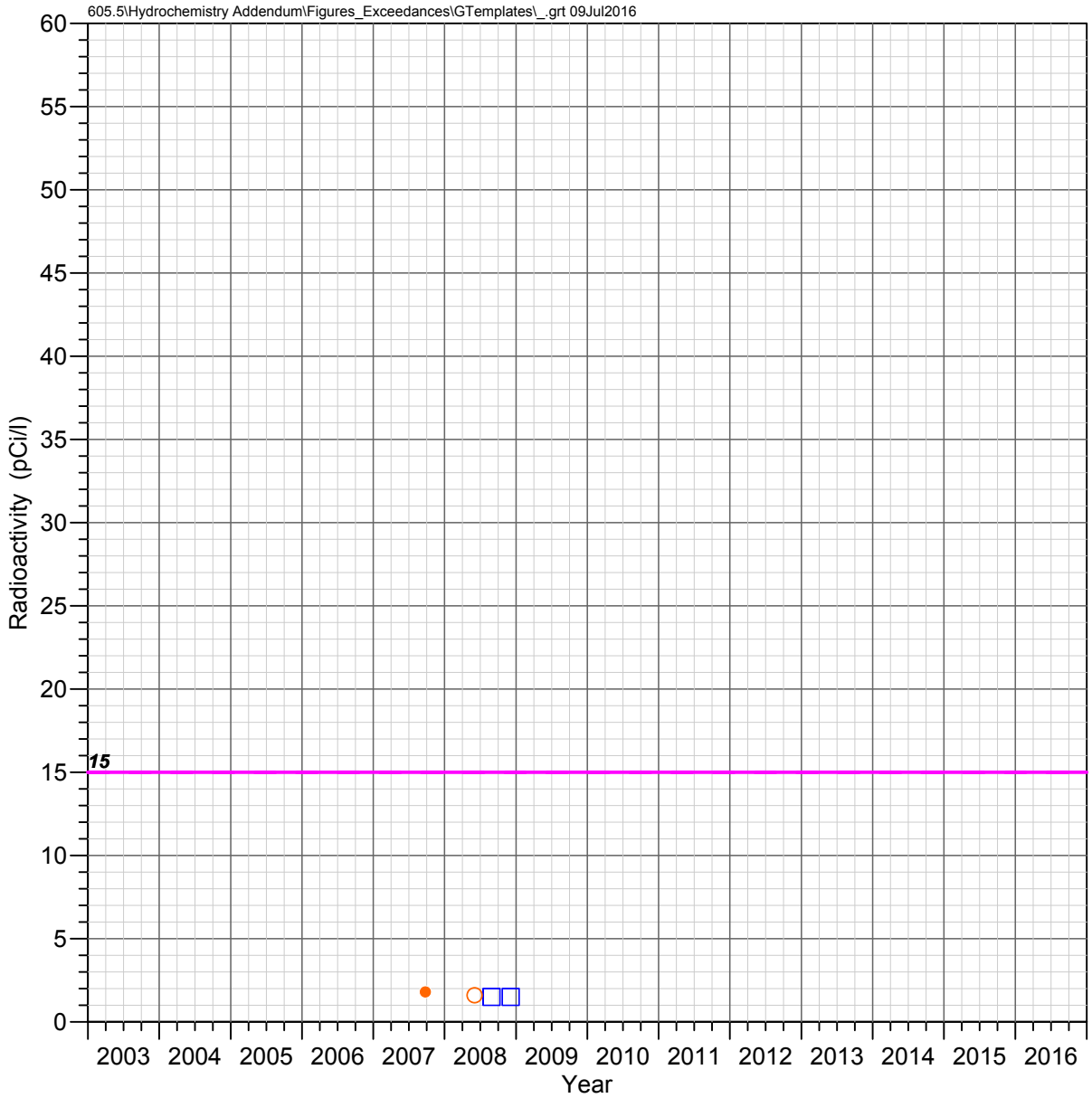


FIGURE E-293. GROSS ALPHA RADIOACTIVITY OBSERVED AT JI RANCH MIDDLE WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



A-06
Apache Leap Tuff Aquifer

GROSS ALPHA

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 15 pCi/l)
- EPA Maximum Contaminant Levels (UNS, 15 pCi/l)

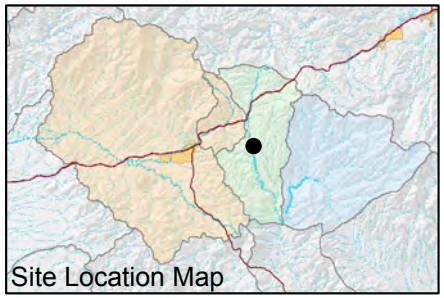
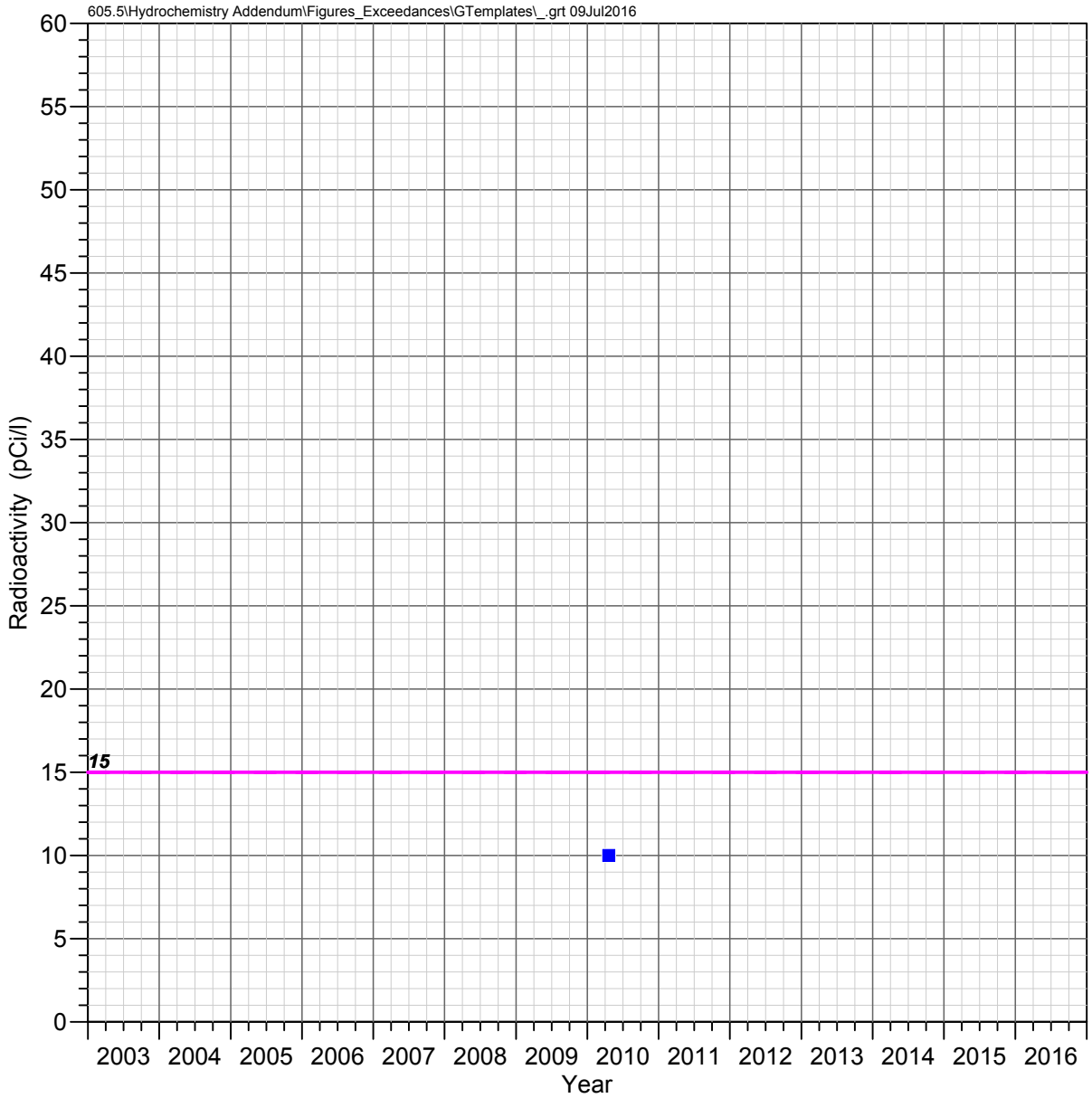


FIGURE E-294. GROSS ALPHA RADIOACTIVITY OBSERVED AT A-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



CT Well
Apache Leap Tuff Aquifer

GROSS ALPHA

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 15 pCi/l)
- EPA Maximum Contaminant Levels (UNS, 15 pCi/l)

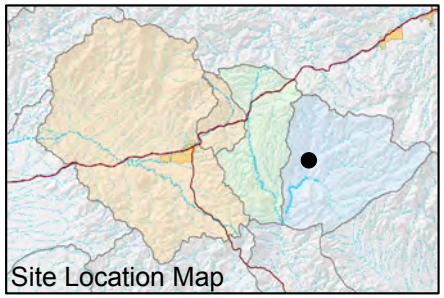
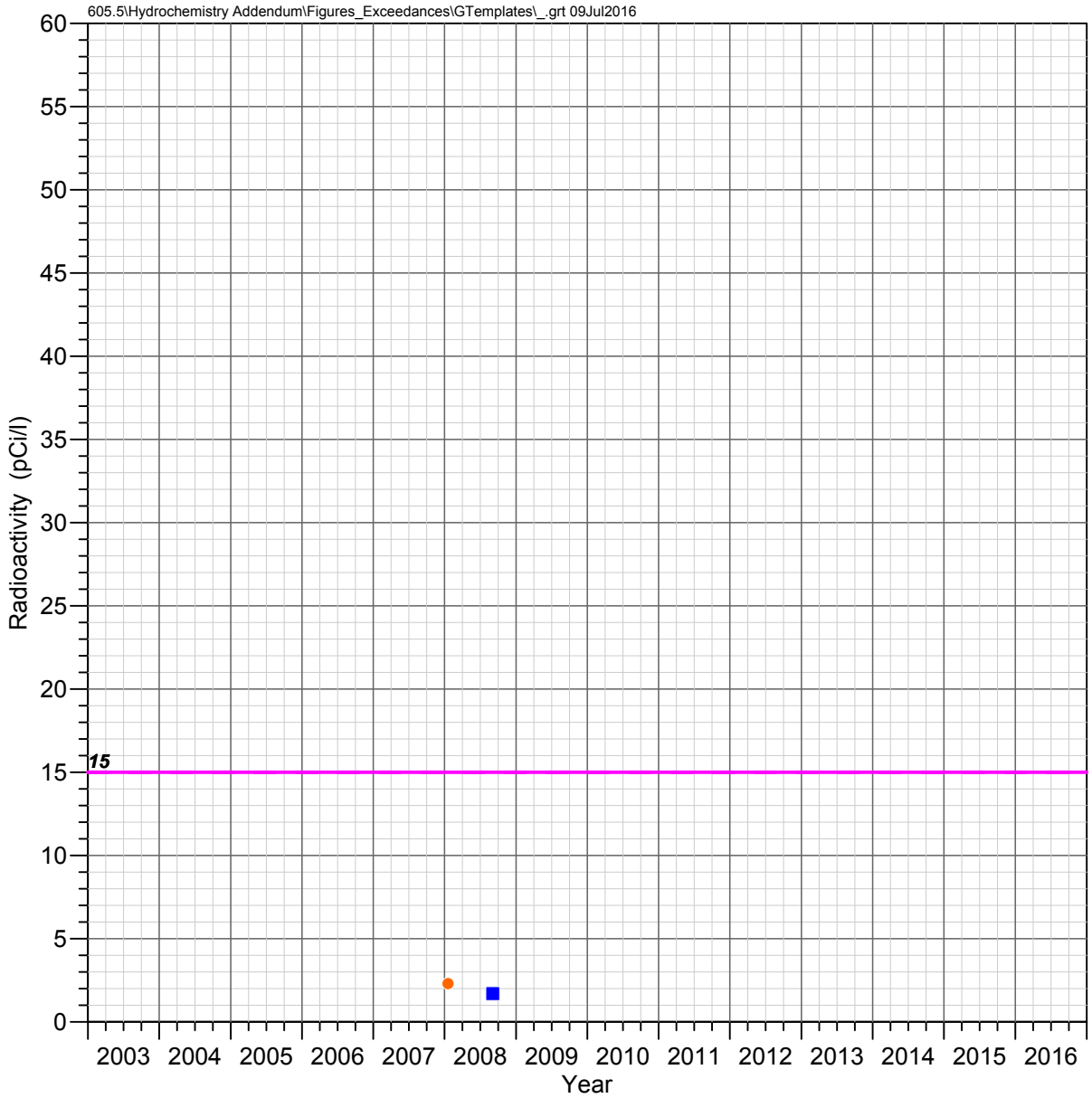


FIGURE E-295. GROSS ALPHA RADIOACTIVITY OBSERVED AT CT WELL, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-04
Apache Leap Tuff Aquifer

GROSS ALPHA

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 15 pCi/l)
- EPA Maximum Contaminant Levels (UNS, 15 pCi/l)

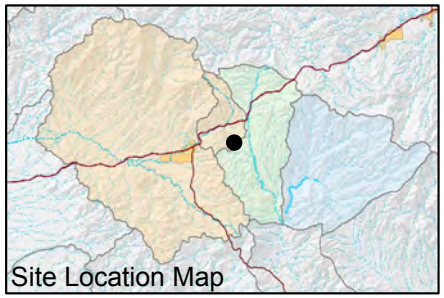
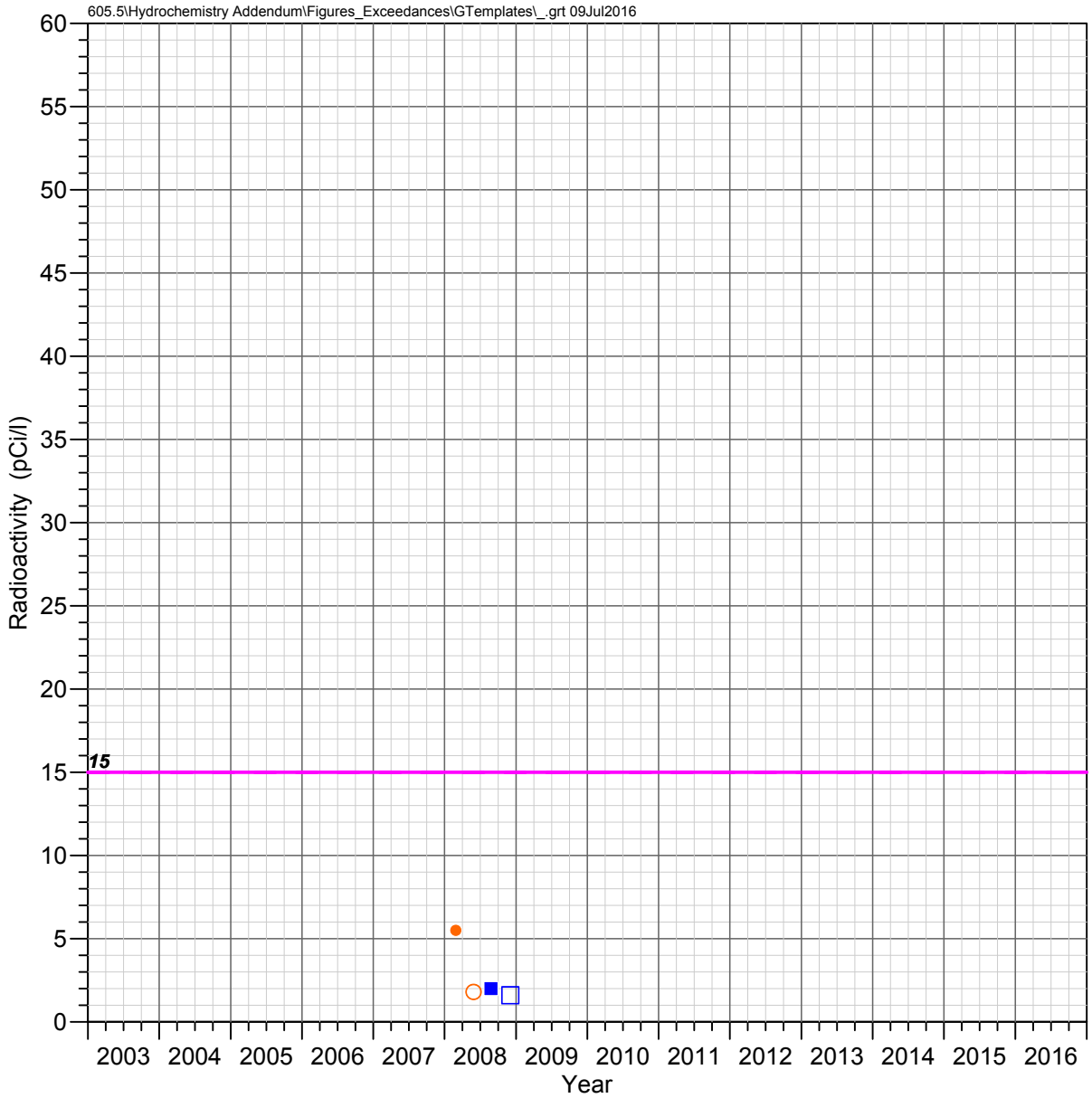


FIGURE E-296. GROSS ALPHA RADIOACTIVITY OBSERVED AT HRES-04, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-05
Apache Leap Tuff Aquifer

GROSS ALPHA

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 15 pCi/l)
- EPA Maximum Contaminant Levels (UNS, 15 pCi/l)

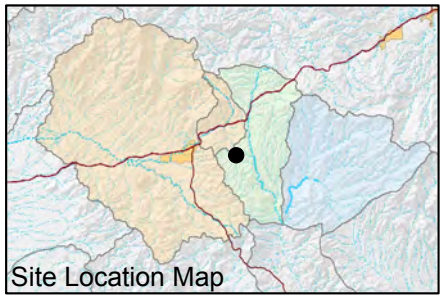
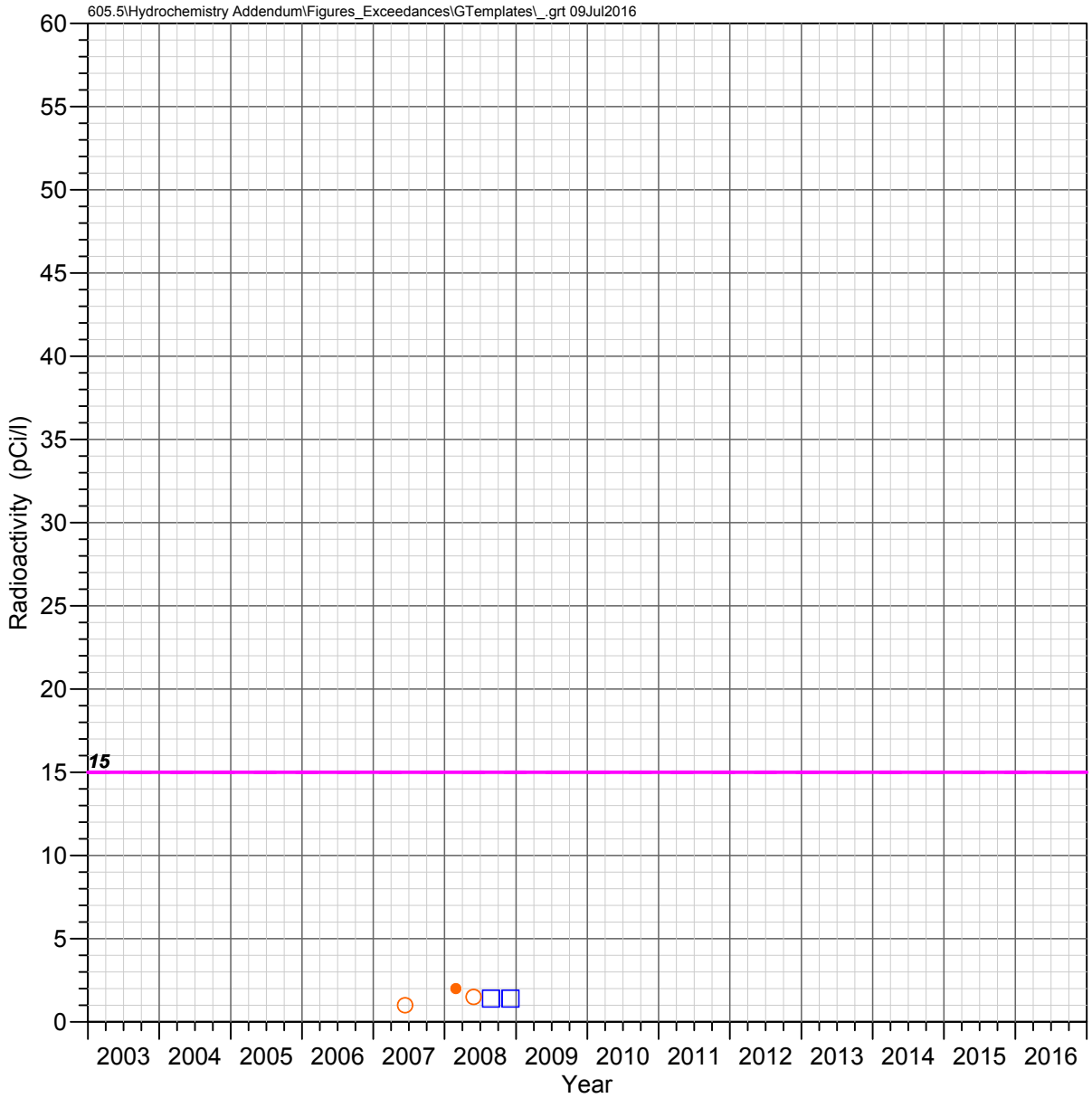


FIGURE E-297. GROSS ALPHA RADIOACTIVITY OBSERVED AT HRES-05, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-06
Apache Leap Tuff Aquifer

GROSS ALPHA

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 15 pCi/l)
- EPA Maximum Contaminant Levels (UNS, 15 pCi/l)

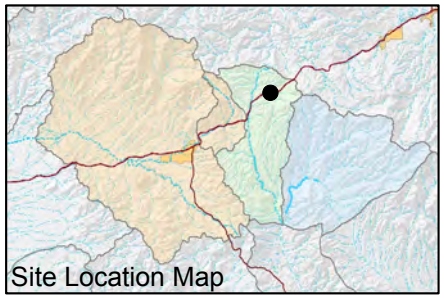
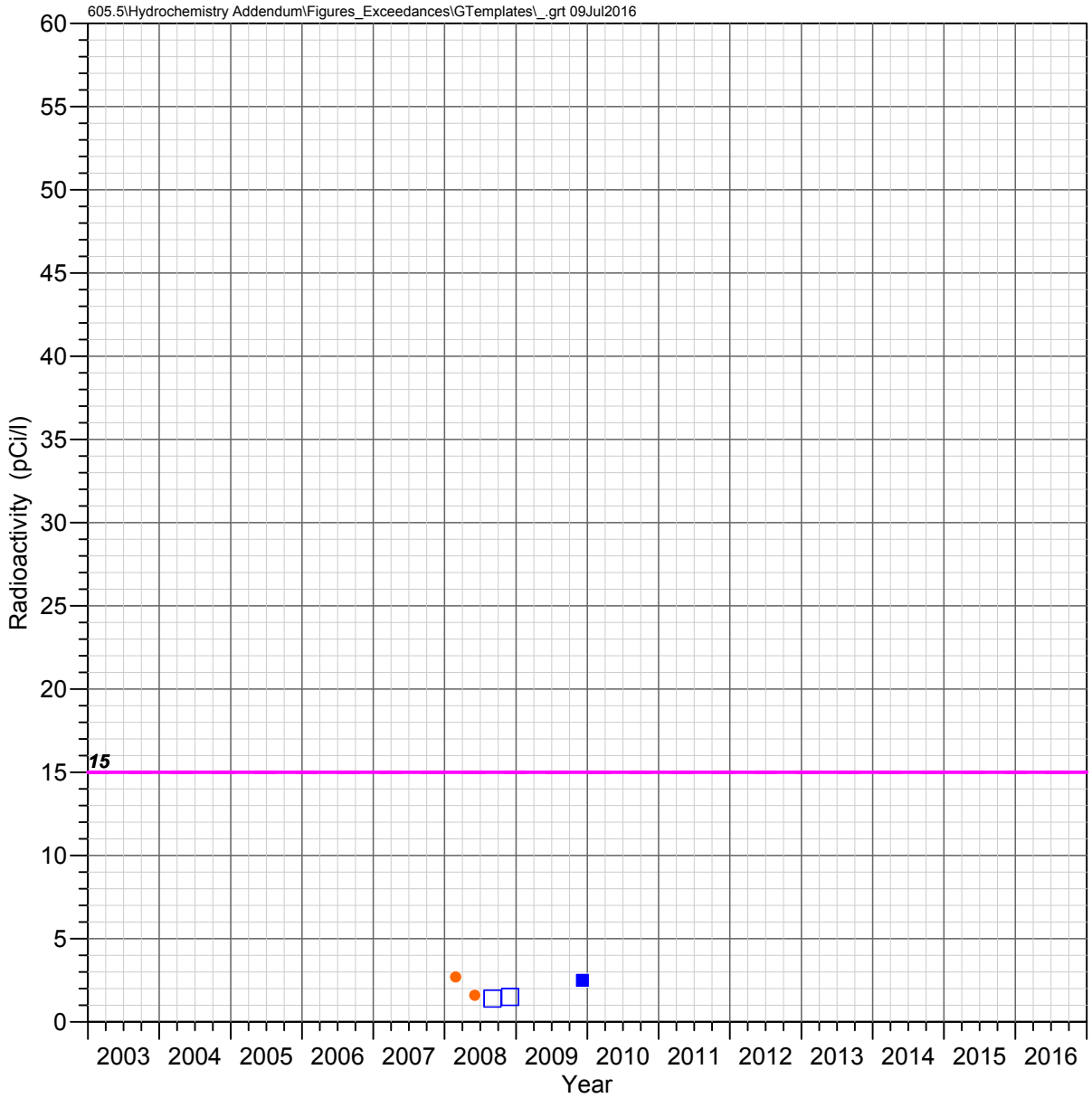


FIGURE E-298. GROSS ALPHA RADIOACTIVITY OBSERVED AT HRES-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-07
Apache Leap Tuff Aquifer

GROSS ALPHA

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 15 pCi/l)
- EPA Maximum Contaminant Levels (UNS, 15 pCi/l)

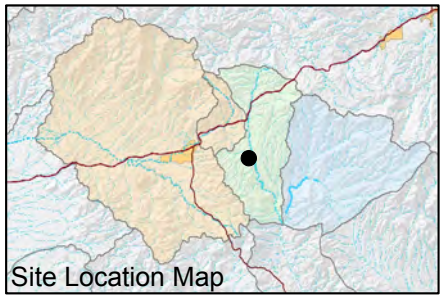


FIGURE E-299. GROSS ALPHA RADIOACTIVITY OBSERVED AT HRES-07, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES

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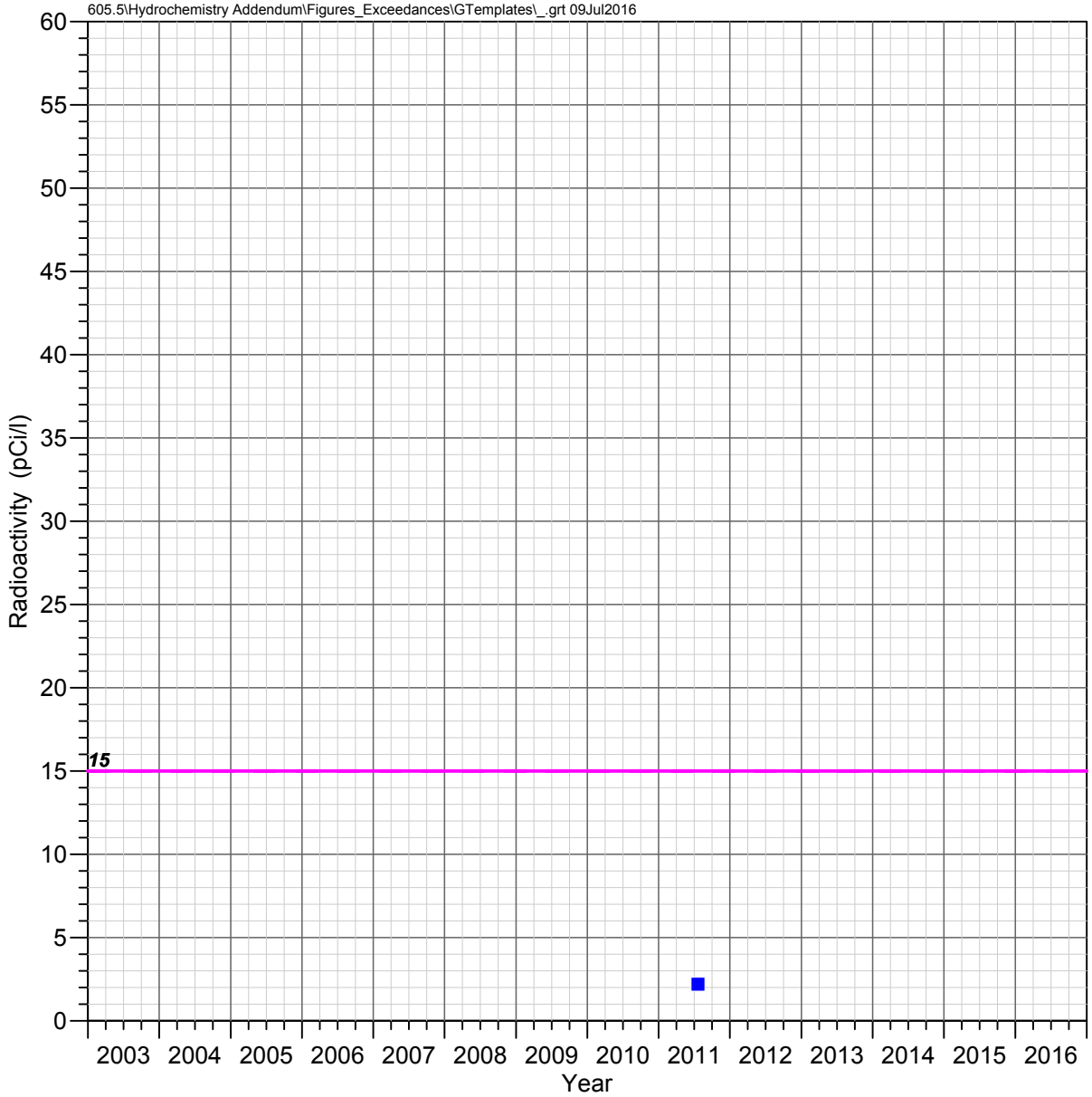


HRES-08
Apache Leap Tuff Aquifer

GROSS ALPHA

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 15 pCi/l)
- EPA Maximum Contaminant Levels (UNS, 15 pCi/l)

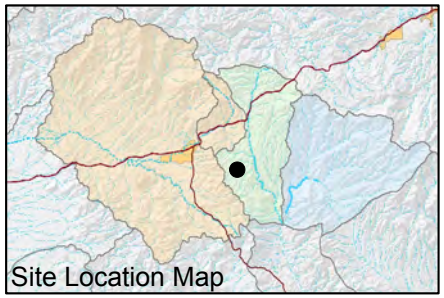
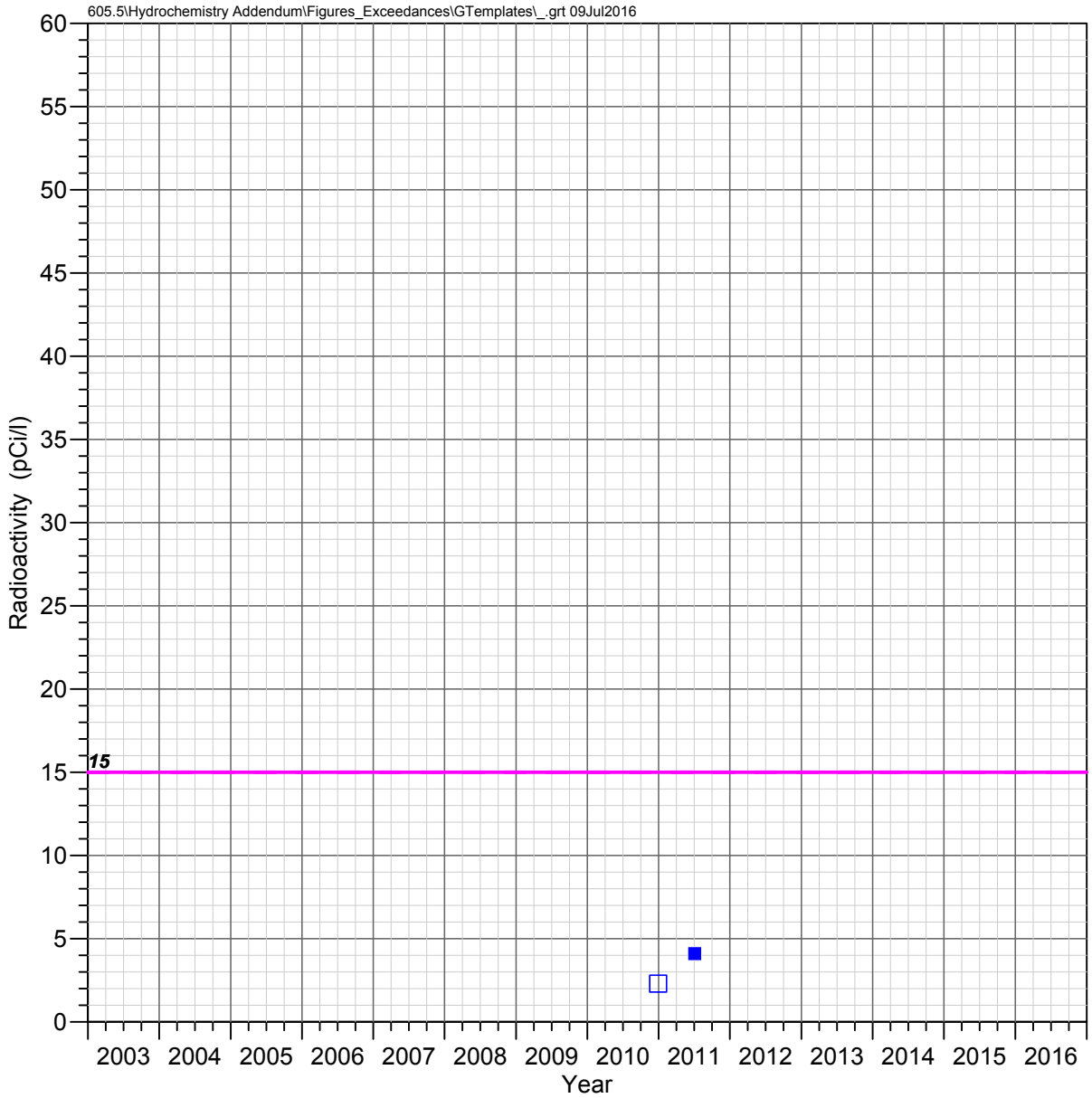


FIGURE E-300. GROSS ALPHA RADIOACTIVITY OBSERVED AT HRES-08, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-09
Apache Leap Tuff Aquifer

GROSS ALPHA

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 15 pCi/l)
- EPA Maximum Contaminant Levels (UNS, 15 pCi/l)

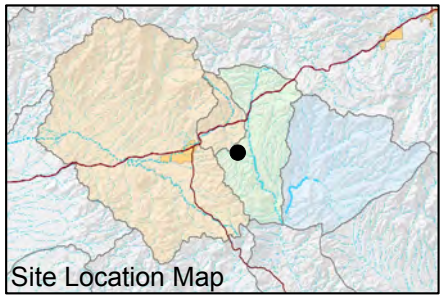
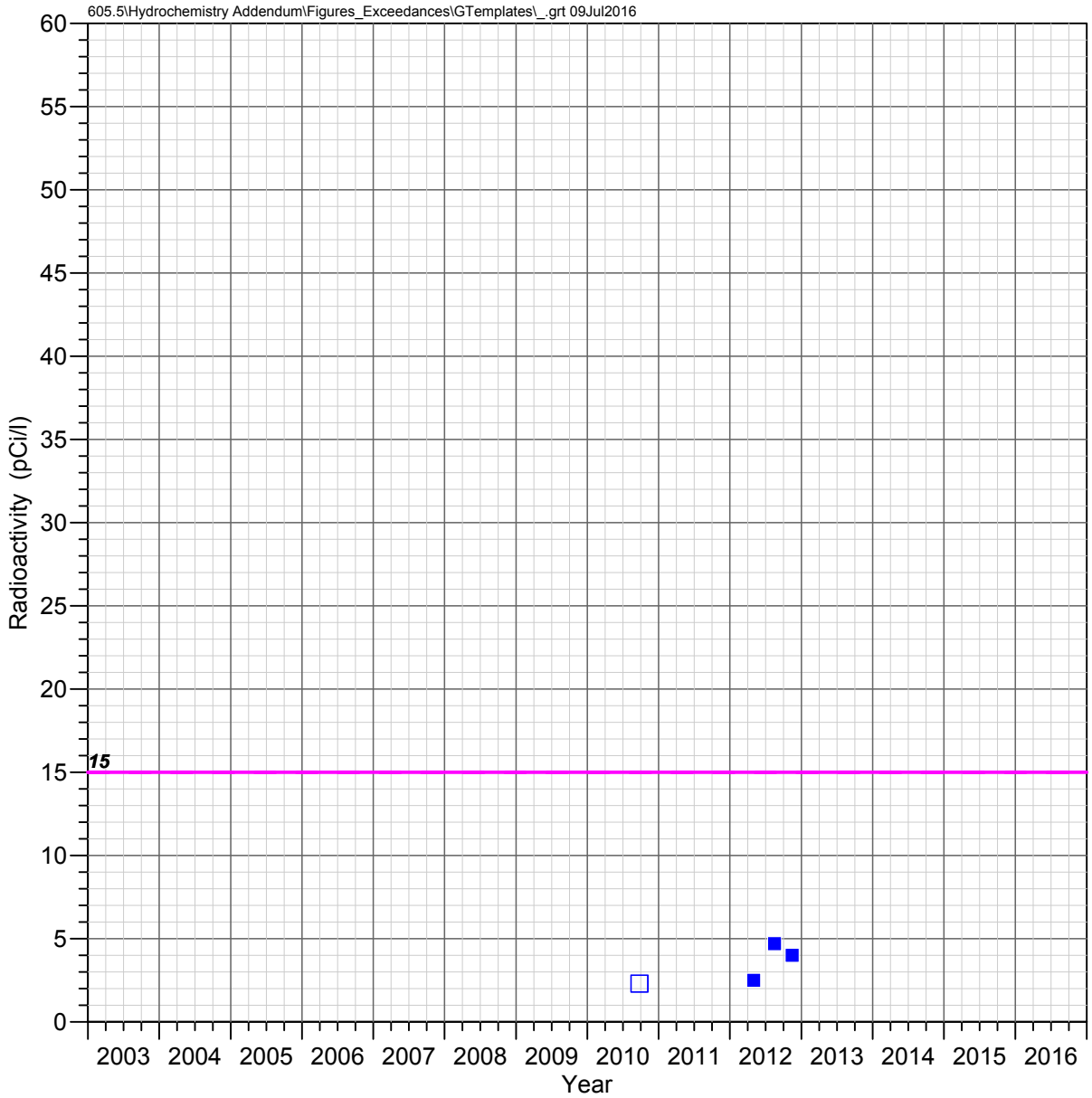


FIGURE E-301. GROSS ALPHA RADIOACTIVITY OBSERVED AT HRES-09, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-10
Apache Leap Tuff Aquifer

GROSS ALPHA

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 15 pCi/l)
- EPA Maximum Contaminant Levels (UNS, 15 pCi/l)

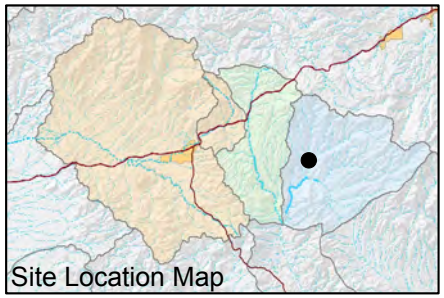


FIGURE E-302. GROSS ALPHA RADIOACTIVITY OBSERVED AT HRES-10, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES

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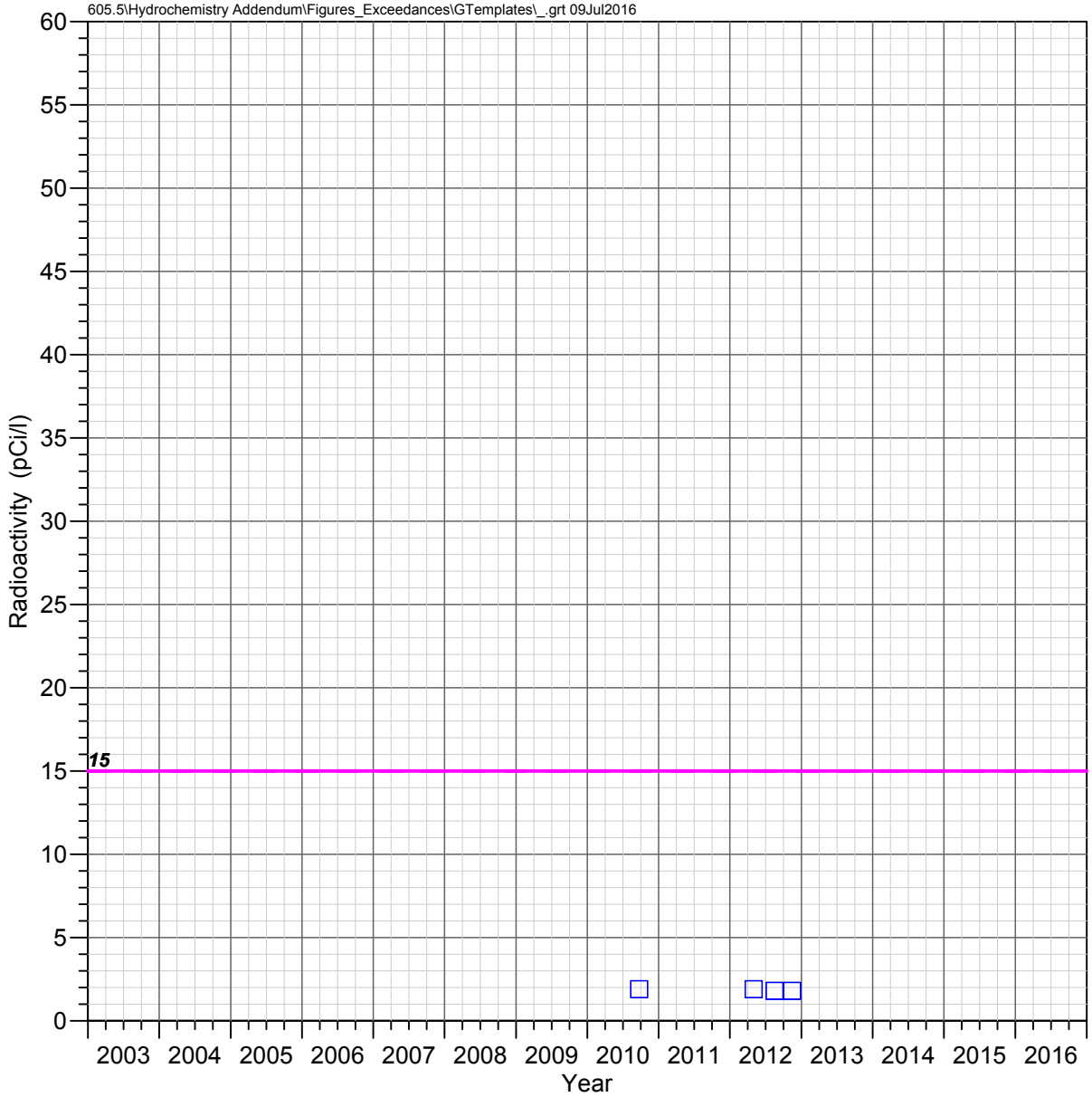


HRES-11
Apache Leap Tuff Aquifer

GROSS ALPHA

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 15 pCi/l)
- EPA Maximum Contaminant Levels (UNS, 15 pCi/l)

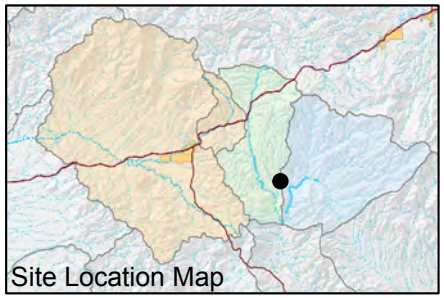
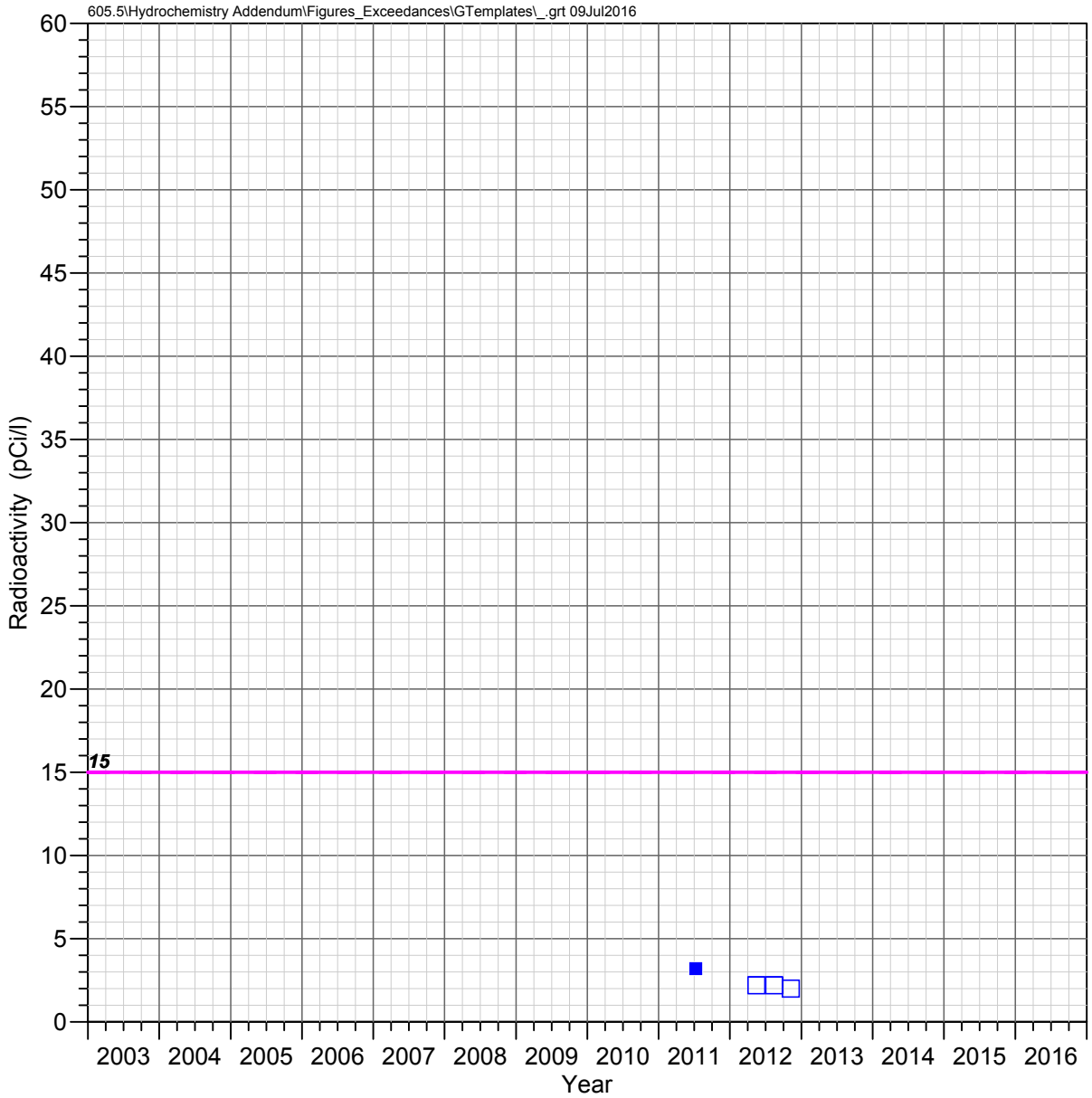


FIGURE E-303. GROSS ALPHA RADIOACTIVITY OBSERVED AT HRES-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-12
Apache Leap Tuff Aquifer

GROSS ALPHA

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 15 pCi/l)
- EPA Maximum Contaminant Levels (UNS, 15 pCi/l)

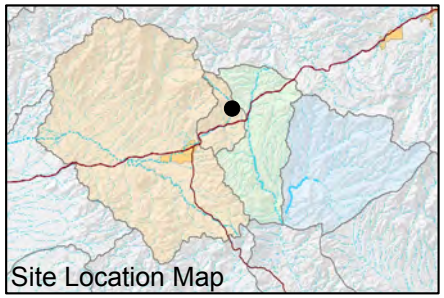
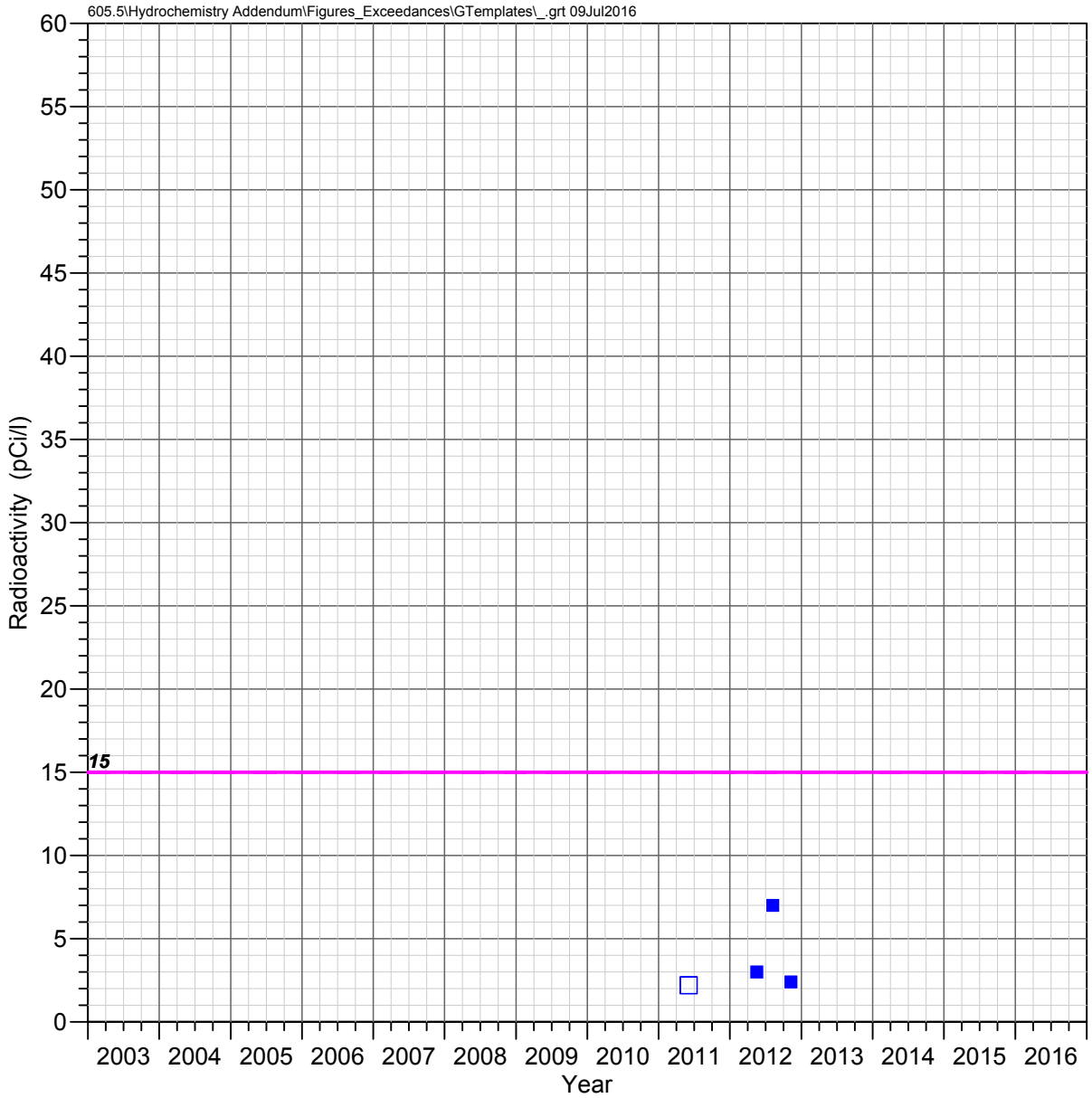


FIGURE E-304. GROSS ALPHA RADIOACTIVITY OBSERVED AT HRES-12, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-13
Apache Leap Tuff Aquifer

GROSS ALPHA

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 15 pCi/l)
- EPA Maximum Contaminant Levels (UNS, 15 pCi/l)

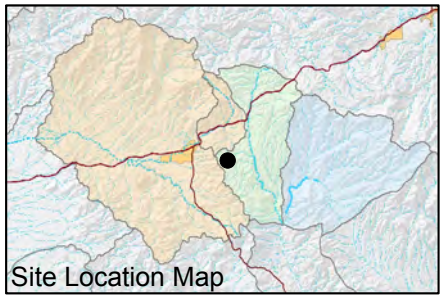
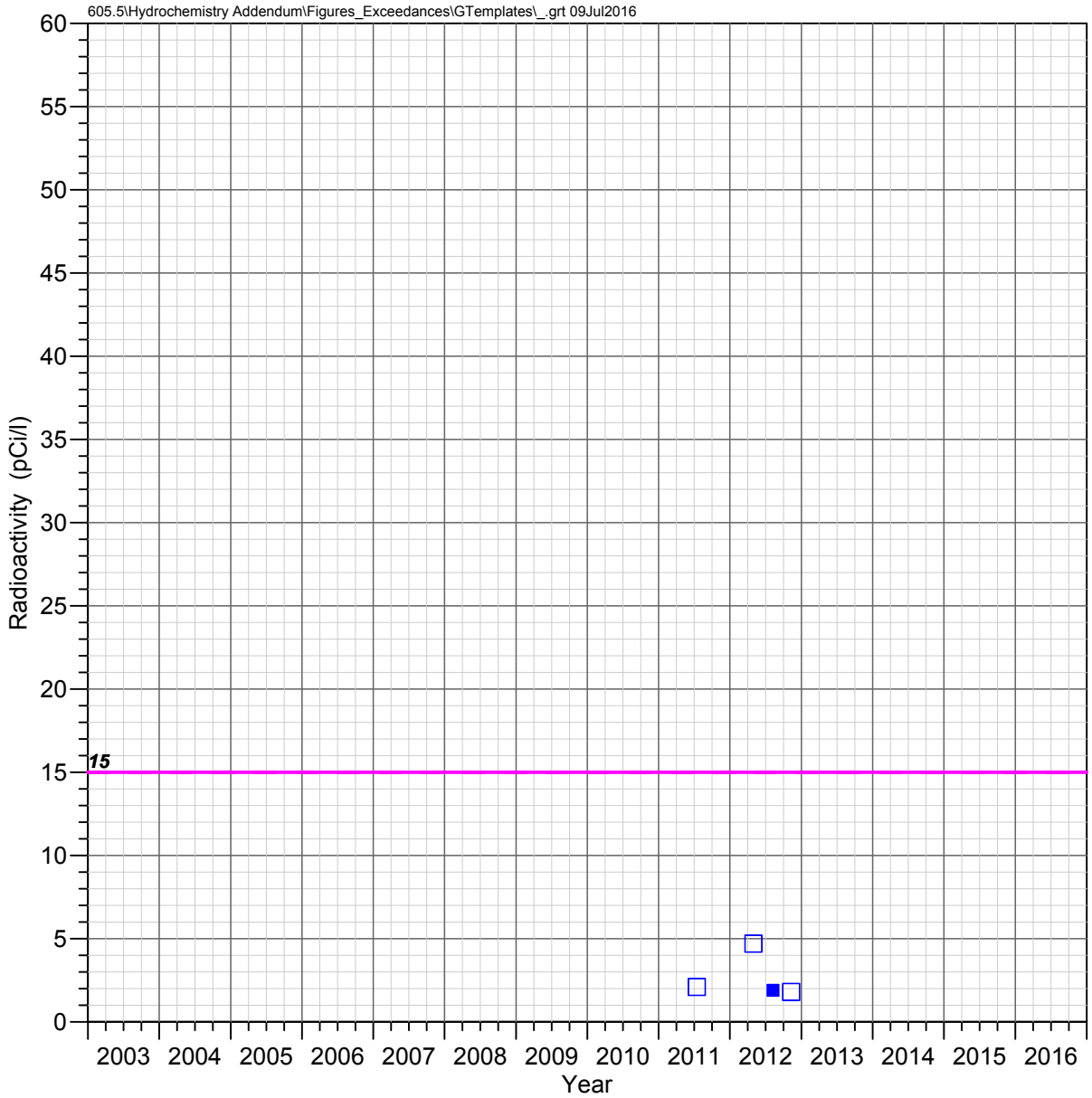


FIGURE E-305. GROSS ALPHA RADIOACTIVITY OBSERVED AT HRES-13, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-14
Apache Leap Tuff Aquifer

GROSS ALPHA

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 15 pCi/l)
- EPA Maximum Contaminant Levels (UNS, 15 pCi/l)

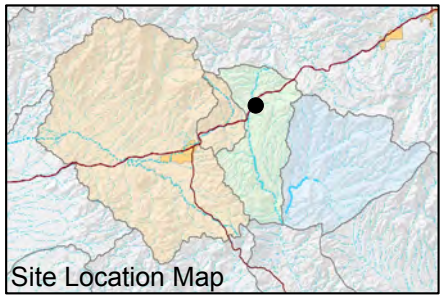
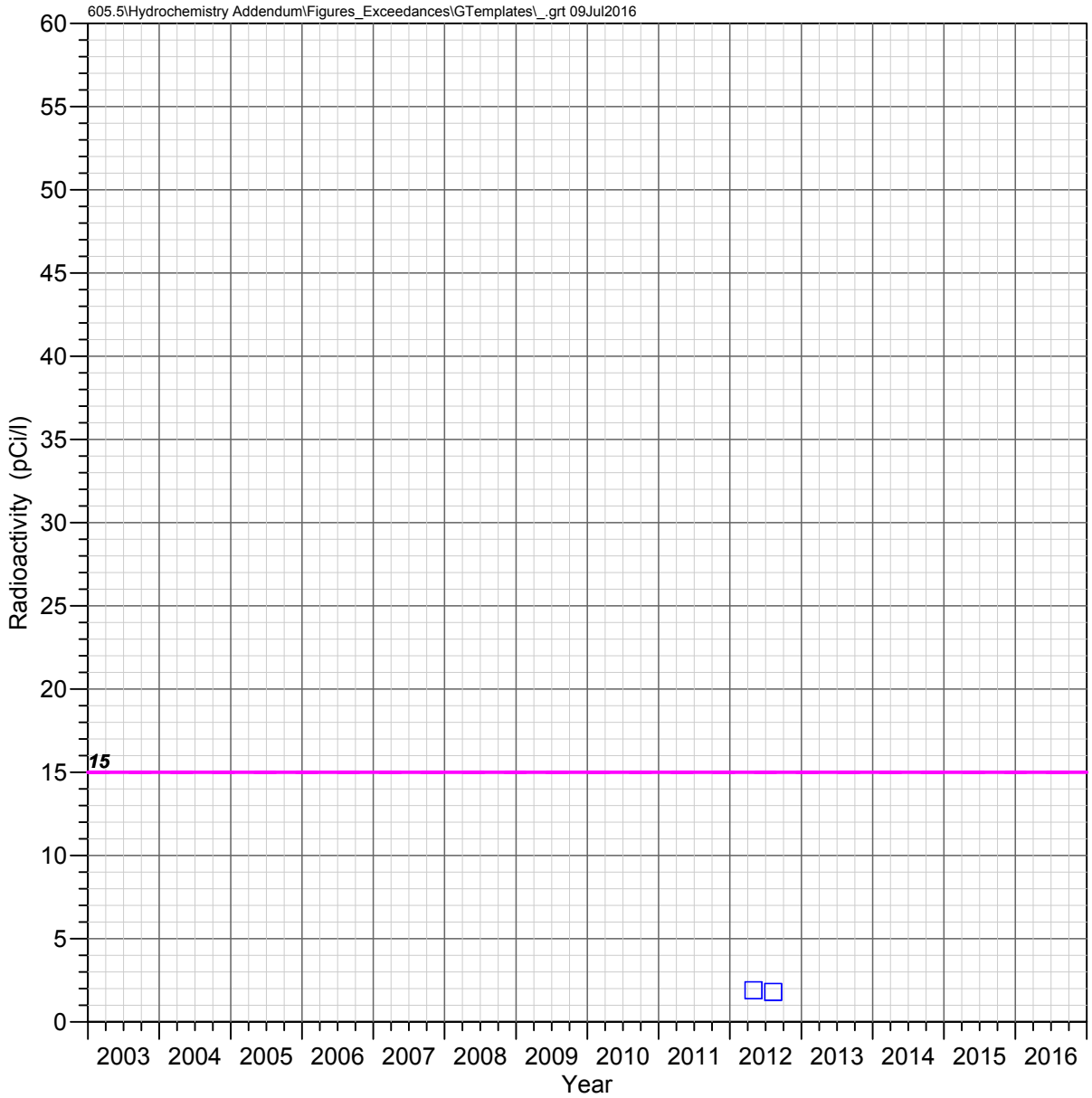


FIGURE E-306. GROSS ALPHA RADIOACTIVITY OBSERVED AT HRES-14, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-15
Apache Leap Tuff Aquifer

GROSS ALPHA

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 15 pCi/l)
- EPA Maximum Contaminant Levels (UNS, 15 pCi/l)

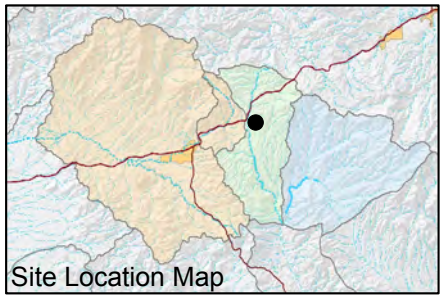
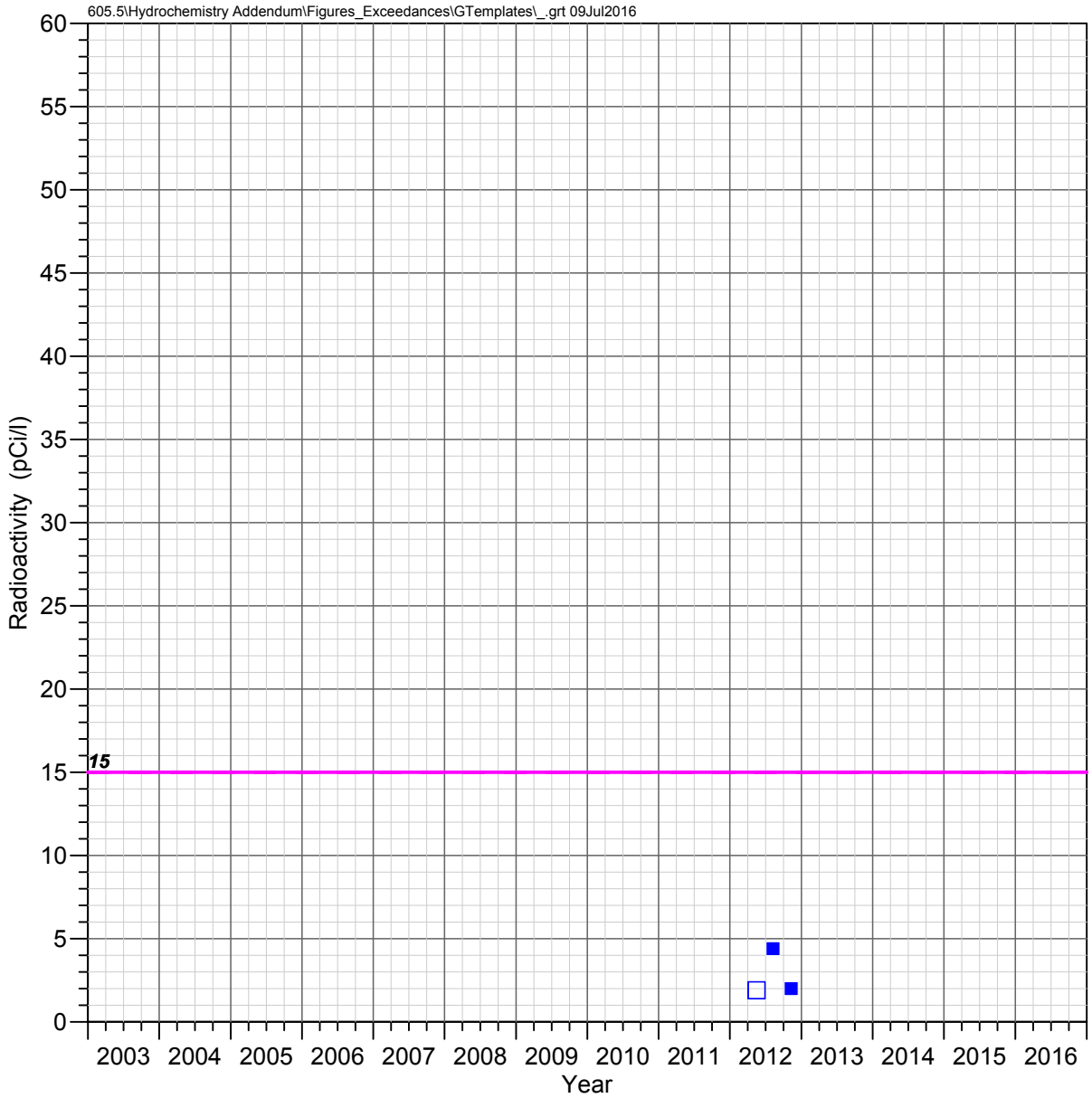


FIGURE E-307. GROSS ALPHA RADIOACTIVITY OBSERVED AT HRES-15, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-17
Apache Leap Tuff Aquifer

GROSS ALPHA

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 15 pCi/l)
- EPA Maximum Contaminant Levels (UNS, 15 pCi/l)

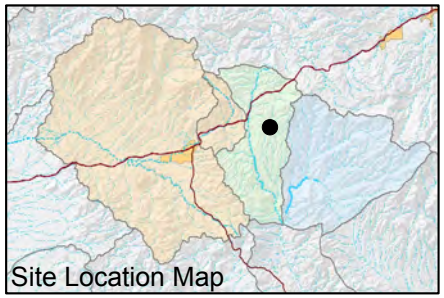
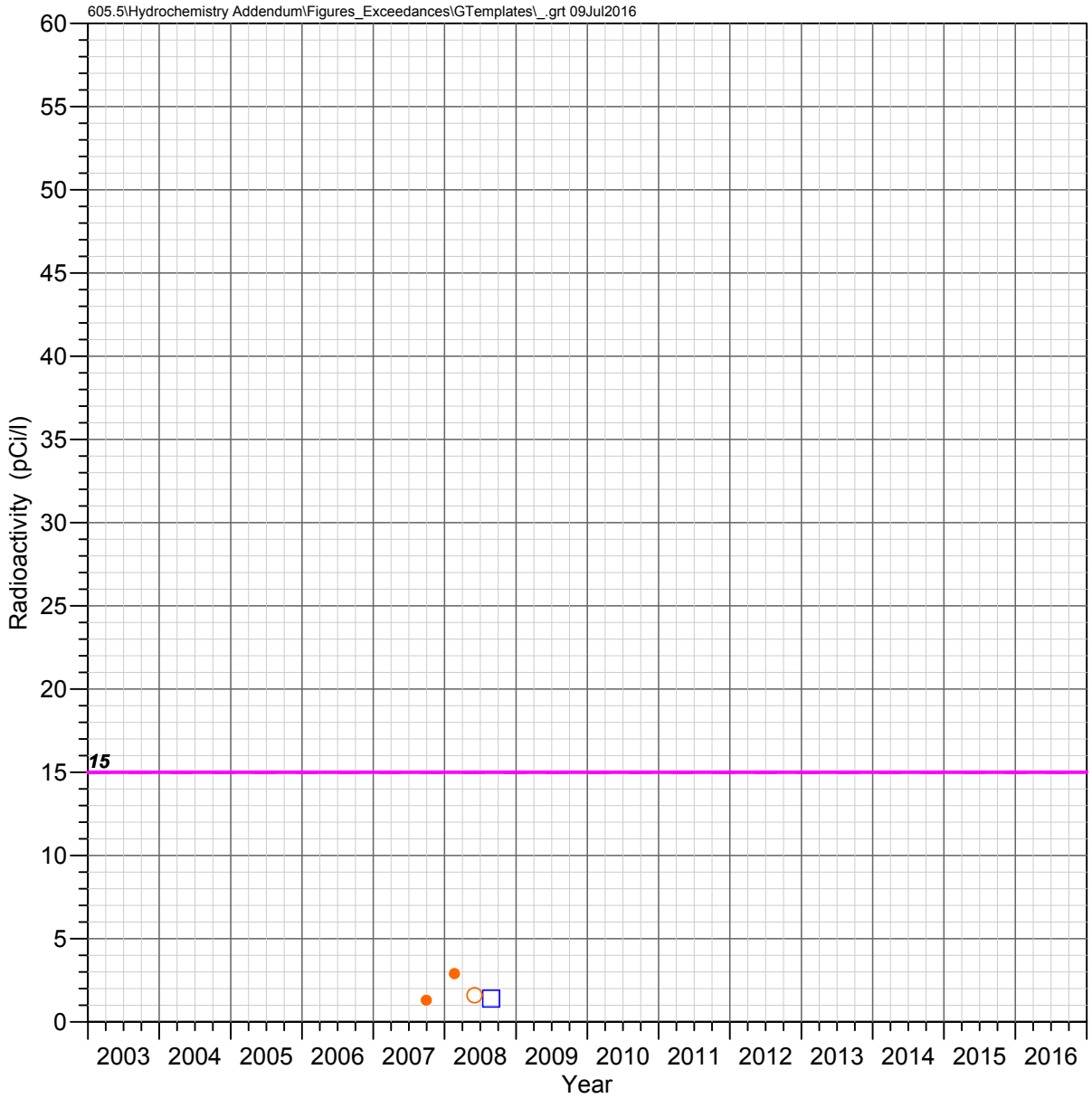


FIGURE E-308. GROSS ALPHA RADIOACTIVITY OBSERVED AT HRES-17, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MJ-11
Apache Leap Tuff Aquifer

GROSS ALPHA

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 15 pCi/l)
- EPA Maximum Contaminant Levels (UNS, 15 pCi/l)

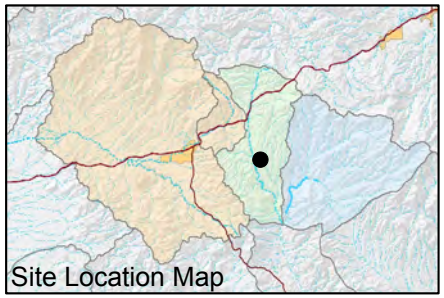
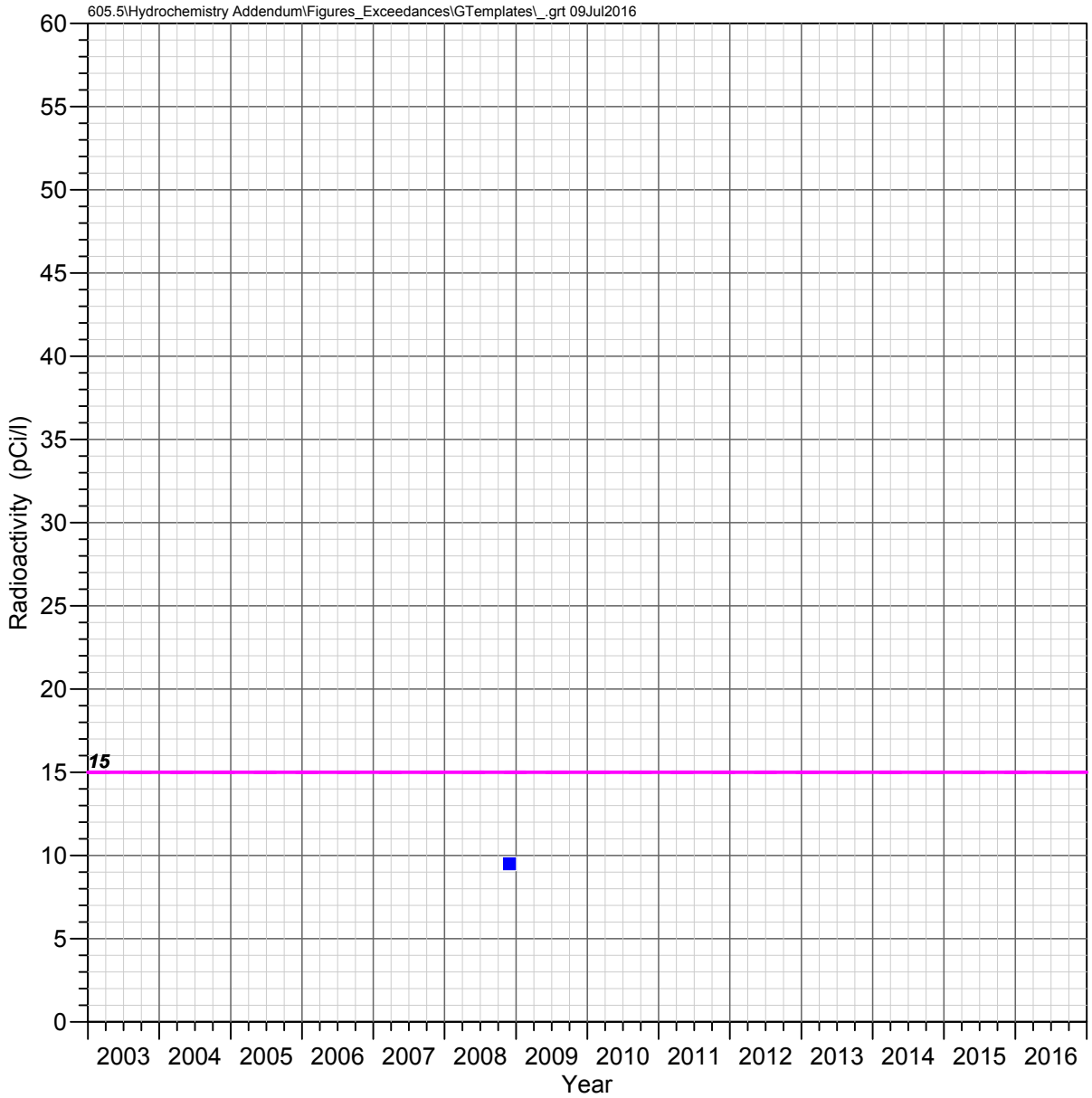


FIGURE E-309. GROSS ALPHA RADIOACTIVITY OBSERVED AT MJ-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-01
Deep Groundwater System

GROSS ALPHA

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 15 pCi/l)
- EPA Maximum Contaminant Levels (UNS, 15 pCi/l)

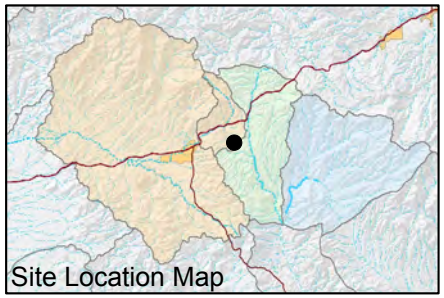
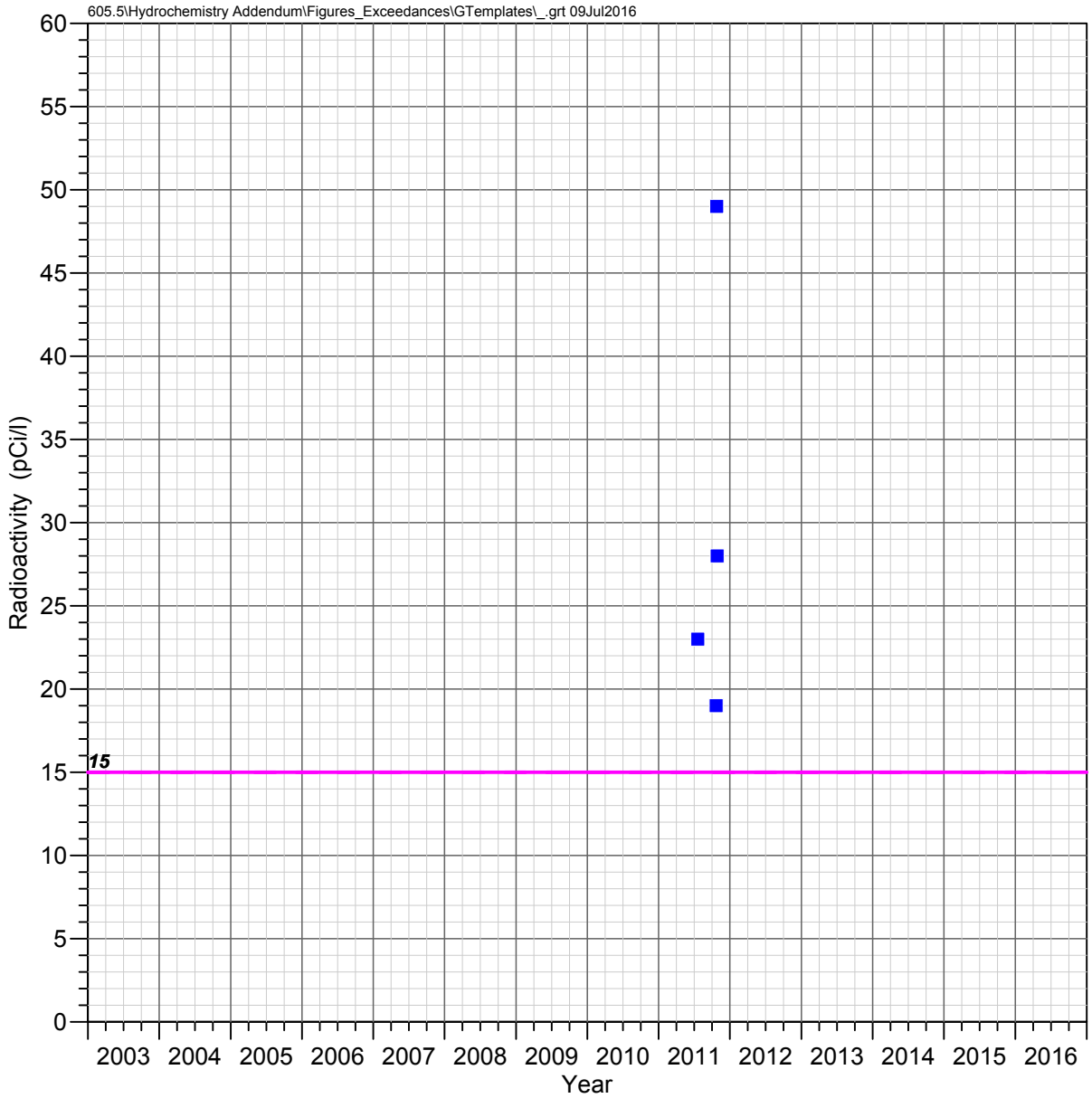


FIGURE E-310. GROSS ALPHA RADIOACTIVITY OBSERVED AT DHRES-01, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-02
Deep Groundwater System

GROSS ALPHA

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 15 pCi/l)
- EPA Maximum Contaminant Levels (UNS, 15 pCi/l)

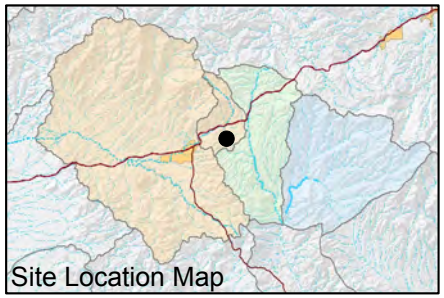
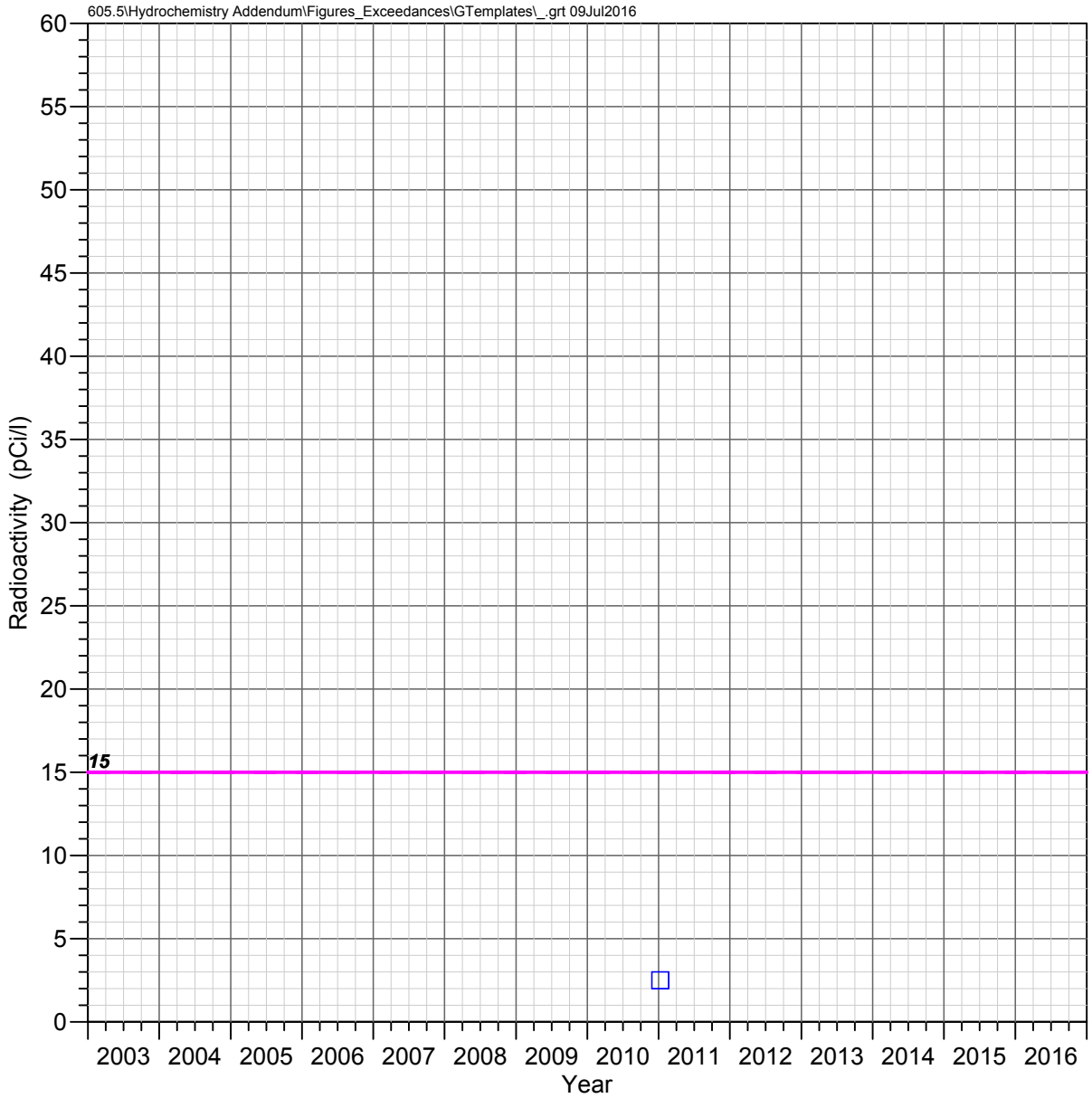


FIGURE E-311. GROSS ALPHA RADIOACTIVITY OBSERVED AT DHRES-02, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-06
Deep Groundwater System

GROSS ALPHA

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 15 pCi/l)
- EPA Maximum Contaminant Levels (UNS, 15 pCi/l)

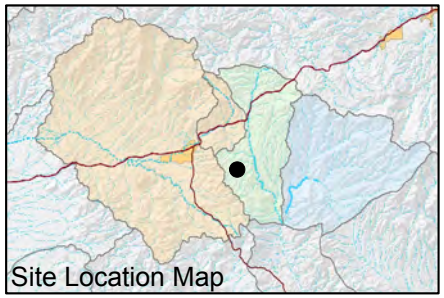
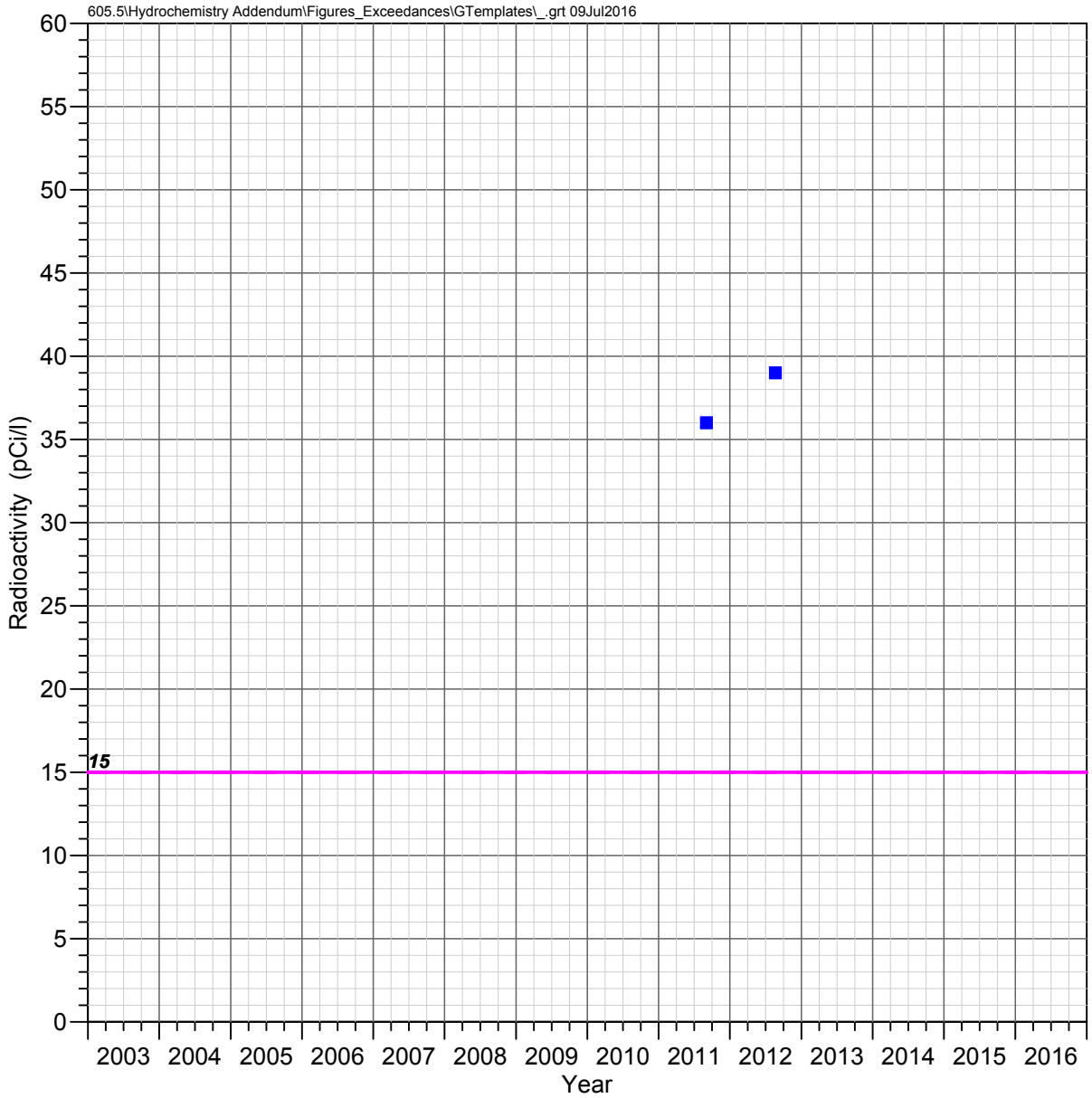


FIGURE E-312. GROSS ALPHA RADIOACTIVITY OBSERVED AT DHRES-06, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-09
Deep Groundwater System

GROSS ALPHA

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 15 pCi/l)
- EPA Maximum Contaminant Levels (UNS, 15 pCi/l)

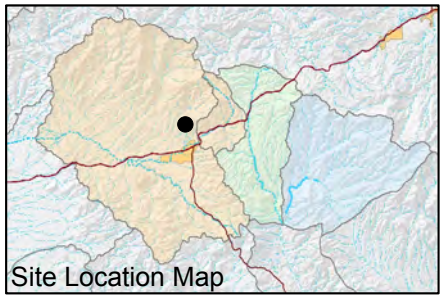
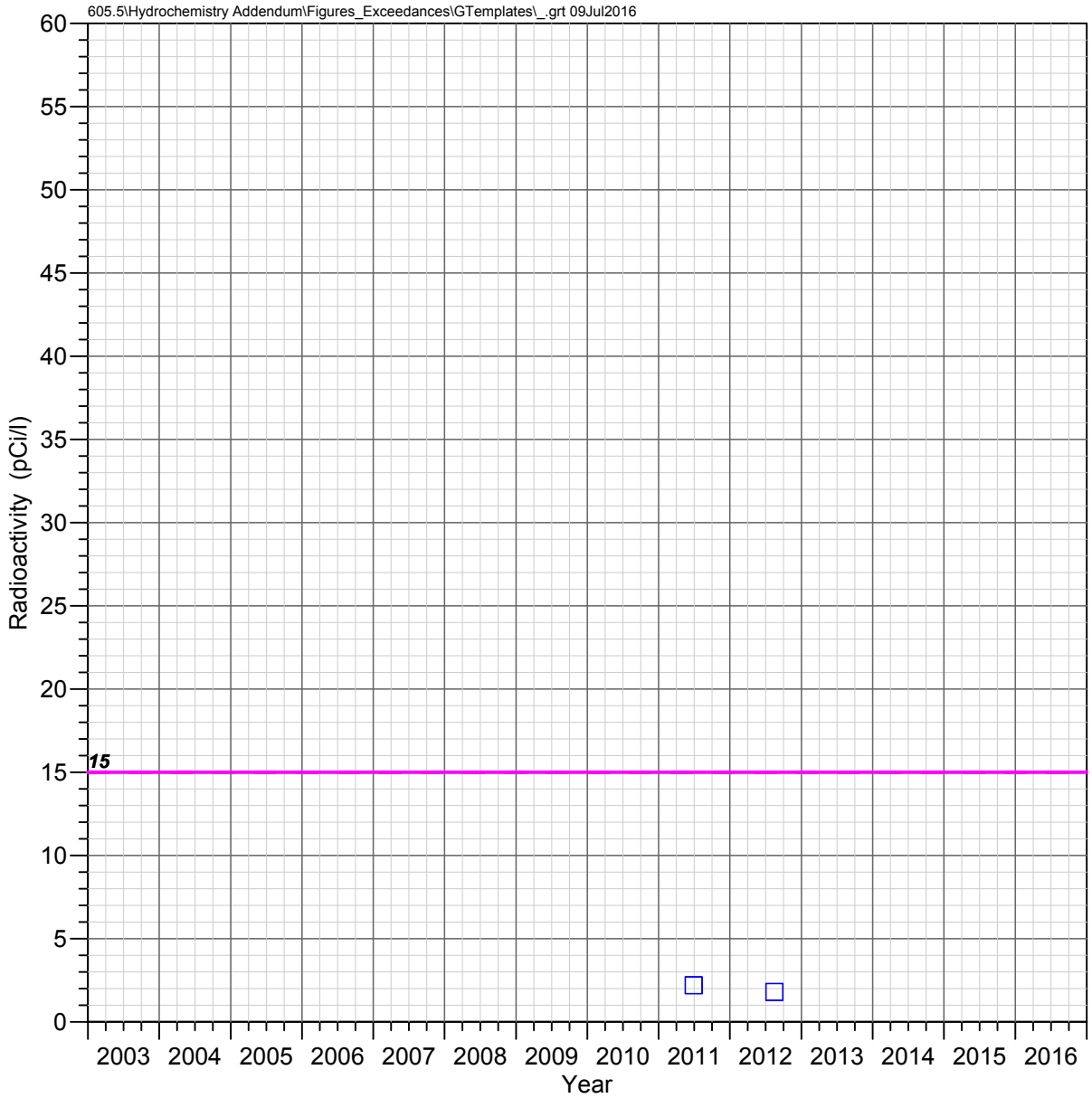


FIGURE E-313. GROSS ALPHA RADIOACTIVITY OBSERVED AT DHRES-09, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-11
Deep Groundwater System

GROSS ALPHA

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 15 pCi/l)
- EPA Maximum Contaminant Levels (UNS, 15 pCi/l)

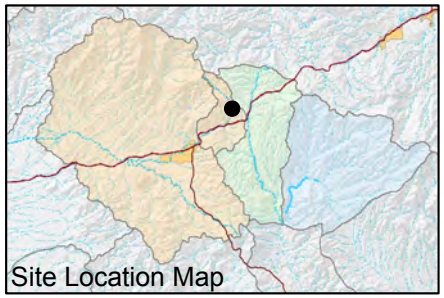
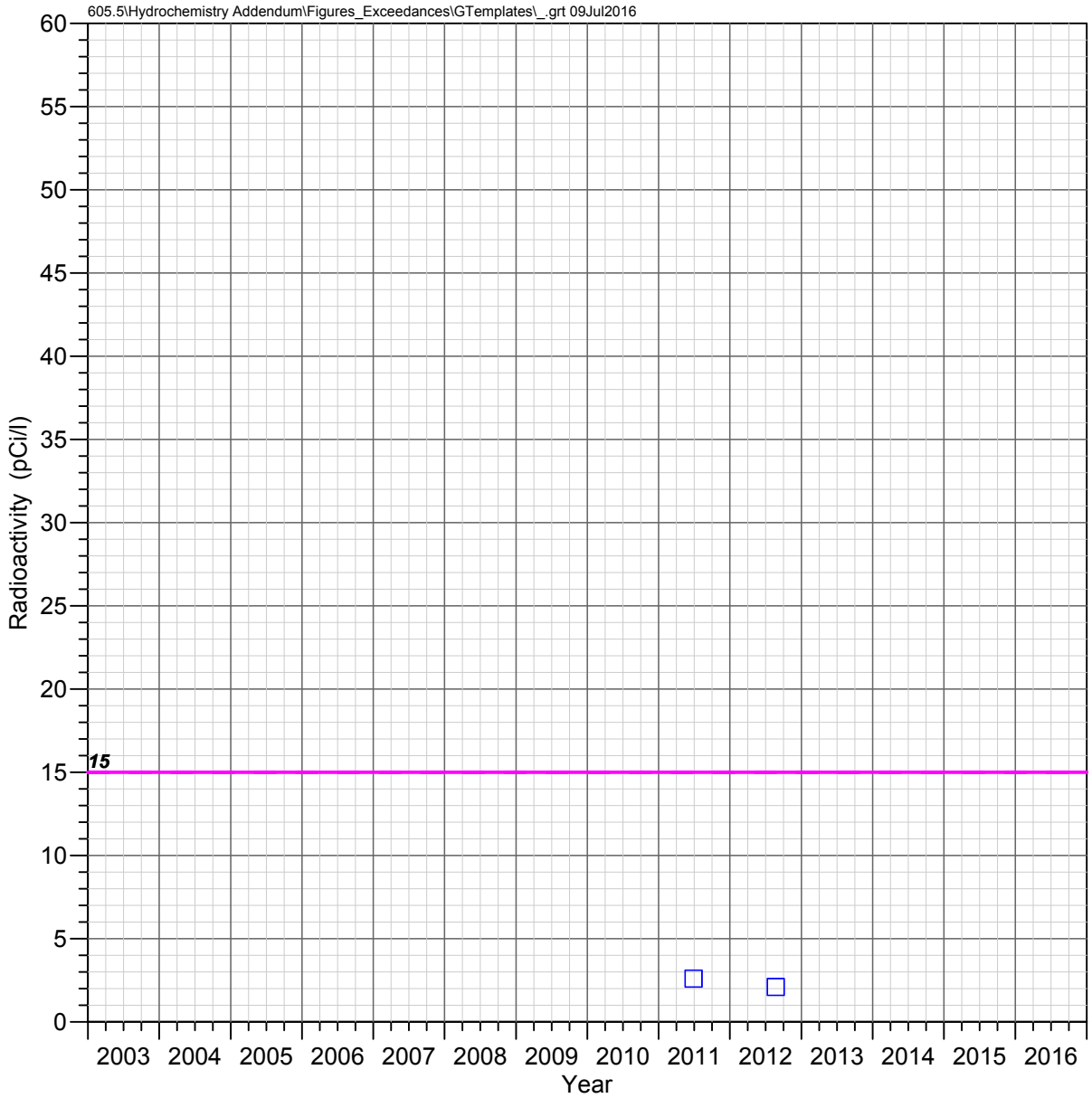


FIGURE E-314. GROSS ALPHA RADIOACTIVITY OBSERVED AT DHRES-11, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-13
Deep Groundwater System

GROSS ALPHA

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 15 pCi/l)
- EPA Maximum Contaminant Levels (UNS, 15 pCi/l)

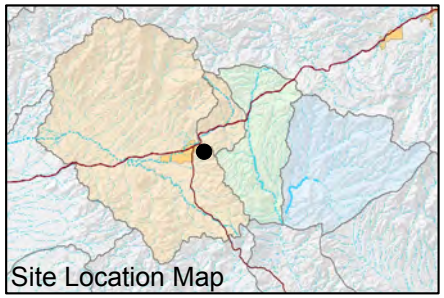
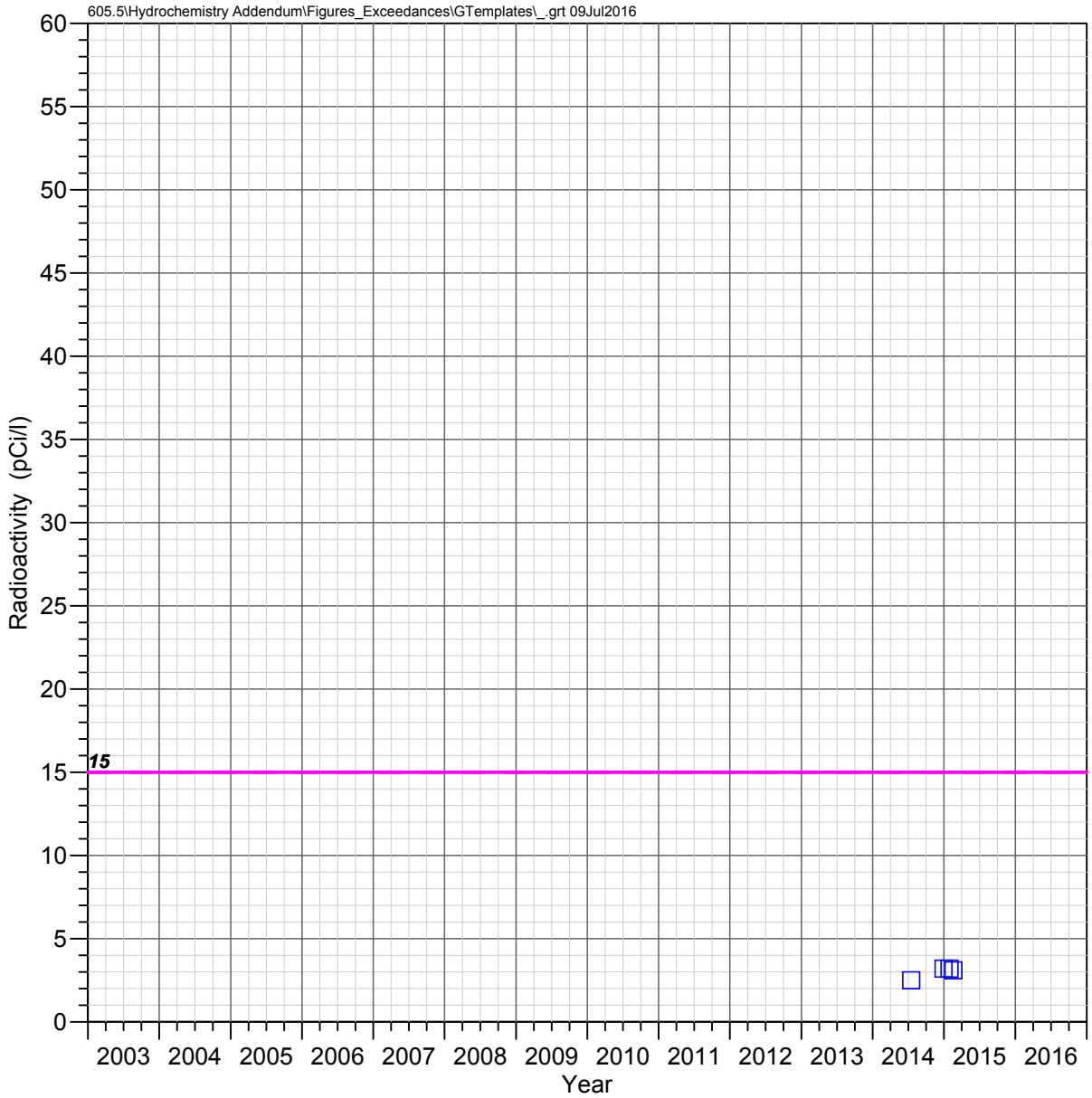


FIGURE E-315. GROSS ALPHA RADIOACTIVITY OBSERVED AT DHRES-13, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-15
Deep Groundwater System

GROSS ALPHA

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 15 pCi/l)
- EPA Maximum Contaminant Levels (UNS, 15 pCi/l)

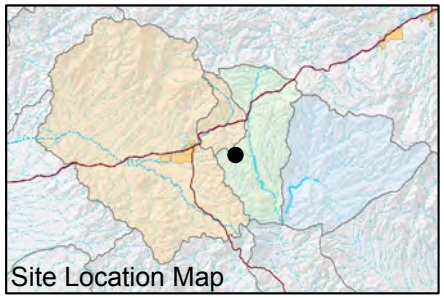
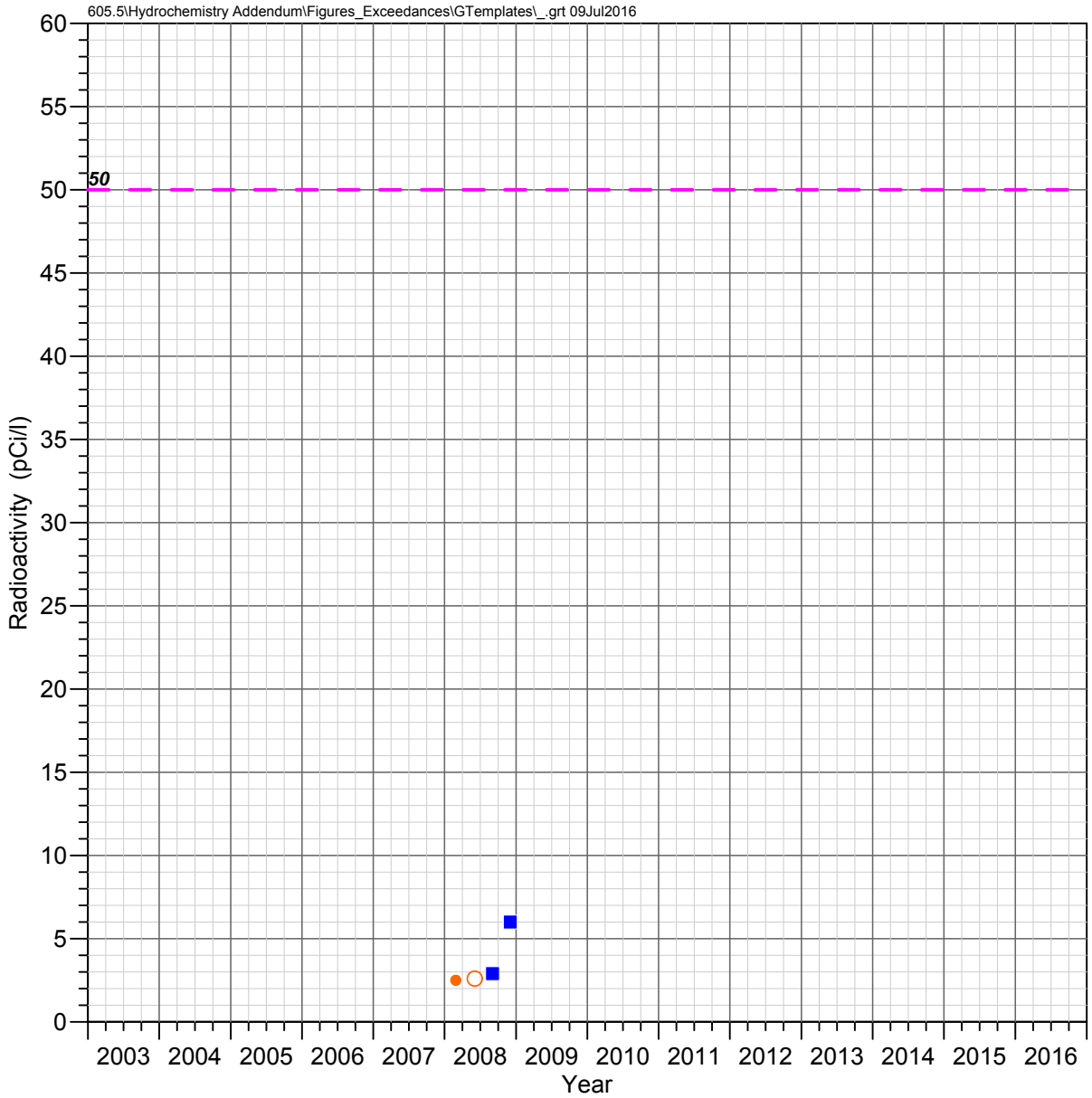


FIGURE E-316. GROSS ALPHA RADIOACTIVITY OBSERVED AT DHRES-15, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Hackberry Windmill Well
Shallow Groundwater System

GROSS BETA

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — EPA Maximum Contaminant Levels (UNS, 50 pCi/l)

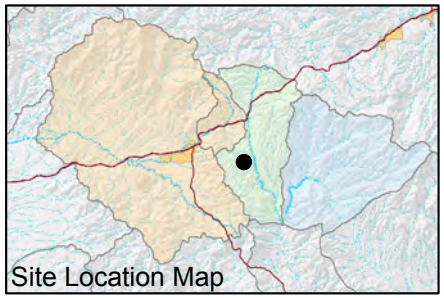
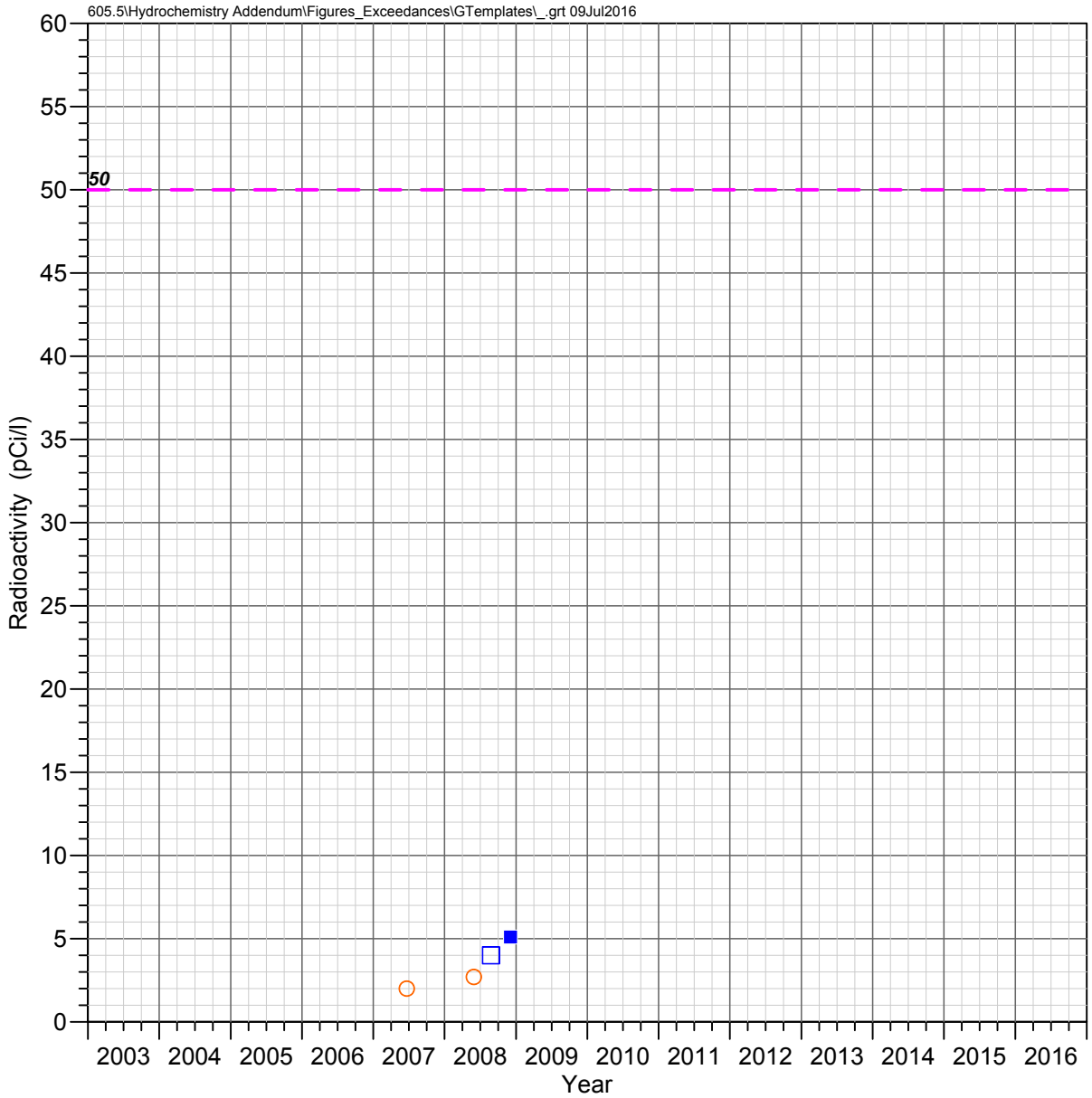


FIGURE E-317. GROSS BETA RADIOACTIVITY OBSERVED AT HACKBERRY WINDMILL WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



JI Ranch Corral Well
Shallow Groundwater System

GROSS BETA

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — EPA Maximum Contaminant Levels (UNS, 50 pCi/l)

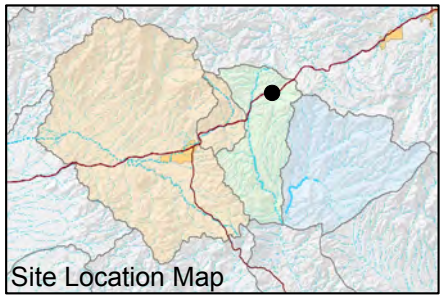
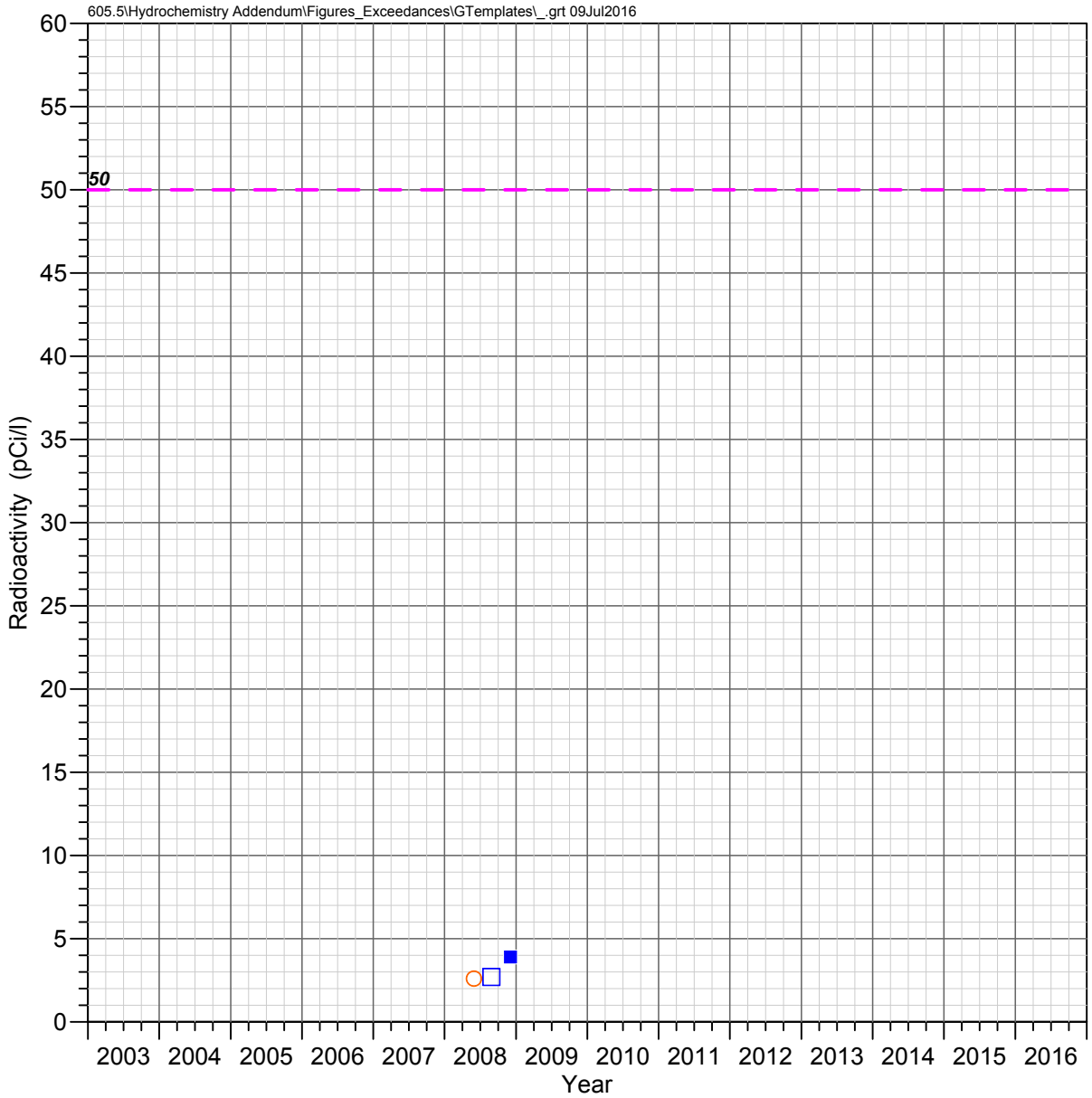


FIGURE E-318. GROSS BETA RADIOACTIVITY OBSERVED AT JI RANCH CORRAL WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



JI Ranch Middle Well
Shallow Groundwater System

GROSS BETA

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — EPA Maximum Contaminant Levels (UNS, 50 pCi/l)

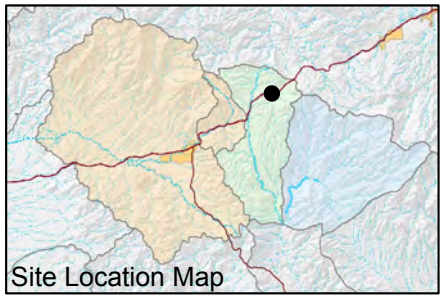
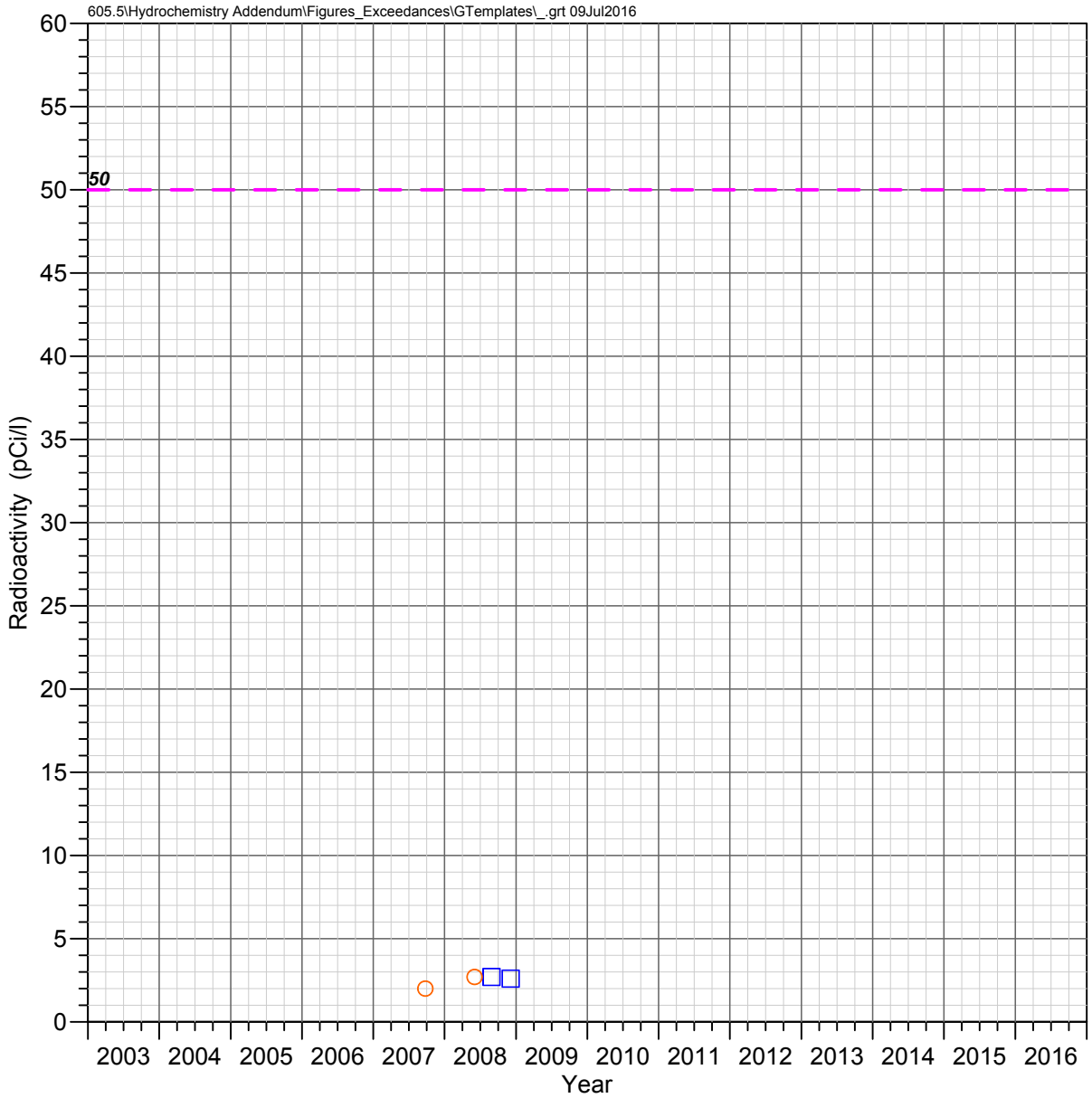


FIGURE E-319. GROSS BETA RADIOACTIVITY OBSERVED AT JI RANCH MIDDLE WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



A-06
Apache Leap Tuff Aquifer

GROSS BETA

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — EPA Maximum Contaminant Levels (UNS, 50 pCi/l)

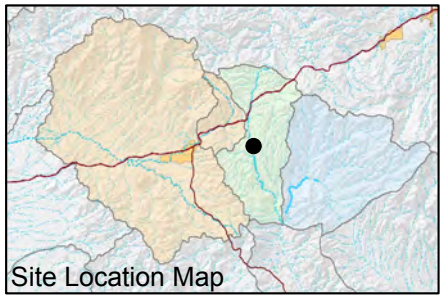
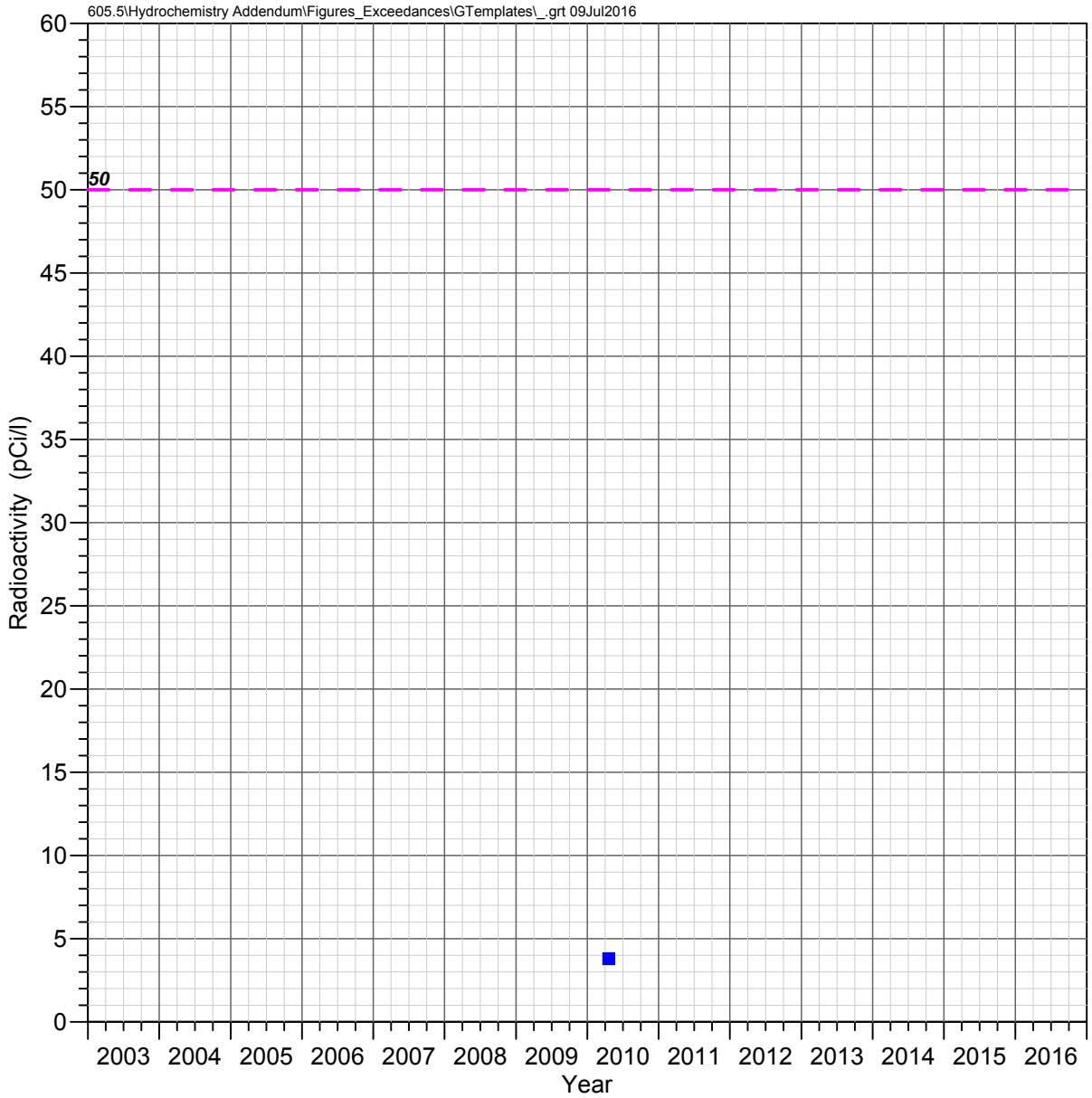


FIGURE E-320. GROSS BETA RADIOACTIVITY OBSERVED AT A-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



CT Well
Apache Leap Tuff Aquifer

GROSS BETA

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — EPA Maximum Contaminant Levels (UNS, 50 pCi/l)

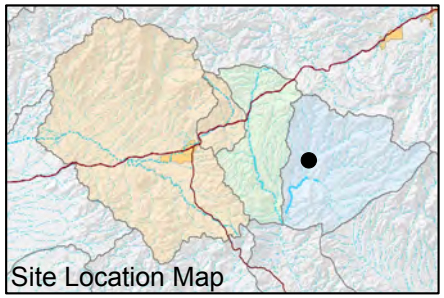
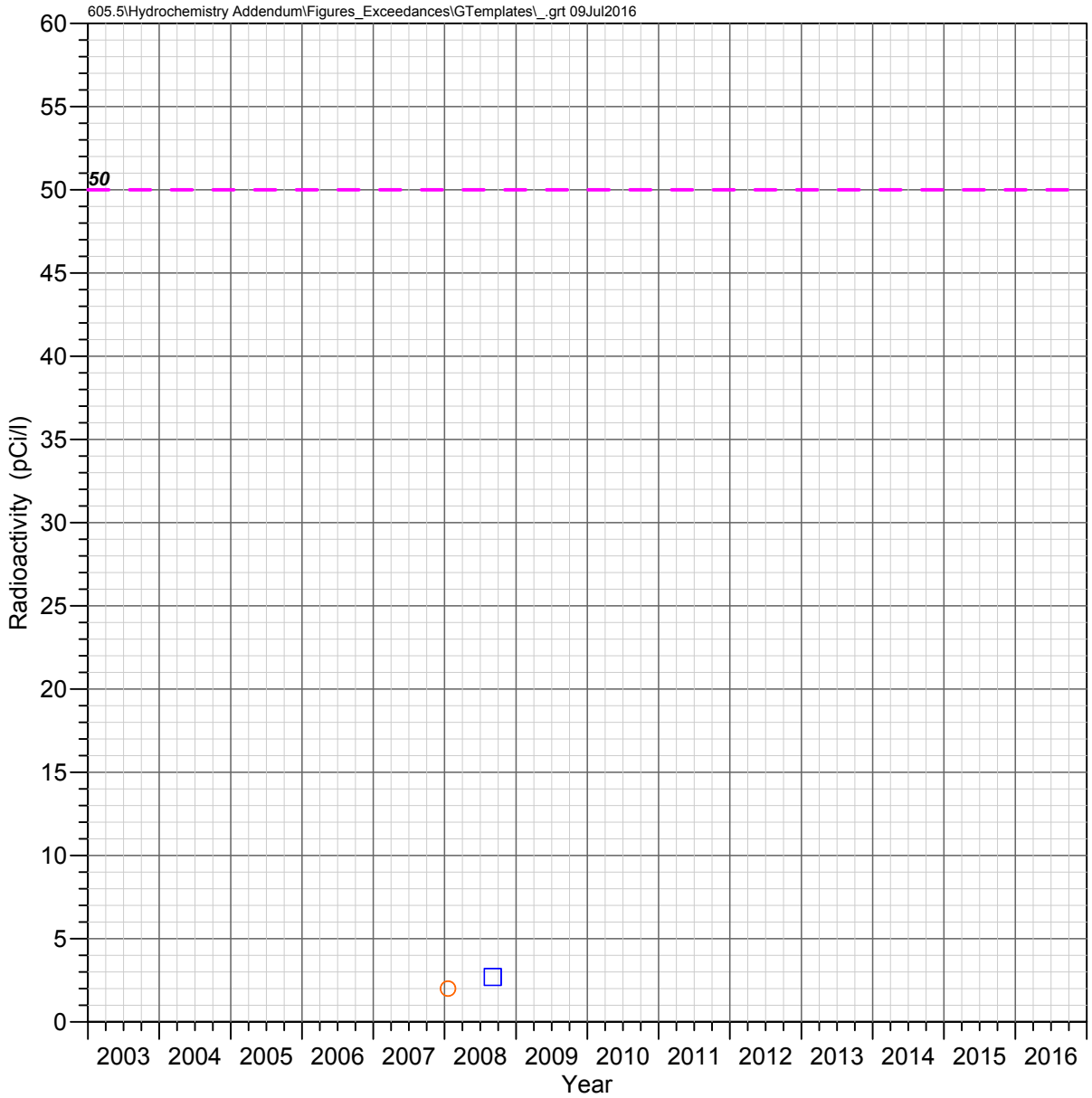


FIGURE E-321. GROSS BETA RADIOACTIVITY OBSERVED AT CT WELL, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-04
Apache Leap Tuff Aquifer

GROSS BETA

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — EPA Maximum Contaminant Levels (UNS, 50 pCi/l)

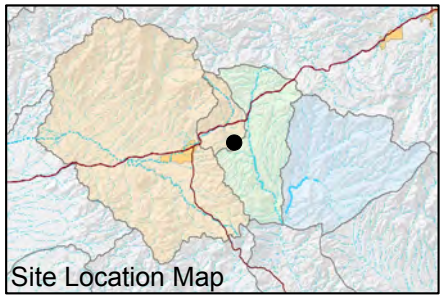
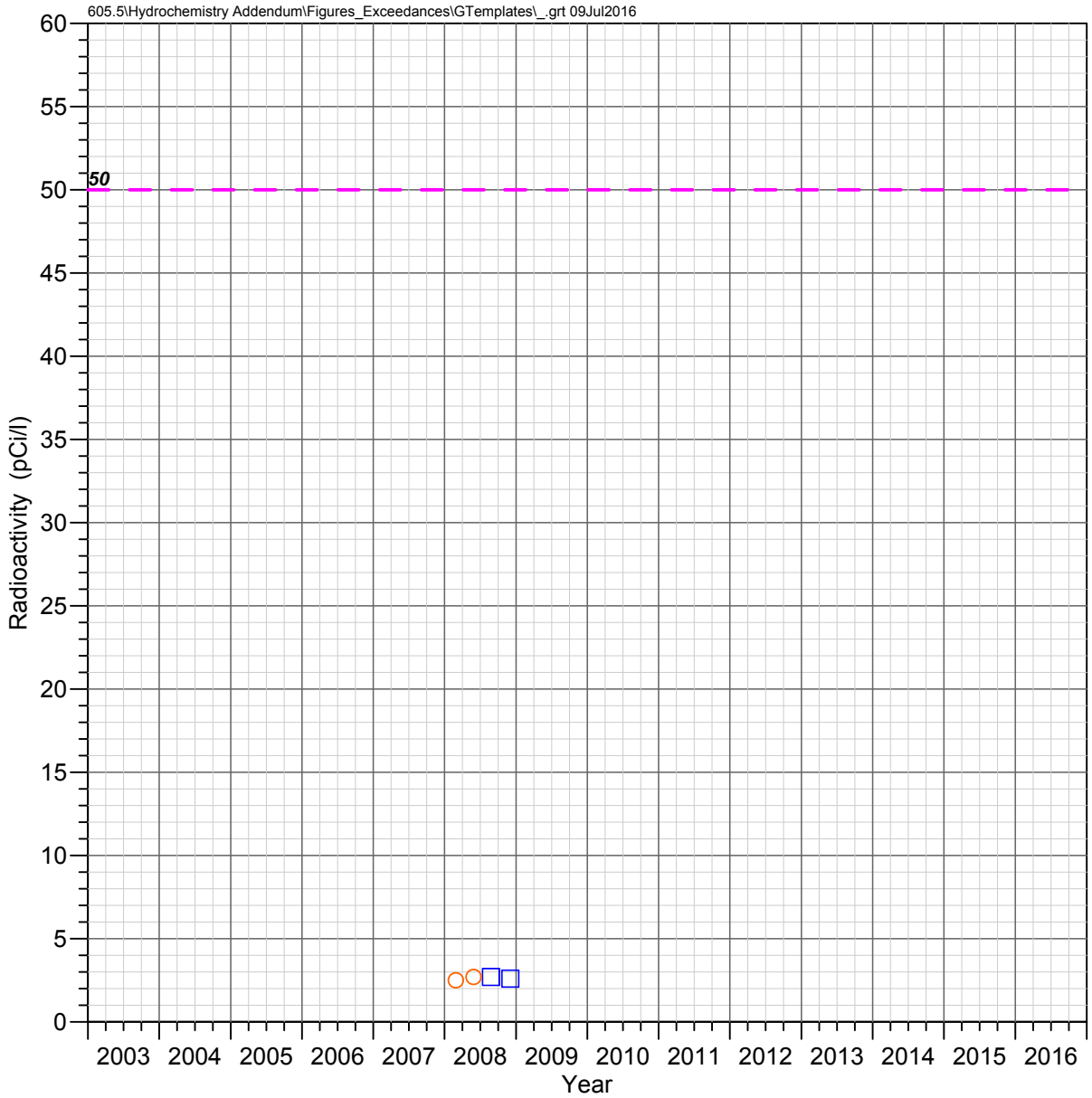


FIGURE E-322. GROSS BETA RADIOACTIVITY OBSERVED AT HRES-04, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-05
Apache Leap Tuff Aquifer

GROSS BETA

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — EPA Maximum Contaminant Levels (UNS, 50 pCi/l)

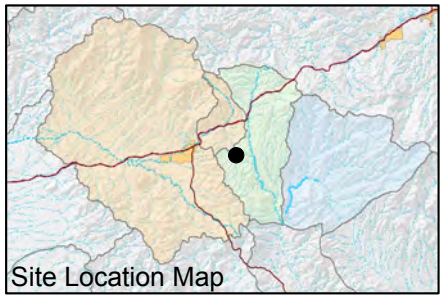
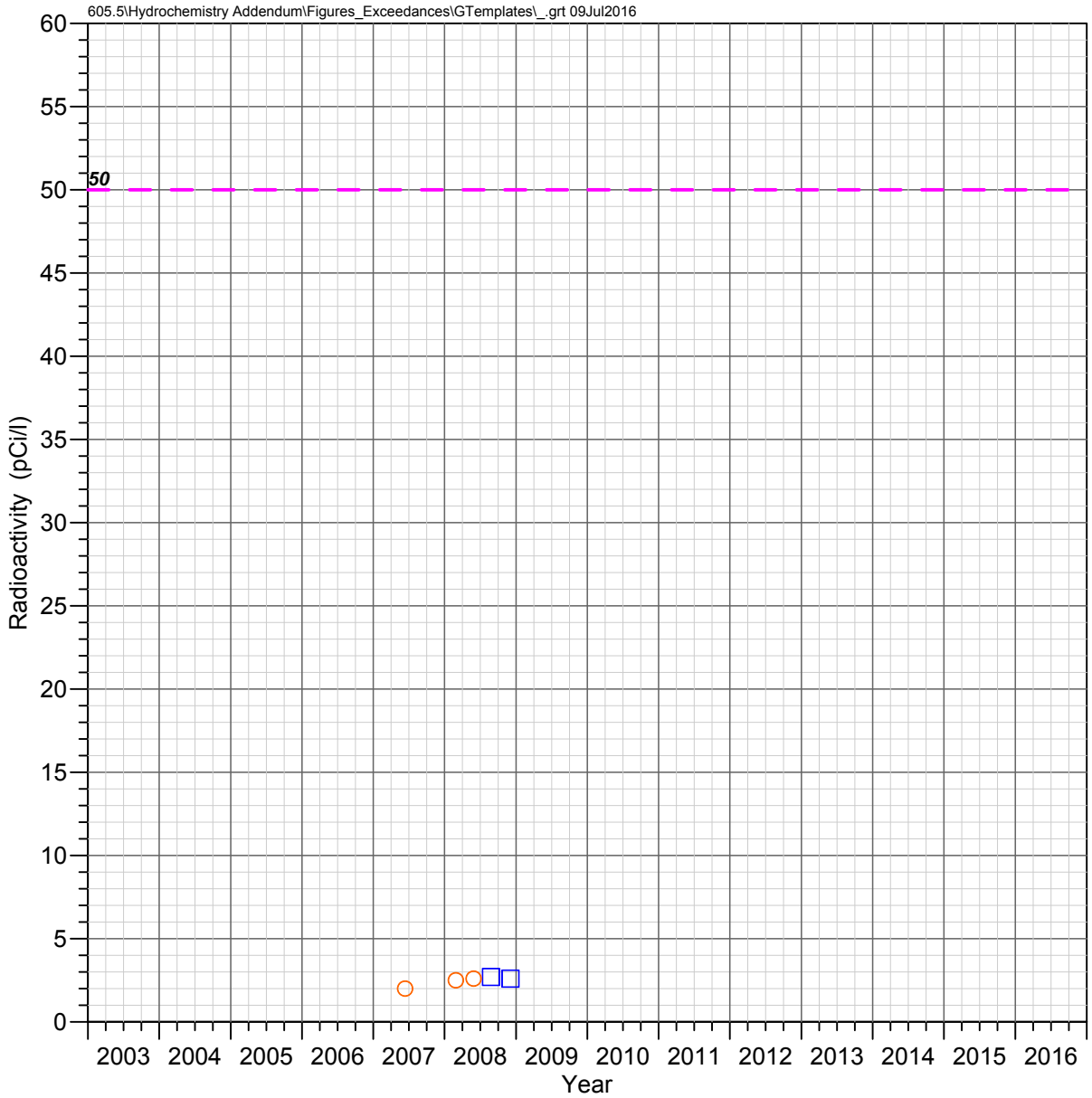


FIGURE E-323. GROSS BETA RADIOACTIVITY OBSERVED AT HRES-05, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-06
Apache Leap Tuff Aquifer

GROSS BETA

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — EPA Maximum Contaminant Levels (UNS, 50 pCi/l)

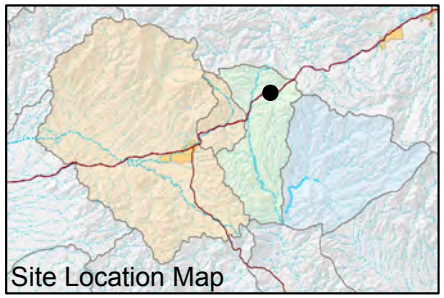
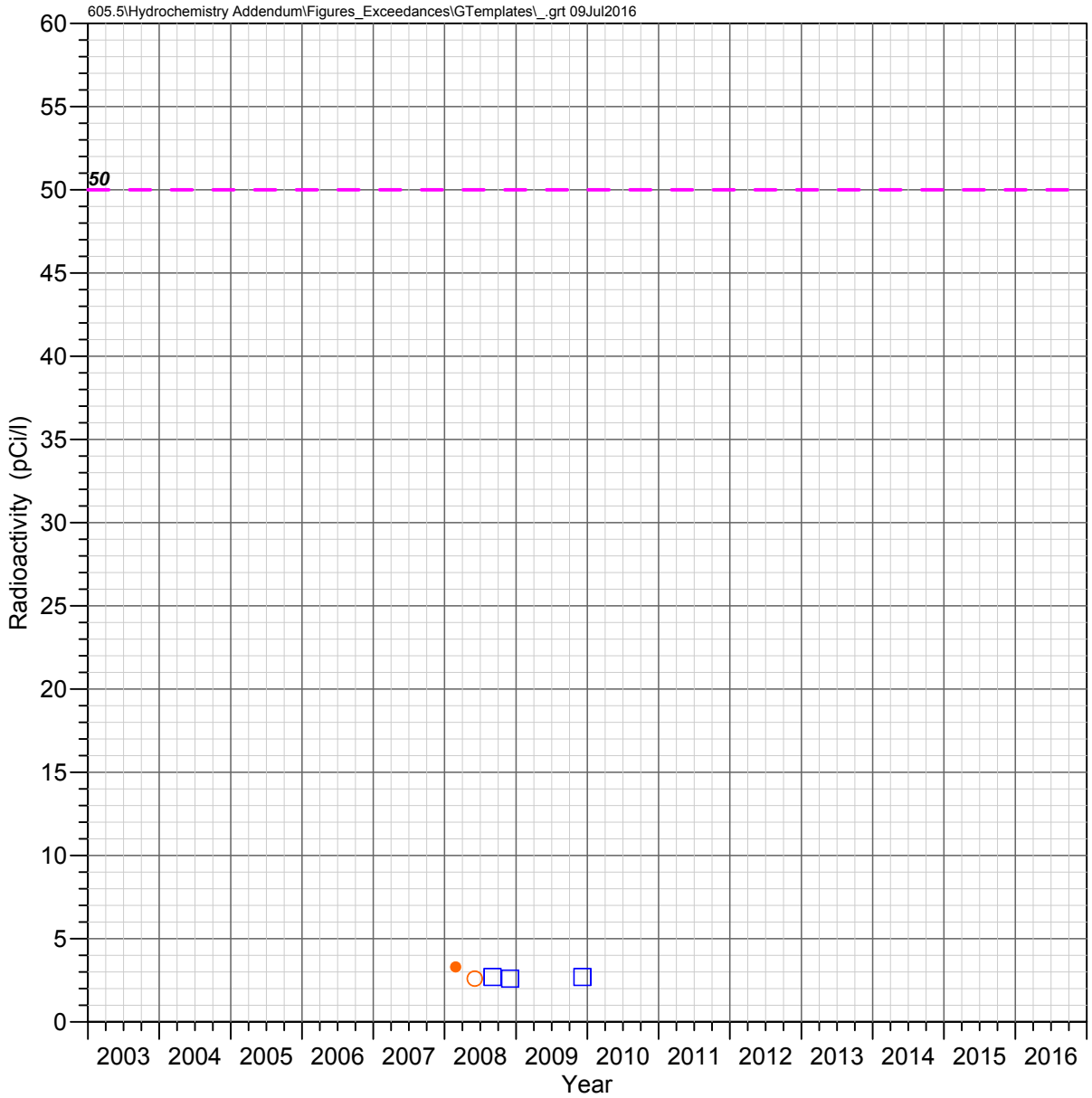


FIGURE E-324. GROSS BETA RADIOACTIVITY OBSERVED AT HRES-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-07
Apache Leap Tuff Aquifer

GROSS BETA

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — EPA Maximum Contaminant Levels (UNS, 50 pCi/l)

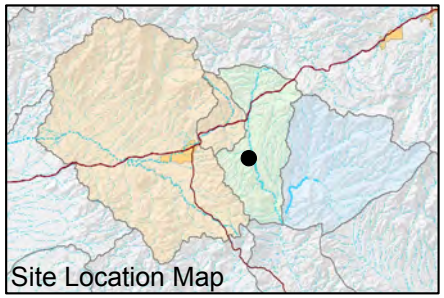
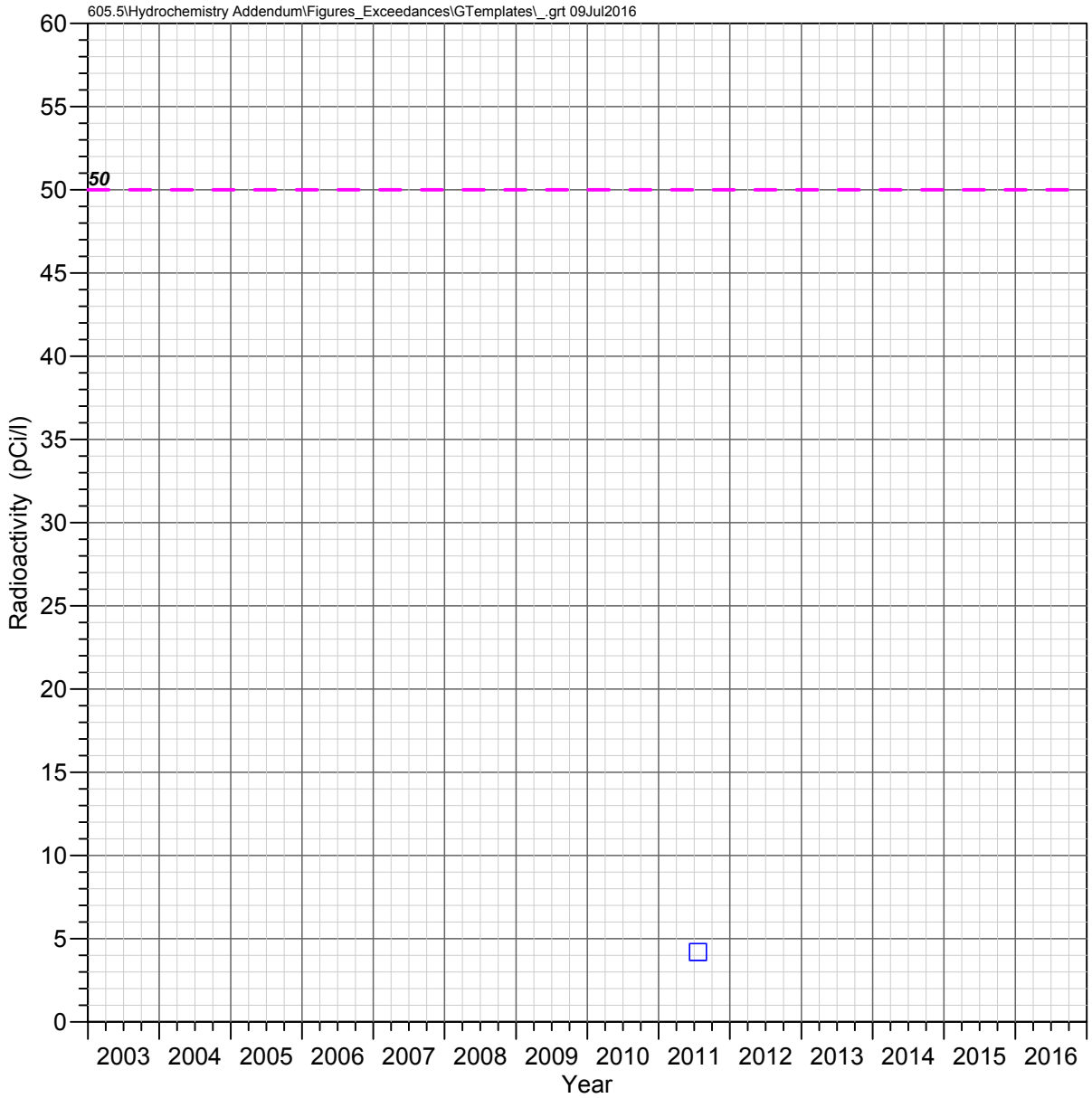


FIGURE E-325. GROSS BETA RADIOACTIVITY OBSERVED AT HRES-07, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-08
Apache Leap Tuff Aquifer

GROSS BETA

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — EPA Maximum Contaminant Levels (UNS, 50 pCi/l)

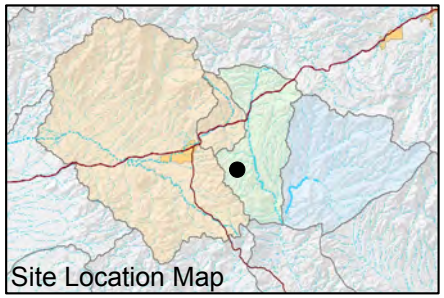
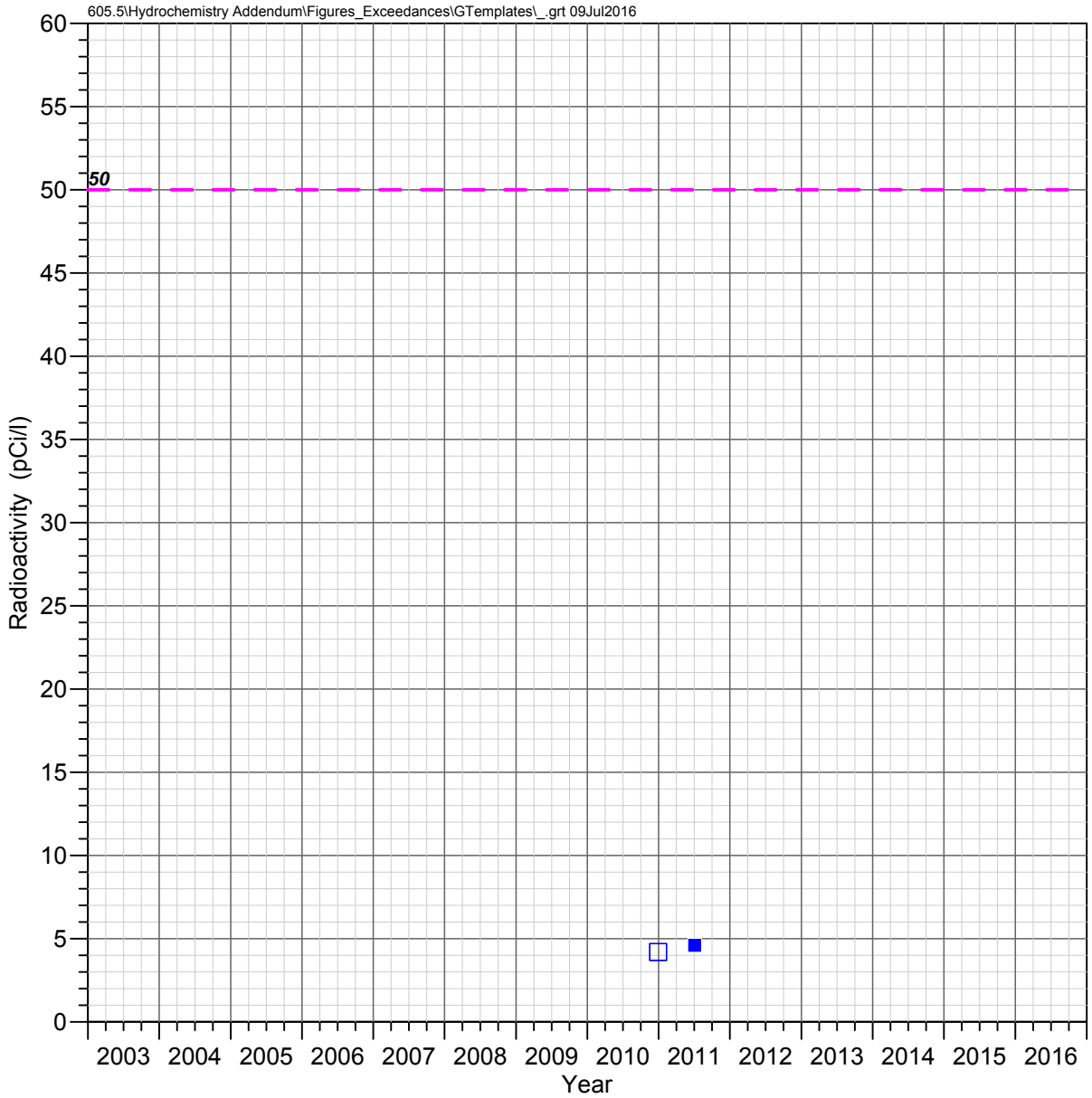


FIGURE E-326. GROSS BETA RADIOACTIVITY OBSERVED AT HRES-08, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-09
Apache Leap Tuff Aquifer

GROSS BETA

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — EPA Maximum Contaminant Levels (UNS, 50 pCi/l)

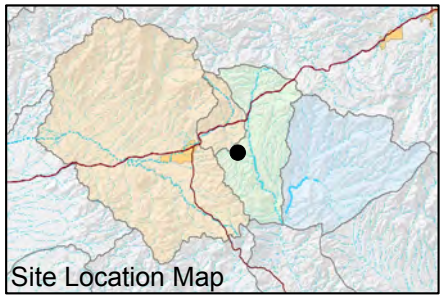
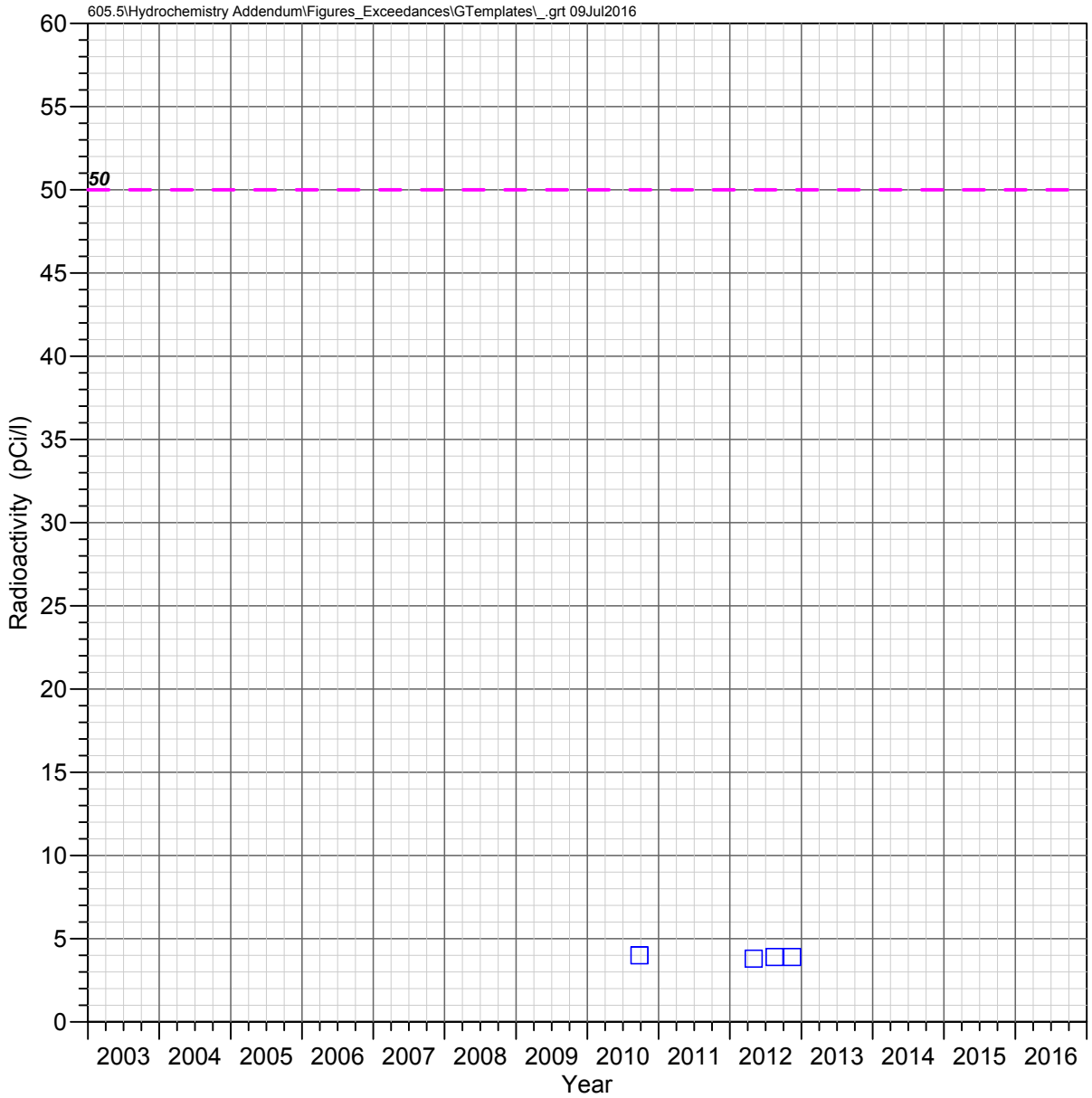


FIGURE E-327. GROSS BETA RADIOACTIVITY OBSERVED AT HRES-09, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-10
Apache Leap Tuff Aquifer

GROSS BETA

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — EPA Maximum Contaminant Levels (UNS, 50 pCi/l)

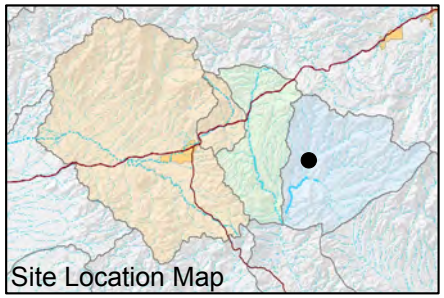
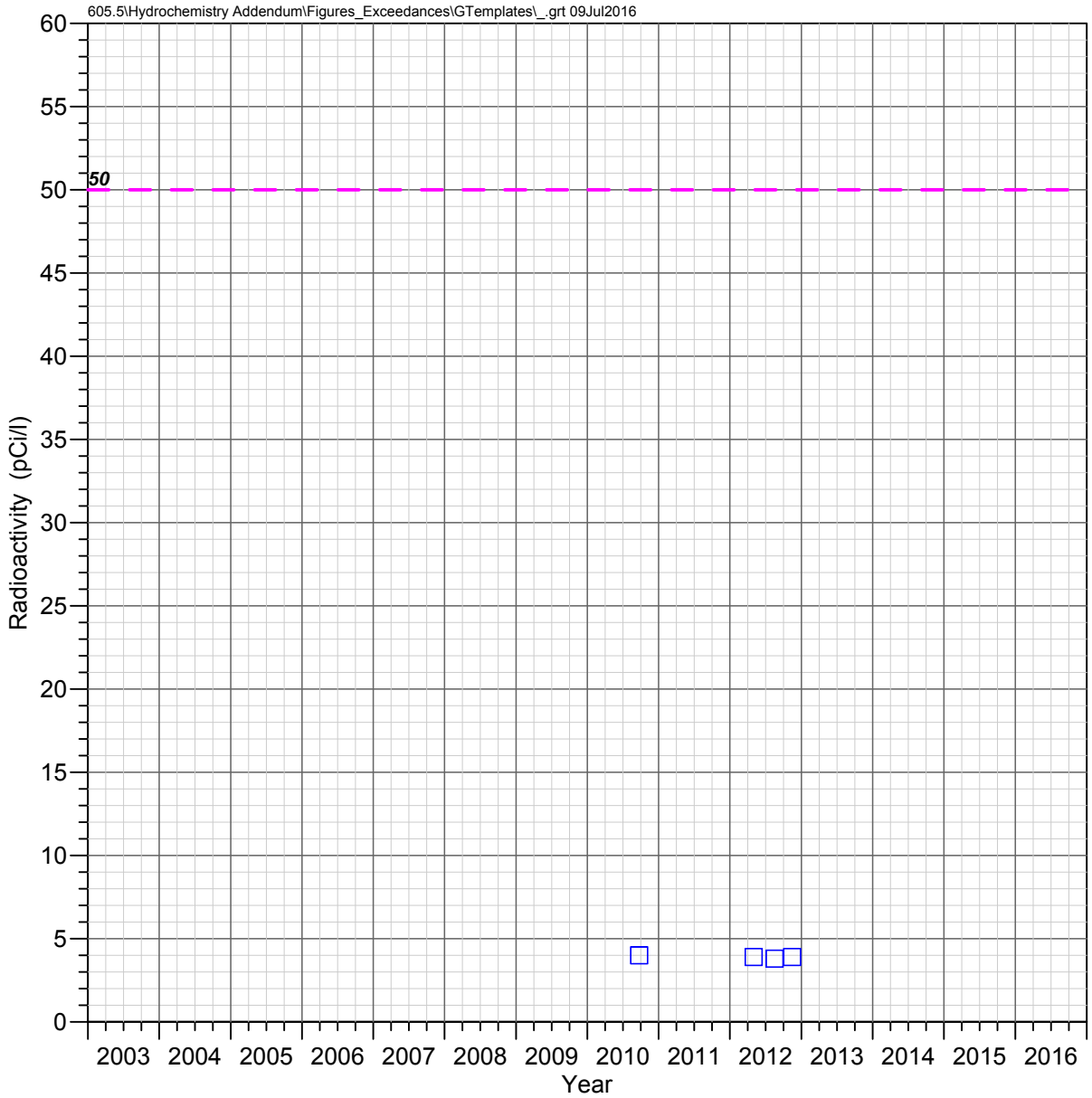


FIGURE E-328. GROSS BETA RADIOACTIVITY OBSERVED AT HRES-10, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-11
Apache Leap Tuff Aquifer

GROSS BETA

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — EPA Maximum Contaminant Levels (UNS, 50 pCi/l)

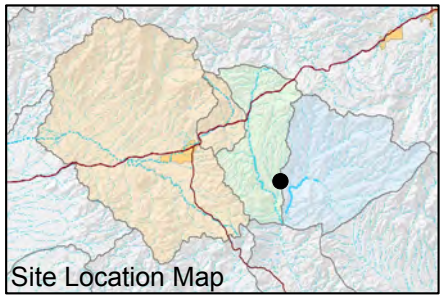
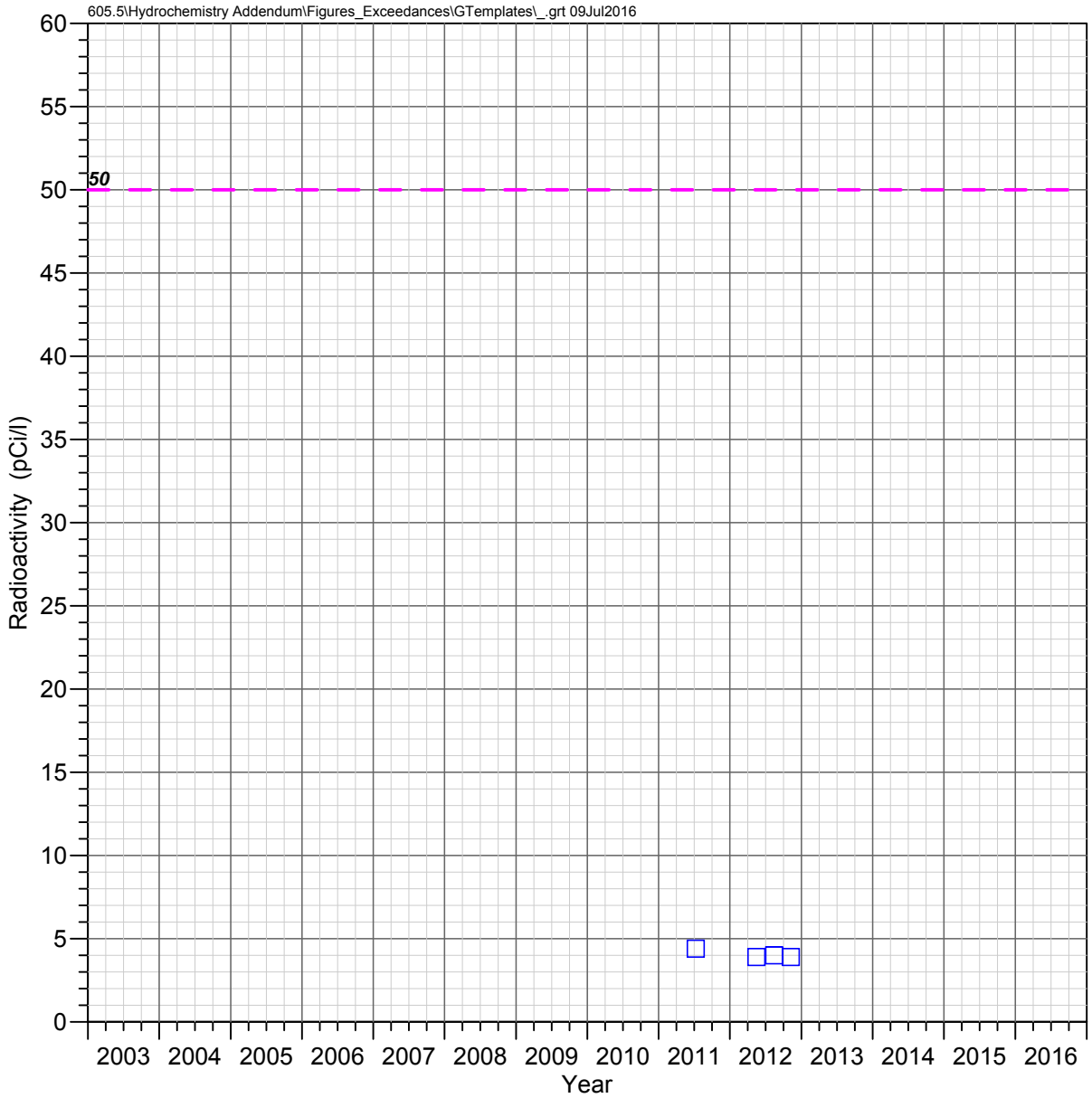


FIGURE E-329. GROSS BETA RADIOACTIVITY OBSERVED AT HRES-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-12
Apache Leap Tuff Aquifer

GROSS BETA

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — EPA Maximum Contaminant Levels (UNS, 50 pCi/l)

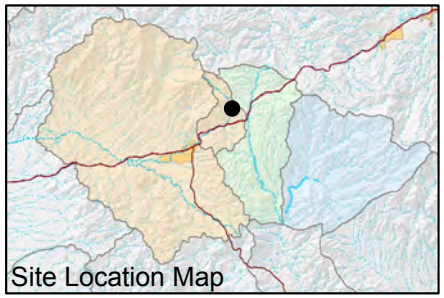
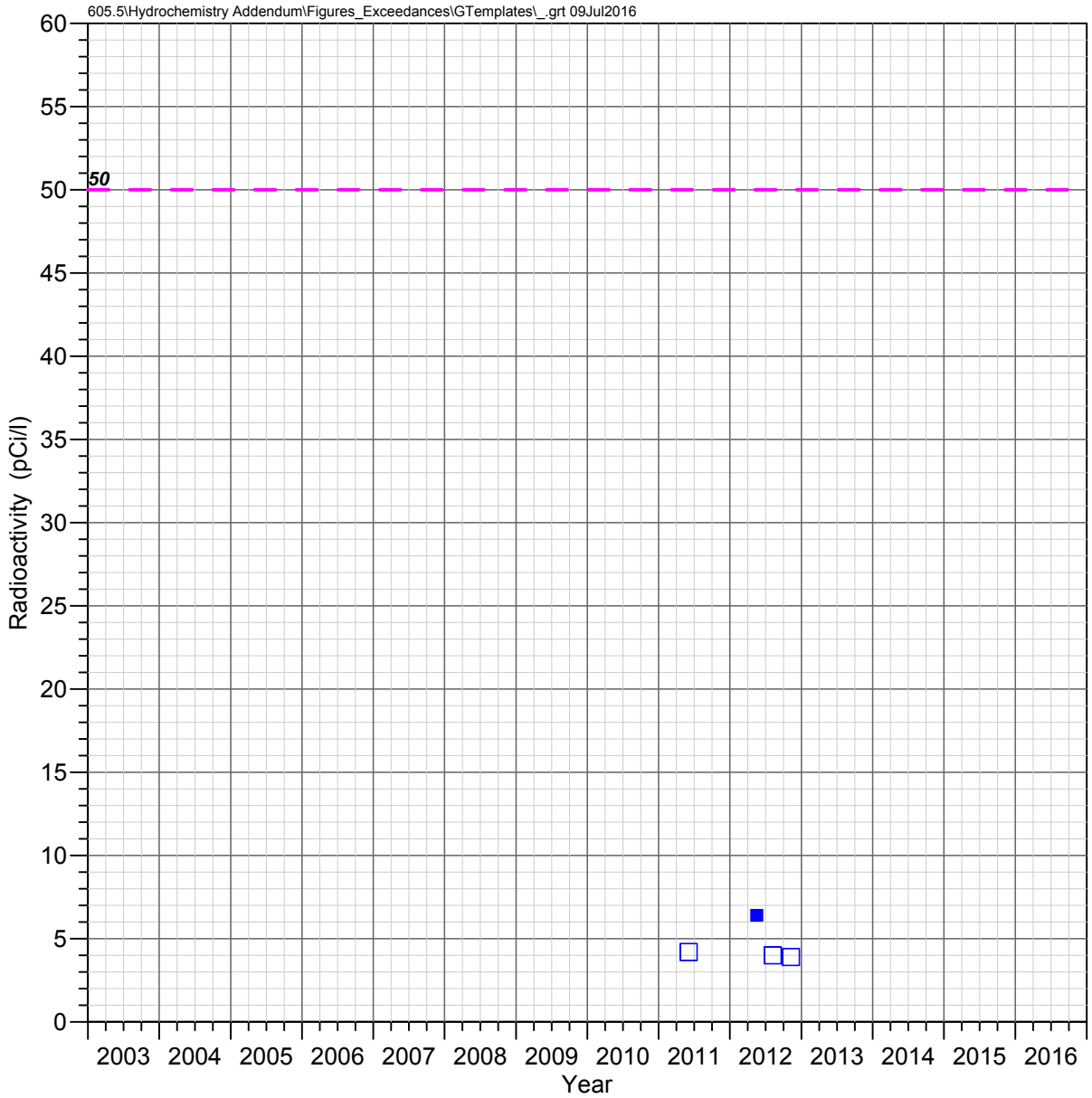


FIGURE E-330. GROSS BETA RADIOACTIVITY OBSERVED AT HRES-12, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-13
Apache Leap Tuff Aquifer

GROSS BETA

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — EPA Maximum Contaminant Levels (UNS, 50 pCi/l)

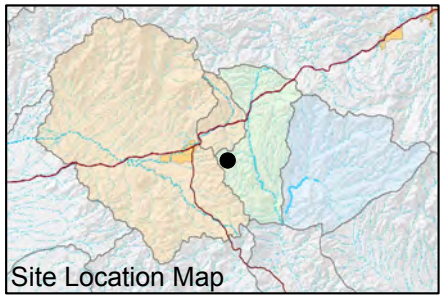
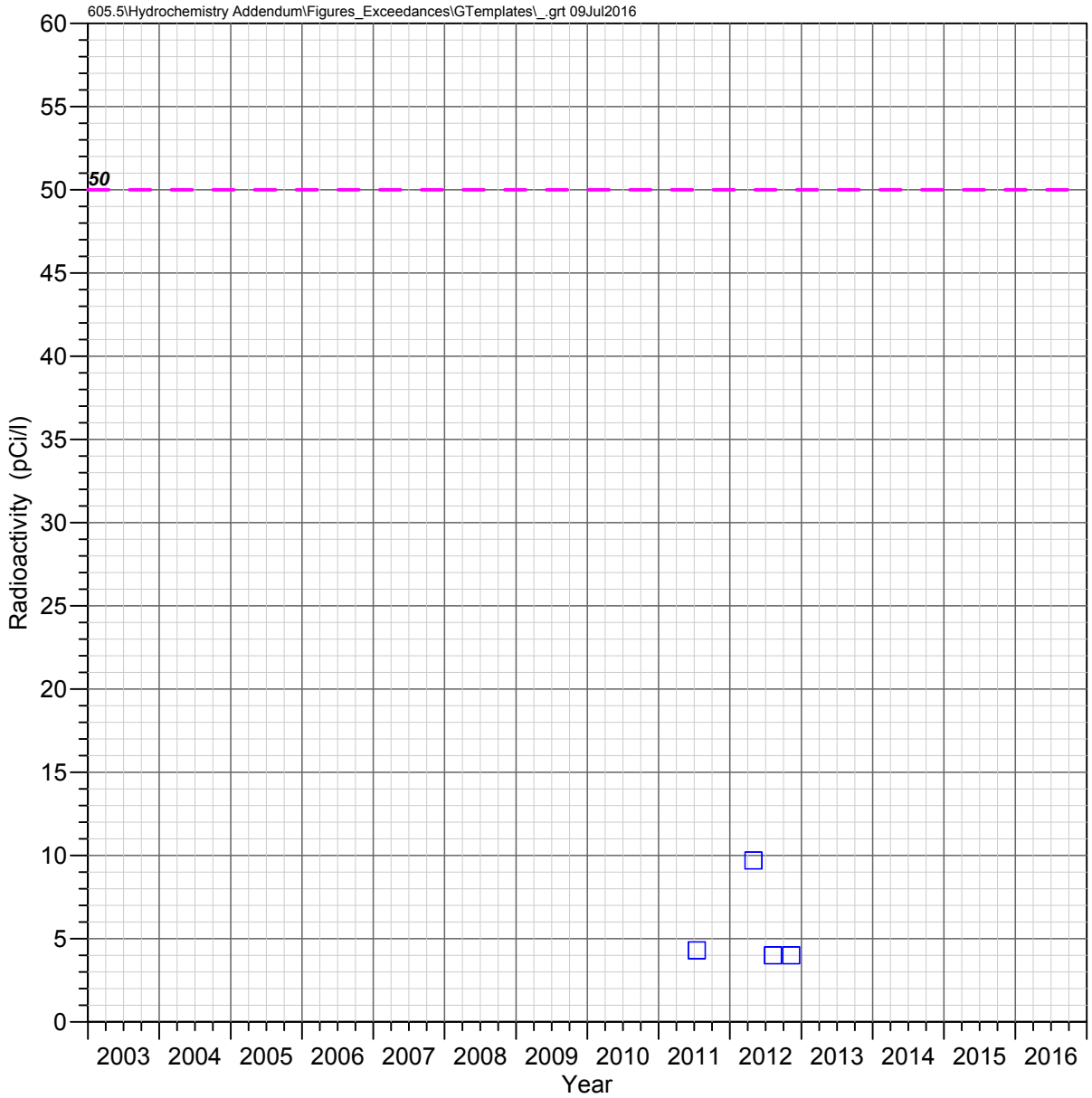


FIGURE E-331. GROSS BETA RADIOACTIVITY OBSERVED AT HRES-13, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-14
Apache Leap Tuff Aquifer

GROSS BETA

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — EPA Maximum Contaminant Levels (UNS, 50 pCi/l)

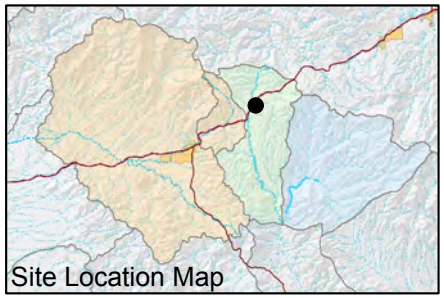
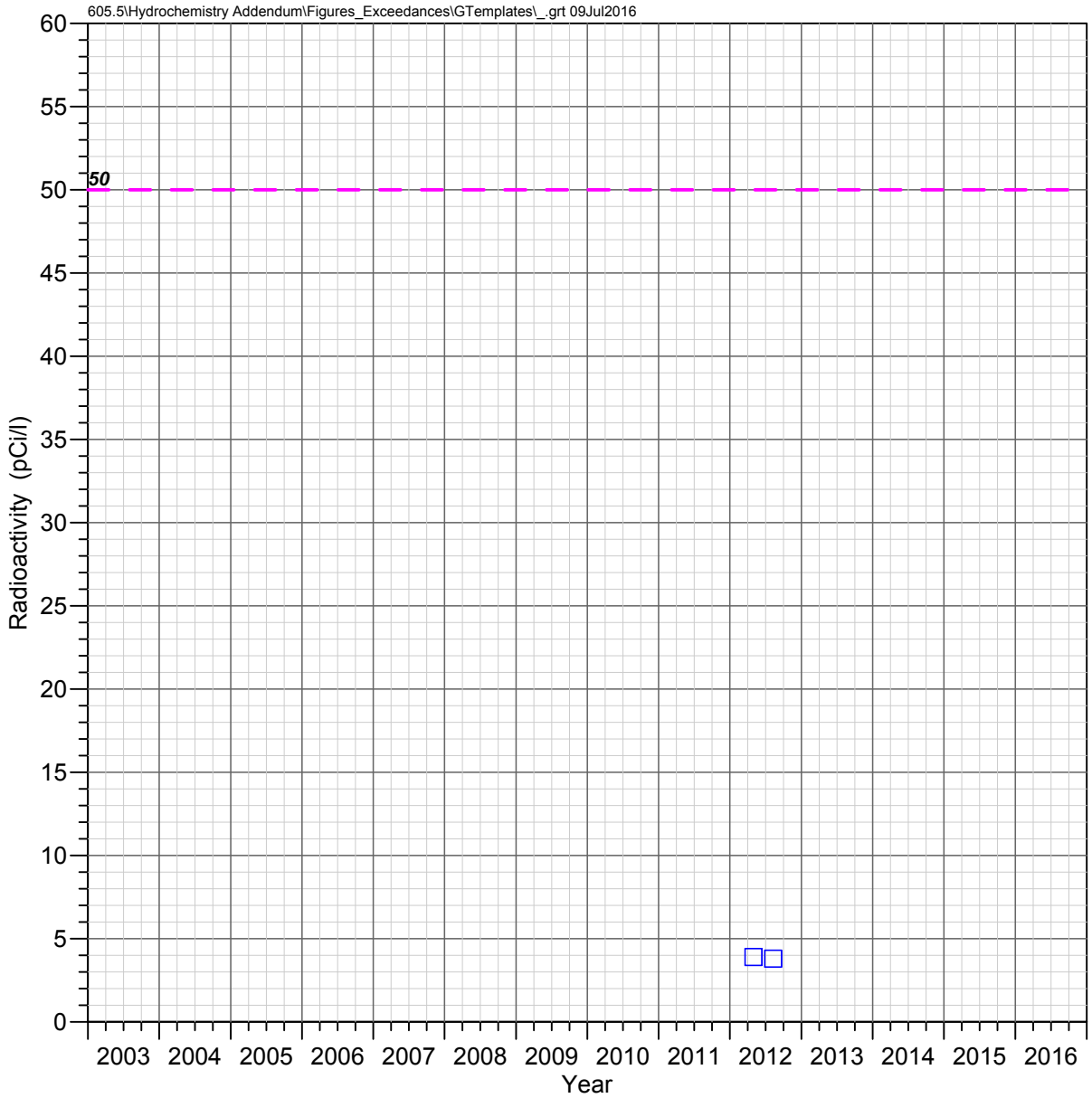


FIGURE E-332. GROSS BETA RADIOACTIVITY OBSERVED AT HRES-14, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-15
Apache Leap Tuff Aquifer

GROSS BETA

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

EPA Maximum Contaminant Levels (UNS, 50 pCi/l)

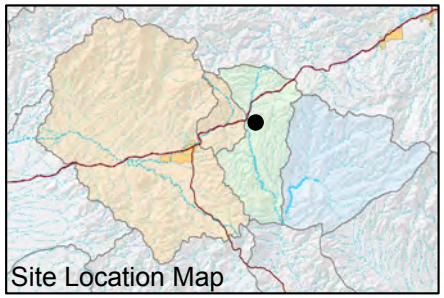
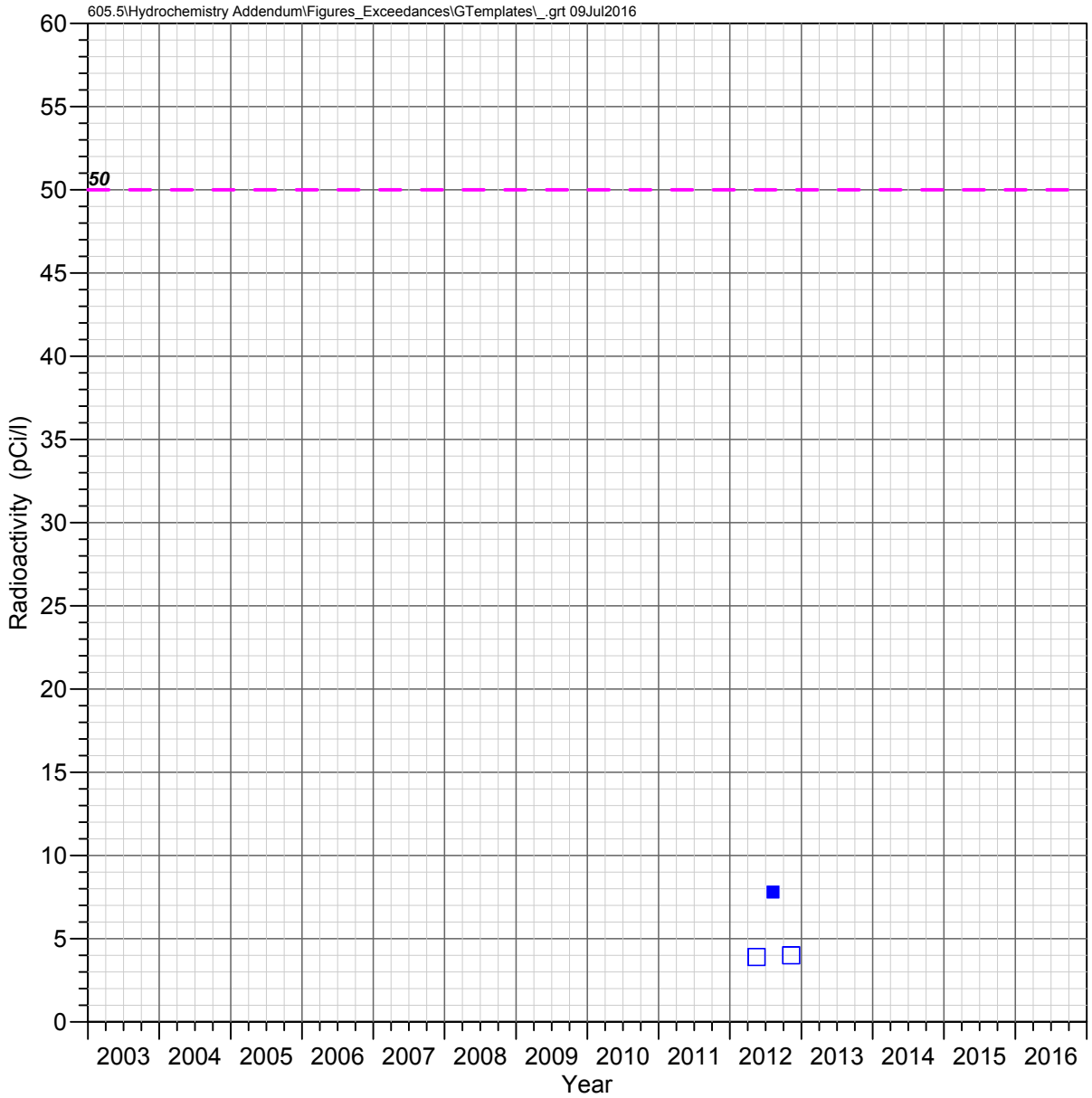


FIGURE E-333. GROSS BETA RADIOACTIVITY OBSERVED AT HRES-15, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-17
Apache Leap Tuff Aquifer

GROSS BETA

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — EPA Maximum Contaminant Levels (UNS, 50 pCi/l)

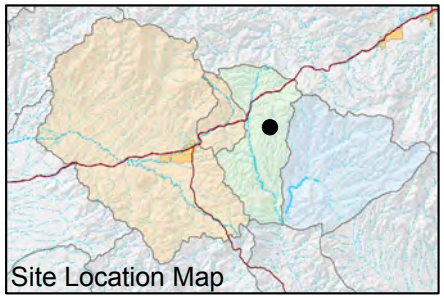
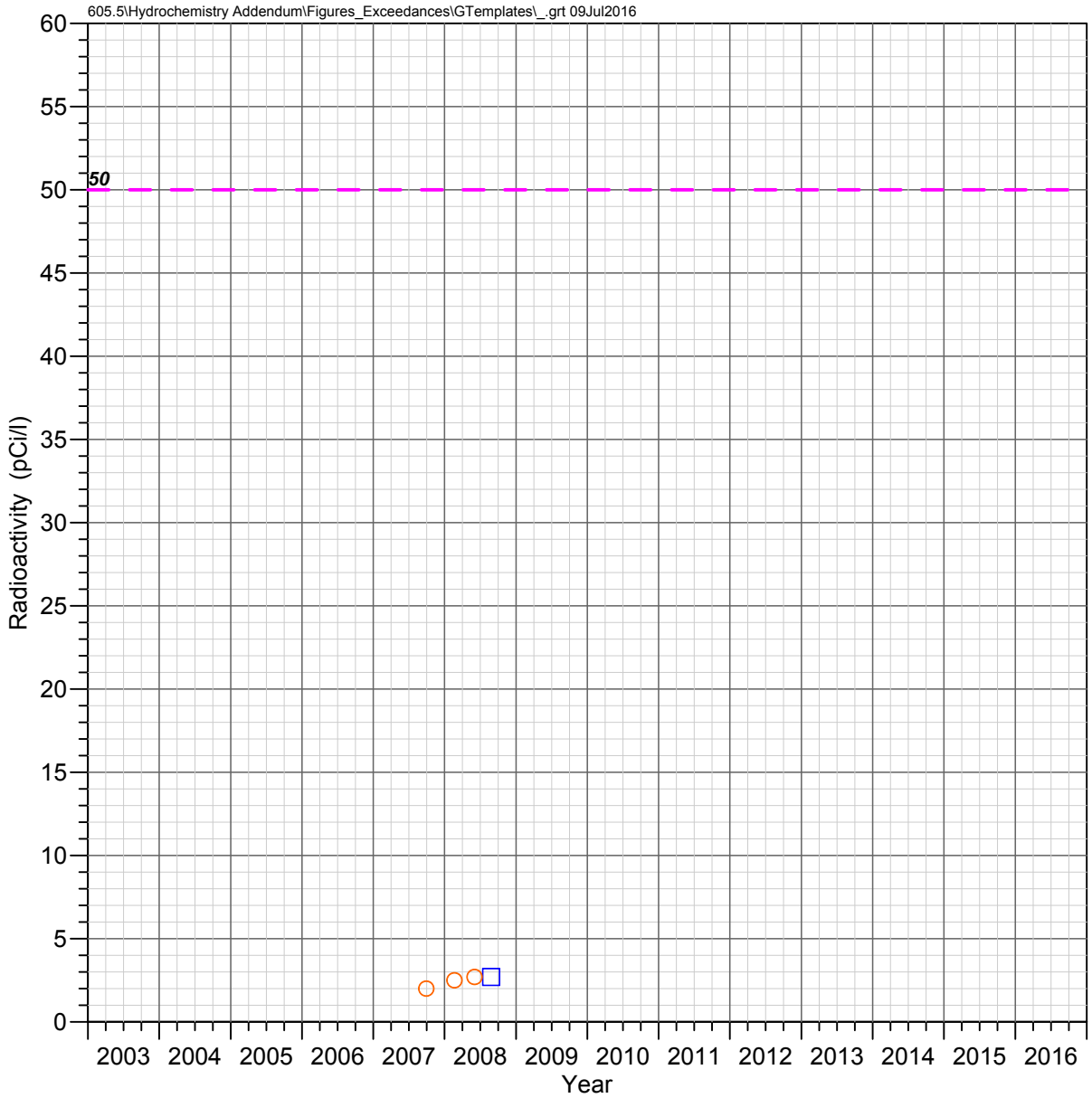


FIGURE E-334. GROSS BETA RADIOACTIVITY OBSERVED AT HRES-17, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MJ-11
Apache Leap Tuff Aquifer

GROSS BETA

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — EPA Maximum Contaminant Levels (UNS, 50 pCi/l)

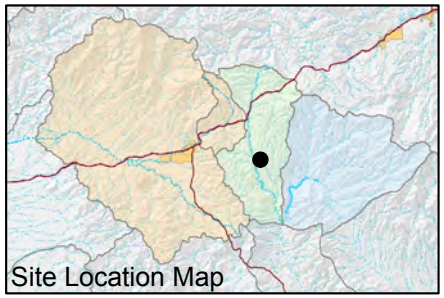
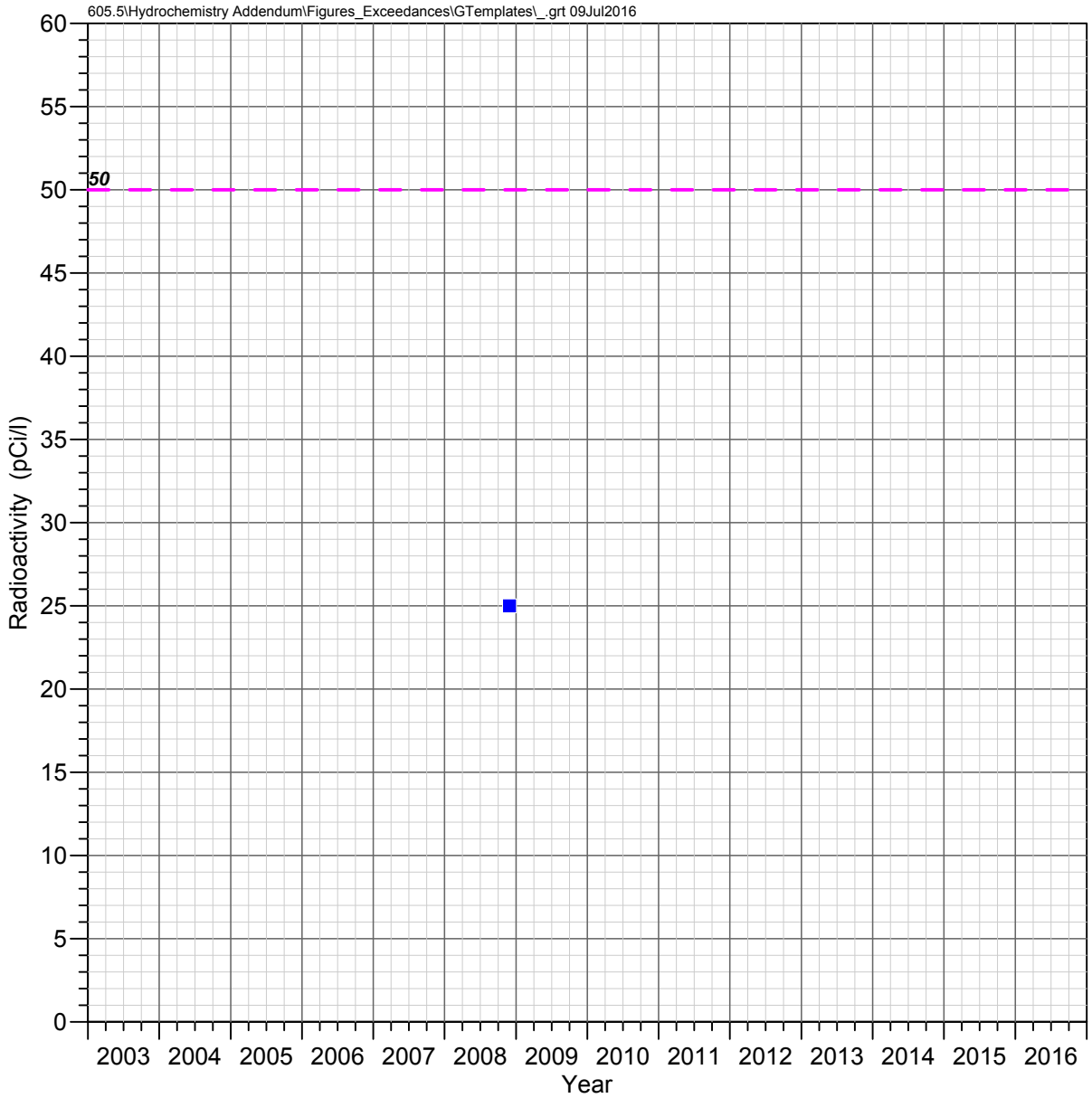


FIGURE E-335. GROSS BETA RADIOACTIVITY OBSERVED AT MJ-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-01
Deep Groundwater System

GROSS BETA

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

EPA Maximum Contaminant Levels (UNS, 50 pCi/l)

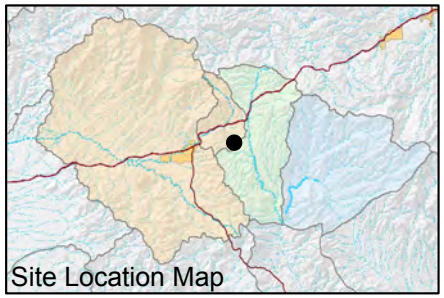
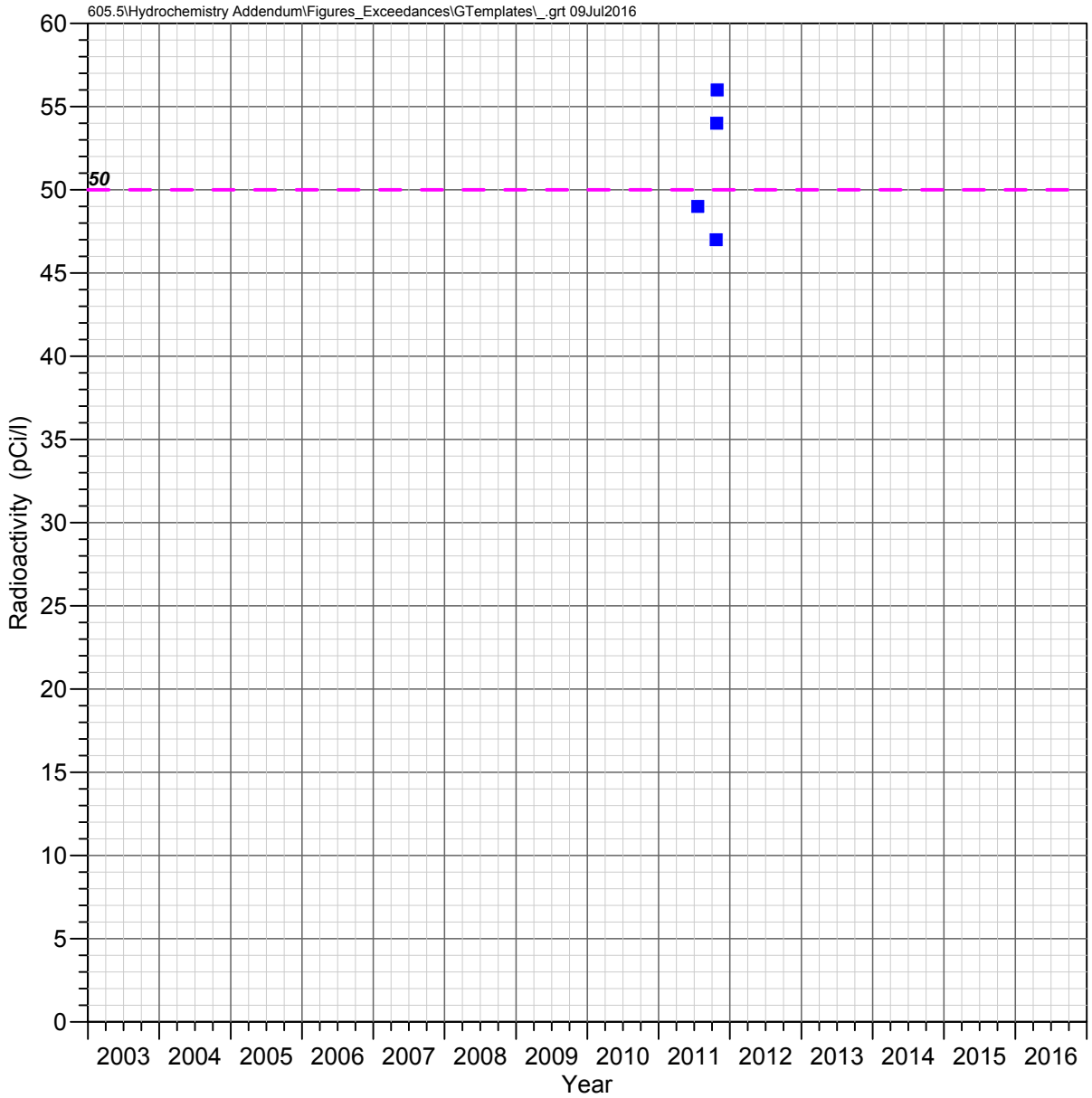


FIGURE E-336. GROSS BETA RADIOACTIVITY OBSERVED AT DHRES-01, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-02
Deep Groundwater System

GROSS BETA

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

EPA Maximum Contaminant Levels (UNS, 50 pCi/l)

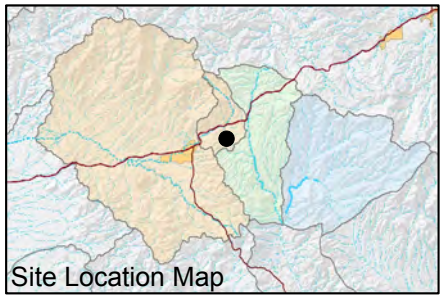
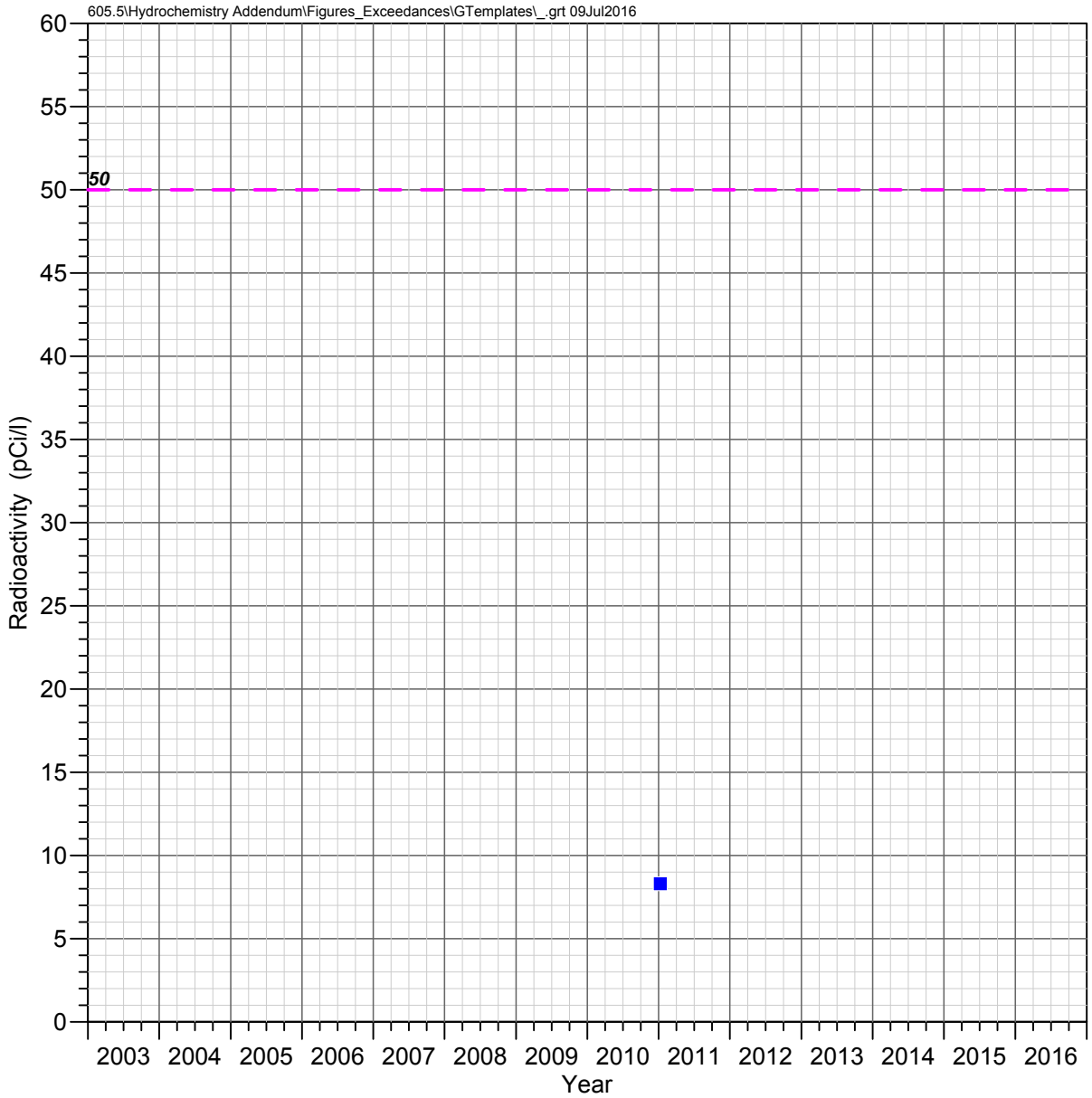


FIGURE E-337. GROSS BETA RADIOACTIVITY OBSERVED AT DHRES-02, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-06
Deep Groundwater System

GROSS BETA

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

EPA Maximum Contaminant Levels (UNS, 50 pCi/l)

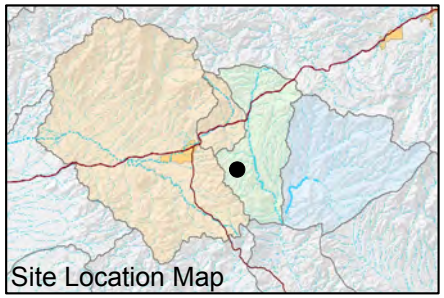
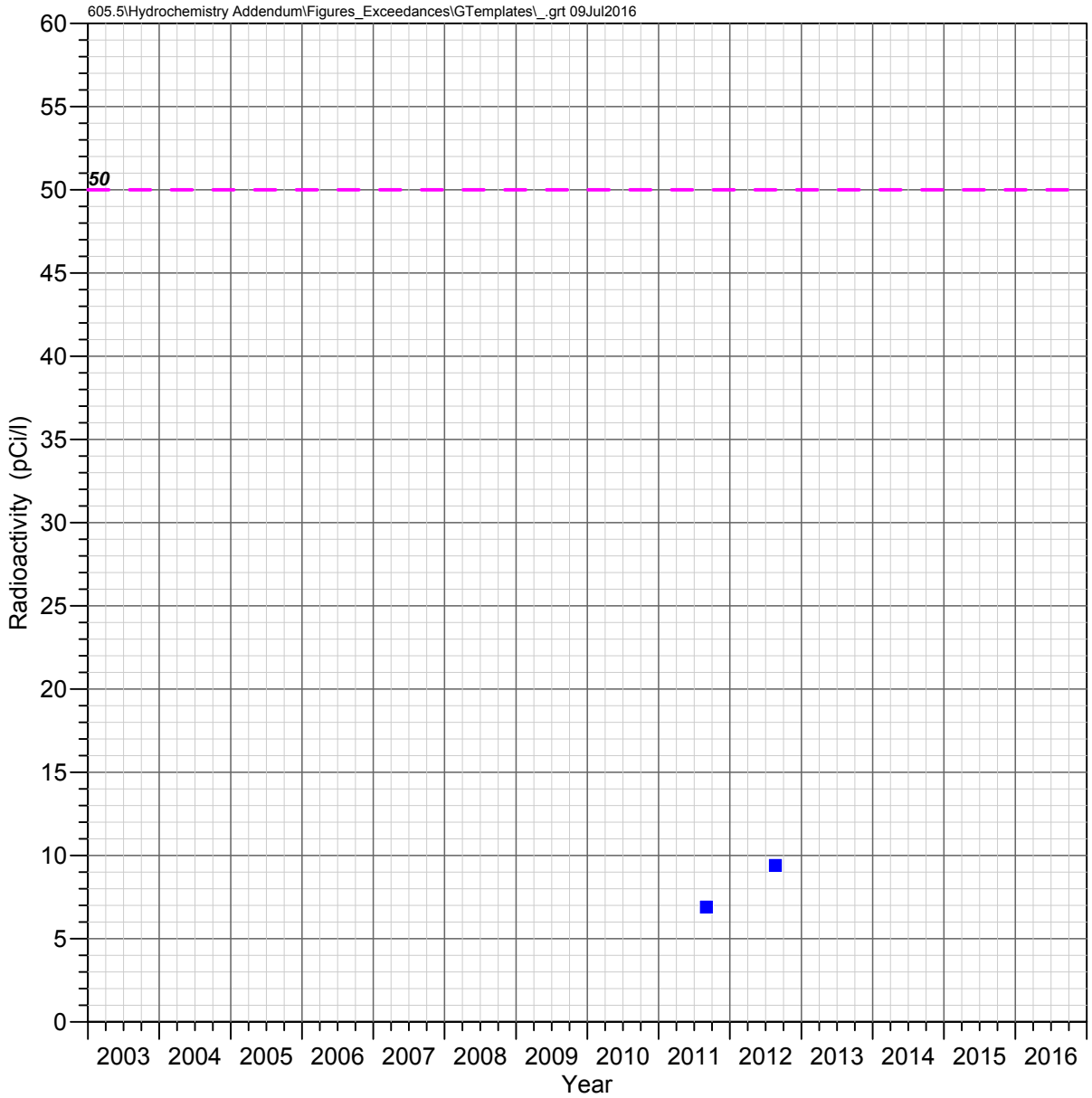


FIGURE E-338. GROSS BETA RADIOACTIVITY OBSERVED AT DHRES-06, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-09
Deep Groundwater System

GROSS BETA

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

EPA Maximum Contaminant Levels (UNS, 50 pCi/l)

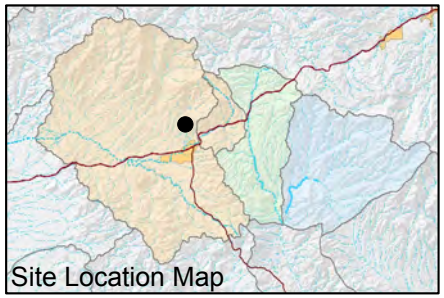
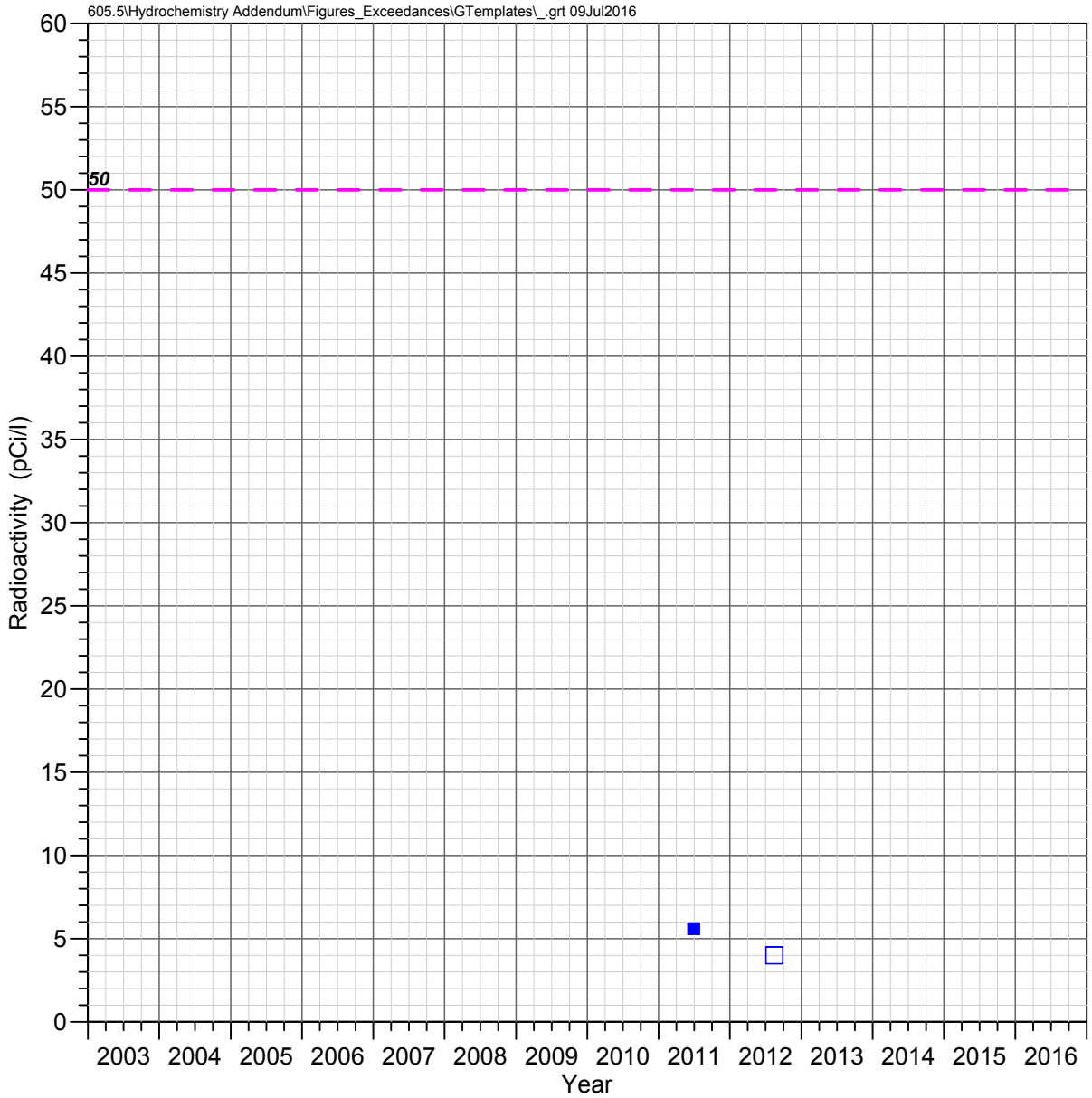


FIGURE E-339. GROSS BETA RADIOACTIVITY OBSERVED AT DHRES-09, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-11
Deep Groundwater System

GROSS BETA

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

EPA Maximum Contaminant Levels (UNS, 50 pCi/l)

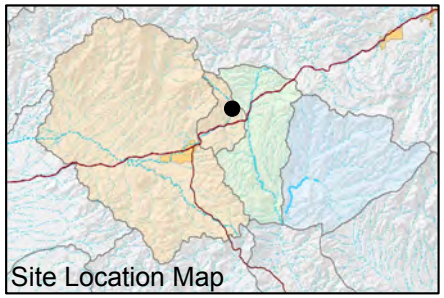
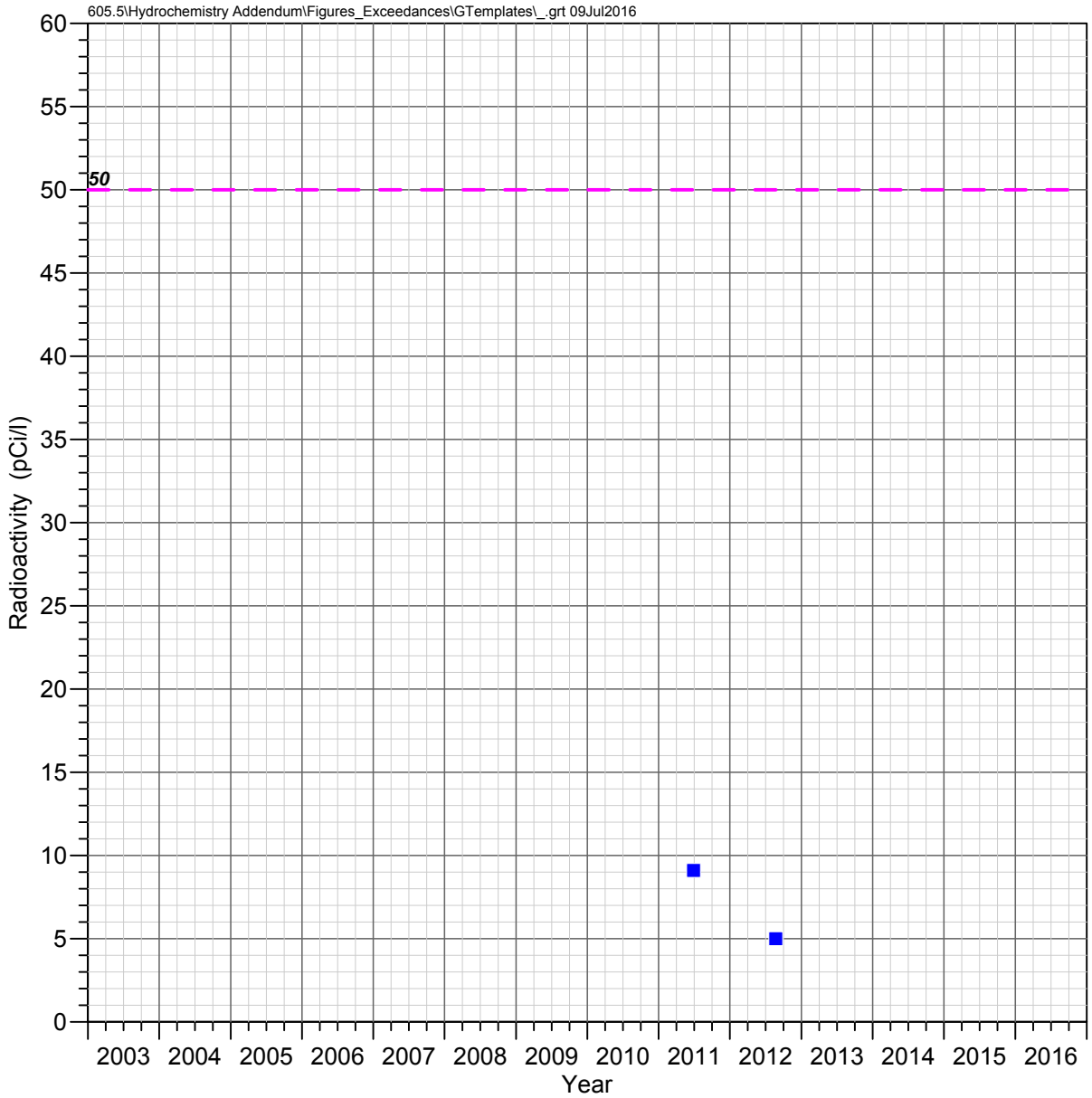


FIGURE E-340. GROSS BETA RADIOACTIVITY OBSERVED AT DHRES-11, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-13
Deep Groundwater System

GROSS BETA

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

EPA Maximum Contaminant Levels (UNS, 50 pCi/l)

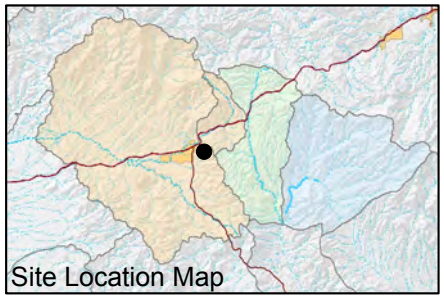
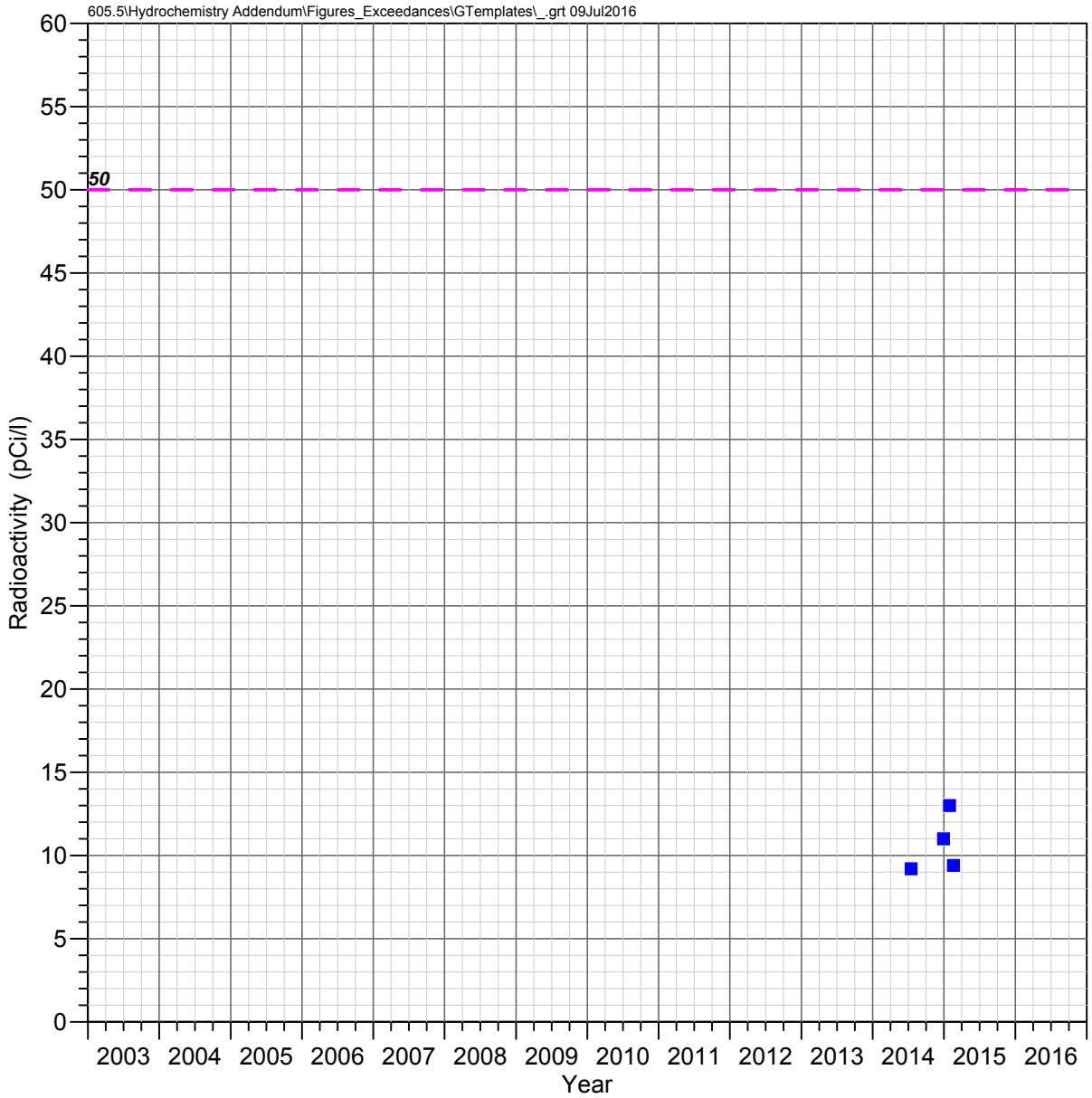


FIGURE E-341. GROSS BETA RADIOACTIVITY OBSERVED AT DHRES-13, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-15
Deep Groundwater System

GROSS BETA

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

EPA Maximum Contaminant Levels (UNS, 50 pCi/l)

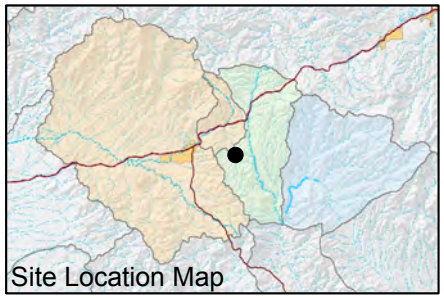
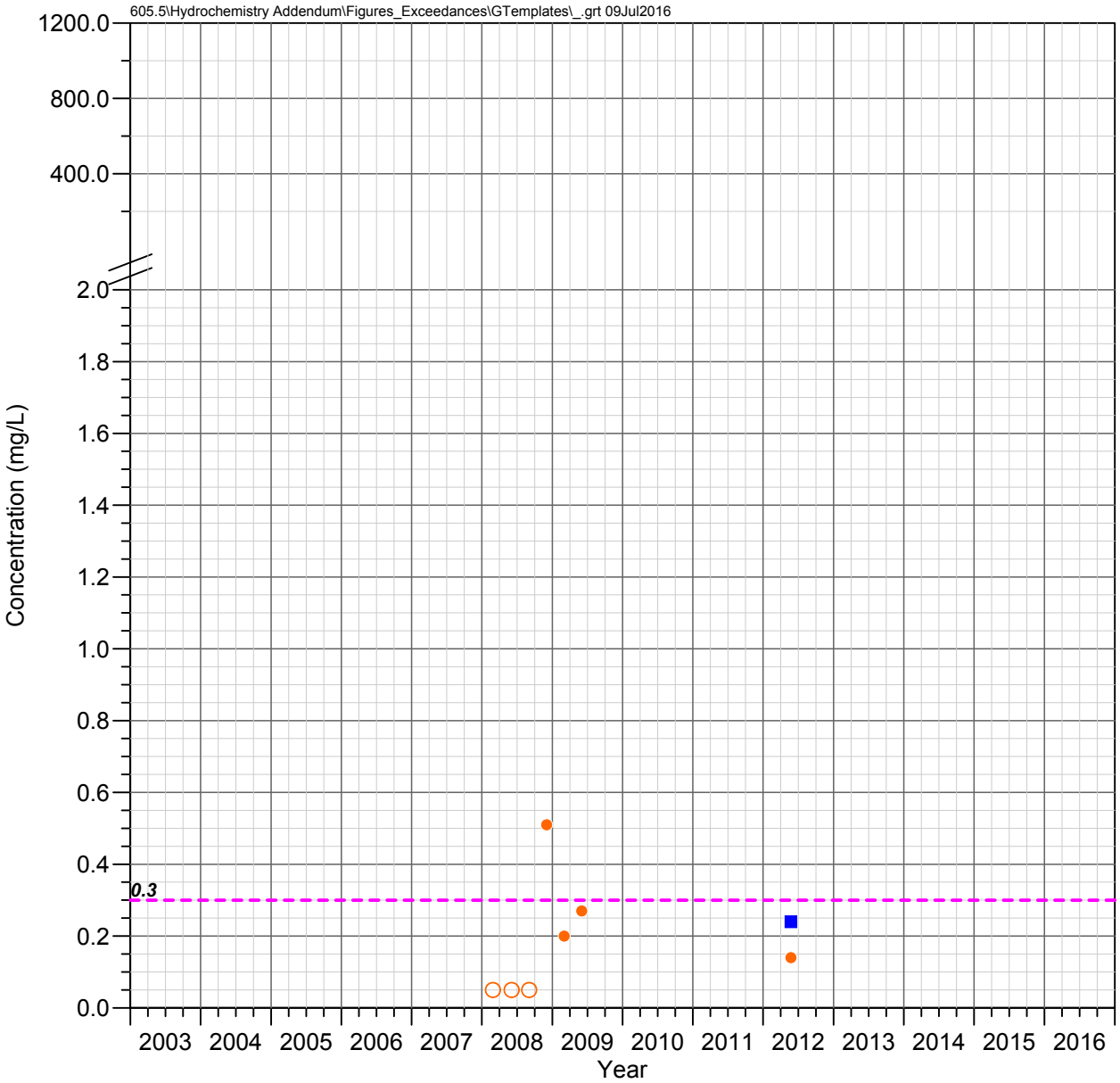


FIGURE E-342. GROSS BETA RADIOACTIVITY OBSERVED AT DHRES-15, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Hackberry Windmill Well Shallow Groundwater System

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.3 mg/L)

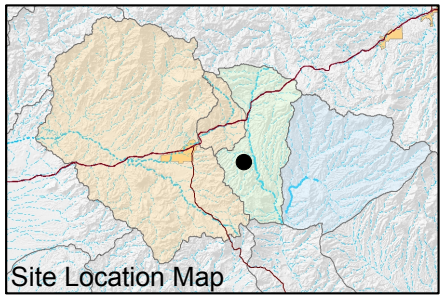
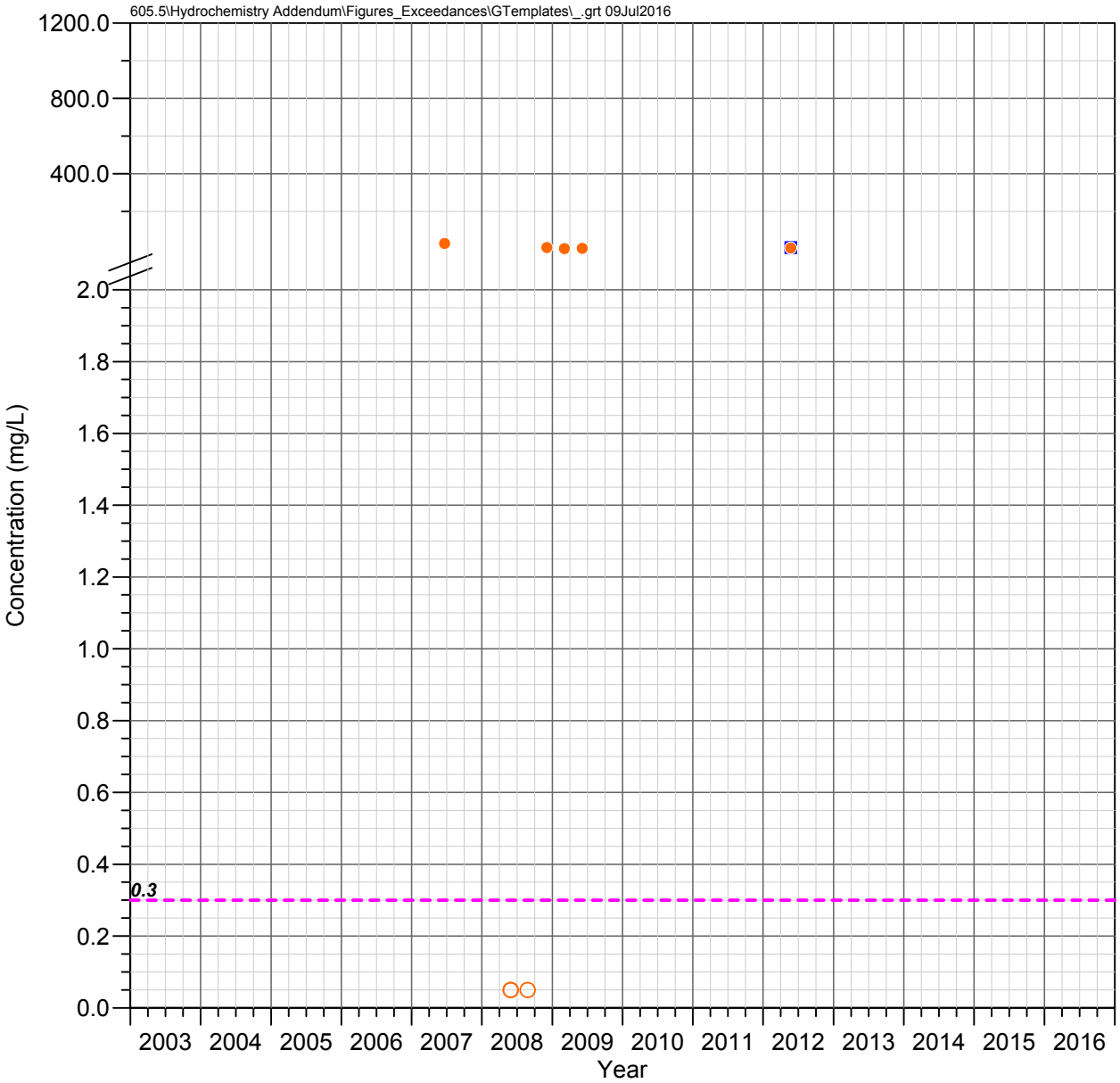


FIGURE E-343. IRON CONCENTRATIONS OBSERVED AT HACKBERRY WINDMILL WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



JI Ranch Corral Well Shallow Groundwater System

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.3 mg/L)

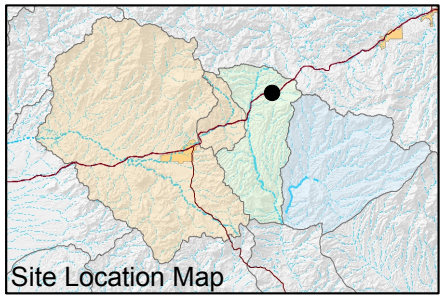
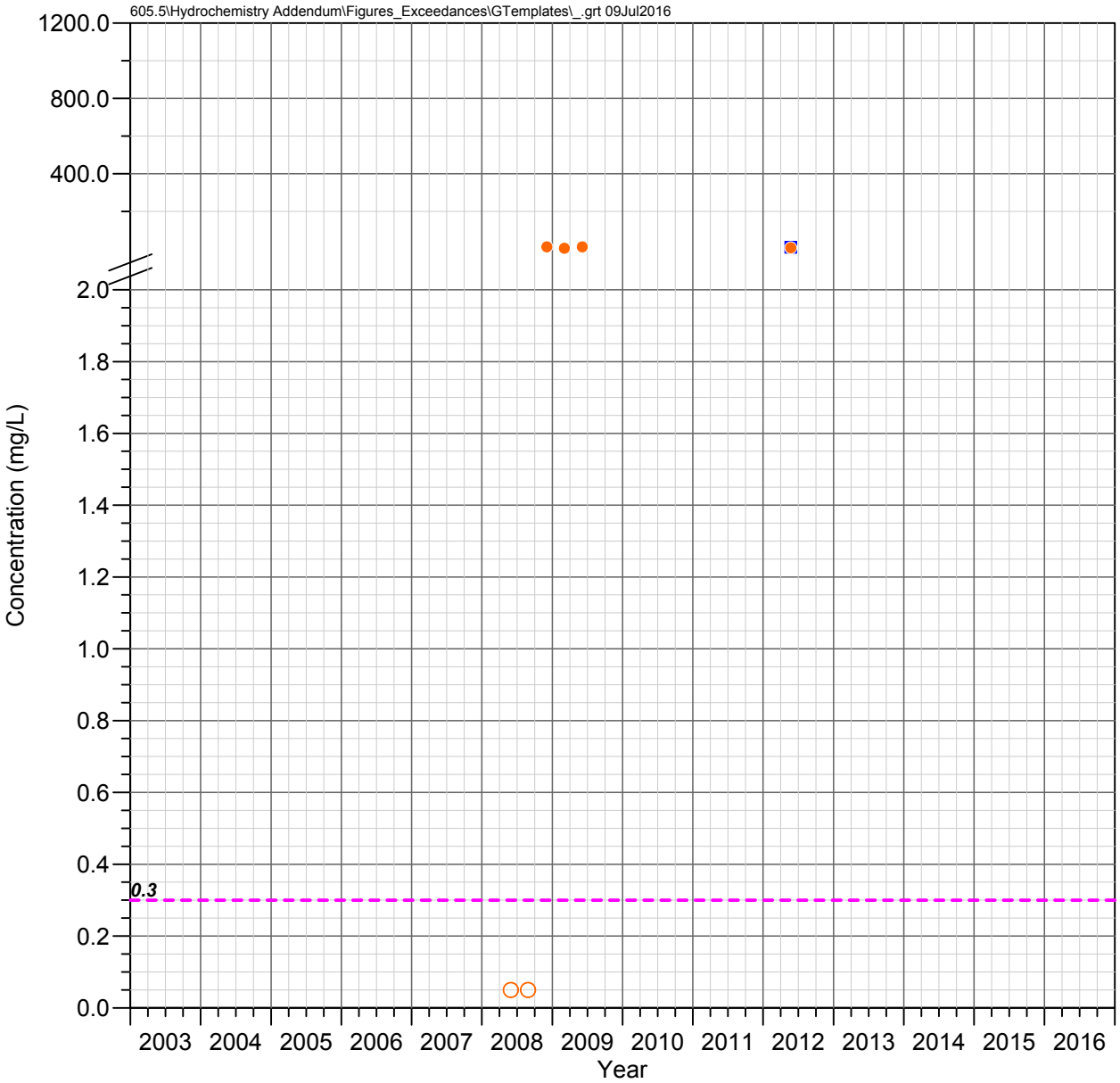


FIGURE E-344. IRON CONCENTRATIONS OBSERVED AT JI RANCH CORRAL WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



JI Ranch Middle Well Shallow Groundwater System

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.3 mg/L)

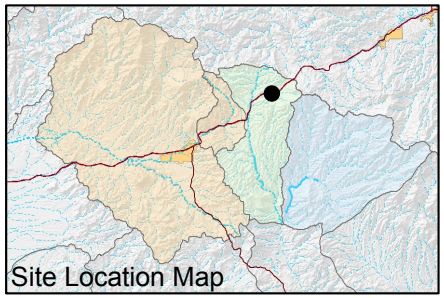
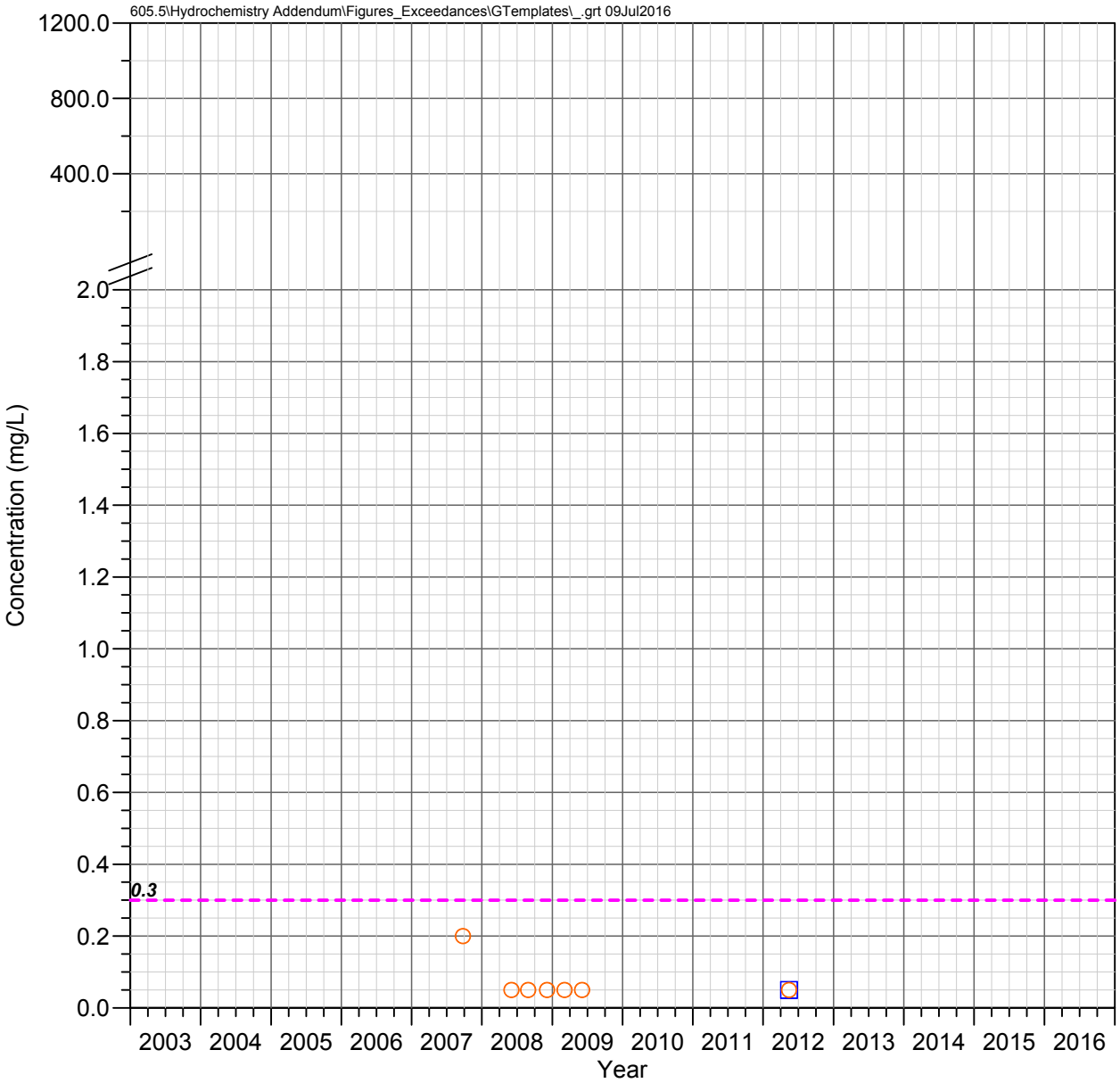


FIGURE E-345. IRON CONCENTRATIONS OBSERVED AT JI RANCH MIDDLE WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



A-06
Apache Leap Tuff Aquifer

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.3 mg/L)

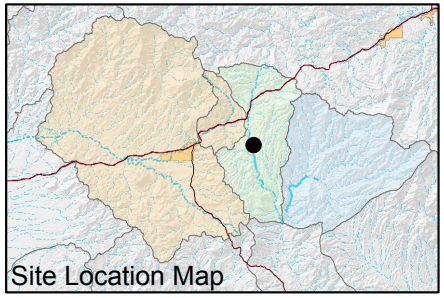
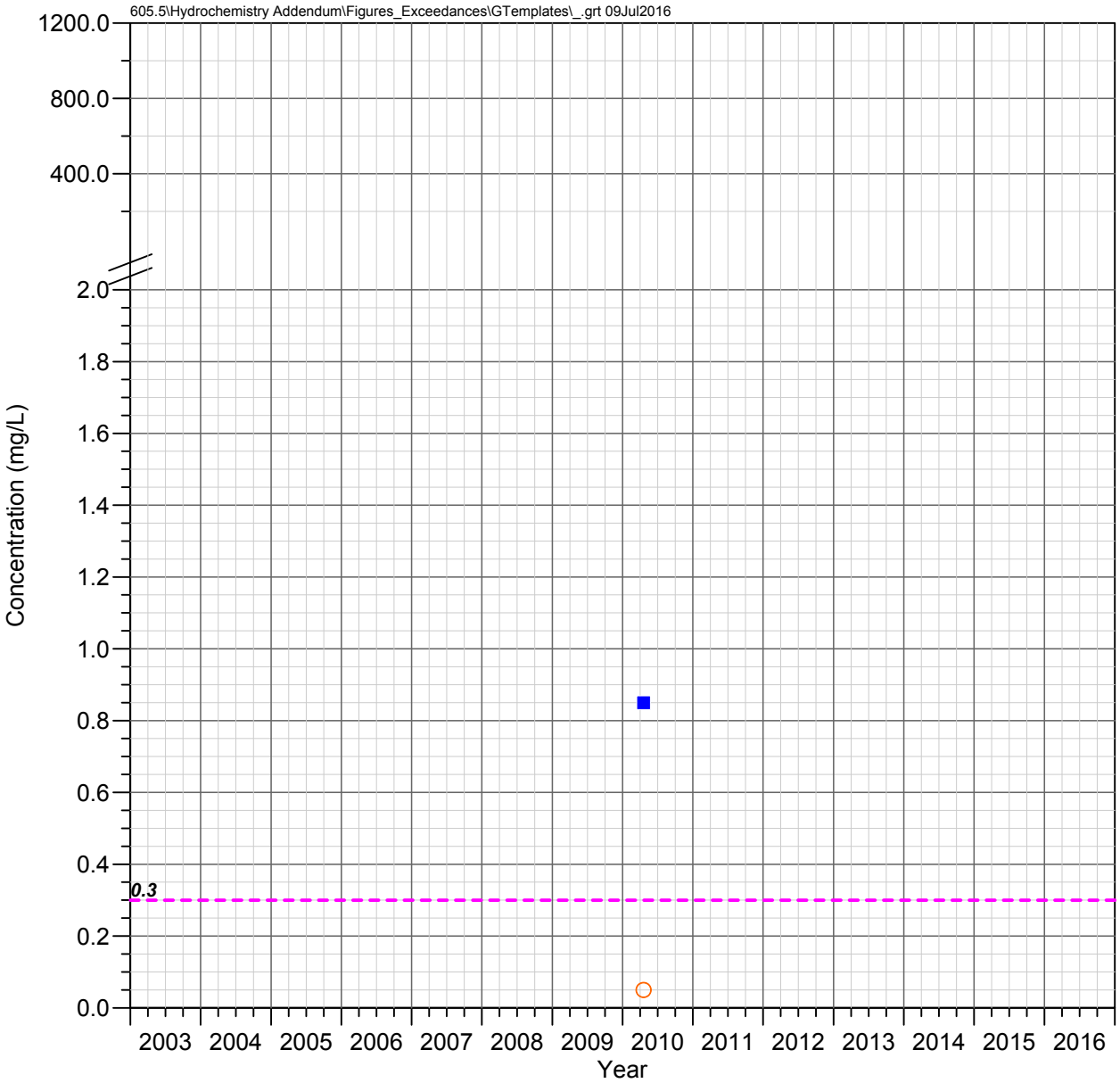


FIGURE E-346. IRON CONCENTRATIONS OBSERVED AT A-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



CT Well
Apache Leap Tuff Aquifer

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.3 mg/L)

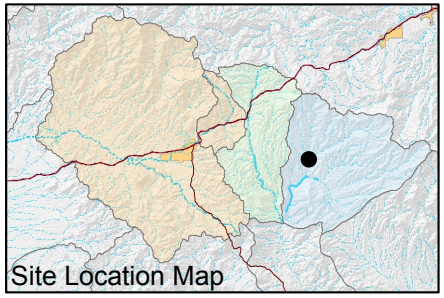
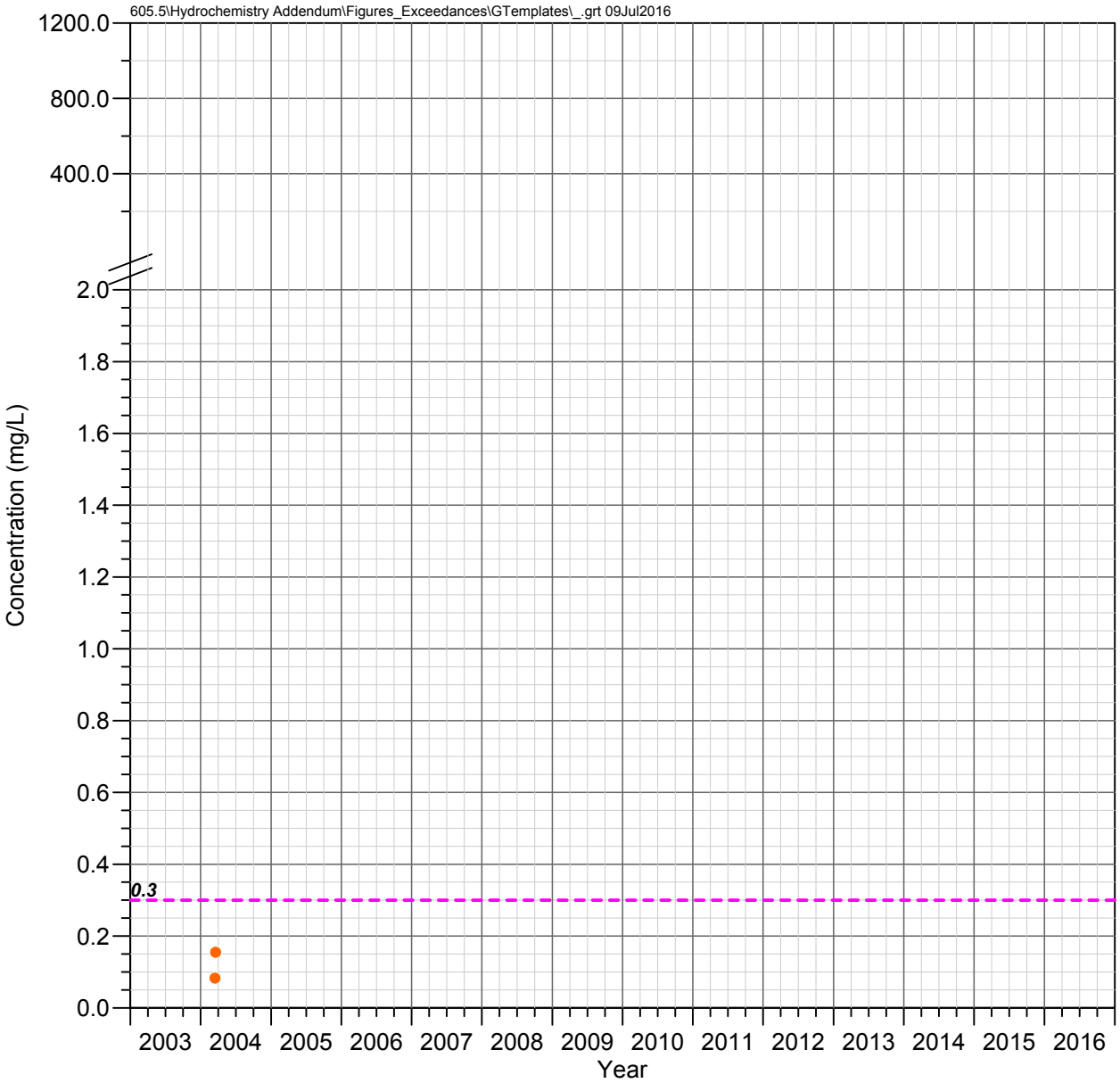


FIGURE E-347. IRON CONCENTRATIONS OBSERVED AT CT WELL, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-01
Apache Leap Tuff Aquifer

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.3 mg/L)

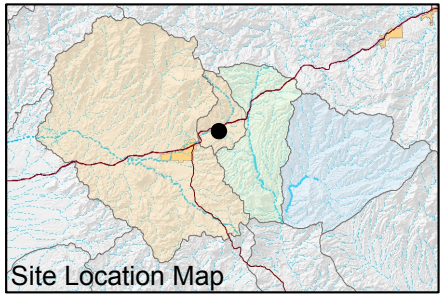
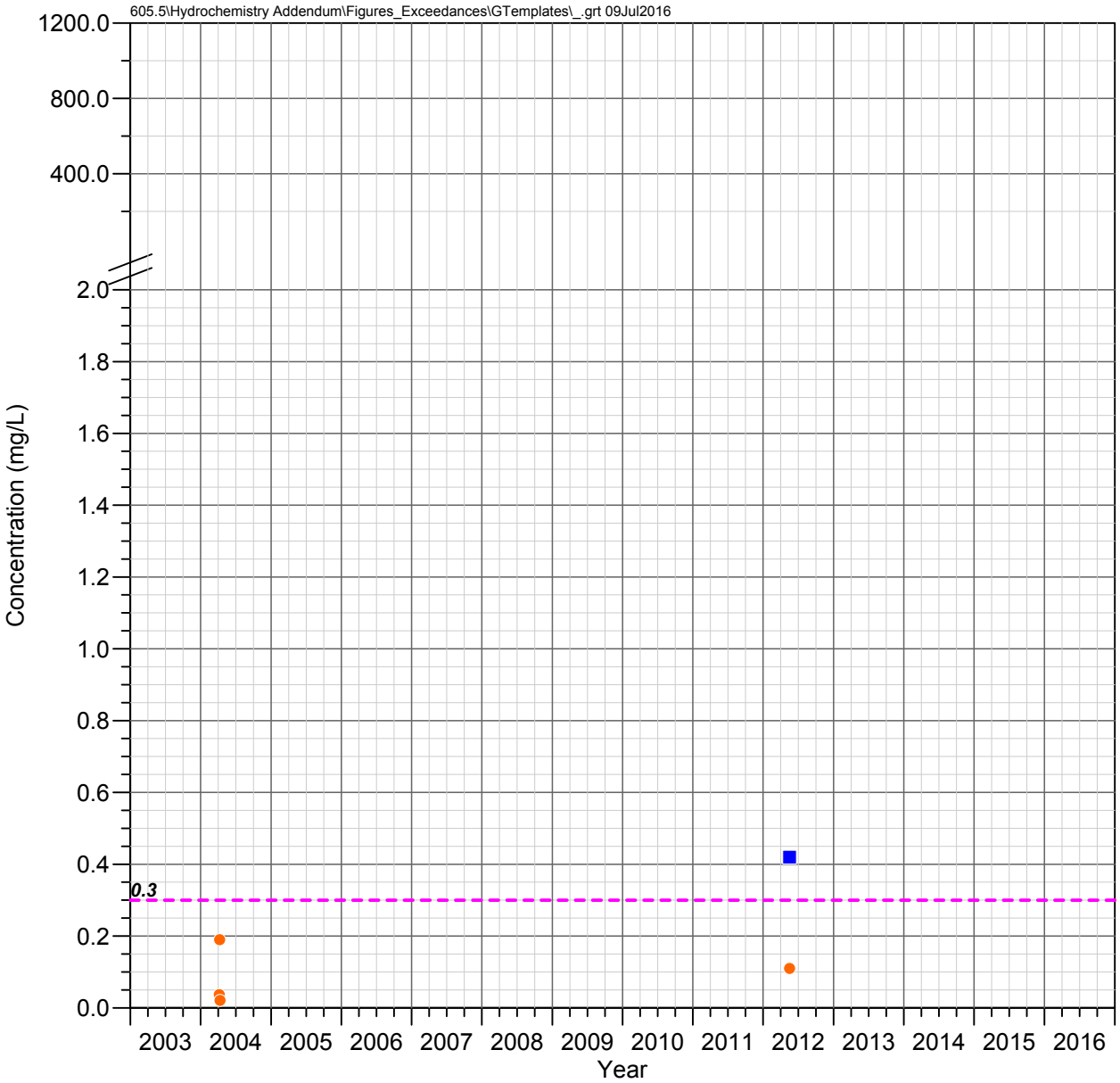


FIGURE E-348. IRON CONCENTRATIONS OBSERVED AT HRES-01, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-02
Apache Leap Tuff Aquifer

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.3 mg/L)

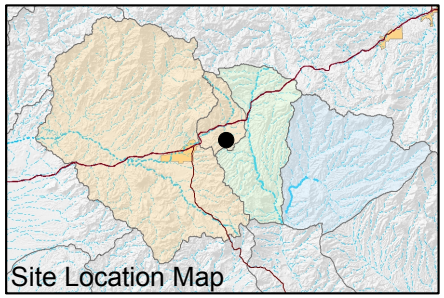
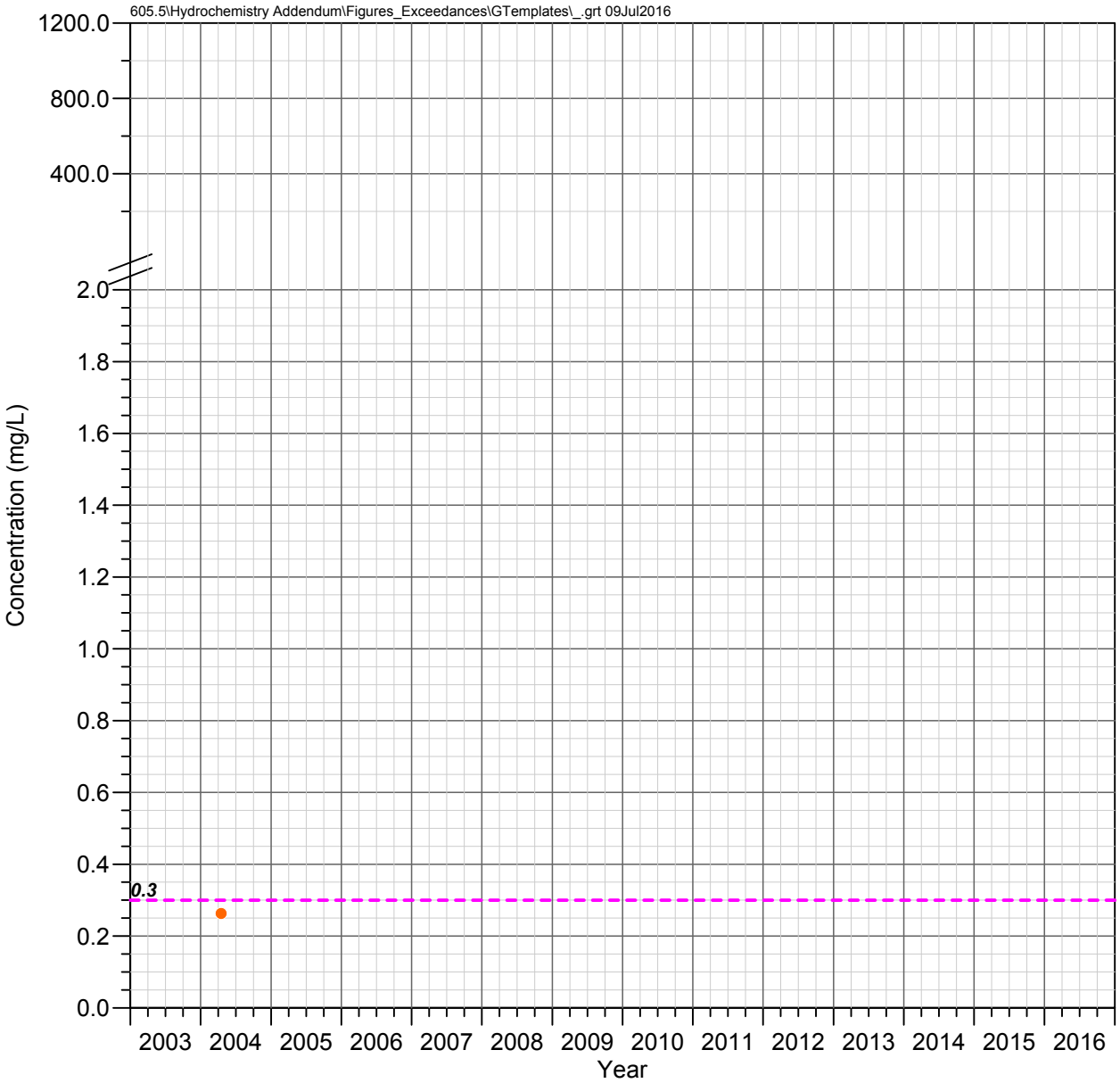


FIGURE E-349. IRON CONCENTRATIONS OBSERVED AT HRES-02, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-03d
Apache Leap Tuff Aquifer

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.3 mg/L)

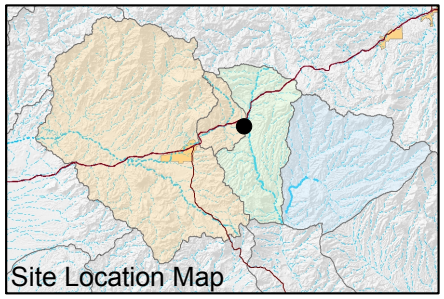
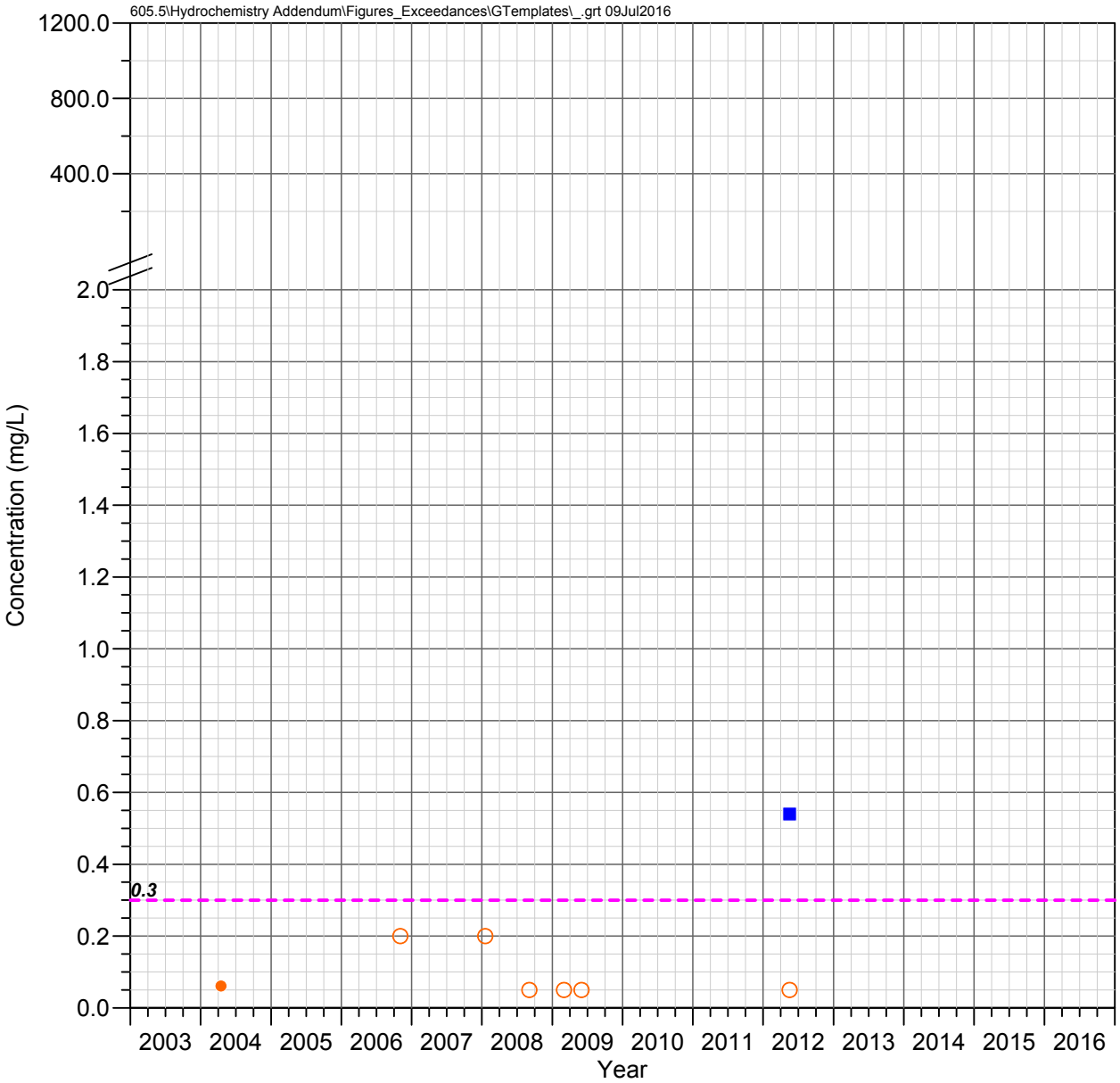


FIGURE E-350. IRON CONCENTRATIONS OBSERVED AT HRES-03D, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-04
Apache Leap Tuff Aquifer

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.3 mg/L)

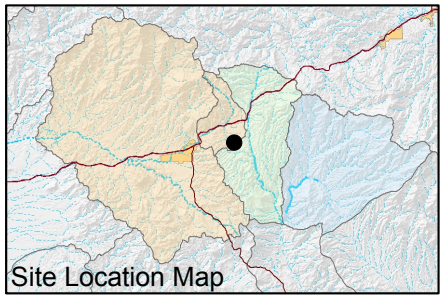
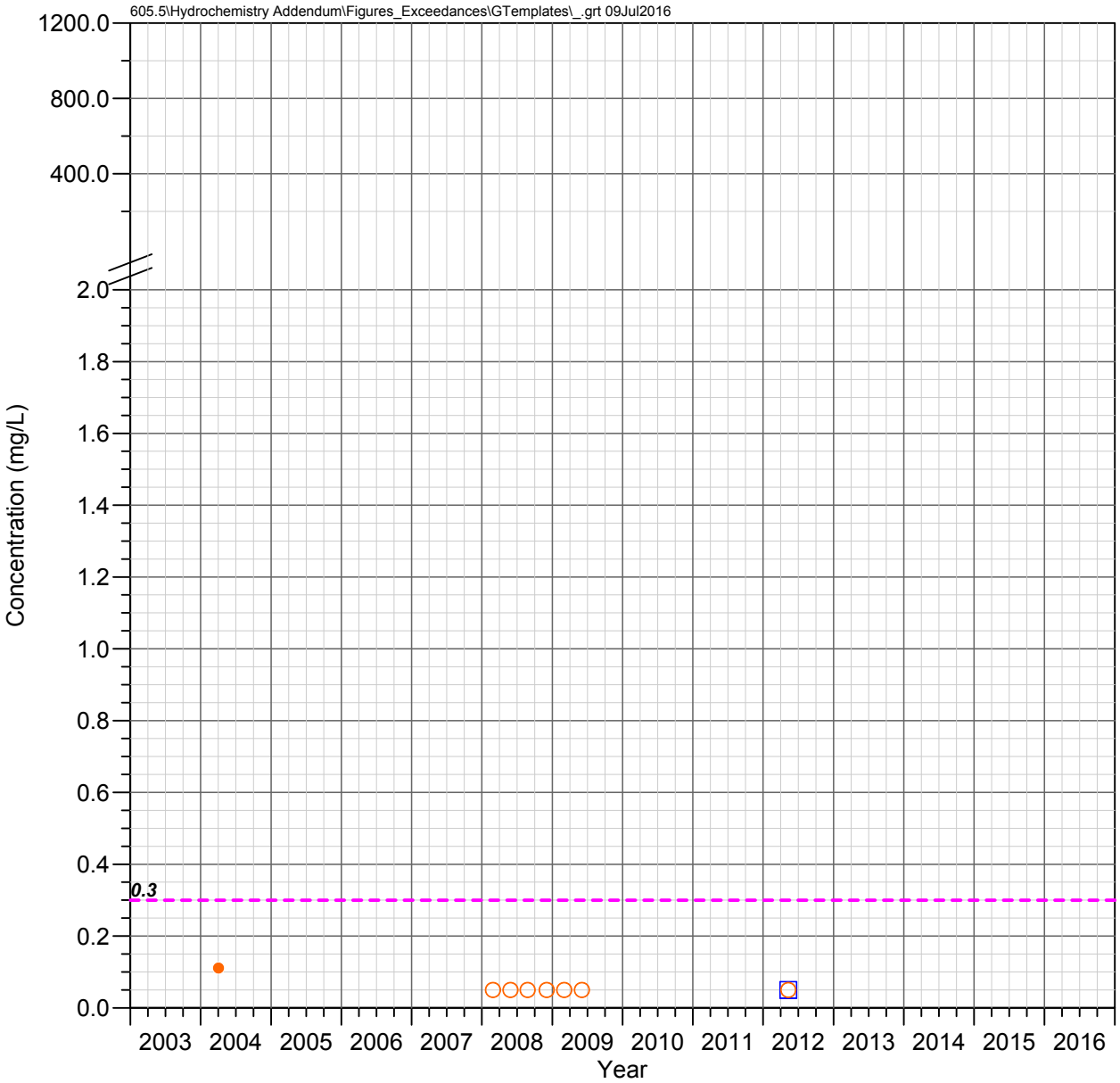


FIGURE E-351. IRON CONCENTRATIONS OBSERVED AT HRES-04, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-05
Apache Leap Tuff Aquifer

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.3 mg/L)

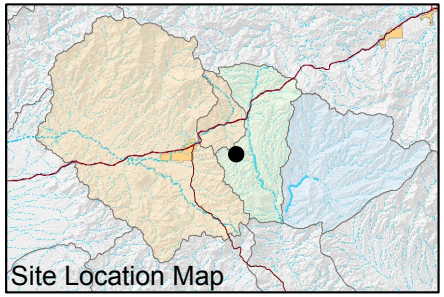
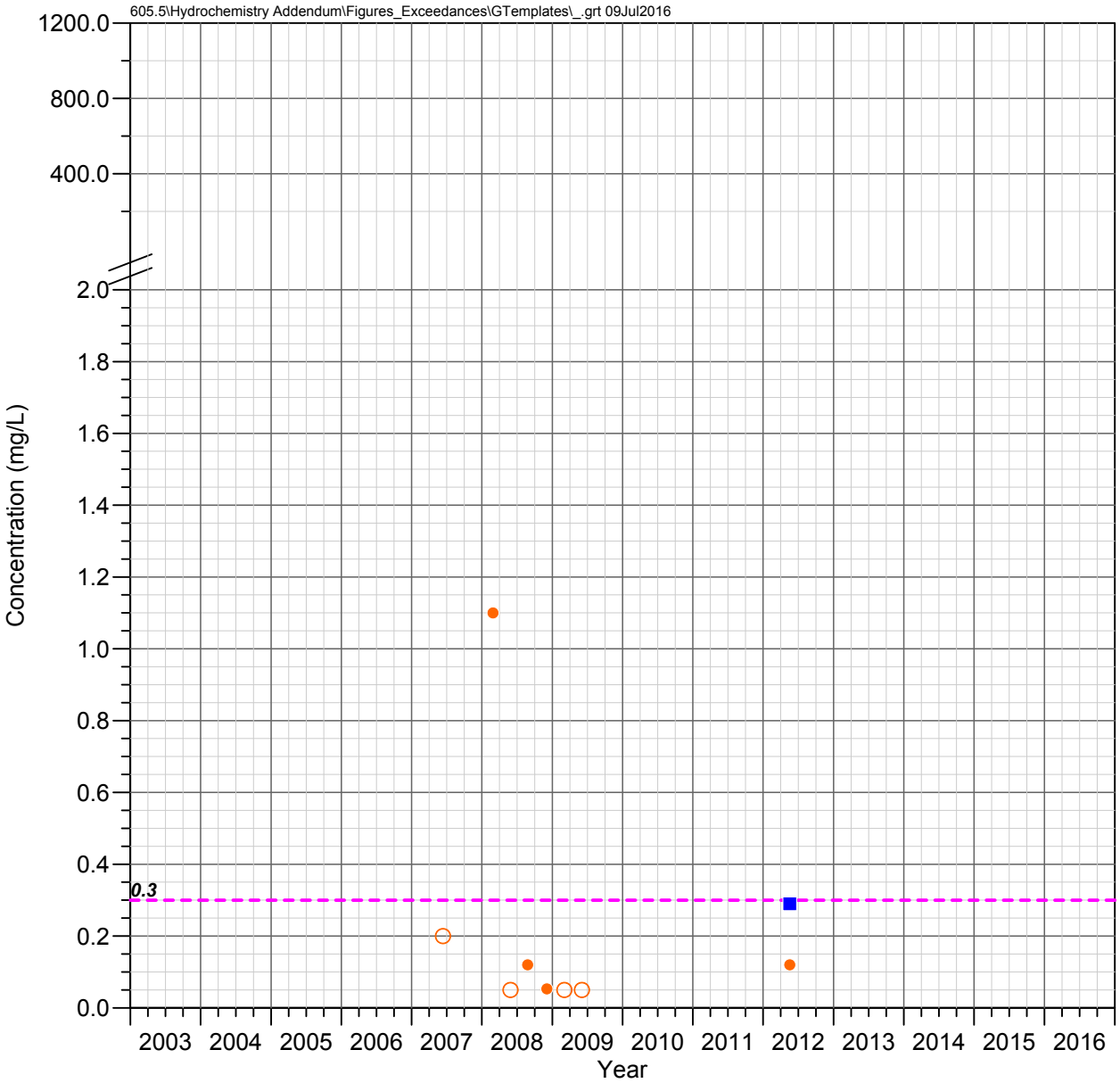


FIGURE E-352. IRON CONCENTRATIONS OBSERVED AT HRES-05, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-06
Apache Leap Tuff Aquifer

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.3 mg/L)

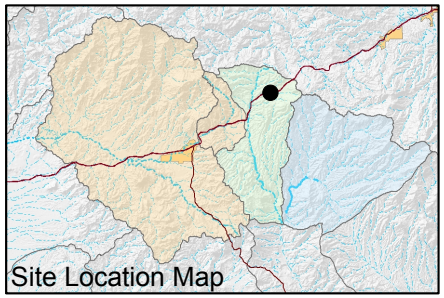
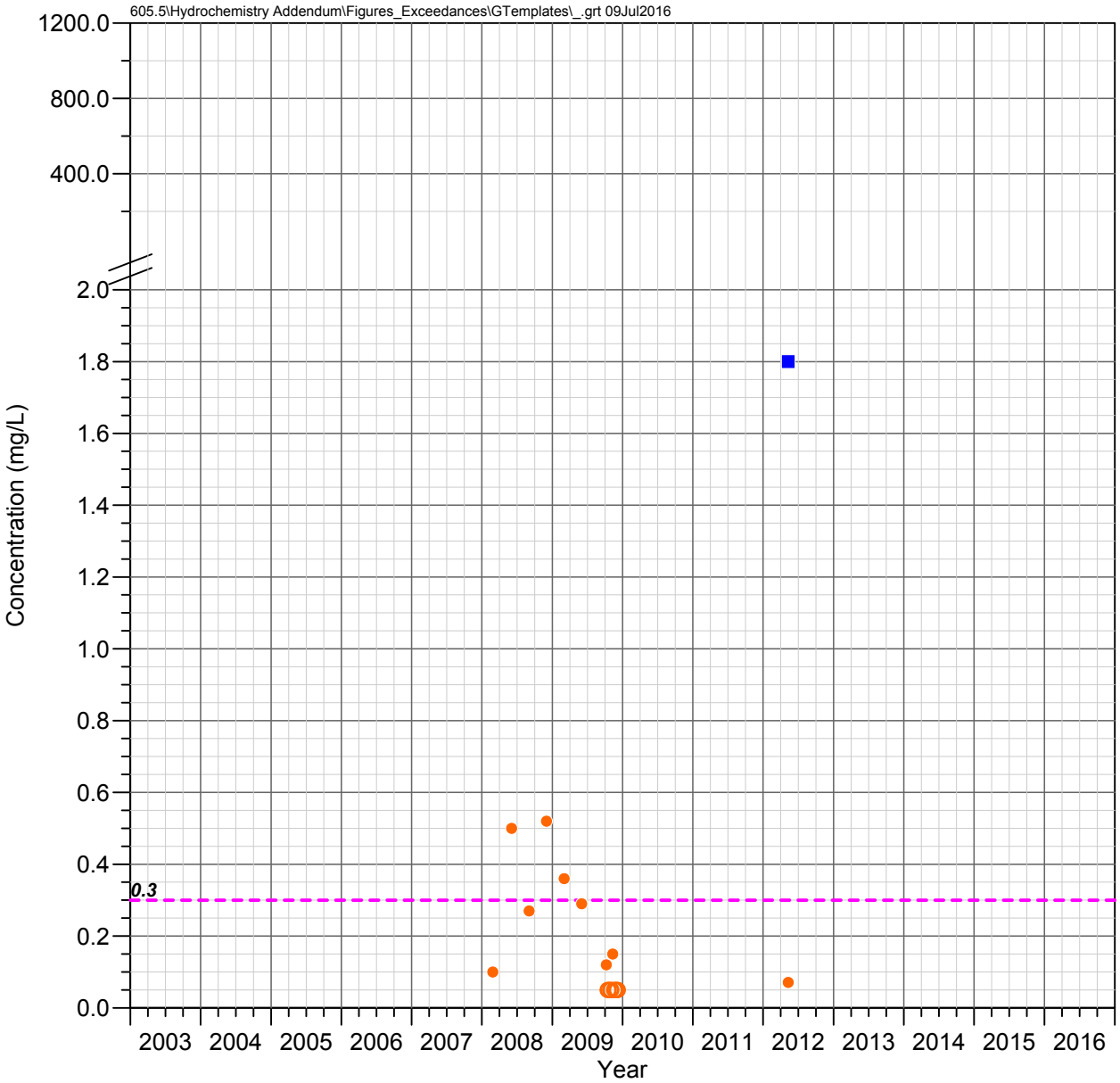


FIGURE E-353. IRON CONCENTRATIONS OBSERVED AT HRES-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-07
Apache Leap Tuff Aquifer

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.3 mg/L)

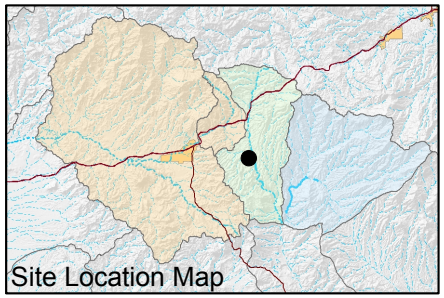
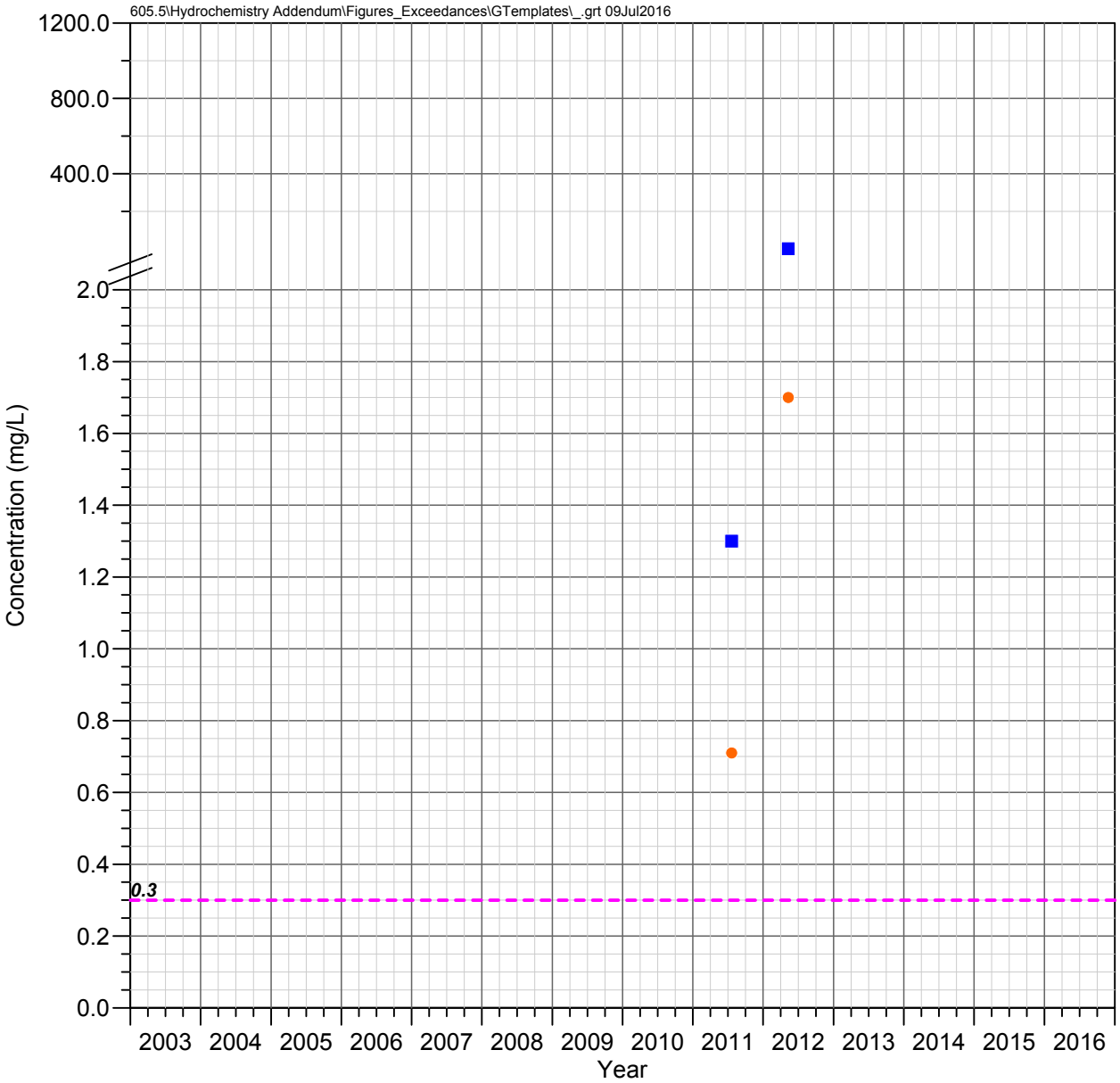


FIGURE E-354. IRON CONCENTRATIONS OBSERVED AT HRES-07, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-08
Apache Leap Tuff Aquifer

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.3 mg/L)

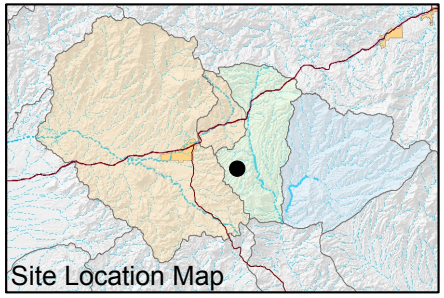
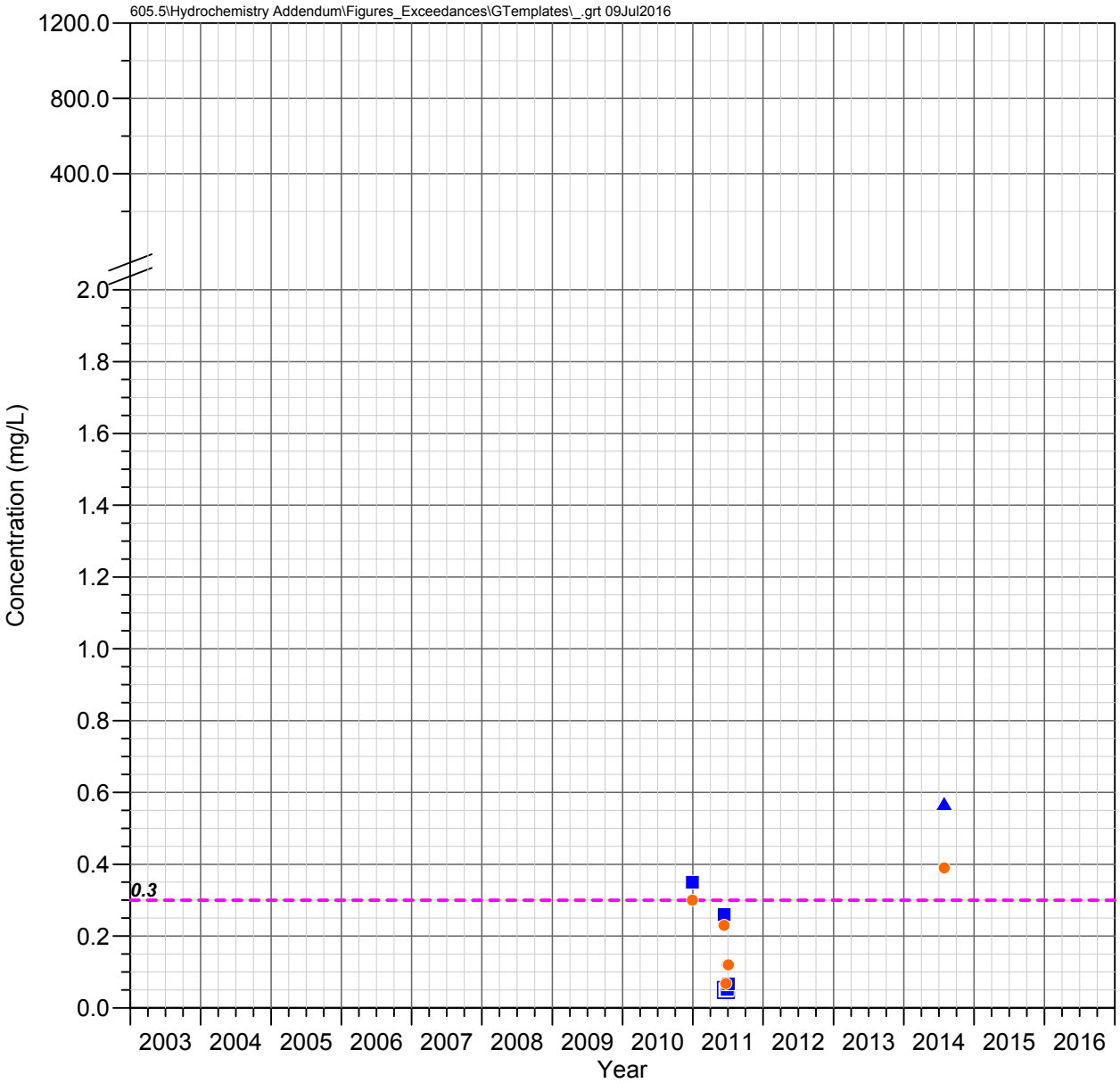


FIGURE E-355. IRON CONCENTRATIONS OBSERVED AT HRES-08, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-09
Apache Leap Tuff Aquifer

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.3 mg/L)

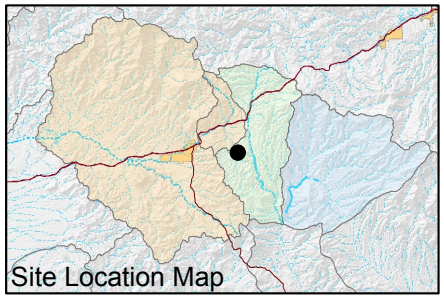
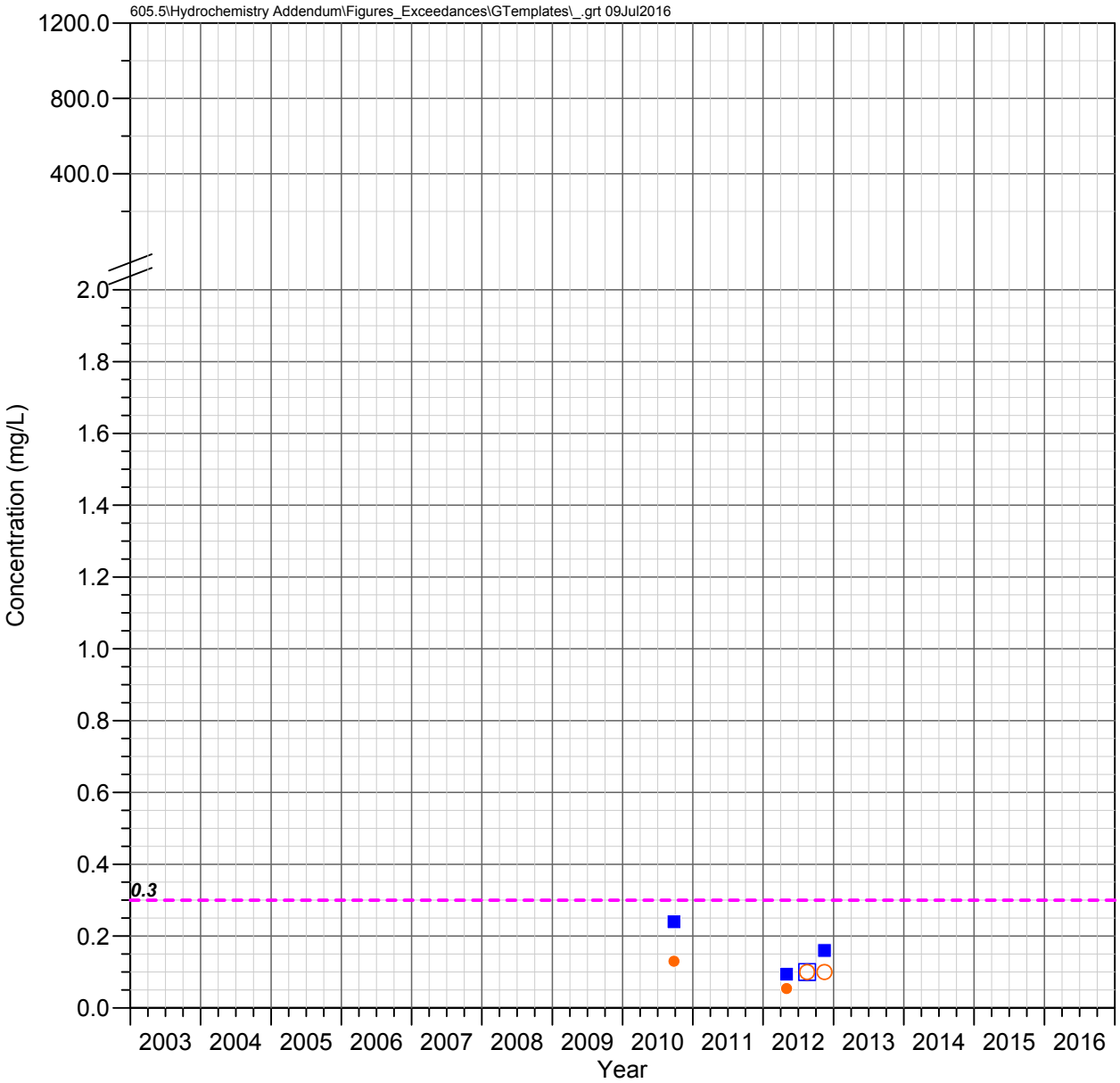


FIGURE E-356. IRON CONCENTRATIONS OBSERVED AT HRES-09, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-10
Apache Leap Tuff Aquifer

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.3 mg/L)

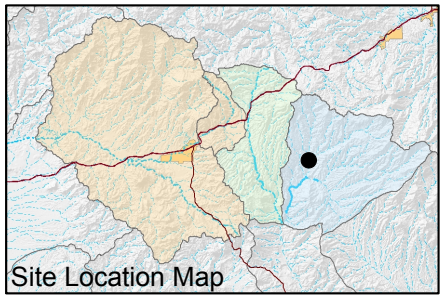
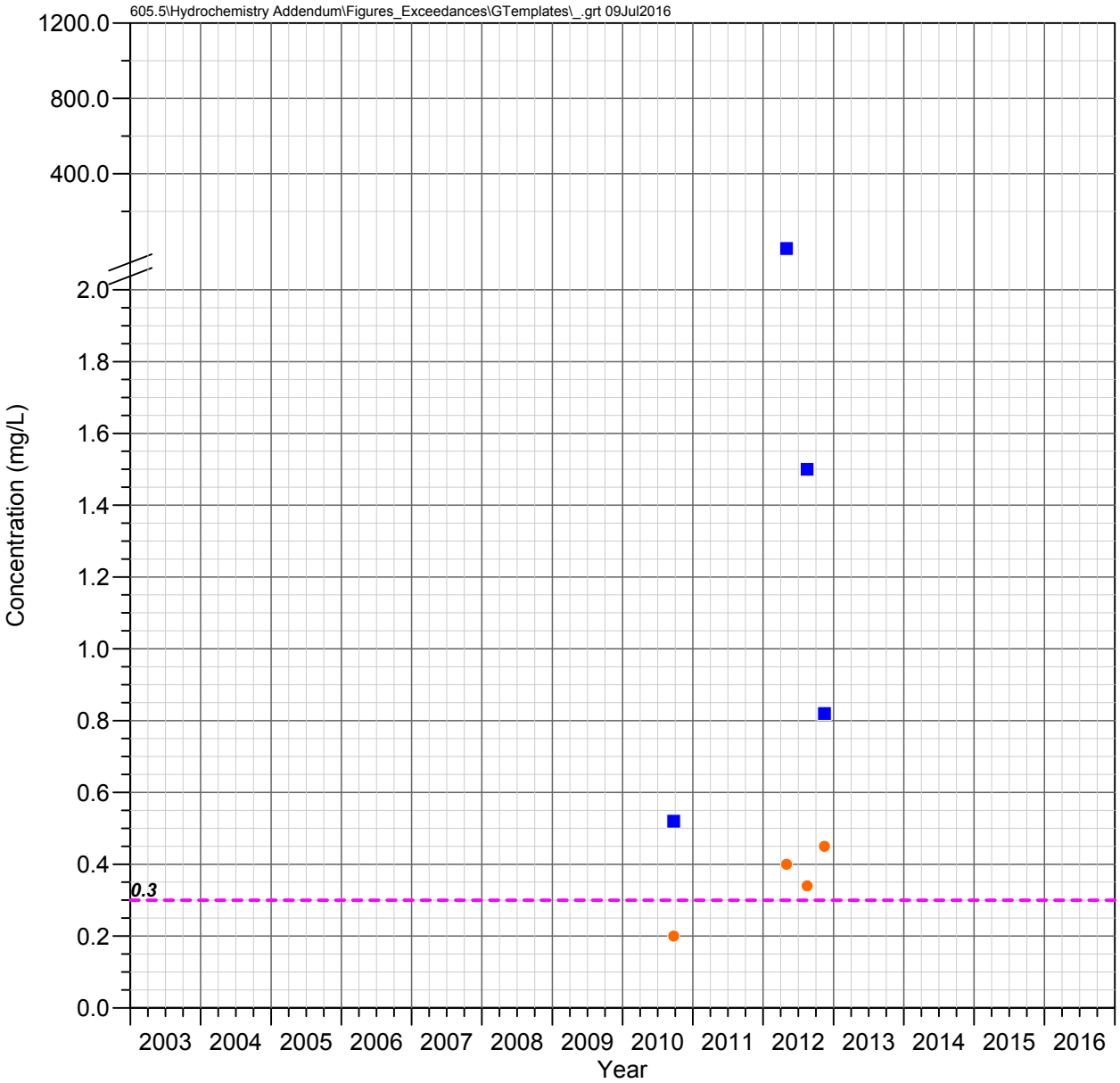


FIGURE E-357. IRON CONCENTRATIONS OBSERVED AT HRES-10, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-11
Apache Leap Tuff Aquifer

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.3 mg/L)

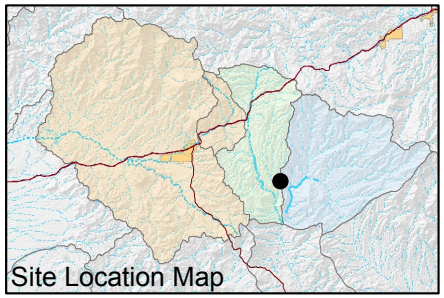
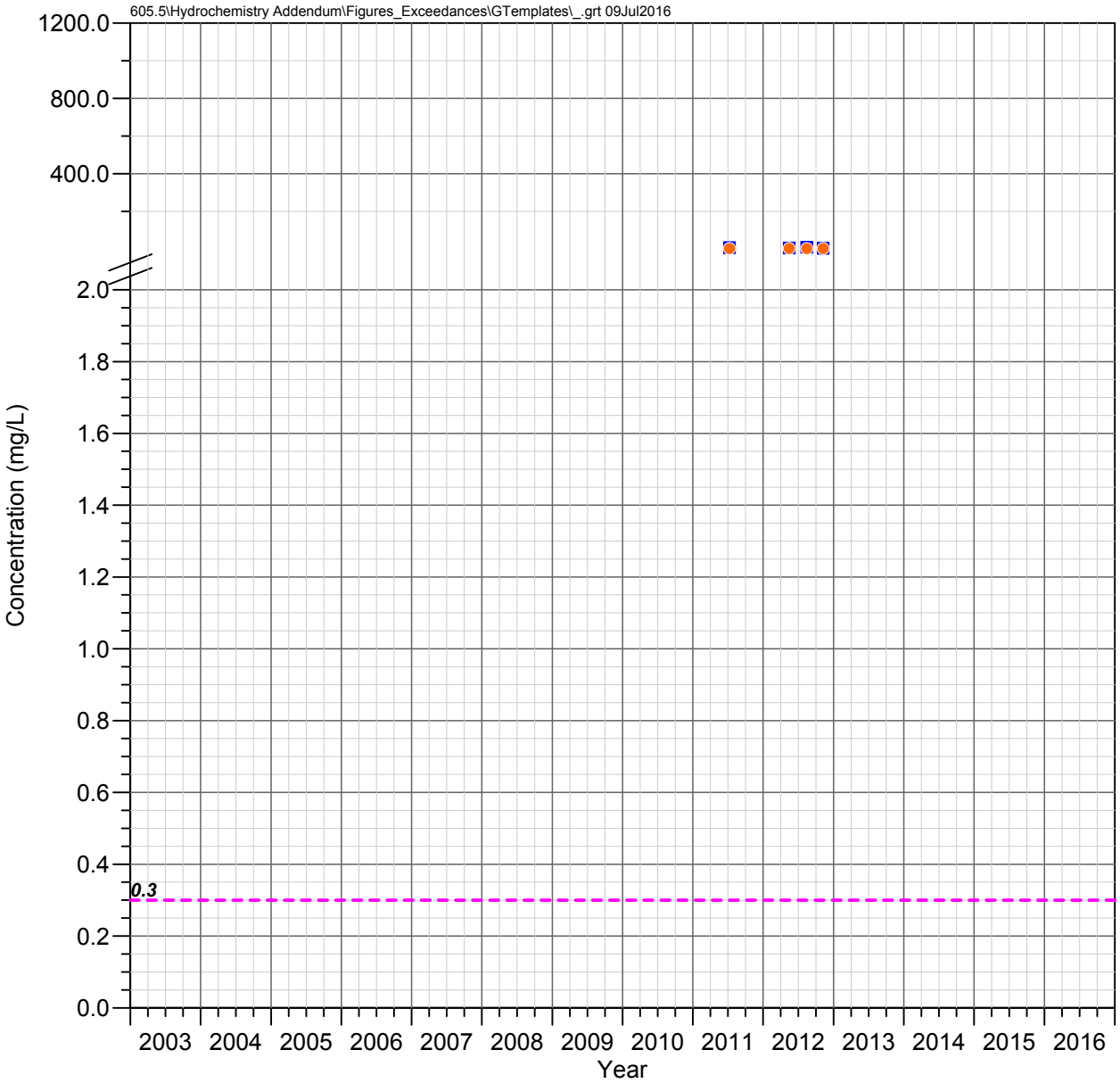


FIGURE E-358. IRON CONCENTRATIONS OBSERVED AT HRES-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-12
Apache Leap Tuff Aquifer

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.3 mg/L)

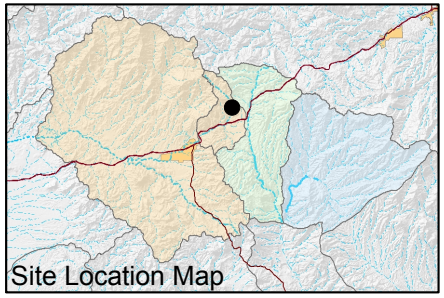
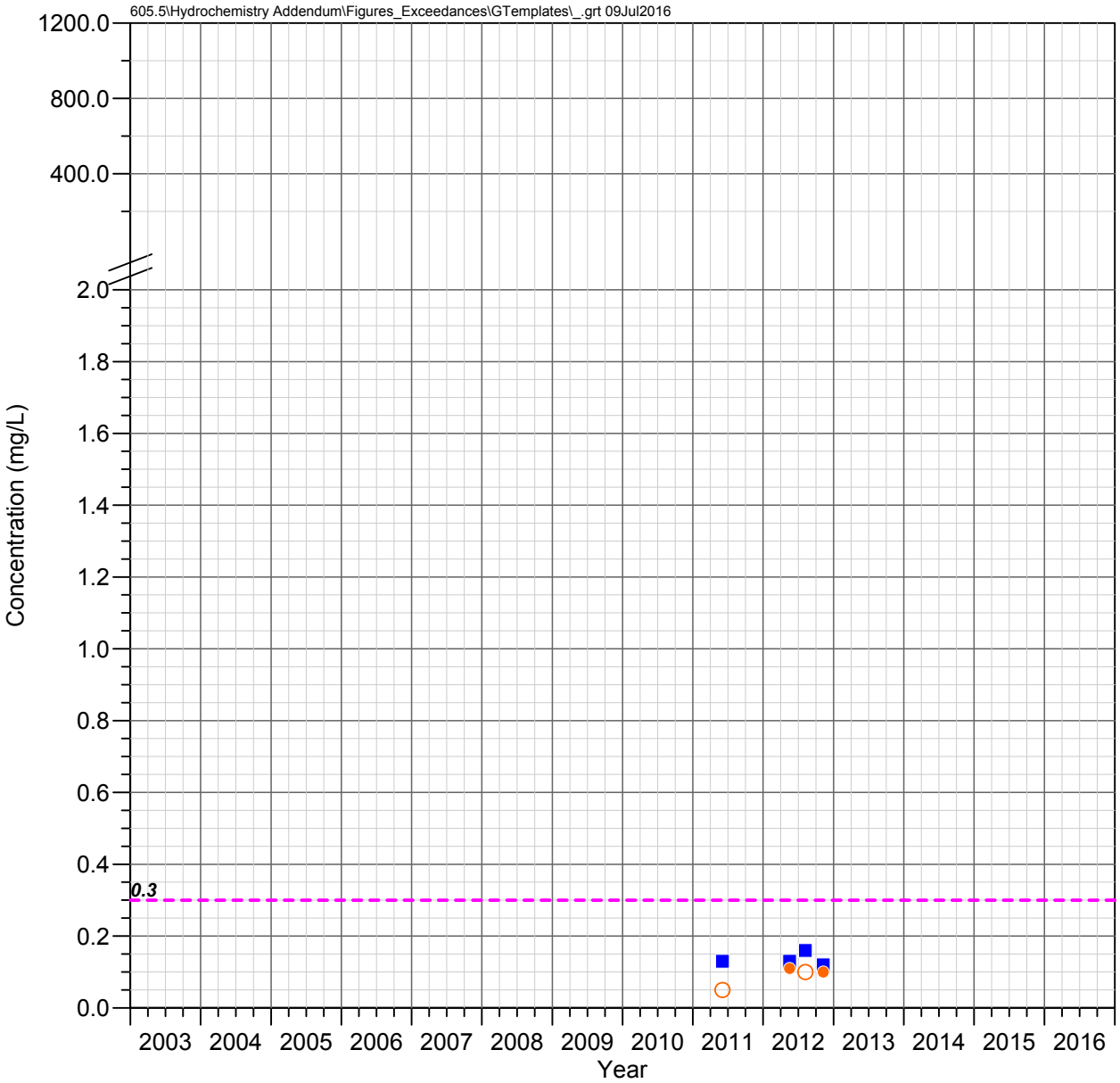


FIGURE E-359. IRON CONCENTRATIONS OBSERVED AT HRES-12, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-13
Apache Leap Tuff Aquifer

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.3 mg/L)

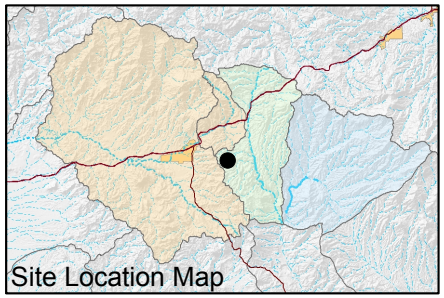
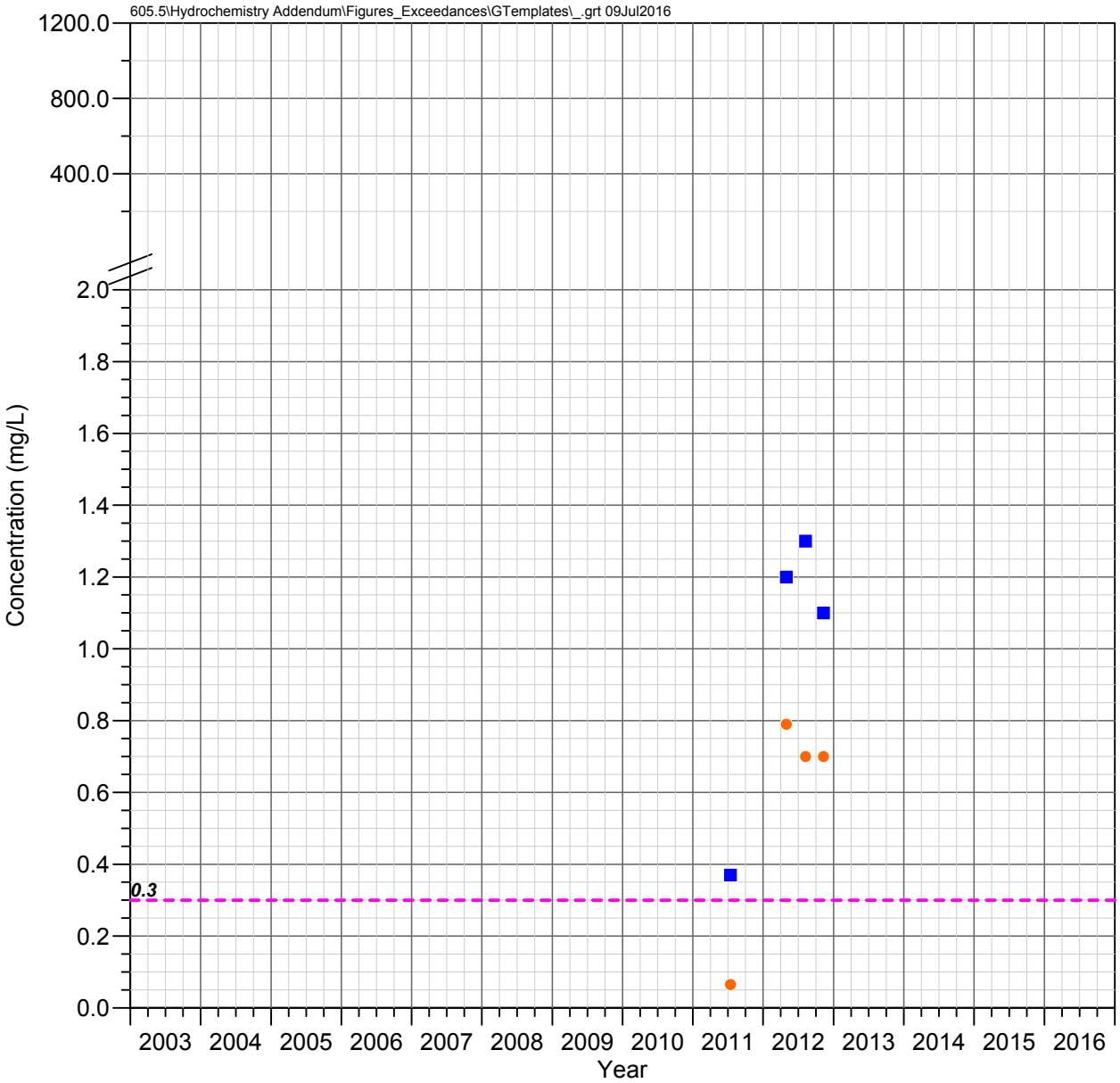


FIGURE E-360. IRON CONCENTRATIONS OBSERVED AT HRES-13, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-14
Apache Leap Tuff Aquifer

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.3 mg/L)

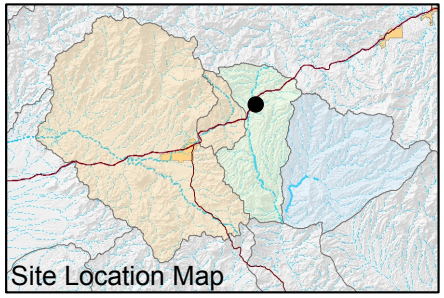
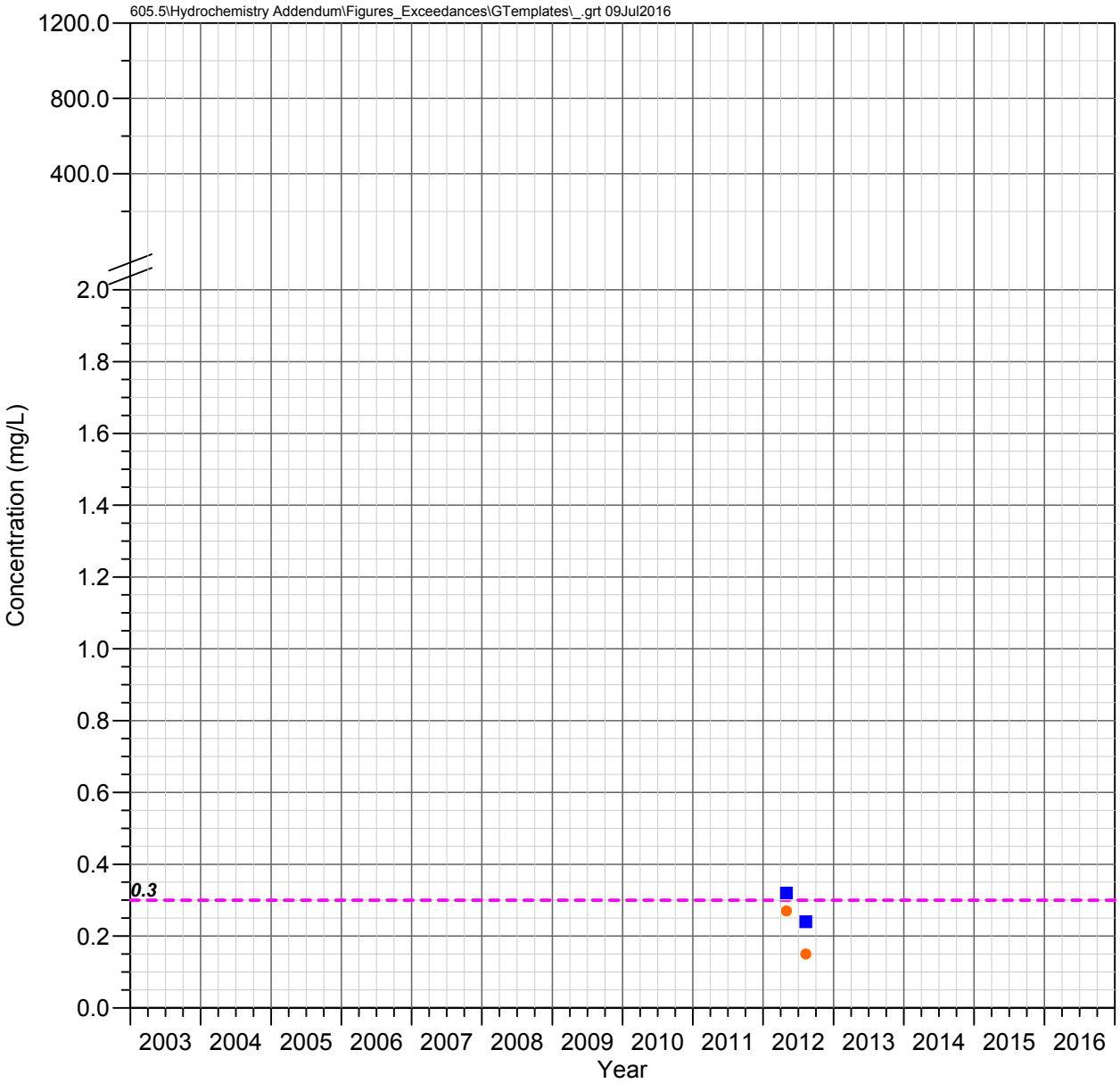


FIGURE E-361. IRON CONCENTRATIONS OBSERVED AT HRES-14, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-15
Apache Leap Tuff Aquifer

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.3 mg/L)

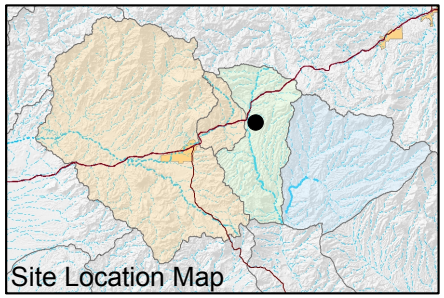
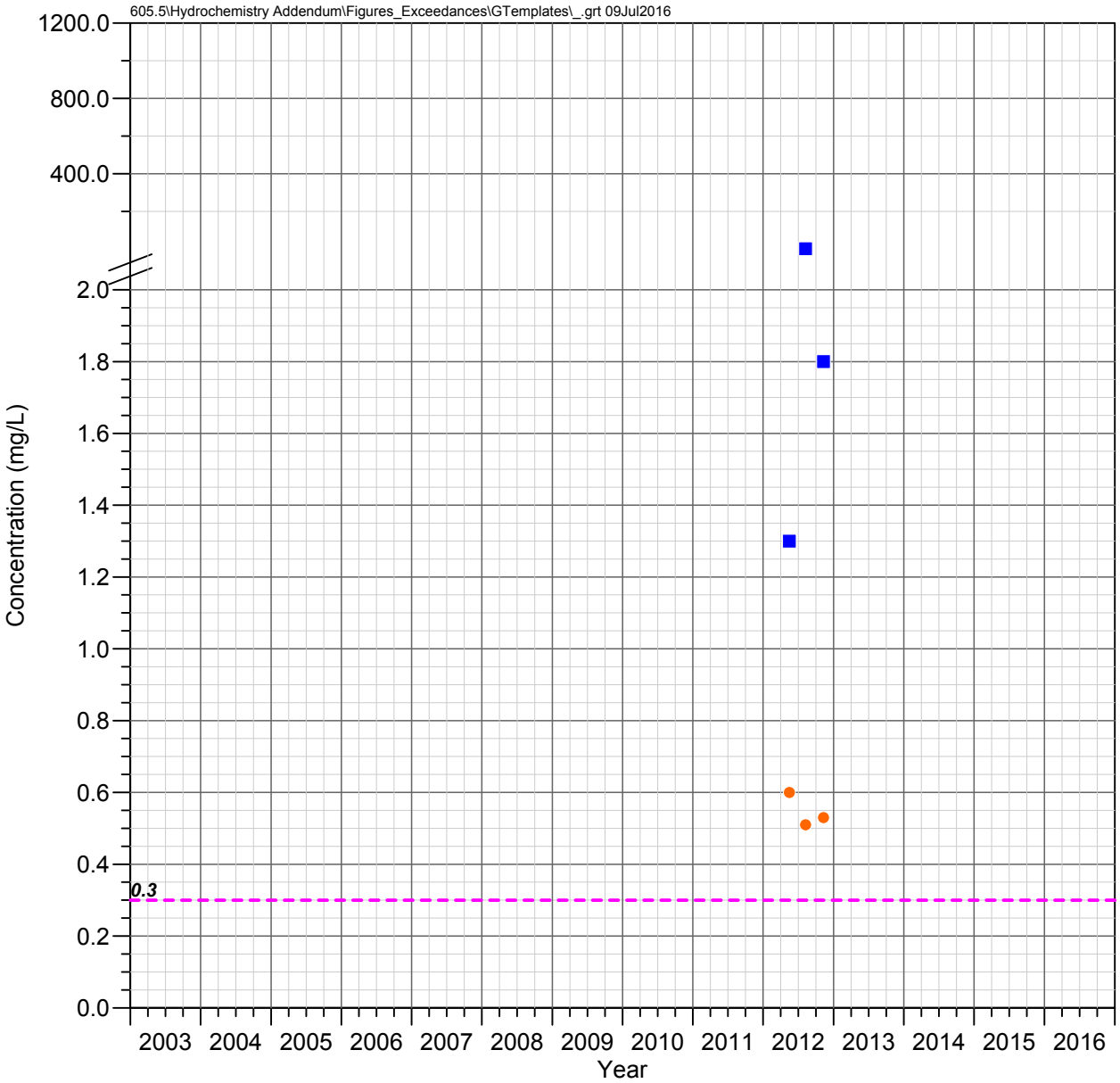


FIGURE E-362. IRON CONCENTRATIONS OBSERVED AT HRES-15, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-17
Apache Leap Tuff Aquifer

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.3 mg/L)

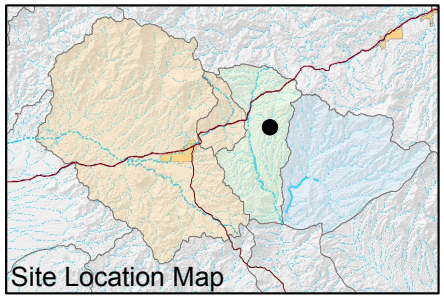
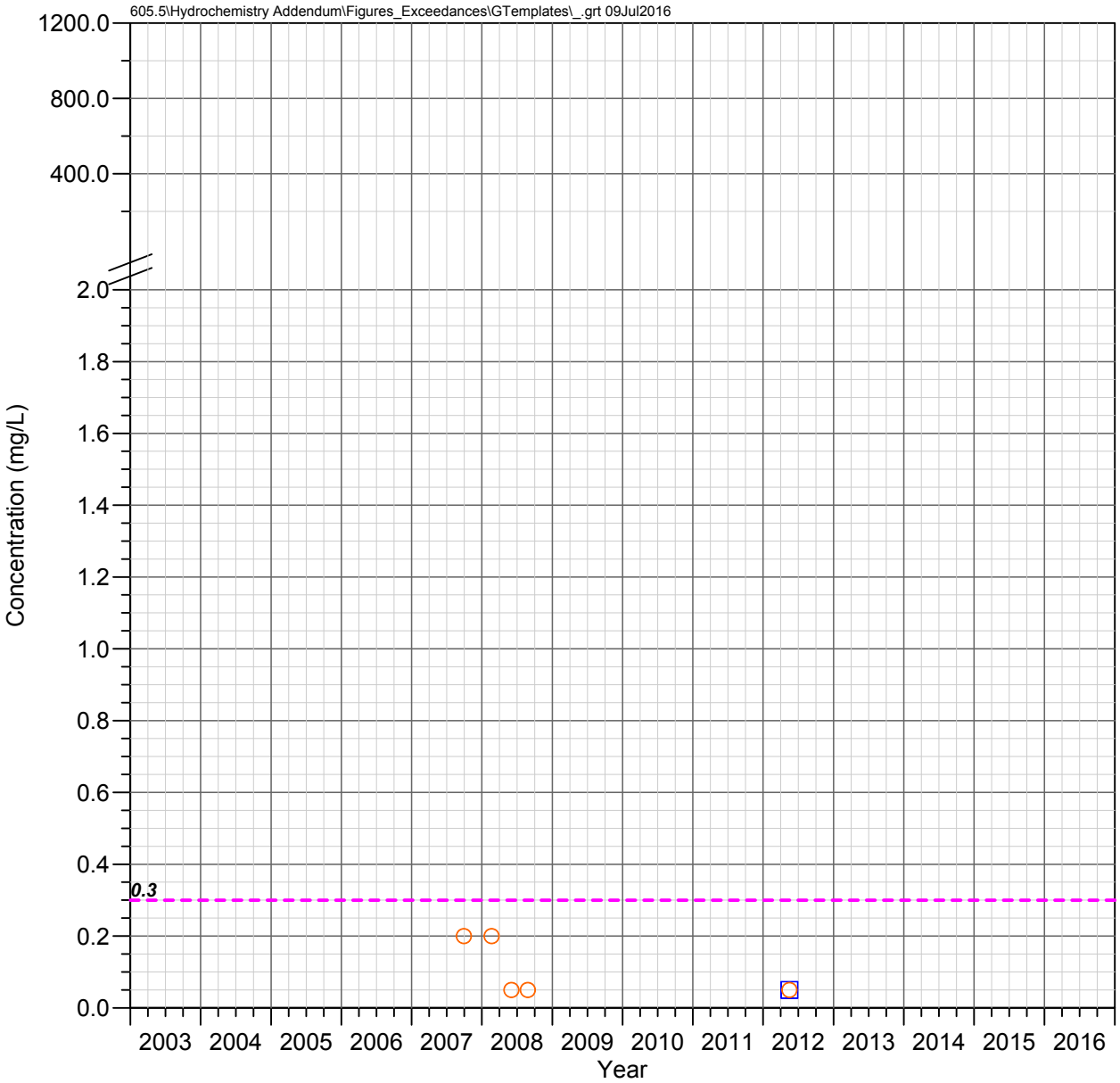


FIGURE E-363. IRON CONCENTRATIONS OBSERVED AT HRES-17, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MJ-11
Apache Leap Tuff Aquifer

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.3 mg/L)

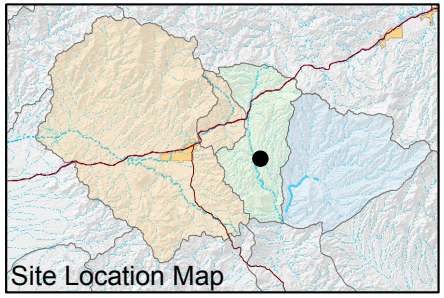
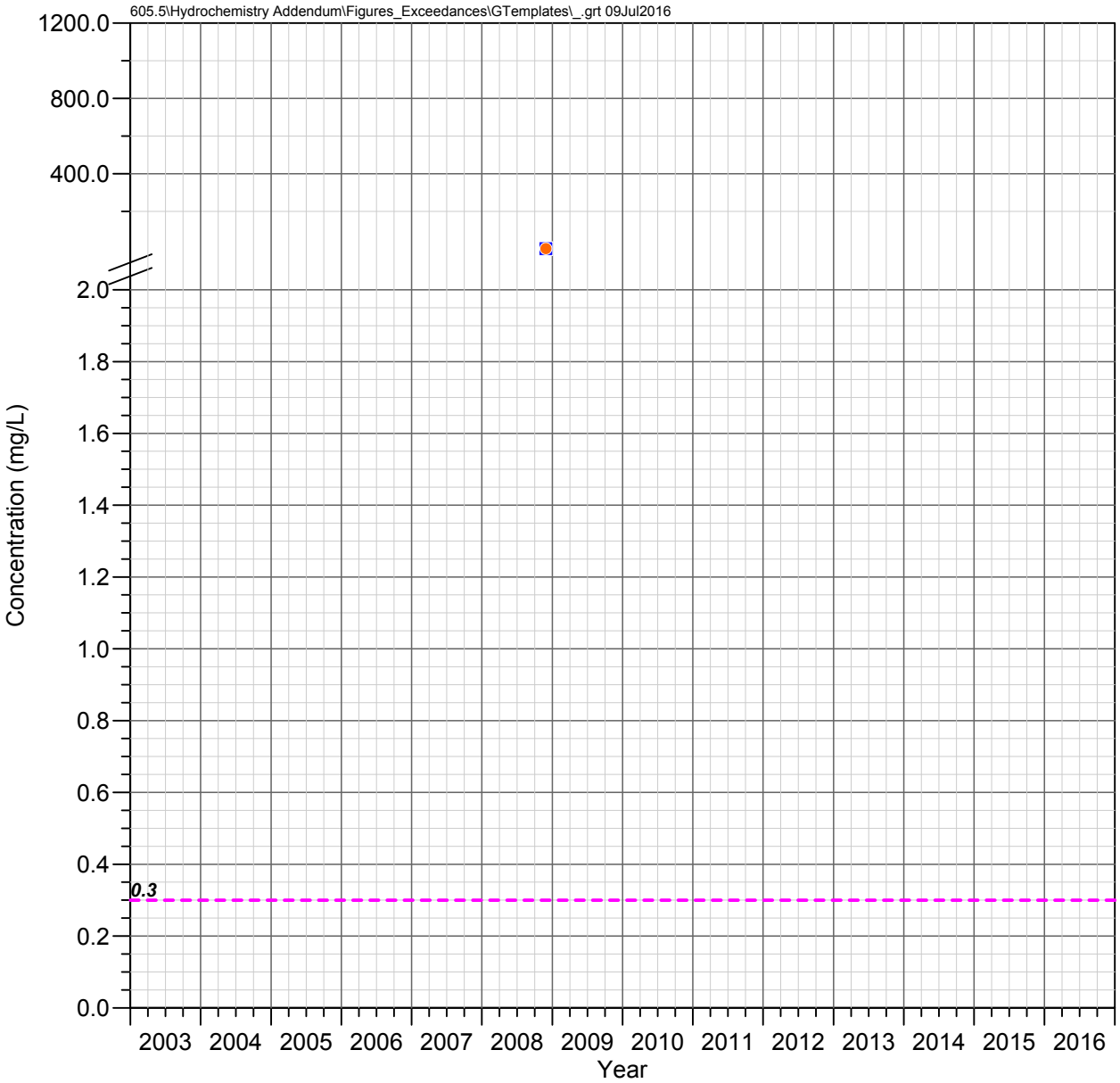


FIGURE E-364. IRON CONCENTRATIONS OBSERVED AT MJ-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-01
Deep Groundwater System

IRON

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.3 mg/L)

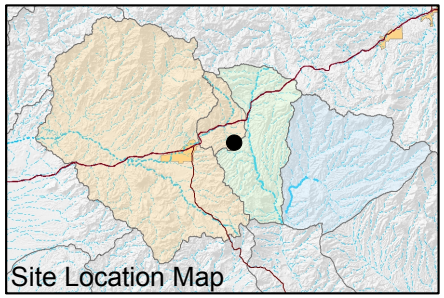
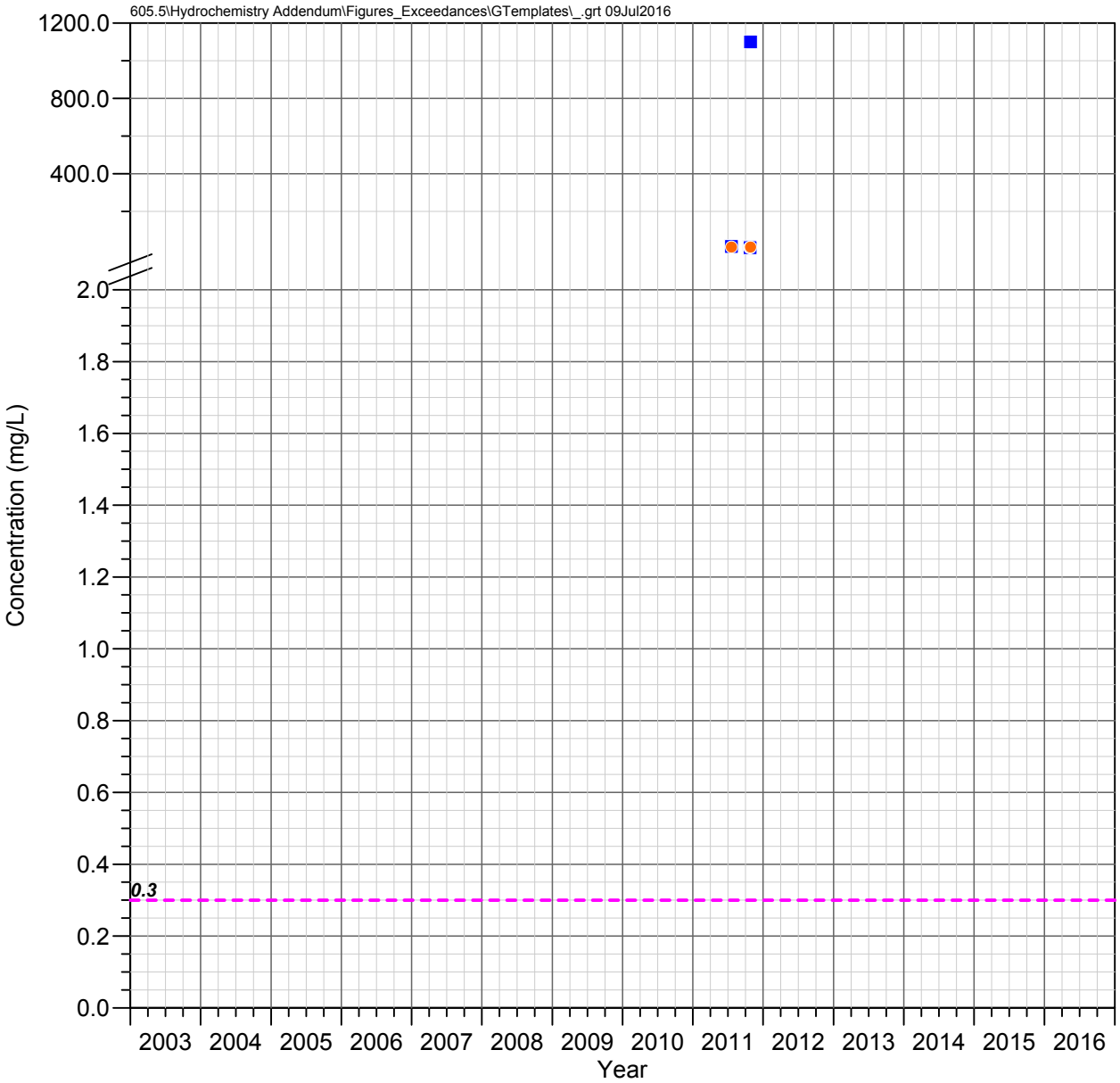


FIGURE E-365. IRON CONCENTRATIONS OBSERVED AT DHRES-01, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-02
Deep Groundwater System

IRON

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.3 mg/L)

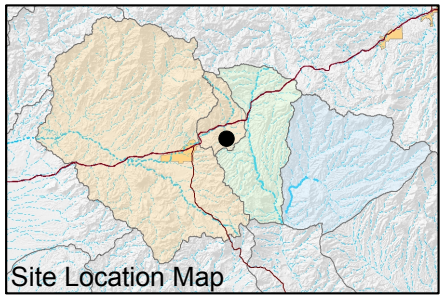
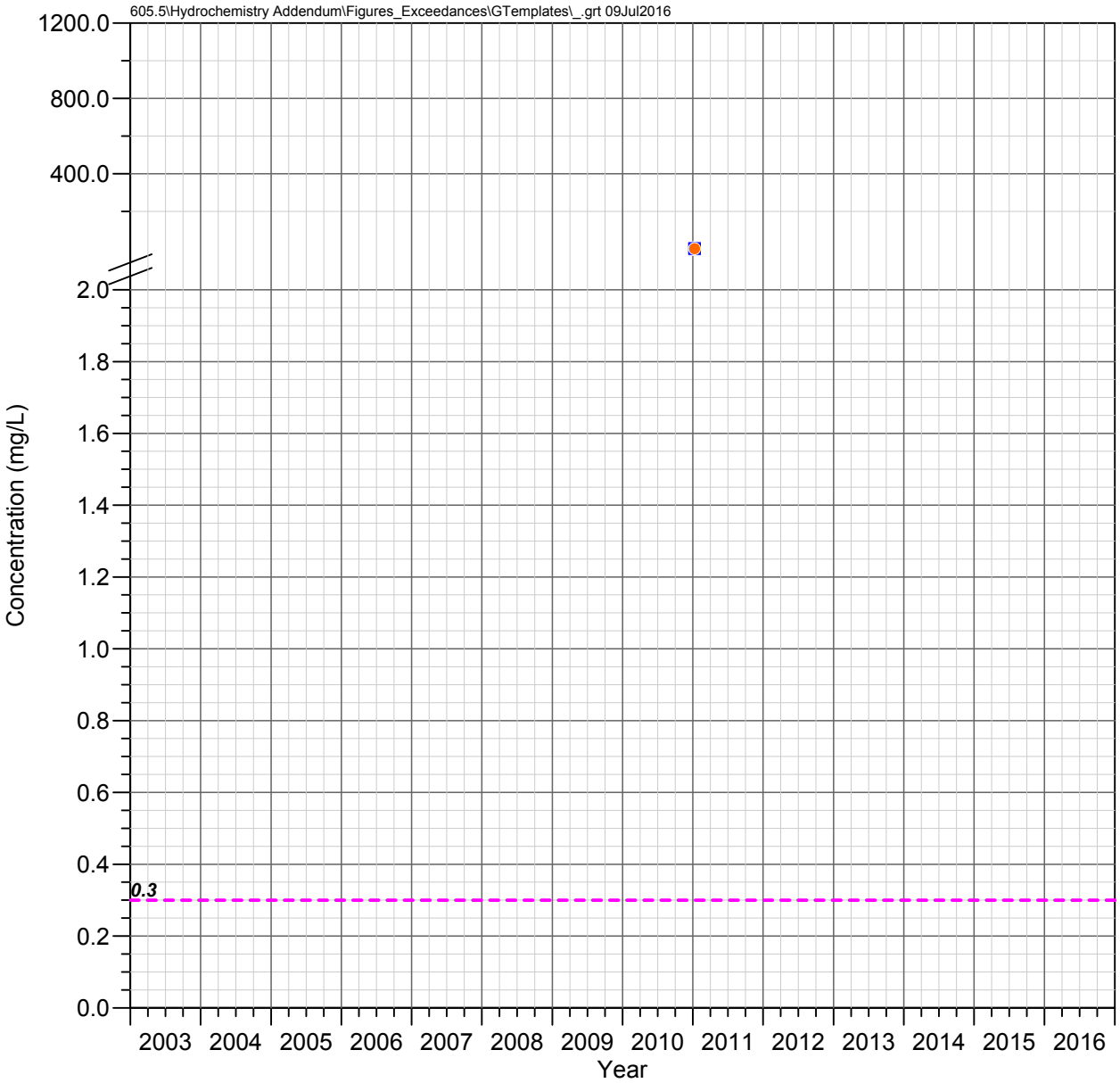


FIGURE E-366. IRON CONCENTRATIONS OBSERVED AT DHRES-02, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-06
Deep Groundwater System

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.3 mg/L)

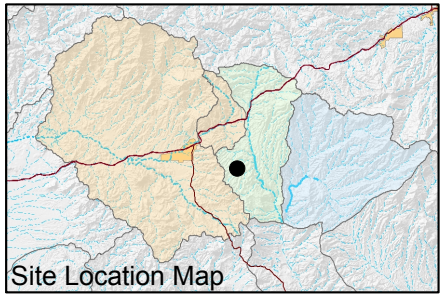
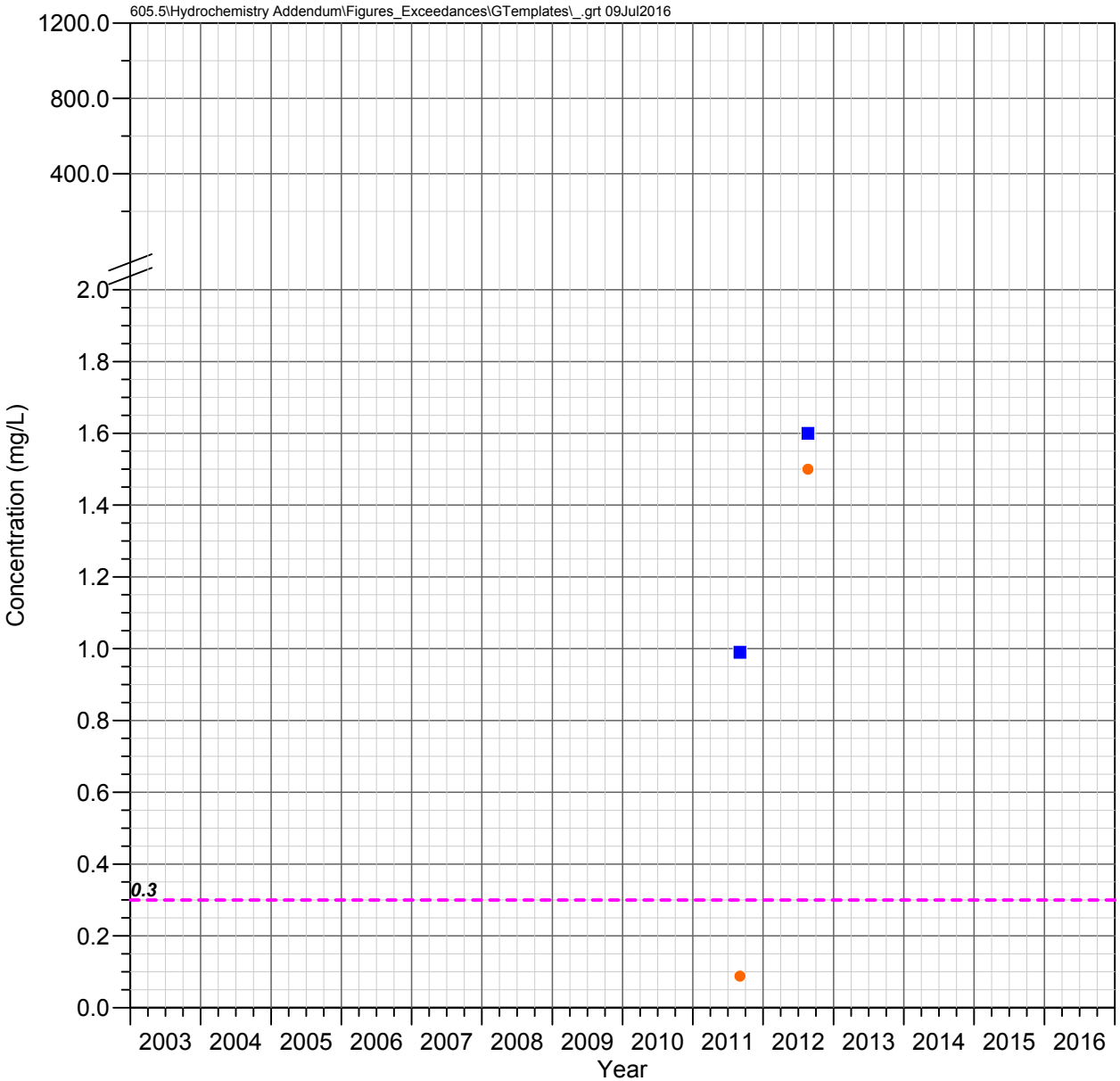


FIGURE E-367. IRON CONCENTRATIONS OBSERVED AT DHRES-06, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-09
Deep Groundwater System

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.3 mg/L)

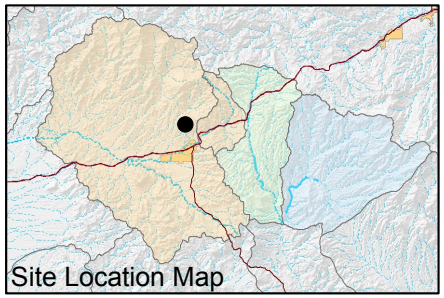
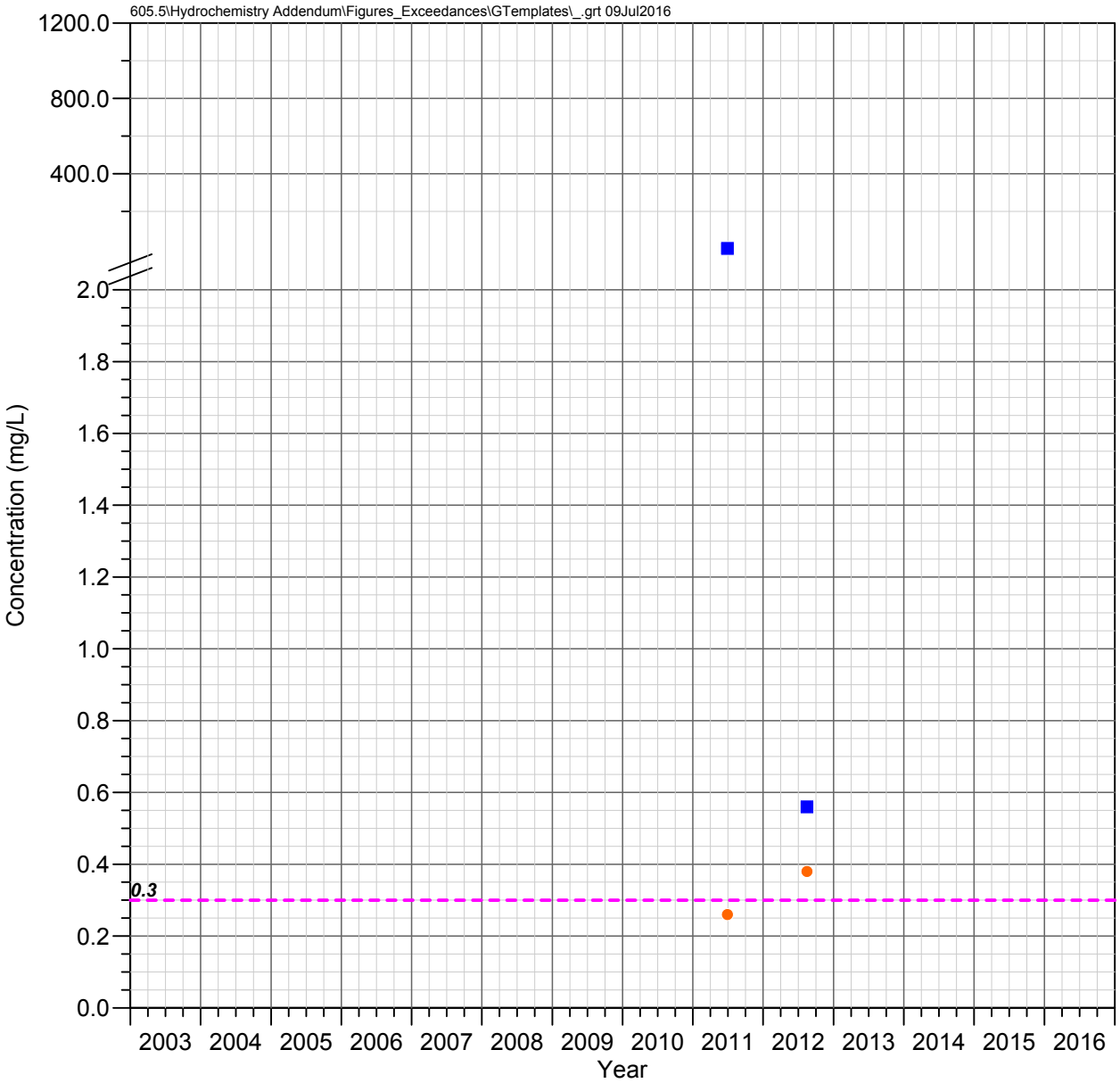


FIGURE E-368. IRON CONCENTRATIONS OBSERVED AT DHRES-09, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-11
Deep Groundwater System

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.3 mg/L)

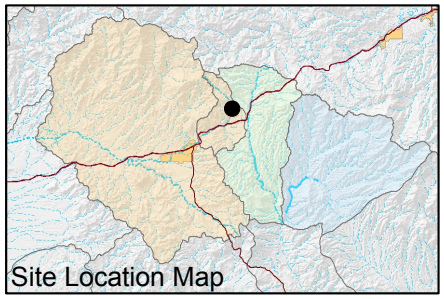
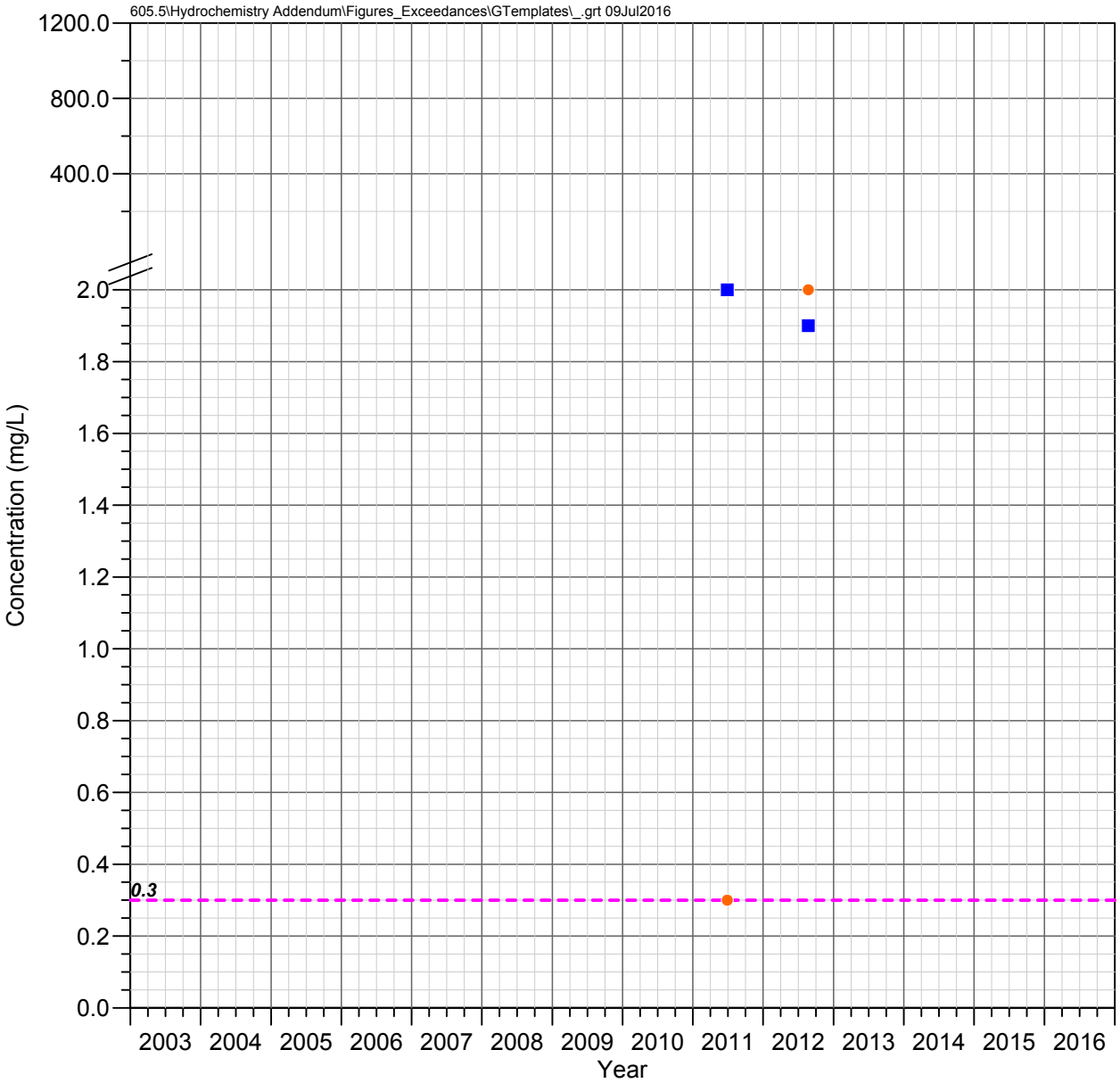


FIGURE E-369. IRON CONCENTRATIONS OBSERVED AT DHRES-11, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-13
Deep Groundwater System

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.3 mg/L)

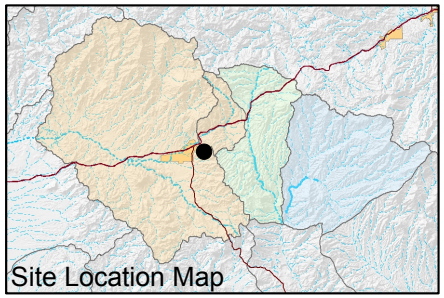
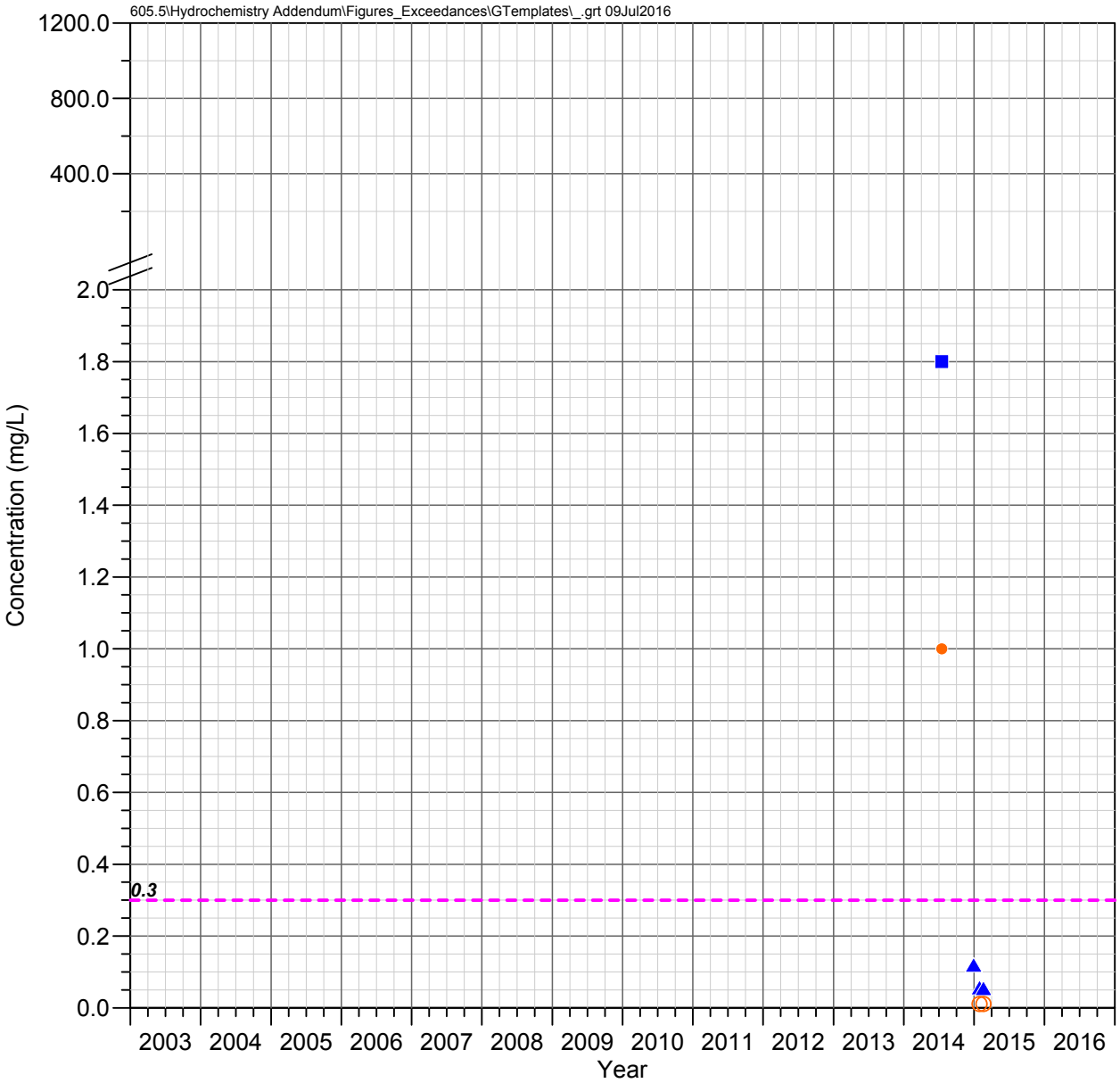


FIGURE E-370. IRON CONCENTRATIONS OBSERVED AT DHRES-13, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-15
Deep Groundwater System

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.3 mg/L)

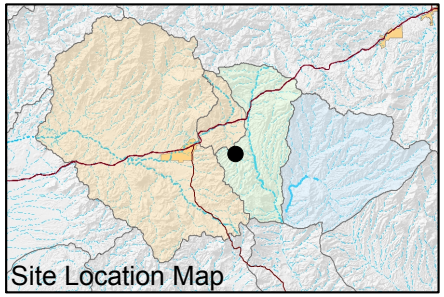
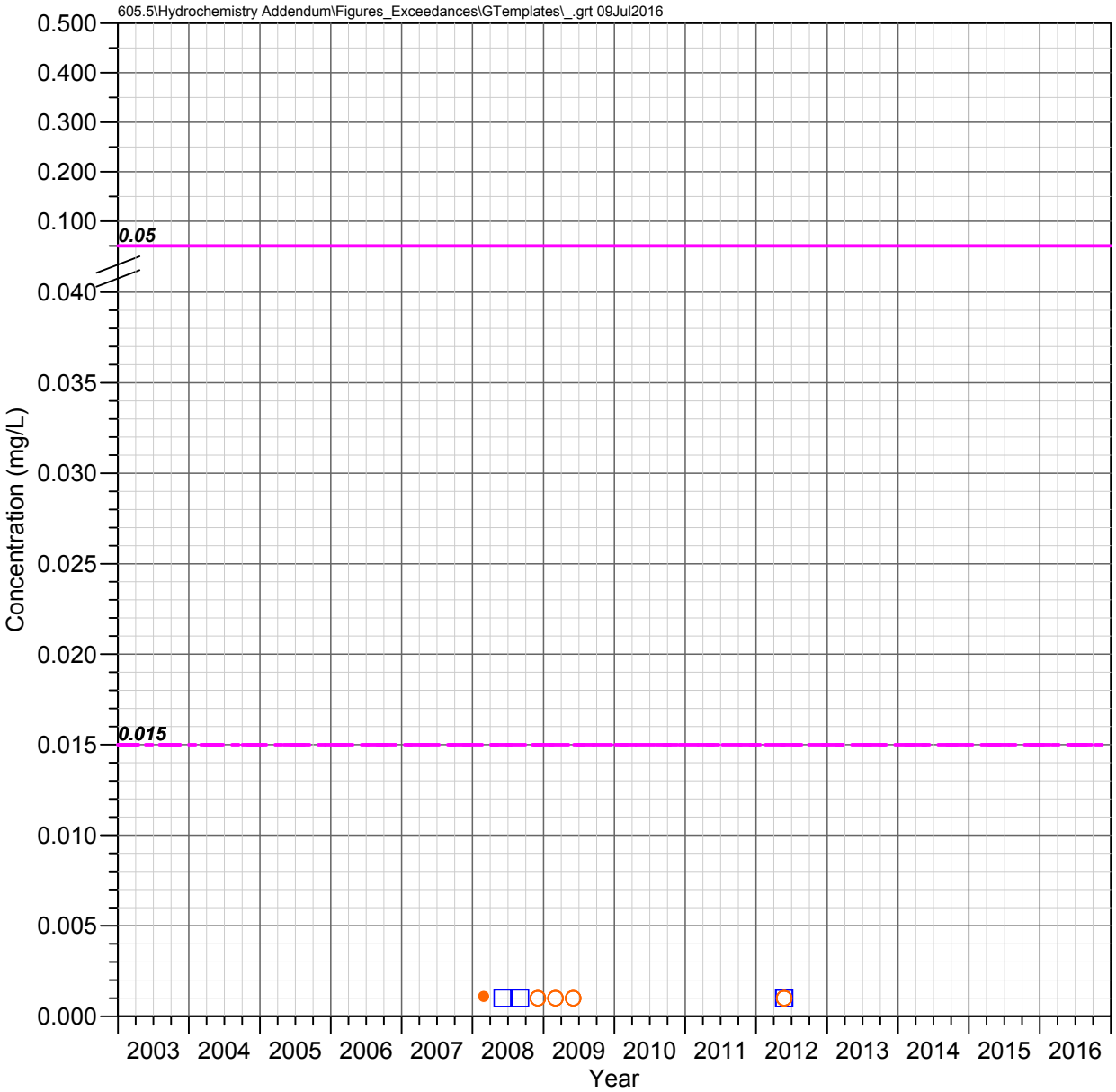


FIGURE E-371. IRON CONCENTRATIONS OBSERVED AT DHRES-15, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Hackberry Windmill Well Shallow Groundwater System

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.015 mg/L)
- EPA Treatment Technique Limit (UNS, 0.015 mg/L)

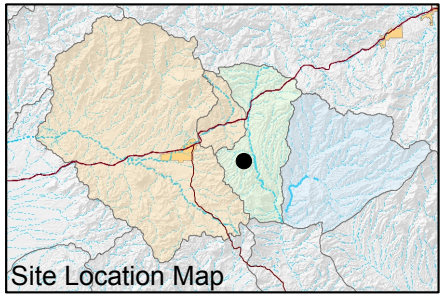
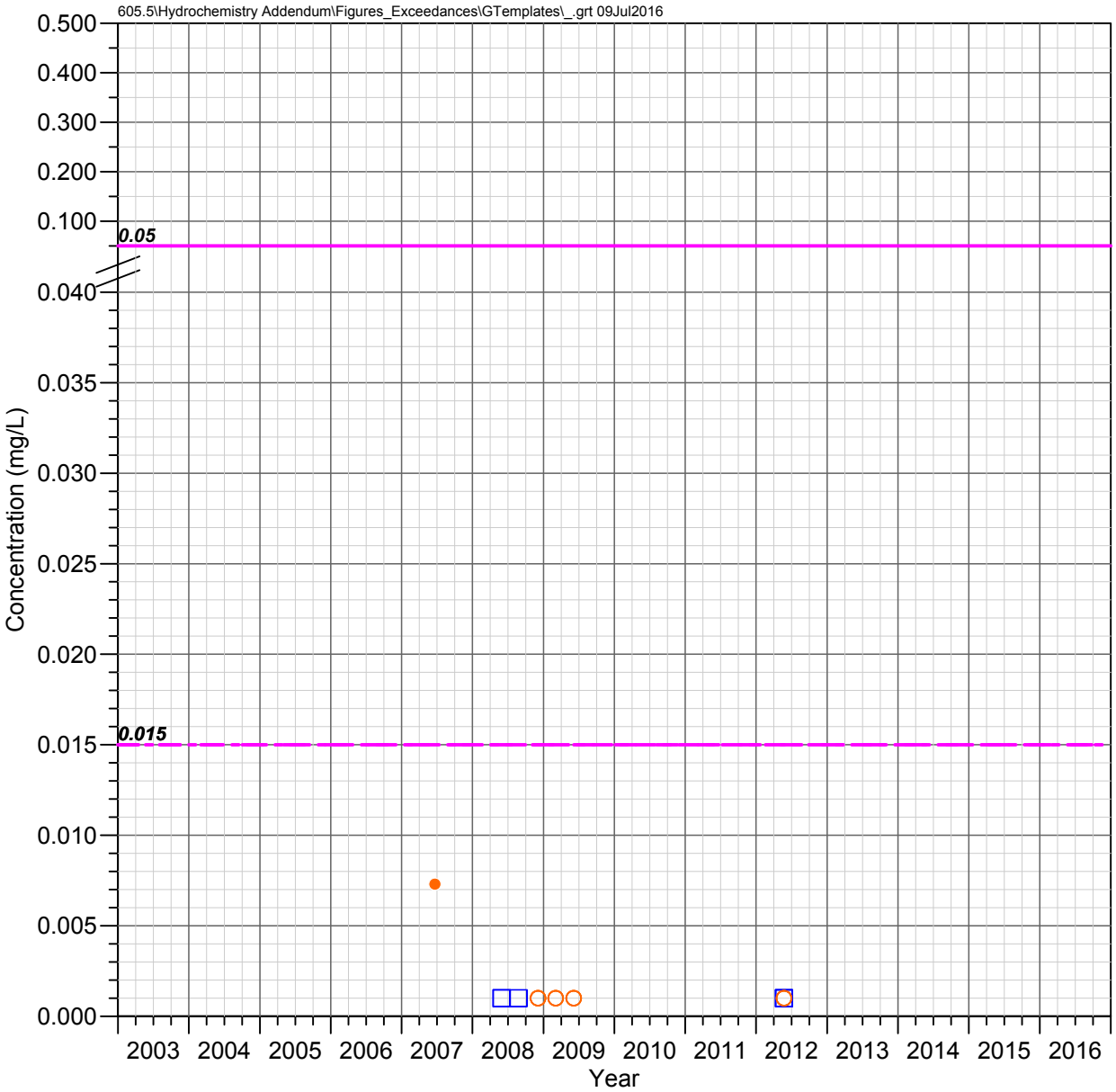


FIGURE E-372. LEAD CONCENTRATIONS OBSERVED AT HACKBERRY WINDMILL WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



JI Ranch Corral Well Shallow Groundwater System

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.015 mg/L)
- EPA Treatment Technique Limit (UNS, 0.015 mg/L)

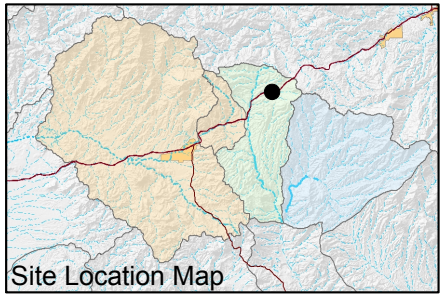
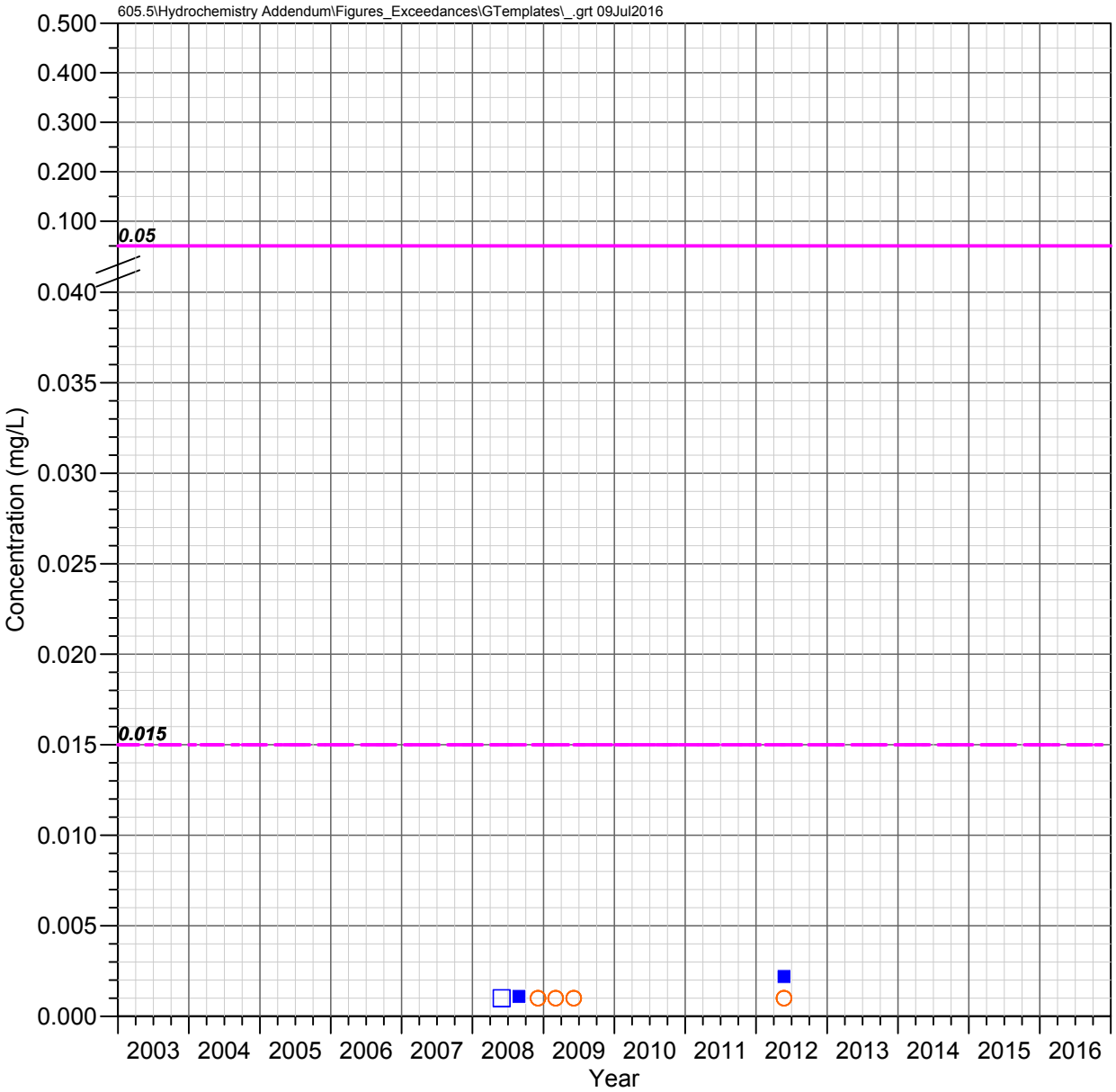


FIGURE E-373. LEAD CONCENTRATIONS OBSERVED AT JI RANCH CORRAL WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



JI Ranch Middle Well Shallow Groundwater System

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.015 mg/L)
- EPA Treatment Technique Limit (UNS, 0.015 mg/L)

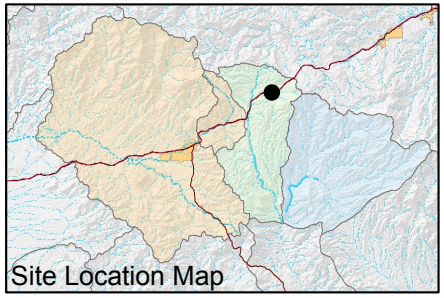
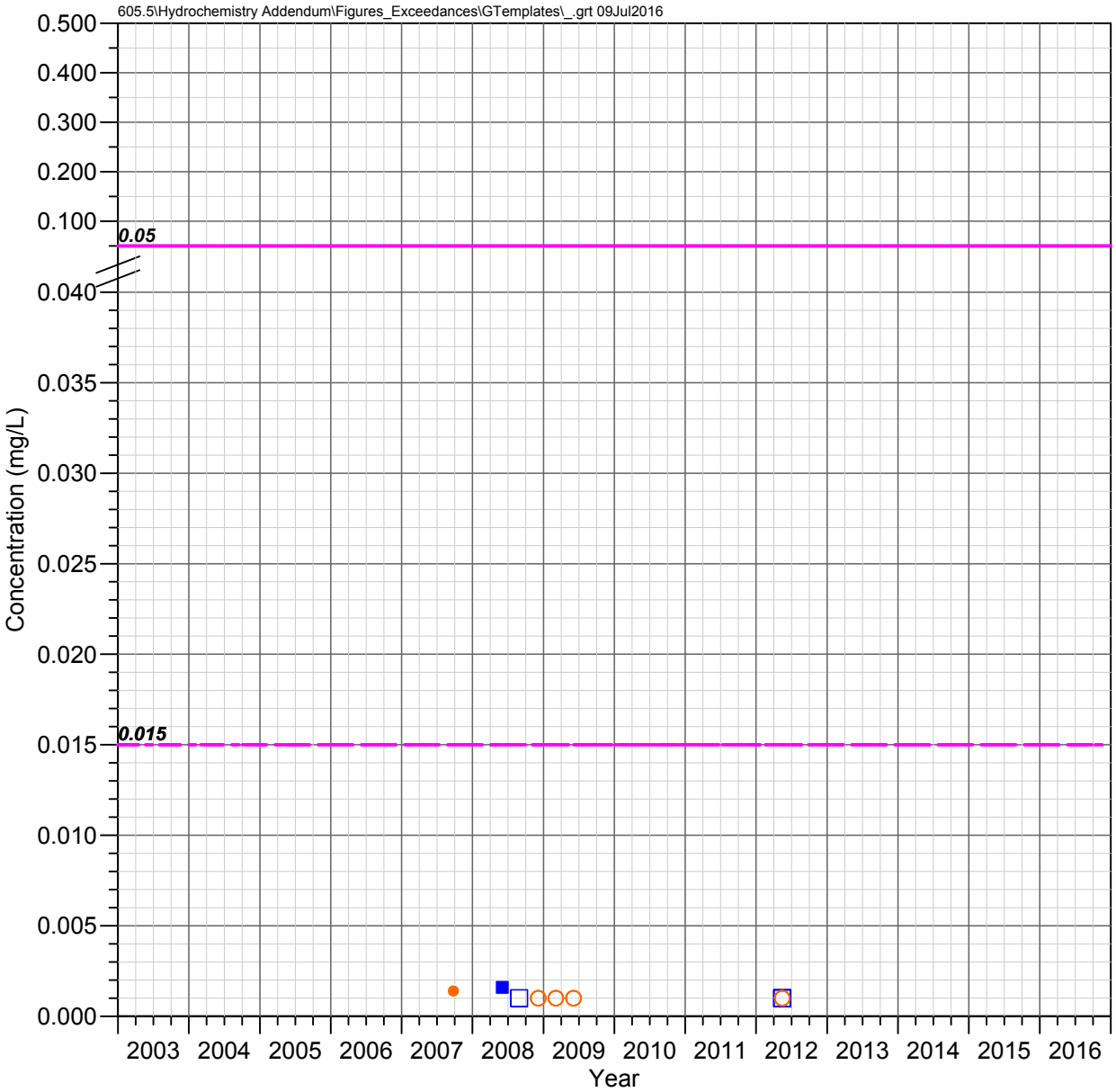


FIGURE E-374. LEAD CONCENTRATIONS OBSERVED AT JI RANCH MIDDLE WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



A-06
Apache Leap Tuff Aquifer

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.015 mg/L)
- EPA Treatment Technique Limit (UNS, 0.015 mg/L)

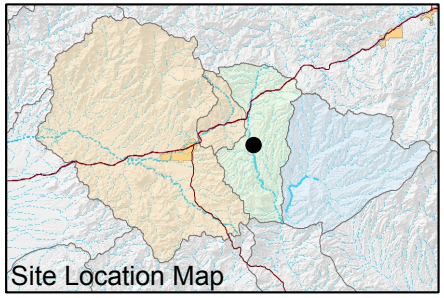
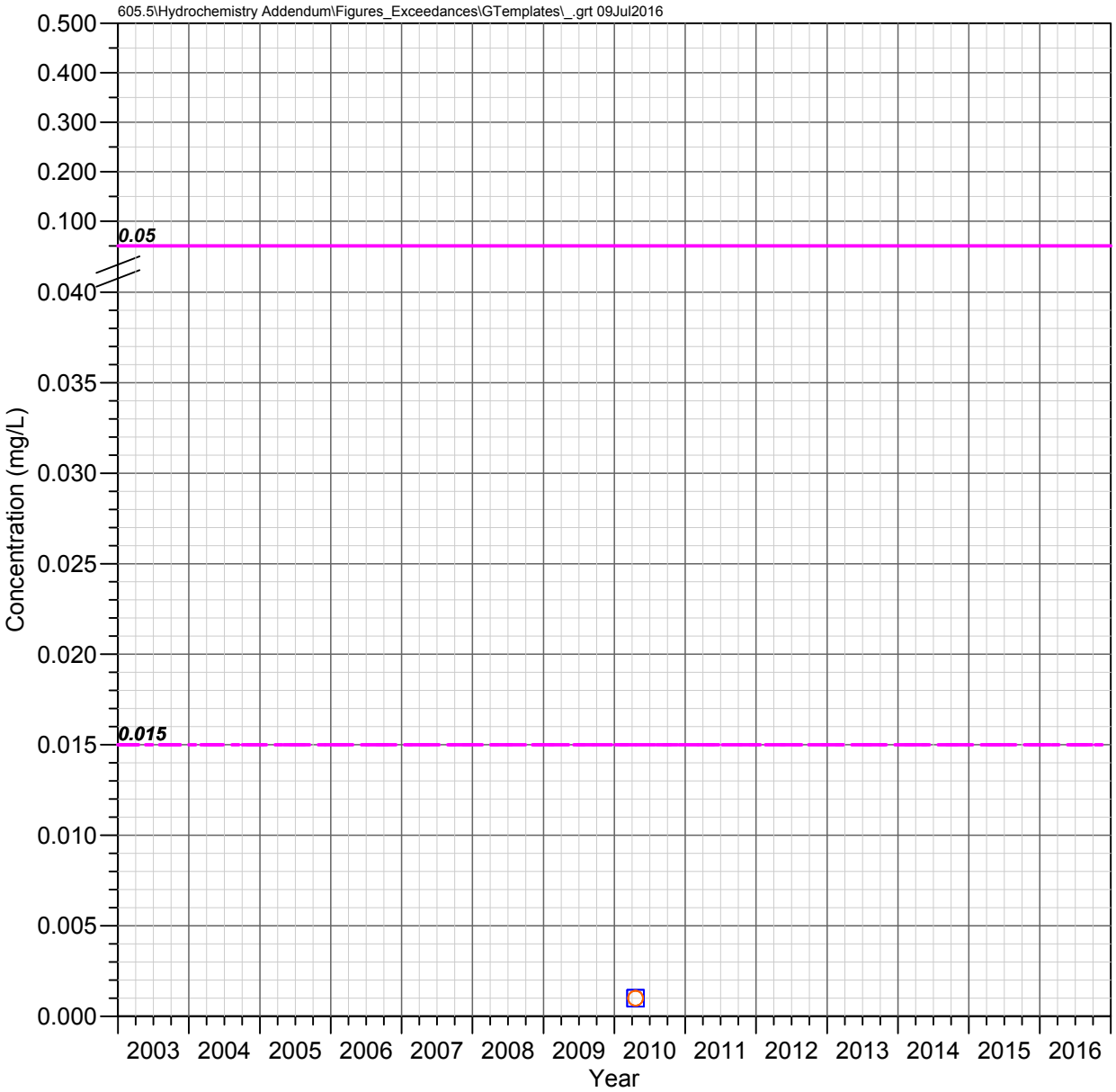


FIGURE E-375. LEAD CONCENTRATIONS OBSERVED AT A-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



CT Well
Apache Leap Tuff Aquifer

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.015 mg/L)
- EPA Treatment Technique Limit (UNS, 0.015 mg/L)

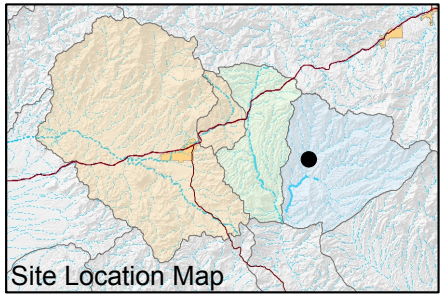
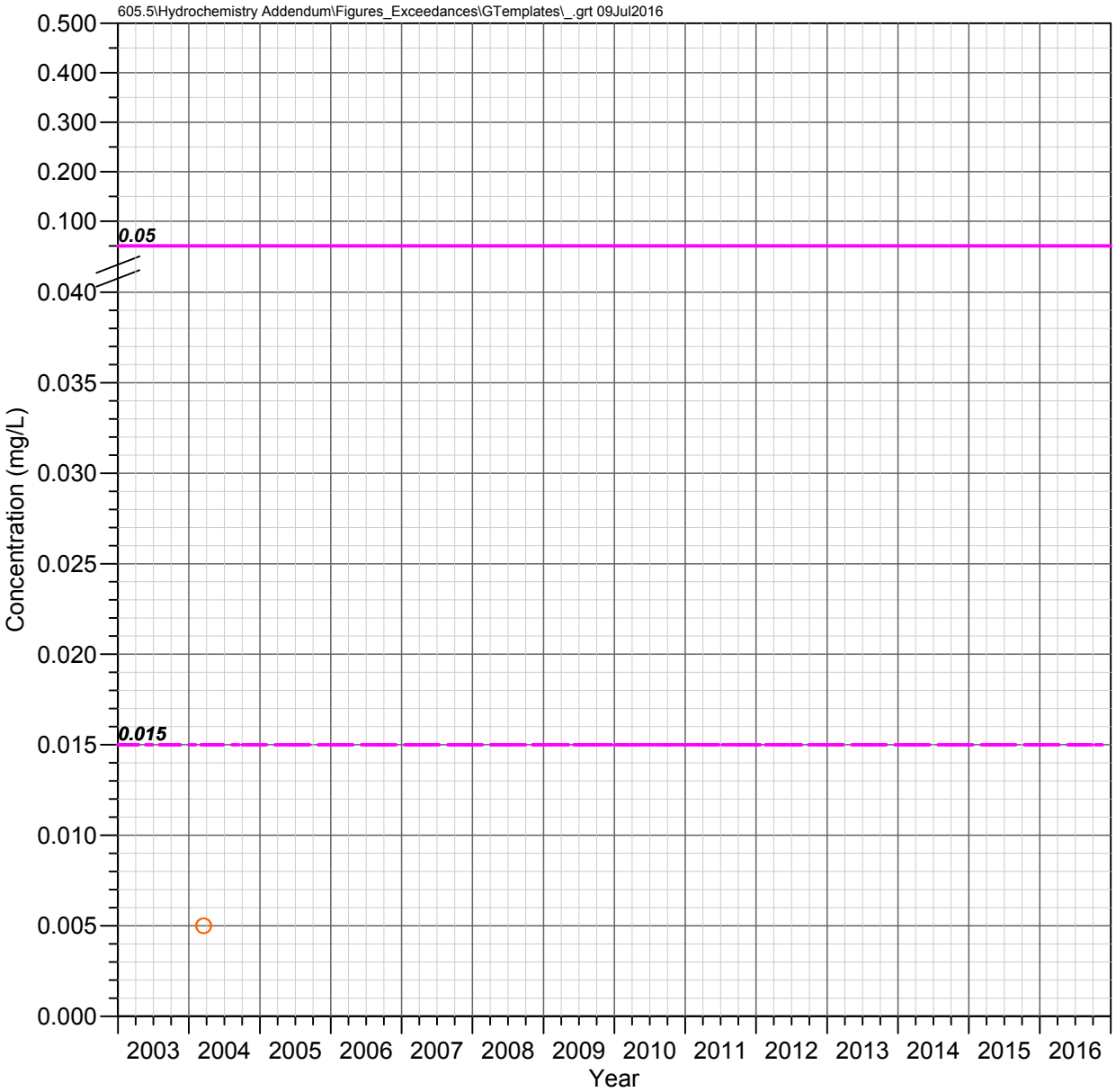


FIGURE E-376. LEAD CONCENTRATIONS OBSERVED AT CT WELL, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-01
Apache Leap Tuff Aquifer

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.015 mg/L)
- EPA Treatment Technique Limit (UNS, 0.015 mg/L)

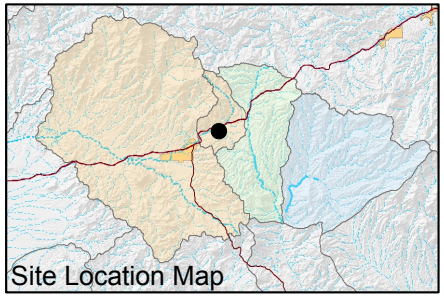
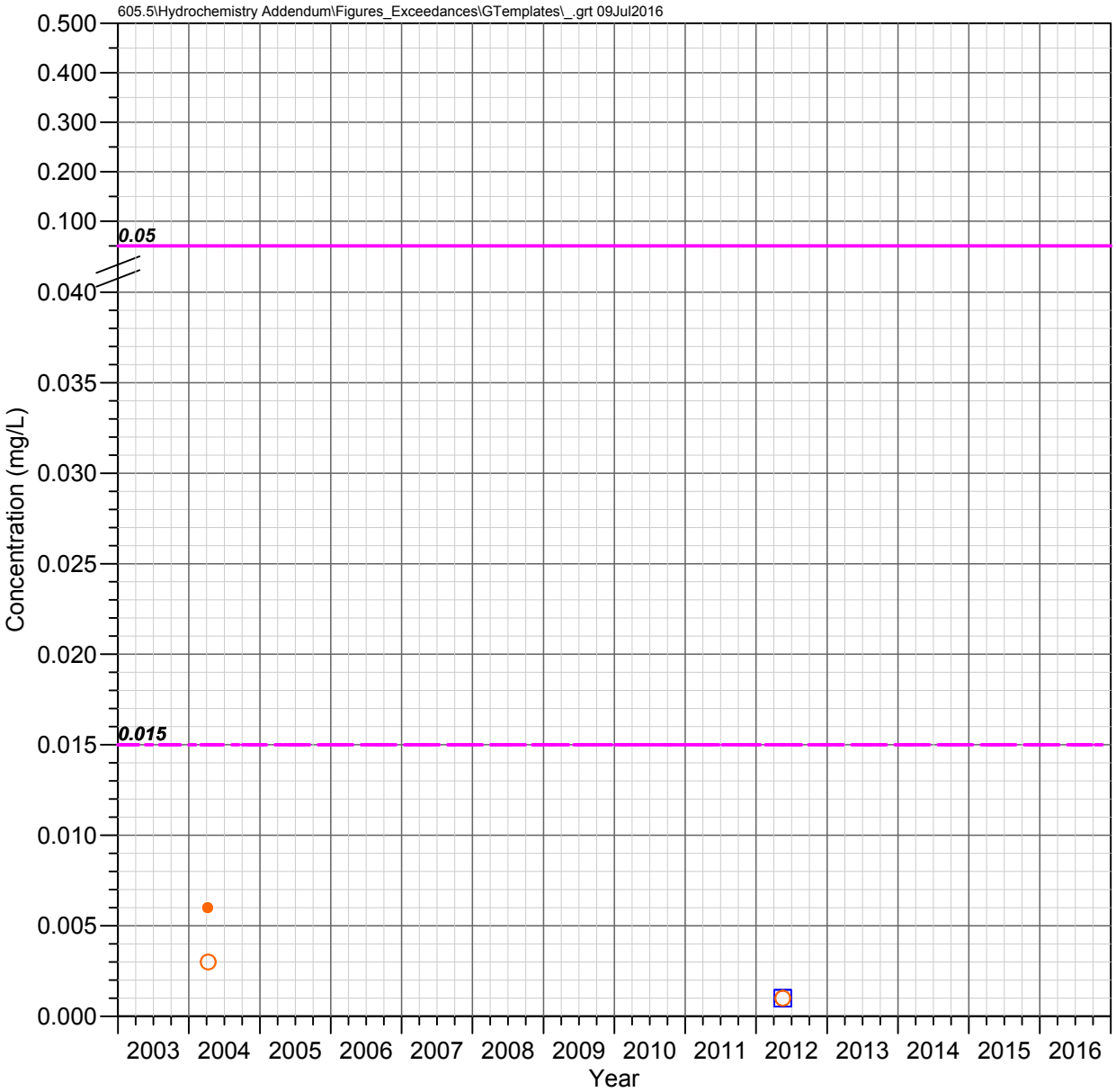


FIGURE E-377. LEAD CONCENTRATIONS OBSERVED AT HRES-01, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-02
Apache Leap Tuff Aquifer

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.015 mg/L)
- EPA Treatment Technique Limit (UNS, 0.015 mg/L)

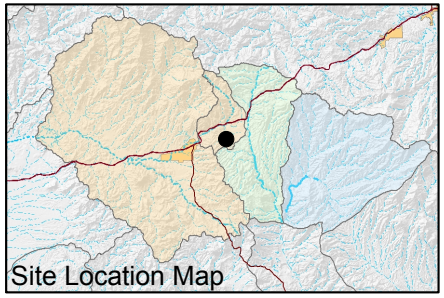
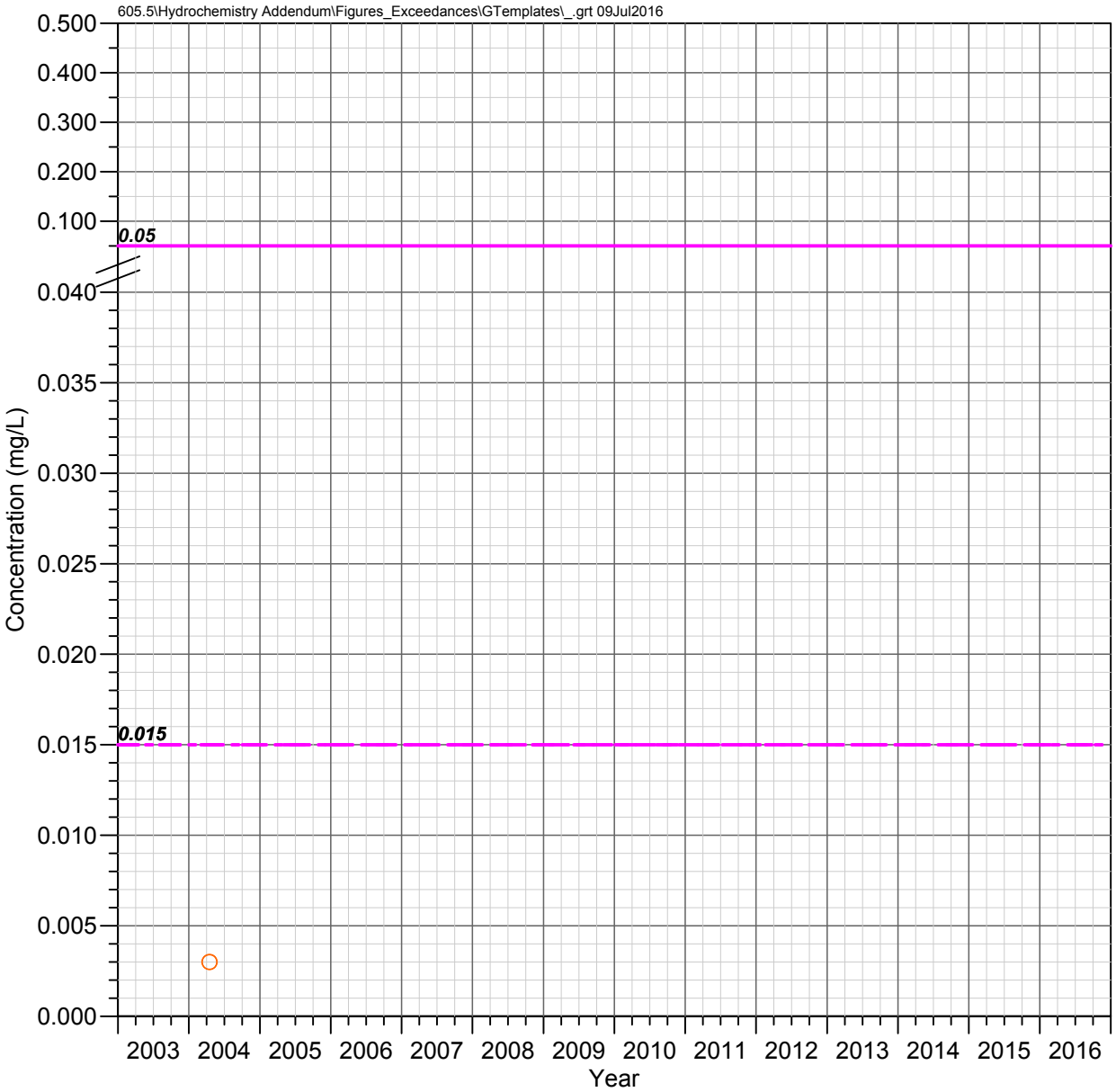


FIGURE E-378. LEAD CONCENTRATIONS OBSERVED AT HRES-02, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-03d
Apache Leap Tuff Aquifer

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.015 mg/L)
- EPA Treatment Technique Limit (UNS, 0.015 mg/L)

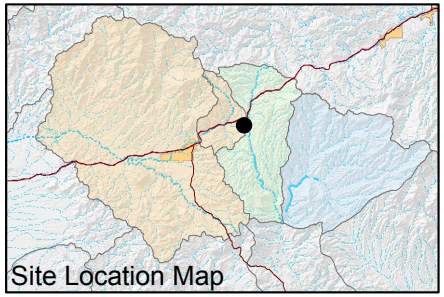
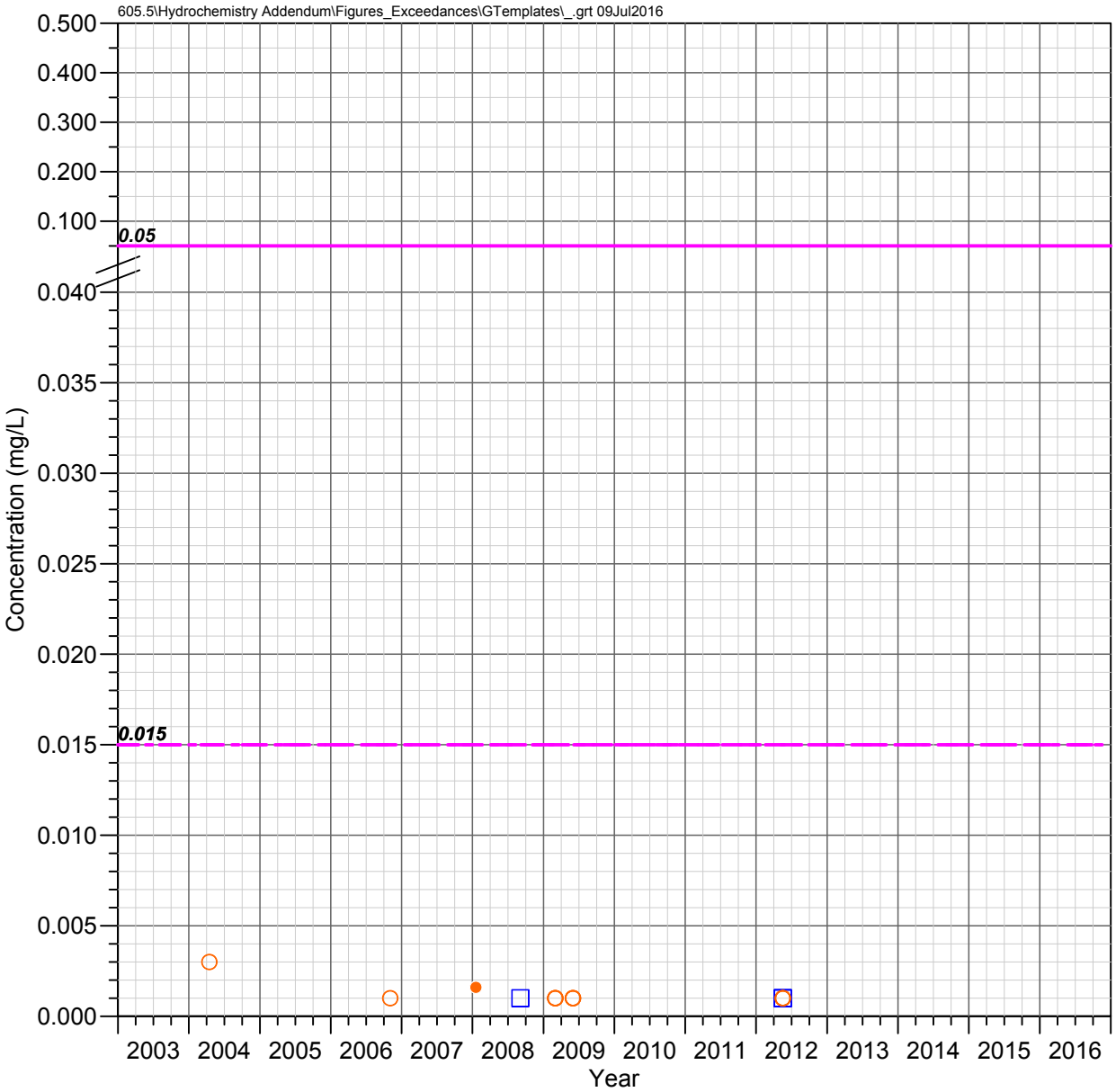


FIGURE E-379. LEAD CONCENTRATIONS OBSERVED AT HRES-03D, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-04
Apache Leap Tuff Aquifer

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.015 mg/L)
- EPA Treatment Technique Limit (UNS, 0.015 mg/L)

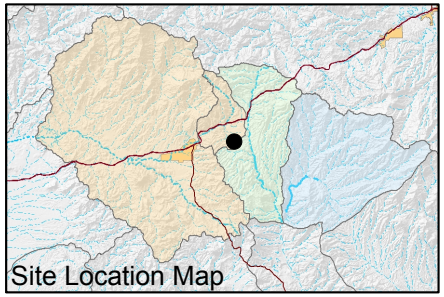
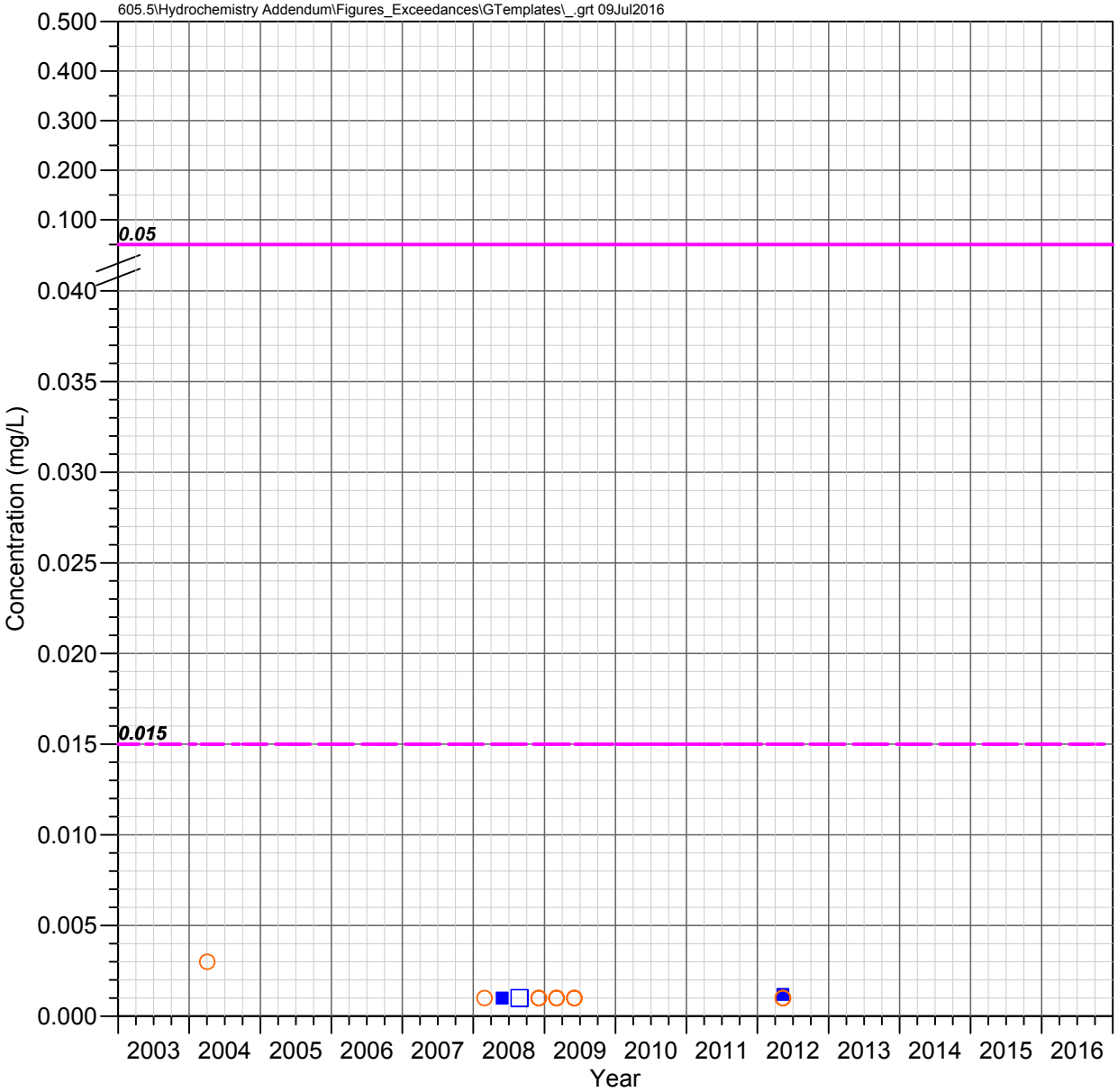


FIGURE E-380. LEAD CONCENTRATIONS OBSERVED AT HRES-04, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES

605.5\Hydrochemistry Addendum\Figures_Exceedances\GTemplates_.grt 09Jul2016



HRES-05
Apache Leap Tuff Aquifer

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.015 mg/L)
- EPA Treatment Technique Limit (UNS, 0.015 mg/L)

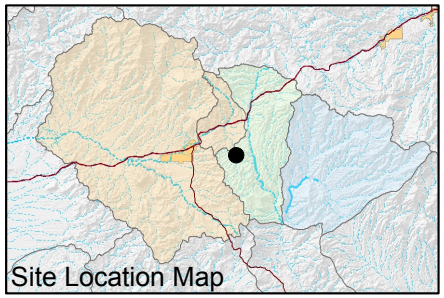
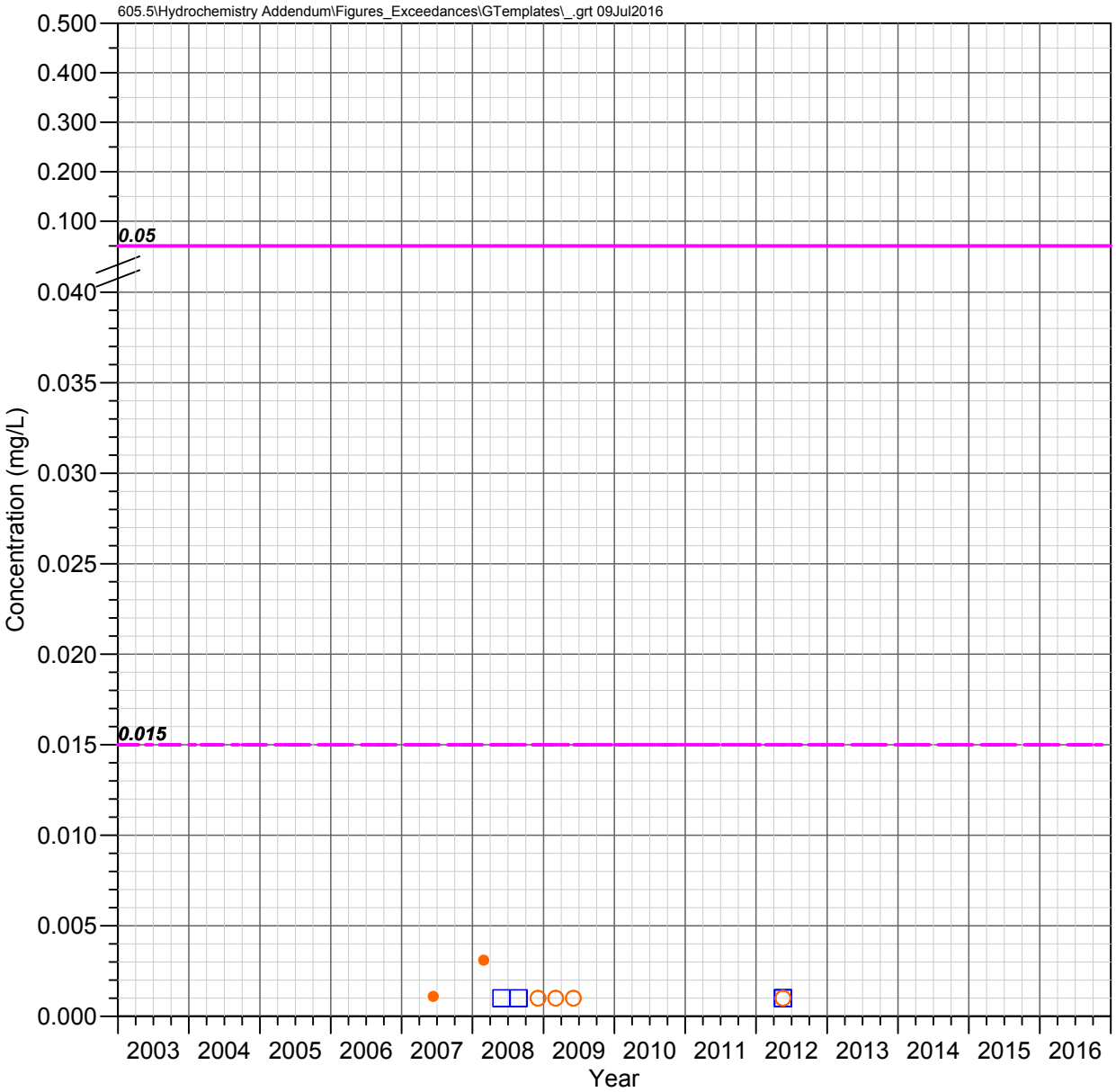


FIGURE E-381. LEAD CONCENTRATIONS OBSERVED AT HRES-05, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-06
Apache Leap Tuff Aquifer

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.015 mg/L)
- EPA Treatment Technique Limit (UNS, 0.015 mg/L)

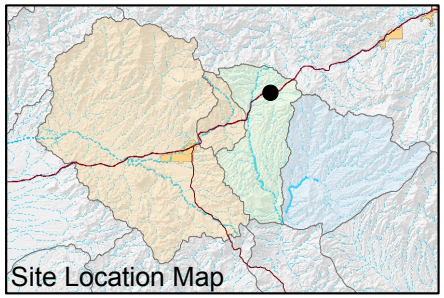
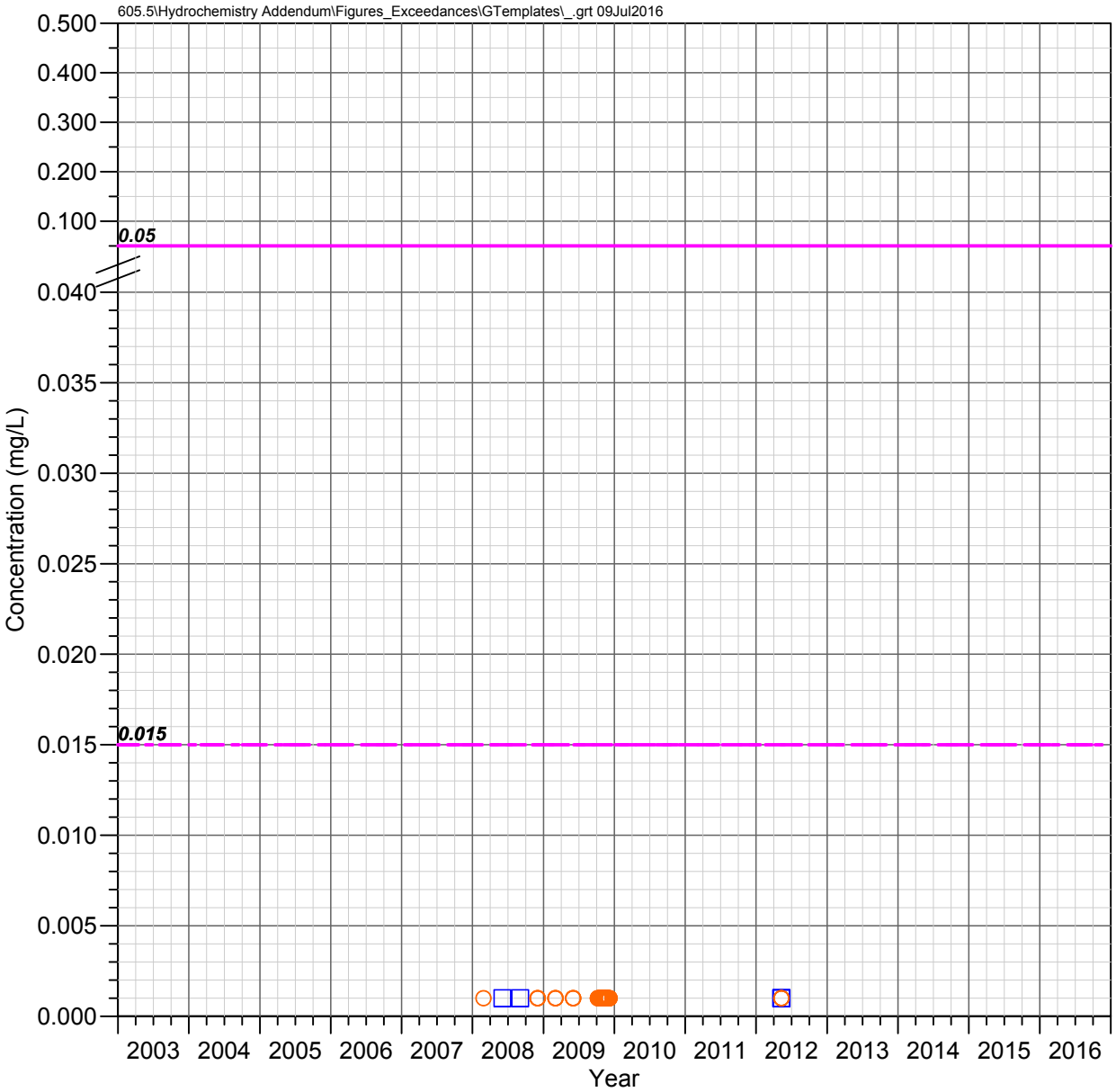


FIGURE E-382. LEAD CONCENTRATIONS OBSERVED AT HRES-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-07
Apache Leap Tuff Aquifer

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.015 mg/L)
- EPA Treatment Technique Limit (UNS, 0.015 mg/L)

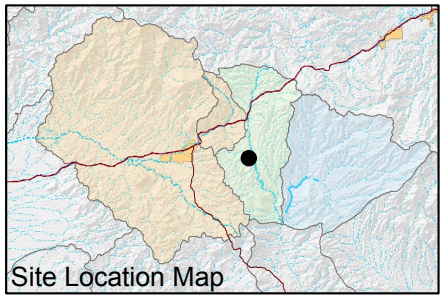
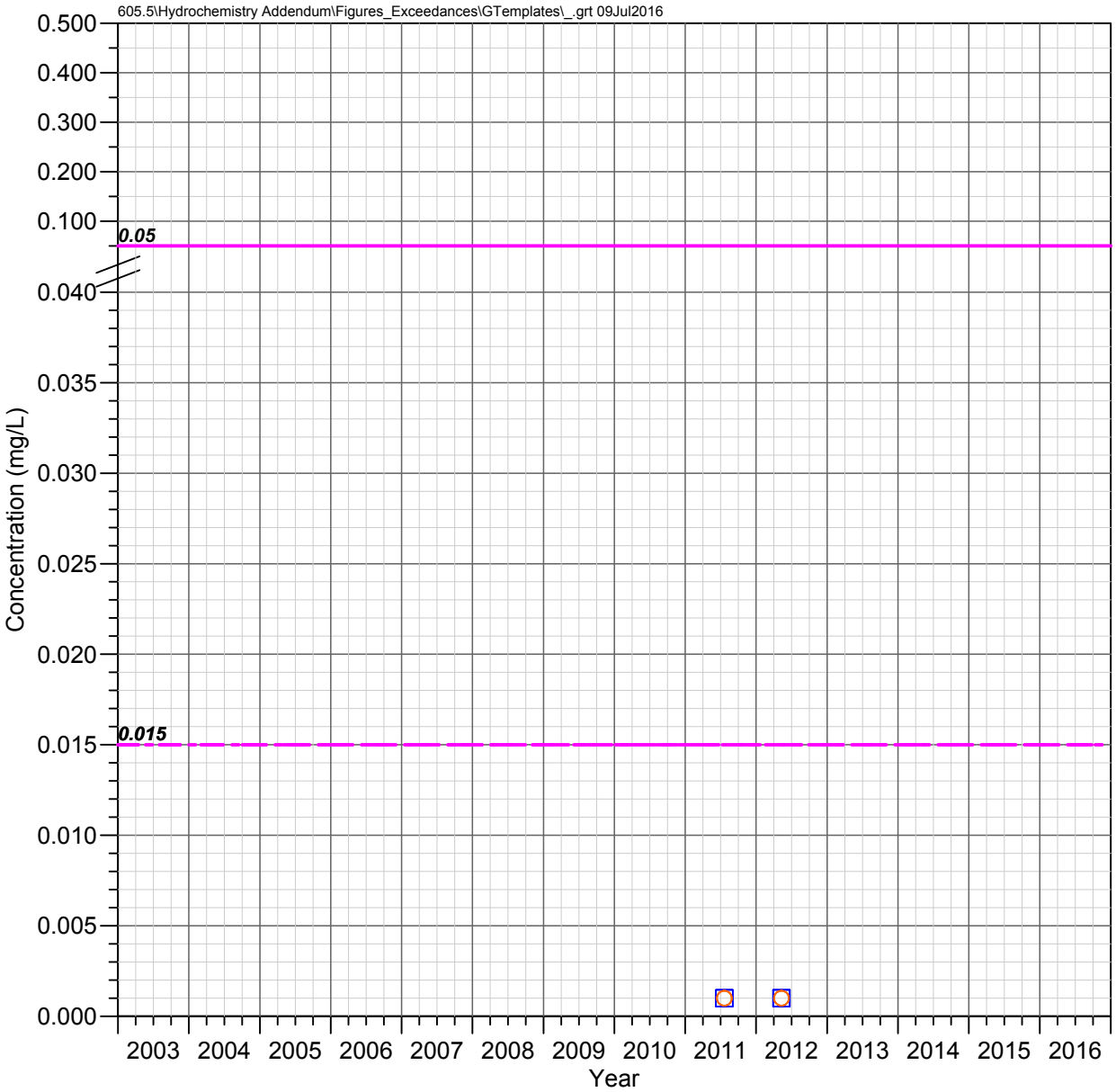


FIGURE E-383. LEAD CONCENTRATIONS OBSERVED AT HRES-07, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-08
Apache Leap Tuff Aquifer

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.015 mg/L)
- EPA Treatment Technique Limit (UNS, 0.015 mg/L)

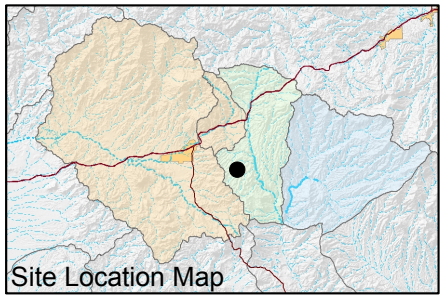
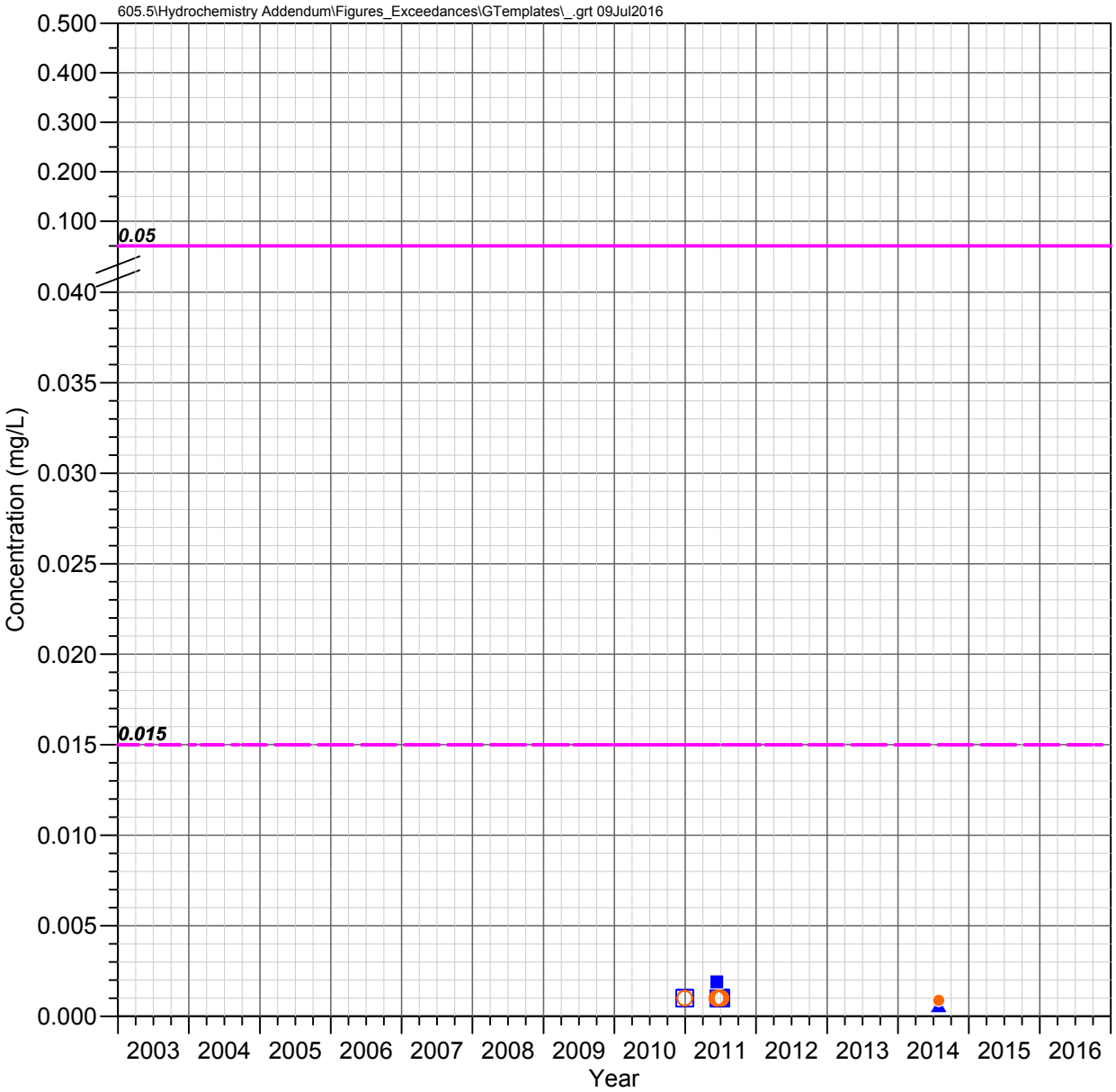


FIGURE E-384. LEAD CONCENTRATIONS OBSERVED AT HRES-08, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-09
Apache Leap Tuff Aquifer

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.015 mg/L)
- EPA Treatment Technique Limit (UNS, 0.015 mg/L)

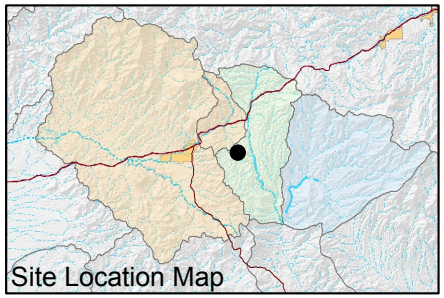
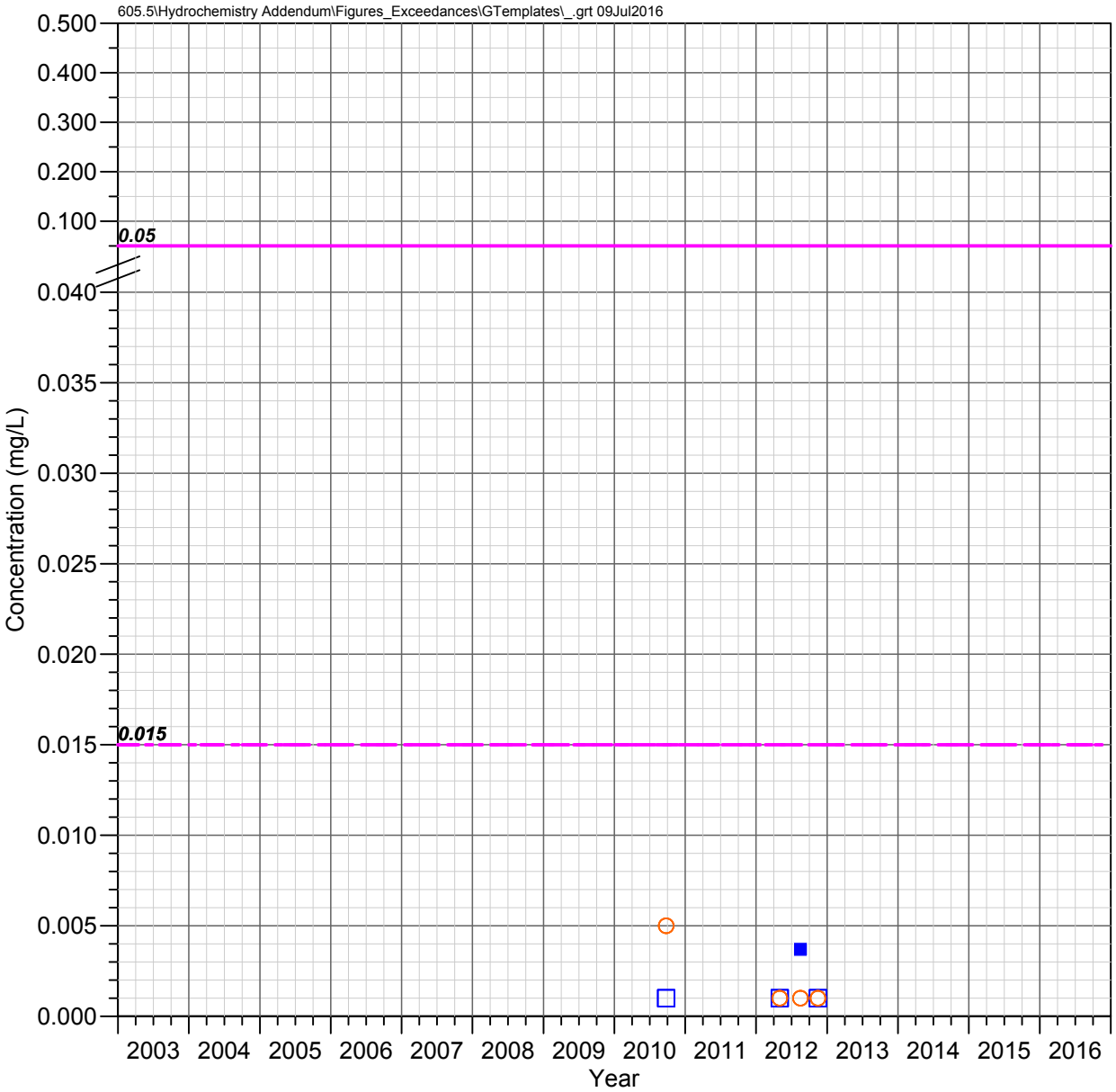


FIGURE E-385. LEAD CONCENTRATIONS OBSERVED AT HRES-09, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-10
Apache Leap Tuff Aquifer

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.015 mg/L)
- EPA Treatment Technique Limit (UNS, 0.015 mg/L)

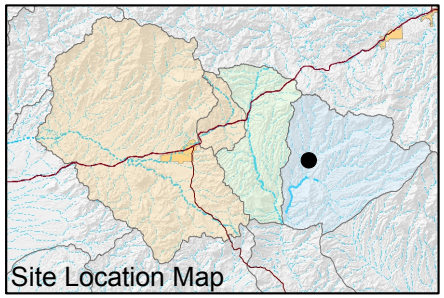
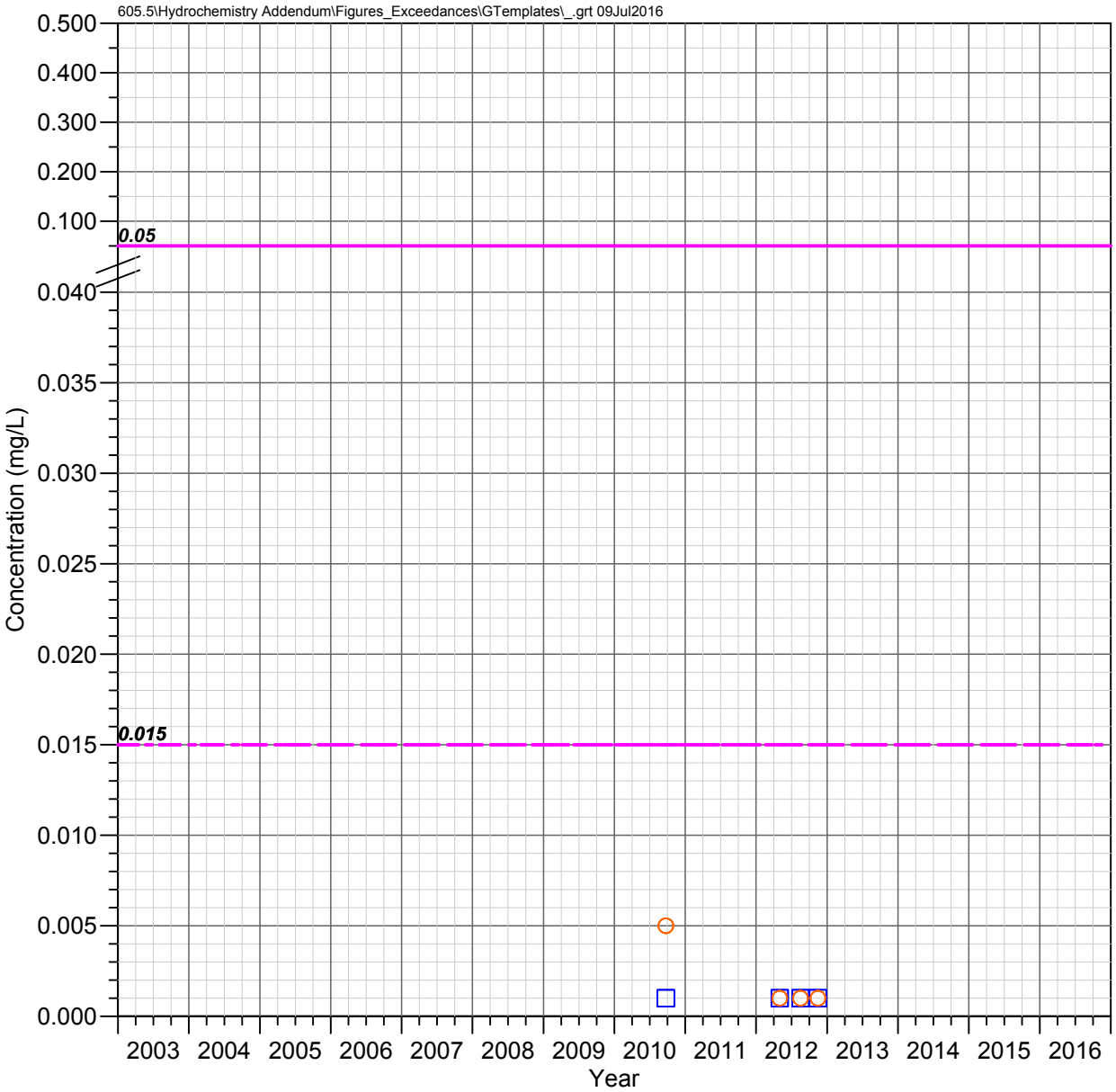


FIGURE E-386. LEAD CONCENTRATIONS OBSERVED AT HRES-10, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-11
Apache Leap Tuff Aquifer

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.015 mg/L)
- EPA Treatment Technique Limit (UNS, 0.015 mg/L)

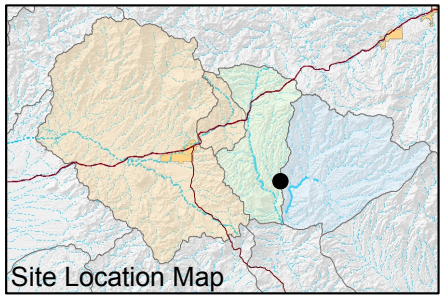
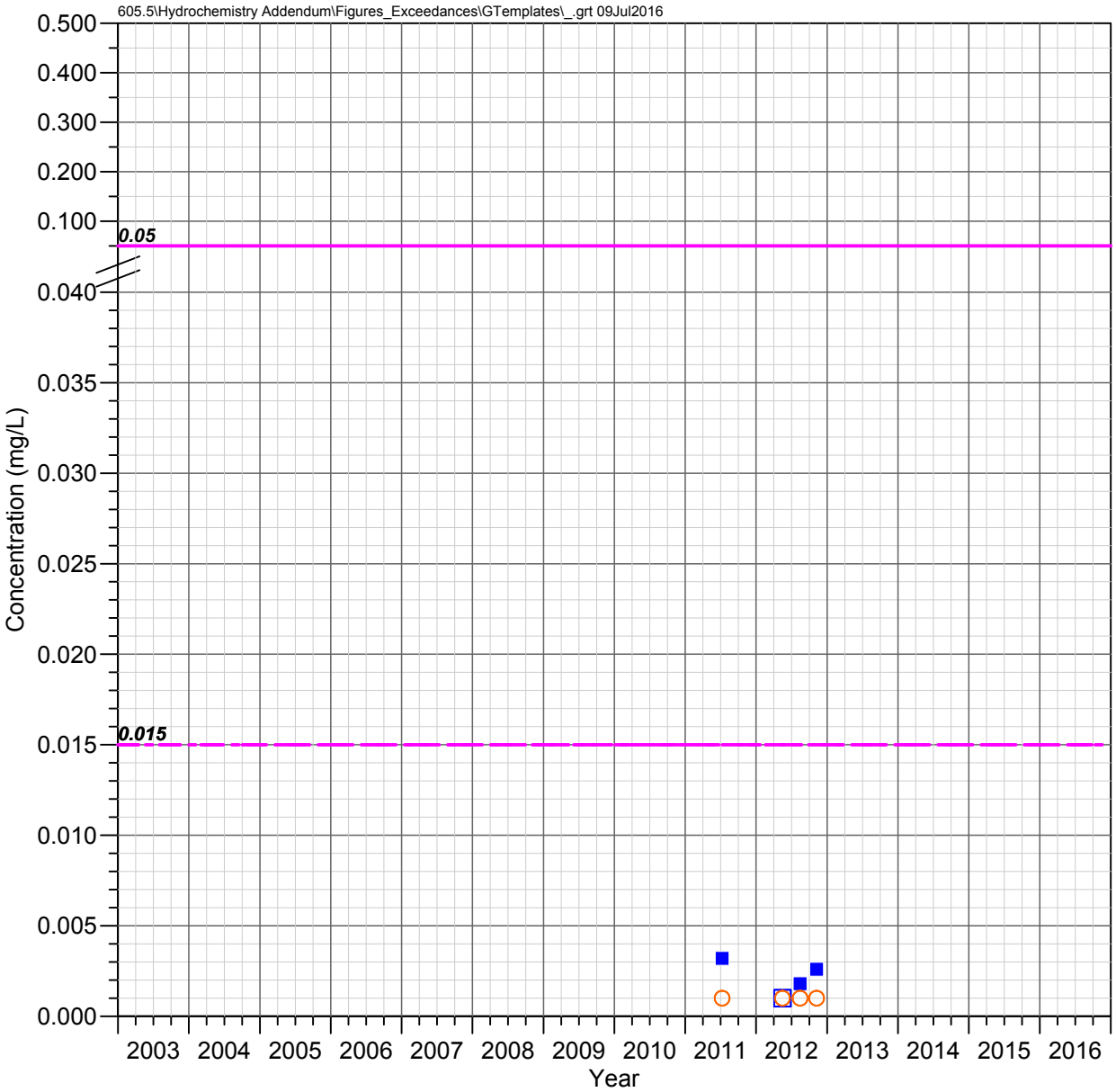


FIGURE E-387. LEAD CONCENTRATIONS OBSERVED AT HRES-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-12
Apache Leap Tuff Aquifer

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.015 mg/L)
- EPA Treatment Technique Limit (UNS, 0.015 mg/L)

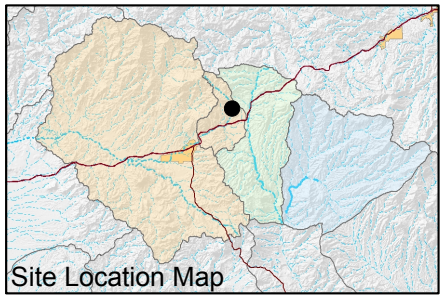
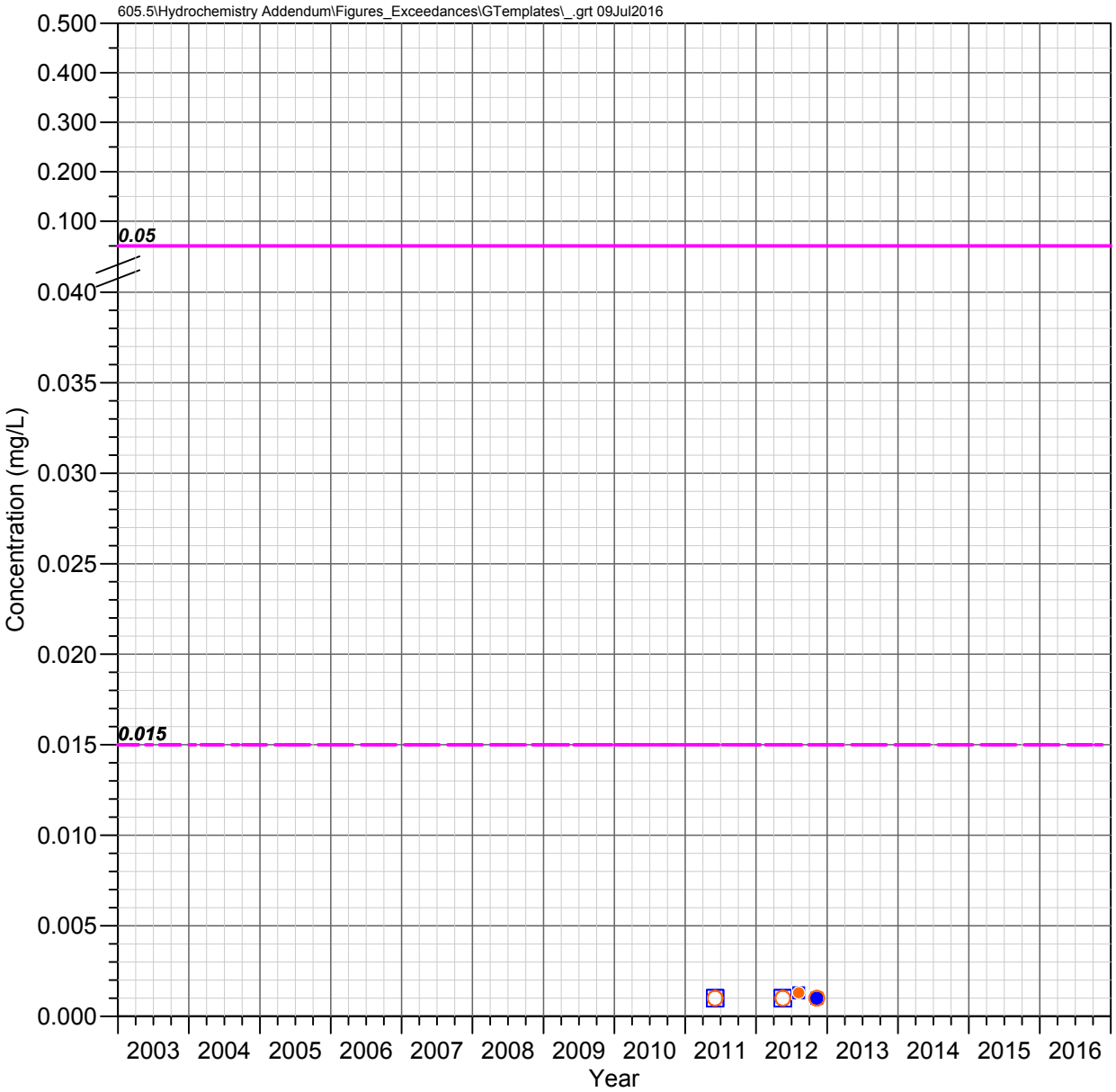


FIGURE E-388. LEAD CONCENTRATIONS OBSERVED AT HRES-12, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-13
Apache Leap Tuff Aquifer

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.015 mg/L)
- EPA Treatment Technique Limit (UNS, 0.015 mg/L)

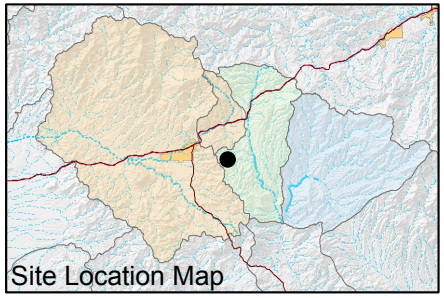
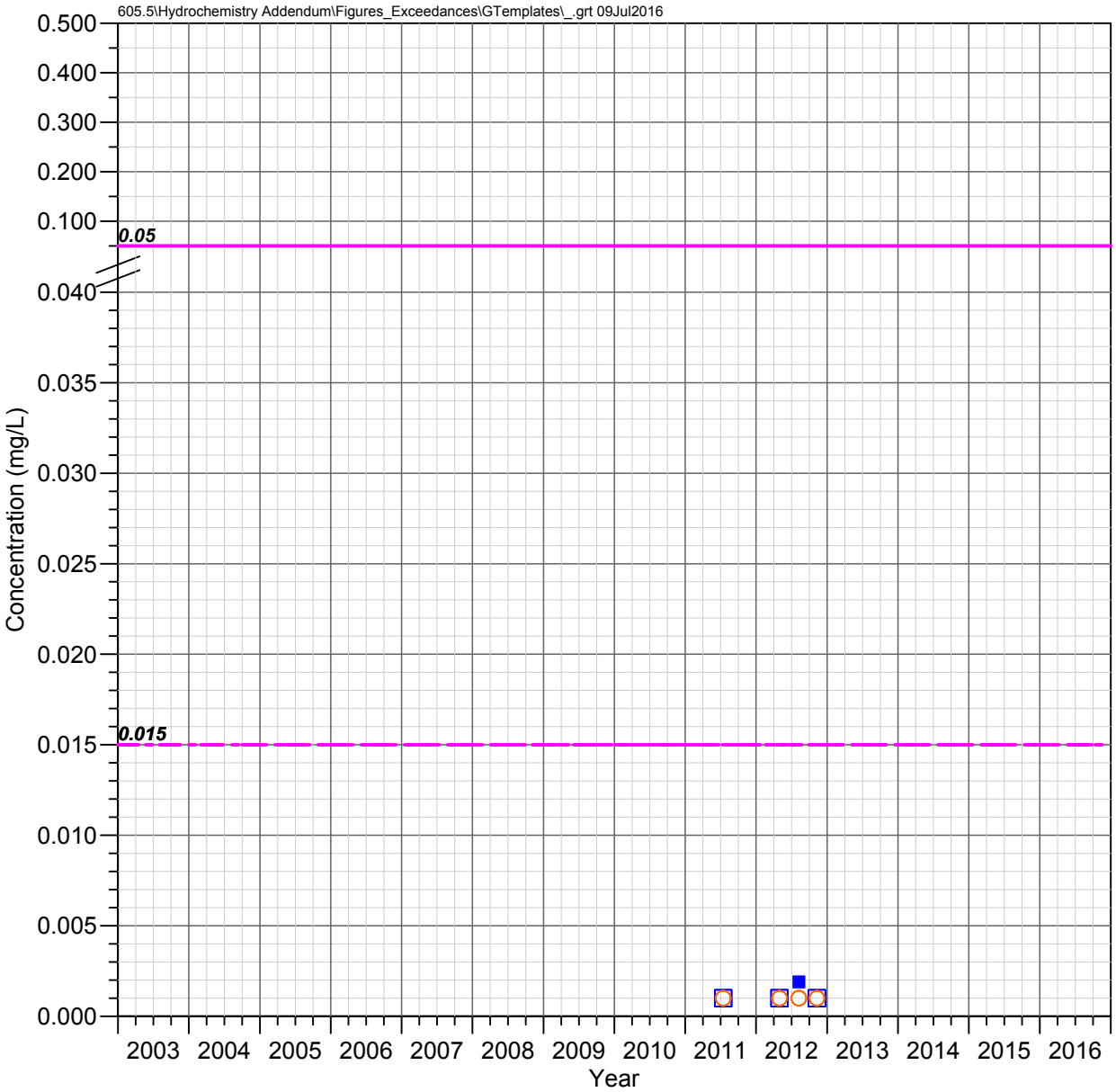


FIGURE E-389. LEAD CONCENTRATIONS OBSERVED AT HRES-13, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-14
Apache Leap Tuff Aquifer

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.015 mg/L)
- EPA Treatment Technique Limit (UNS, 0.015 mg/L)

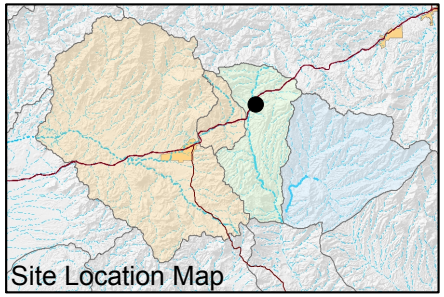
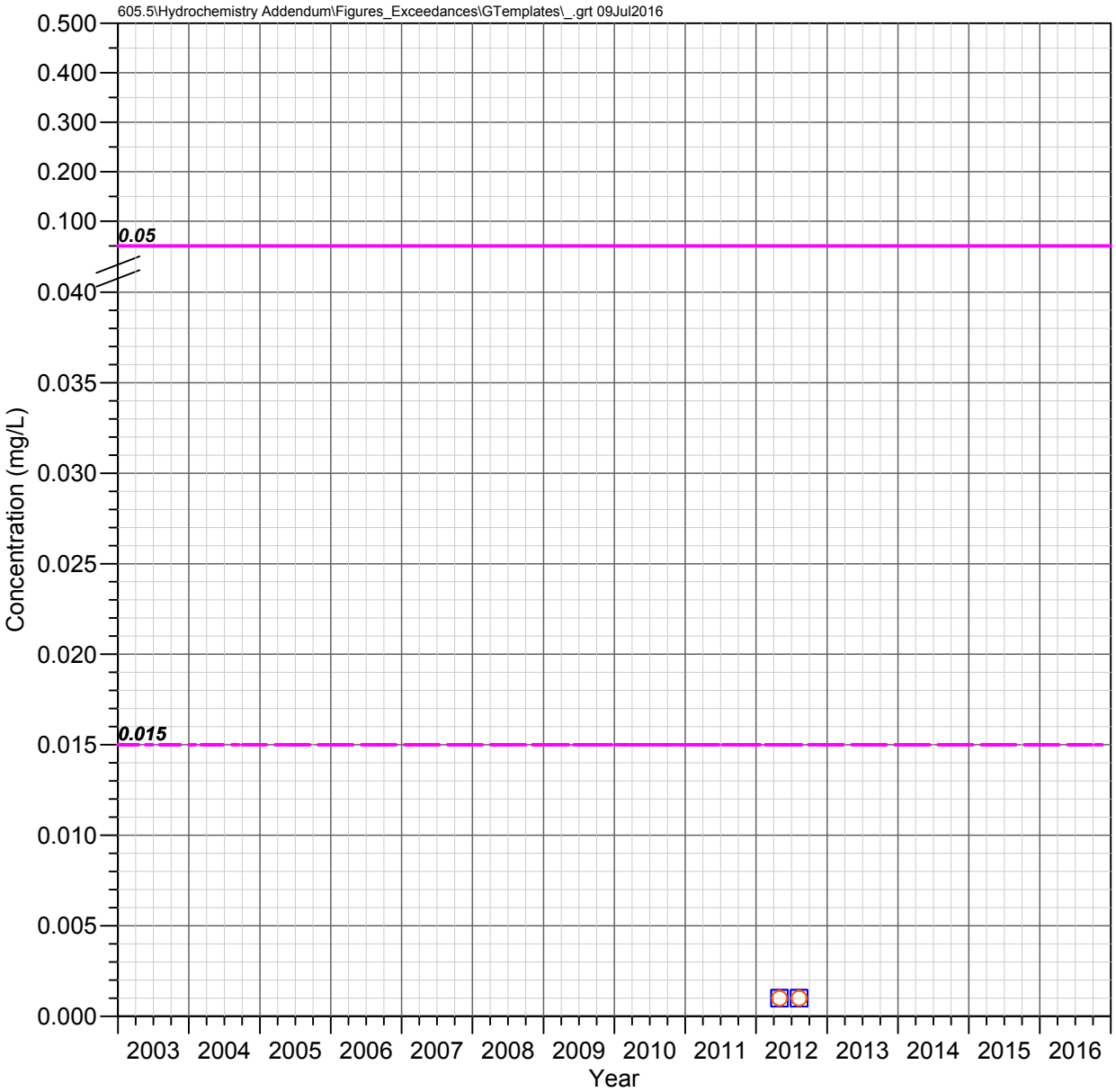


FIGURE E-390. LEAD CONCENTRATIONS OBSERVED AT HRES-14, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-15
Apache Leap Tuff Aquifer

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.015 mg/L)
- EPA Treatment Technique Limit (UNS, 0.015 mg/L)

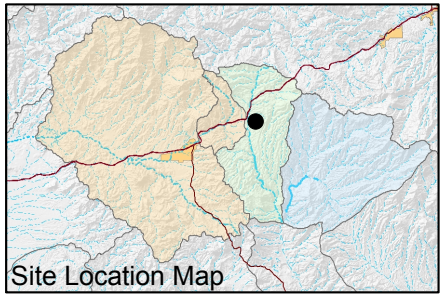
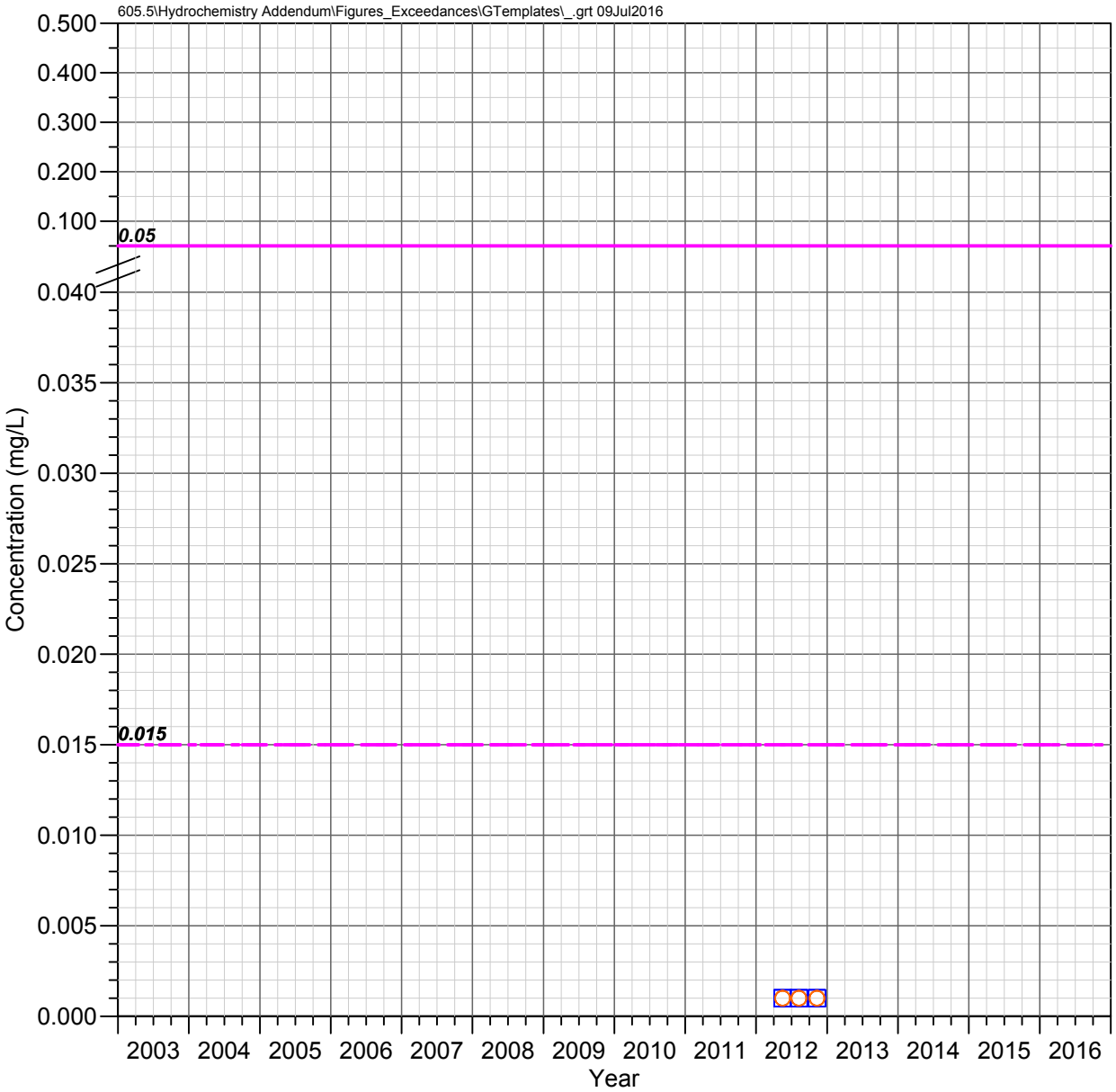


FIGURE E-391. LEAD CONCENTRATIONS OBSERVED AT HRES-15, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-17
Apache Leap Tuff Aquifer

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.015 mg/L)
- EPA Treatment Technique Limit (UNS, 0.015 mg/L)

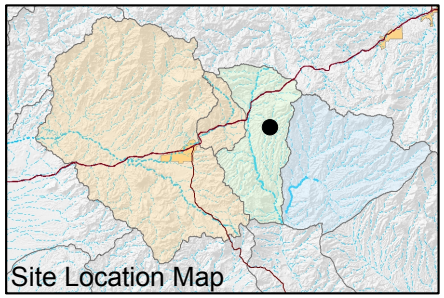
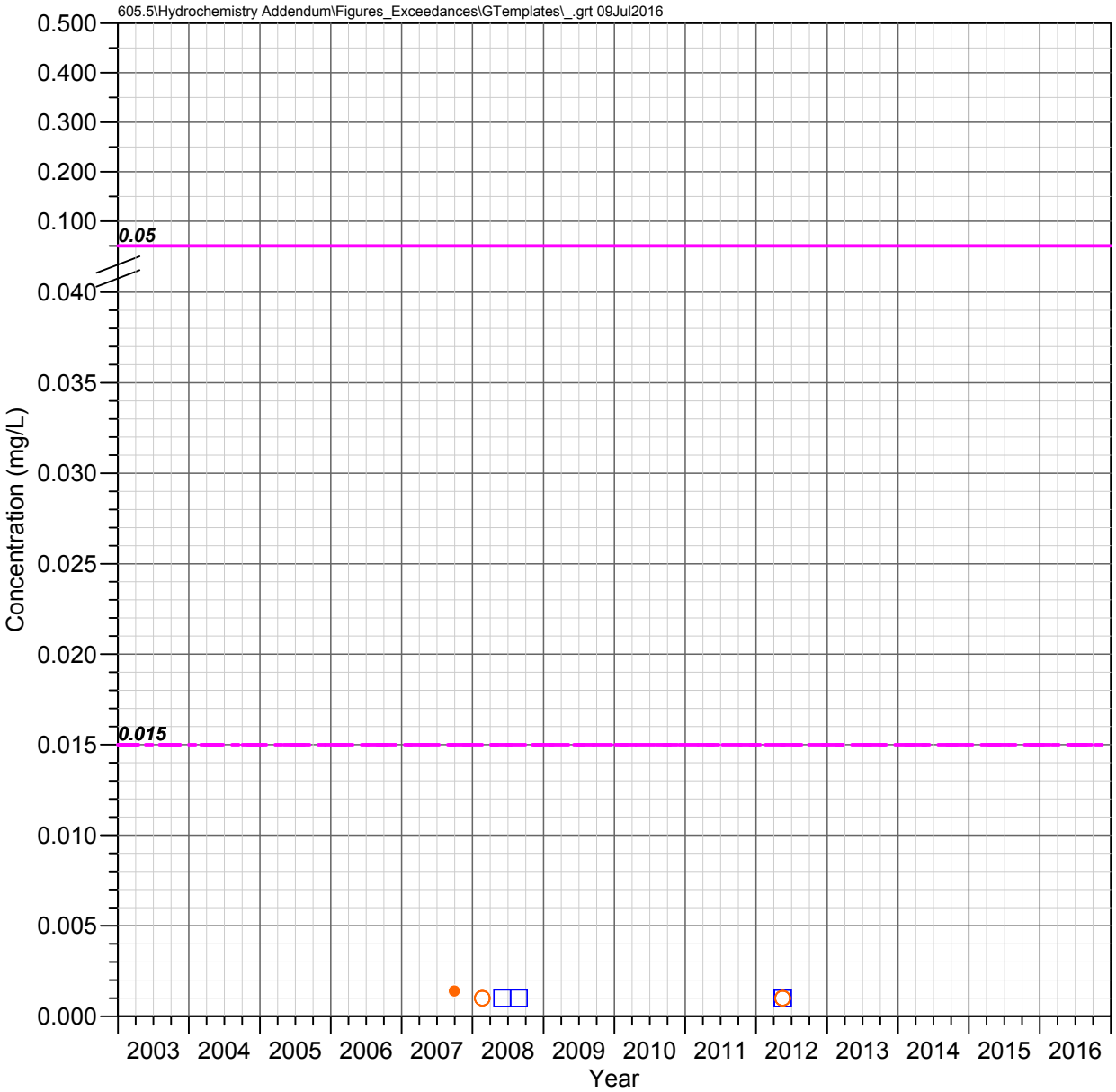


FIGURE E-392. LEAD CONCENTRATIONS OBSERVED AT HRES-17, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MJ-11
Apache Leap Tuff Aquifer

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.015 mg/L)
- EPA Treatment Technique Limit (UNS, 0.015 mg/L)

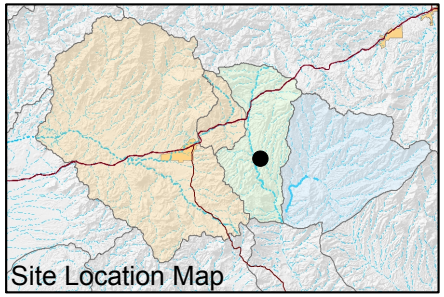
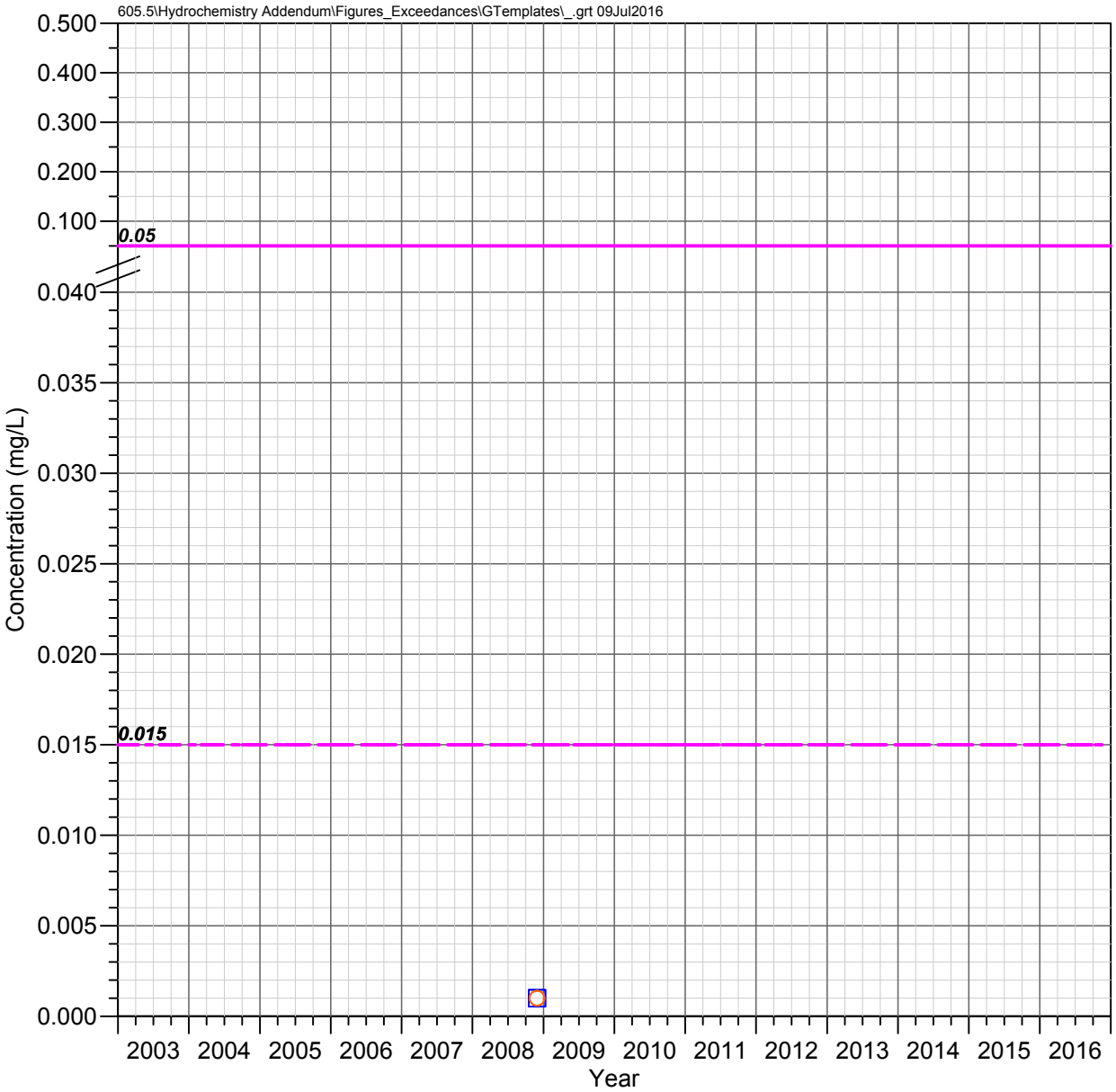


FIGURE E-393. LEAD CONCENTRATIONS OBSERVED AT MJ-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-01
Deep Groundwater System

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.015 mg/L)
- EPA Treatment Technique Limit (UNS, 0.015 mg/L)

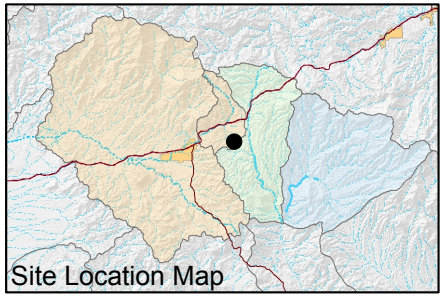
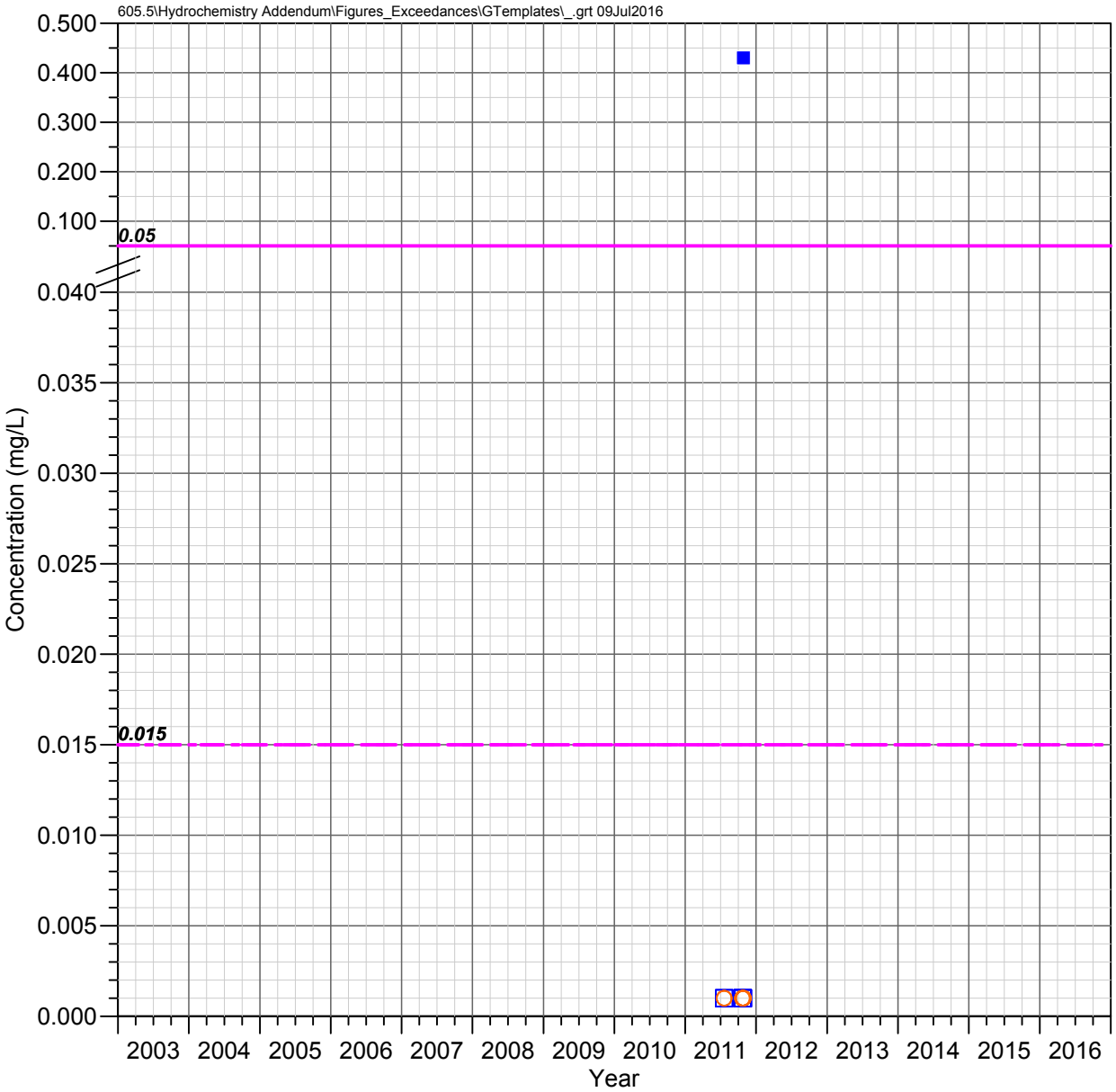


FIGURE E-394. LEAD CONCENTRATIONS OBSERVED AT DHRES-01, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-02
Deep Groundwater System

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.015 mg/L)
- EPA Treatment Technique Limit (UNS, 0.015 mg/L)

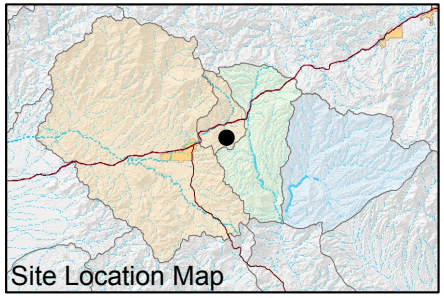
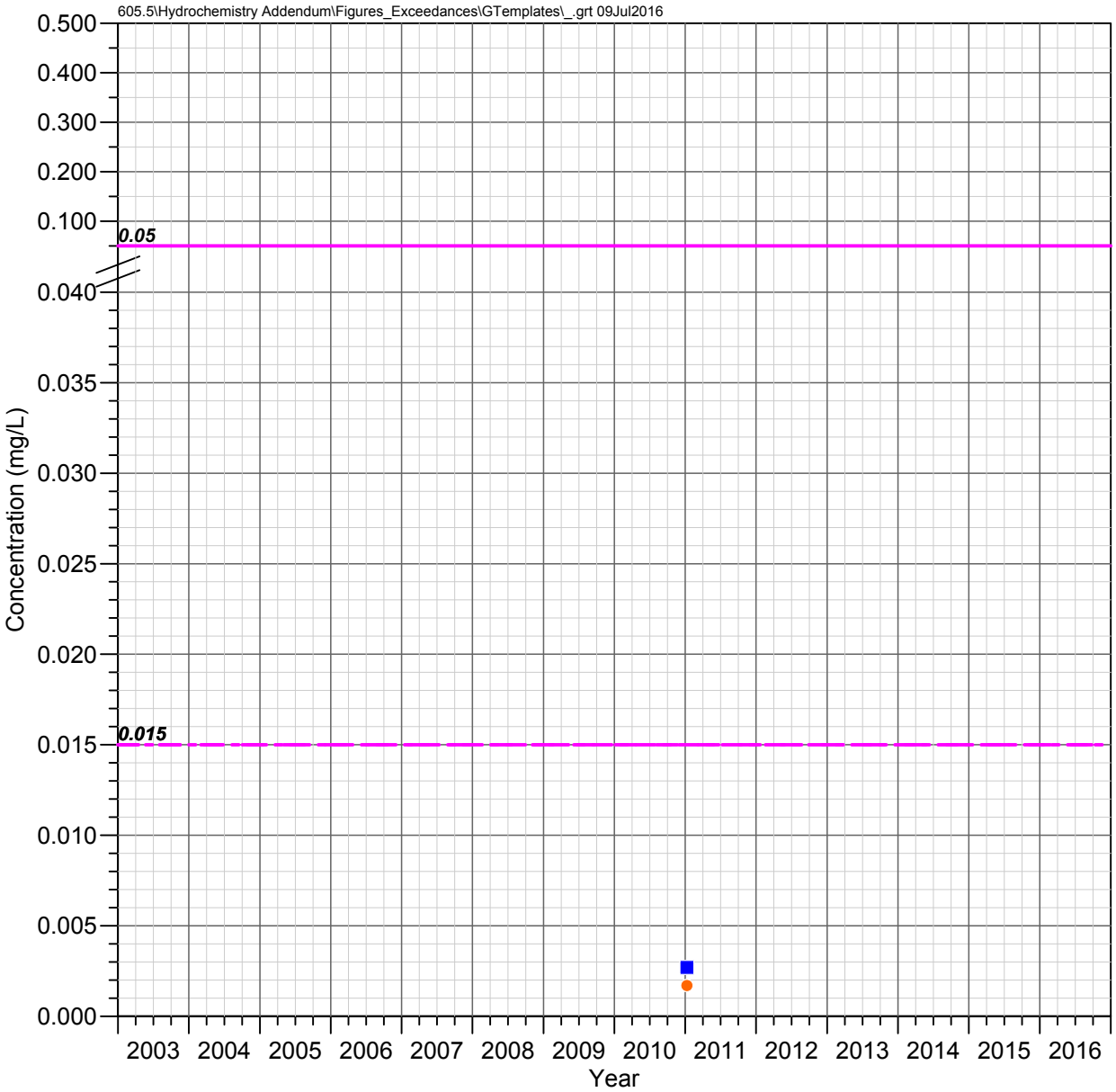


FIGURE E-395. LEAD CONCENTRATIONS OBSERVED AT DHRES-02, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-06
Deep Groundwater System

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.015 mg/L)
- EPA Treatment Technique Limit (UNS, 0.015 mg/L)

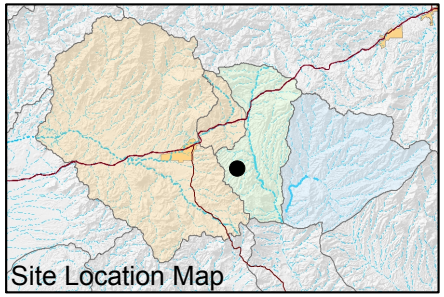
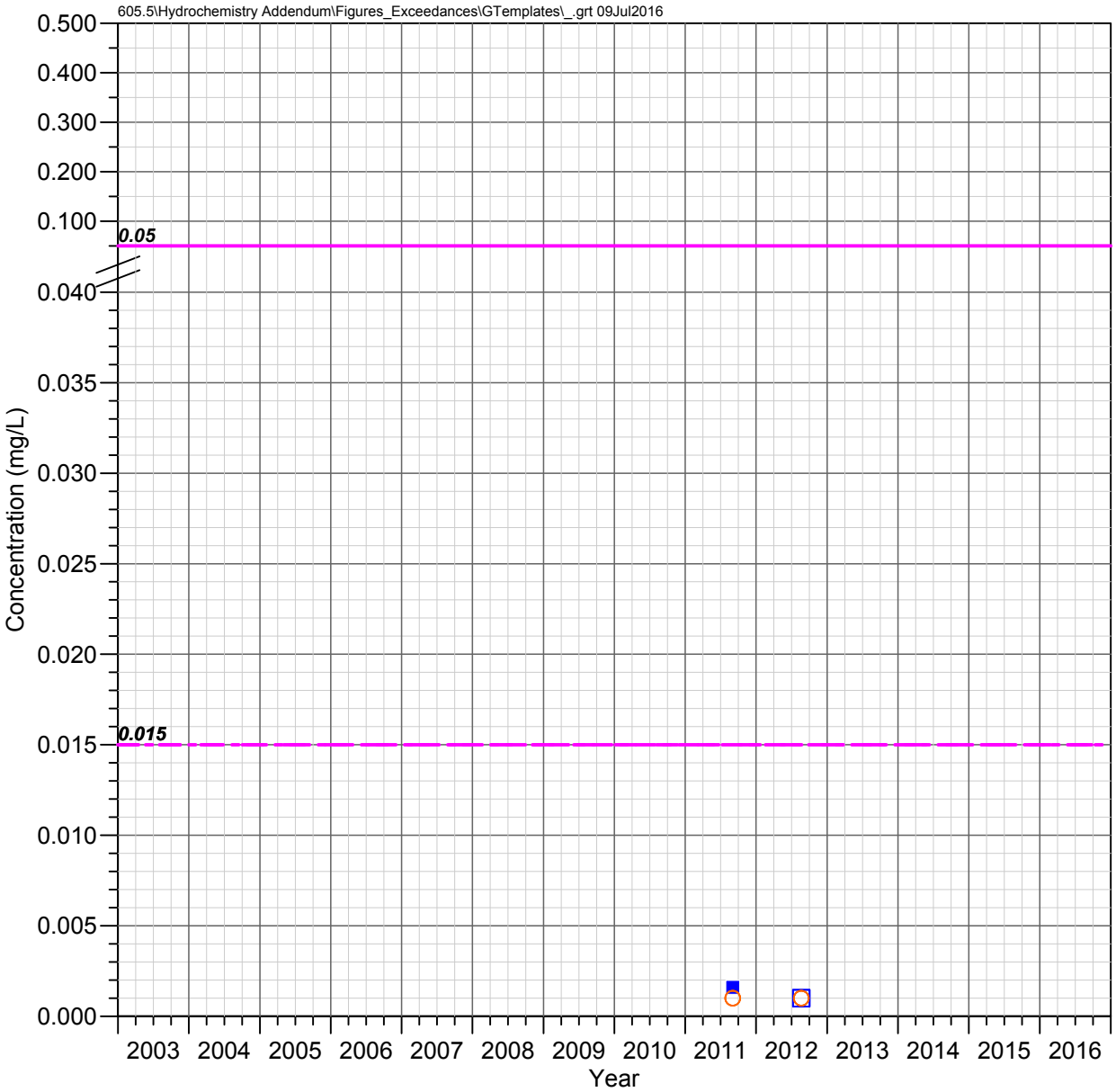


FIGURE E-396. LEAD CONCENTRATIONS OBSERVED AT DHRES-06, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-09
Deep Groundwater System

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.015 mg/L)
- EPA Treatment Technique Limit (UNS, 0.015 mg/L)

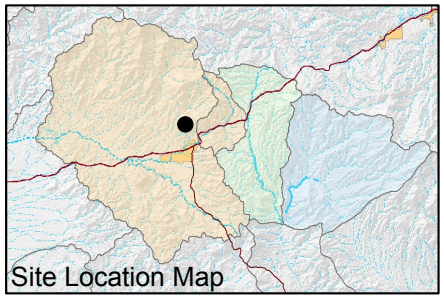
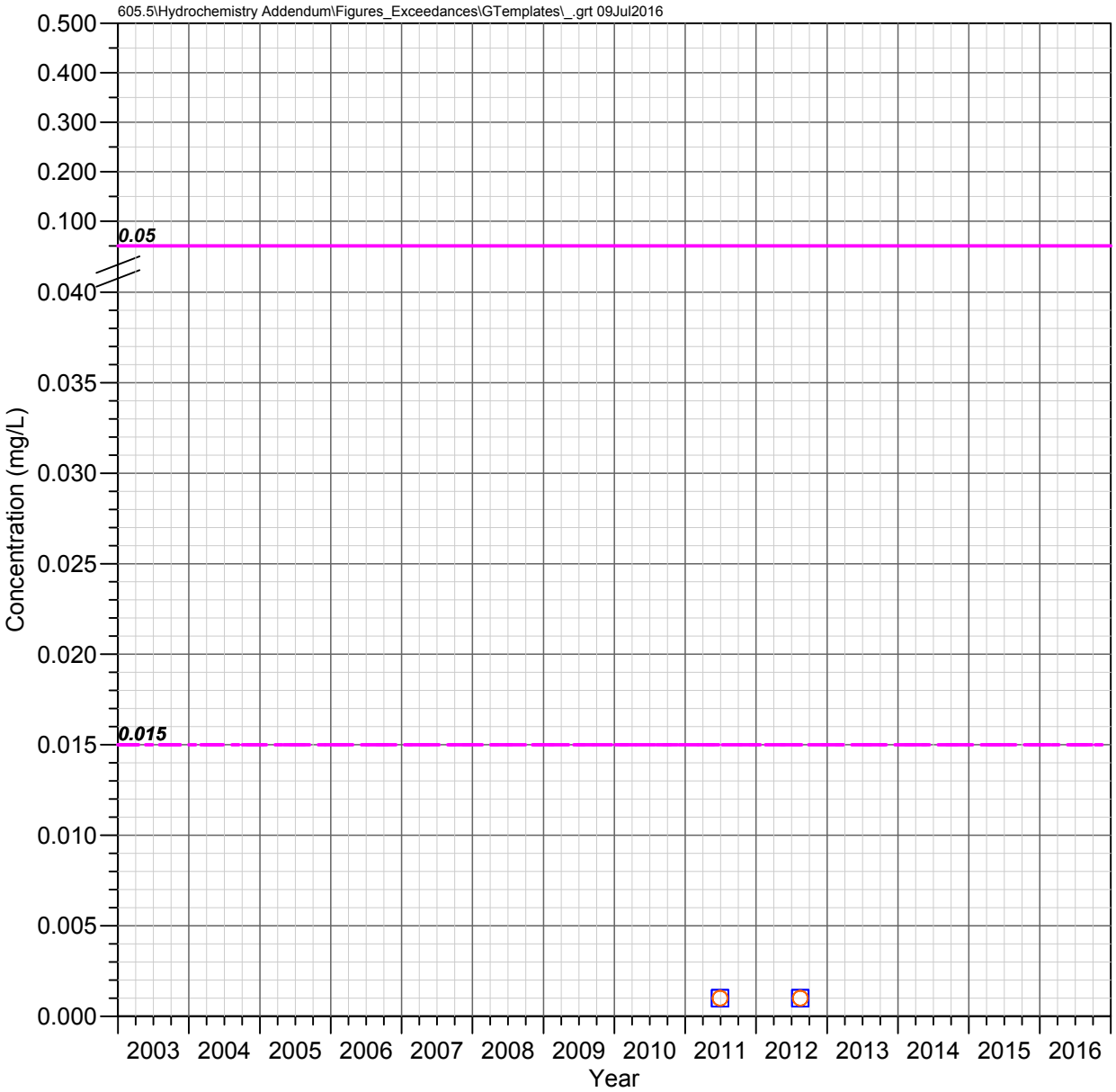


FIGURE E-397. LEAD CONCENTRATIONS OBSERVED AT DHRES-09, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-11
Deep Groundwater System

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.015 mg/L)
- EPA Treatment Technique Limit (UNS, 0.015 mg/L)

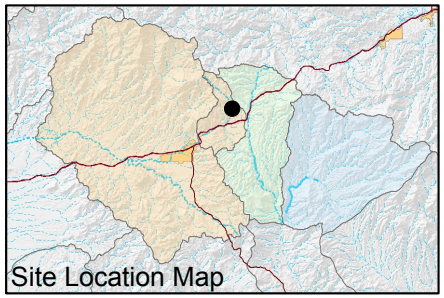
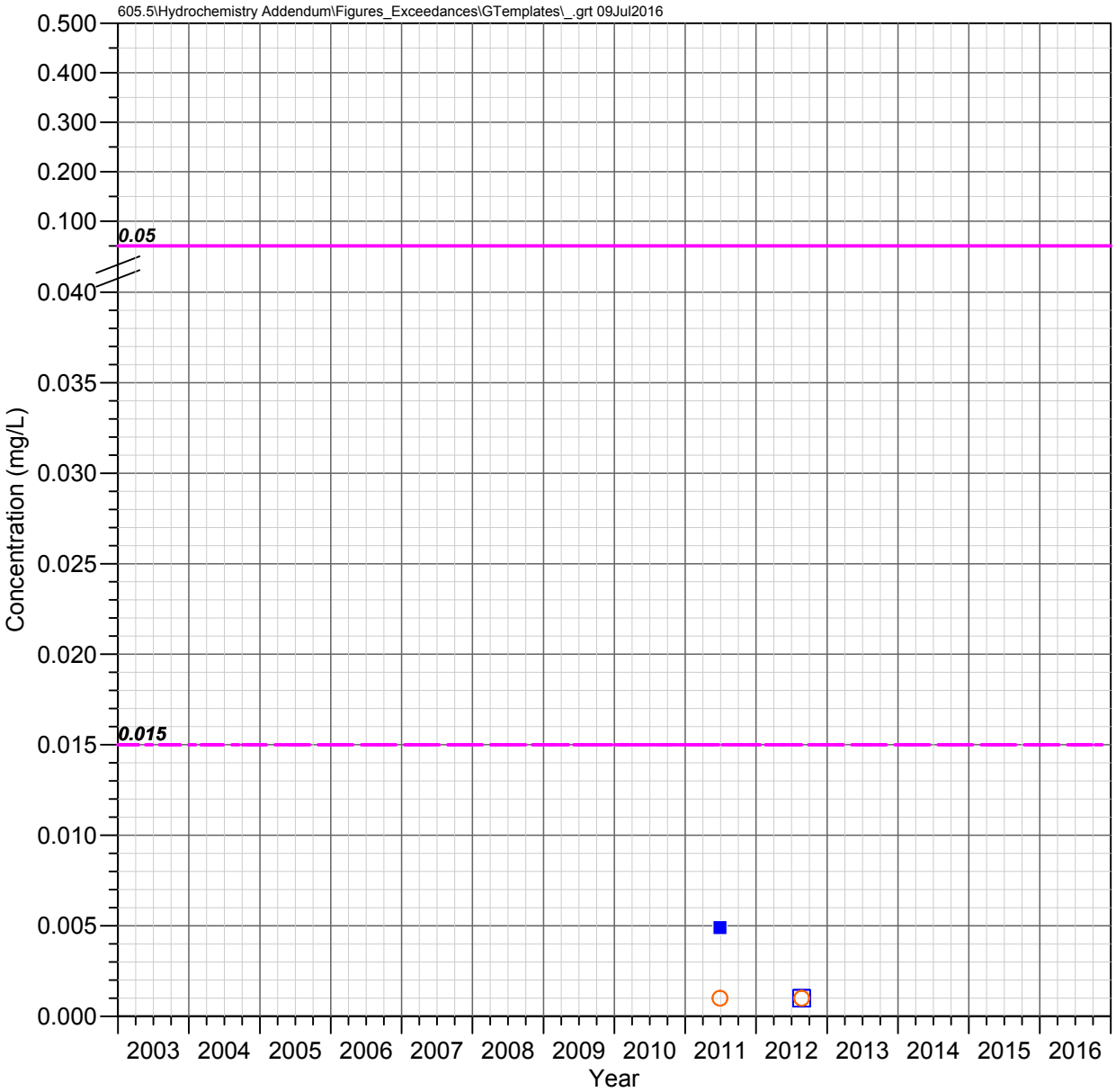


FIGURE E-398. LEAD CONCENTRATIONS OBSERVED AT DHRES-11, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-13
Deep Groundwater System

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.015 mg/L)
- EPA Treatment Technique Limit (UNS, 0.015 mg/L)

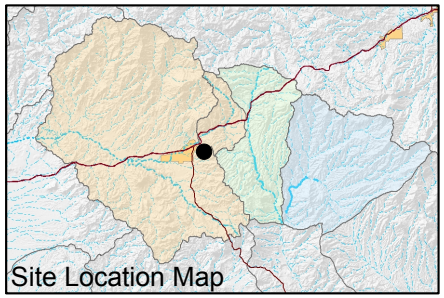
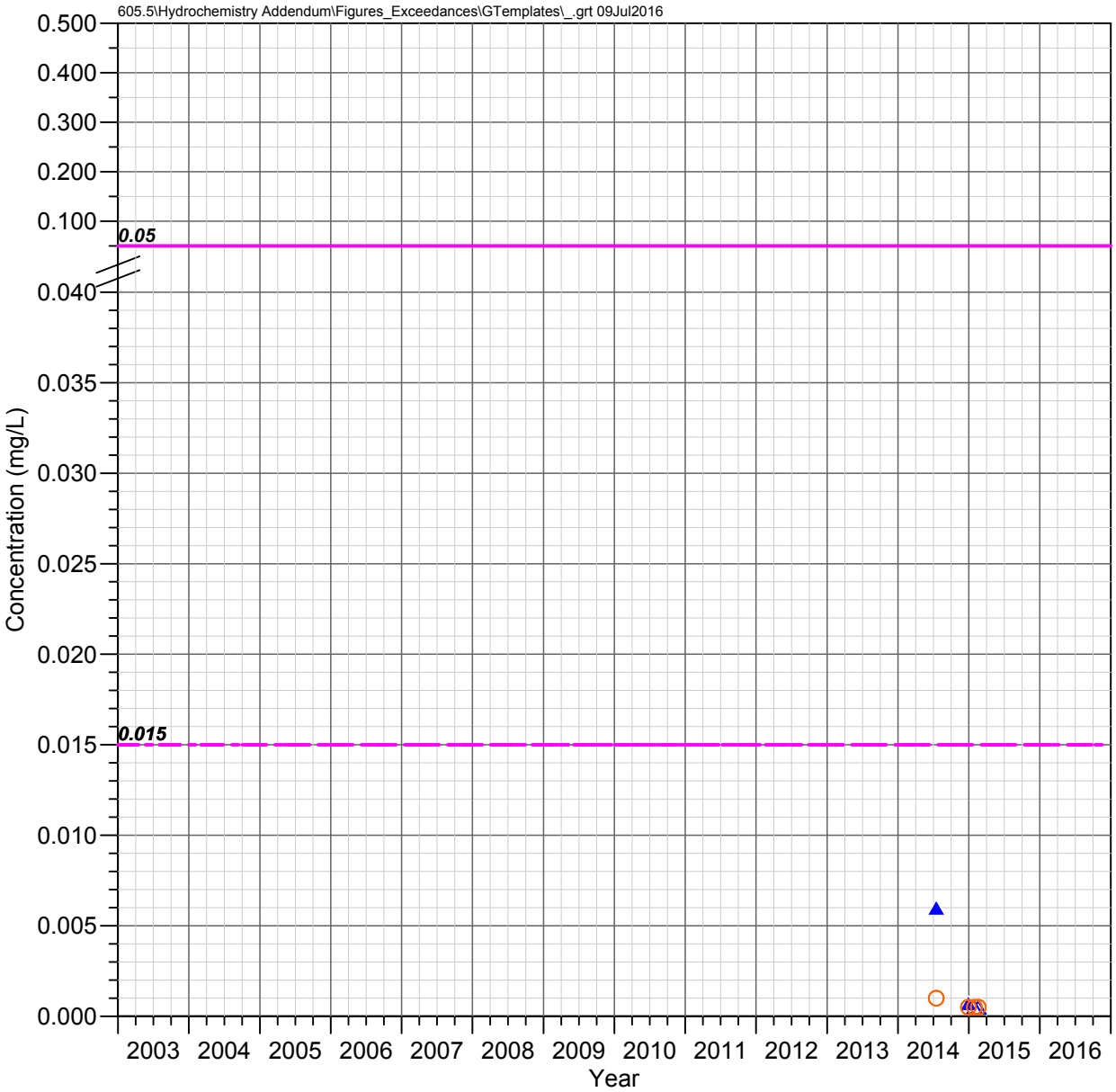


FIGURE E-399. LEAD CONCENTRATIONS OBSERVED AT DHRES-13, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-15
Deep Groundwater System

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.015 mg/L)
- EPA Treatment Technique Limit (UNS, 0.015 mg/L)

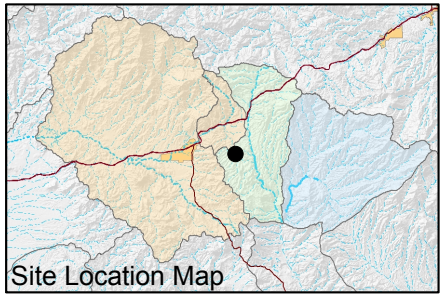
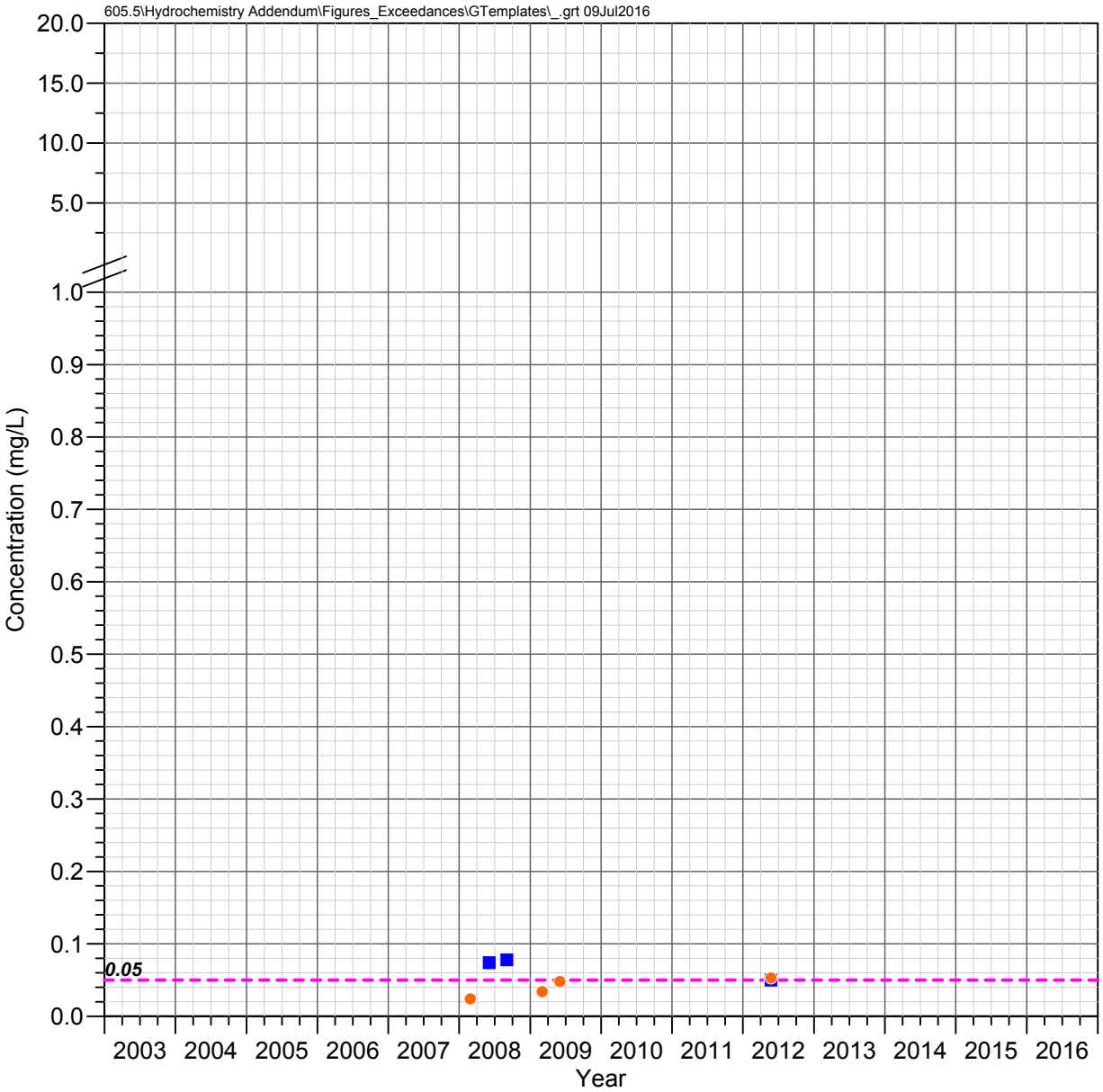


FIGURE E-400. LEAD CONCENTRATIONS OBSERVED AT DHRES-15, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Hackberry Windmill Well Shallow Groundwater System

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

EPA Secondary MCL (UNS, 0.05 mg/L)

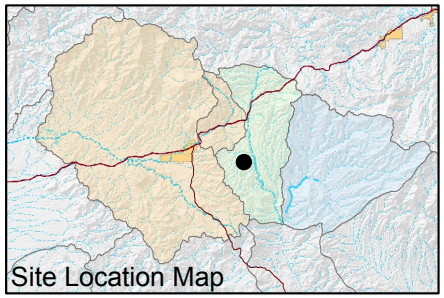
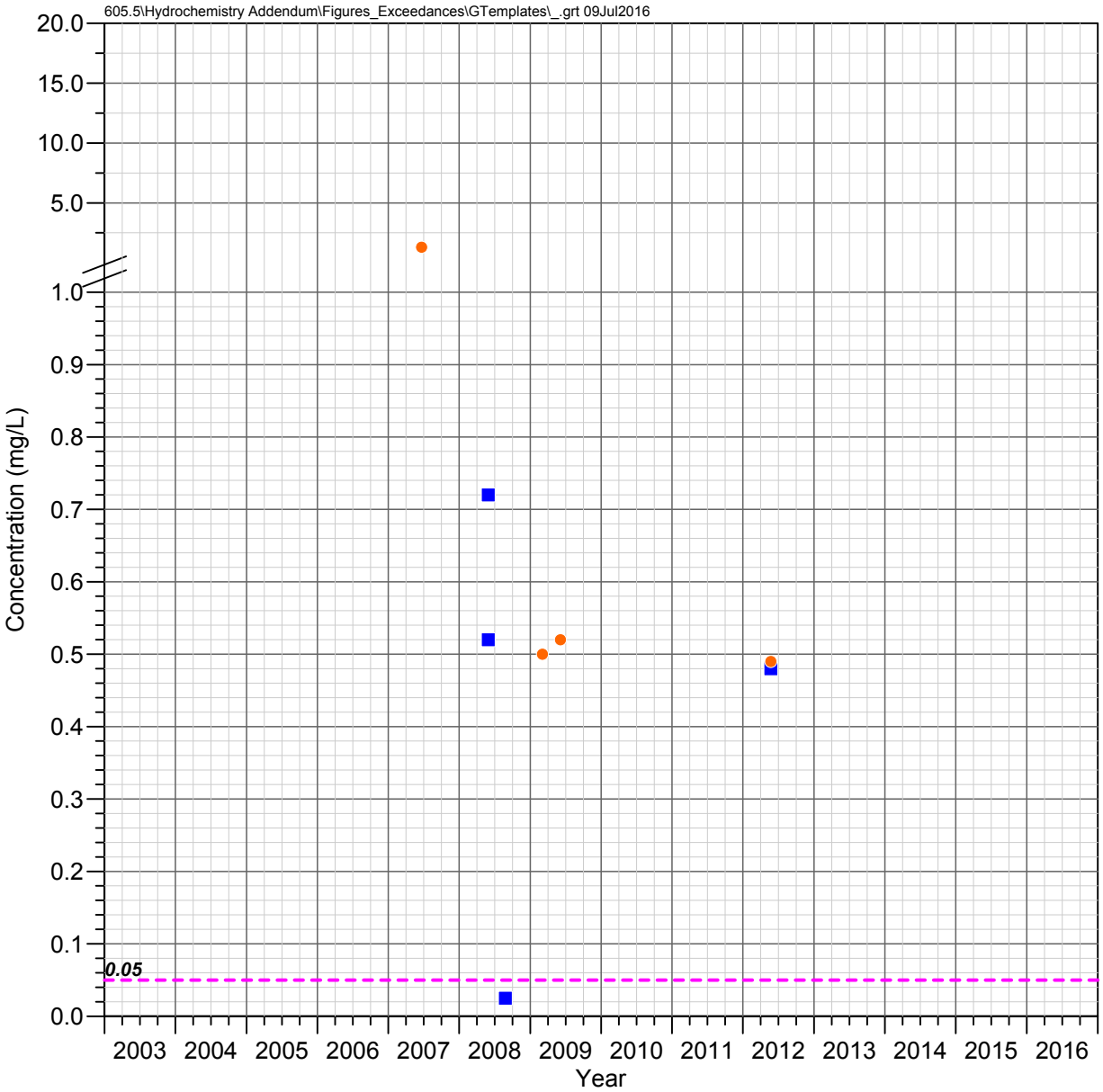


FIGURE E-401. MANGANESE CONCENTRATIONS OBSERVED AT HACKBERRY WINDMILL WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



JI Ranch Corral Well Shallow Groundwater System

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

EPA Secondary MCL (UNS, 0.05 mg/L)

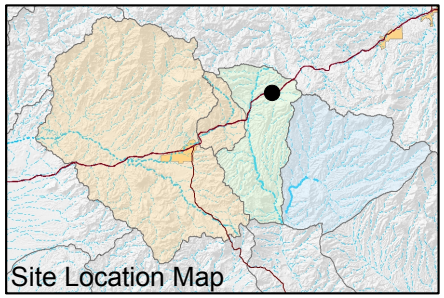
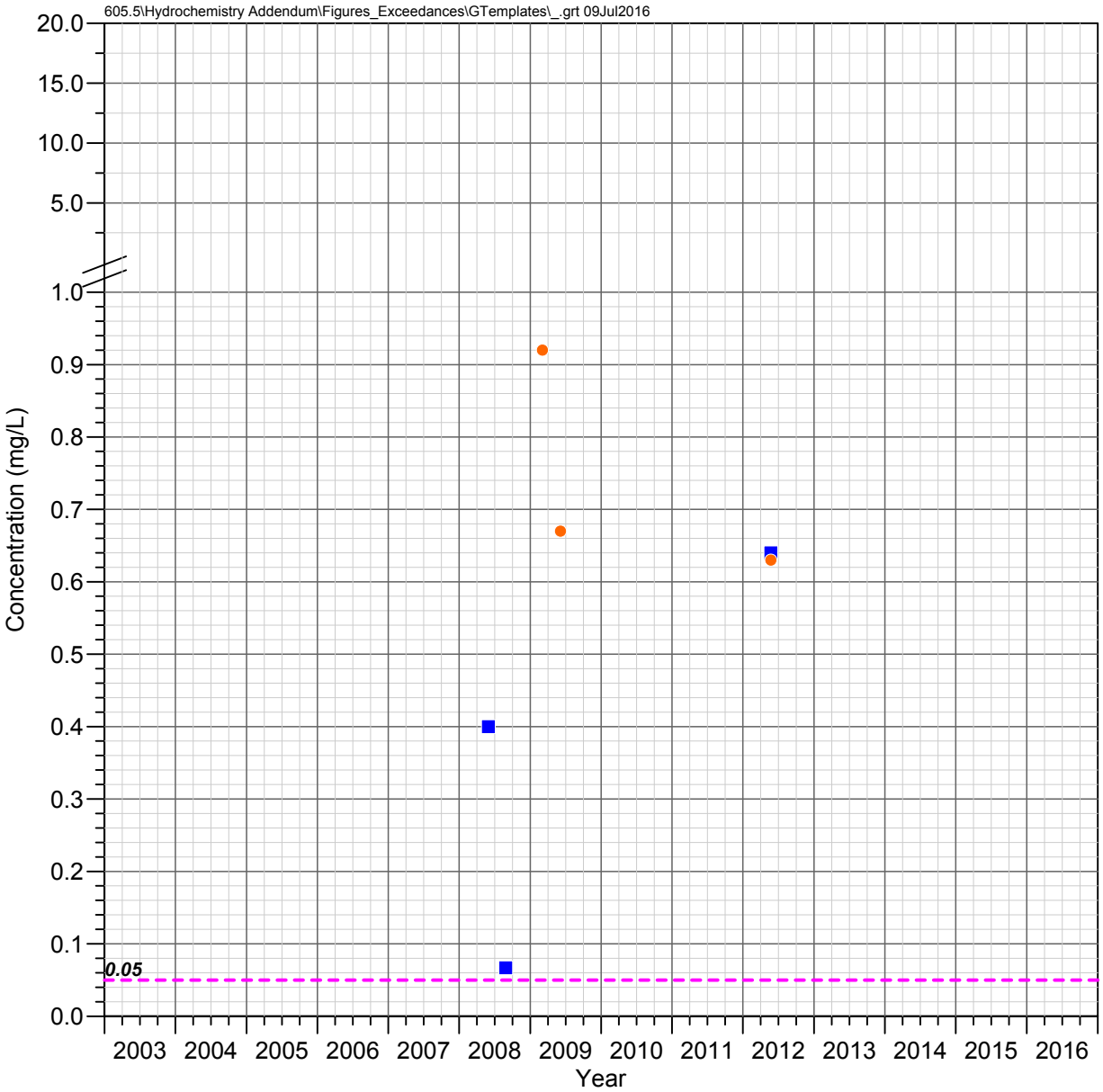


FIGURE E-402. MANGANESE CONCENTRATIONS OBSERVED AT JI RANCH CORRAL WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



JI Ranch Middle Well Shallow Groundwater System

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.05 mg/L)

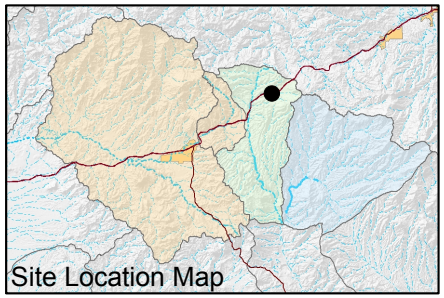
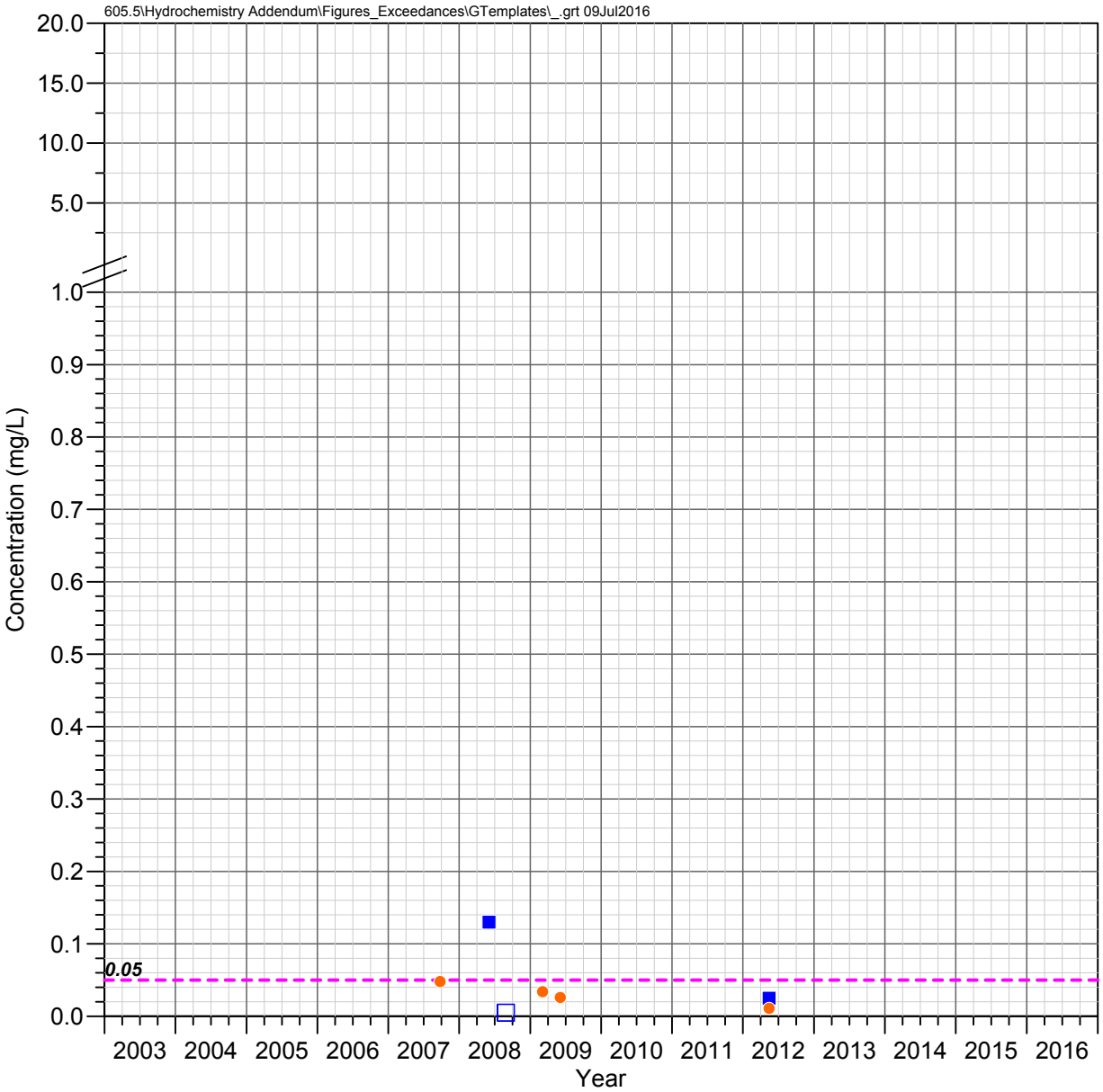


FIGURE E-403. MANGANESE CONCENTRATIONS OBSERVED AT JI RANCH MIDDLE WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



A-06
Apache Leap Tuff Aquifer

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.05 mg/L)

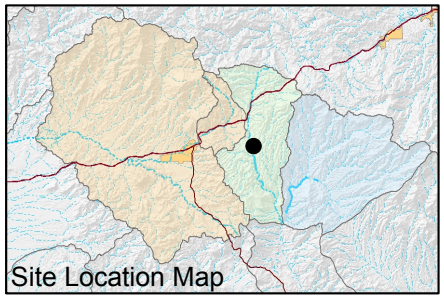
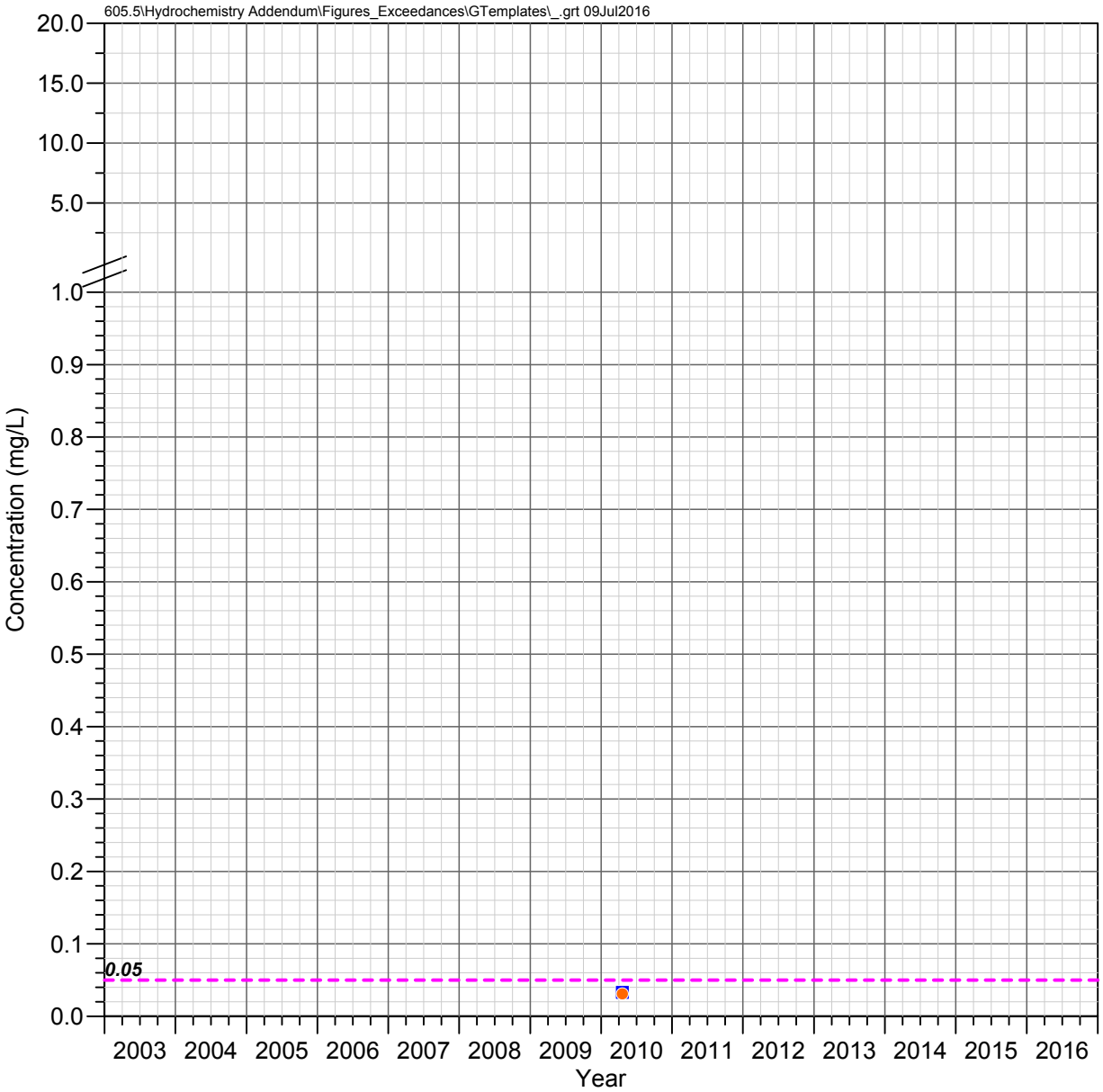


FIGURE E-404. MANGANESE CONCENTRATIONS OBSERVED AT A-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



CT Well
Apache Leap Tuff Aquifer

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.05 mg/L)

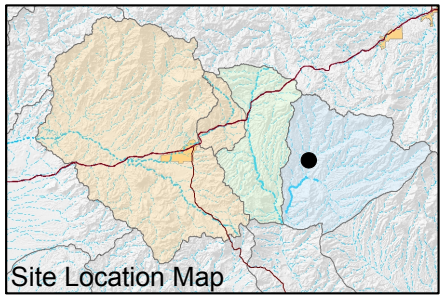
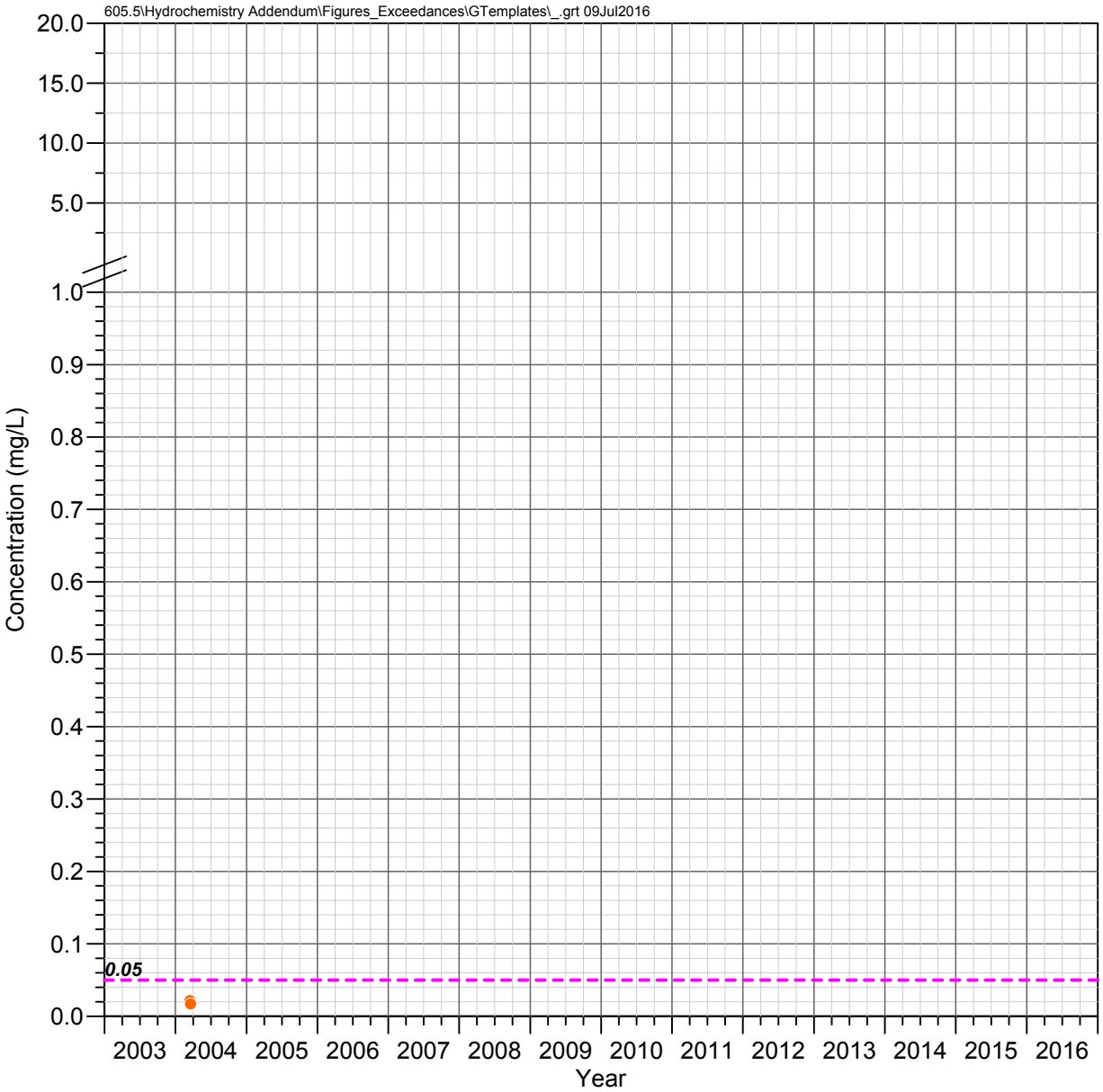


FIGURE E-405. MANGANESE CONCENTRATIONS OBSERVED AT CT WELL, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-01
Apache Leap Tuff Aquifer

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.05 mg/L)

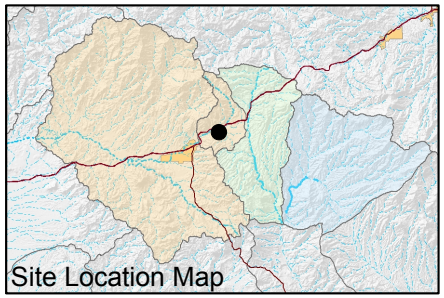
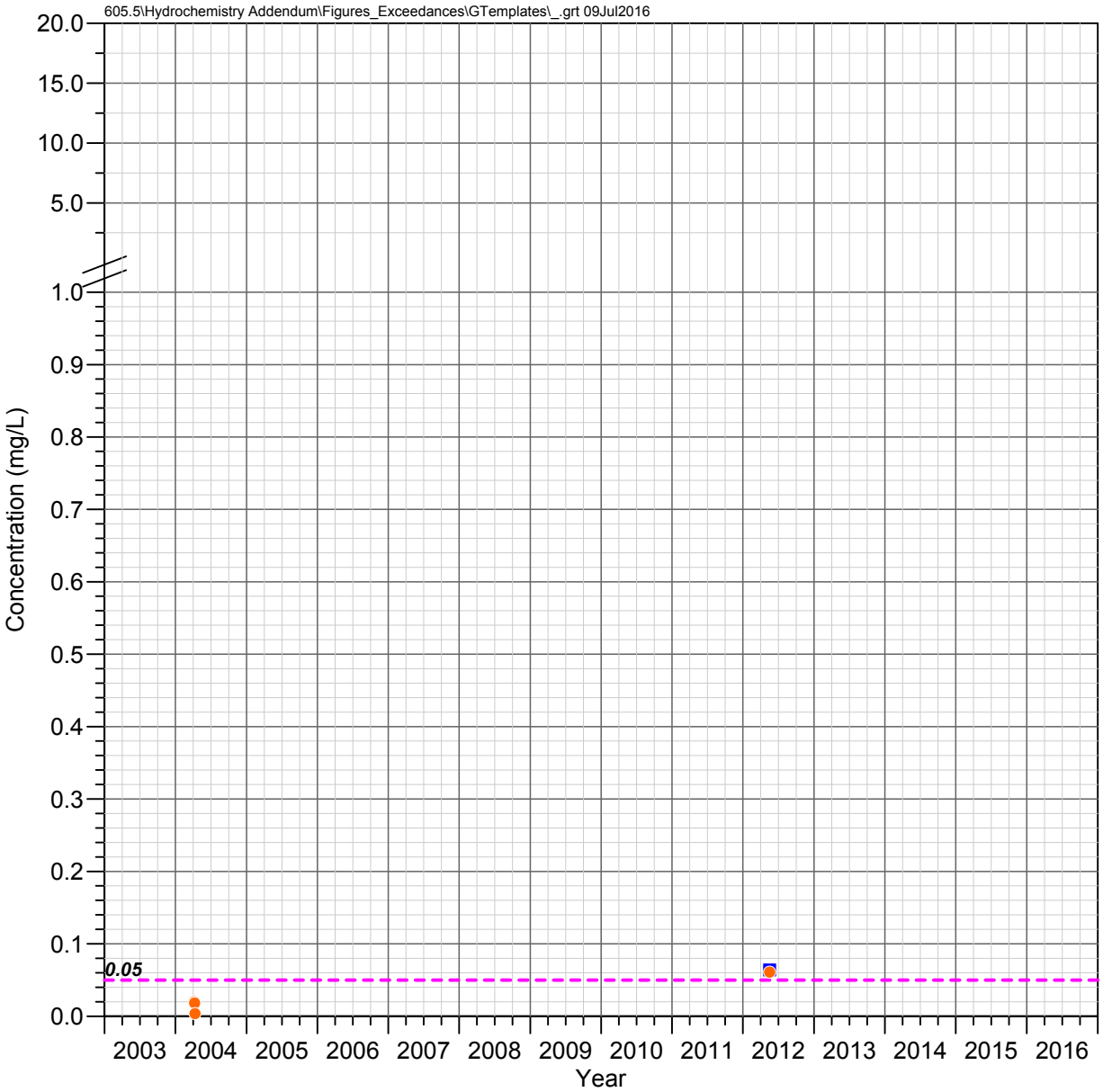


FIGURE E-406. MANGANESE CONCENTRATIONS OBSERVED AT HRES-01, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-02
Apache Leap Tuff Aquifer

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.05 mg/L)

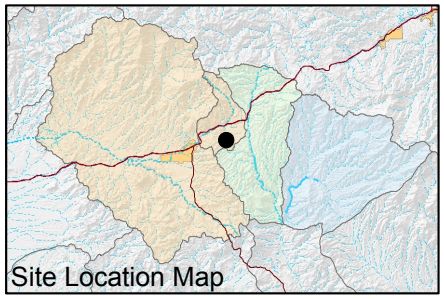
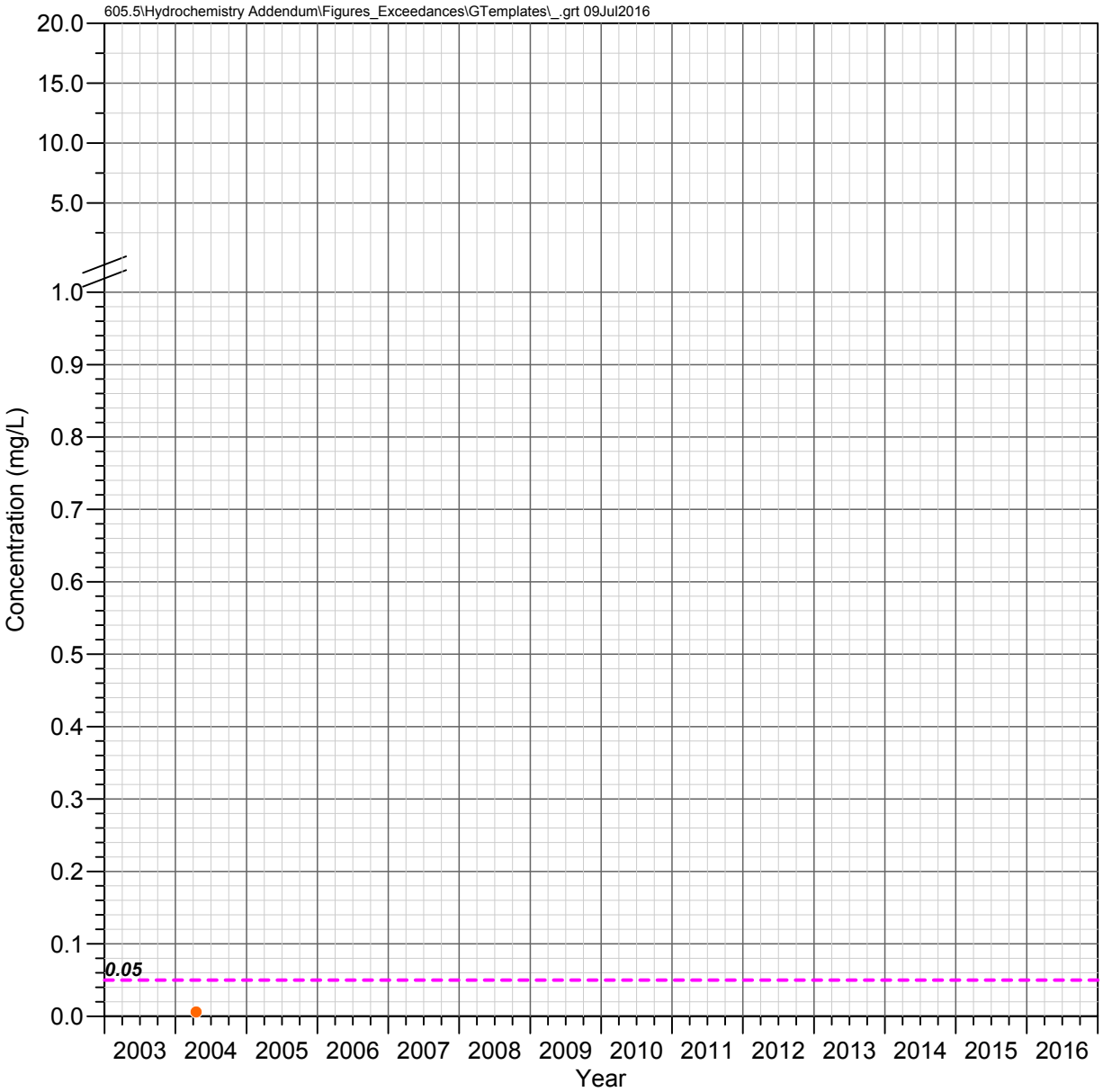


FIGURE E-407. MANGANESE CONCENTRATIONS OBSERVED AT HRES-02, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-03d
Apache Leap Tuff Aquifer

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.05 mg/L)

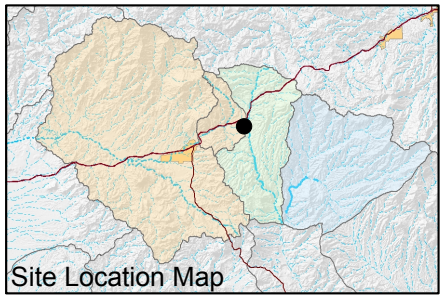
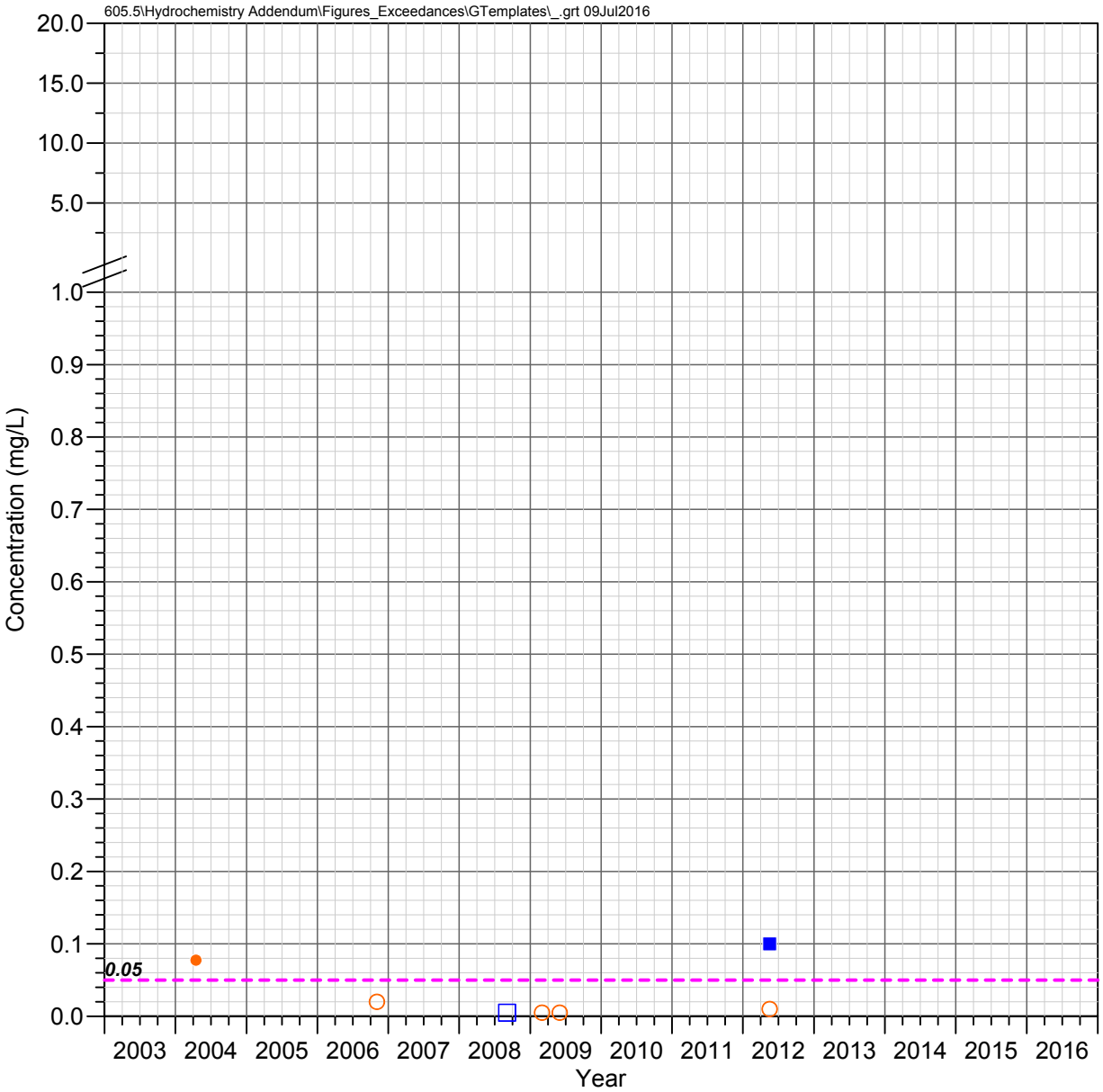


FIGURE E-408. MANGANESE CONCENTRATIONS OBSERVED AT HRES-03D, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-04
Apache Leap Tuff Aquifer

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.05 mg/L)

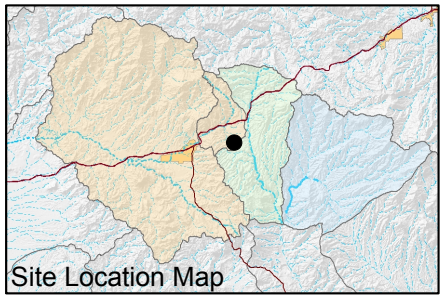
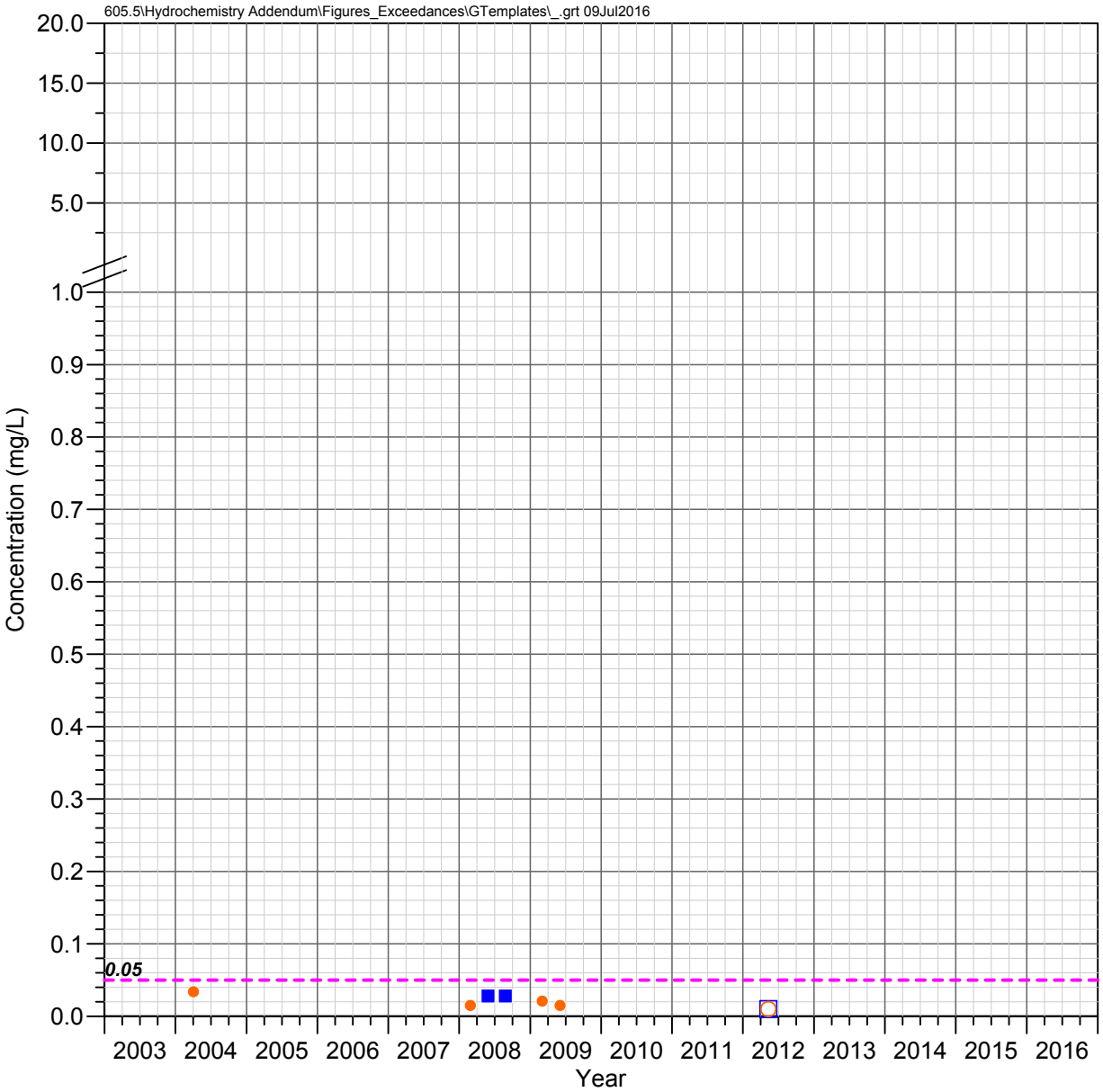


FIGURE E-409. MANGANESE CONCENTRATIONS OBSERVED AT HRES-04, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-05
Apache Leap Tuff Aquifer

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.05 mg/L)

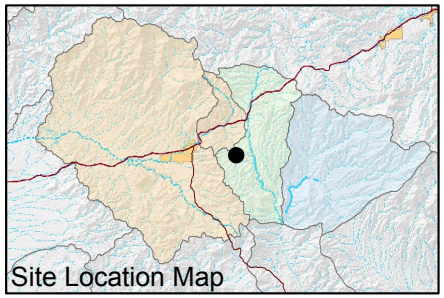
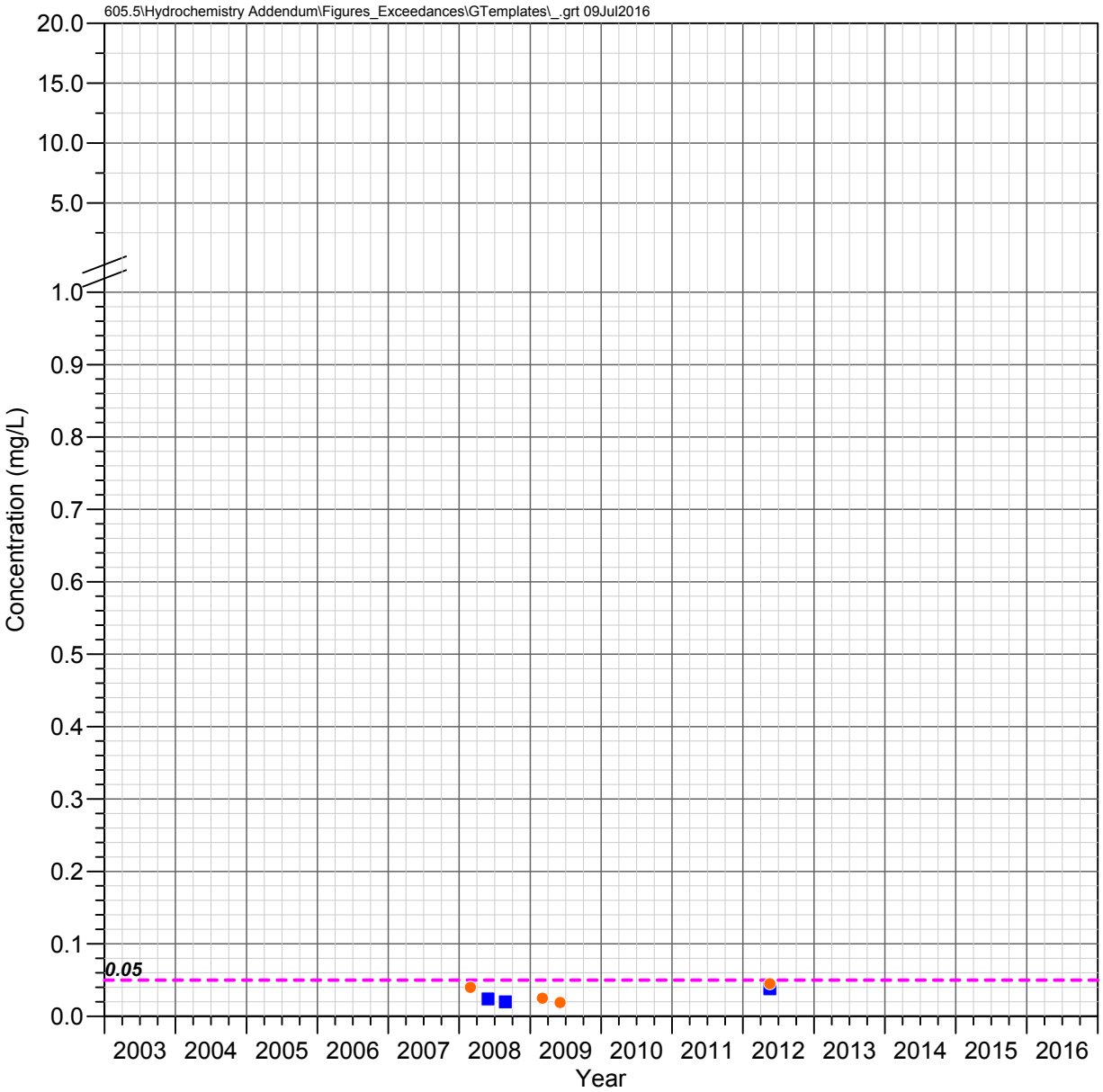


FIGURE E-410. MANGANESE CONCENTRATIONS OBSERVED AT HRES-05, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-06
Apache Leap Tuff Aquifer

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.05 mg/L)

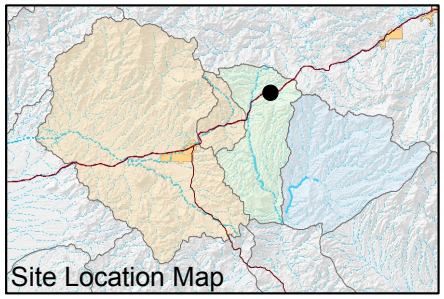
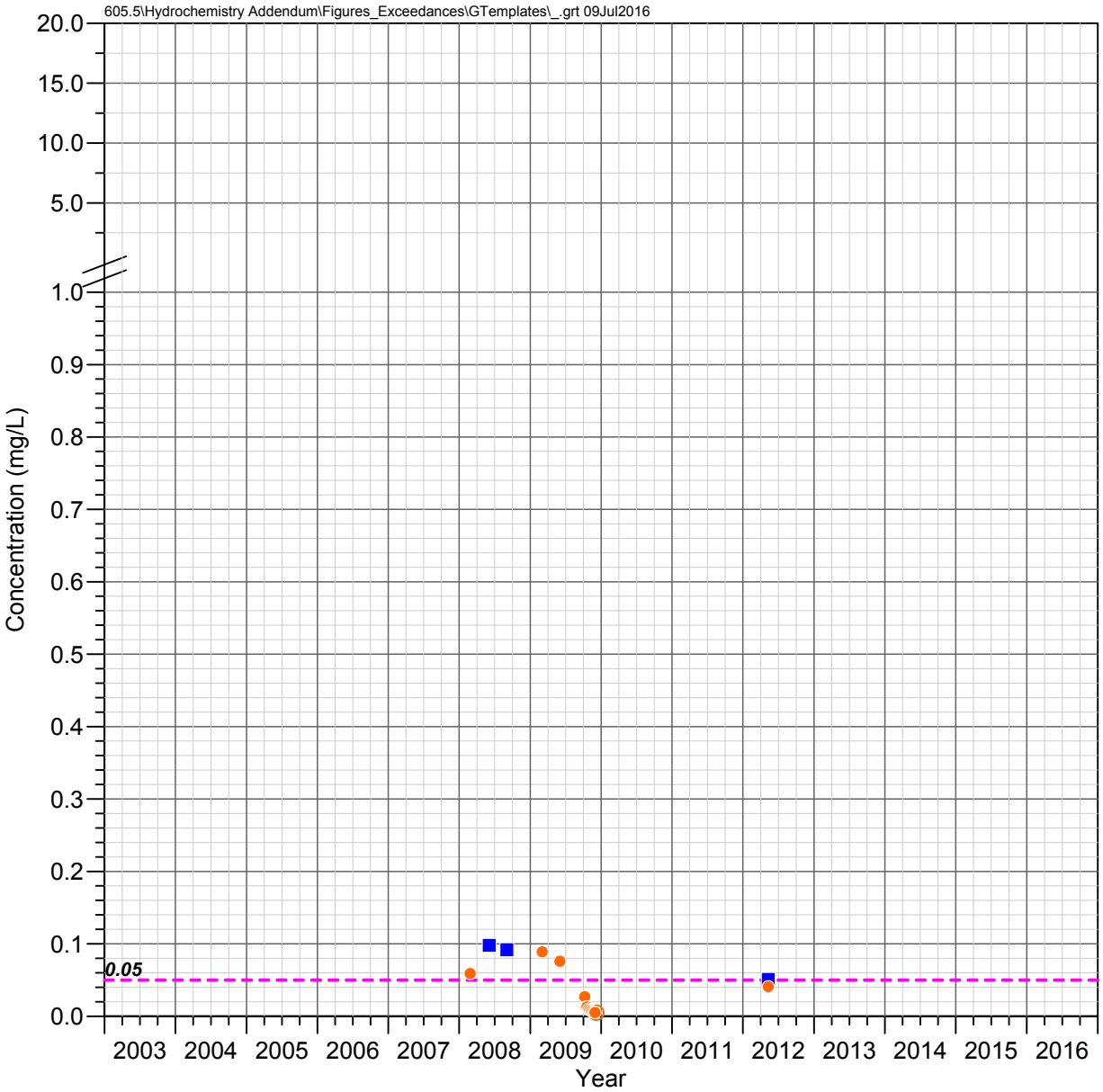


FIGURE E-411. MANGANESE CONCENTRATIONS OBSERVED AT HRES-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-07
Apache Leap Tuff Aquifer

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.05 mg/L)

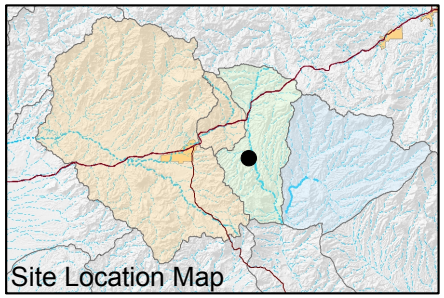
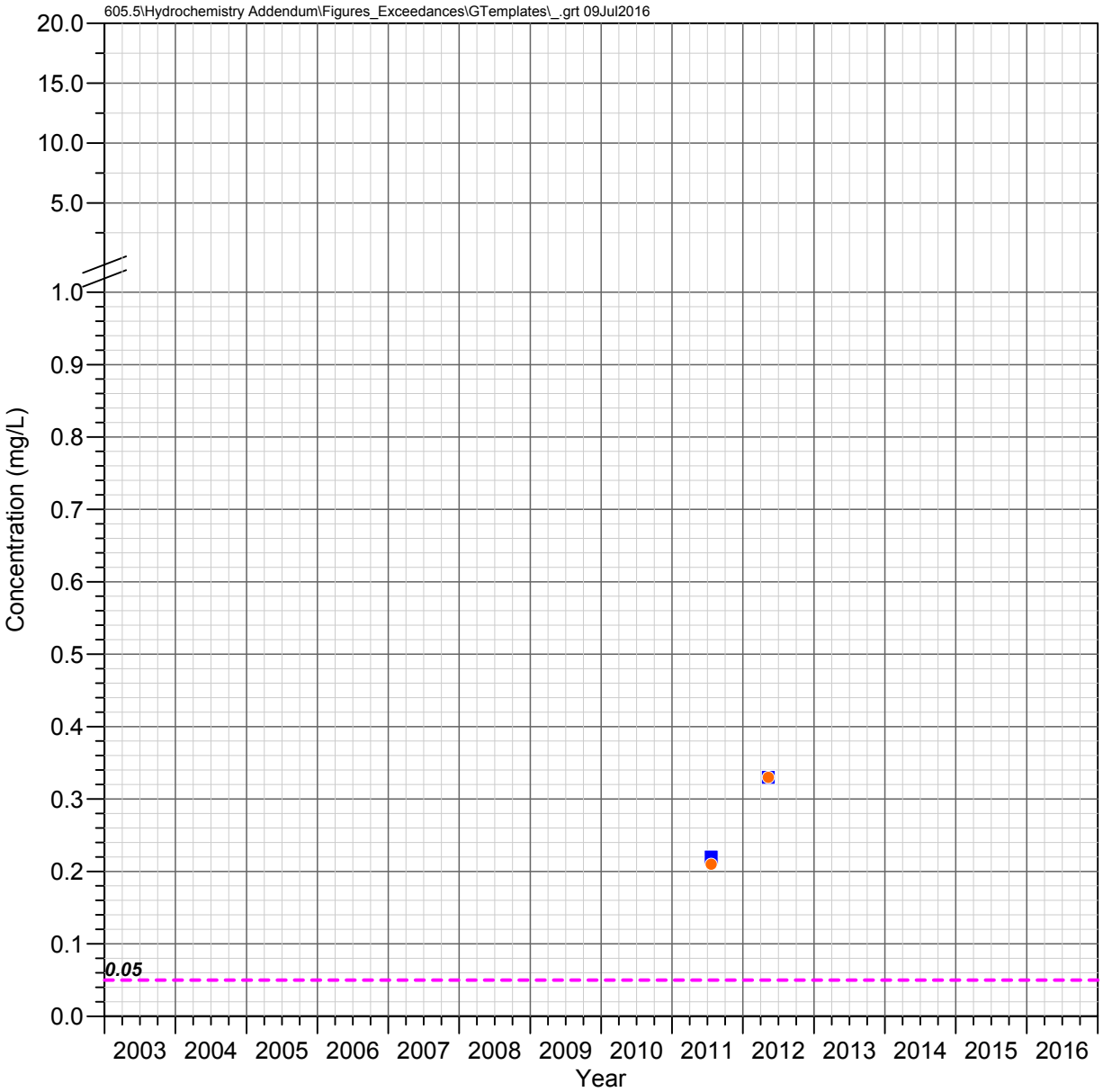


FIGURE E-412. MANGANESE CONCENTRATIONS OBSERVED AT HRES-07, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-08
Apache Leap Tuff Aquifer

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.05 mg/L)

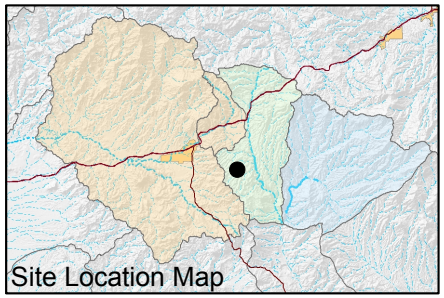
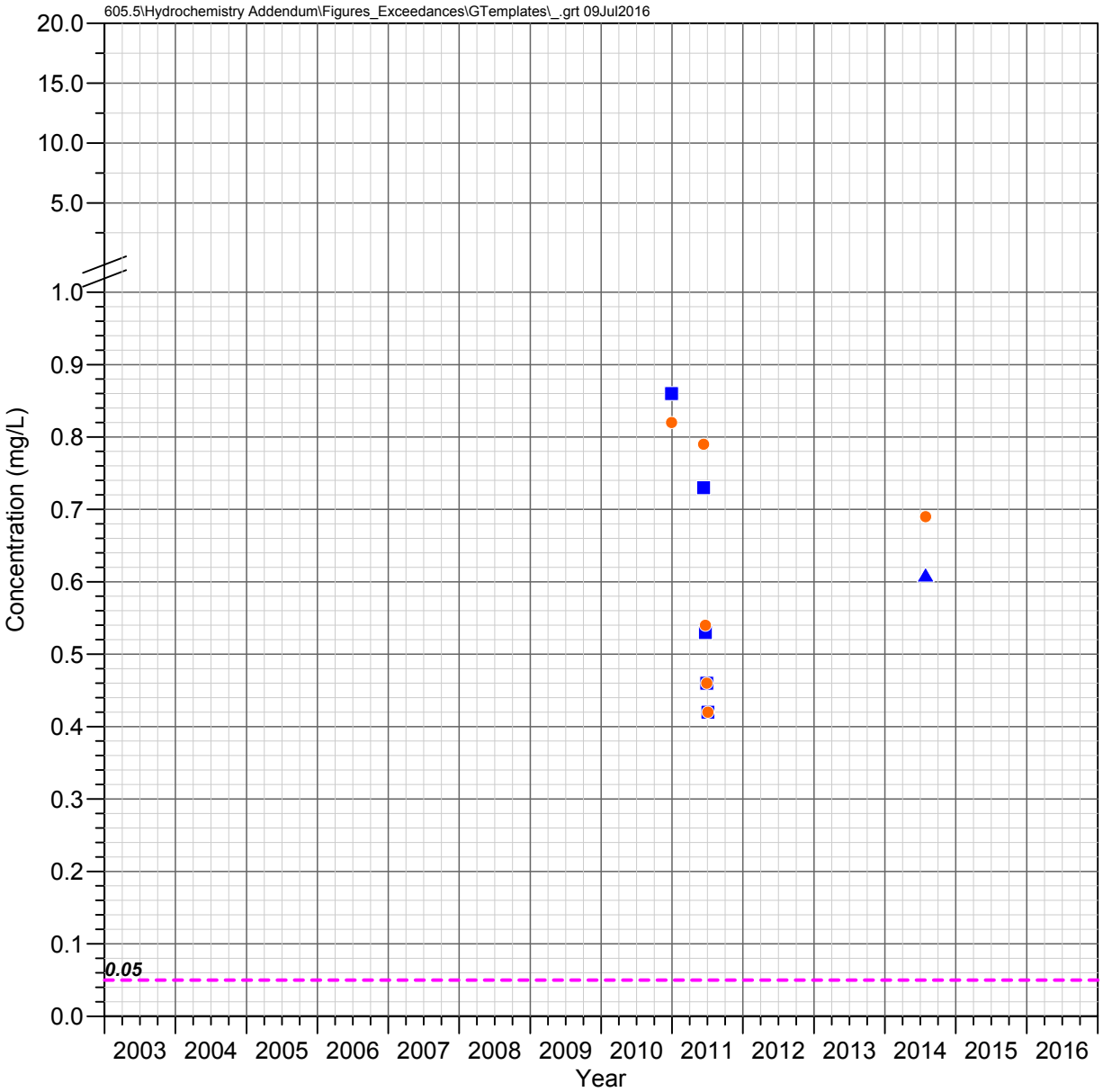


FIGURE E-413. MANGANESE CONCENTRATIONS OBSERVED AT HRES-08, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-09
Apache Leap Tuff Aquifer

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.05 mg/L)

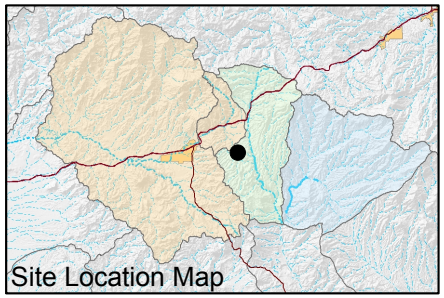
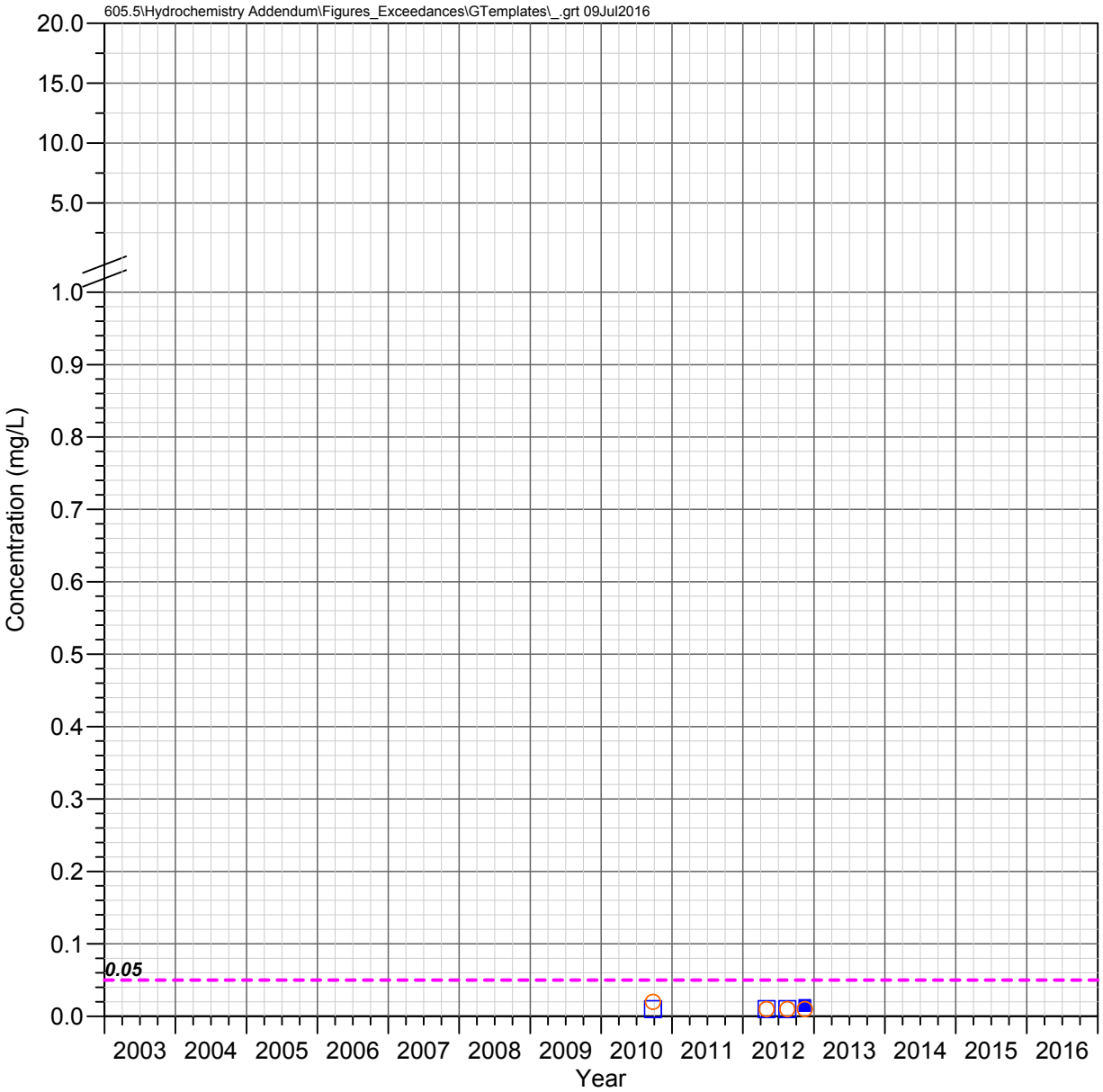


FIGURE E-414. MANGANESE CONCENTRATIONS OBSERVED AT HRES-09, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-10
Apache Leap Tuff Aquifer

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.05 mg/L)

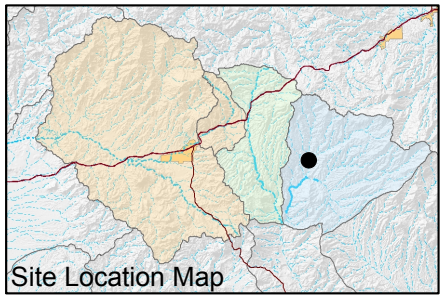
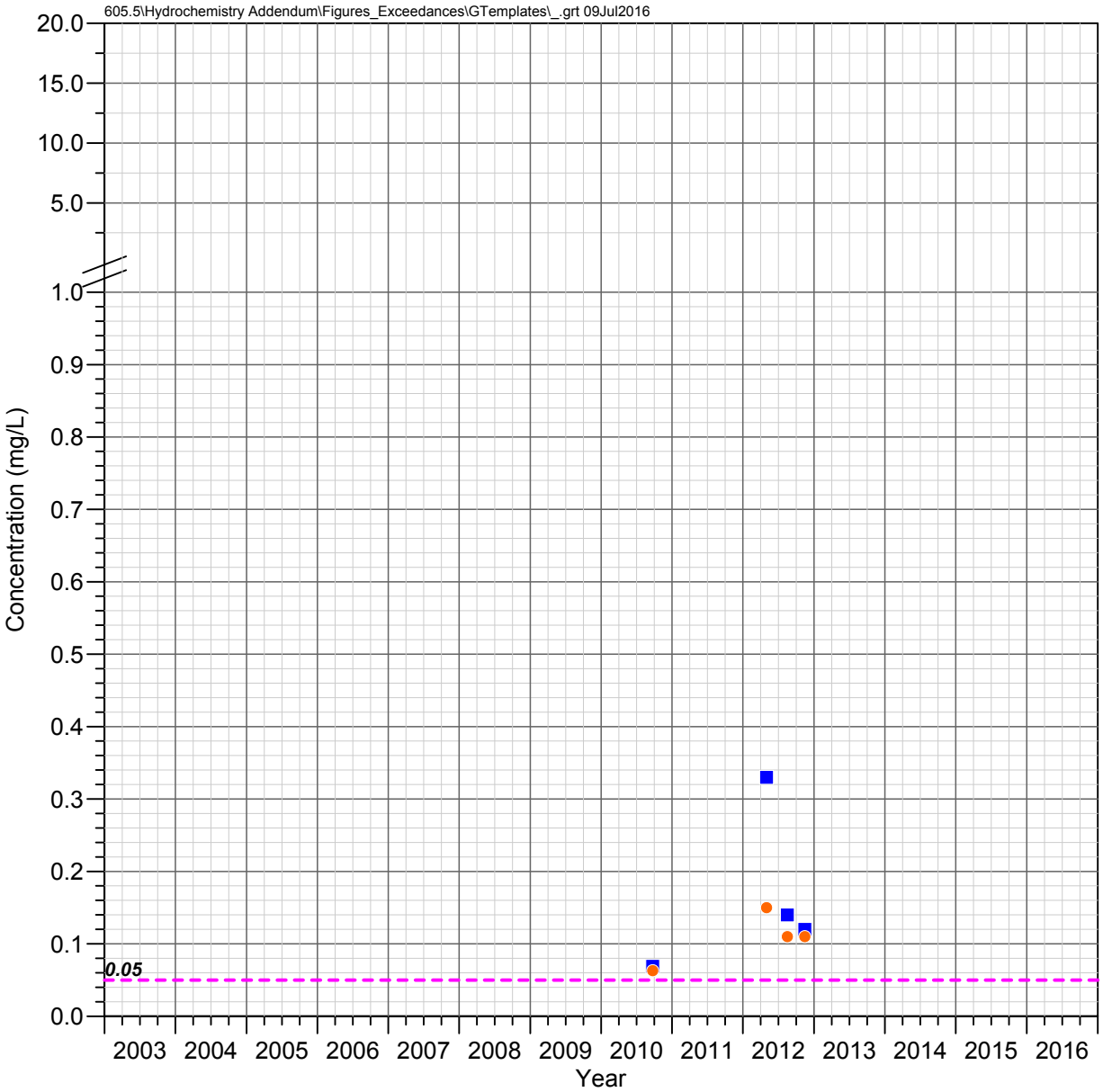


FIGURE E-415. MANGANESE CONCENTRATIONS OBSERVED AT HRES-10, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-11
Apache Leap Tuff Aquifer

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.05 mg/L)

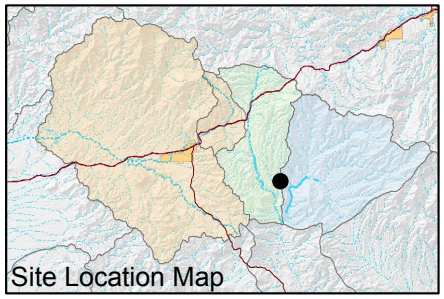
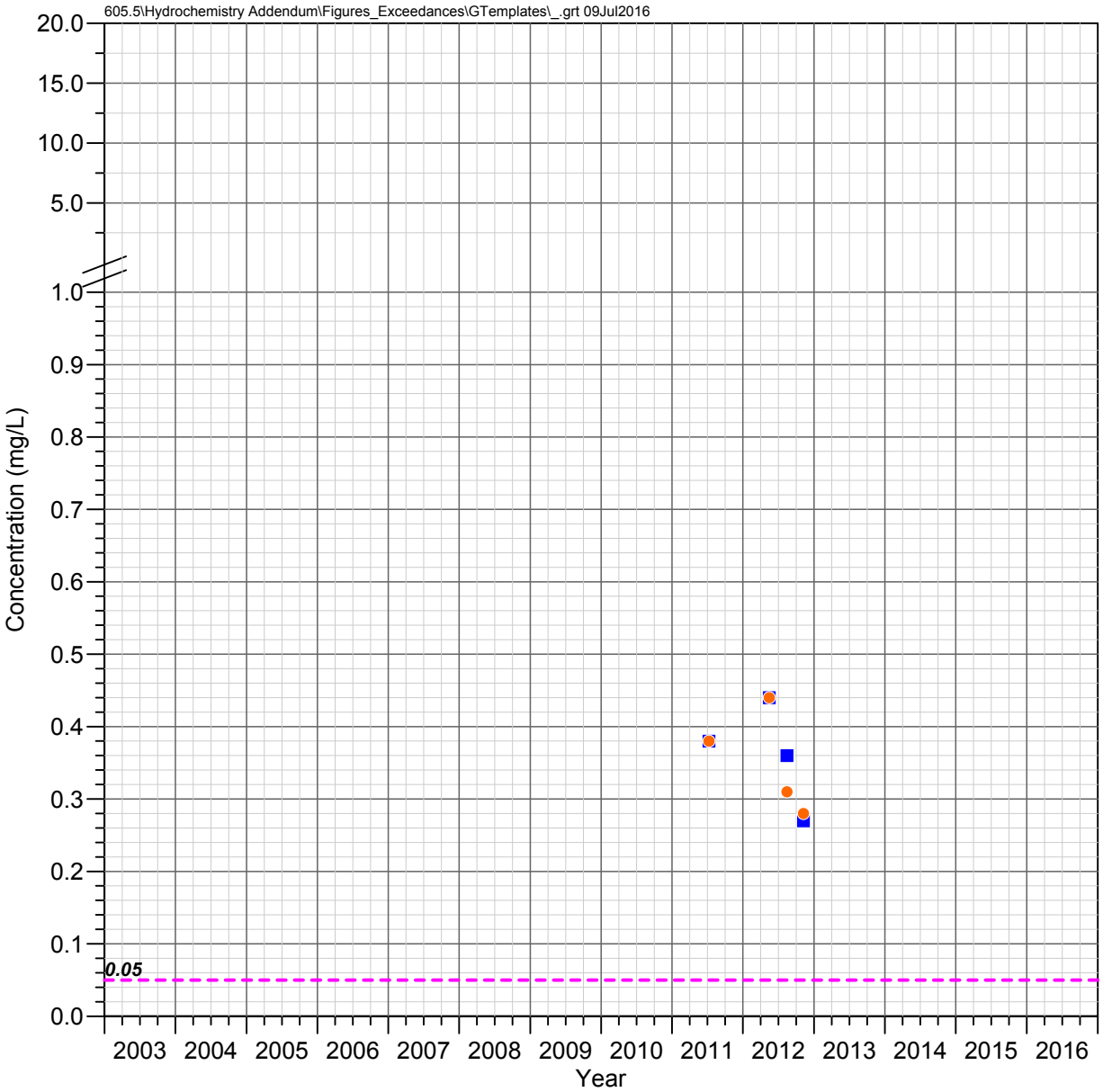


FIGURE E-416. MANGANESE CONCENTRATIONS OBSERVED AT HRES-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-12
Apache Leap Tuff Aquifer

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.05 mg/L)

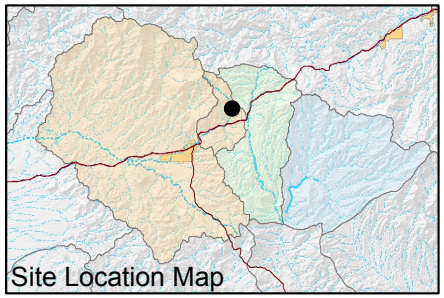
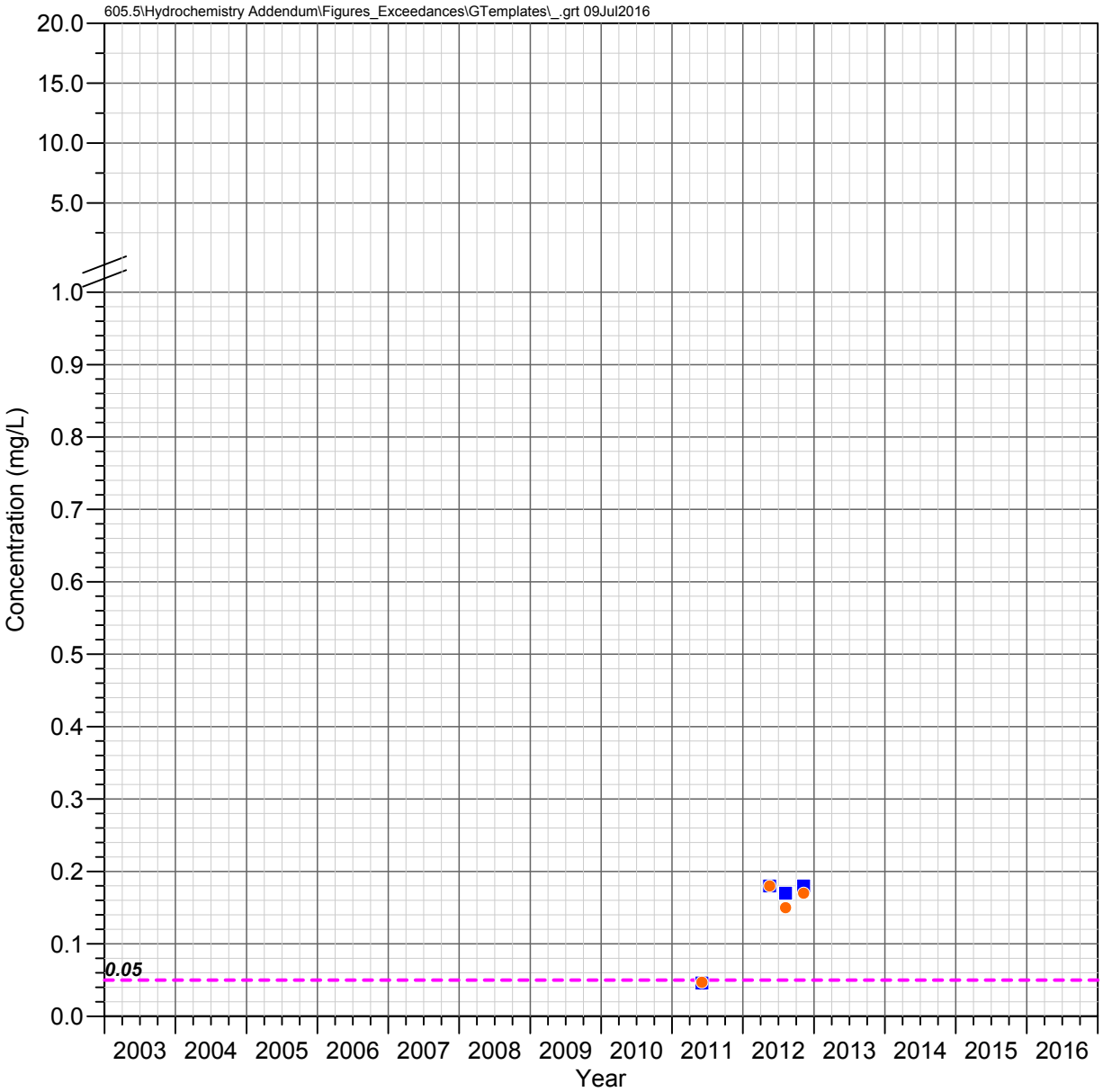


FIGURE E-417. MANGANESE CONCENTRATIONS OBSERVED AT HRES-12, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-13
Apache Leap Tuff Aquifer

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.05 mg/L)

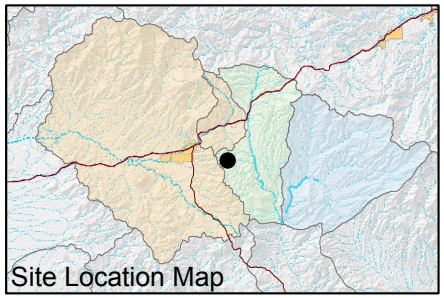
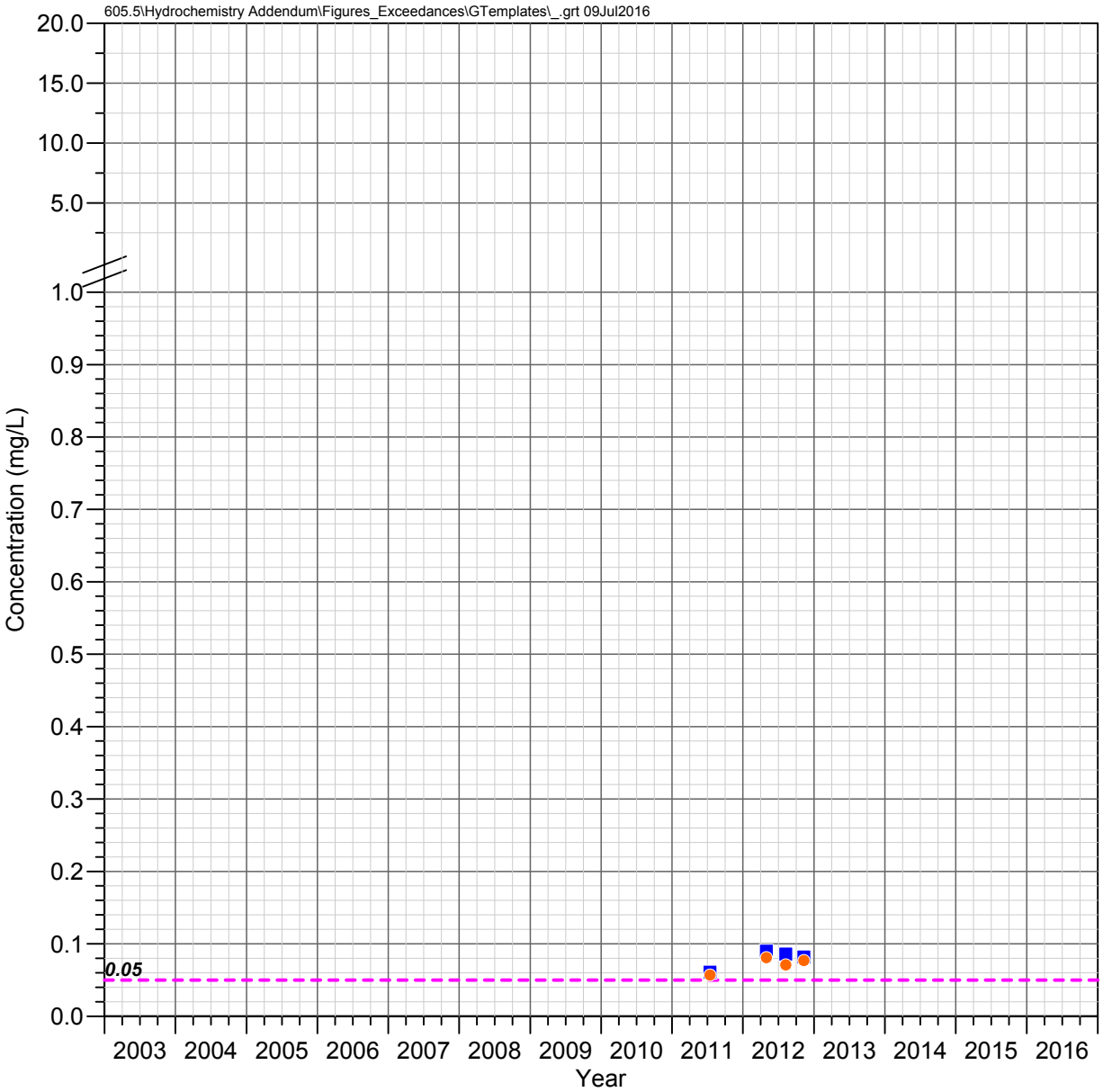


FIGURE E-418. MANGANESE CONCENTRATIONS OBSERVED AT HRES-13, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-14
Apache Leap Tuff Aquifer

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.05 mg/L)

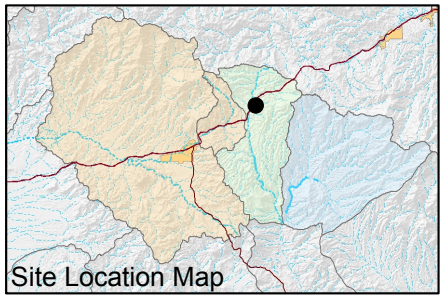
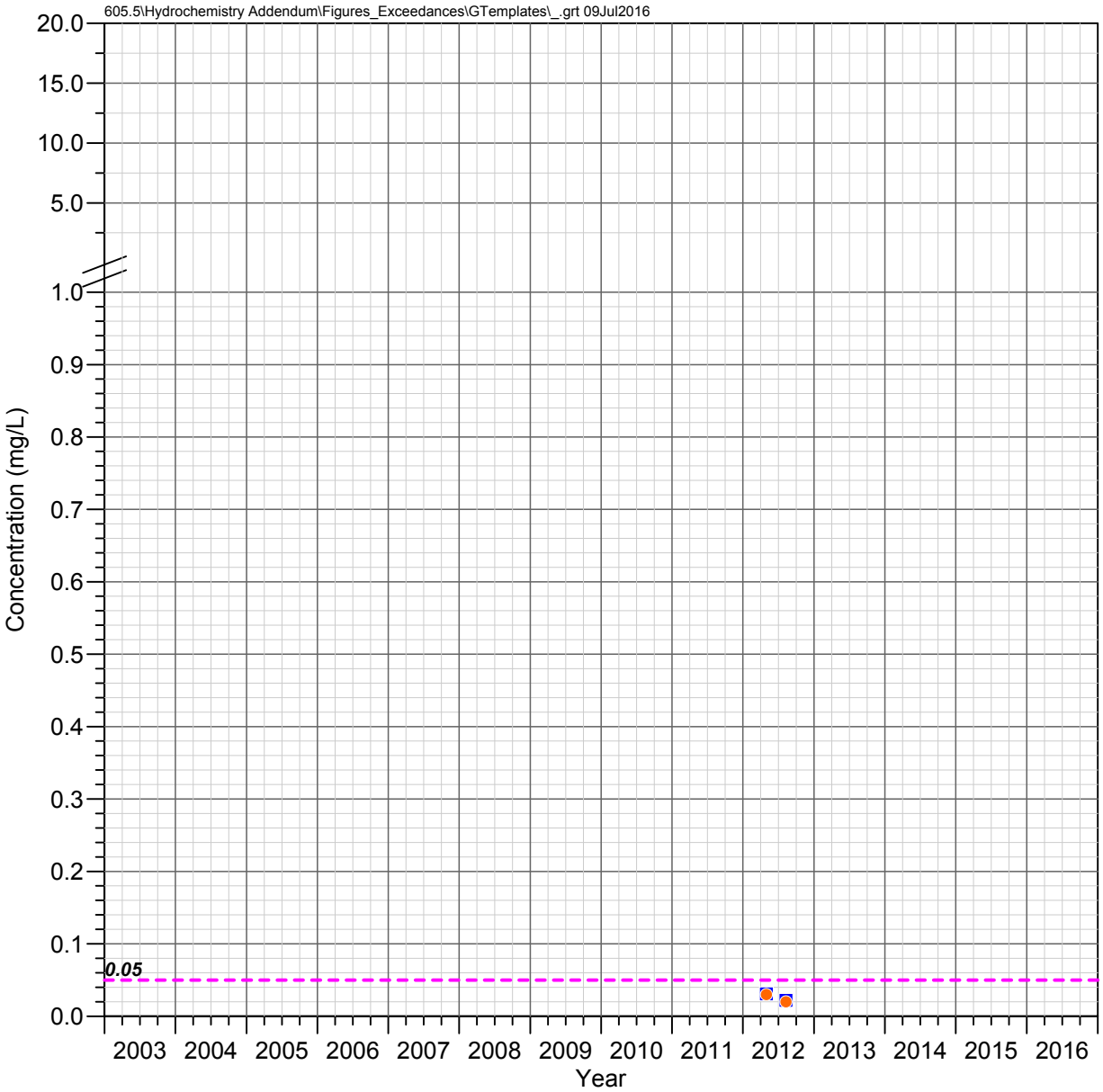


FIGURE E-419. MANGANESE CONCENTRATIONS OBSERVED AT HRES-14, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-15
Apache Leap Tuff Aquifer

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.05 mg/L)

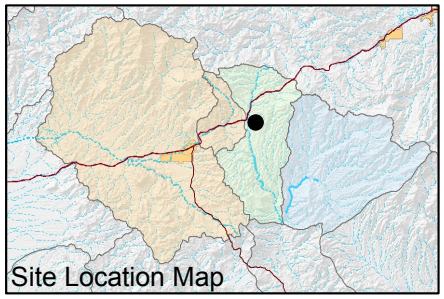
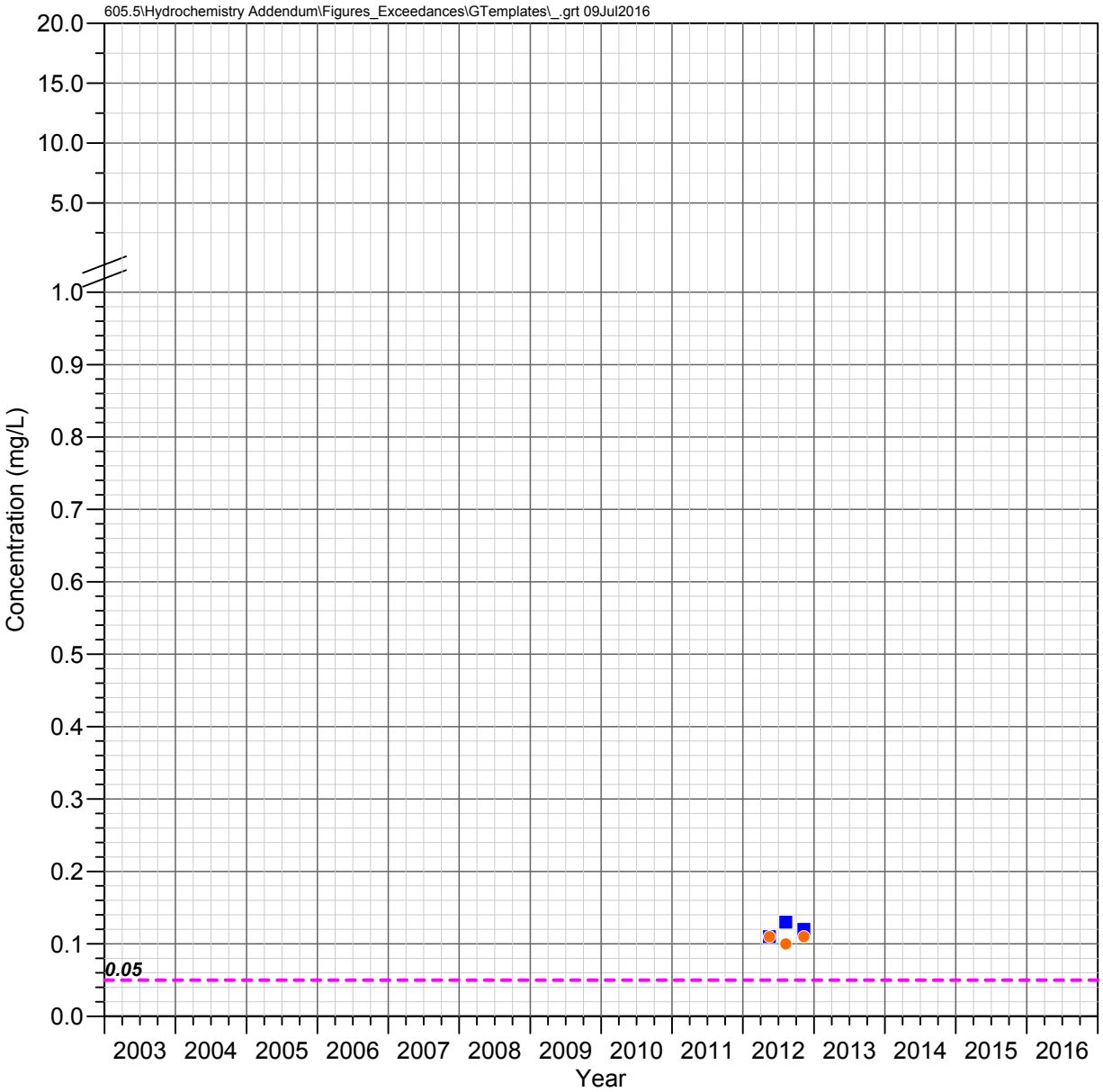


FIGURE E-420. MANGANESE CONCENTRATIONS OBSERVED AT HRES-15, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-17
Apache Leap Tuff Aquifer

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.05 mg/L)

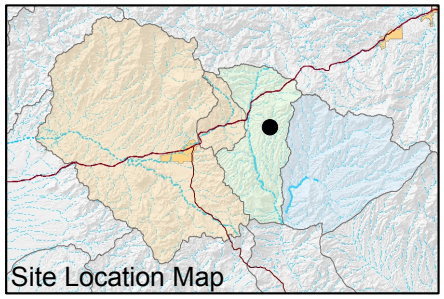
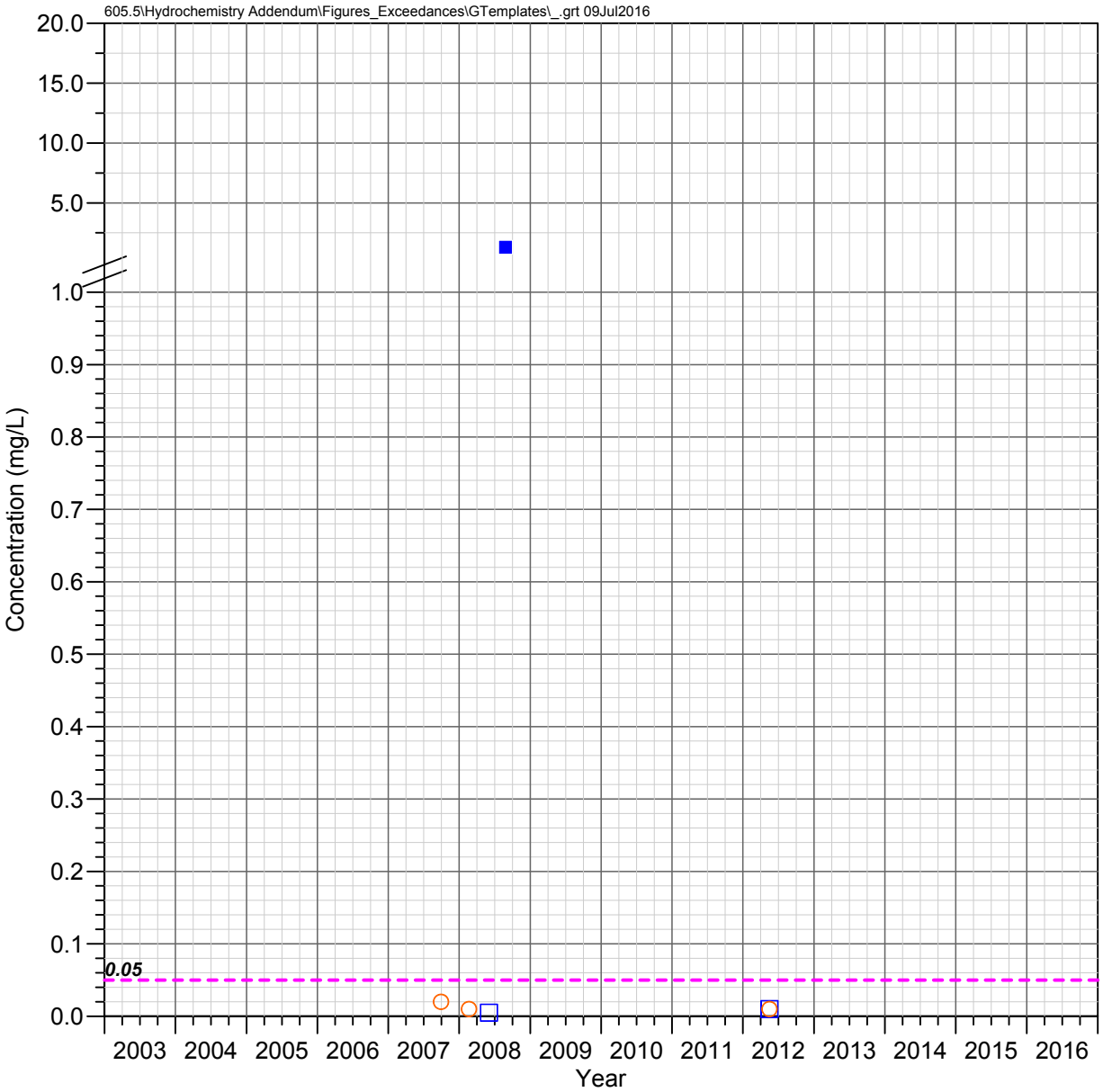


FIGURE E-421. MANGANESE CONCENTRATIONS OBSERVED AT HRES-17, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MJ-11
Apache Leap Tuff Aquifer

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.05 mg/L)

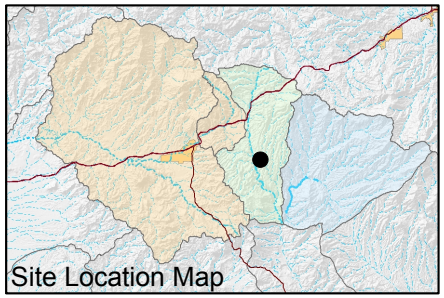
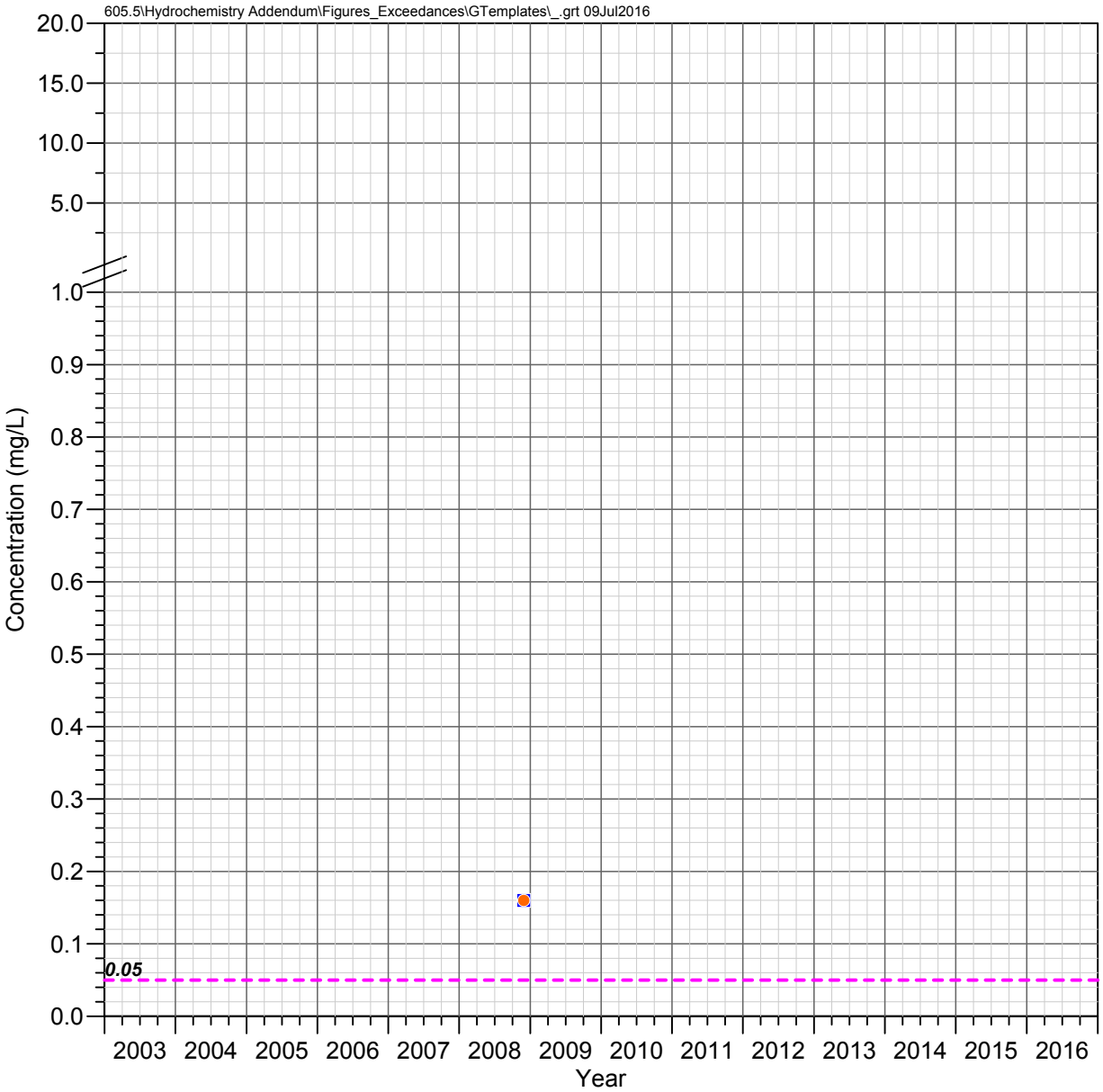


FIGURE E-422. MANGANESE CONCENTRATIONS OBSERVED AT MJ-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-01
Deep Groundwater System

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.05 mg/L)

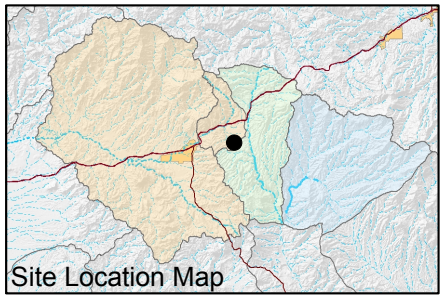
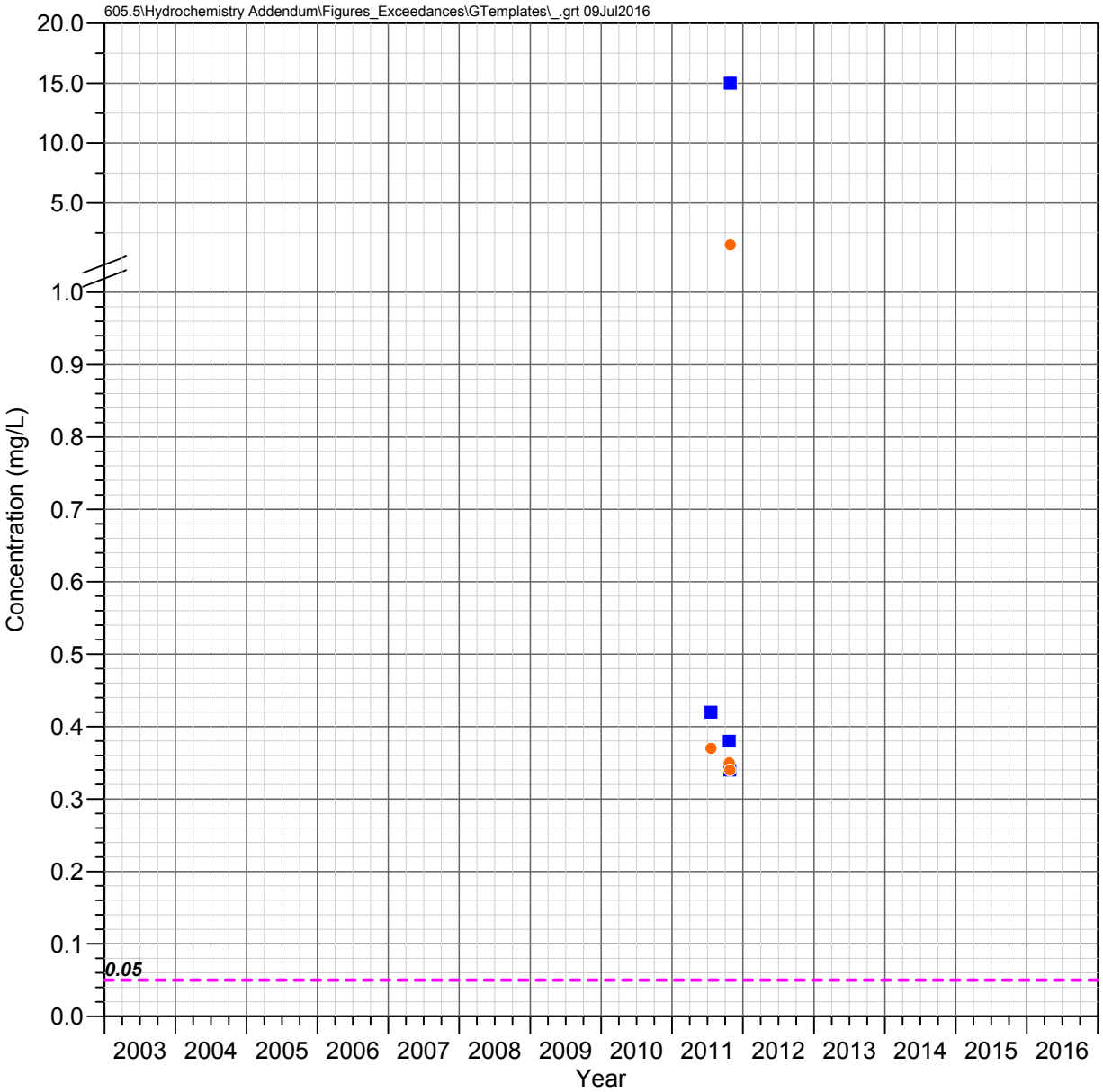


FIGURE E-423. MANGANESE CONCENTRATIONS OBSERVED AT DHRES-01, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-02
Deep Groundwater System

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.05 mg/L)

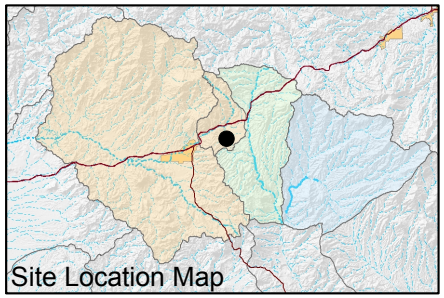
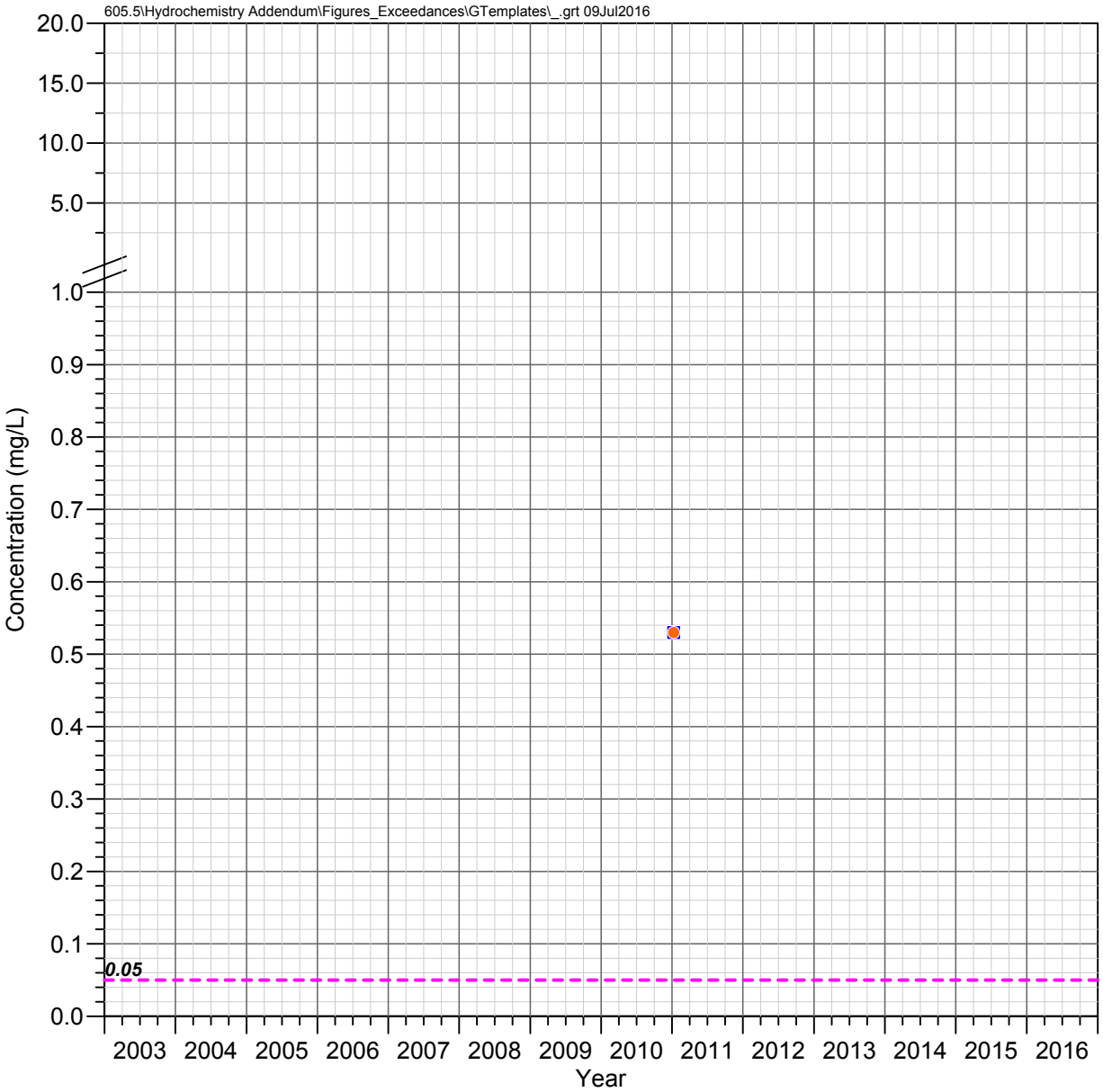


FIGURE E-424. MANGANESE CONCENTRATIONS OBSERVED AT DHRES-02, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-06
Deep Groundwater System

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.05 mg/L)

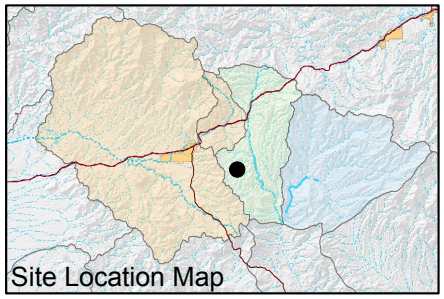
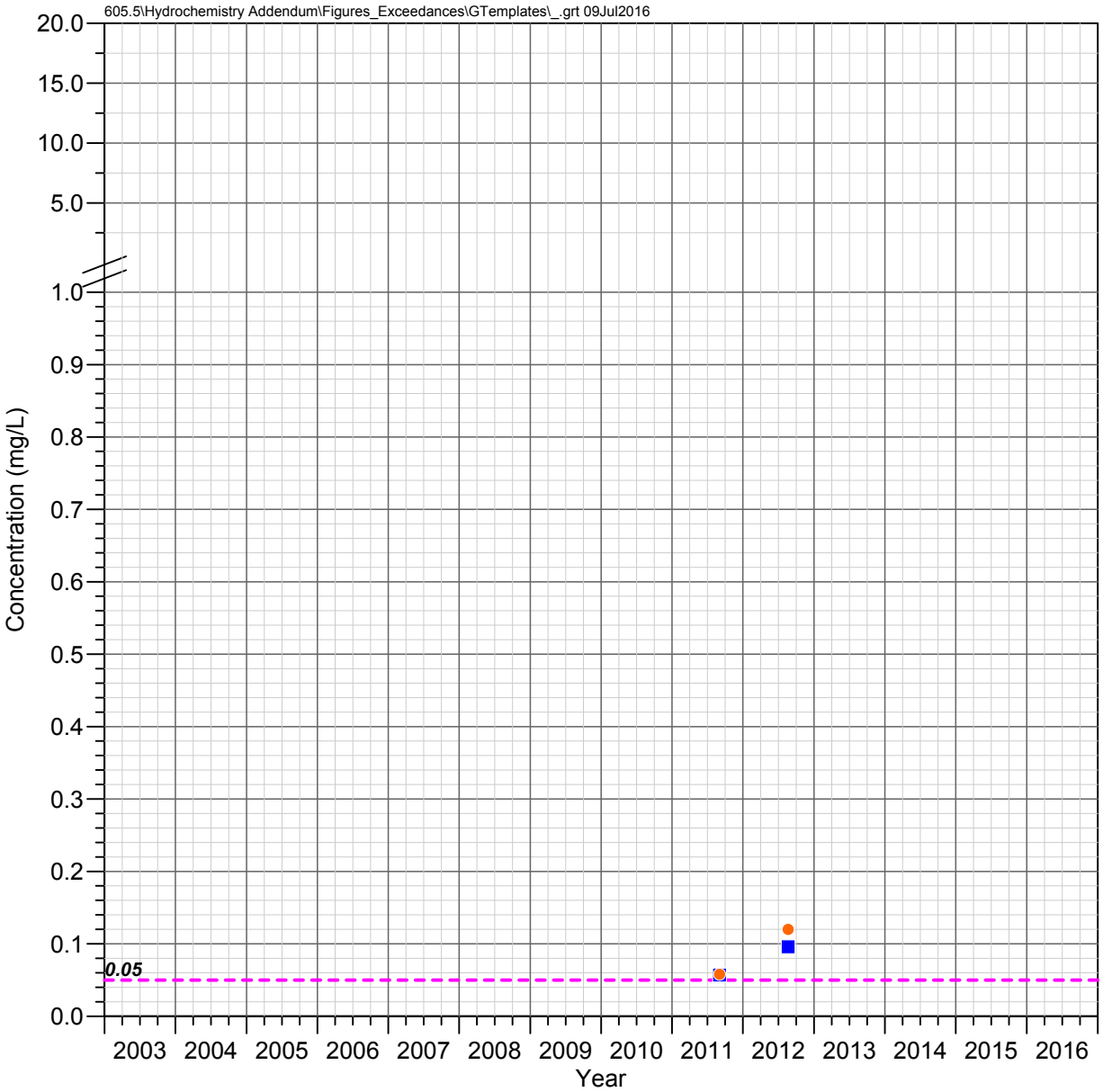


FIGURE E-425. MANGANESE CONCENTRATIONS OBSERVED AT DHRES-06, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-09
Deep Groundwater System

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.05 mg/L)

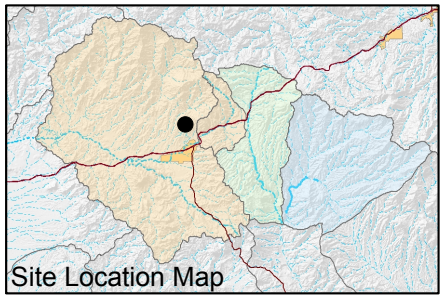
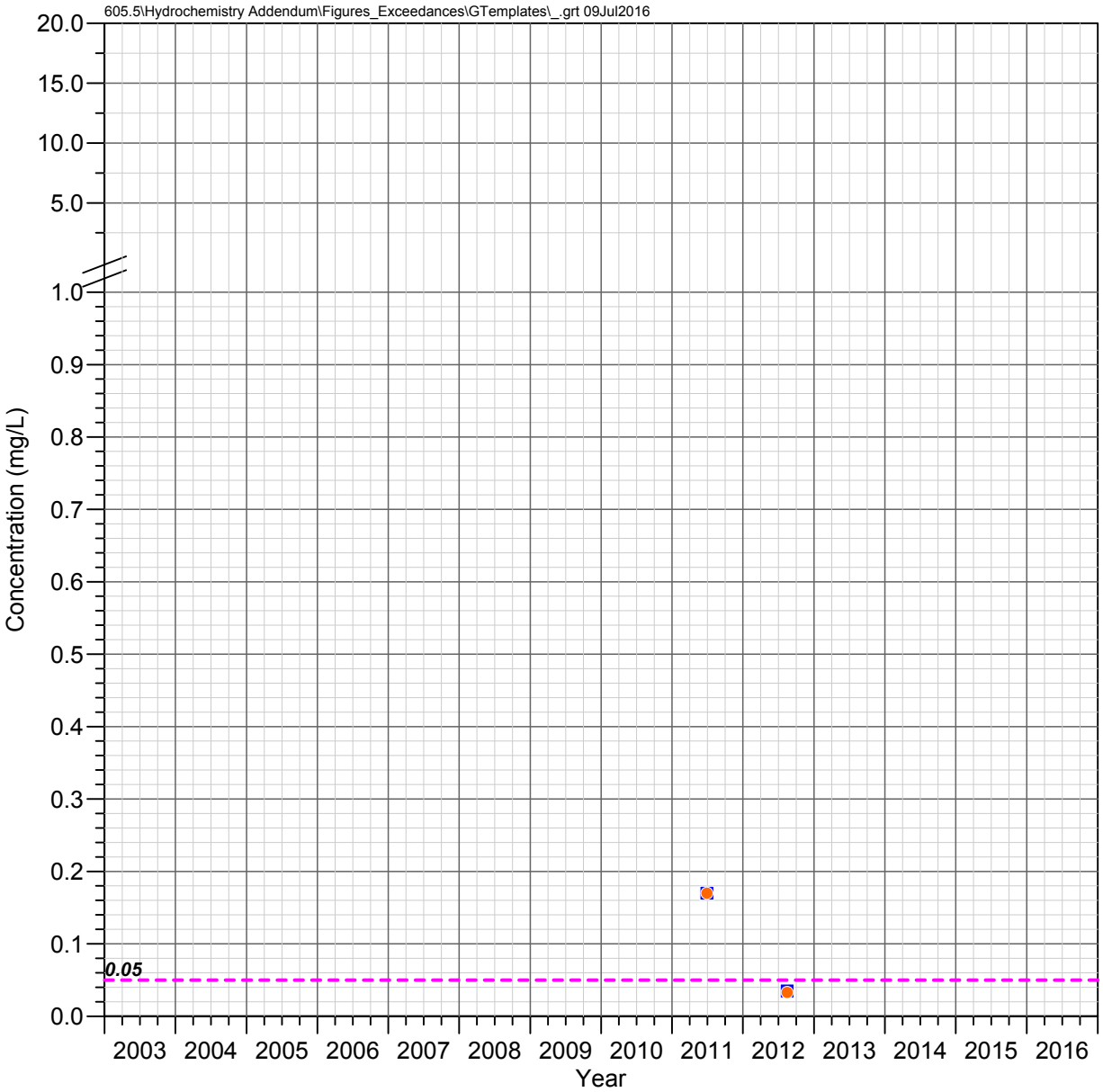


FIGURE E-426. MANGANESE CONCENTRATIONS OBSERVED AT DHRES-09, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-11
Deep Groundwater System

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.05 mg/L)

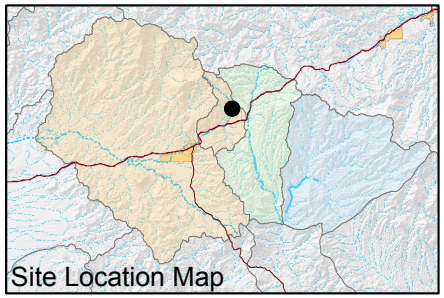
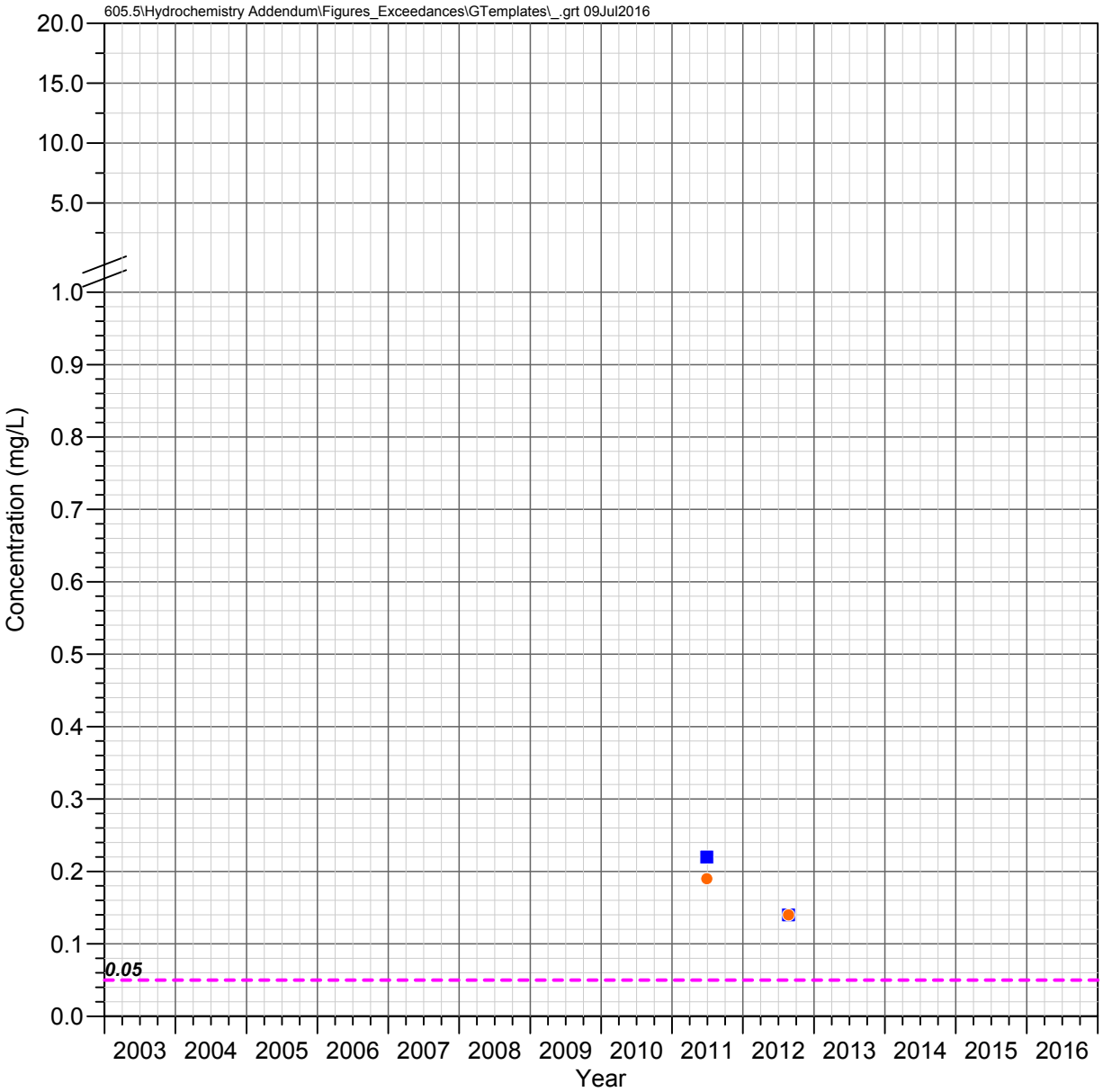


FIGURE E-427. MANGANESE CONCENTRATIONS OBSERVED AT DHRES-11, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-13
Deep Groundwater System

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.05 mg/L)

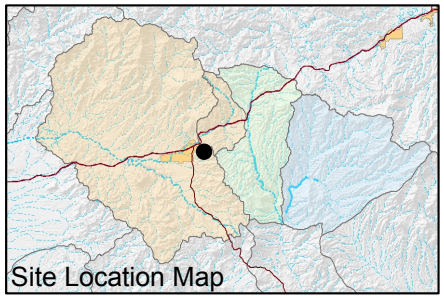
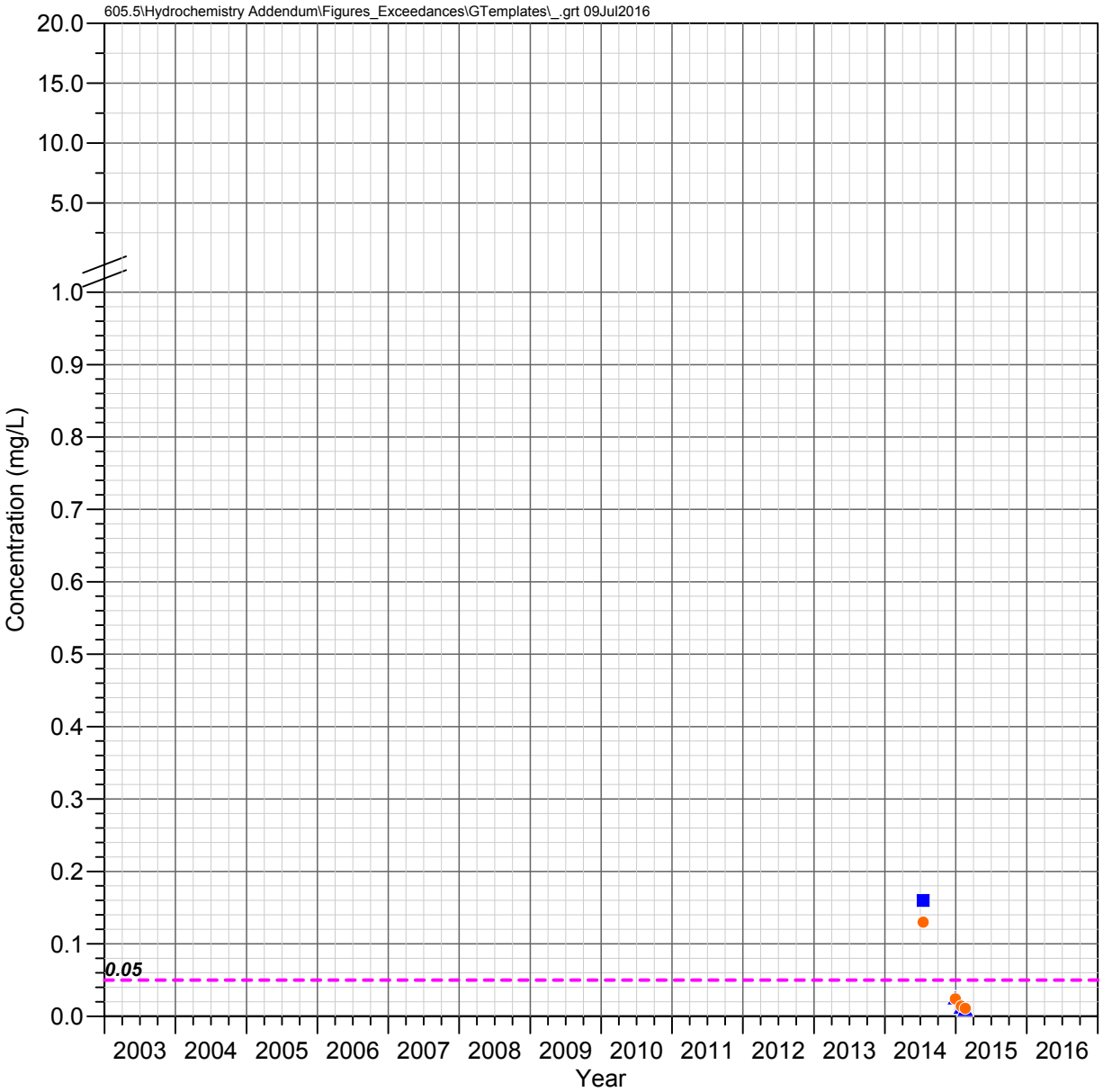


FIGURE E-428. MANGANESE CONCENTRATIONS OBSERVED AT DHRES-13, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-15
Deep Groundwater System

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.05 mg/L)

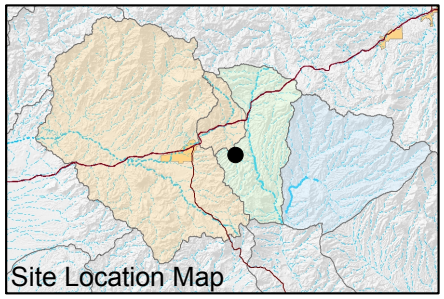
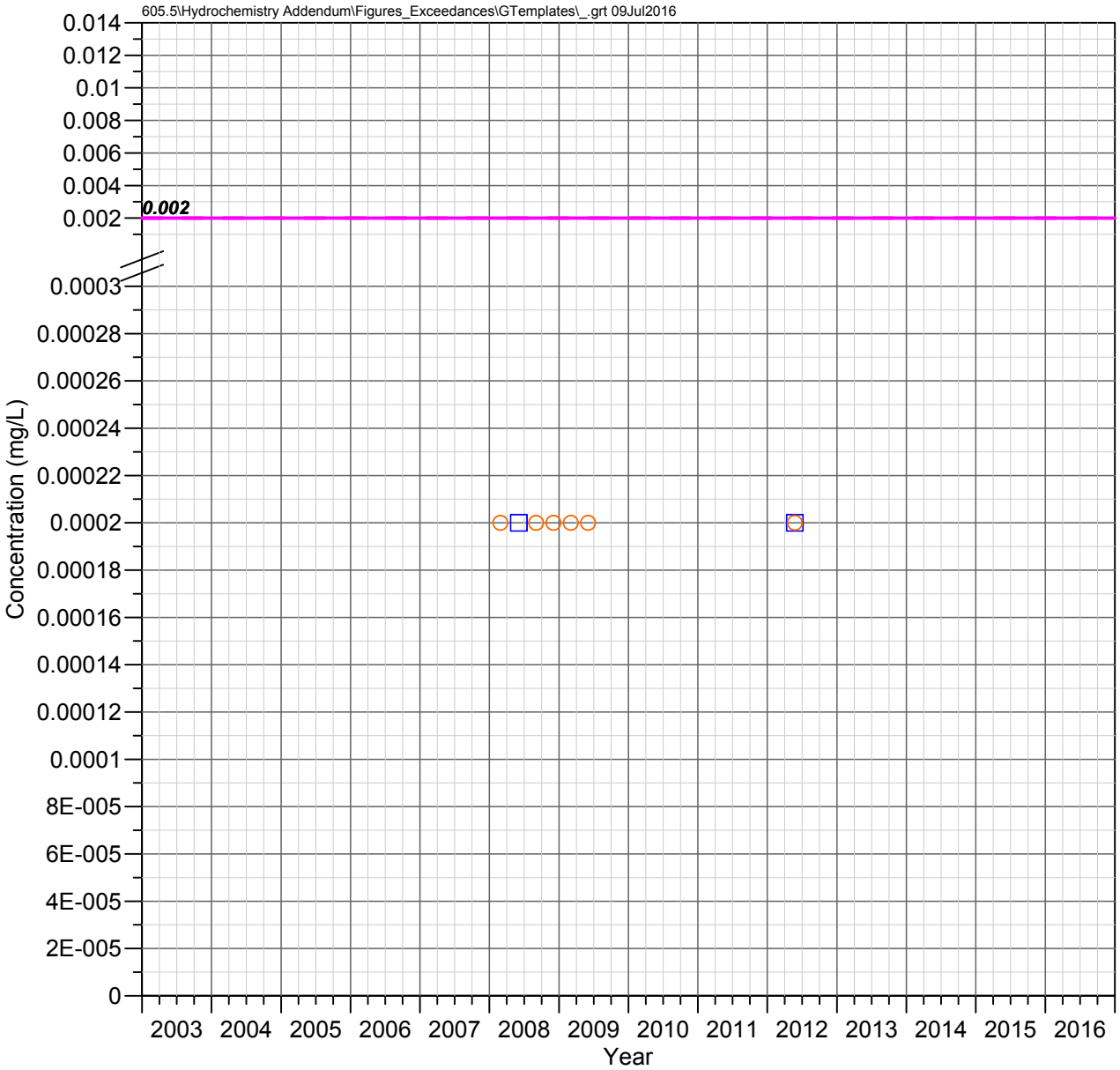


FIGURE E-429. MANGANESE CONCENTRATIONS OBSERVED AT DHRES-15, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Hackberry Windmill Well Shallow Groundwater System

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

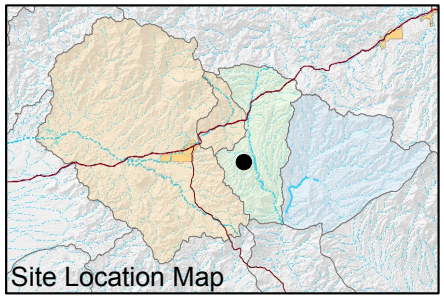
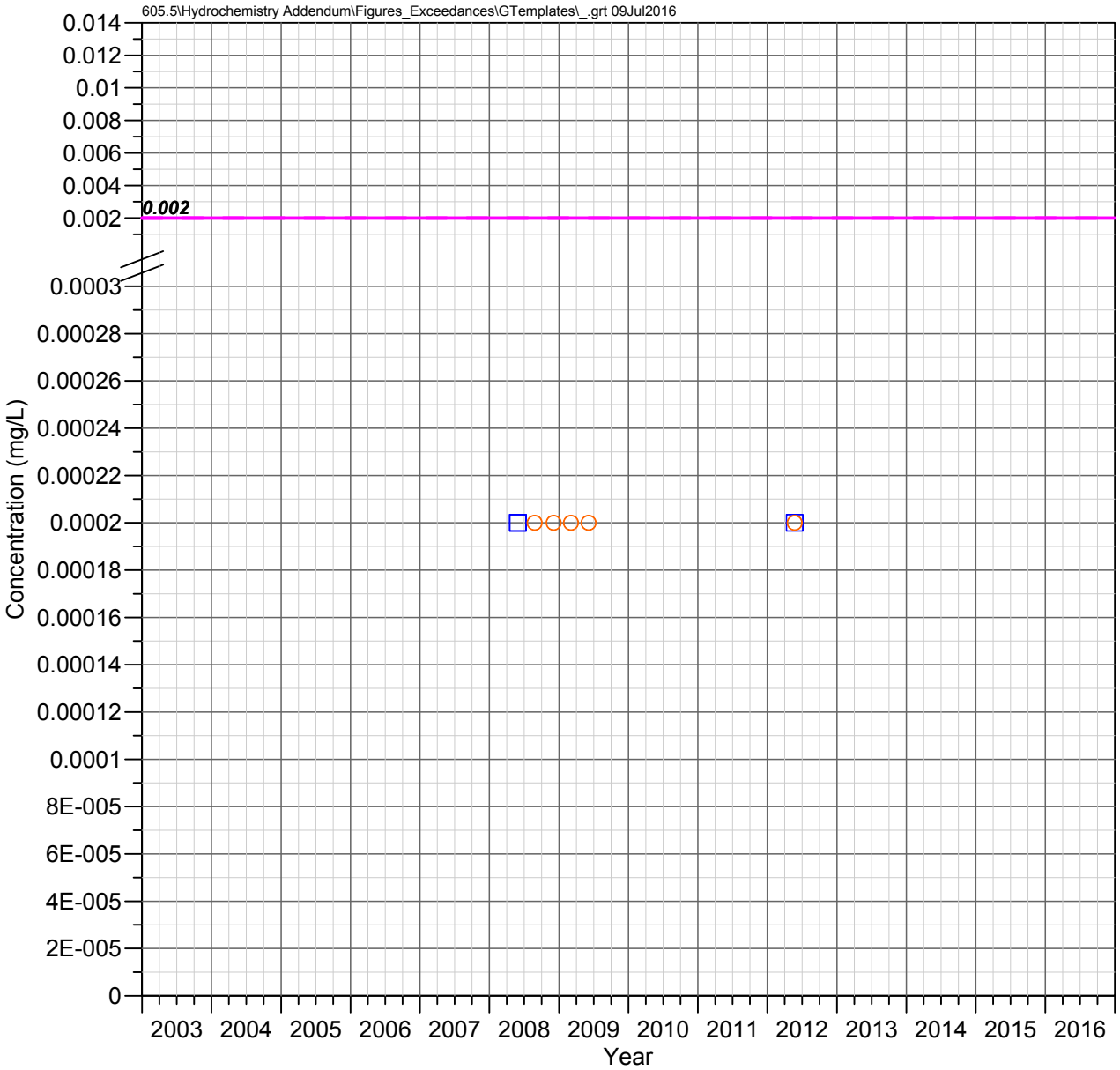


FIGURE E-430. MERCURY CONCENTRATIONS OBSERVED AT HACKBERRY WINDMILL WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



JI Ranch Corral Well Shallow Groundwater System

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

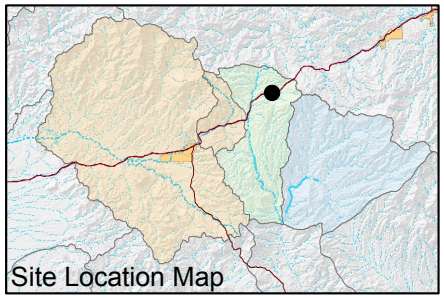
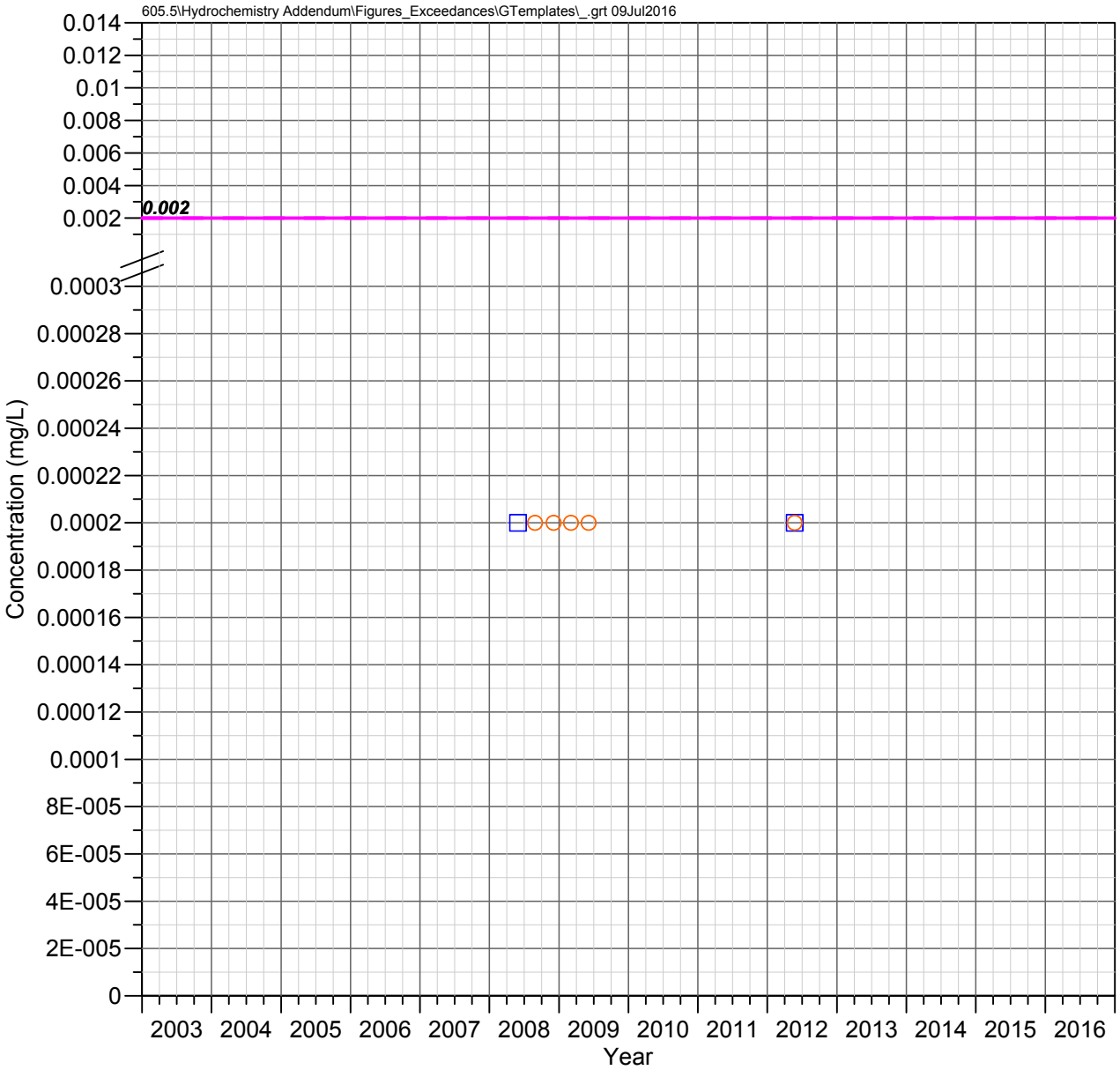


FIGURE E-431. MERCURY CONCENTRATIONS OBSERVED AT JI RANCH CORRAL WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



JI Ranch Middle Well Shallow Groundwater System

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

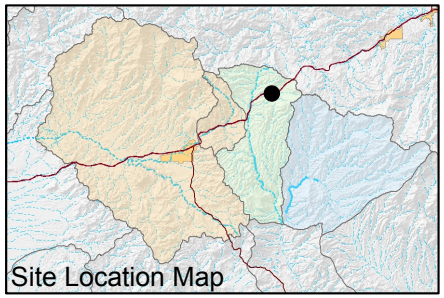
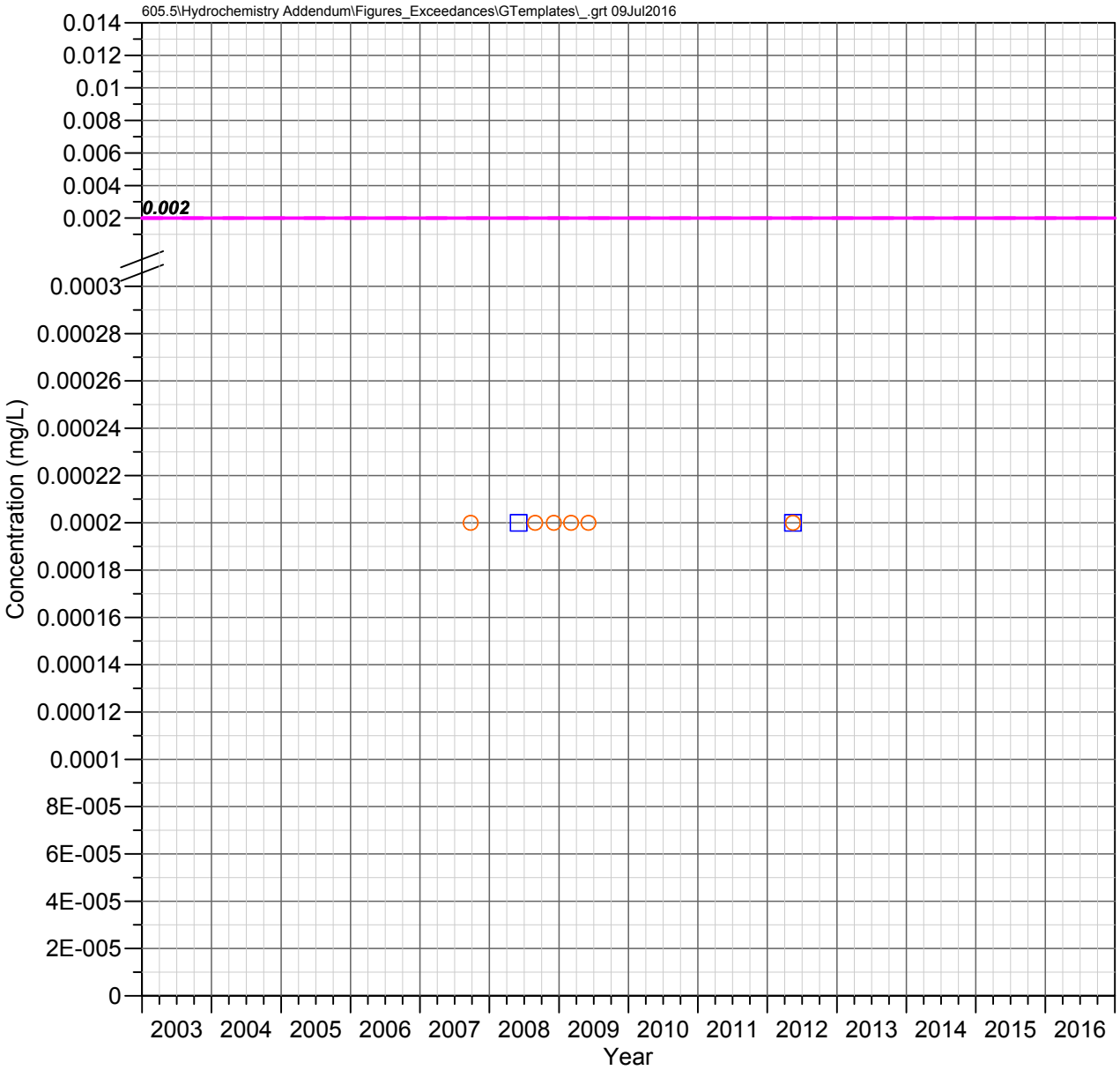


FIGURE E-432. MERCURY CONCENTRATIONS OBSERVED AT JI RANCH MIDDLE WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



A-06
Apache Leap Tuff Aquifer

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

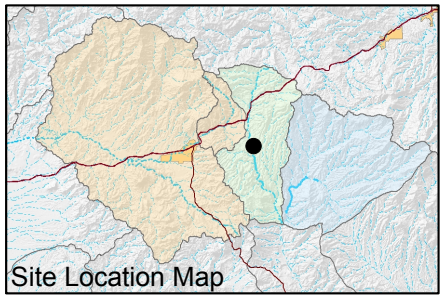
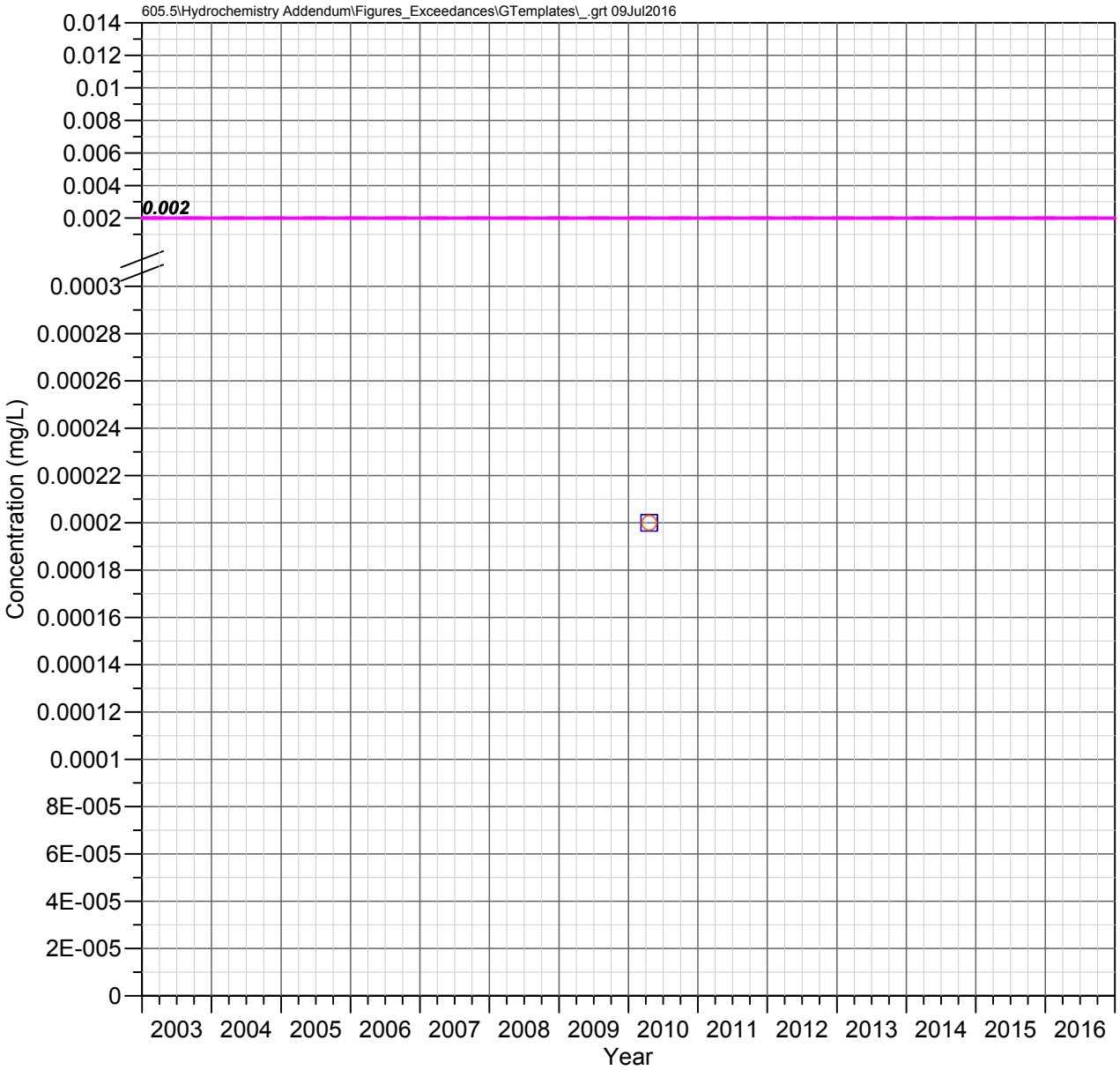


FIGURE E-433. MERCURY CONCENTRATIONS OBSERVED AT A-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



CT Well
Apache Leap Tuff Aquifer

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

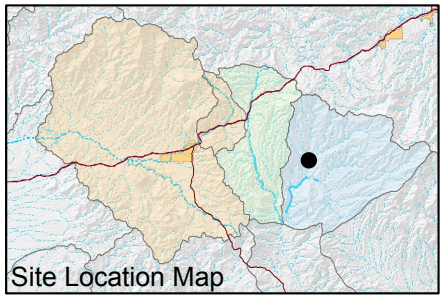
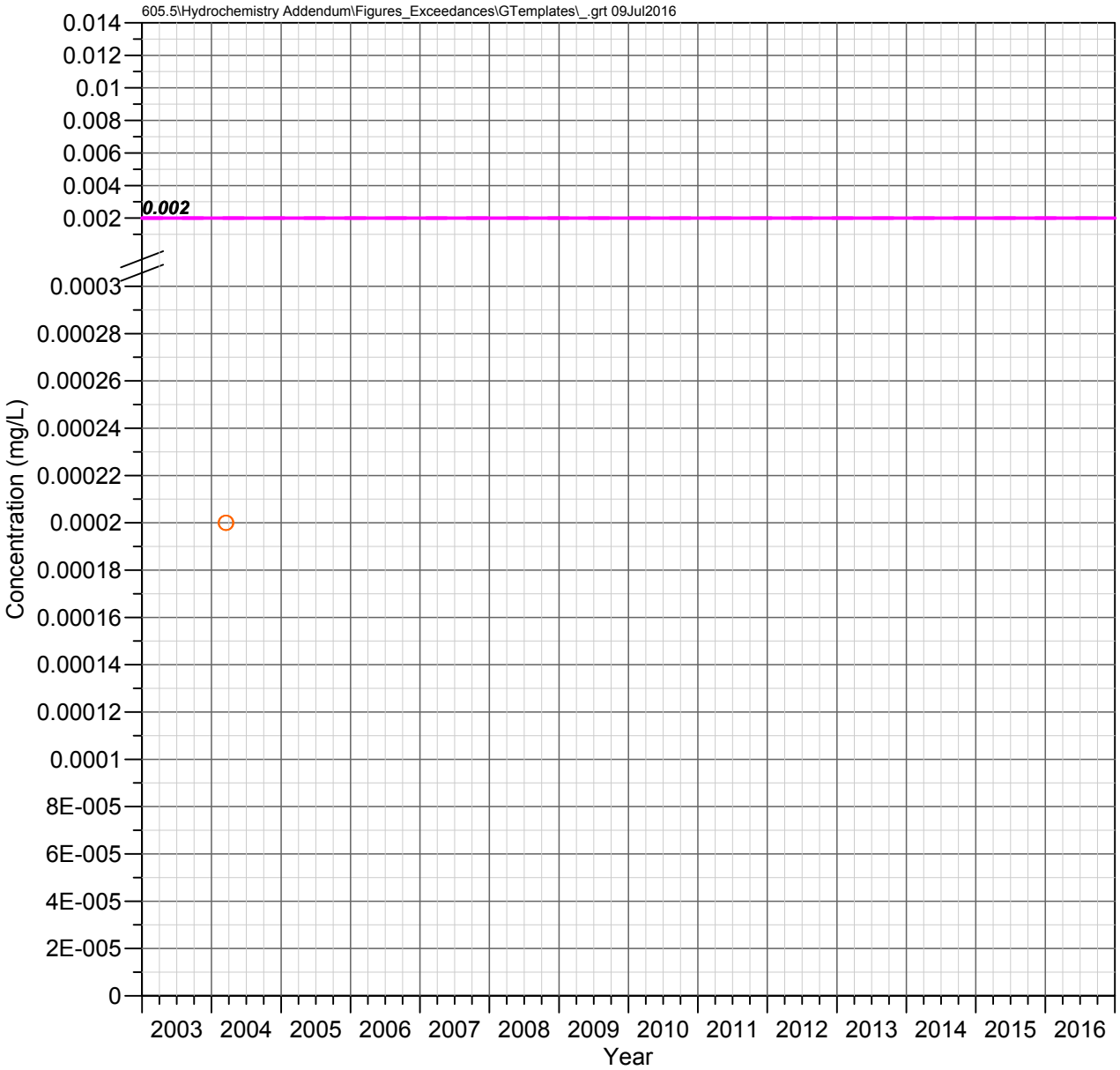


FIGURE E-434. MERCURY CONCENTRATIONS OBSERVED AT CT WELL, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-01
Apache Leap Tuff Aquifer

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

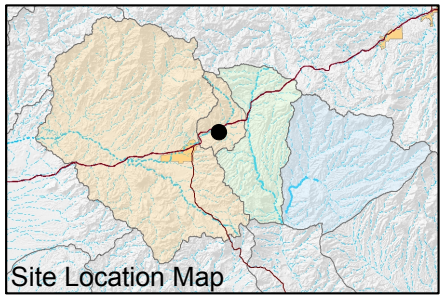
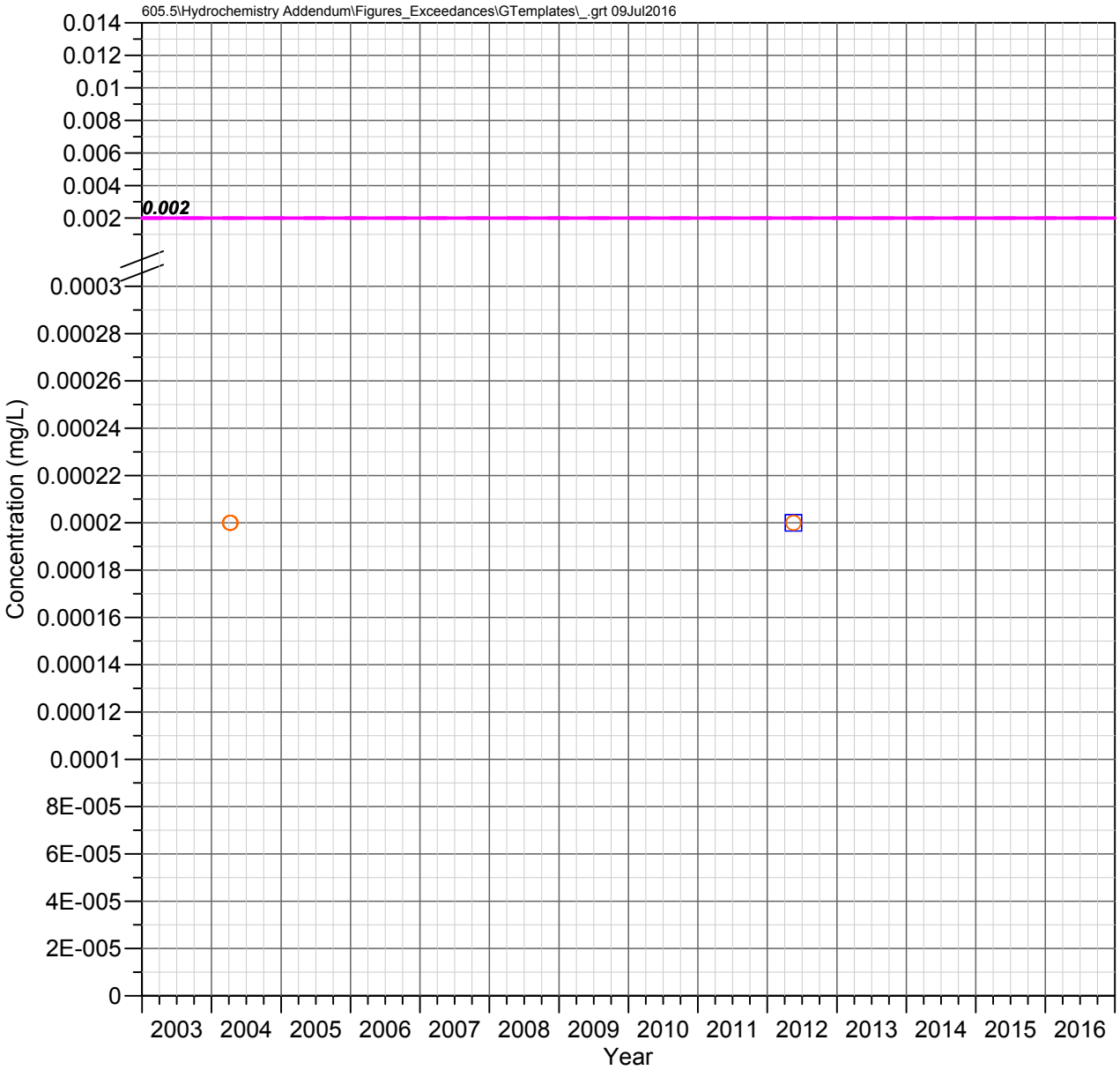


FIGURE E-435. MERCURY CONCENTRATIONS OBSERVED AT HRES-01, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-02
Apache Leap Tuff Aquifer

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

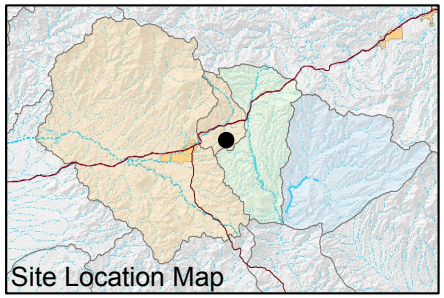
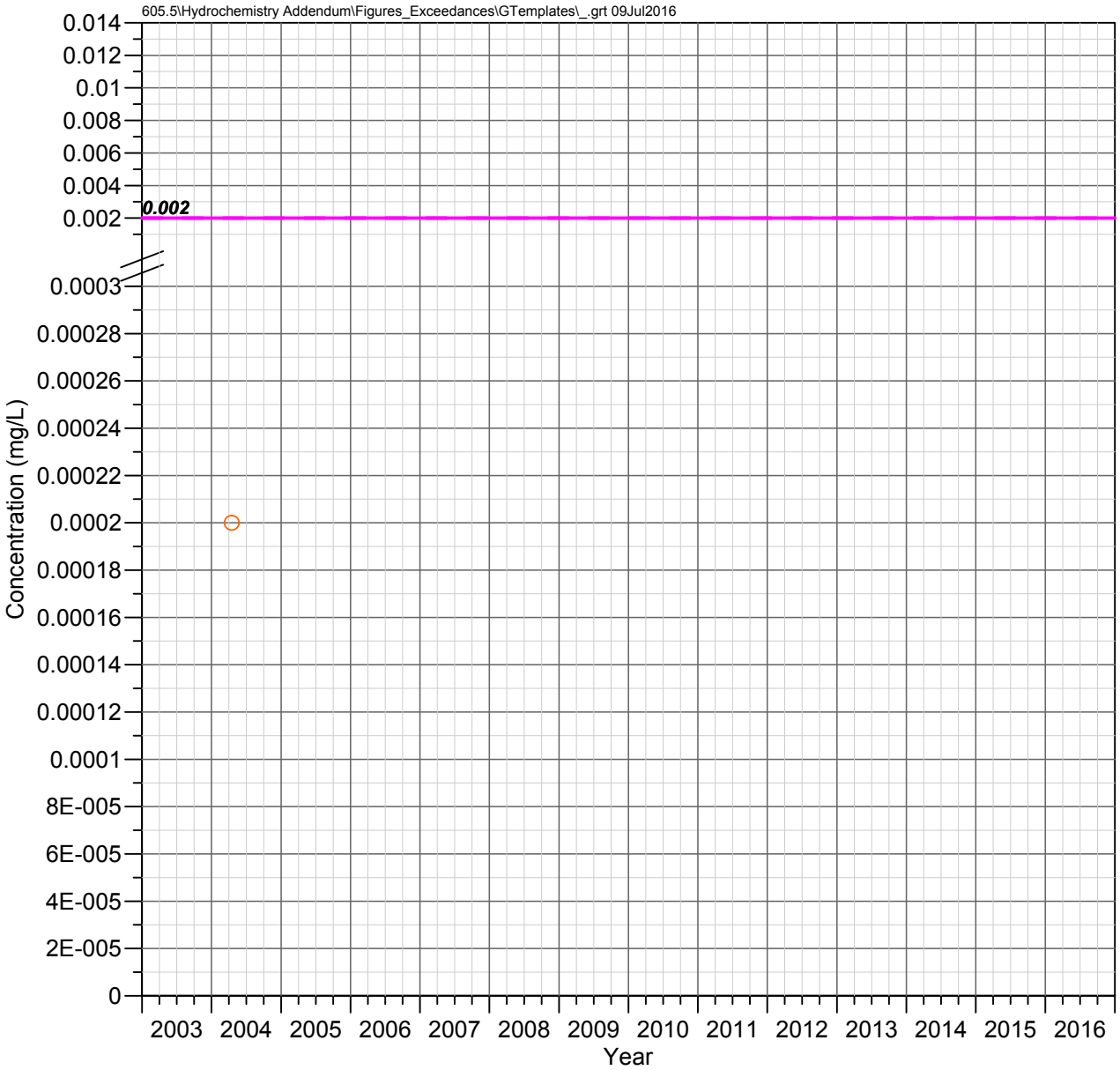


FIGURE E-436. MERCURY CONCENTRATIONS OBSERVED AT HRES-02, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-03d
Apache Leap Tuff Aquifer

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

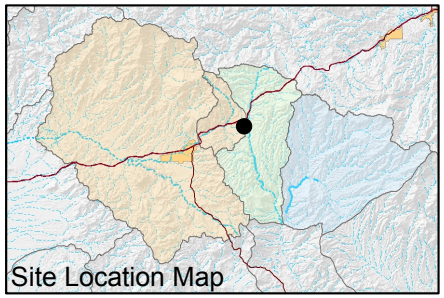
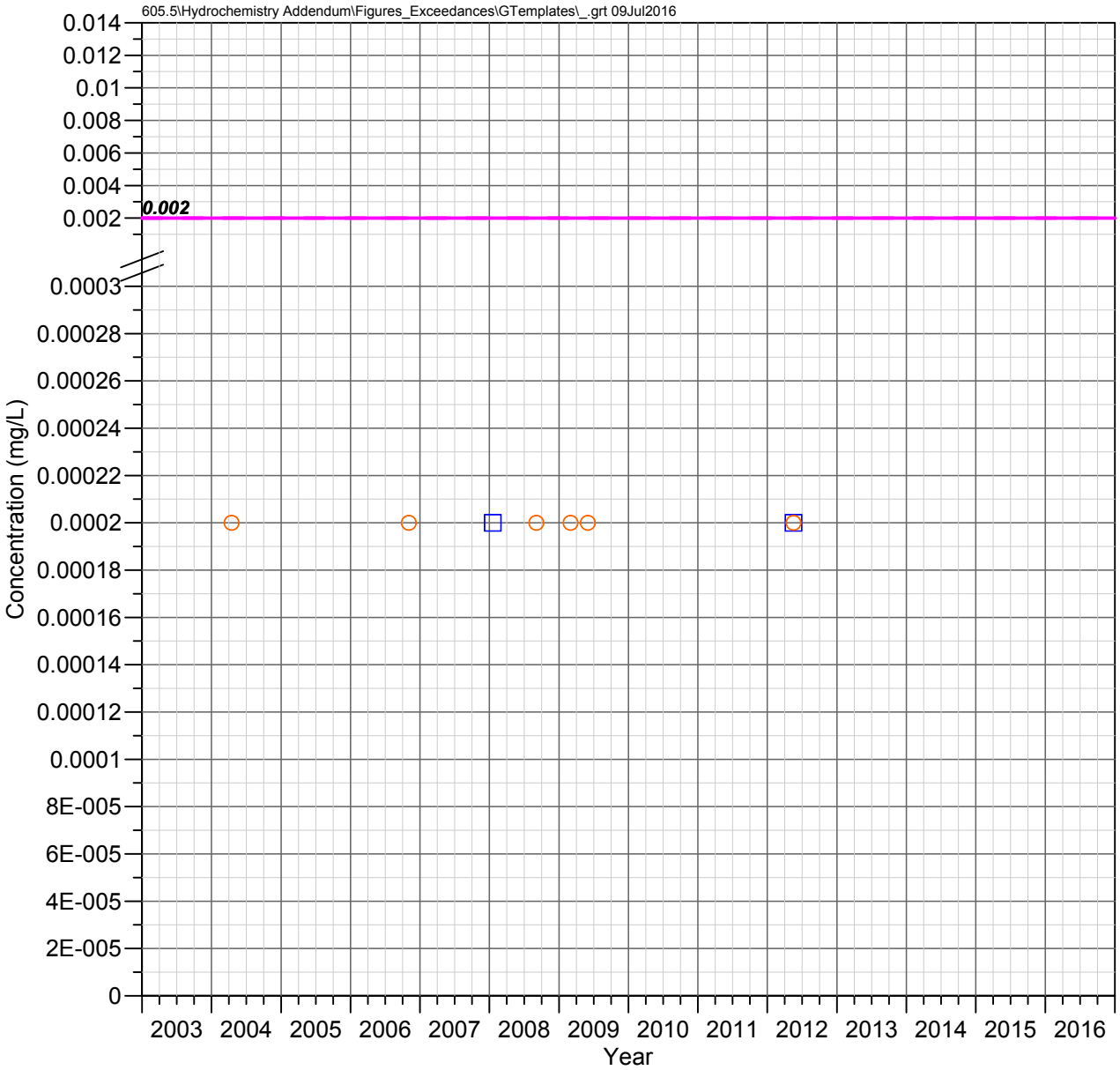


FIGURE E-437. MERCURY CONCENTRATIONS OBSERVED AT HRES-03D, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-04
Apache Leap Tuff Aquifer

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

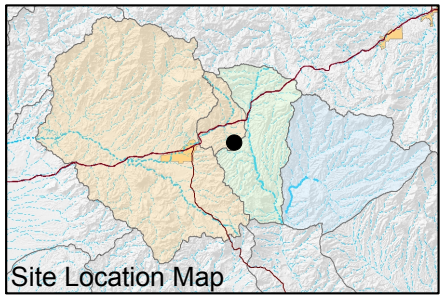
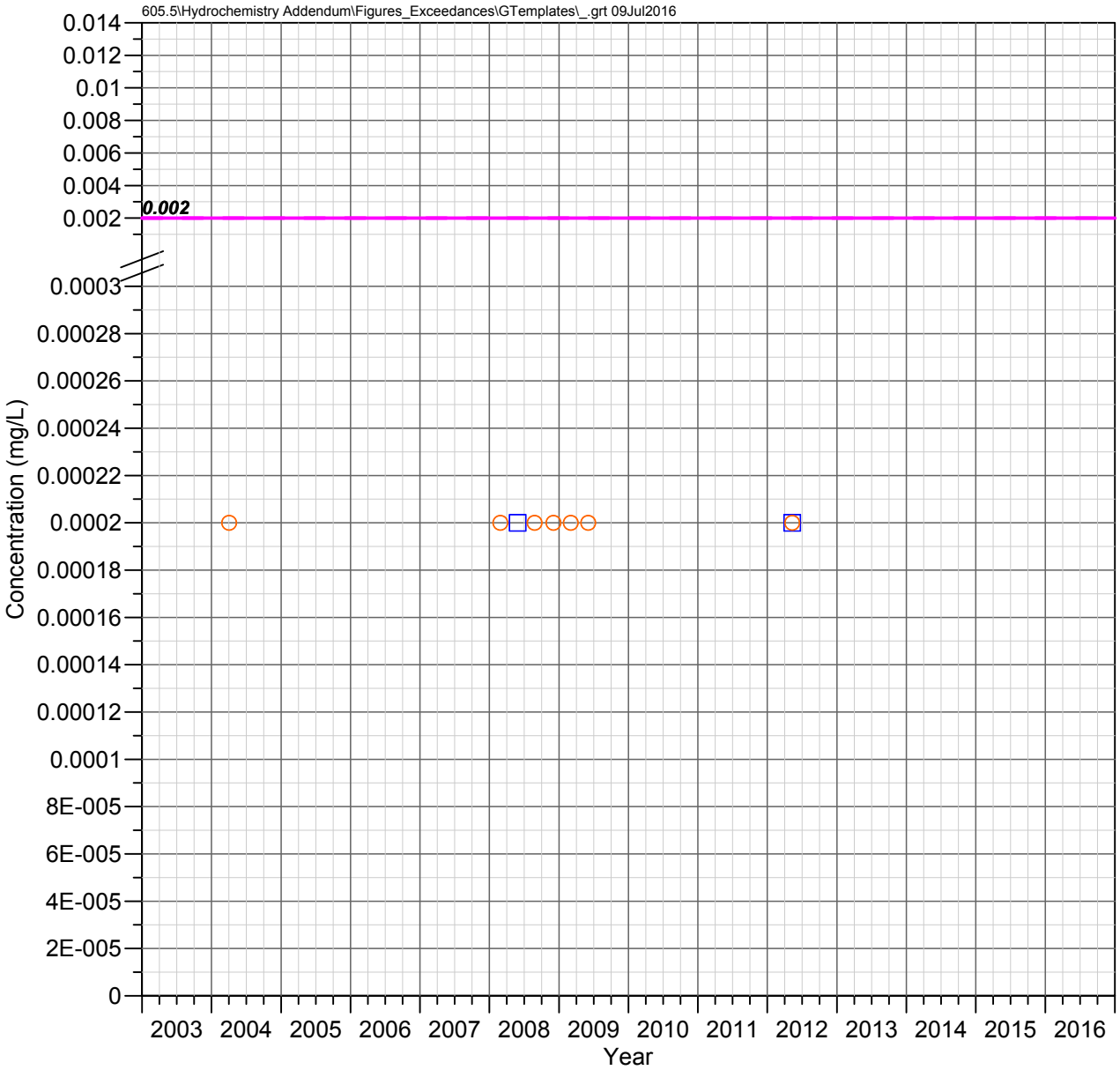


FIGURE E-438. MERCURY CONCENTRATIONS OBSERVED AT HRES-04, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-05
Apache Leap Tuff Aquifer

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

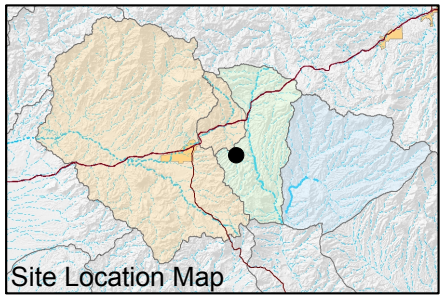
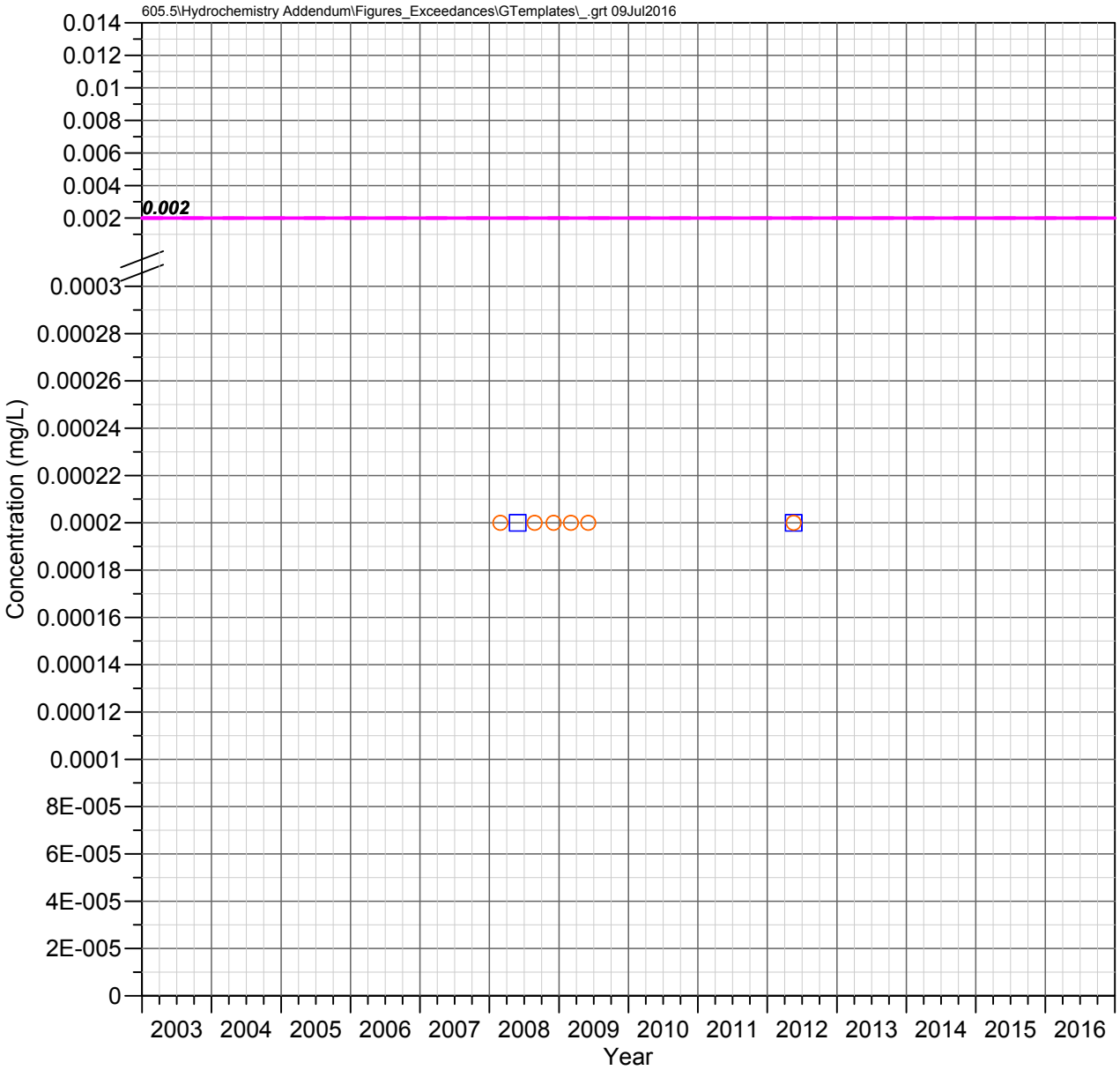


FIGURE E-439. MERCURY CONCENTRATIONS OBSERVED AT HRES-05, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-06
Apache Leap Tuff Aquifer

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

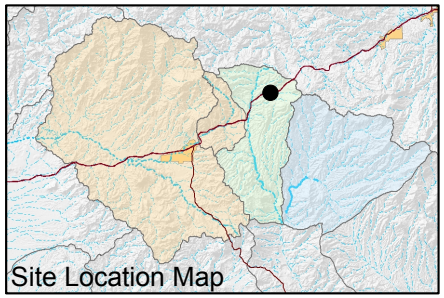
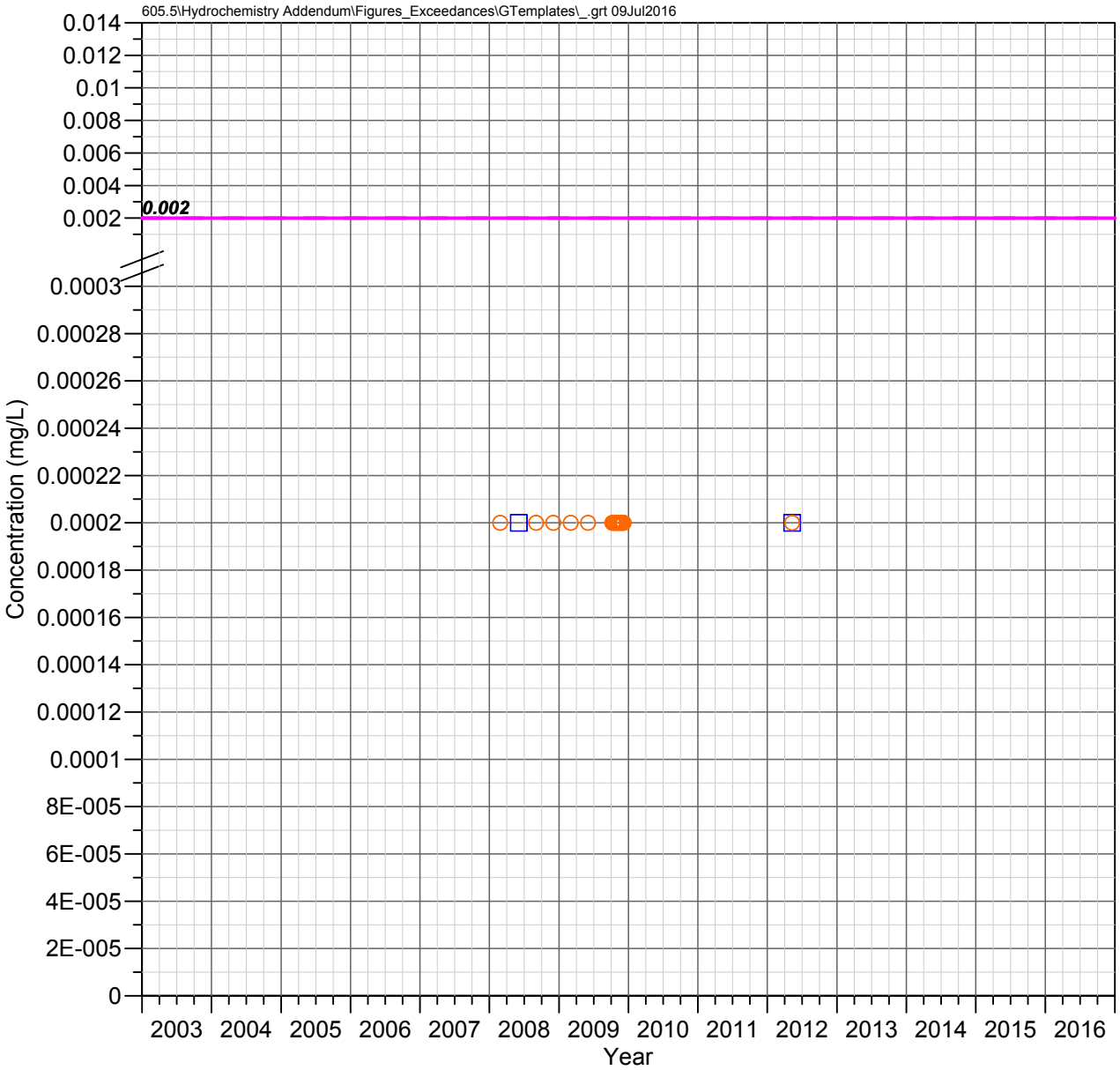


FIGURE E-440. MERCURY CONCENTRATIONS OBSERVED AT HRES-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-07
Apache Leap Tuff Aquifer

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

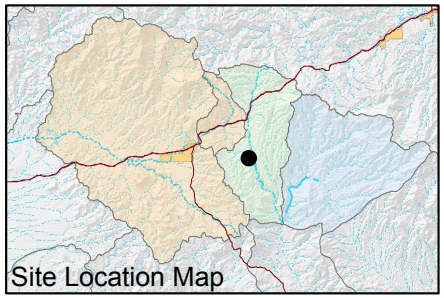
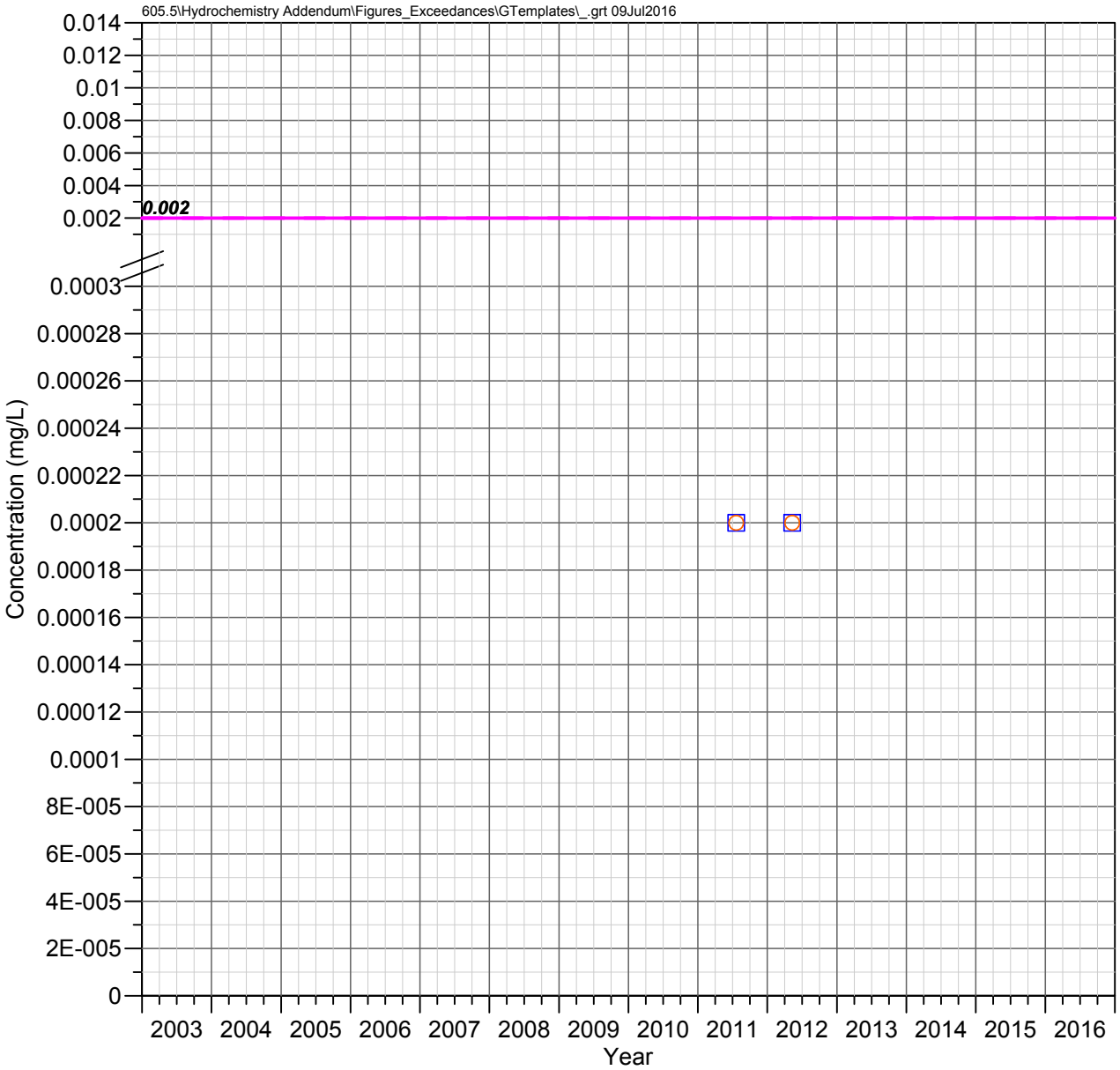


FIGURE E-441. MERCURY CONCENTRATIONS OBSERVED AT HRES-07, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-08
Apache Leap Tuff Aquifer

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

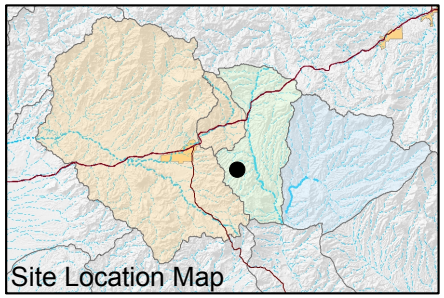
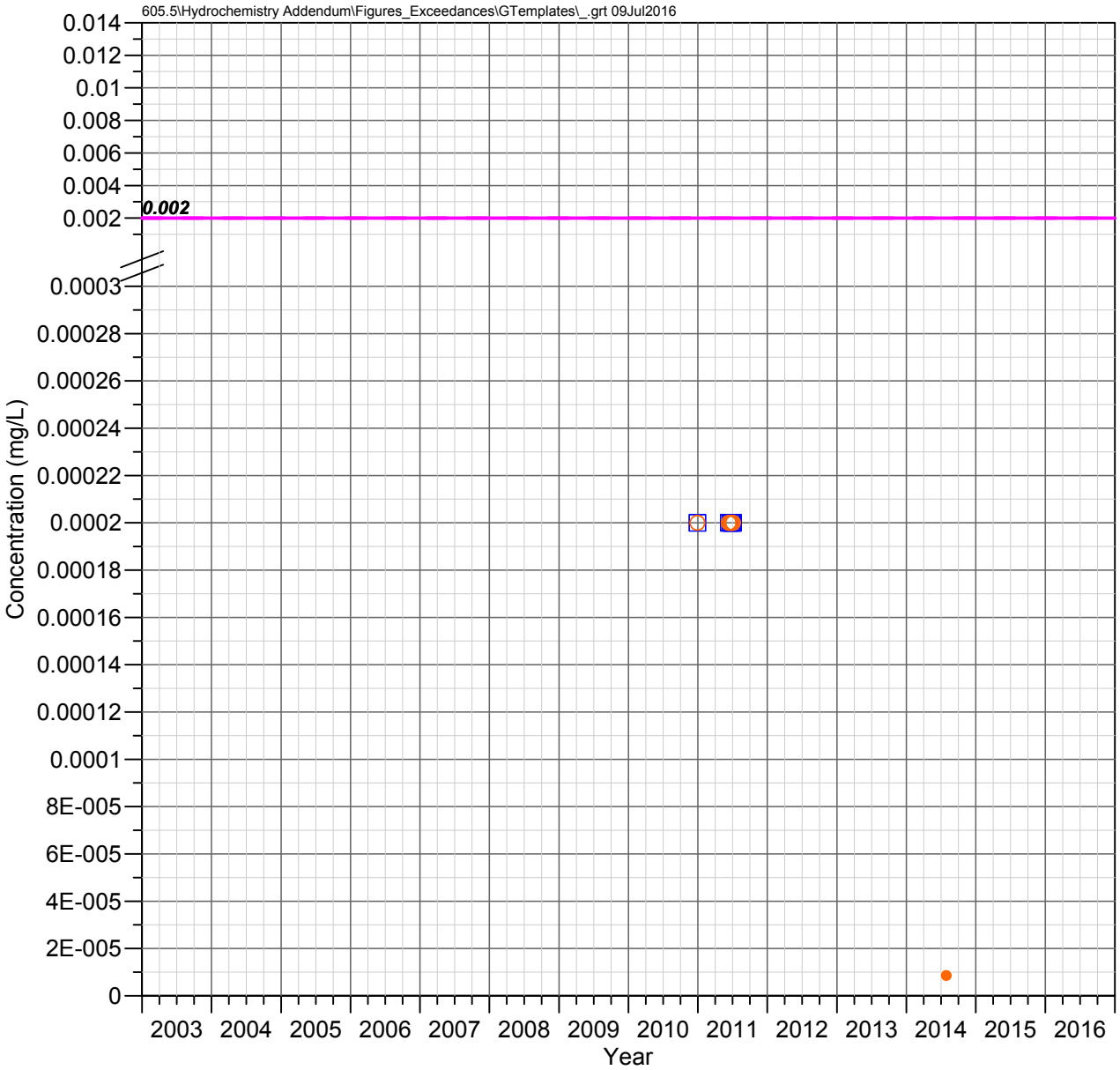


FIGURE E-442. MERCURY CONCENTRATIONS OBSERVED AT HRES-08, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-09
Apache Leap Tuff Aquifer

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

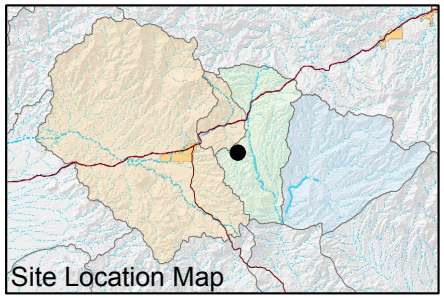
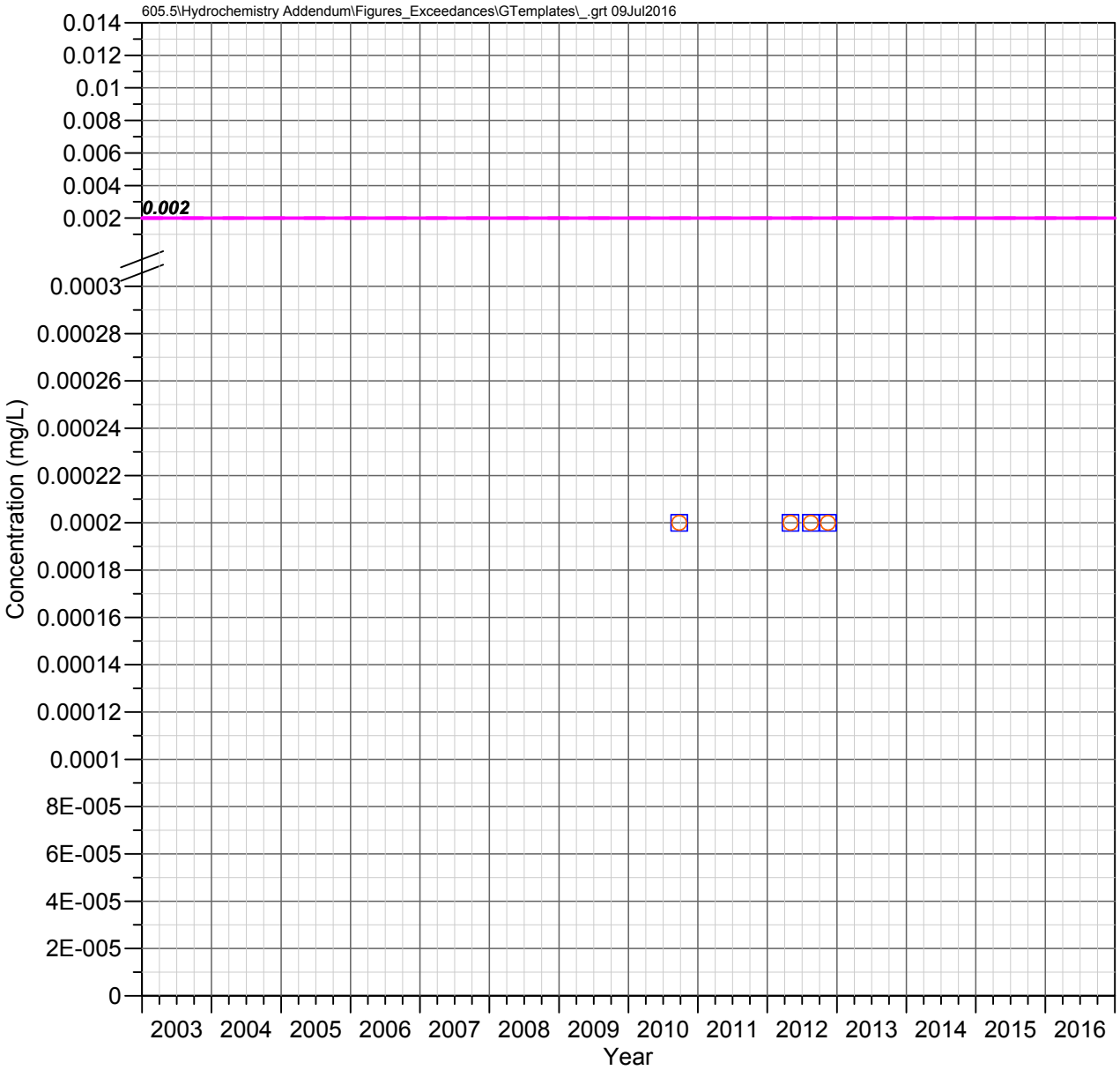


FIGURE E-443. MERCURY CONCENTRATIONS OBSERVED AT HRES-09, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-10
Apache Leap Tuff Aquifer

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

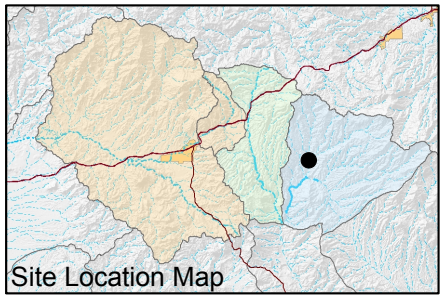
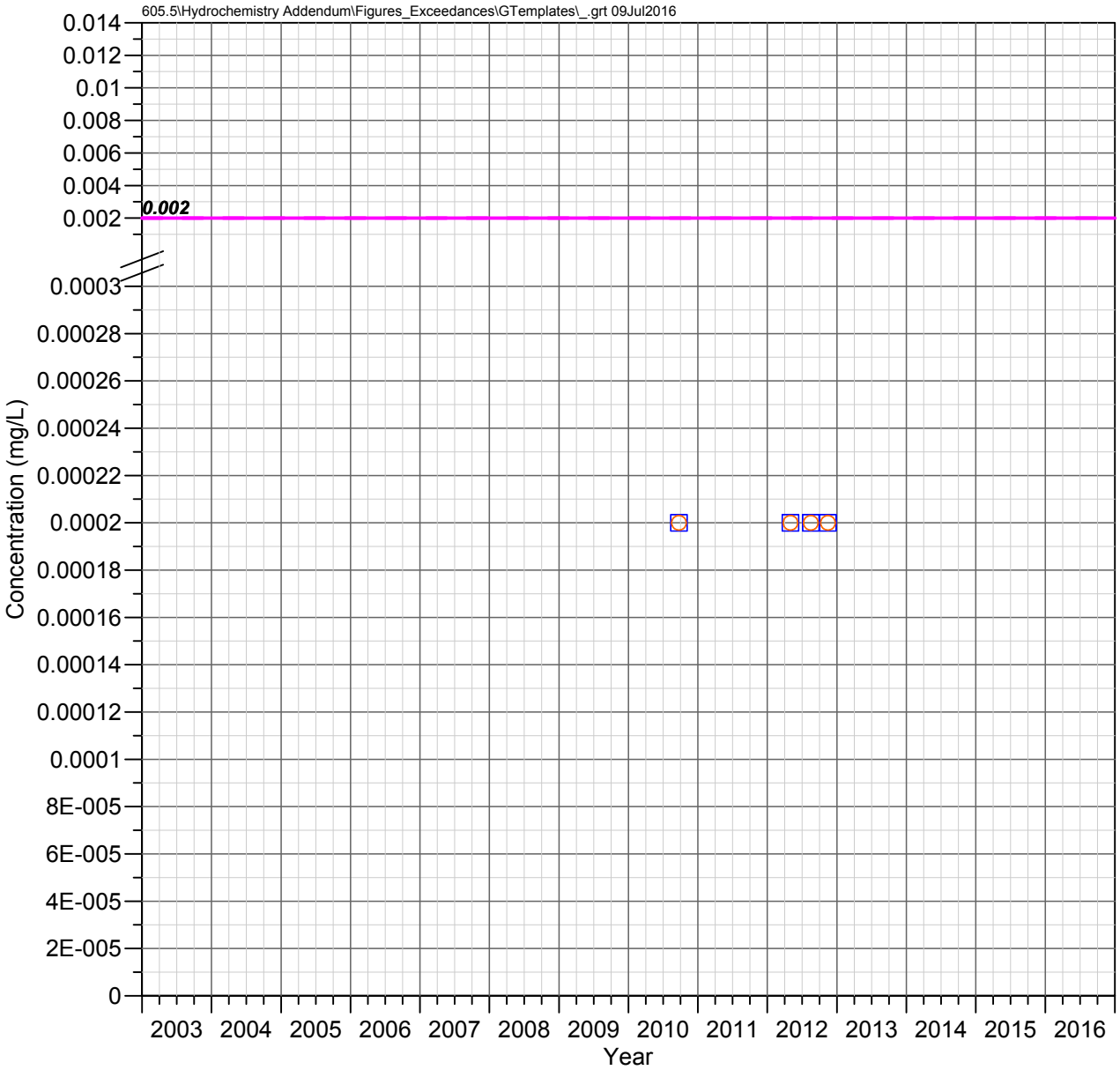


FIGURE E-444. MERCURY CONCENTRATIONS OBSERVED AT HRES-10, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-11
Apache Leap Tuff Aquifer

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

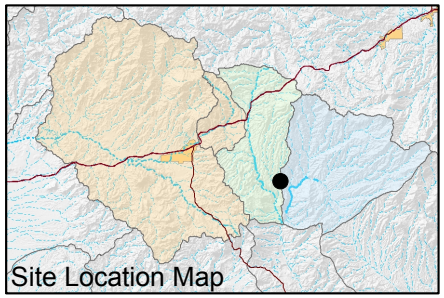
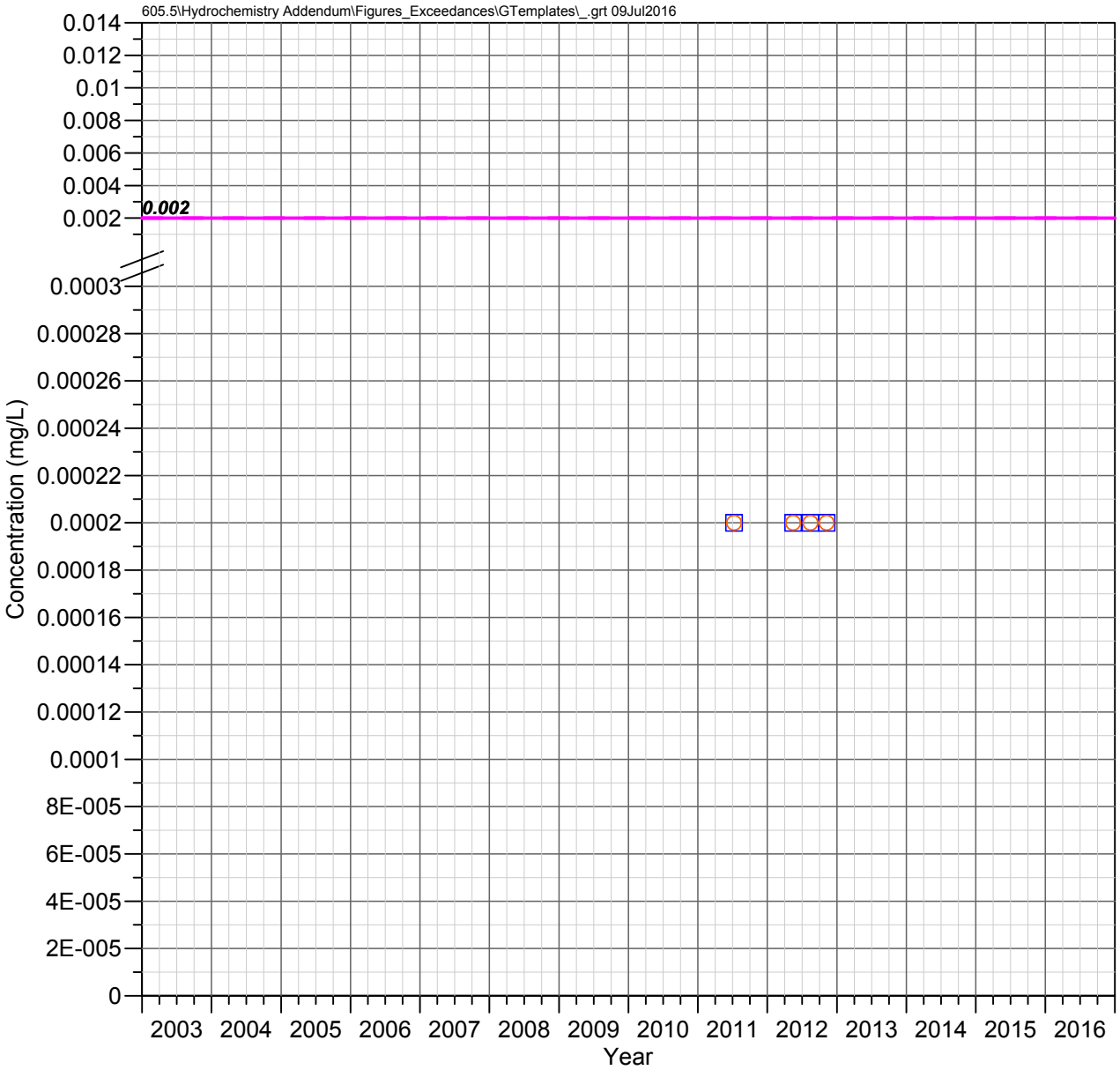


FIGURE E-445. MERCURY CONCENTRATIONS OBSERVED AT HRES-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-12
Apache Leap Tuff Aquifer

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

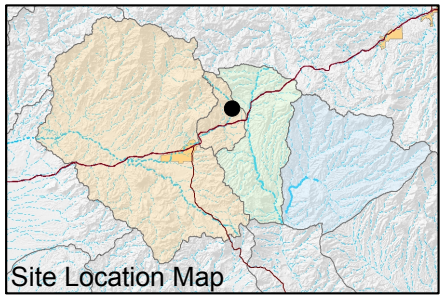
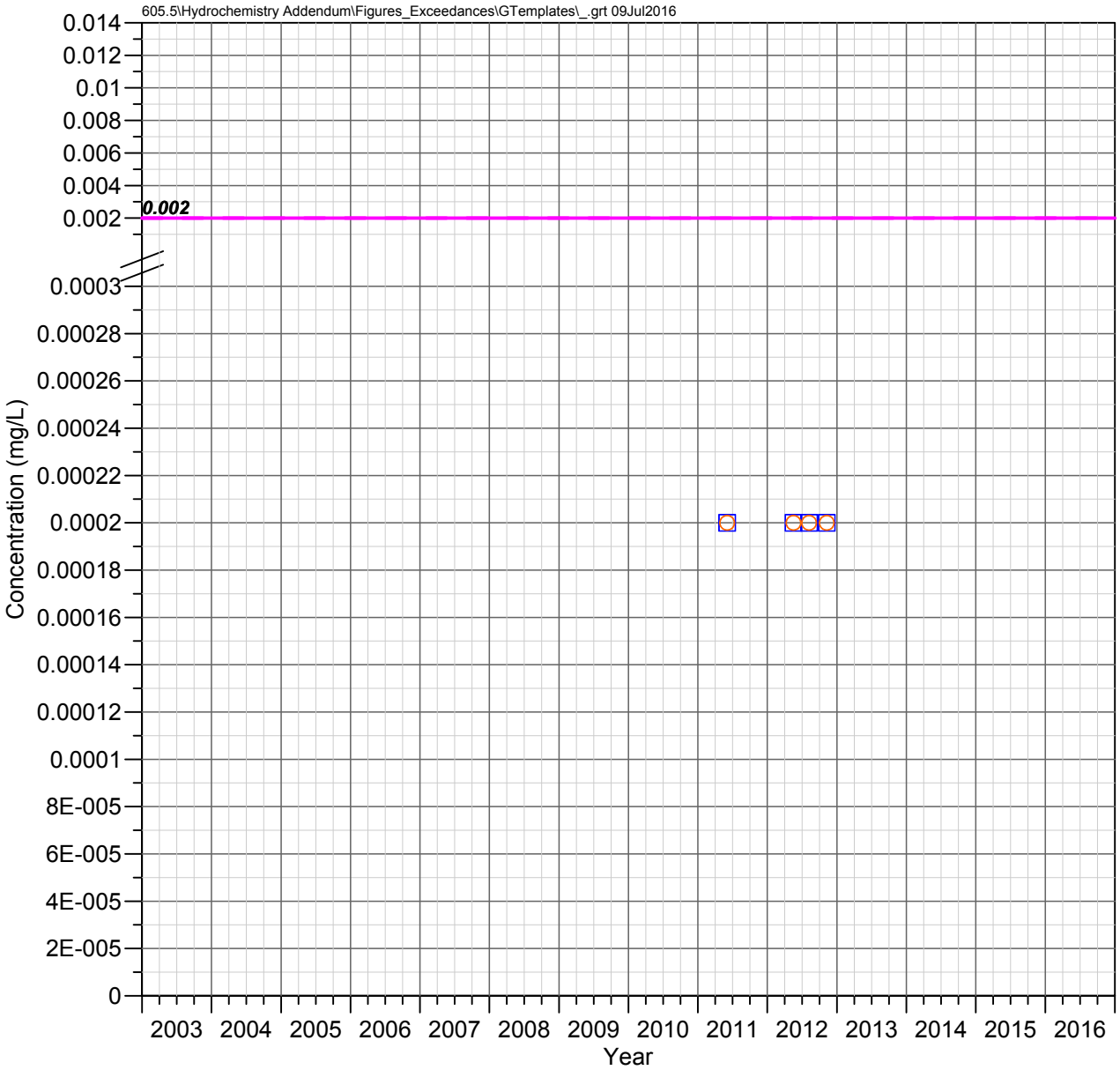


FIGURE E-446. MERCURY CONCENTRATIONS OBSERVED AT HRES-12, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-13
Apache Leap Tuff Aquifer

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

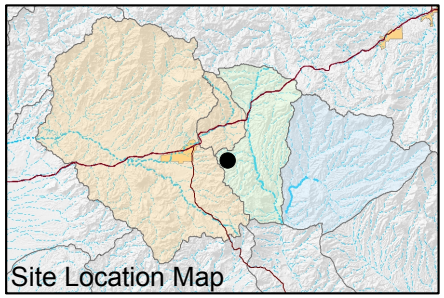
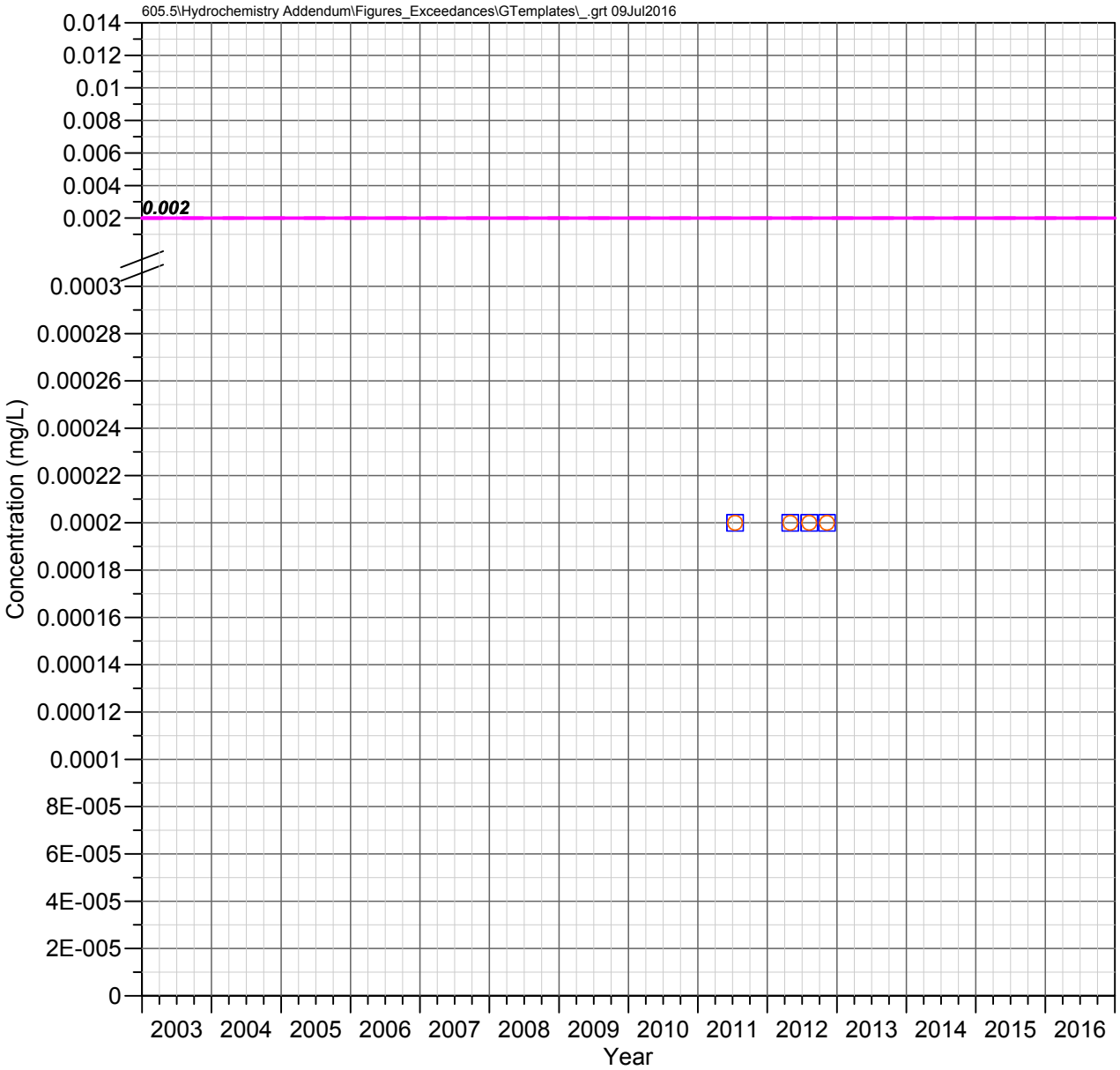


FIGURE E-447. MERCURY CONCENTRATIONS OBSERVED AT HRES-13, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-14
Apache Leap Tuff Aquifer

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

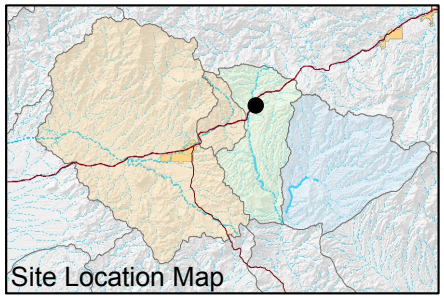
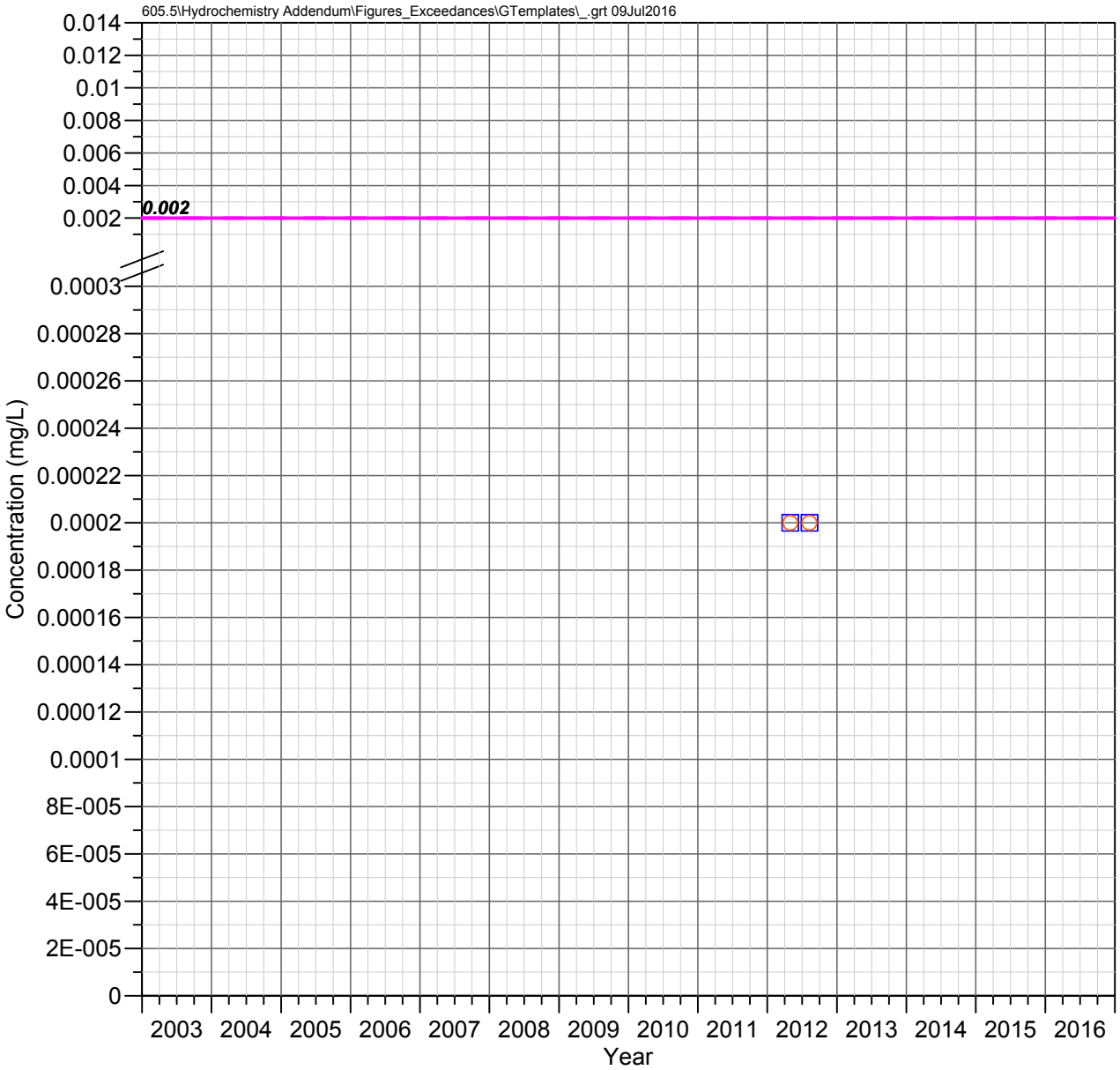


FIGURE E-448. MERCURY CONCENTRATIONS OBSERVED AT HRES-14, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-15
Apache Leap Tuff Aquifer

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

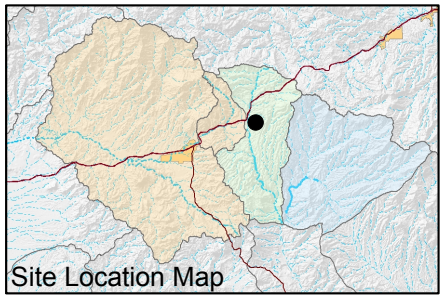
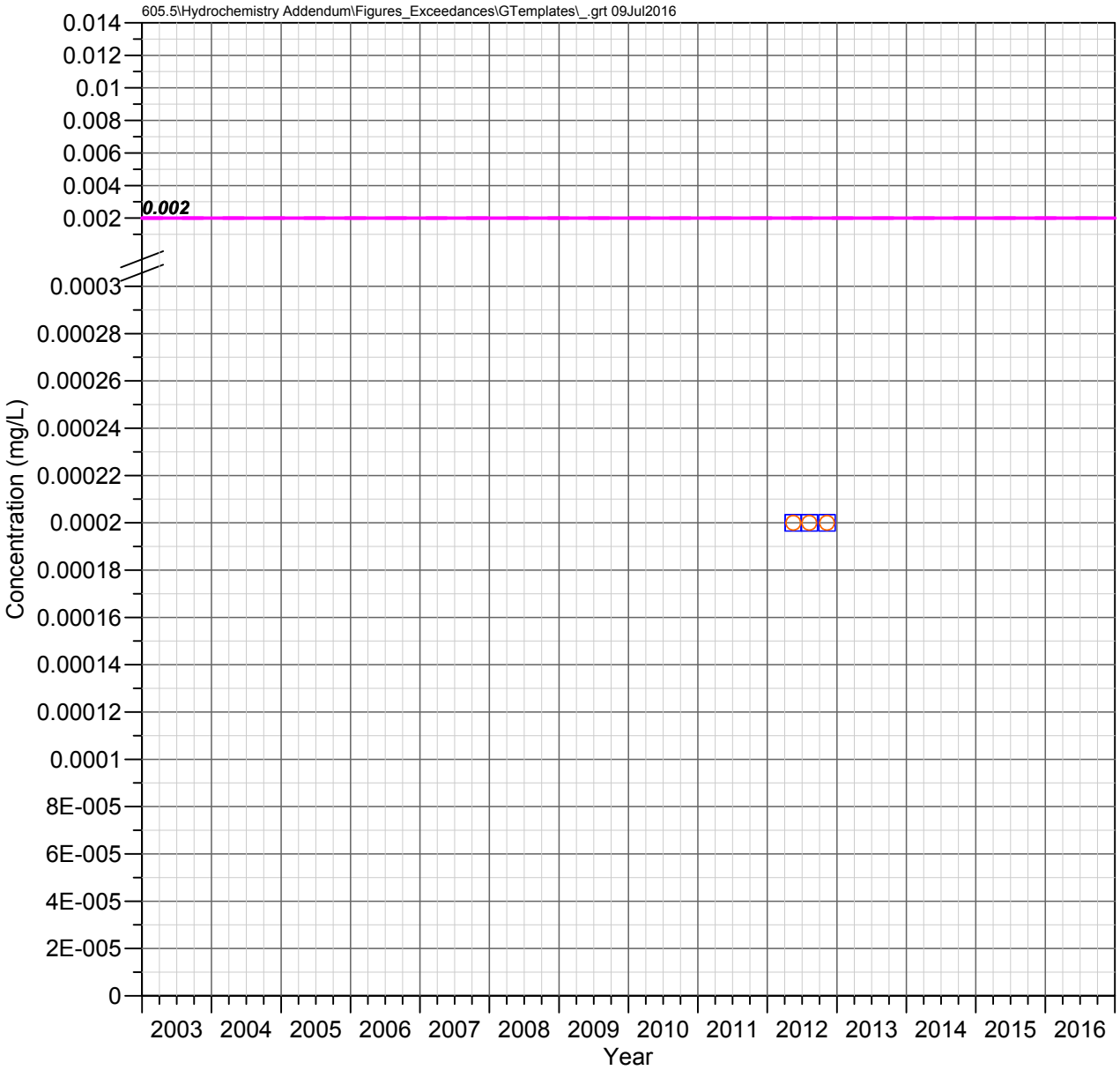


FIGURE E-449. MERCURY CONCENTRATIONS OBSERVED AT HRES-15, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-17
Apache Leap Tuff Aquifer

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

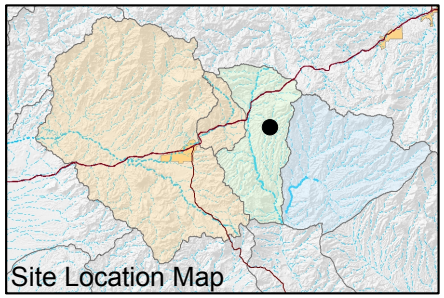
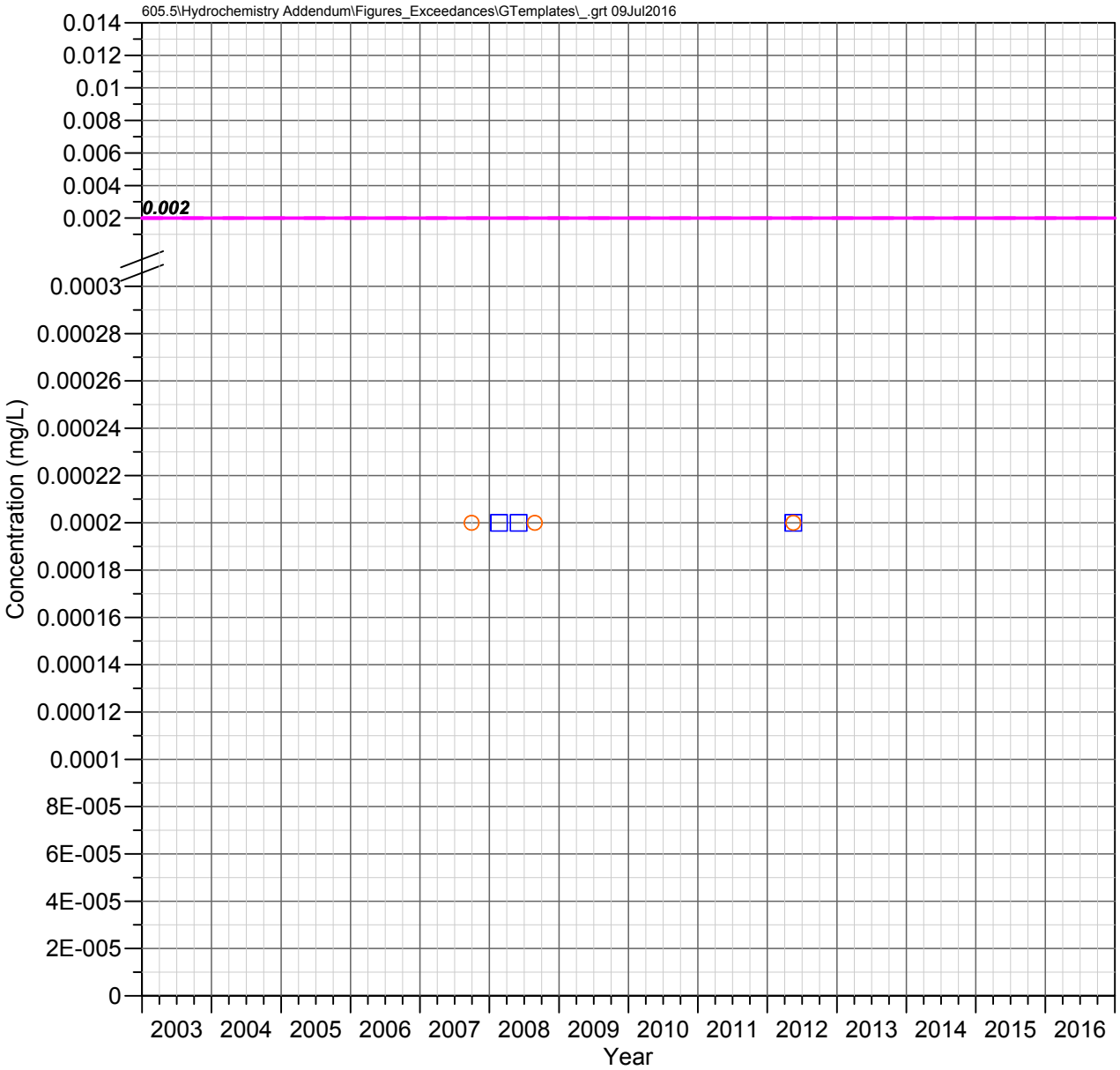


FIGURE E-450. MERCURY CONCENTRATIONS OBSERVED AT HRES-17, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MJ-11
Apache Leap Tuff Aquifer

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

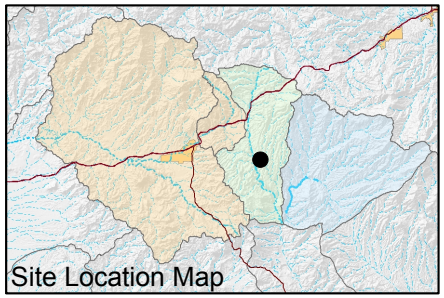
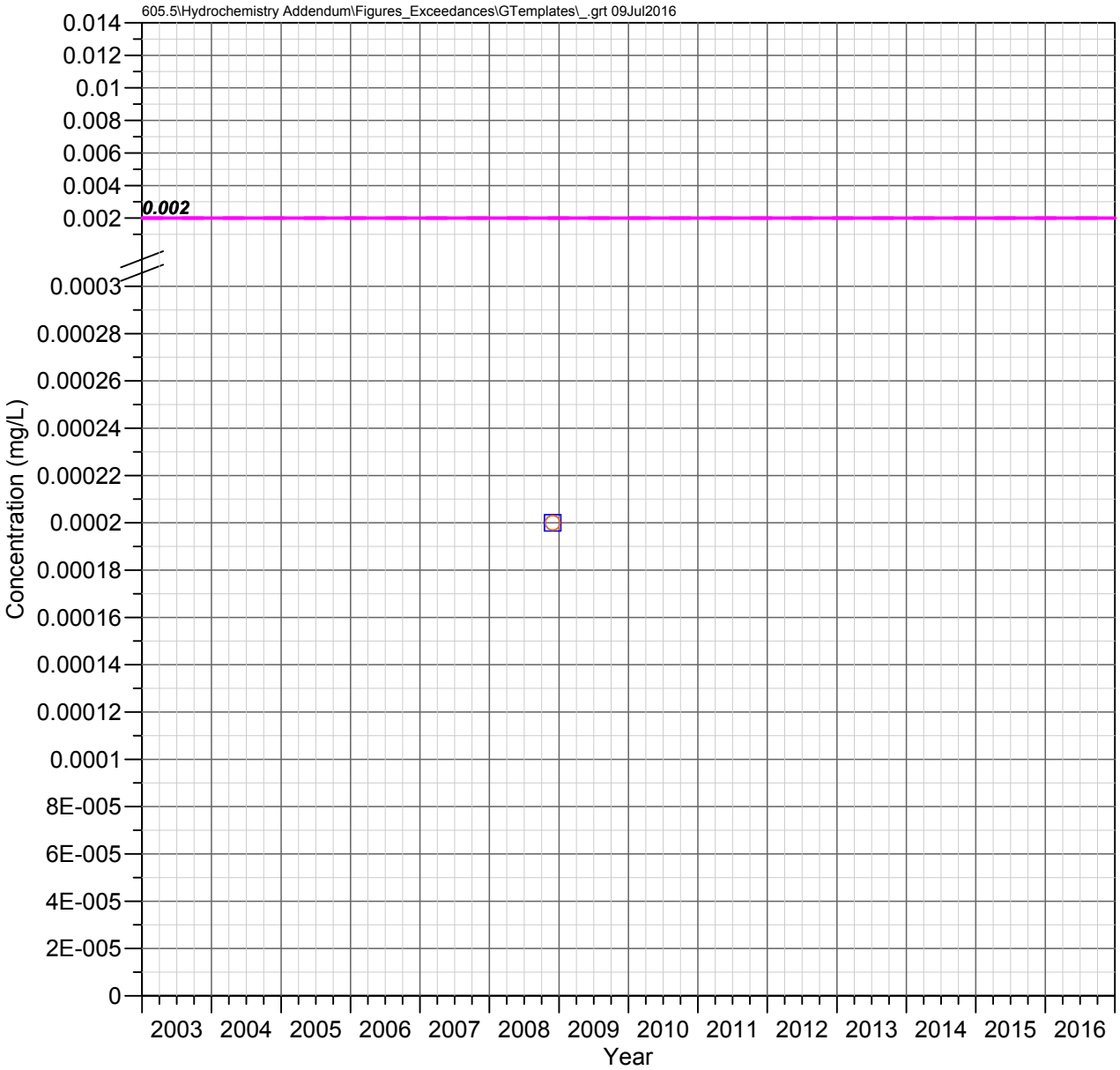


FIGURE E-451. MERCURY CONCENTRATIONS OBSERVED AT MJ-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-01
Deep Groundwater System

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

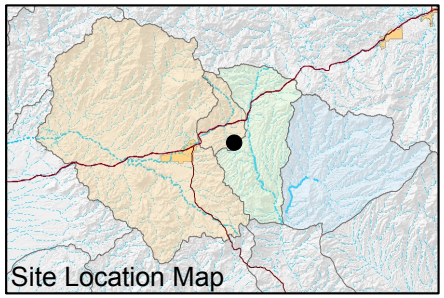
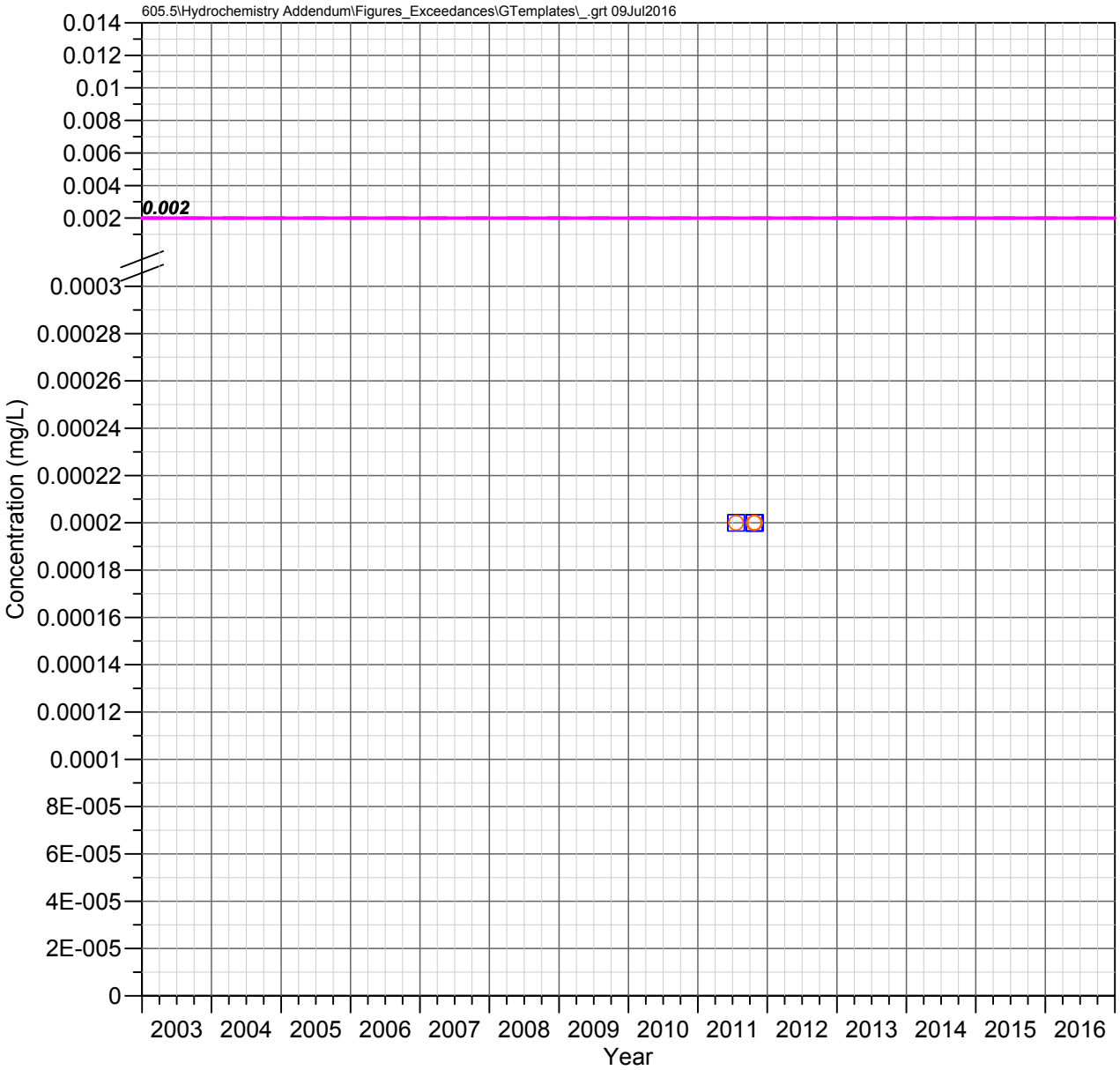


FIGURE E-452. MERCURY CONCENTRATIONS OBSERVED AT DHRES-01, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-02
Deep Groundwater System

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

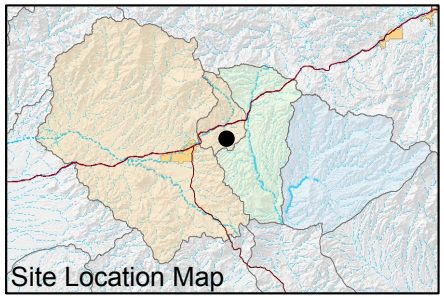
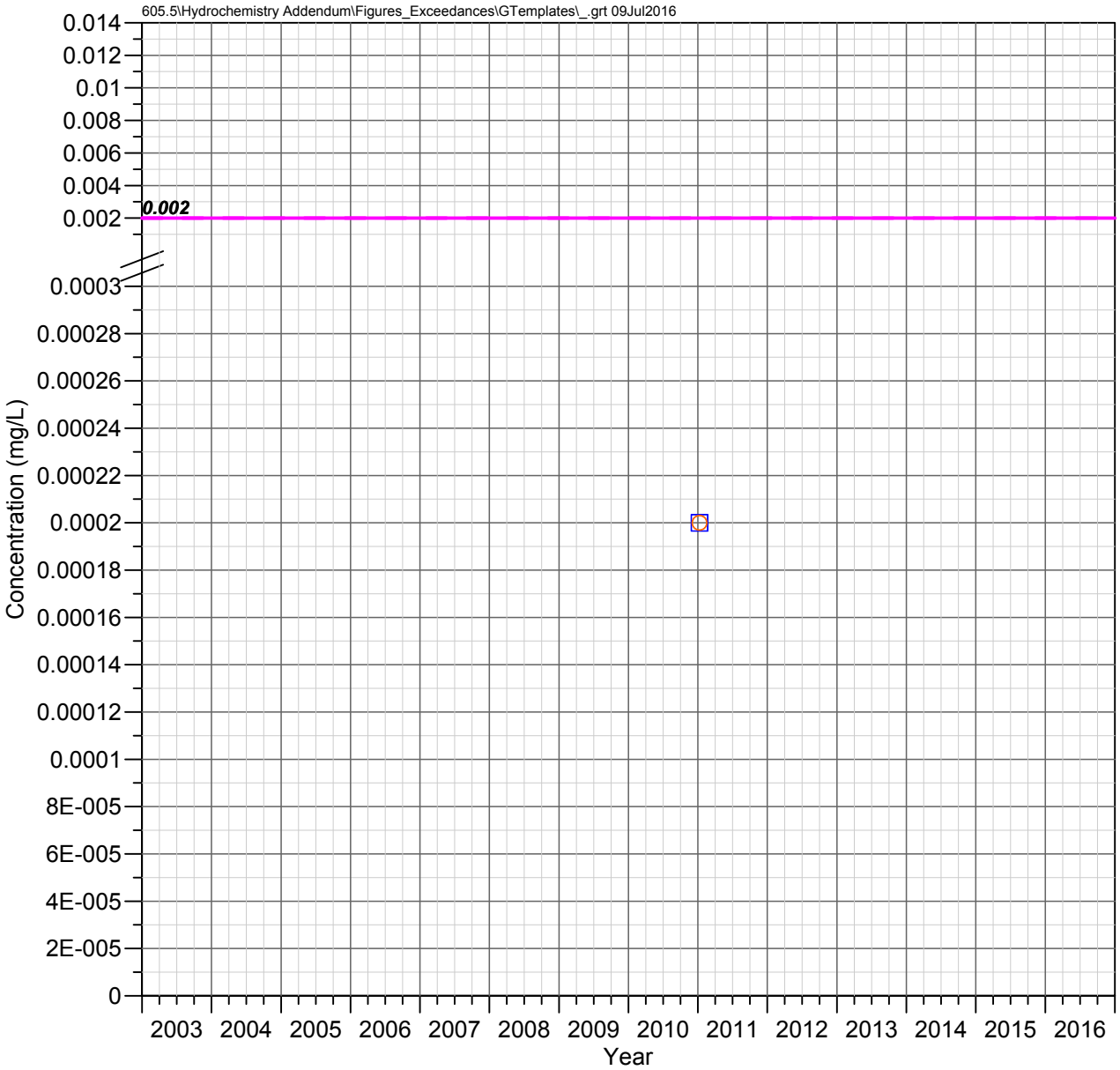


FIGURE E-453. MERCURY CONCENTRATIONS OBSERVED AT DHRES-02, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-06
Deep Groundwater System

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

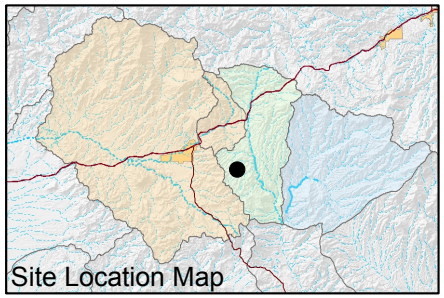
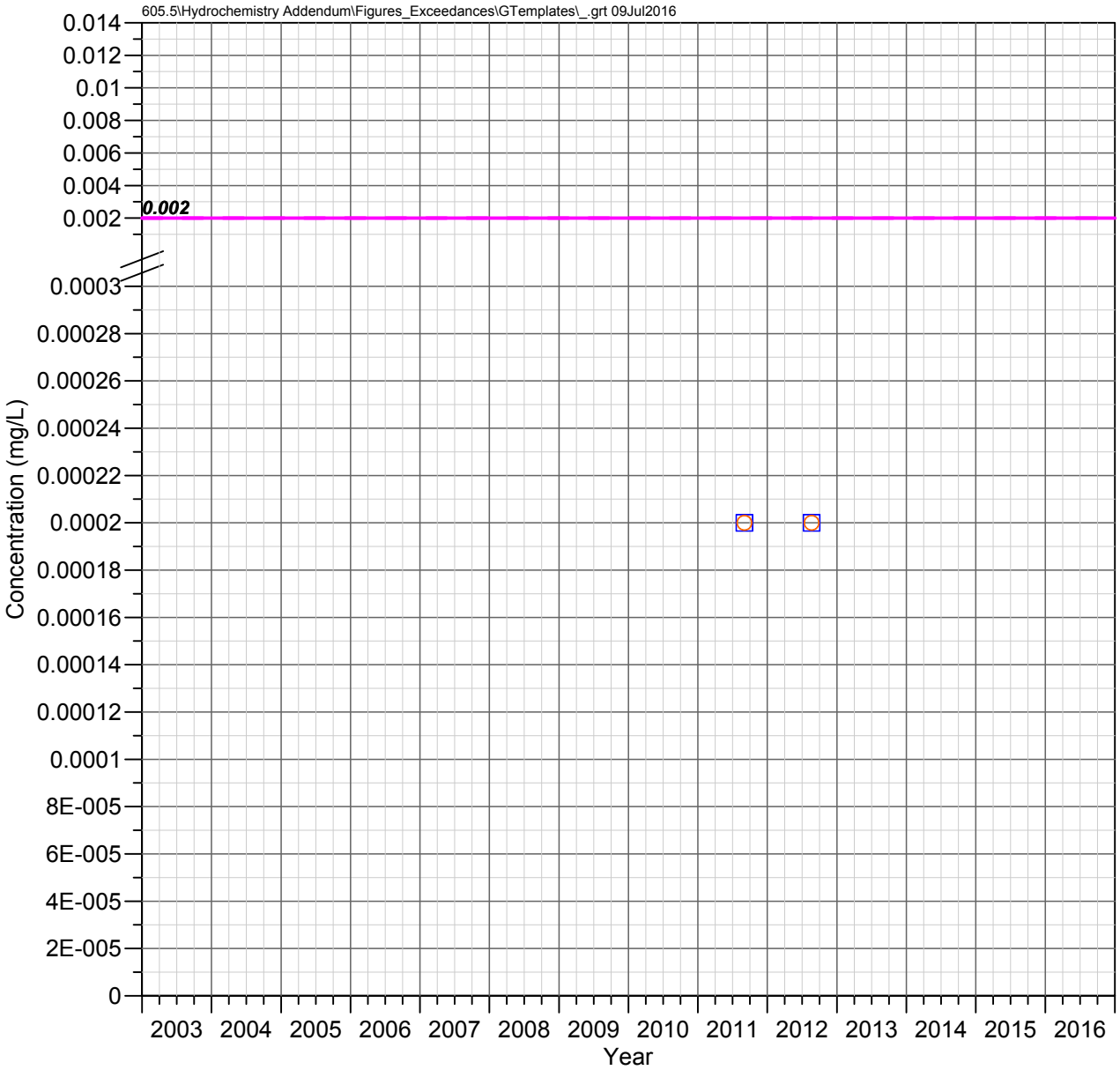


FIGURE E-454. MERCURY CONCENTRATIONS OBSERVED AT DHRES-06, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-09
Deep Groundwater System

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

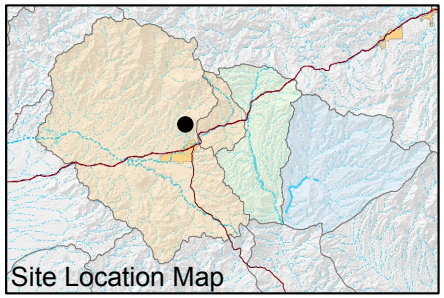
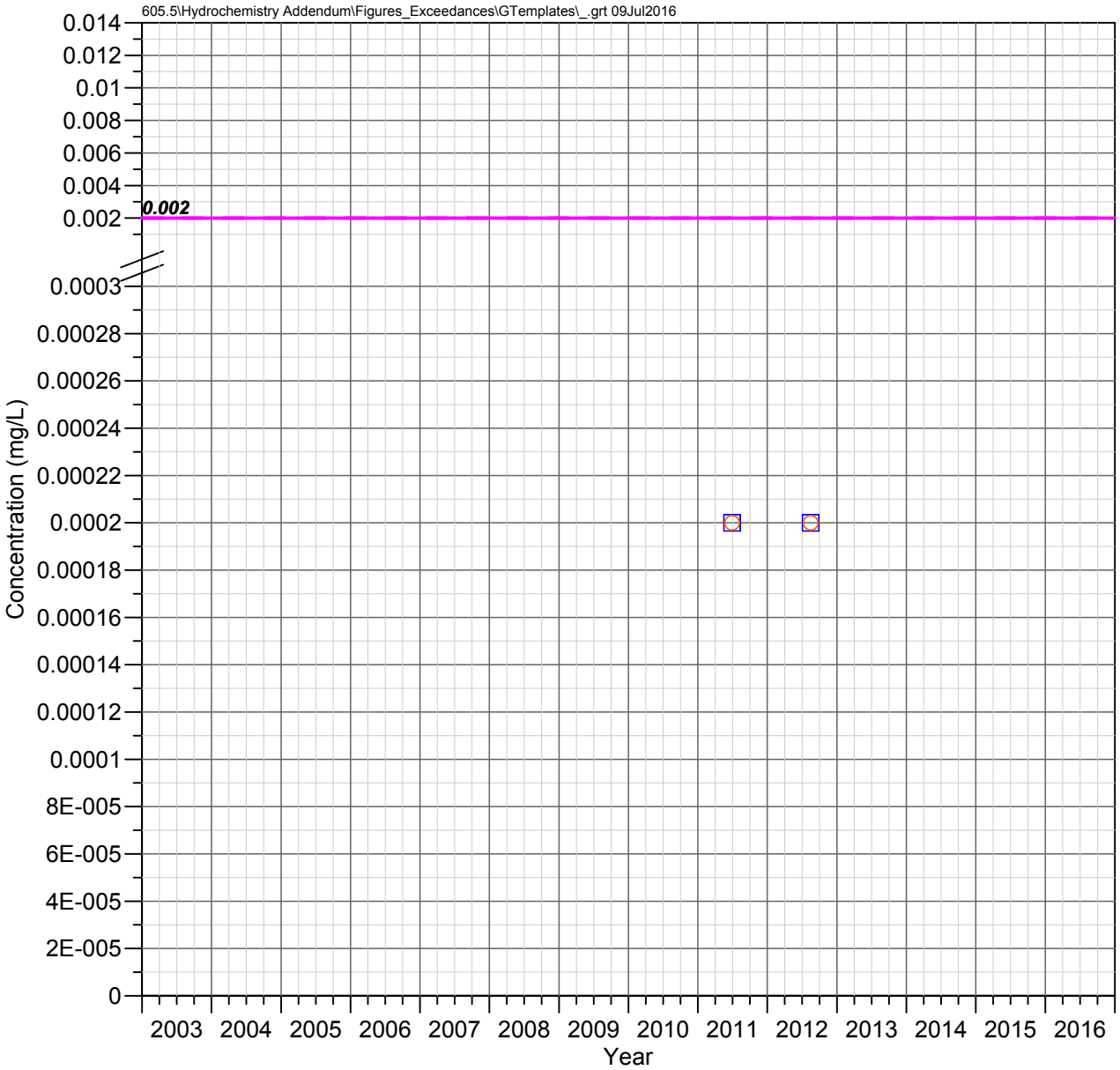


FIGURE E-455. MERCURY CONCENTRATIONS OBSERVED AT DHRES-09, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-11
Deep Groundwater System

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

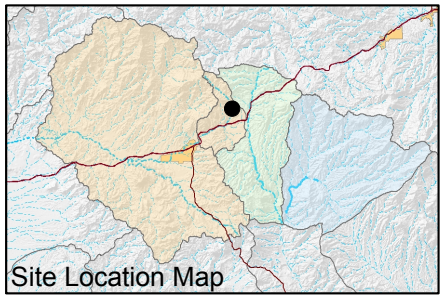
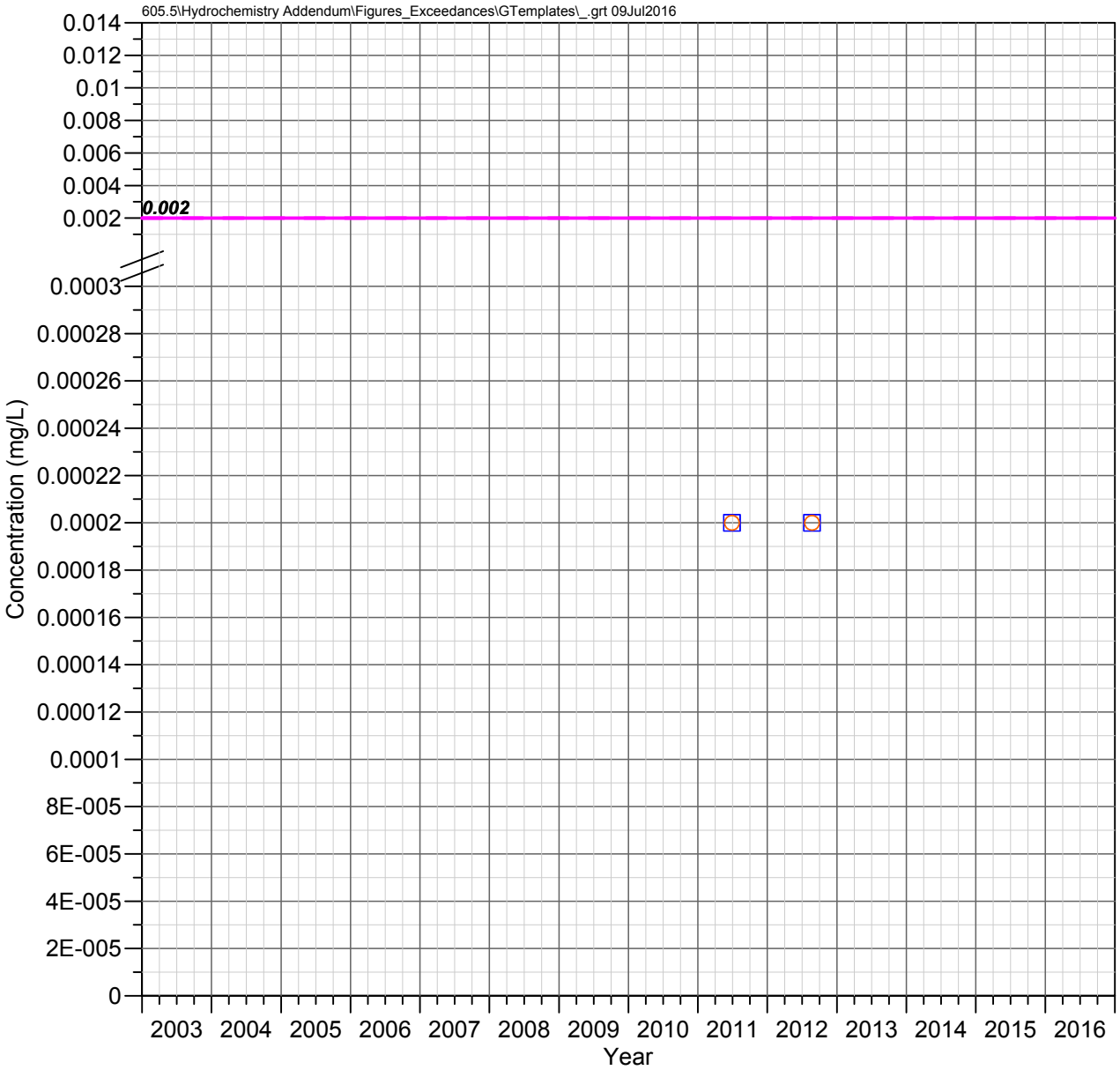


FIGURE E-456. MERCURY CONCENTRATIONS OBSERVED AT DHRES-11, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-13
Deep Groundwater System

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

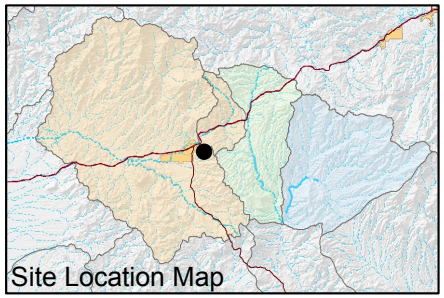
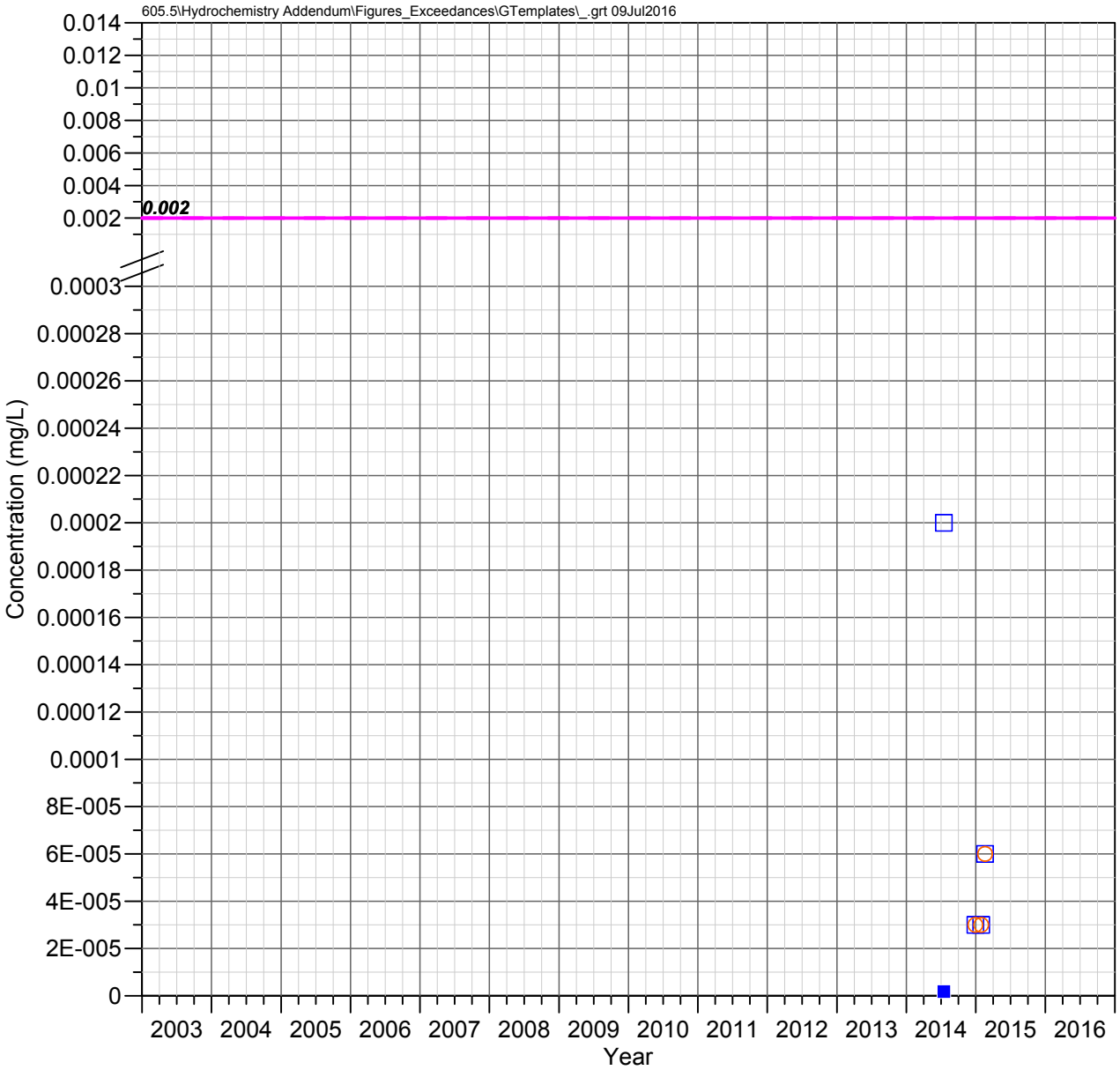


FIGURE E-457. MERCURY CONCENTRATIONS OBSERVED AT DHRES-13, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-15
Deep Groundwater System

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

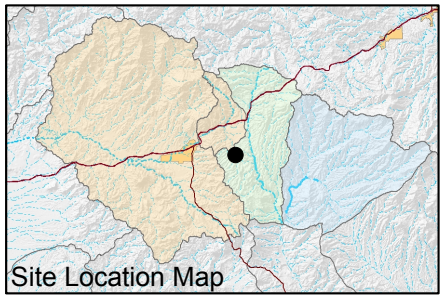
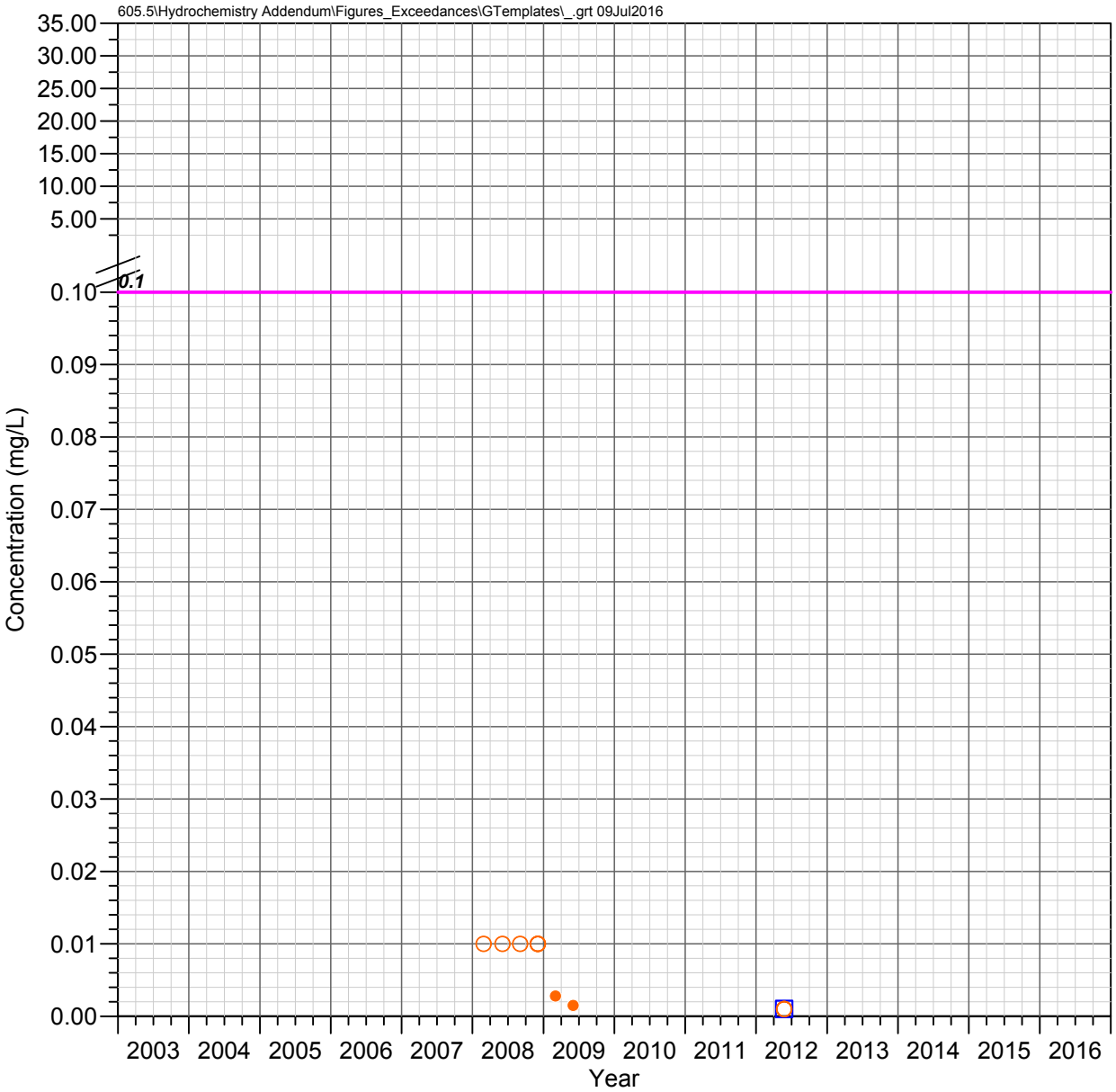


FIGURE E-458. MERCURY CONCENTRATIONS OBSERVED AT DHRES-15, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Hackberry Windmill Well Shallow Groundwater System

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)

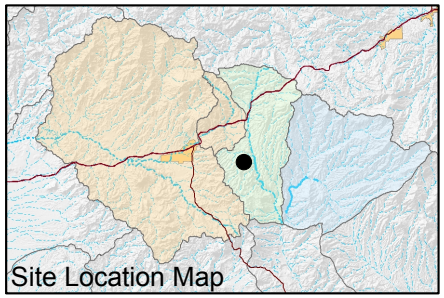
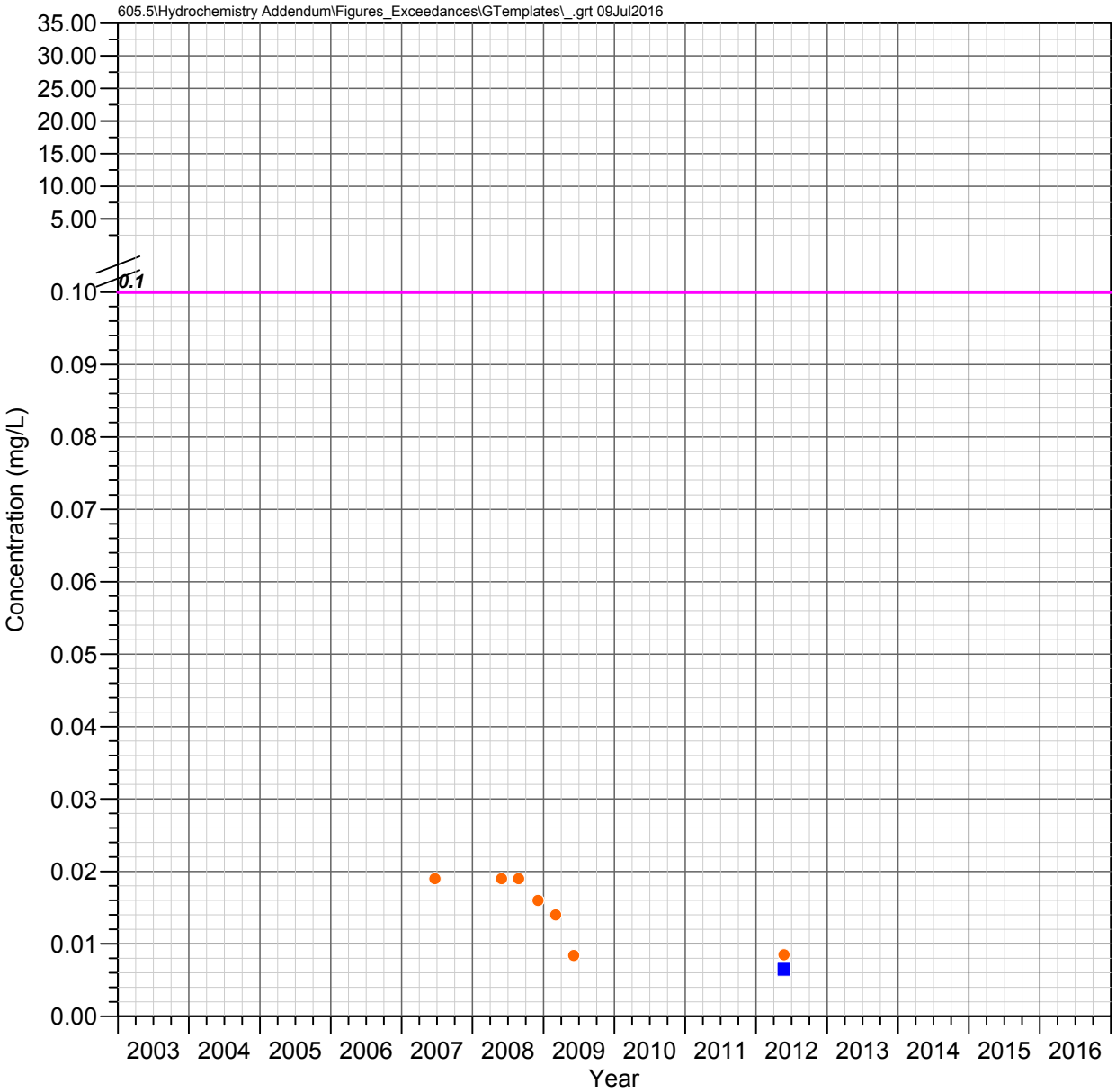


FIGURE E-459. NICKEL CONCENTRATIONS OBSERVED AT HACKBERRY WINDMILL WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



JI Ranch Corral Well Shallow Groundwater System

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)

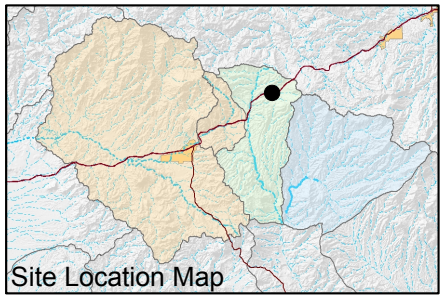
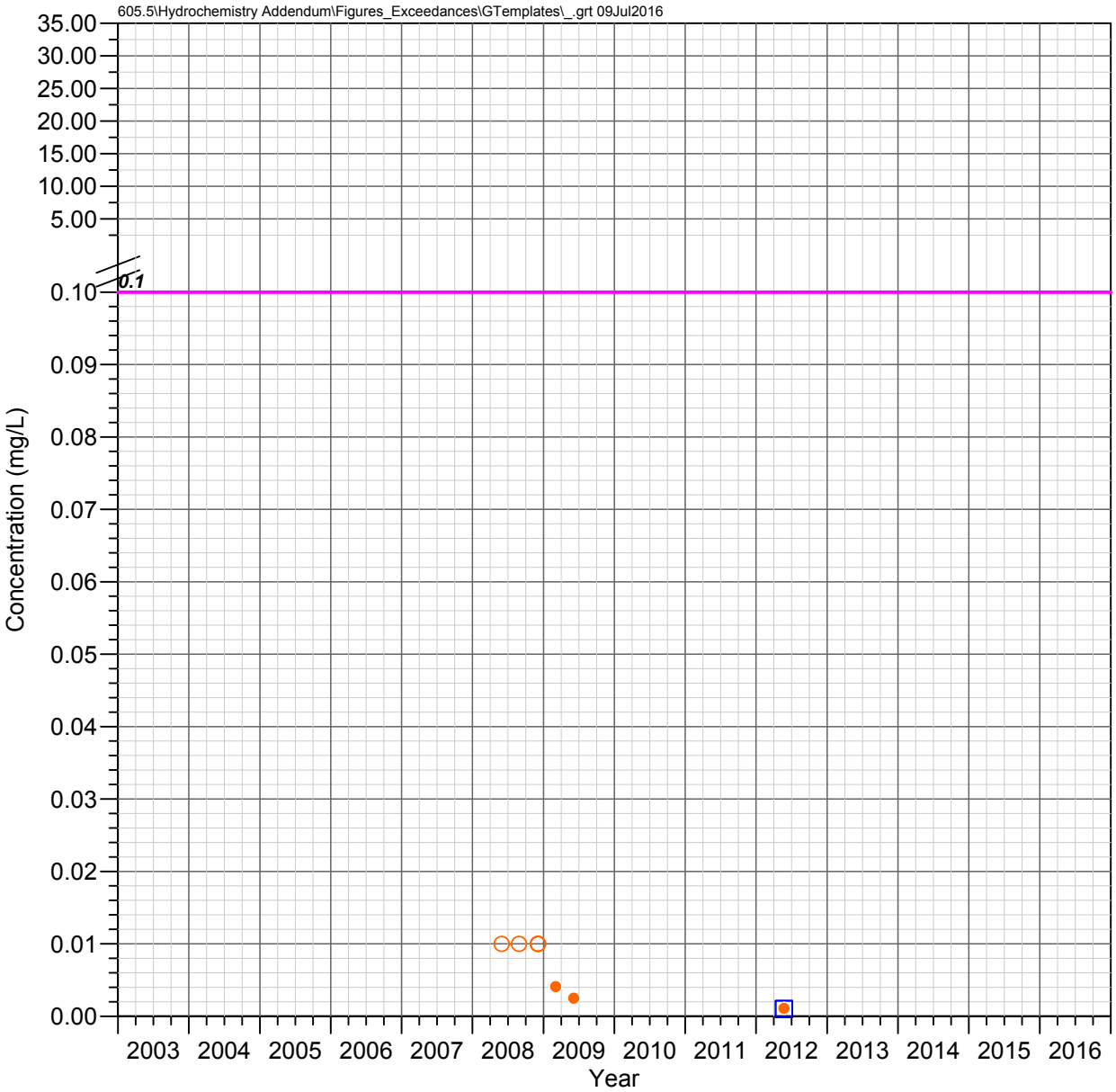


FIGURE E-460. NICKEL CONCENTRATIONS OBSERVED AT JI RANCH CORRAL WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



JI Ranch Middle Well Shallow Groundwater System

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)

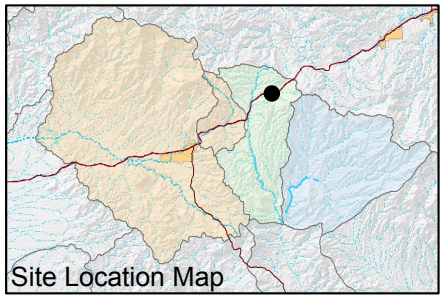
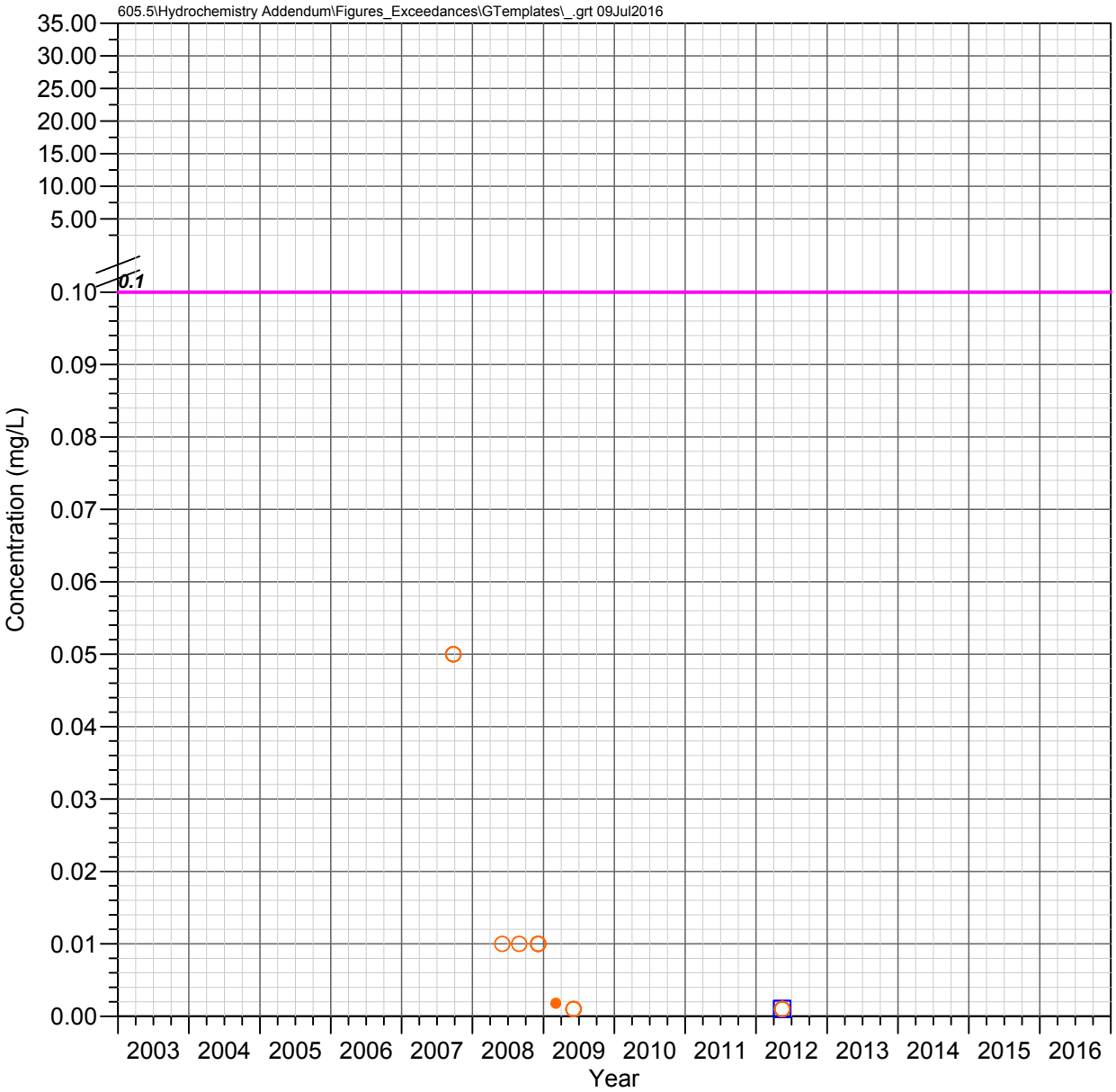


FIGURE E-461. NICKEL CONCENTRATIONS OBSERVED AT JI RANCH MIDDLE WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



A-06
Apache Leap Tuff Aquifer

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)

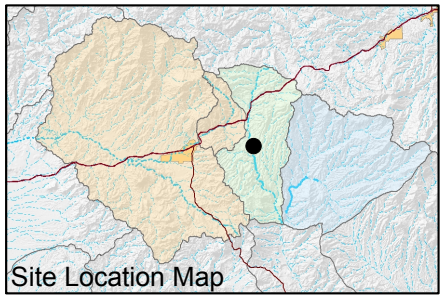
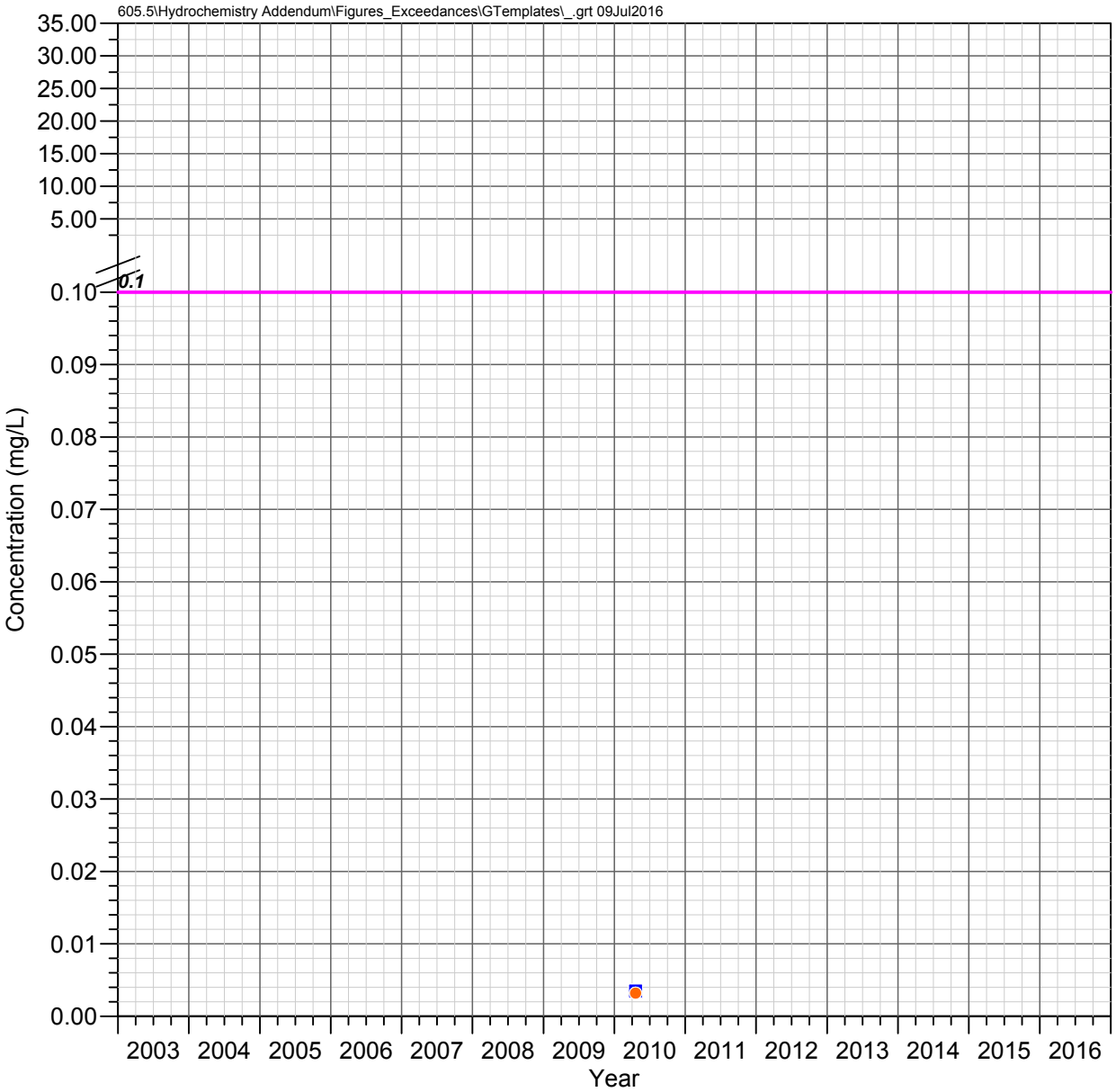


FIGURE E-462. NICKEL CONCENTRATIONS OBSERVED AT A-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



CT Well
Apache Leap Tuff Aquifer

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)

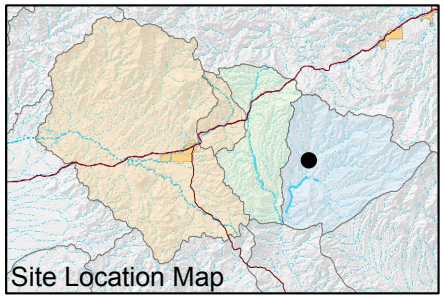
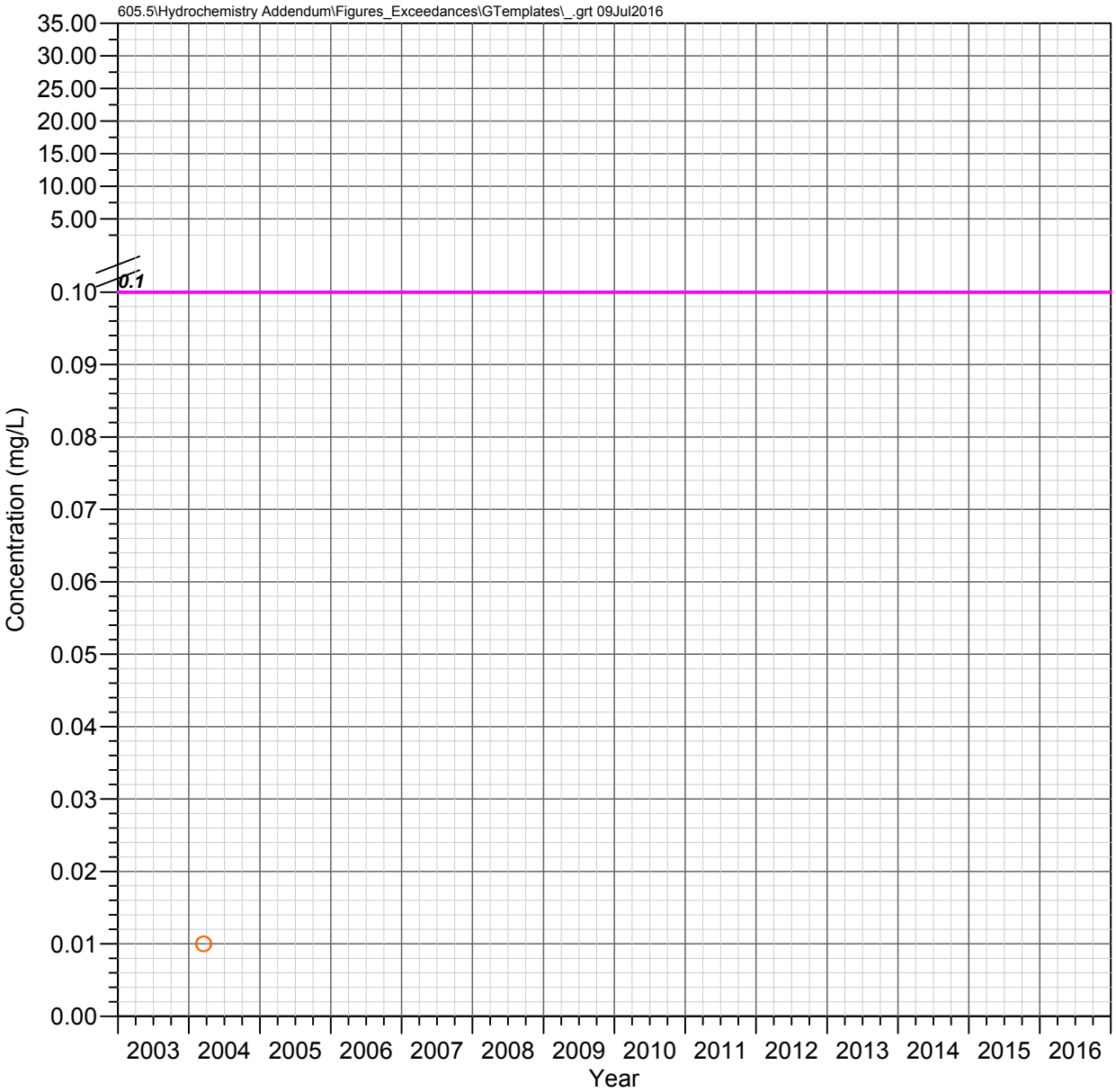


FIGURE E-463. NICKEL CONCENTRATIONS OBSERVED AT CT WELL, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-01
Apache Leap Tuff Aquifer

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)

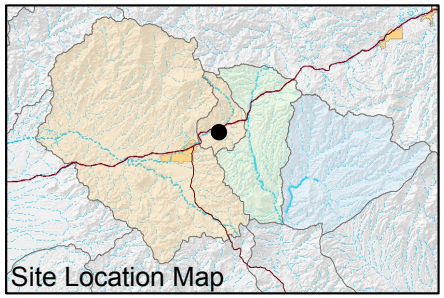
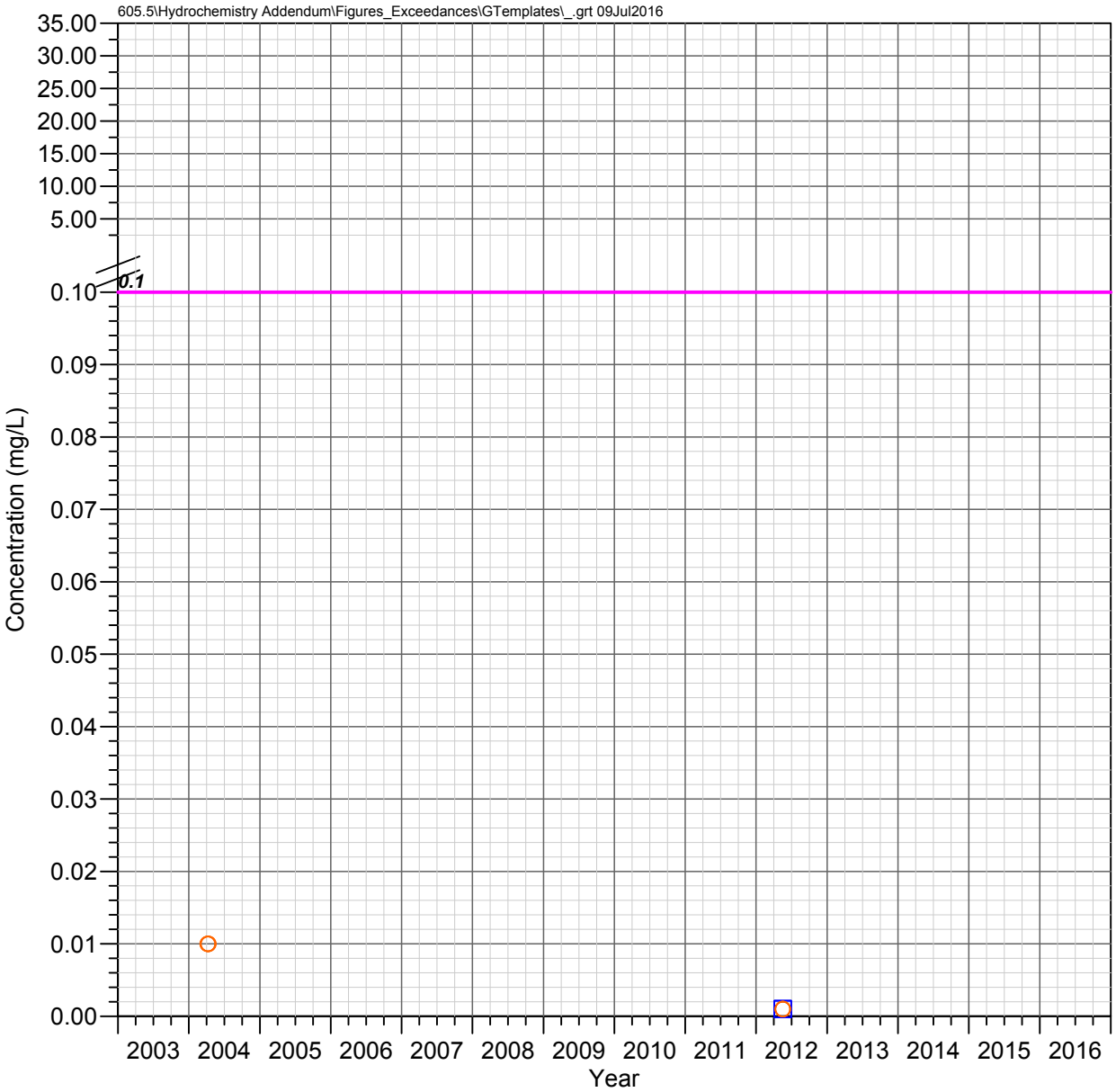


FIGURE E-464. NICKEL CONCENTRATIONS OBSERVED AT HRES-01, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-02
Apache Leap Tuff Aquifer

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)

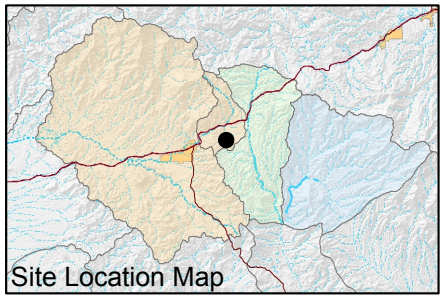
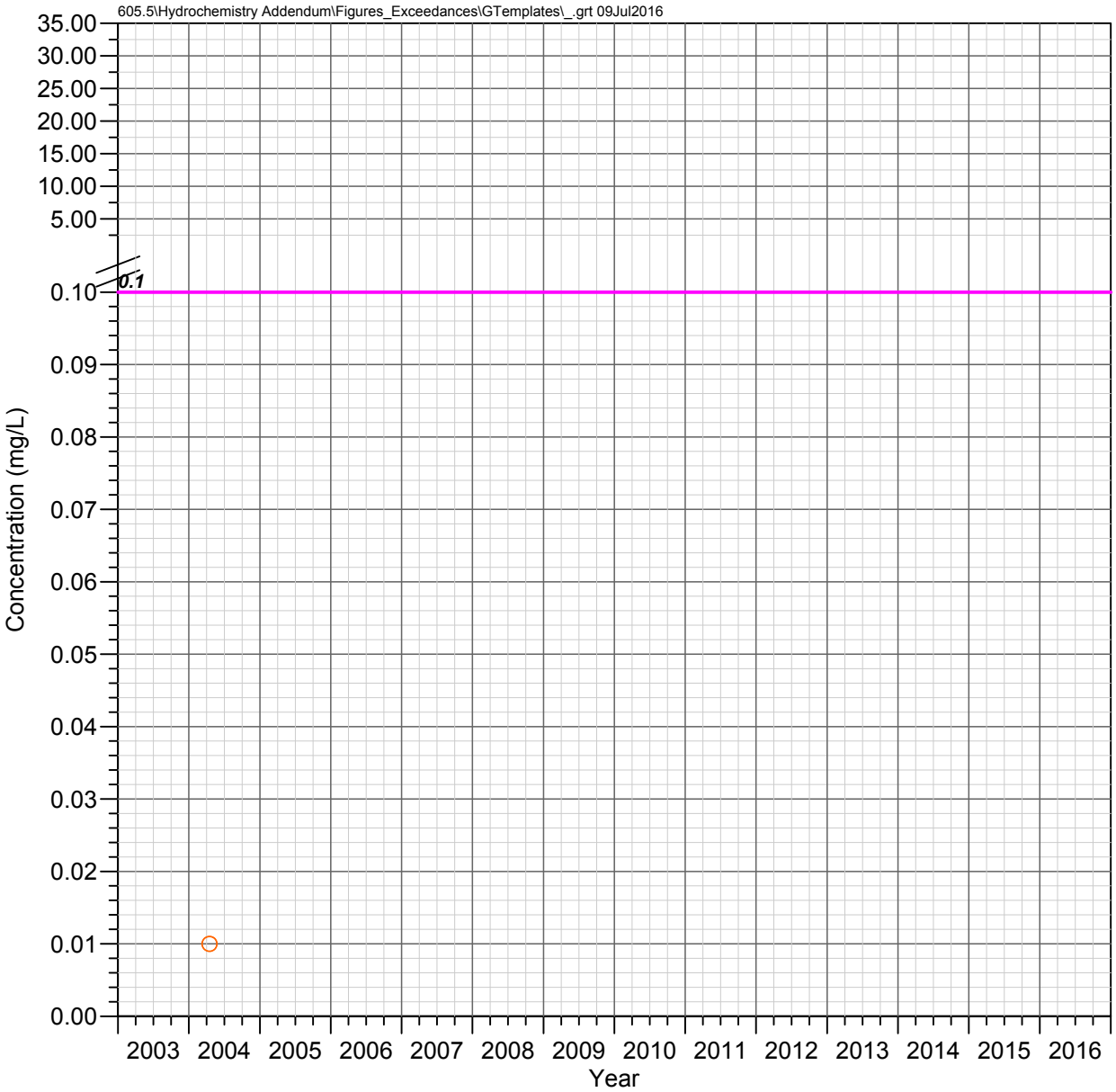


FIGURE E-465. NICKEL CONCENTRATIONS OBSERVED AT HRES-02, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-03d
Apache Leap Tuff Aquifer

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)

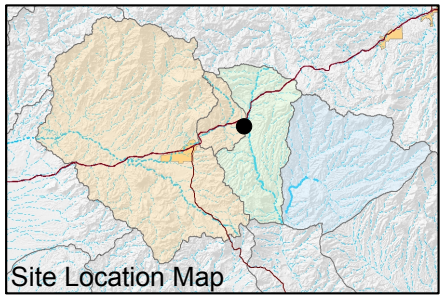
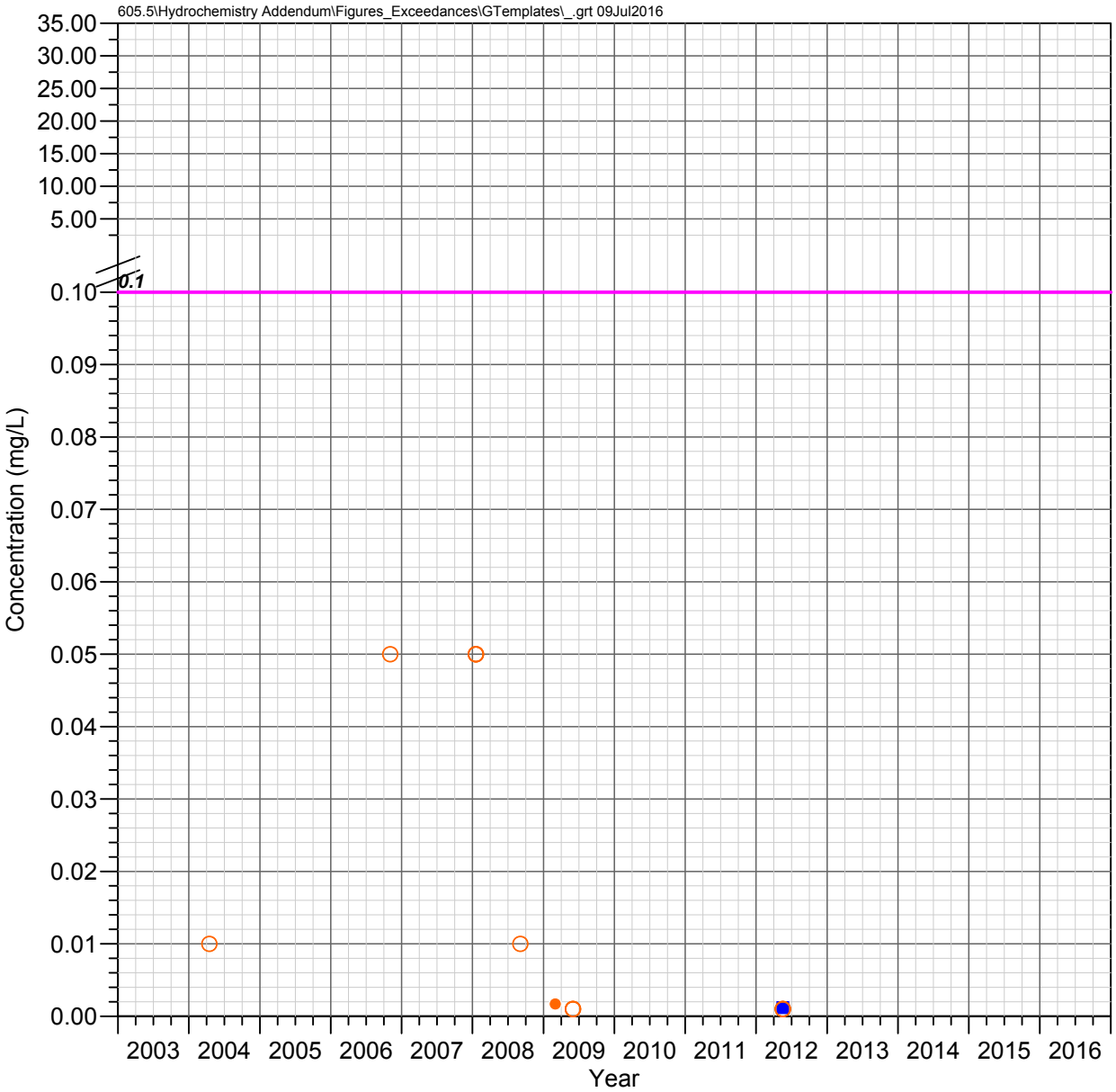


FIGURE E-466. NICKEL CONCENTRATIONS OBSERVED AT HRES-03D, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-04
Apache Leap Tuff Aquifer

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)

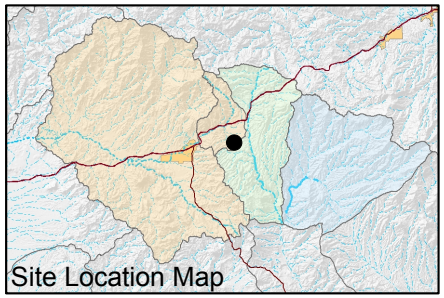
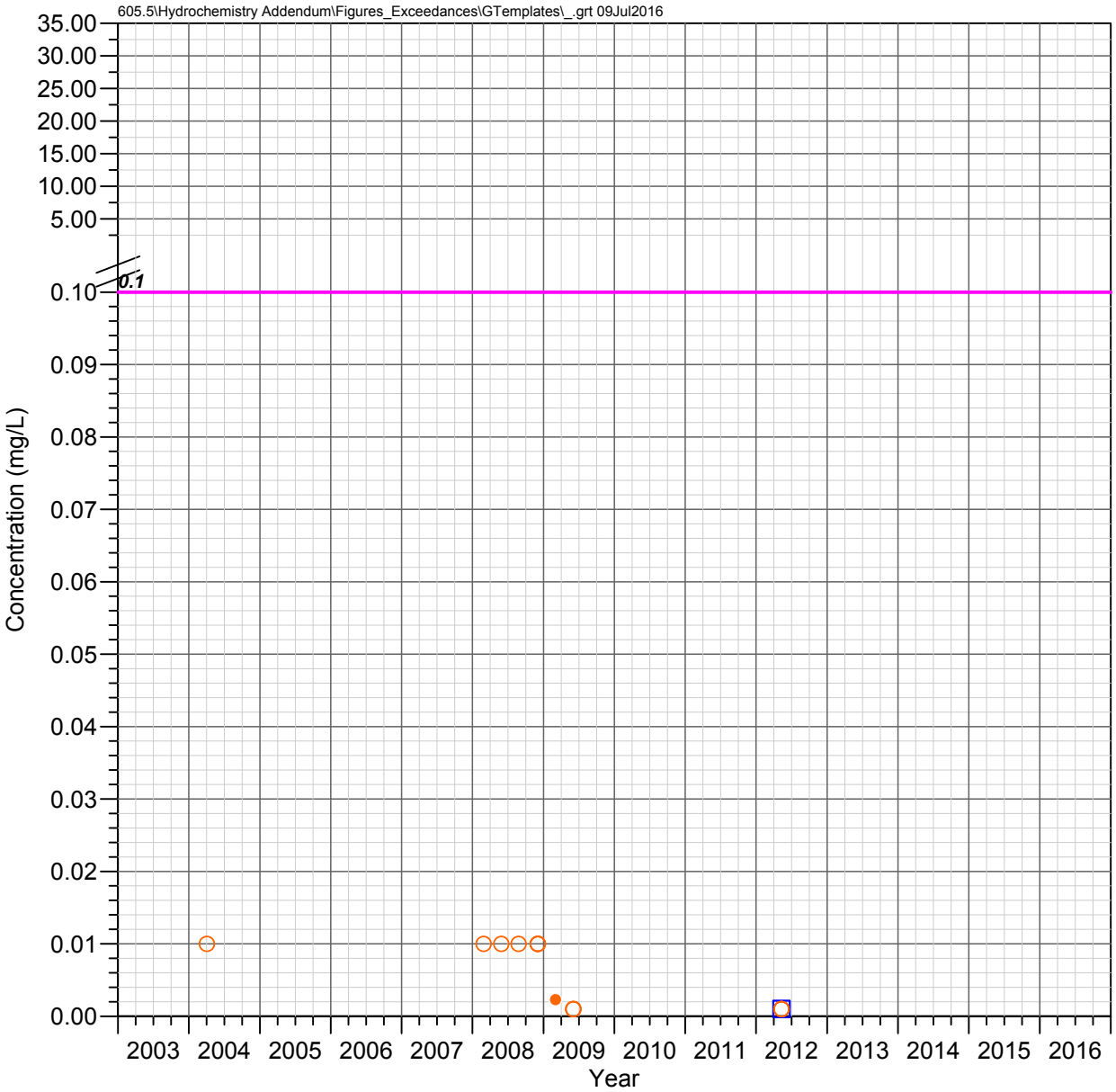


FIGURE E-467. NICKEL CONCENTRATIONS OBSERVED AT HRES-04, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-05
Apache Leap Tuff Aquifer

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)

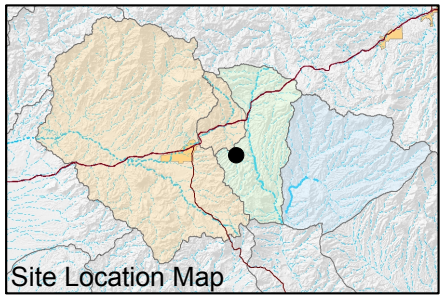
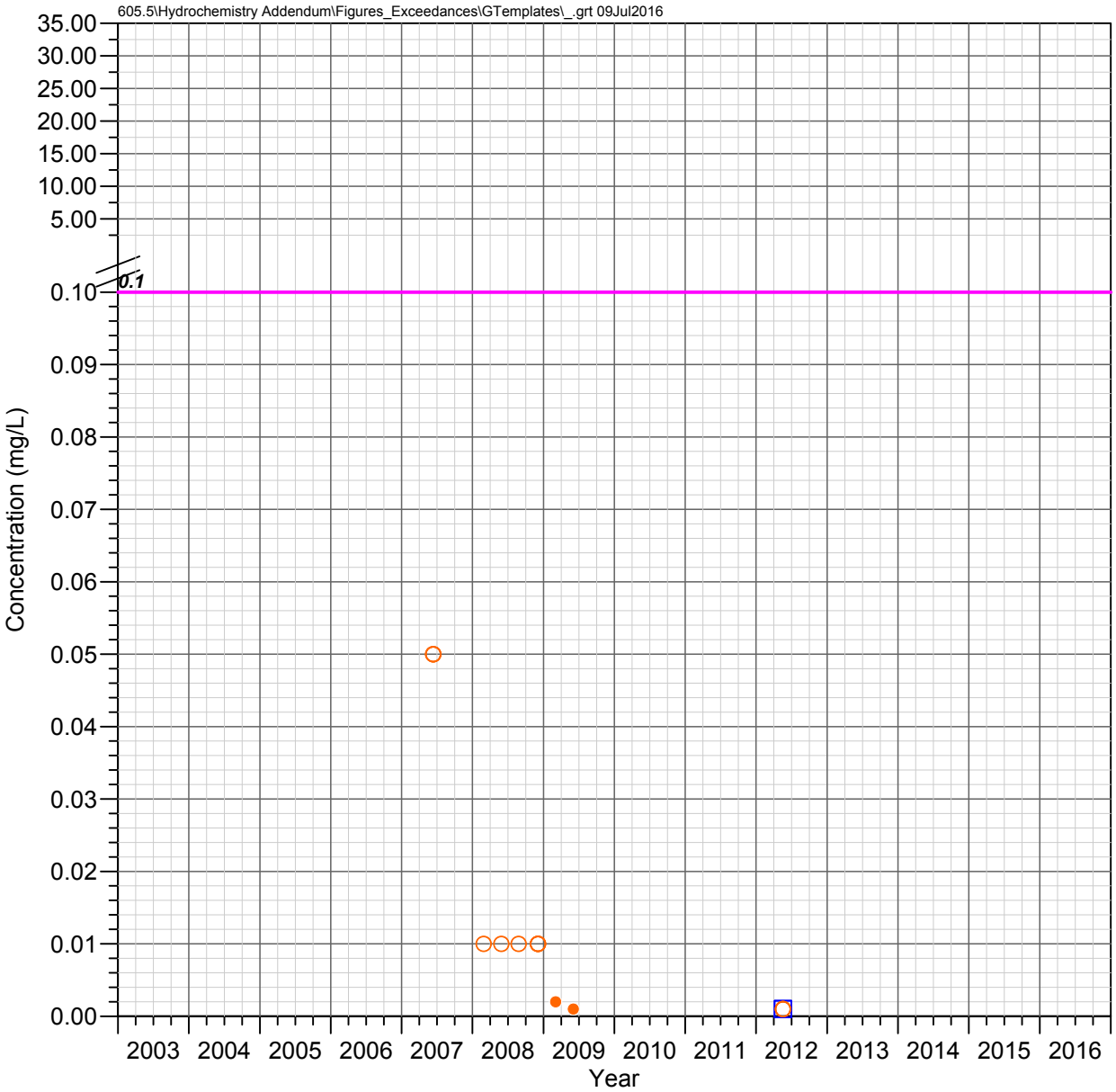


FIGURE E-468. NICKEL CONCENTRATIONS OBSERVED AT HRES-05, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-06
Apache Leap Tuff Aquifer

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)

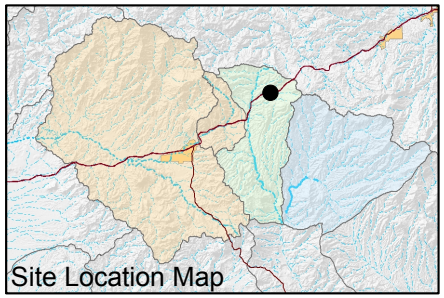
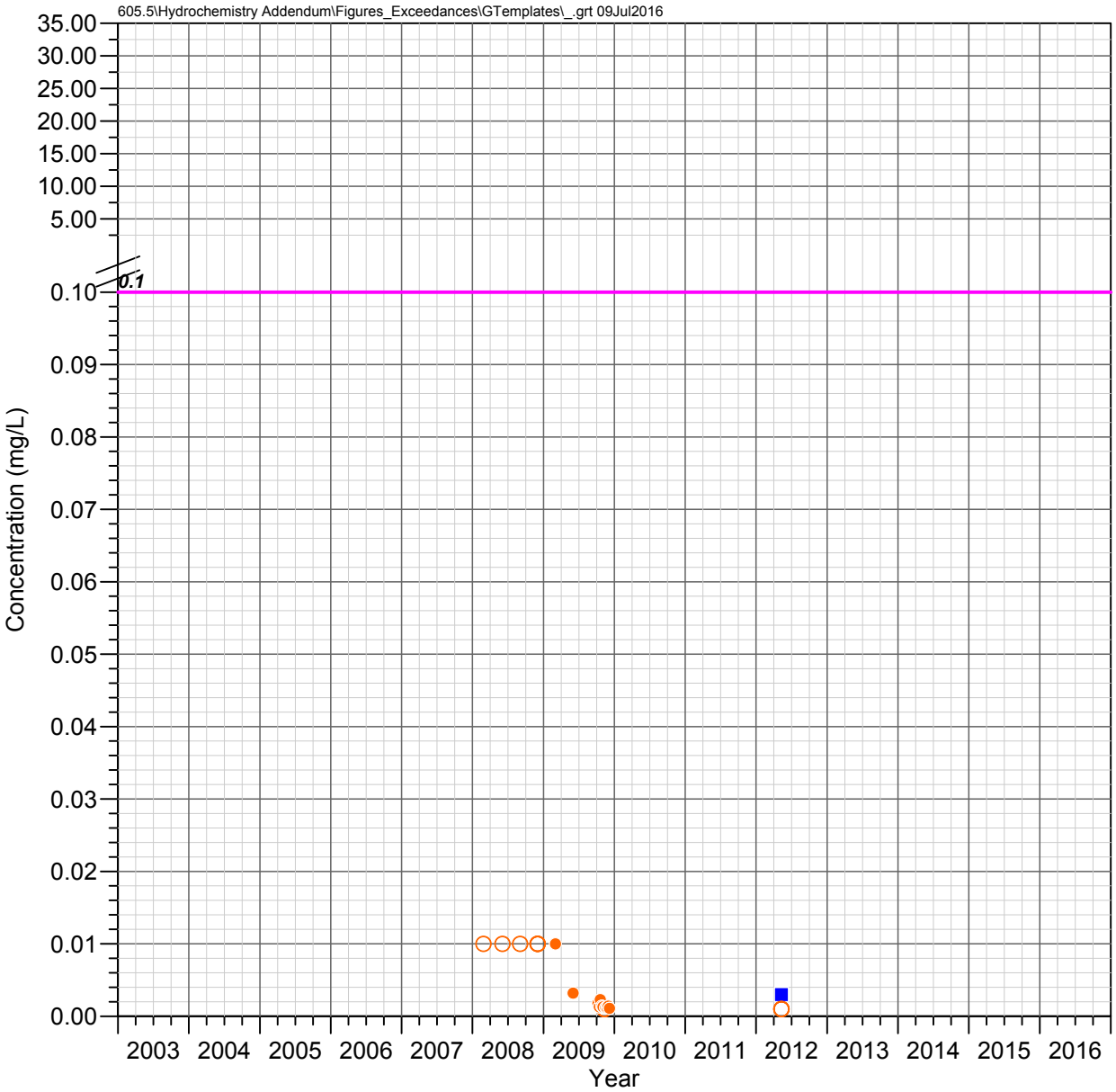


FIGURE E-469. NICKEL CONCENTRATIONS OBSERVED AT HRES-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-07
Apache Leap Tuff Aquifer

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)

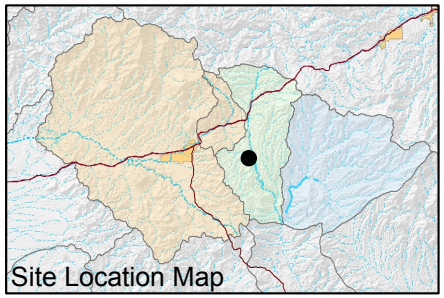
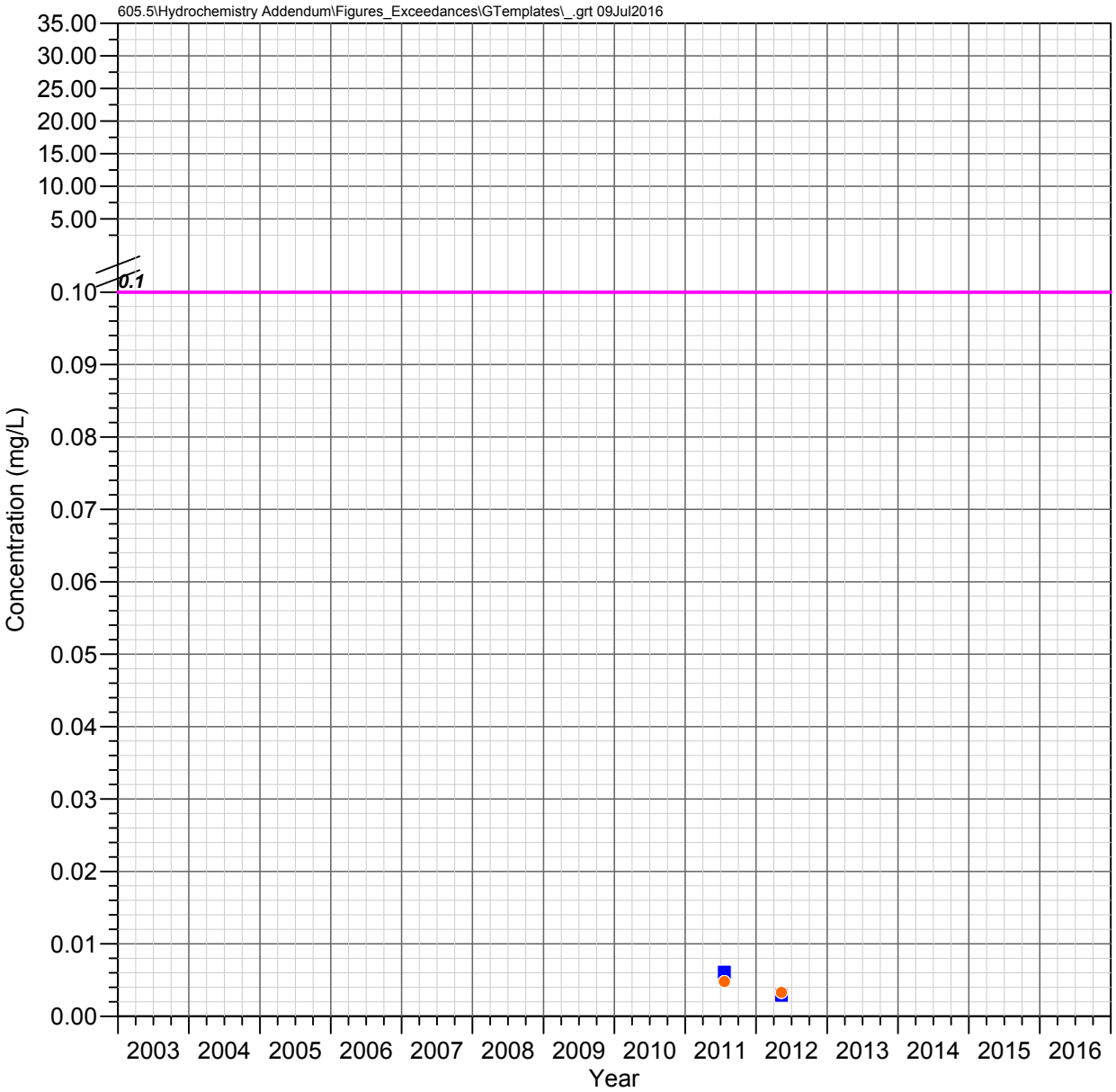


FIGURE E-470. NICKEL CONCENTRATIONS OBSERVED AT HRES-07, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-08
Apache Leap Tuff Aquifer

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)

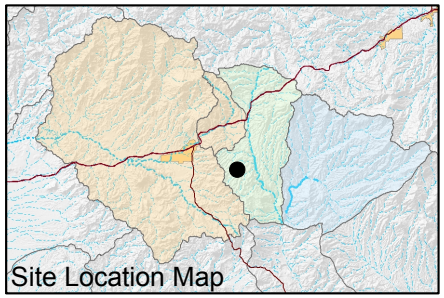
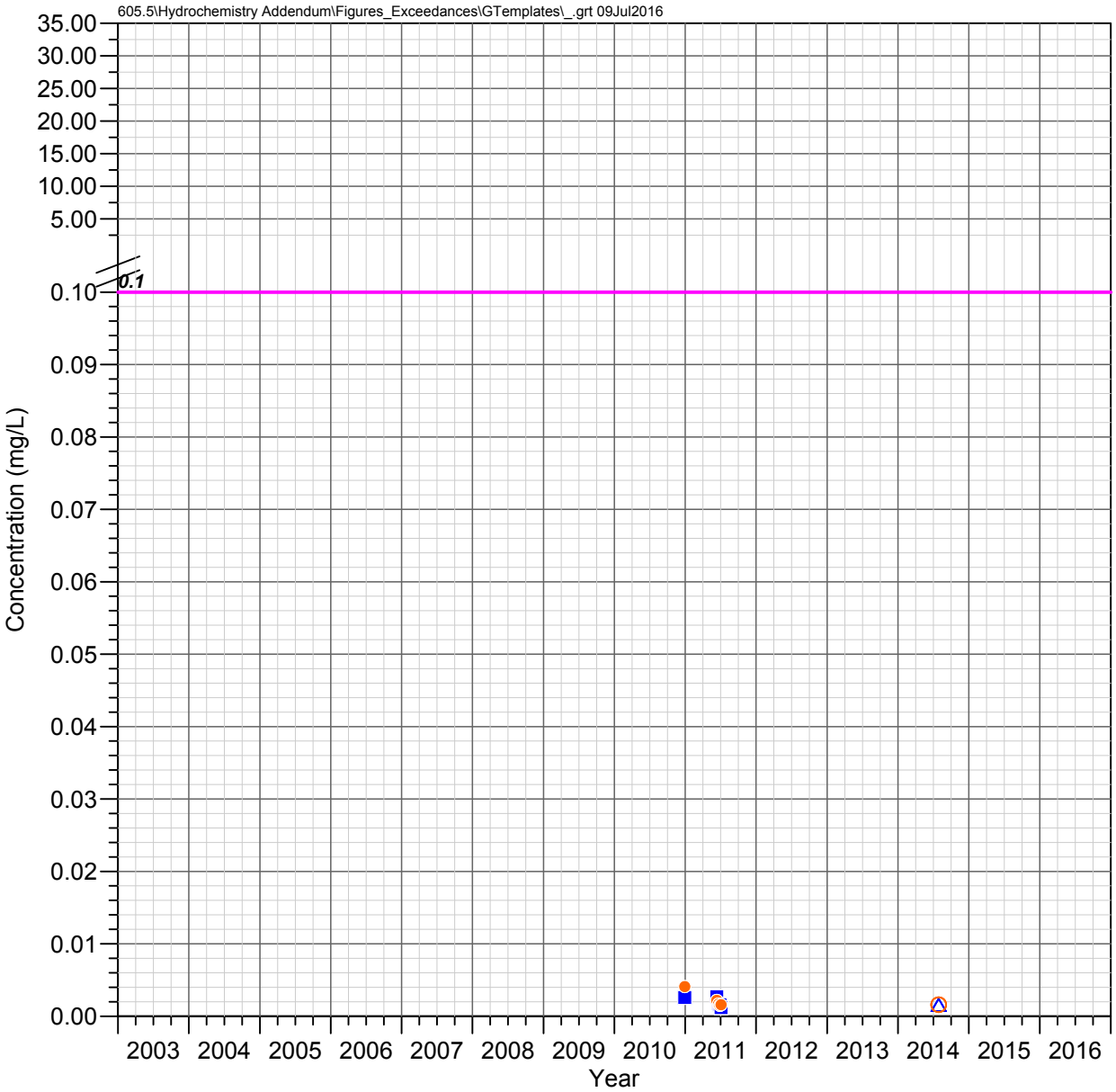


FIGURE E-471. NICKEL CONCENTRATIONS OBSERVED AT HRES-08, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-09
Apache Leap Tuff Aquifer

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)

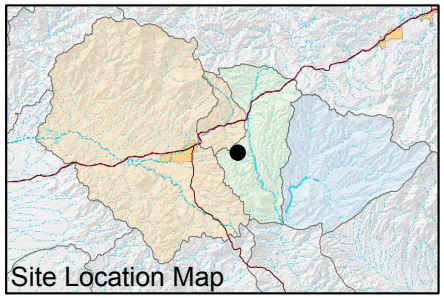
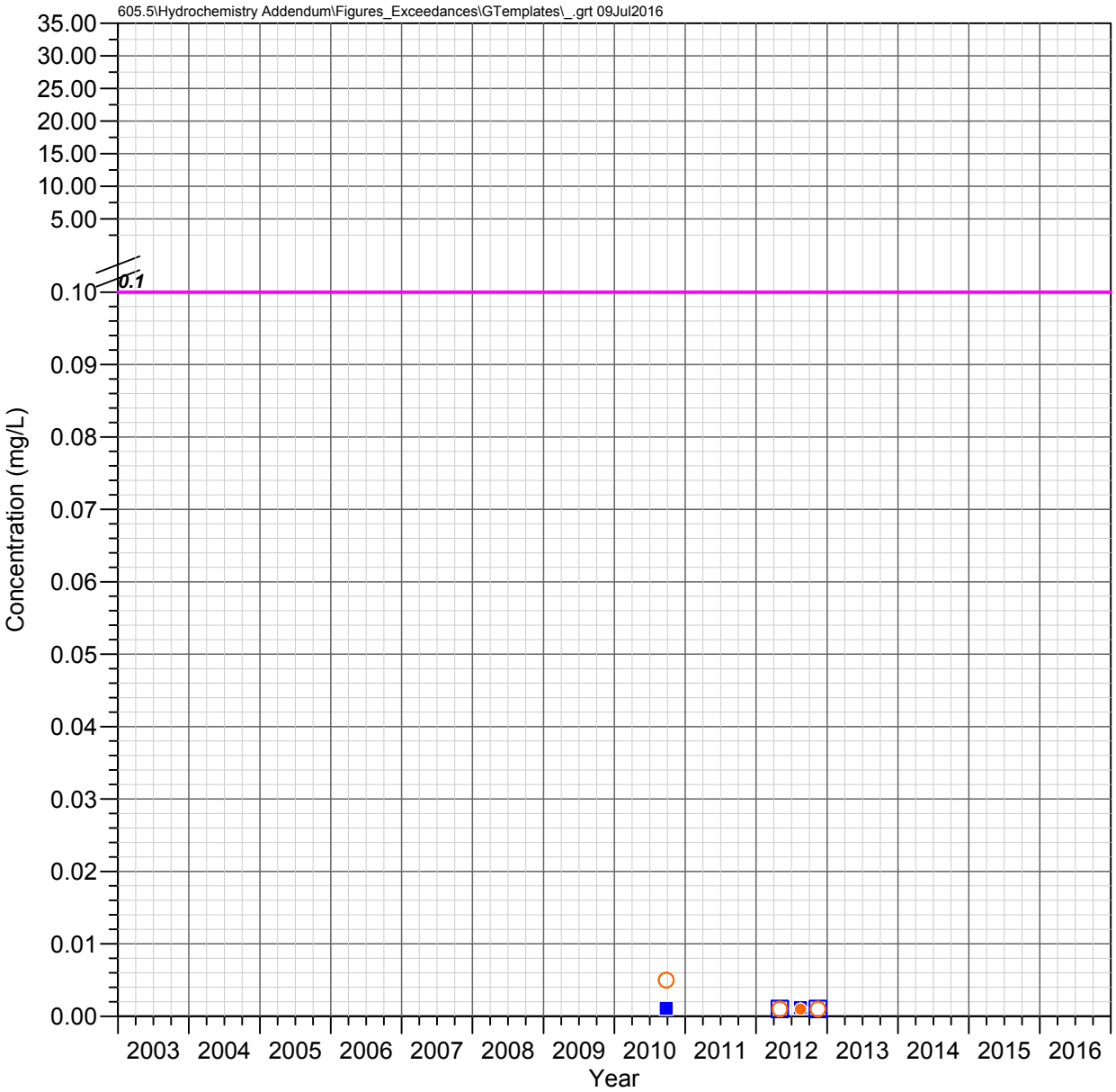


FIGURE E-472. NICKEL CONCENTRATIONS OBSERVED AT HRES-09, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-10
Apache Leap Tuff Aquifer

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)

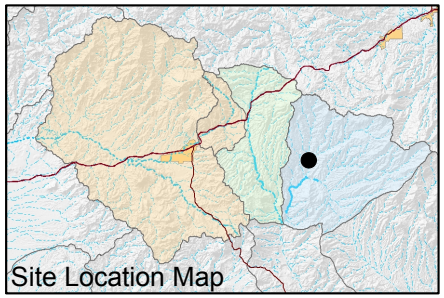
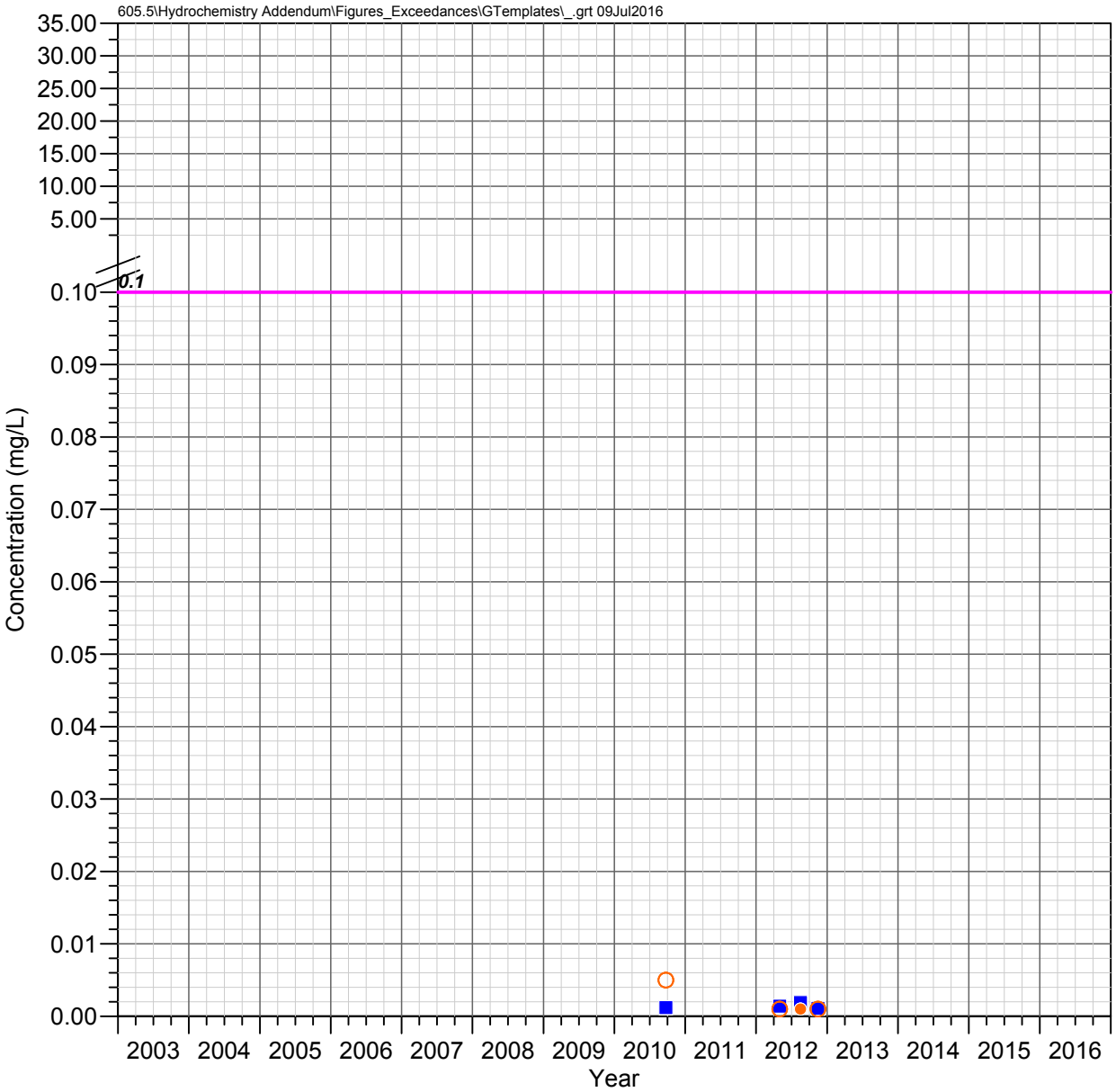


FIGURE E-473. NICKEL CONCENTRATIONS OBSERVED AT HRES-10, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-11
Apache Leap Tuff Aquifer

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)

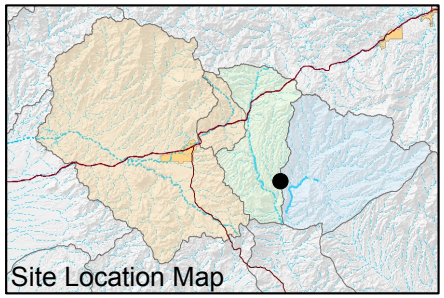
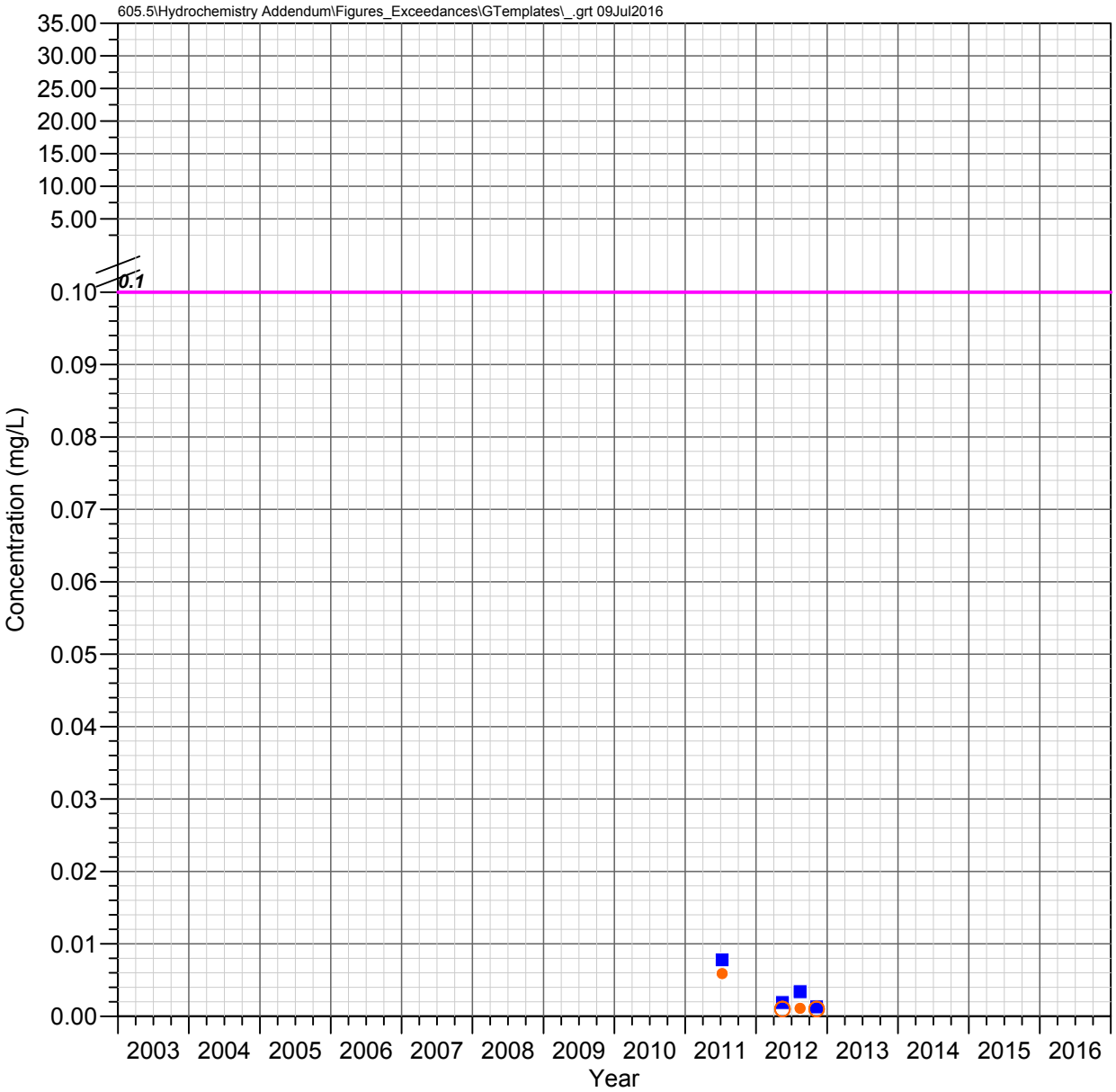


FIGURE E-474. NICKEL CONCENTRATIONS OBSERVED AT HRES-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-12
Apache Leap Tuff Aquifer

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)

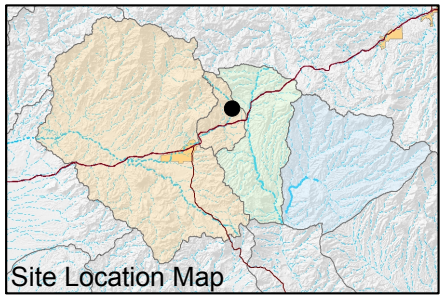
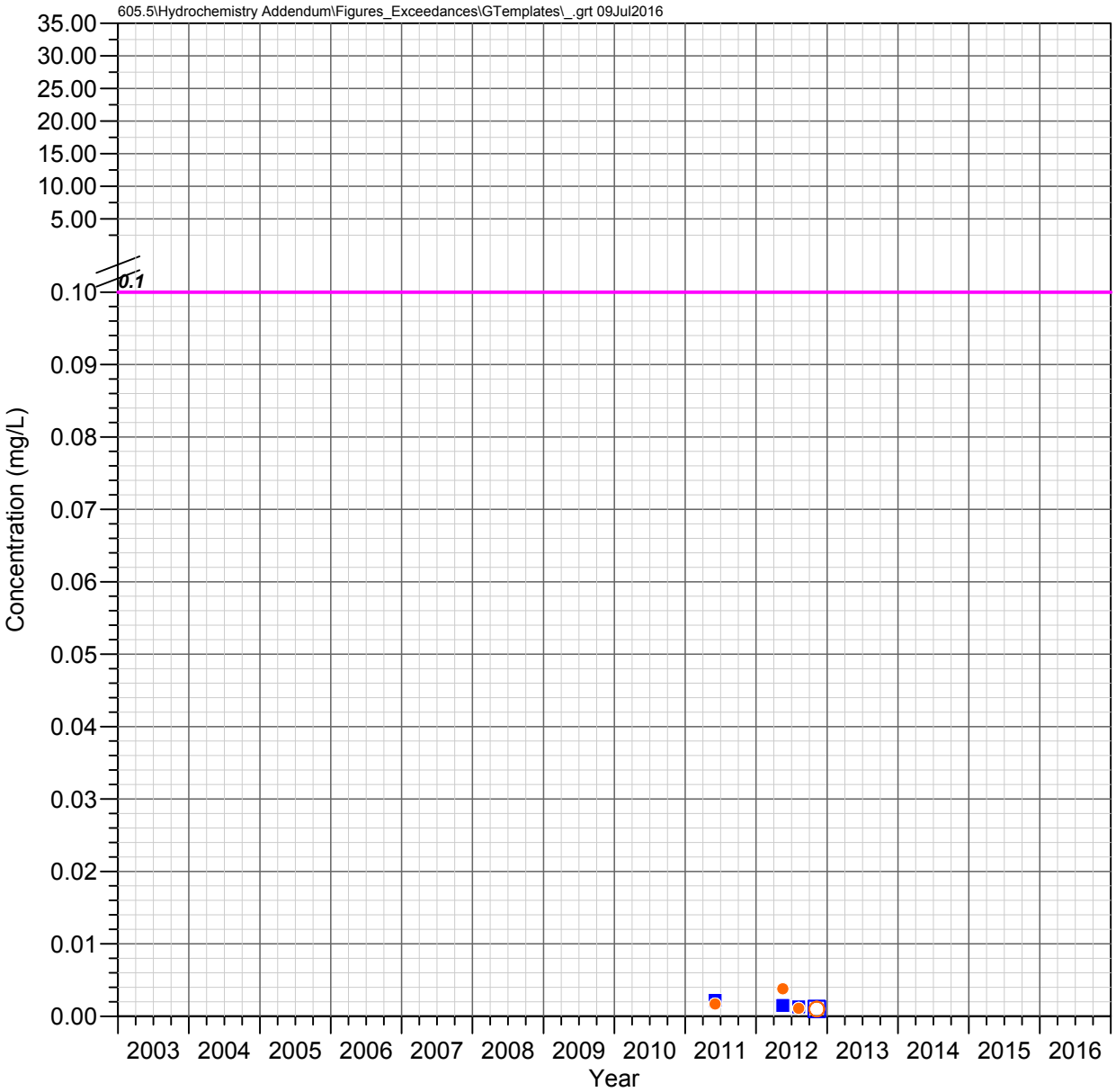


FIGURE E-475. NICKEL CONCENTRATIONS OBSERVED AT HRES-12, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-13
Apache Leap Tuff Aquifer

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)

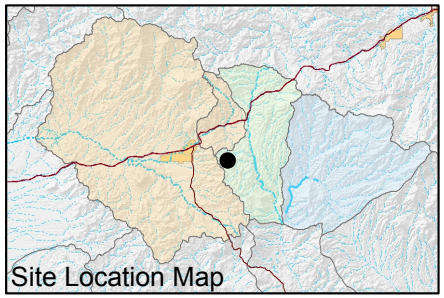
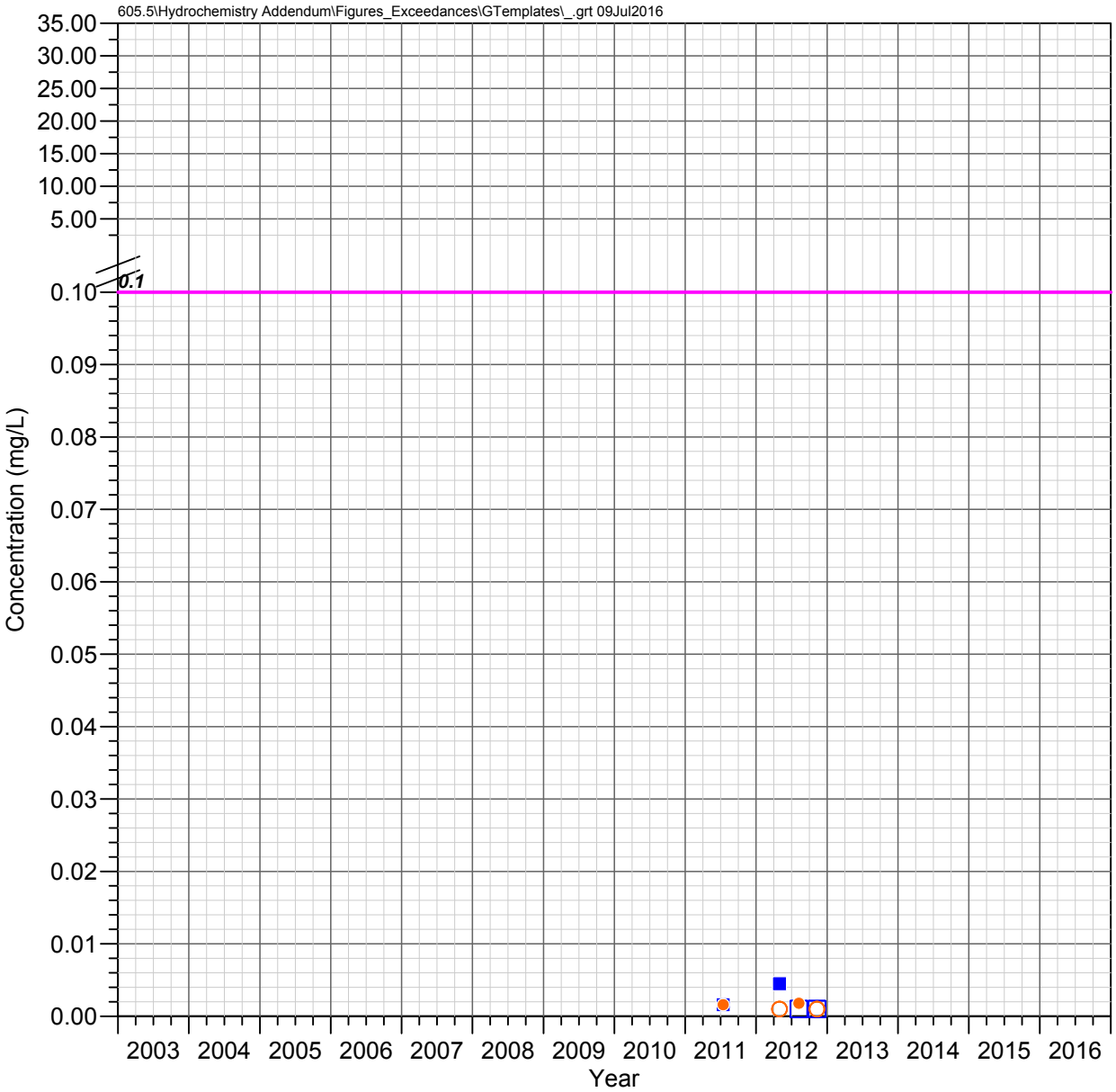


FIGURE E-476. NICKEL CONCENTRATIONS OBSERVED AT HRES-13, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-14
Apache Leap Tuff Aquifer

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)

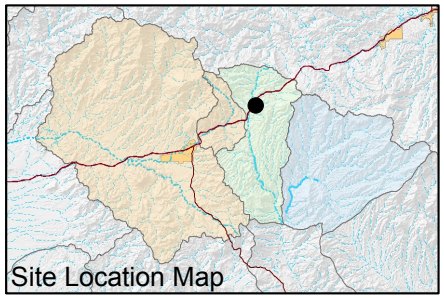
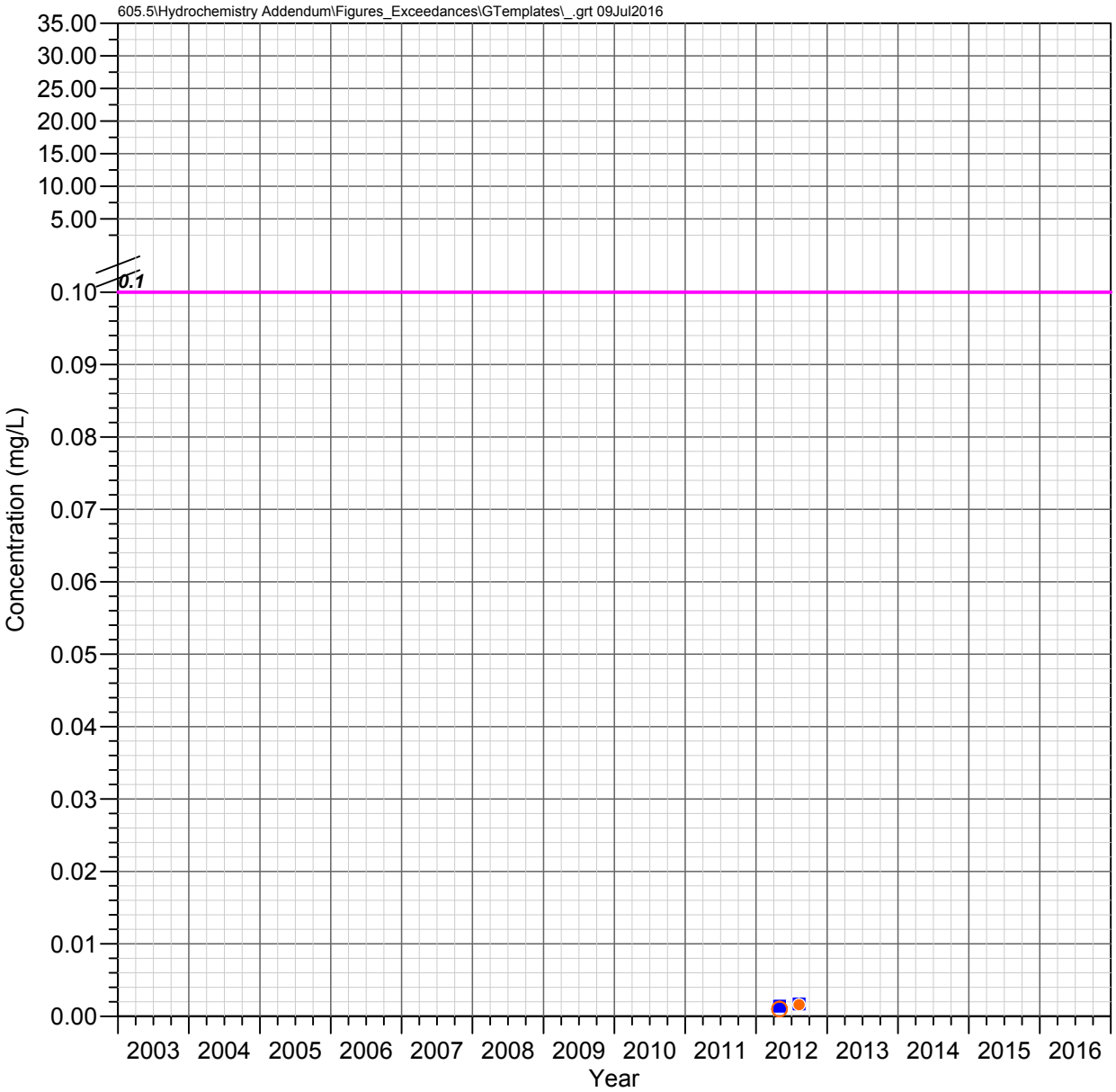


FIGURE E-477. NICKEL CONCENTRATIONS OBSERVED AT HRES-14, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-15
Apache Leap Tuff Aquifer

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)

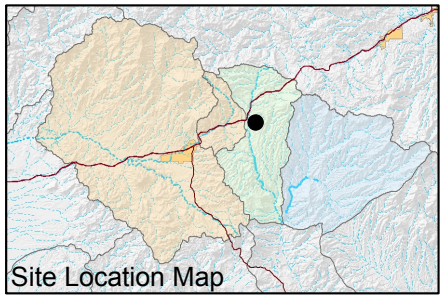
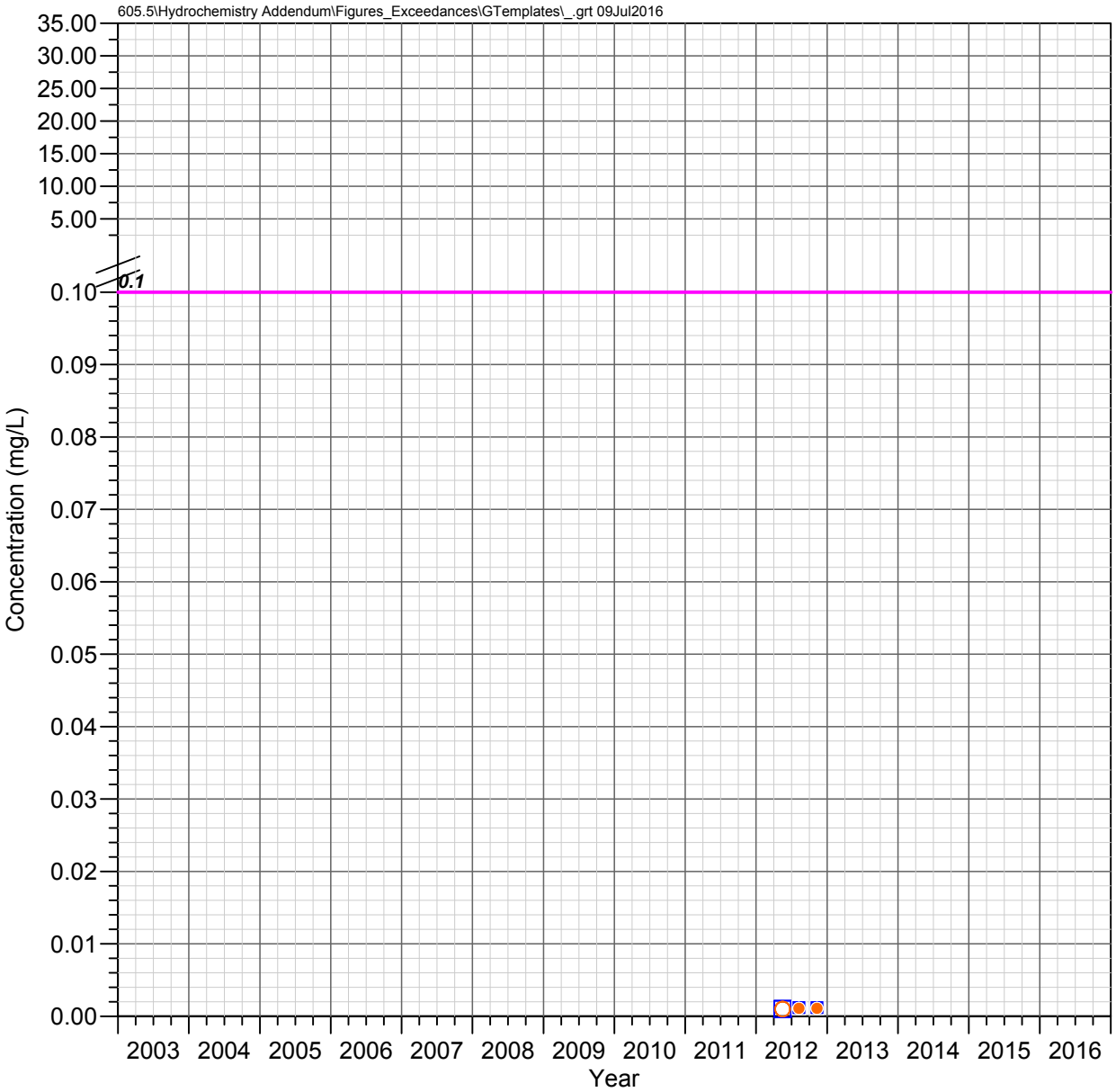


FIGURE E-478. NICKEL CONCENTRATIONS OBSERVED AT HRES-15, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-17
Apache Leap Tuff Aquifer

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)

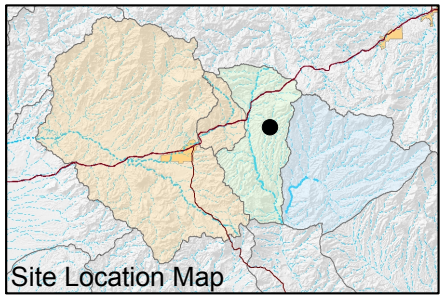
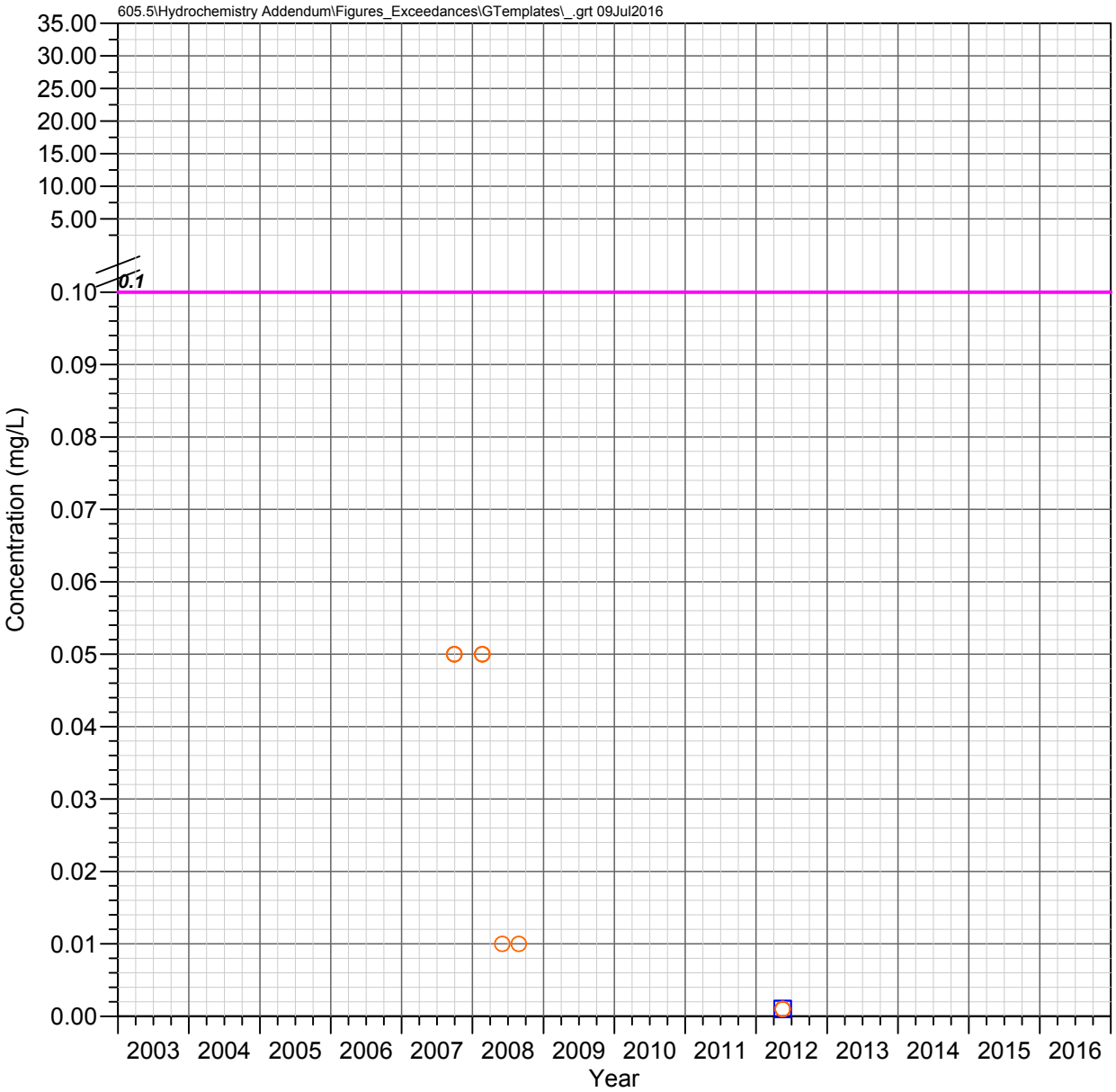


FIGURE E-479. NICKEL CONCENTRATIONS OBSERVED AT HRES-17, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MJ-11
Apache Leap Tuff Aquifer

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)

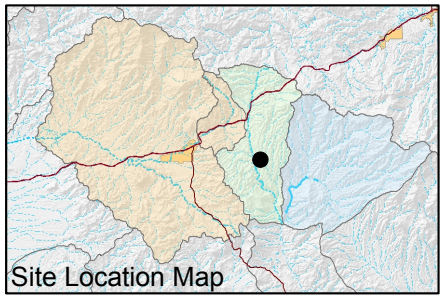
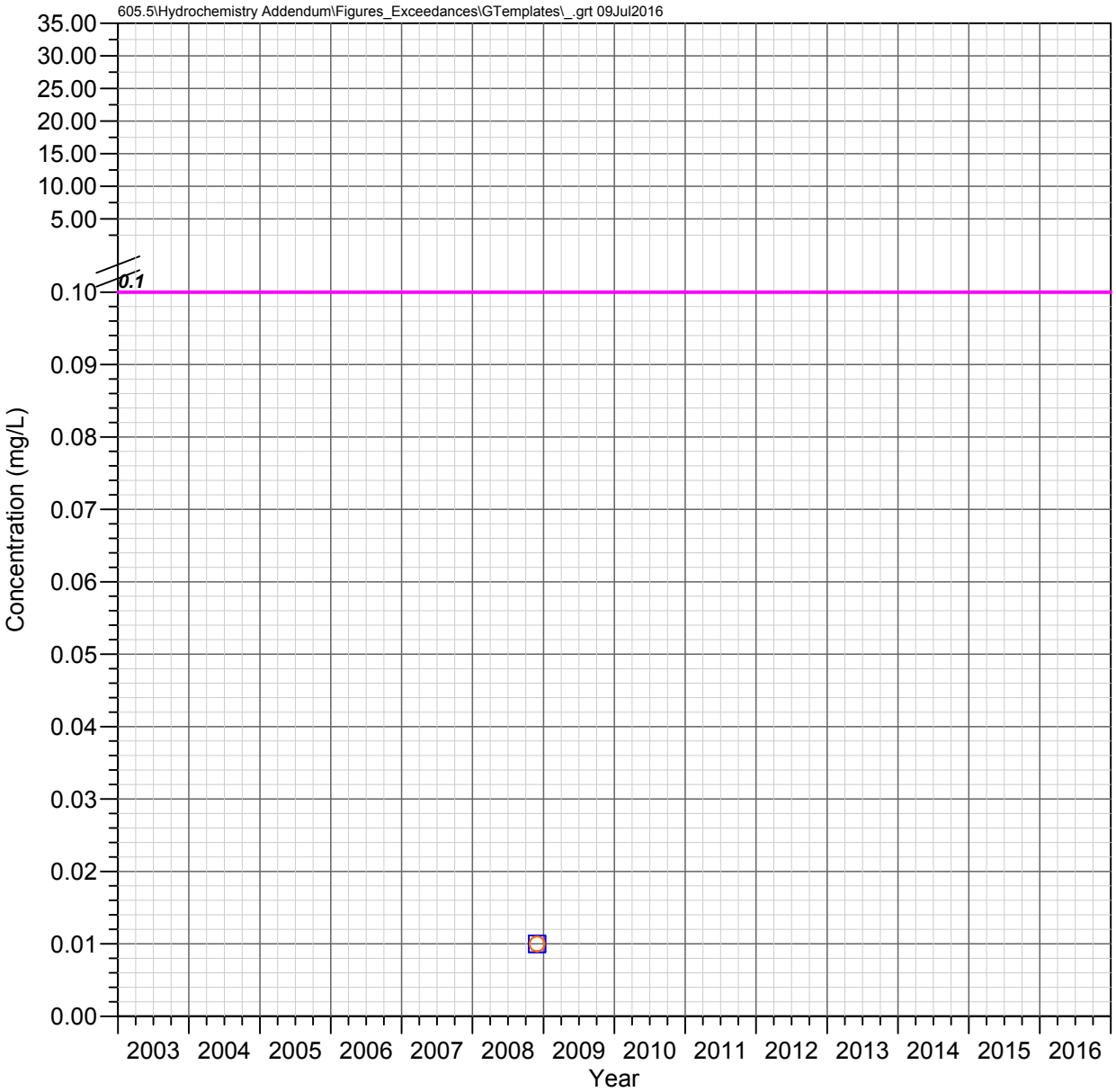


FIGURE E-480. NICKEL CONCENTRATIONS OBSERVED AT MJ-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-01
Deep Groundwater System

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)

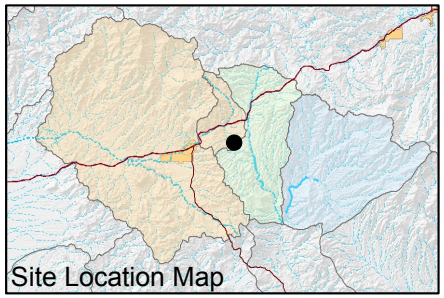
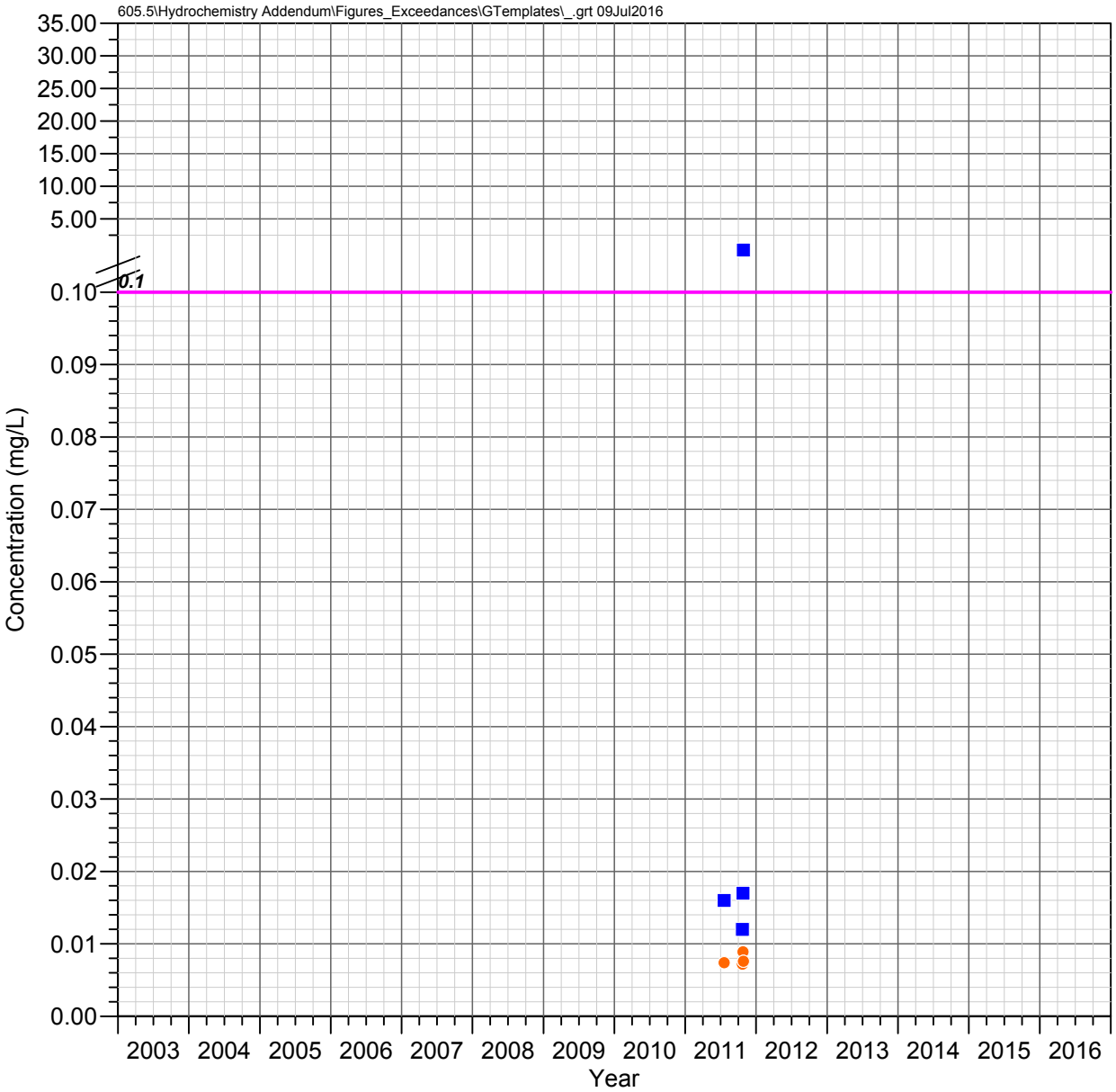


FIGURE E-481. NICKEL CONCENTRATIONS OBSERVED AT DHRES-01, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-02
Deep Groundwater System

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)

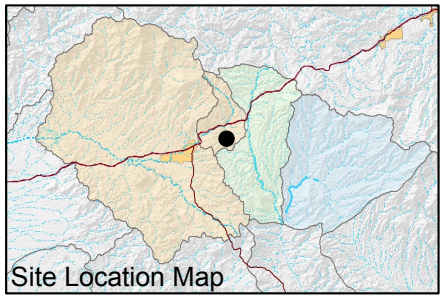
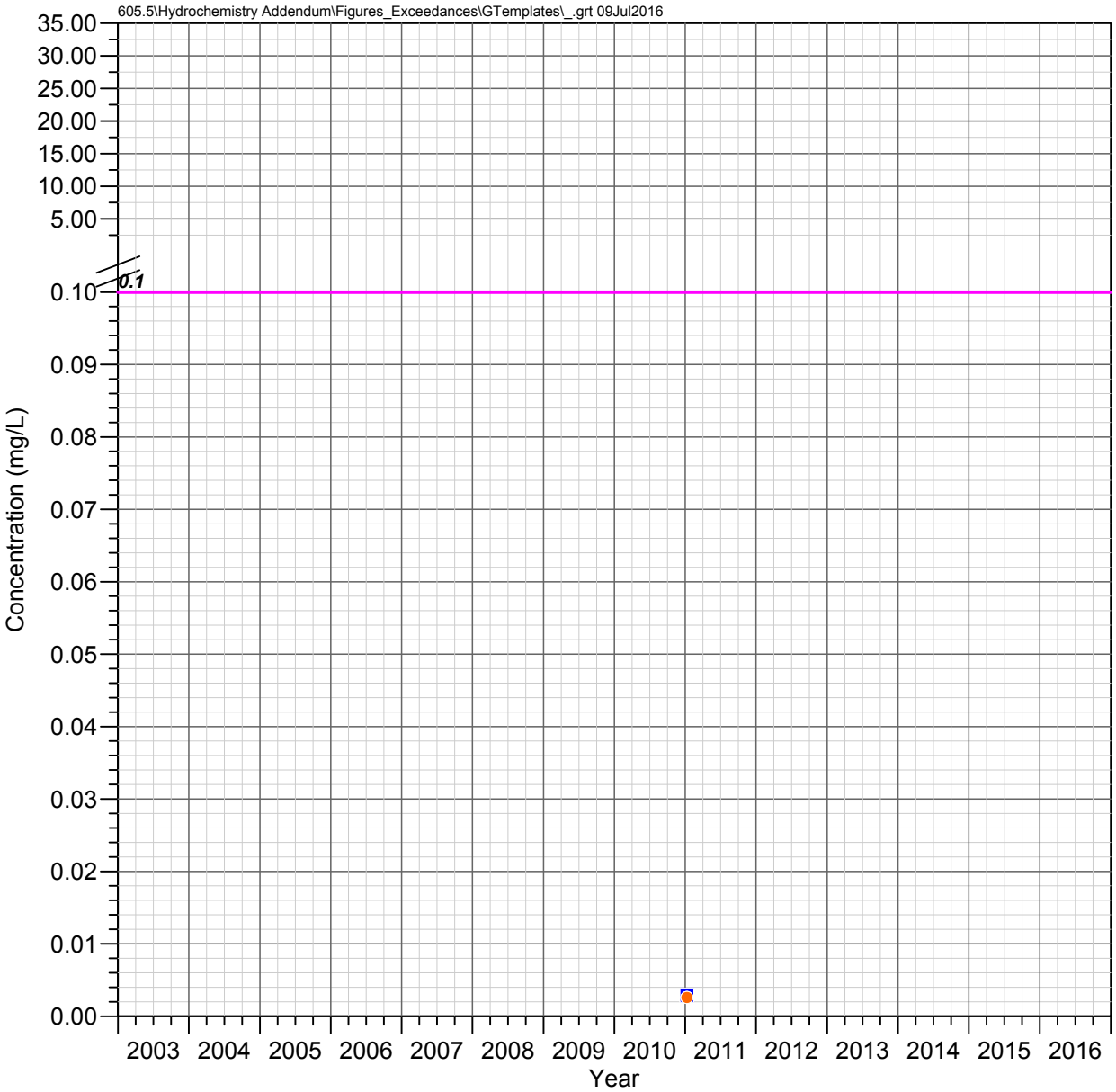


FIGURE E-482. NICKEL CONCENTRATIONS OBSERVED AT DHRES-02, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-06
Deep Groundwater System

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)

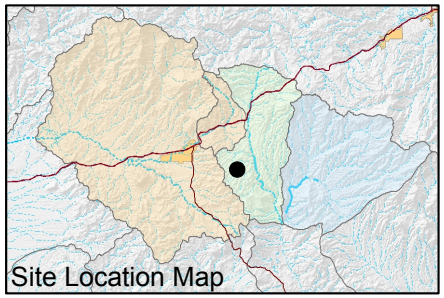
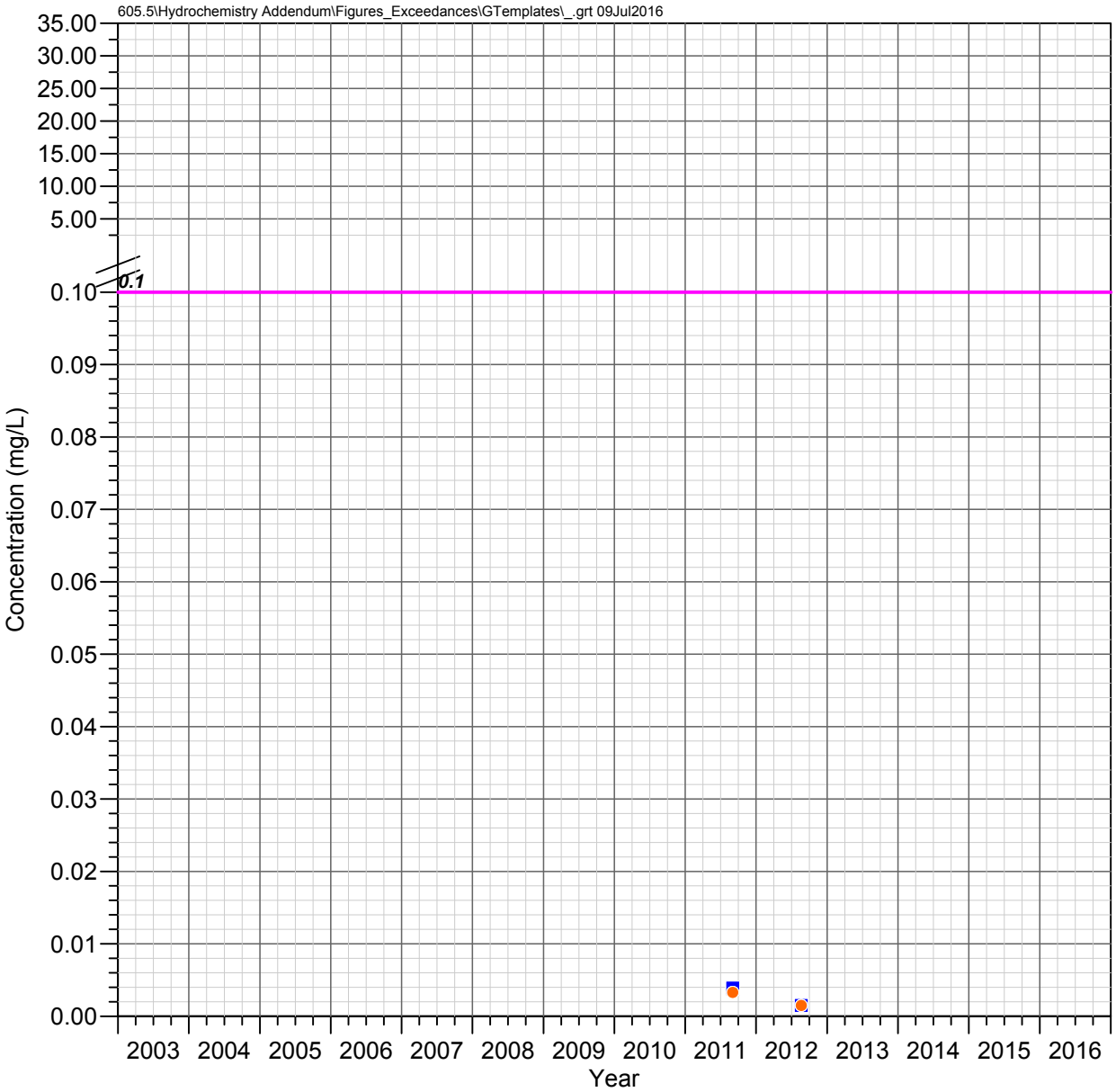


FIGURE E-483. NICKEL CONCENTRATIONS OBSERVED AT DHRES-06, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-09
Deep Groundwater System

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)

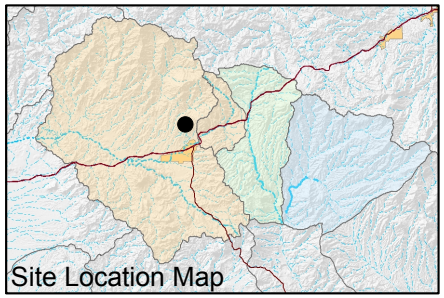
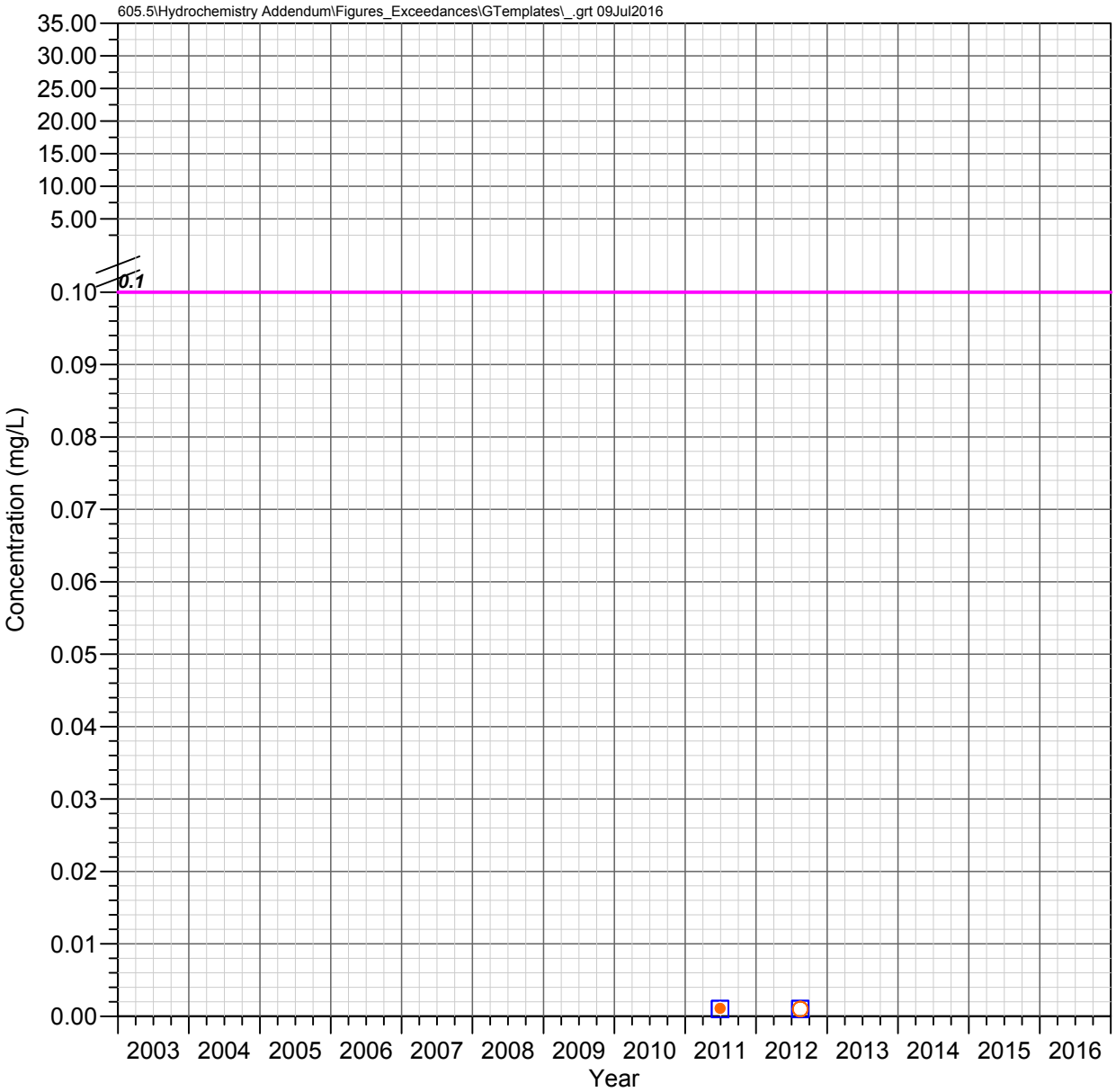


FIGURE E-484. NICKEL CONCENTRATIONS OBSERVED AT DHRES-09, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-11
Deep Groundwater System

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)

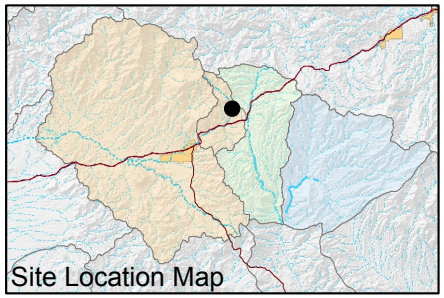
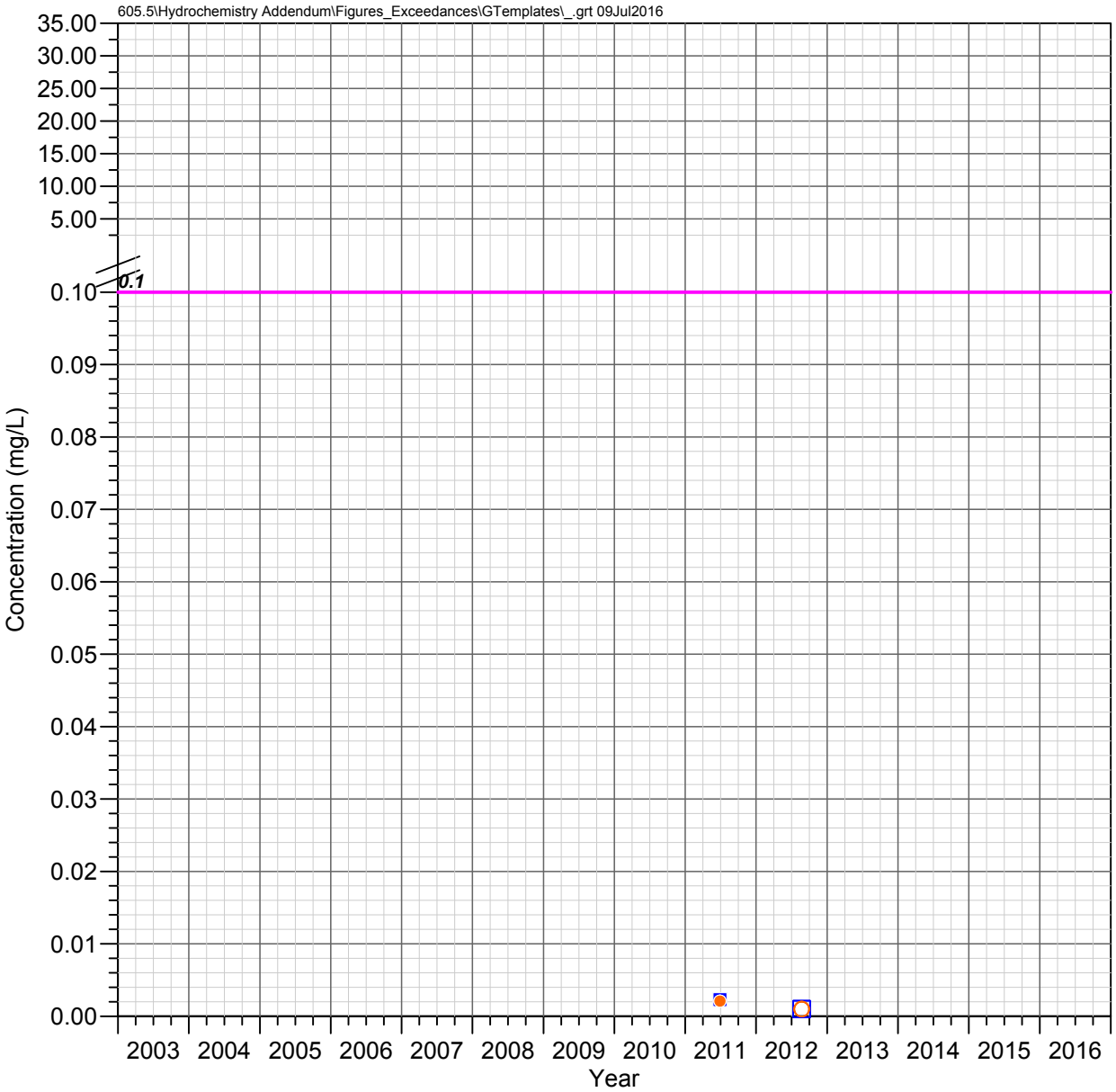


FIGURE E-485. NICKEL CONCENTRATIONS OBSERVED AT DHRES-11, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-13
Deep Groundwater System

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)

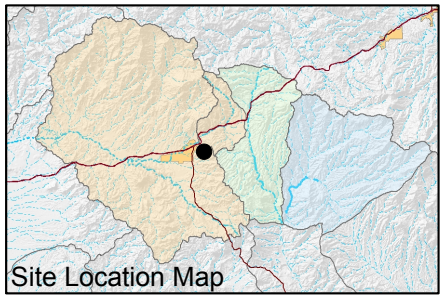
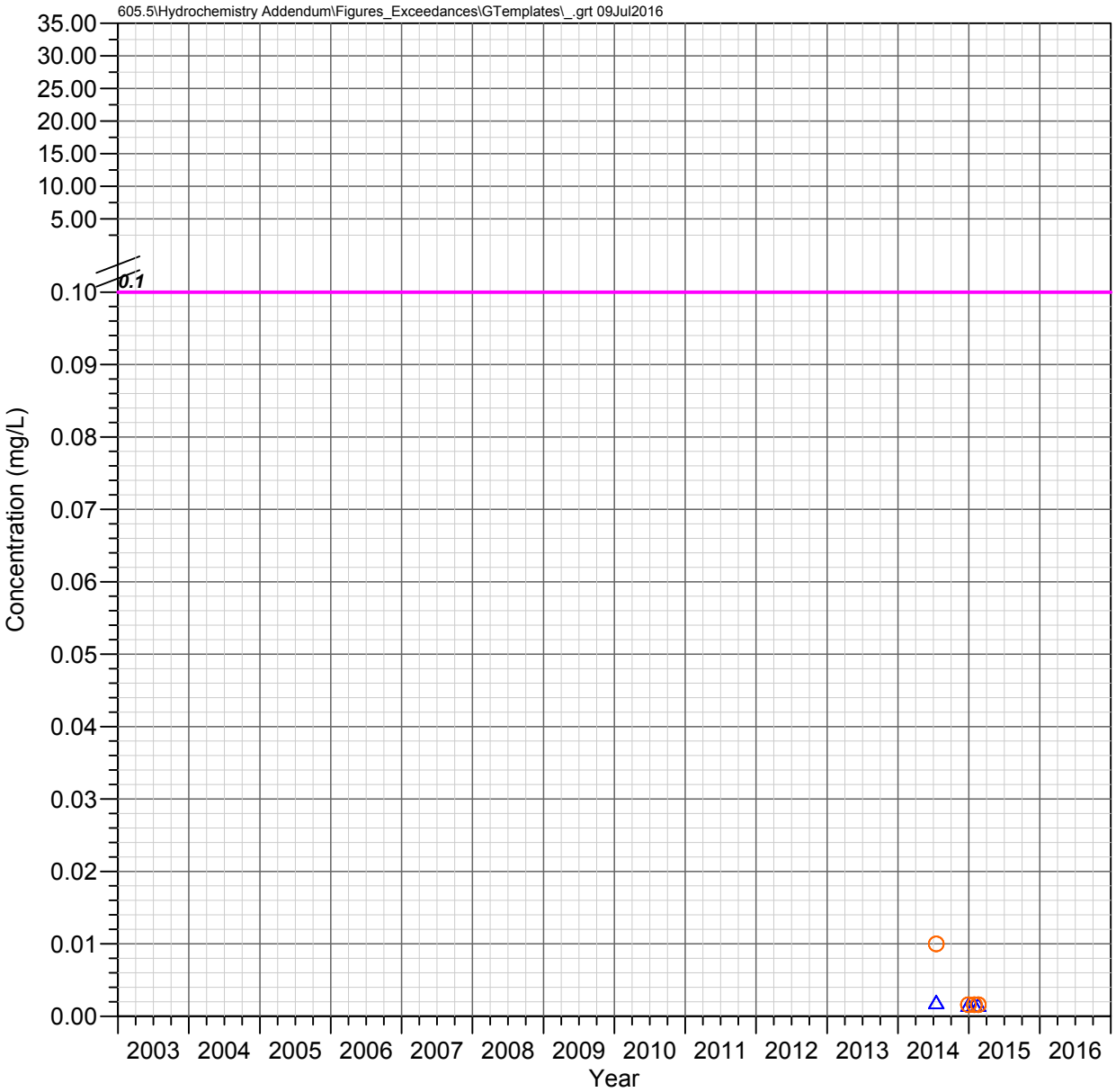


FIGURE E-486. NICKEL CONCENTRATIONS OBSERVED AT DHRES-13, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-15
Deep Groundwater System

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Numeric Aquifer Water Quality Standards (UNS, 0.1 mg/L)

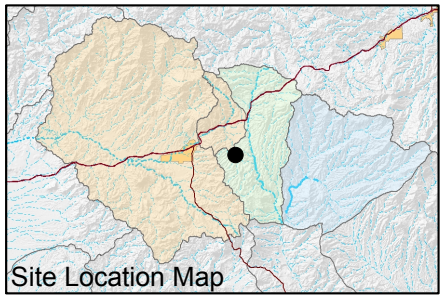
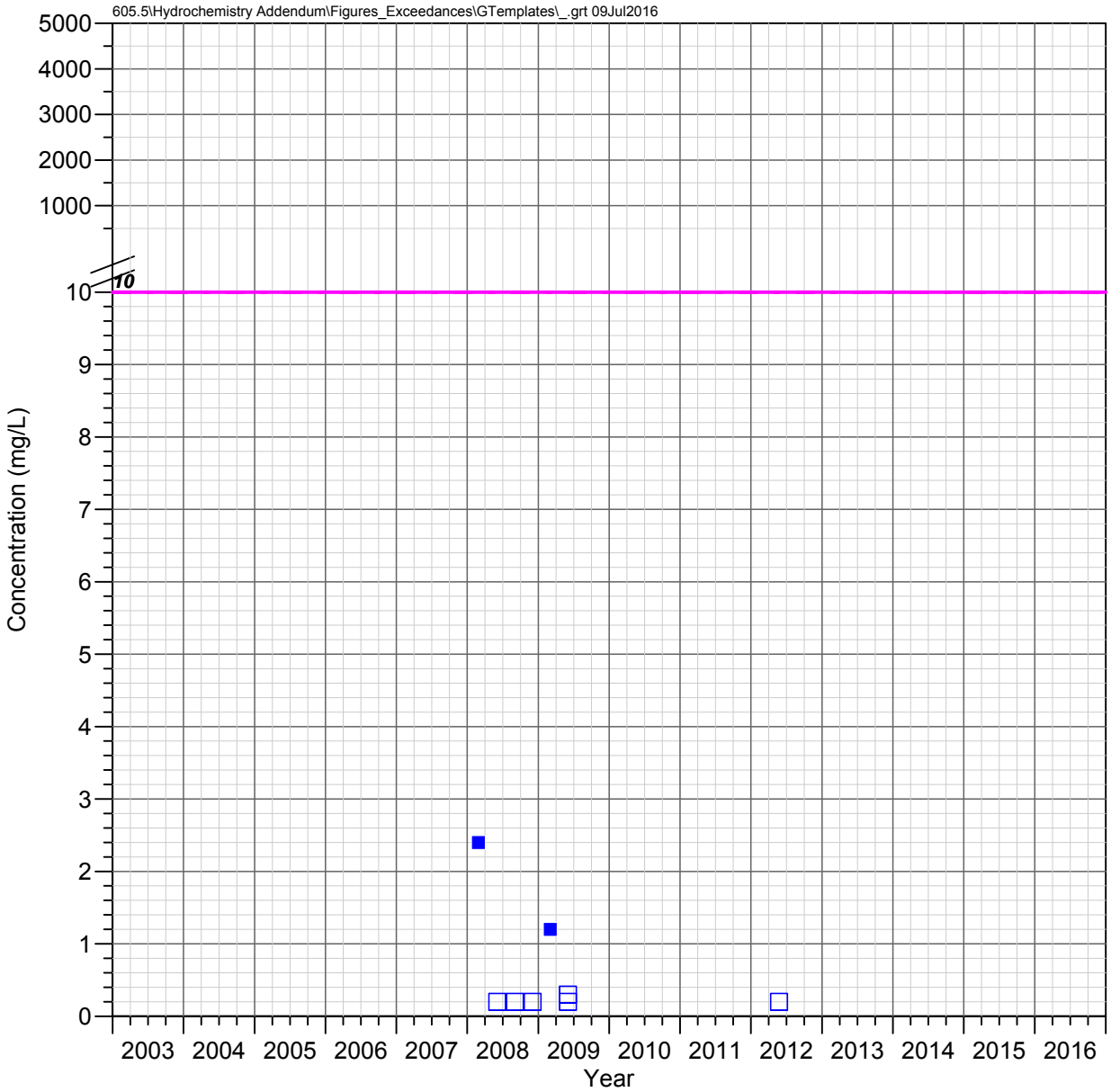


FIGURE E-487. NICKEL CONCENTRATIONS OBSERVED AT DHRES-15, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Hackberry Windmill Well
Shallow Groundwater System

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 10 mg/L)
- EPA Maximum Contaminant Levels (UNS, 10 mg/L)

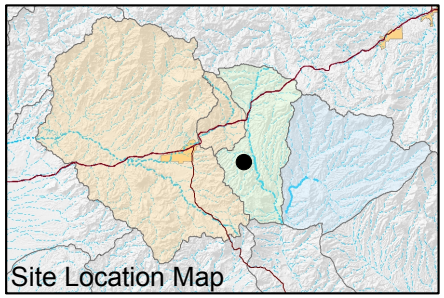
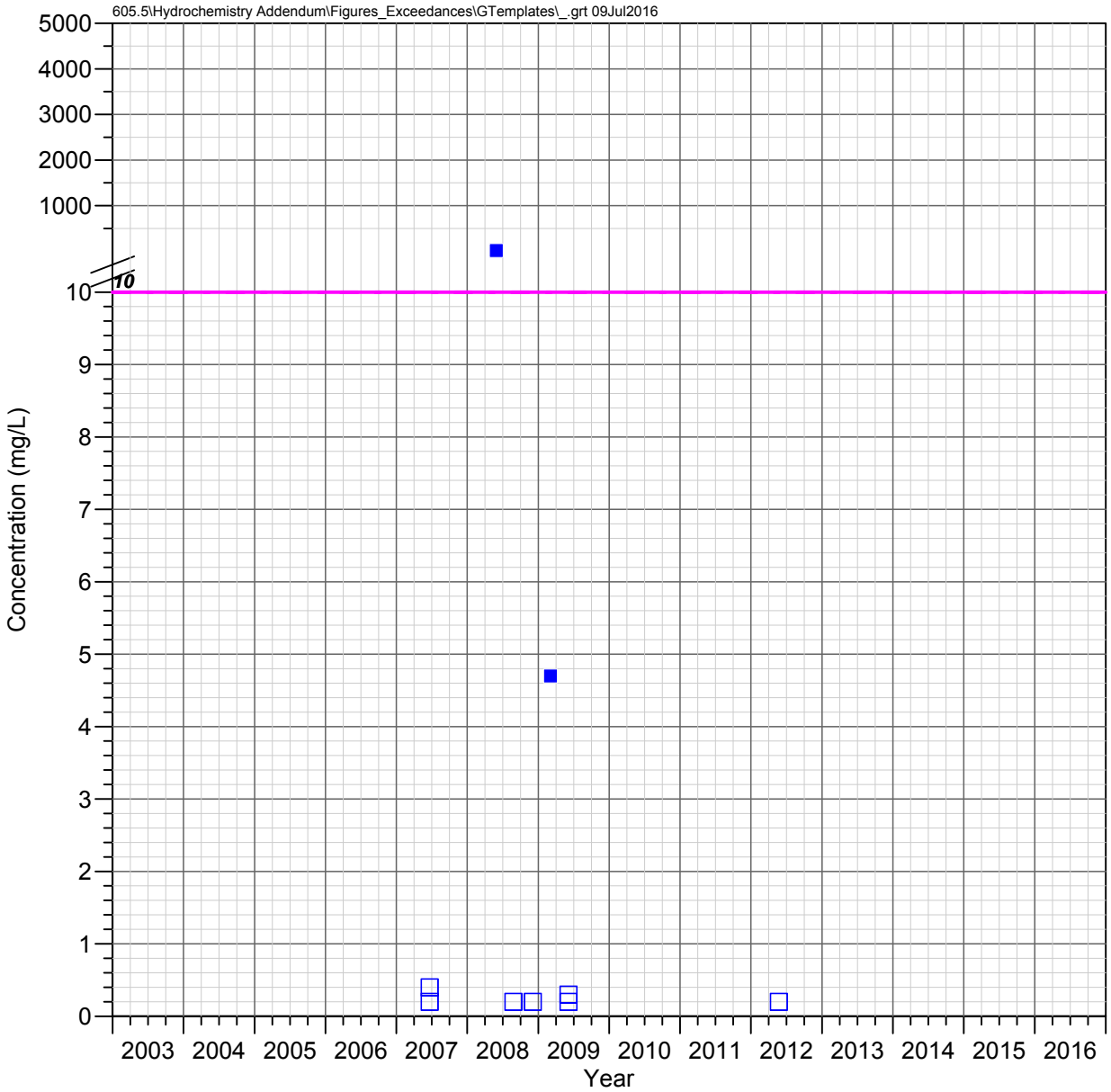


FIGURE E-488. NITRATE AS N CONCENTRATIONS OBSERVED AT HACKBERRY WINDMILL WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



JI Ranch Corral Well
Shallow Groundwater System

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 10 mg/L)
- EPA Maximum Contaminant Levels (UNS, 10 mg/L)

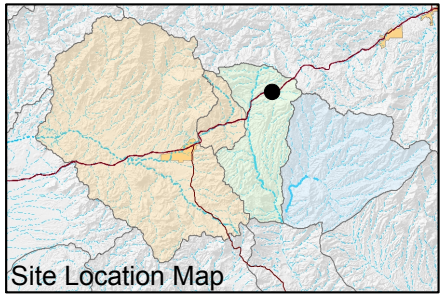
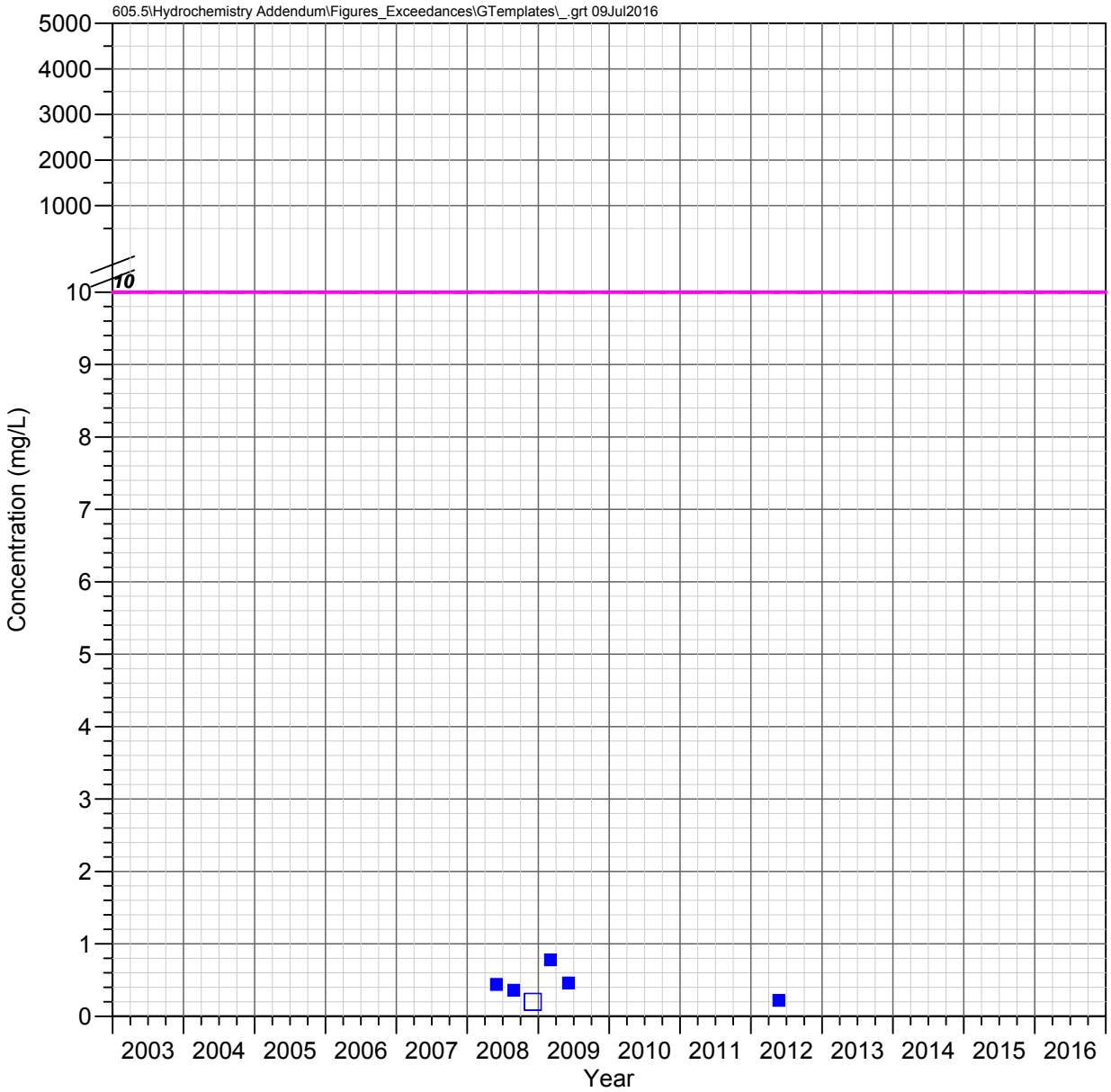


FIGURE E-489. NITRATE AS N CONCENTRATIONS OBSERVED AT JI RANCH CORRAL WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



JI Ranch Middle Well
Shallow Groundwater System

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 10 mg/L)
- EPA Maximum Contaminant Levels (UNS, 10 mg/L)

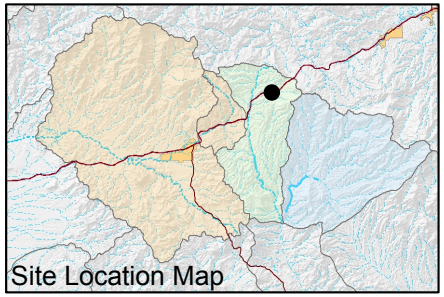
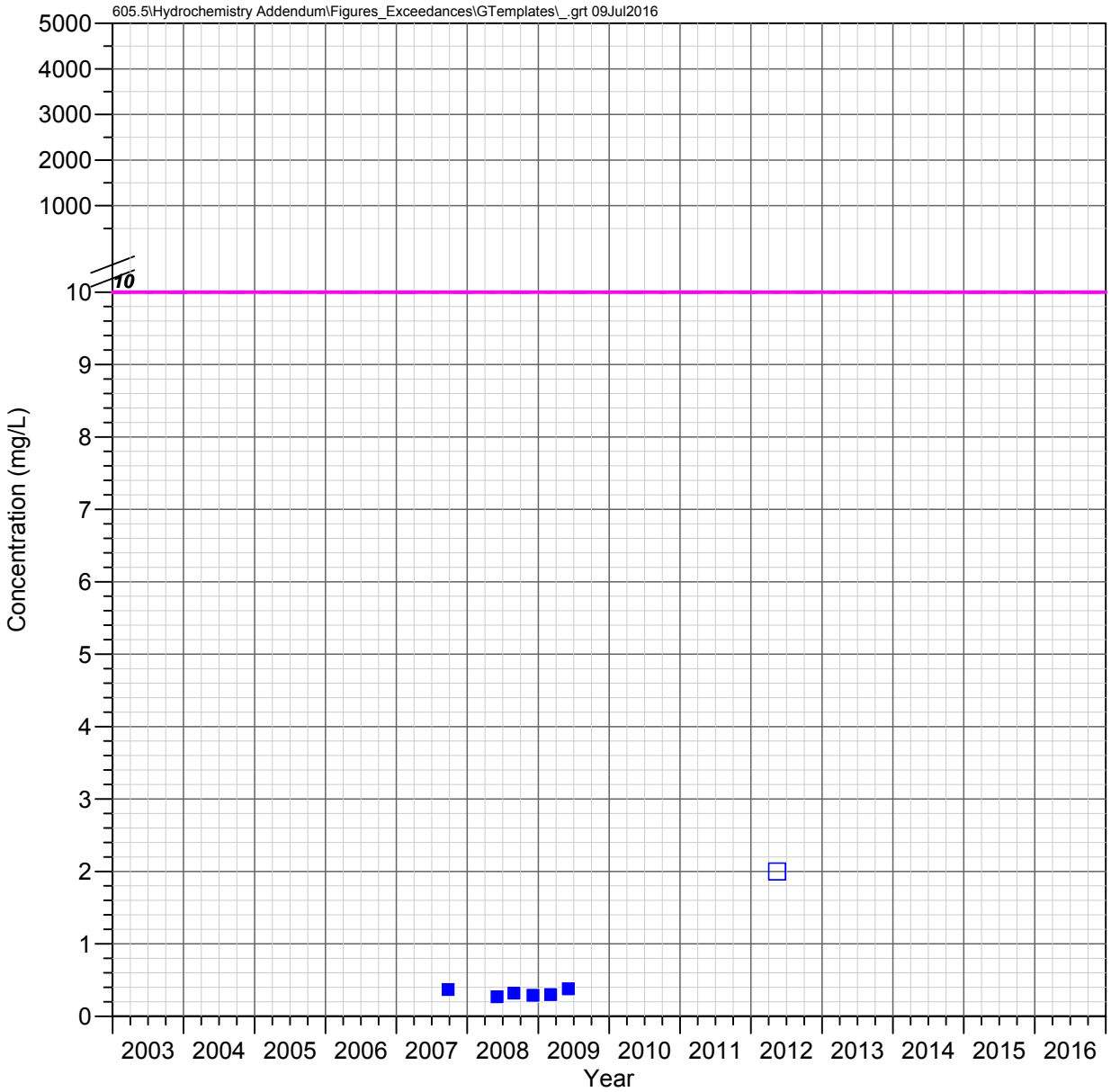


FIGURE E-490. NITRATE AS N CONCENTRATIONS OBSERVED AT JI RANCH MIDDLE WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



A-06
Apache Leap Tuff Aquifer

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 10 mg/L)
- EPA Maximum Contaminant Levels (UNS, 10 mg/L)

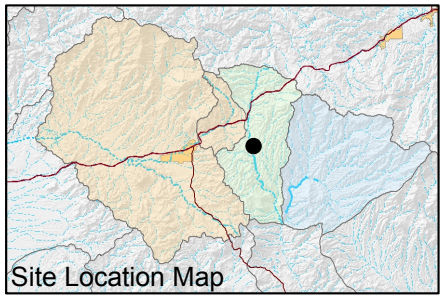
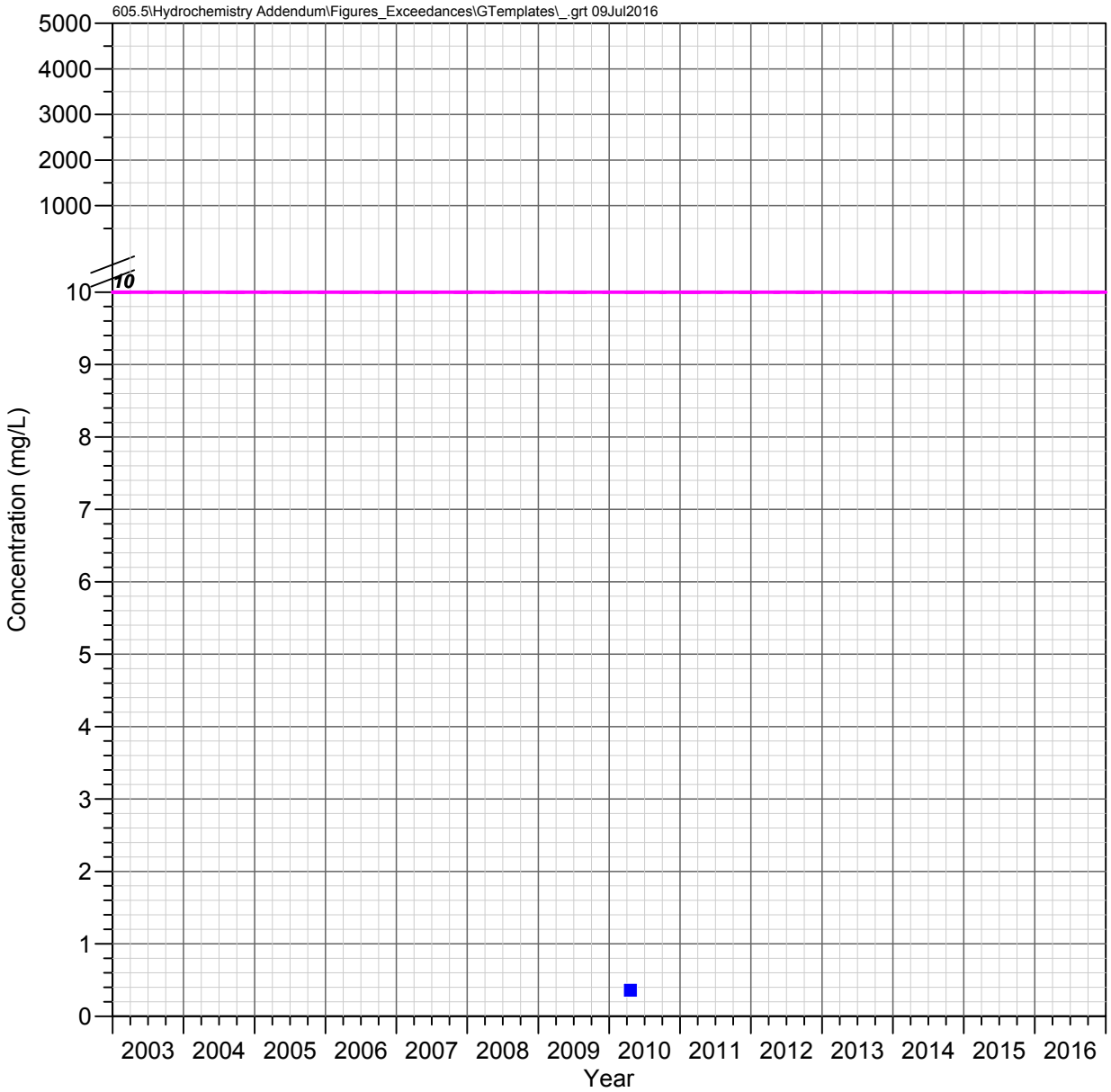


FIGURE E-491. NITRATE AS N CONCENTRATIONS OBSERVED AT A-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



CT Well
Apache Leap Tuff Aquifer

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 10 mg/L)
- EPA Maximum Contaminant Levels (UNS, 10 mg/L)

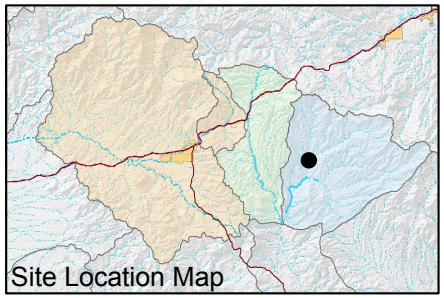
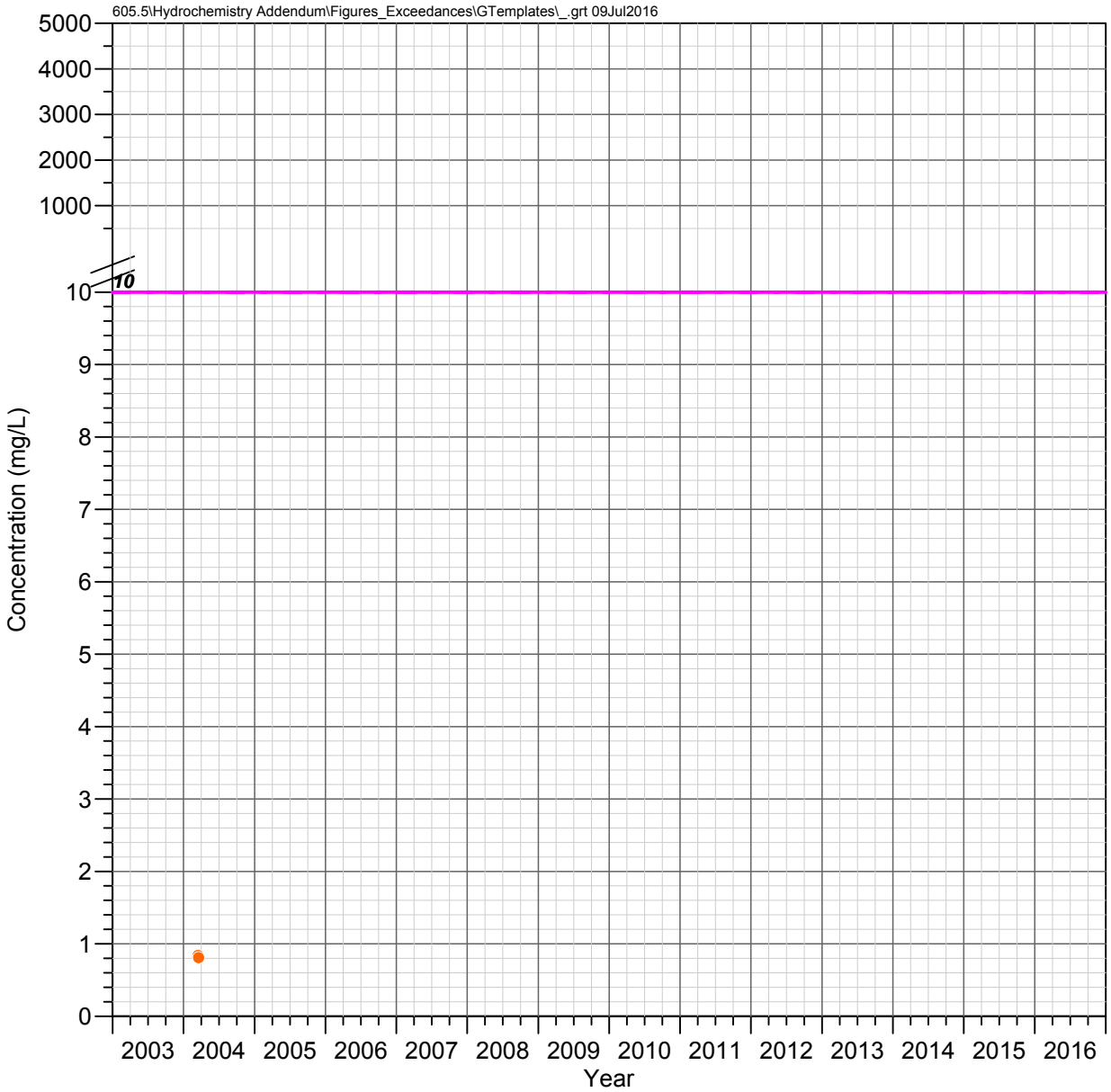


FIGURE E-492. NITRATE AS N CONCENTRATIONS OBSERVED AT CT WELL, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-01
Apache Leap Tuff Aquifer

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 10 mg/L)
- EPA Maximum Contaminant Levels (UNS, 10 mg/L)

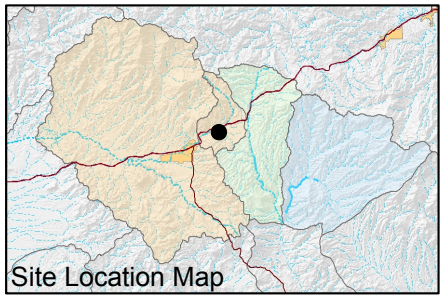
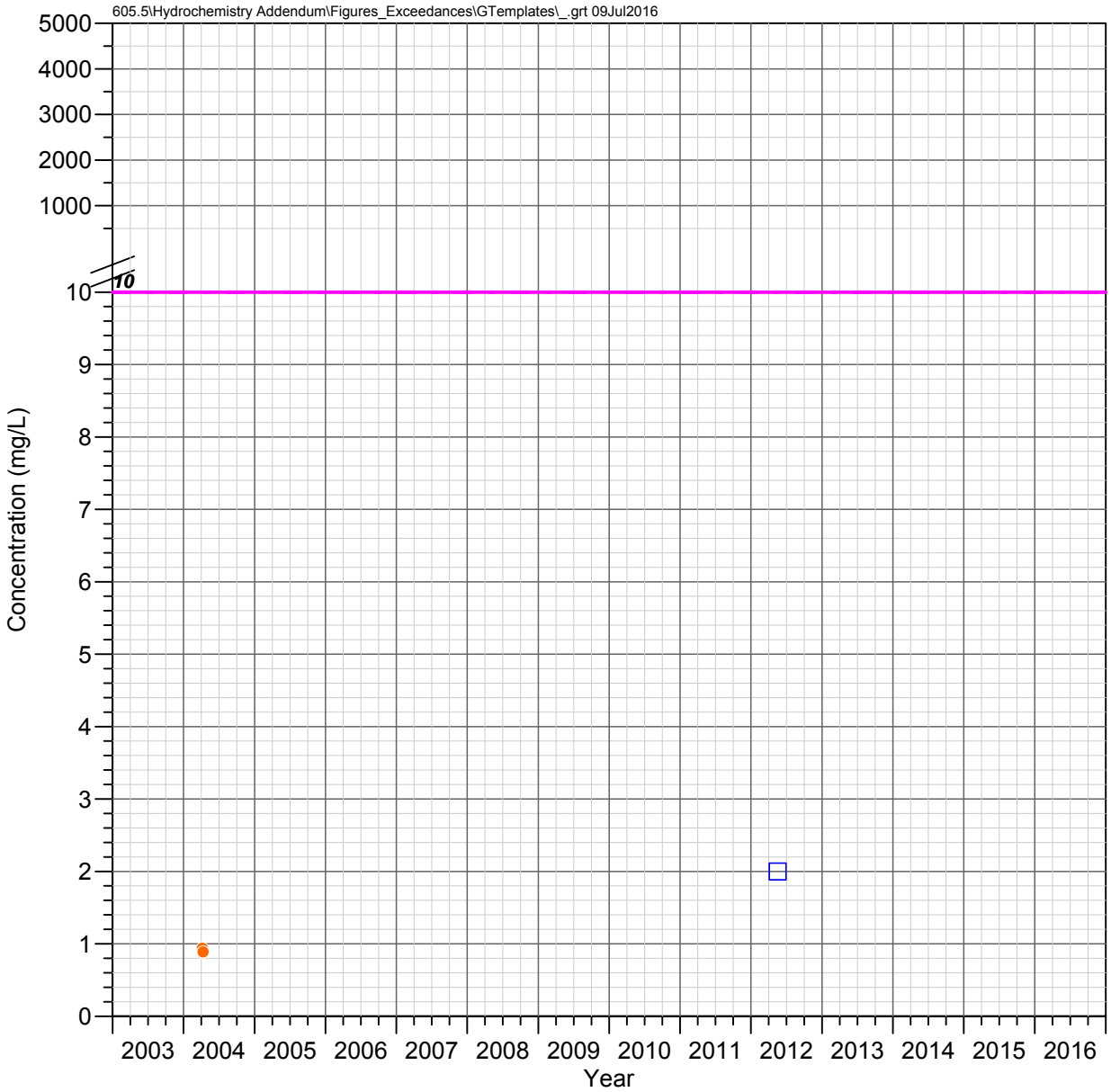


FIGURE E-493. NITRATE AS N CONCENTRATIONS OBSERVED AT HRES-01, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-02
Apache Leap Tuff Aquifer

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 10 mg/L)
- EPA Maximum Contaminant Levels (UNS, 10 mg/L)

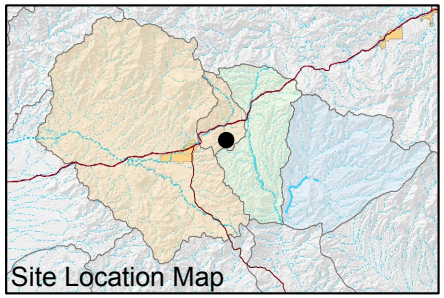
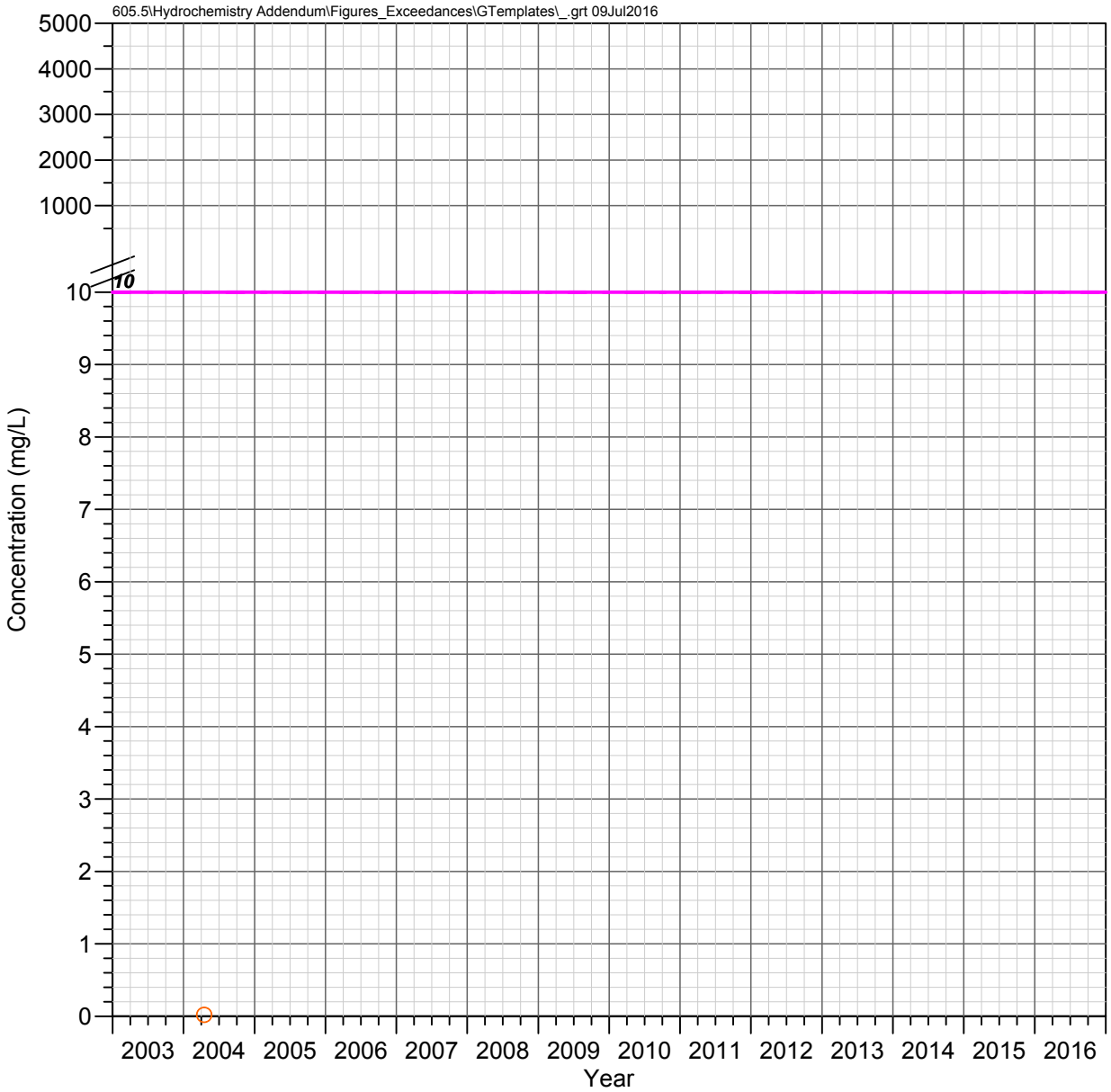


FIGURE E-494. NITRATE AS N CONCENTRATIONS OBSERVED AT HRES-02, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-03d
Apache Leap Tuff Aquifer

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 10 mg/L)
- EPA Maximum Contaminant Levels (UNS, 10 mg/L)

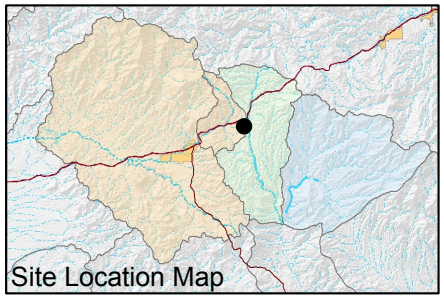
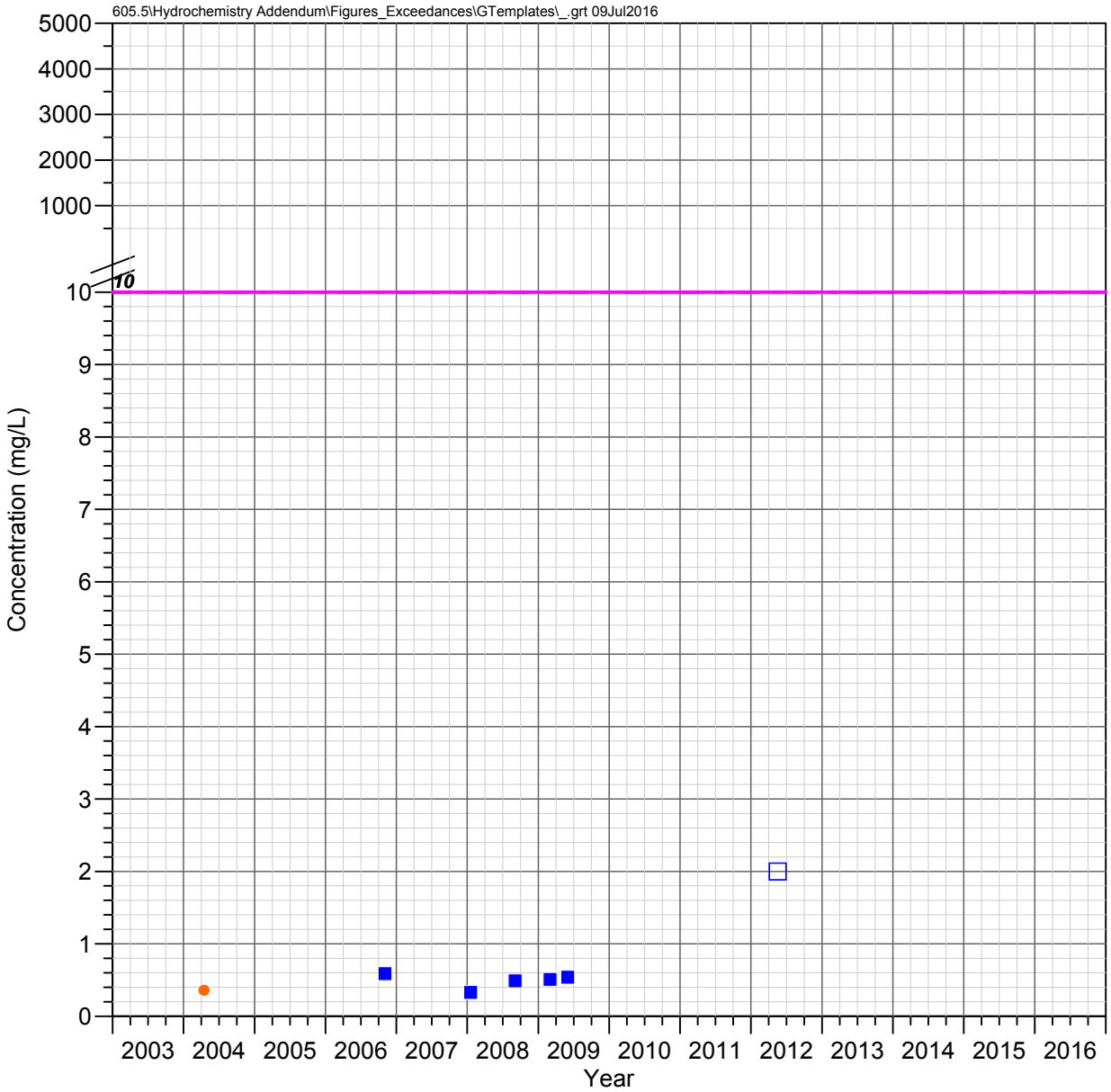


FIGURE E-495. NITRATE AS N CONCENTRATIONS OBSERVED AT HRES-03D, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-04
Apache Leap Tuff Aquifer

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 10 mg/L)
- EPA Maximum Contaminant Levels (UNS, 10 mg/L)

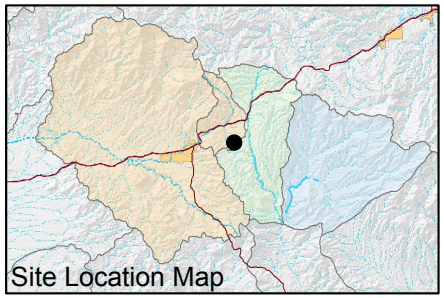
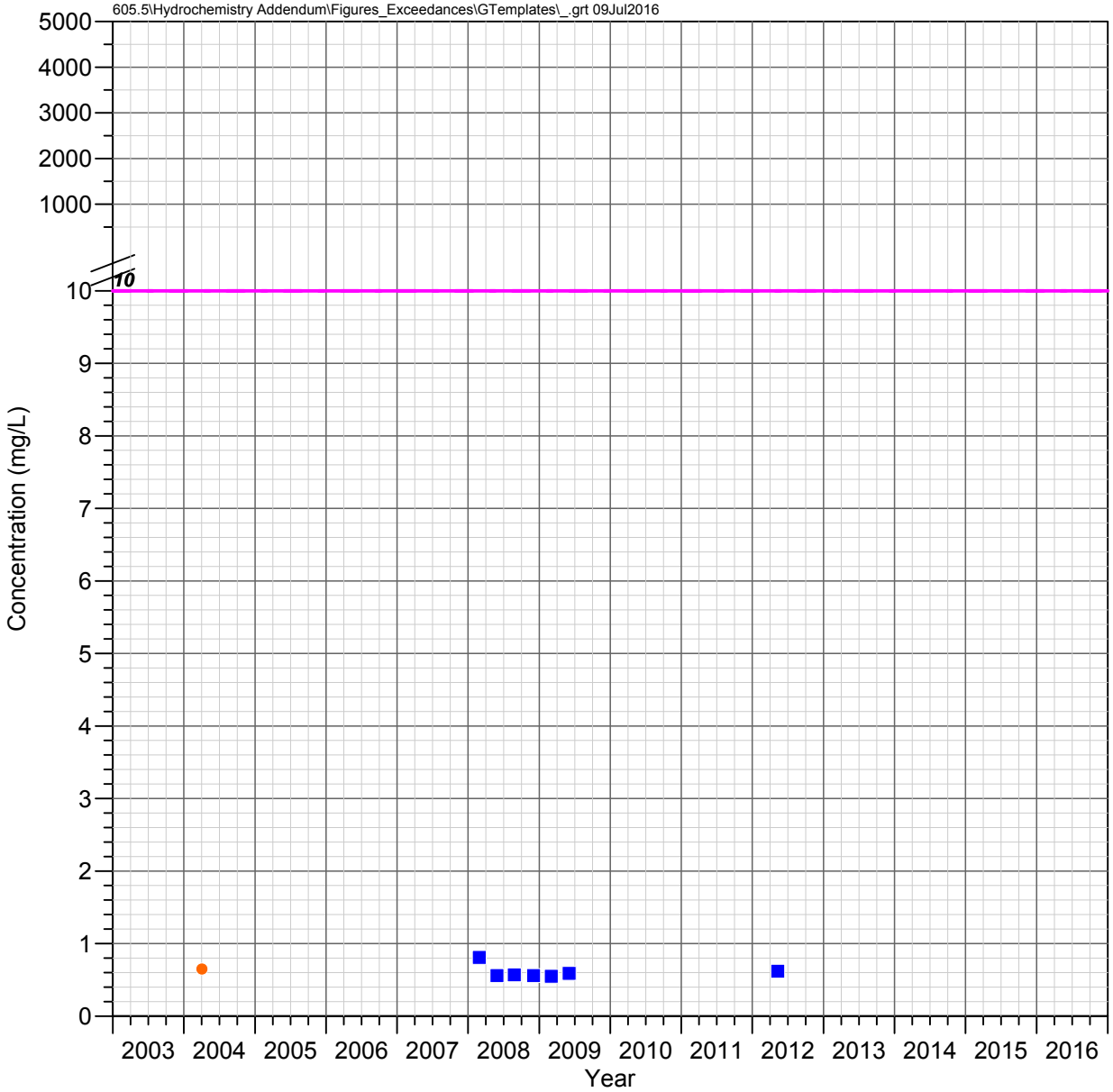


FIGURE E-496. NITRATE AS N CONCENTRATIONS OBSERVED AT HRES-04, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES

605.5\Hydrochemistry Addendum\Figures_Exceedances\GTemplates_.grt 09Jul2016



HRES-05
Apache Leap Tuff Aquifer

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 10 mg/L)
- EPA Maximum Contaminant Levels (UNS, 10 mg/L)

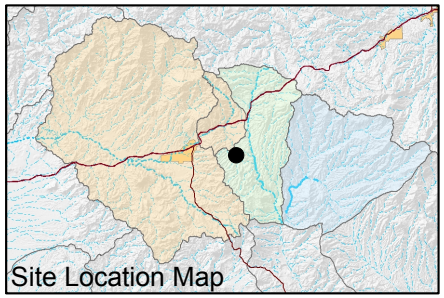
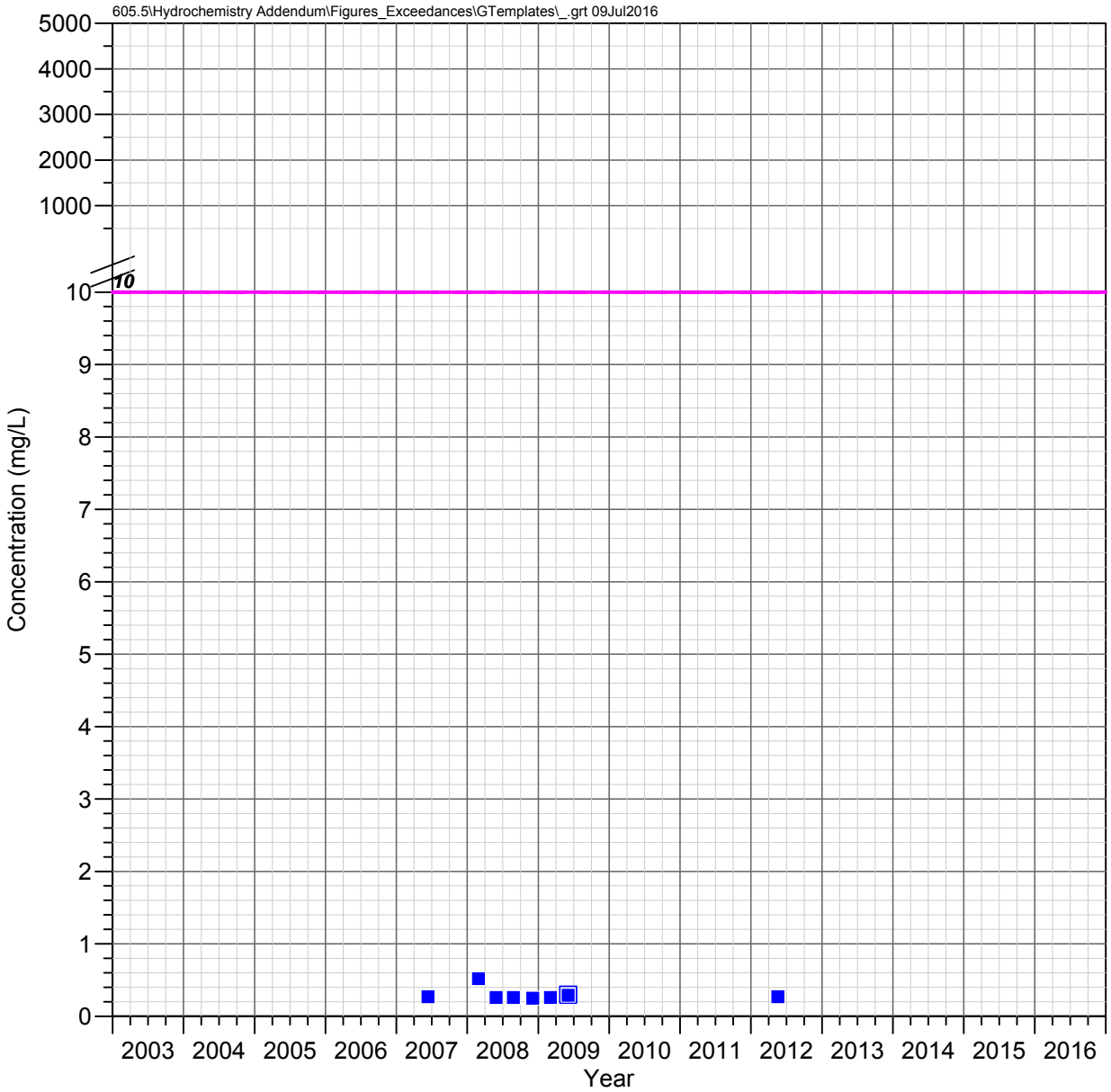


FIGURE E-497. NITRATE AS N CONCENTRATIONS OBSERVED AT HRES-05, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-06
Apache Leap Tuff Aquifer

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 10 mg/L)
- EPA Maximum Contaminant Levels (UNS, 10 mg/L)

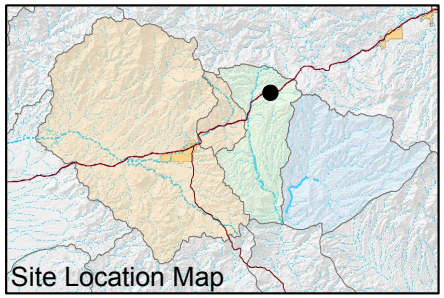
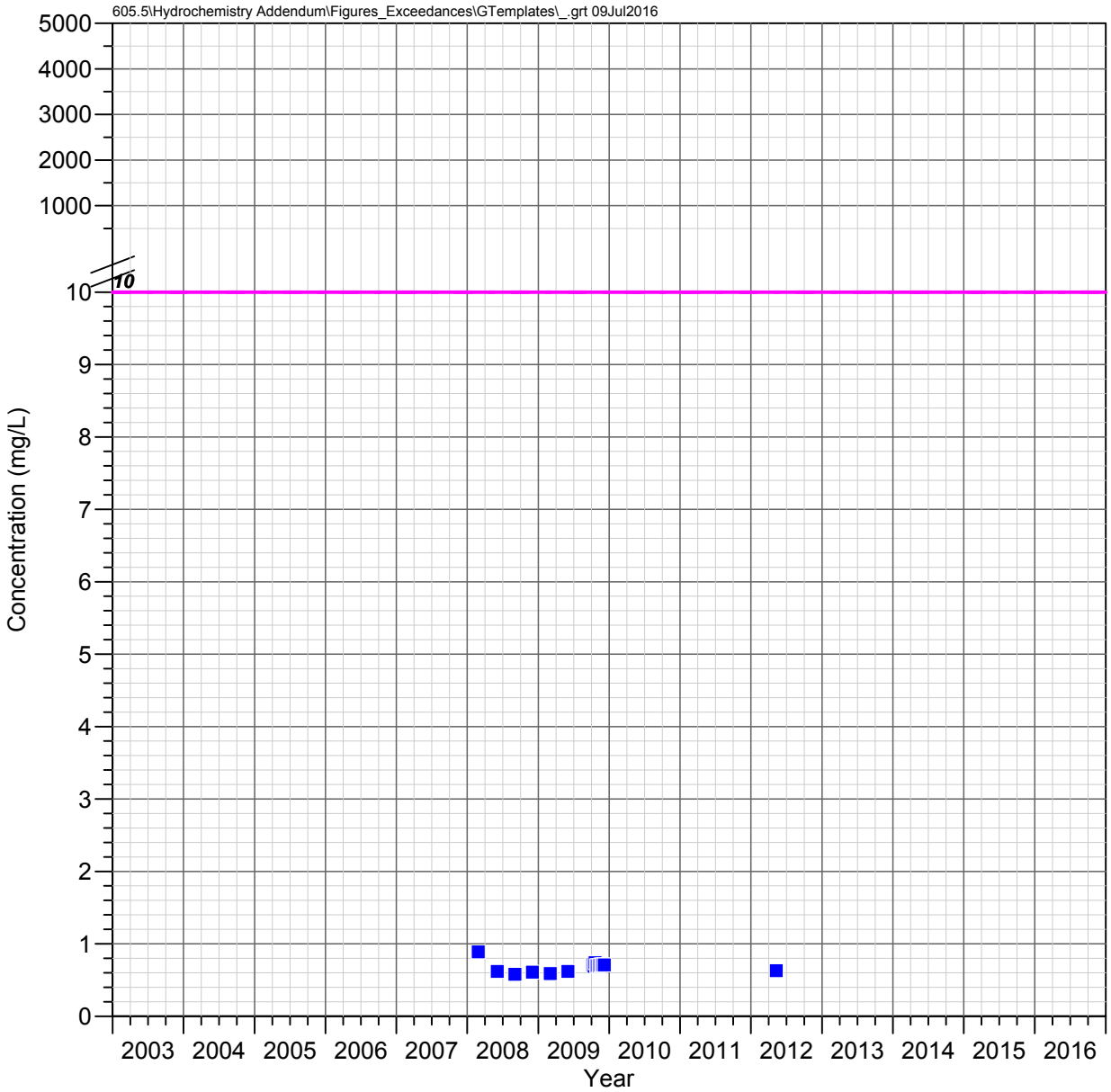


FIGURE E-498. NITRATE AS N CONCENTRATIONS OBSERVED AT HRES-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-07
Apache Leap Tuff Aquifer

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 10 mg/L)
- EPA Maximum Contaminant Levels (UNS, 10 mg/L)

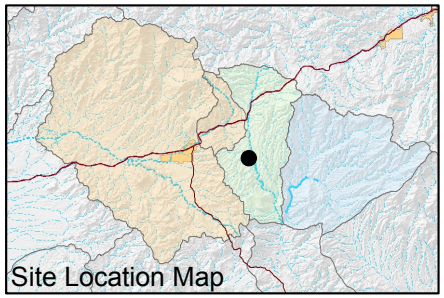
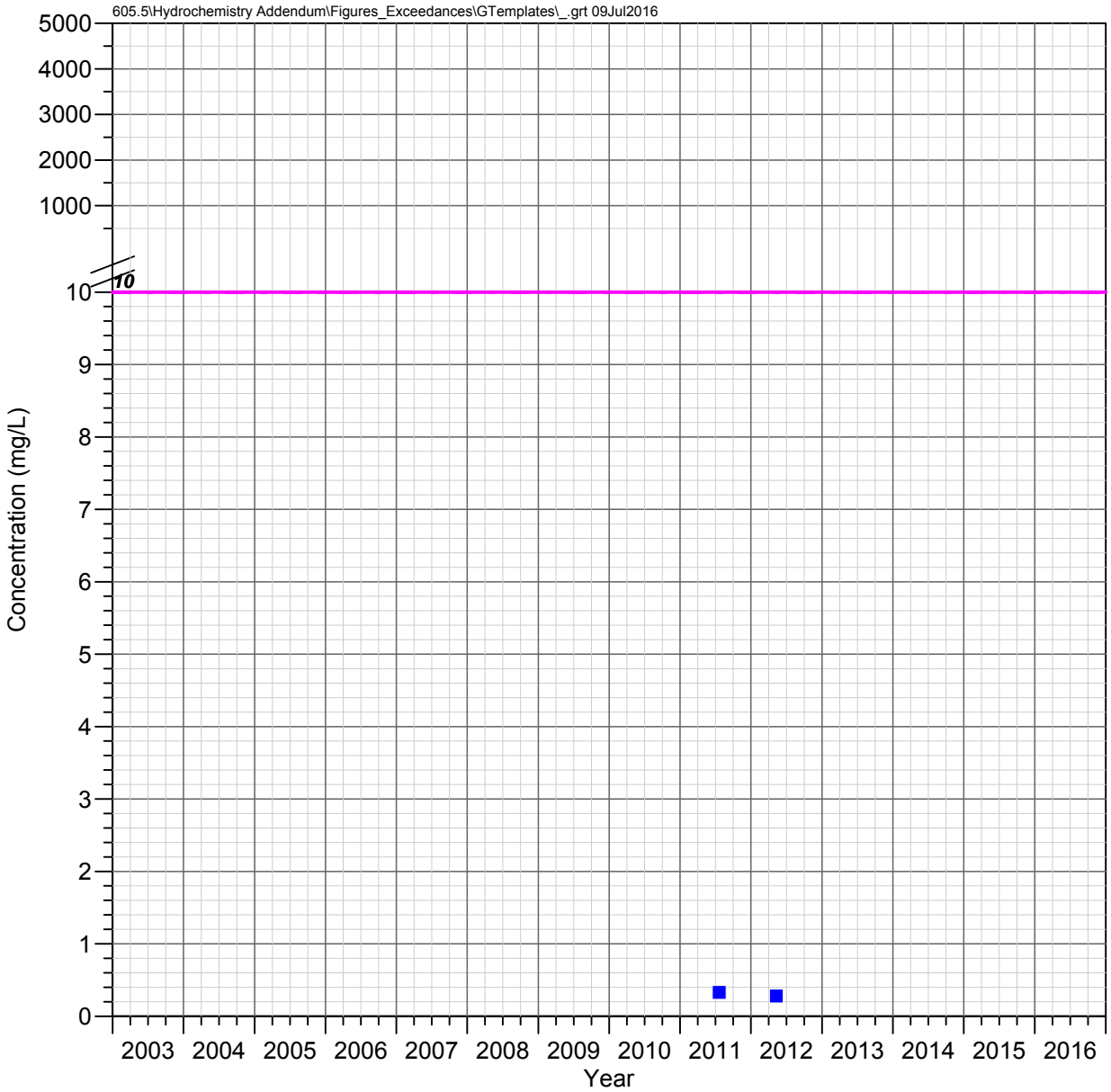


FIGURE E-499. NITRATE AS N CONCENTRATIONS OBSERVED AT HRES-07, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-08
Apache Leap Tuff Aquifer

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 10 mg/L)
- EPA Maximum Contaminant Levels (UNS, 10 mg/L)

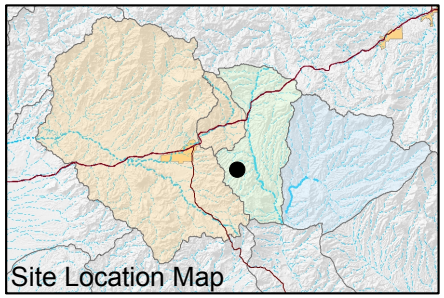
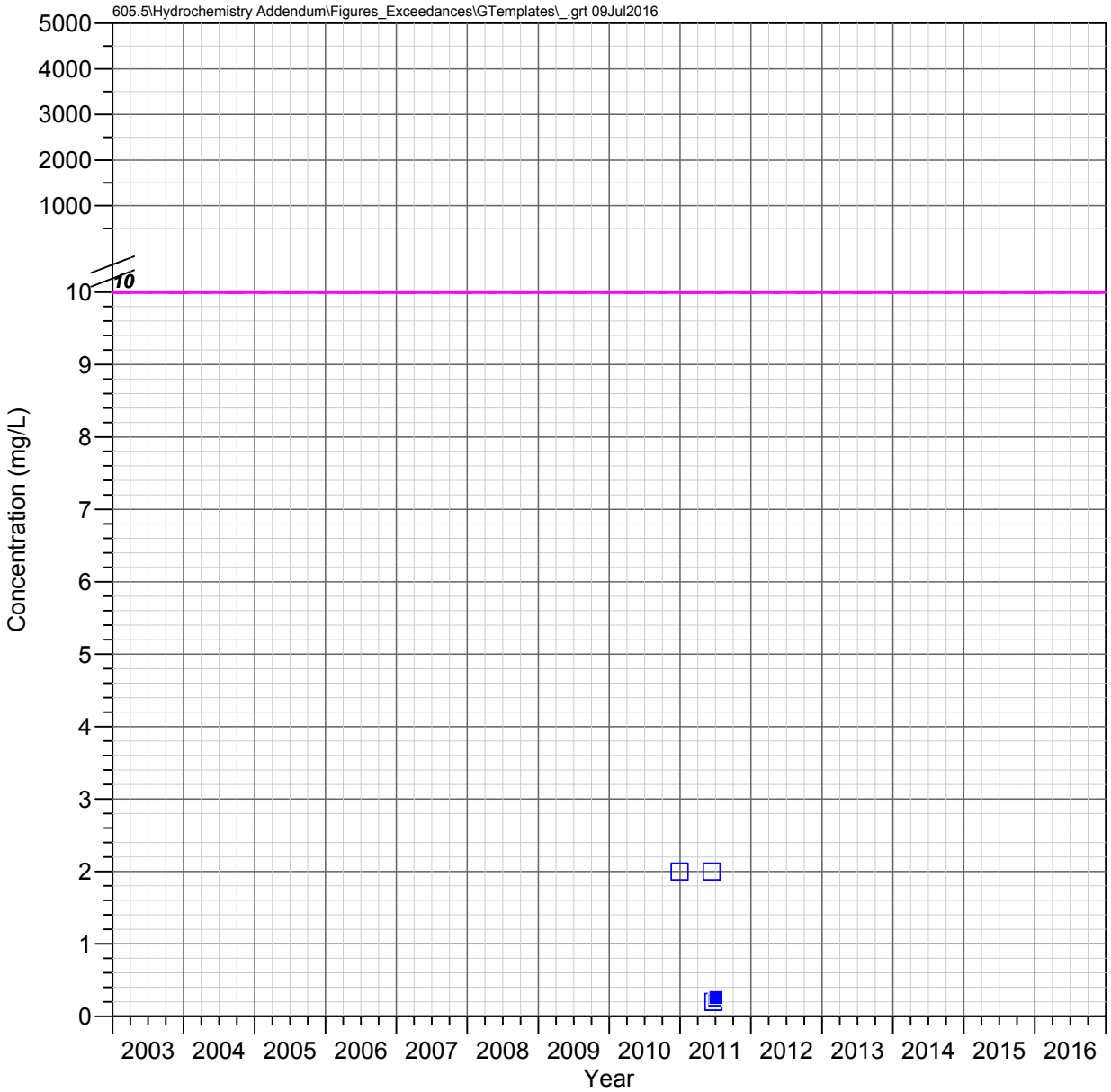


FIGURE E-500. NITRATE AS N CONCENTRATIONS OBSERVED AT HRES-08, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-09
Apache Leap Tuff Aquifer

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 10 mg/L)
- EPA Maximum Contaminant Levels (UNS, 10 mg/L)

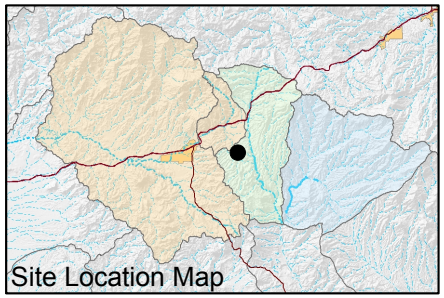
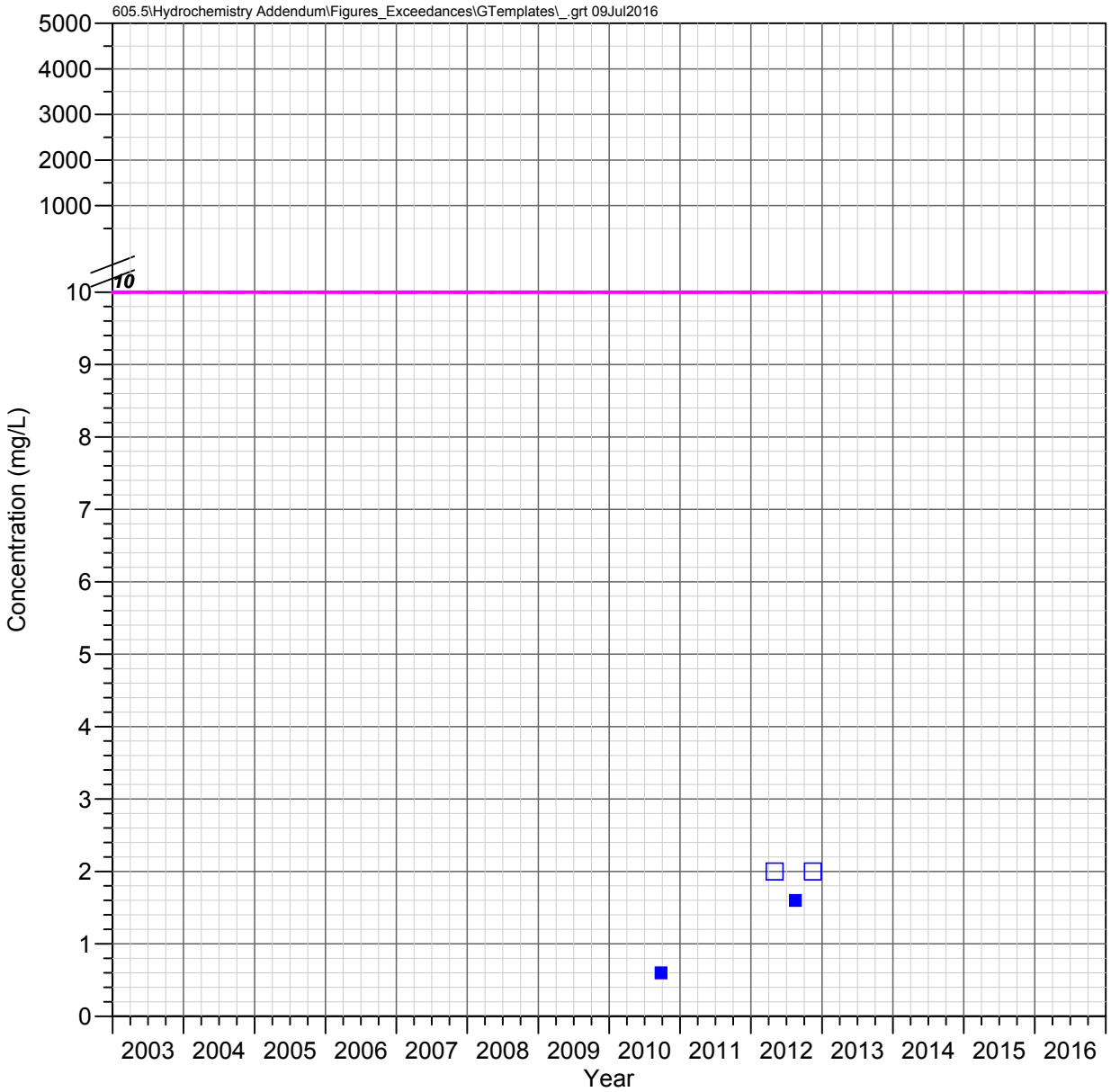


FIGURE E-501. NITRATE AS N CONCENTRATIONS OBSERVED AT HRES-09, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-10
Apache Leap Tuff Aquifer

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 10 mg/L)
- EPA Maximum Contaminant Levels (UNS, 10 mg/L)

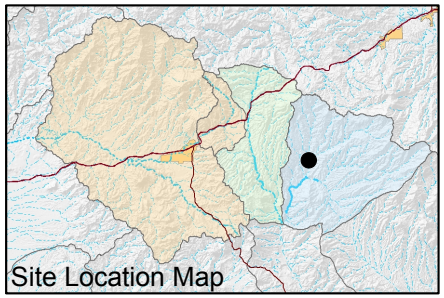
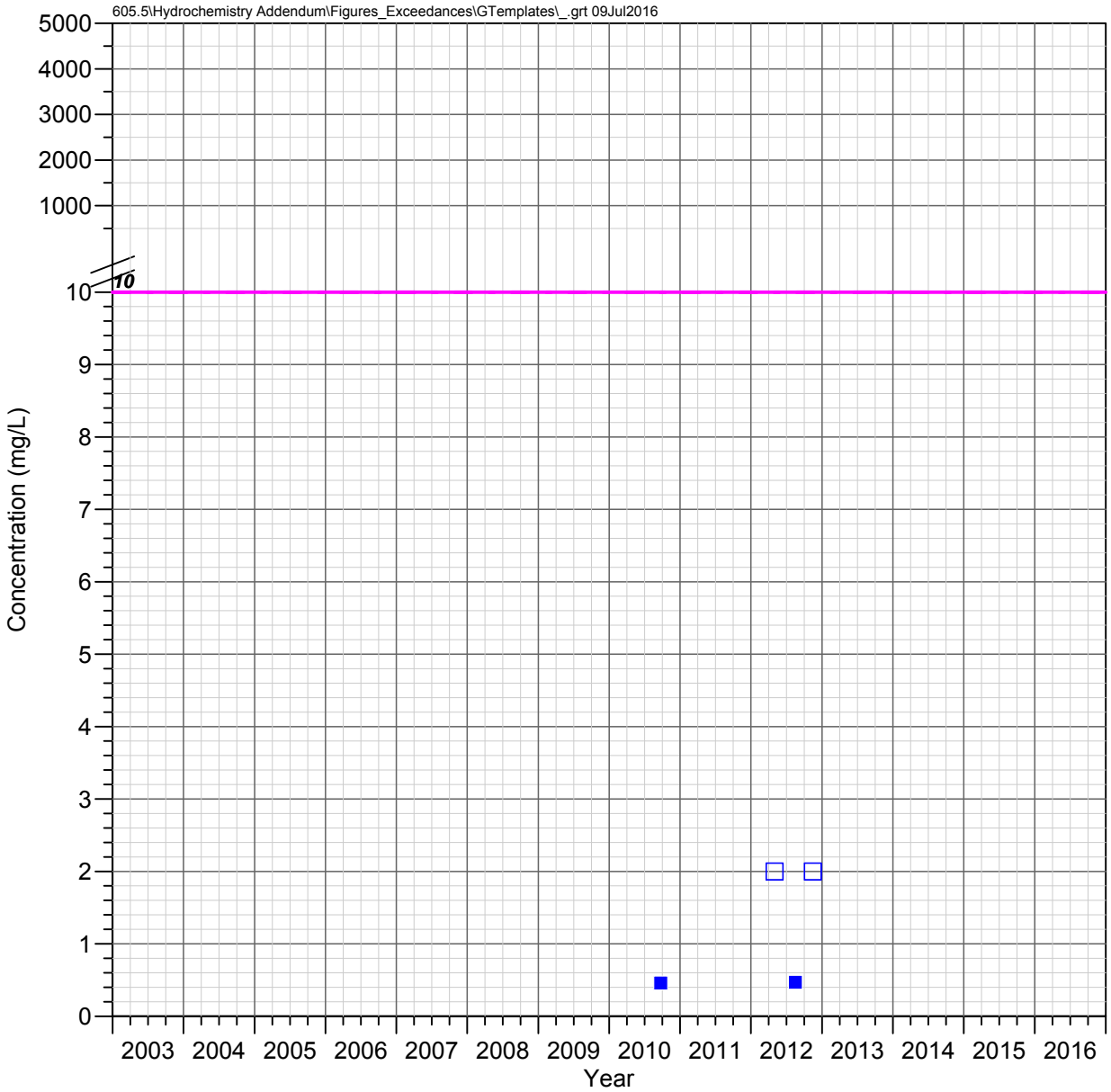


FIGURE E-502. NITRATE AS N CONCENTRATIONS OBSERVED AT HRES-10, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-11
Apache Leap Tuff Aquifer

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 10 mg/L)
- EPA Maximum Contaminant Levels (UNS, 10 mg/L)

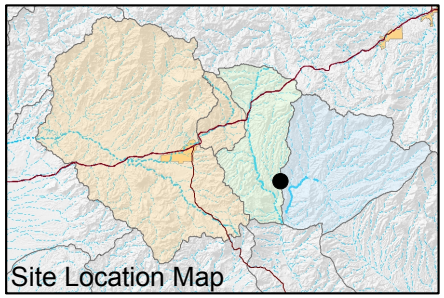
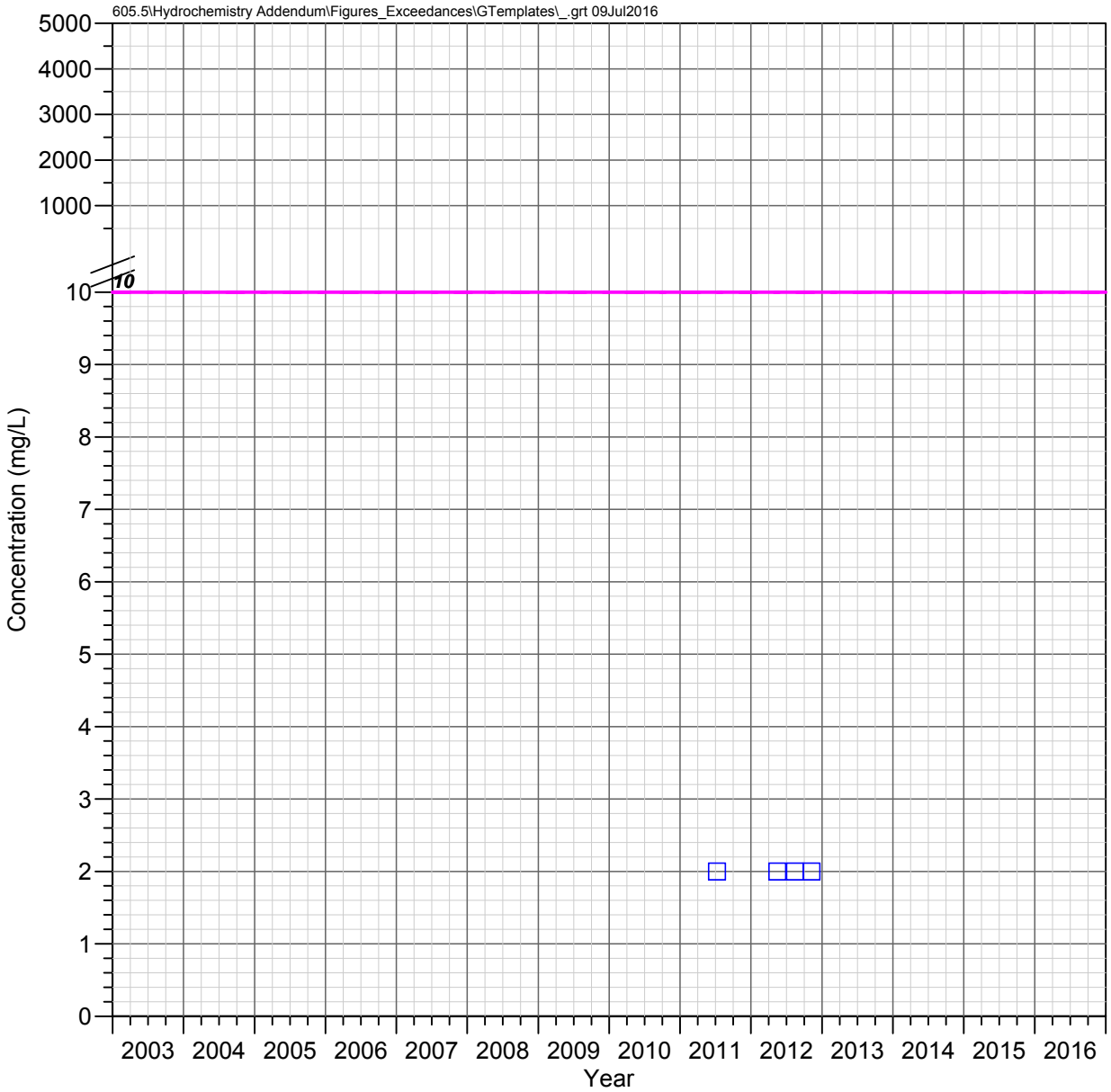


FIGURE E-503. NITRATE AS N CONCENTRATIONS OBSERVED AT HRES-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-12
Apache Leap Tuff Aquifer

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 10 mg/L)
- EPA Maximum Contaminant Levels (UNS, 10 mg/L)

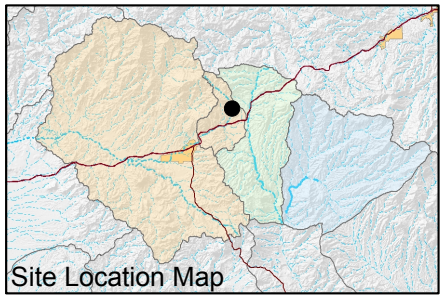
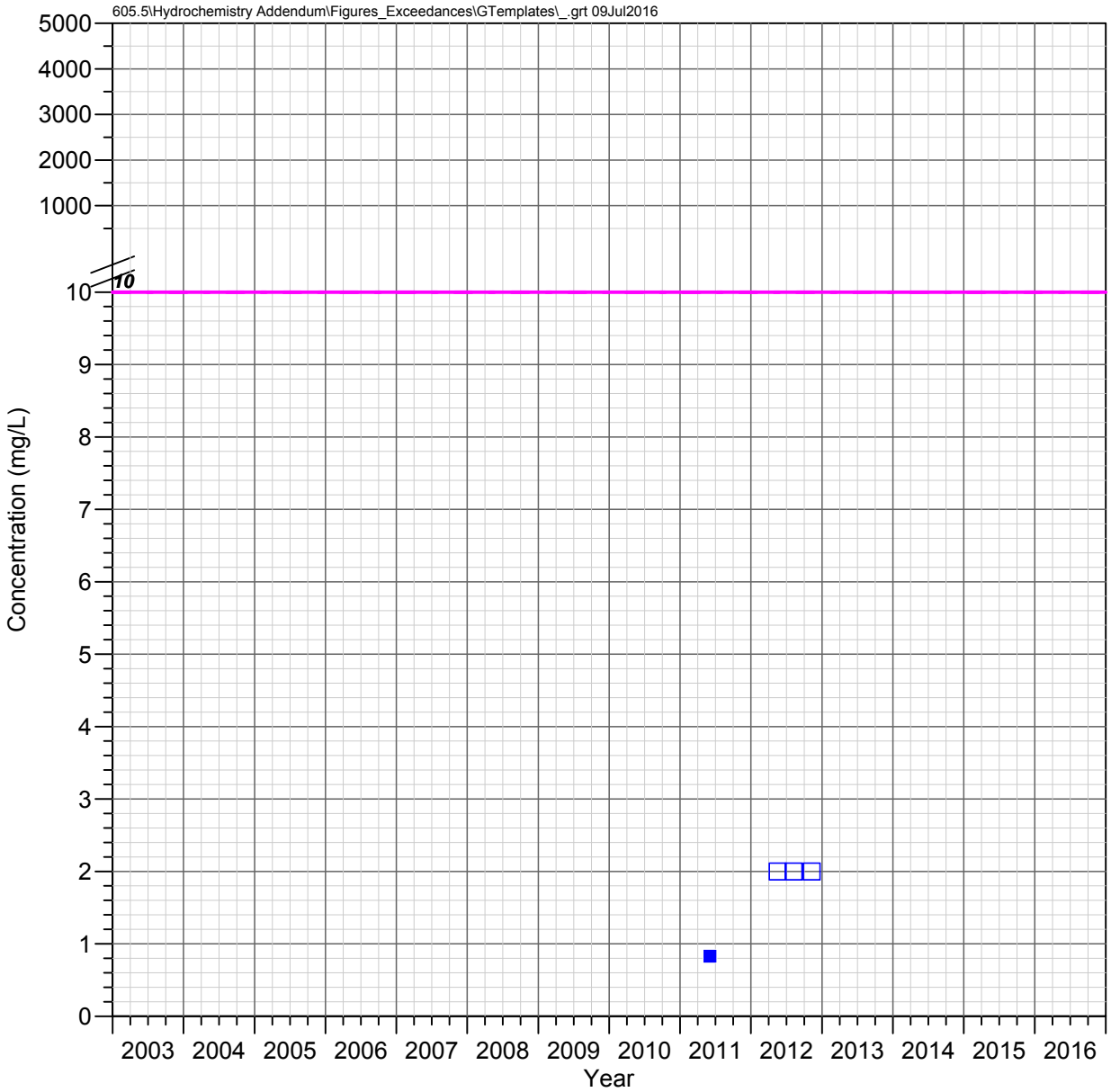


FIGURE E-504. NITRATE AS N CONCENTRATIONS OBSERVED AT HRES-12, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-13
Apache Leap Tuff Aquifer

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 10 mg/L)
- EPA Maximum Contaminant Levels (UNS, 10 mg/L)

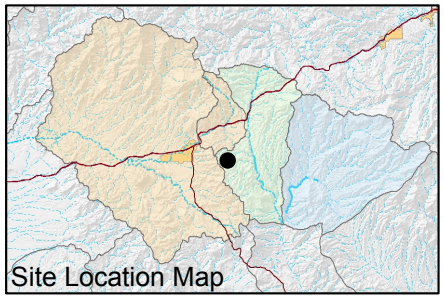
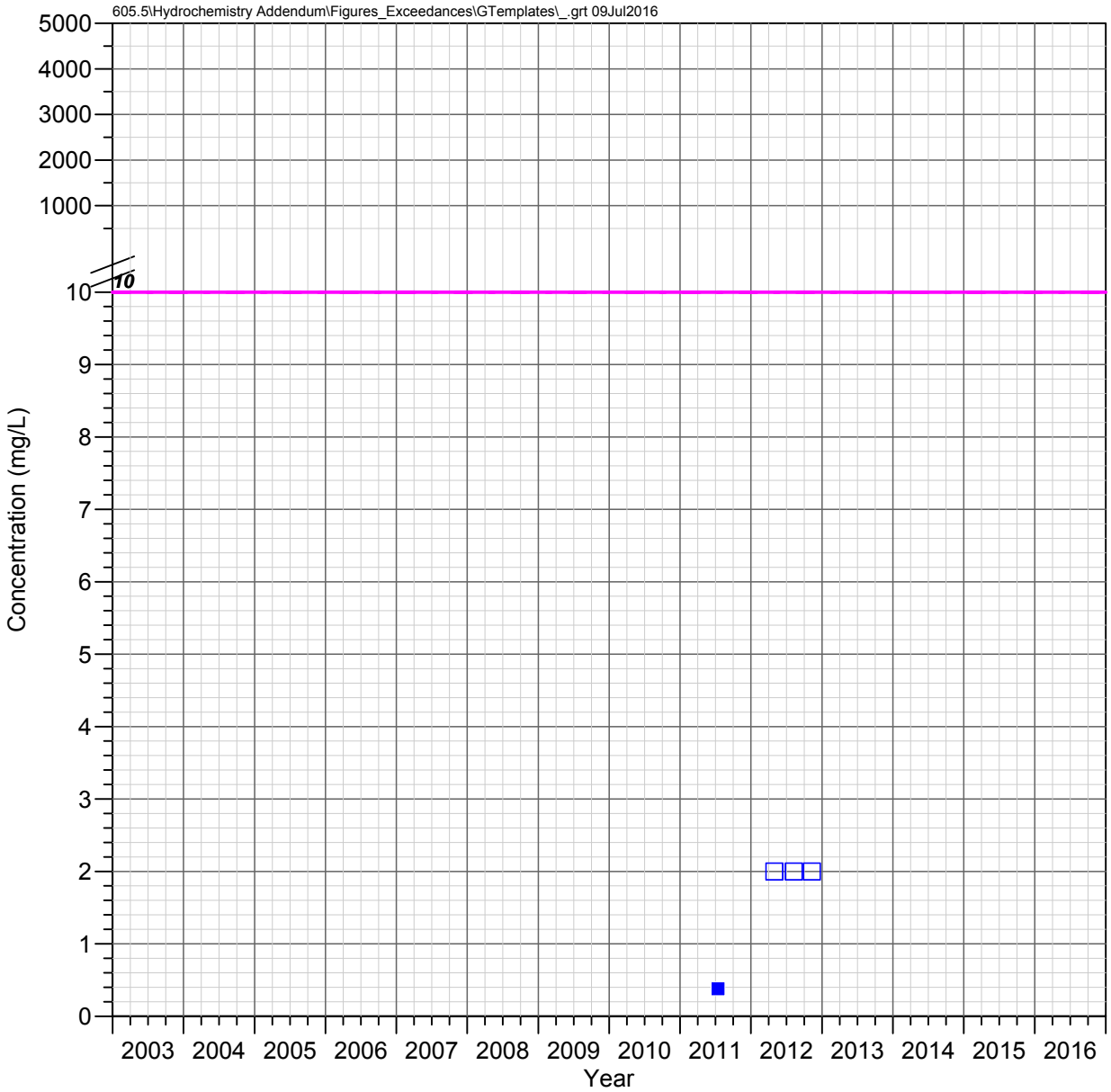


FIGURE E-505. NITRATE AS N CONCENTRATIONS OBSERVED AT HRES-13, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-14
Apache Leap Tuff Aquifer

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 10 mg/L)
- EPA Maximum Contaminant Levels (UNS, 10 mg/L)

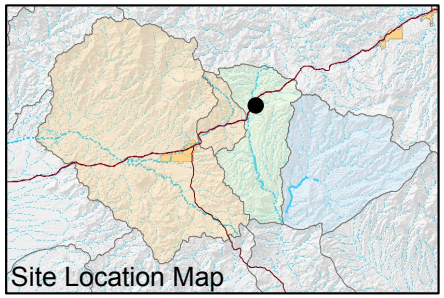
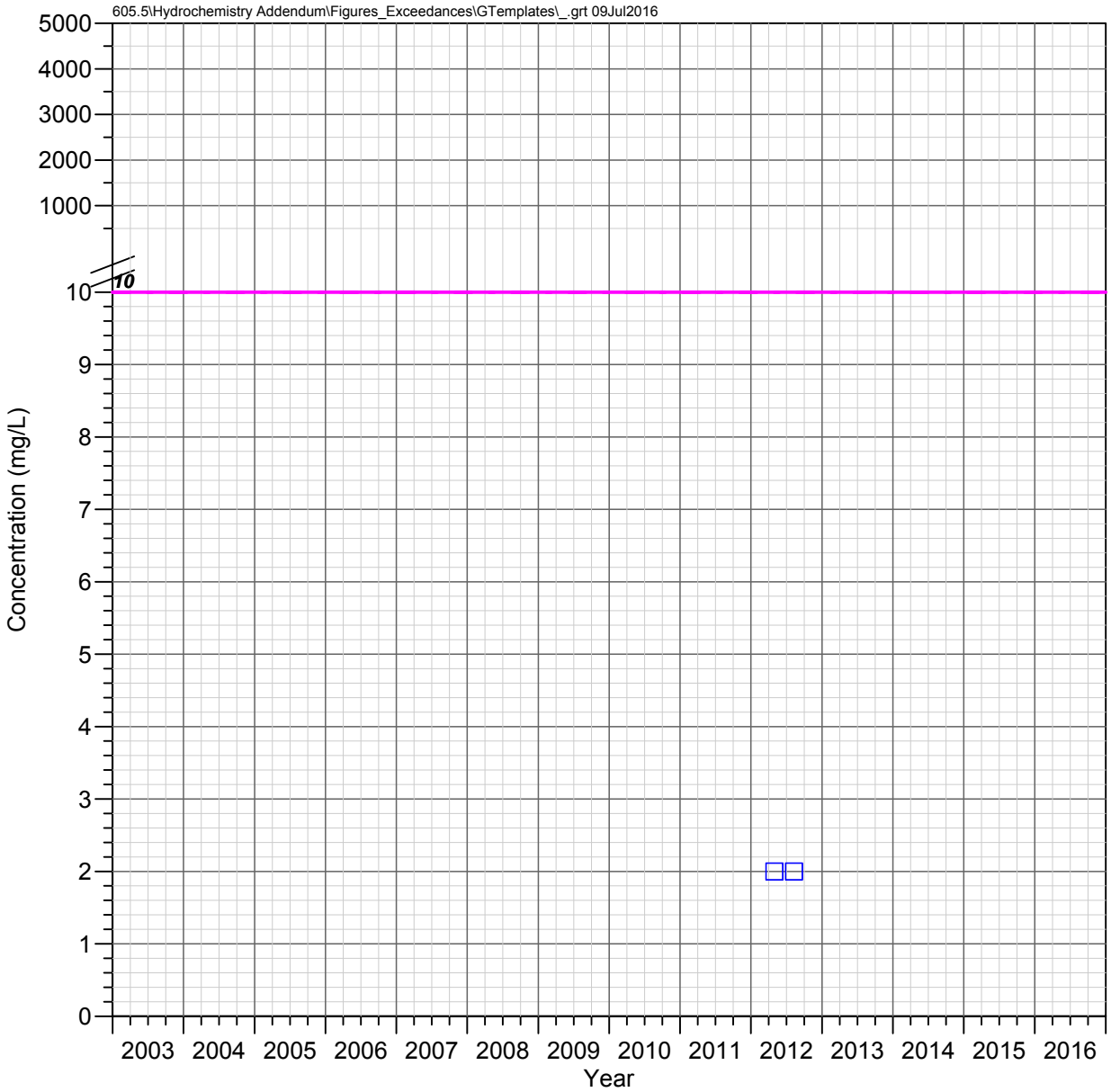


FIGURE E-506. NITRATE AS N CONCENTRATIONS OBSERVED AT HRES-14, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-15
Apache Leap Tuff Aquifer

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 10 mg/L)
- EPA Maximum Contaminant Levels (UNS, 10 mg/L)

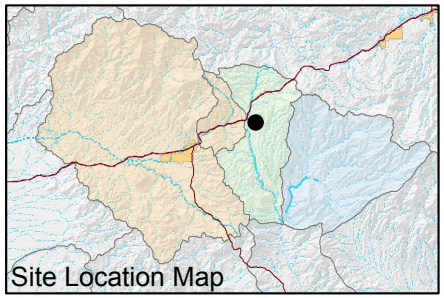
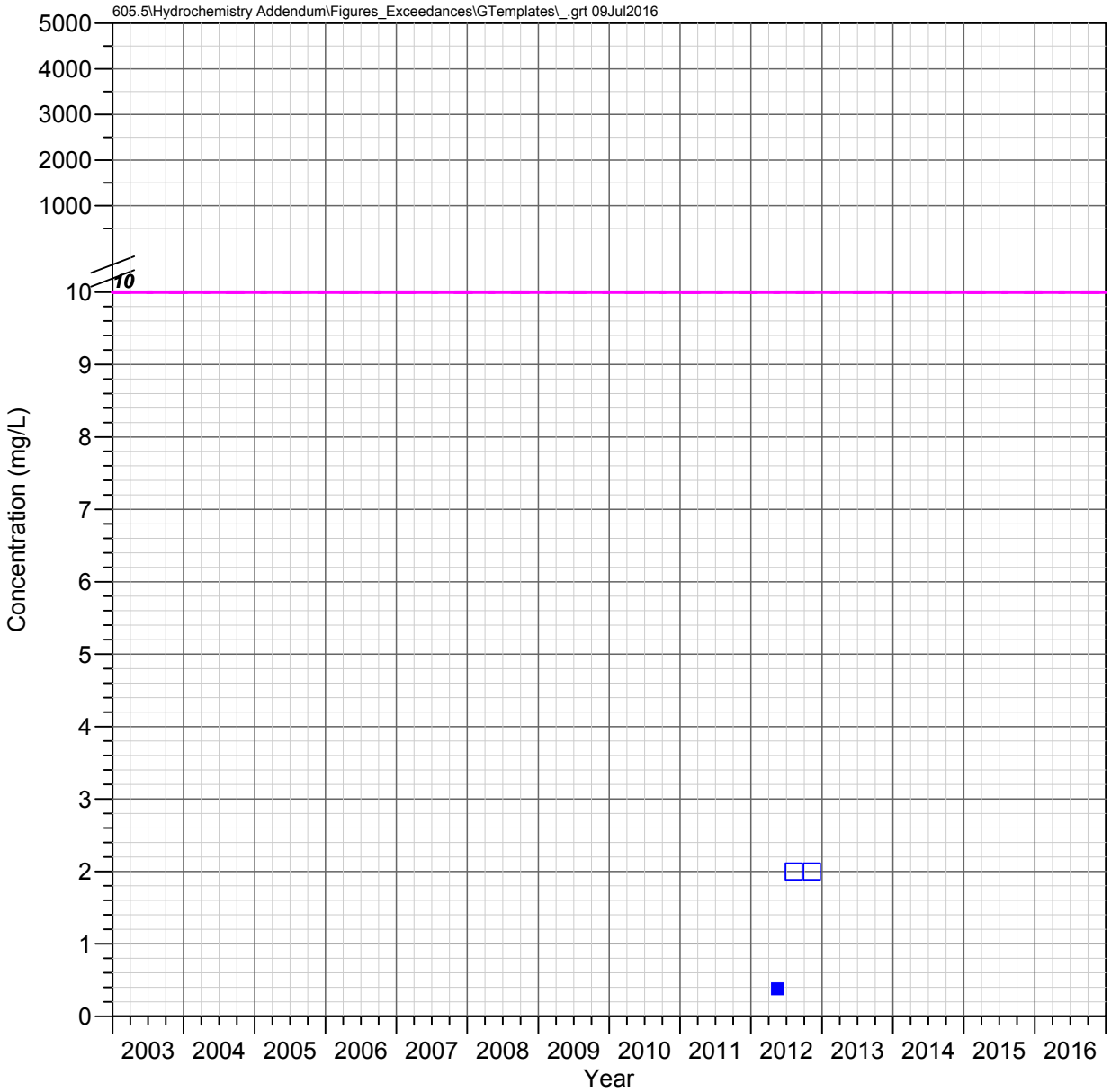


FIGURE E-507. NITRATE AS N CONCENTRATIONS OBSERVED AT HRES-15, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-17
Apache Leap Tuff Aquifer

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 10 mg/L)
- EPA Maximum Contaminant Levels (UNS, 10 mg/L)

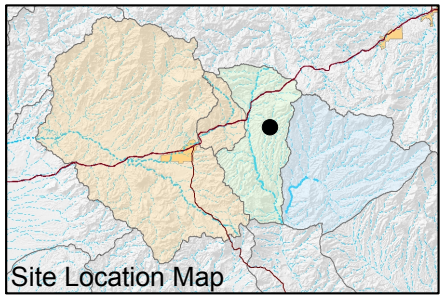
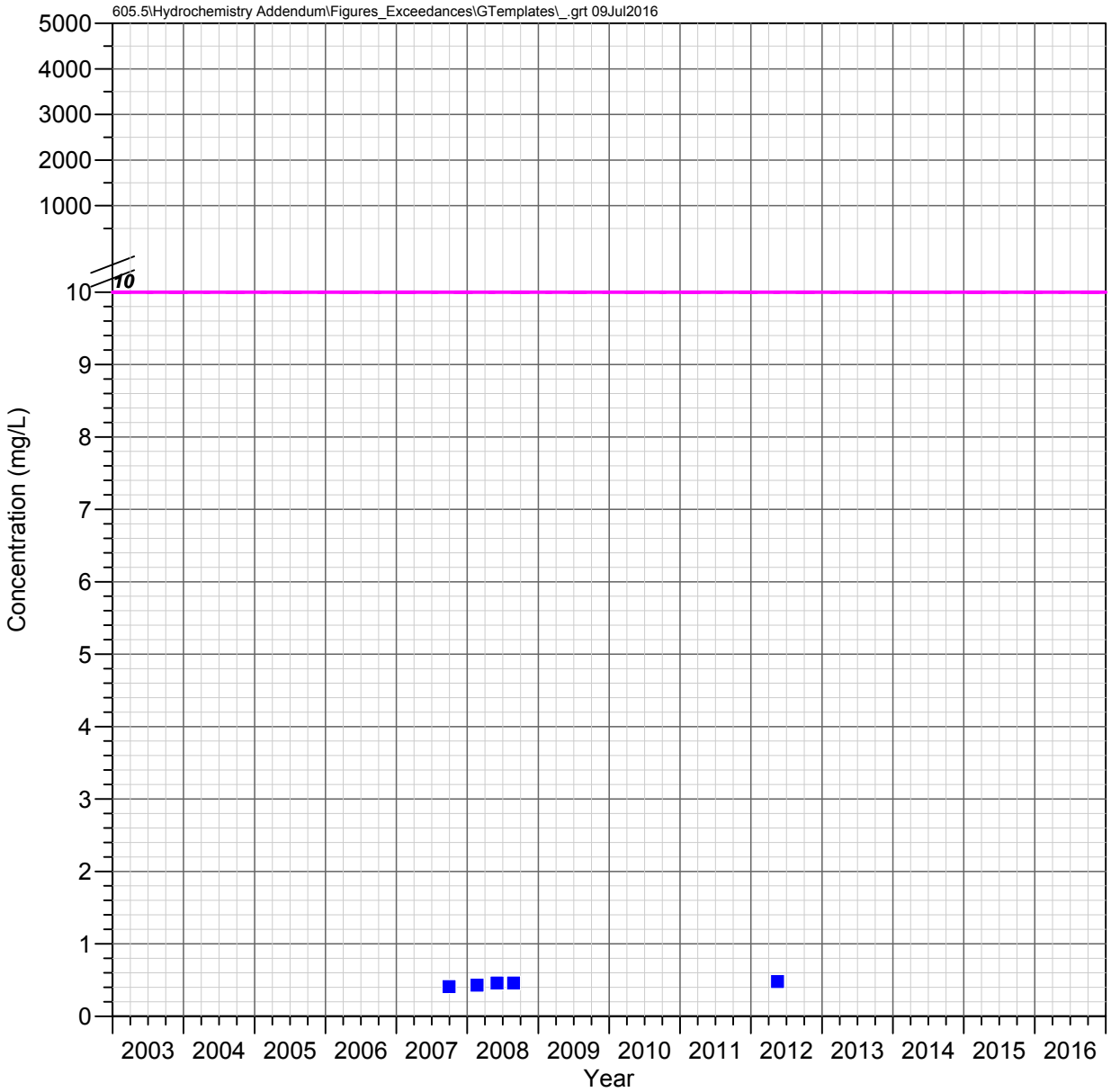


FIGURE E-508. NITRATE AS N CONCENTRATIONS OBSERVED AT HRES-17, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MJ-11
Apache Leap Tuff Aquifer

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 10 mg/L)
- EPA Maximum Contaminant Levels (UNS, 10 mg/L)

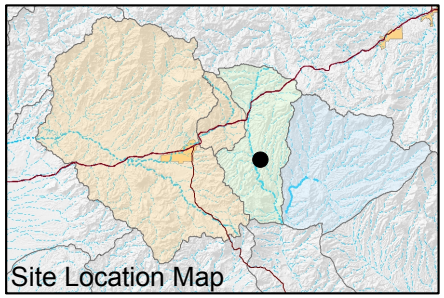
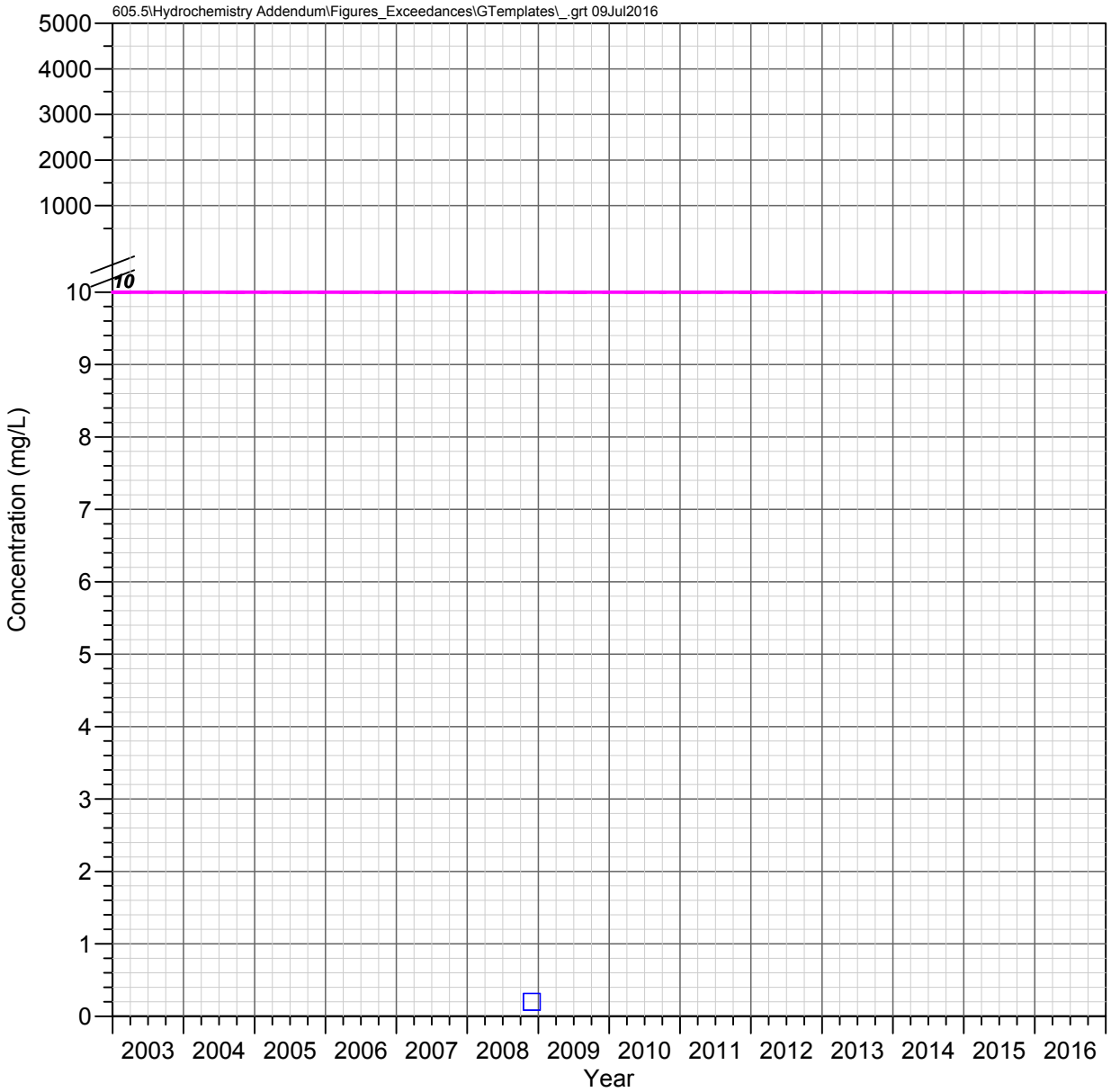


FIGURE E-509. NITRATE AS N CONCENTRATIONS OBSERVED AT MJ-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-01
Deep Groundwater System

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 10 mg/L)
- EPA Maximum Contaminant Levels (UNS, 10 mg/L)

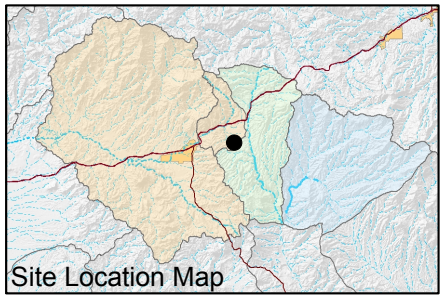
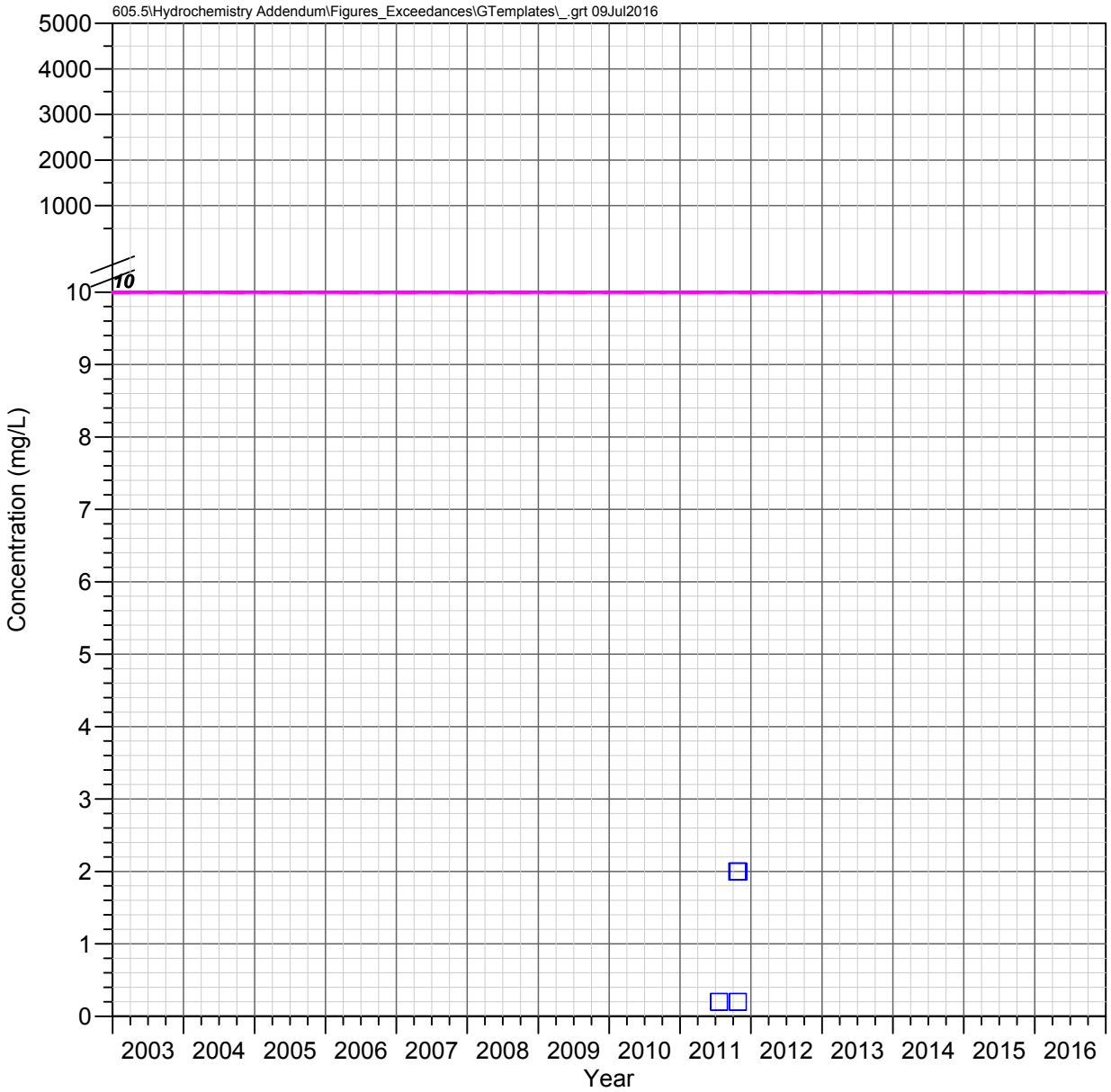


FIGURE E-510. NITRATE AS N CONCENTRATIONS OBSERVED AT DHRES-01, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-02
Deep Groundwater System

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 10 mg/L)
- EPA Maximum Contaminant Levels (UNS, 10 mg/L)

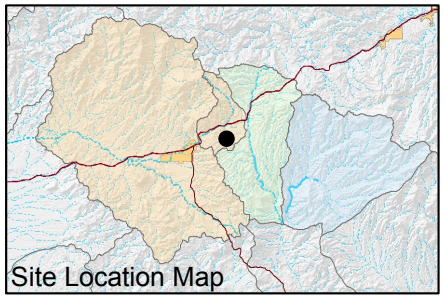
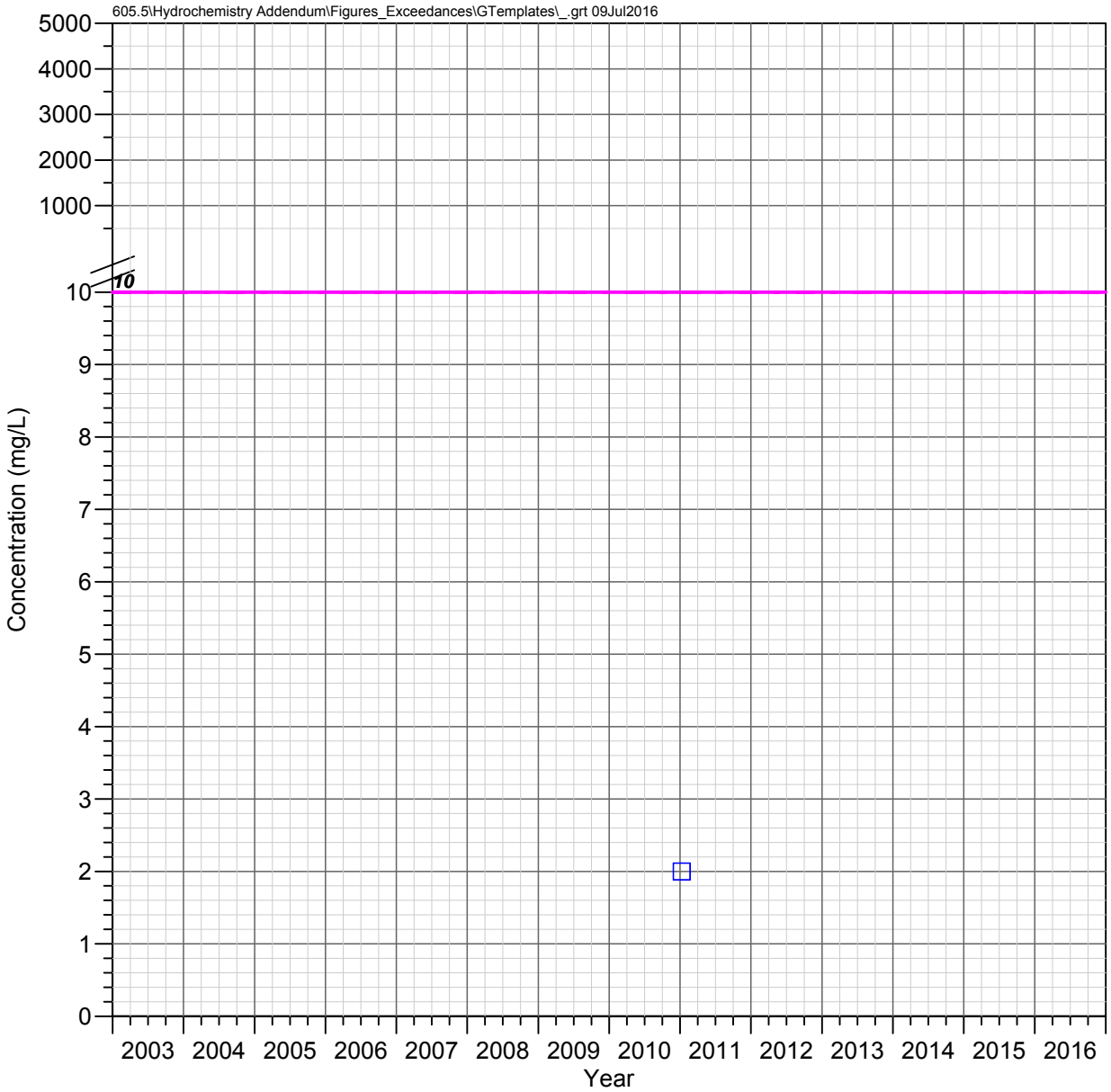


FIGURE E-511. NITRATE AS N CONCENTRATIONS OBSERVED AT DHRES-02, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-06
Deep Groundwater System

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 10 mg/L)
- EPA Maximum Contaminant Levels (UNS, 10 mg/L)

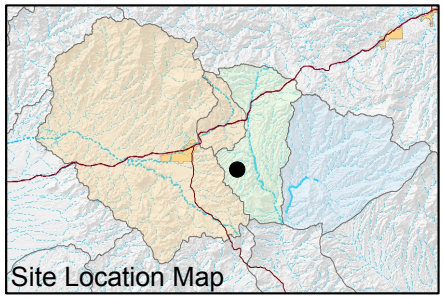
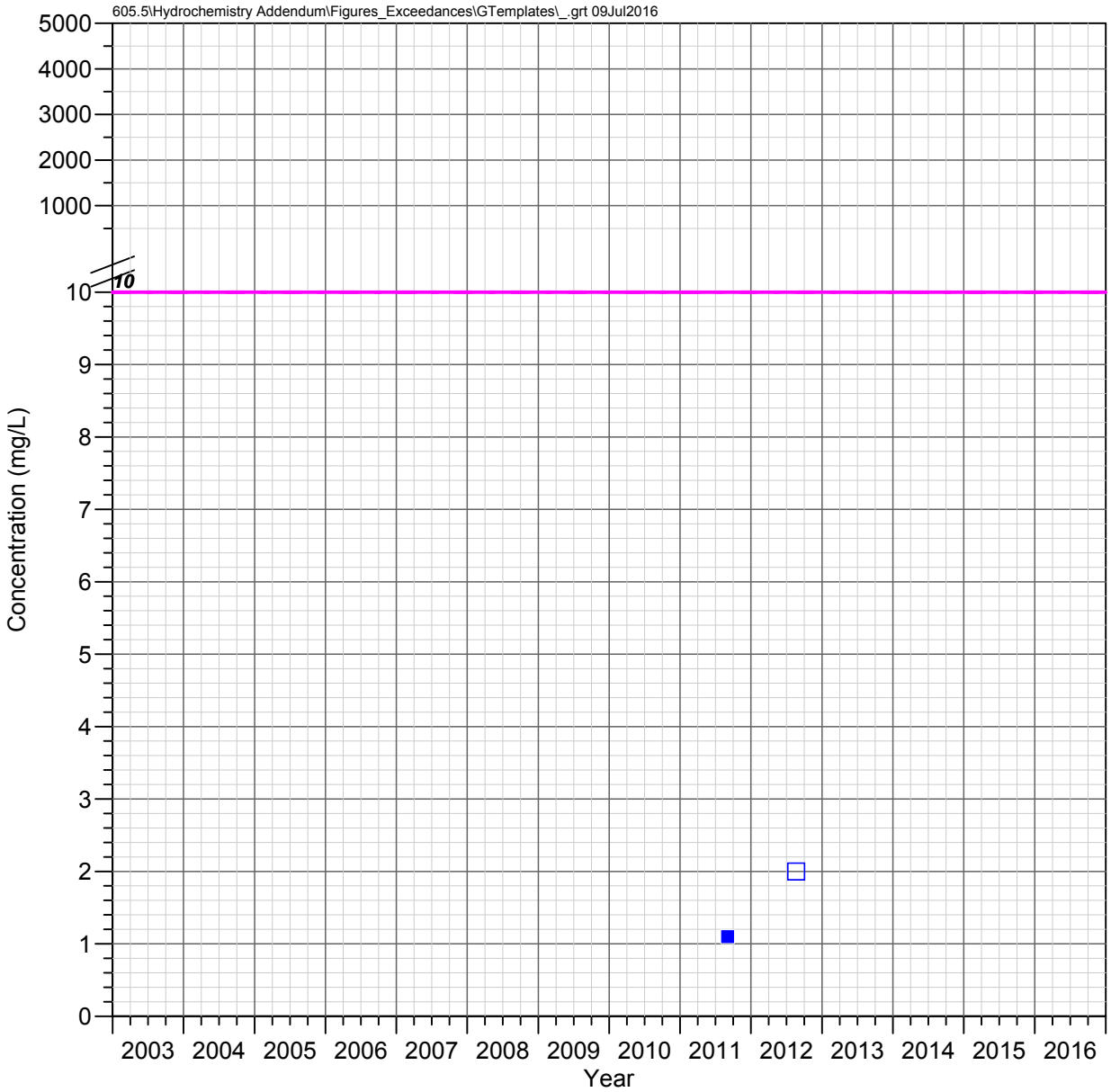


FIGURE E-512. NITRATE AS N CONCENTRATIONS OBSERVED AT DHRES-06, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-09
Deep Groundwater System

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 10 mg/L)
- EPA Maximum Contaminant Levels (UNS, 10 mg/L)

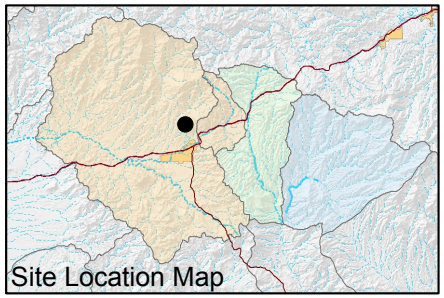
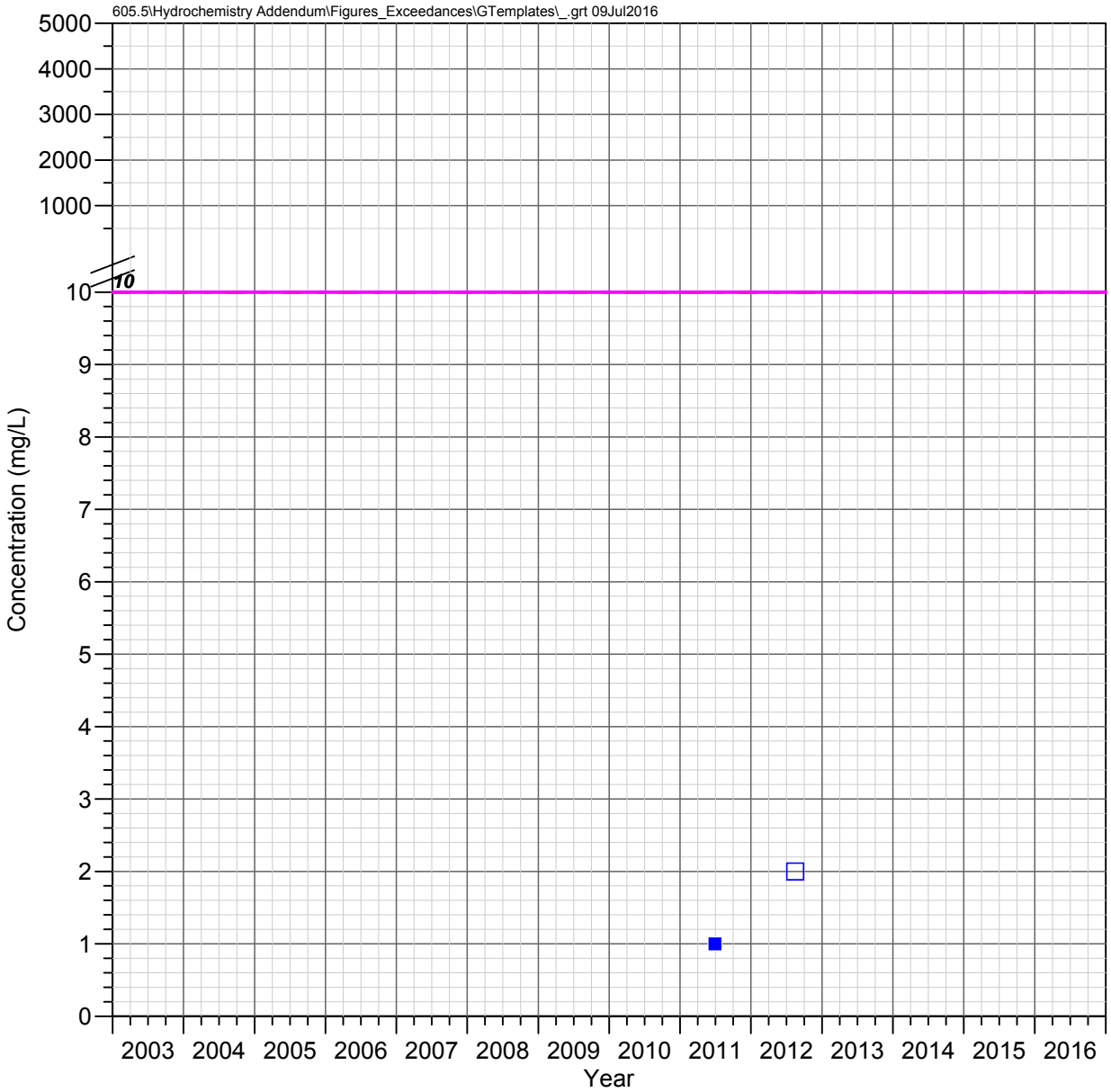


FIGURE E-513. NITRATE AS N CONCENTRATIONS OBSERVED AT DHRES-09, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-11
Deep Groundwater System

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 10 mg/L)
- EPA Maximum Contaminant Levels (UNS, 10 mg/L)

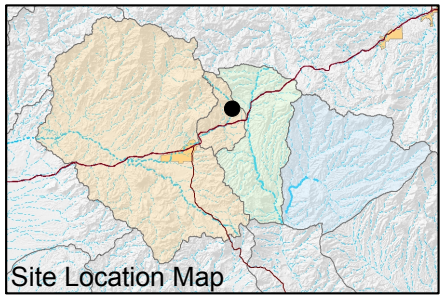
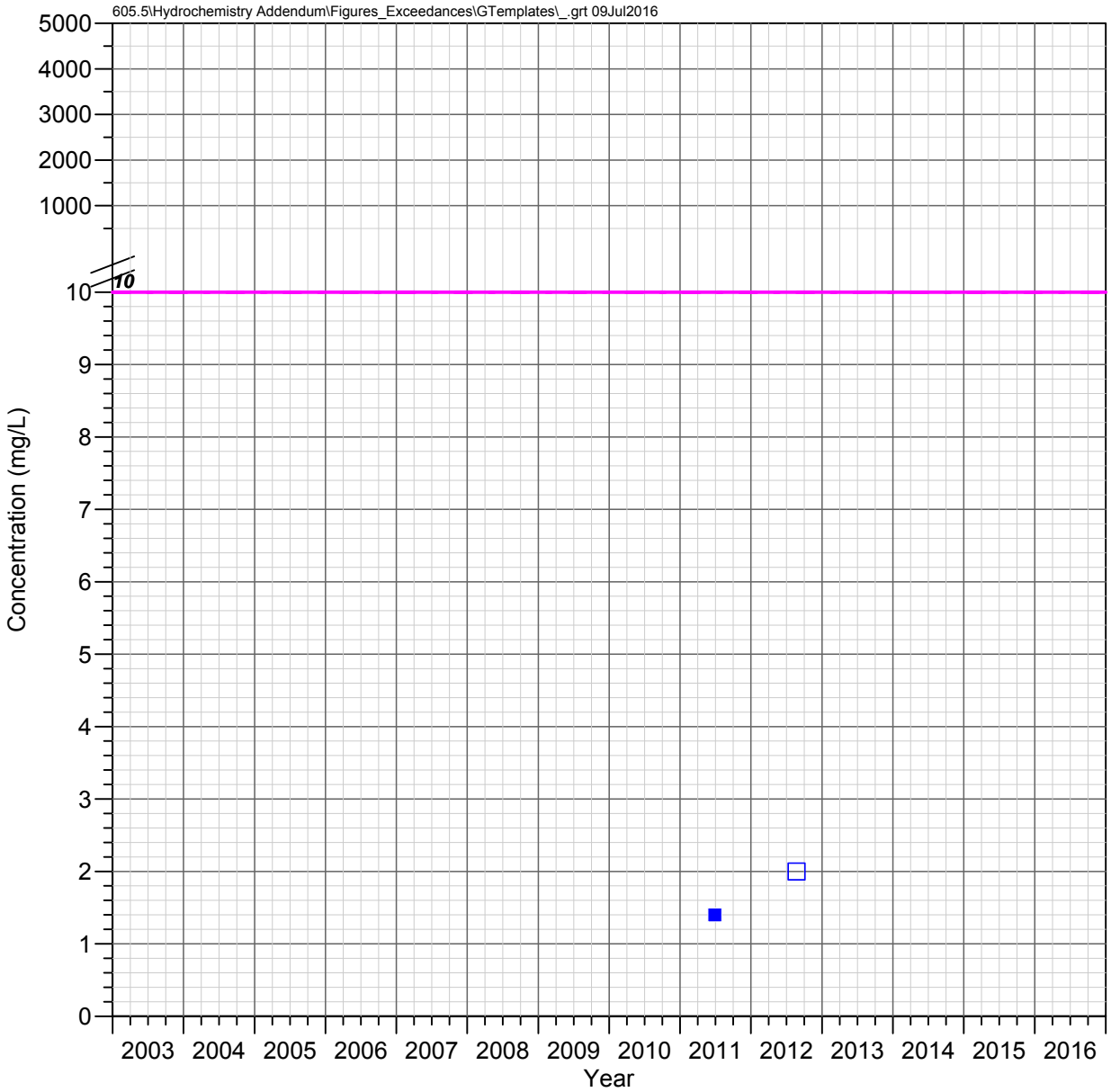


FIGURE E-514. NITRATE AS N CONCENTRATIONS OBSERVED AT DHRES-11, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-13
Deep Groundwater System

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 10 mg/L)
- EPA Maximum Contaminant Levels (UNS, 10 mg/L)

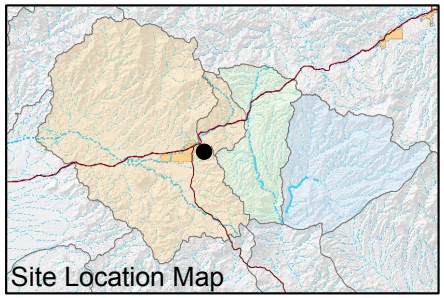
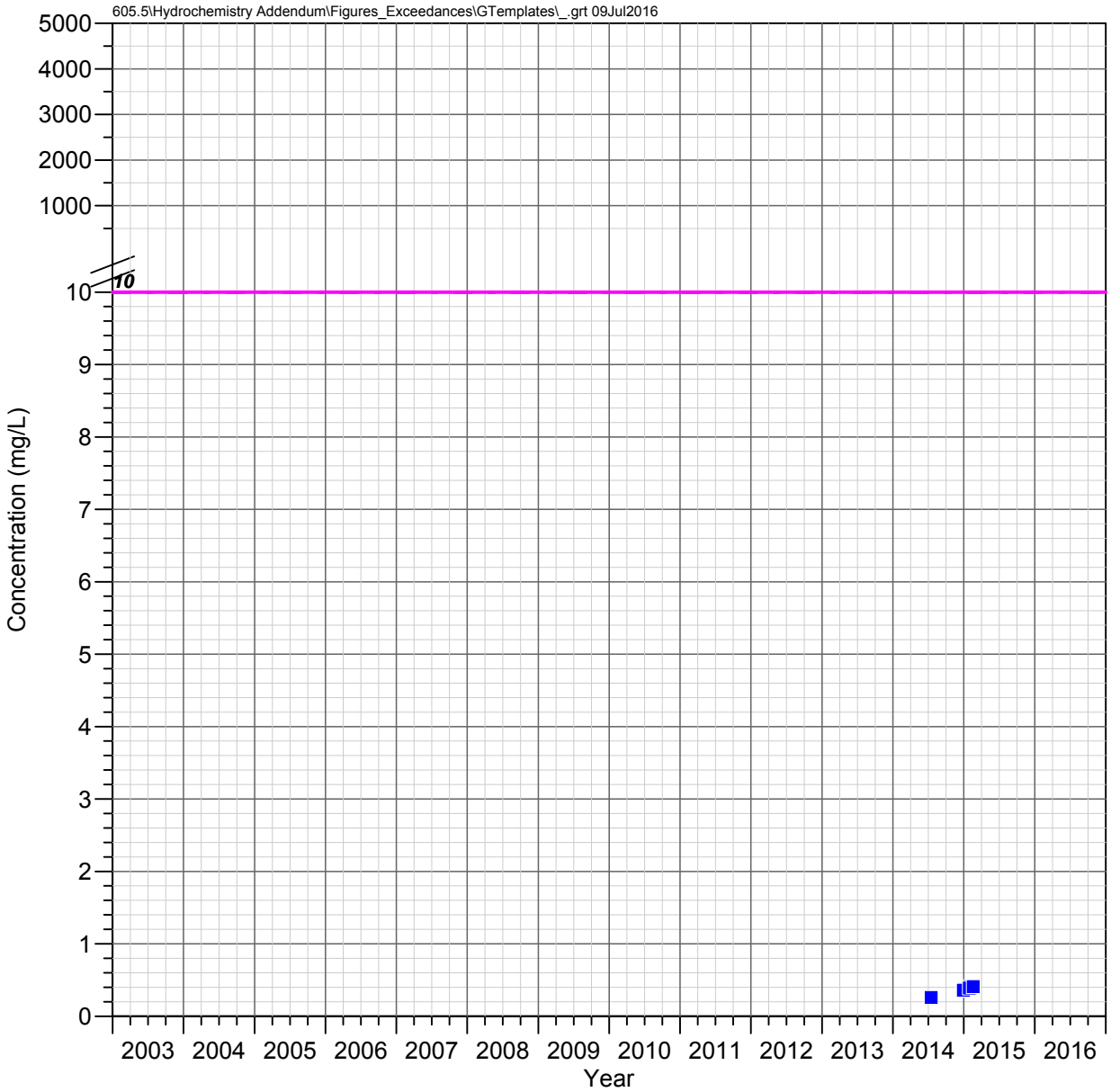


FIGURE E-515. NITRATE AS N CONCENTRATIONS OBSERVED AT DHRES-13, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-15
Deep Groundwater System

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 10 mg/L)
- EPA Maximum Contaminant Levels (UNS, 10 mg/L)

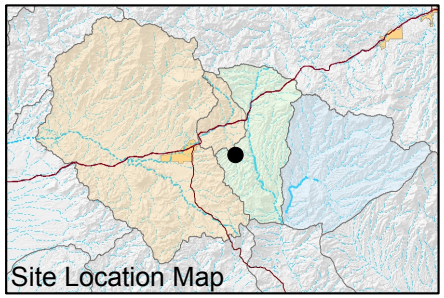
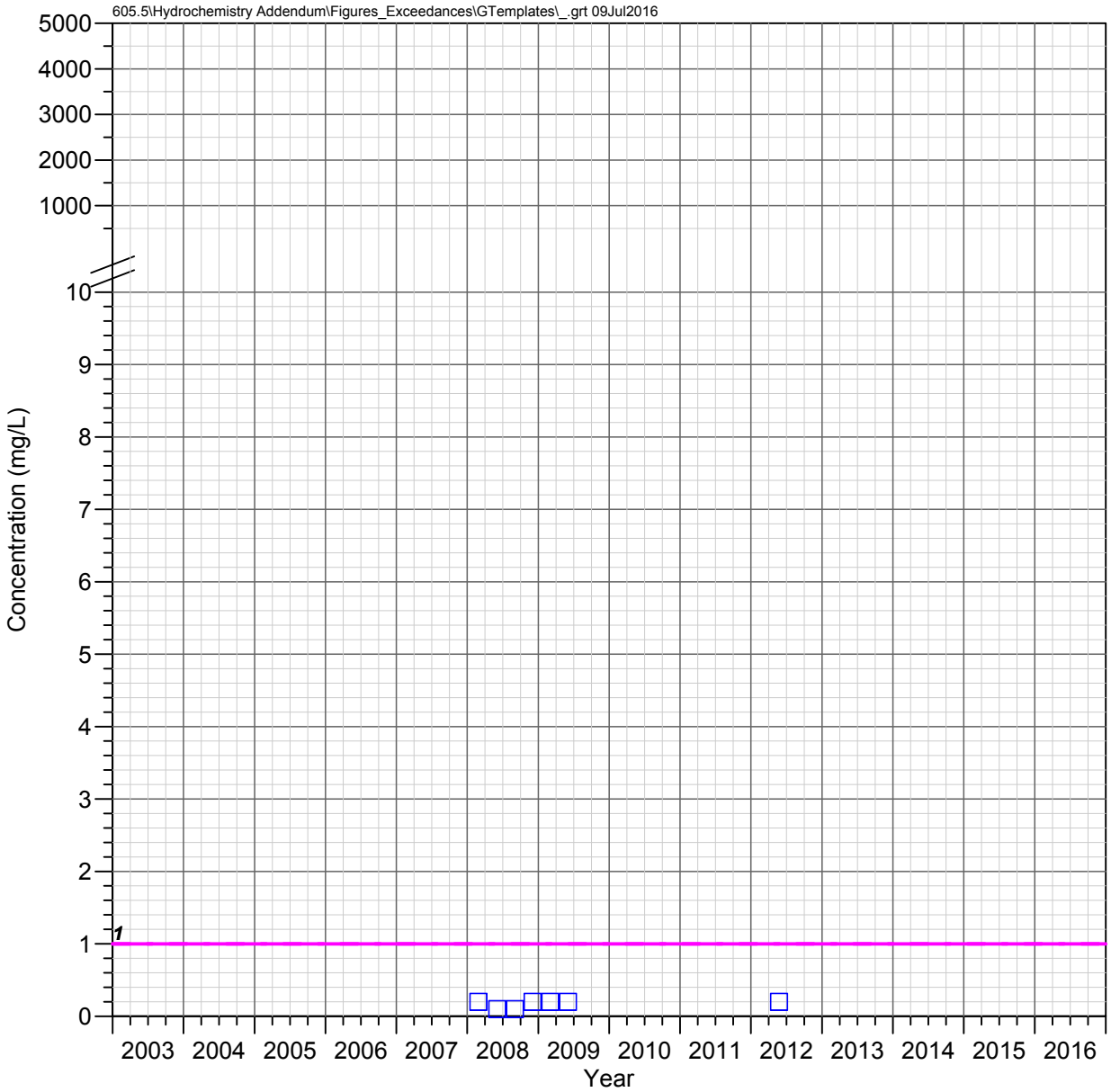


FIGURE E-516. NITRATE AS N CONCENTRATIONS OBSERVED AT DHRES-15, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Hackberry Windmill Well Shallow Groundwater System

NITRITE AS N

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 1 mg/L)
- EPA Maximum Contaminant Levels (UNS, 1 mg/L)

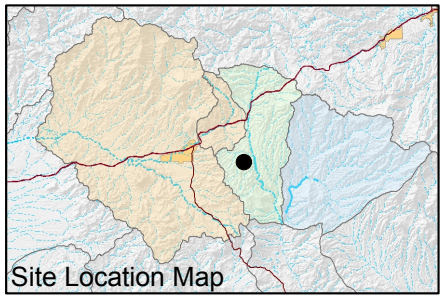
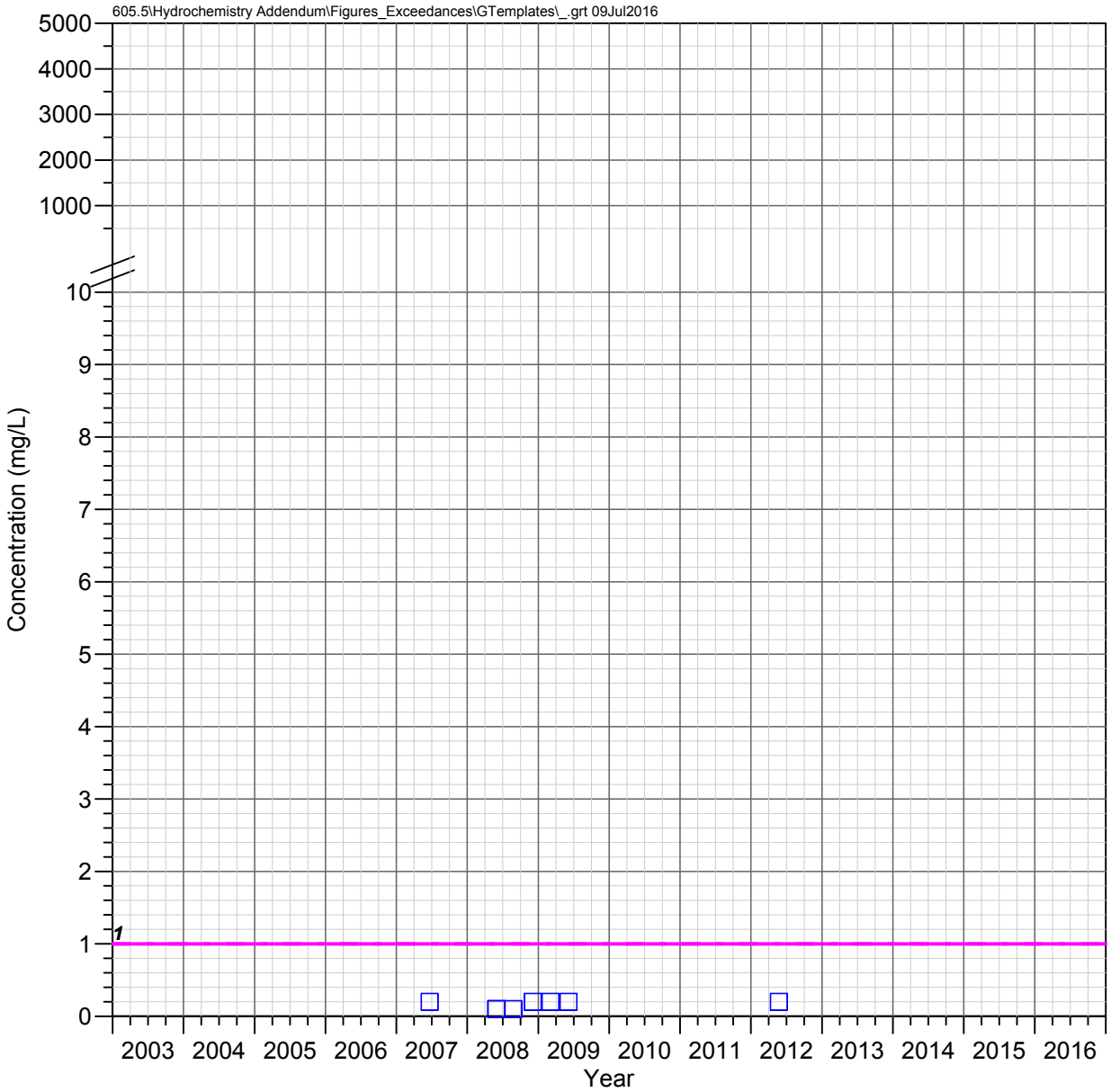


FIGURE E-517. NITRITE AS N CONCENTRATIONS OBSERVED AT HACKBERRY WINDMILL WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



JI Ranch Corral Well
Shallow Groundwater System

NITRITE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 1 mg/L)
- EPA Maximum Contaminant Levels (UNS, 1 mg/L)

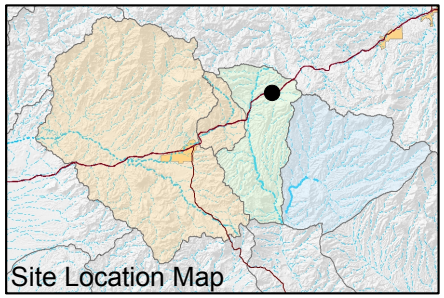
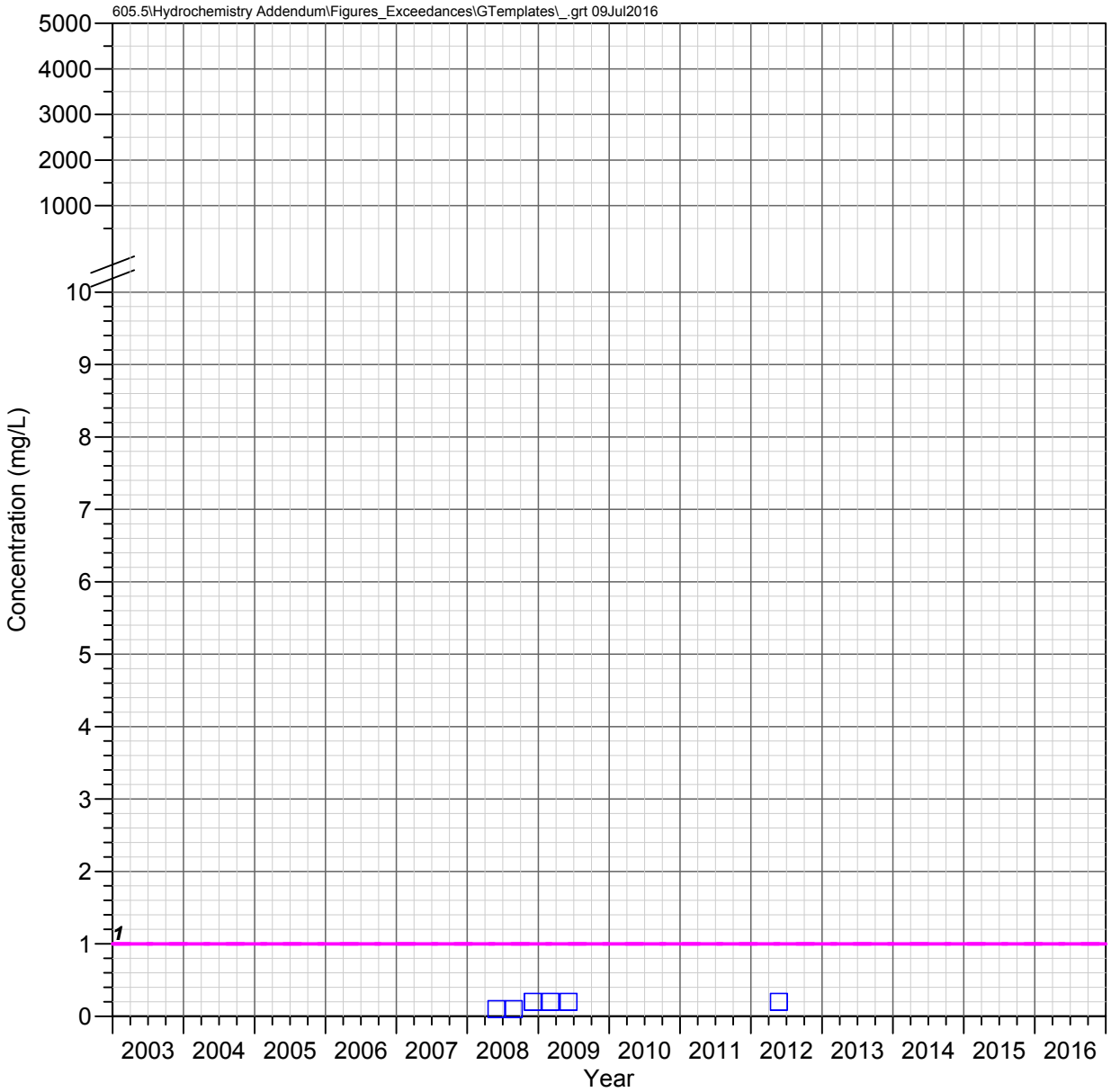


FIGURE E-518. NITRITE AS N CONCENTRATIONS OBSERVED AT JI RANCH CORRAL WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



JI Ranch Middle Well
Shallow Groundwater System

NITRITE AS N

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 1 mg/L)
- EPA Maximum Contaminant Levels (UNS, 1 mg/L)

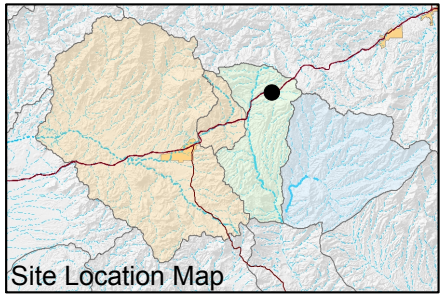
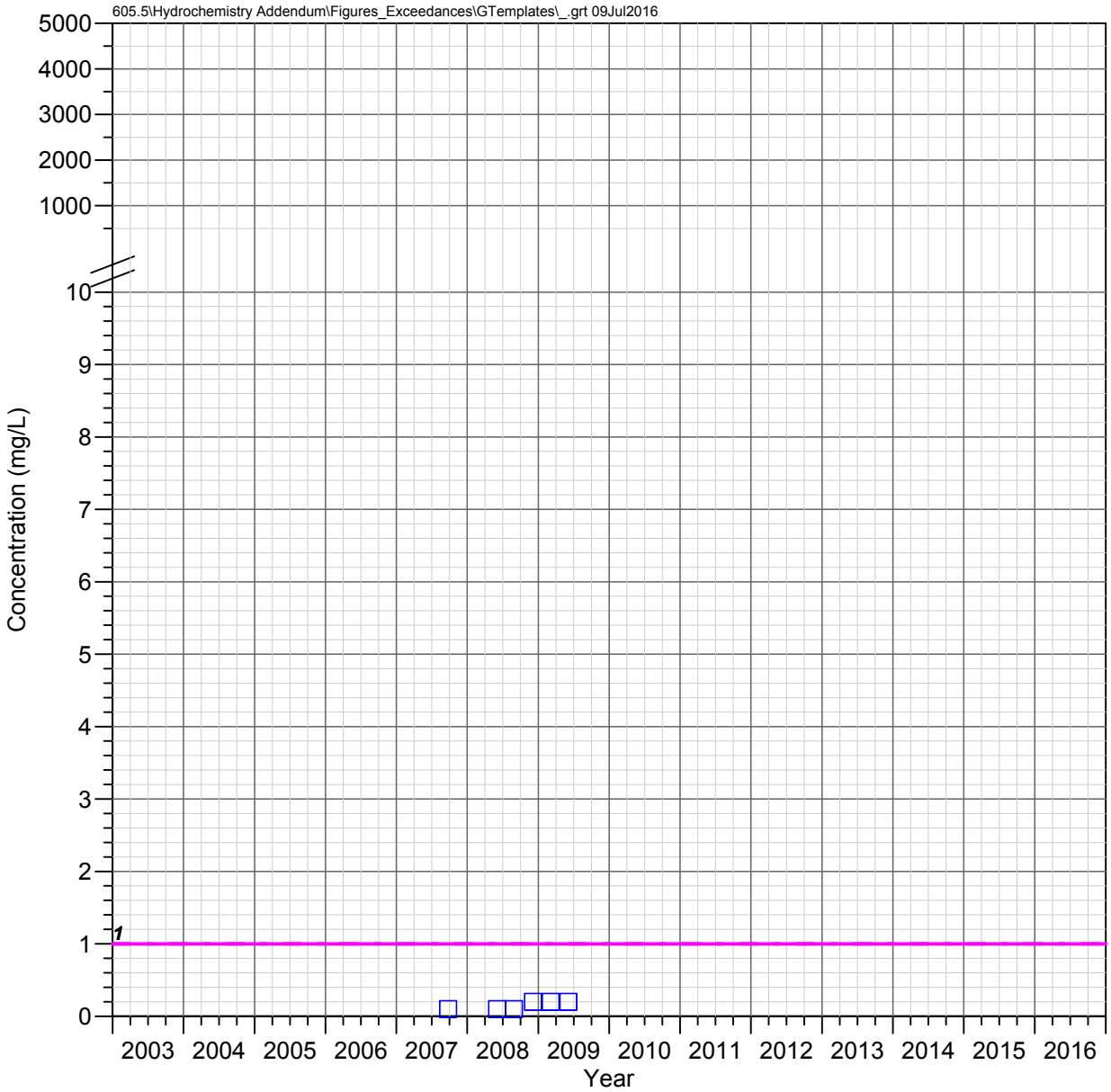


FIGURE E-519. NITRITE AS N CONCENTRATIONS OBSERVED AT JI RANCH MIDDLE WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



A-06
Apache Leap Tuff Aquifer

NITRITE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 1 mg/L)
- EPA Maximum Contaminant Levels (UNS, 1 mg/L)

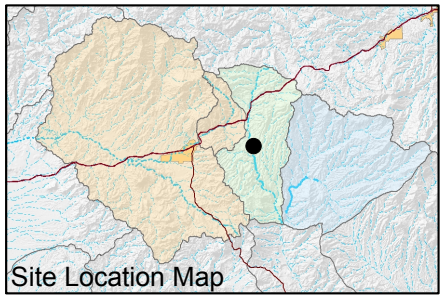
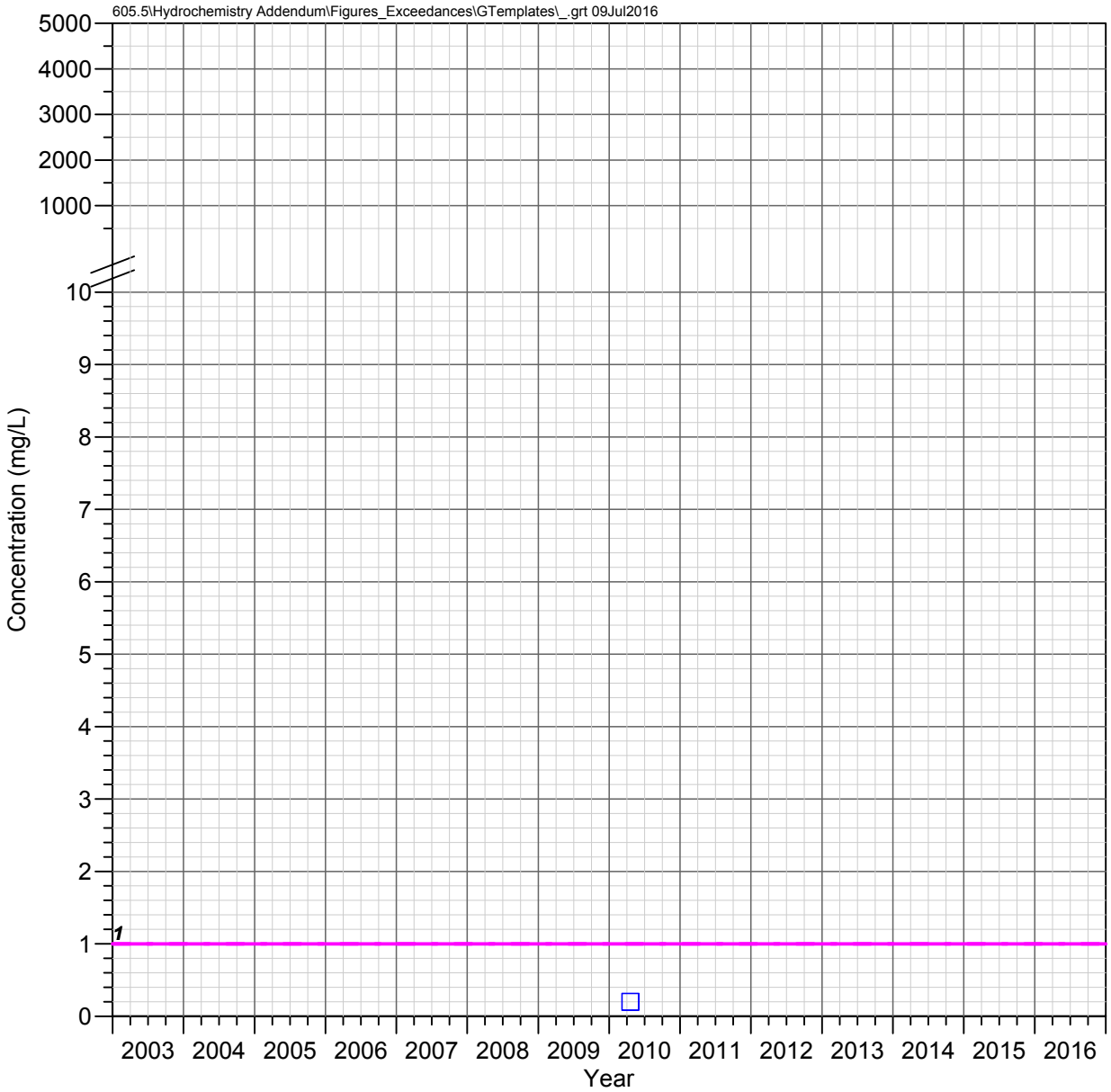


FIGURE E-520. NITRITE AS N CONCENTRATIONS OBSERVED AT A-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



CT Well
Apache Leap Tuff Aquifer

NITRITE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 1 mg/L)
- EPA Maximum Contaminant Levels (UNS, 1 mg/L)

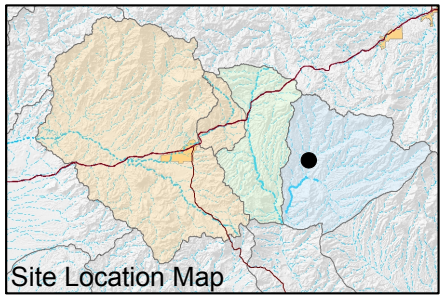
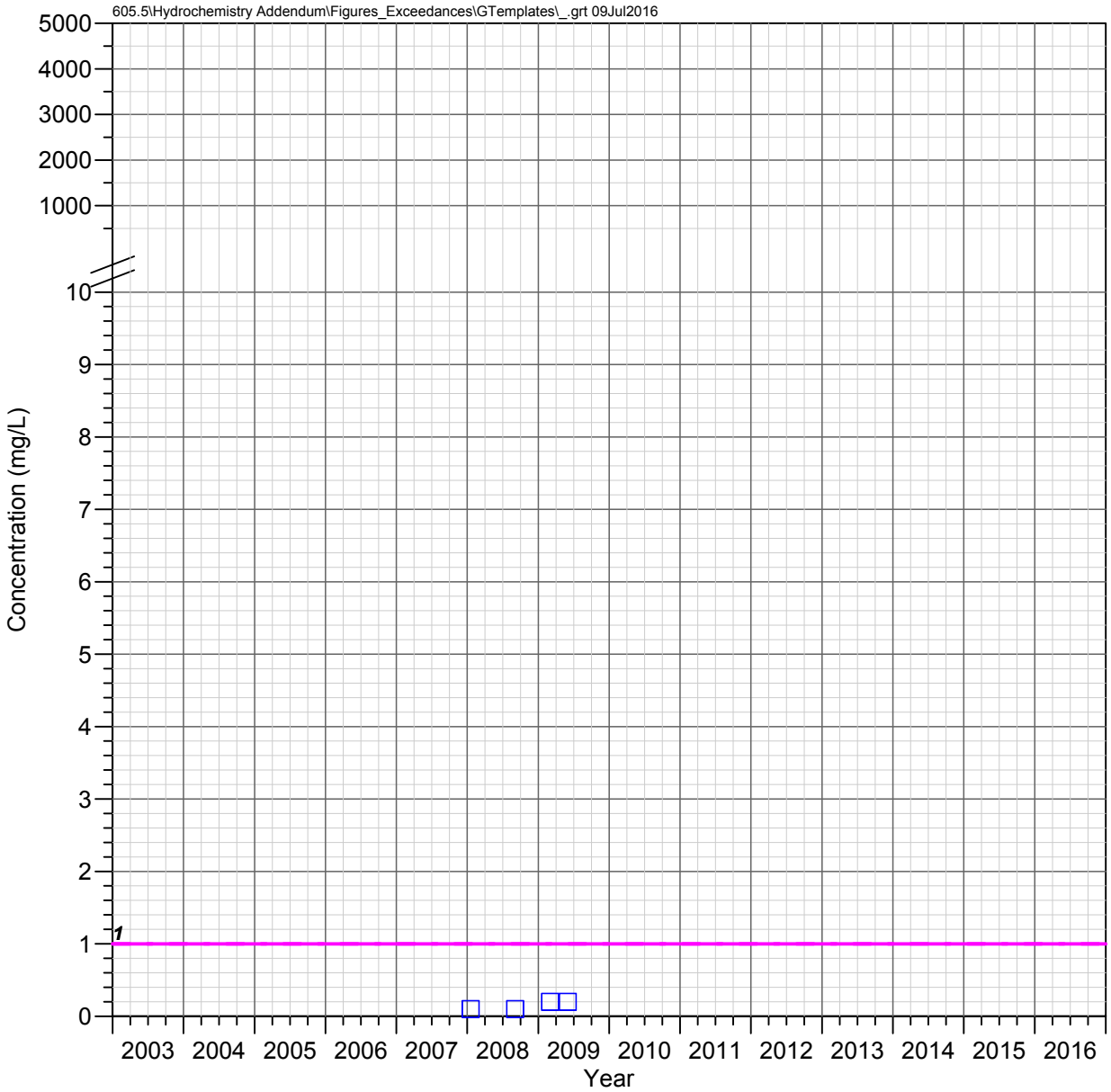


FIGURE E-521. NITRITE AS N CONCENTRATIONS OBSERVED AT CT WELL, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-04
Apache Leap Tuff Aquifer

NITRITE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 1 mg/L)
- EPA Maximum Contaminant Levels (UNS, 1 mg/L)

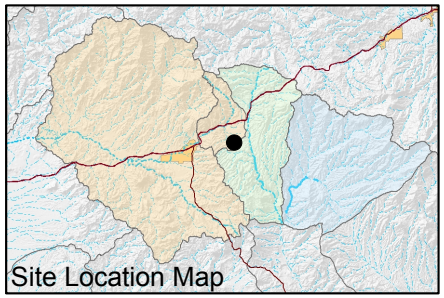
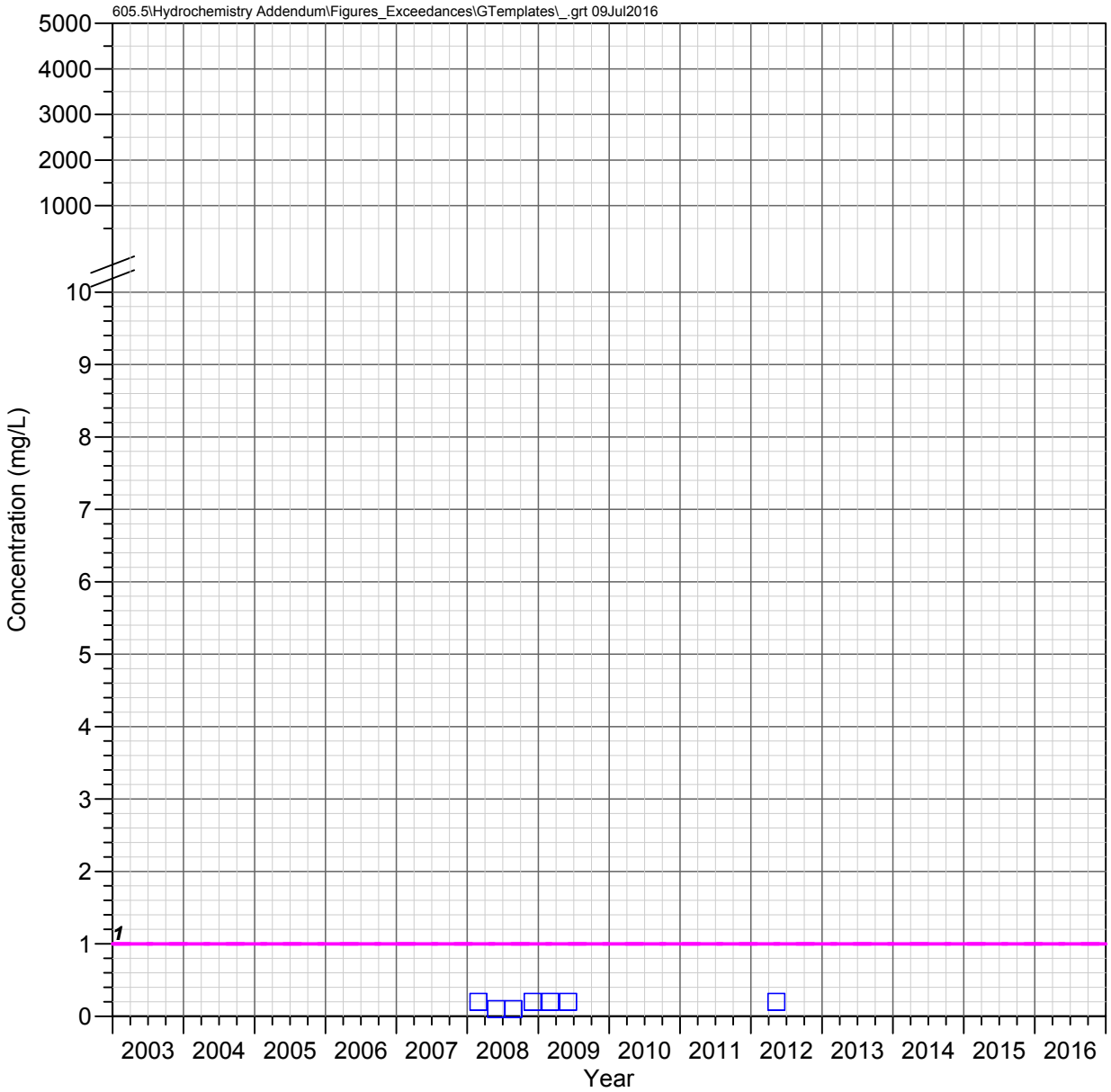


FIGURE E-522. NITRITE AS N CONCENTRATIONS OBSERVED AT HRES-04, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-05
Apache Leap Tuff Aquifer

NITRITE AS N

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 1 mg/L)
- EPA Maximum Contaminant Levels (UNS, 1 mg/L)

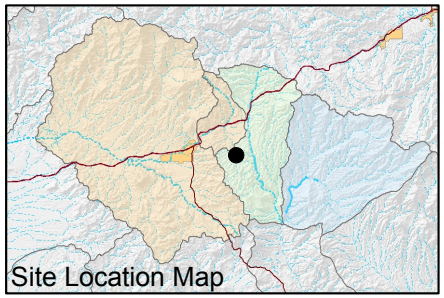
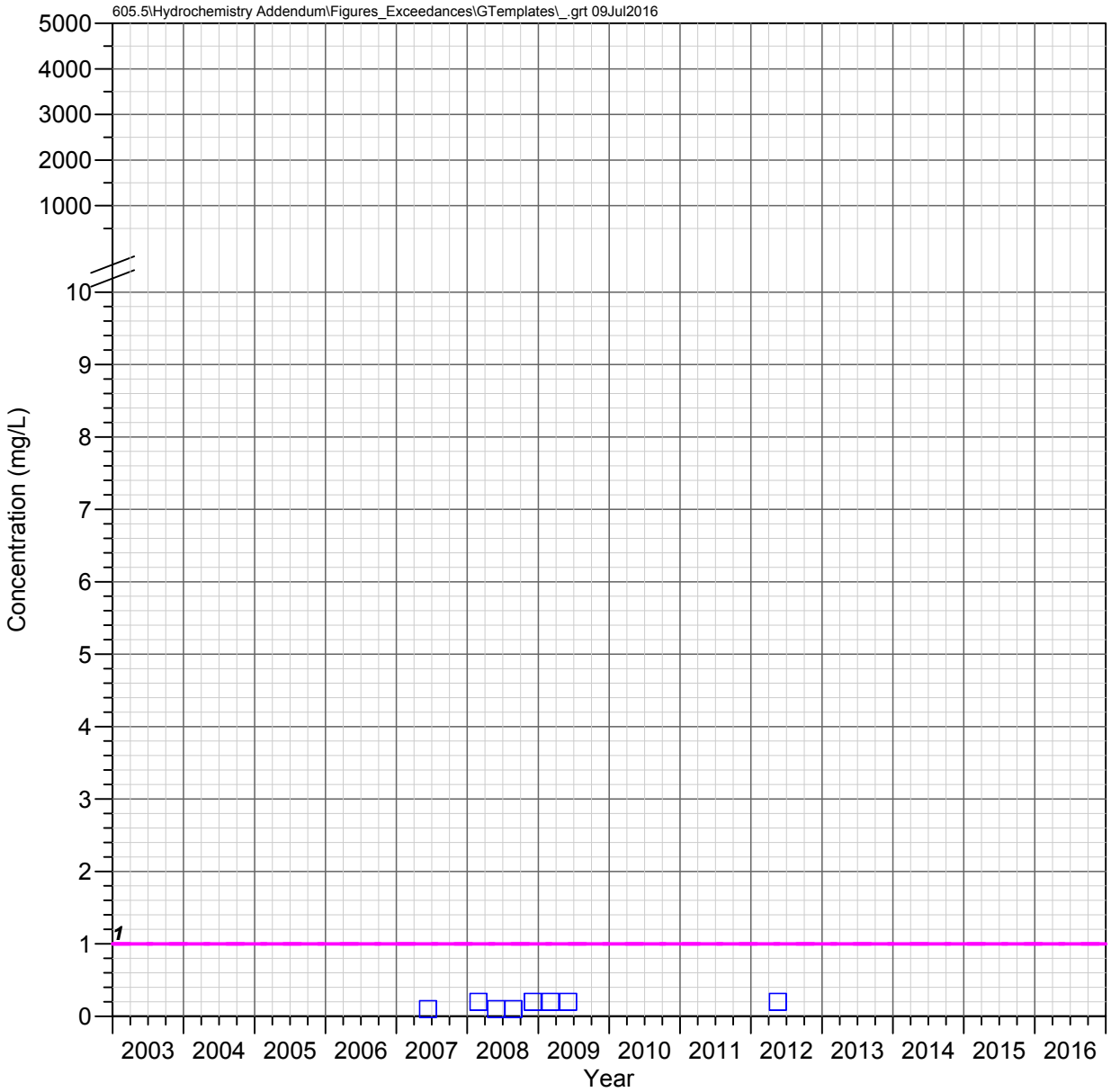


FIGURE E-523. NITRITE AS N CONCENTRATIONS OBSERVED AT HRES-05, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-06
Apache Leap Tuff Aquifer

NITRITE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 1 mg/L)
- EPA Maximum Contaminant Levels (UNS, 1 mg/L)

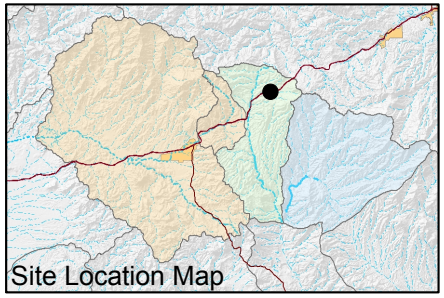
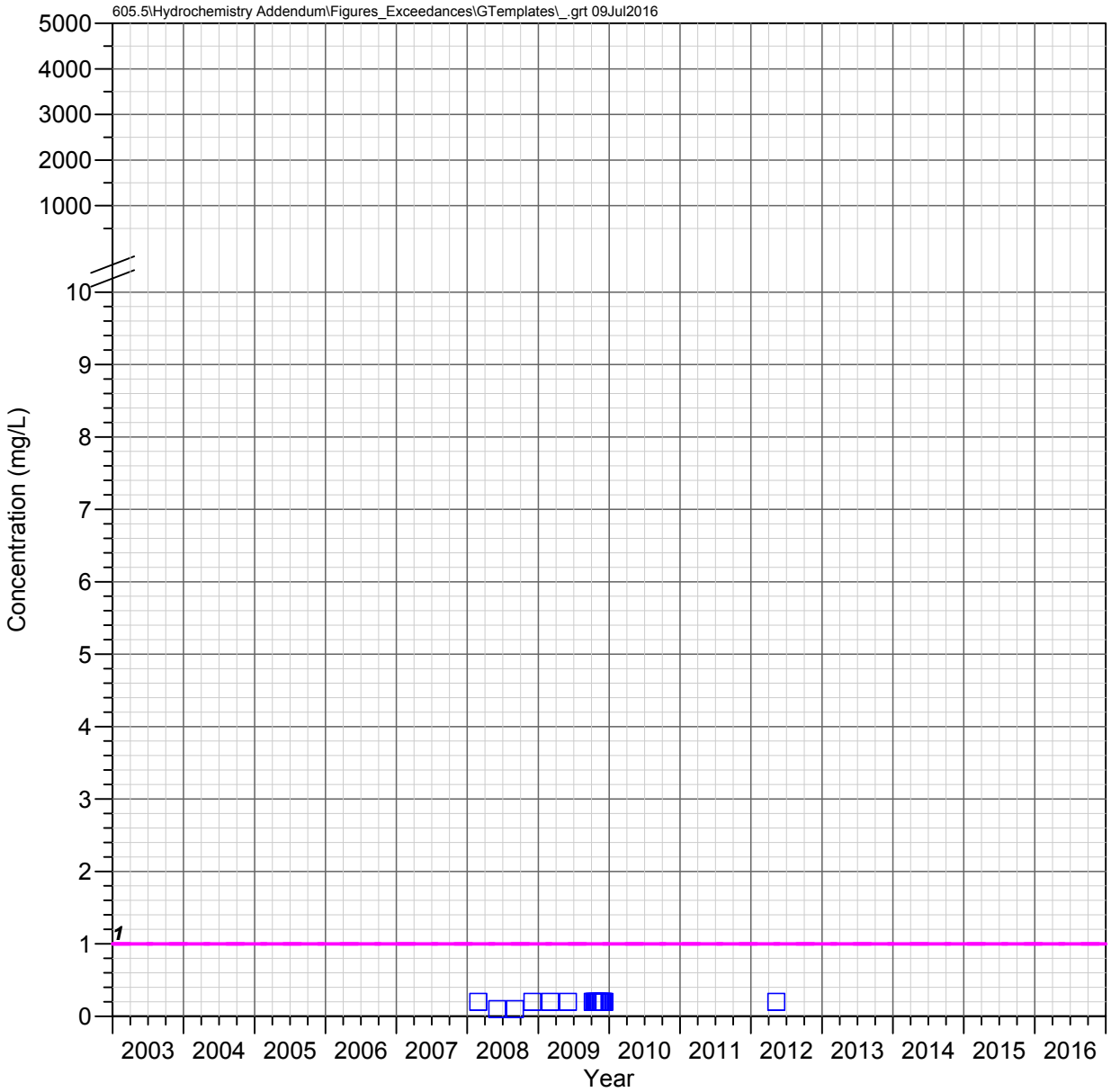


FIGURE E-524. NITRITE AS N CONCENTRATIONS OBSERVED AT HRES-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-07
Apache Leap Tuff Aquifer

NITRITE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 1 mg/L)
- EPA Maximum Contaminant Levels (UNS, 1 mg/L)

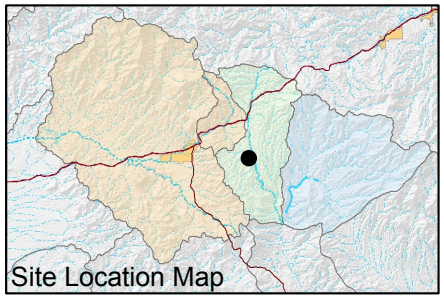
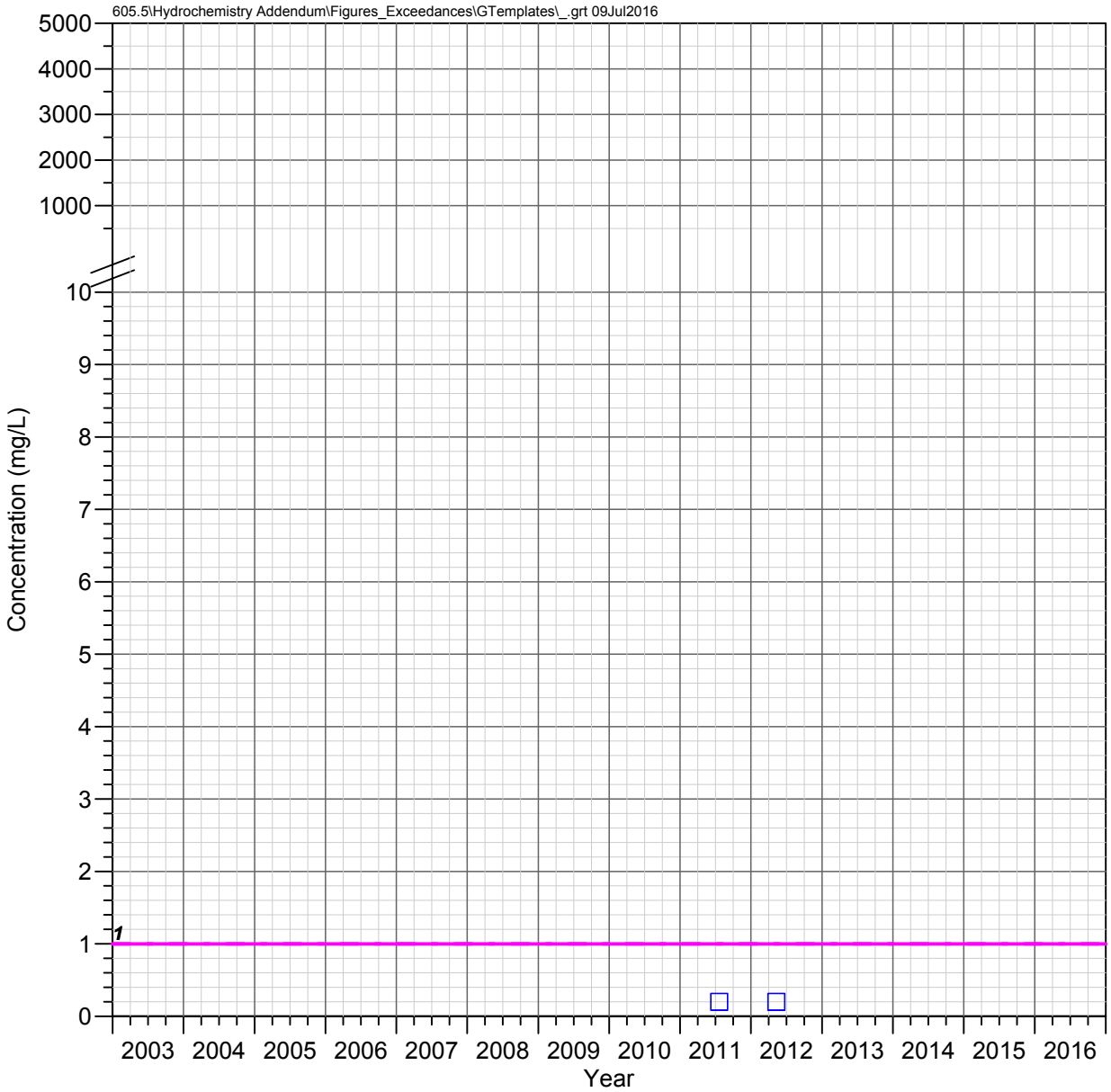


FIGURE E-525. NITRITE AS N CONCENTRATIONS OBSERVED AT HRES-07, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-08
Apache Leap Tuff Aquifer

NITRITE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 1 mg/L)
- EPA Maximum Contaminant Levels (UNS, 1 mg/L)

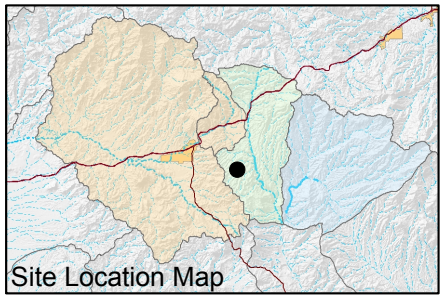
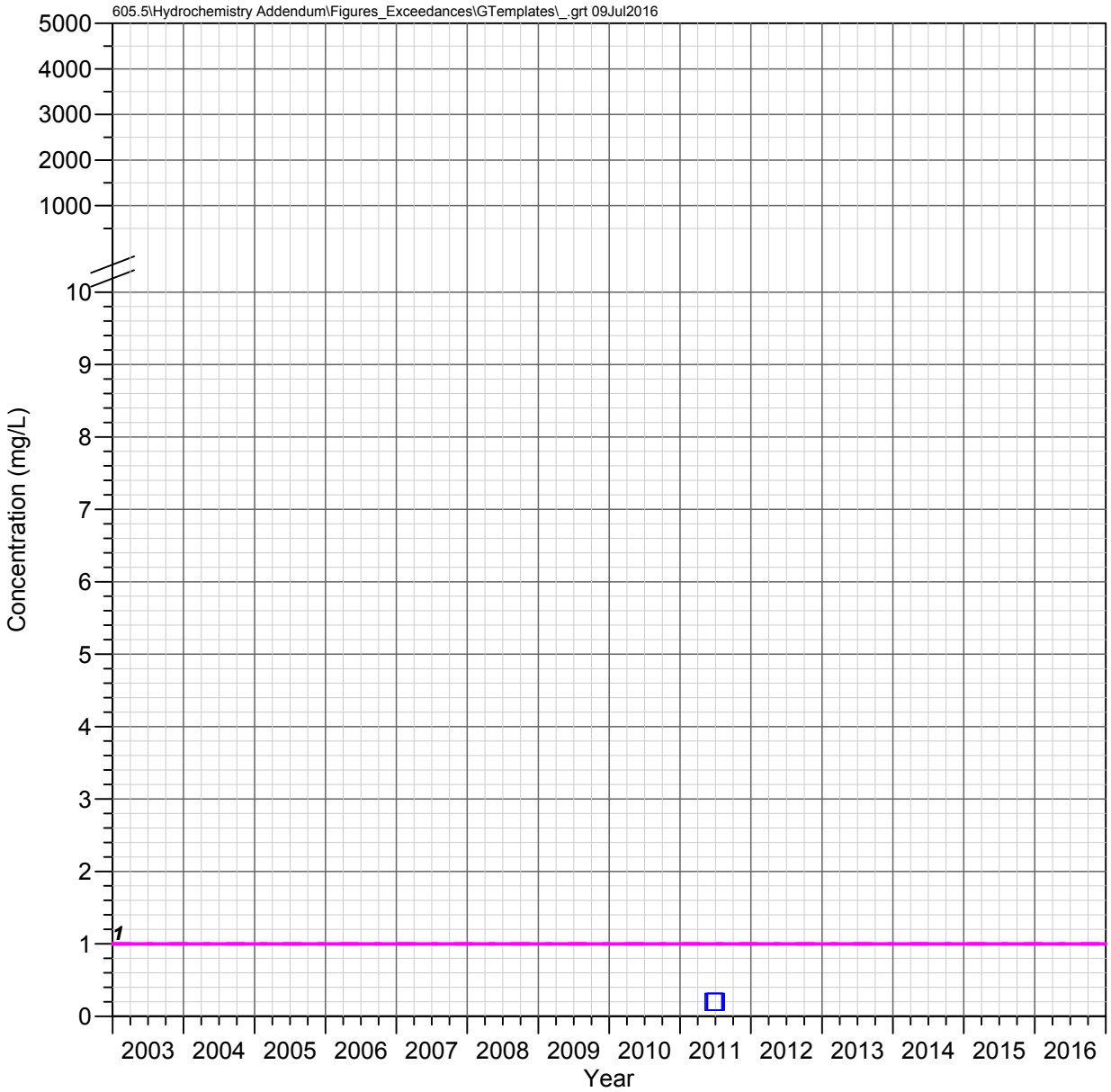


FIGURE E-526. NITRITE AS N CONCENTRATIONS OBSERVED AT HRES-08, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-09
Apache Leap Tuff Aquifer

NITRITE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 1 mg/L)
- EPA Maximum Contaminant Levels (UNS, 1 mg/L)

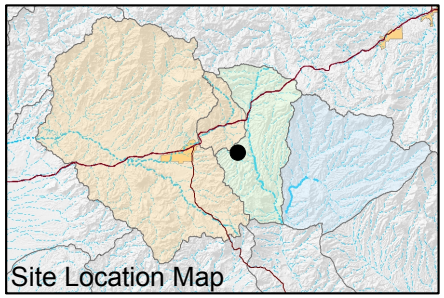
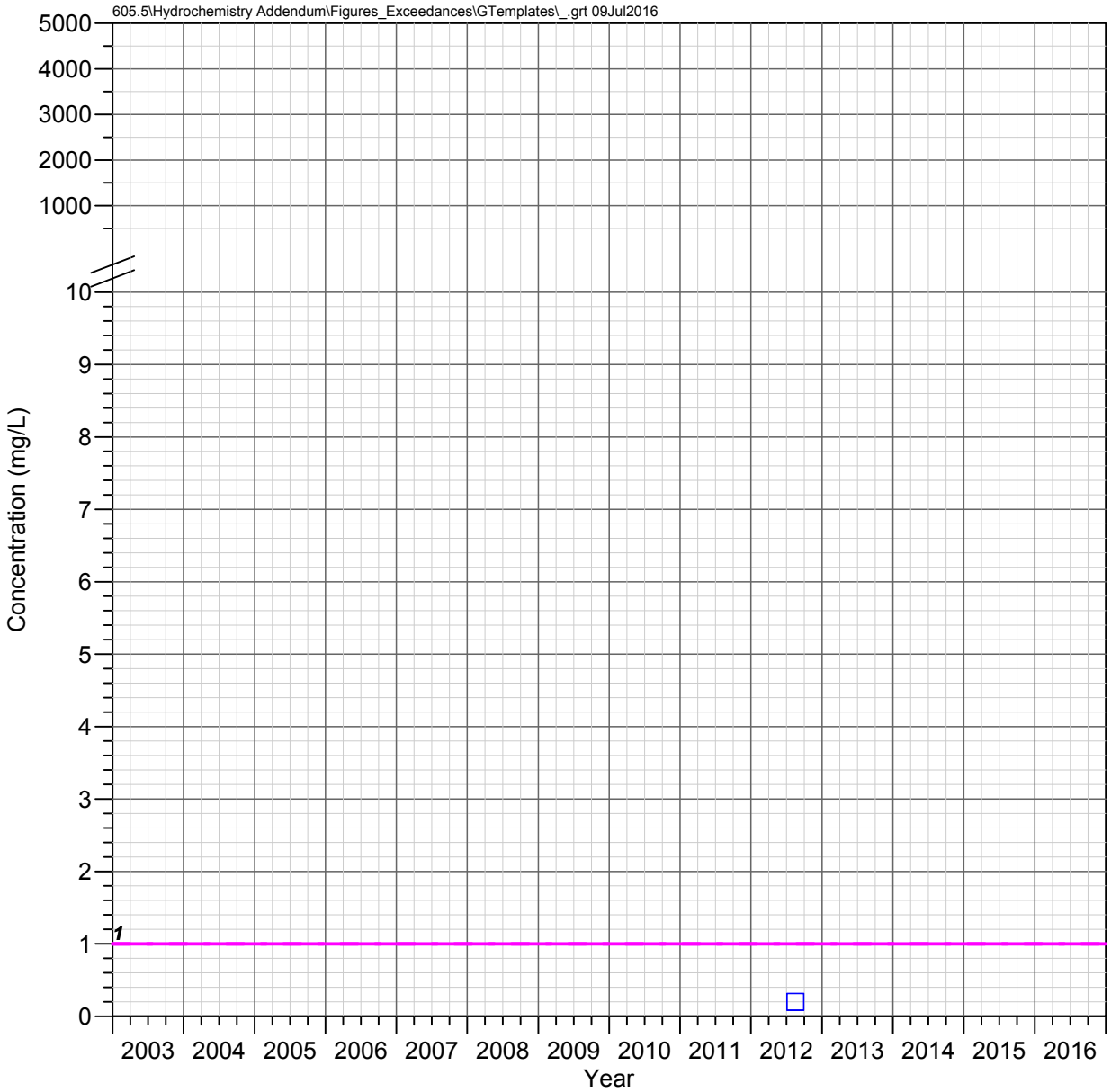


FIGURE E-527. NITRITE AS N CONCENTRATIONS OBSERVED AT HRES-09, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-10
Apache Leap Tuff Aquifer

NITRITE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 1 mg/L)
- EPA Maximum Contaminant Levels (UNS, 1 mg/L)

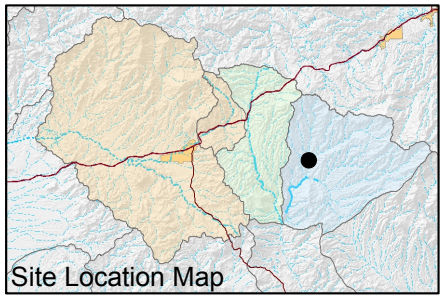
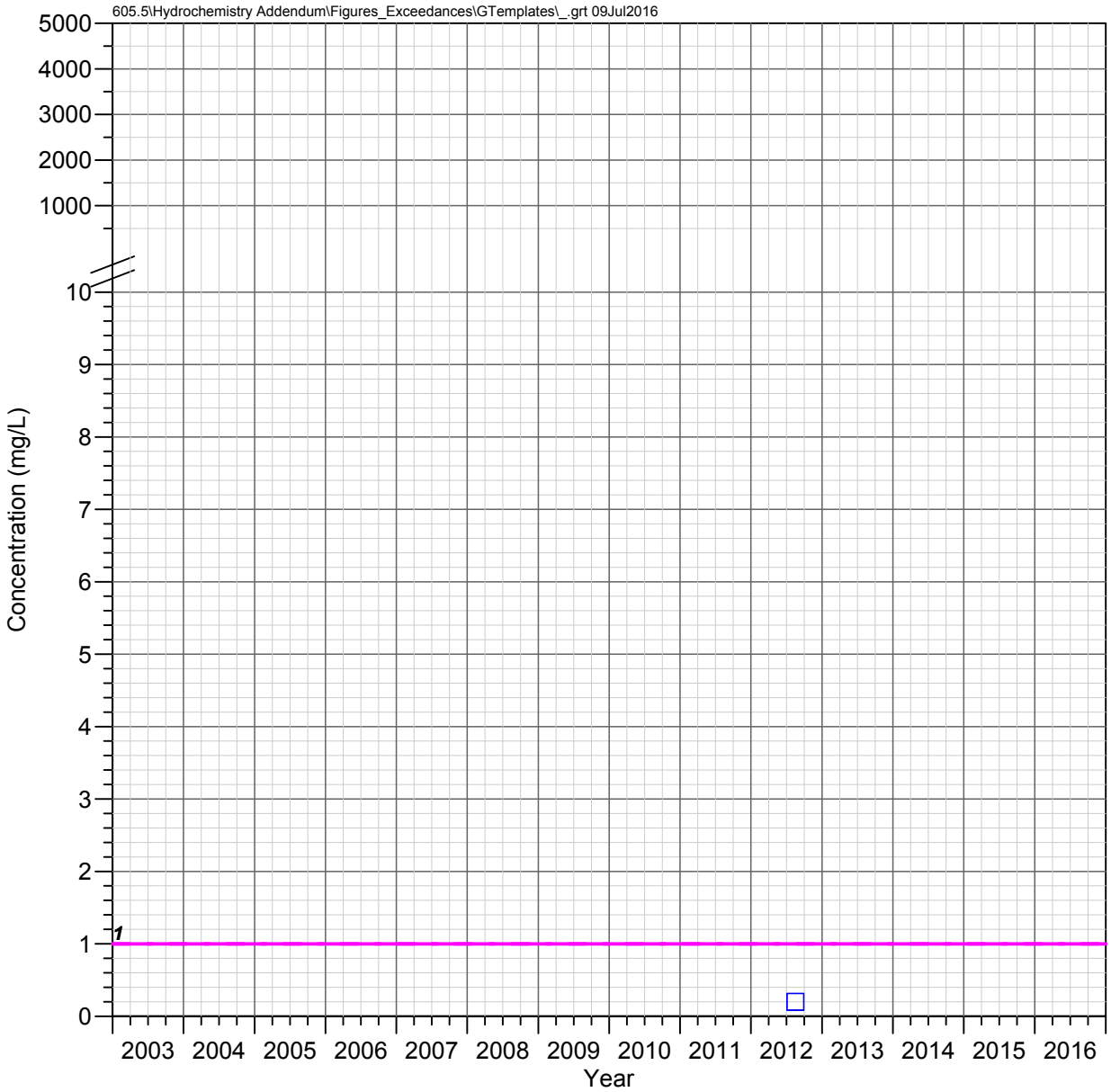


FIGURE E-528. NITRITE AS N CONCENTRATIONS OBSERVED AT HRES-10, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-11
Apache Leap Tuff Aquifer

NITRITE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 1 mg/L)
- EPA Maximum Contaminant Levels (UNS, 1 mg/L)

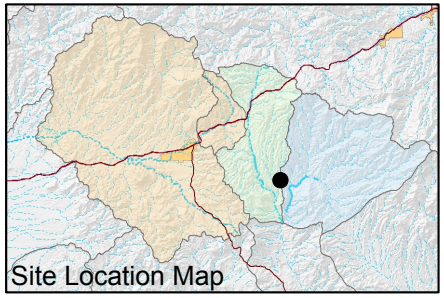
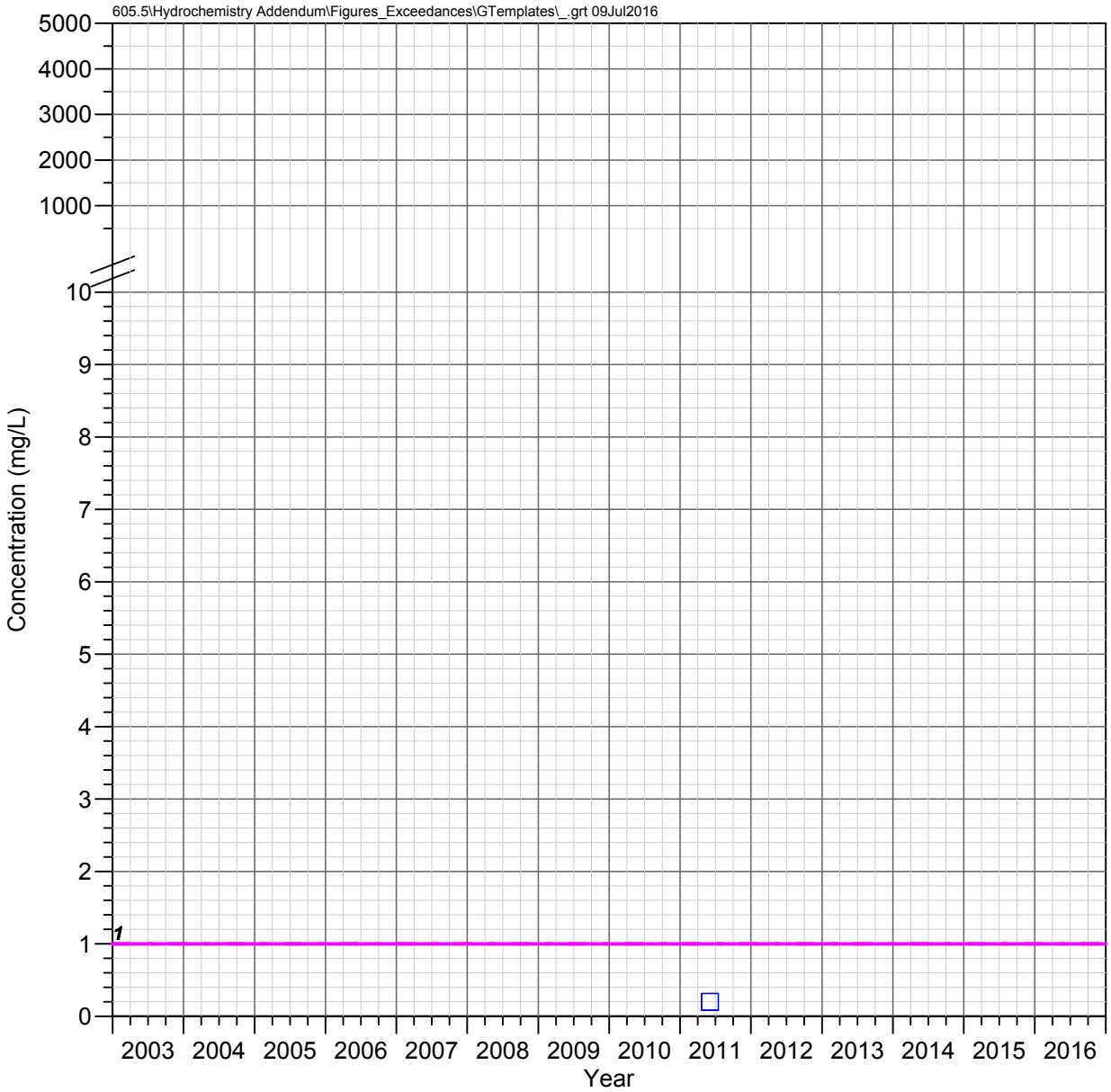


FIGURE E-529. NITRITE AS N CONCENTRATIONS OBSERVED AT HRES-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-13
Apache Leap Tuff Aquifer

NITRITE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 1 mg/L)
- EPA Maximum Contaminant Levels (UNS, 1 mg/L)

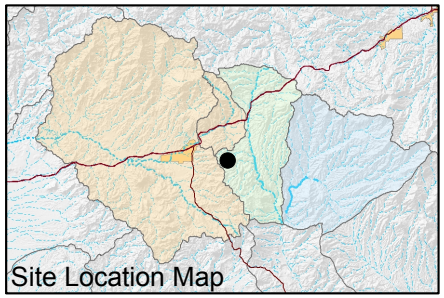
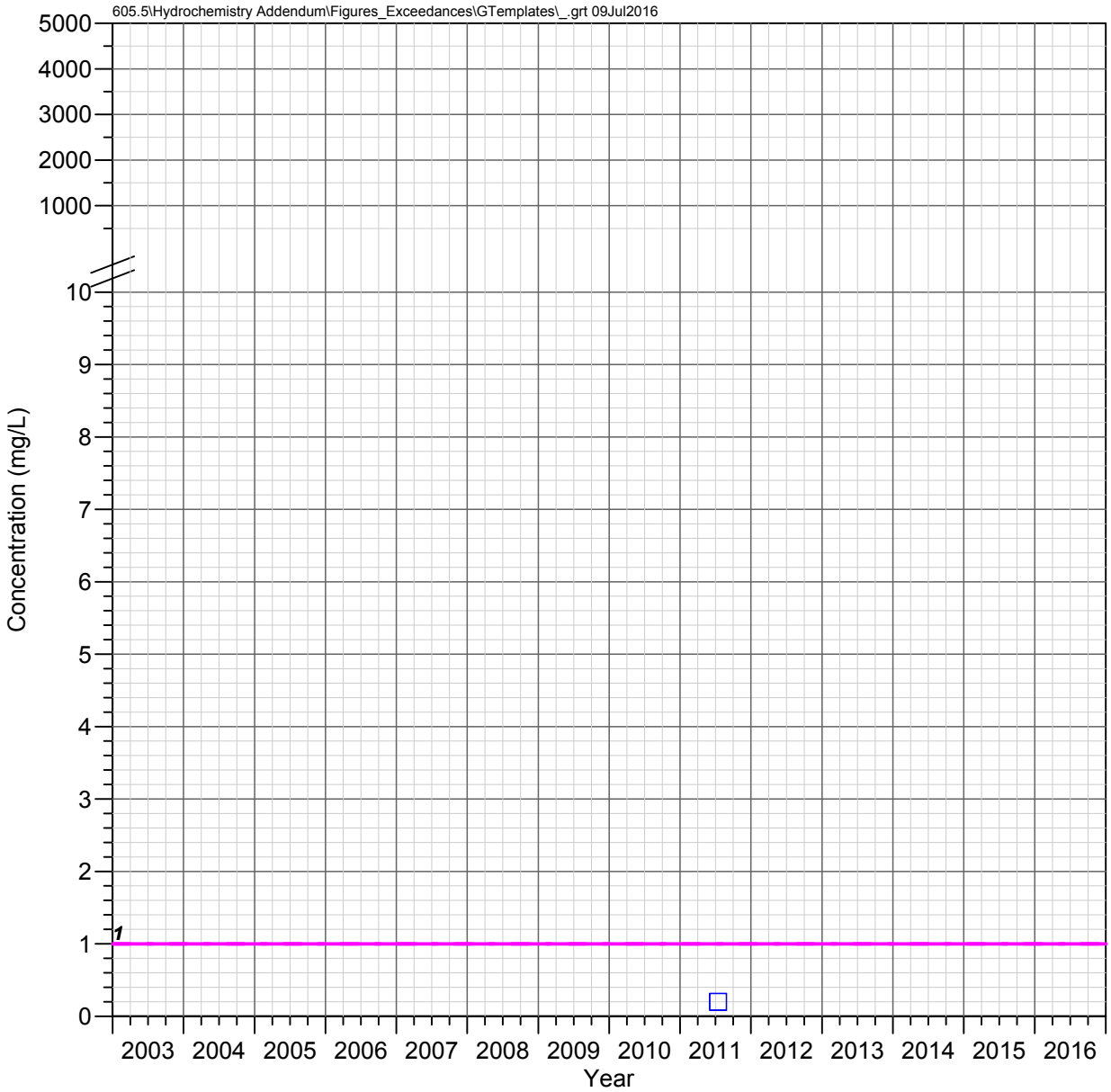


FIGURE E-530. NITRITE AS N CONCENTRATIONS OBSERVED AT HRES-13, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-14
Apache Leap Tuff Aquifer

NITRITE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 1 mg/L)
- EPA Maximum Contaminant Levels (UNS, 1 mg/L)

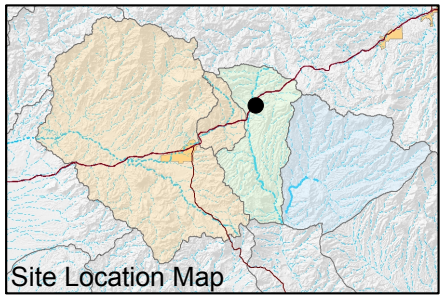
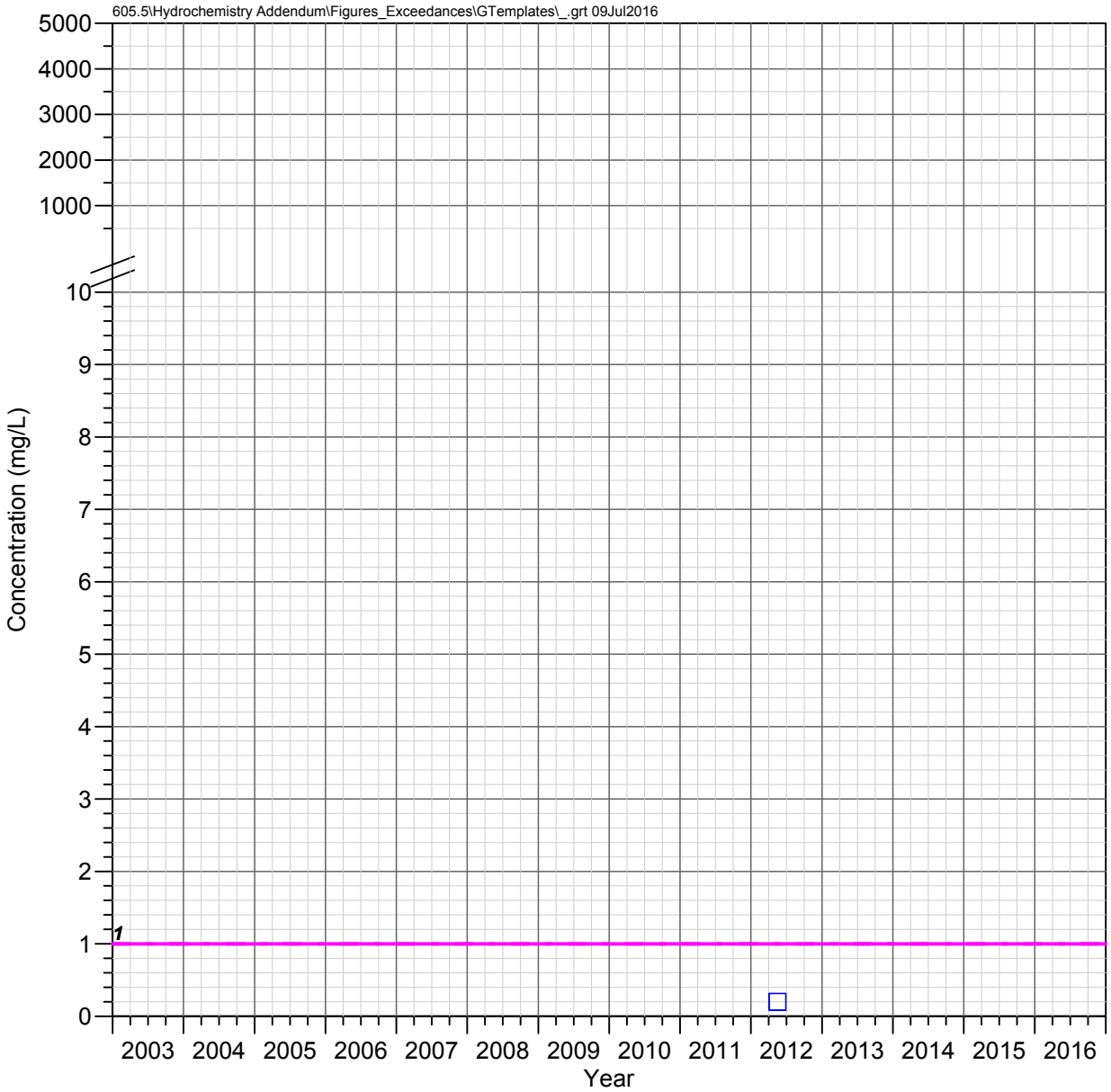


FIGURE E-531. NITRITE AS N CONCENTRATIONS OBSERVED AT HRES-14, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-17
Apache Leap Tuff Aquifer

NITRITE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 1 mg/L)
- EPA Maximum Contaminant Levels (UNS, 1 mg/L)

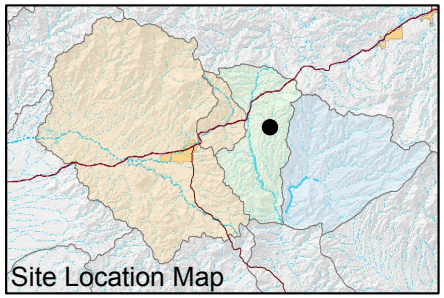
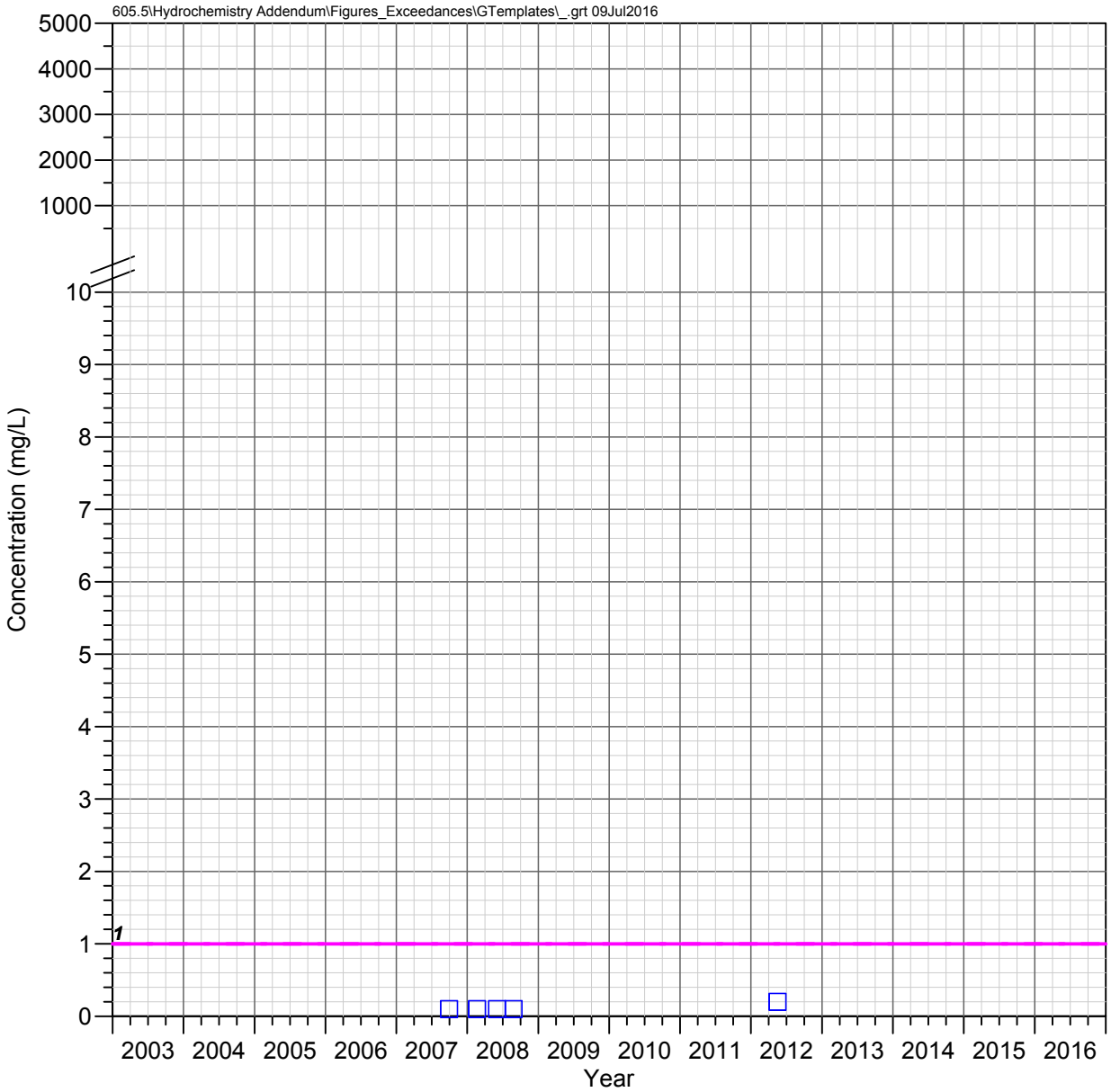


FIGURE E-532. NITRITE AS N CONCENTRATIONS OBSERVED AT HRES-17, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MJ-11
Apache Leap Tuff Aquifer

NITRITE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 1 mg/L)
- EPA Maximum Contaminant Levels (UNS, 1 mg/L)

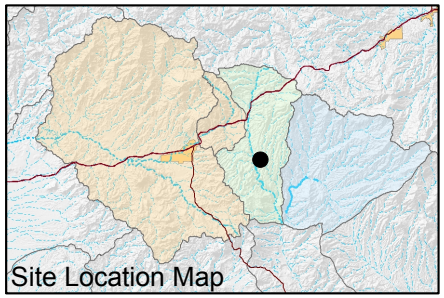
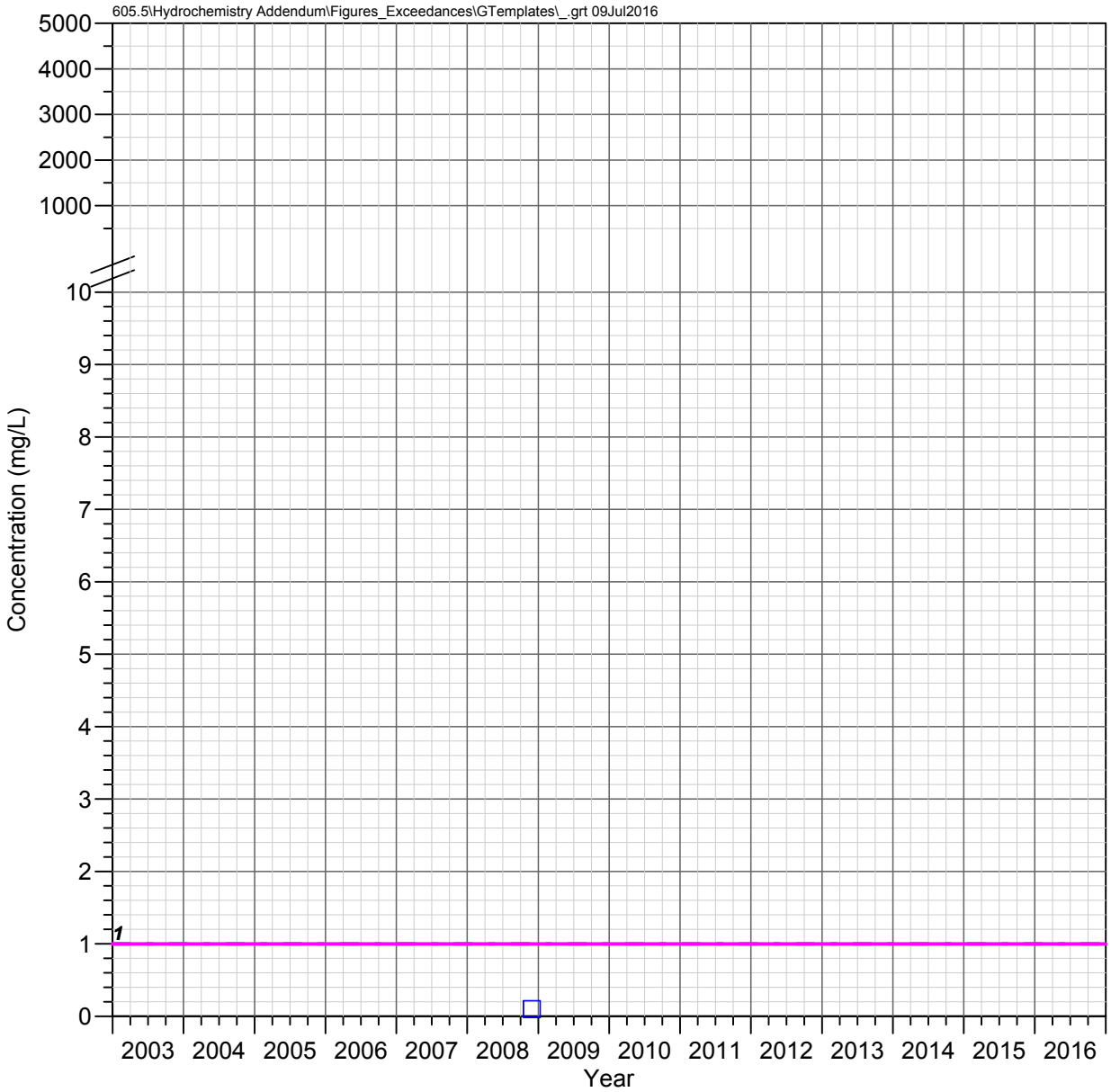


FIGURE E-533. NITRITE AS N CONCENTRATIONS OBSERVED AT MJ-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-01
Deep Groundwater System

NITRITE AS N

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 1 mg/L)
- EPA Maximum Contaminant Levels (UNS, 1 mg/L)

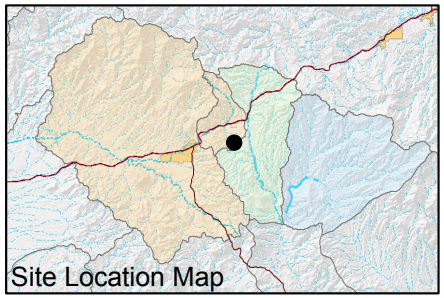
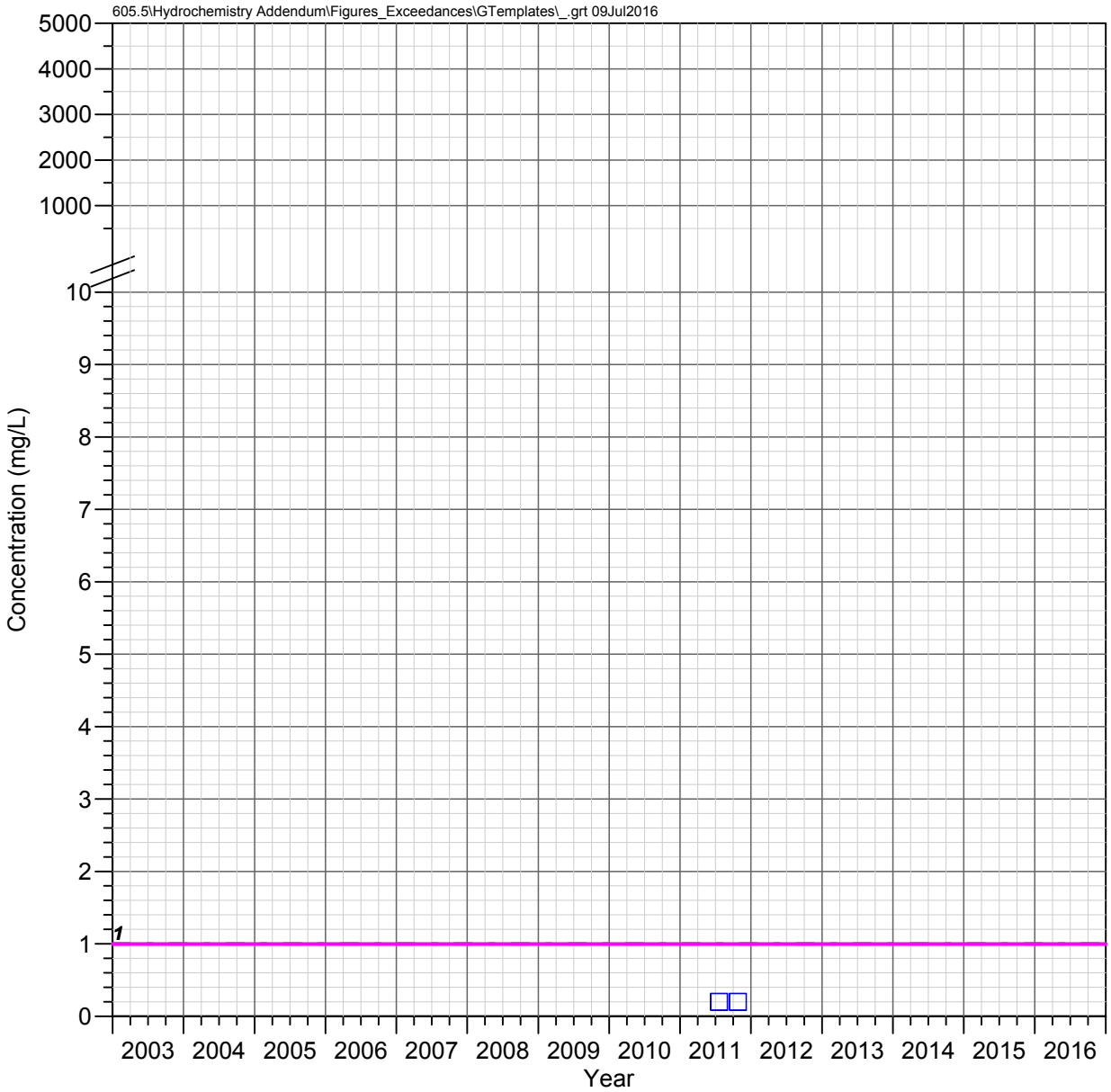


FIGURE E-534. NITRITE AS N CONCENTRATIONS OBSERVED AT DHRES-01, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-02
Deep Groundwater System

NITRITE AS N

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 1 mg/L)
- EPA Maximum Contaminant Levels (UNS, 1 mg/L)

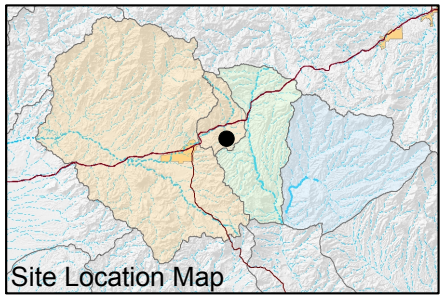
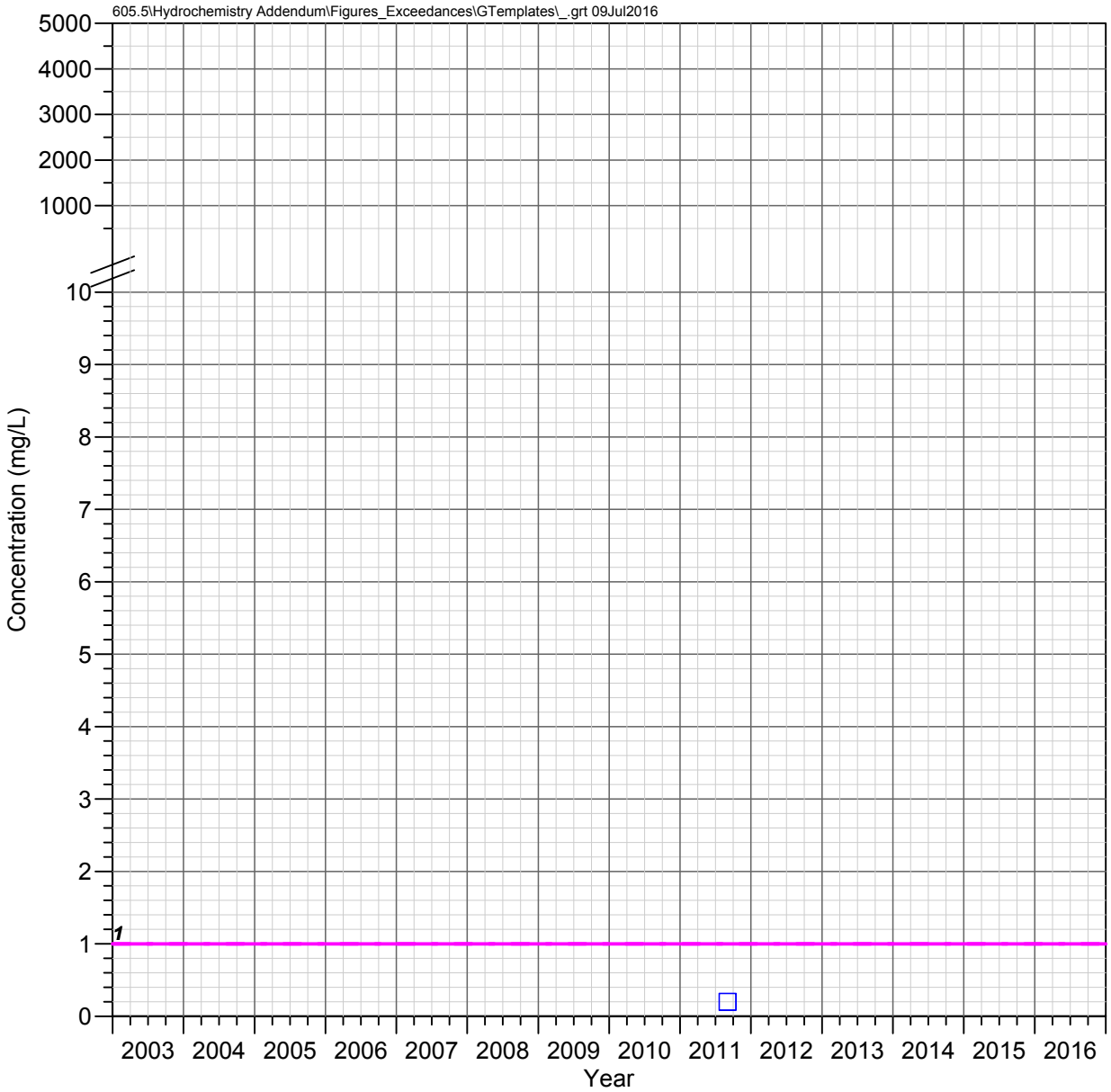


FIGURE E-535. NITRITE AS N CONCENTRATIONS OBSERVED AT DHRES-02, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-09
Deep Groundwater System

NITRITE AS N

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 1 mg/L)
- EPA Maximum Contaminant Levels (UNS, 1 mg/L)

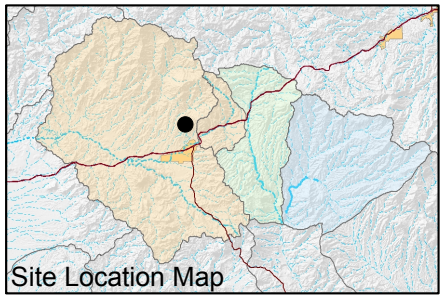
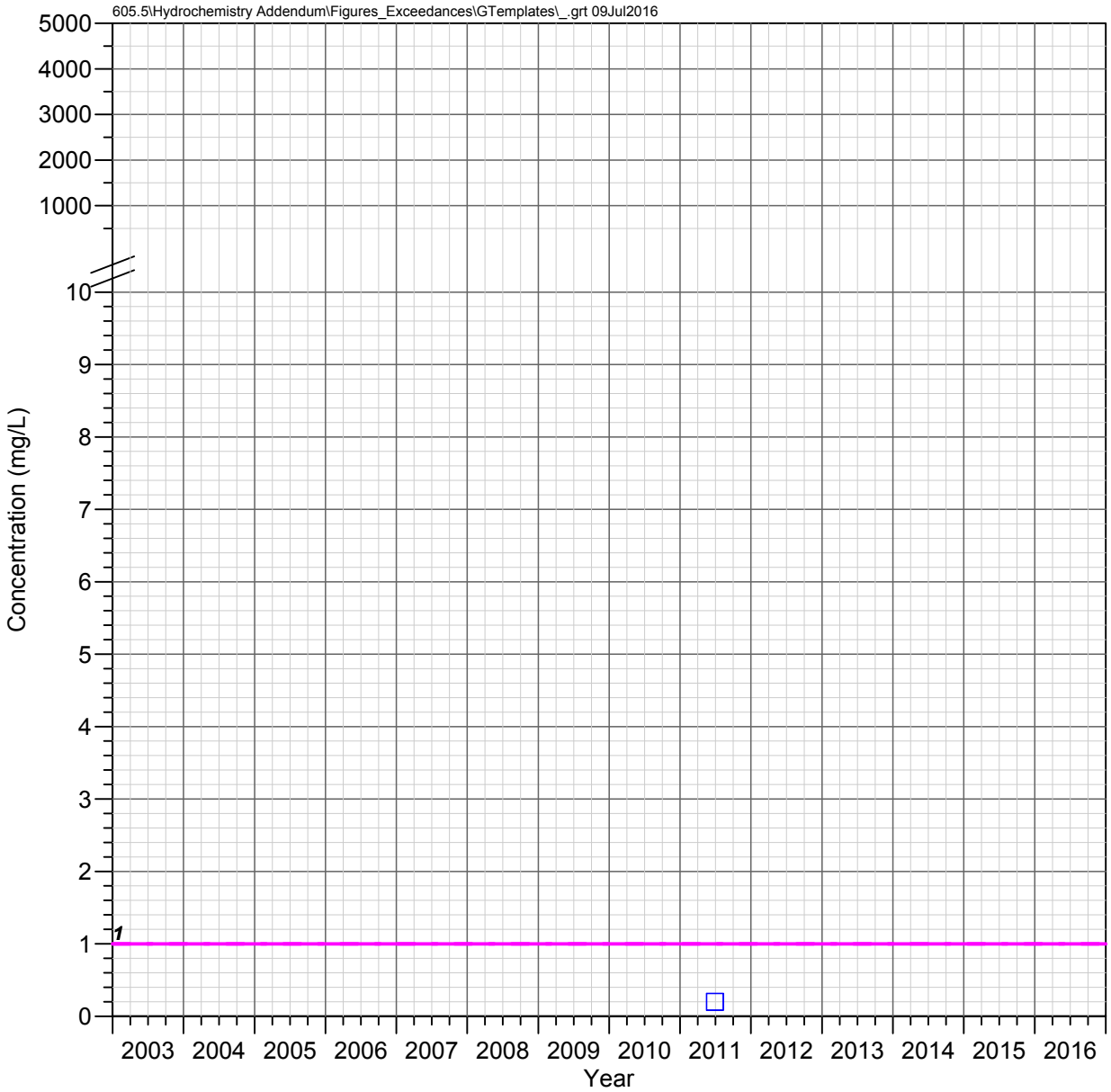


FIGURE E-536. NITRITE AS N CONCENTRATIONS OBSERVED AT DHRES-09, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-11
Deep Groundwater System

NITRITE AS N

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 1 mg/L)
- EPA Maximum Contaminant Levels (UNS, 1 mg/L)

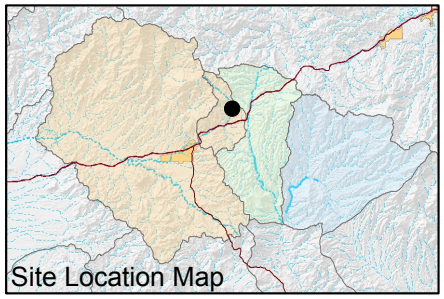
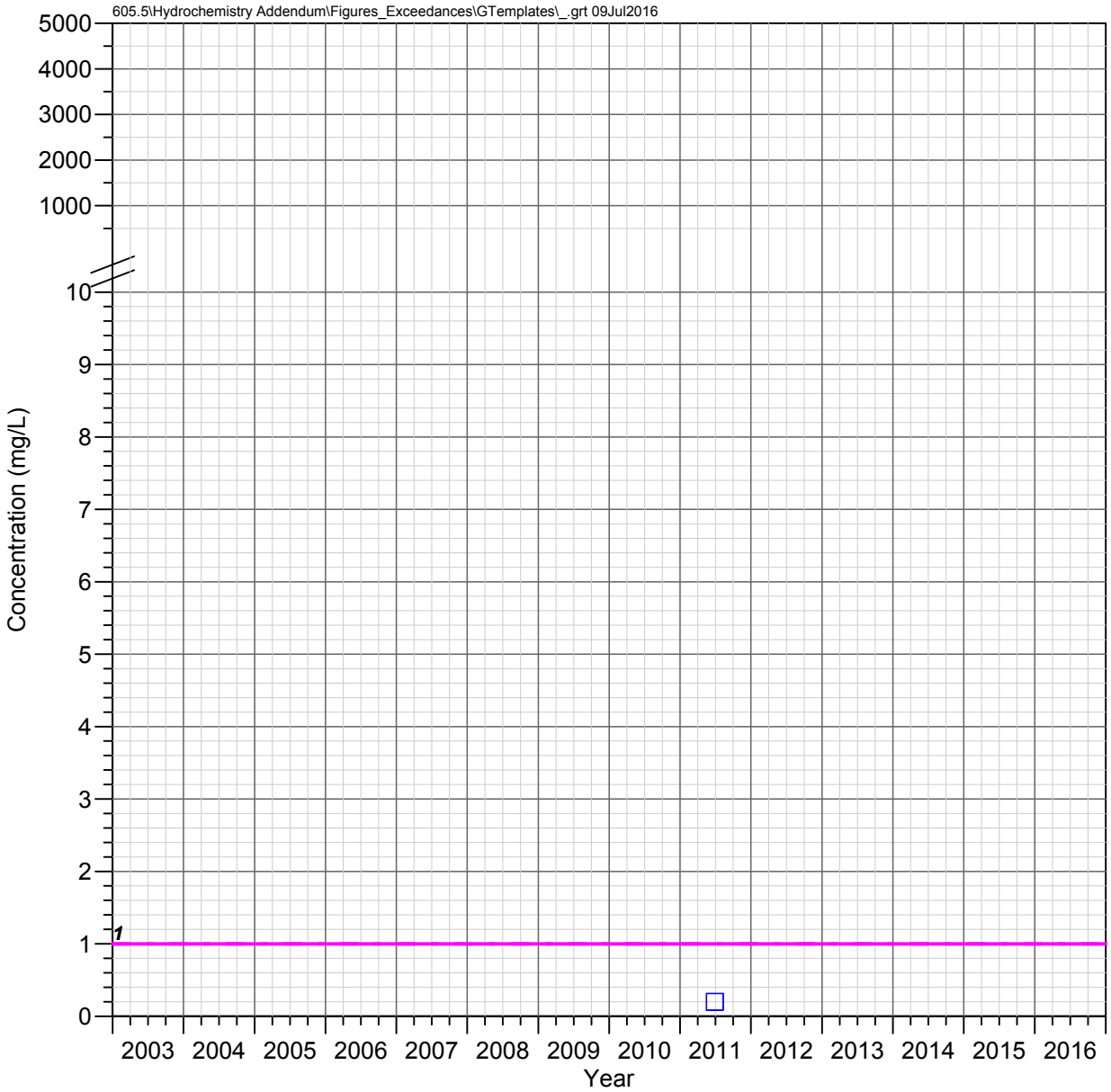


FIGURE E-537. NITRITE AS N CONCENTRATIONS OBSERVED AT DHRES-11, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-13
Deep Groundwater System

NITRITE AS N

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 1 mg/L)
- EPA Maximum Contaminant Levels (UNS, 1 mg/L)

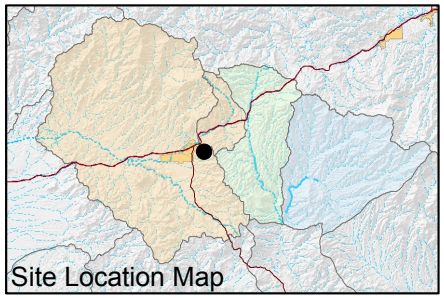
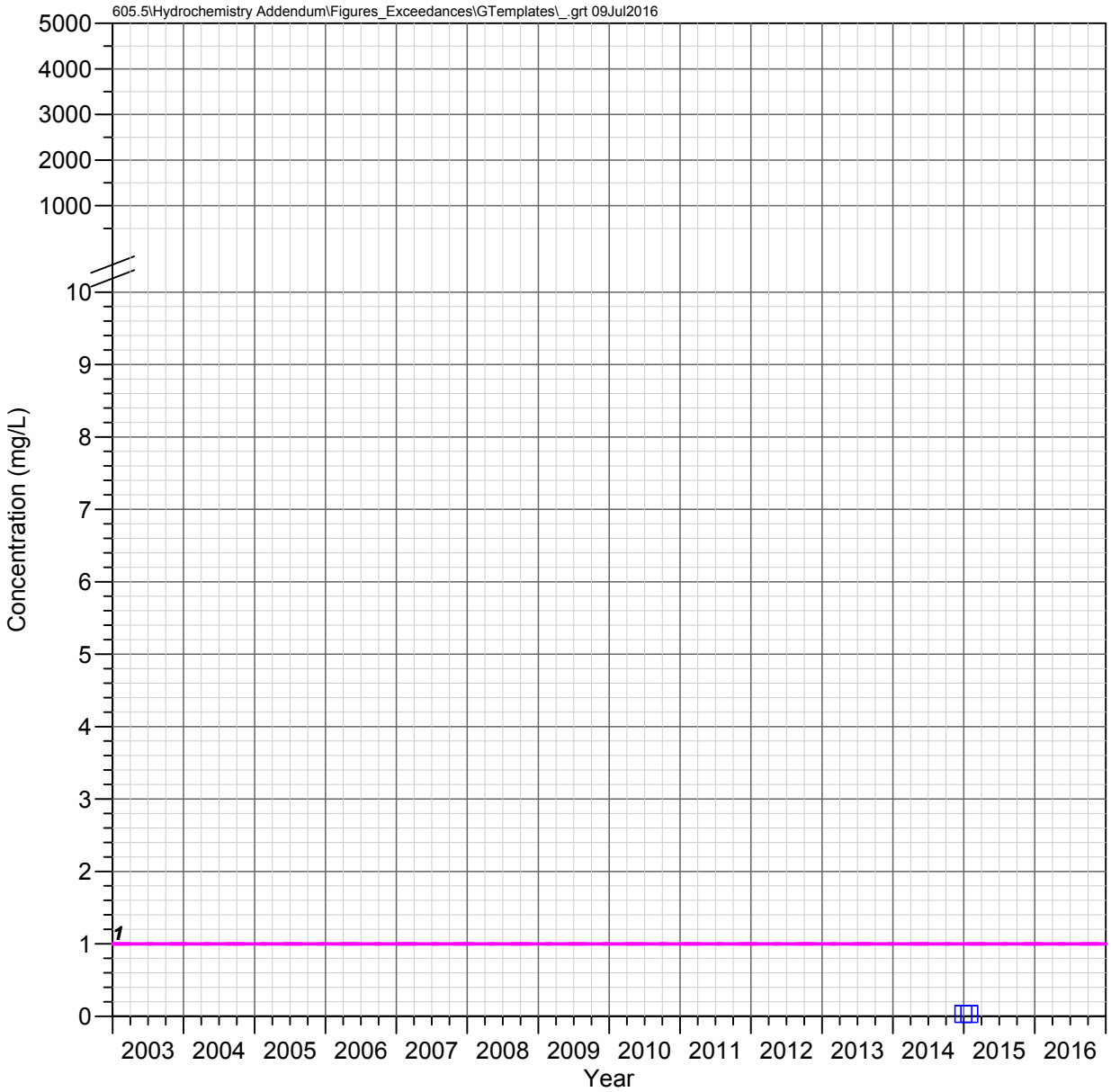


FIGURE E-538. NITRITE AS N CONCENTRATIONS OBSERVED AT DHRES-13, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-15
Deep Groundwater System

NITRITE AS N

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 1 mg/L)
- EPA Maximum Contaminant Levels (UNS, 1 mg/L)

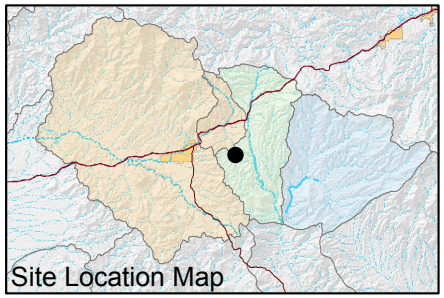
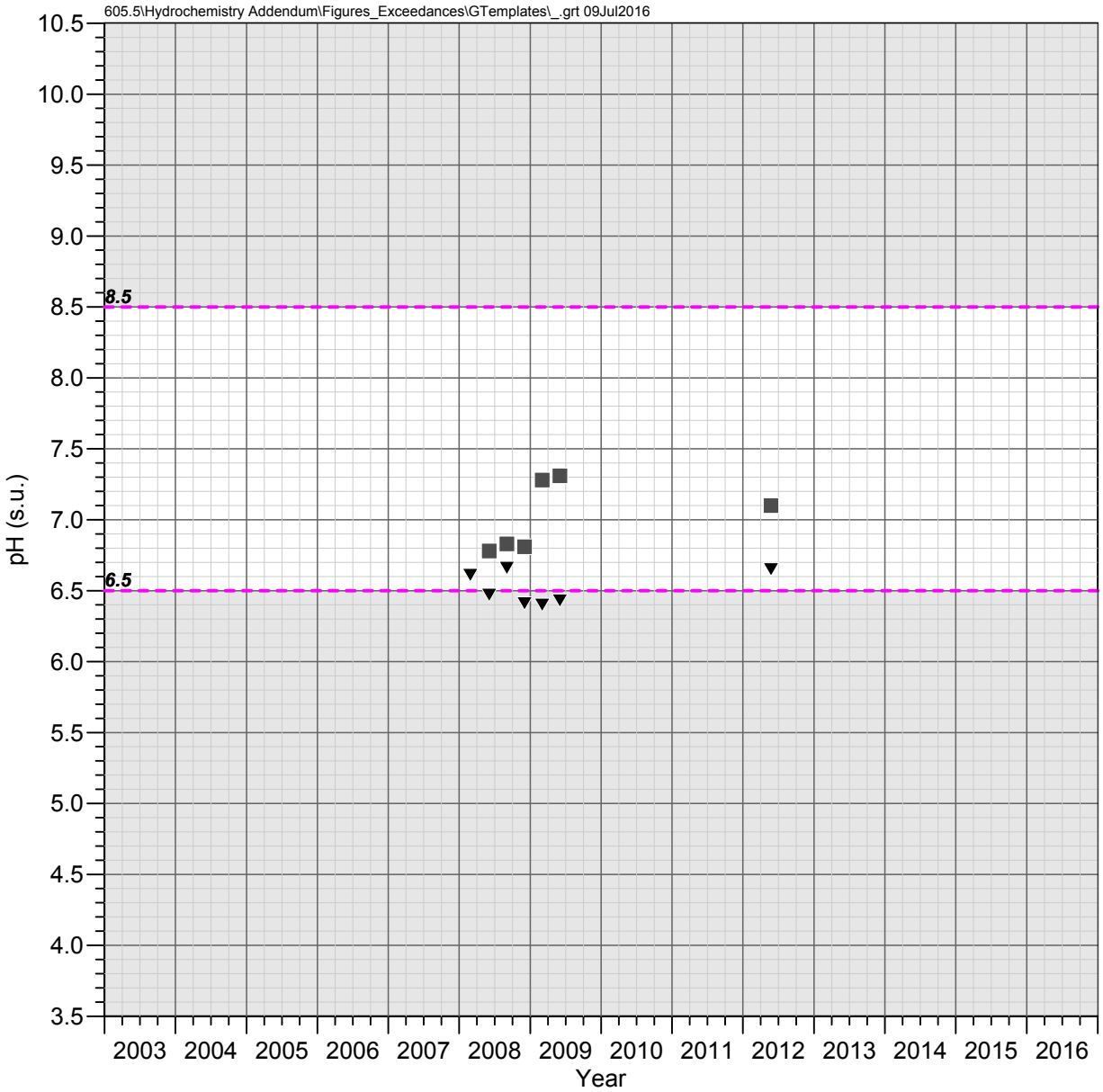


FIGURE E-539. NITRITE AS N CONCENTRATIONS OBSERVED AT DHRES-15, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Hackberry Windmill Well
Shallow Groundwater System

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- - - - EPA Secondary MCL (>6.5 and <8.5)

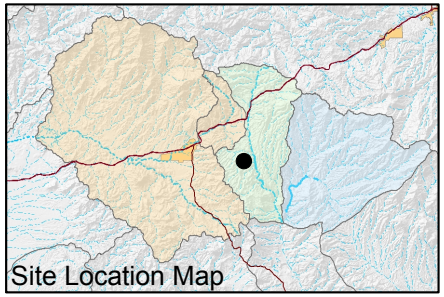
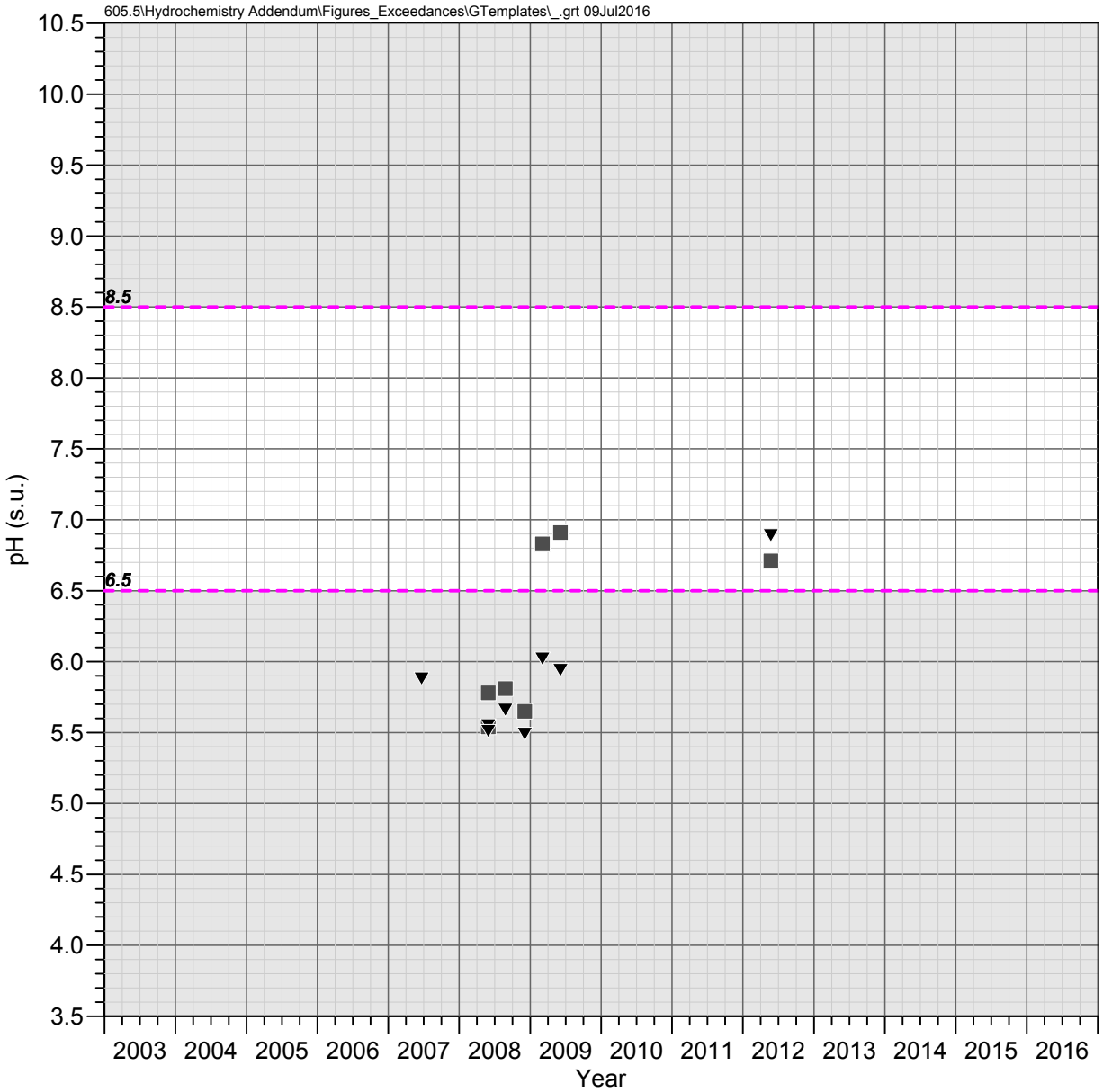


FIGURE E-540. pH OBSERVED AT HACKBERRY WINDMILL WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



JI Ranch Corral Well
Shallow Groundwater System

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- - - - EPA Secondary MCL (>6.5 and <8.5)

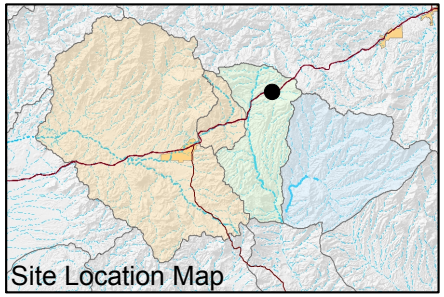
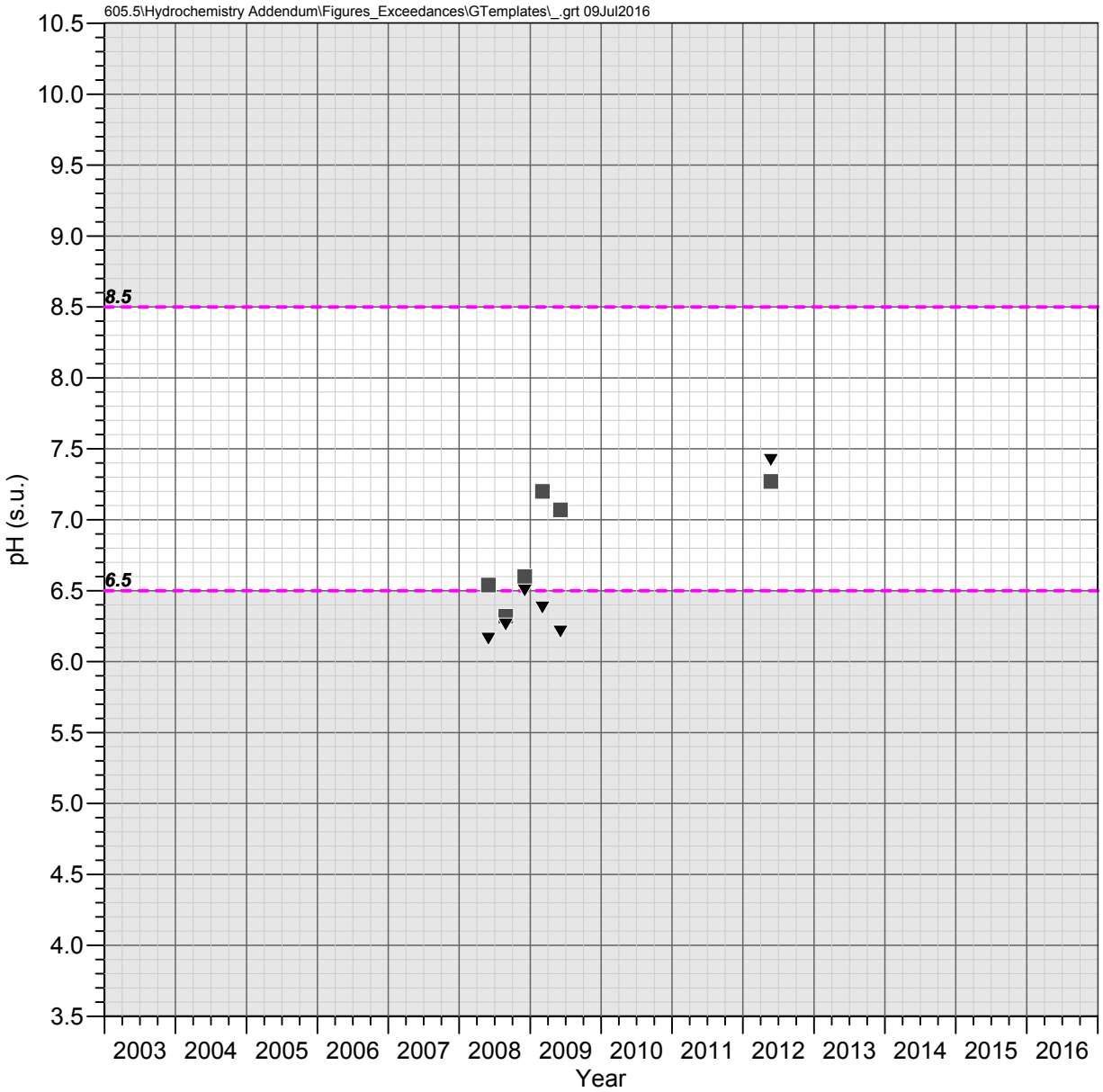


FIGURE E-541. pH OBSERVED AT JI RANCH CORRAL WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



JI Ranch Middle Well
Shallow Groundwater System

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- - - - EPA Secondary MCL (>6.5 and <8.5)

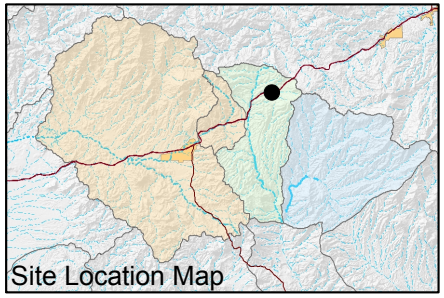
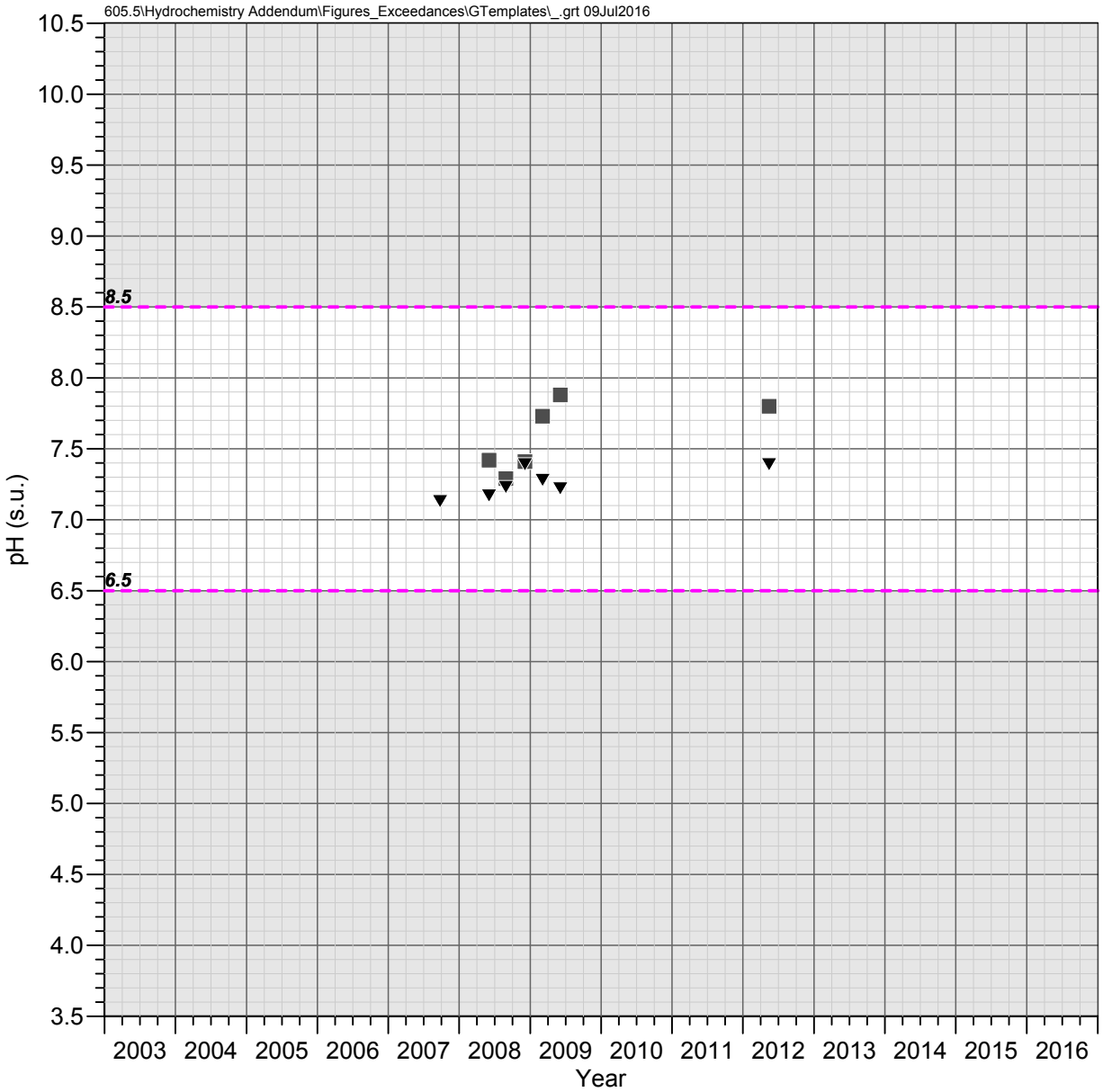


FIGURE E-542. pH OBSERVED AT JI RANCH MIDDLE WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



A-06
Apache Leap Tuff Aquifer

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- - - - EPA Secondary MCL (>6.5 and <8.5)

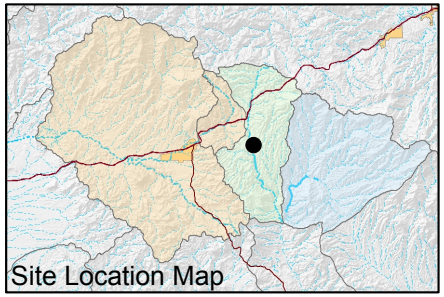
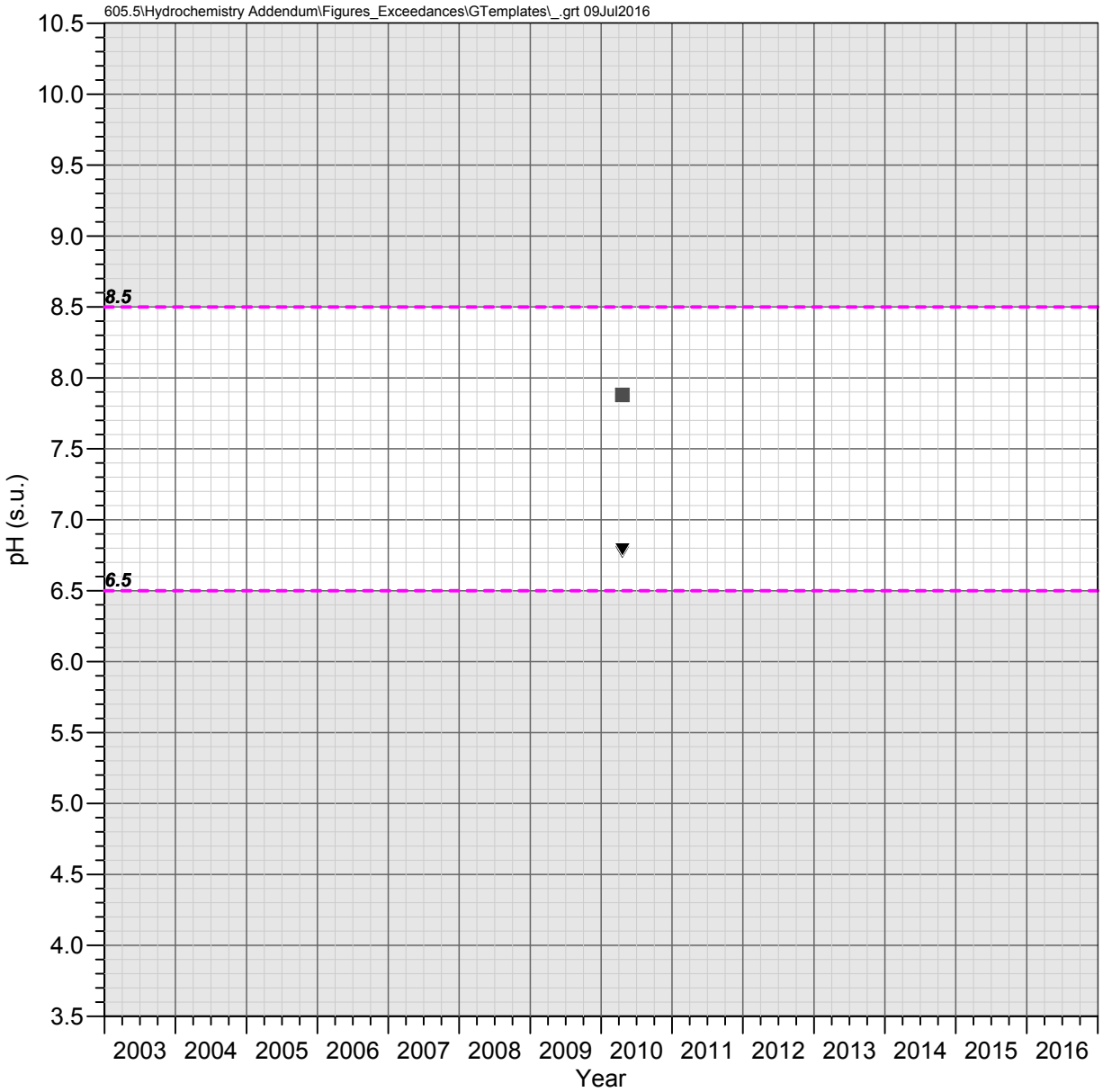


FIGURE E-543. pH OBSERVED AT A-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



CT Well
Apache Leap Tuff Aquifer

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- - - - EPA Secondary MCL (>6.5 and <8.5)

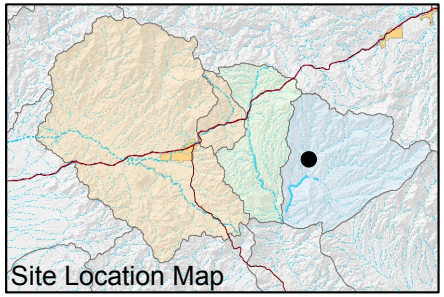
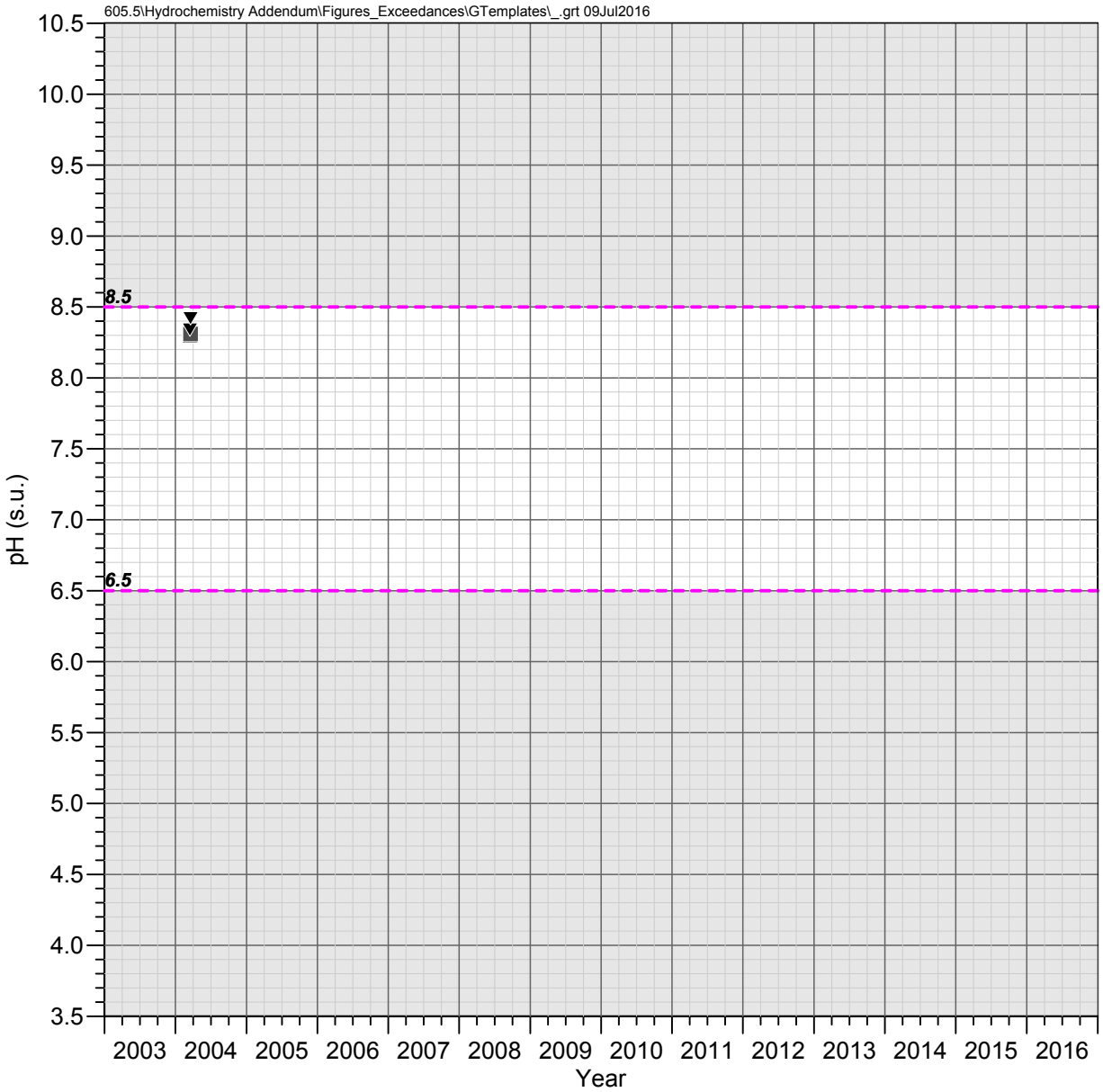


FIGURE E-544. pH OBSERVED AT CT WELL, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-01
Apache Leap Tuff Aquifer

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- - - - EPA Secondary MCL (>6.5 and <8.5)

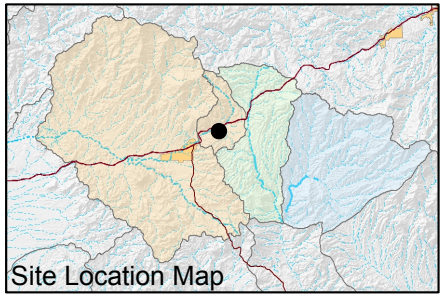
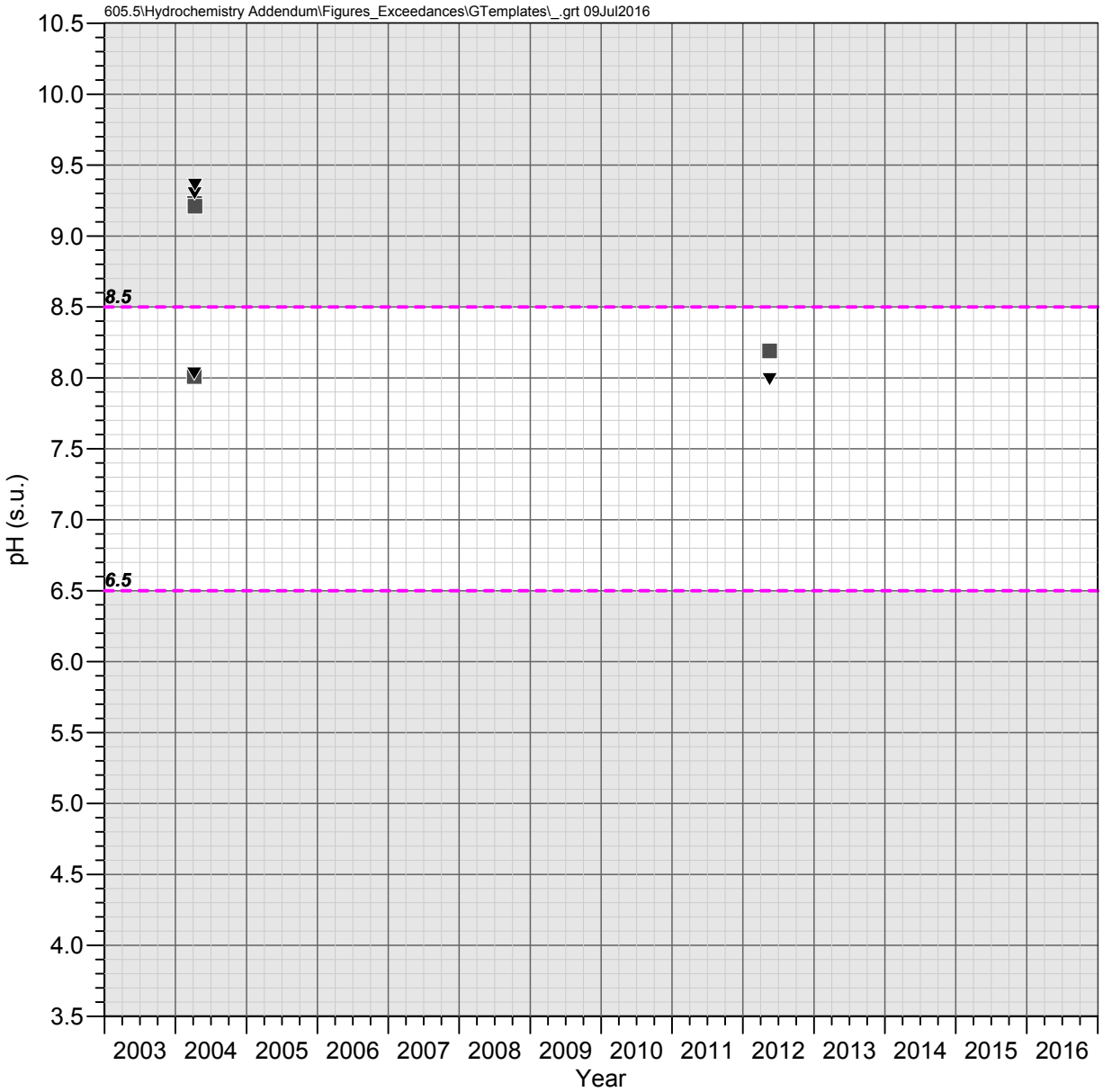


FIGURE E-545. pH OBSERVED AT HRES-01, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-02
Apache Leap Tuff Aquifer

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- - - - EPA Secondary MCL (>6.5 and <8.5)

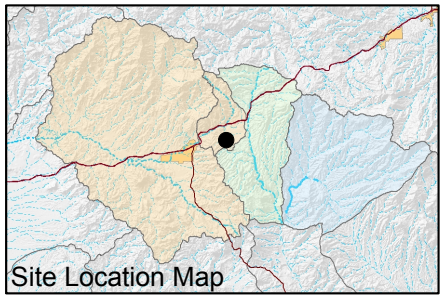
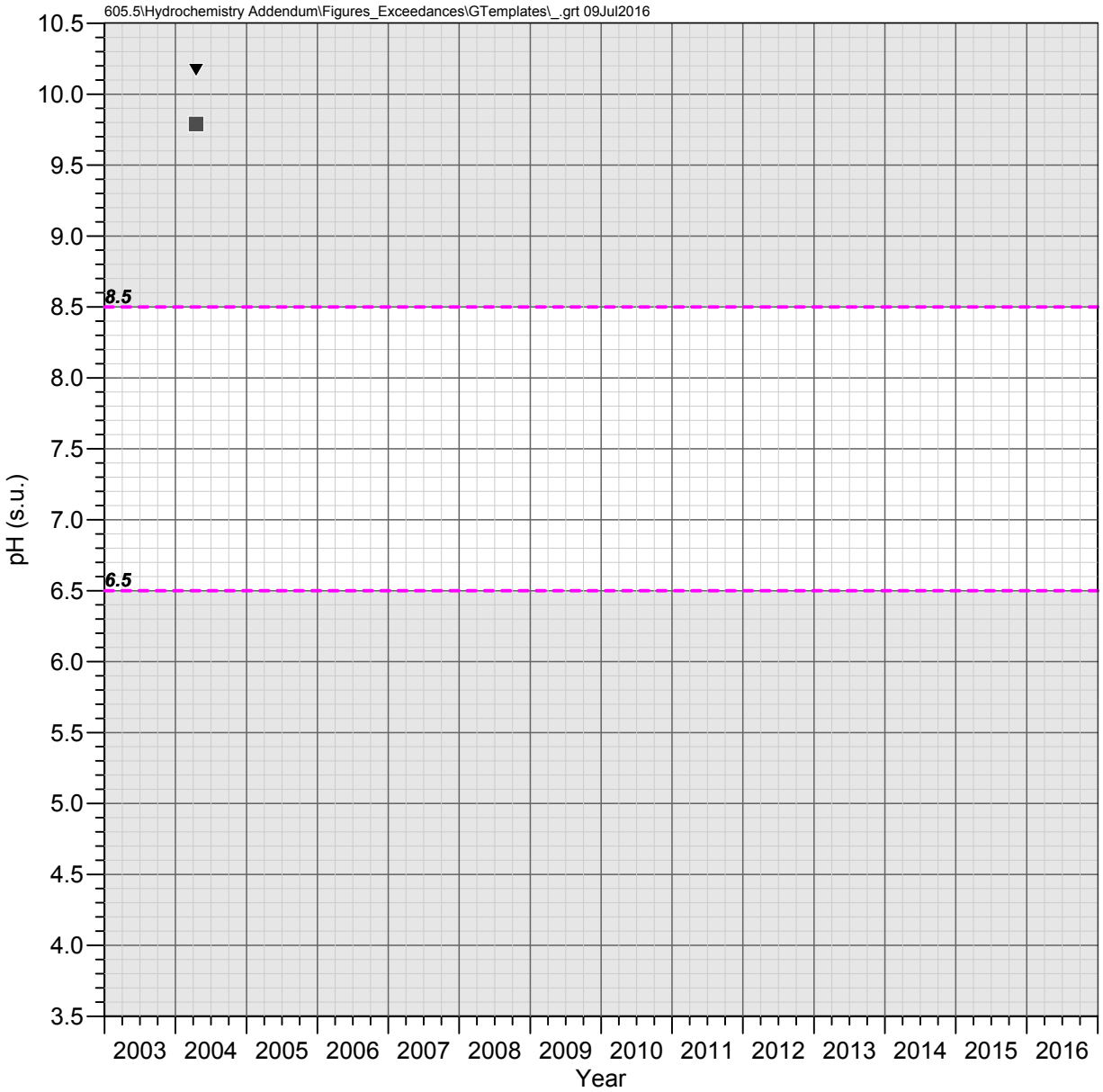


FIGURE E-546. pH OBSERVED AT HRES-02, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-03d
Apache Leap Tuff Aquifer

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- - - - EPA Secondary MCL (>6.5 and <8.5)

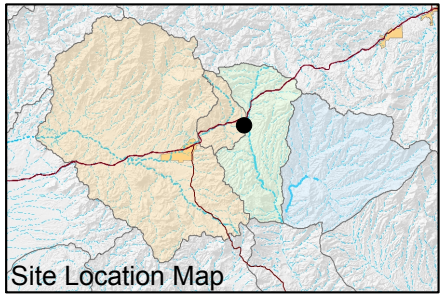
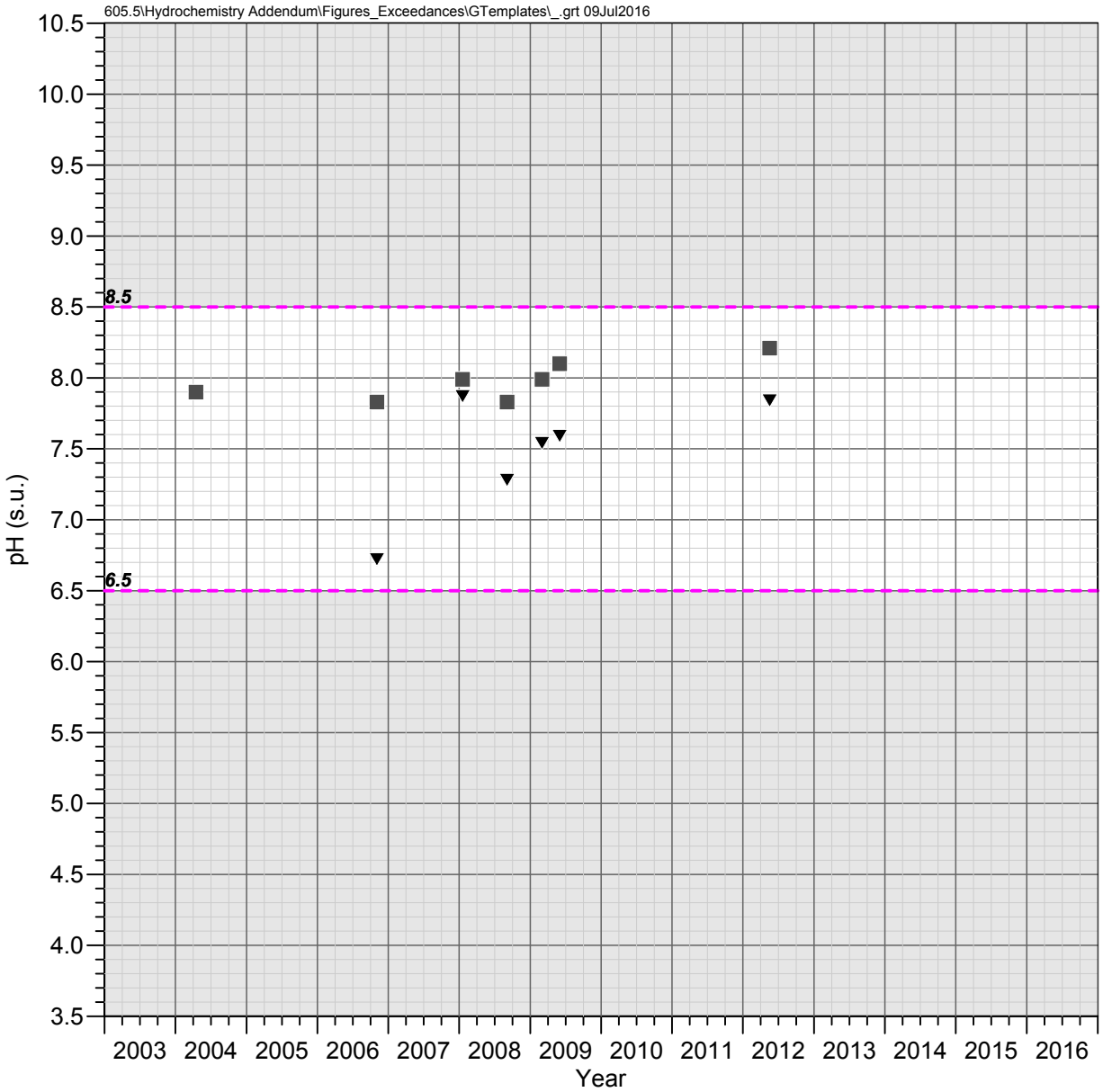


FIGURE E-547. pH OBSERVED AT HRES-03D, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-04
Apache Leap Tuff Aquifer

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- - - - EPA Secondary MCL (>6.5 and <8.5)

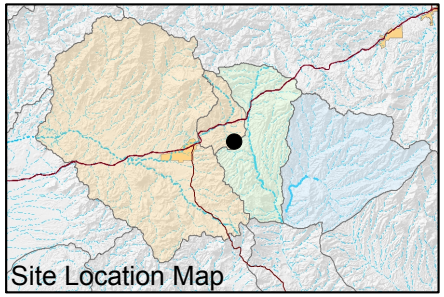
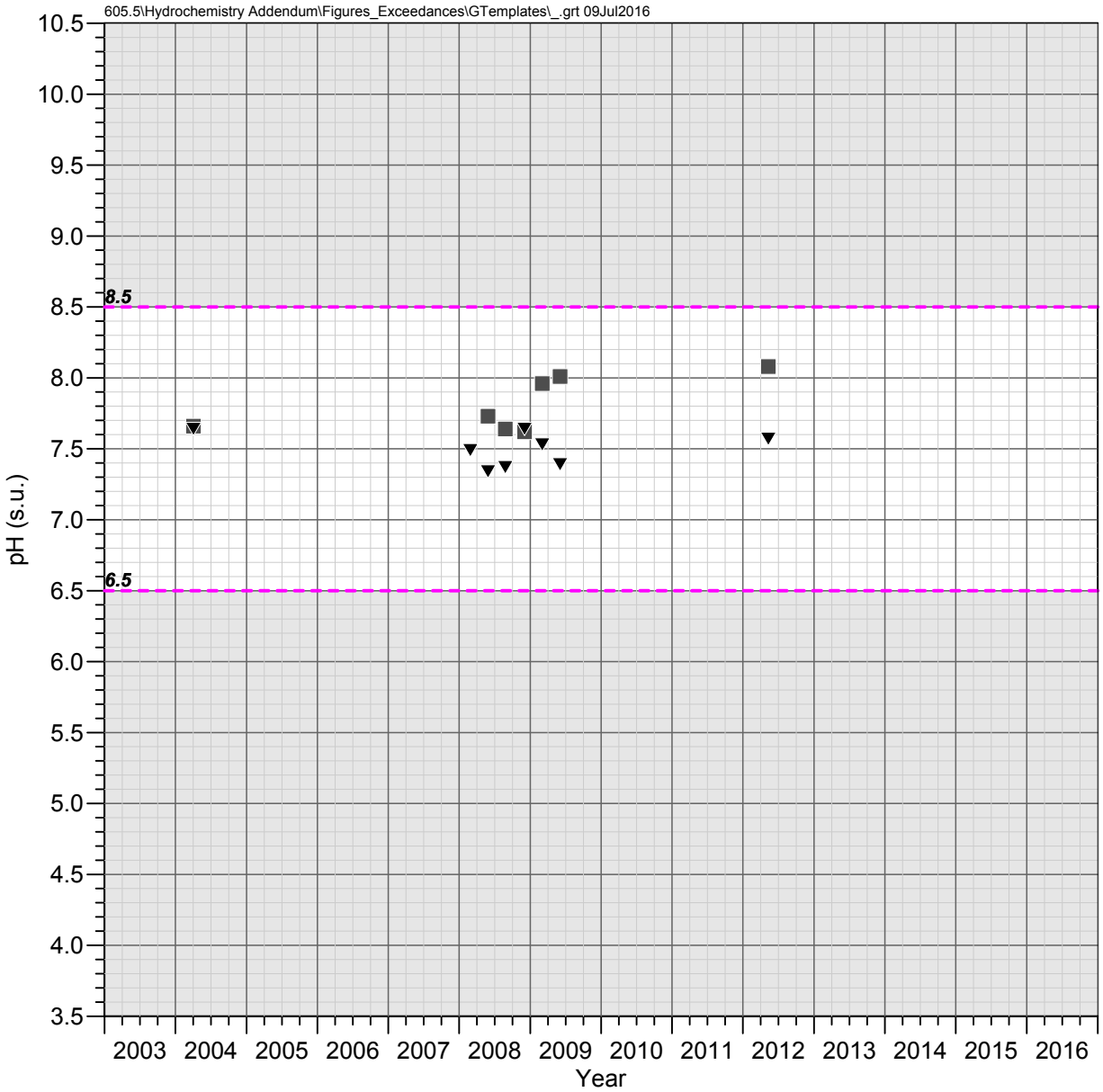


FIGURE E-548. pH OBSERVED AT HRES-04, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-05
Apache Leap Tuff Aquifer

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- - - - EPA Secondary MCL (>6.5 and <8.5)

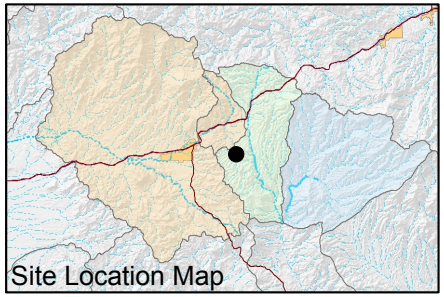
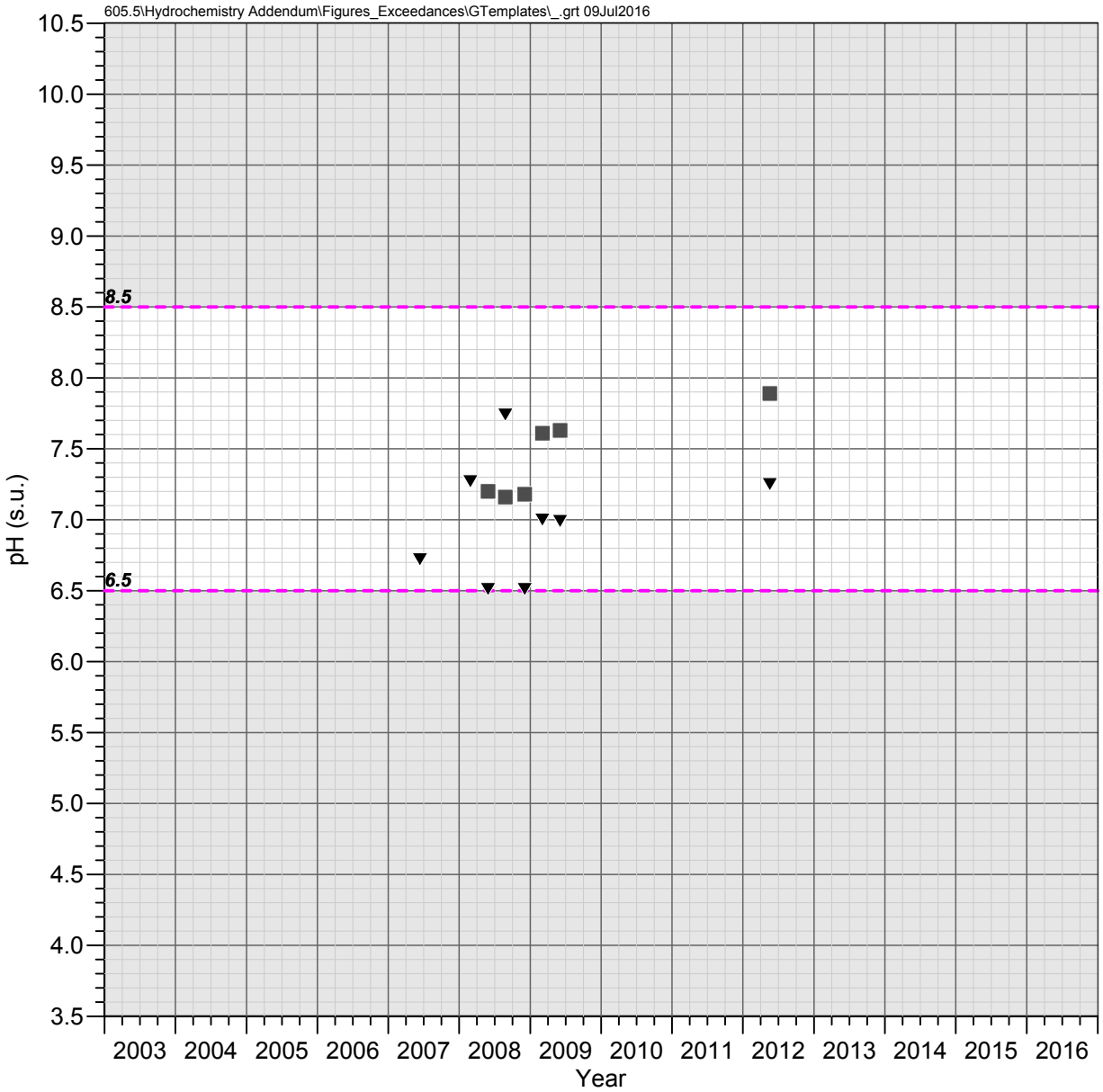


FIGURE E-549. pH OBSERVED AT HRES-05, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-06
Apache Leap Tuff Aquifer

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- - - - EPA Secondary MCL (>6.5 and <8.5)

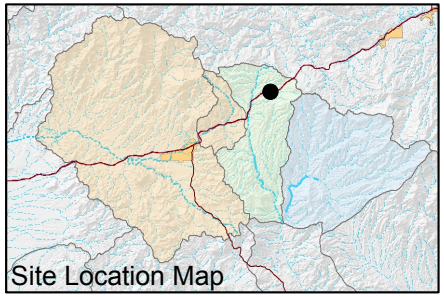
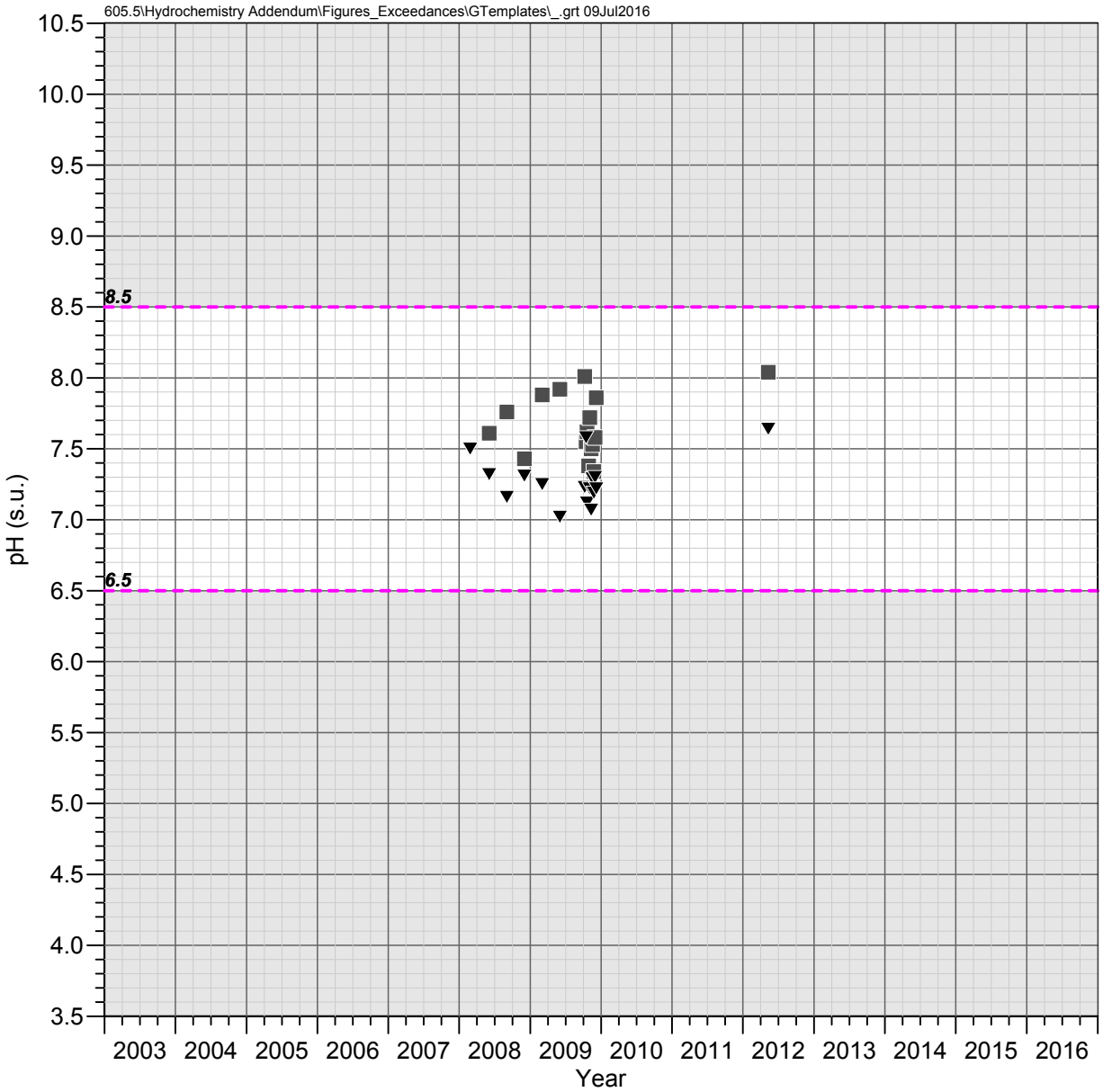


FIGURE E-550. pH OBSERVED AT HRES-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-07
Apache Leap Tuff Aquifer

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- - - - EPA Secondary MCL (>6.5 and <8.5)

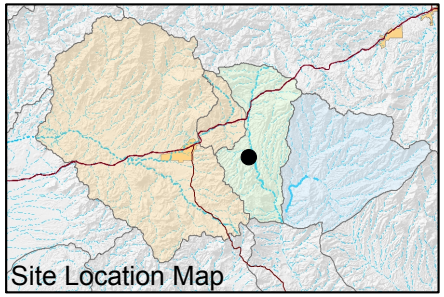
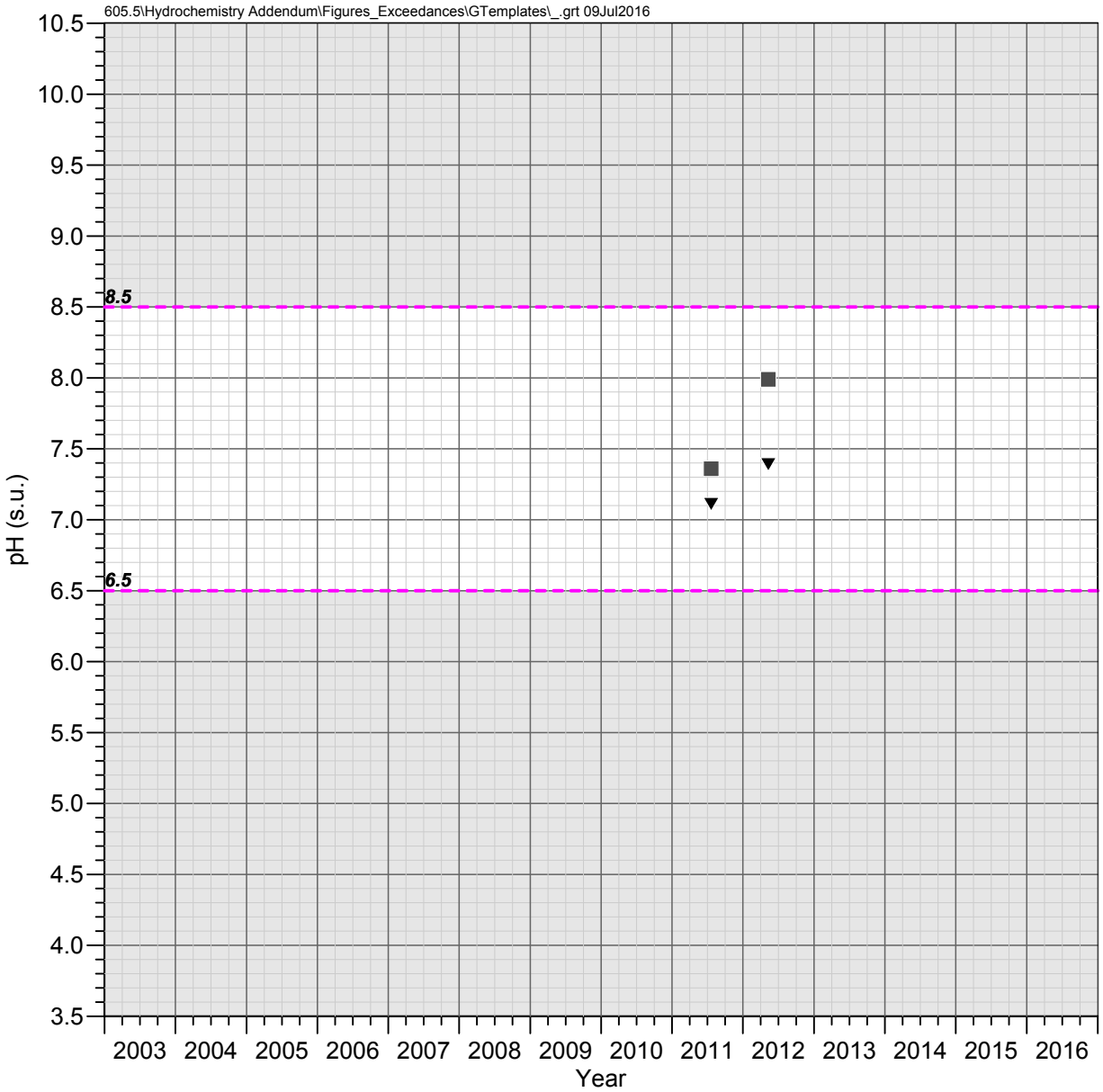


FIGURE E-551. pH OBSERVED AT HRES-07, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-08
Apache Leap Tuff Aquifer

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- - - - EPA Secondary MCL (>6.5 and <8.5)

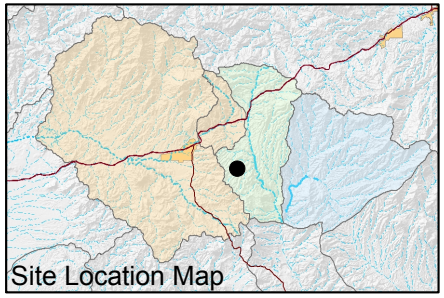
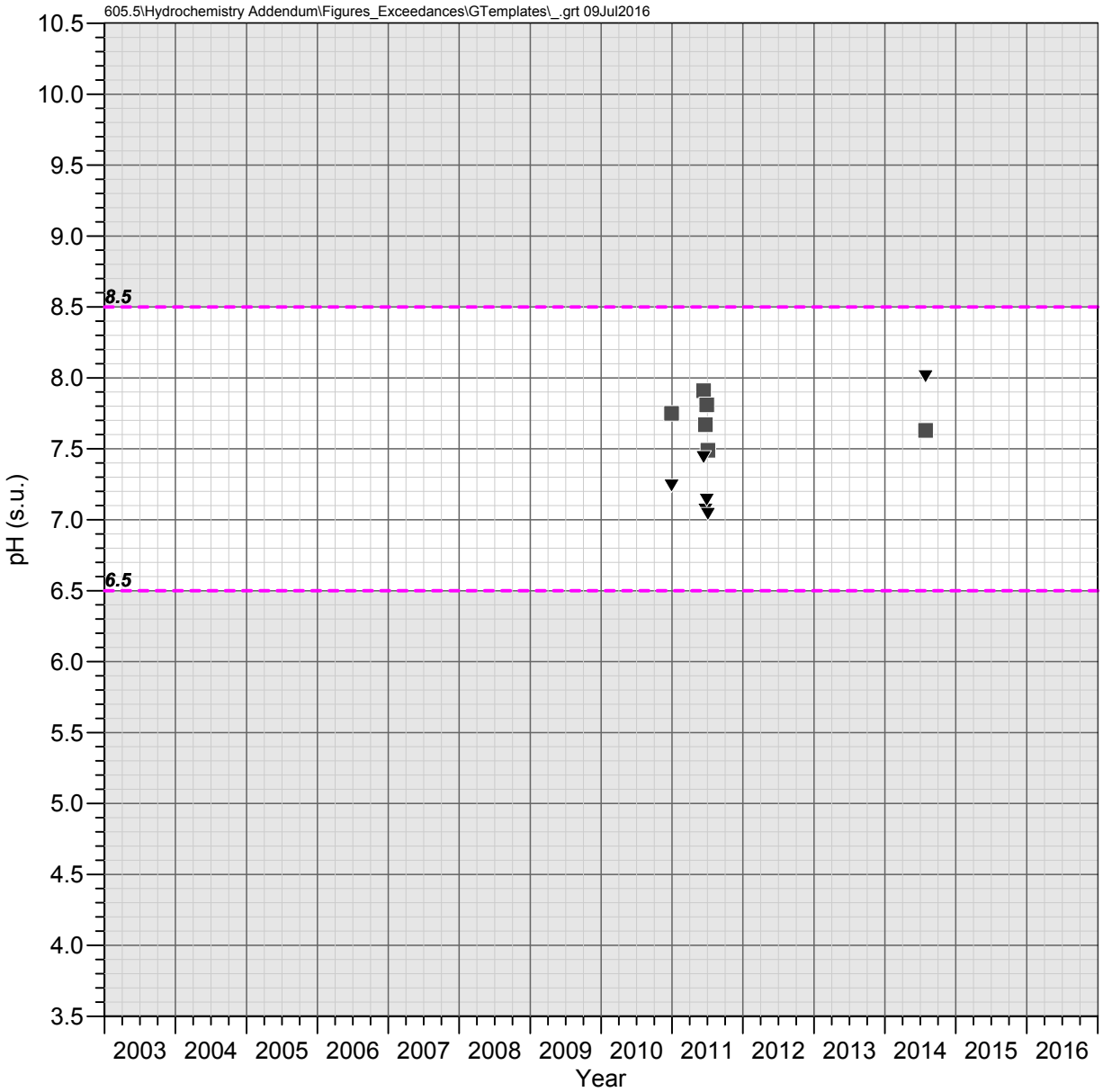


FIGURE E-552. pH OBSERVED AT HRES-08, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-09
Apache Leap Tuff Aquifer

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- - - - EPA Secondary MCL (>6.5 and <8.5)

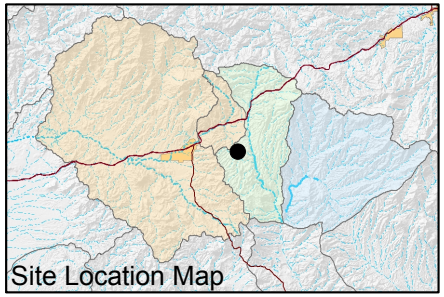
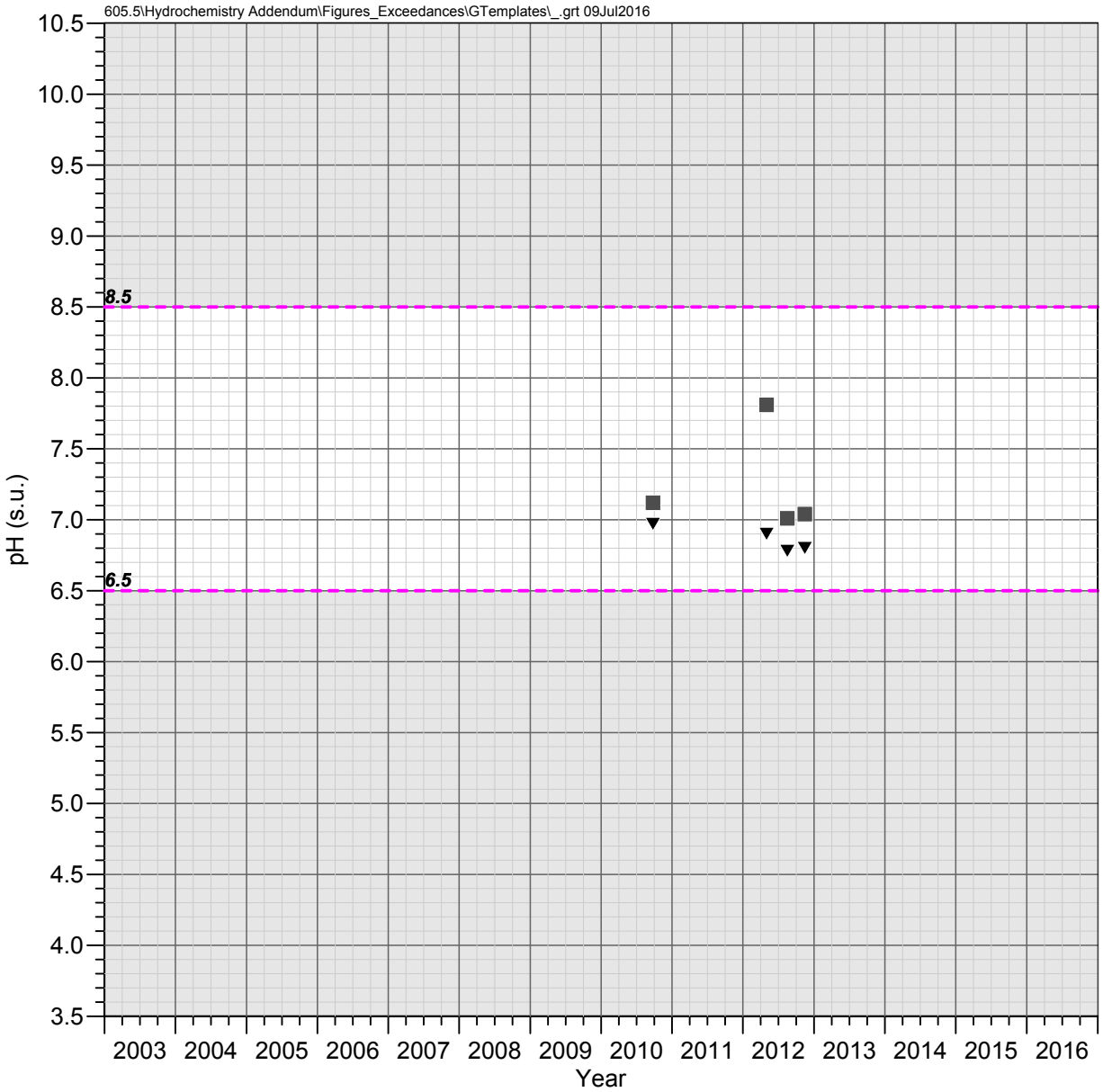


FIGURE E-553. pH OBSERVED AT HRES-09, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-10
Apache Leap Tuff Aquifer

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- - - - EPA Secondary MCL (>6.5 and <8.5)

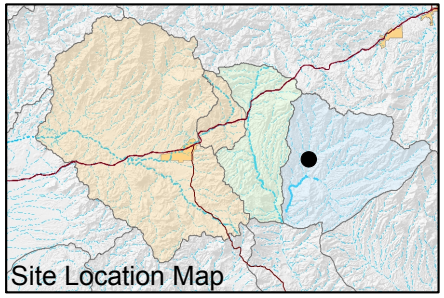
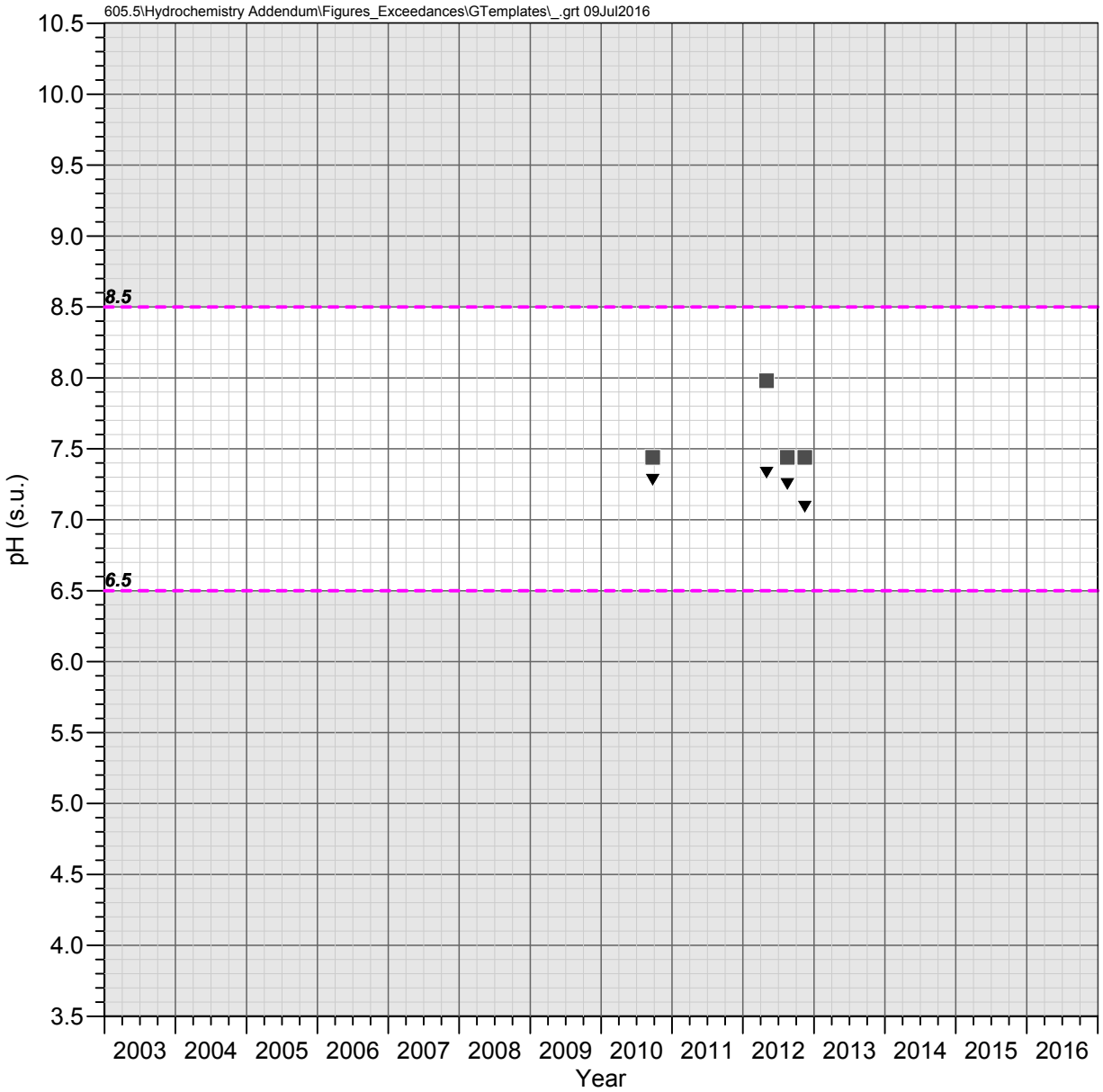


FIGURE E-554. pH OBSERVED AT HRES-10, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-11
Apache Leap Tuff Aquifer

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- - - - EPA Secondary MCL (>6.5 and <8.5)

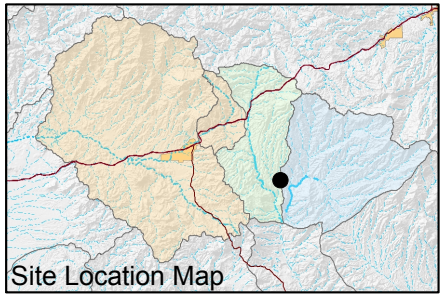
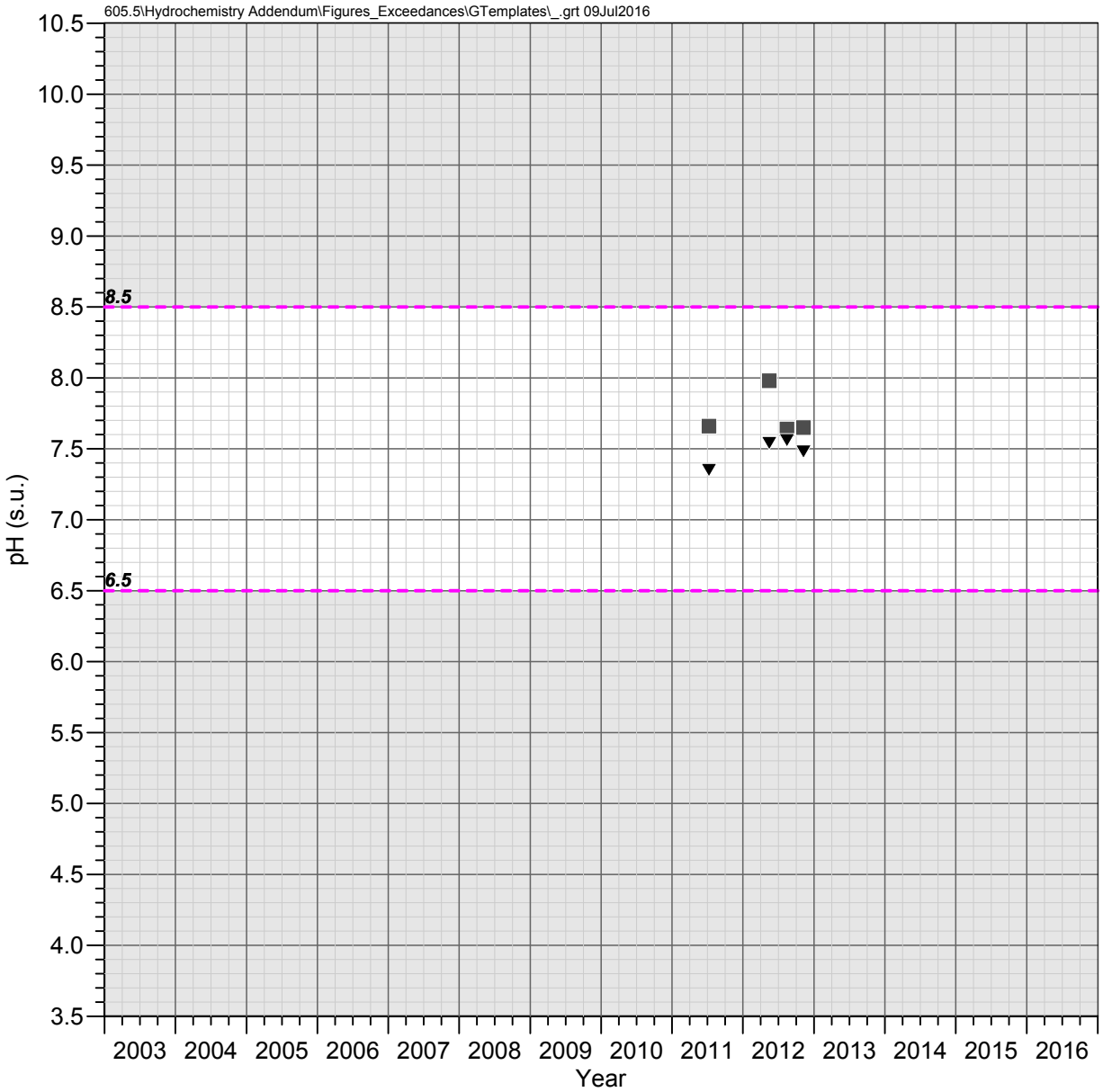


FIGURE E-555. pH OBSERVED AT HRES-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-12
Apache Leap Tuff Aquifer

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- - - - EPA Secondary MCL (>6.5 and <8.5)

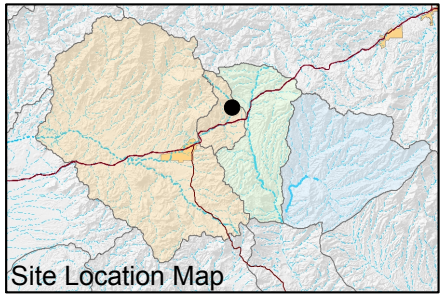
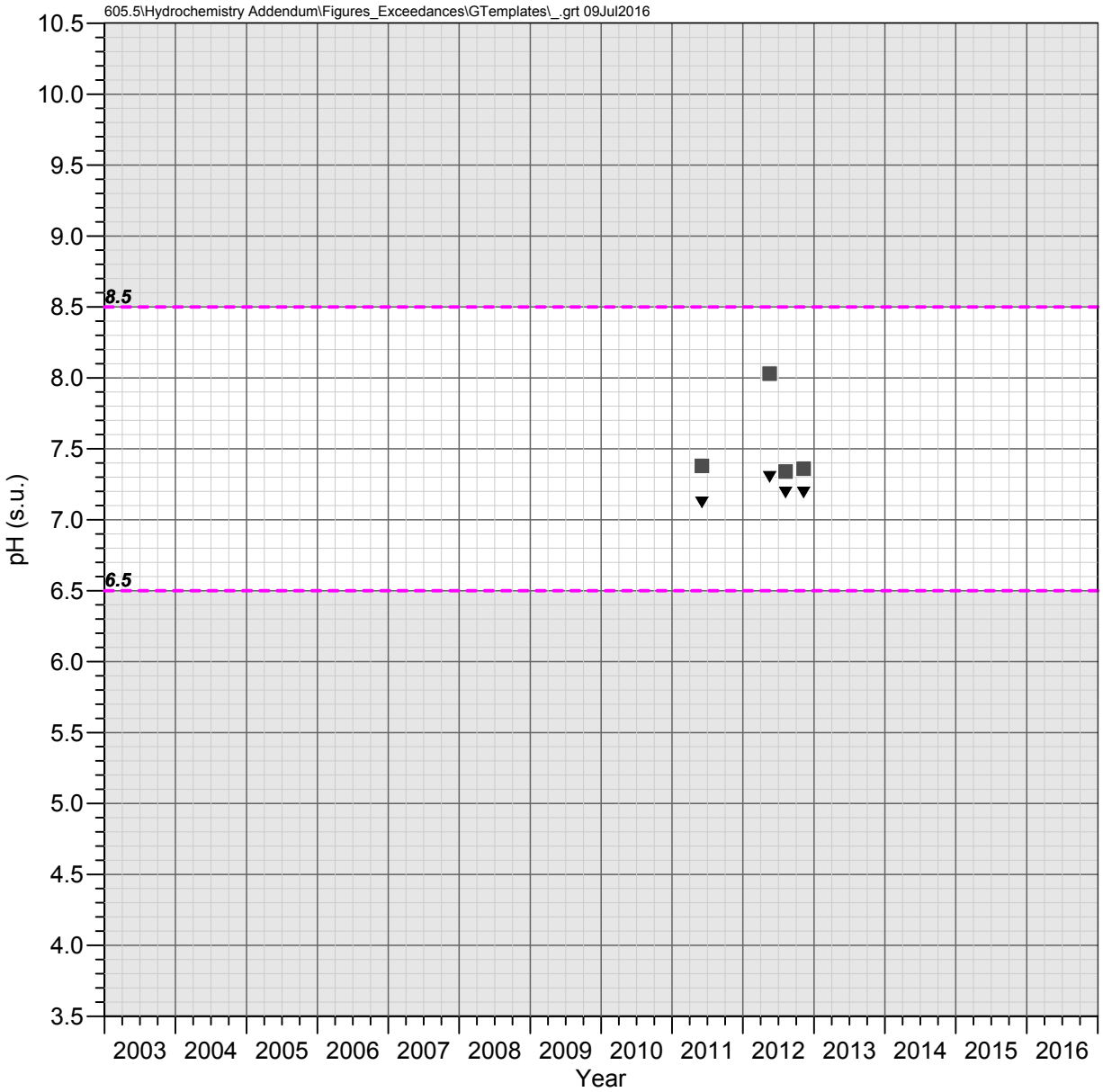


FIGURE E-556. pH OBSERVED AT HRES-12, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-13
Apache Leap Tuff Aquifer

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- - - - EPA Secondary MCL (>6.5 and <8.5)

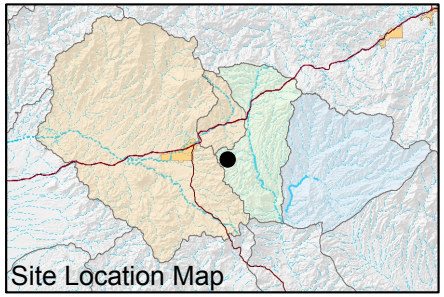
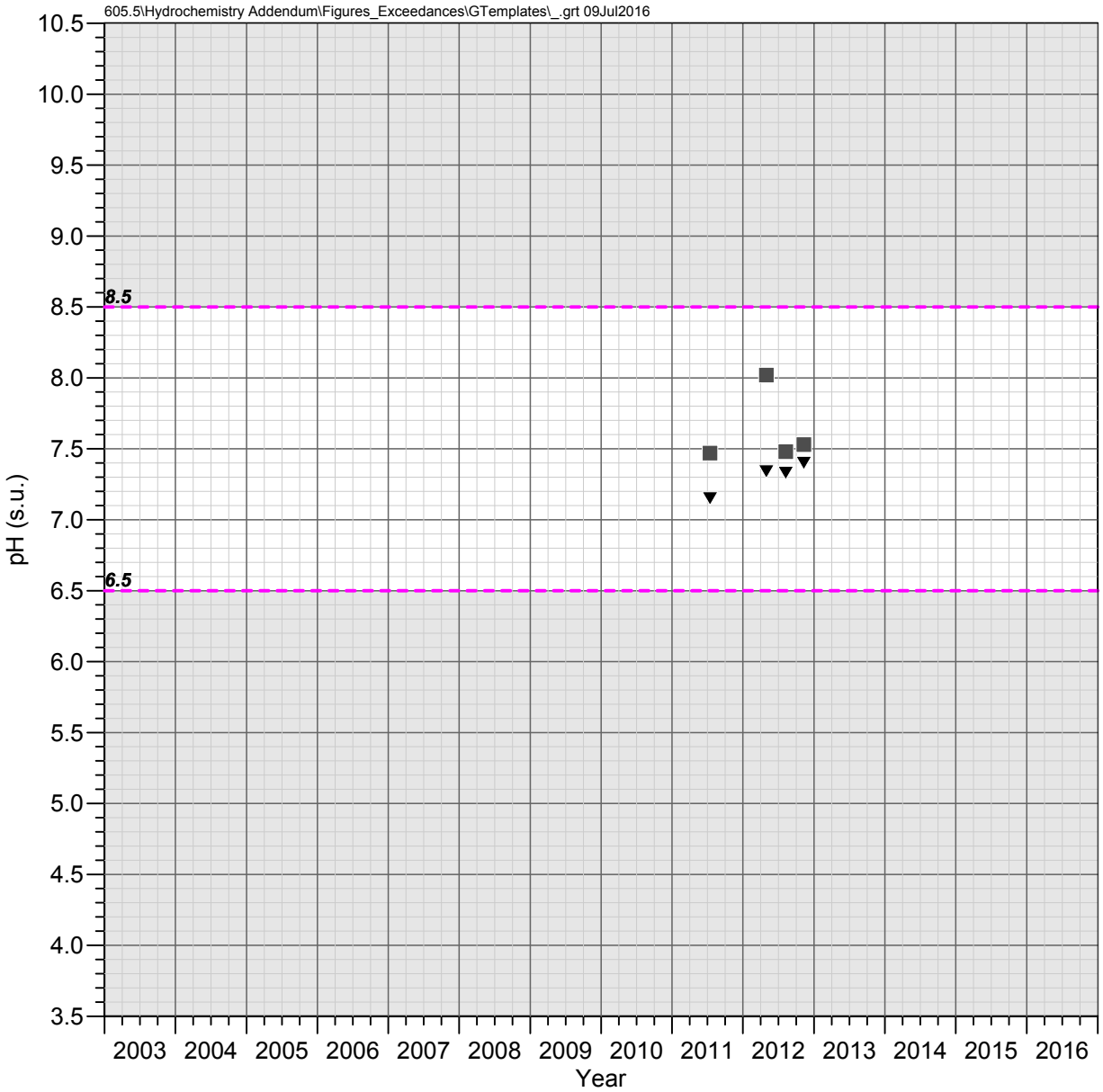


FIGURE E-557. pH OBSERVED AT HRES-13, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-14
Apache Leap Tuff Aquifer

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- - - - EPA Secondary MCL (>6.5 and <8.5)

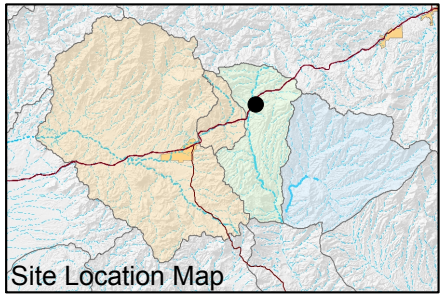
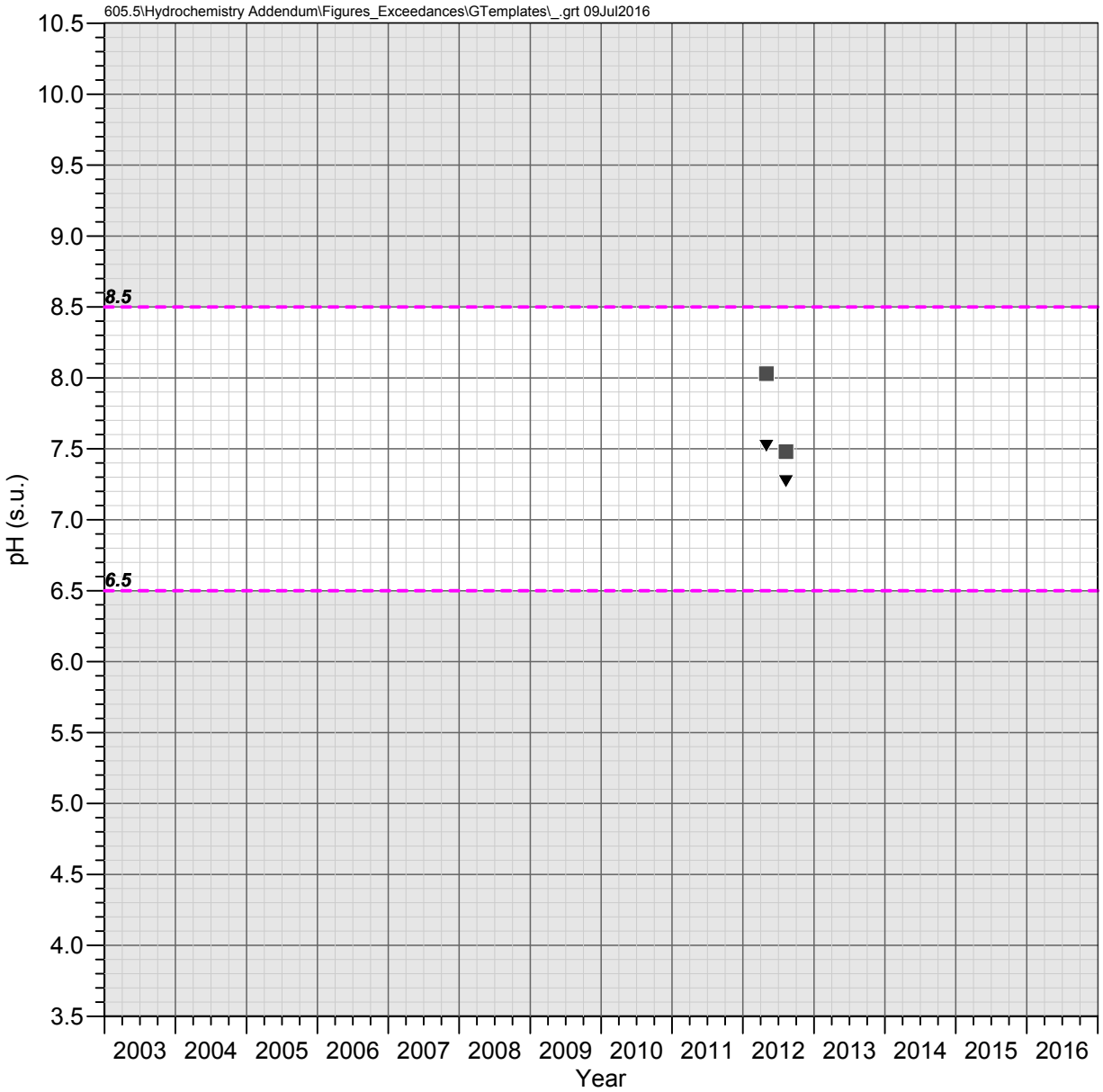


FIGURE E-558. pH OBSERVED AT HRES-14, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-15
Apache Leap Tuff Aquifer

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- - - - EPA Secondary MCL (>6.5 and <8.5)

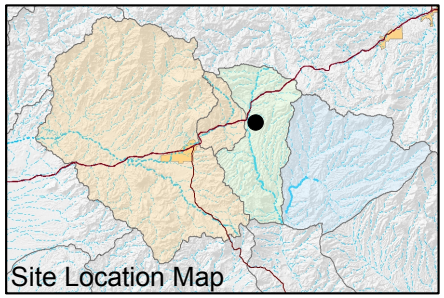
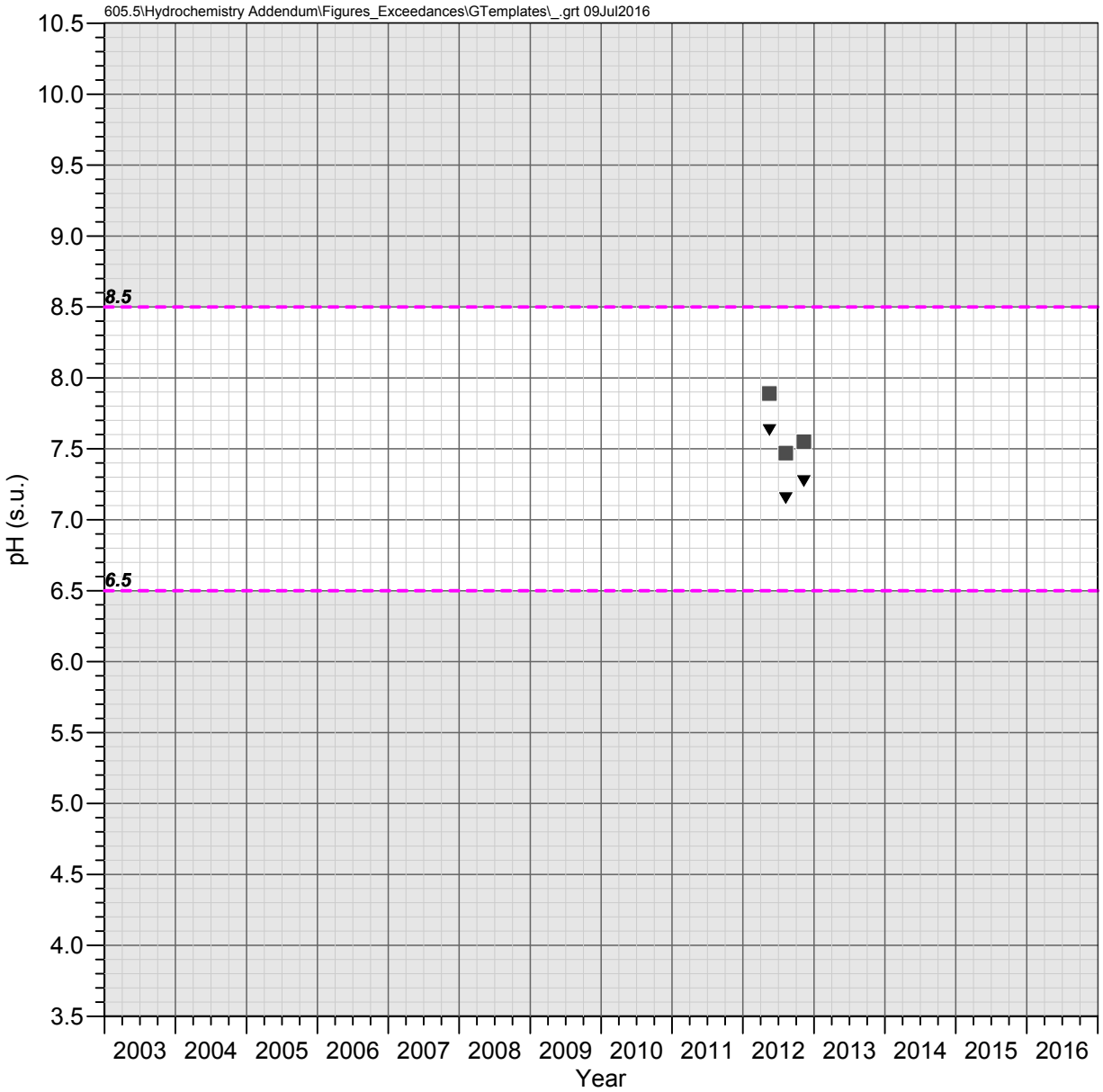


FIGURE E-559. pH OBSERVED AT HRES-15, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-17
Apache Leap Tuff Aquifer

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- - - - EPA Secondary MCL (>6.5 and <8.5)

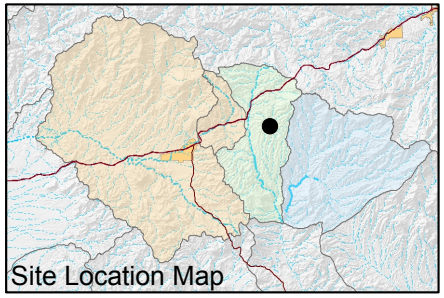
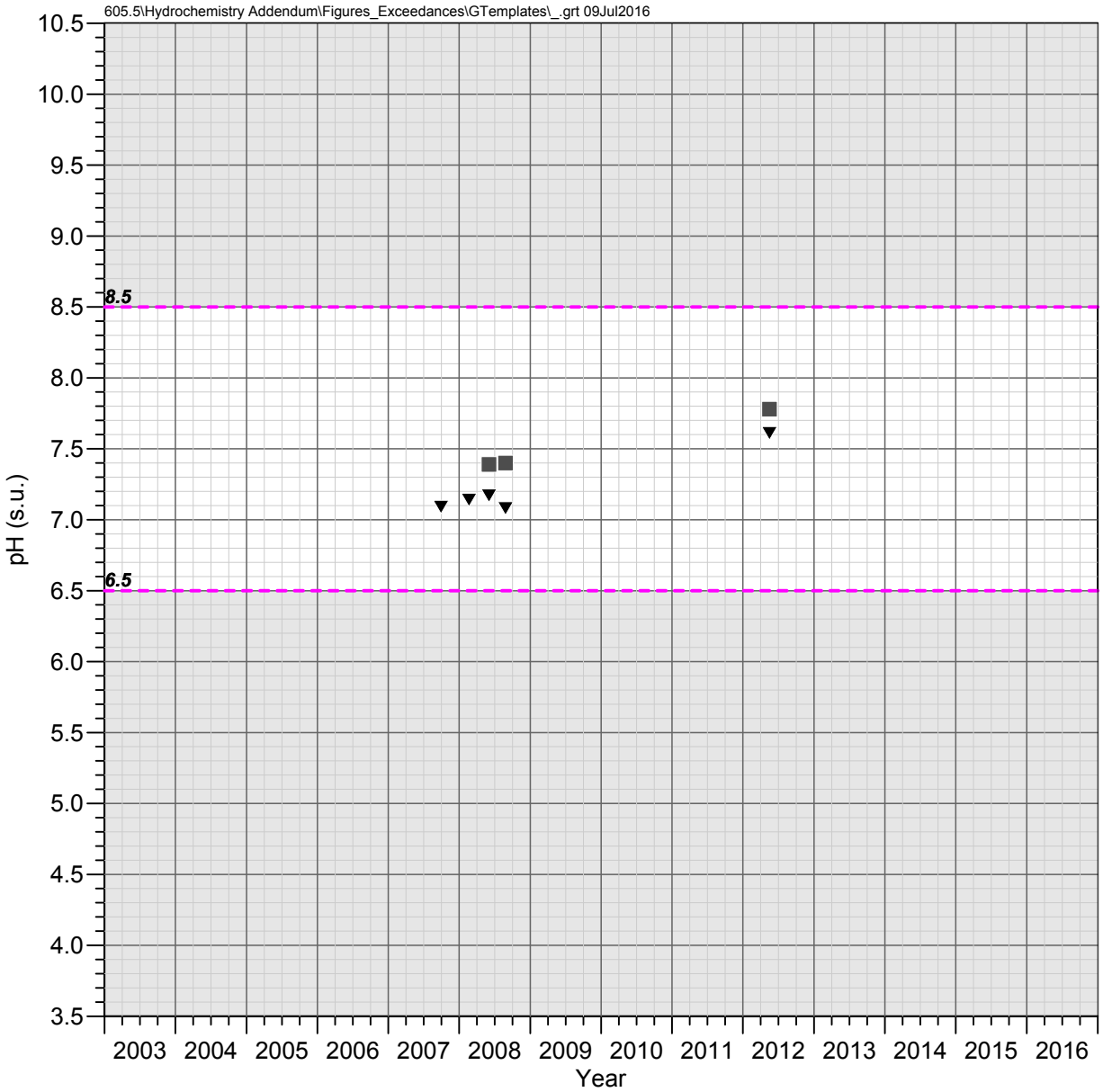


FIGURE E-560. pH OBSERVED AT HRES-17, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MJ-11
Apache Leap Tuff Aquifer

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- - - - EPA Secondary MCL (>6.5 and <8.5)

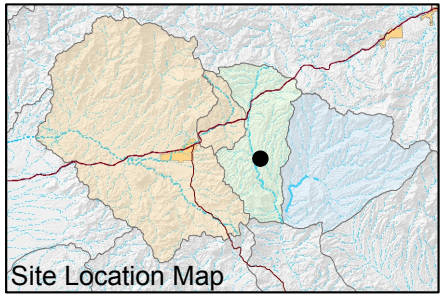
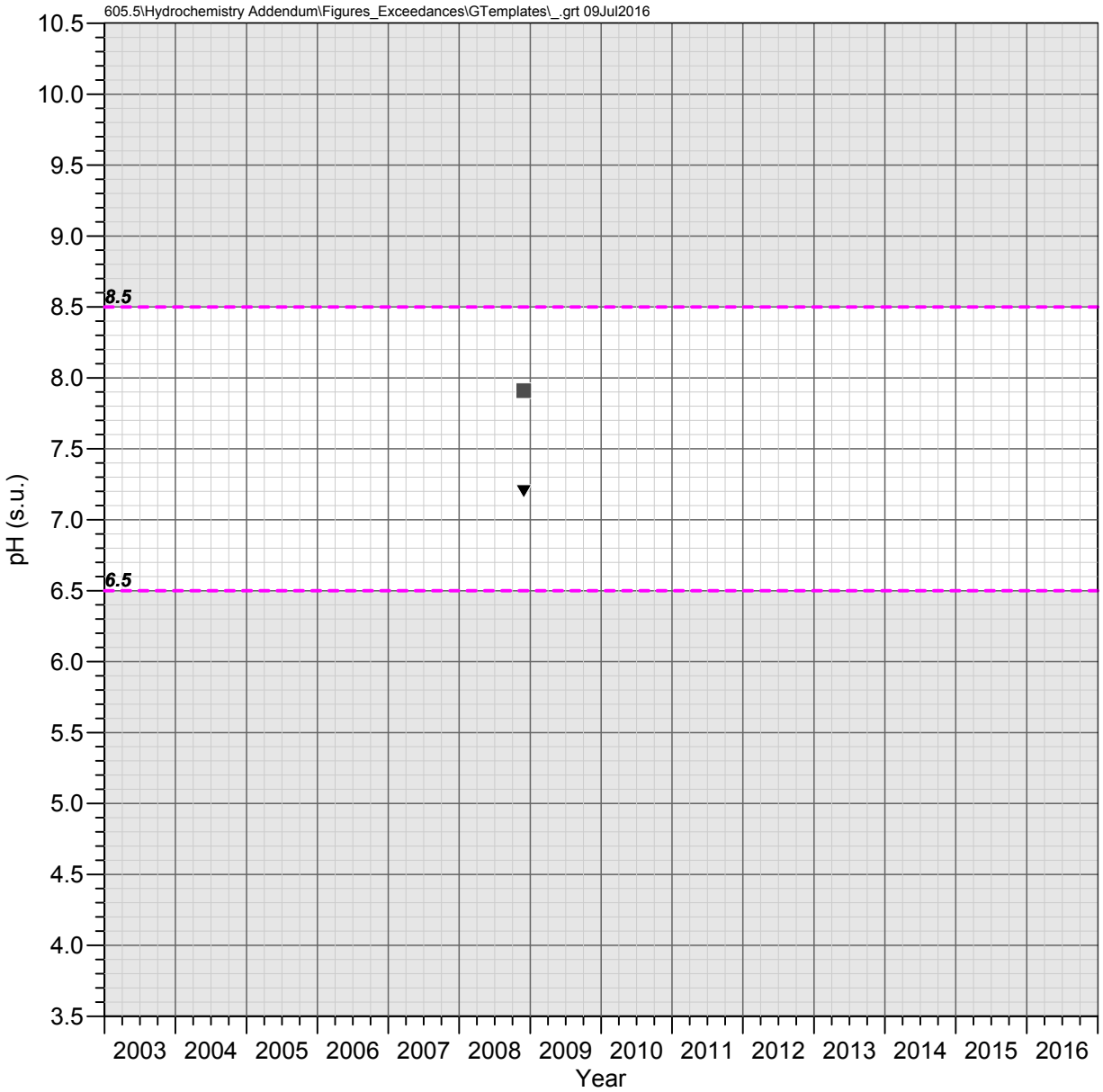


FIGURE E-561. pH OBSERVED AT MJ-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-01
Deep Groundwater System

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- - - - EPA Secondary MCL (>6.5 and <8.5)

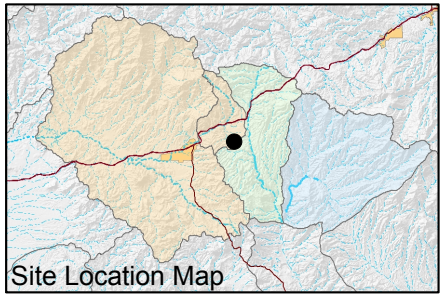
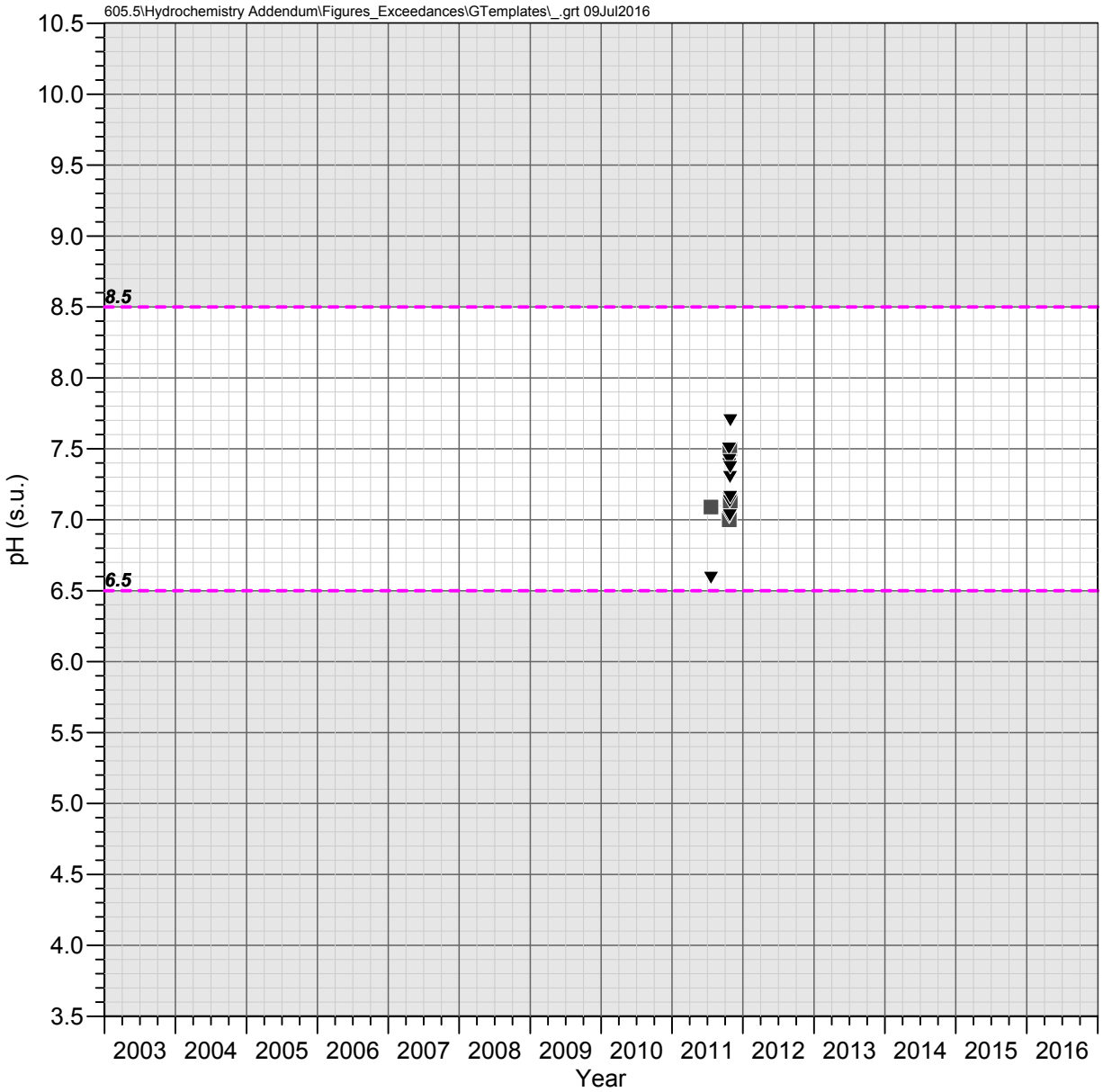


FIGURE E-562. pH OBSERVED AT DHRES-01, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-02
Deep Groundwater System

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- - - - EPA Secondary MCL (>6.5 and <8.5)

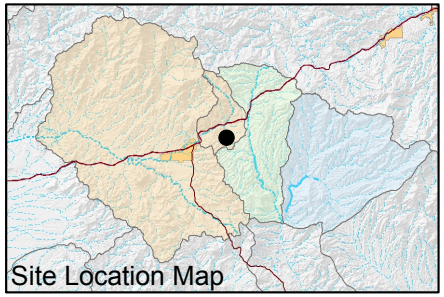
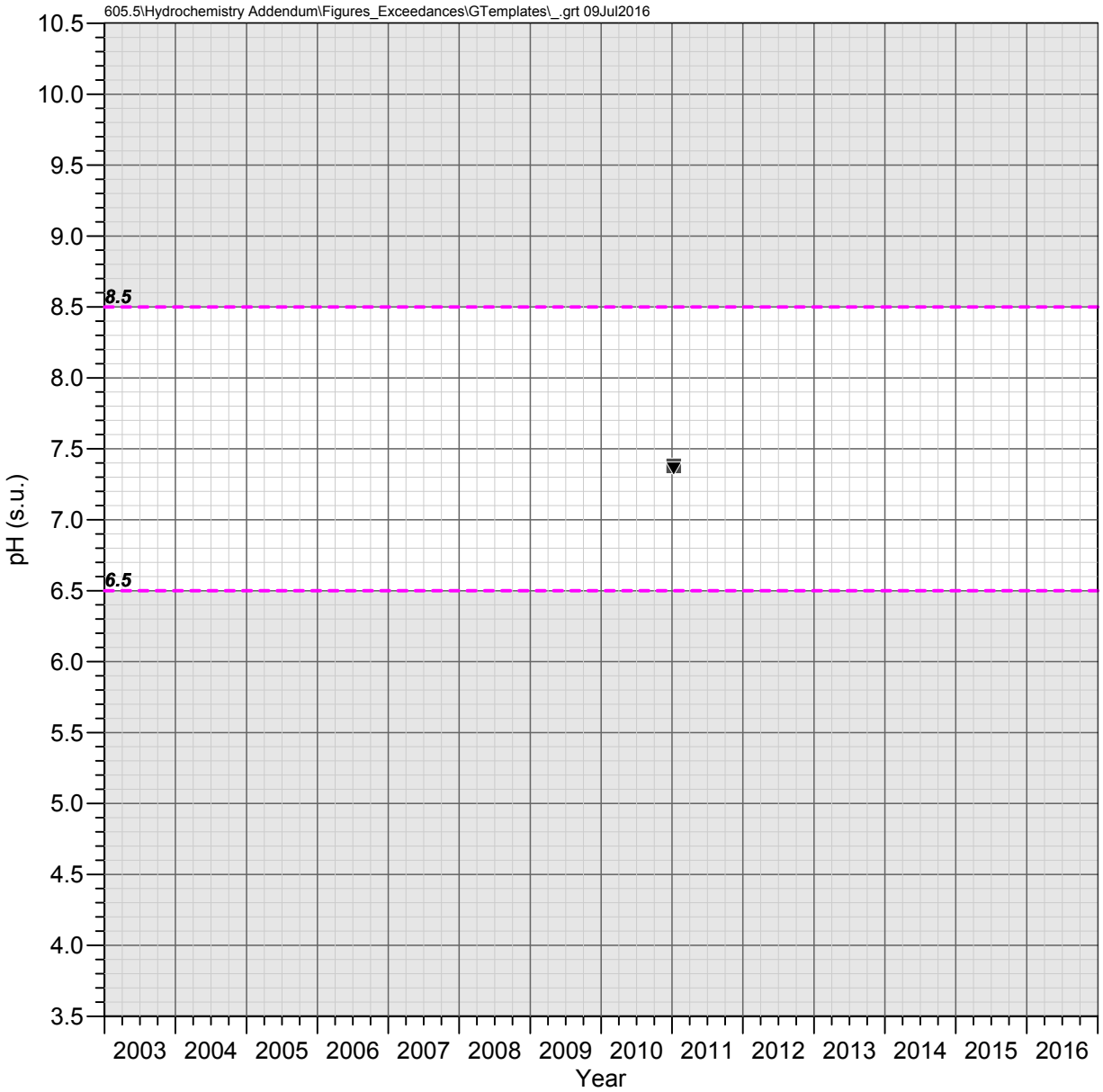


FIGURE E-563. pH OBSERVED AT DHRES-02, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-06
Deep Groundwater System

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- - - - EPA Secondary MCL (>6.5 and <8.5)

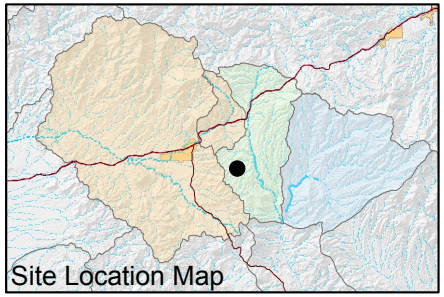
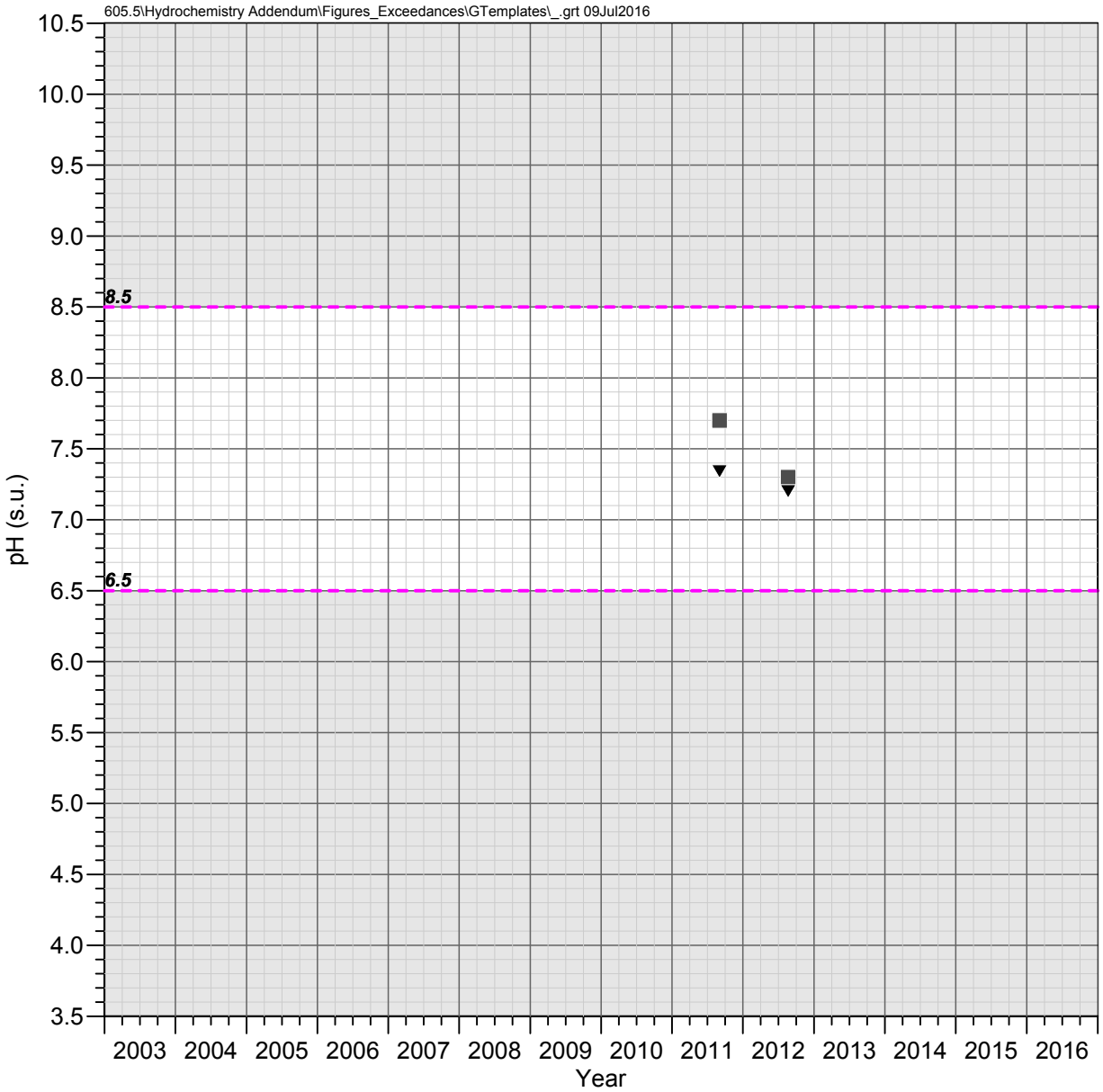


FIGURE E-564. pH OBSERVED AT DHRES-06, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-09
Deep Groundwater System

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- - - - EPA Secondary MCL (>6.5 and <8.5)

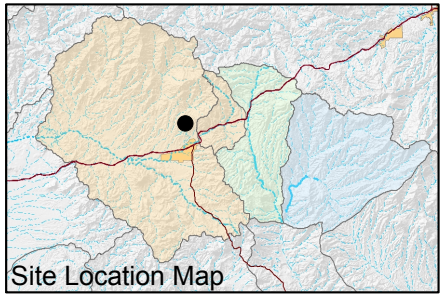
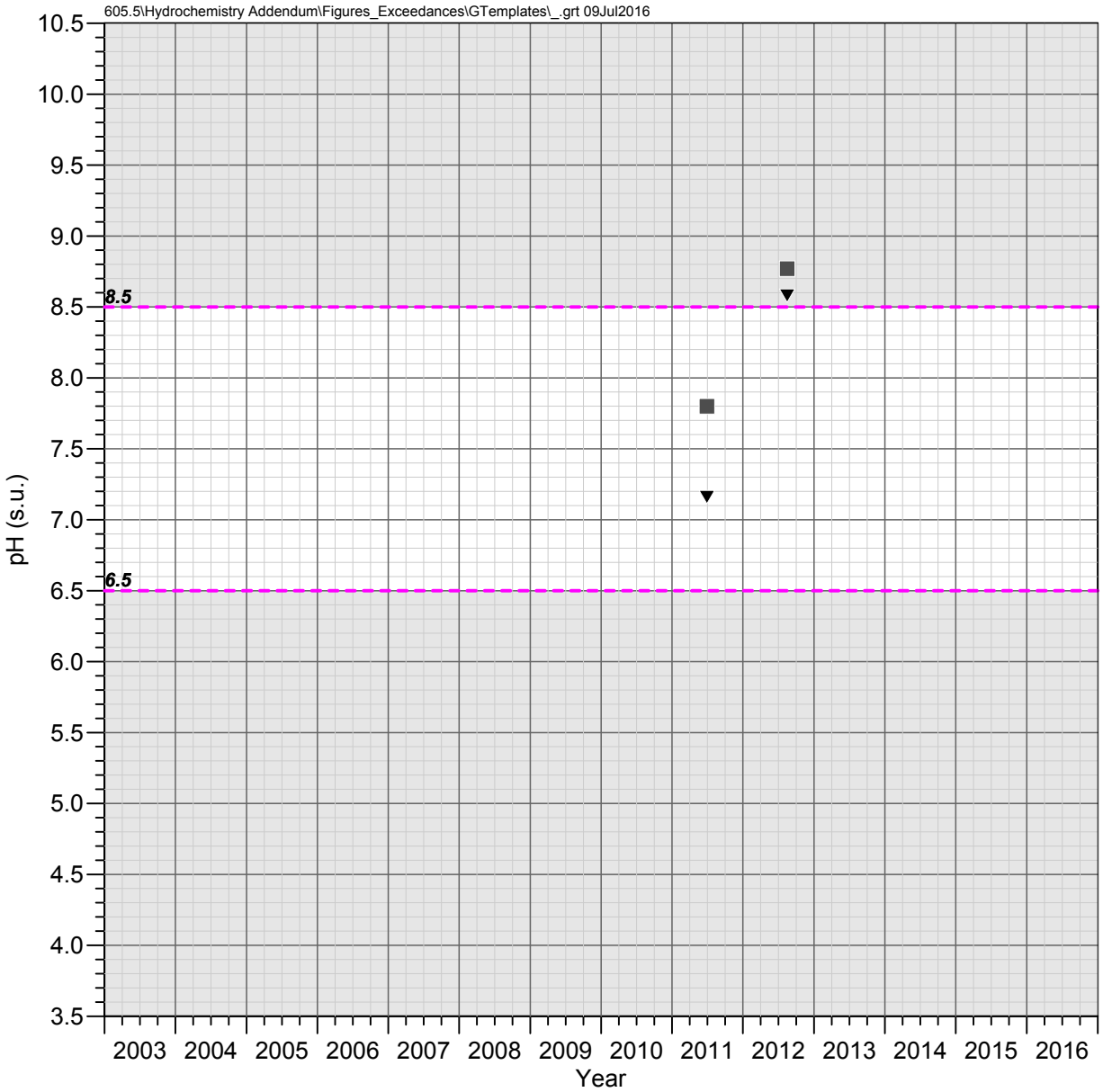


FIGURE E-565. pH OBSERVED AT DHRES-09, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-11
Deep Groundwater System

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- - - - EPA Secondary MCL (>6.5 and <8.5)

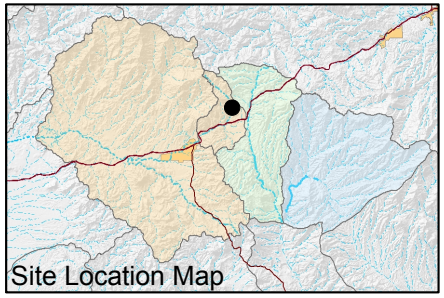
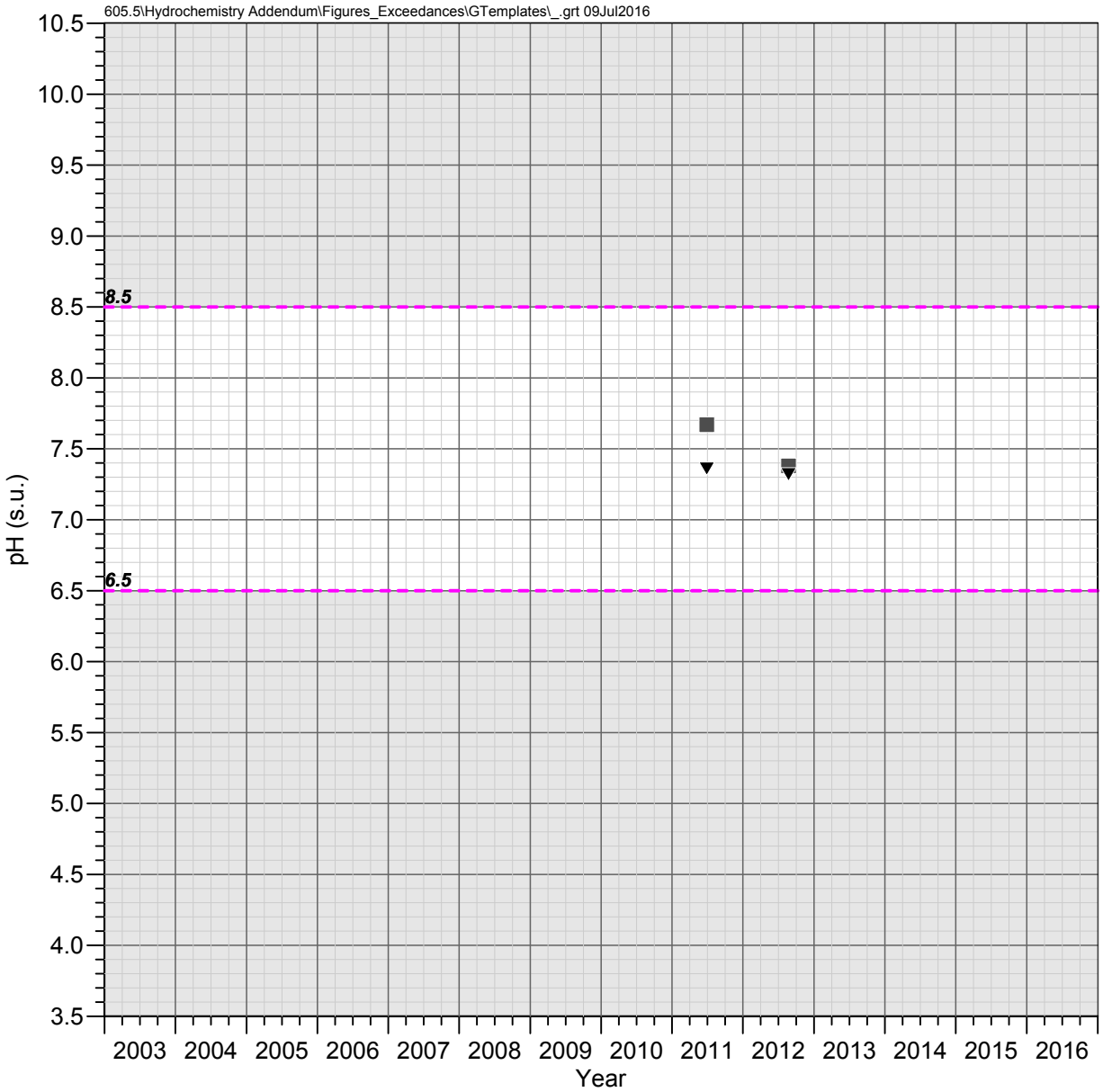


FIGURE E-566. pH OBSERVED AT DHRES-11, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-13
Deep Groundwater System

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- - - - EPA Secondary MCL (>6.5 and <8.5)

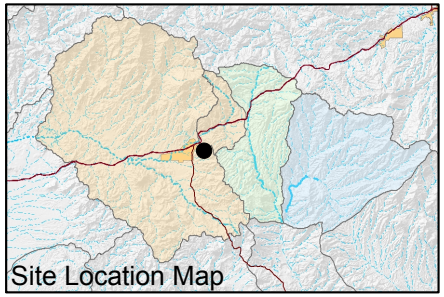
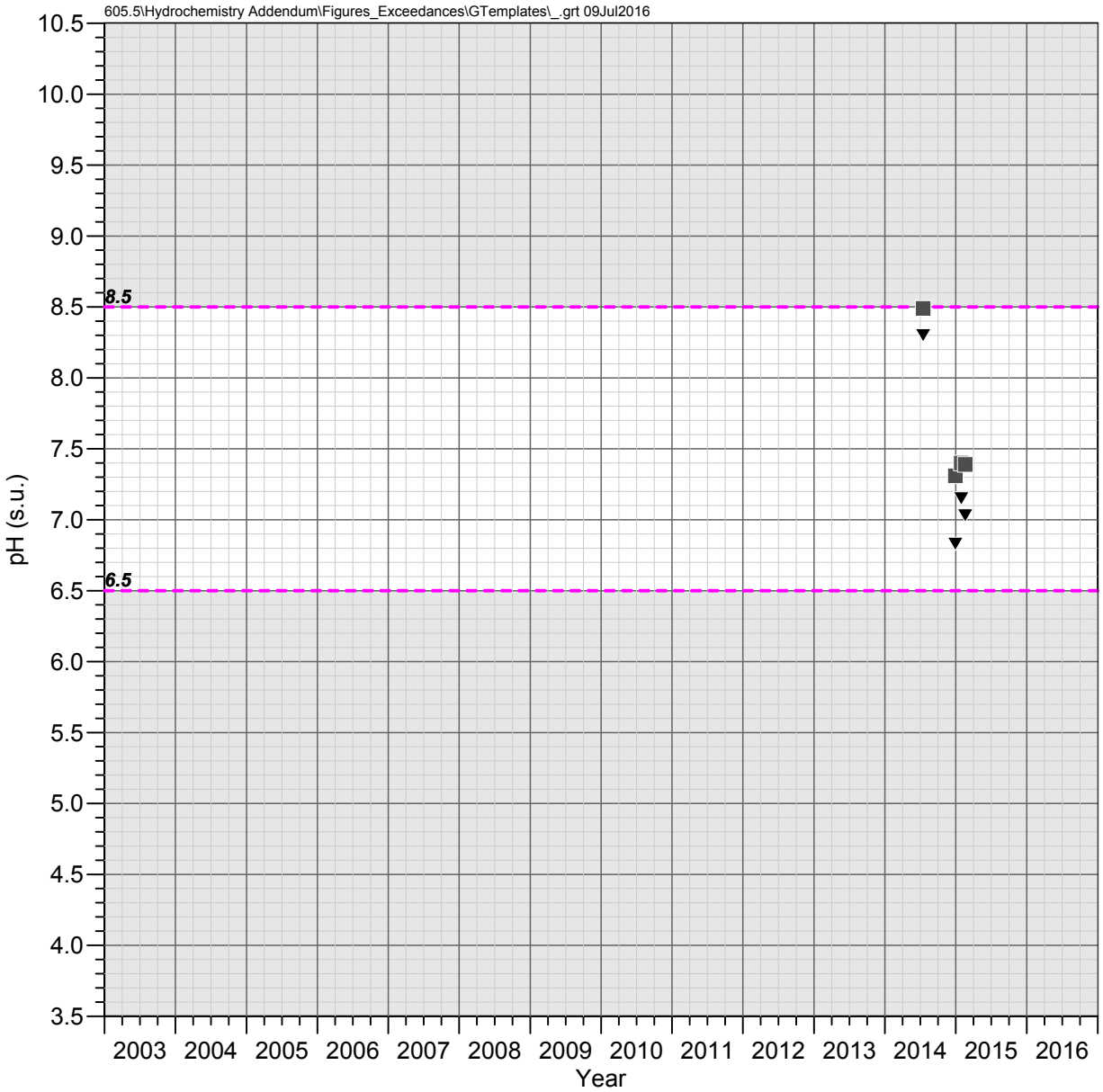


FIGURE E-567. pH OBSERVED AT DHRES-13, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-15
Deep Groundwater System

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- - - - EPA Secondary MCL (>6.5 and <8.5)

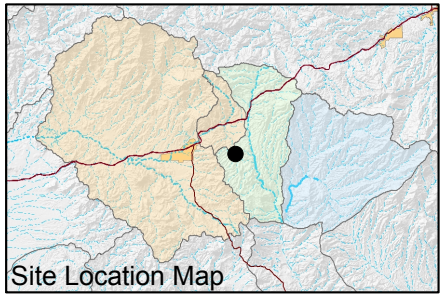
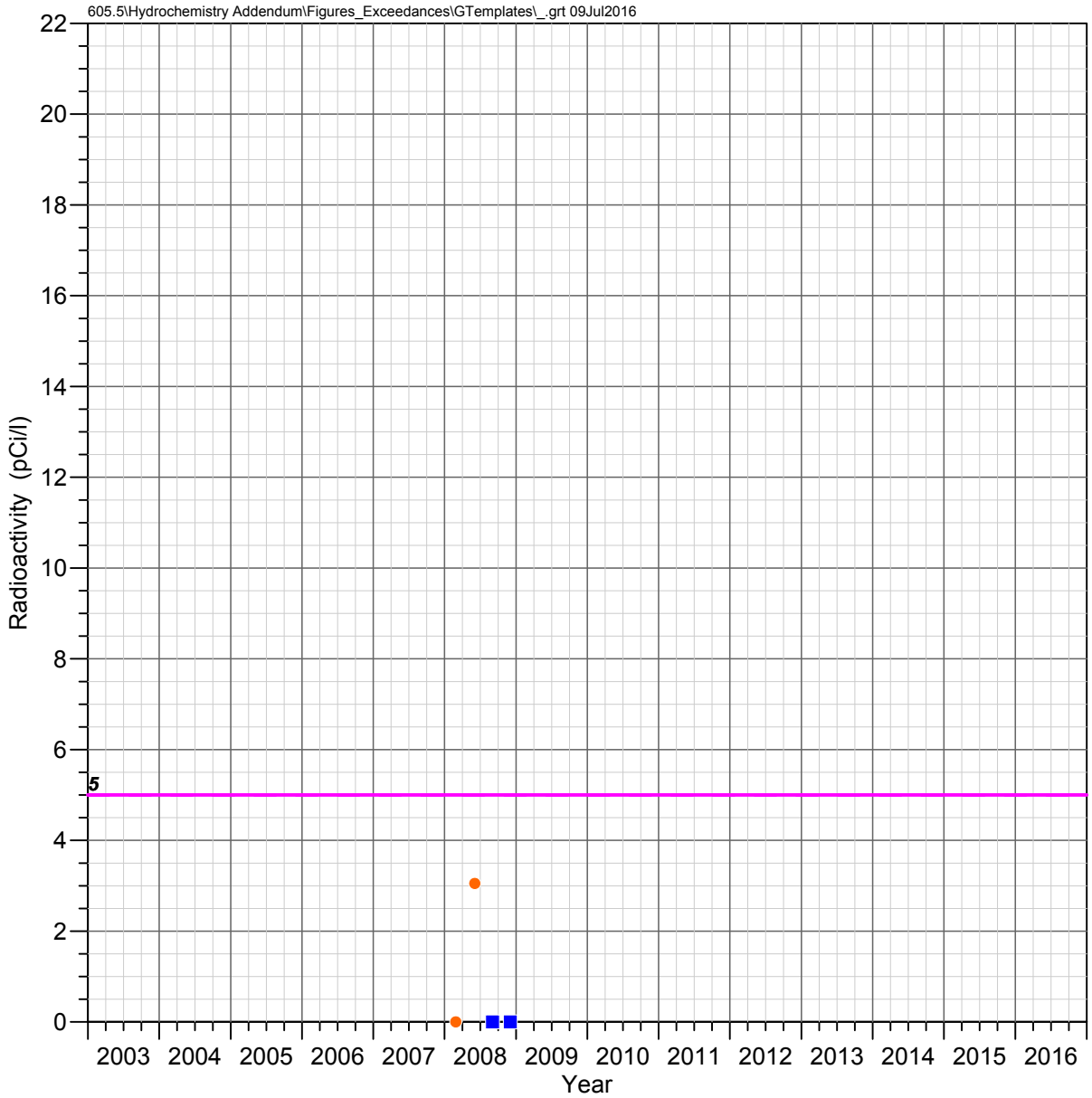


FIGURE E-568. pH OBSERVED AT DHRES-15, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Hackberry Windmill Well
Shallow Groundwater System

RADIUM 226 + RADIUM 228

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 5 pCi/l)
- EPA Maximum Contaminant Levels (UNS, 5 pCi/l)

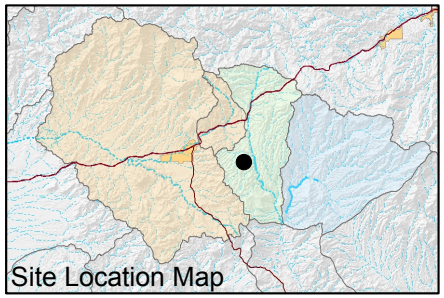
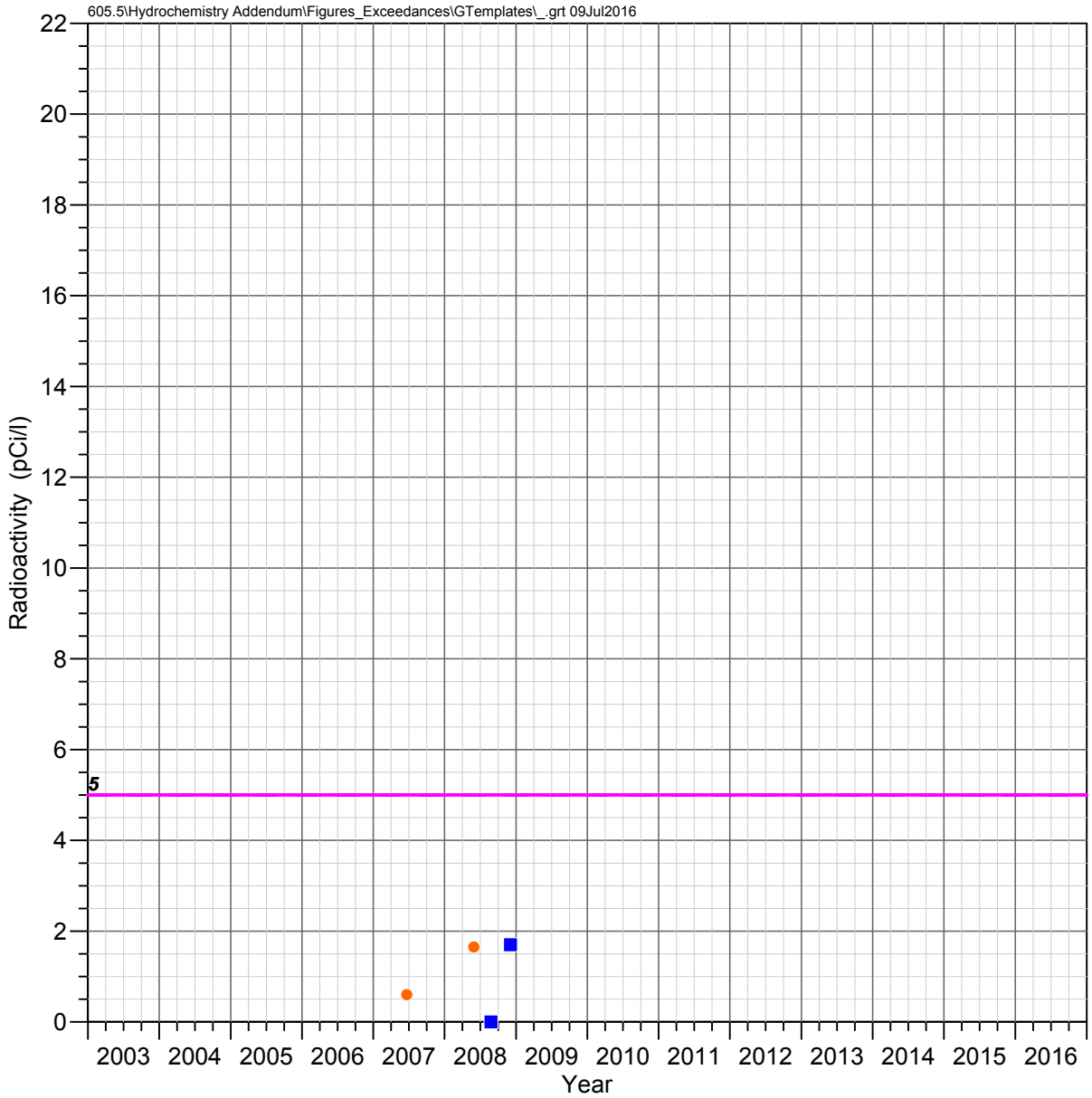


FIGURE E-569. RADIUM 226 + RADIUM 228 RADIOACTIVITY OBSERVED AT HACKBERRY WINDMILL WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



JI Ranch Corral Well
Shallow Groundwater System

RADIUM 226 + RADIUM 228

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 5 pCi/l)
- EPA Maximum Contaminant Levels (UNS, 5 pCi/l)

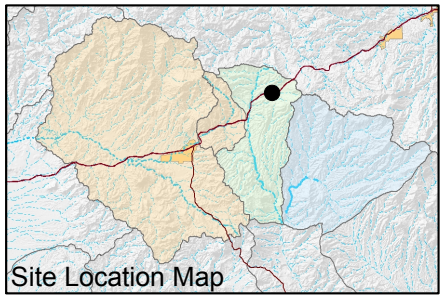
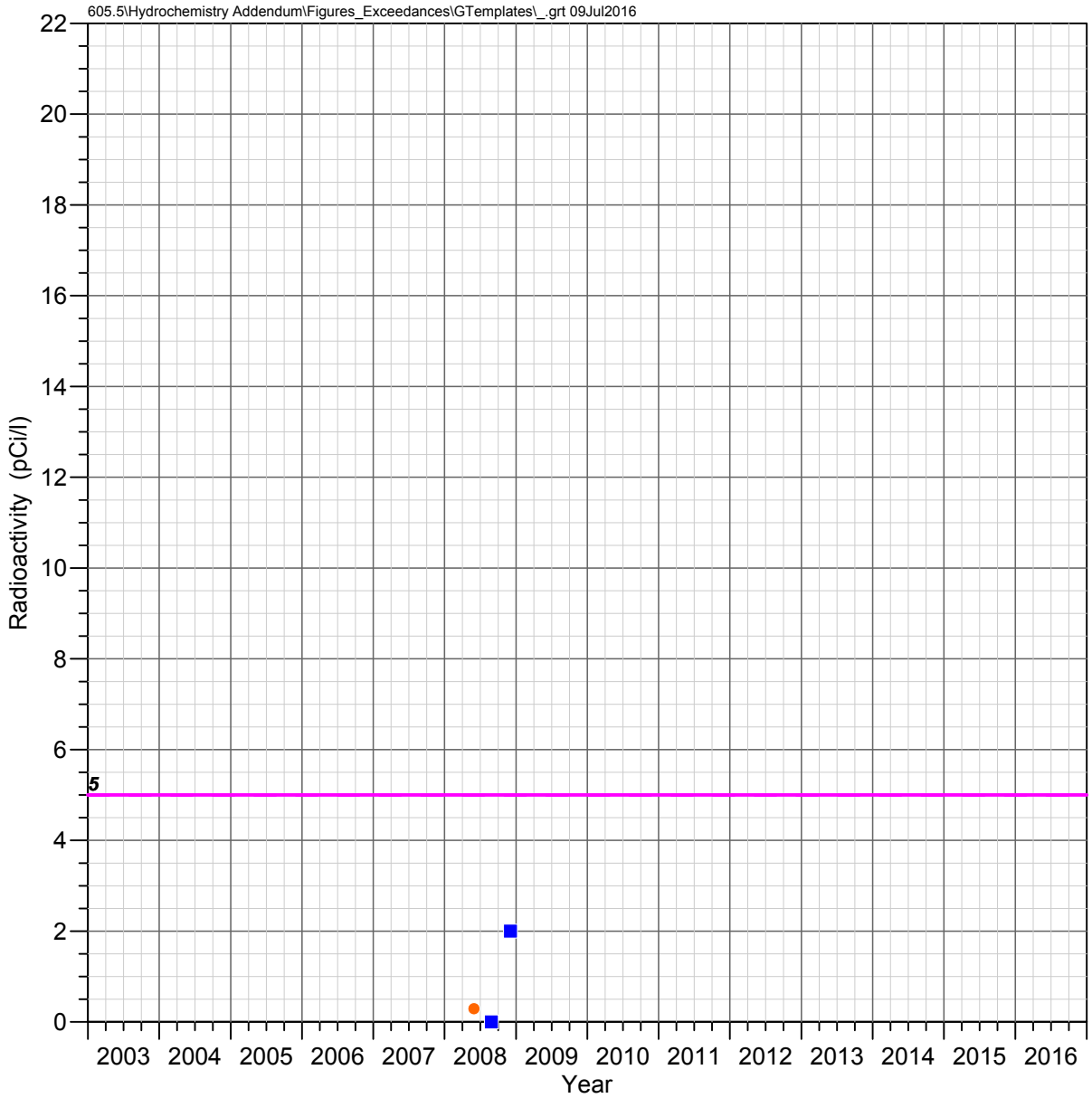


FIGURE E-570. RADIUM 226 + RADIUM 228 RADIOACTIVITY OBSERVED AT JI RANCH CORRAL WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



JI Ranch Middle Well
Shallow Groundwater System

RADIUM 226 + RADIUM 228

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 5 pCi/l)
- EPA Maximum Contaminant Levels (UNS, 5 pCi/l)

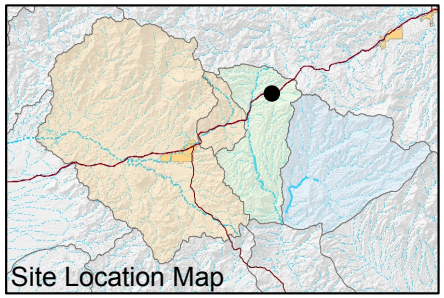
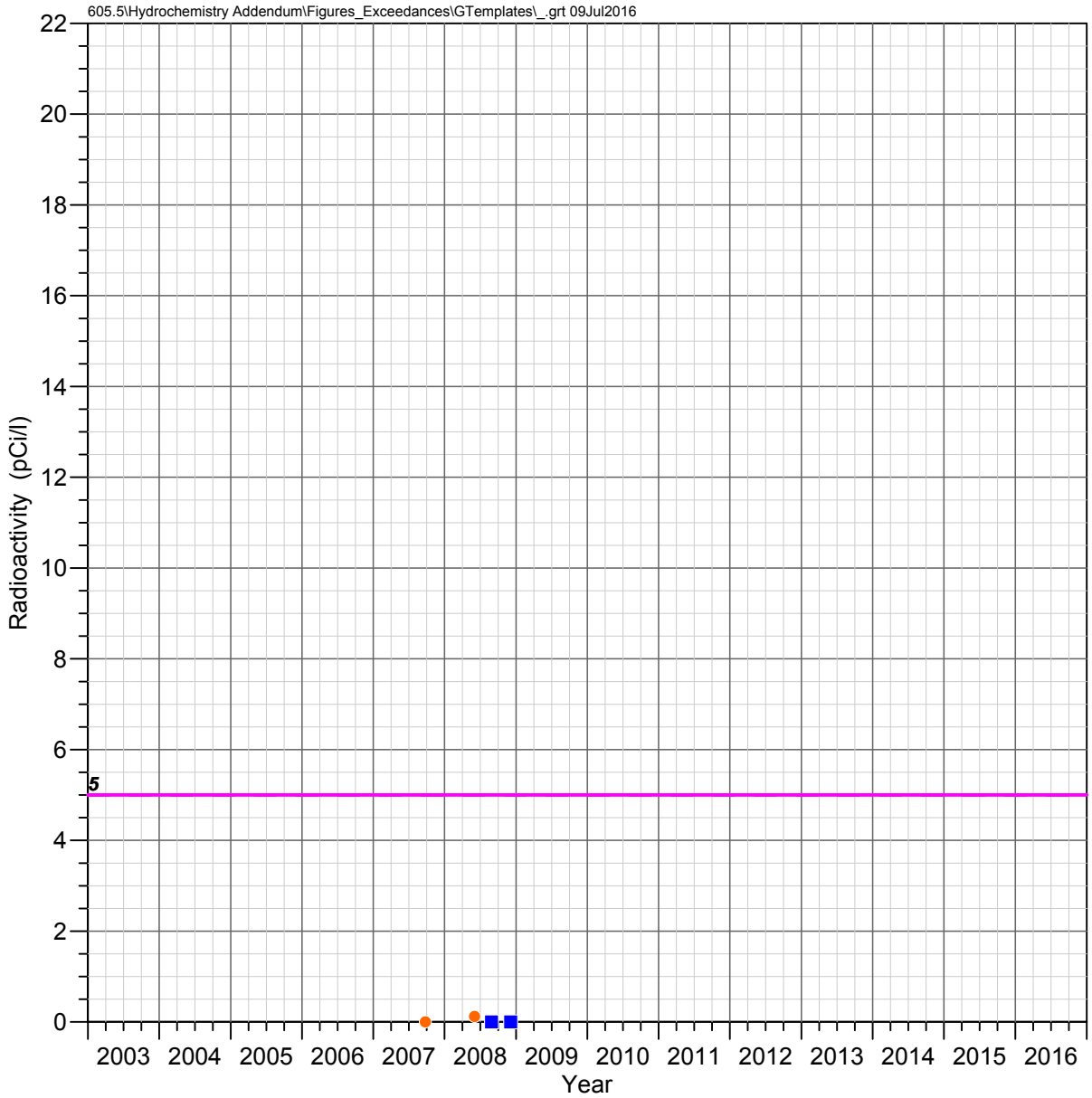


FIGURE E-571. RADIUM 226 + RADIUM 228 RADIOACTIVITY OBSERVED AT JI RANCH MIDDLE WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



A-06
Apache Leap Tuff Aquifer

RADIUM 226 + RADIUM 228

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 5 pCi/l)
- EPA Maximum Contaminant Levels (UNS, 5 pCi/l)

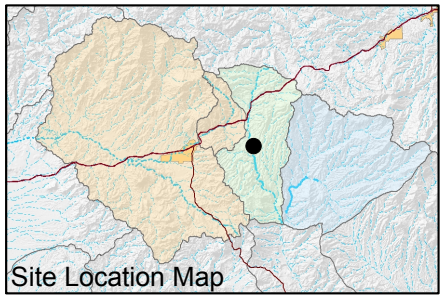
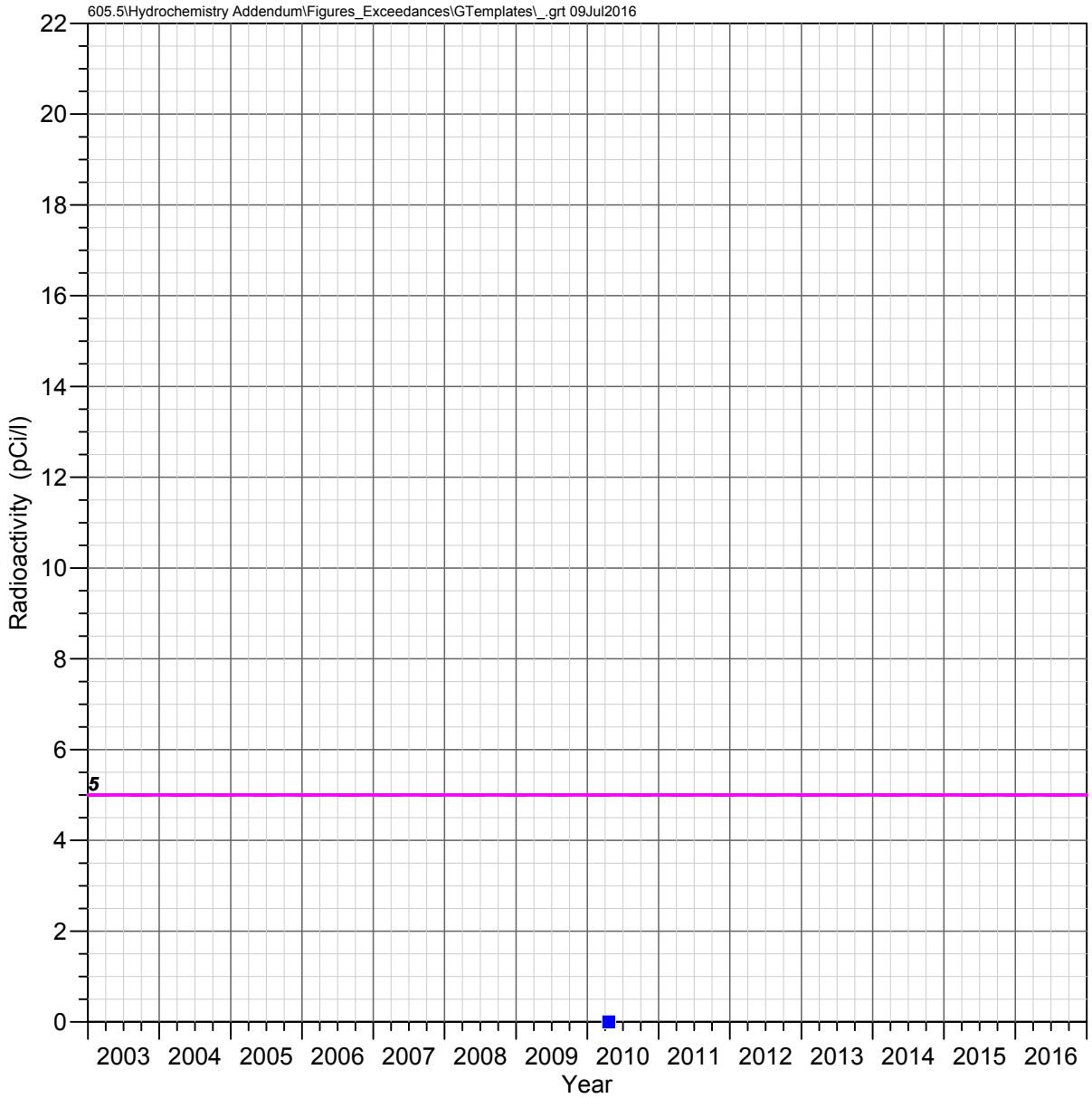


FIGURE E-572. RADIUM 226 + RADIUM 228 RADIOACTIVITY OBSERVED AT A-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



CT Well
Apache Leap Tuff Aquifer

RADIUM 226 + RADIUM 228

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 5 pCi/l)
- EPA Maximum Contaminant Levels (UNS, 5 pCi/l)

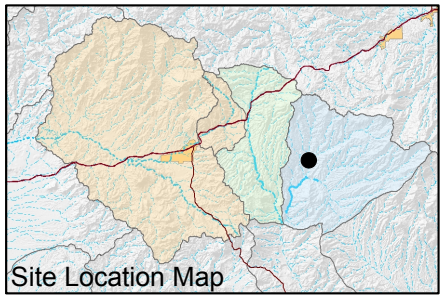
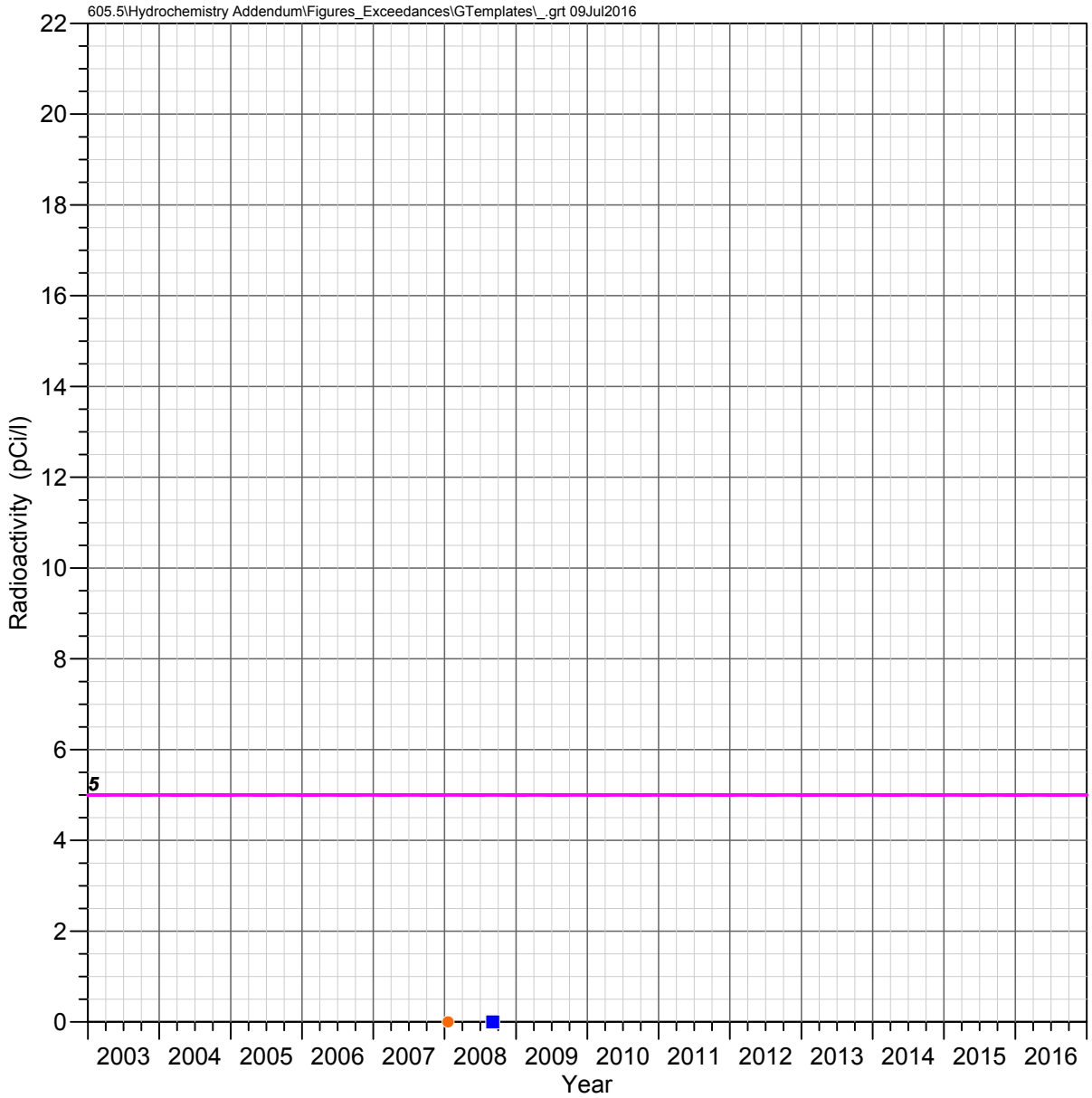


FIGURE E-573. RADIUM 226 + RADIUM 228 RADIOACTIVITY OBSERVED AT CT WELL, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-04
Apache Leap Tuff Aquifer

RADIUM 226 + RADIUM 228

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 5 pCi/l)
- EPA Maximum Contaminant Levels (UNS, 5 pCi/l)

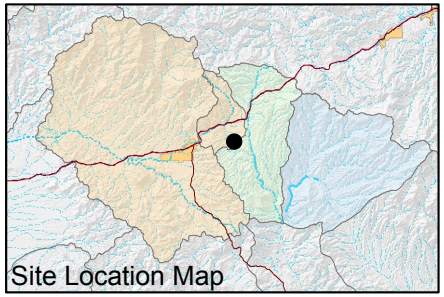
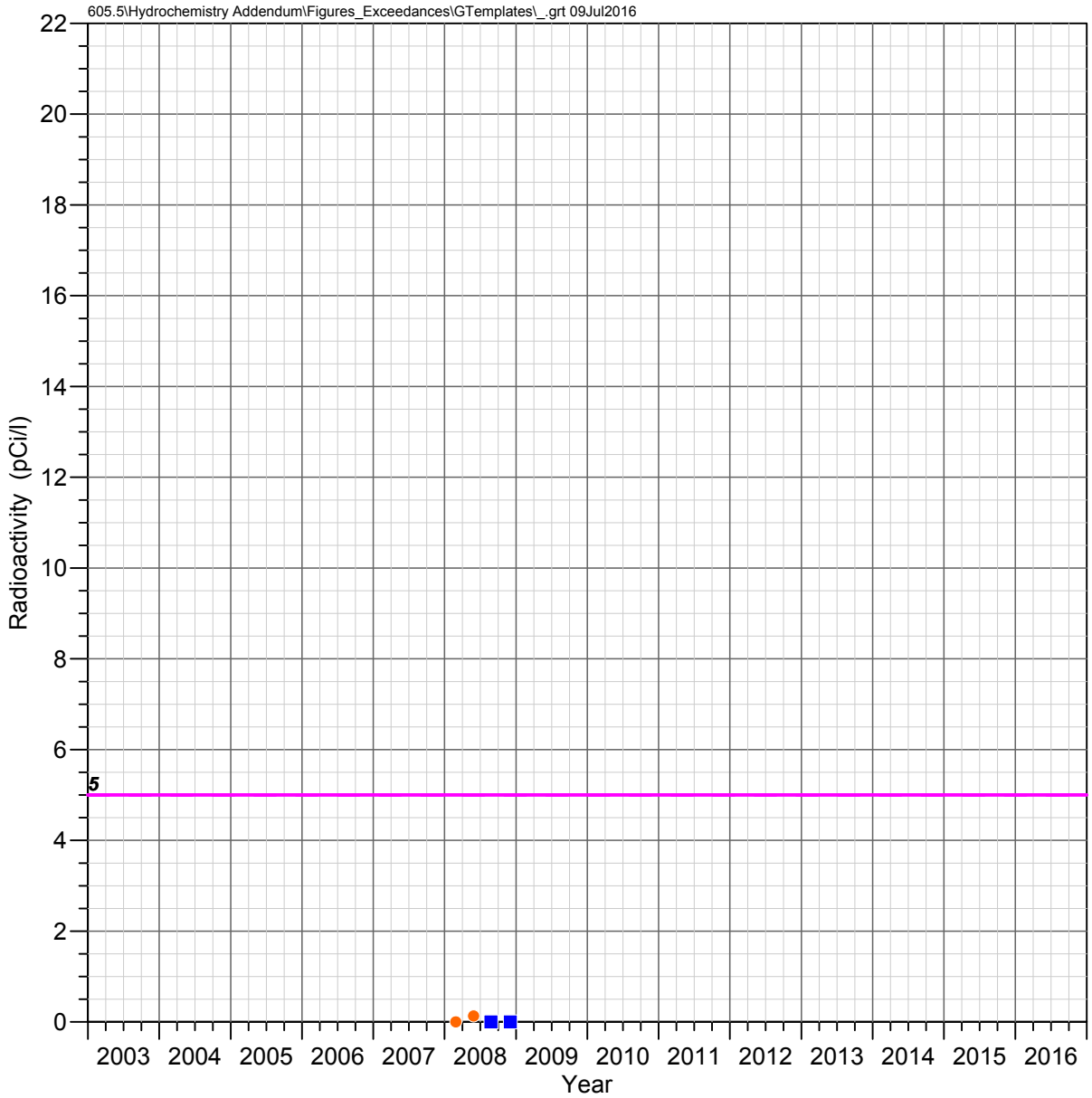


FIGURE E-574. RADIUM 226 + RADIUM 228 RADIOACTIVITY OBSERVED AT HRES-04, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-05
Apache Leap Tuff Aquifer

RADIUM 226 + RADIUM 228

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 5 pCi/l)
- EPA Maximum Contaminant Levels (UNS, 5 pCi/l)

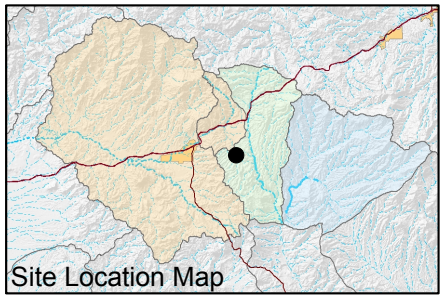
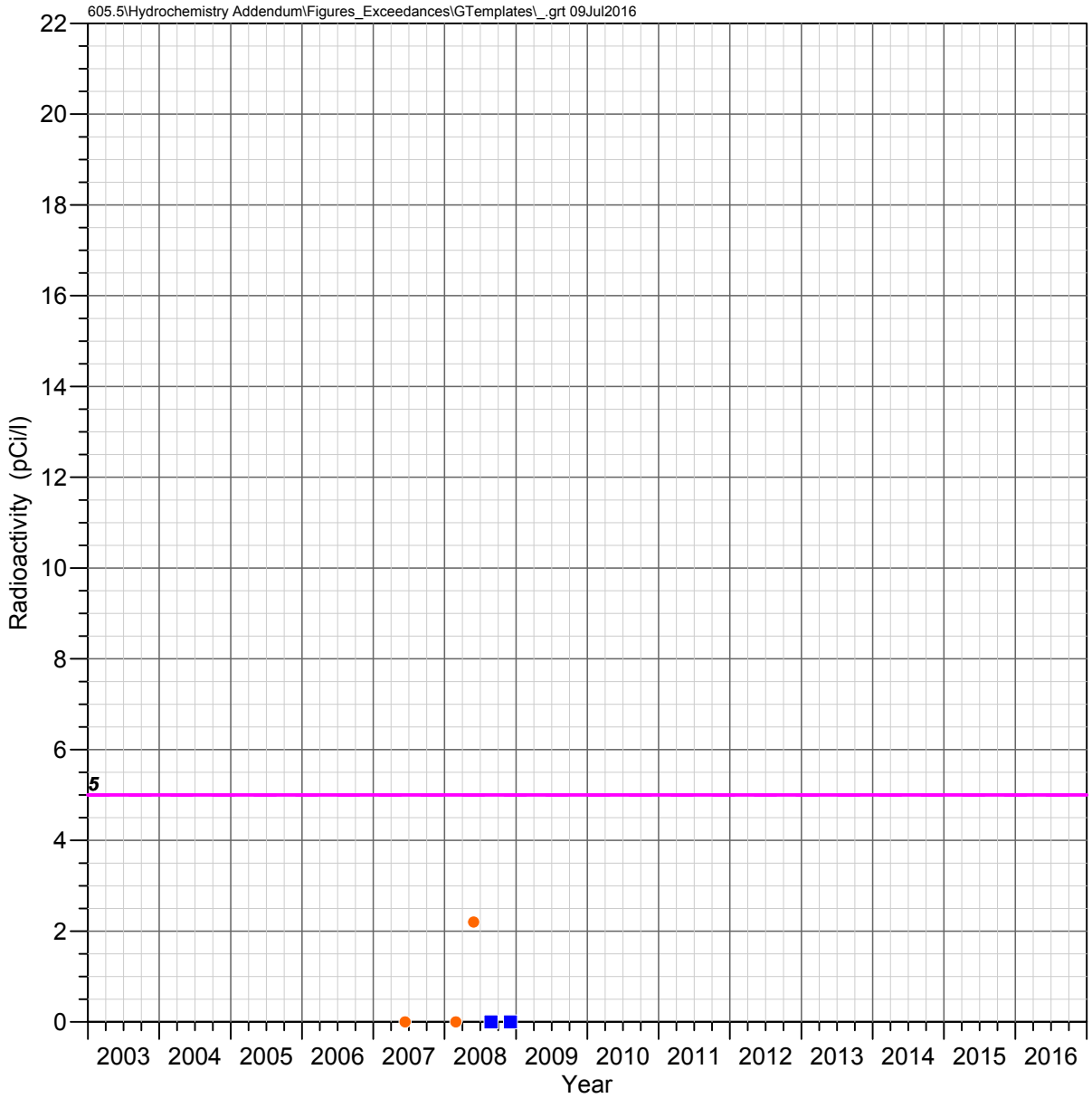


FIGURE E-575. RADIUM 226 + RADIUM 228 RADIOACTIVITY OBSERVED AT HRES-05, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-06
Apache Leap Tuff Aquifer

RADIUM 226 + RADIUM 228

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 5 pCi/l)
- EPA Maximum Contaminant Levels (UNS, 5 pCi/l)

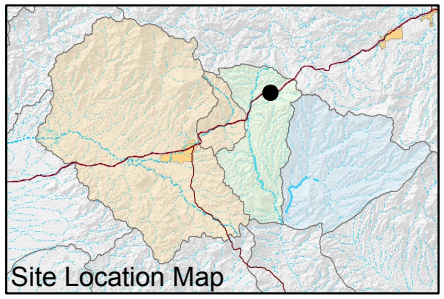
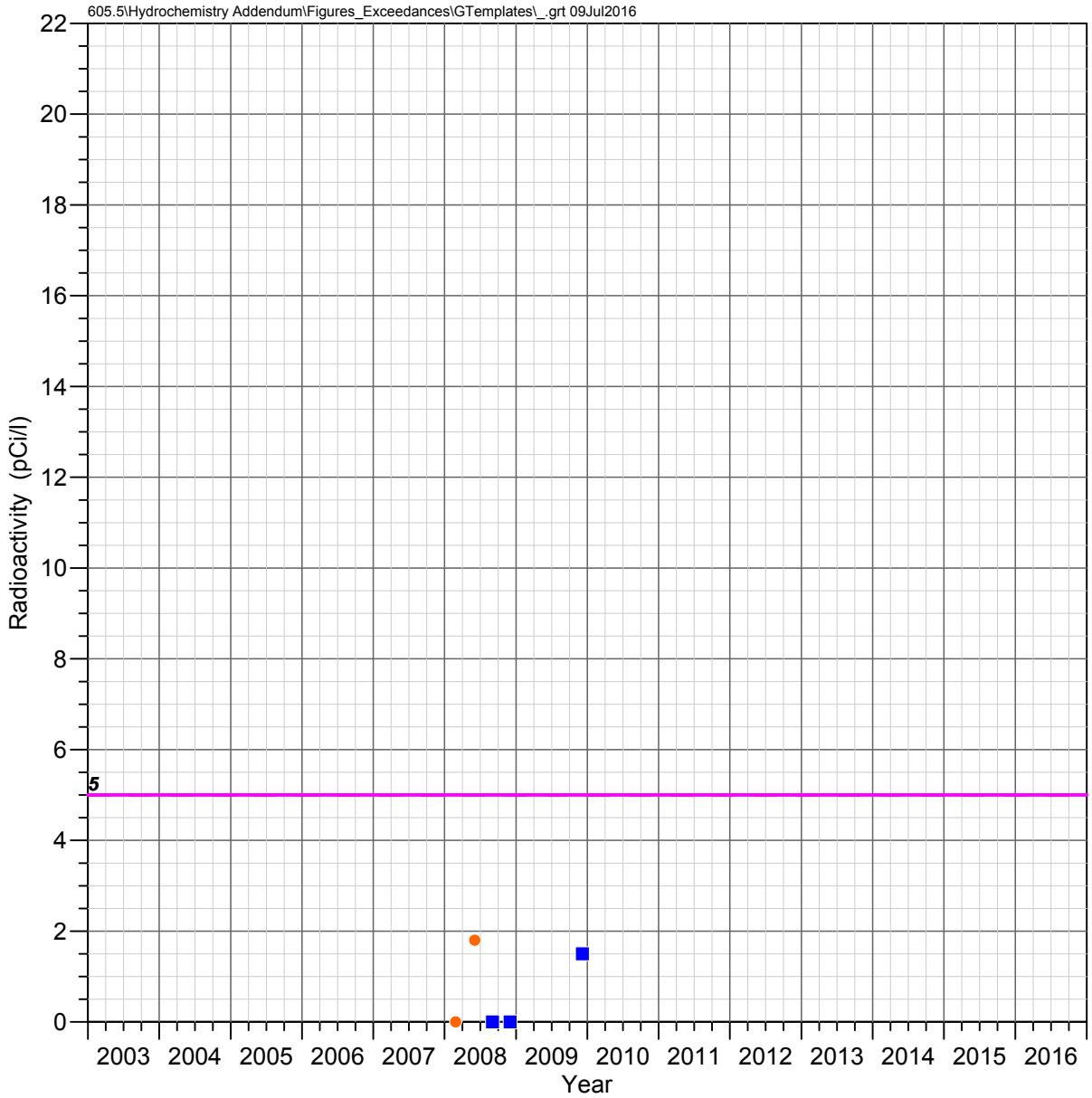


FIGURE E-576. RADIUM 226 + RADIUM 228 RADIOACTIVITY OBSERVED AT HRES-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-07
Apache Leap Tuff Aquifer

RADIUM 226 + RADIUM 228

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 5 pCi/l)
- EPA Maximum Contaminant Levels (UNS, 5 pCi/l)

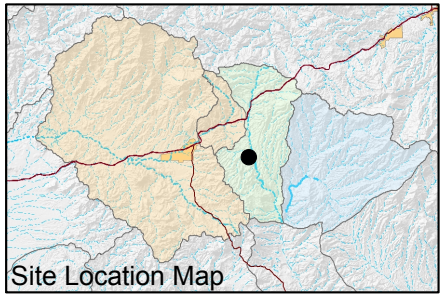
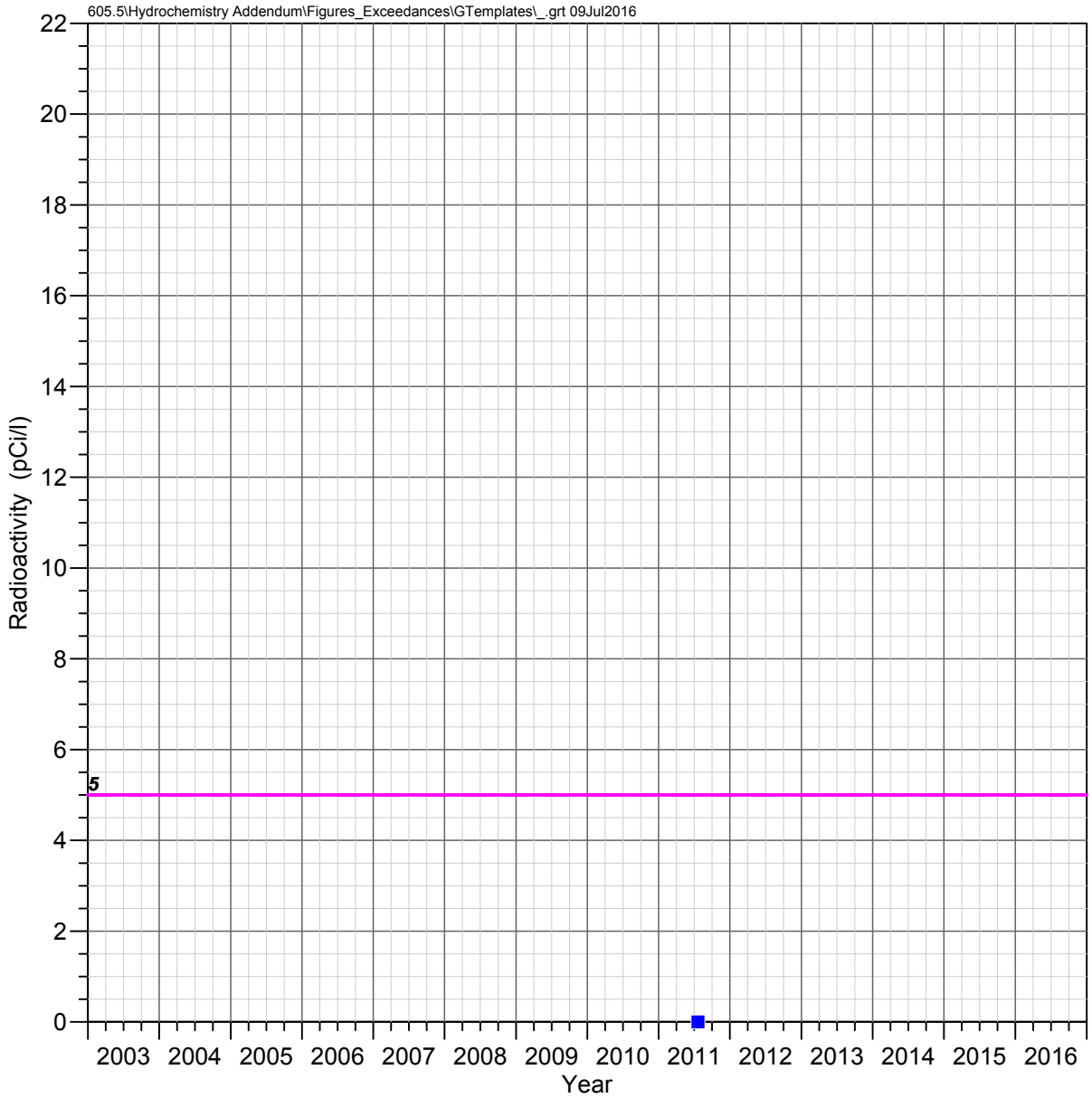


FIGURE E-577. RADIUM 226 + RADIUM 228 RADIOACTIVITY OBSERVED AT HRES-07, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-08
Apache Leap Tuff Aquifer

RADIUM 226 + RADIUM 228

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 5 pCi/l)
- EPA Maximum Contaminant Levels (UNS, 5 pCi/l)

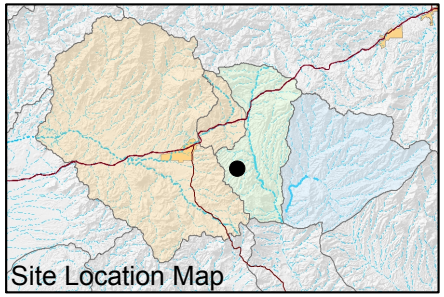
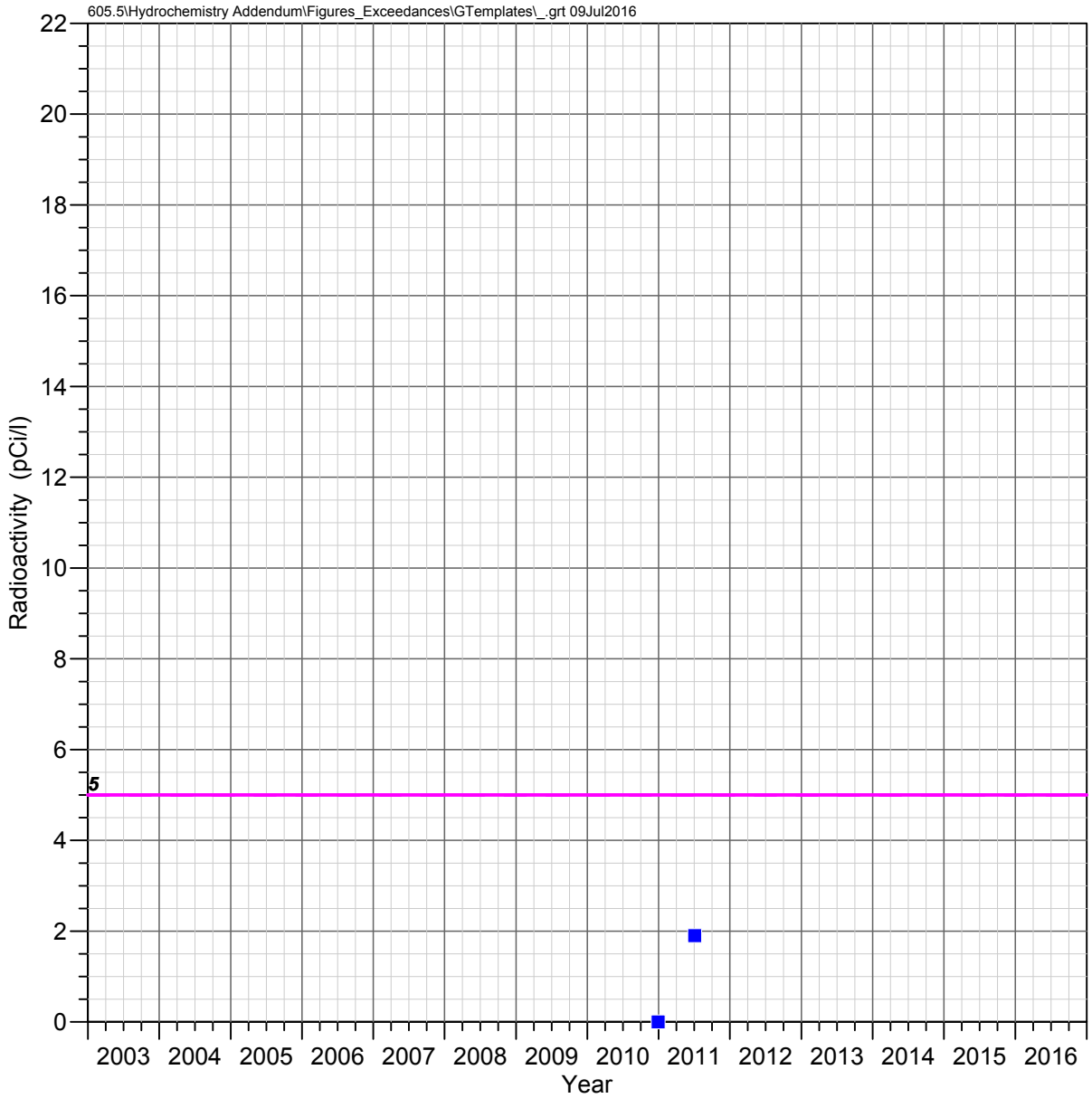


FIGURE E-578. RADIUM 226 + RADIUM 228 RADIOACTIVITY OBSERVED AT HRES-08, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-09
Apache Leap Tuff Aquifer

RADIUM 226 + RADIUM 228

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 5 pCi/l)
- EPA Maximum Contaminant Levels (UNS, 5 pCi/l)

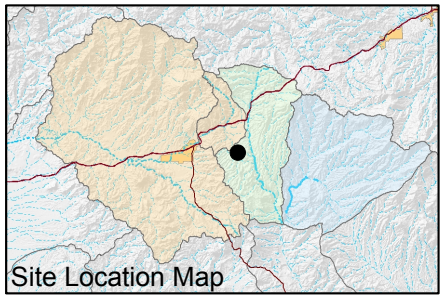
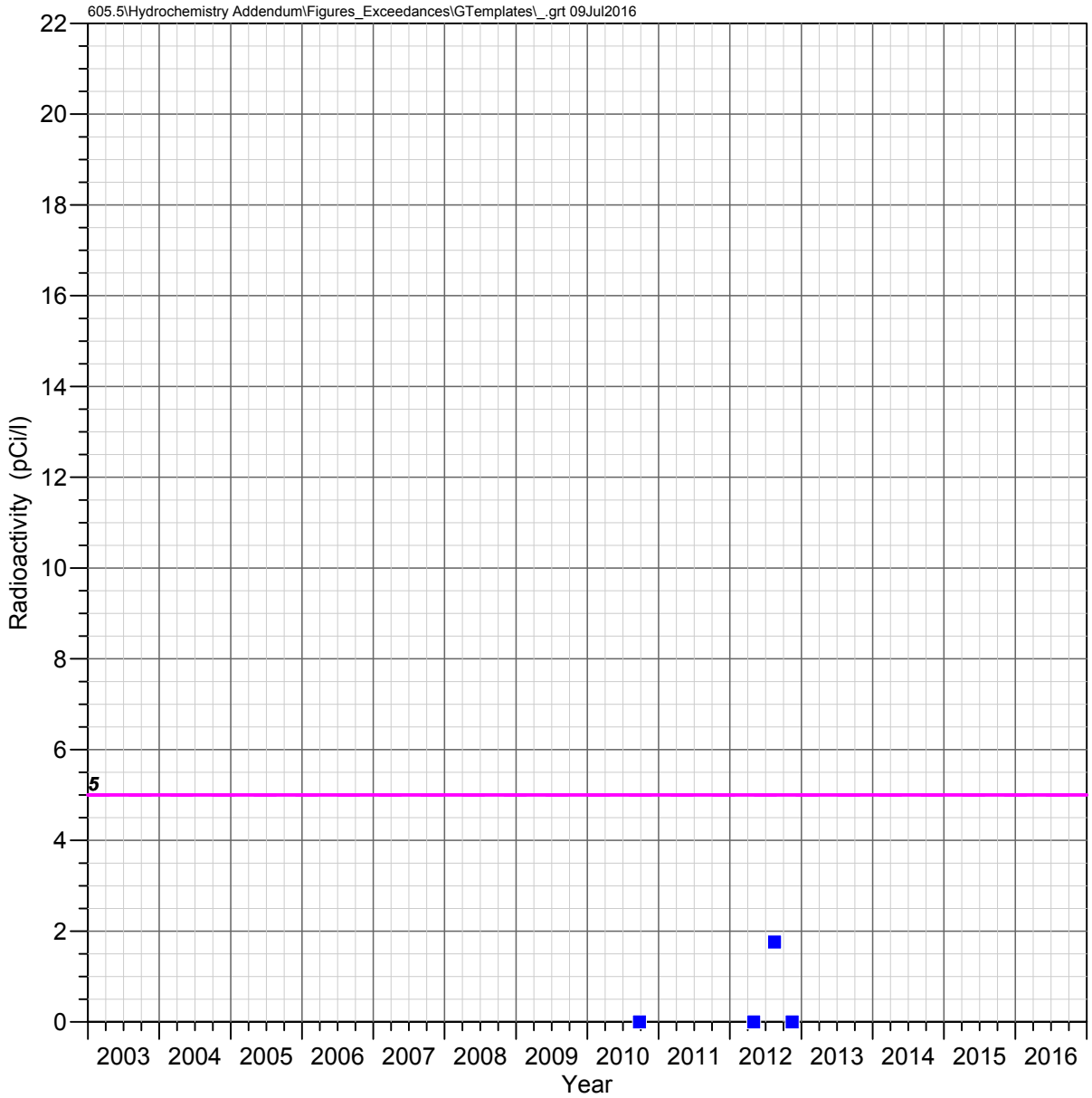


FIGURE E-579. RADIUM 226 + RADIUM 228 RADIOACTIVITY OBSERVED AT HRES-09, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-10
Apache Leap Tuff Aquifer

RADIUM 226 + RADIUM 228

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 5 pCi/l)
- EPA Maximum Contaminant Levels (UNS, 5 pCi/l)

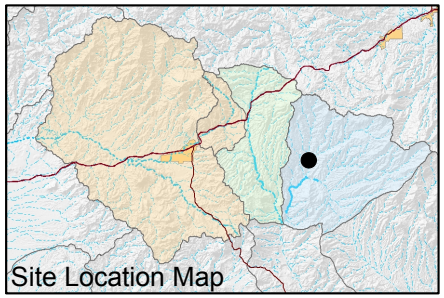
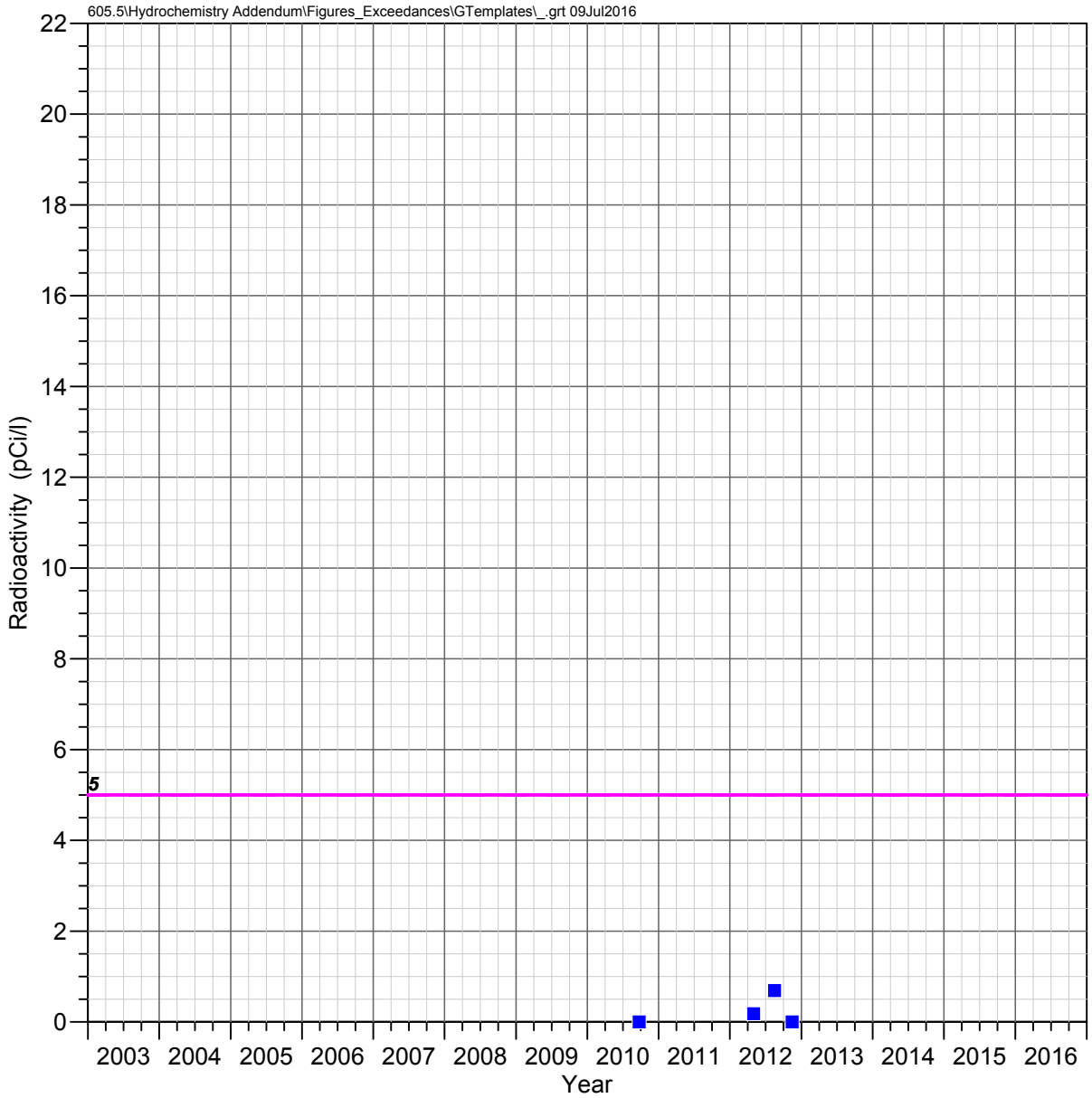


FIGURE E-580. RADIUM 226 + RADIUM 228 RADIOACTIVITY OBSERVED AT HRES-10, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-11
Apache Leap Tuff Aquifer

RADIUM 226 + RADIUM 228

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 5 pCi/l)
- EPA Maximum Contaminant Levels (UNS, 5 pCi/l)

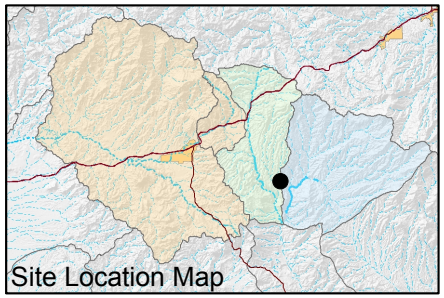
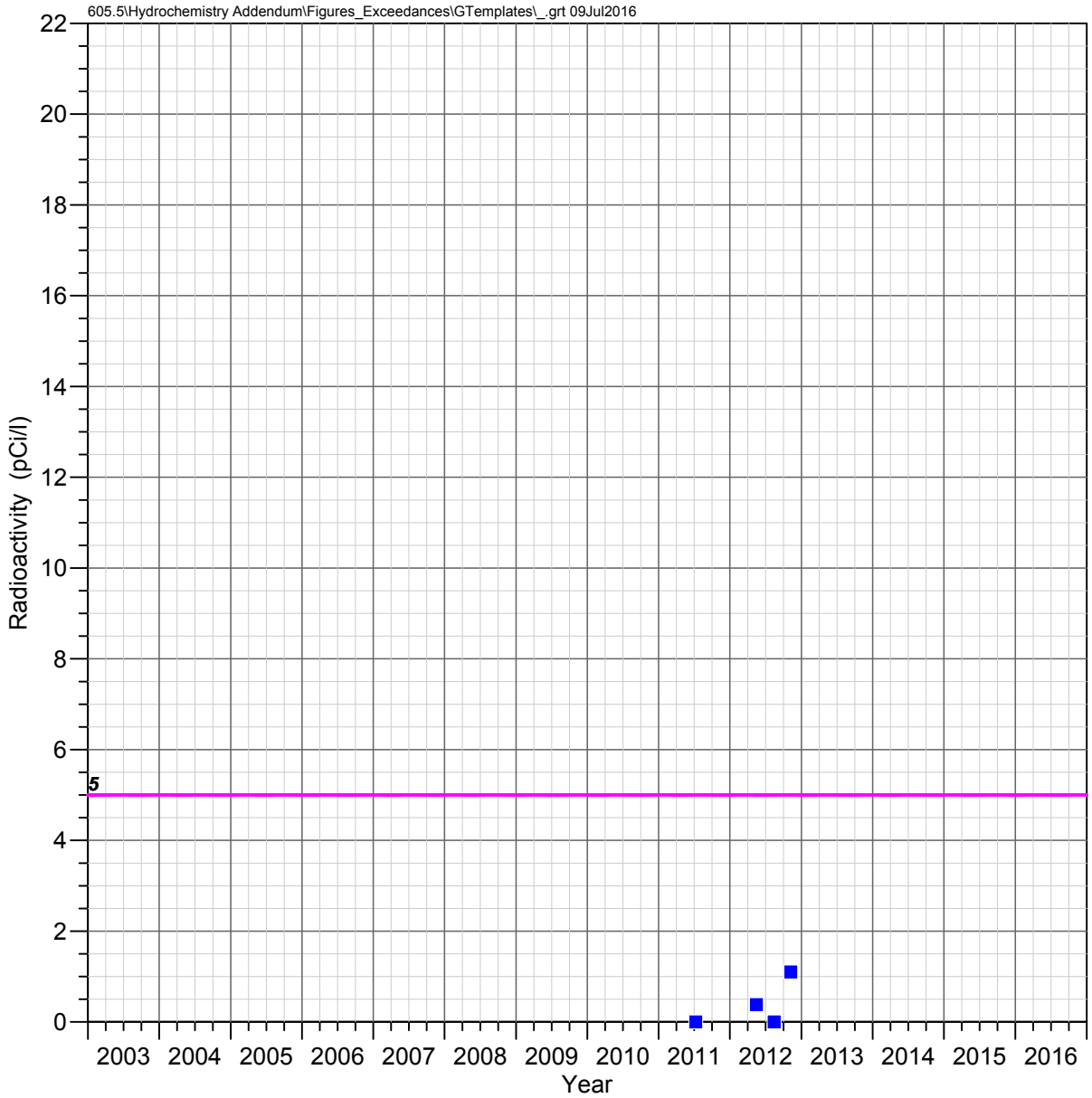


FIGURE E-581. RADIUM 226 + RADIUM 228 RADIOACTIVITY OBSERVED AT HRES-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-12
Apache Leap Tuff Aquifer

RADIUM 226 + RADIUM 228

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 5 pCi/l)
- EPA Maximum Contaminant Levels (UNS, 5 pCi/l)

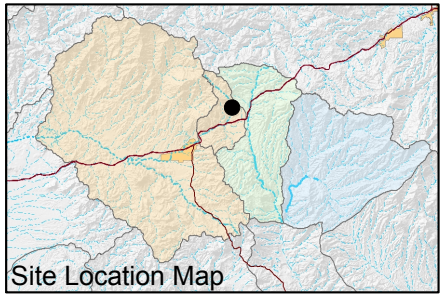
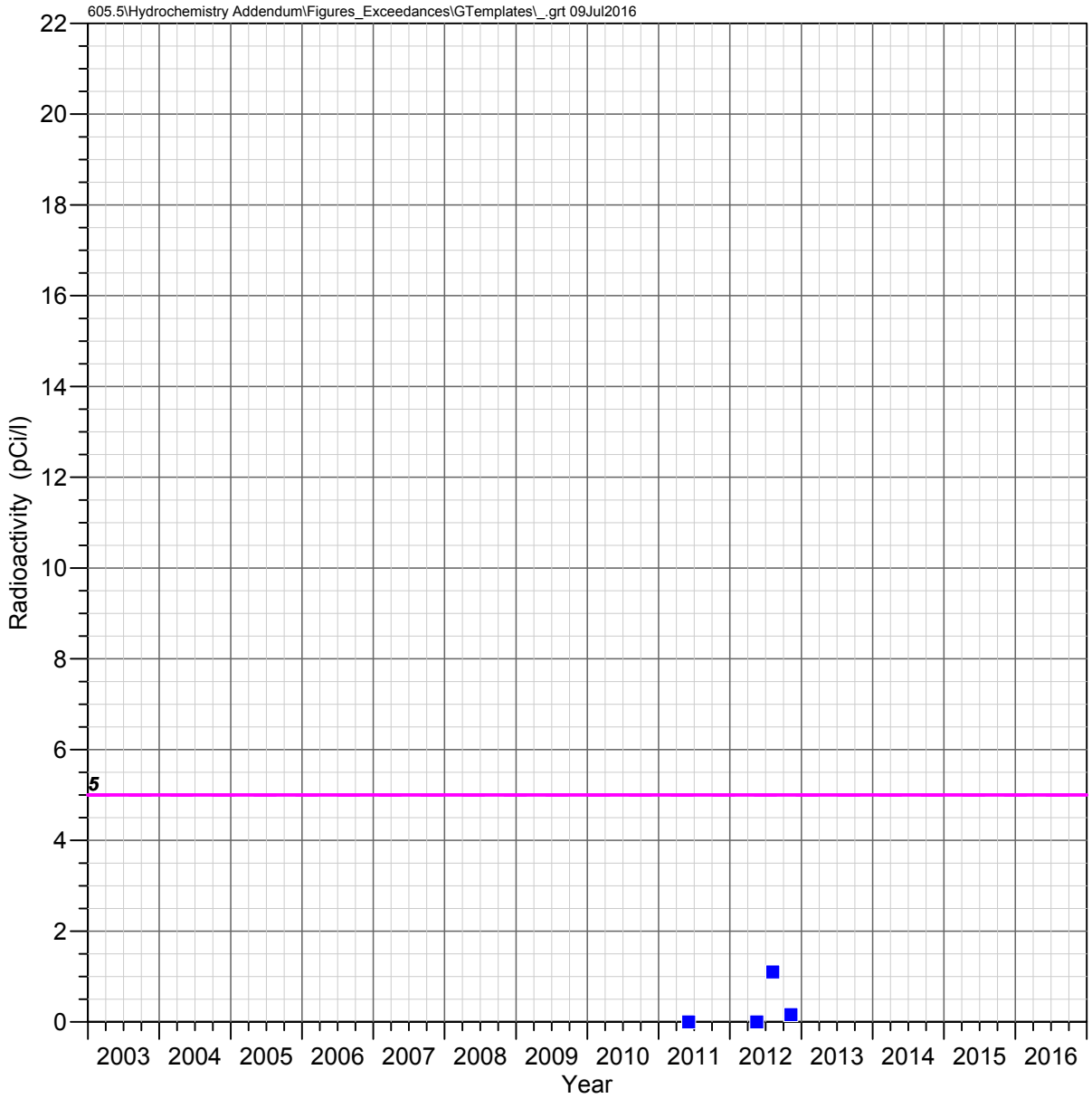


FIGURE E-582. RADIUM 226 + RADIUM 228 RADIOACTIVITY OBSERVED AT HRES-12, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-13
Apache Leap Tuff Aquifer

RADIUM 226 + RADIUM 228

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 5 pCi/l)
- EPA Maximum Contaminant Levels (UNS, 5 pCi/l)

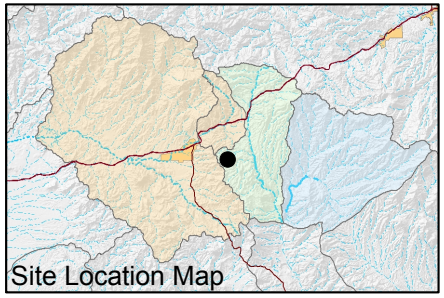
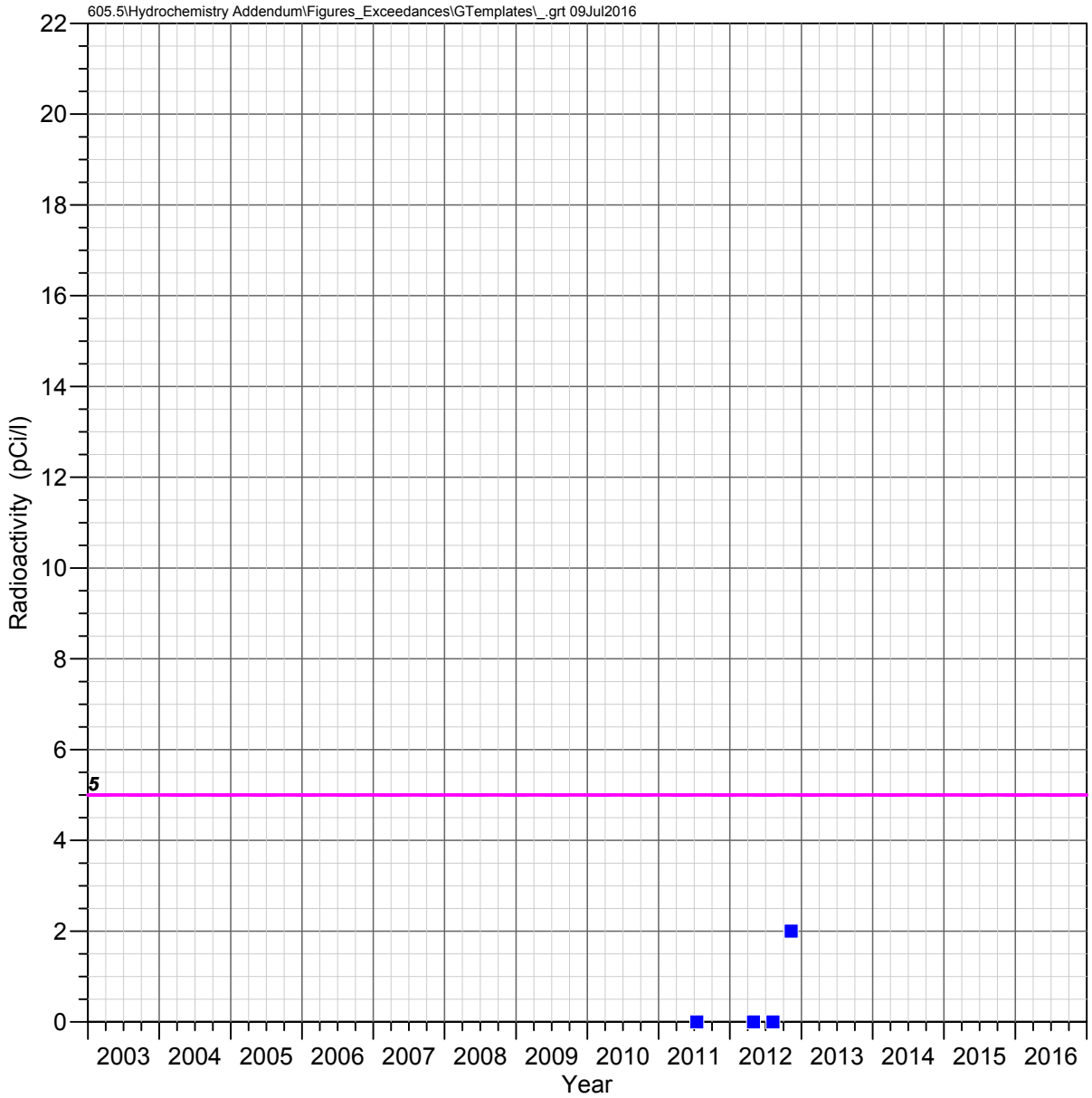


FIGURE E-583. RADIUM 226 + RADIUM 228 RADIOACTIVITY OBSERVED AT HRES-13, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-14
Apache Leap Tuff Aquifer

RADIUM 226 + RADIUM 228

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 5 pCi/l)
- EPA Maximum Contaminant Levels (UNS, 5 pCi/l)

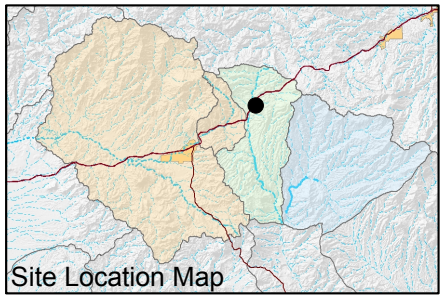
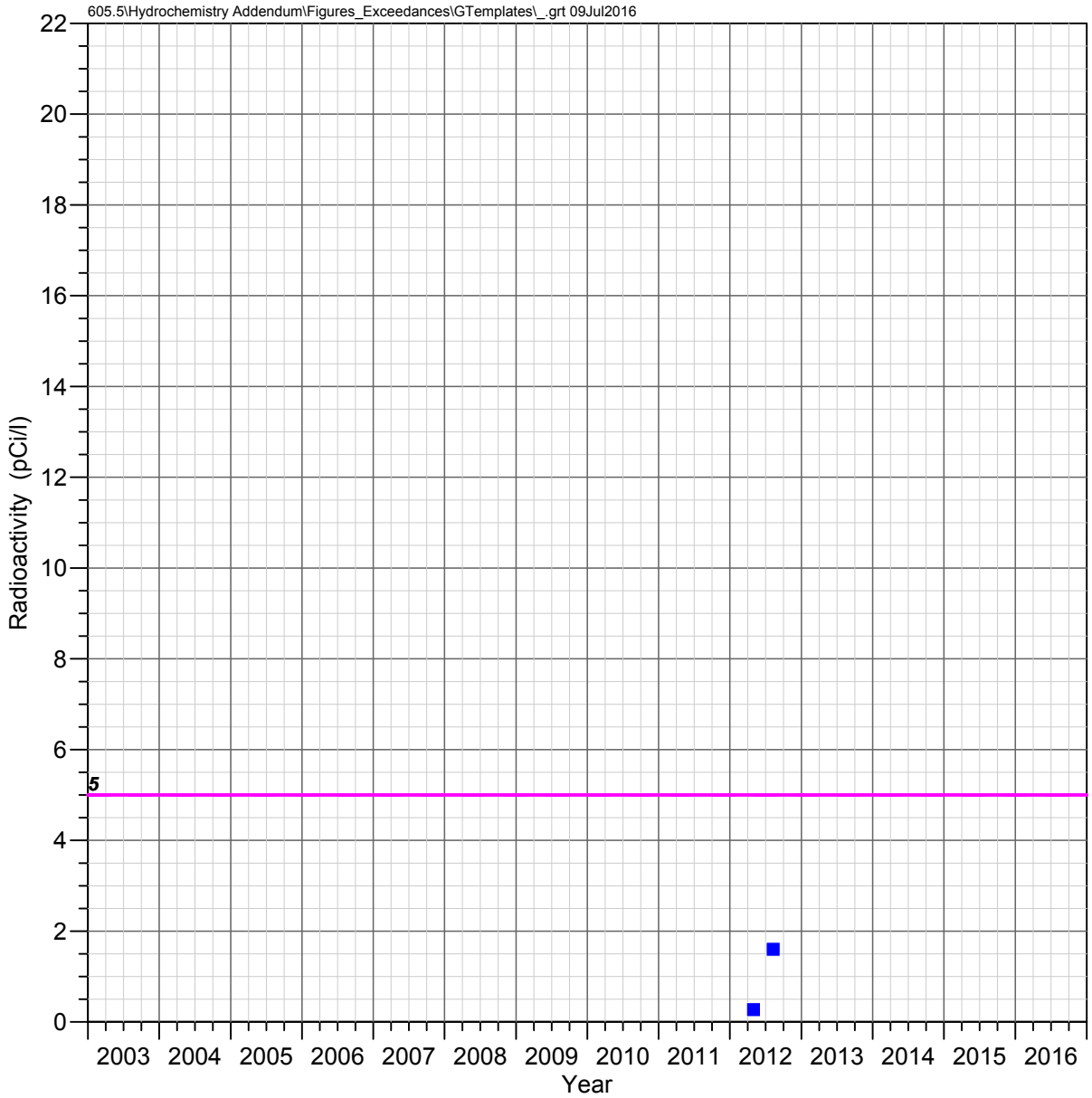


FIGURE E-584. RADIUM 226 + RADIUM 228 RADIOACTIVITY OBSERVED AT HRES-14, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-15
Apache Leap Tuff Aquifer

RADIUM 226 + RADIUM 228

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 5 pCi/l)
- EPA Maximum Contaminant Levels (UNS, 5 pCi/l)

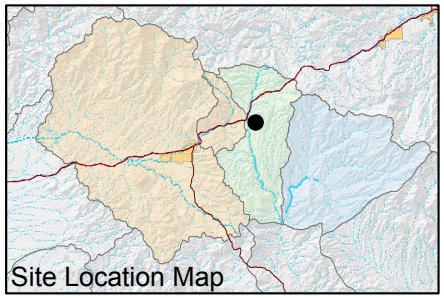
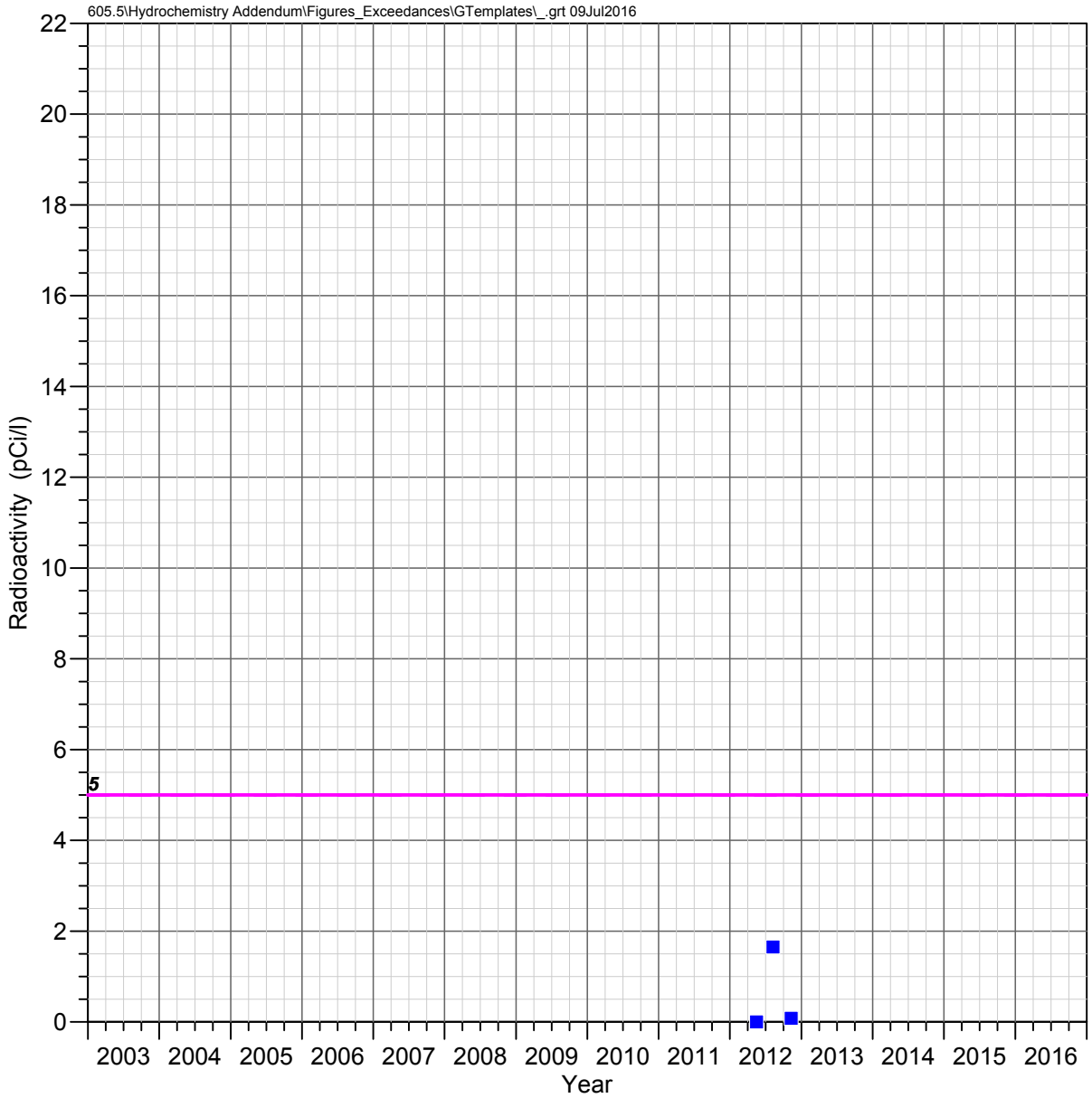


FIGURE E-585. RADIUM 226 + RADIUM 228 RADIOACTIVITY OBSERVED AT HRES-15, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-17
Apache Leap Tuff Aquifer

RADIUM 226 + RADIUM 228

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 5 pCi/l)
- EPA Maximum Contaminant Levels (UNS, 5 pCi/l)

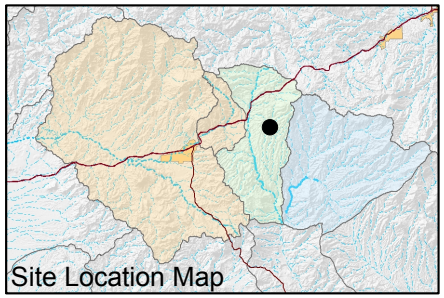
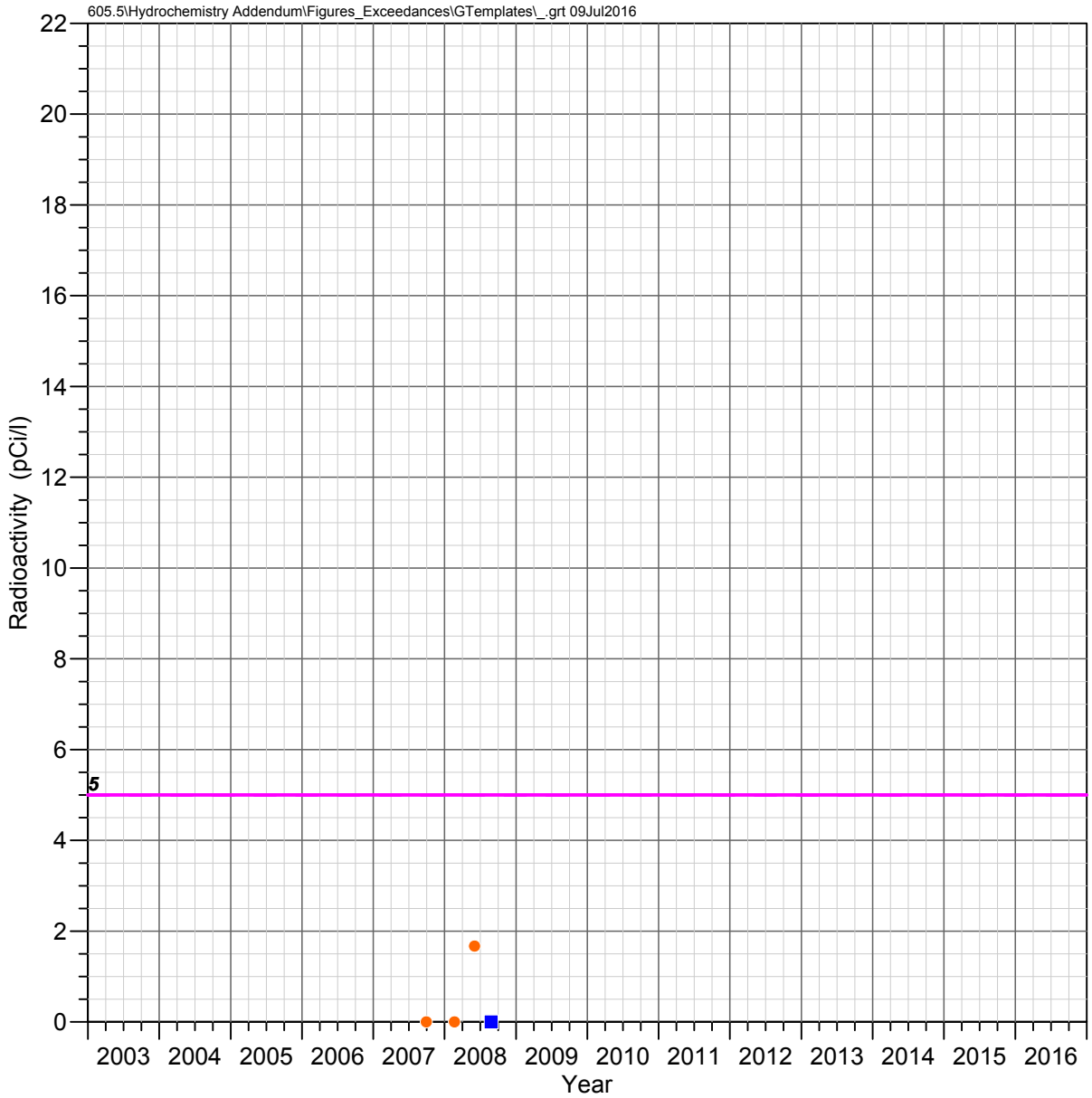


FIGURE E-586. RADIUM 226 + RADIUM 228 RADIOACTIVITY OBSERVED AT HRES-17, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MJ-11
Apache Leap Tuff Aquifer

RADIUM 226 + RADIUM 228

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 5 pCi/l)
- EPA Maximum Contaminant Levels (UNS, 5 pCi/l)

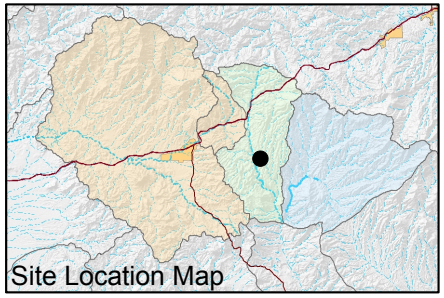
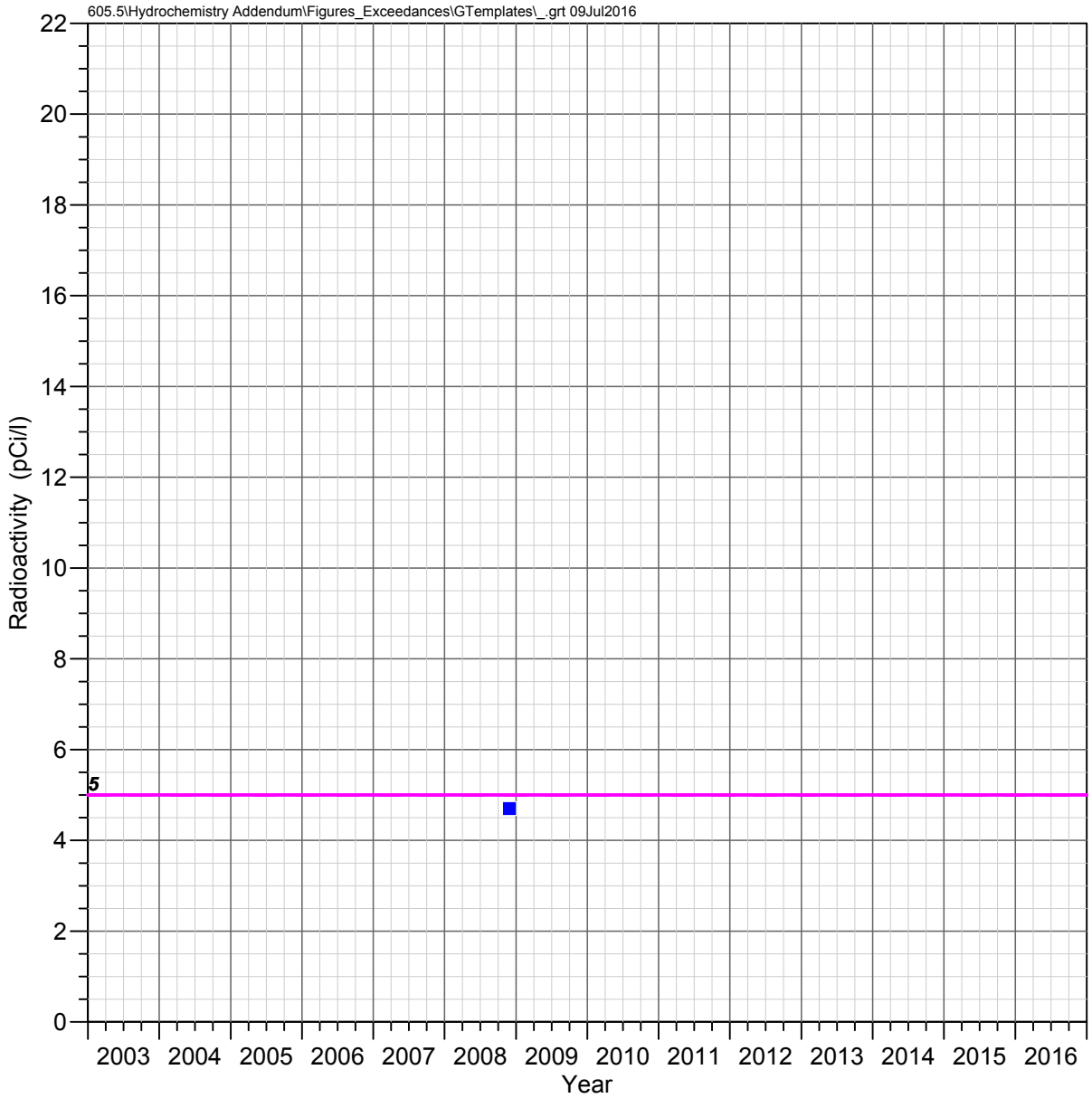


FIGURE E-587. RADIUM 226 + RADIUM 228 RADIOACTIVITY OBSERVED AT MJ-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-01
Deep Groundwater System

RADIUM 226 + RADIUM 228

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 5 pCi/l)
- EPA Maximum Contaminant Levels (UNS, 5 pCi/l)

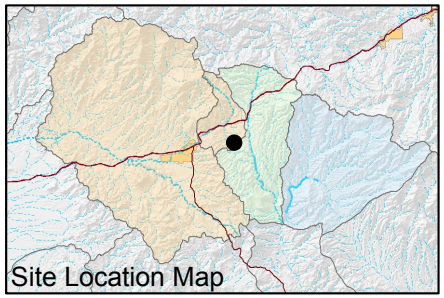
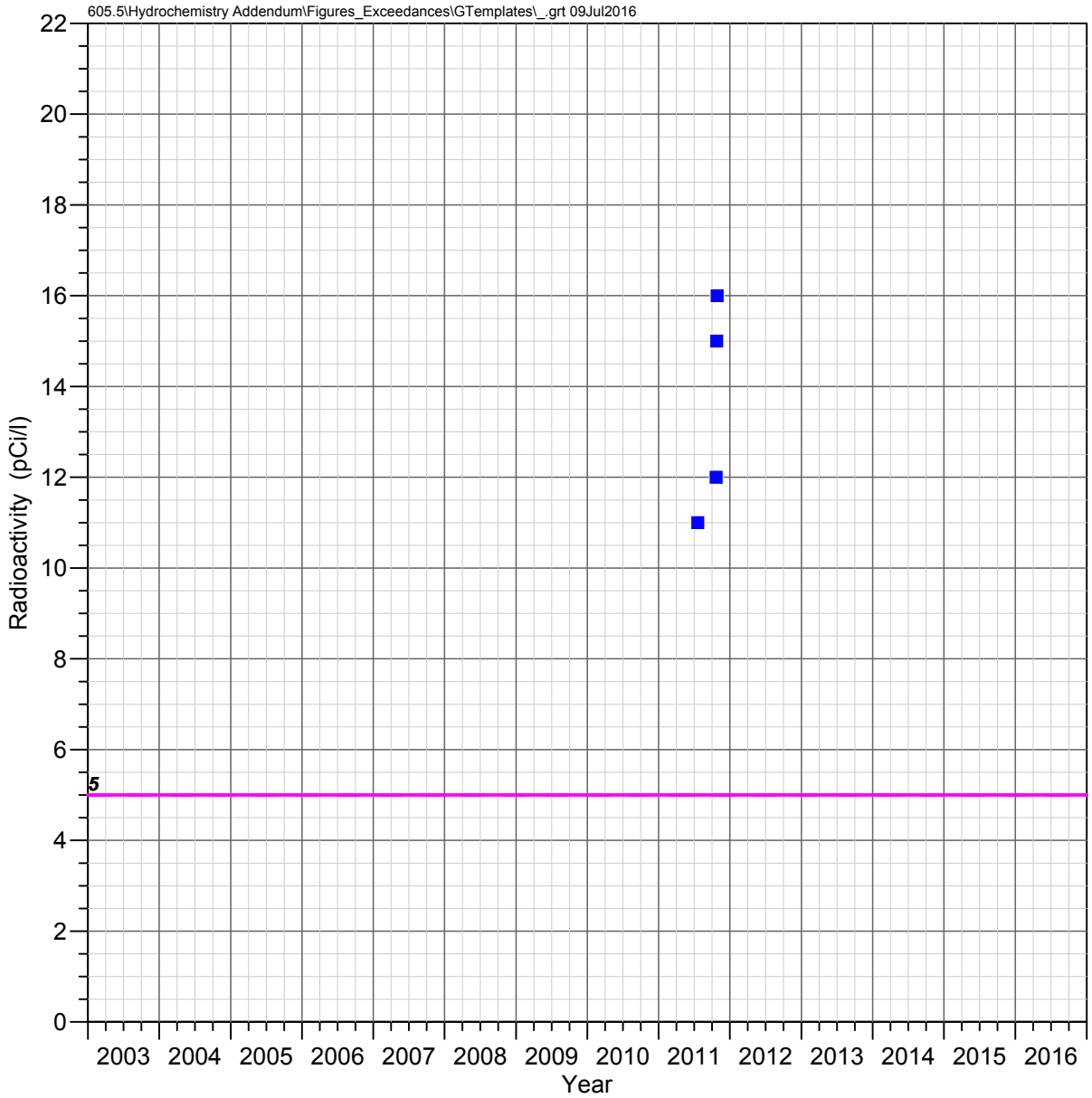


FIGURE E-588. RADIUM 226 + RADIUM 228 RADIOACTIVITY OBSERVED AT DHRES-01, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-02
Deep Groundwater System

RADIUM 226 + RADIUM 228

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 5 pCi/l)
- EPA Maximum Contaminant Levels (UNS, 5 pCi/l)

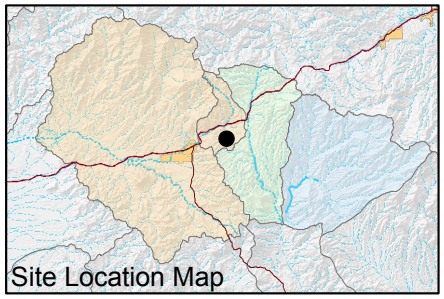
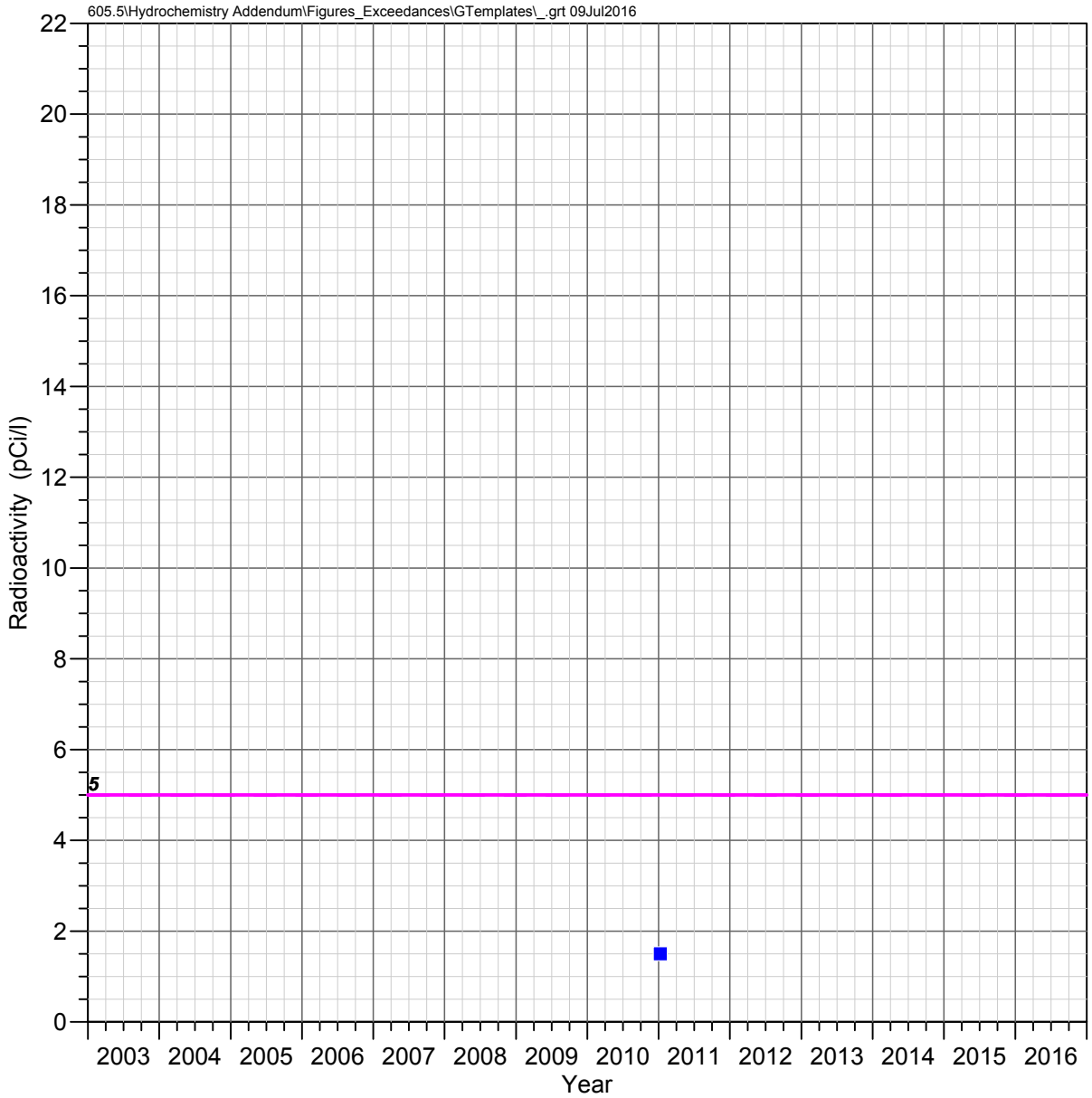


FIGURE E-589. RADIUM 226 + RADIUM 228 RADIOACTIVITY OBSERVED AT DHRES-02, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-06
Deep Groundwater System

RADIUM 226 + RADIUM 228

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 5 pCi/l)
- EPA Maximum Contaminant Levels (UNS, 5 pCi/l)

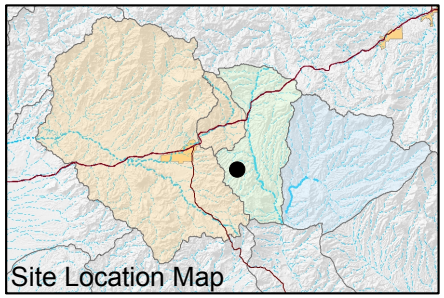
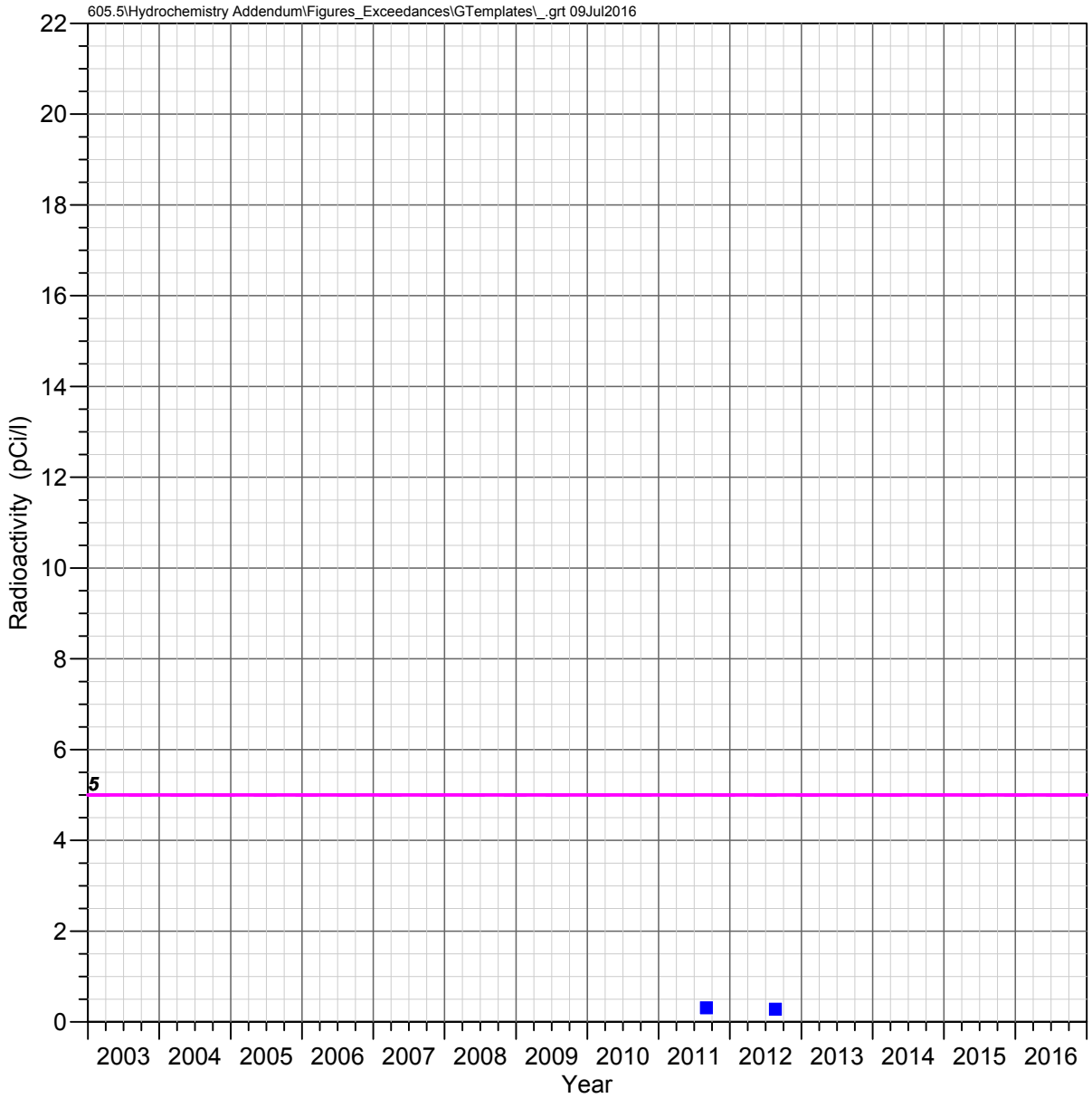


FIGURE E-590. RADIUM 226 + RADIUM 228 RADIOACTIVITY OBSERVED AT DHRES-06, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-09
Deep Groundwater System

RADIUM 226 + RADIUM 228

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 5 pCi/l)
- EPA Maximum Contaminant Levels (UNS, 5 pCi/l)

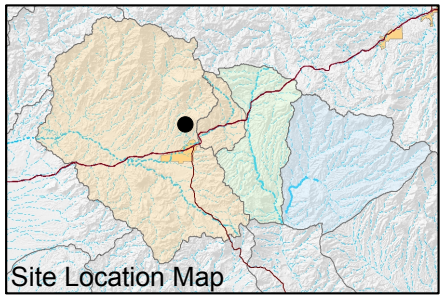
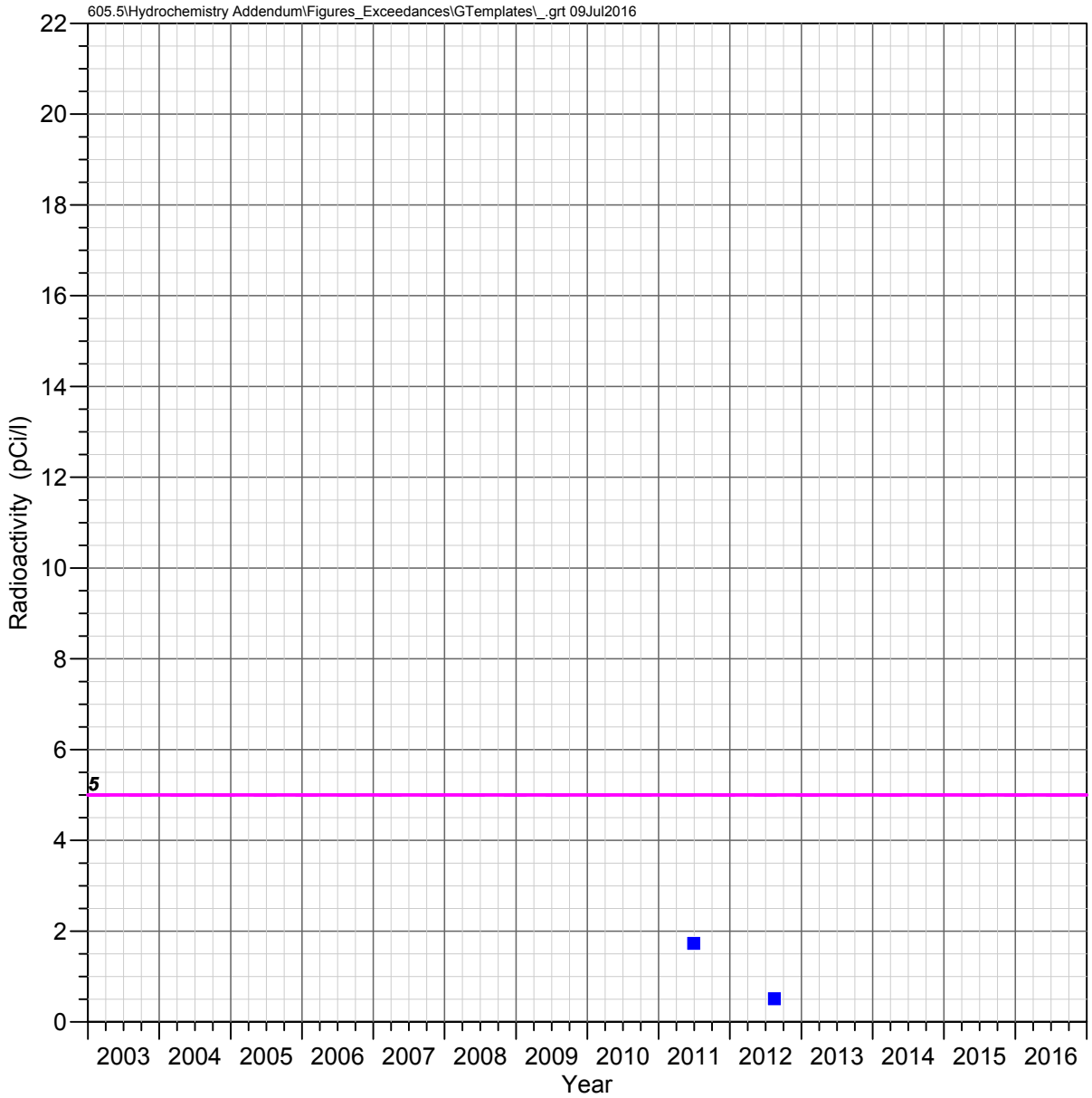


FIGURE E-591. RADIUM 226 + RADIUM 228 RADIOACTIVITY OBSERVED AT DHRES-09, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-11
Deep Groundwater System

RADIUM 226 + RADIUM 228

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 5 pCi/l)
- EPA Maximum Contaminant Levels (UNS, 5 pCi/l)

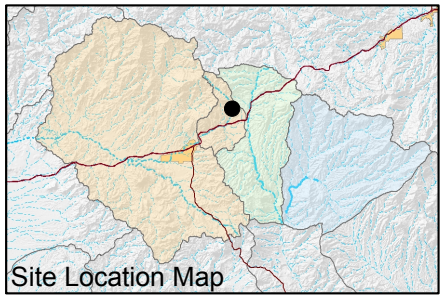
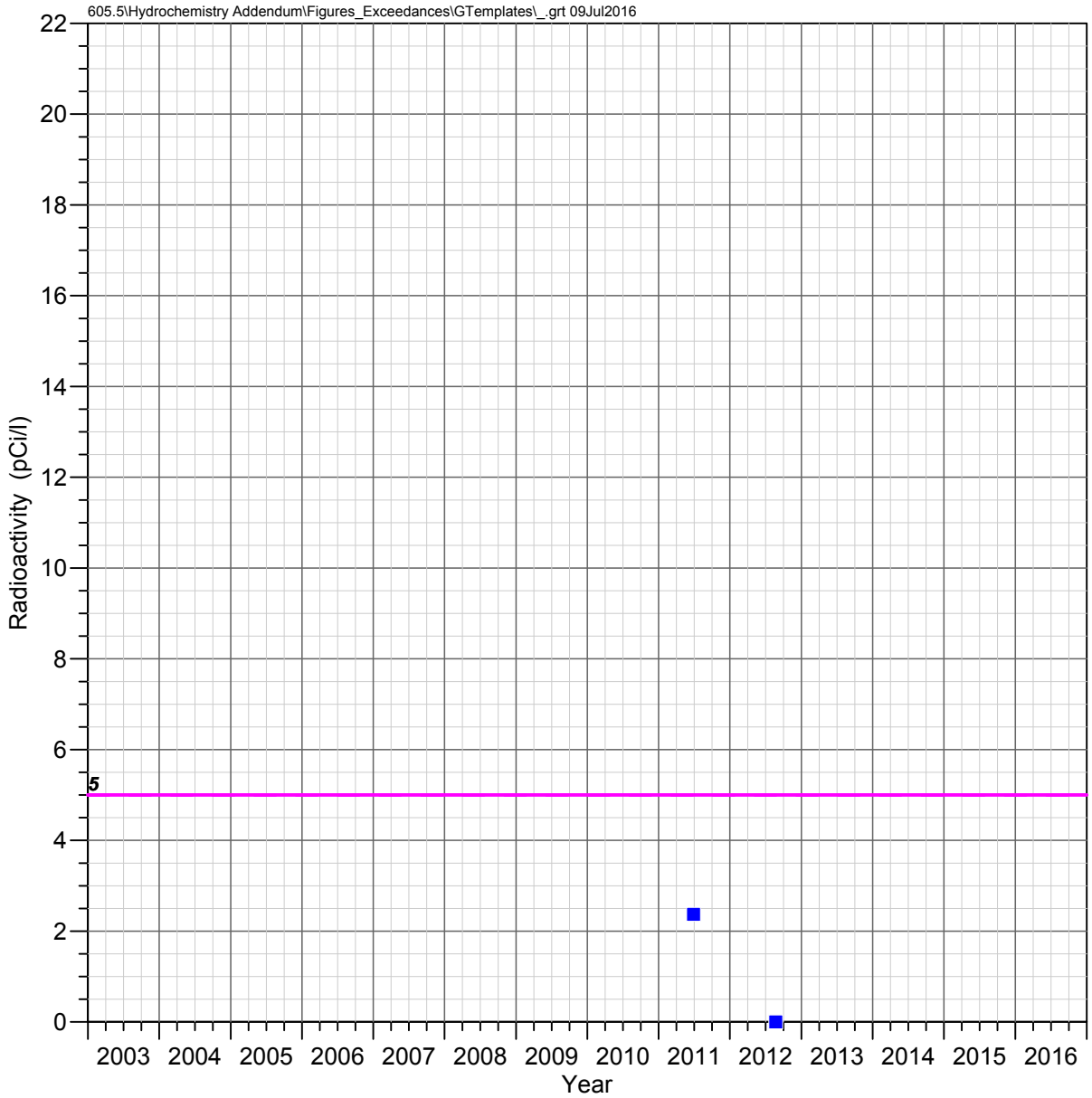


FIGURE E-592. RADIUM 226 + RADIUM 228 RADIOACTIVITY OBSERVED AT DHRES-11, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-13
Deep Groundwater System

RADIUM 226 + RADIUM 228

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 5 pCi/l)
- EPA Maximum Contaminant Levels (UNS, 5 pCi/l)

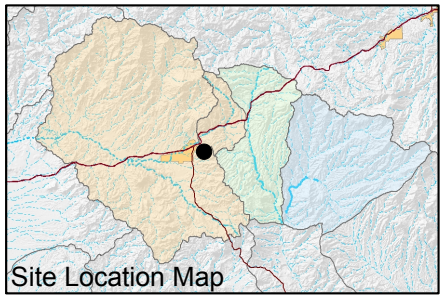
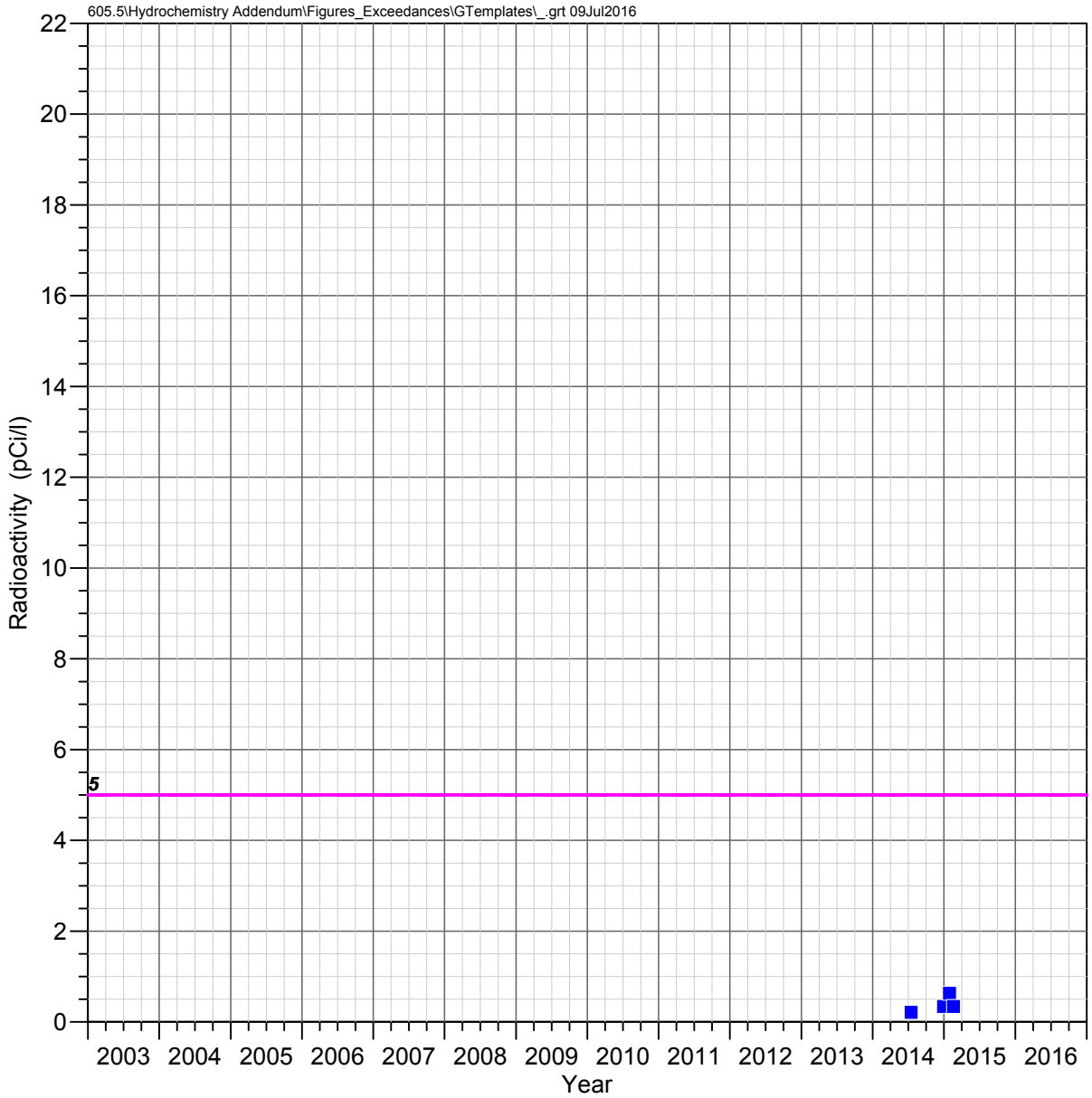


FIGURE E-593. RADIUM 226 + RADIUM 228 RADIOACTIVITY OBSERVED AT DHRES-13, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-15
Deep Groundwater System

RADIUM 226 + RADIUM 228

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 5 pCi/l)
- EPA Maximum Contaminant Levels (UNS, 5 pCi/l)

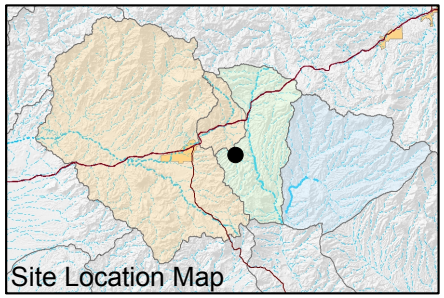
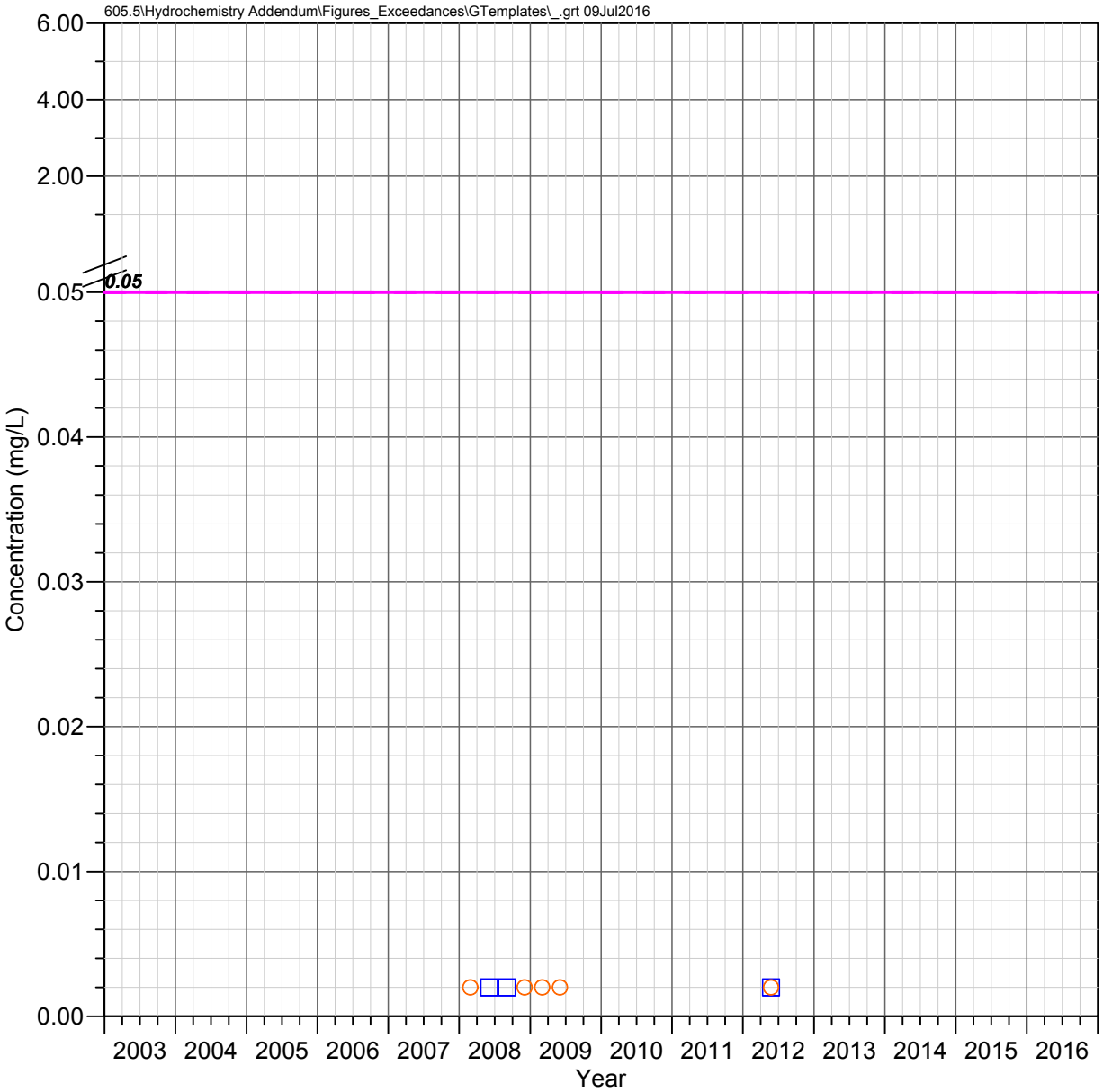


FIGURE E-594. RADIUM 226 + RADIUM 228 RADIOACTIVITY OBSERVED AT DHRES-15, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Hackberry Windmill Well Shallow Groundwater System

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.05 mg/L)

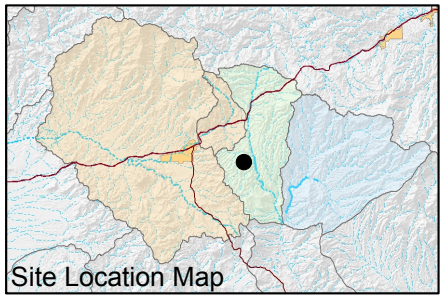
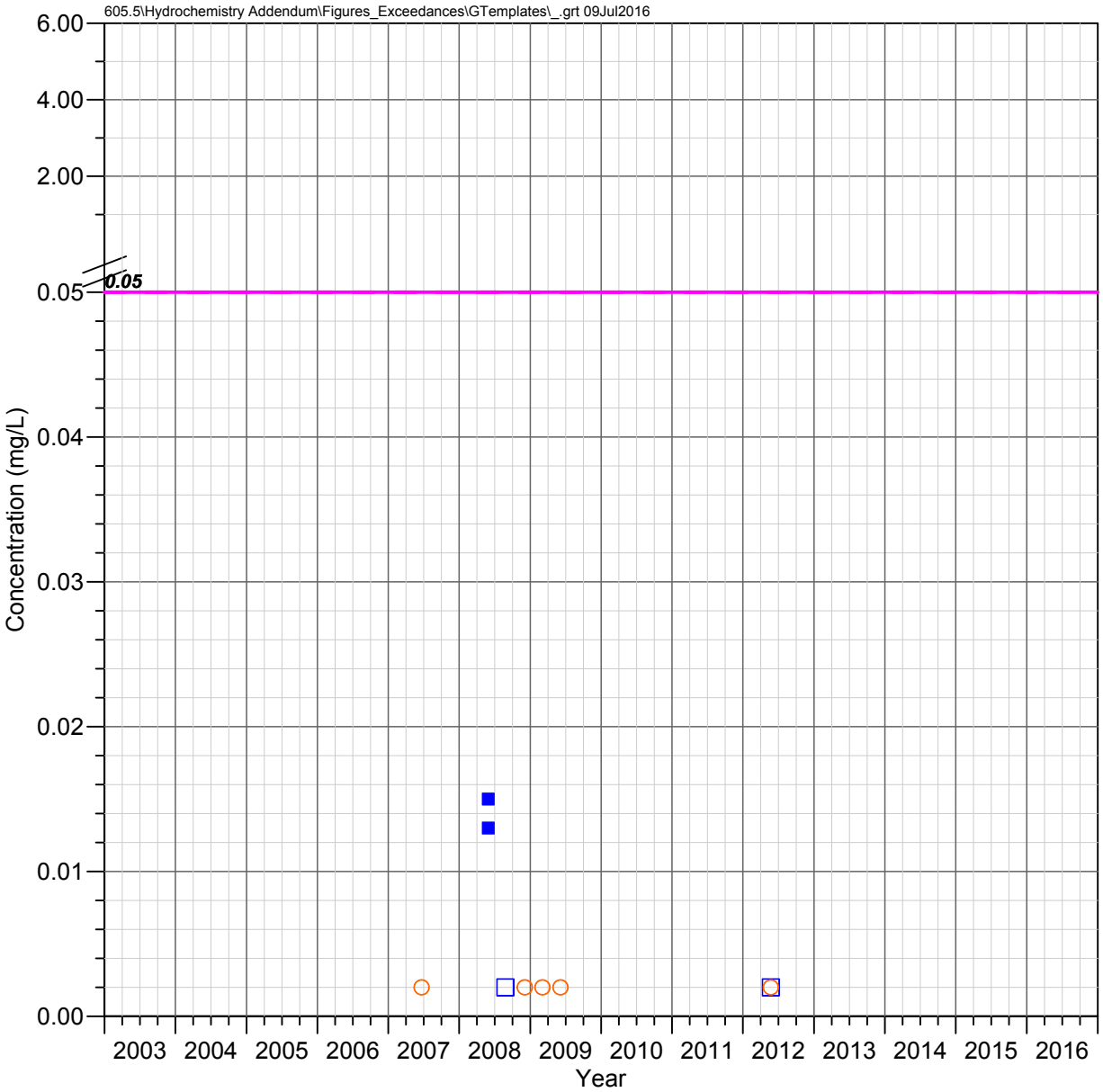


FIGURE E-595. SELENIUM CONCENTRATIONS OBSERVED AT HACKBERRY WINDMILL WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



JI Ranch Corral Well Shallow Groundwater System

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.05 mg/L)

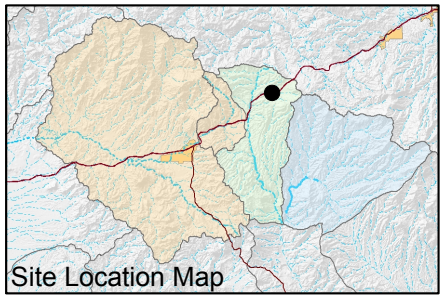
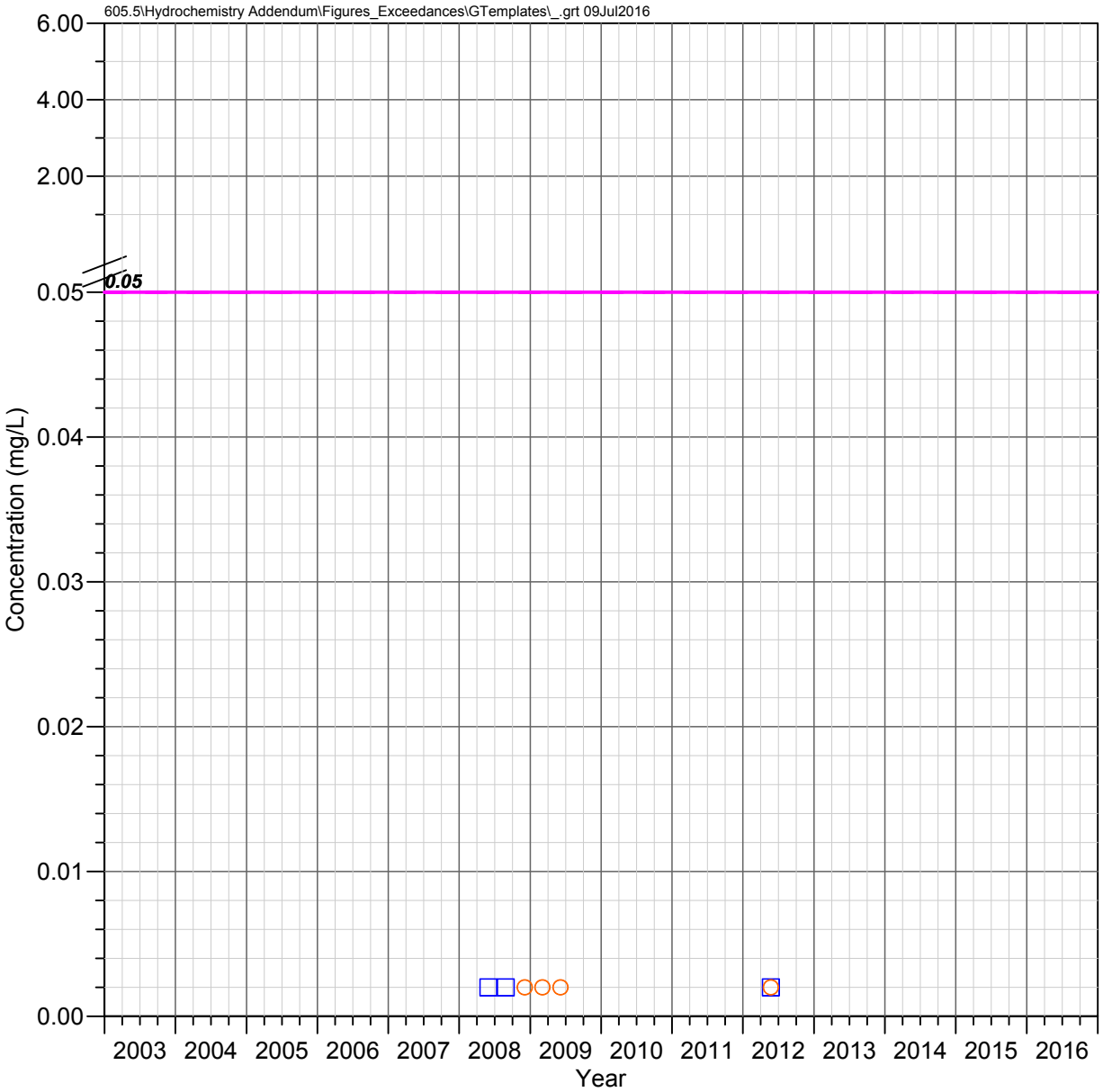


FIGURE E-596. SELENIUM CONCENTRATIONS OBSERVED AT JI RANCH CORRAL WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



JI Ranch Middle Well Shallow Groundwater System

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.05 mg/L)

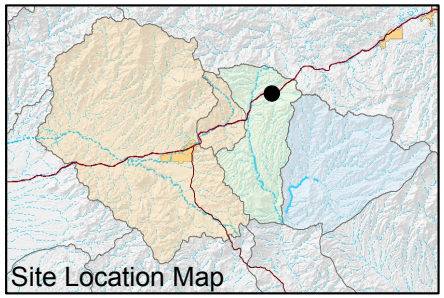
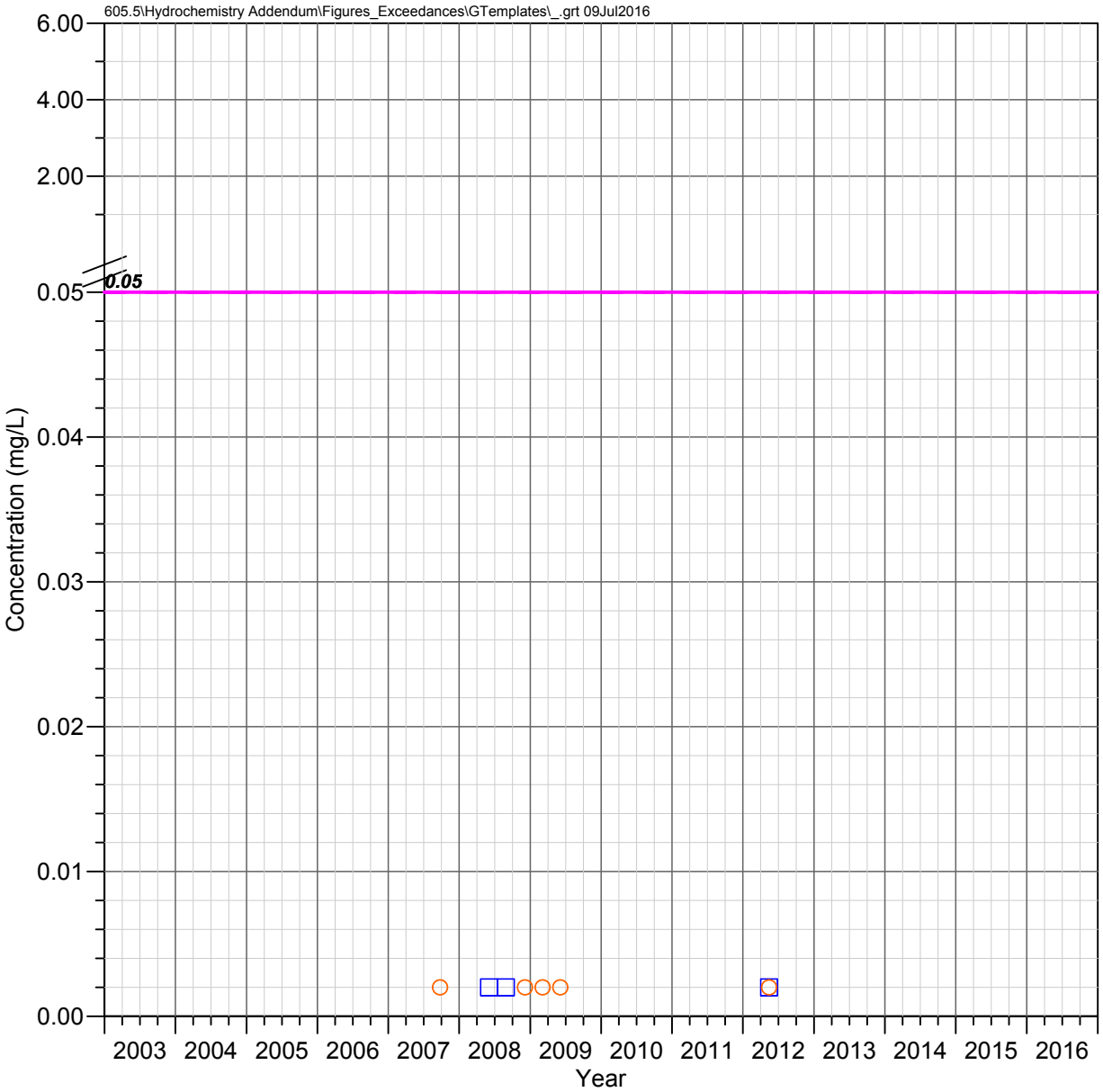


FIGURE E-597. SELENIUM CONCENTRATIONS OBSERVED AT JI RANCH MIDDLE WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



A-06
Apache Leap Tuff Aquifer

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.05 mg/L)

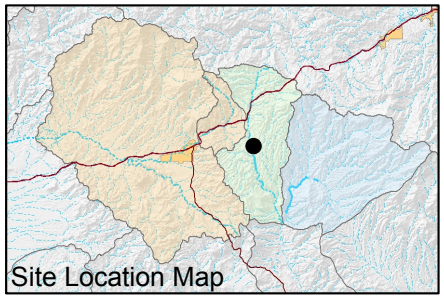
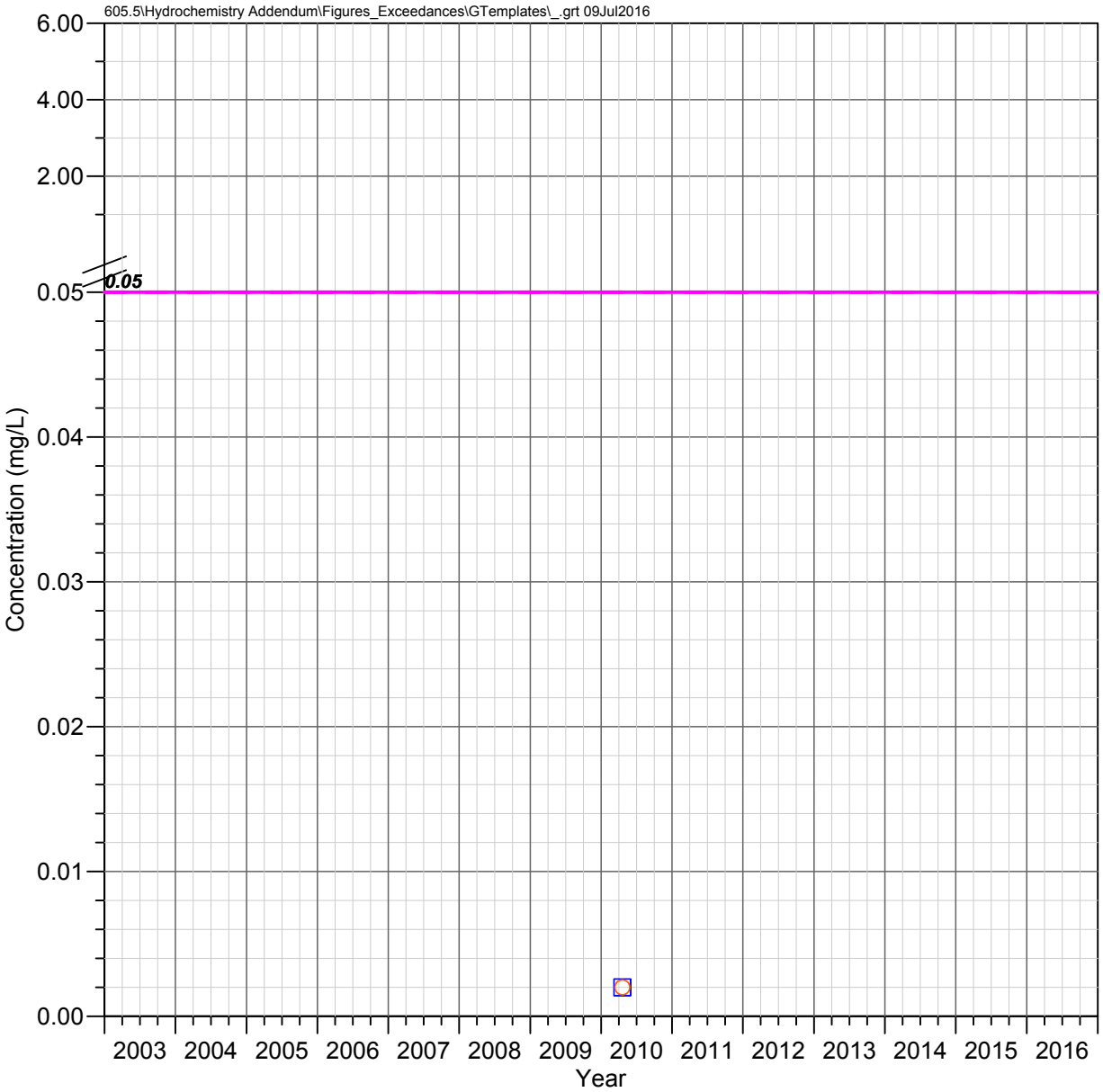


FIGURE E-598. SELENIUM CONCENTRATIONS OBSERVED AT A-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



CT Well
Apache Leap Tuff Aquifer

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.05 mg/L)

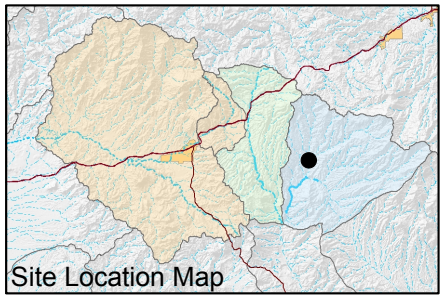
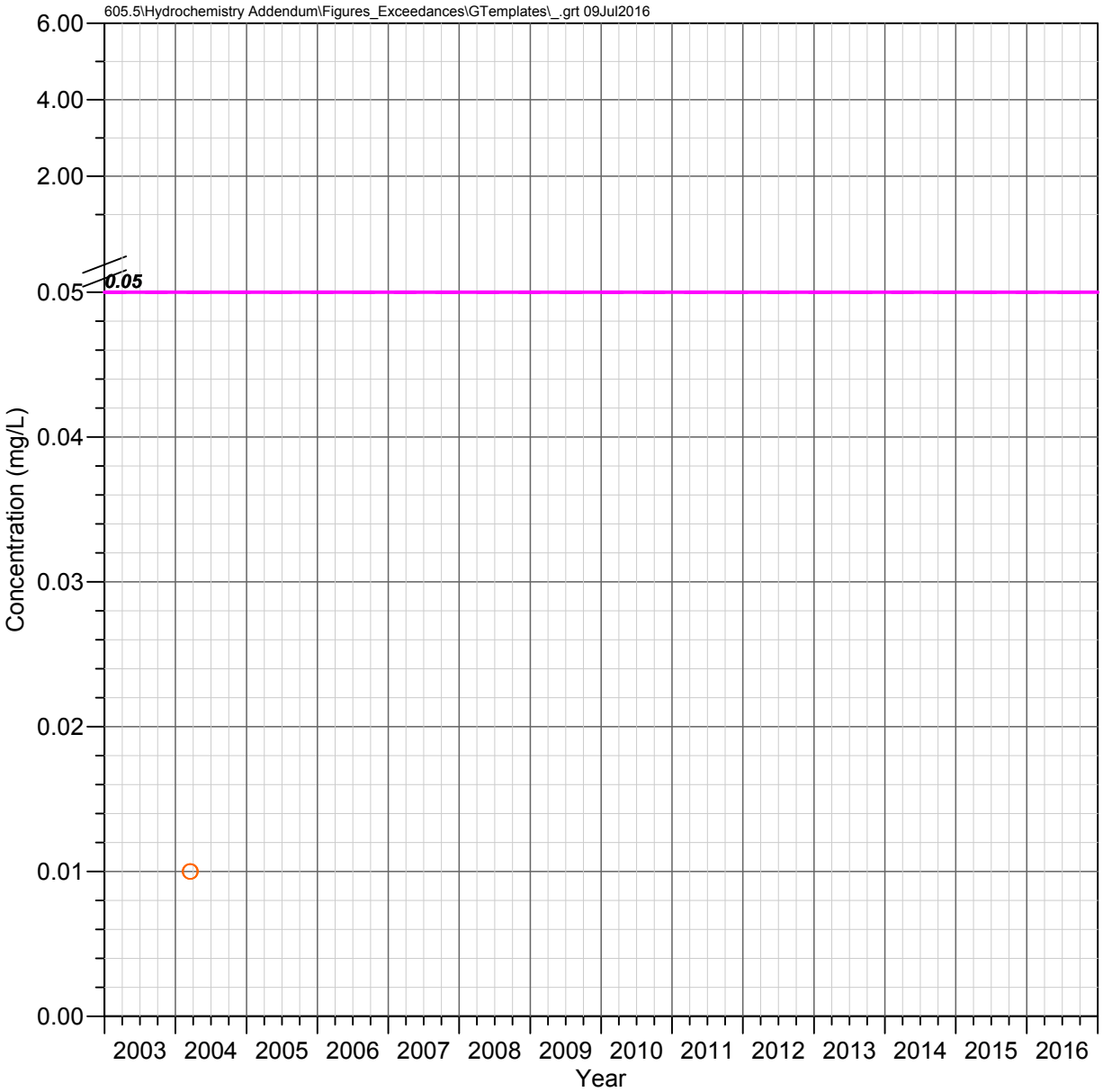


FIGURE E-599. SELENIUM CONCENTRATIONS OBSERVED AT CT WELL, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-01
Apache Leap Tuff Aquifer

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.05 mg/L)

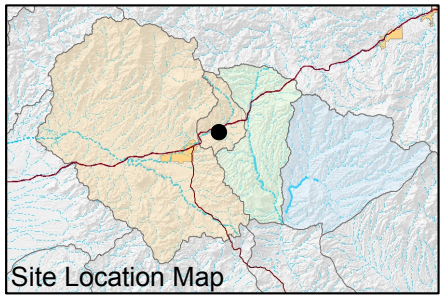
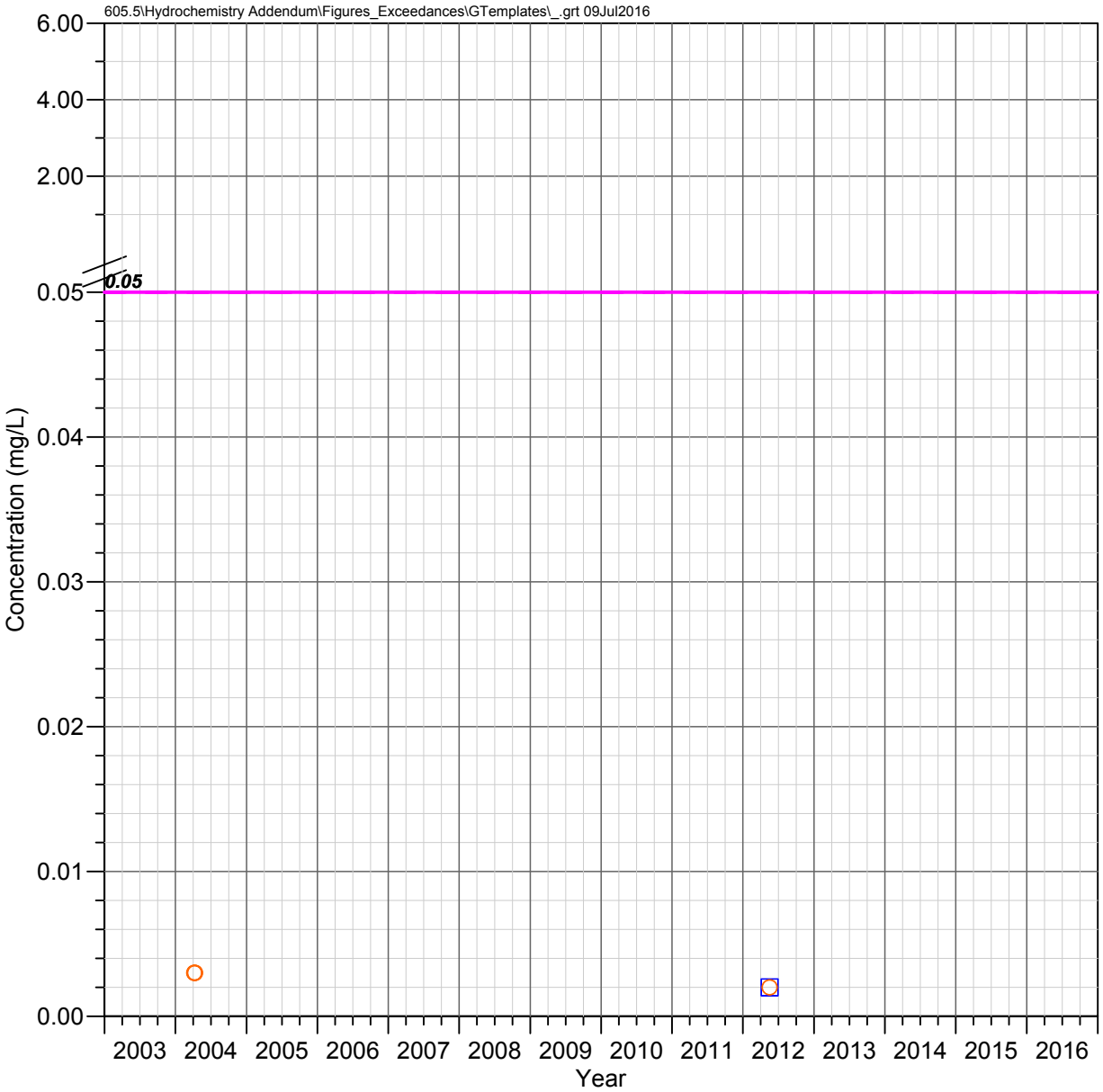


FIGURE E-600. SELENIUM CONCENTRATIONS OBSERVED AT HRES-01, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-02
Apache Leap Tuff Aquifer

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.05 mg/L)

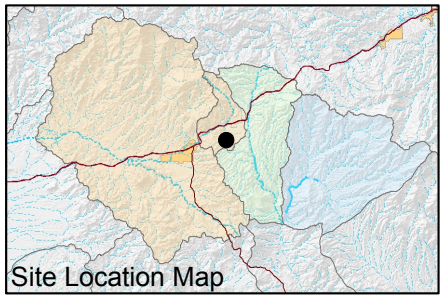
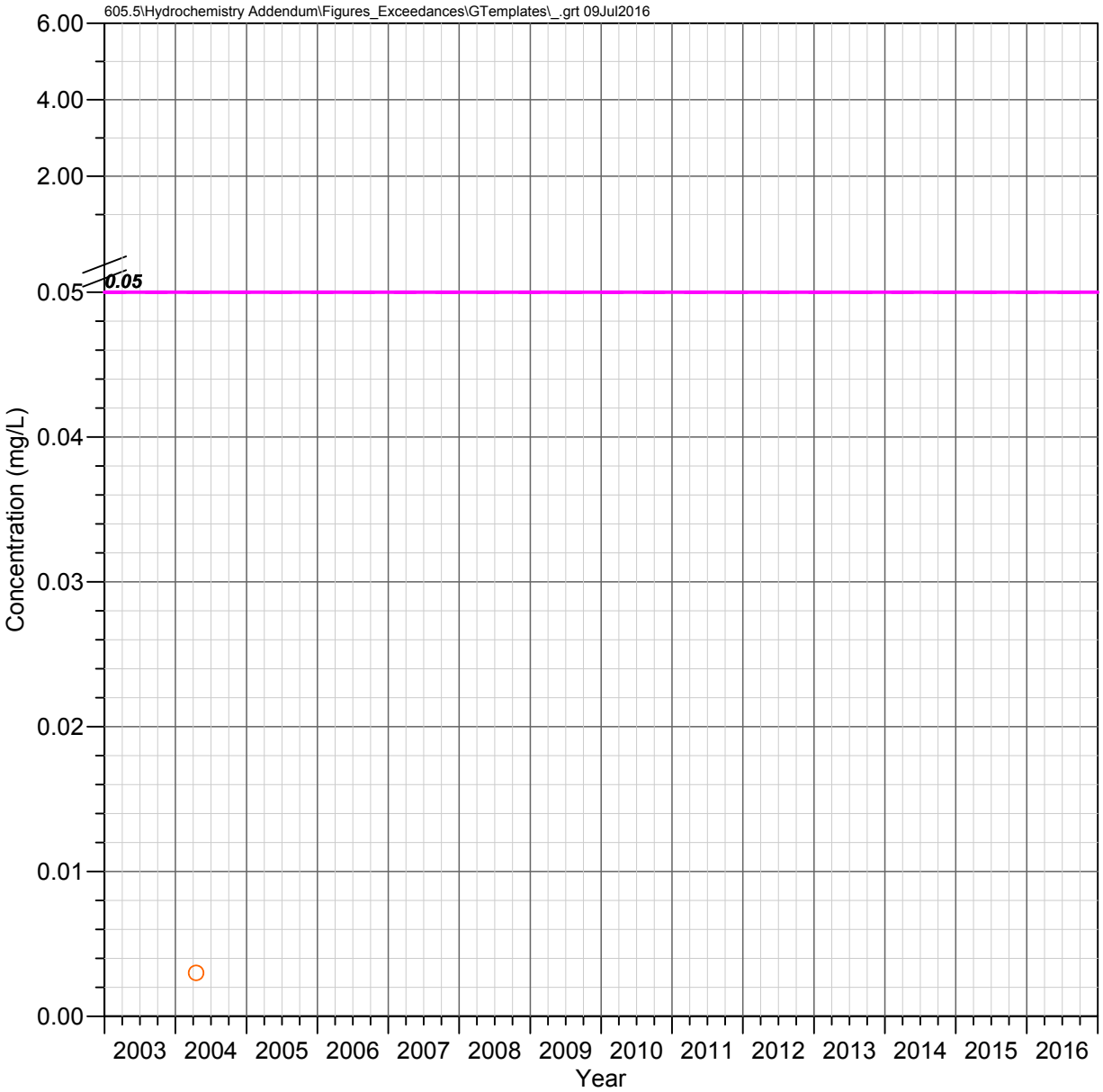


FIGURE E-601. SELENIUM CONCENTRATIONS OBSERVED AT HRES-02, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-03d
Apache Leap Tuff Aquifer

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.05 mg/L)

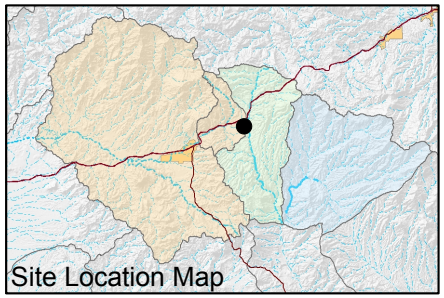
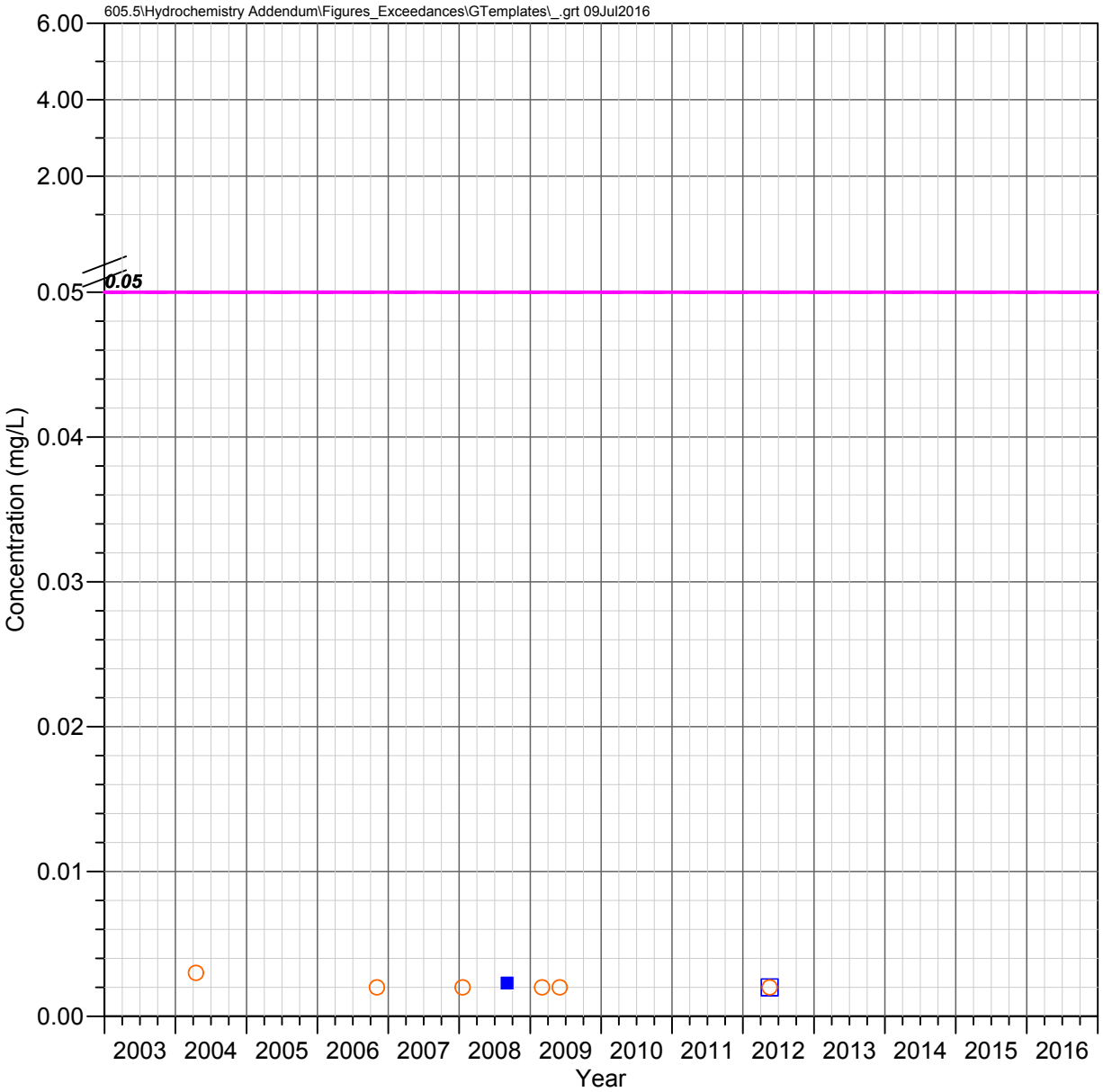


FIGURE E-602. SELENIUM CONCENTRATIONS OBSERVED AT HRES-03D, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-04
Apache Leap Tuff Aquifer

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.05 mg/L)

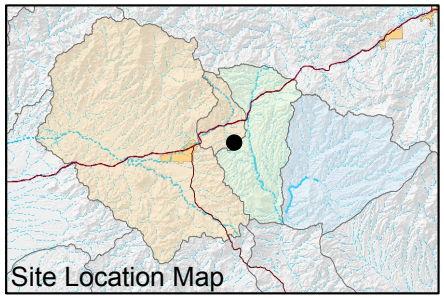
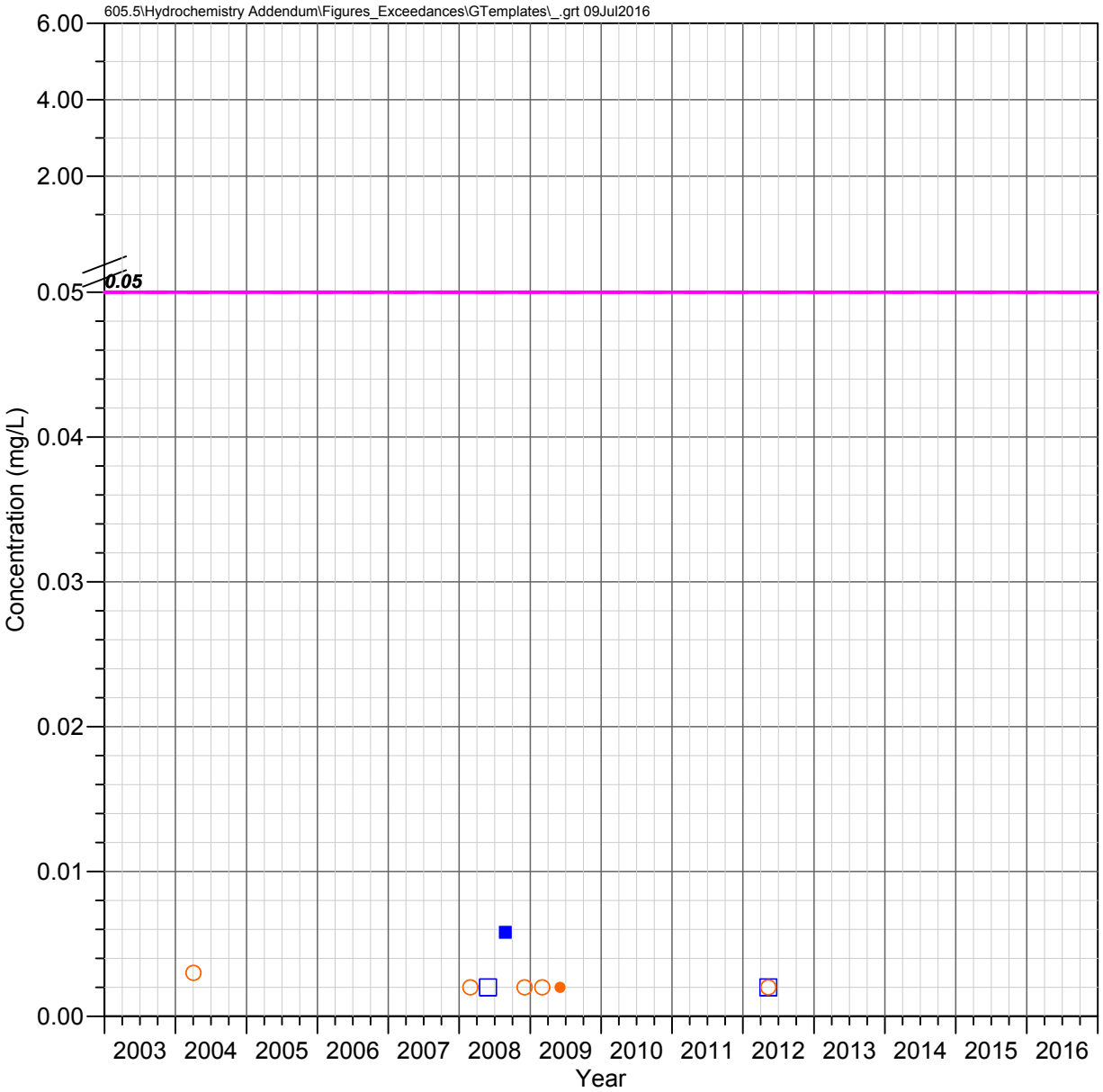


FIGURE E-603. SELENIUM CONCENTRATIONS OBSERVED AT HRES-04, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-05
Apache Leap Tuff Aquifer

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.05 mg/L)

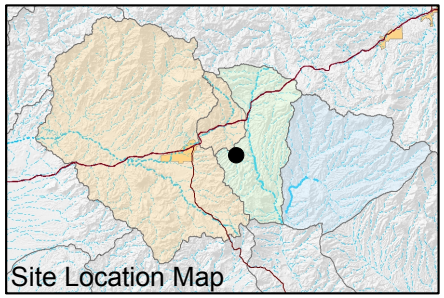
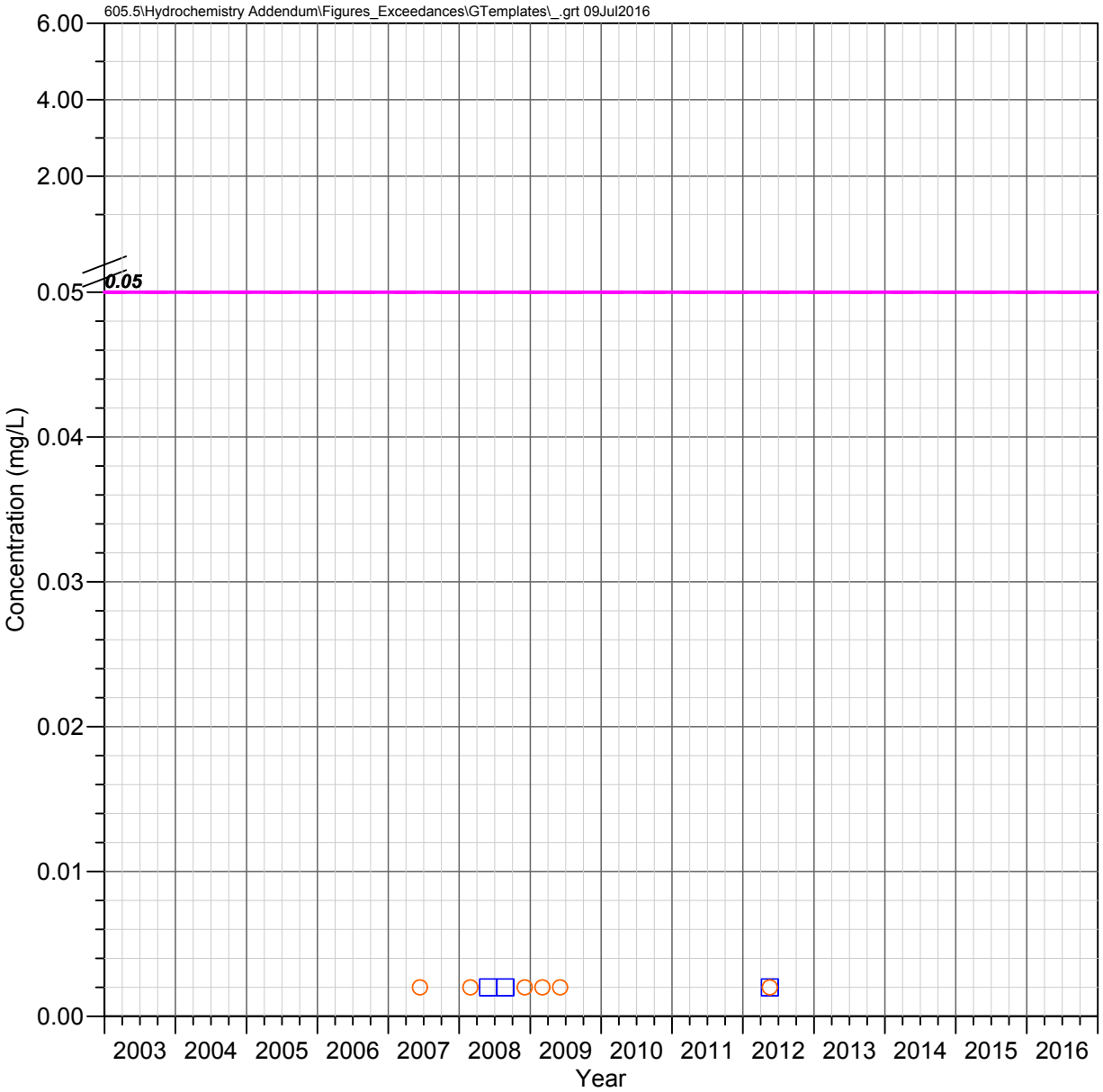


FIGURE E-604. SELENIUM CONCENTRATIONS OBSERVED AT HRES-05, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-06
Apache Leap Tuff Aquifer

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.05 mg/L)

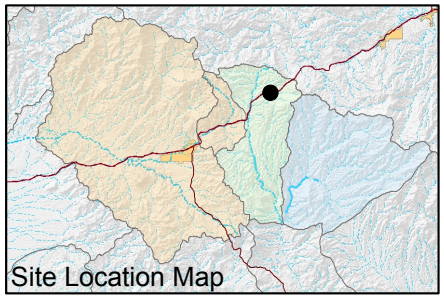
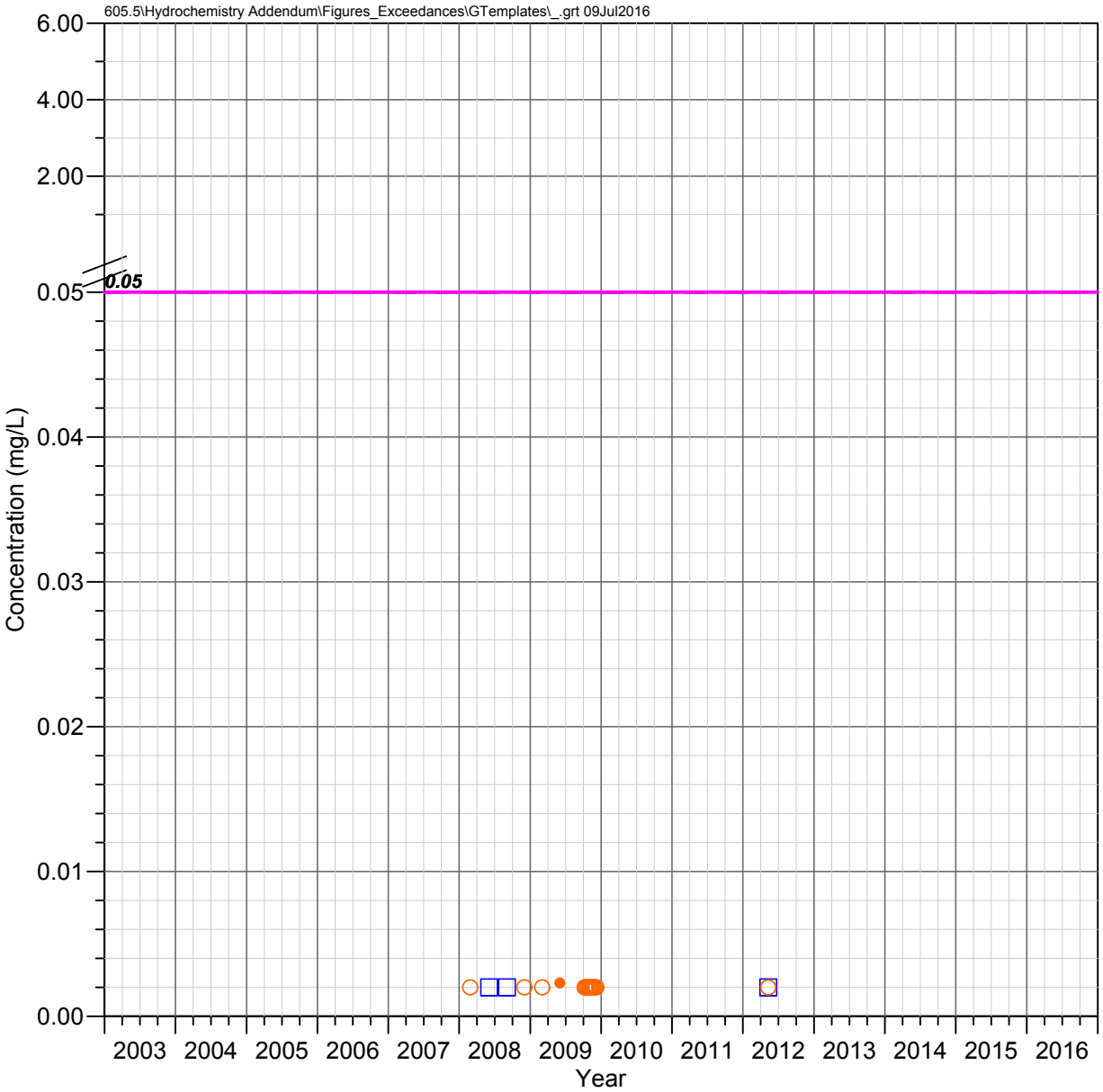


FIGURE E-605. SELENIUM CONCENTRATIONS OBSERVED AT HRES-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-07
Apache Leap Tuff Aquifer

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.05 mg/L)

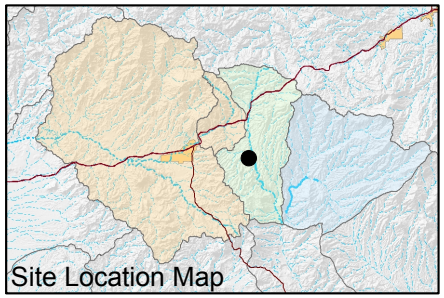
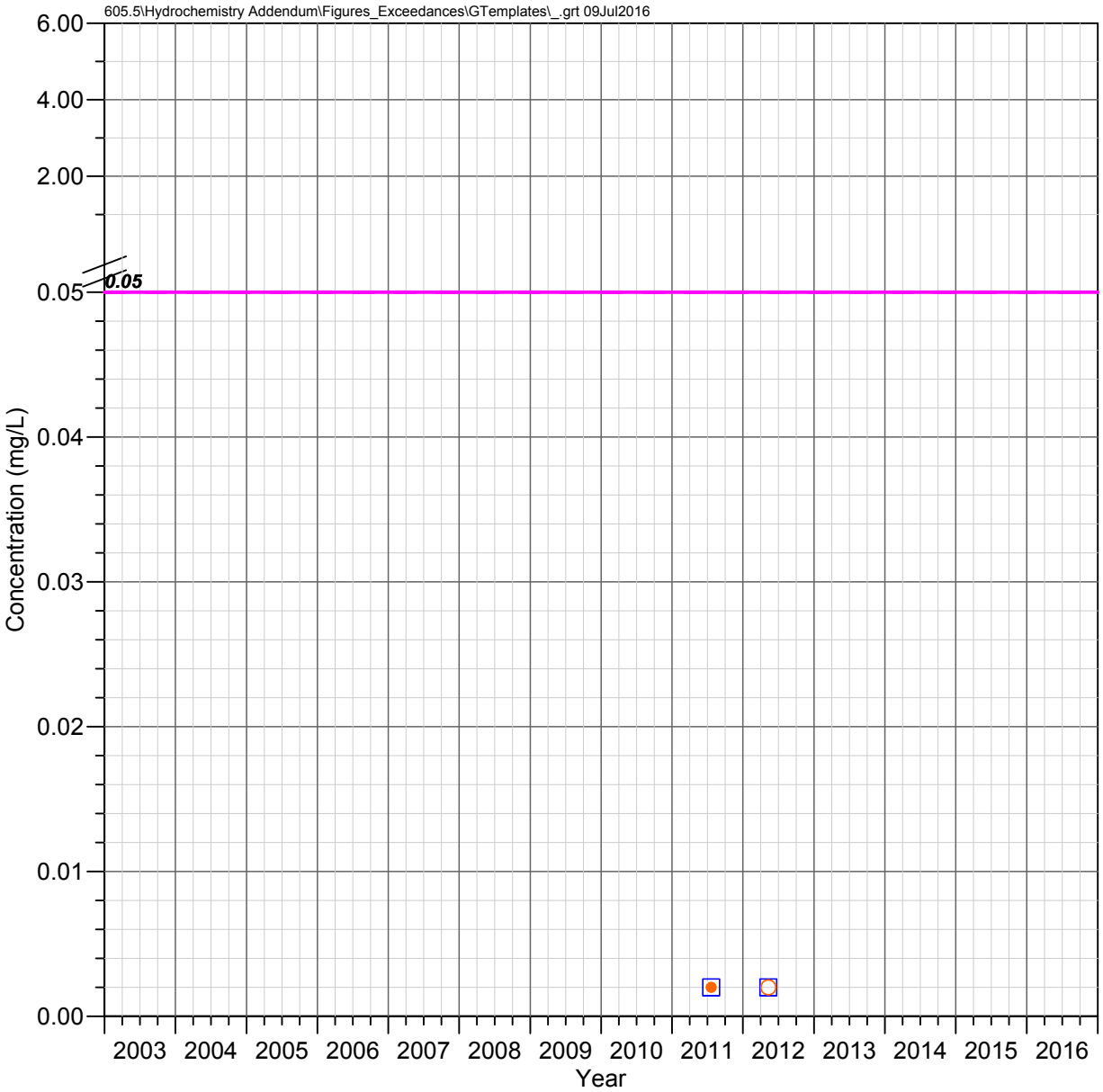


FIGURE E-606. SELENIUM CONCENTRATIONS OBSERVED AT HRES-07, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-08
Apache Leap Tuff Aquifer

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.05 mg/L)

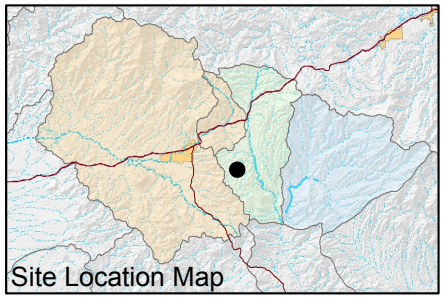
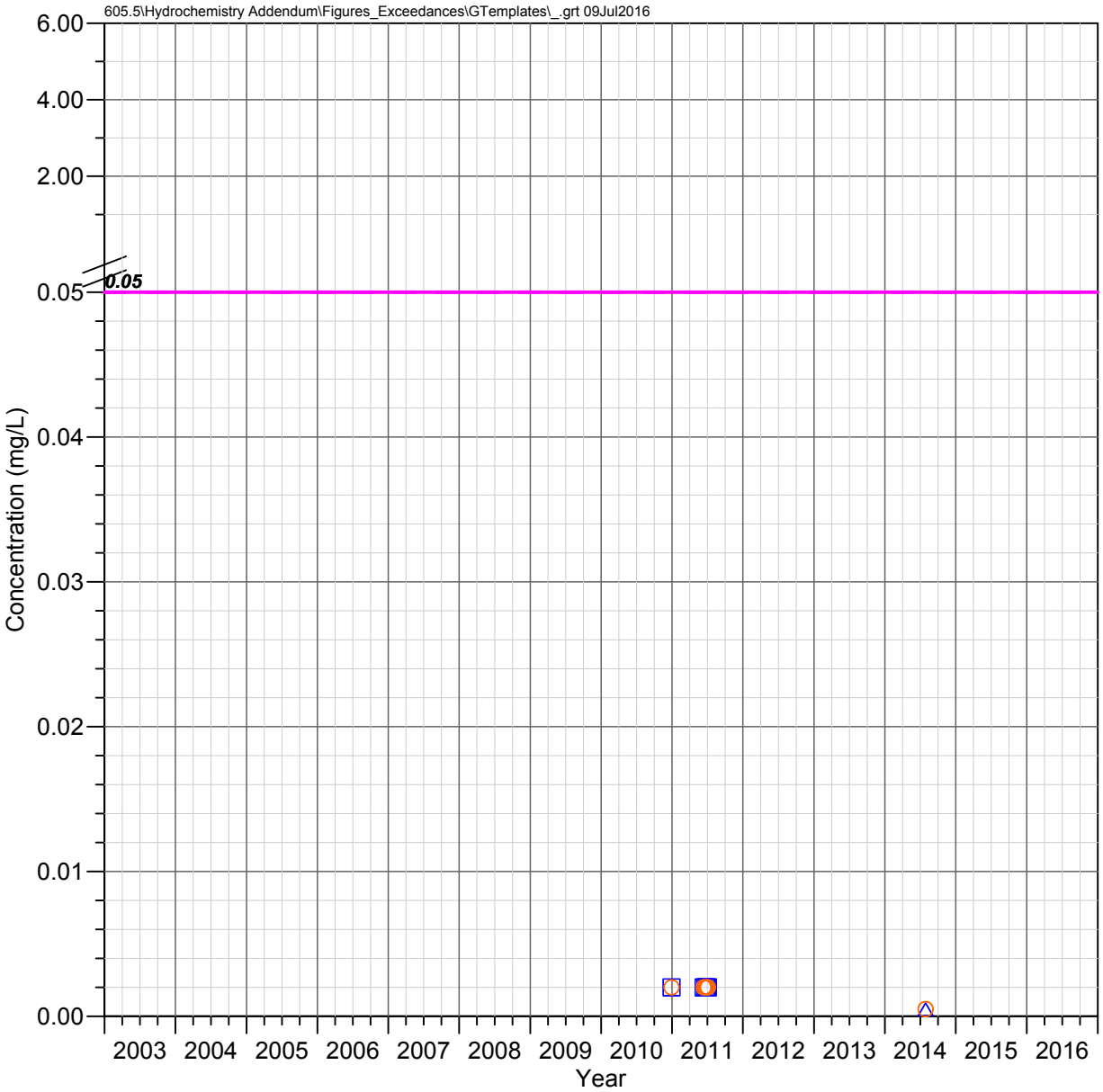


FIGURE E-607. SELENIUM CONCENTRATIONS OBSERVED AT HRES-08, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-09
Apache Leap Tuff Aquifer

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.05 mg/L)

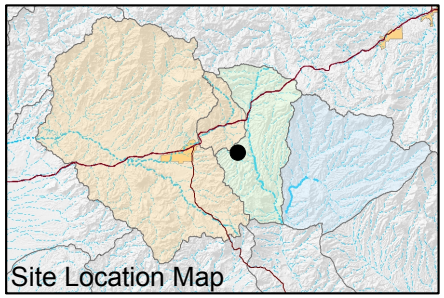
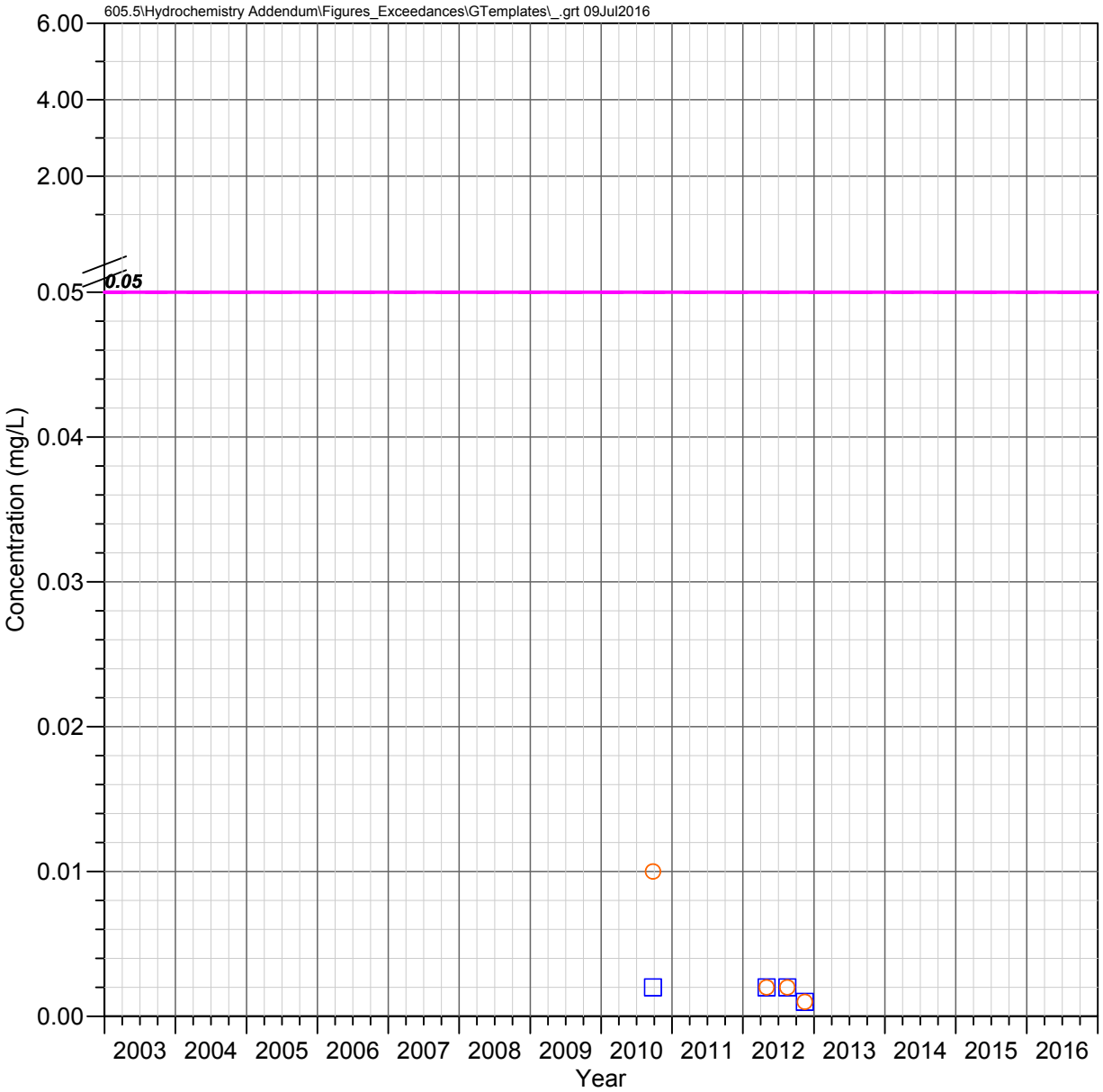


FIGURE E-608. SELENIUM CONCENTRATIONS OBSERVED AT HRES-09, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-10
Apache Leap Tuff Aquifer

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.05 mg/L)

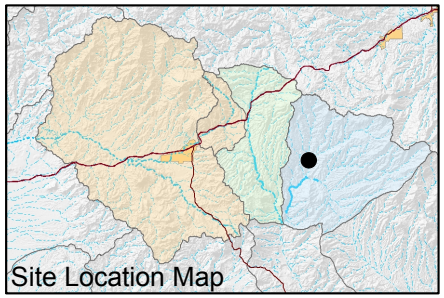
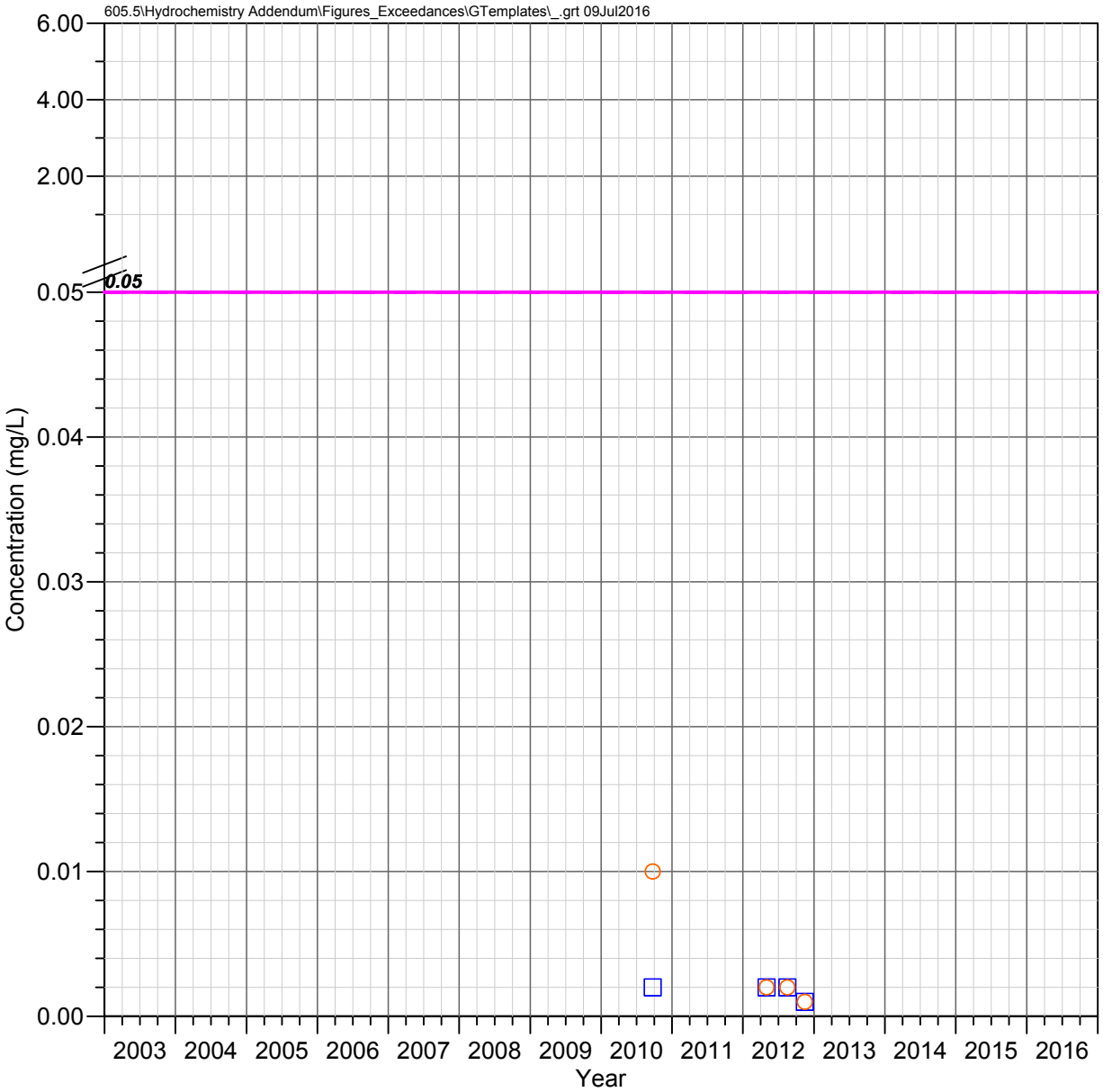


FIGURE E-609. SELENIUM CONCENTRATIONS OBSERVED AT HRES-10, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-11
Apache Leap Tuff Aquifer

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.05 mg/L)

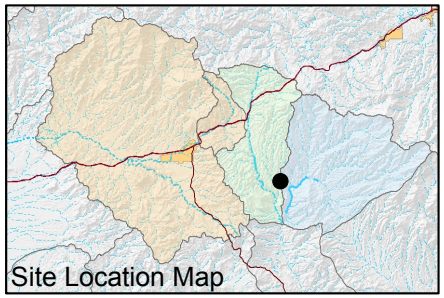
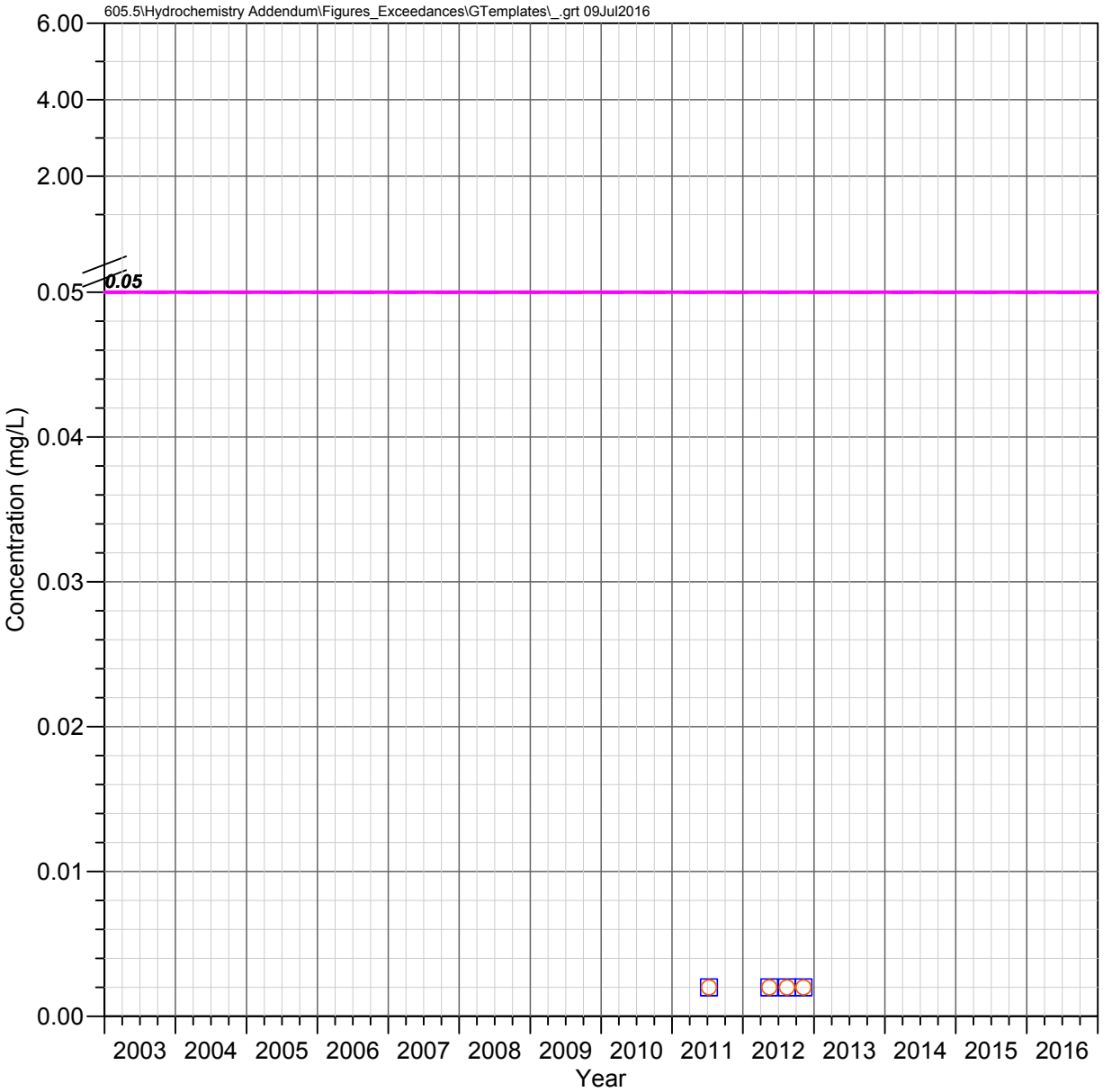


FIGURE E-610. SELENIUM CONCENTRATIONS OBSERVED AT HRES-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-12
Apache Leap Tuff Aquifer

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.05 mg/L)

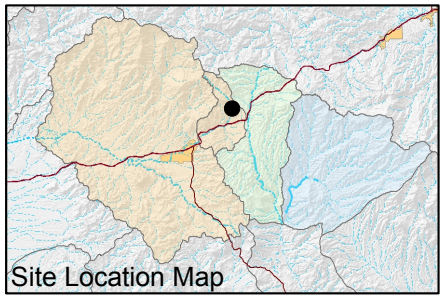
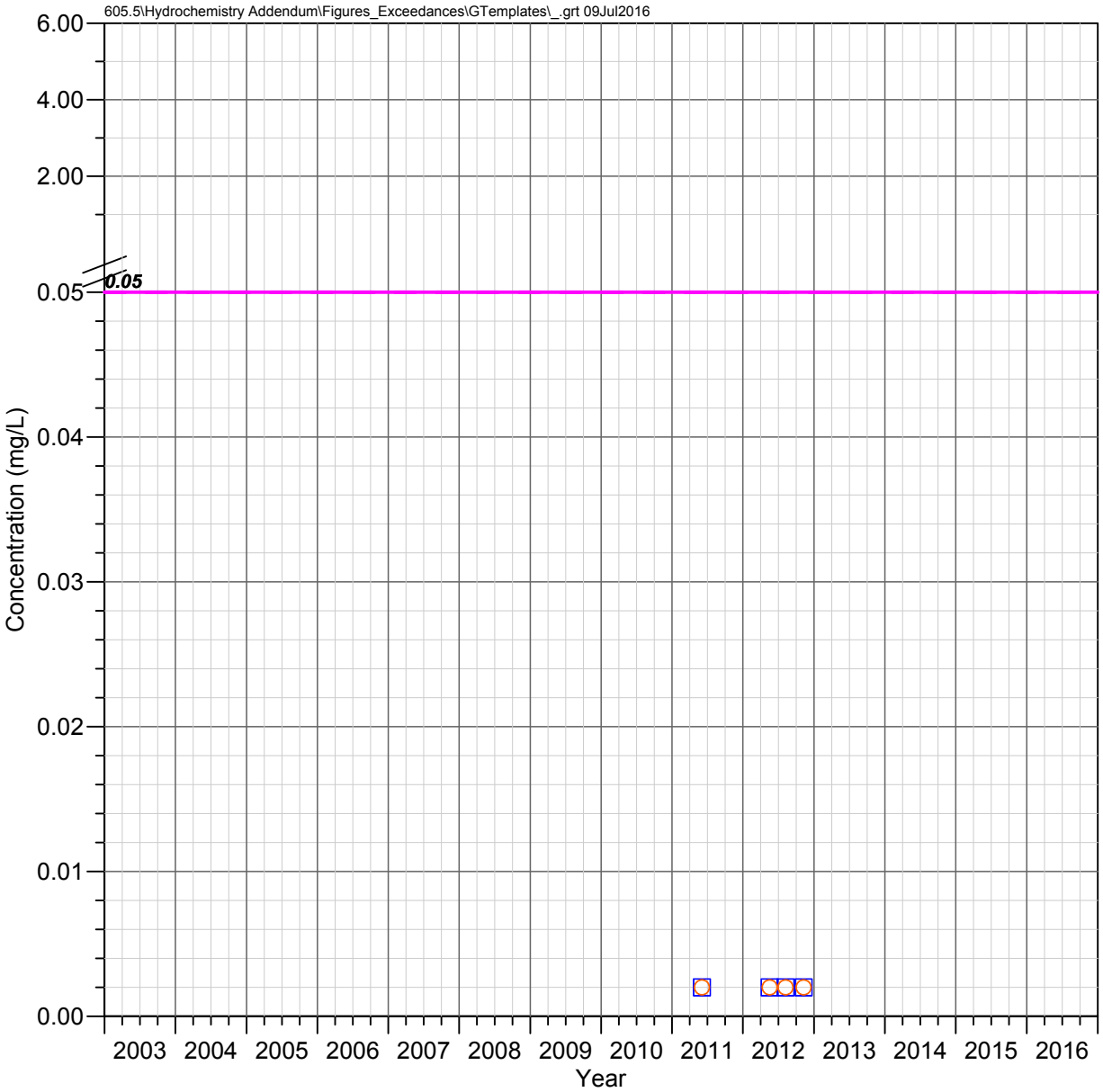


FIGURE E-611. SELENIUM CONCENTRATIONS OBSERVED AT HRES-12, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-13
Apache Leap Tuff Aquifer

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.05 mg/L)

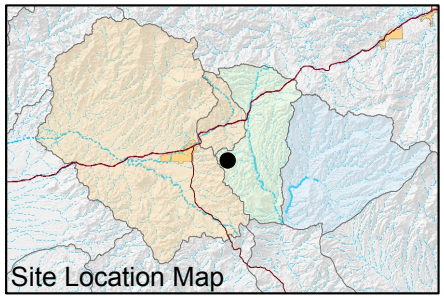
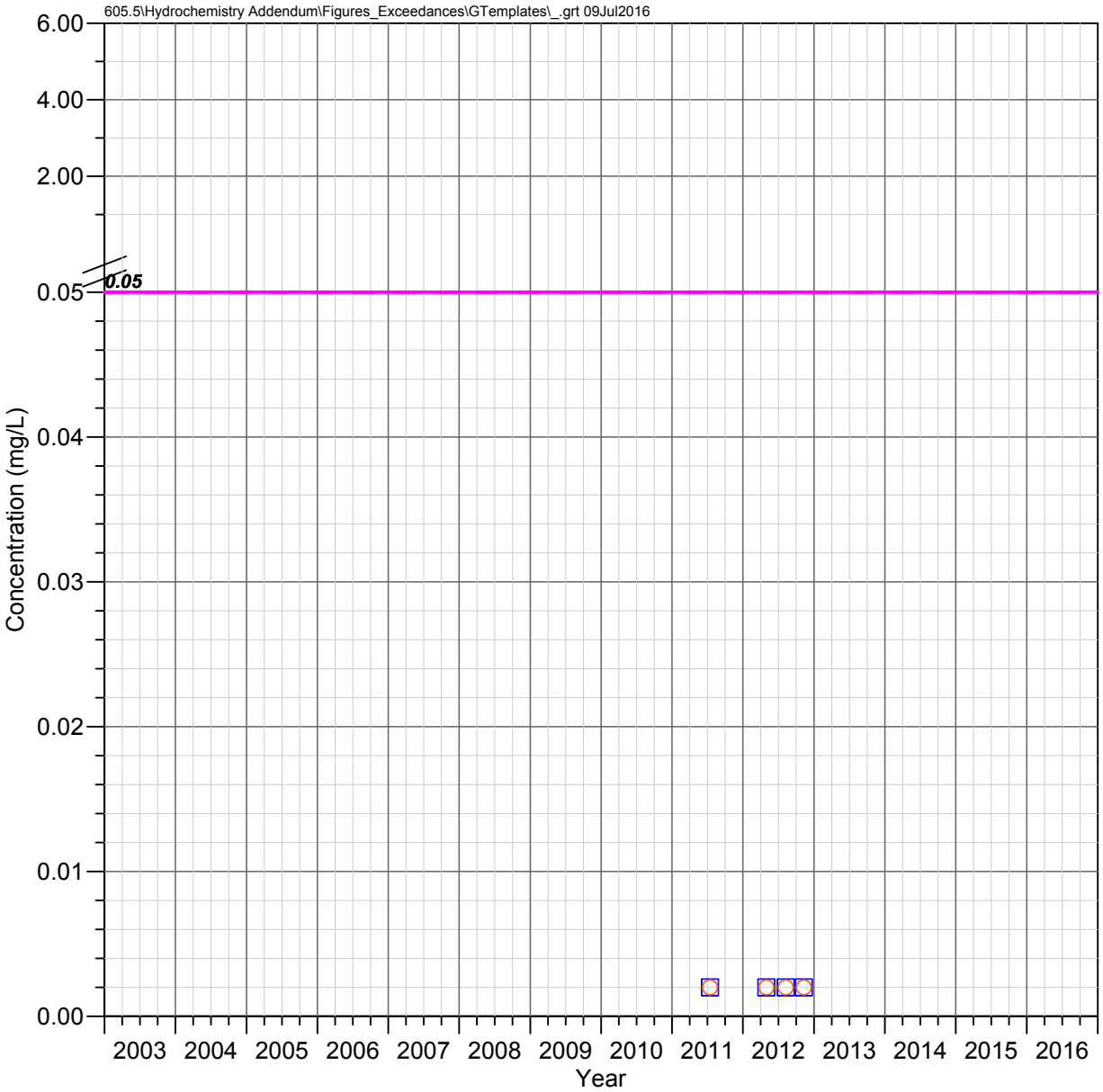


FIGURE E-612. SELENIUM CONCENTRATIONS OBSERVED AT HRES-13, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-14
Apache Leap Tuff Aquifer

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.05 mg/L)

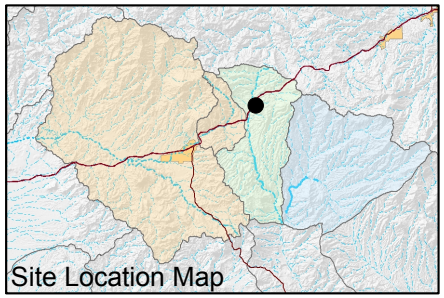
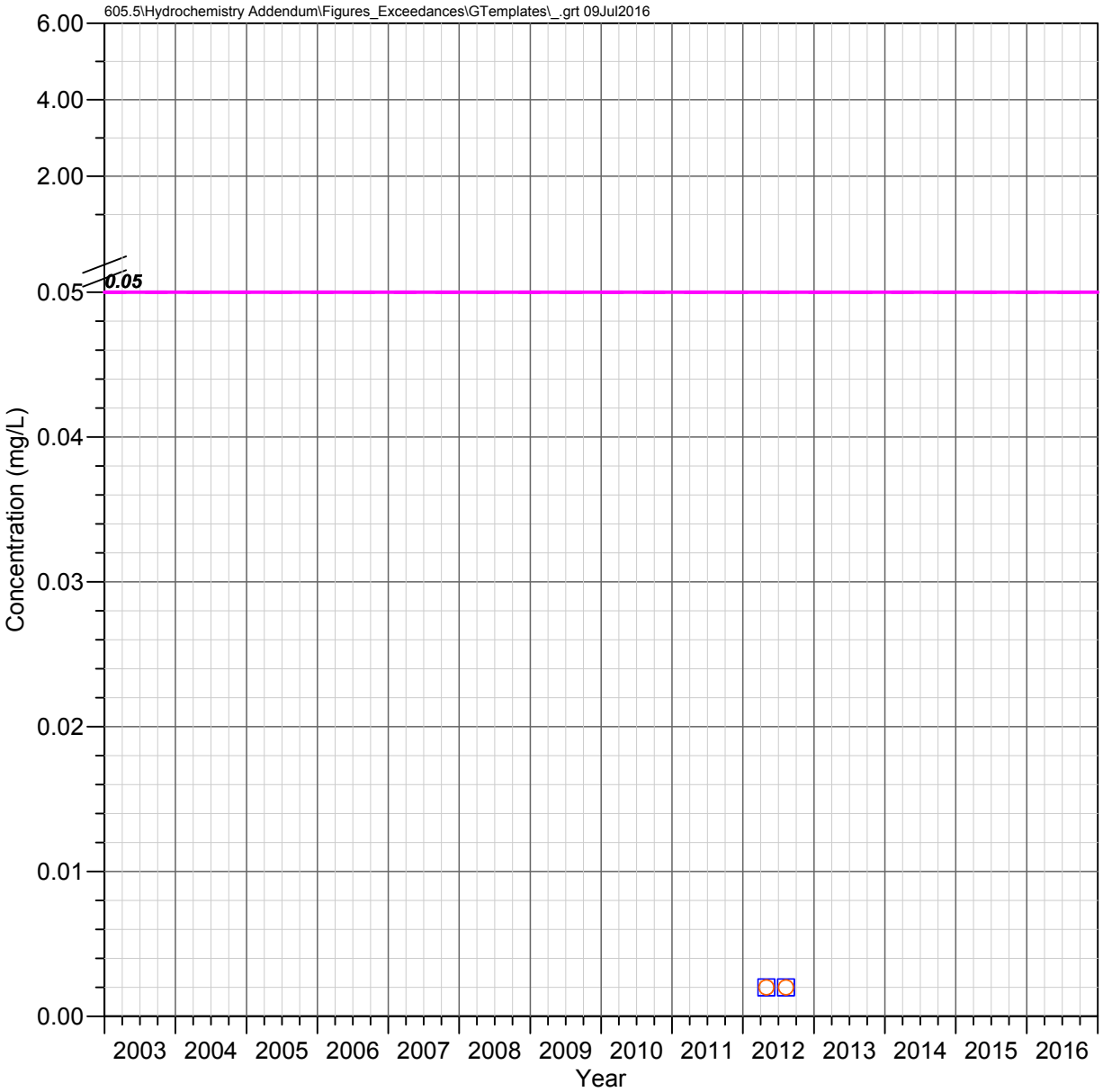


FIGURE E-613. SELENIUM CONCENTRATIONS OBSERVED AT HRES-14, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-15
Apache Leap Tuff Aquifer

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.05 mg/L)

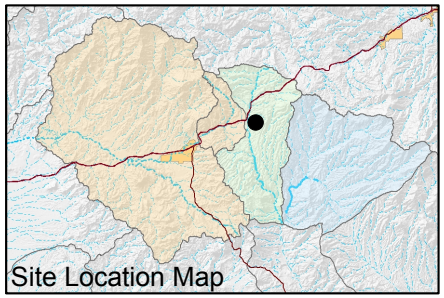
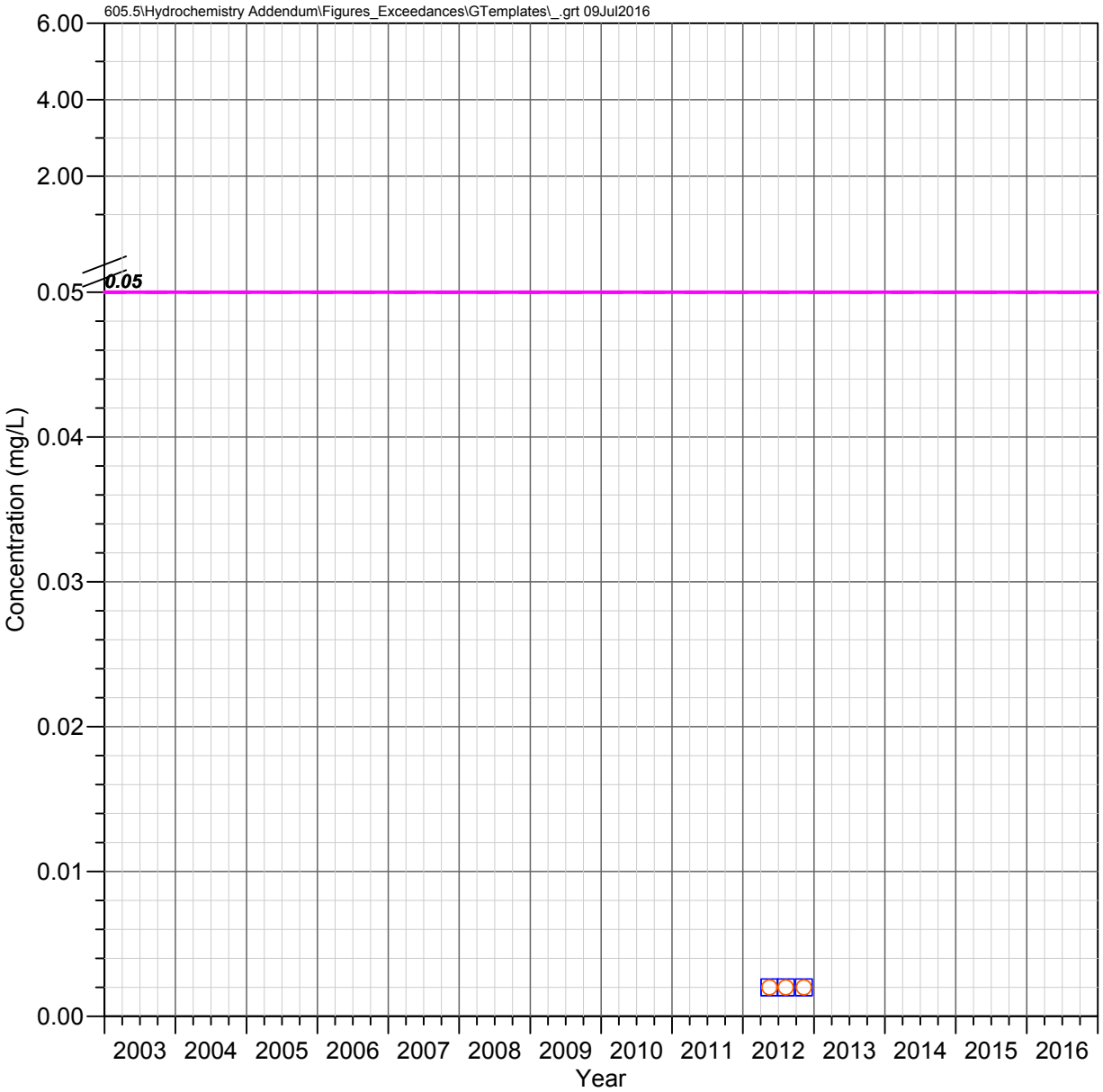


FIGURE E-614. SELENIUM CONCENTRATIONS OBSERVED AT HRES-15, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-17
Apache Leap Tuff Aquifer

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.05 mg/L)

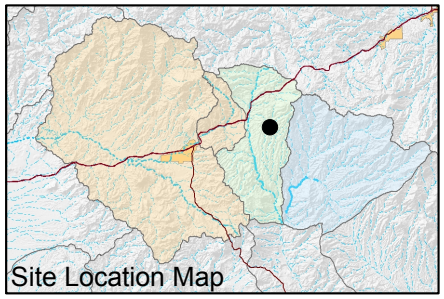
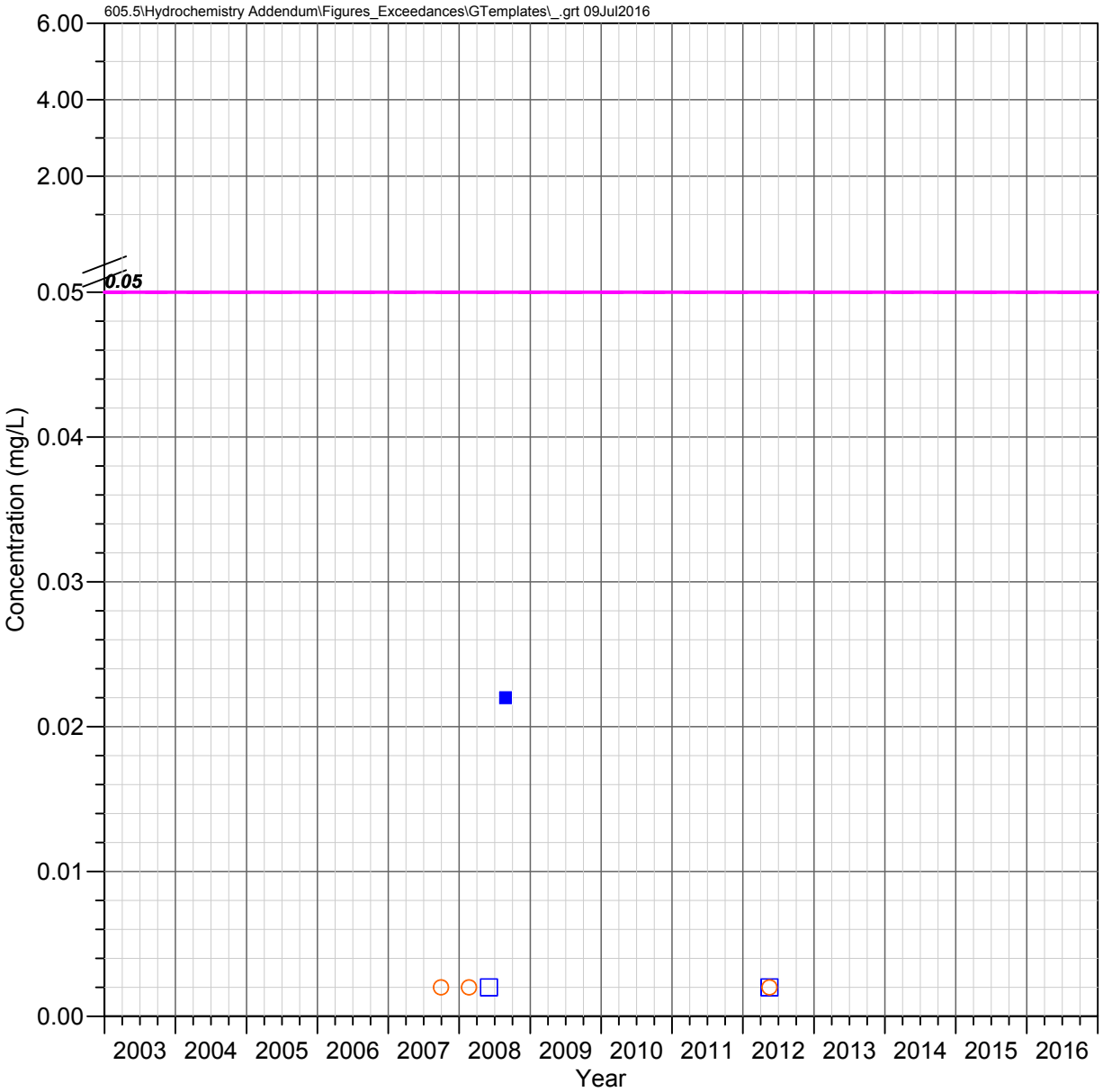


FIGURE E-615. SELENIUM CONCENTRATIONS OBSERVED AT HRES-17, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MJ-11
Apache Leap Tuff Aquifer

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.05 mg/L)

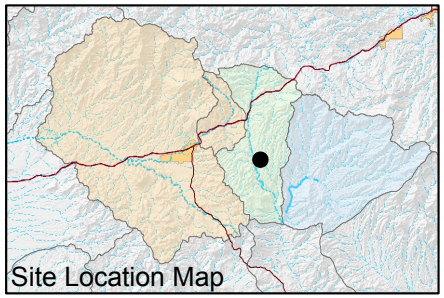
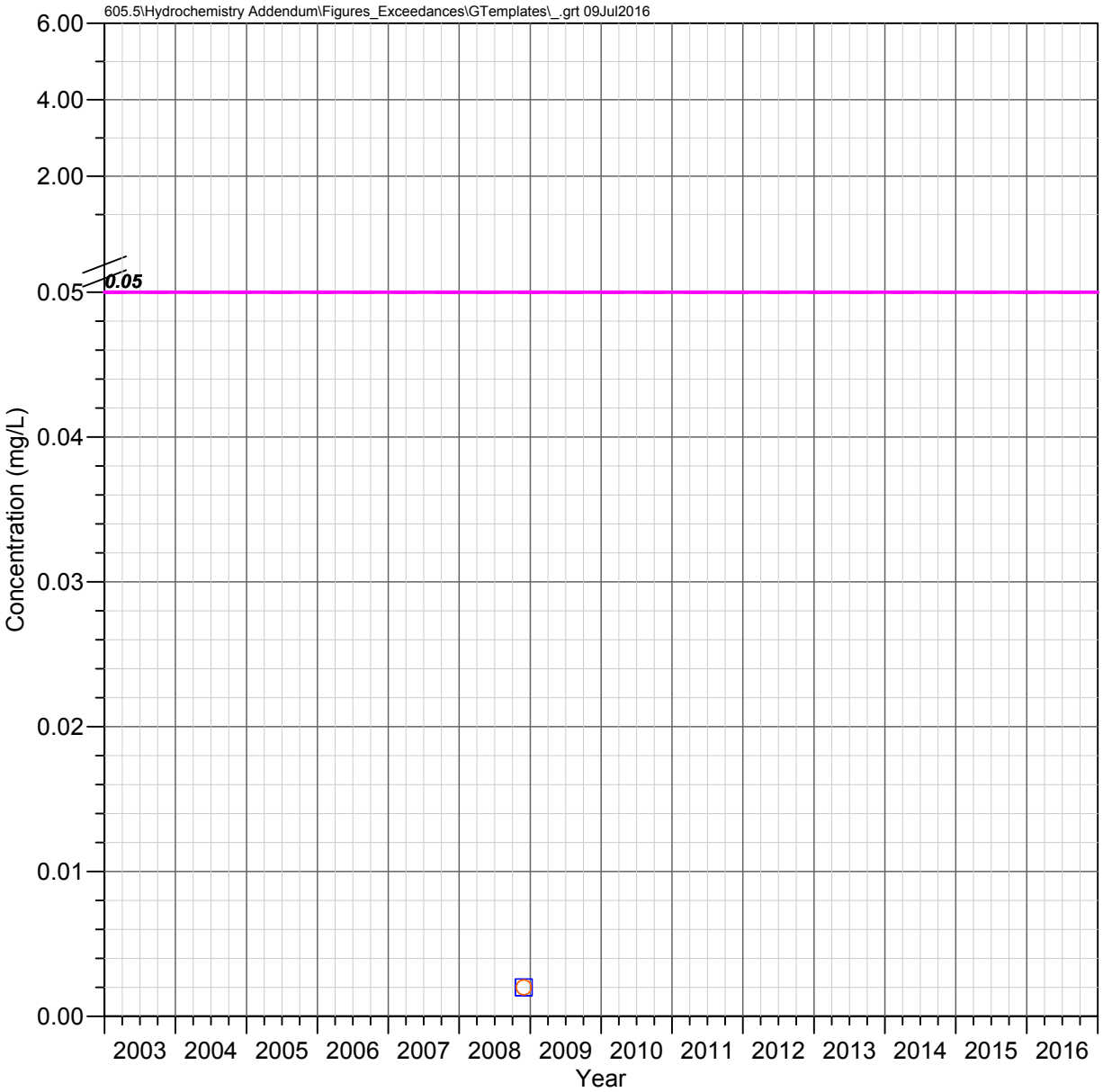


FIGURE E-616. SELENIUM CONCENTRATIONS OBSERVED AT MJ-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-01
Deep Groundwater System

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.05 mg/L)

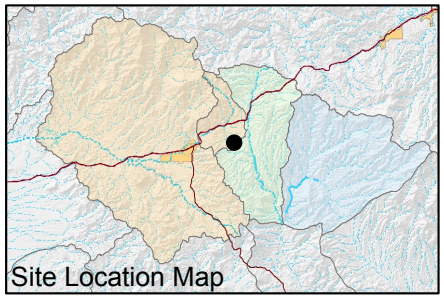
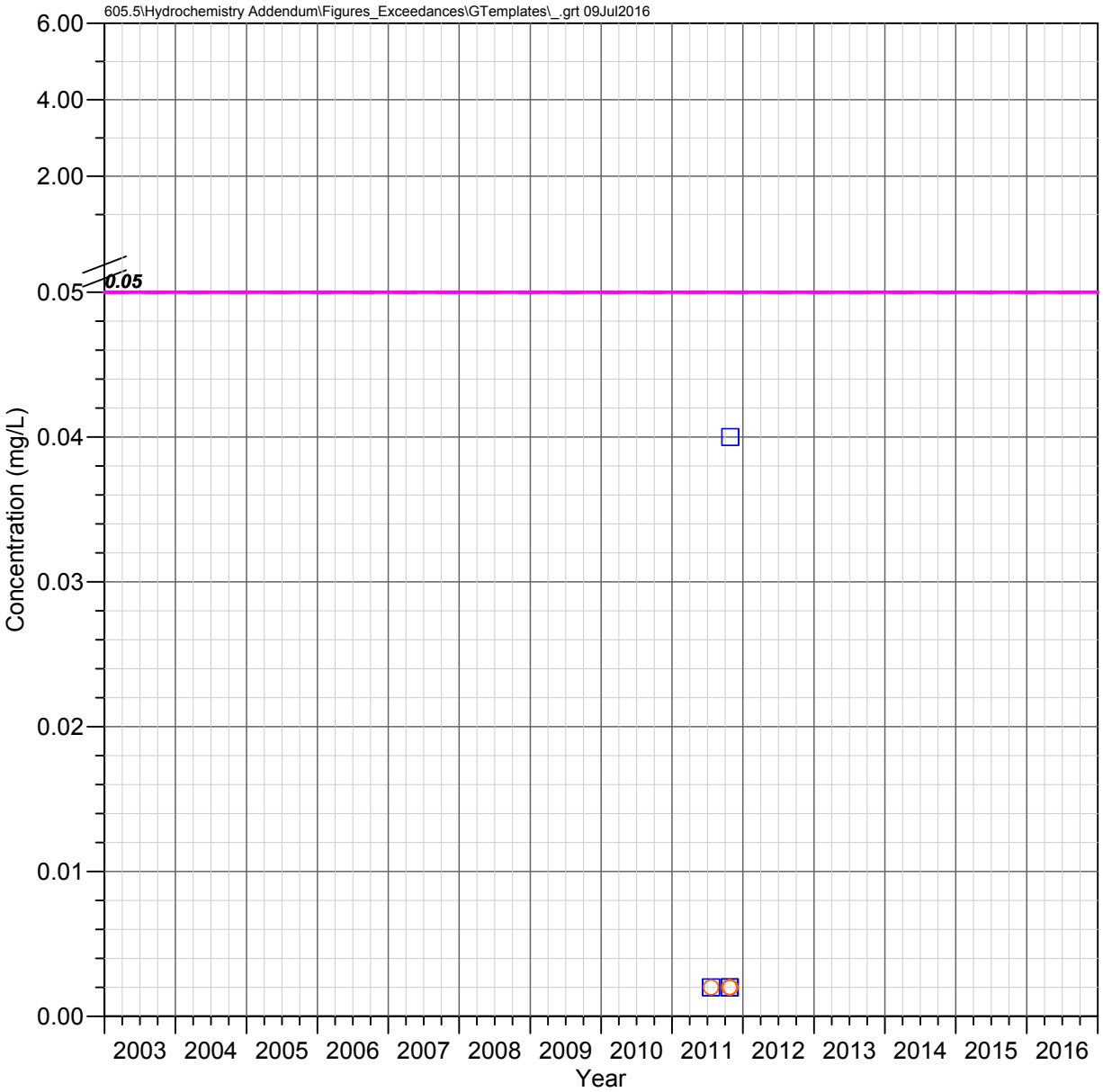


FIGURE E-617. SELENIUM CONCENTRATIONS OBSERVED AT DHRES-01, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-02
Deep Groundwater System

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.05 mg/L)

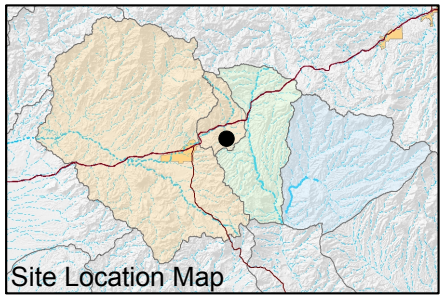
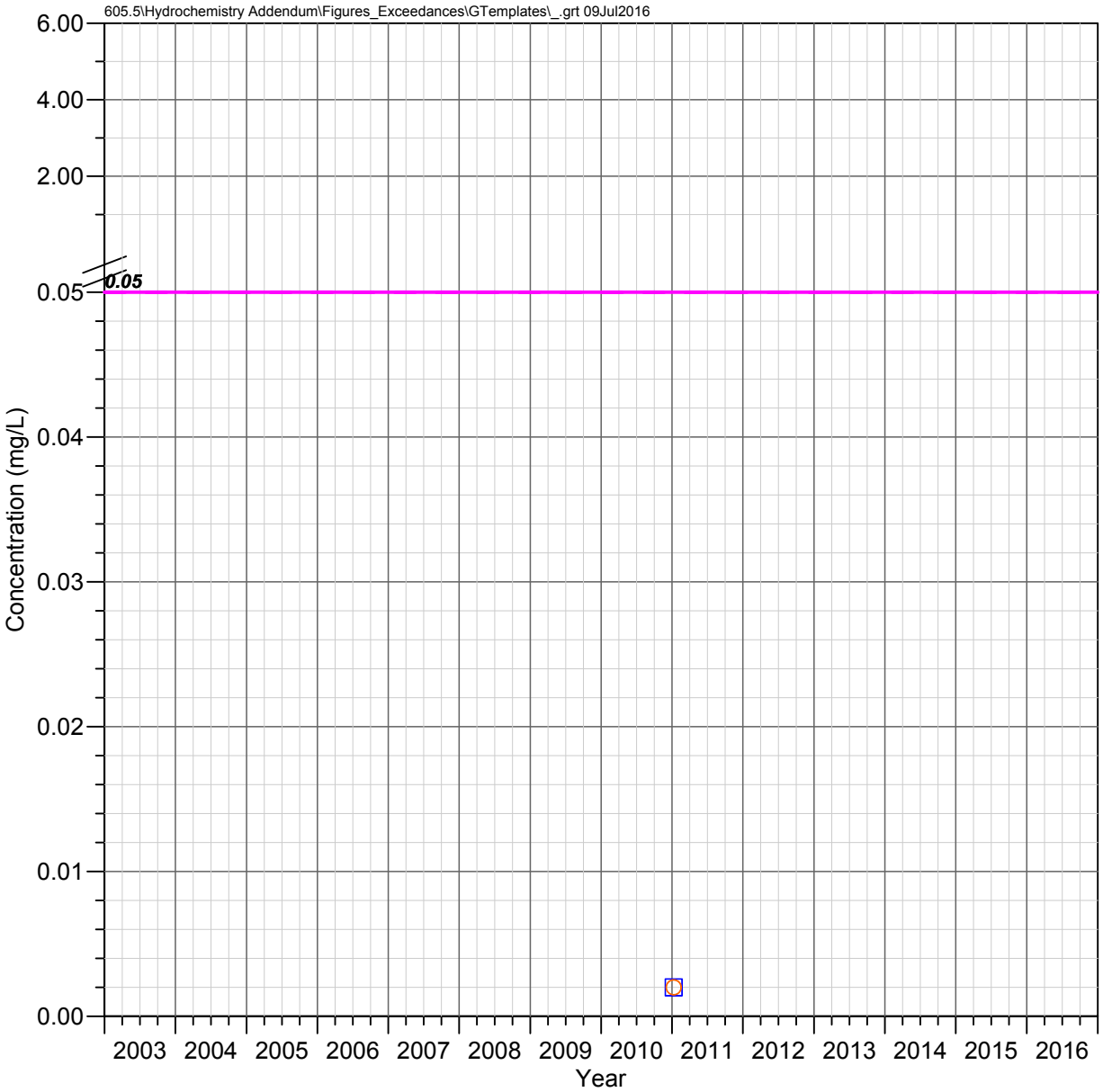


FIGURE E-618. SELENIUM CONCENTRATIONS OBSERVED AT DHRES-02, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-06
Deep Groundwater System

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.05 mg/L)

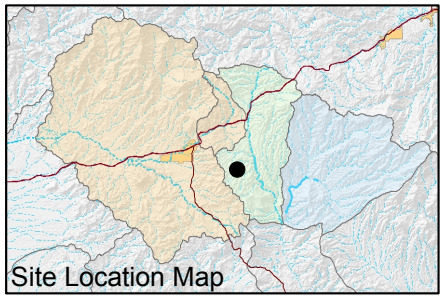
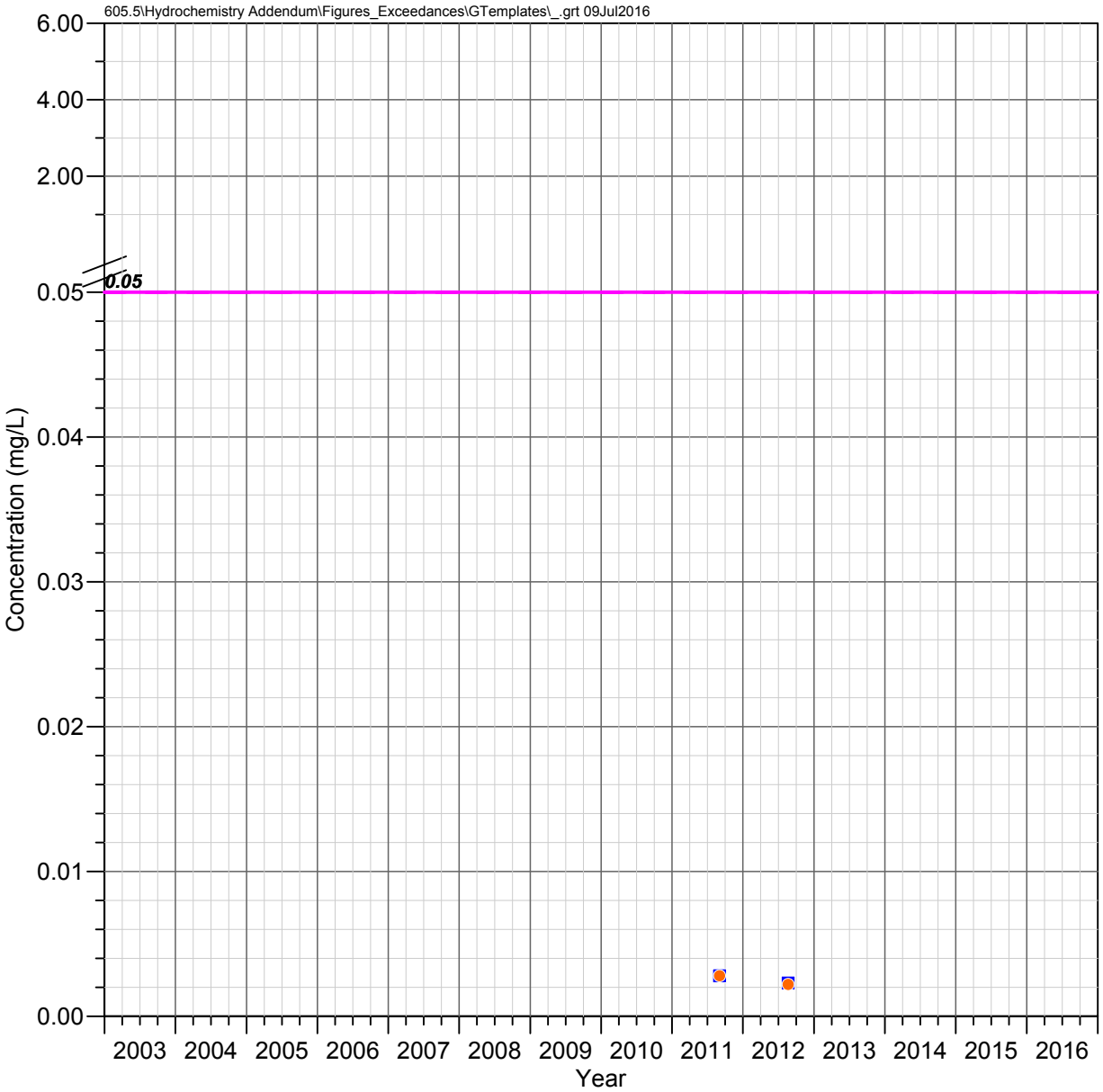


FIGURE E-619. SELENIUM CONCENTRATIONS OBSERVED AT DHRES-06, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-09
Deep Groundwater System

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.05 mg/L)

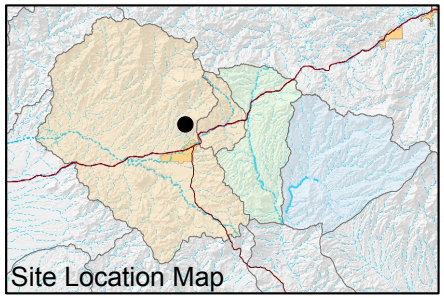
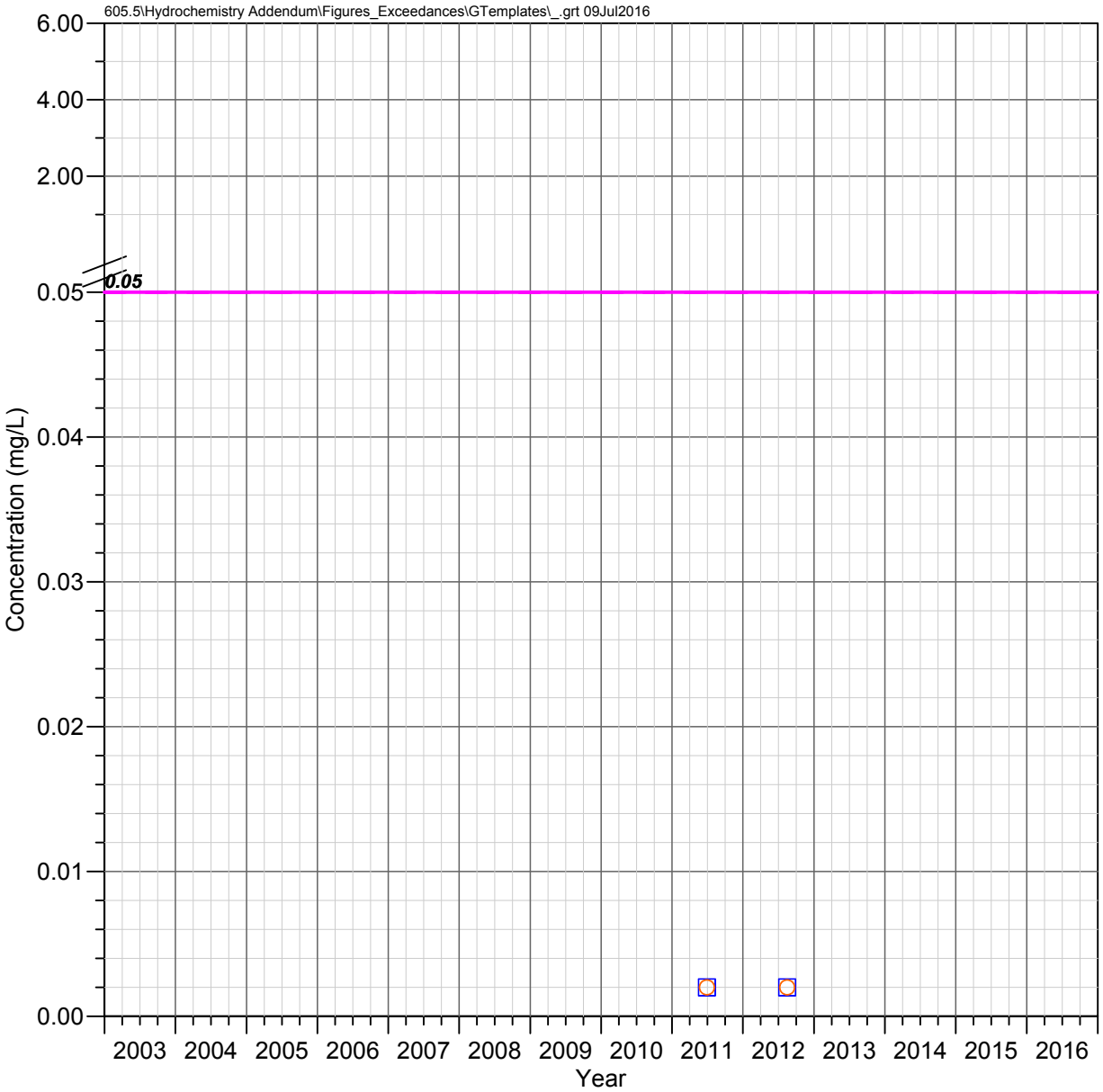


FIGURE E-620. SELENIUM CONCENTRATIONS OBSERVED AT DHRES-09, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-11
Deep Groundwater System

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.05 mg/L)

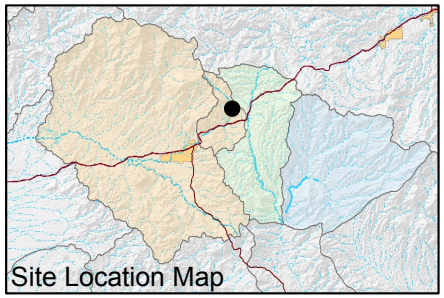
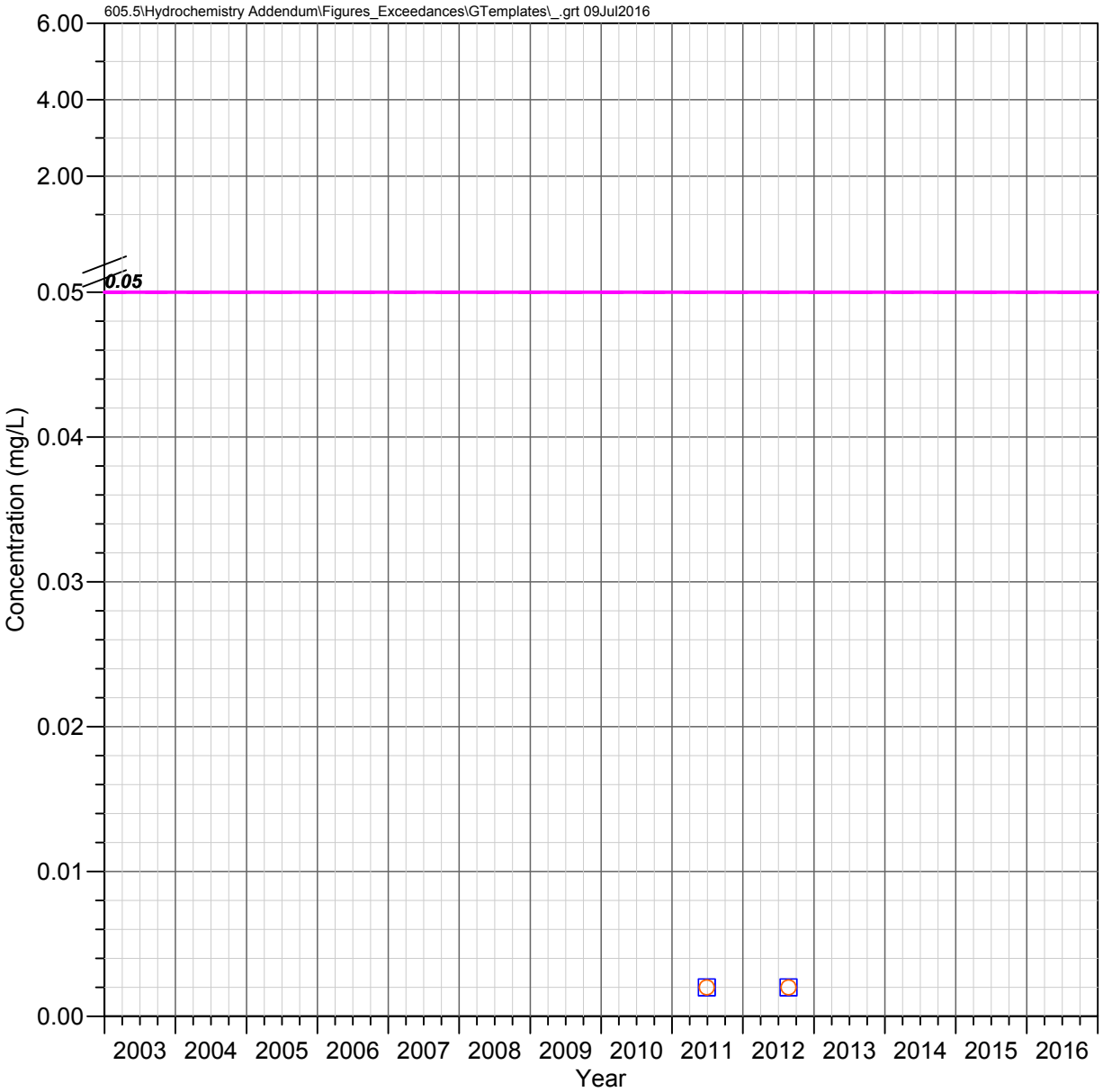


FIGURE E-621. SELENIUM CONCENTRATIONS OBSERVED AT DHRES-11, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-13
Deep Groundwater System

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.05 mg/L)

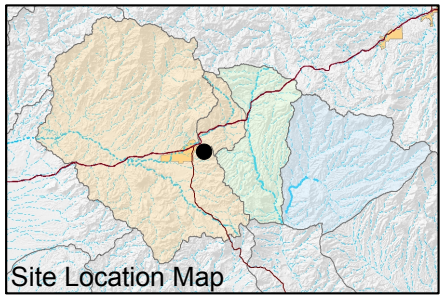
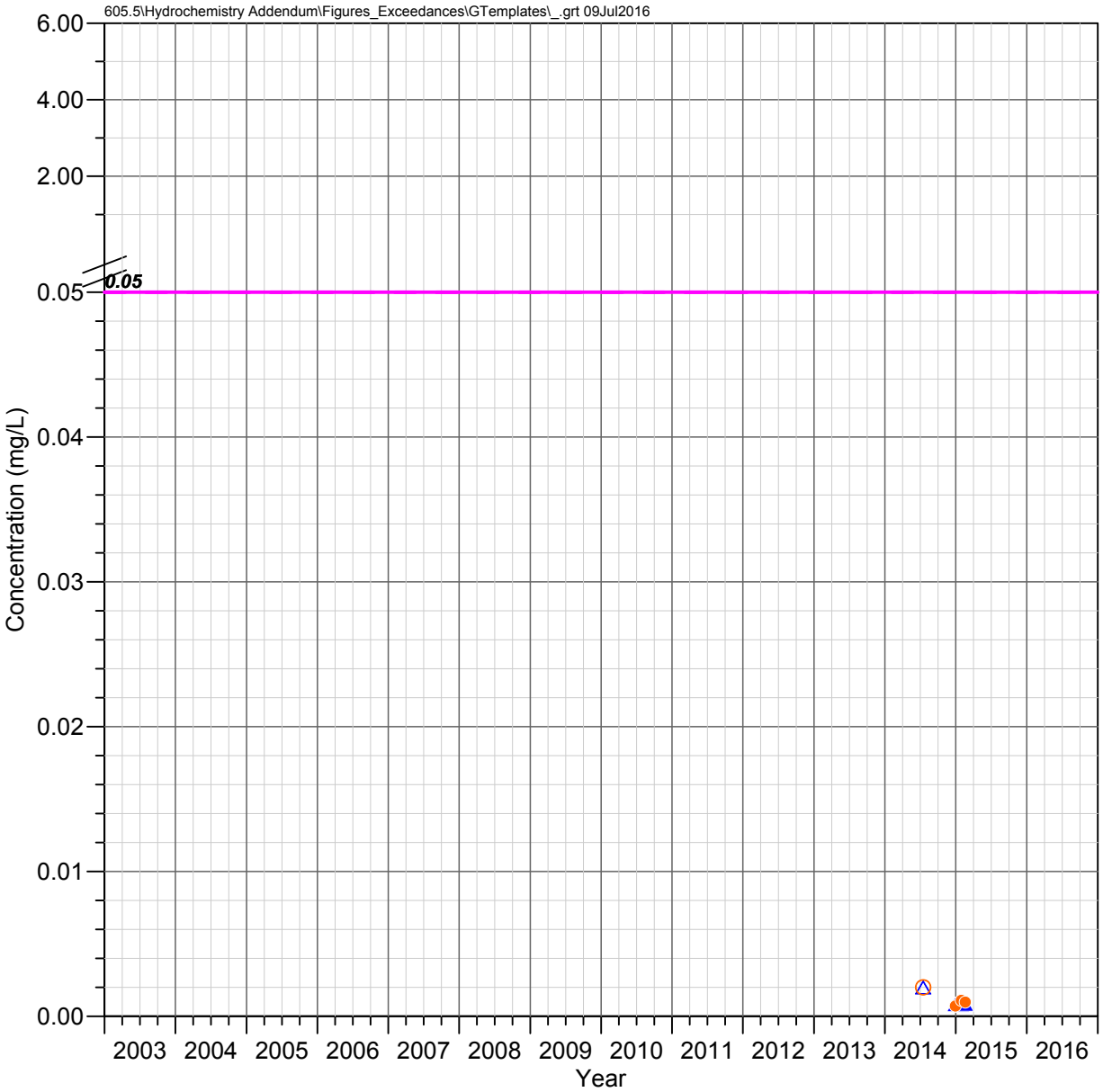


FIGURE E-622. SELENIUM CONCENTRATIONS OBSERVED AT DHRES-13, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-15
Deep Groundwater System

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.05 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.05 mg/L)

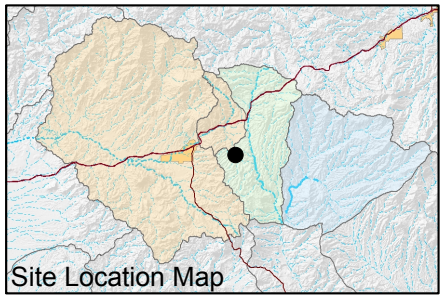
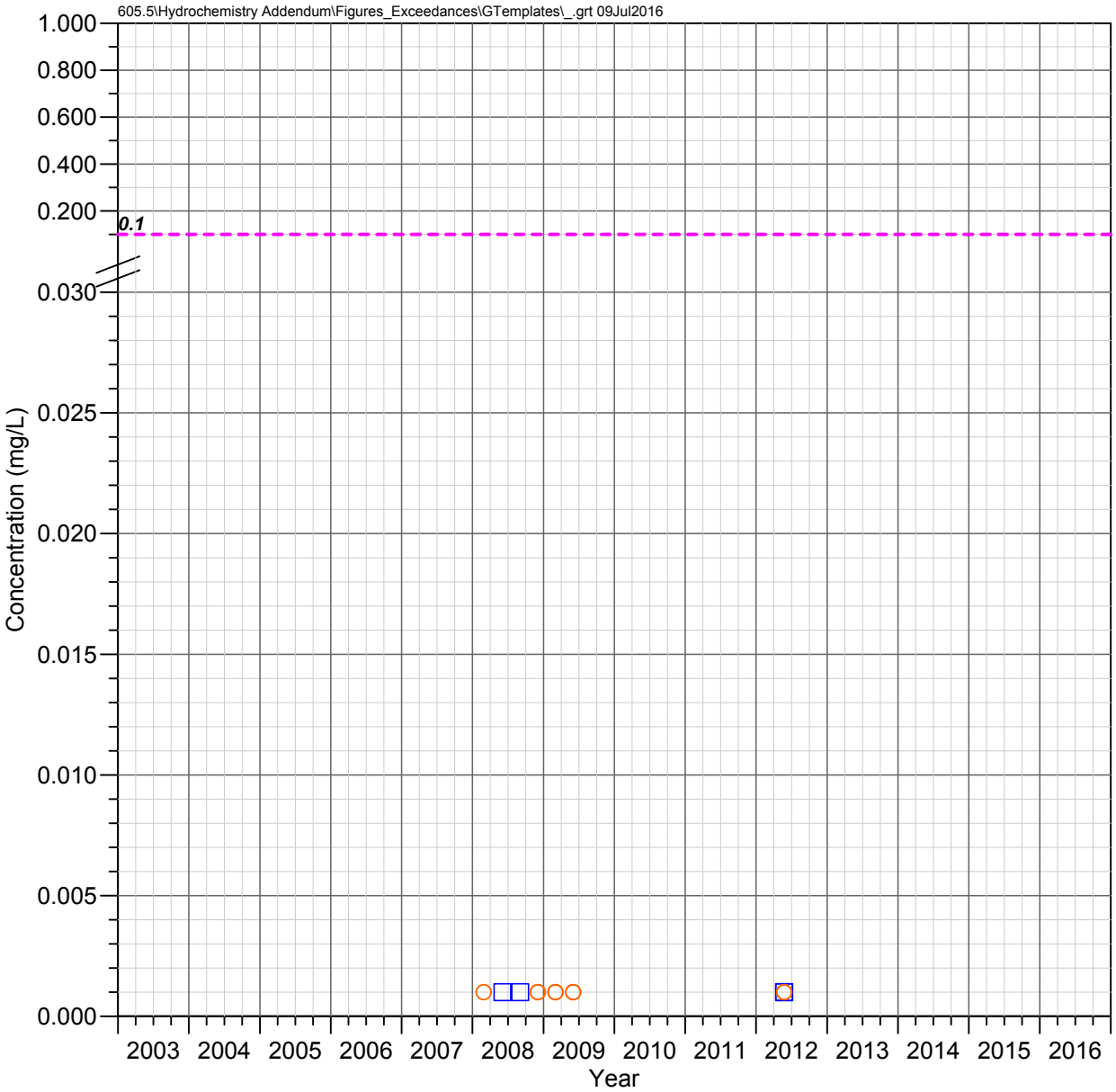


FIGURE E-623. SELENIUM CONCENTRATIONS OBSERVED AT DHRES-15, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Hackberry Windmill Well
Shallow Groundwater System

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.1 mg/L)

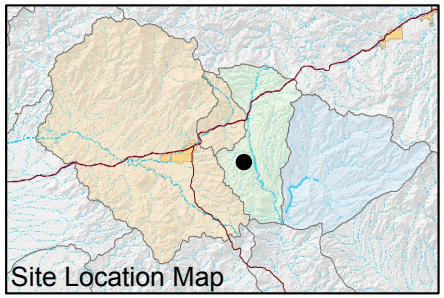
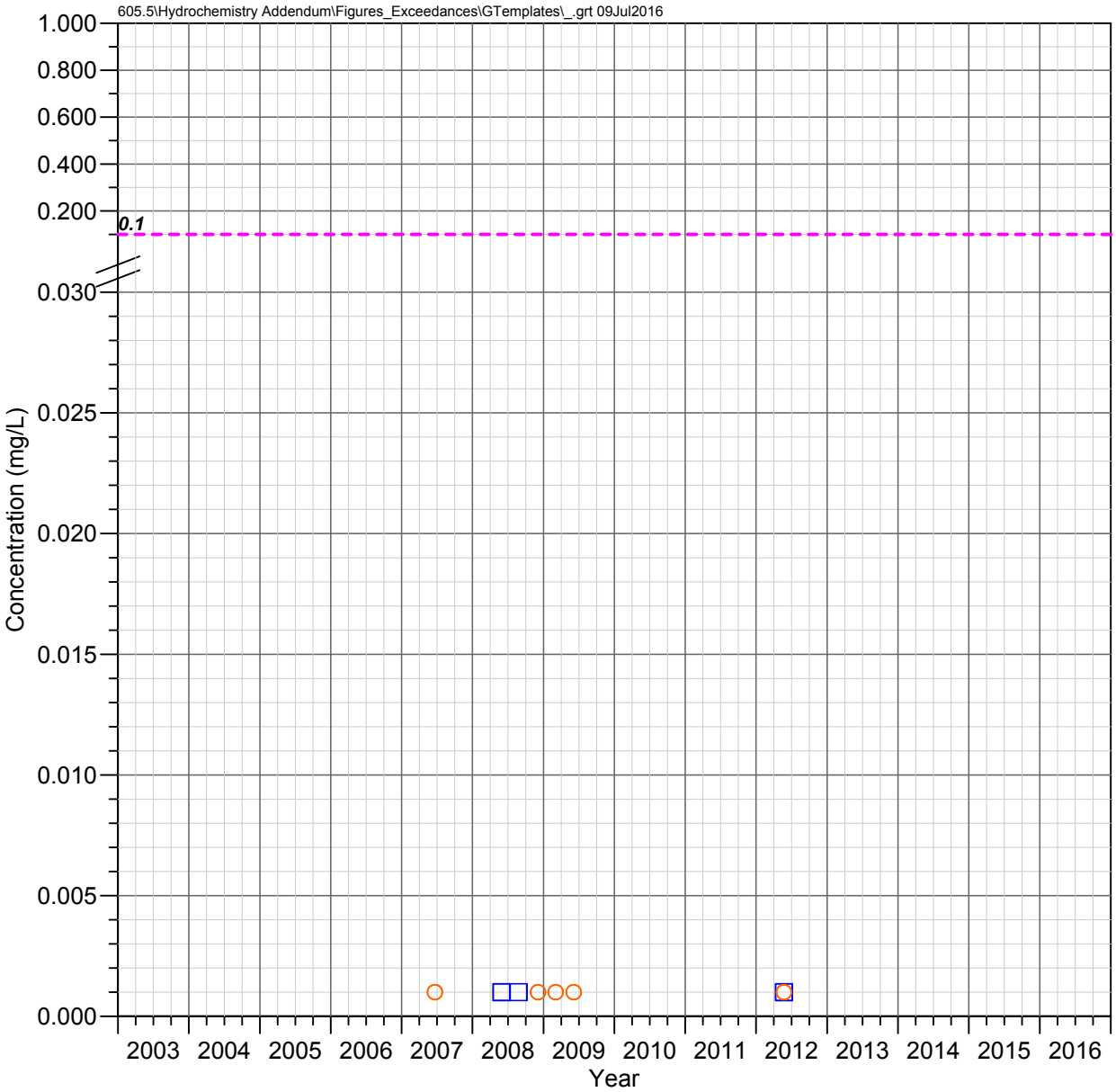


FIGURE E-624. SILVER CONCENTRATIONS OBSERVED AT HACKBERRY WINDMILL WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



JI Ranch Corral Well
Shallow Groundwater System

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.1 mg/L)

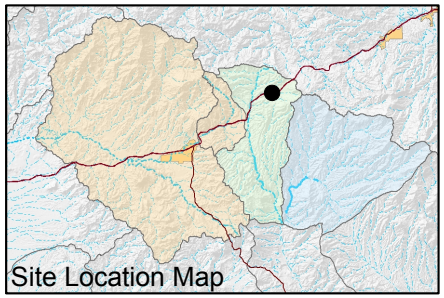
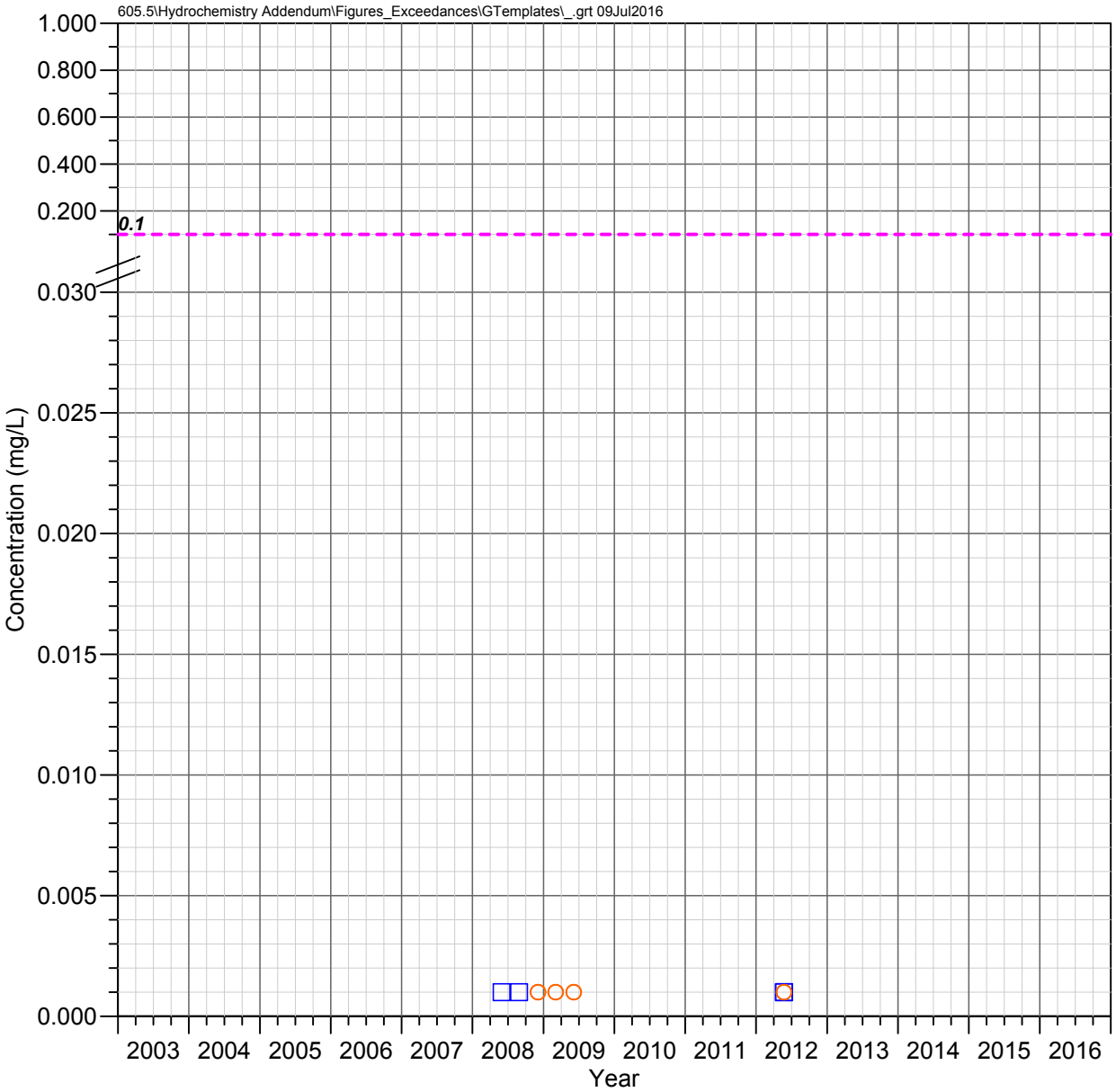


FIGURE E-625. SILVER CONCENTRATIONS OBSERVED AT JI RANCH CORRAL WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



JI Ranch Middle Well
Shallow Groundwater System

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.1 mg/L)

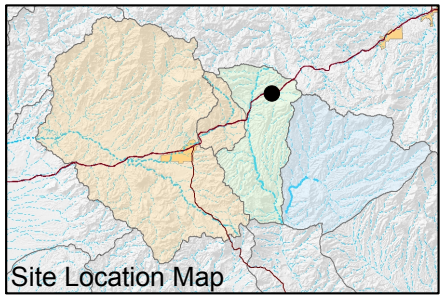
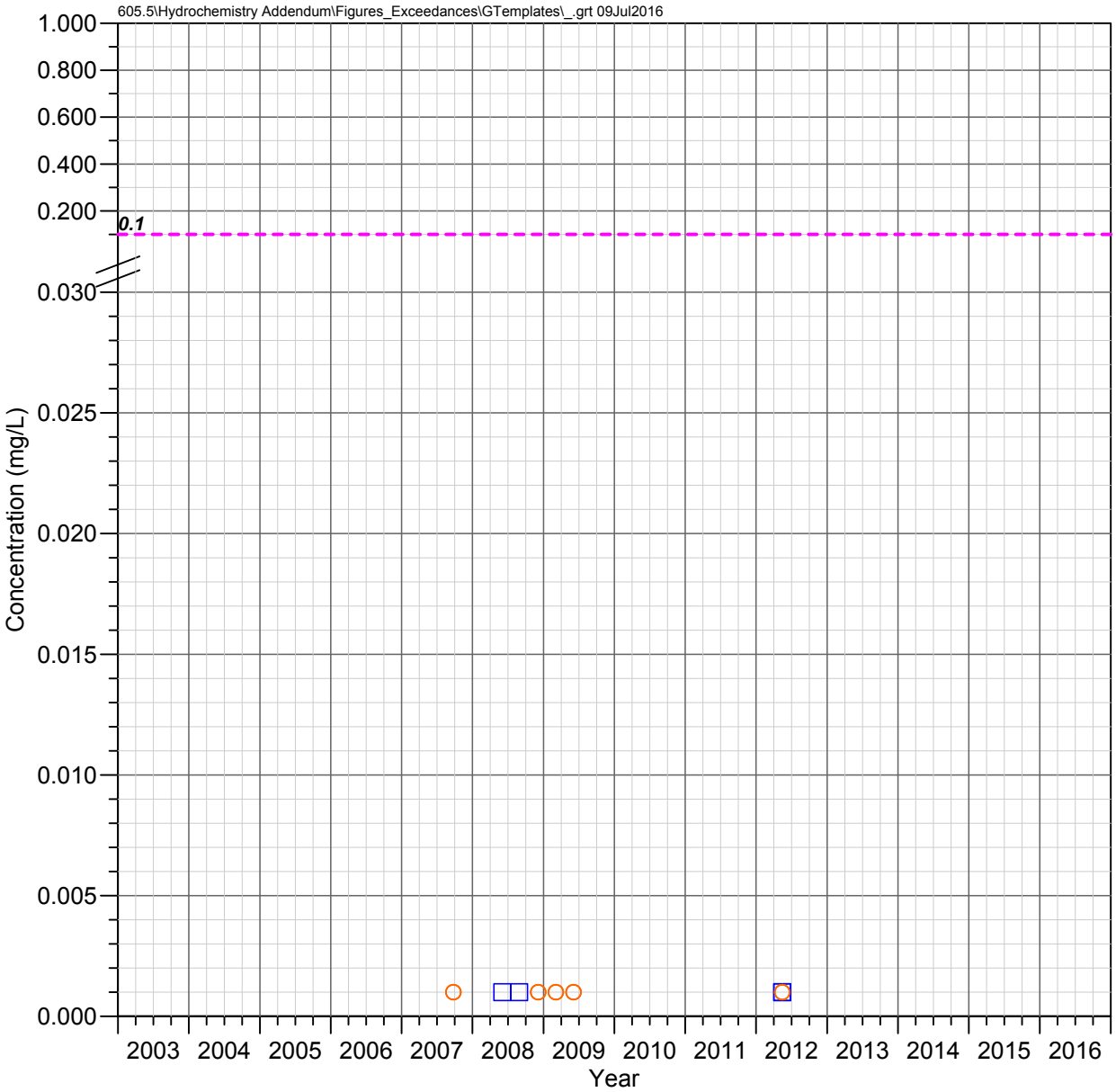


FIGURE E-626. SILVER CONCENTRATIONS OBSERVED AT JI RANCH MIDDLE WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



A-06
Apache Leap Tuff Aquifer

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.1 mg/L)

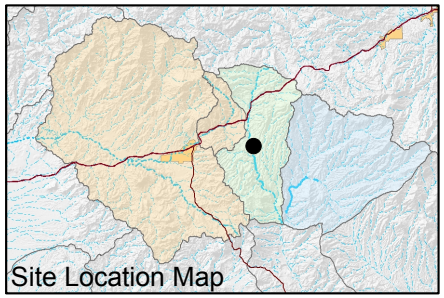
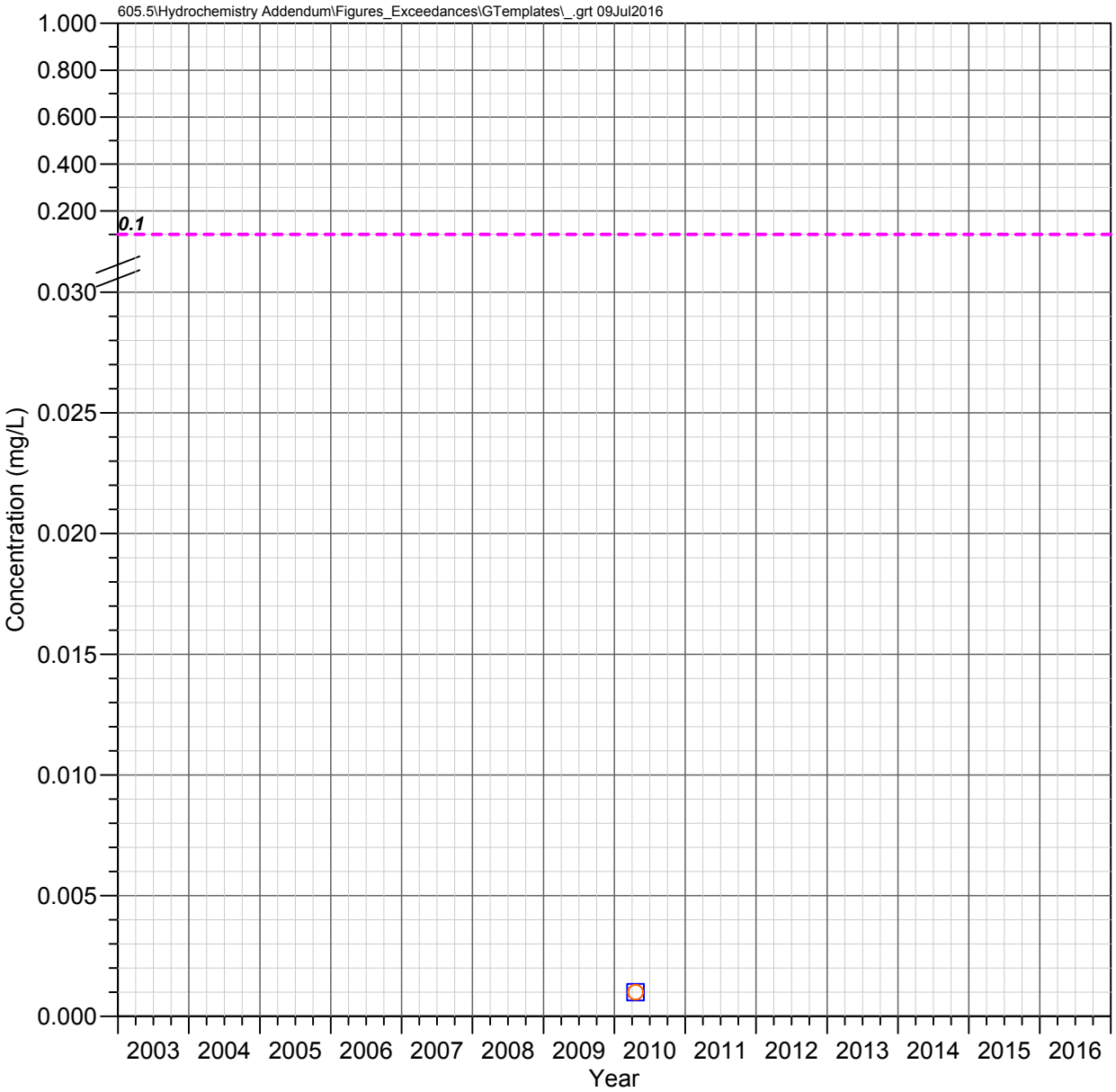


FIGURE E-627. SILVER CONCENTRATIONS OBSERVED AT A-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



CT Well
Apache Leap Tuff Aquifer

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.1 mg/L)

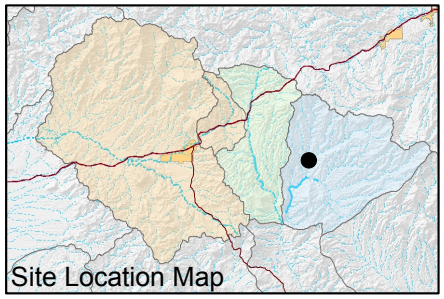
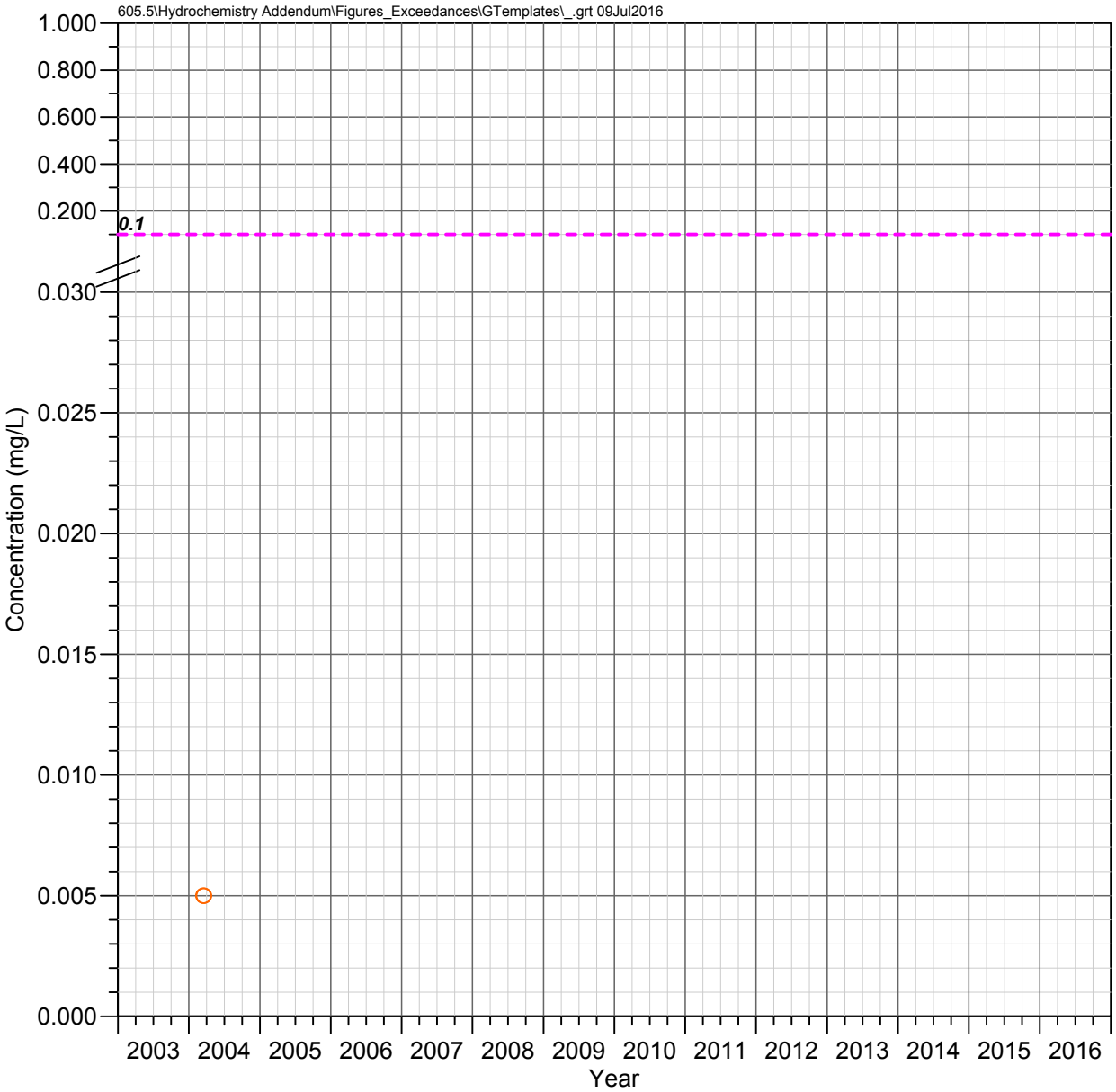


FIGURE E-628. SILVER CONCENTRATIONS OBSERVED AT CT WELL, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-01
Apache Leap Tuff Aquifer

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.1 mg/L)

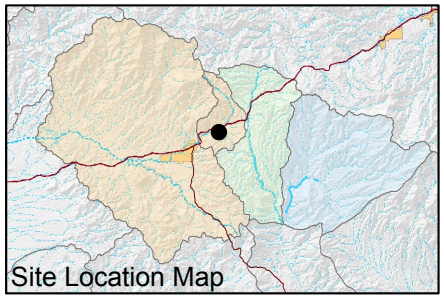
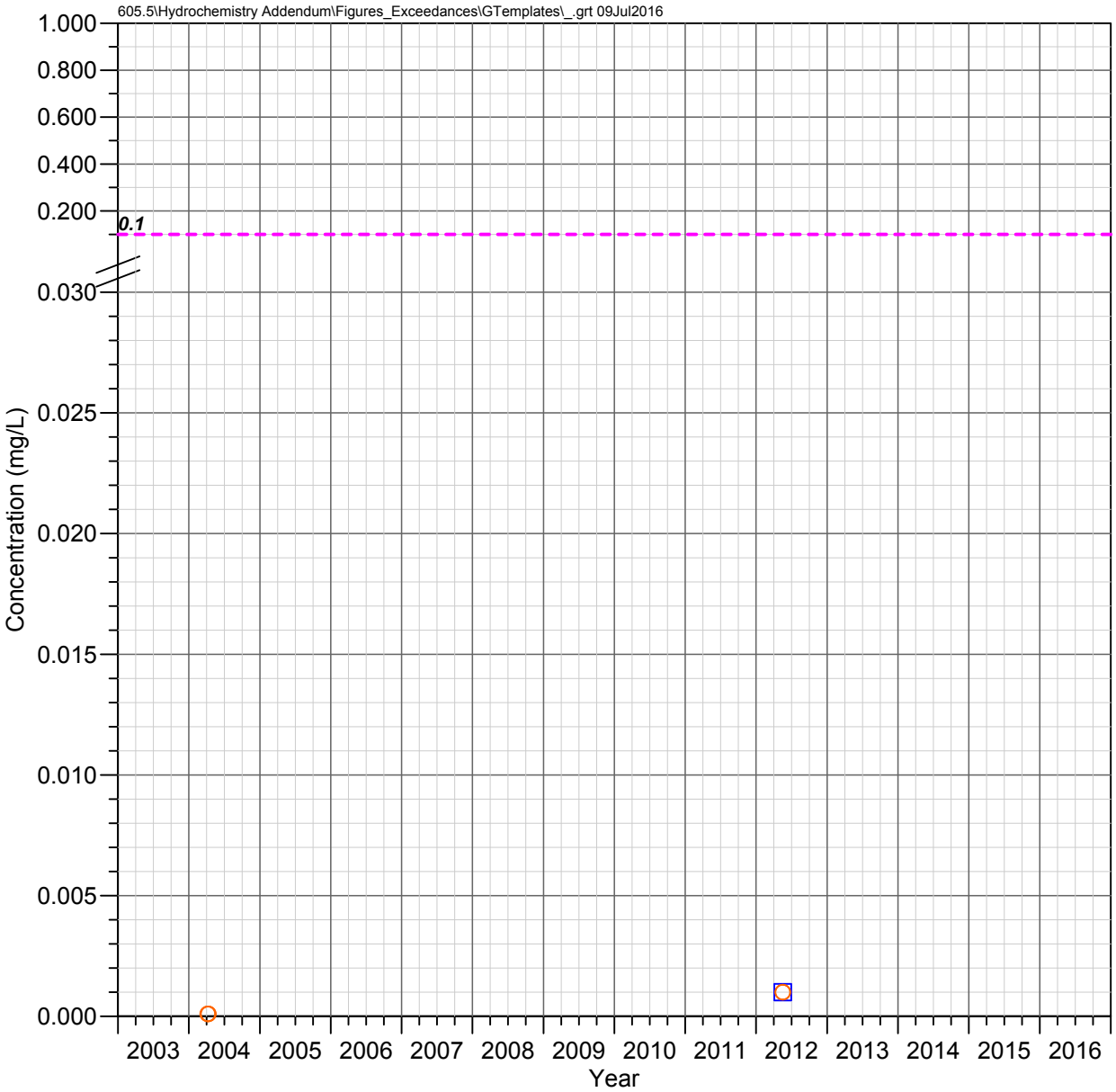


FIGURE E-629. SILVER CONCENTRATIONS OBSERVED AT HRES-01, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-02
Apache Leap Tuff Aquifer

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.1 mg/L)

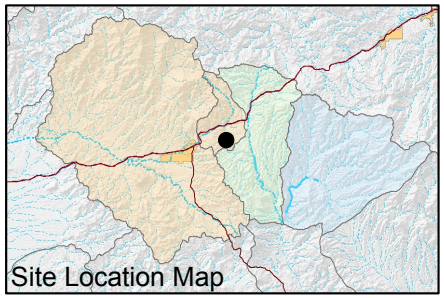
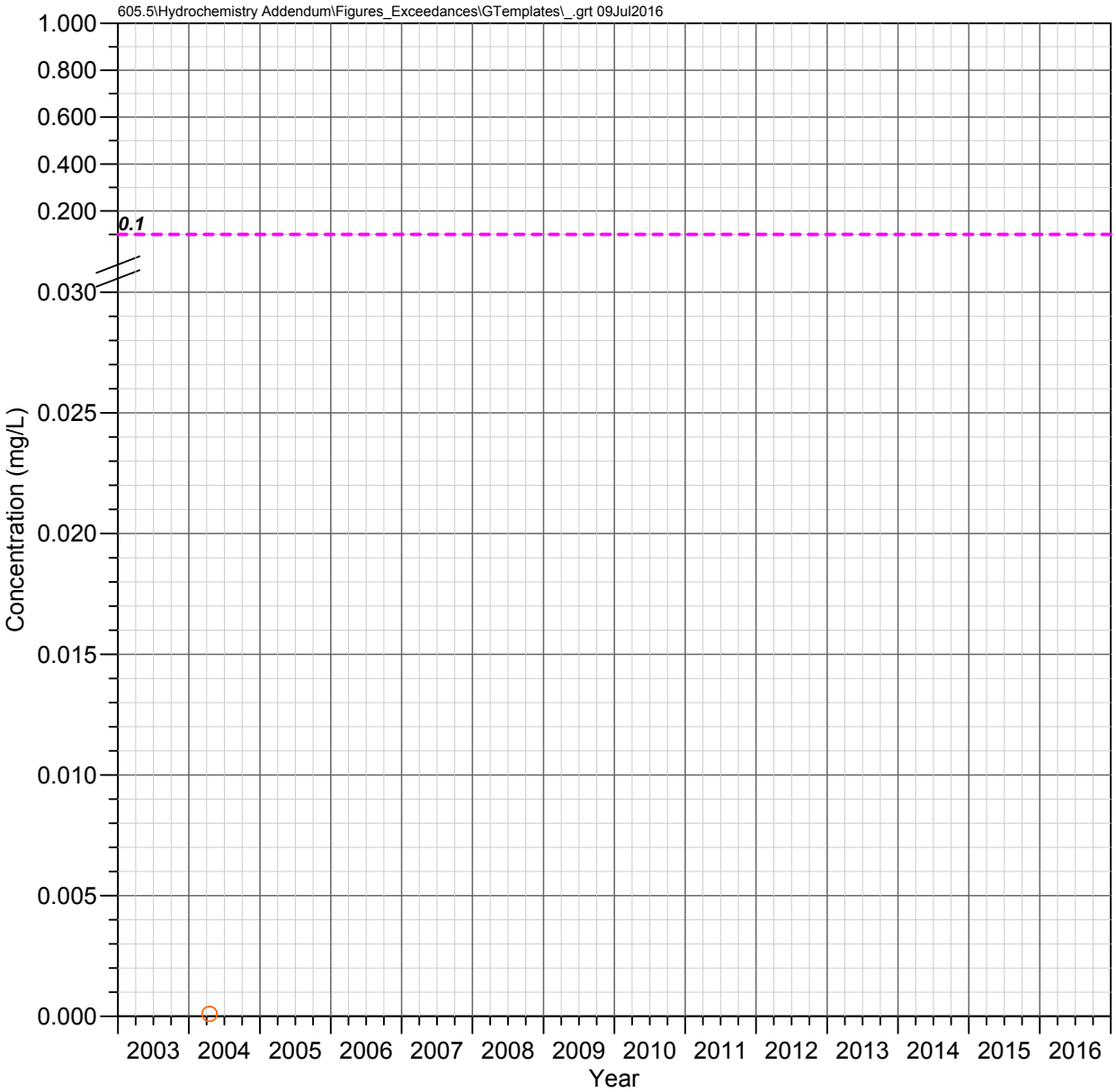


FIGURE E-630. SILVER CONCENTRATIONS OBSERVED AT HRES-02, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-03d
Apache Leap Tuff Aquifer

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.1 mg/L)

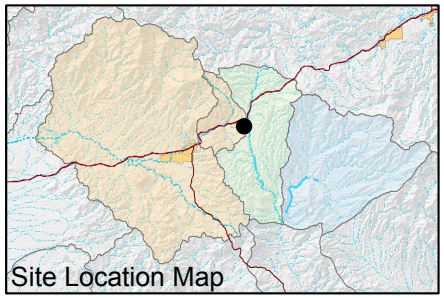
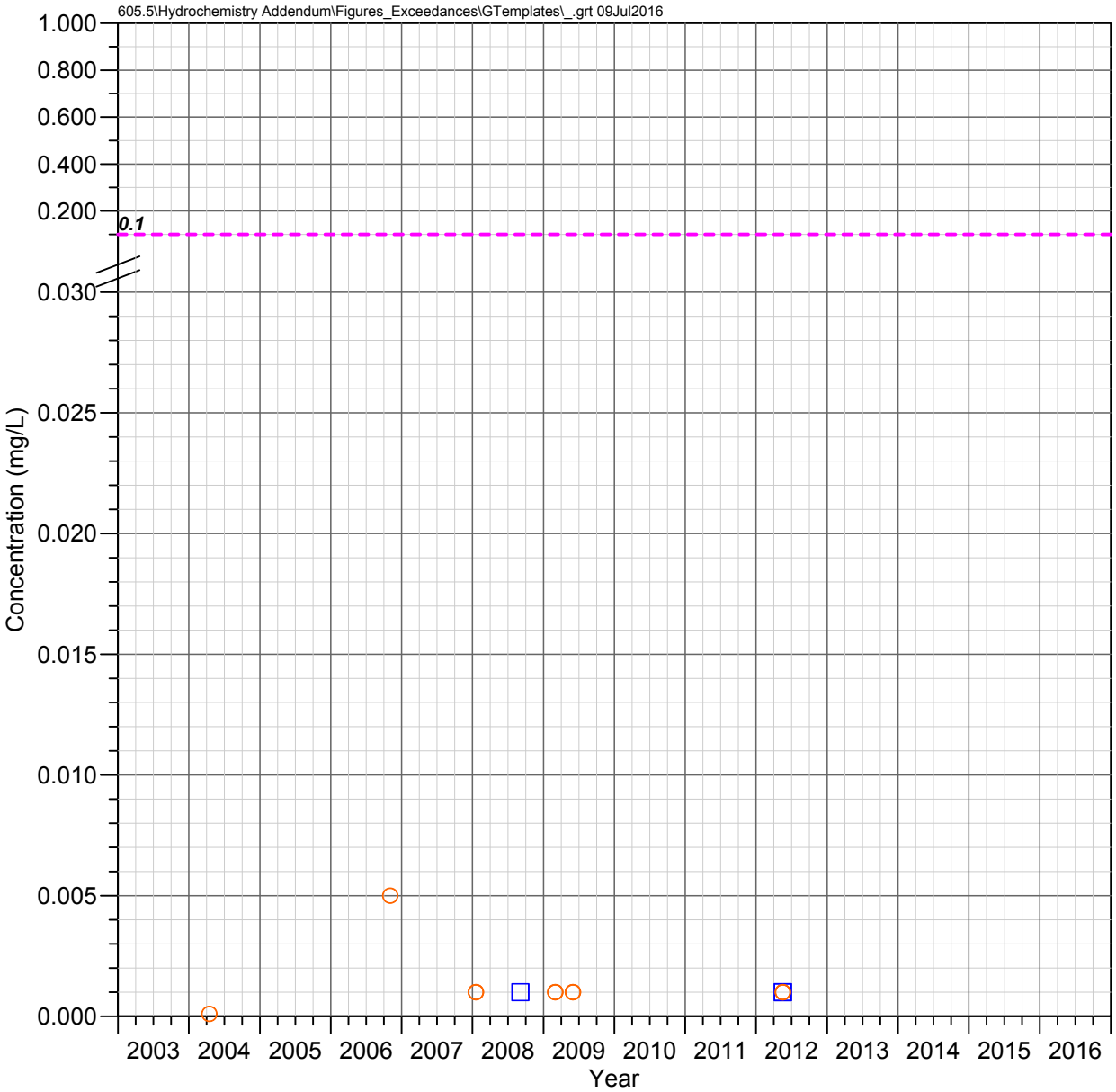


FIGURE E-631. SILVER CONCENTRATIONS OBSERVED AT HRES-03D, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-04
Apache Leap Tuff Aquifer

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.1 mg/L)

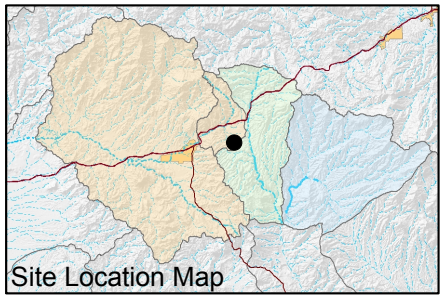
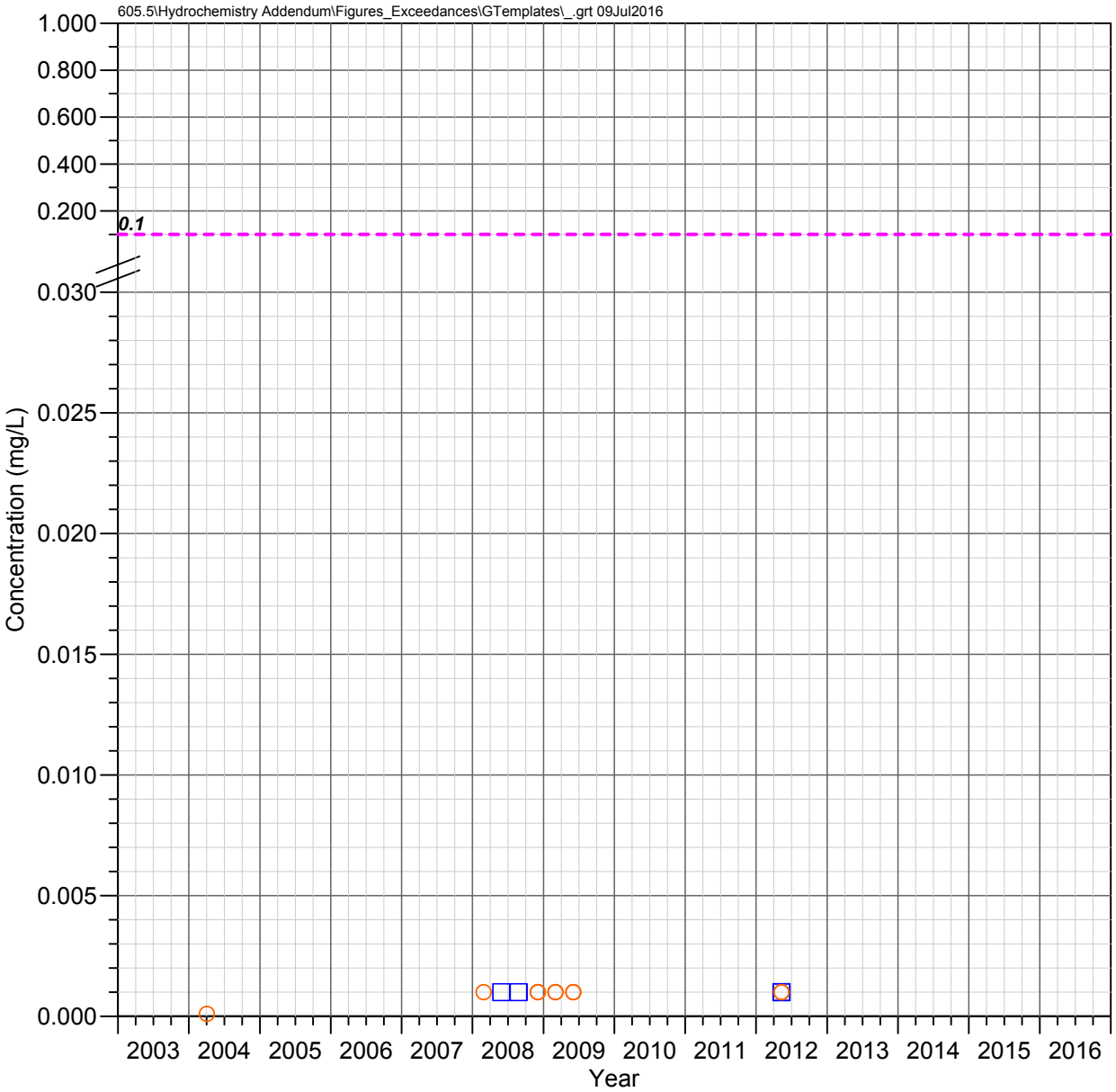


FIGURE E-632. SILVER CONCENTRATIONS OBSERVED AT HRES-04, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-05
Apache Leap Tuff Aquifer

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.1 mg/L)

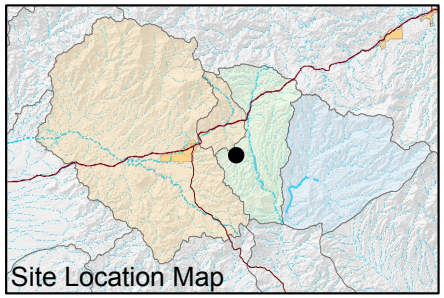
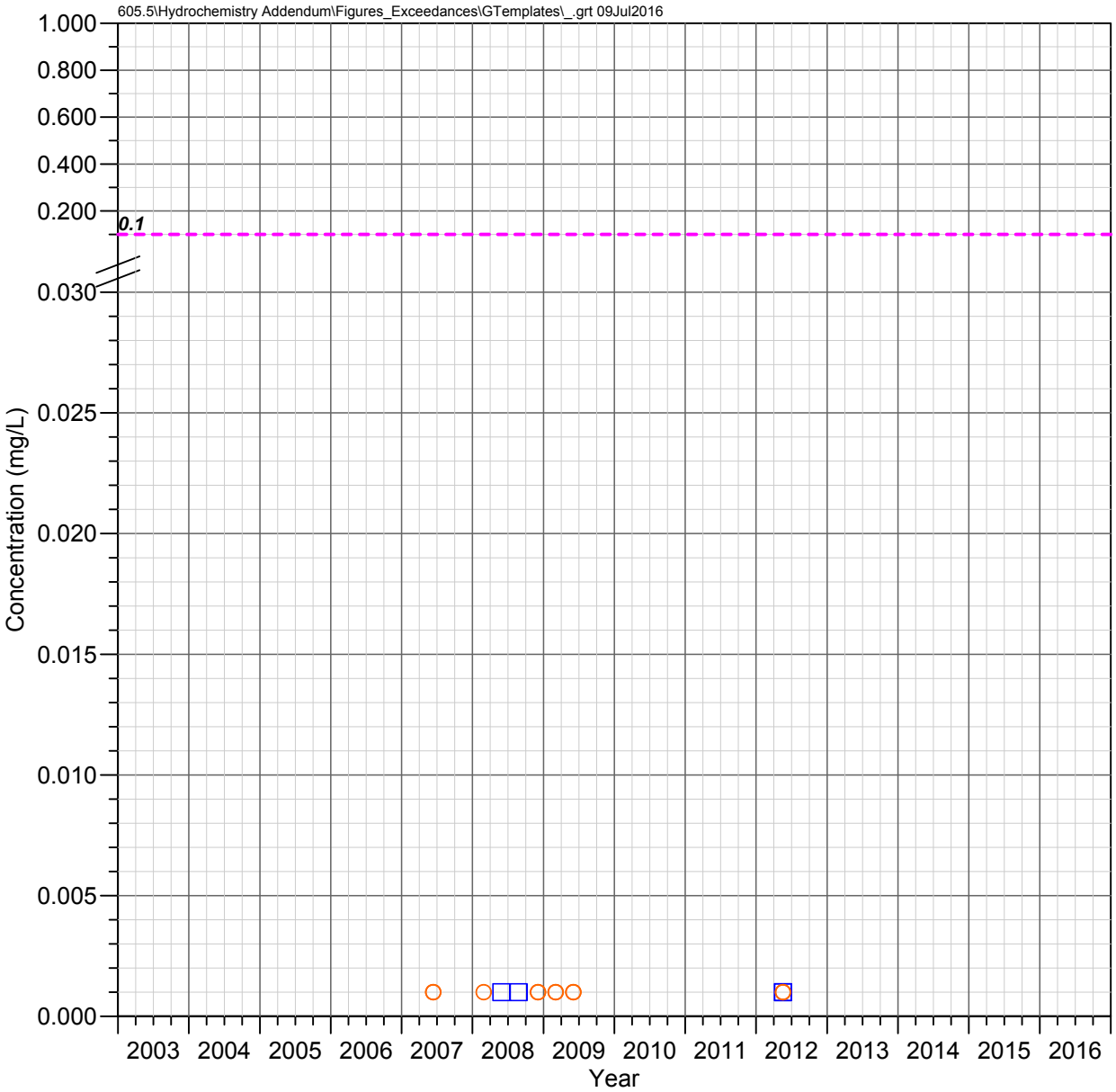


FIGURE E-633. SILVER CONCENTRATIONS OBSERVED AT HRES-05, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-06
Apache Leap Tuff Aquifer

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.1 mg/L)

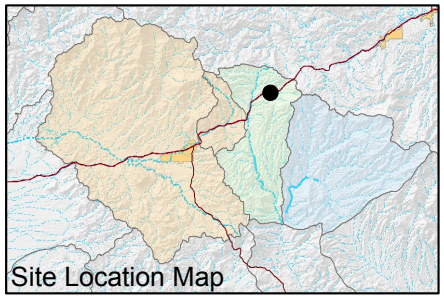
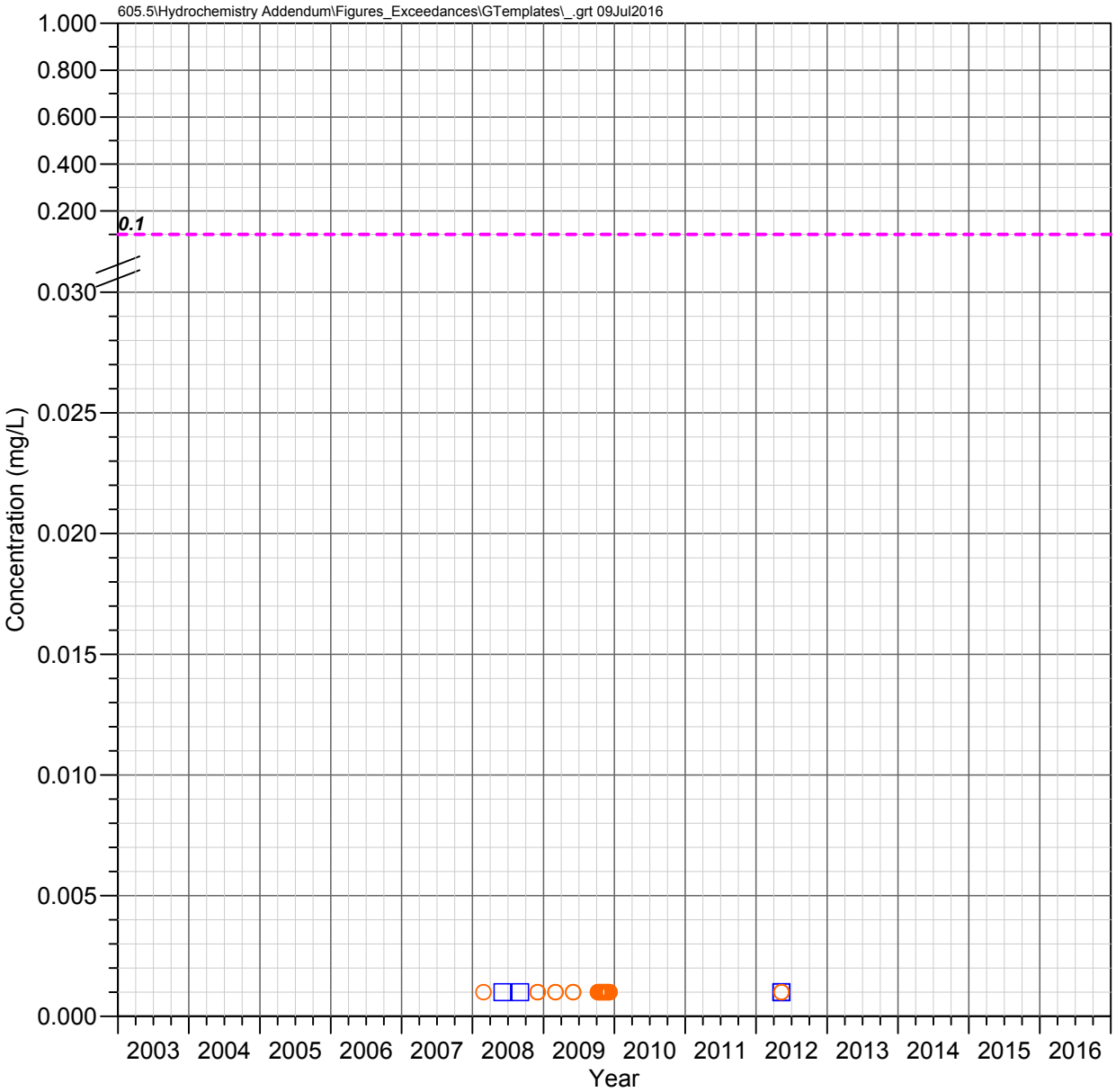


FIGURE E-634. SILVER CONCENTRATIONS OBSERVED AT HRES-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-07
Apache Leap Tuff Aquifer

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.1 mg/L)

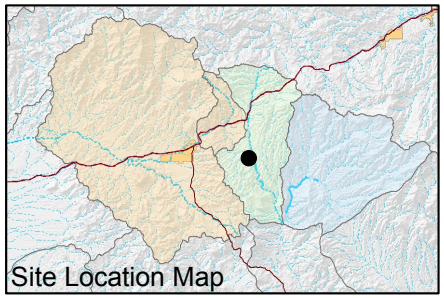
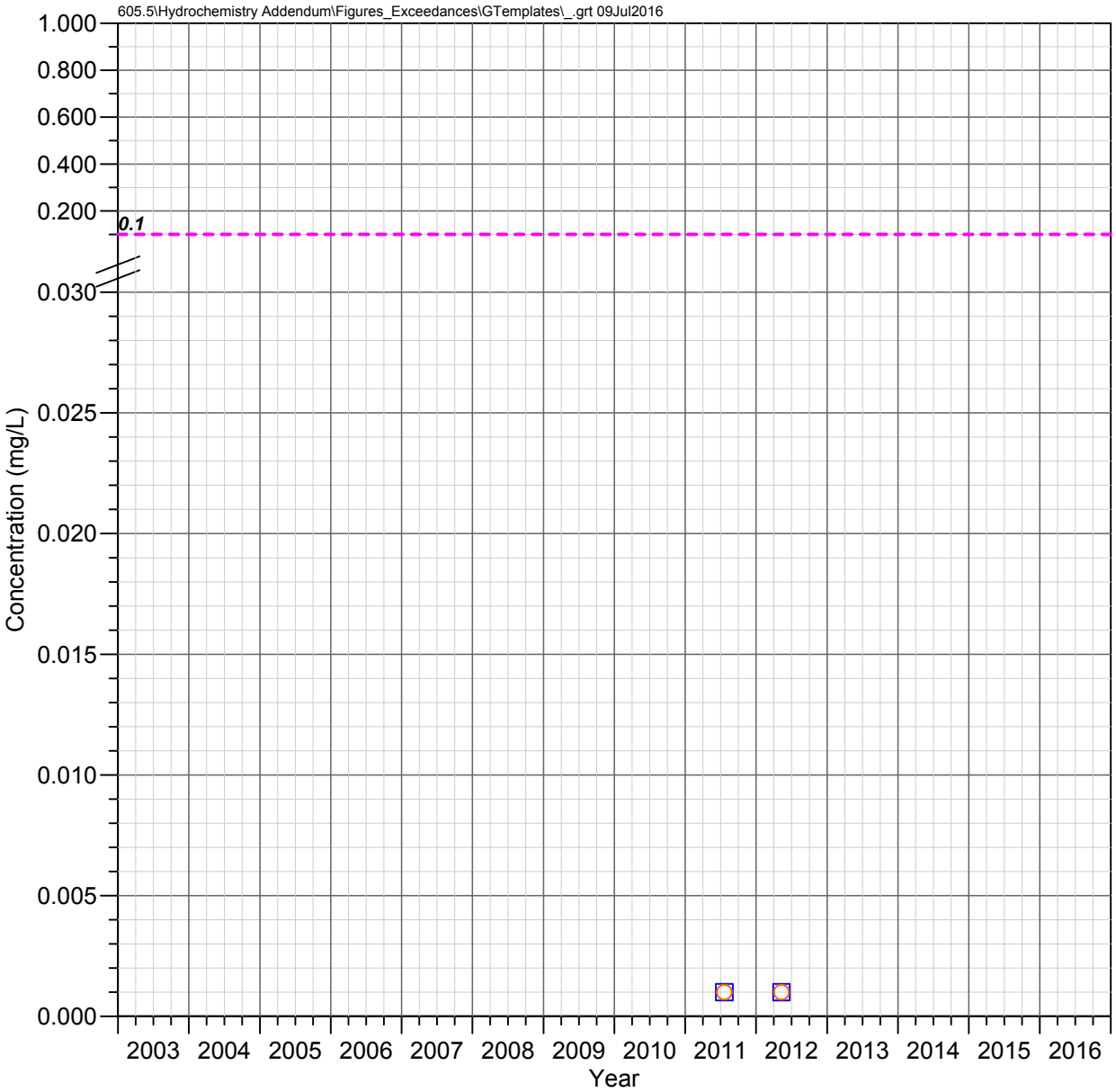


FIGURE E-635. SILVER CONCENTRATIONS OBSERVED AT HRES-07, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-08
Apache Leap Tuff Aquifer

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.1 mg/L)

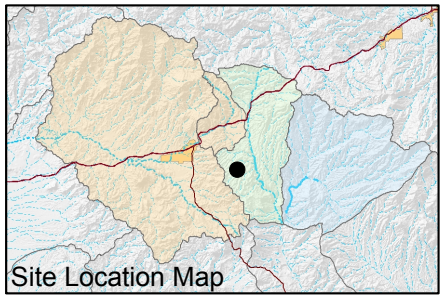
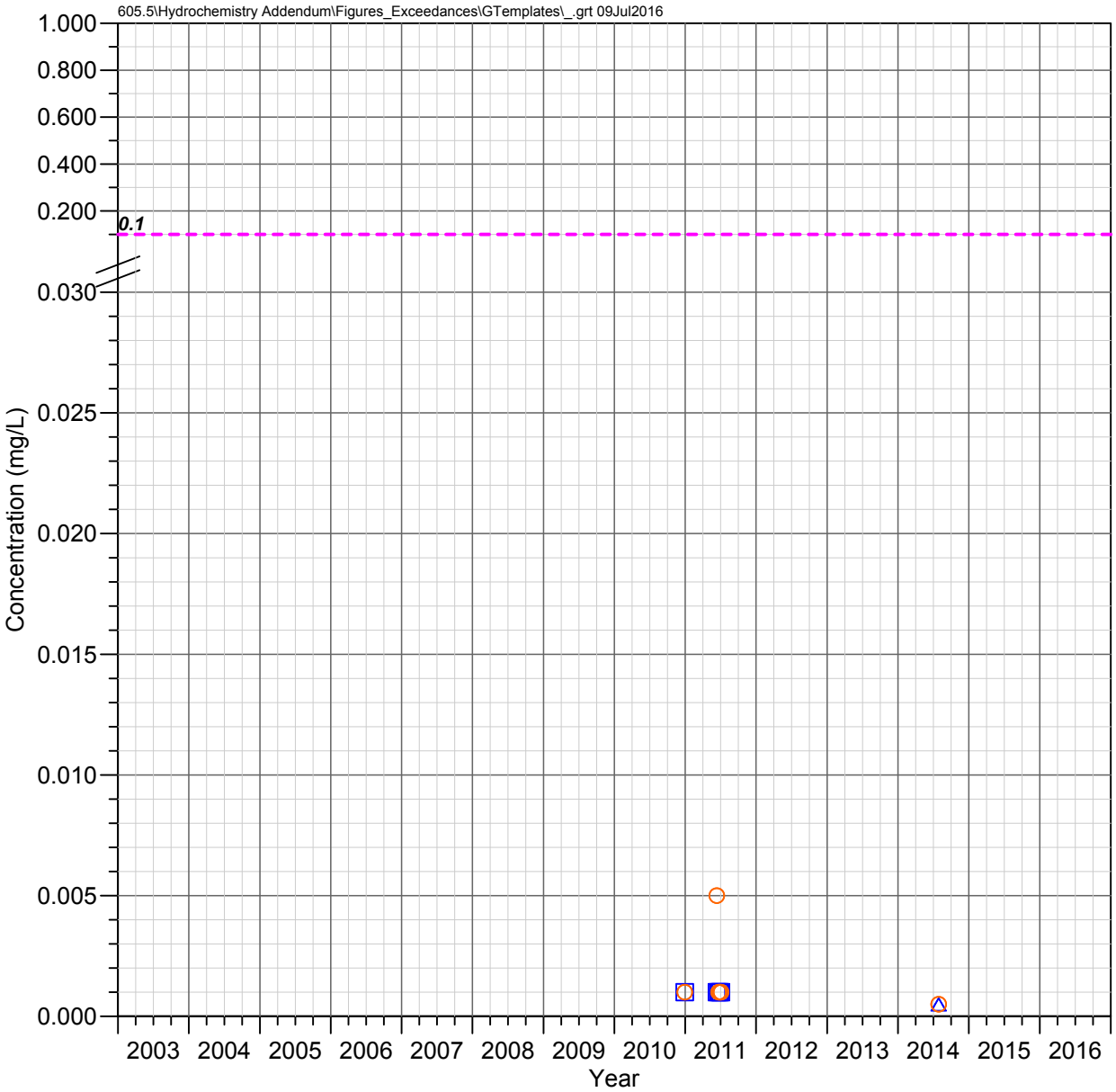


FIGURE E-636. SILVER CONCENTRATIONS OBSERVED AT HRES-08, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-09
Apache Leap Tuff Aquifer

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.1 mg/L)

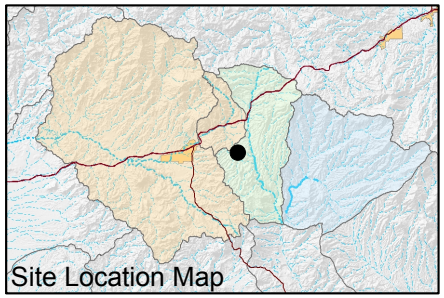
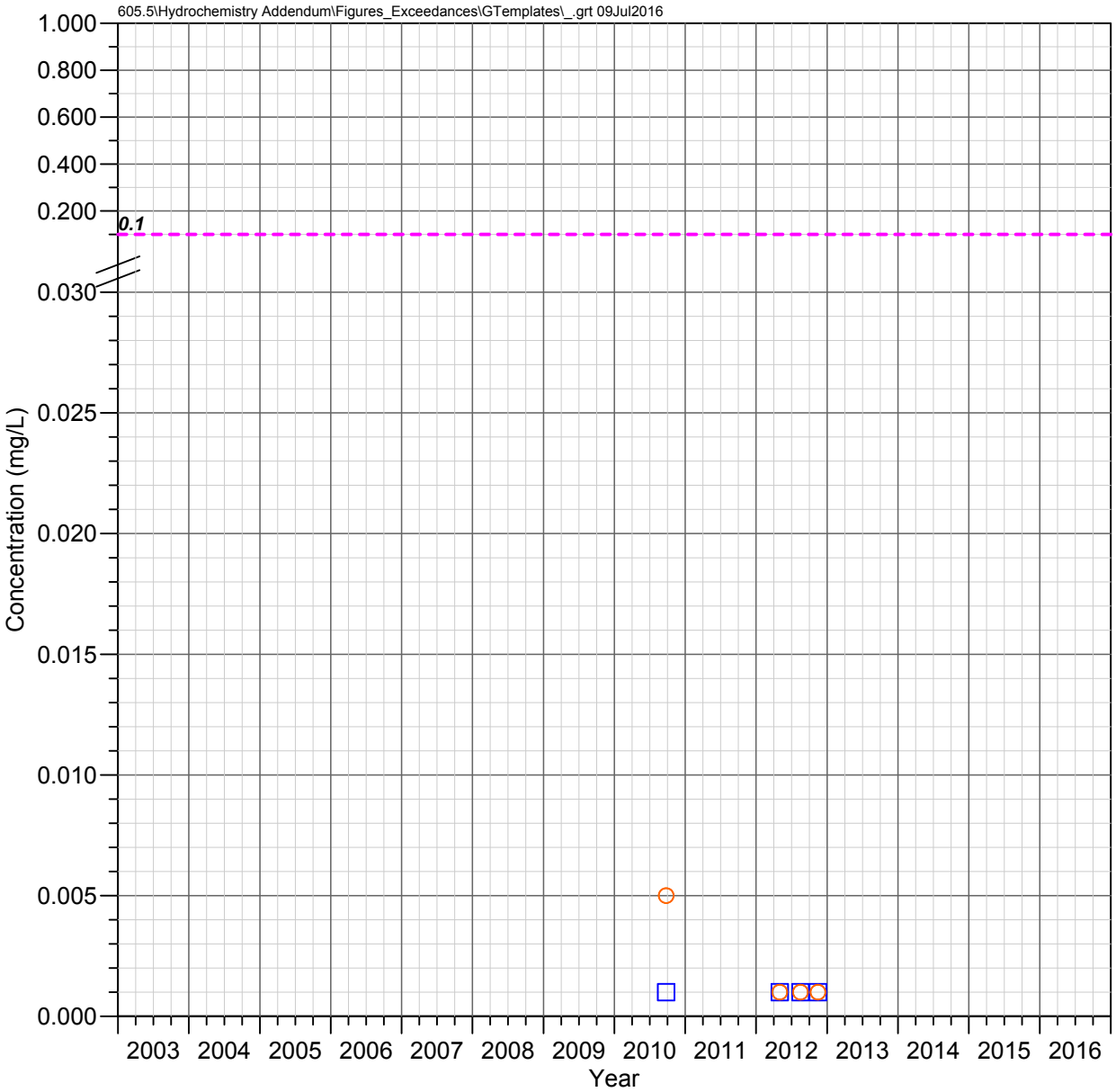


FIGURE E-637. SILVER CONCENTRATIONS OBSERVED AT HRES-09, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-10
Apache Leap Tuff Aquifer

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.1 mg/L)

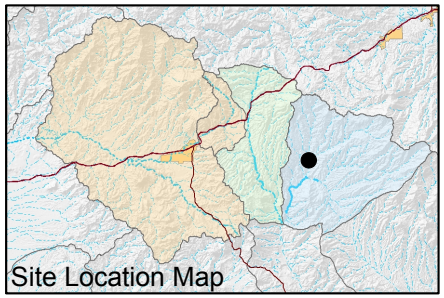
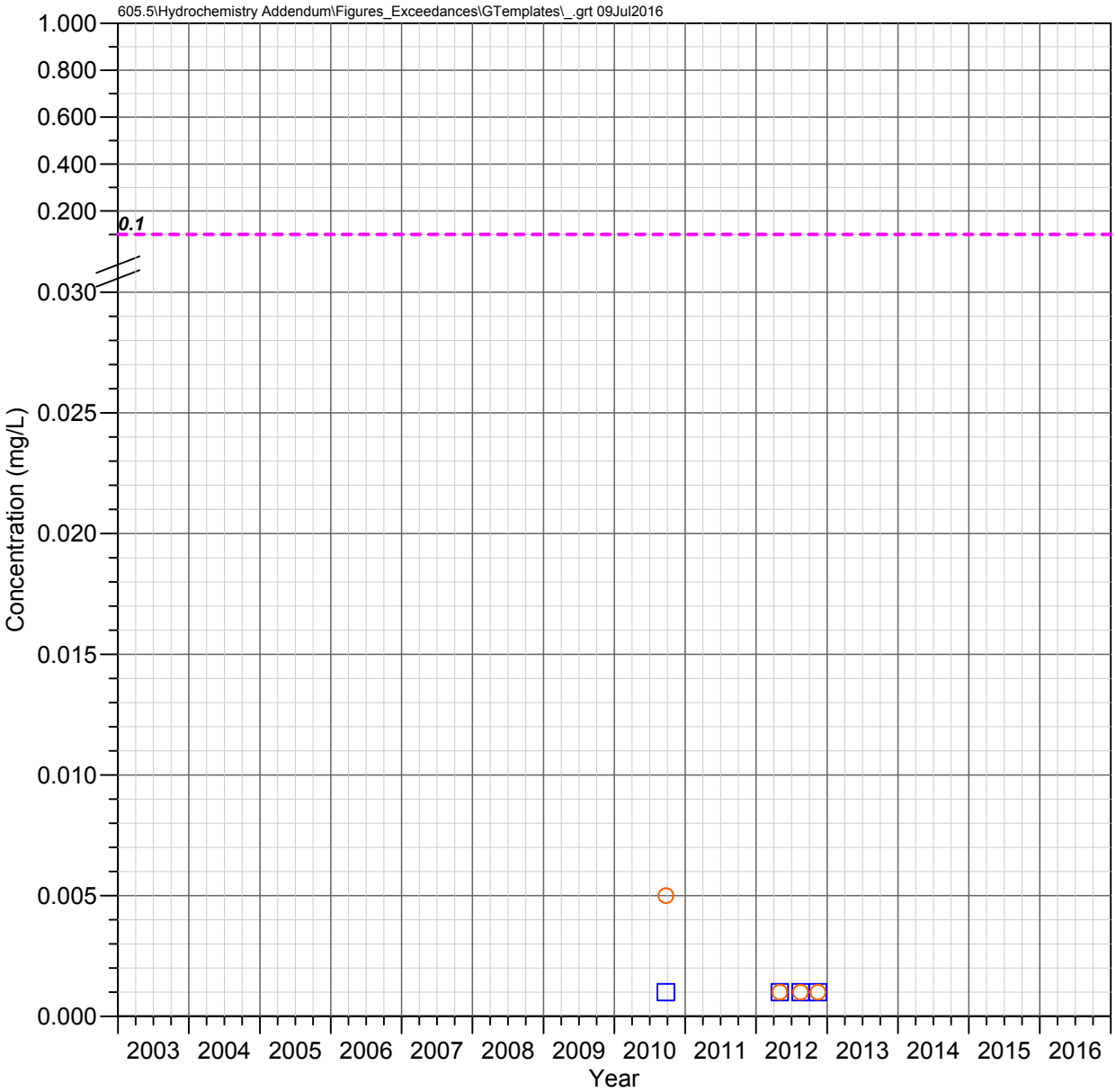


FIGURE E-638. SILVER CONCENTRATIONS OBSERVED AT HRES-10, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-11
Apache Leap Tuff Aquifer

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.1 mg/L)

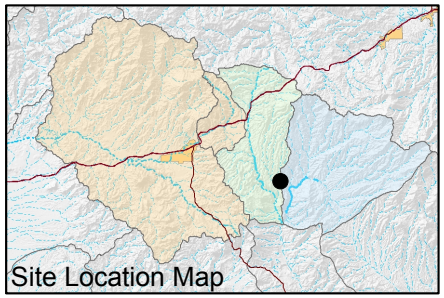
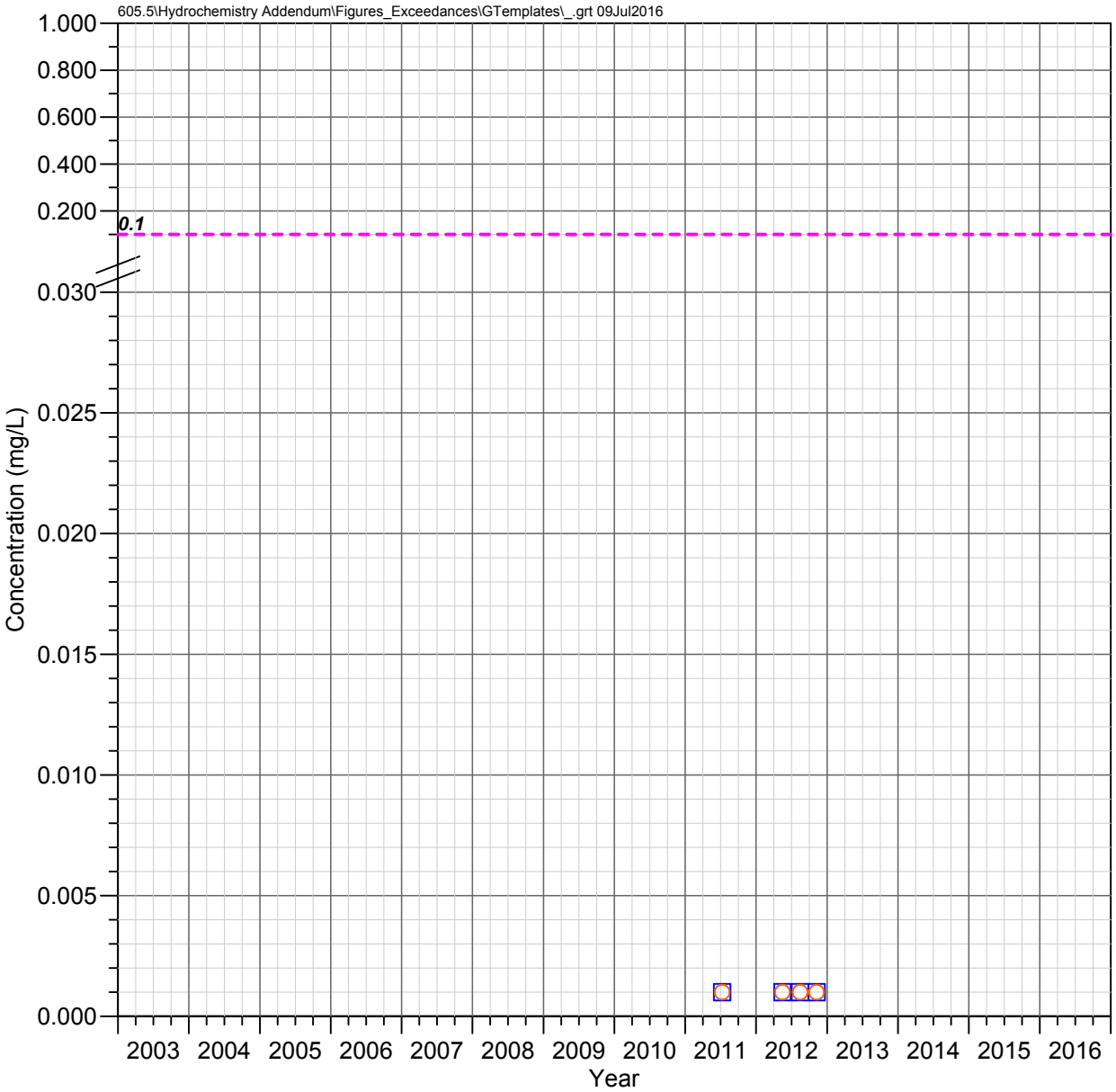


FIGURE E-639. SILVER CONCENTRATIONS OBSERVED AT HRES-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-12
Apache Leap Tuff Aquifer

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.1 mg/L)

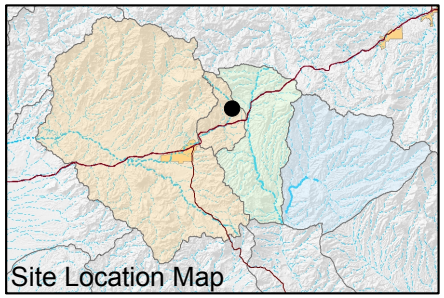
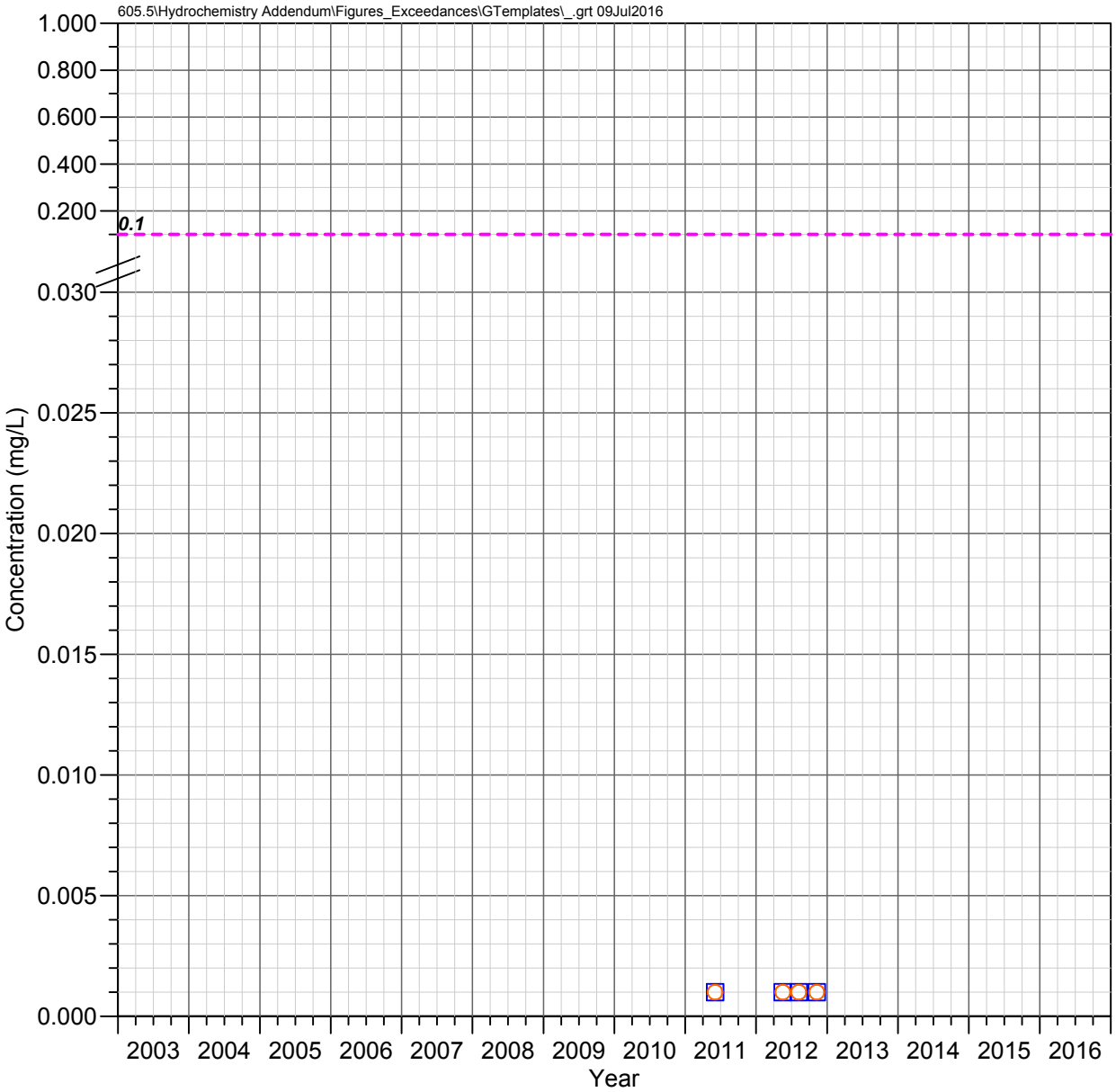


FIGURE E-640. SILVER CONCENTRATIONS OBSERVED AT HRES-12, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-13
Apache Leap Tuff Aquifer

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.1 mg/L)

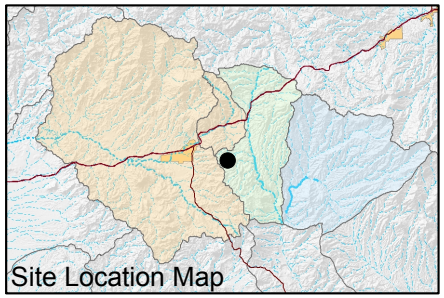
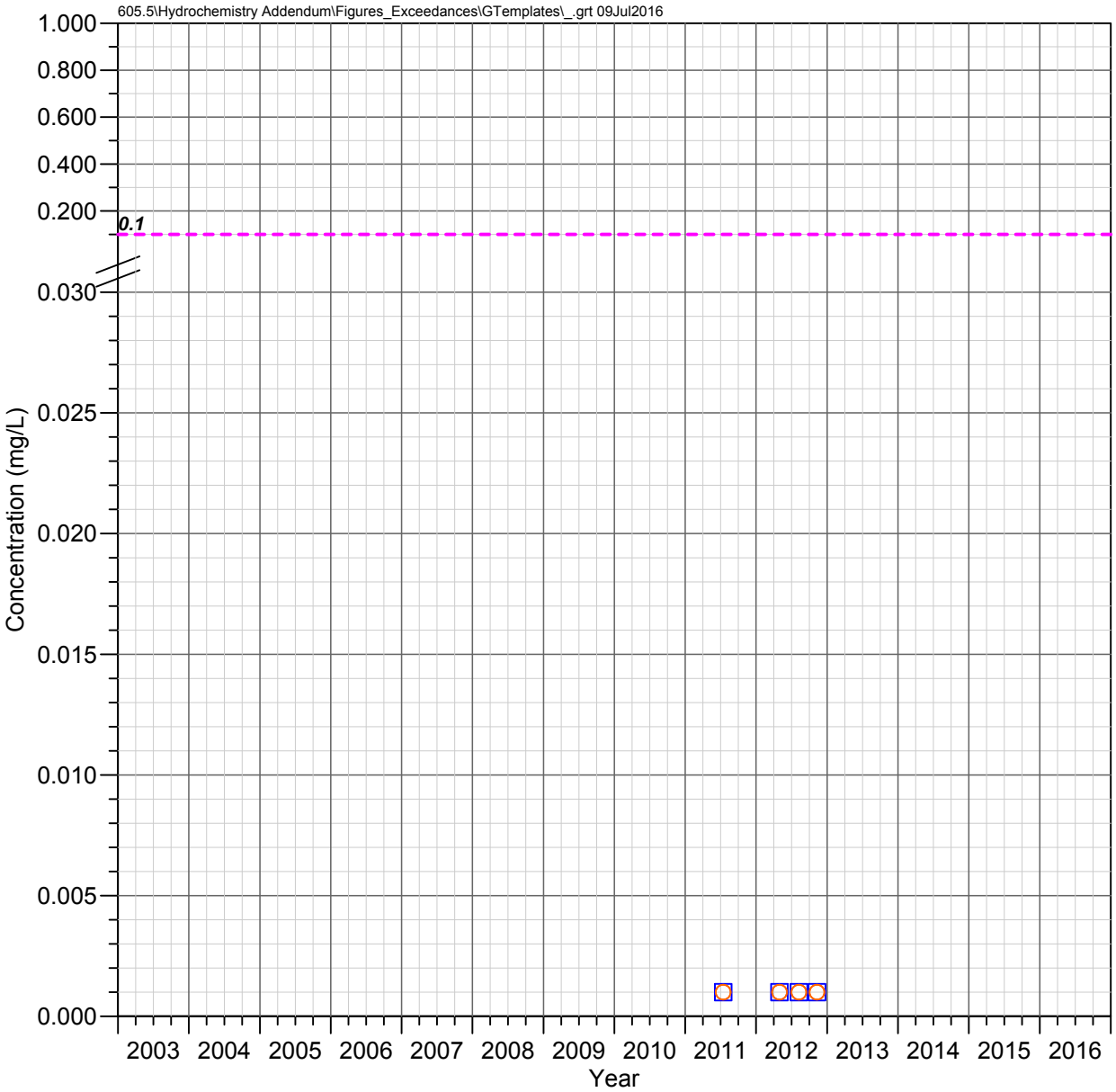


FIGURE E-641. SILVER CONCENTRATIONS OBSERVED AT HRES-13, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-14
Apache Leap Tuff Aquifer

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.1 mg/L)

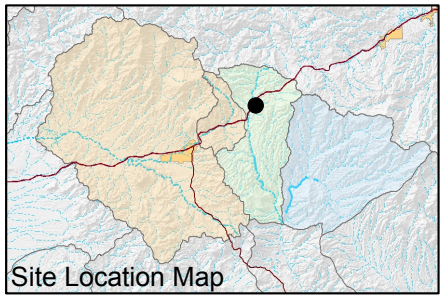
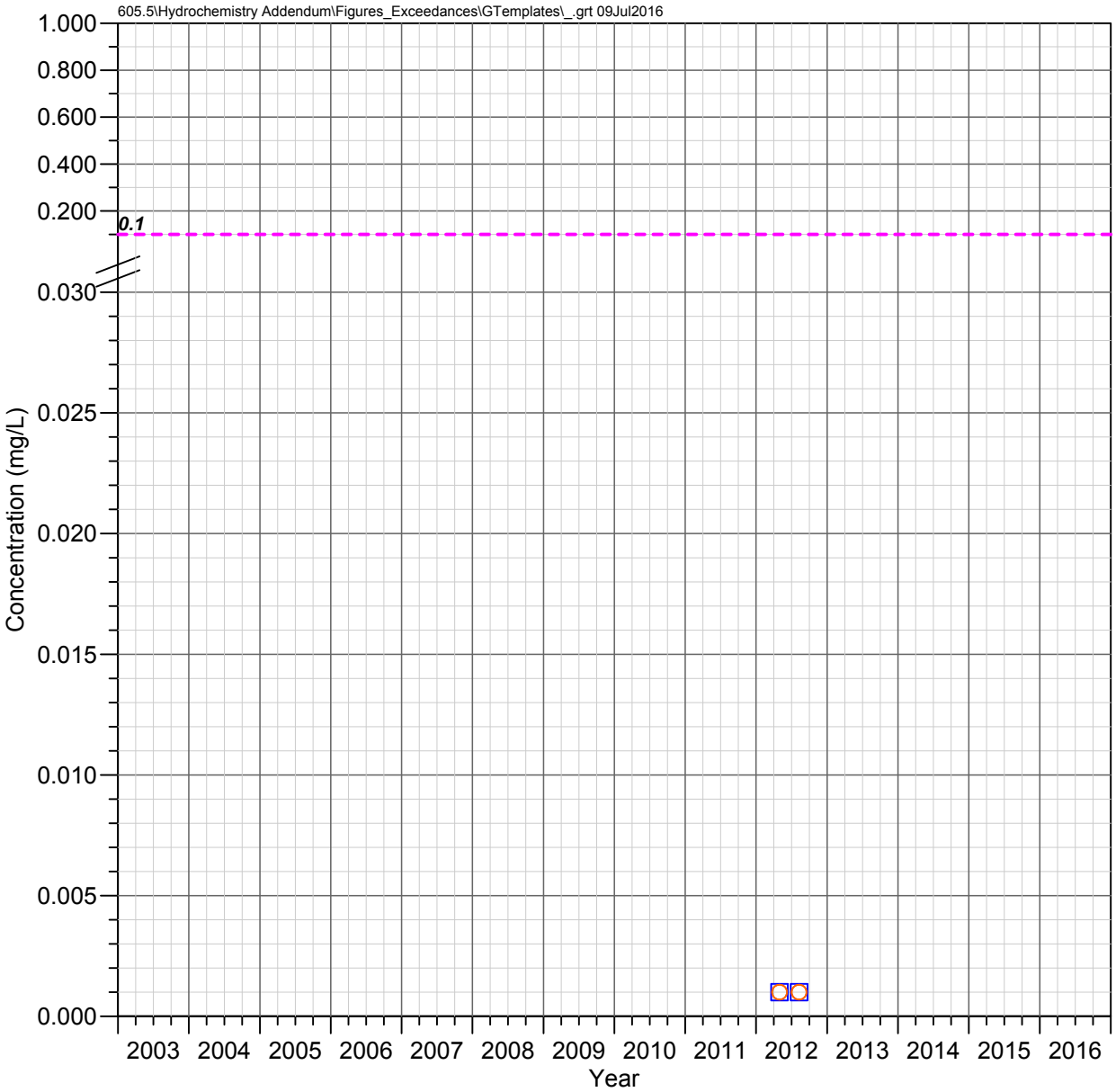


FIGURE E-642. SILVER CONCENTRATIONS OBSERVED AT HRES-14, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-15
Apache Leap Tuff Aquifer

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.1 mg/L)

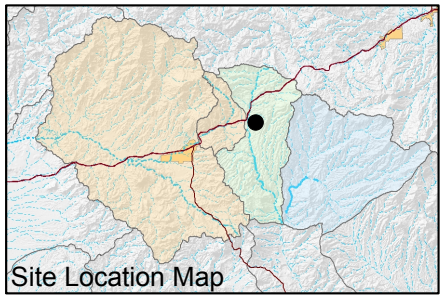
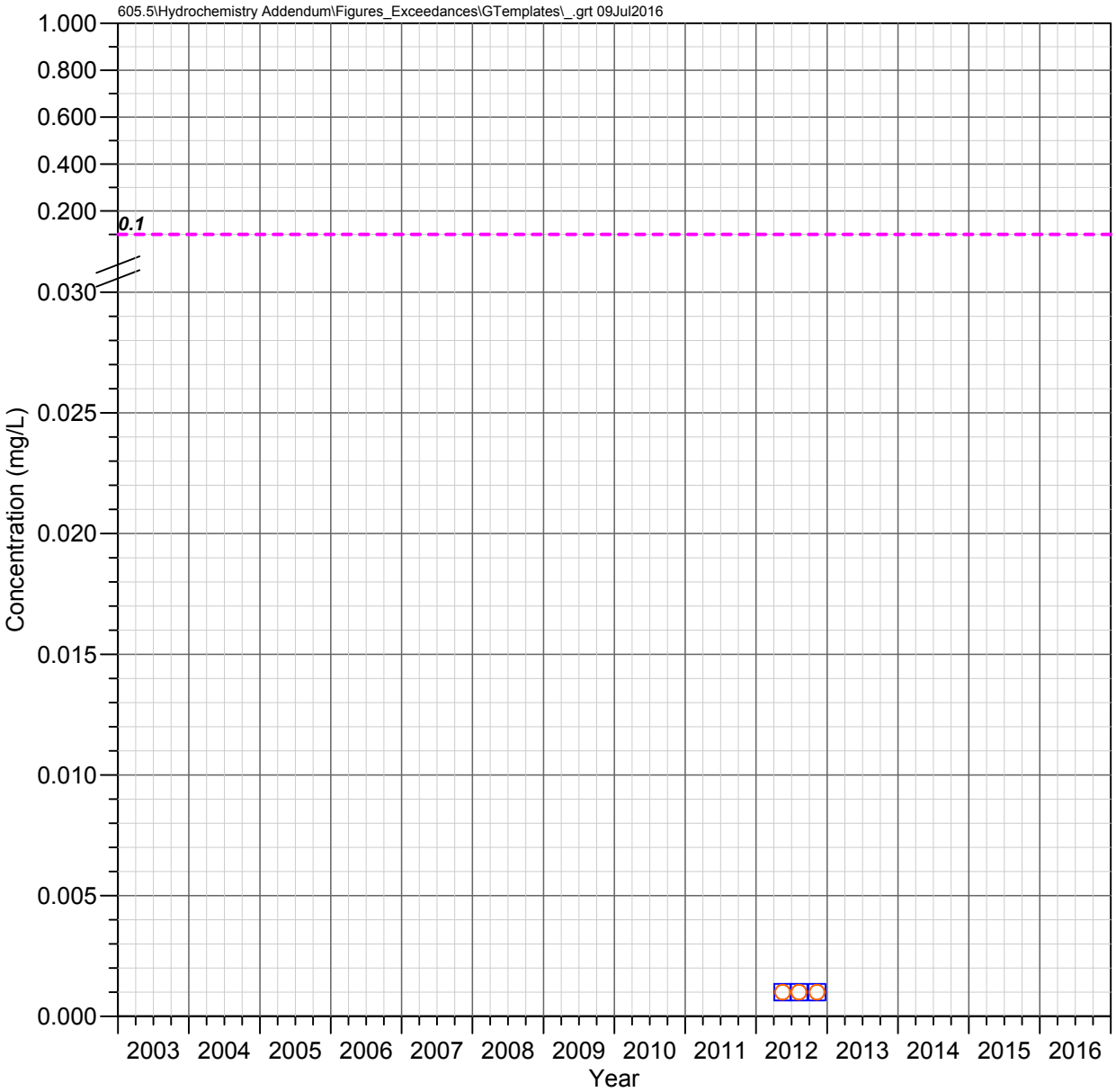


FIGURE E-643. SILVER CONCENTRATIONS OBSERVED AT HRES-15, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-17
Apache Leap Tuff Aquifer

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.1 mg/L)

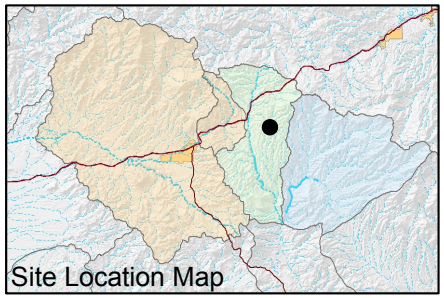
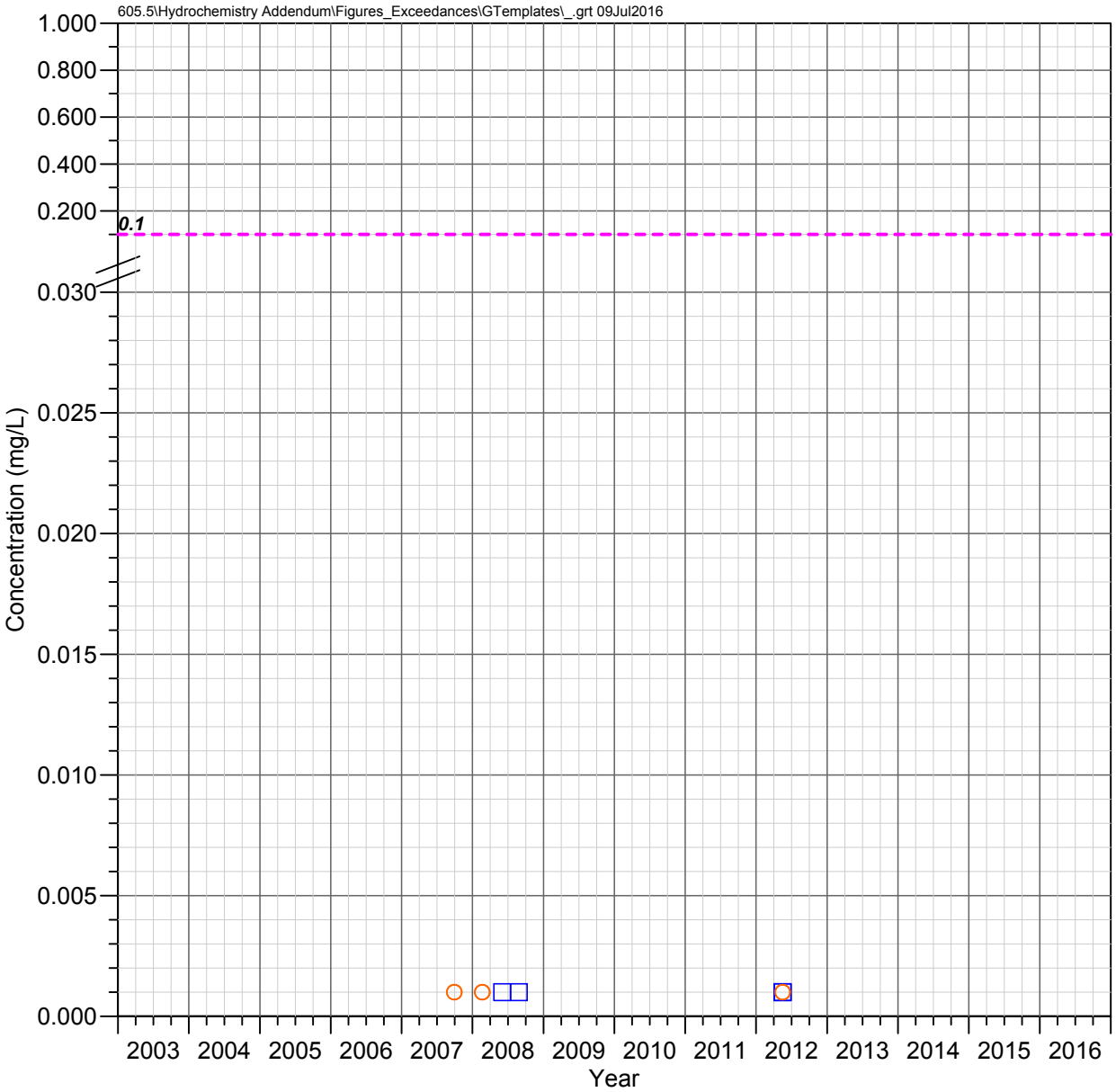


FIGURE E-644. SILVER CONCENTRATIONS OBSERVED AT HRES-17, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MJ-11
Apache Leap Tuff Aquifer

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.1 mg/L)

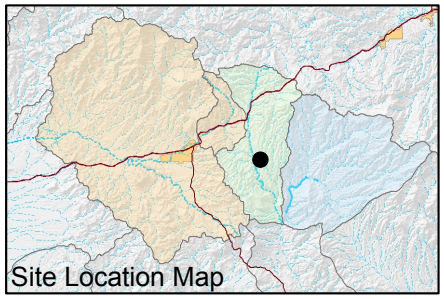
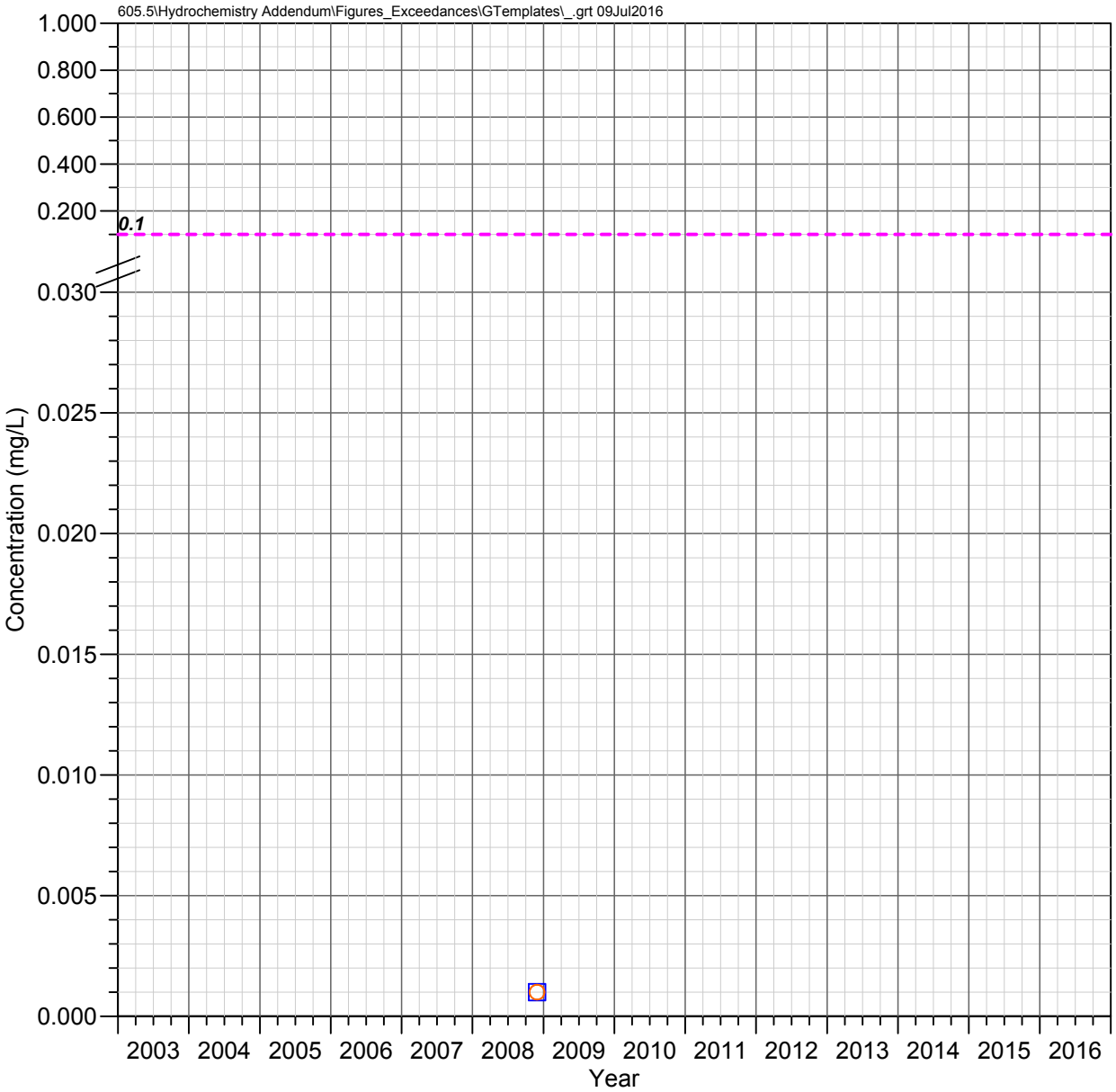


FIGURE E-645. SILVER CONCENTRATIONS OBSERVED AT MJ-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-01
Deep Groundwater System

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.1 mg/L)

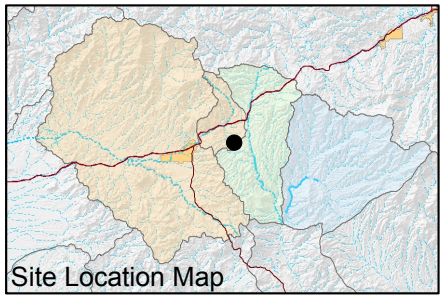
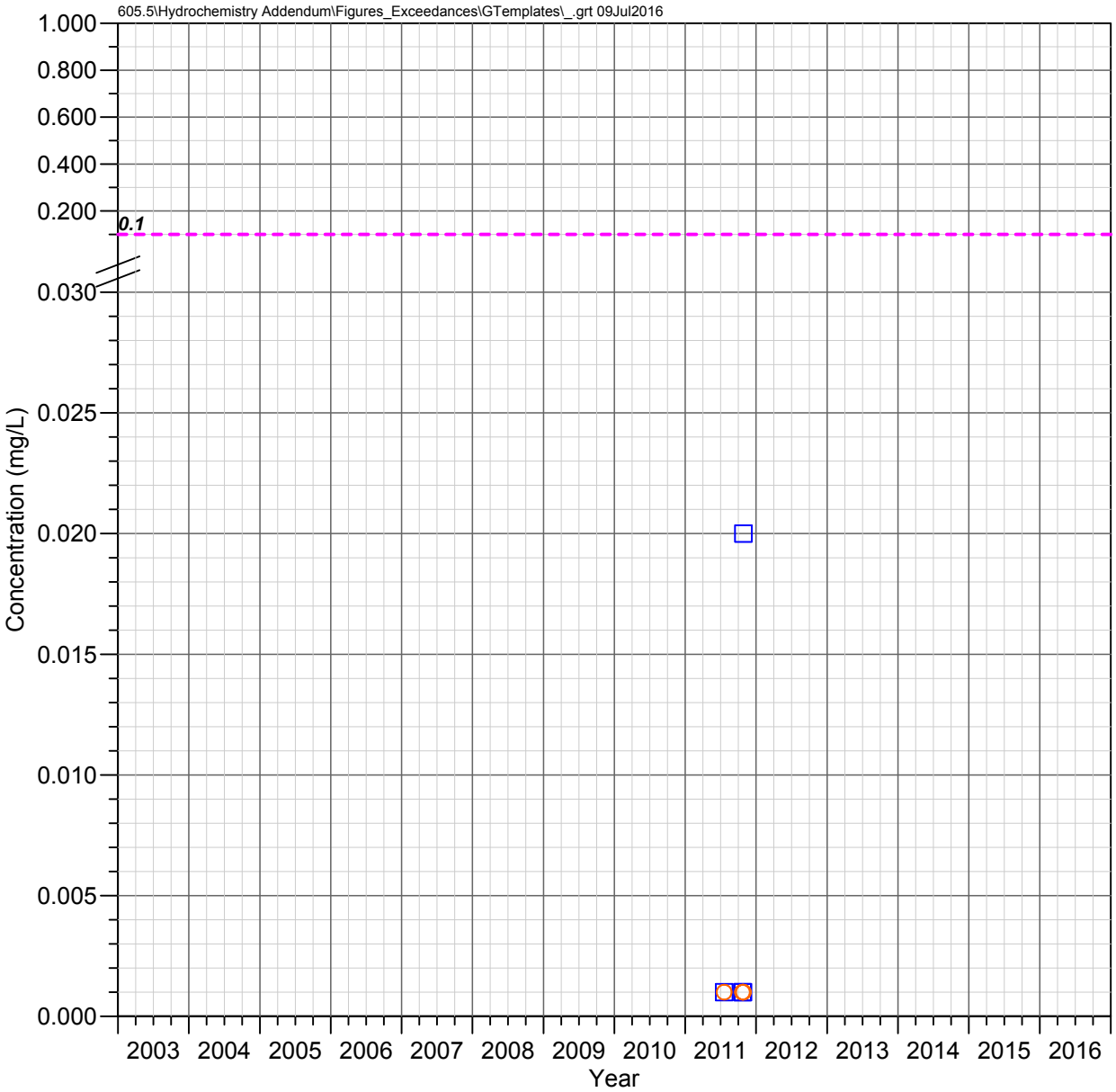


FIGURE E-646. SILVER CONCENTRATIONS OBSERVED AT DHRES-01, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-02
Deep Groundwater System

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- EPA Secondary MCL (UNS, 0.1 mg/L)

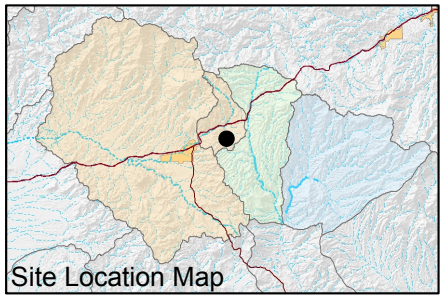
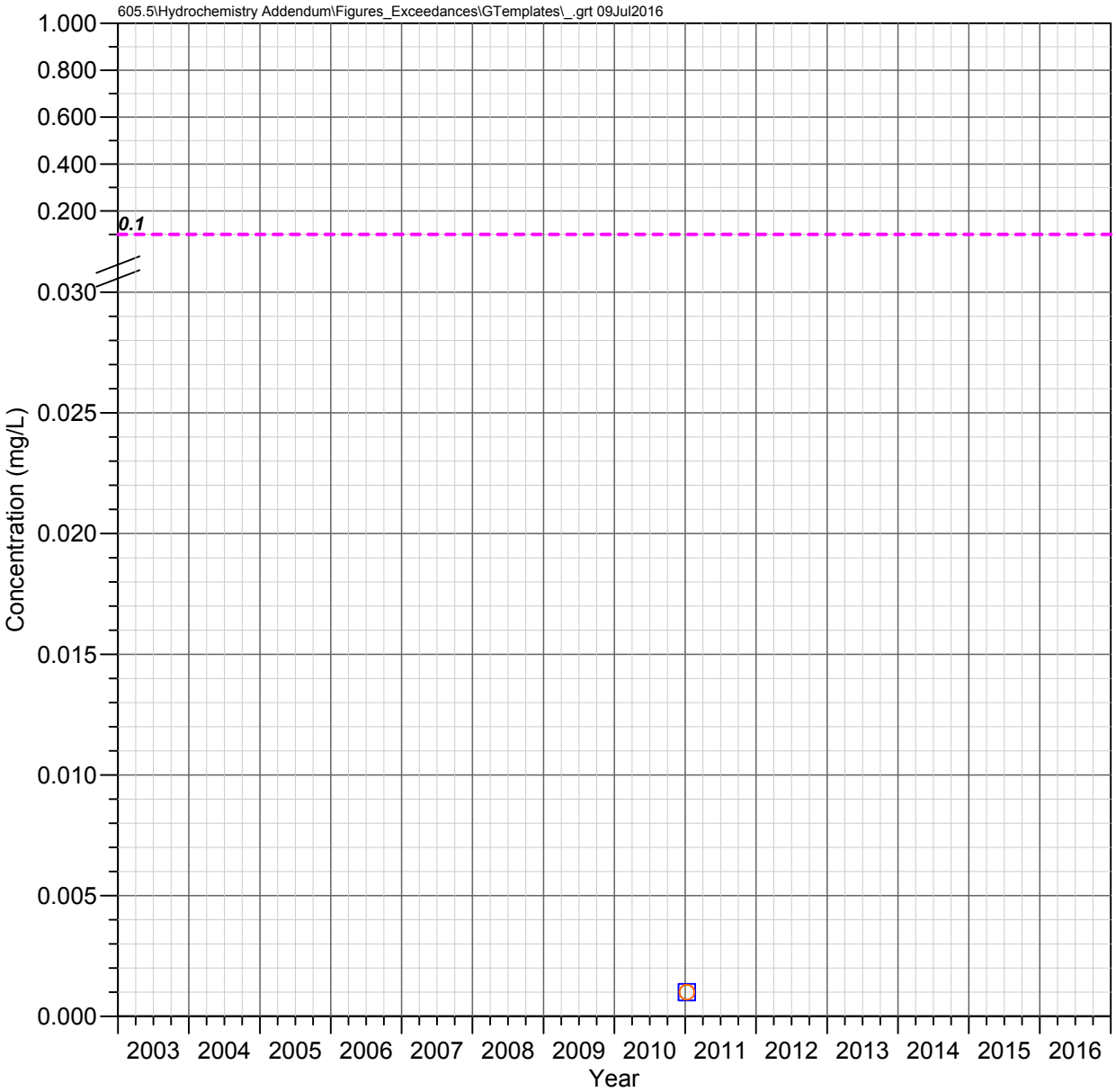


FIGURE E-647. SILVER CONCENTRATIONS OBSERVED AT DHRES-02, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-06
Deep Groundwater System

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.1 mg/L)

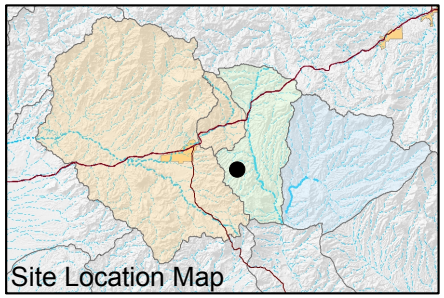
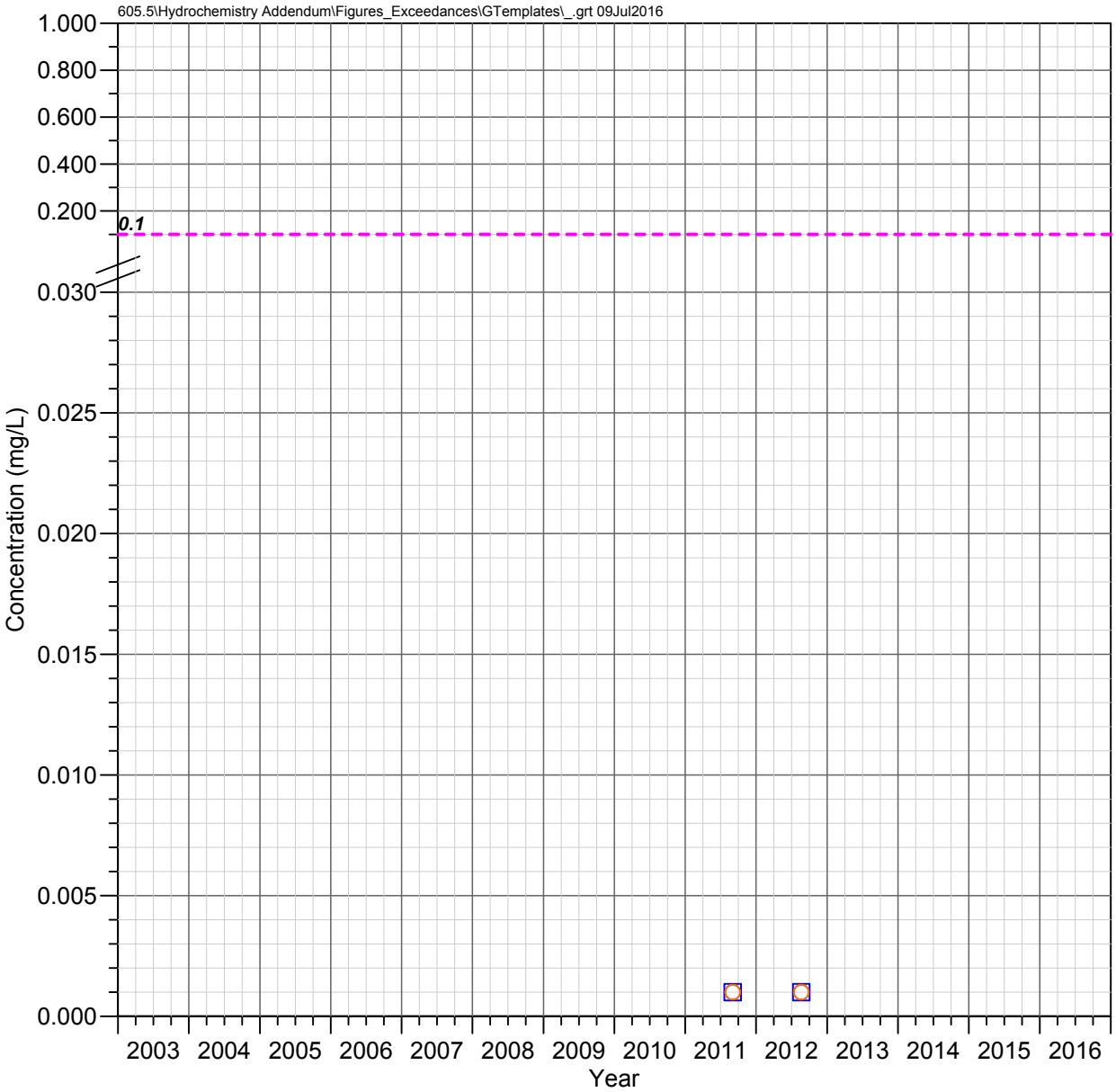


FIGURE E-648. SILVER CONCENTRATIONS OBSERVED AT DHRES-06, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-09
Deep Groundwater System

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.1 mg/L)

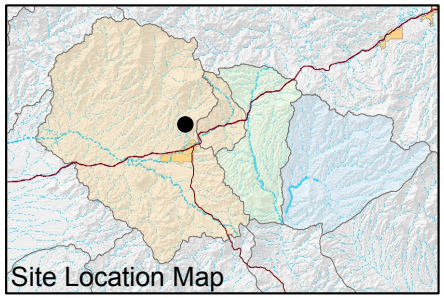
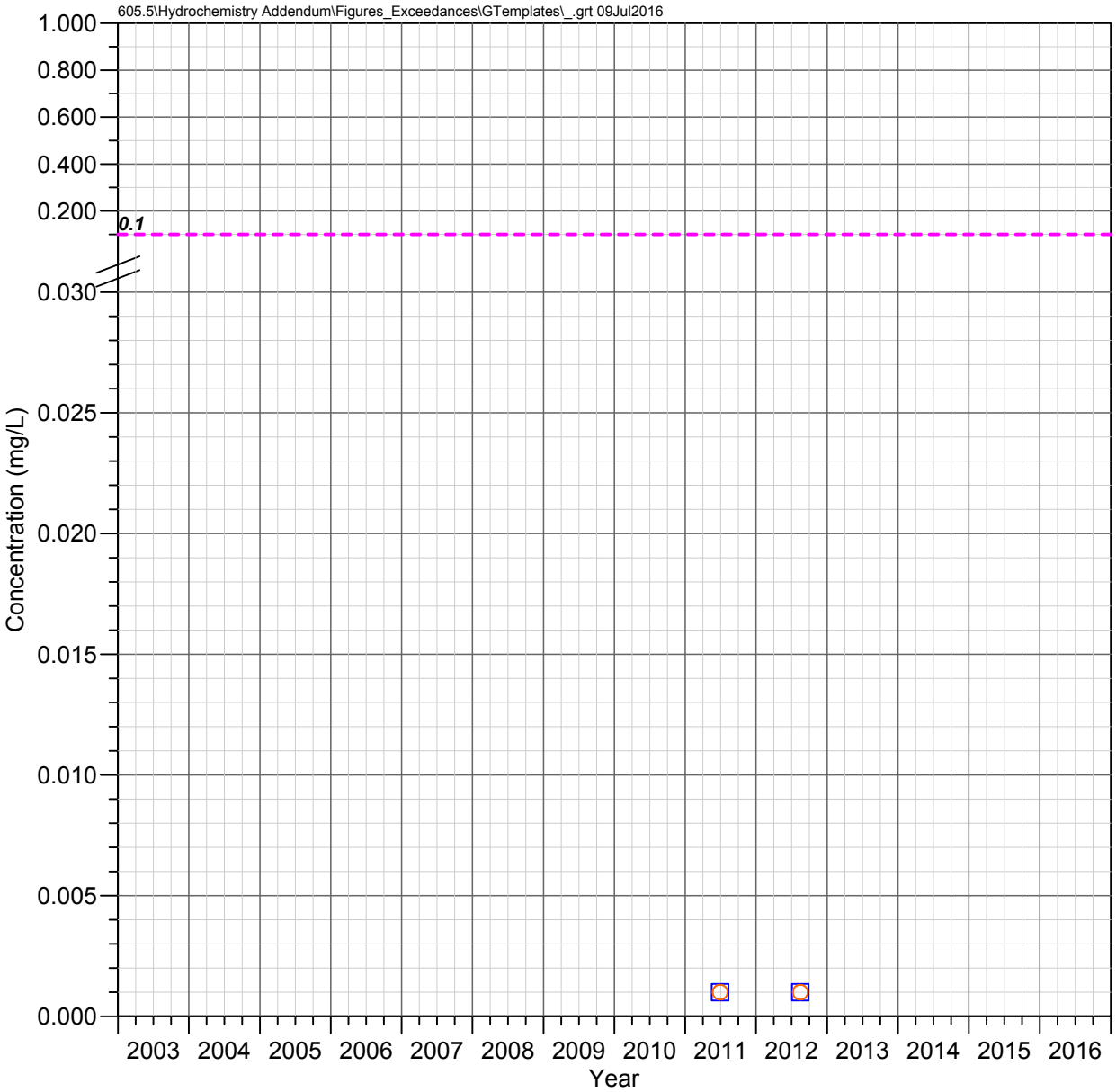


FIGURE E-649. SILVER CONCENTRATIONS OBSERVED AT DHRES-09, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-11
Deep Groundwater System

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.1 mg/L)

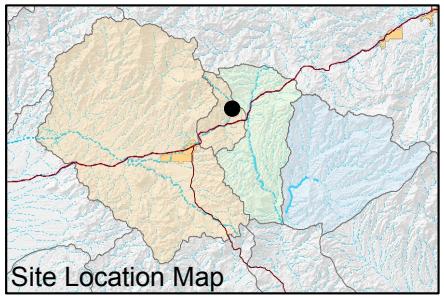
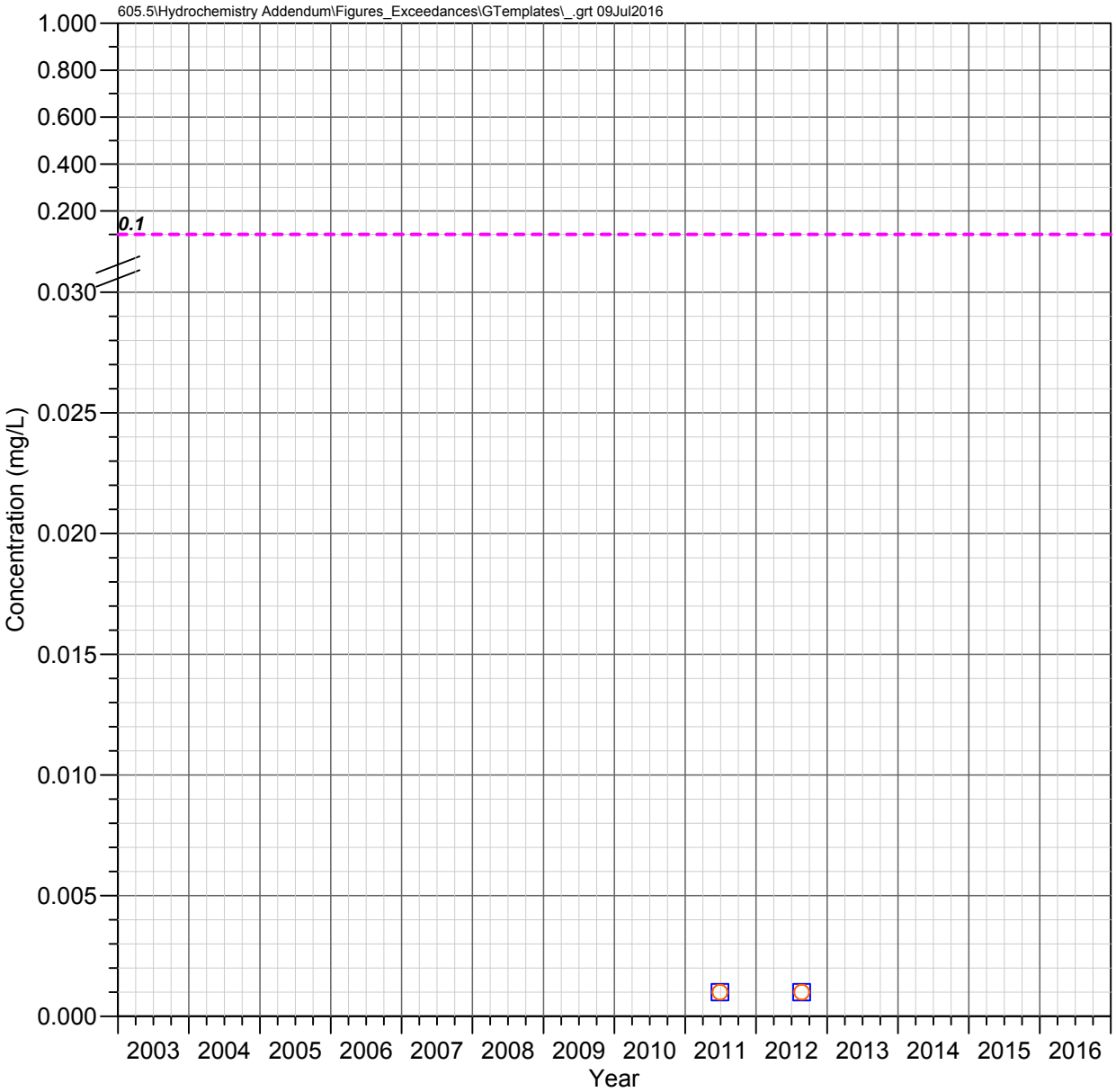


FIGURE E-650. SILVER CONCENTRATIONS OBSERVED AT DHRES-11, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-13
Deep Groundwater System

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.1 mg/L)

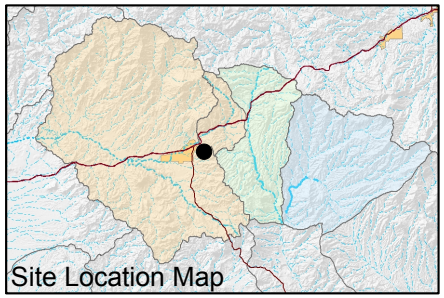
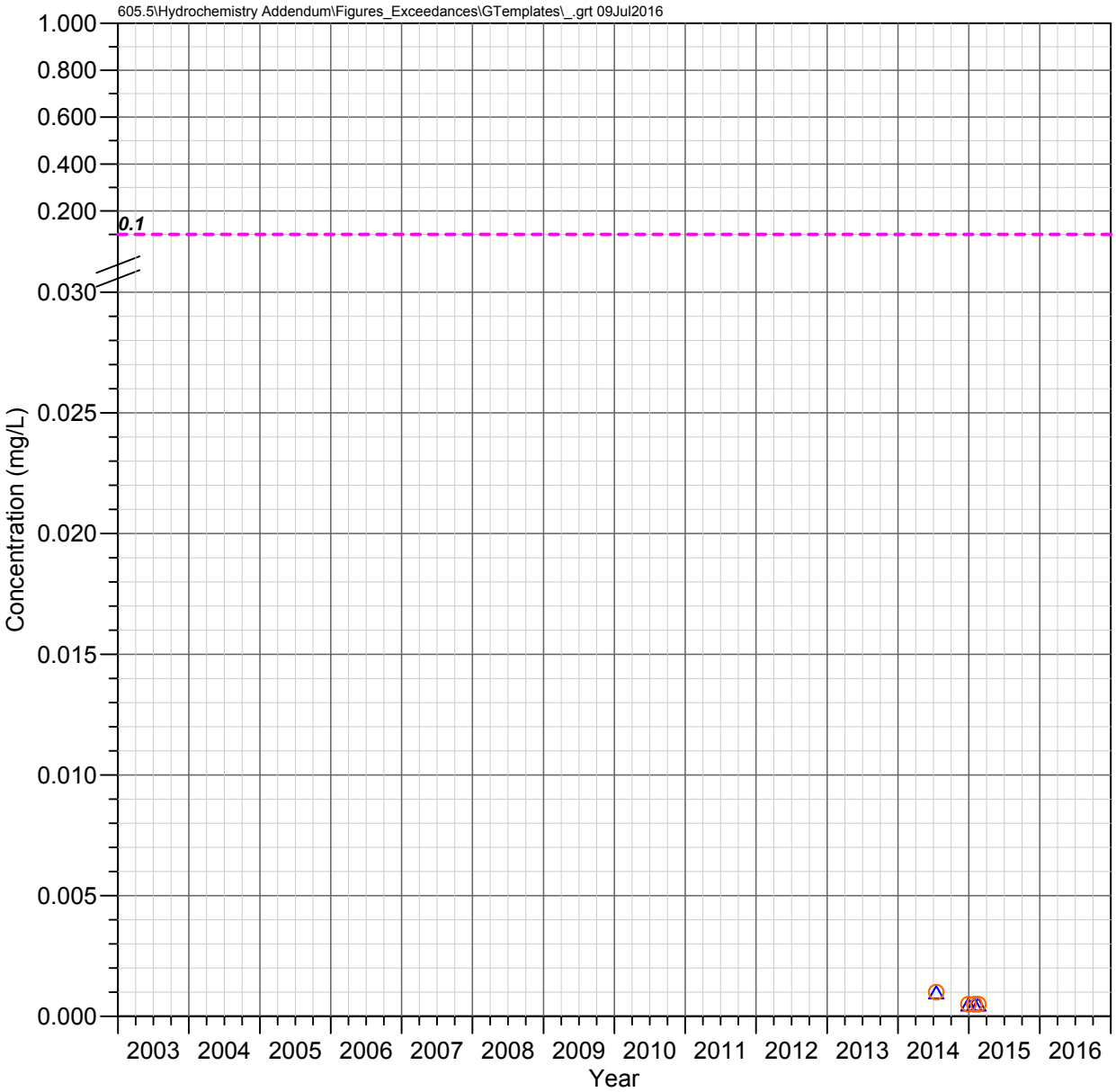


FIGURE E-651. SILVER CONCENTRATIONS OBSERVED AT DHRES-13, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-15
Deep Groundwater System

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 0.1 mg/L)

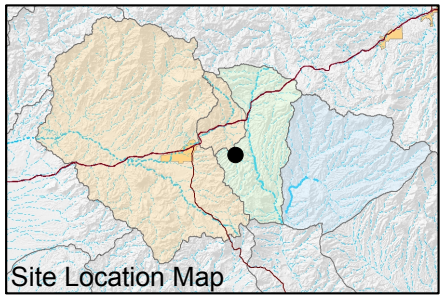
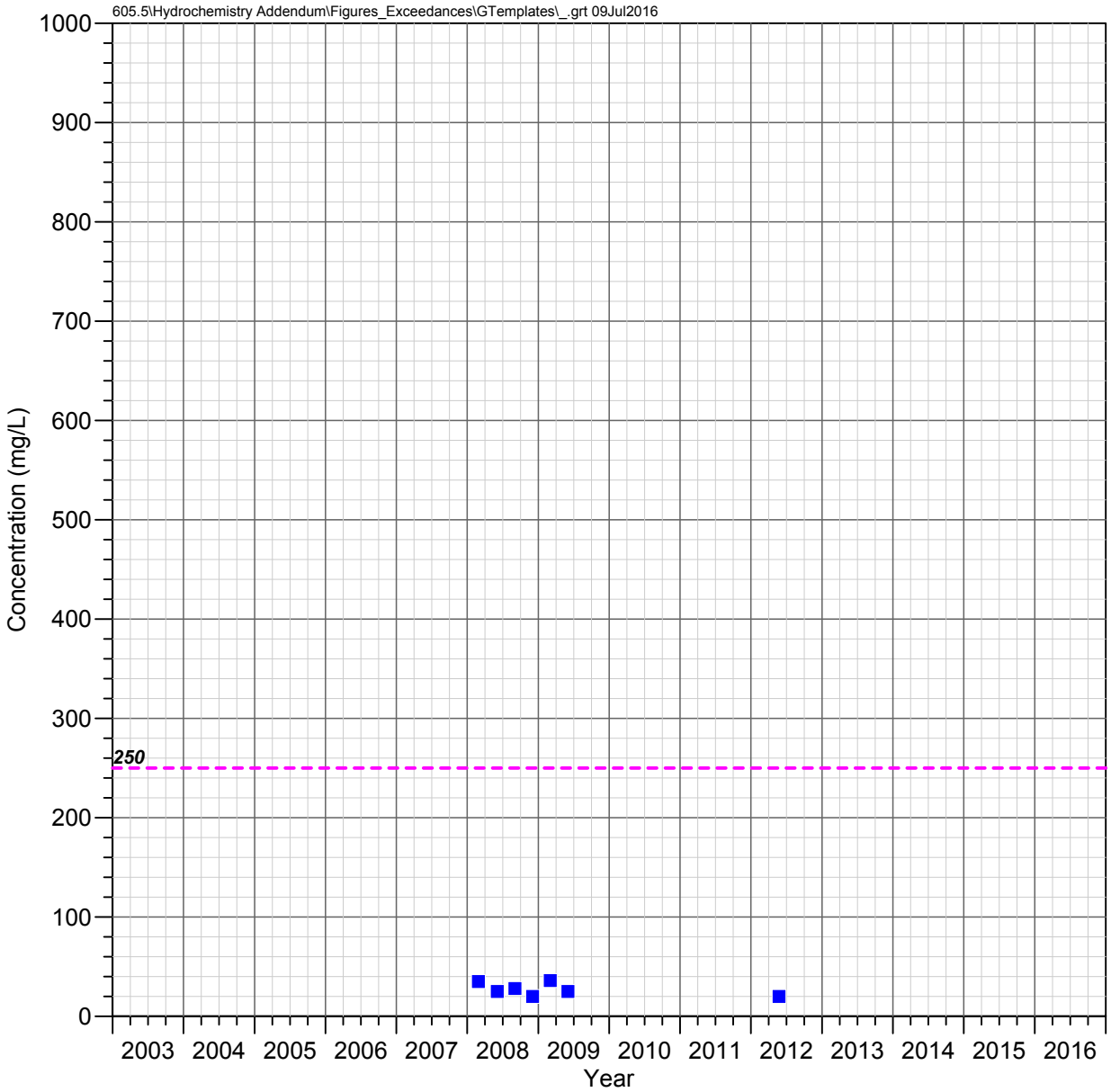


FIGURE E-652. SILVER CONCENTRATIONS OBSERVED AT DHRES-15, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Hackberry Windmill Well
Shallow Groundwater System

SULFATE

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

EPA Secondary MCL (UNS, 250 mg/L)

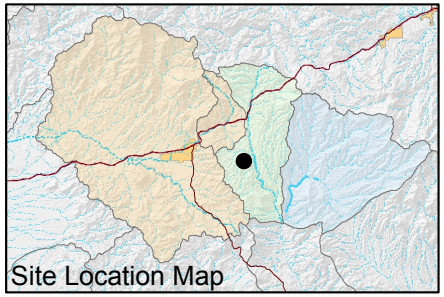
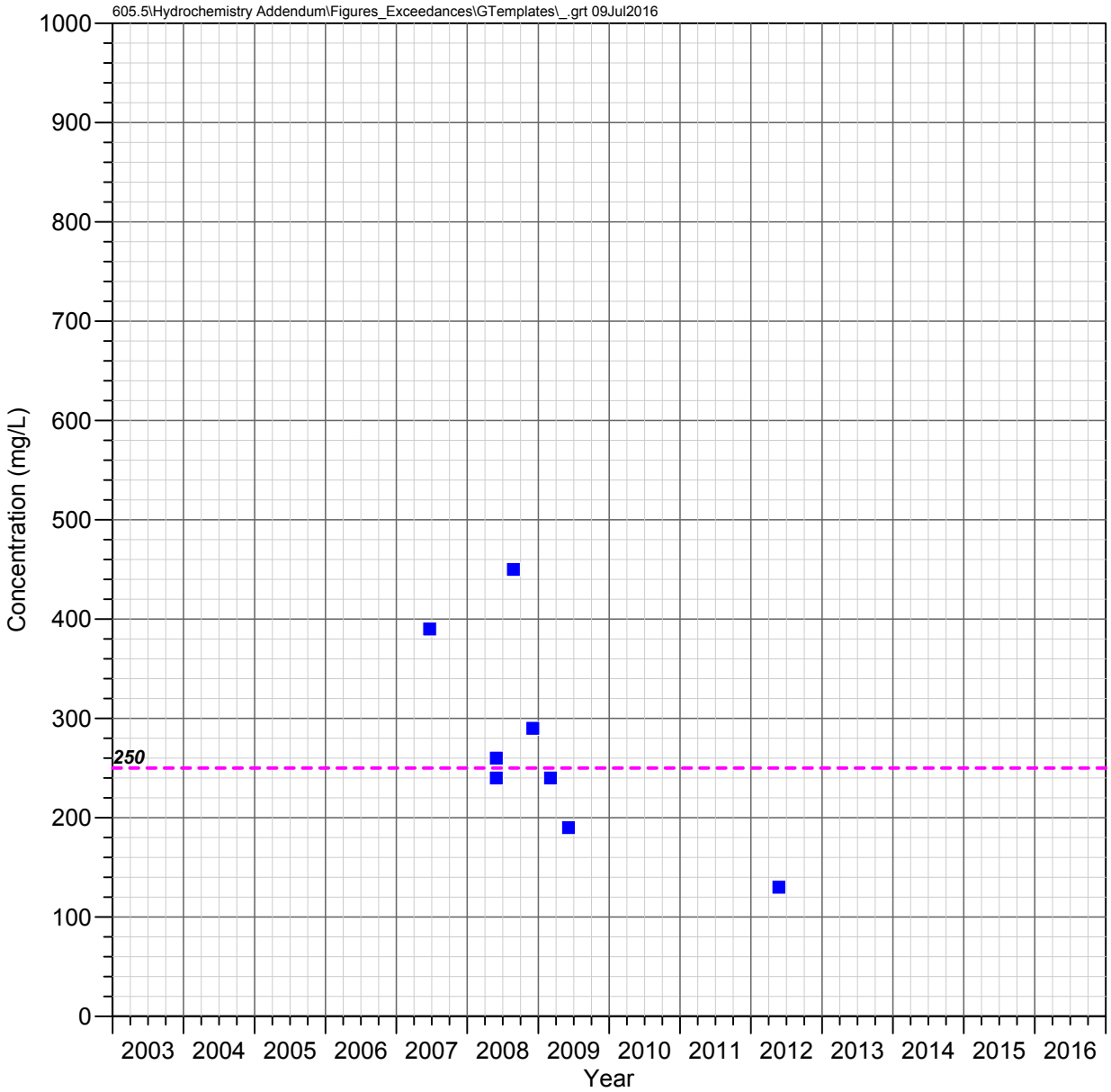


FIGURE E-653. SULFATE CONCENTRATIONS OBSERVED AT HACKBERRY WINDMILL WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



JI Ranch Corral Well
Shallow Groundwater System

SULFATE

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

EPA Secondary MCL (UNS, 250 mg/L)

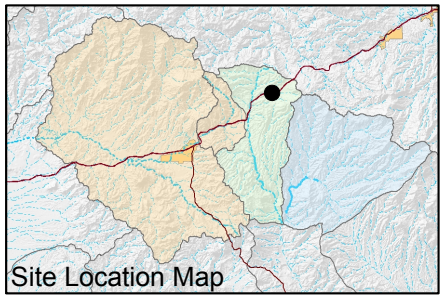
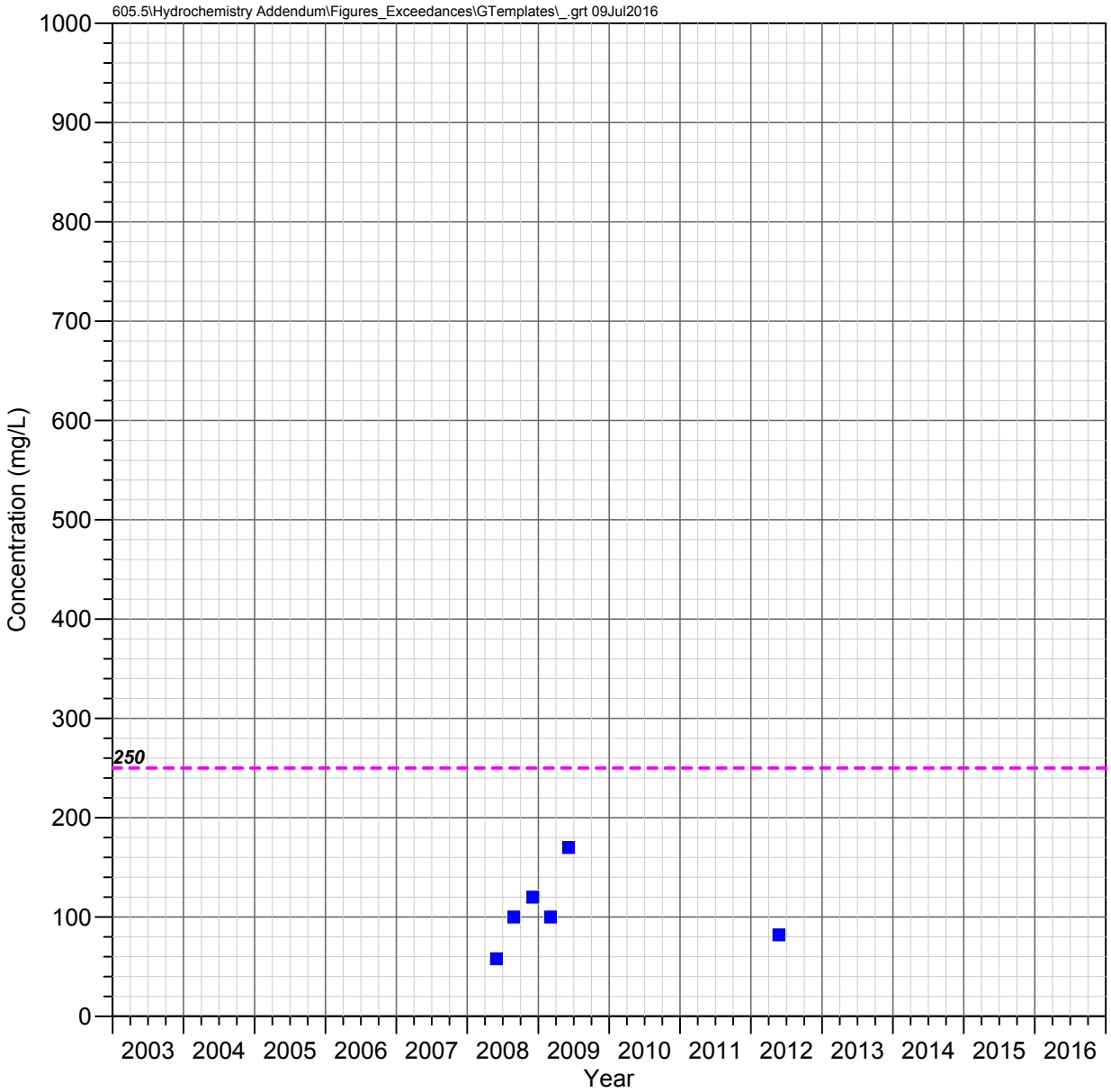


FIGURE E-654. SULFATE CONCENTRATIONS OBSERVED AT JI RANCH CORRAL WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



JI Ranch Middle Well
Shallow Groundwater System

SULFATE

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

EPA Secondary MCL (UNS, 250 mg/L)

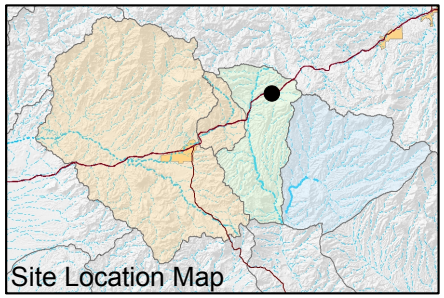
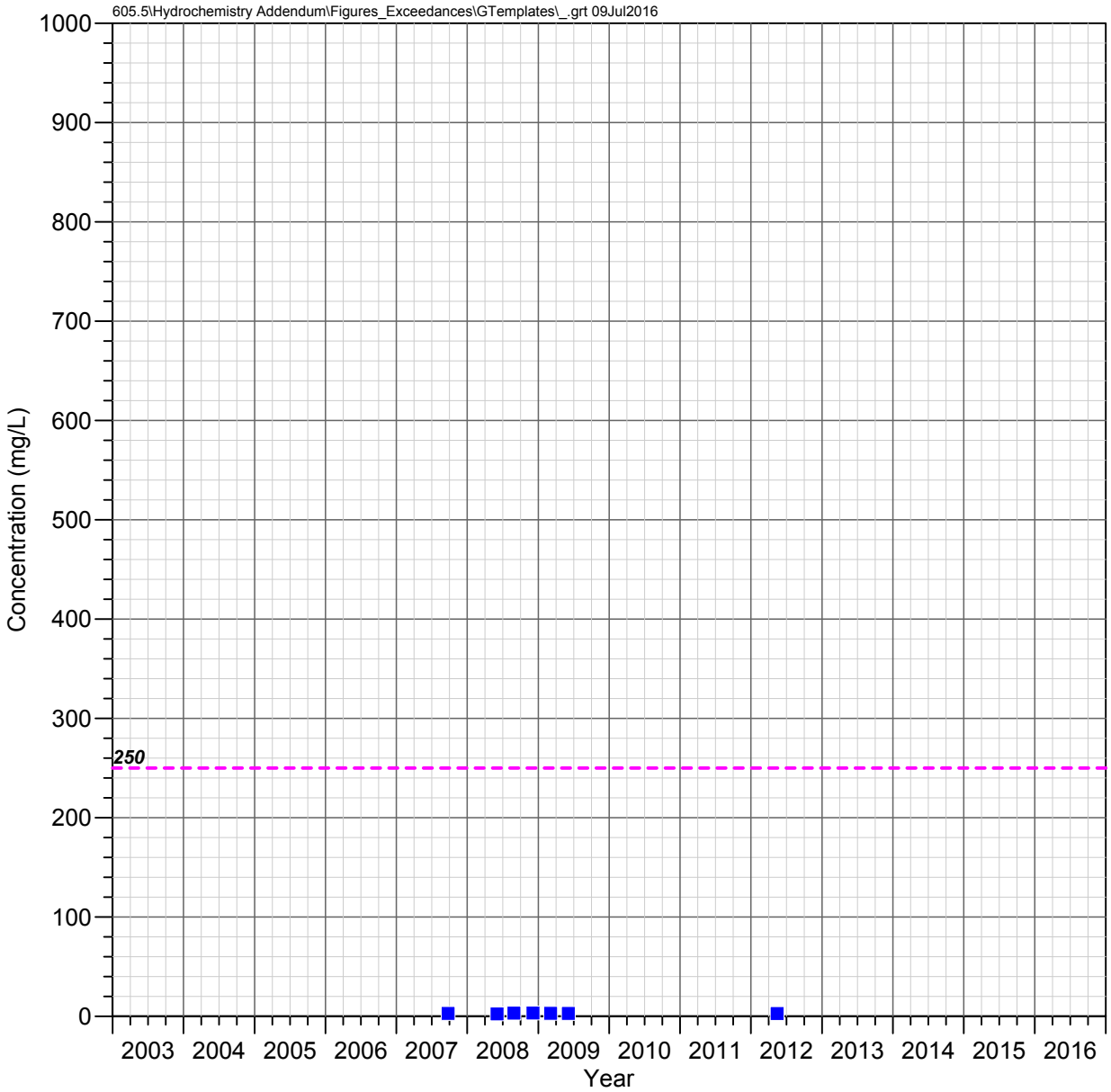


FIGURE E-655. SULFATE CONCENTRATIONS OBSERVED AT JI RANCH MIDDLE WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



A-06
Apache Leap Tuff Aquifer

SULFATE

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

EPA Secondary MCL (UNS, 250 mg/L)

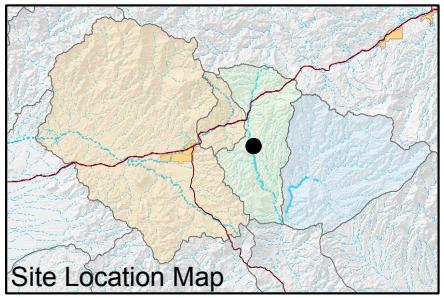
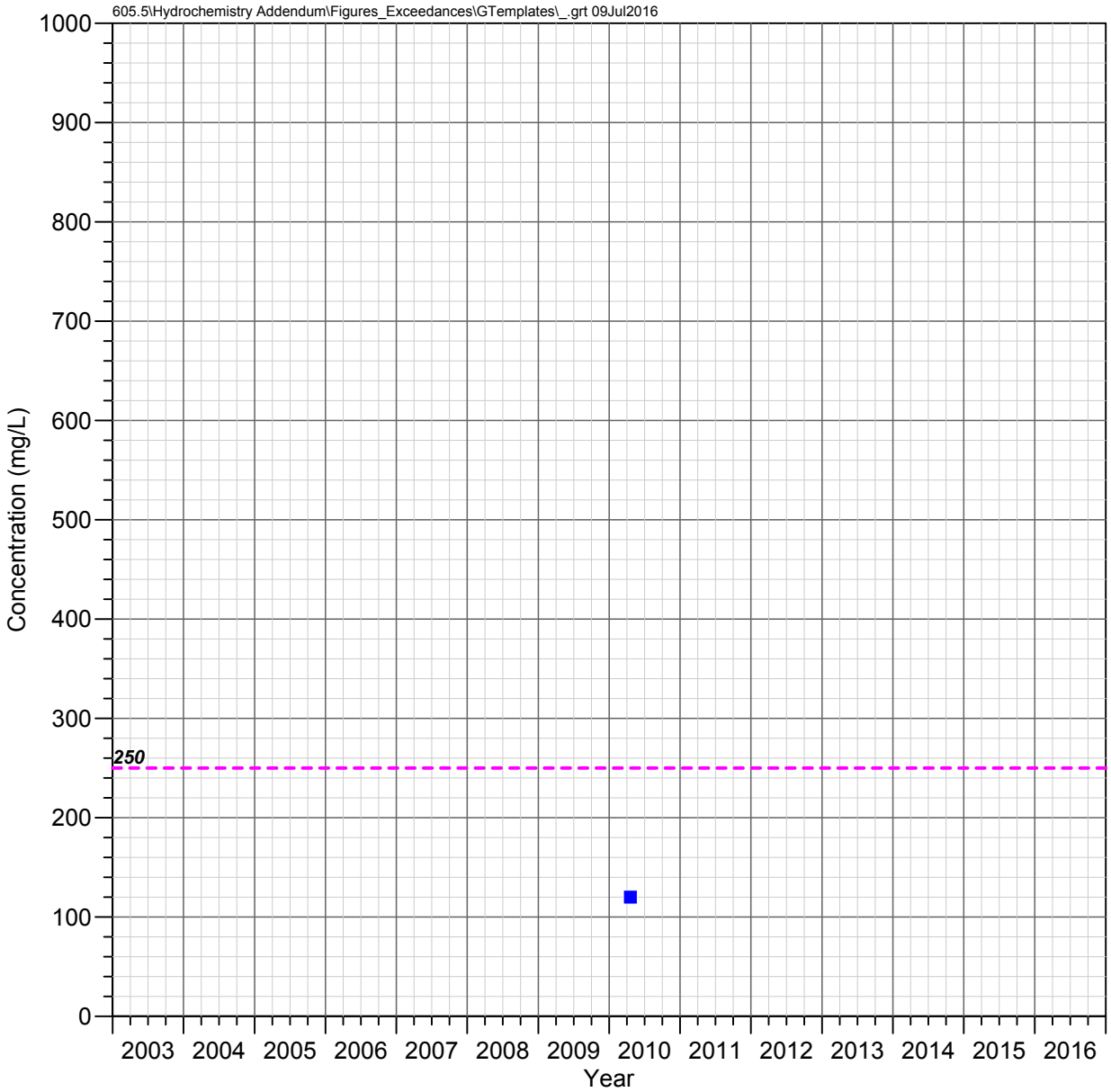


FIGURE E-656. SULFATE CONCENTRATIONS OBSERVED AT A-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



CT Well
Apache Leap Tuff Aquifer

SULFATE

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

EPA Secondary MCL (UNS, 250 mg/L)

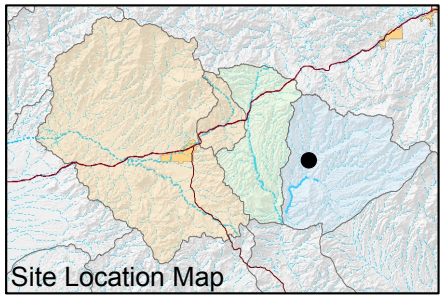
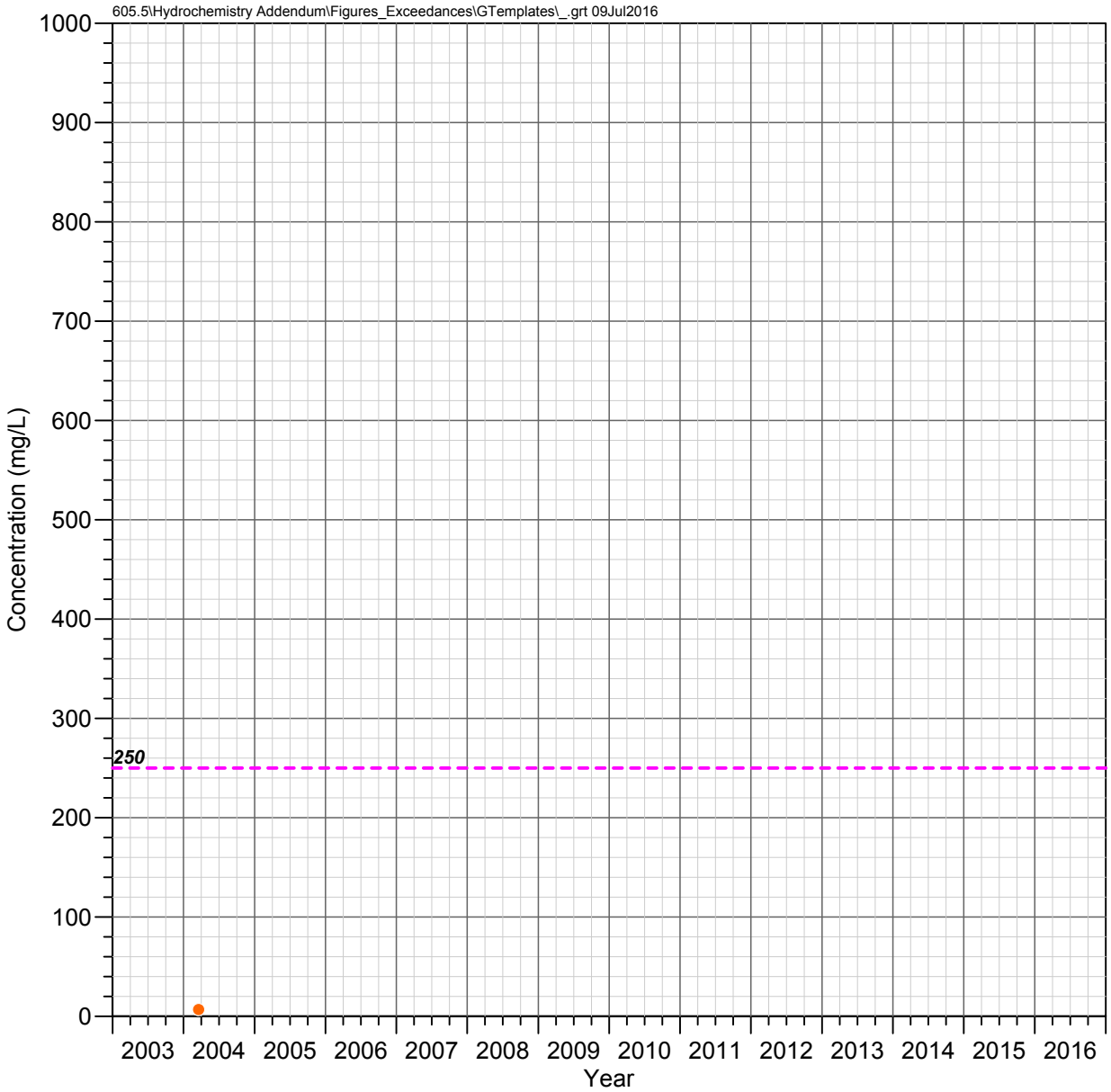


FIGURE E-657. SULFATE CONCENTRATIONS OBSERVED AT CT WELL, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-01
Apache Leap Tuff Aquifer

SULFATE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 250 mg/L)

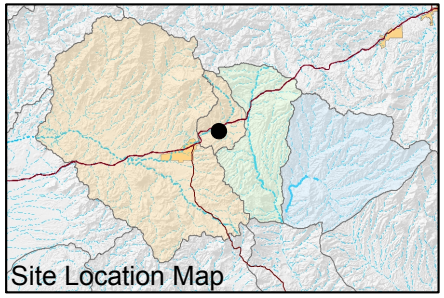
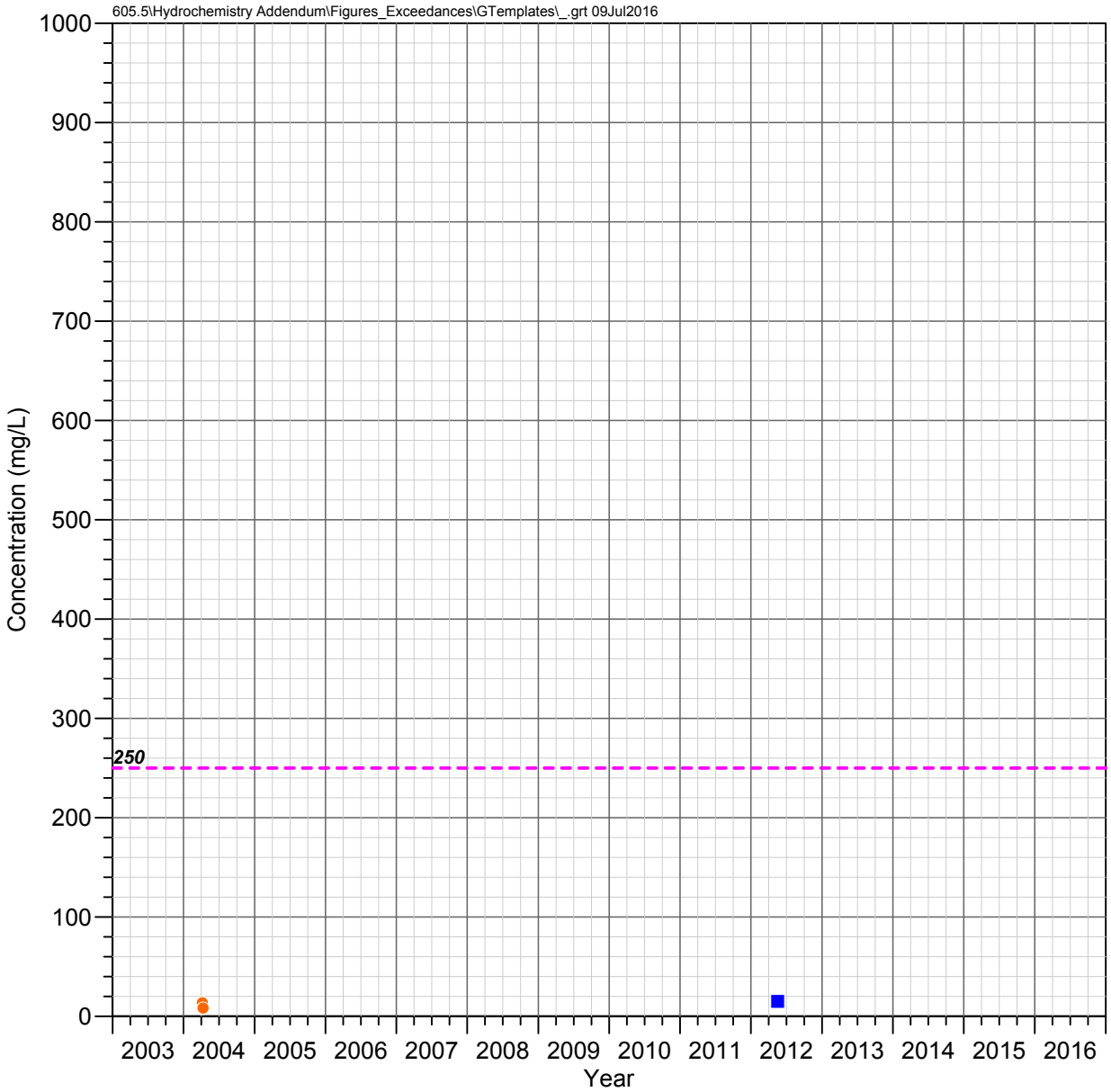


FIGURE E-658. SULFATE CONCENTRATIONS OBSERVED AT HRES-01, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-02
Apache Leap Tuff Aquifer

SULFATE

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

EPA Secondary MCL (UNS, 250 mg/L)

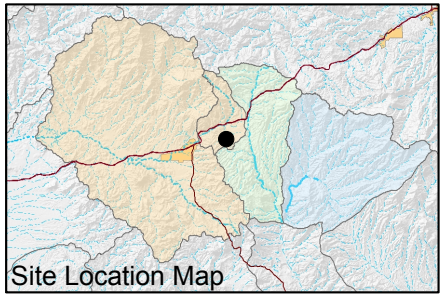
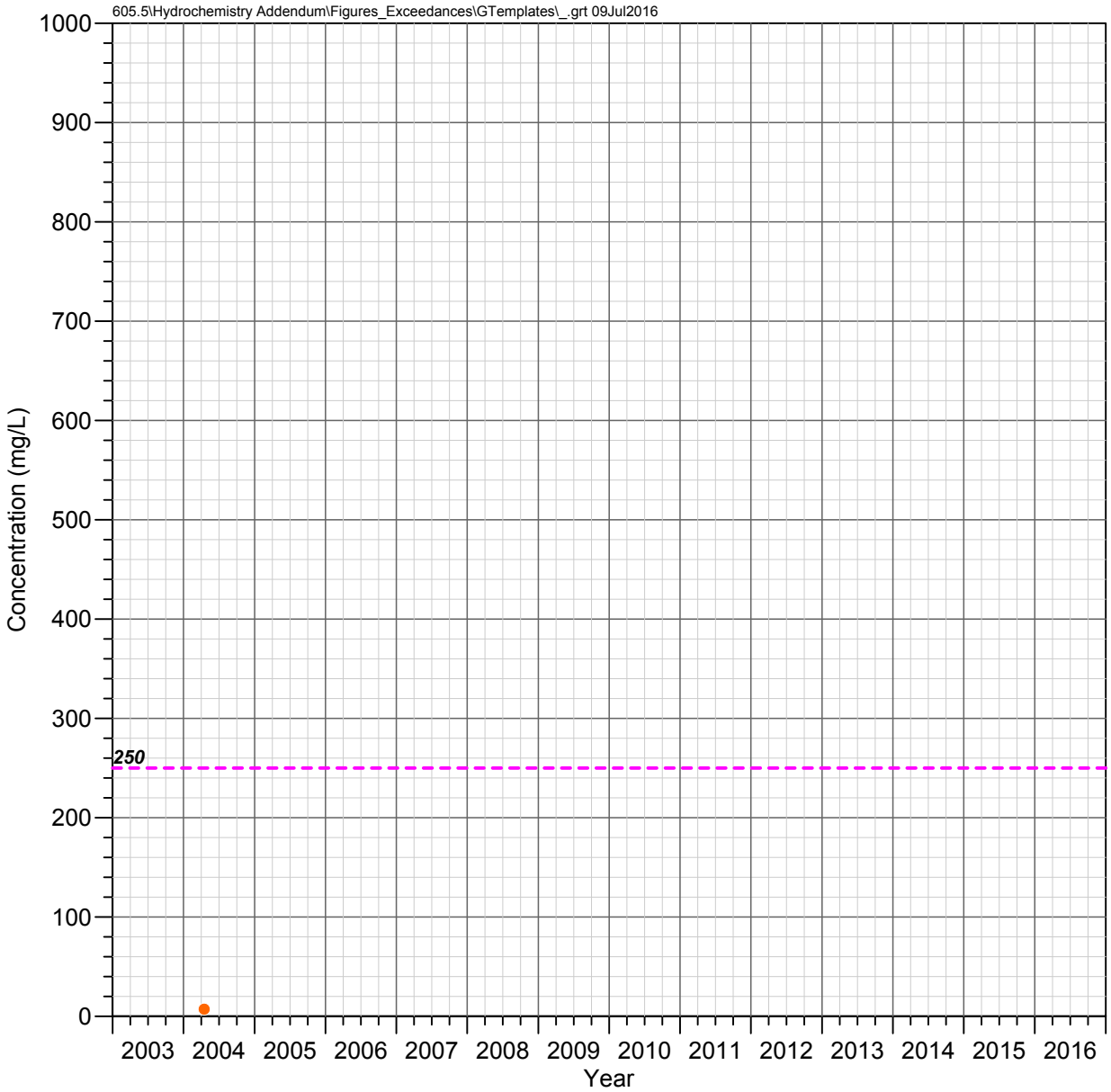


FIGURE E-659. SULFATE CONCENTRATIONS OBSERVED AT HRES-02, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-03d
Apache Leap Tuff Aquifer

SULFATE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 250 mg/L)

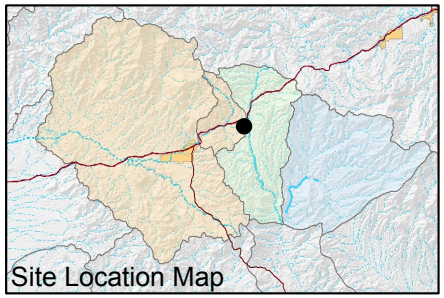
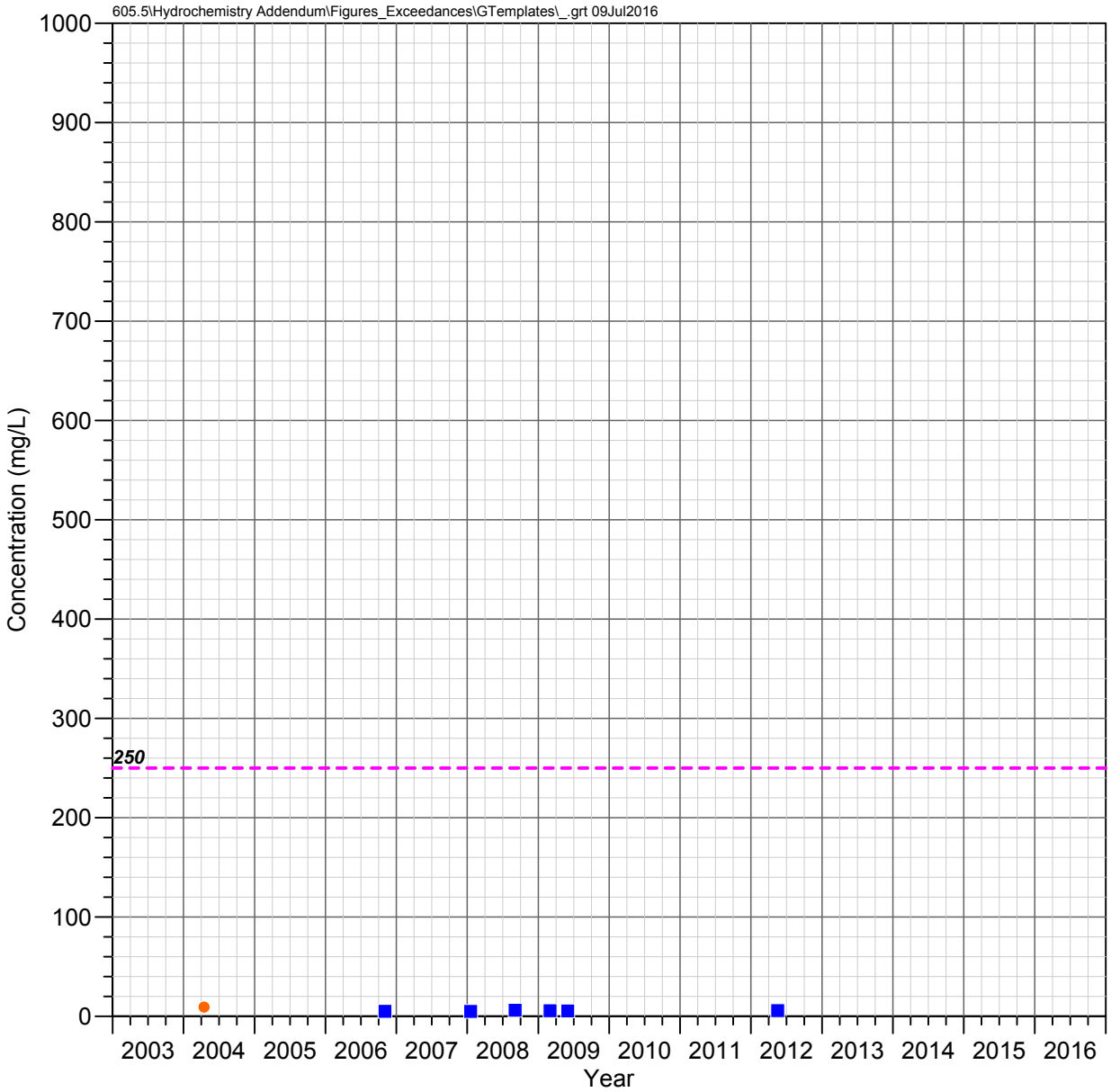


FIGURE E-660. SULFATE CONCENTRATIONS OBSERVED AT HRES-03D, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-04
Apache Leap Tuff Aquifer

SULFATE

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

EPA Secondary MCL (UNS, 250 mg/L)

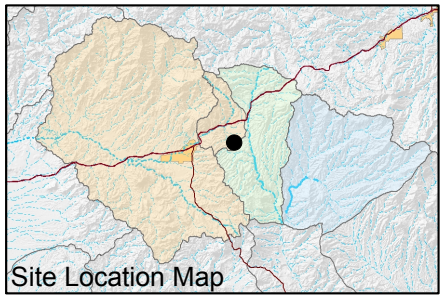
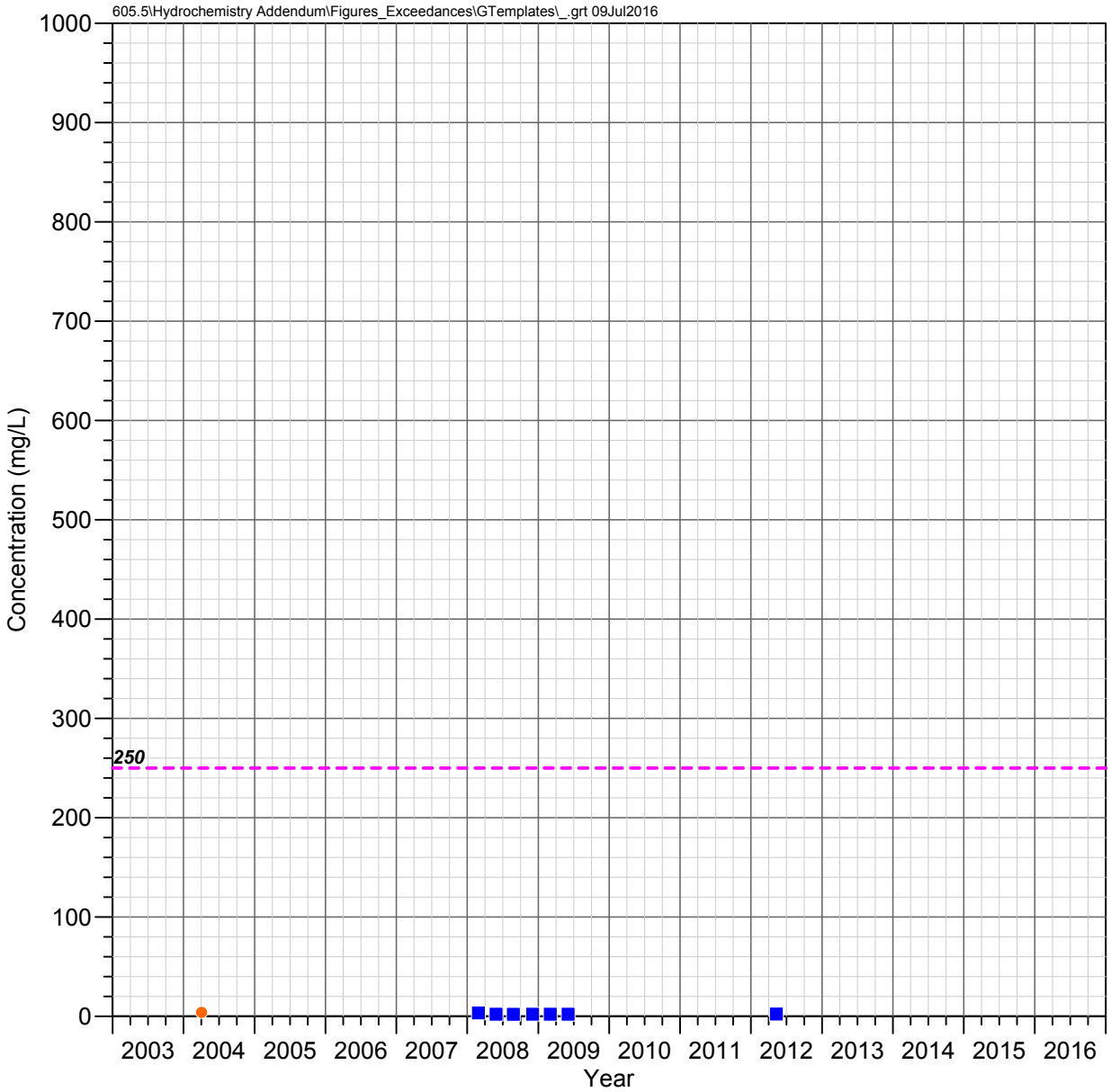


FIGURE E-661. SULFATE CONCENTRATIONS OBSERVED AT HRES-04, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-05
Apache Leap Tuff Aquifer

SULFATE

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

EPA Secondary MCL (UNS, 250 mg/L)

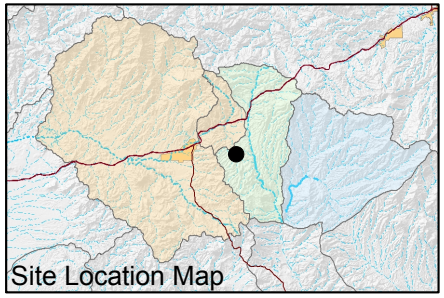
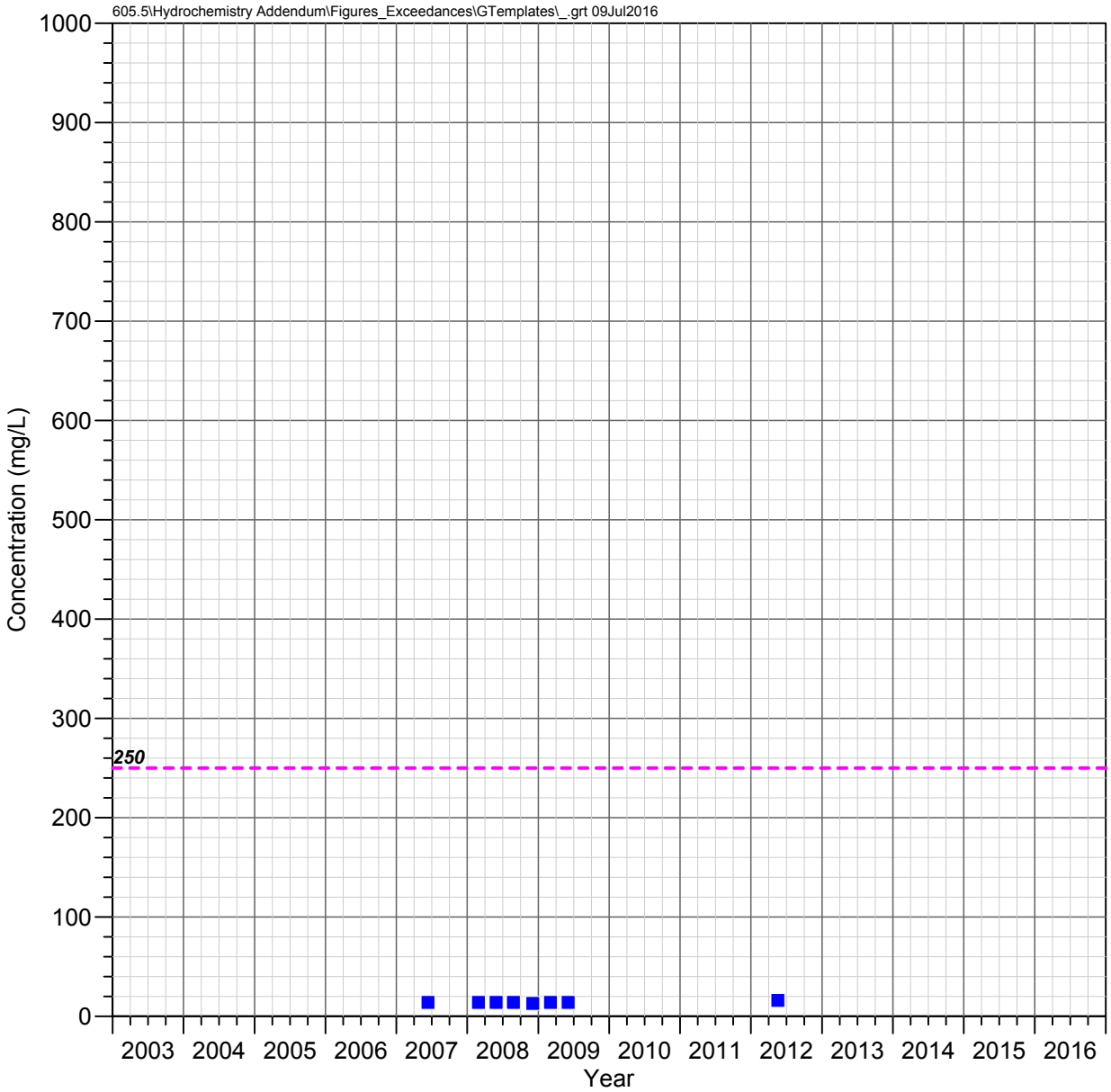


FIGURE E-662. SULFATE CONCENTRATIONS OBSERVED AT HRES-05, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-06
Apache Leap Tuff Aquifer

SULFATE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 250 mg/L)

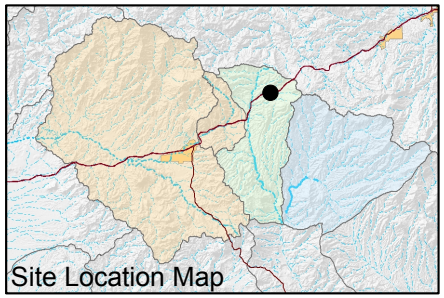
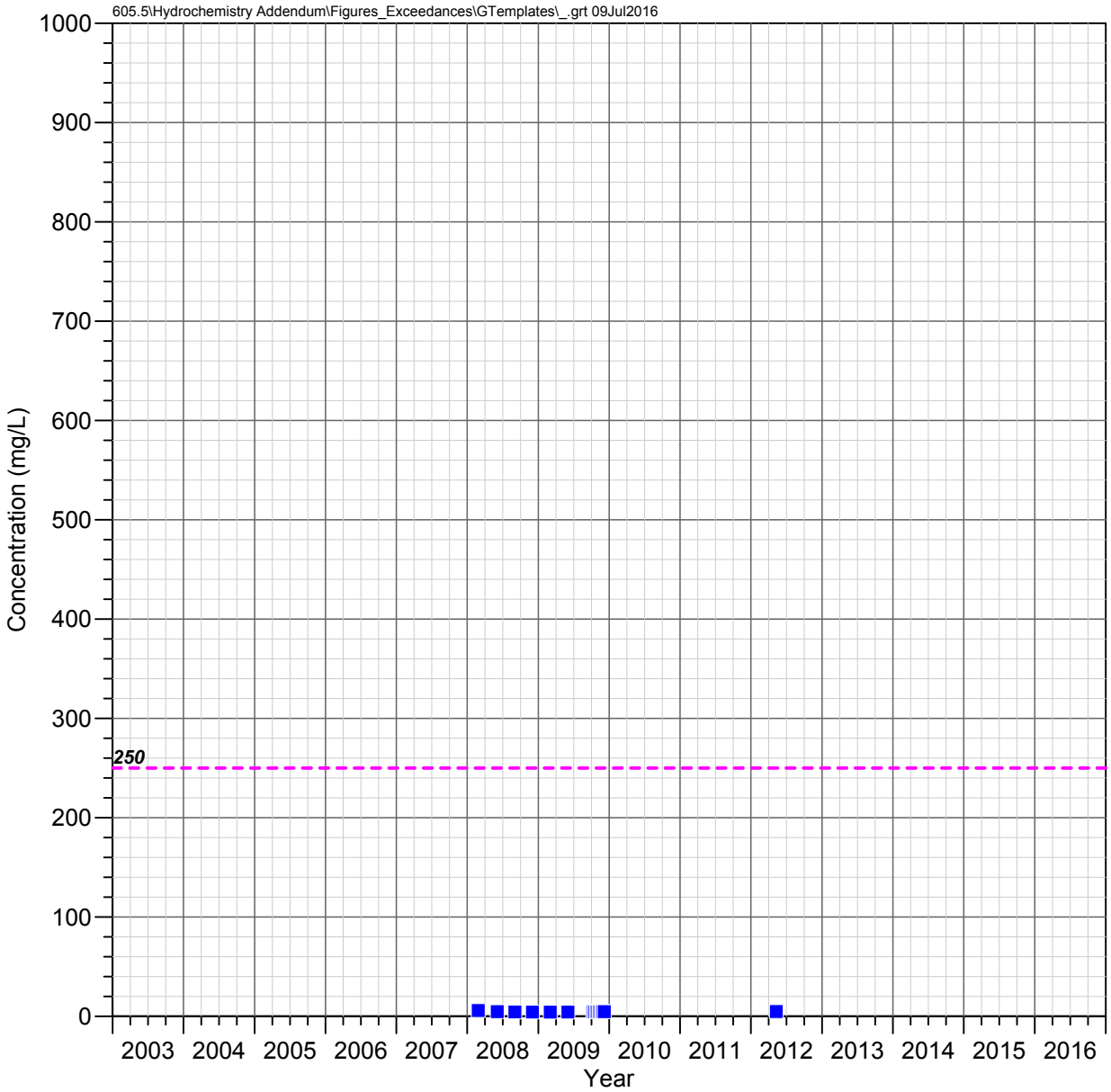


FIGURE E-663. SULFATE CONCENTRATIONS OBSERVED AT HRES-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-07
Apache Leap Tuff Aquifer

SULFATE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 250 mg/L)

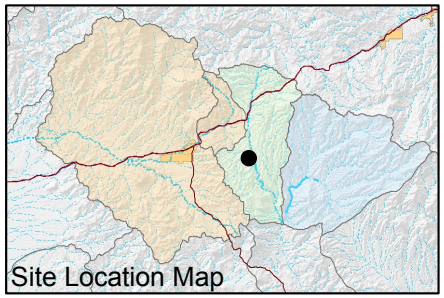
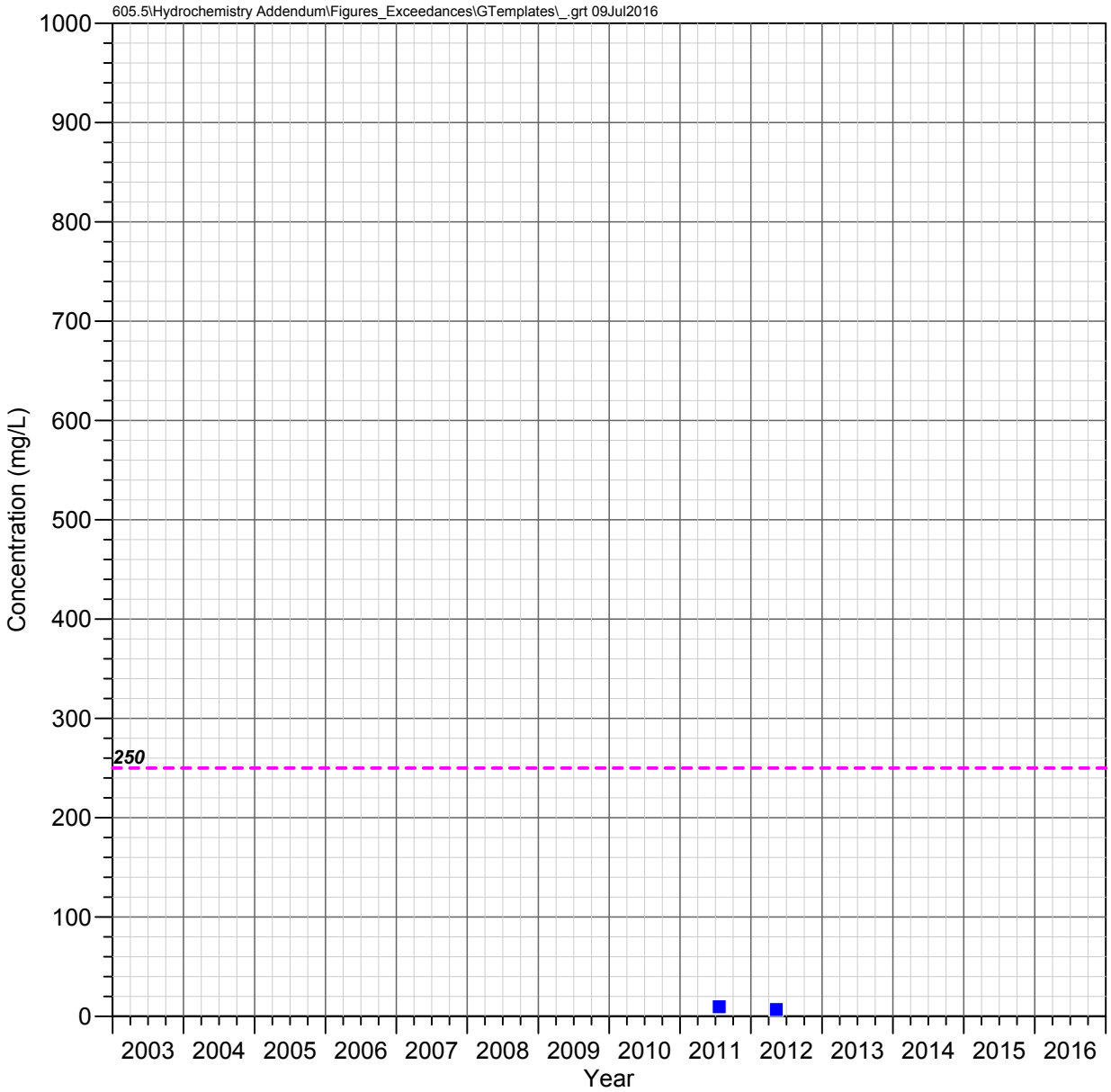


FIGURE E-664. SULFATE CONCENTRATIONS OBSERVED AT HRES-07, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-08
Apache Leap Tuff Aquifer

SULFATE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 250 mg/L)

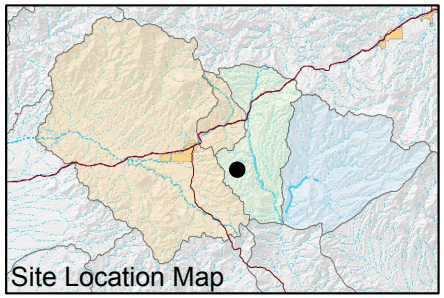
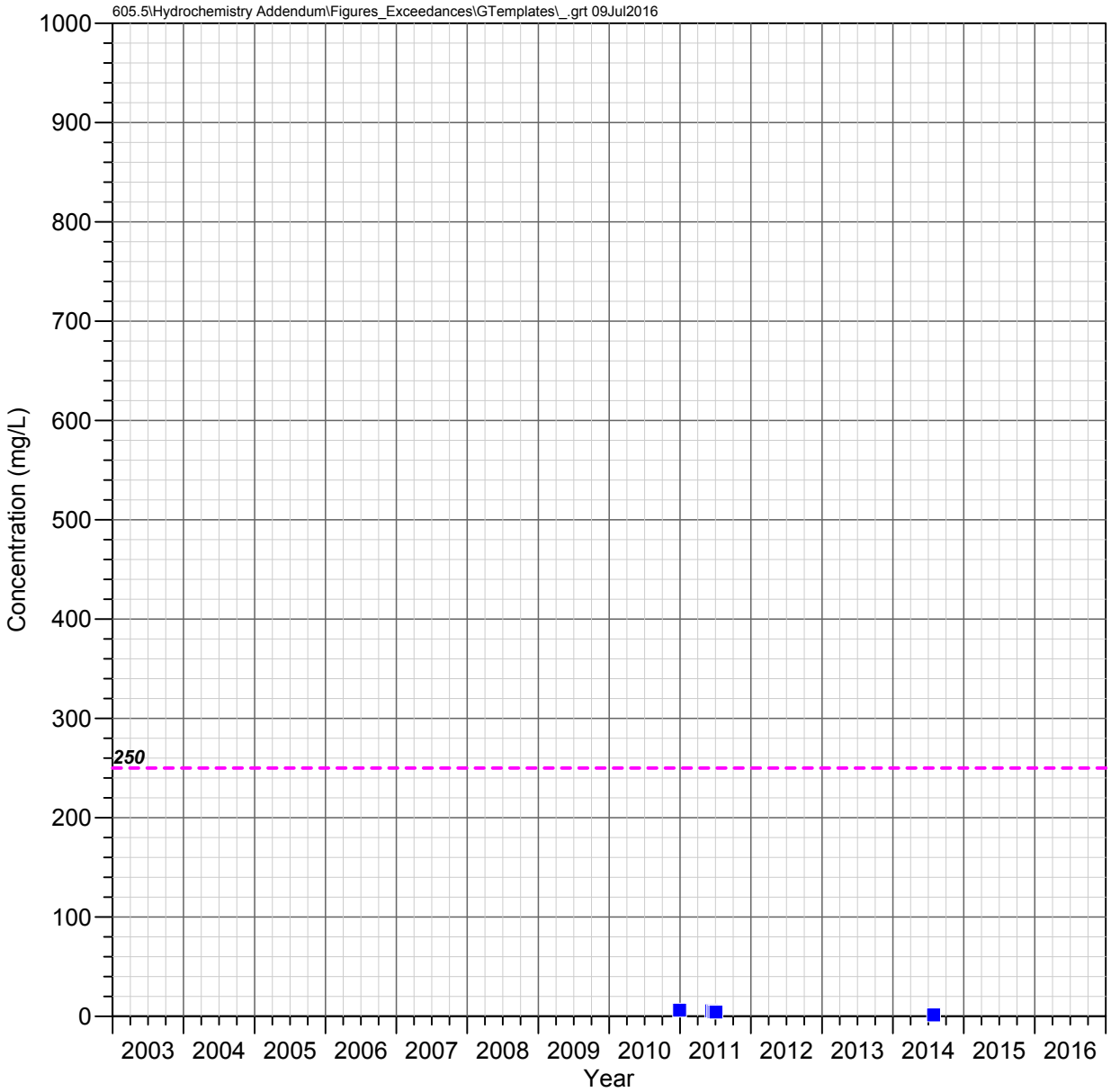


FIGURE E-665. SULFATE CONCENTRATIONS OBSERVED AT HRES-08, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-09
Apache Leap Tuff Aquifer

SULFATE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 250 mg/L)

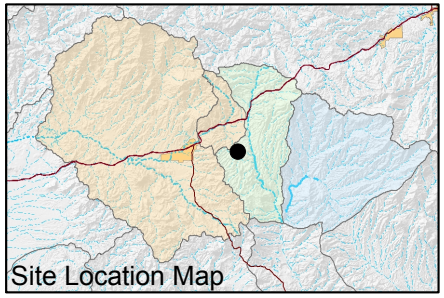
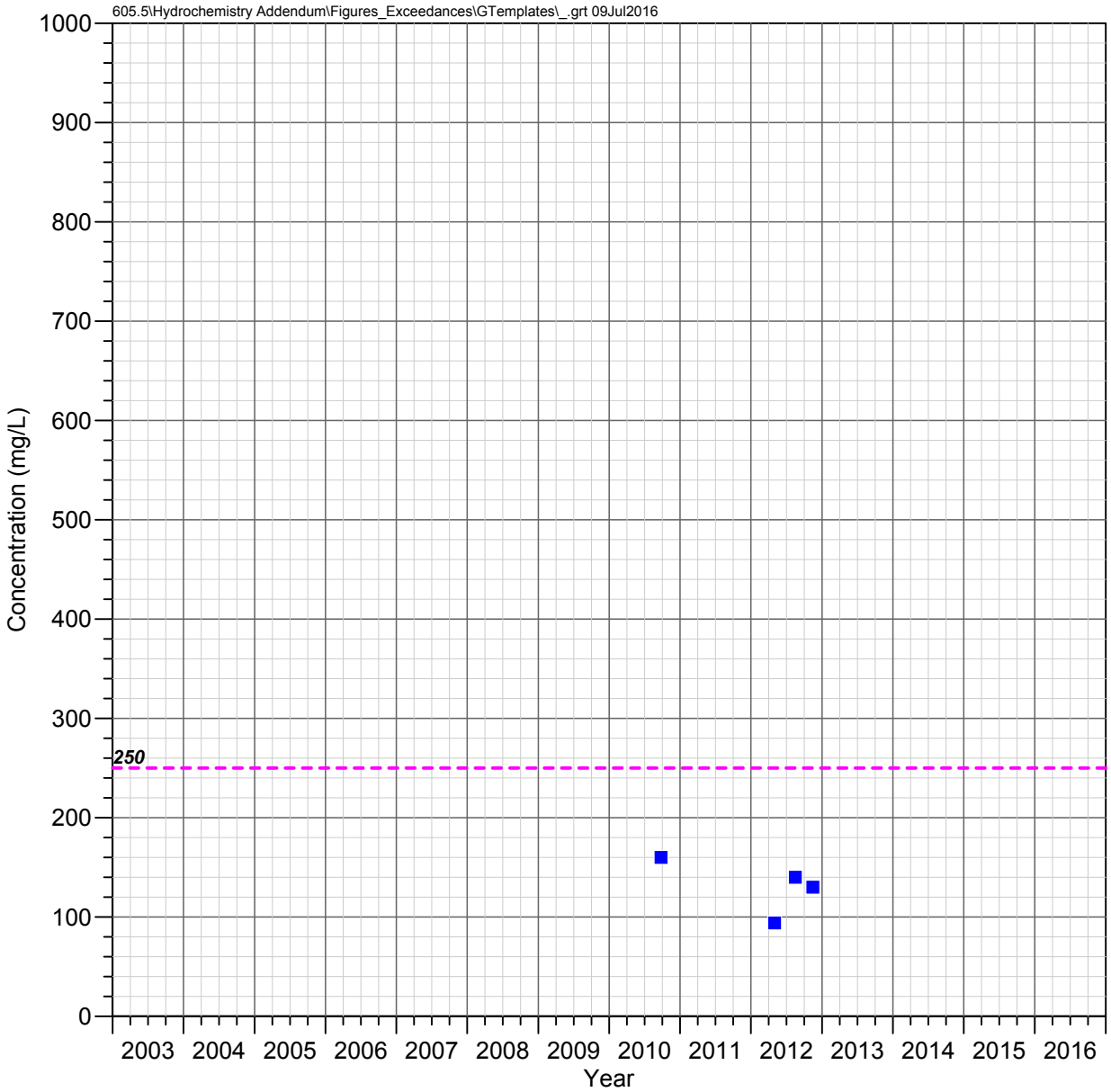


FIGURE E-666. SULFATE CONCENTRATIONS OBSERVED AT HRES-09, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-10
Apache Leap Tuff Aquifer

SULFATE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 250 mg/L)

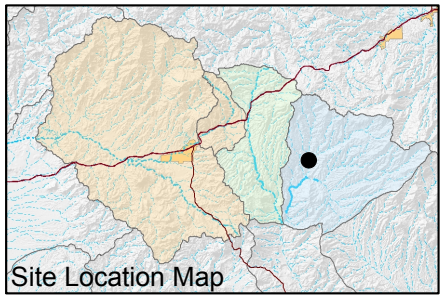
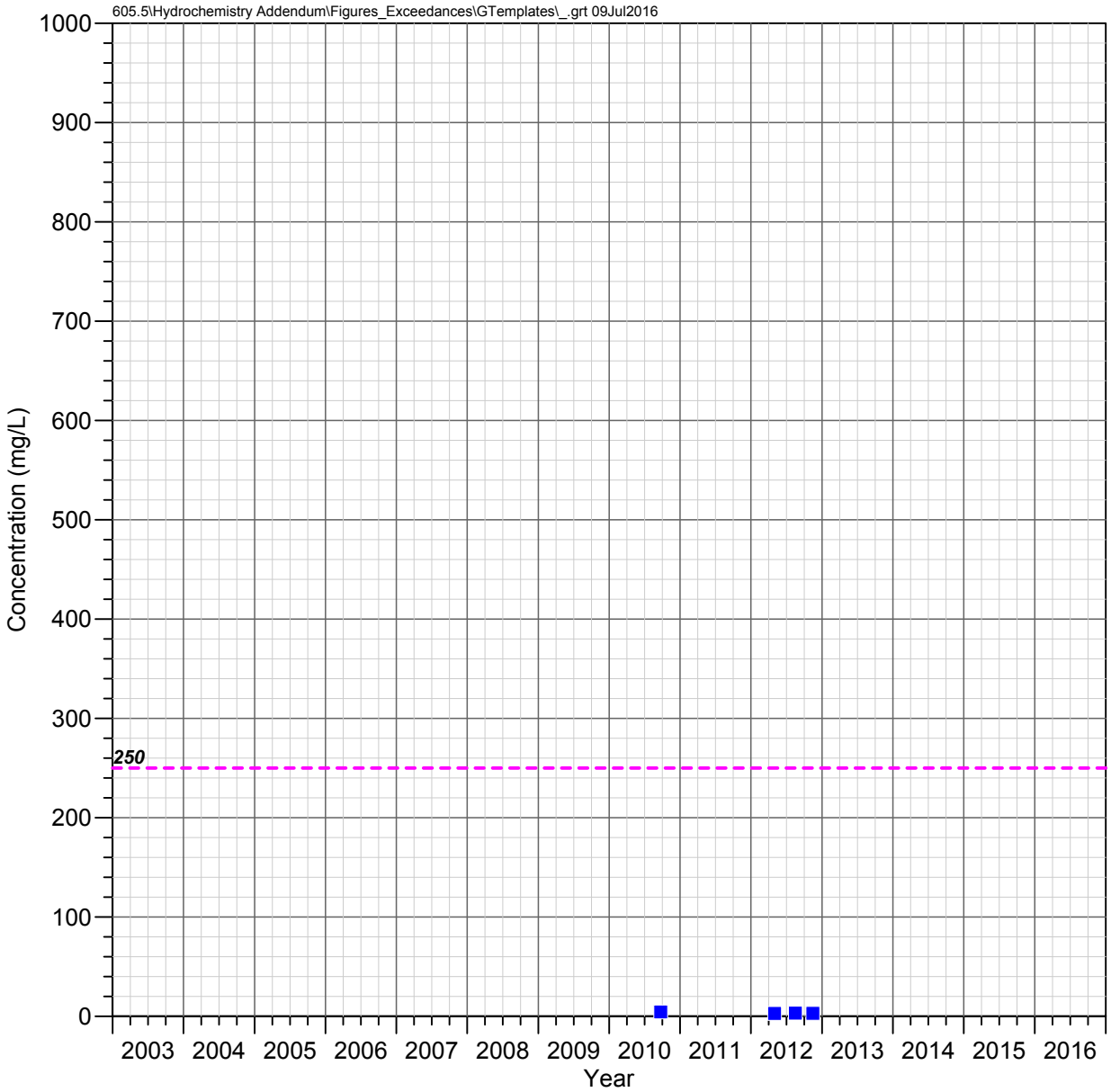


FIGURE E-667. SULFATE CONCENTRATIONS OBSERVED AT HRES-10, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-11
Apache Leap Tuff Aquifer

SULFATE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 250 mg/L)

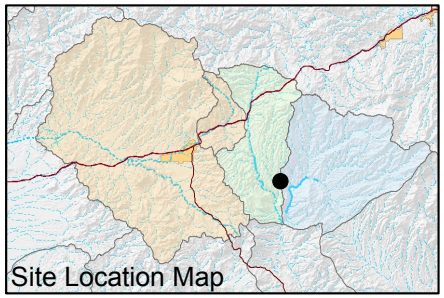
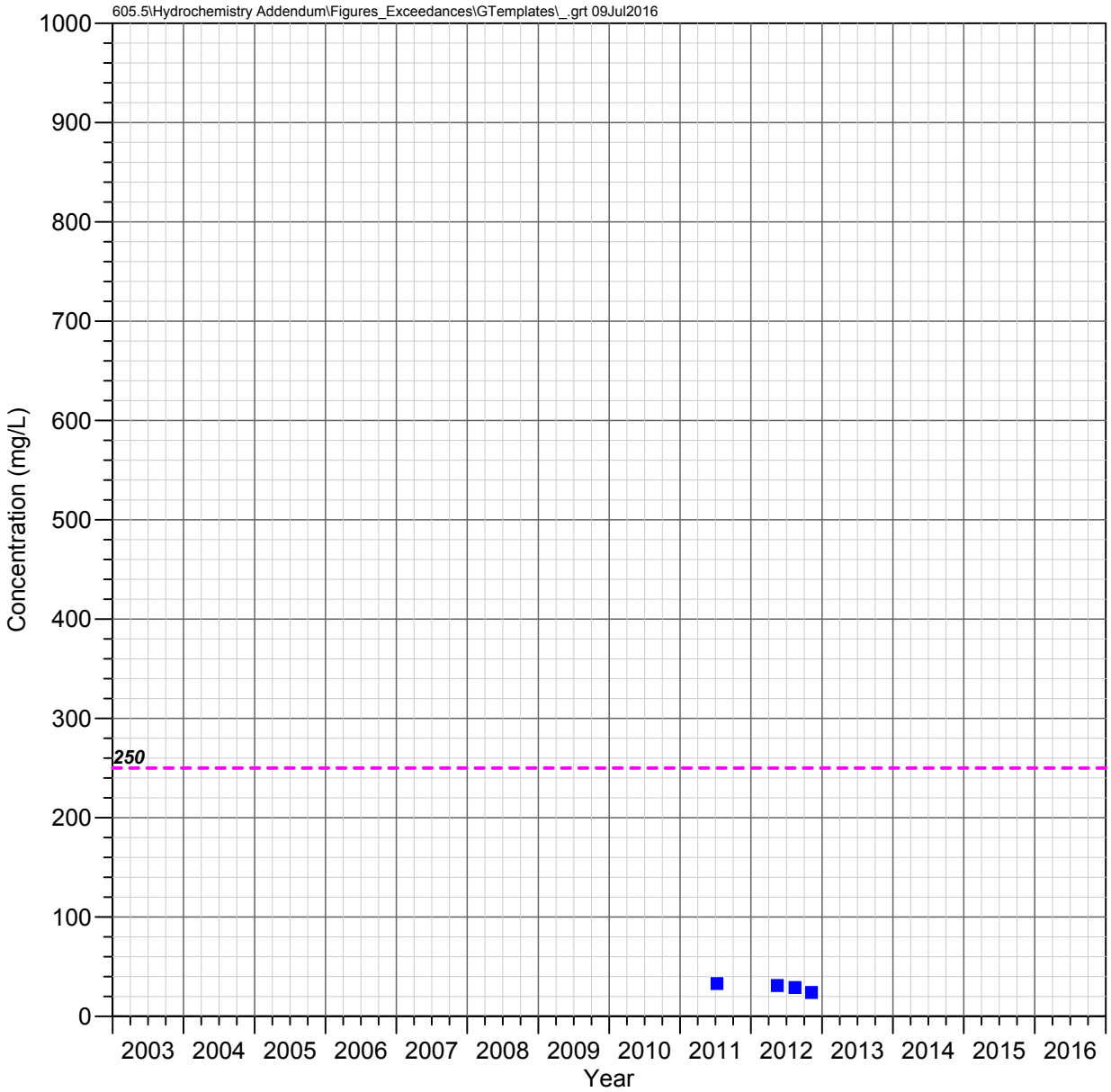


FIGURE E-668. SULFATE CONCENTRATIONS OBSERVED AT HRES-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-12
Apache Leap Tuff Aquifer

SULFATE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 250 mg/L)

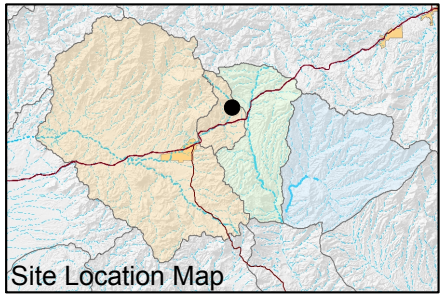
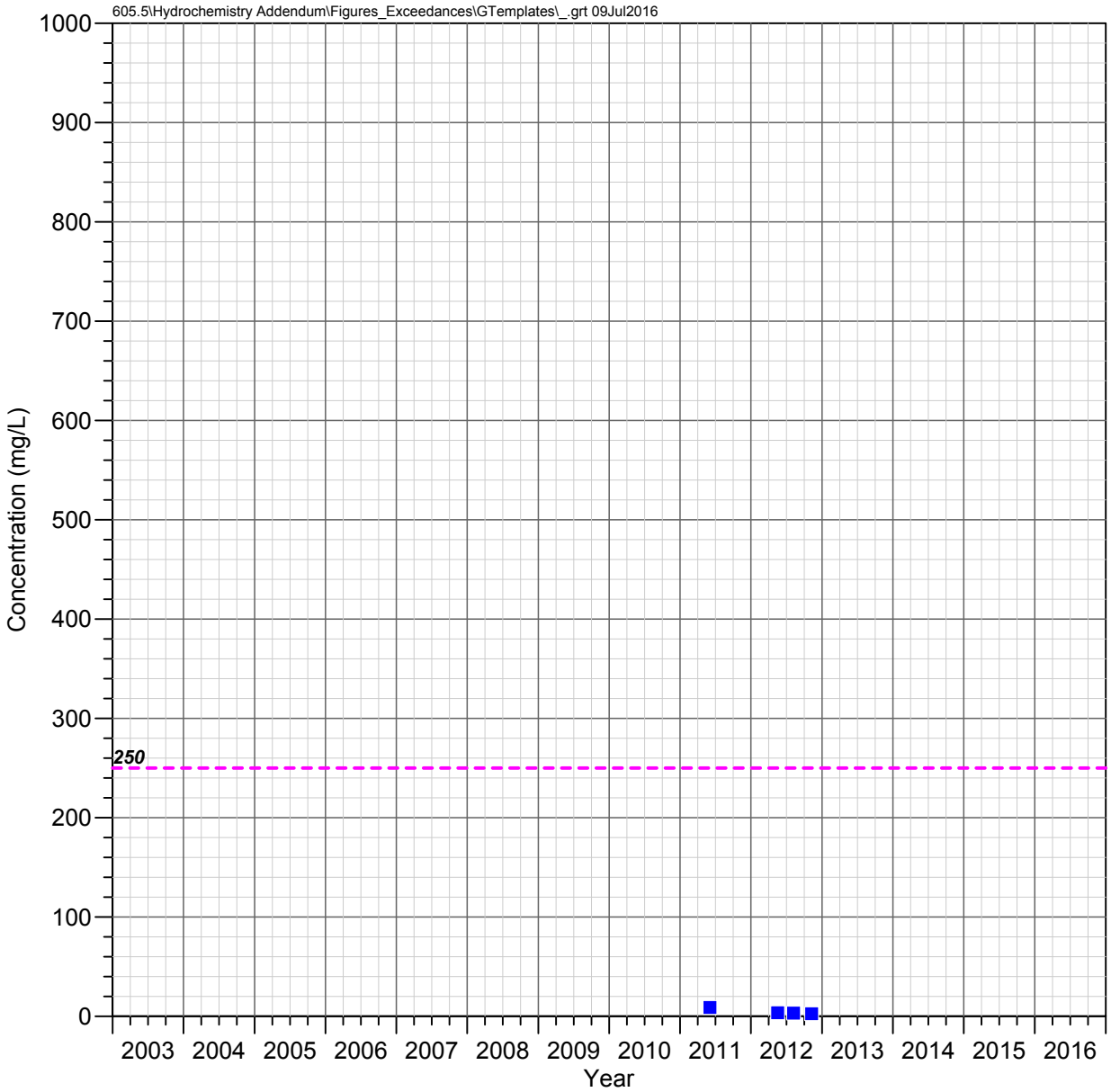


FIGURE E-669. SULFATE CONCENTRATIONS OBSERVED AT HRES-12, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-13
Apache Leap Tuff Aquifer

SULFATE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 250 mg/L)

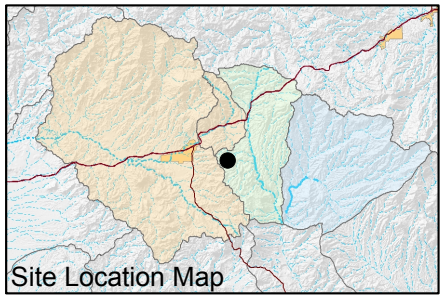
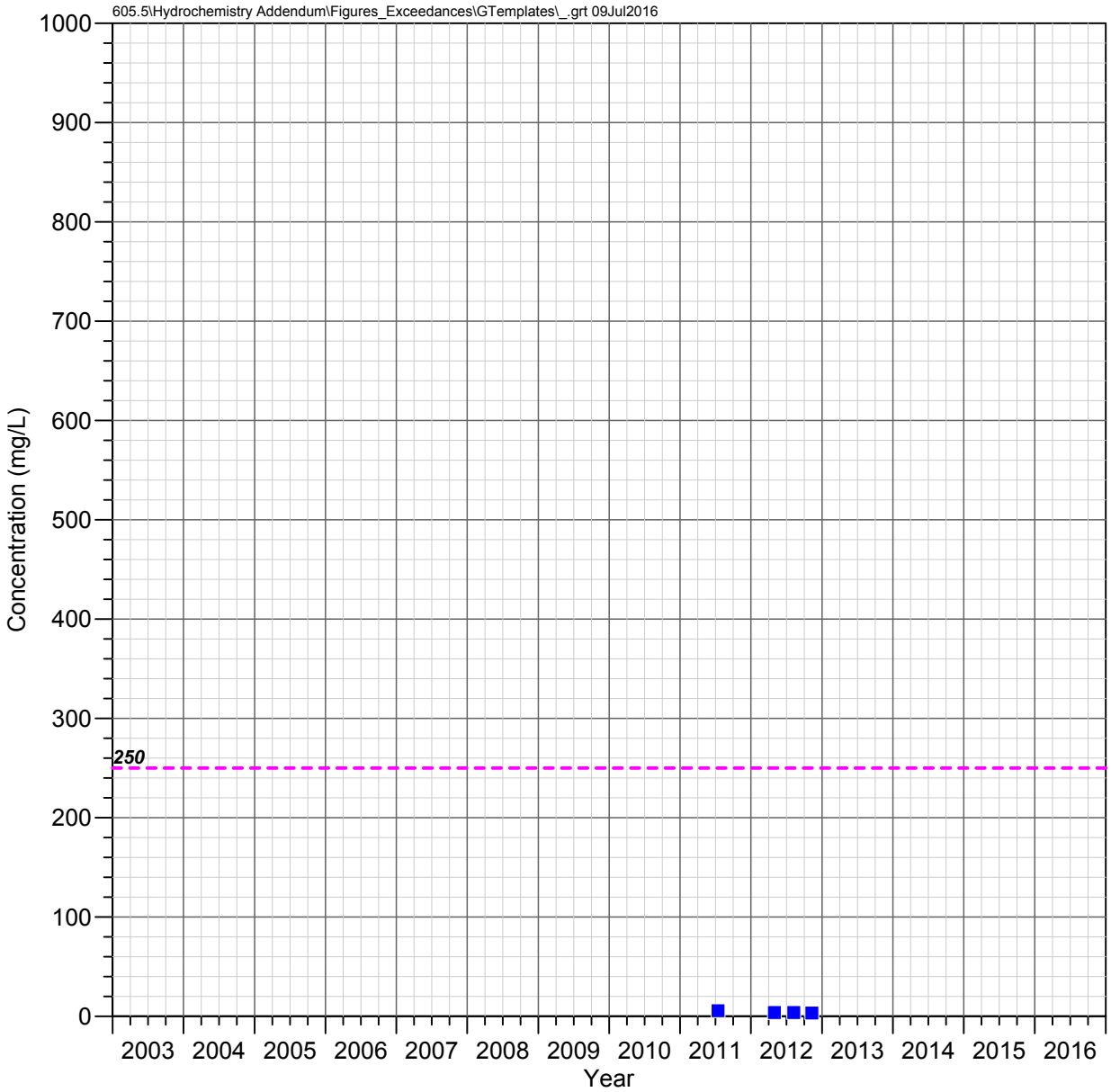


FIGURE E-670. SULFATE CONCENTRATIONS OBSERVED AT HRES-13, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-14
Apache Leap Tuff Aquifer

SULFATE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 250 mg/L)

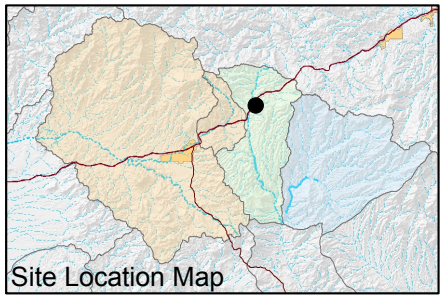
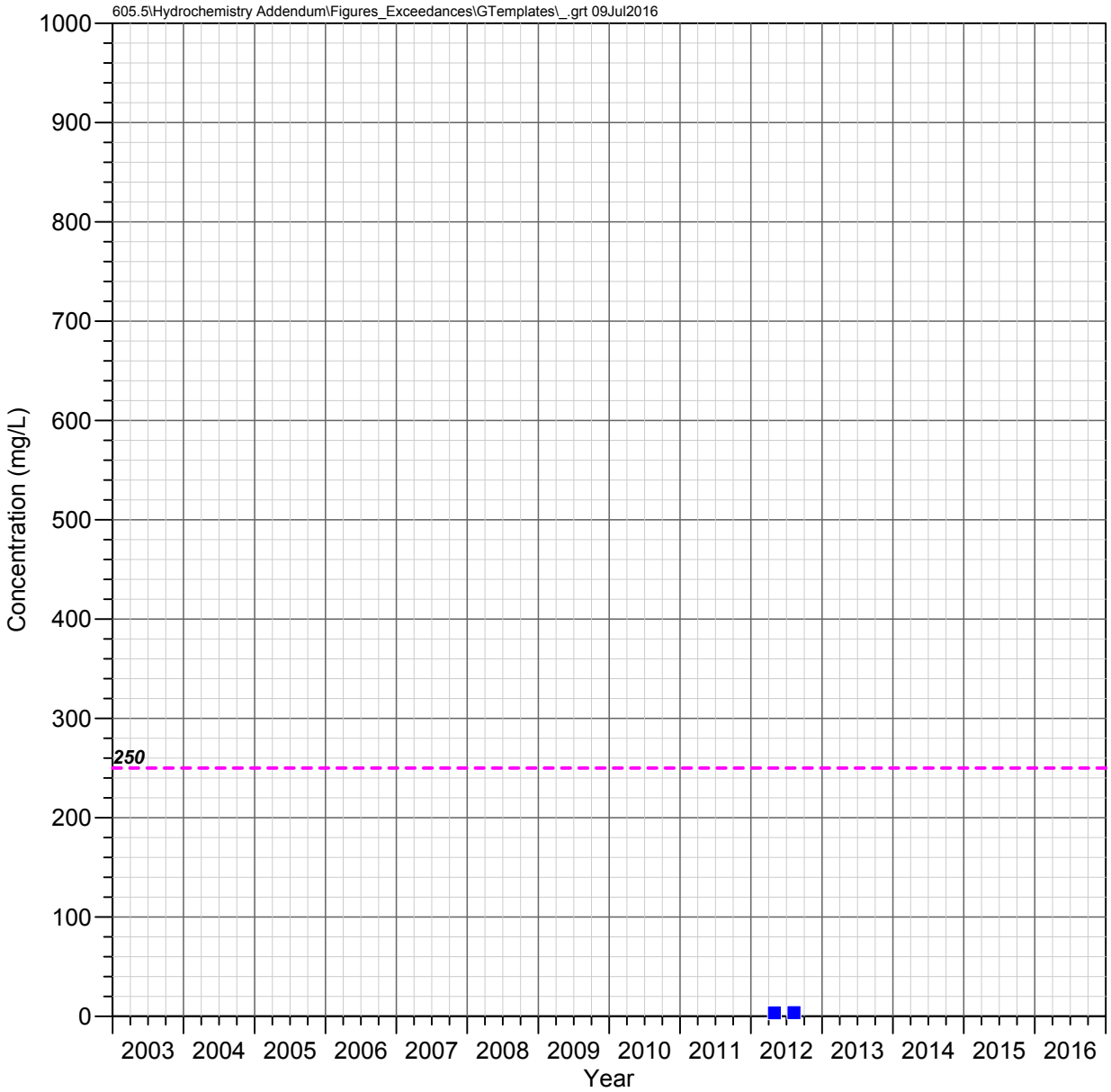


FIGURE E-671. SULFATE CONCENTRATIONS OBSERVED AT HRES-14, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-15
Apache Leap Tuff Aquifer

SULFATE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 250 mg/L)

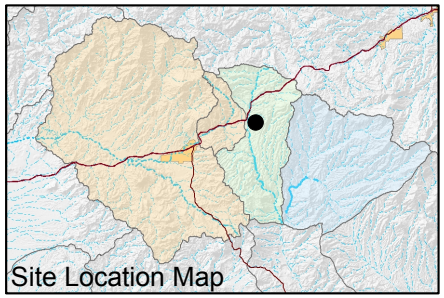
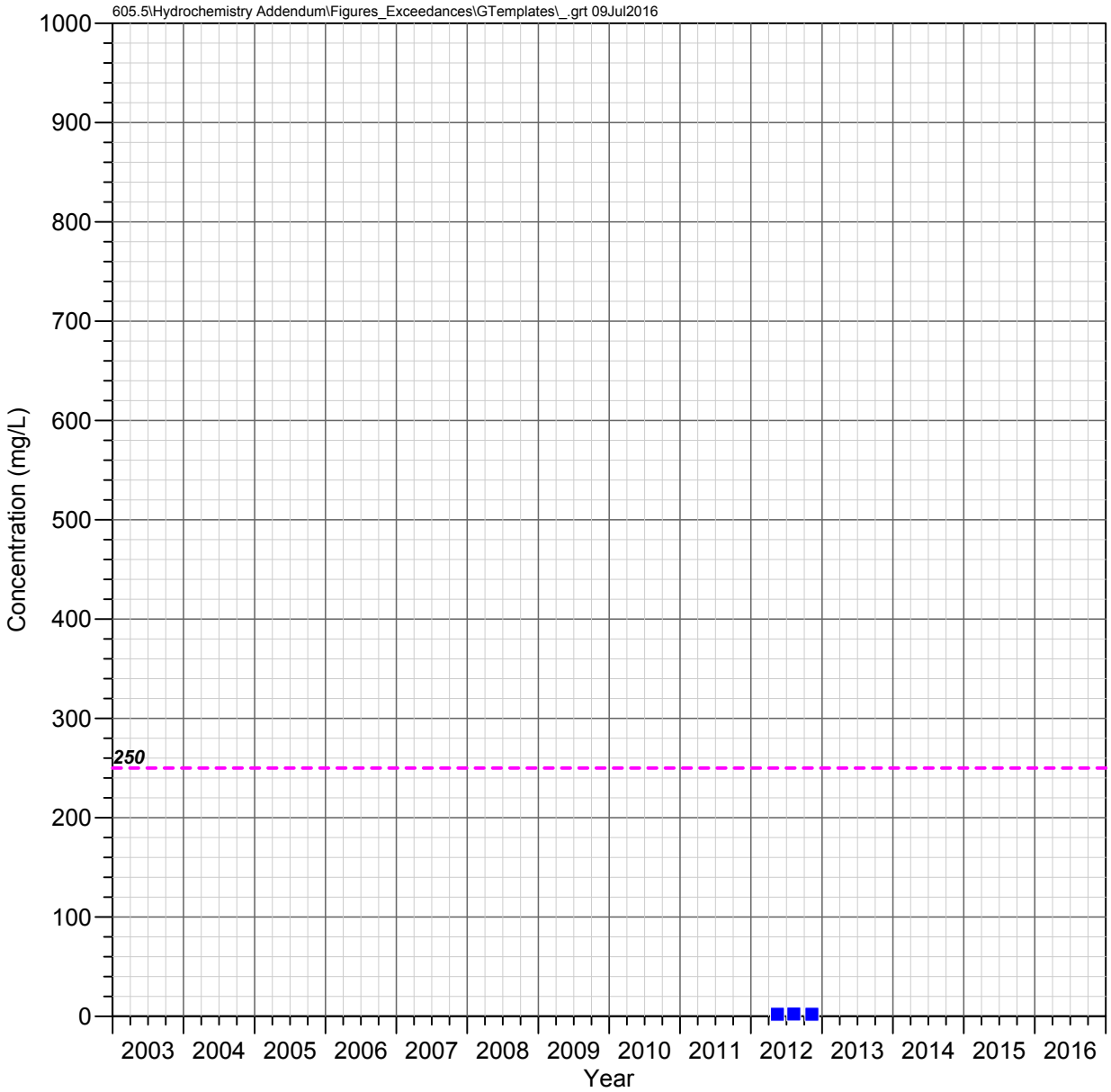


FIGURE E-672. SULFATE CONCENTRATIONS OBSERVED AT HRES-15, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-17
Apache Leap Tuff Aquifer

SULFATE

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

EPA Secondary MCL (UNS, 250 mg/L)

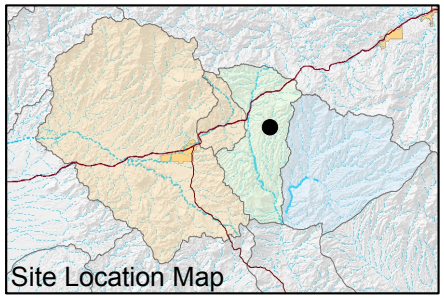
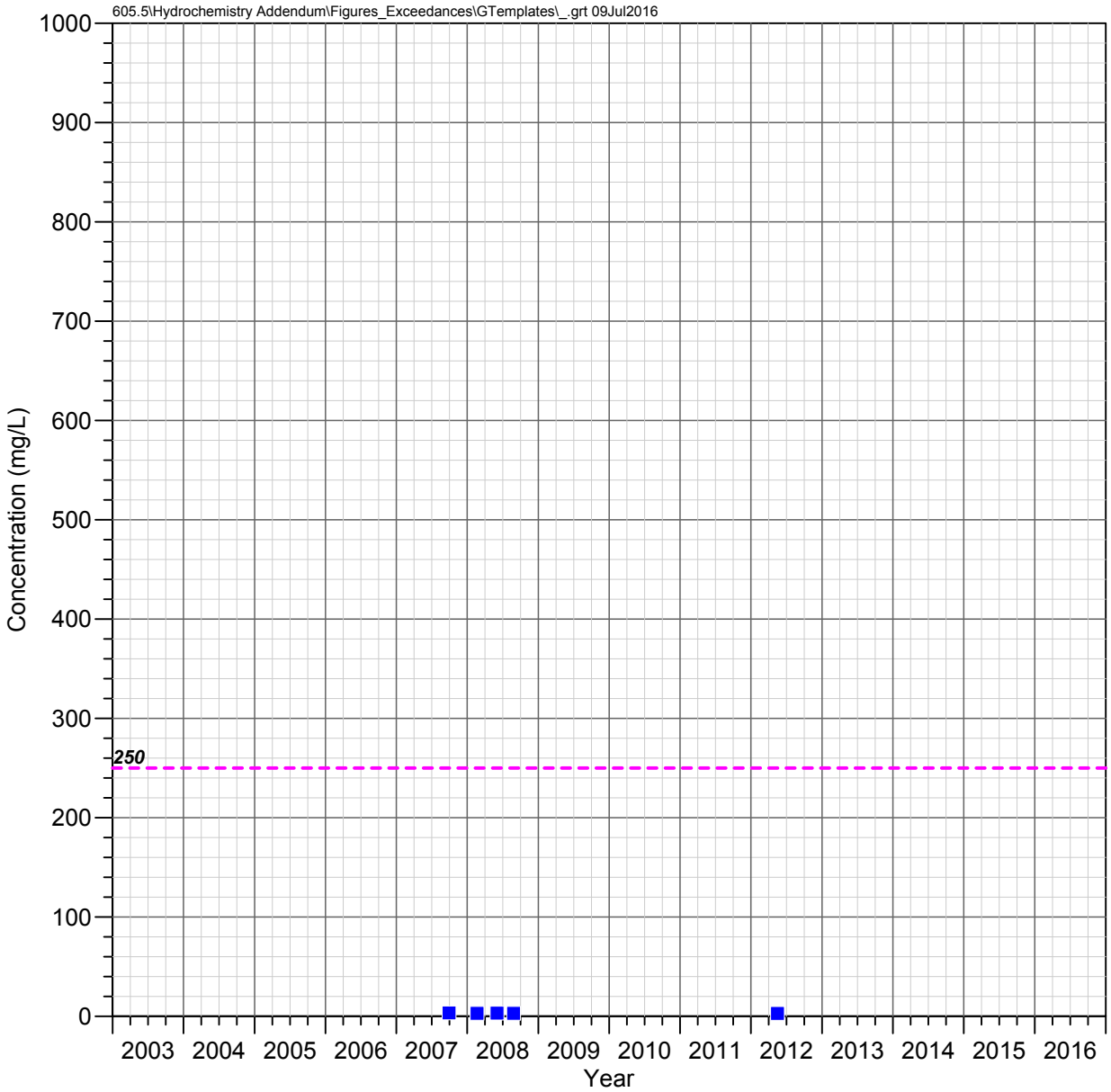


FIGURE E-673. SULFATE CONCENTRATIONS OBSERVED AT HRES-17, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MJ-11
Apache Leap Tuff Aquifer

SULFATE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 250 mg/L)

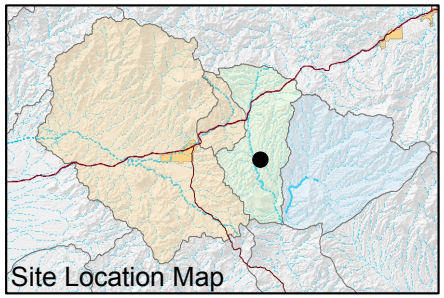
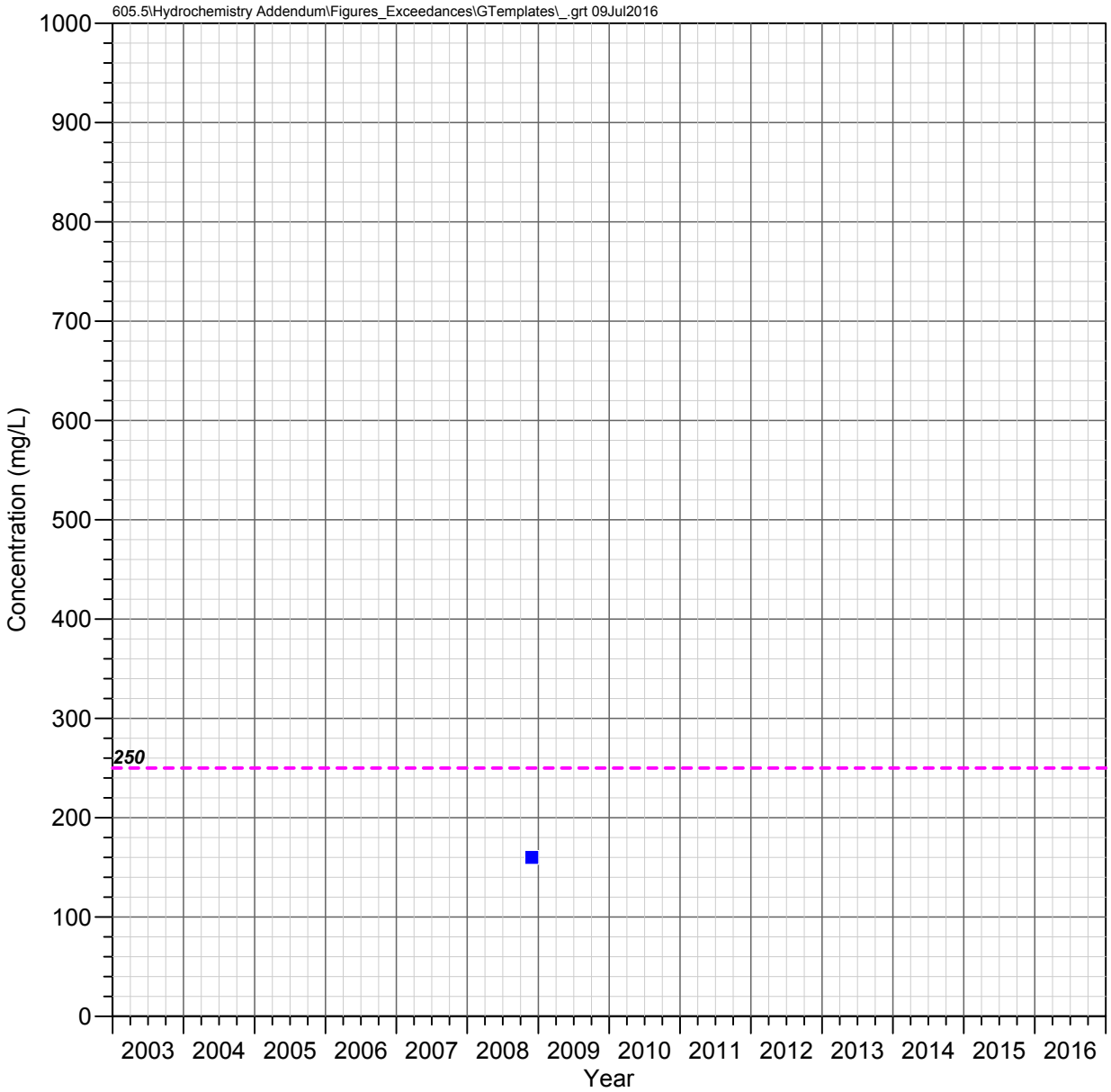


FIGURE E-674. SULFATE CONCENTRATIONS OBSERVED AT MJ-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-01
Deep Groundwater System

SULFATE

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

EPA Secondary MCL (UNS, 250 mg/L)

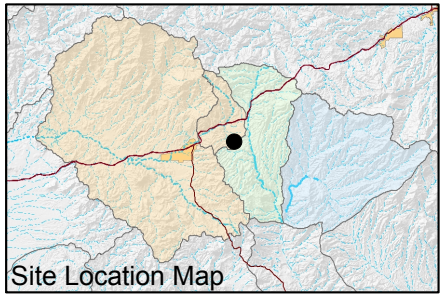
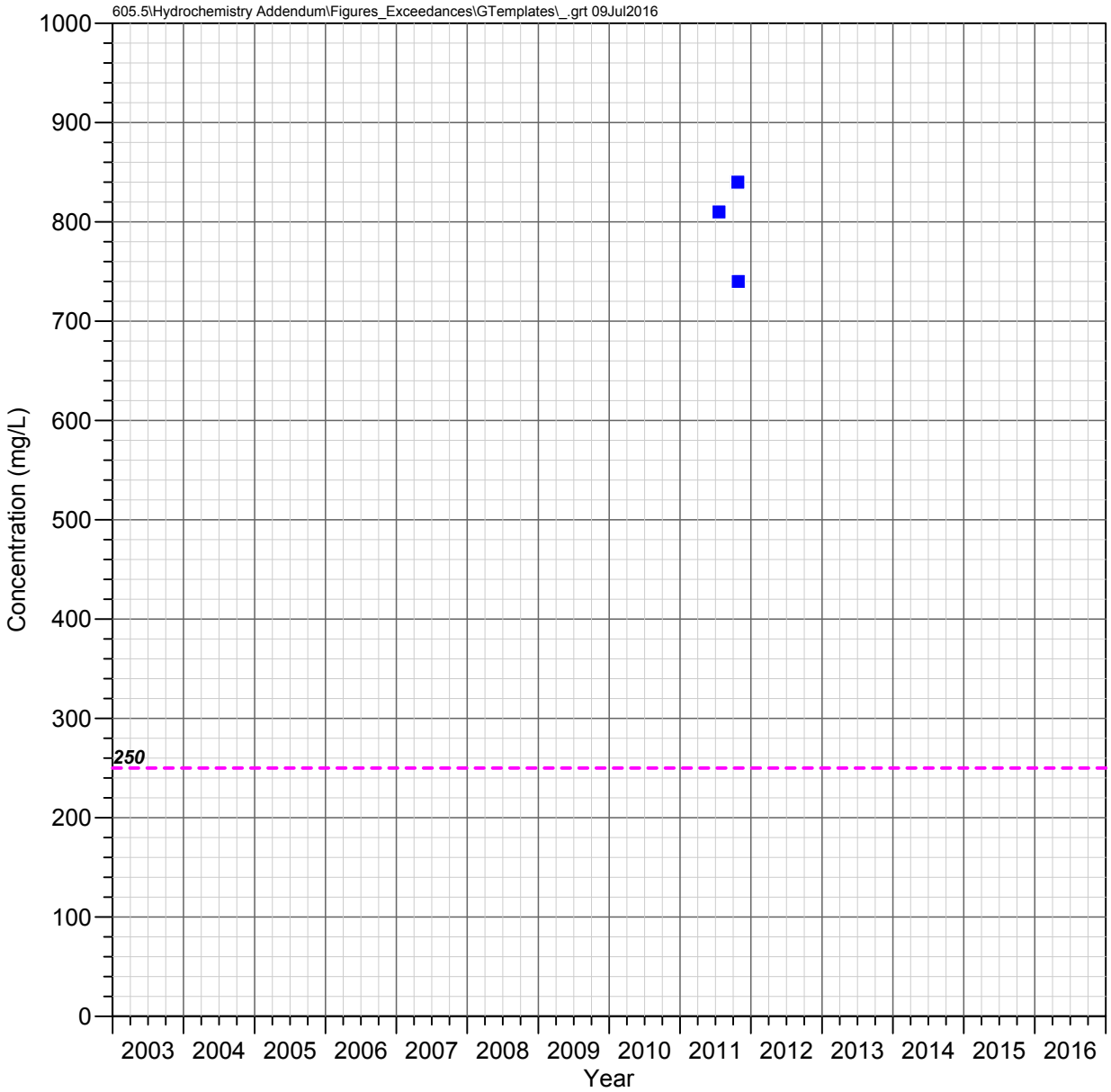


FIGURE E-675. SULFATE CONCENTRATIONS OBSERVED AT DHRES-01, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-02
Deep Groundwater System

SULFATE

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

EPA Secondary MCL (UNS, 250 mg/L)

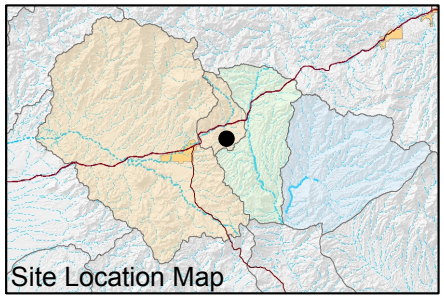
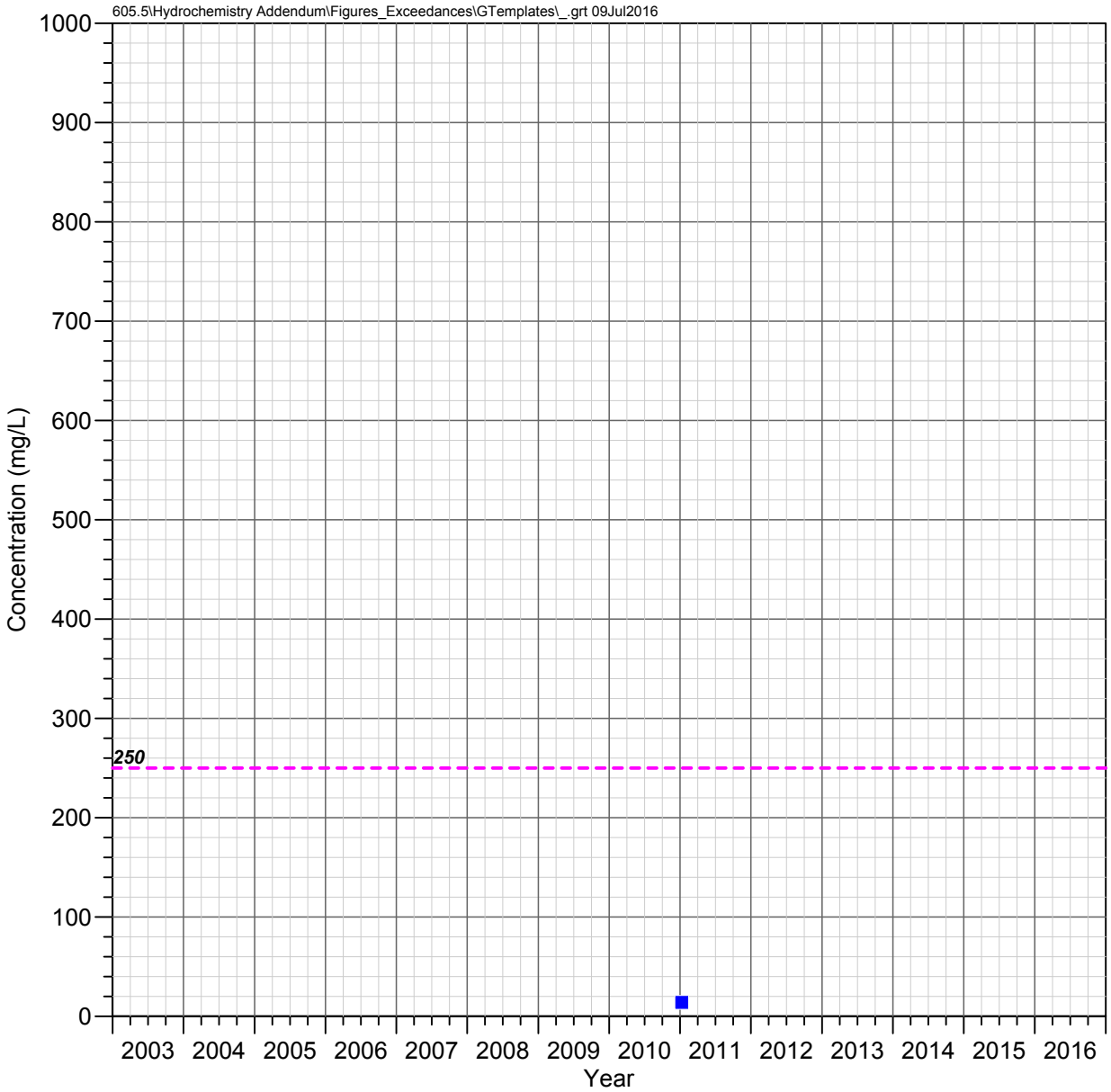


FIGURE E-676. SULFATE CONCENTRATIONS OBSERVED AT DHRES-02, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-06
Deep Groundwater System

SULFATE

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

EPA Secondary MCL (UNS, 250 mg/L)

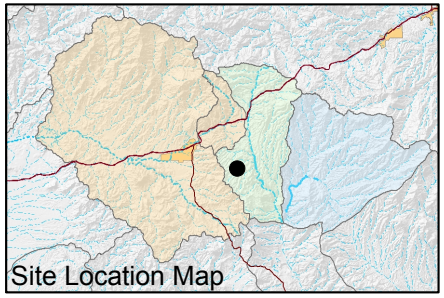
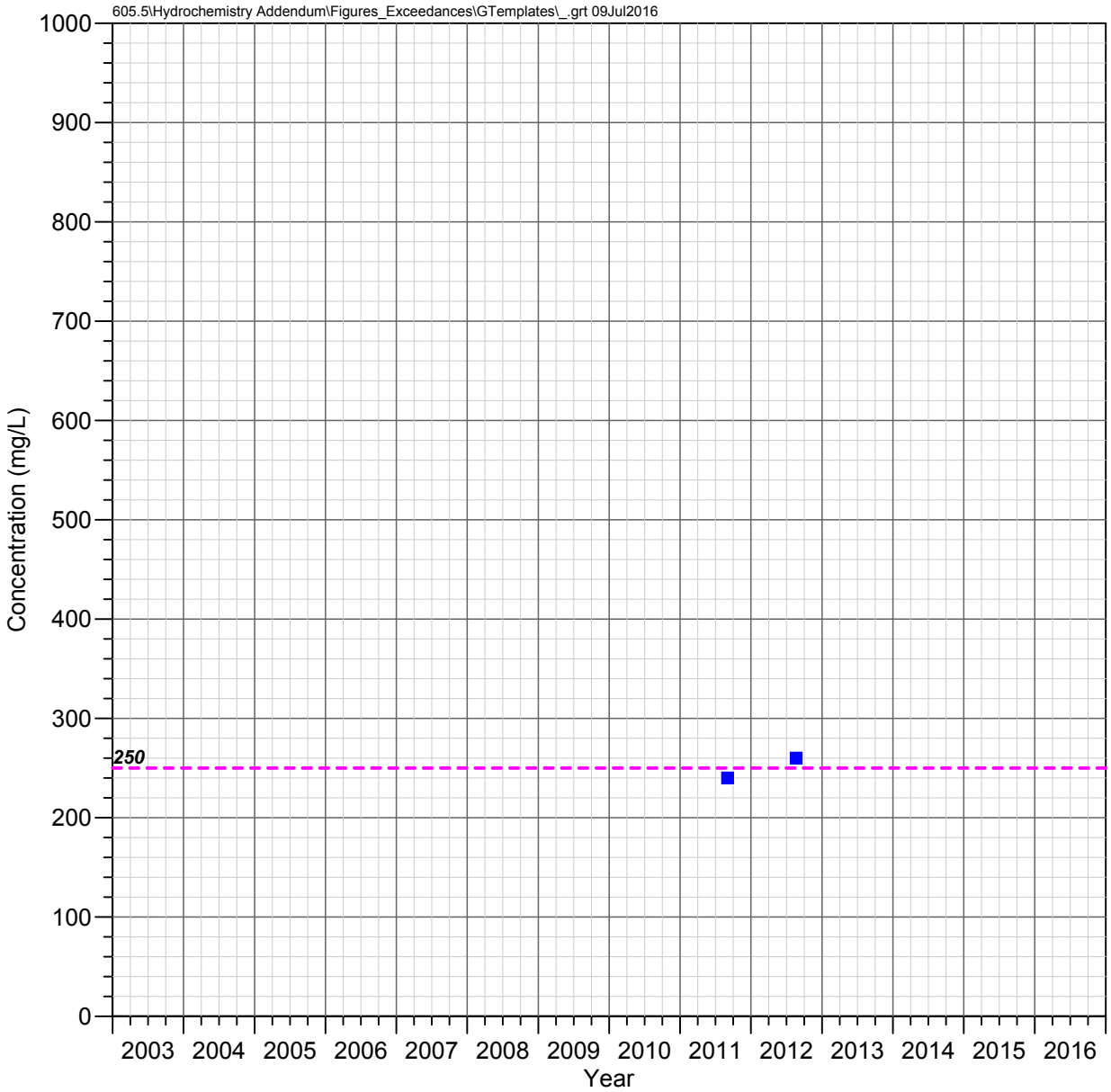


FIGURE E-677. SULFATE CONCENTRATIONS OBSERVED AT DHRES-06, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-09
Deep Groundwater System

SULFATE

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

EPA Secondary MCL (UNS, 250 mg/L)

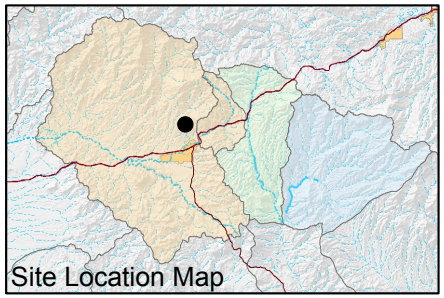
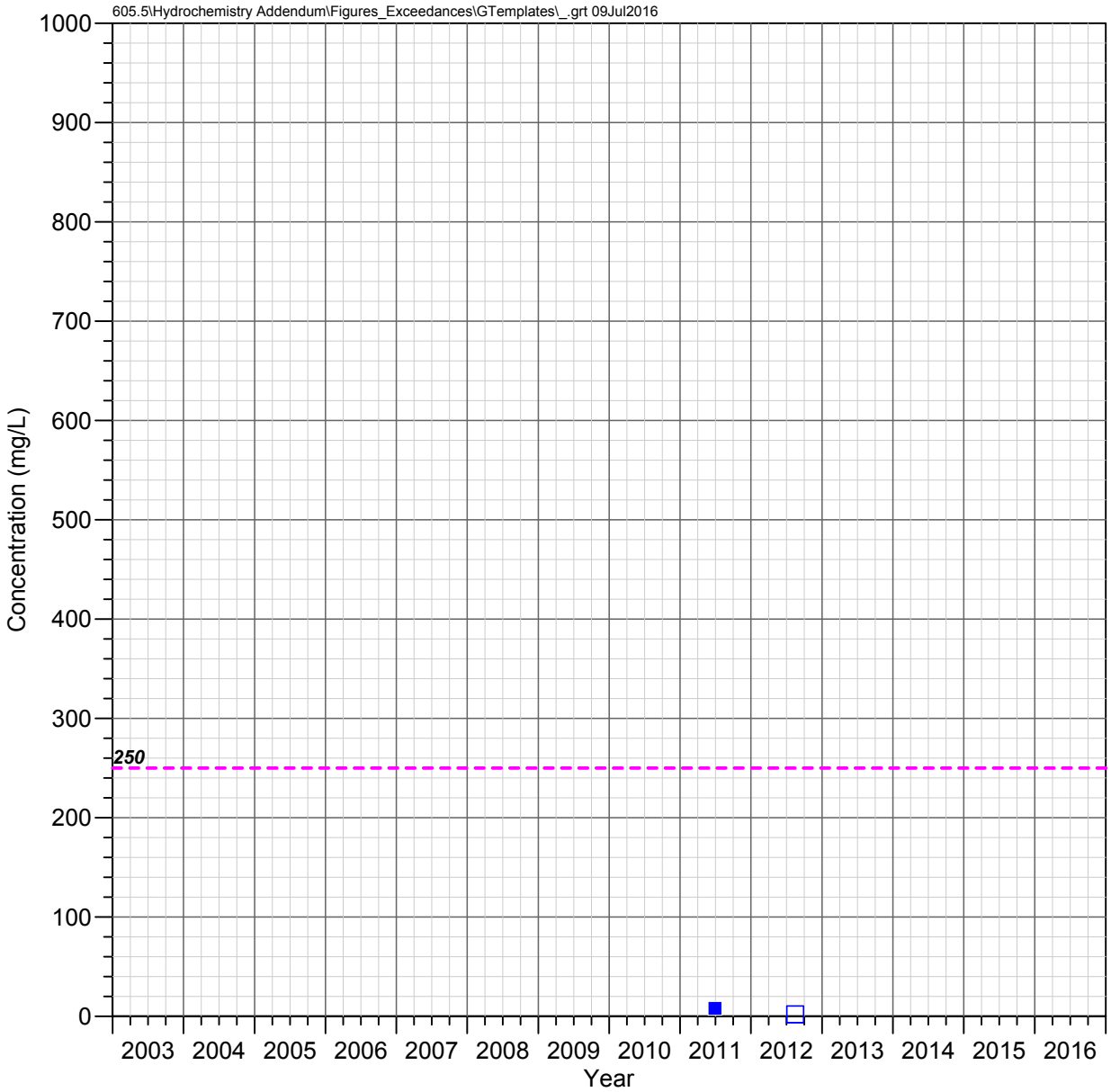


FIGURE E-678. SULFATE CONCENTRATIONS OBSERVED AT DHRES-09, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-11
Deep Groundwater System

SULFATE

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

EPA Secondary MCL (UNS, 250 mg/L)

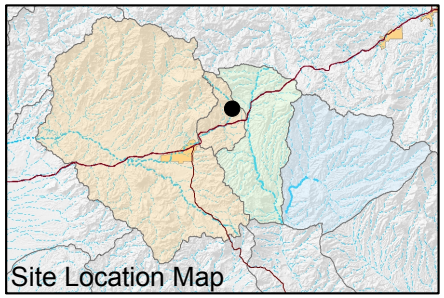
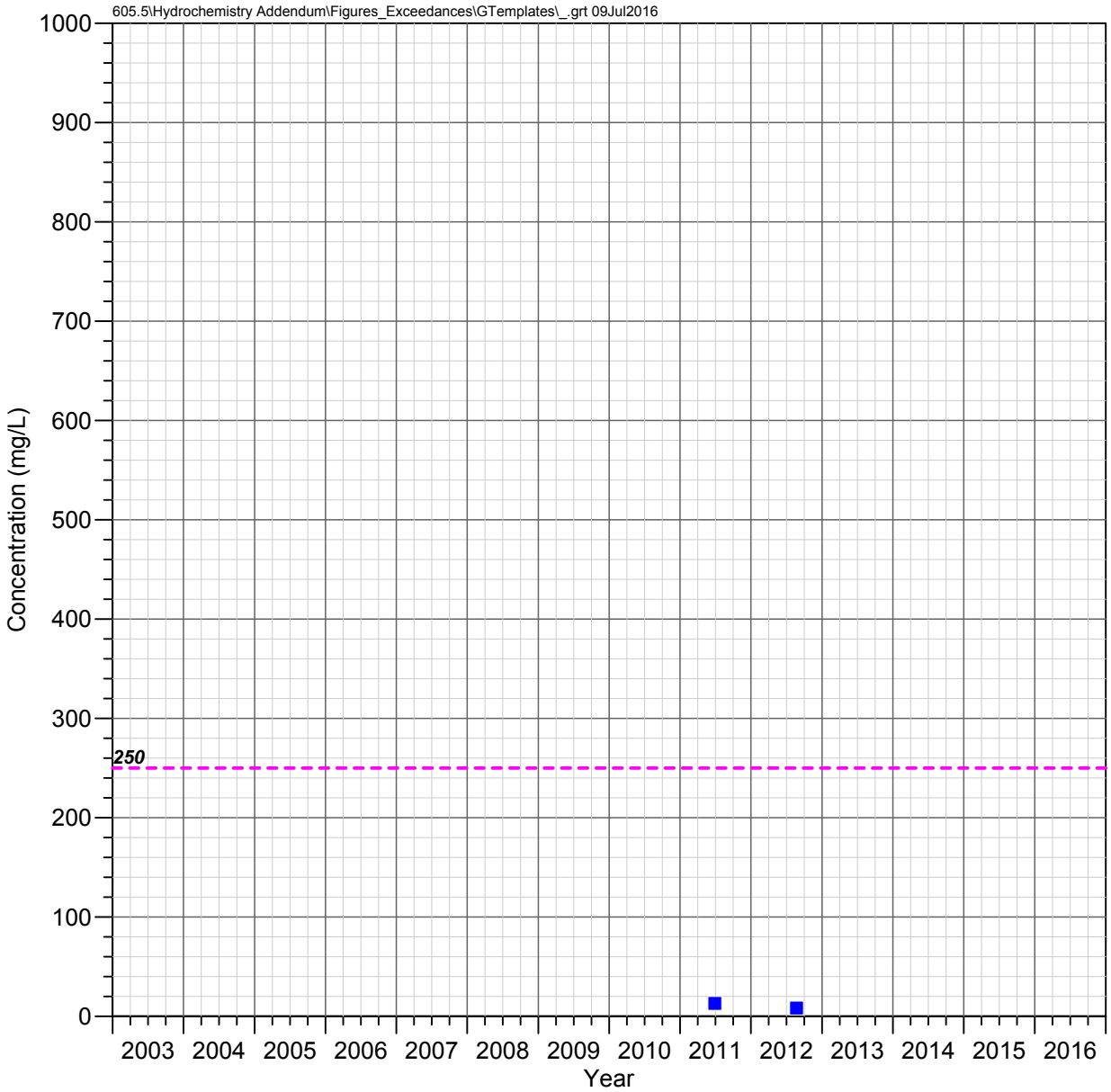


FIGURE E-679. SULFATE CONCENTRATIONS OBSERVED AT DHRES-11, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-13
Deep Groundwater System

SULFATE

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

EPA Secondary MCL (UNS, 250 mg/L)

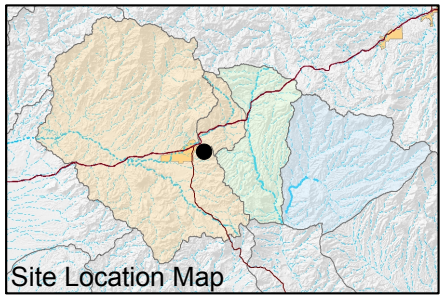
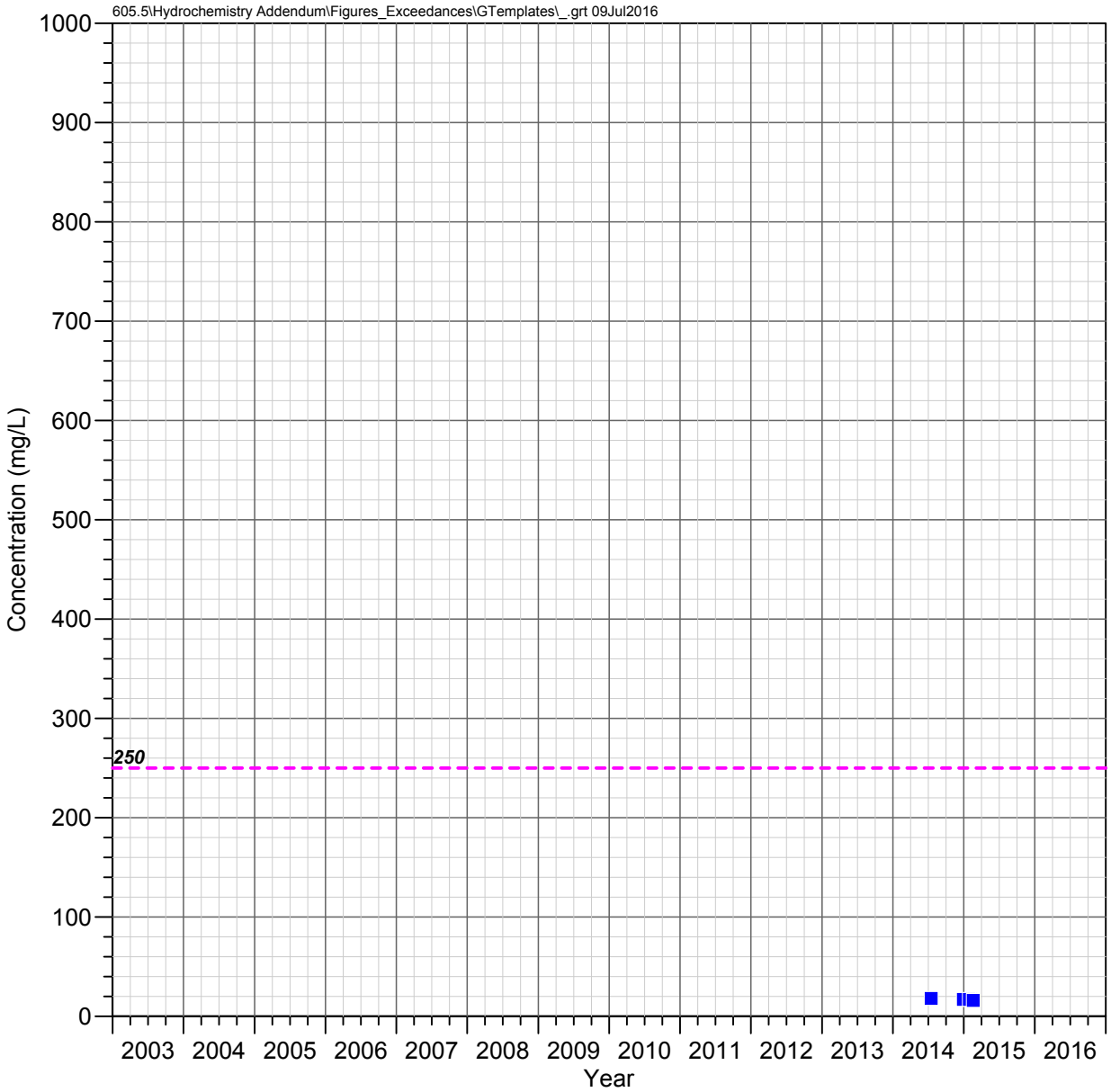


FIGURE E-680. SULFATE CONCENTRATIONS OBSERVED AT DHRES-13, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-15
Deep Groundwater System

SULFATE

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

EPA Secondary MCL (UNS, 250 mg/L)

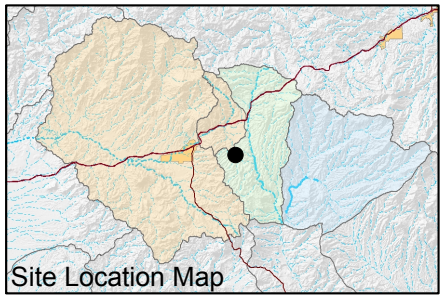
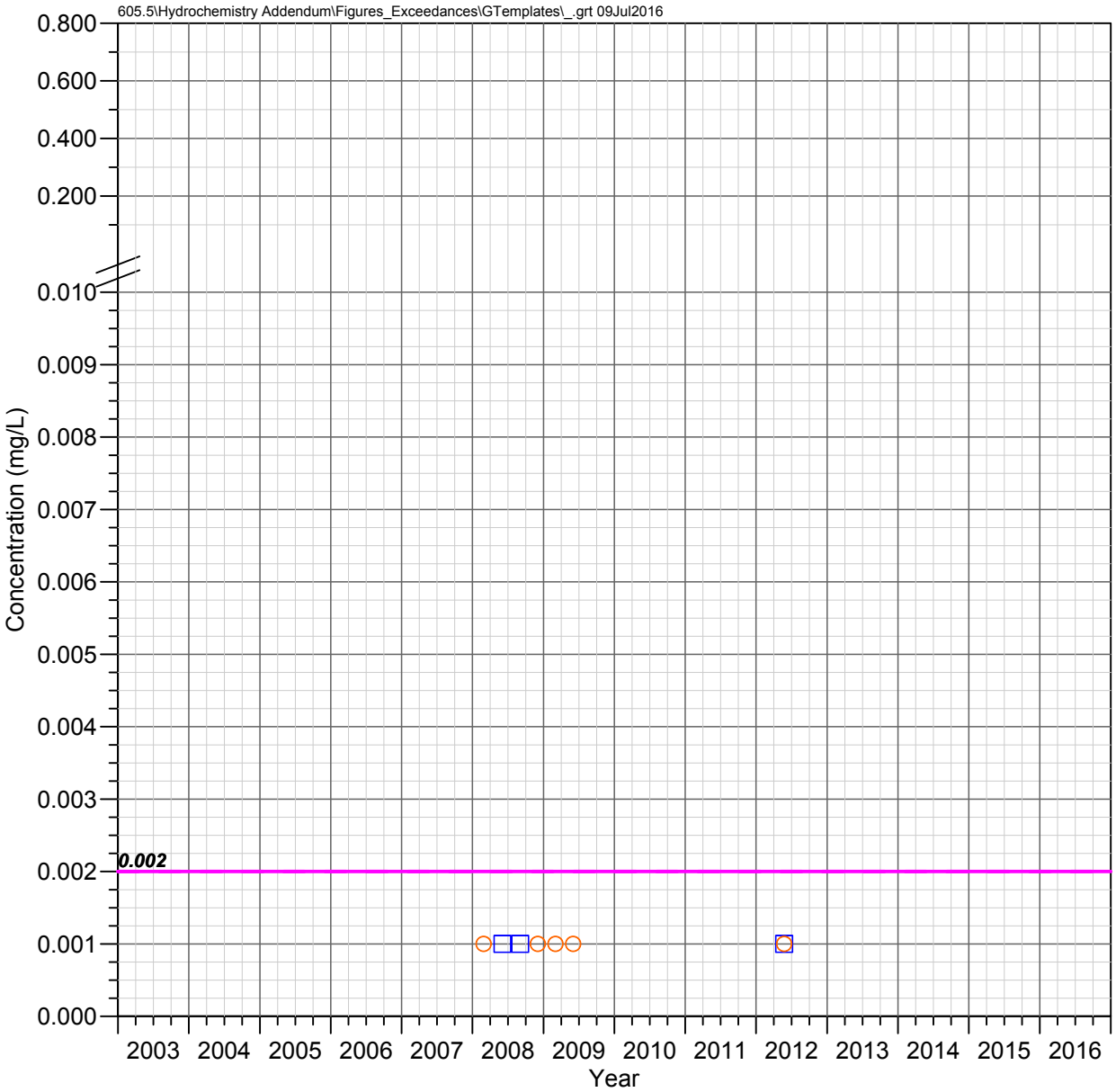


FIGURE E-681. SULFATE CONCENTRATIONS OBSERVED AT DHRES-15, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Hackberry Windmill Well Shallow Groundwater System

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

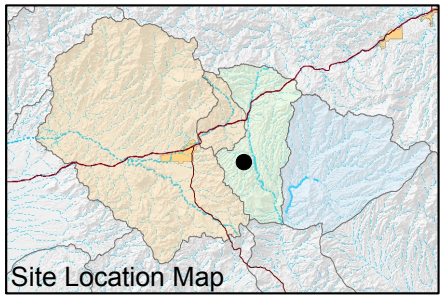
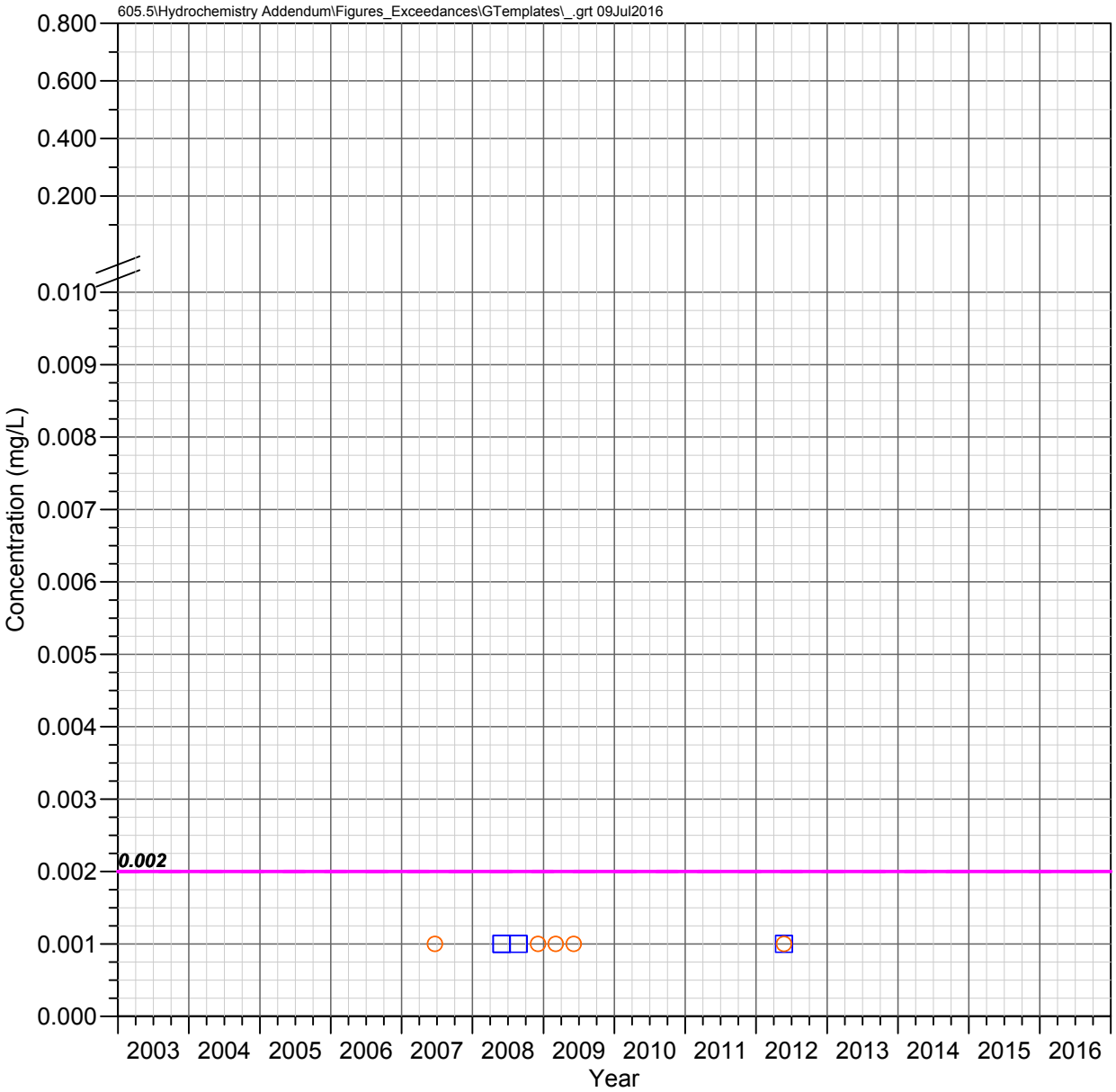


FIGURE E-682. THALLIUM CONCENTRATIONS OBSERVED AT HACKBERRY WINDMILL WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



JI Ranch Corral Well Shallow Groundwater System

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

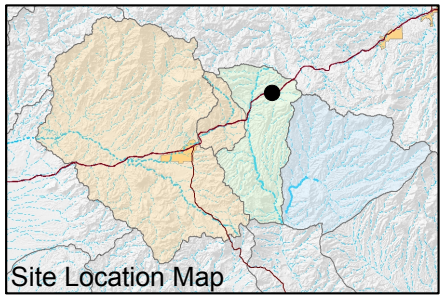
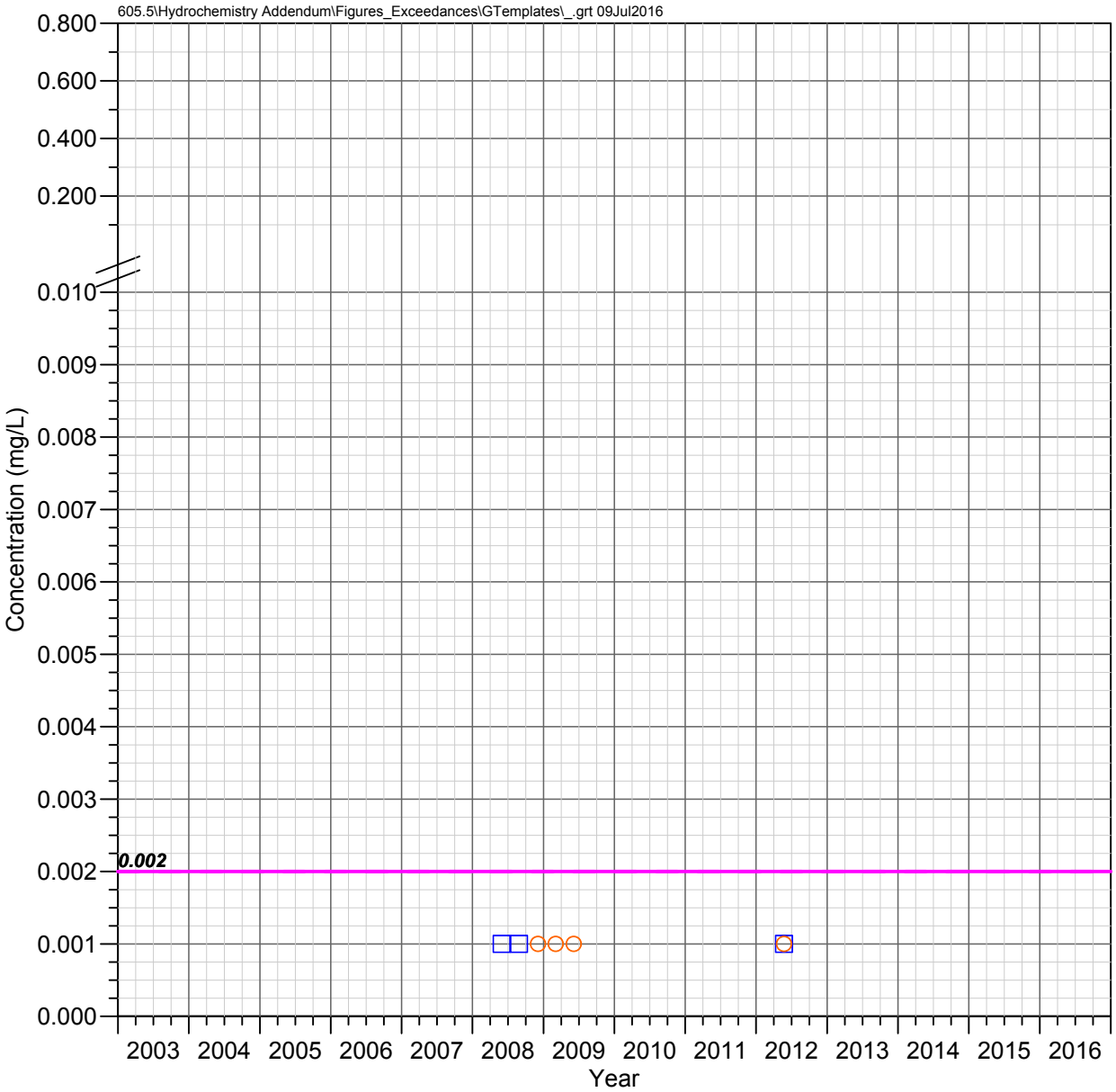


FIGURE E-683. THALLIUM CONCENTRATIONS OBSERVED AT JI RANCH CORRAL WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



JI Ranch Middle Well Shallow Groundwater System

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

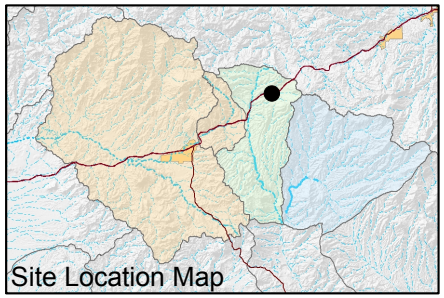
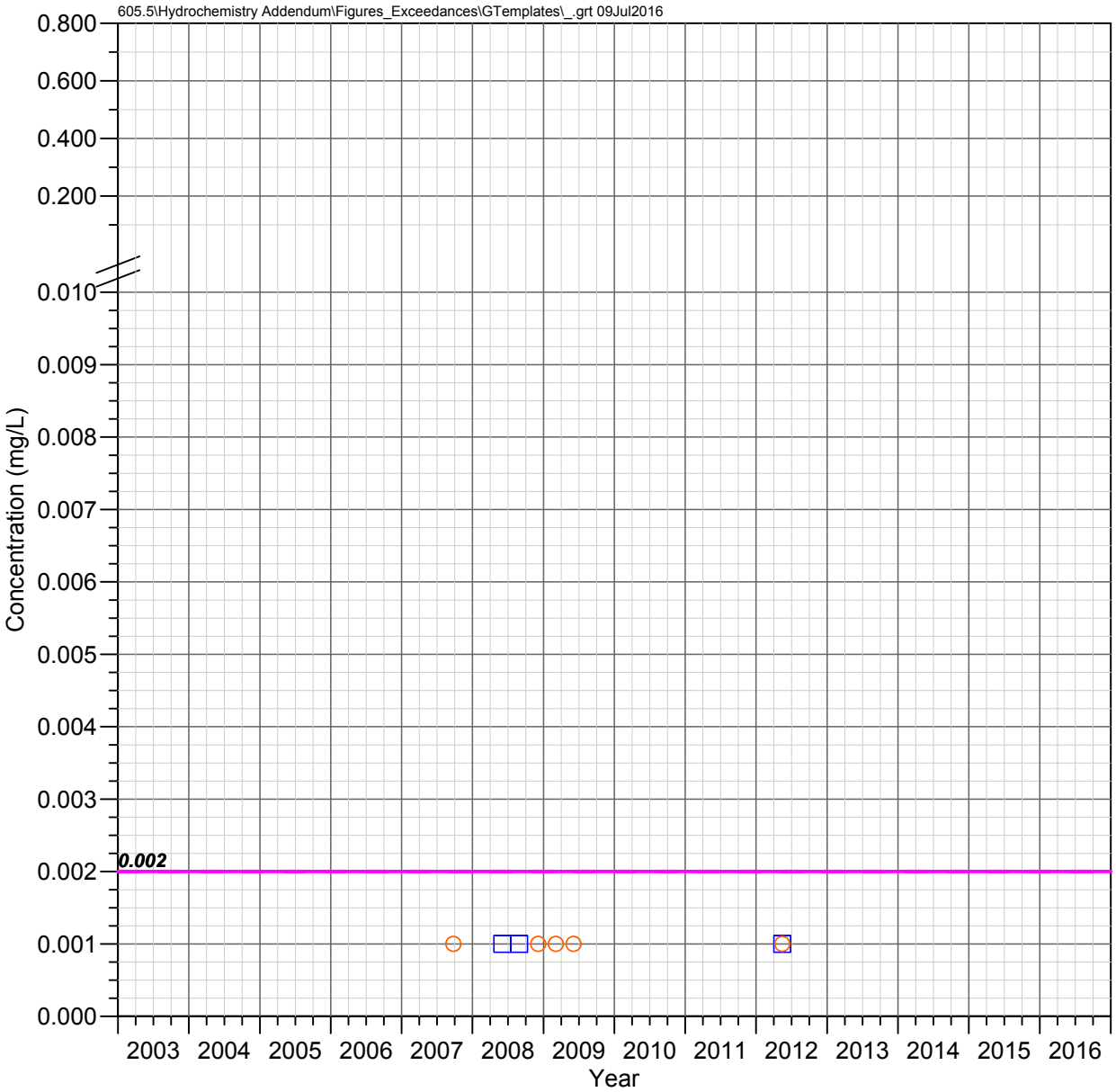


FIGURE E-684. THALLIUM CONCENTRATIONS OBSERVED AT JI RANCH MIDDLE WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



A-06
Apache Leap Tuff Aquifer

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

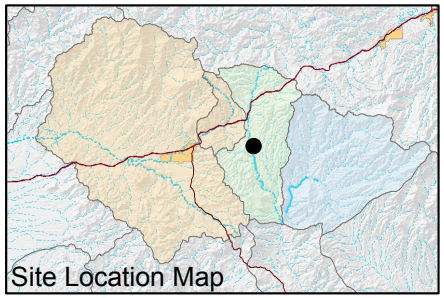
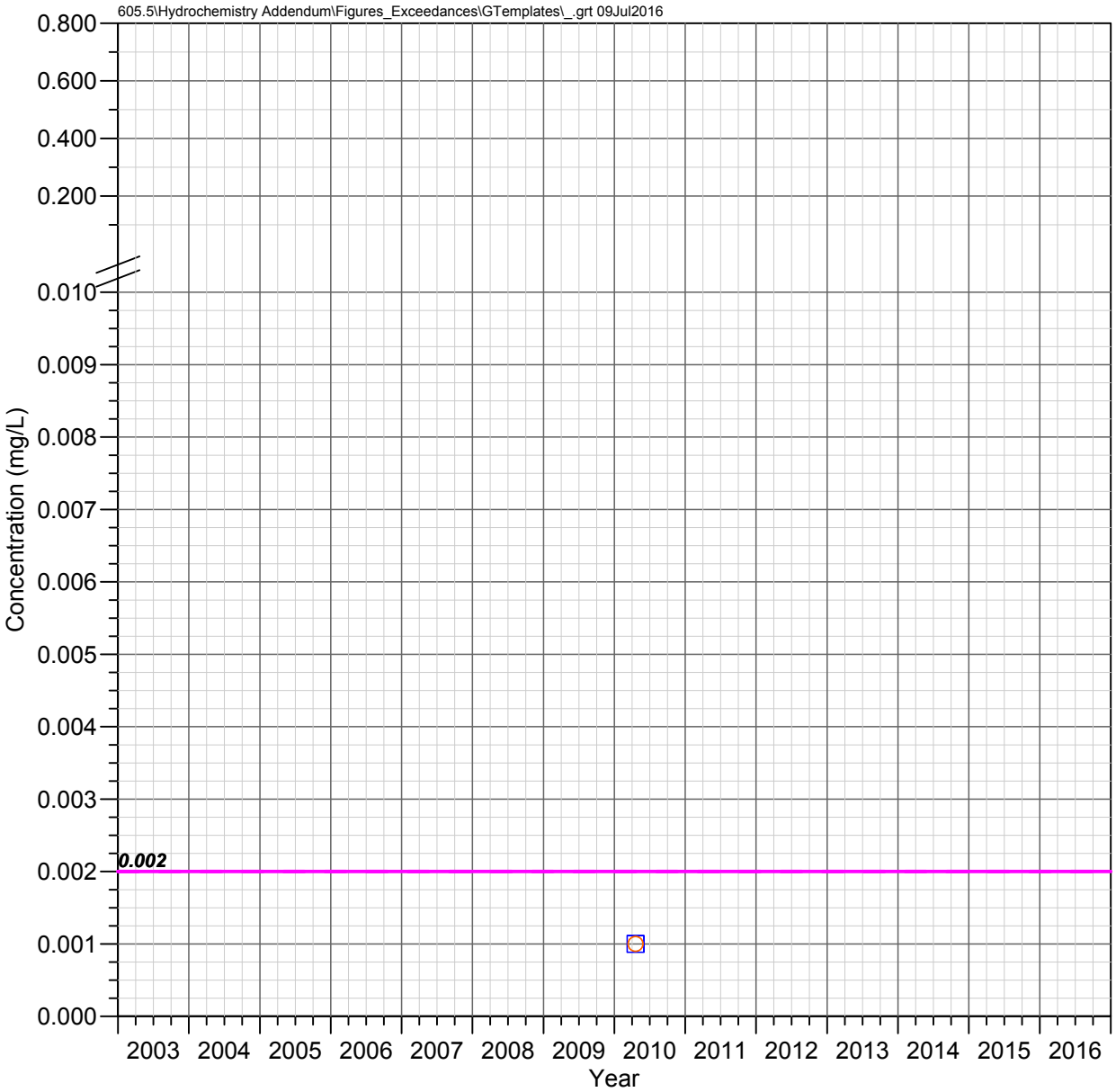


FIGURE E-685. THALLIUM CONCENTRATIONS OBSERVED AT A-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



CT Well
Apache Leap Tuff Aquifer

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

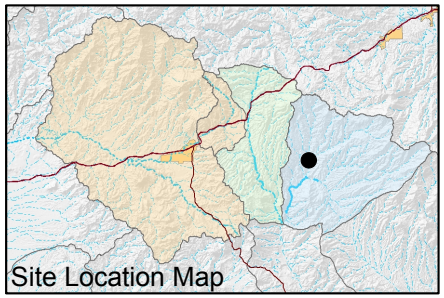
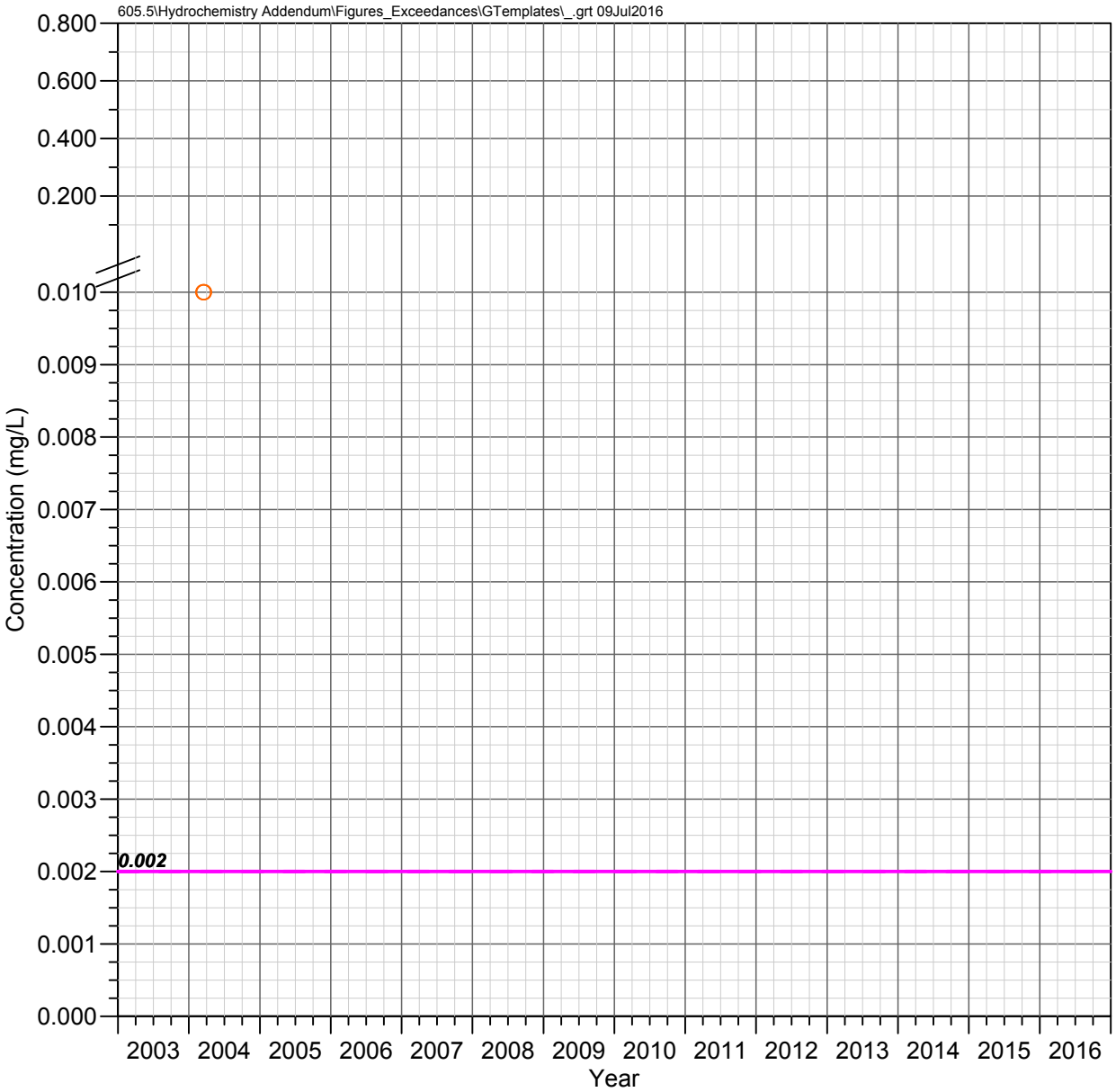


FIGURE E-686. THALLIUM CONCENTRATIONS OBSERVED AT CT WELL, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-01
Apache Leap Tuff Aquifer

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

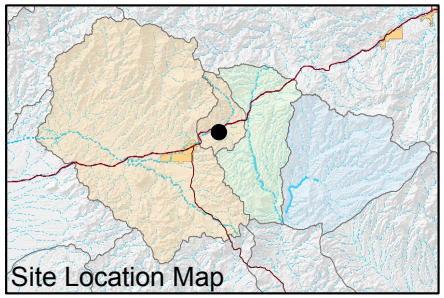
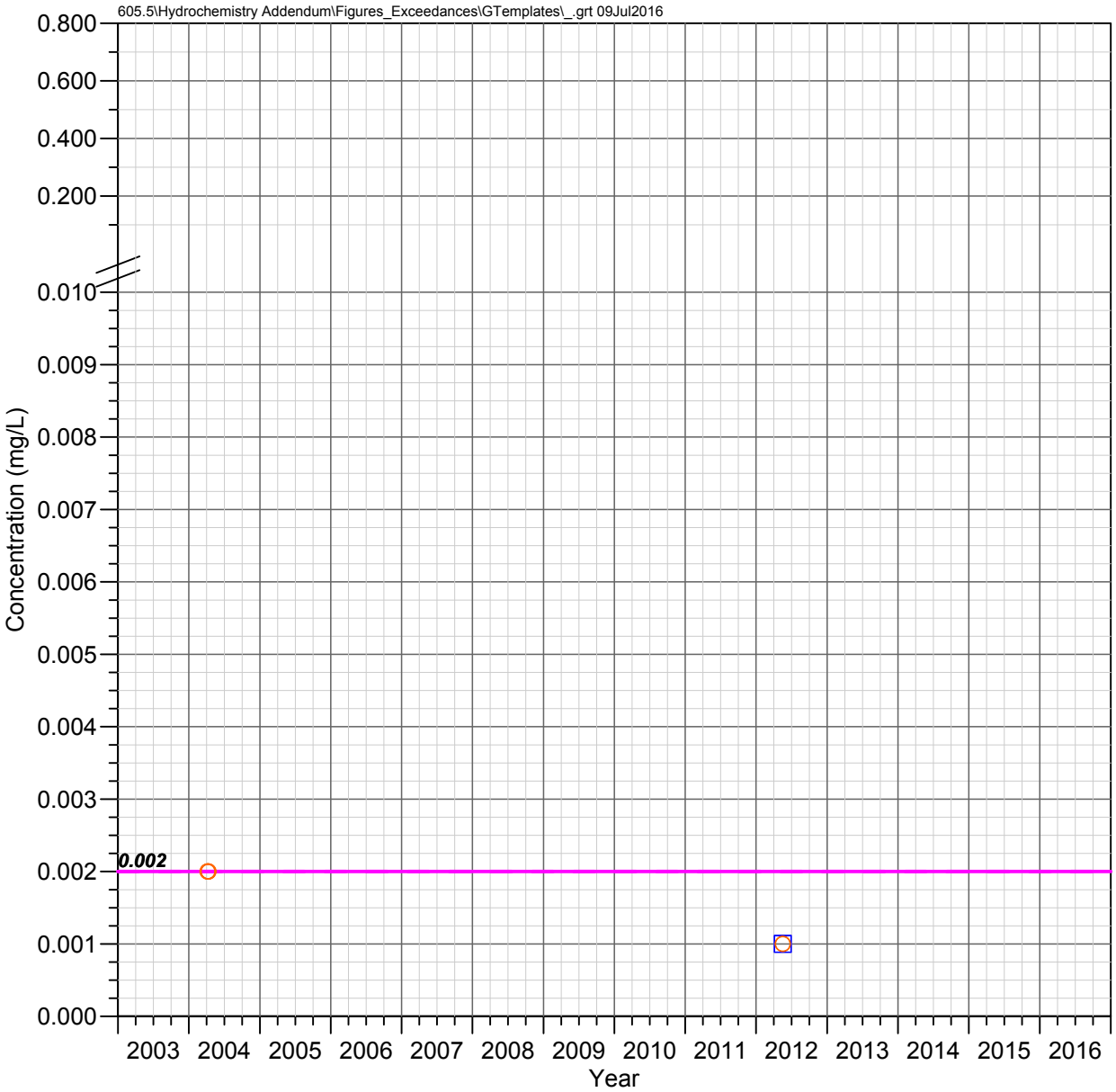


FIGURE E-687. THALLIUM CONCENTRATIONS OBSERVED AT HRES-01, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-02
Apache Leap Tuff Aquifer

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

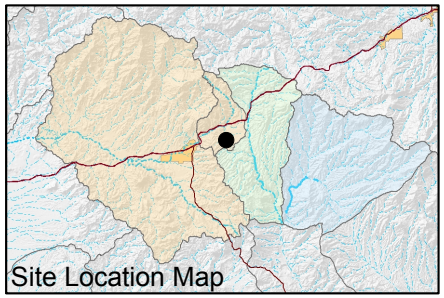
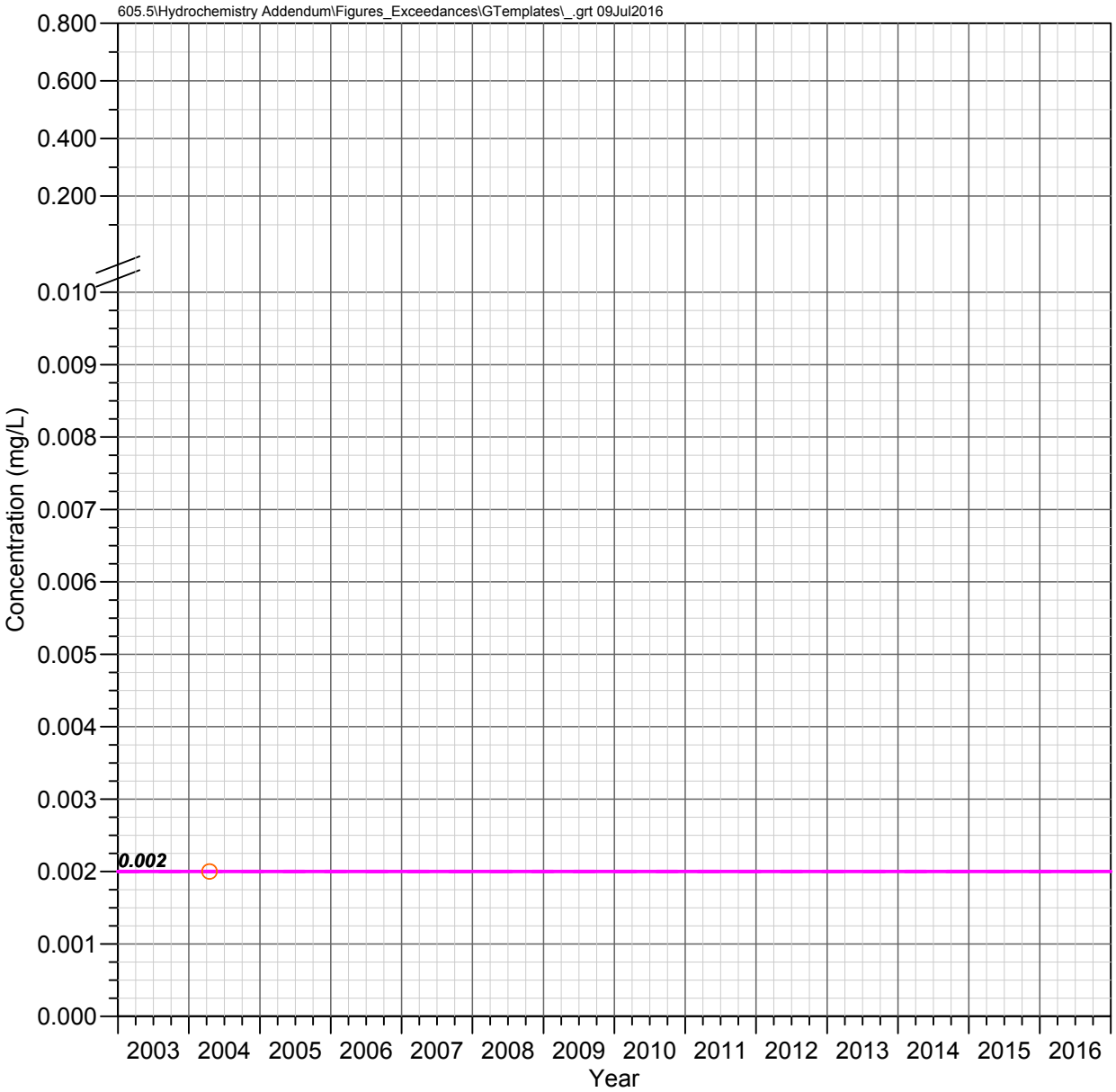


FIGURE E-688. THALLIUM CONCENTRATIONS OBSERVED AT HRES-02, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-03d
Apache Leap Tuff Aquifer

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

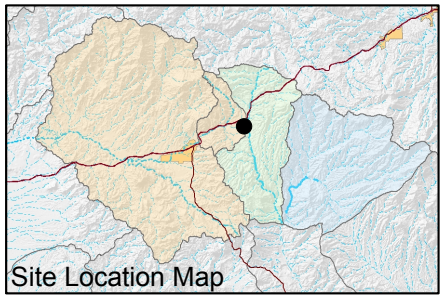
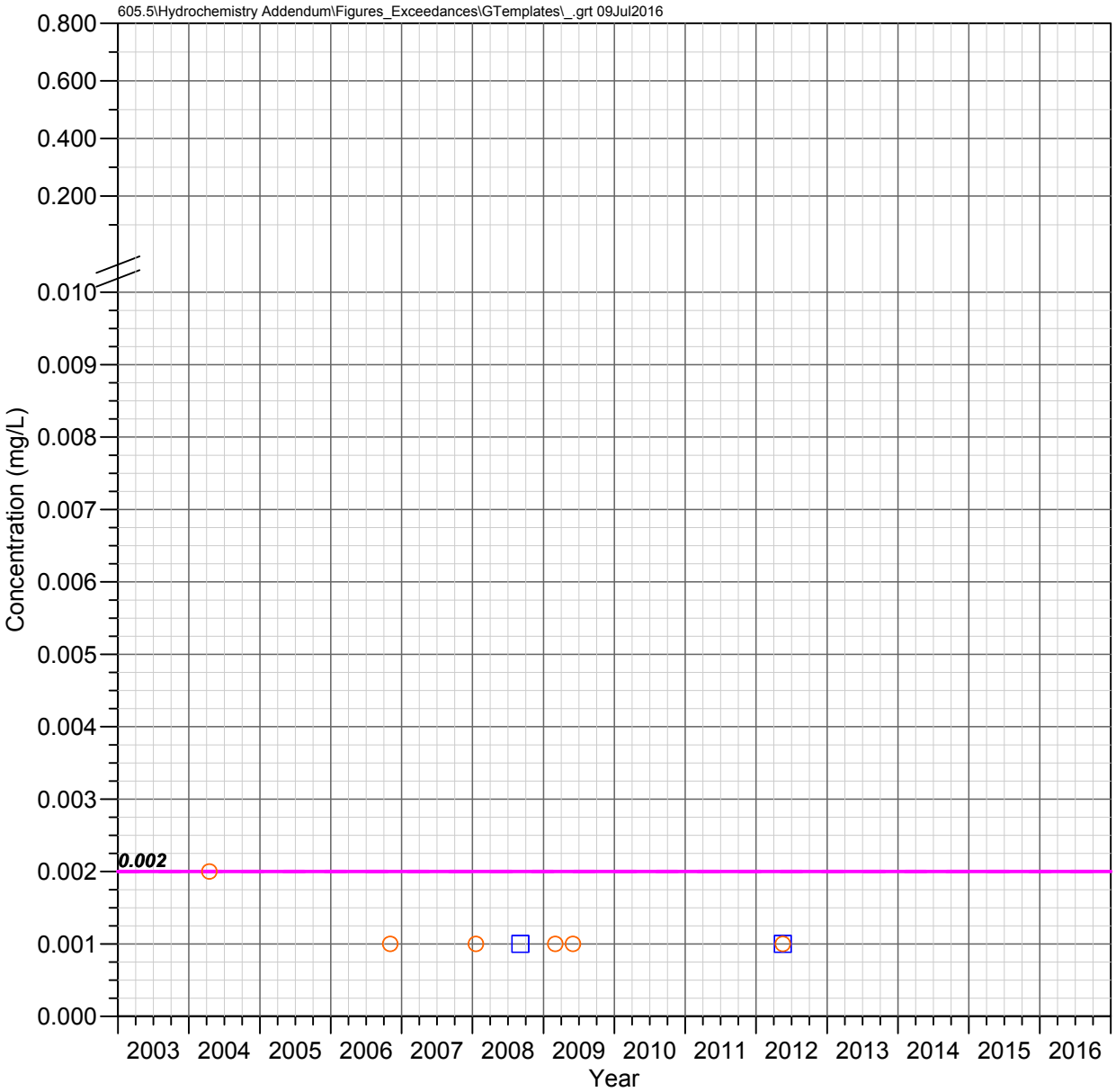


FIGURE E-689. THALLIUM CONCENTRATIONS OBSERVED AT HRES-03D, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-04
Apache Leap Tuff Aquifer

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

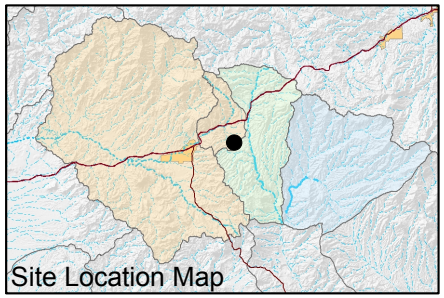
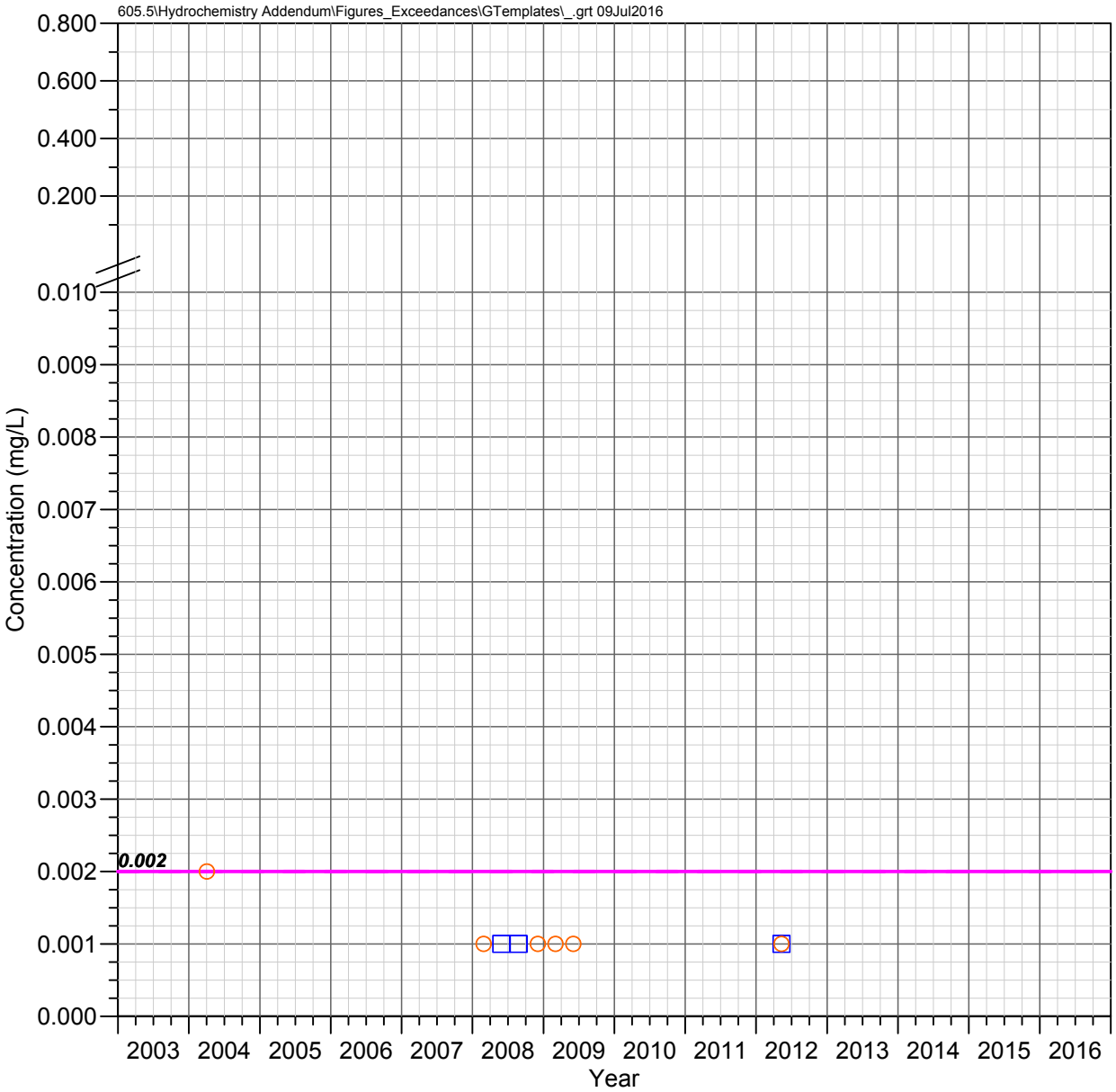


FIGURE E-690. THALLIUM CONCENTRATIONS OBSERVED AT HRES-04, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-05
Apache Leap Tuff Aquifer

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

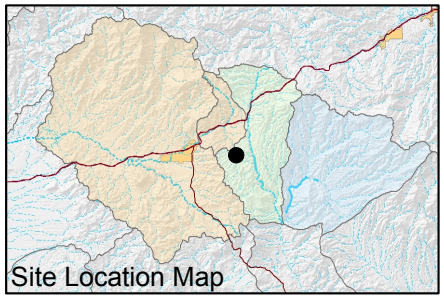
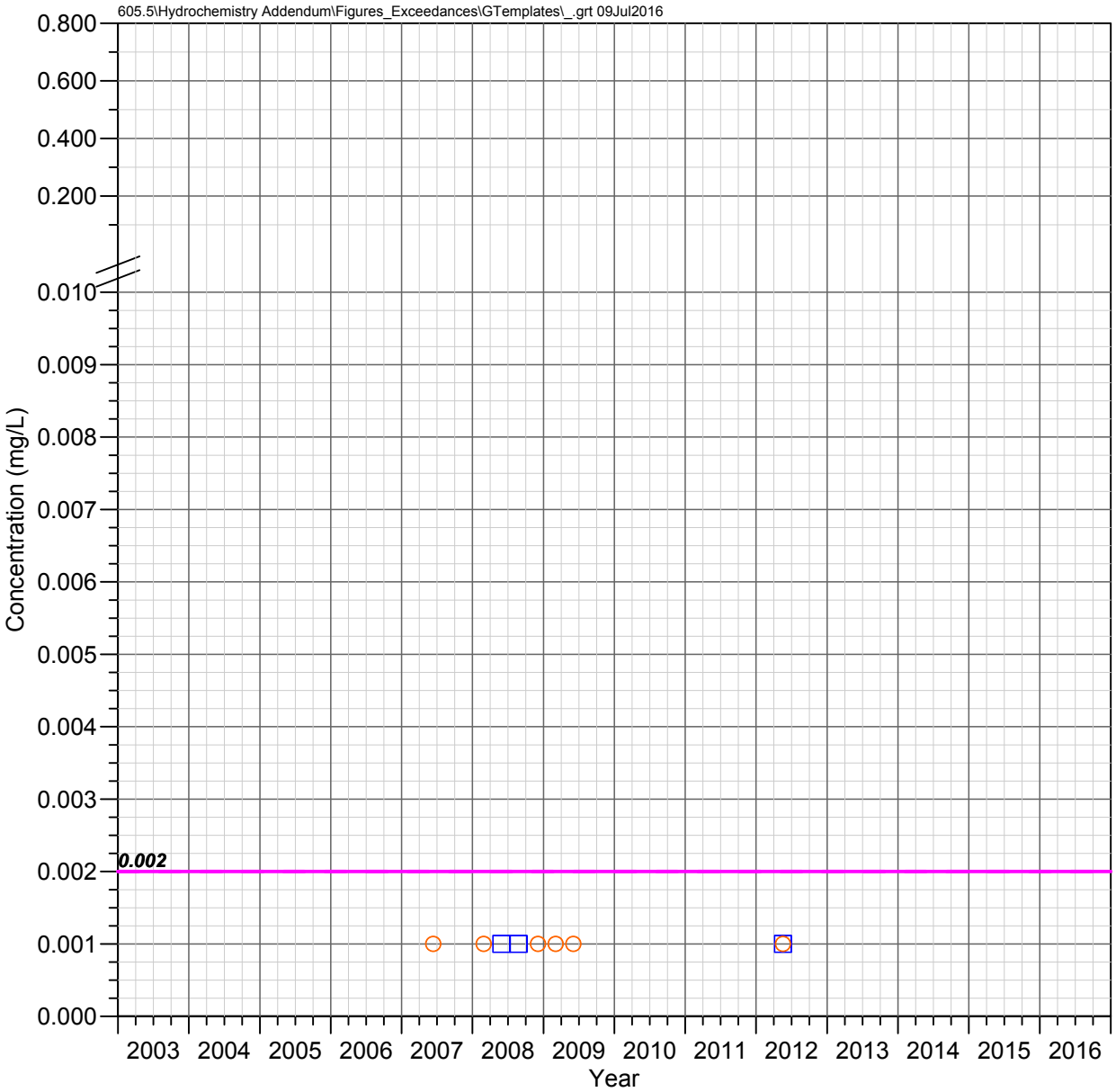


FIGURE E-691. THALLIUM CONCENTRATIONS OBSERVED AT HRES-05, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-06
Apache Leap Tuff Aquifer

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

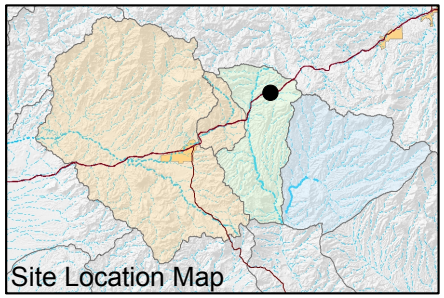
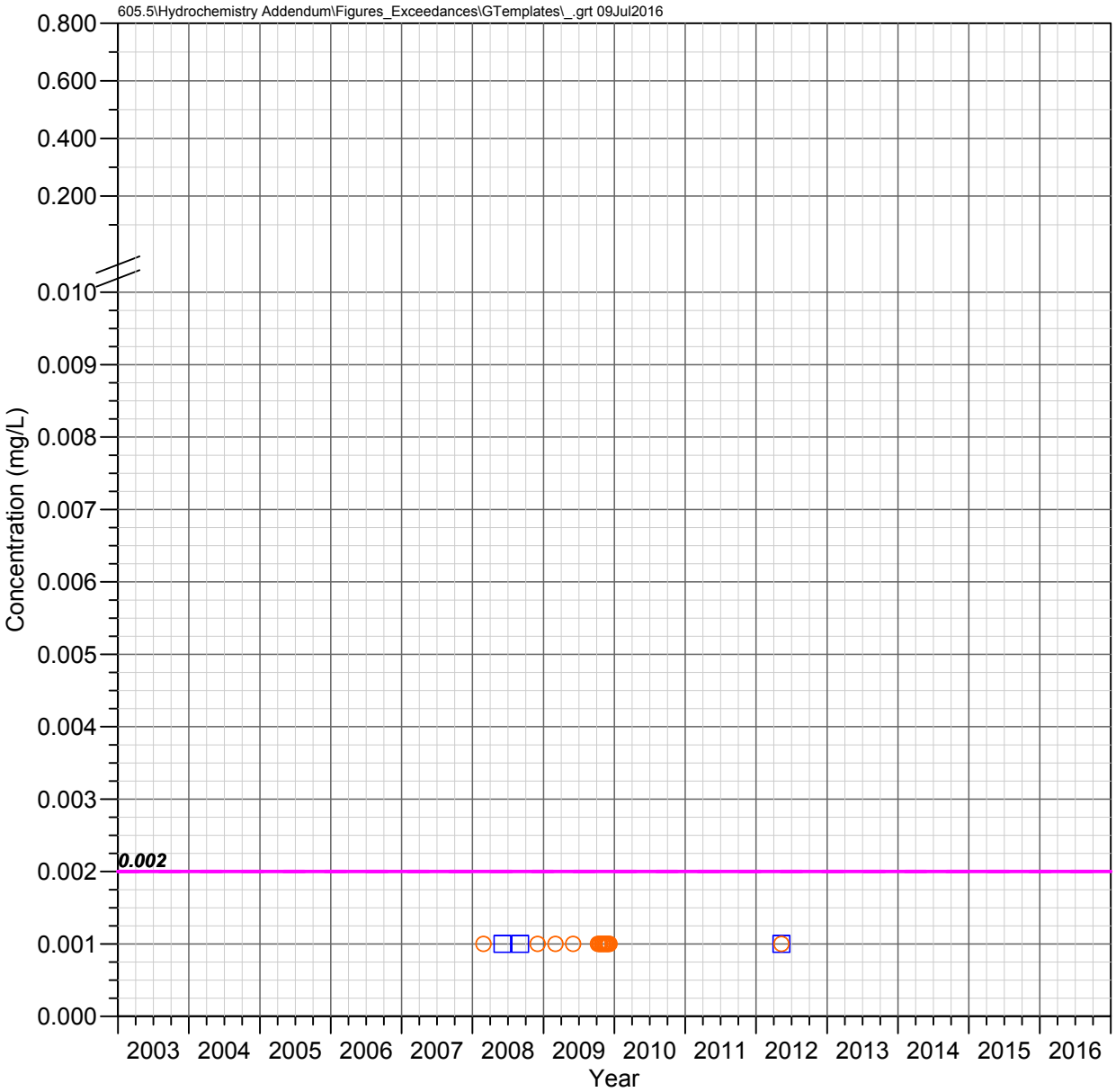


FIGURE E-692. THALLIUM CONCENTRATIONS OBSERVED AT HRES-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-07
Apache Leap Tuff Aquifer

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

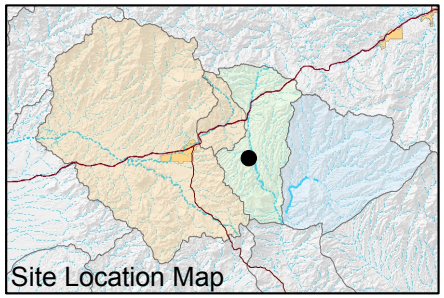
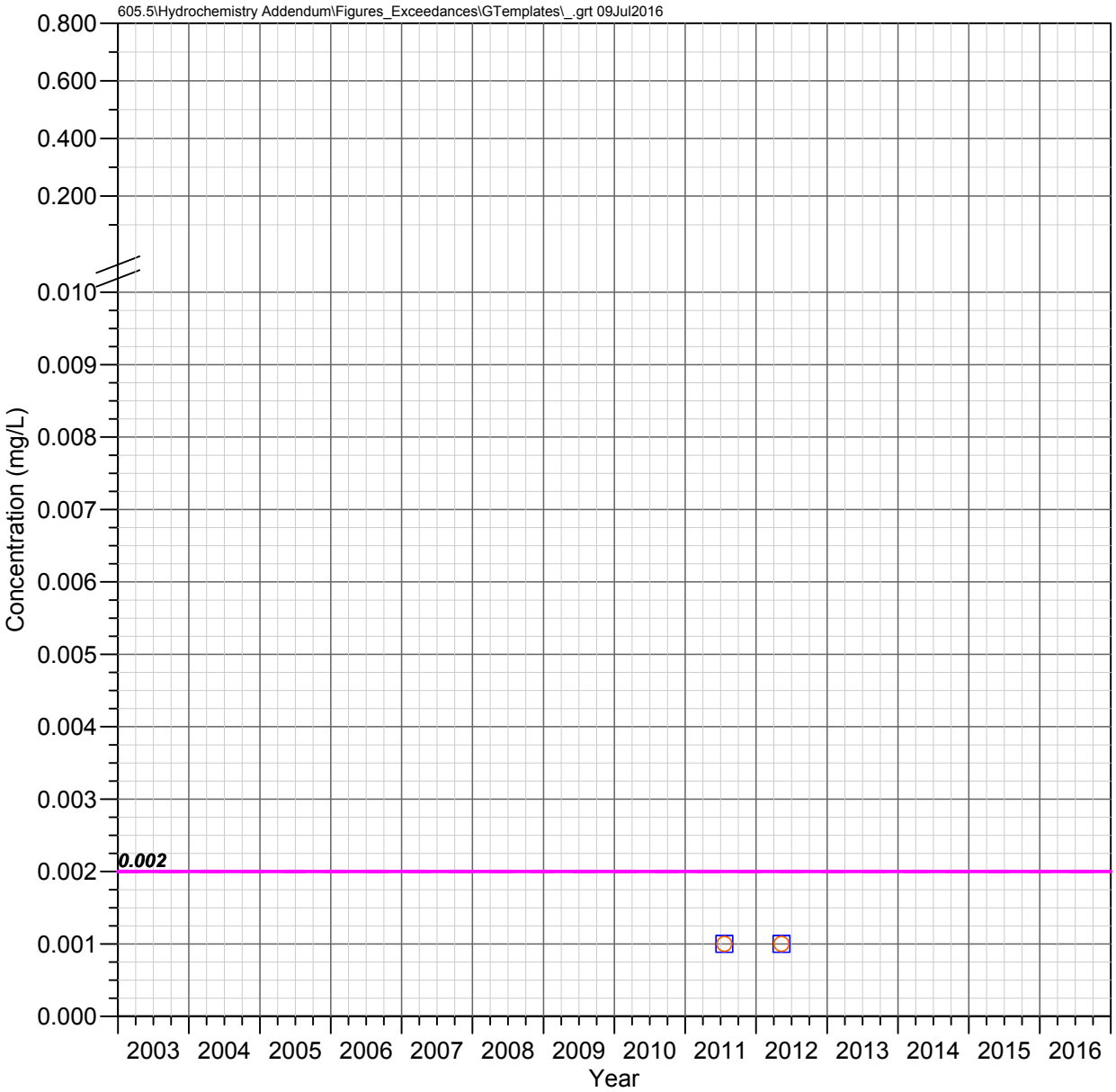


FIGURE E-693. THALLIUM CONCENTRATIONS OBSERVED AT HRES-07, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-08
Apache Leap Tuff Aquifer

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

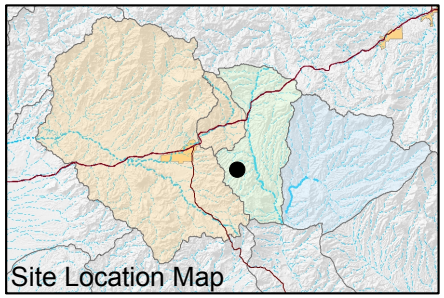
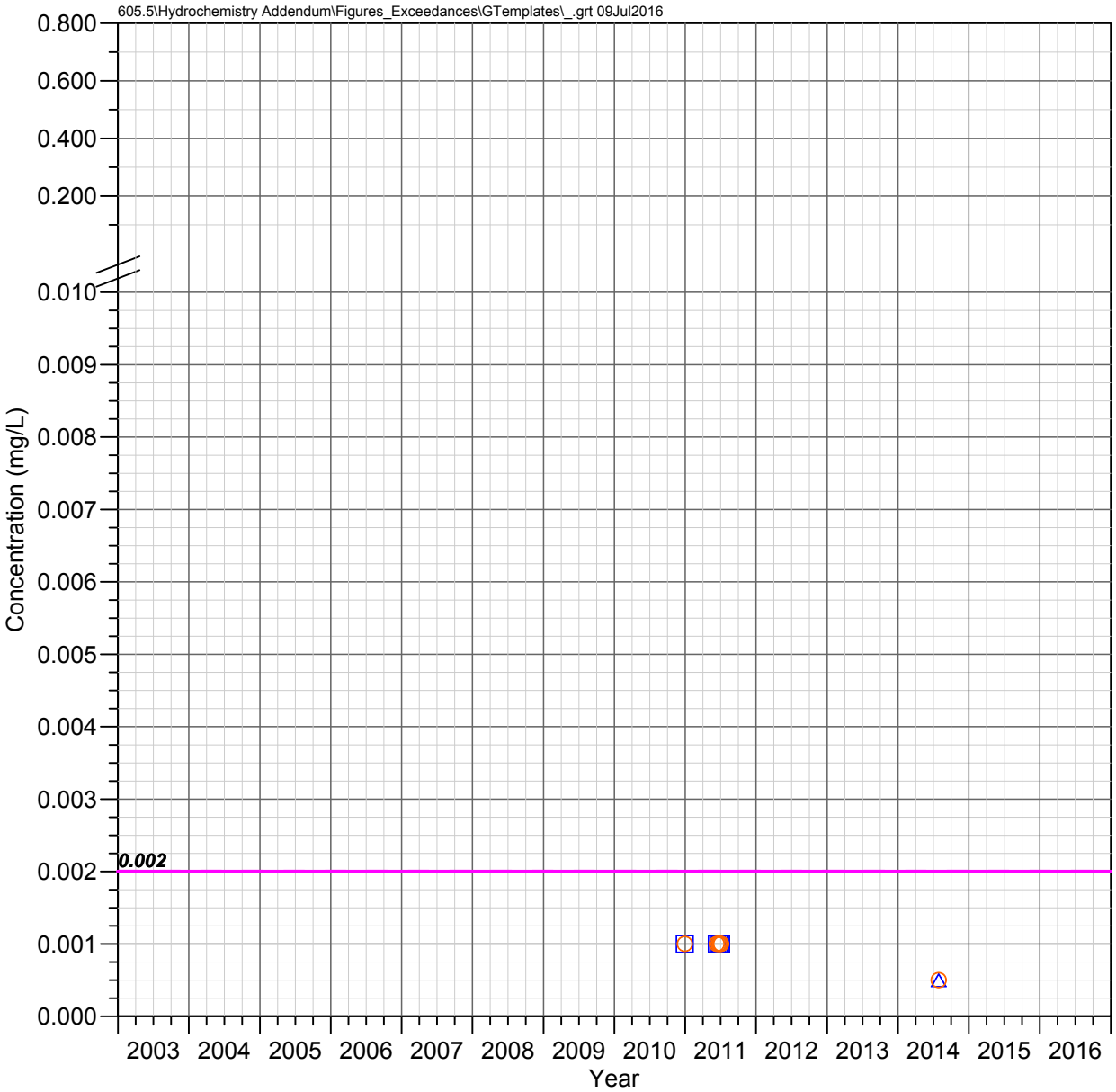


FIGURE E-694. THALLIUM CONCENTRATIONS OBSERVED AT HRES-08, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-09
Apache Leap Tuff Aquifer

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

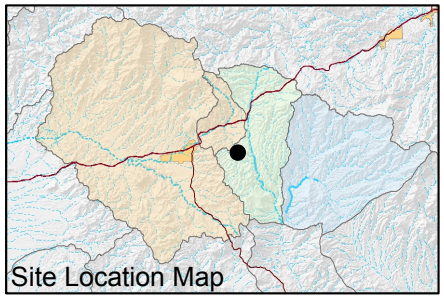
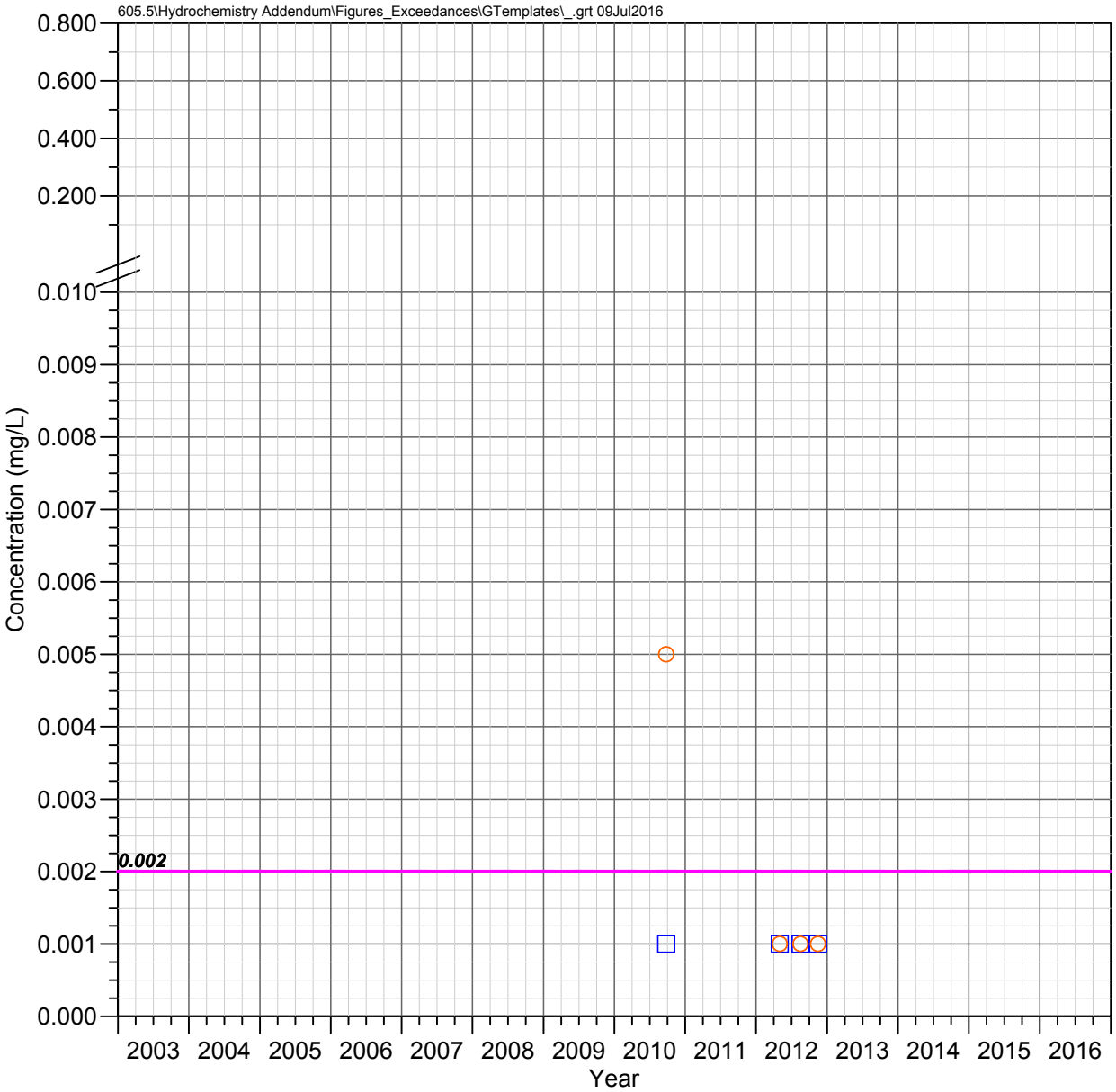


FIGURE E-695. THALLIUM CONCENTRATIONS OBSERVED AT HRES-09, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-10
Apache Leap Tuff Aquifer

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

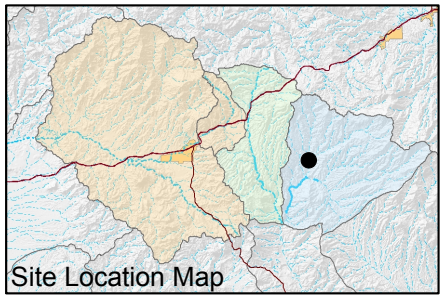
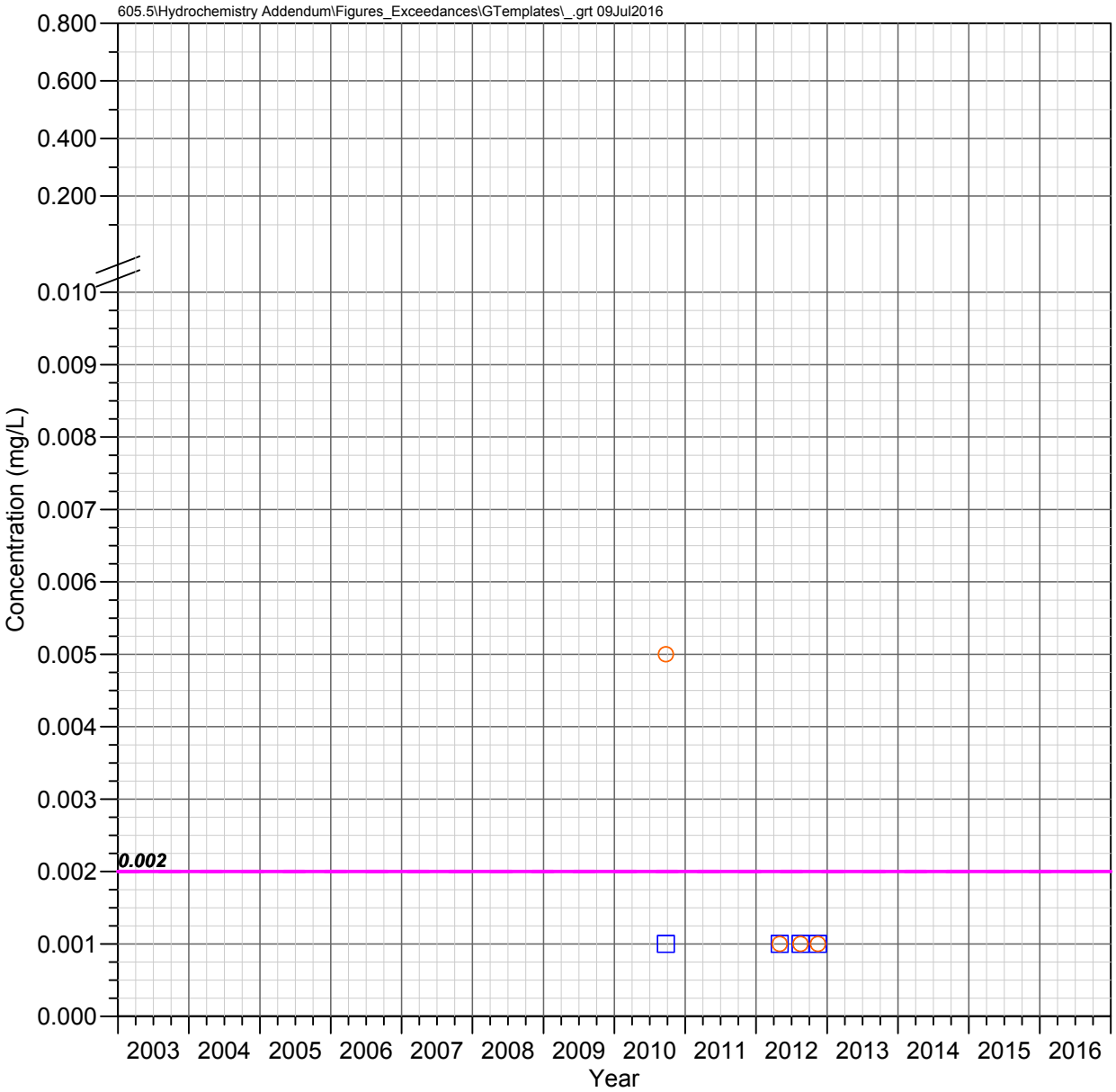


FIGURE E-696. THALLIUM CONCENTRATIONS OBSERVED AT HRES-10, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-11
Apache Leap Tuff Aquifer

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

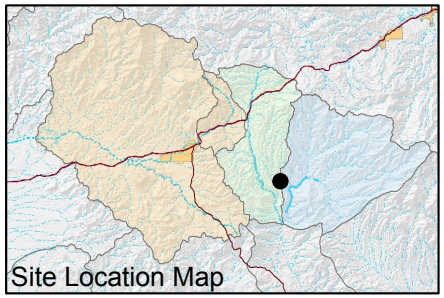
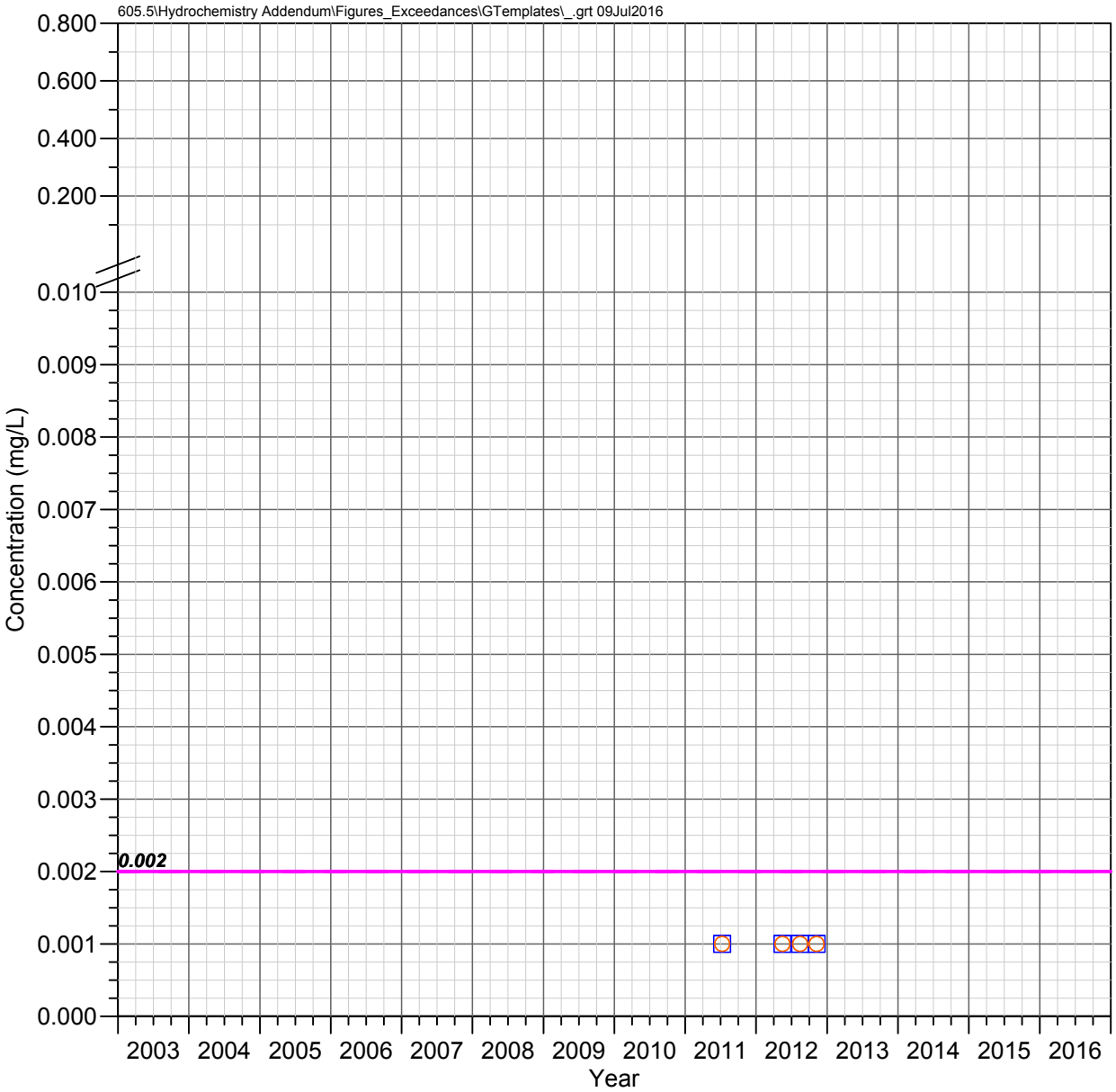


FIGURE E-697. THALLIUM CONCENTRATIONS OBSERVED AT HRES-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-12
Apache Leap Tuff Aquifer

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

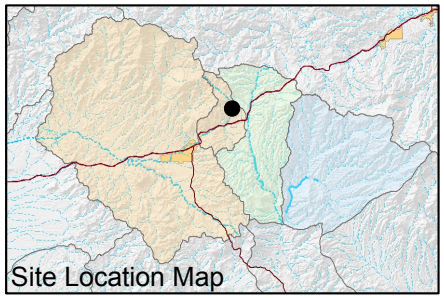
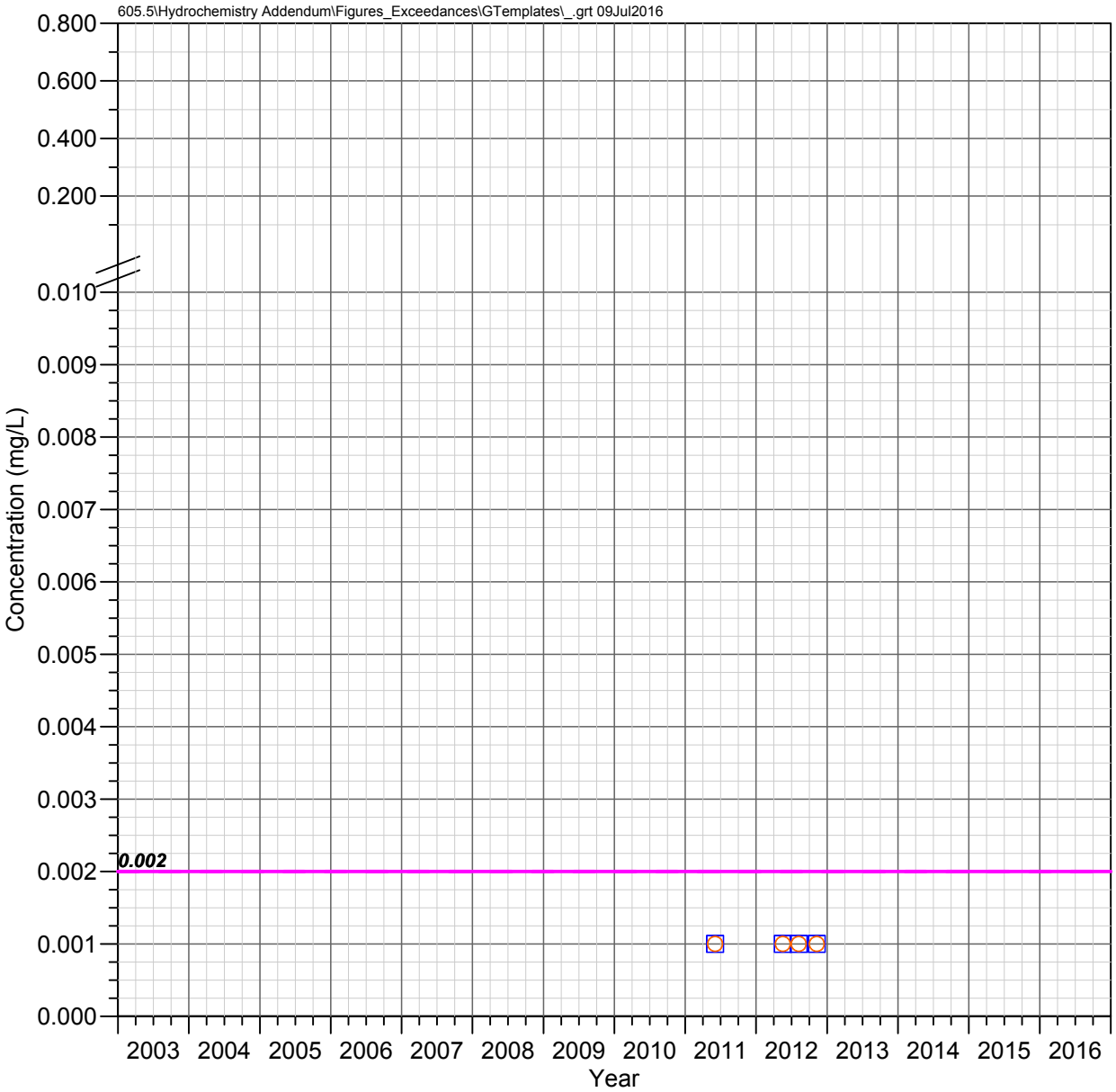


FIGURE E-698. THALLIUM CONCENTRATIONS OBSERVED AT HRES-12, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-13
Apache Leap Tuff Aquifer

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

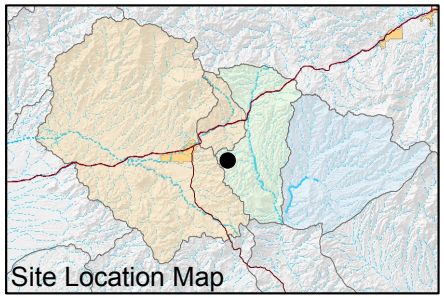
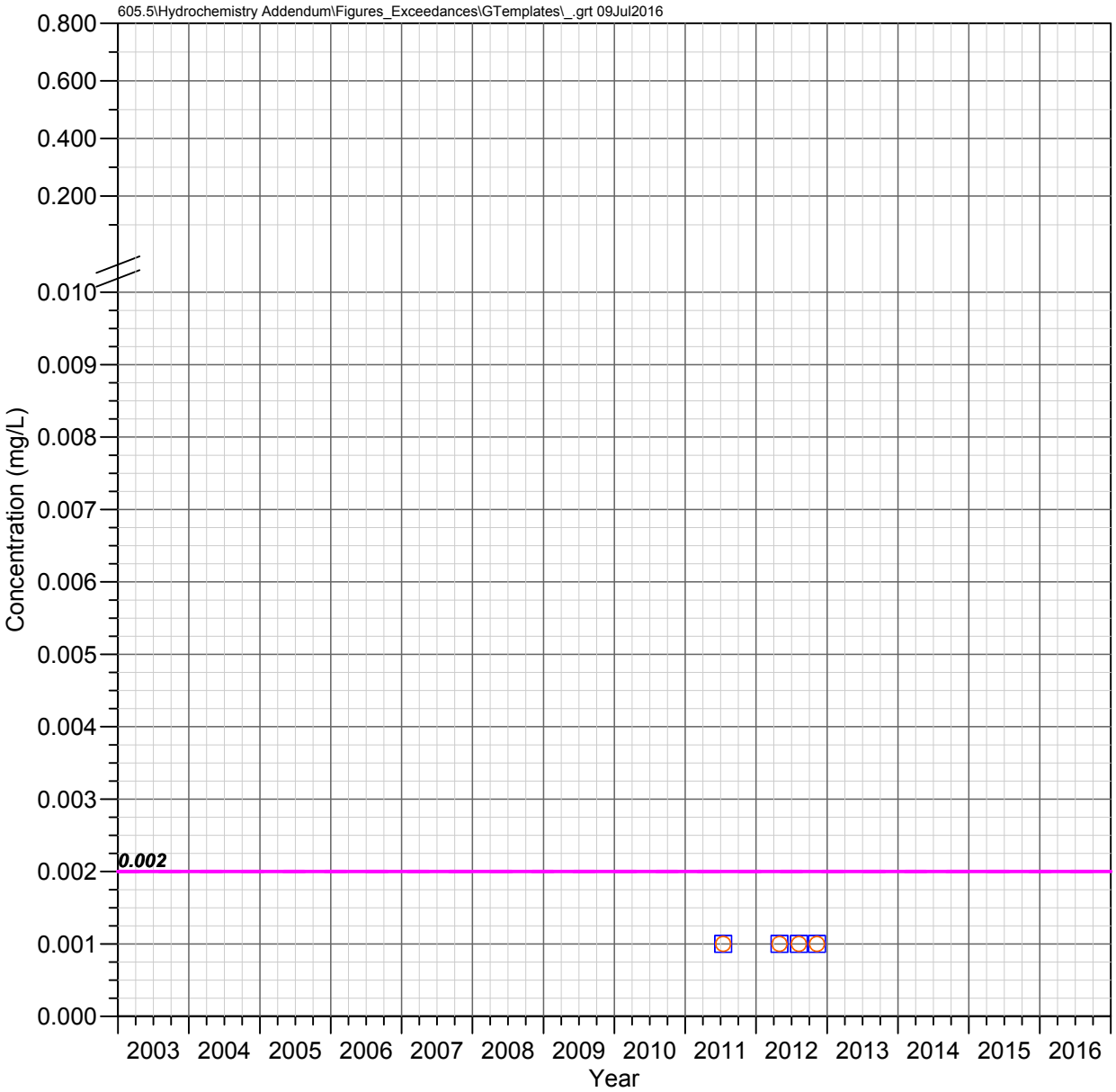


FIGURE E-699. THALLIUM CONCENTRATIONS OBSERVED AT HRES-13, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-14
Apache Leap Tuff Aquifer

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

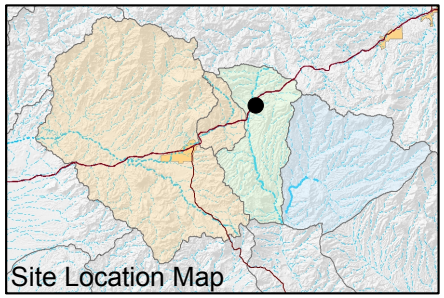
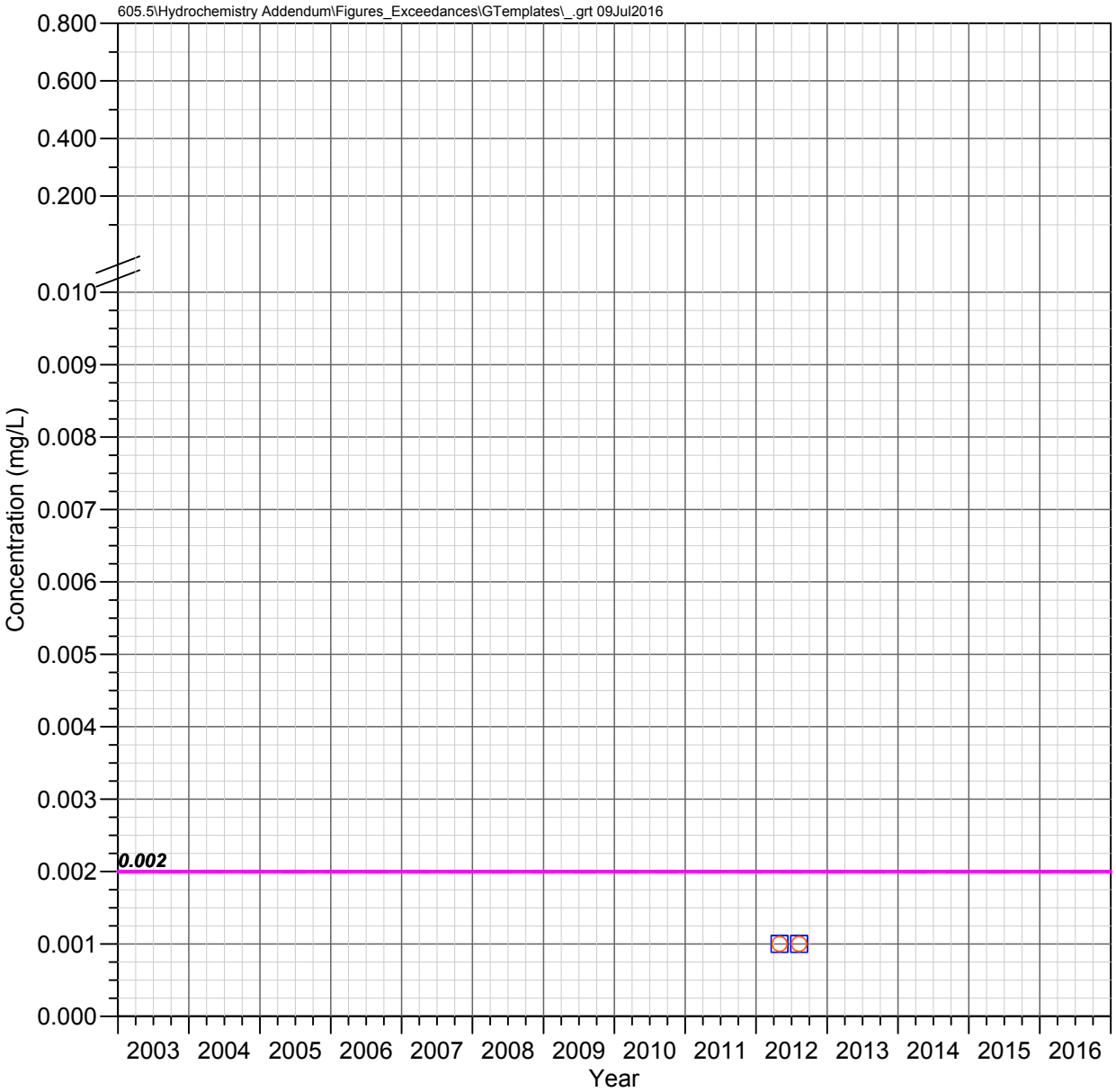


FIGURE E-700. THALLIUM CONCENTRATIONS OBSERVED AT HRES-14, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-15
Apache Leap Tuff Aquifer

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

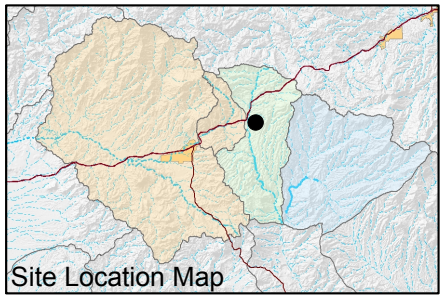
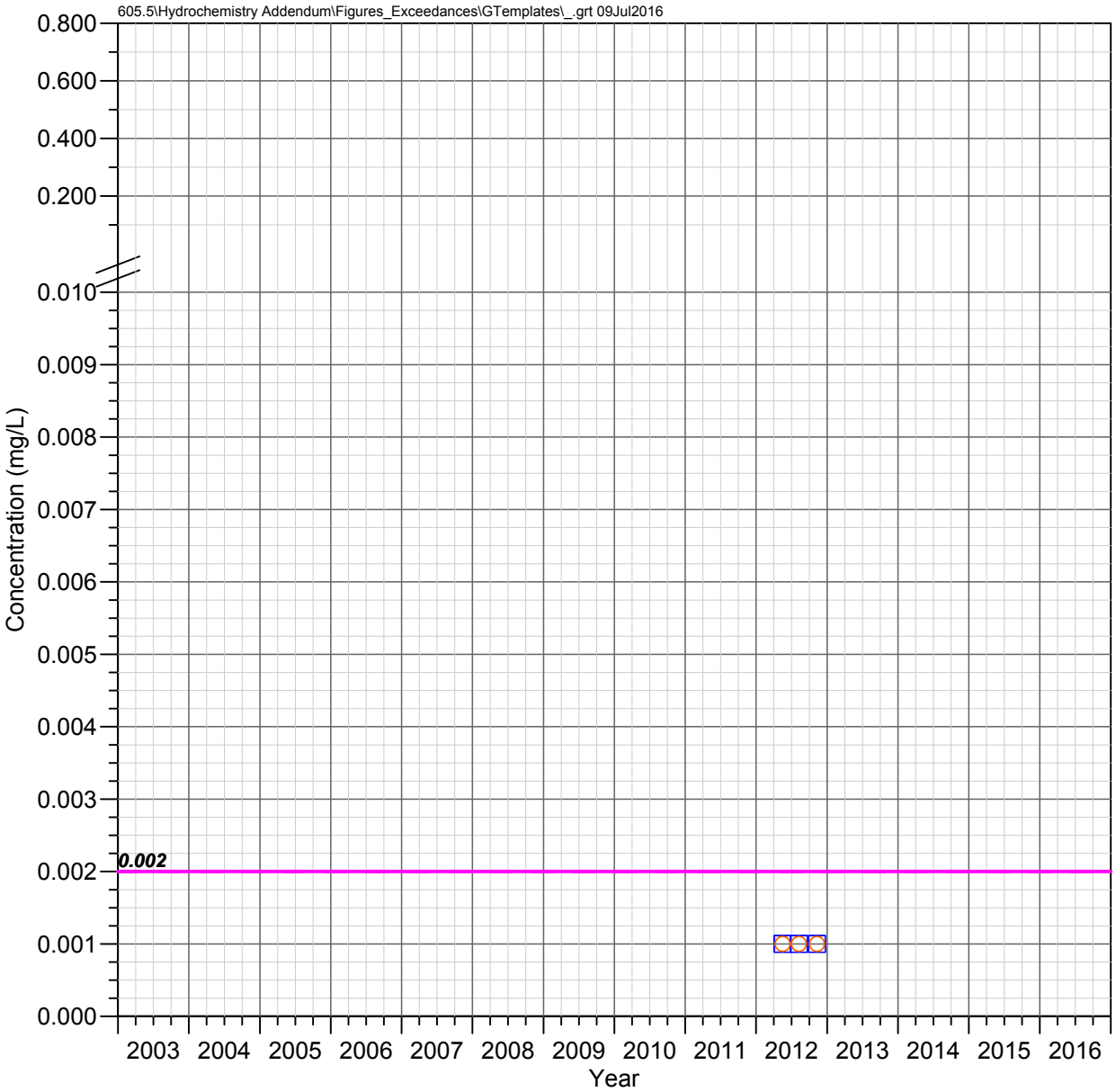


FIGURE E-701. THALLIUM CONCENTRATIONS OBSERVED AT HRES-15, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-17
Apache Leap Tuff Aquifer

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

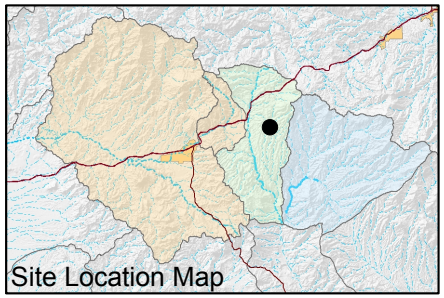
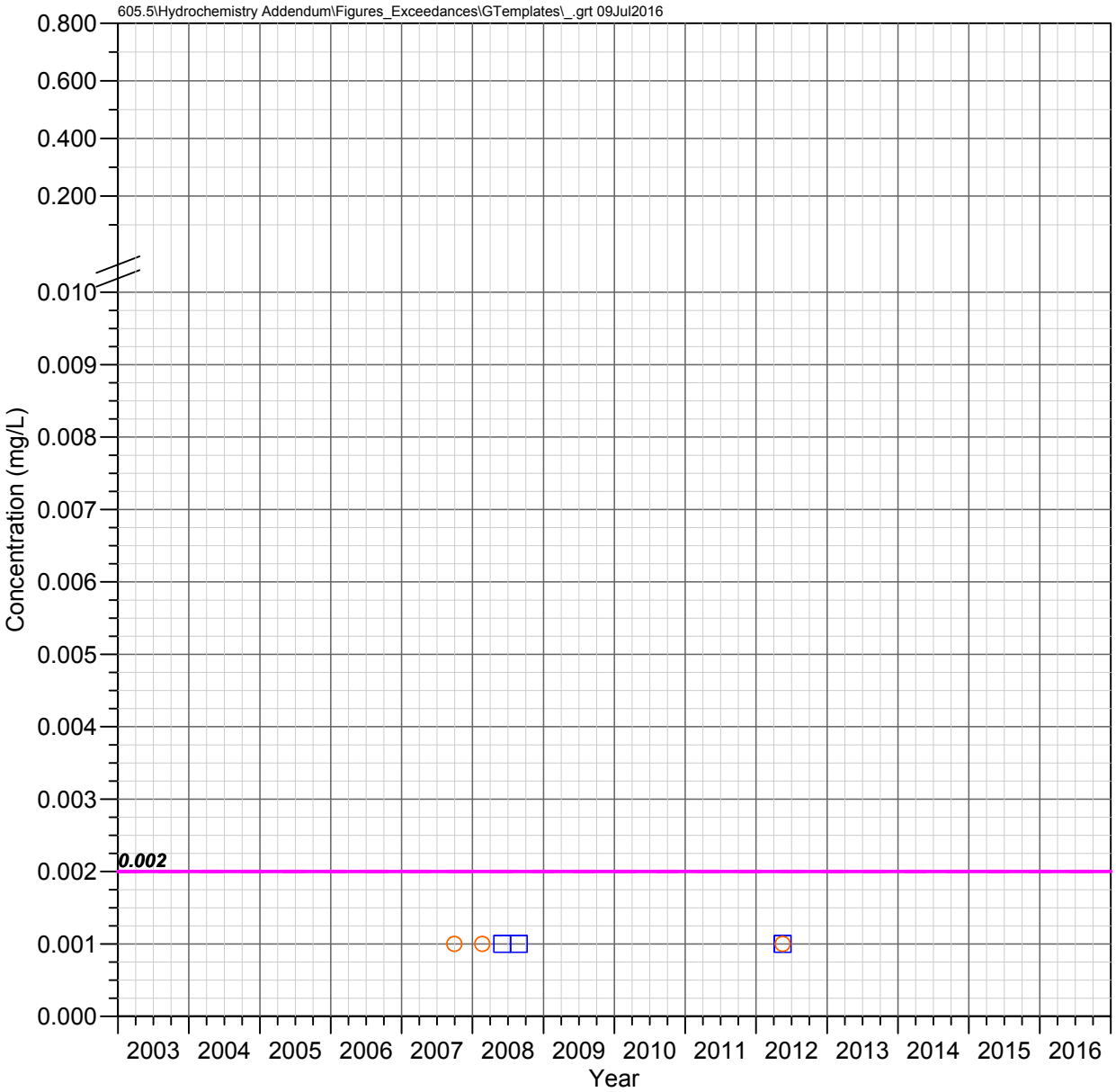


FIGURE E-702. THALLIUM CONCENTRATIONS OBSERVED AT HRES-17, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MJ-11
Apache Leap Tuff Aquifer

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

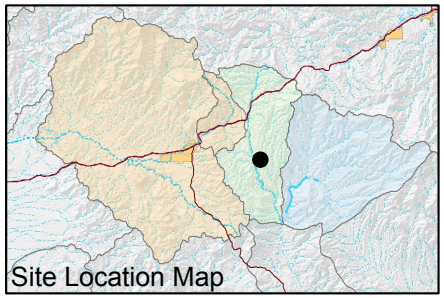
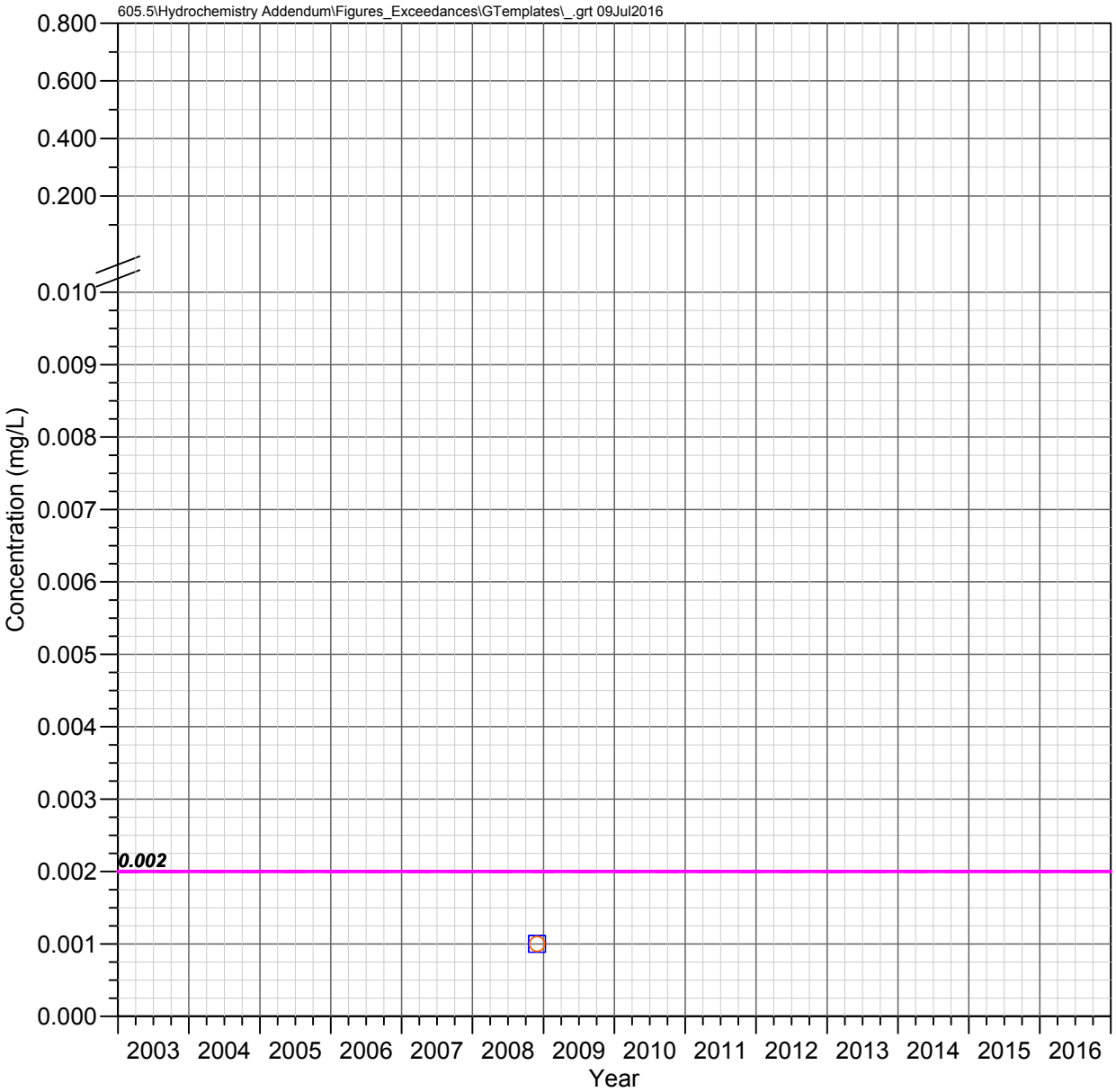


FIGURE E-703. THALLIUM CONCENTRATIONS OBSERVED AT MJ-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-01
Deep Groundwater System

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

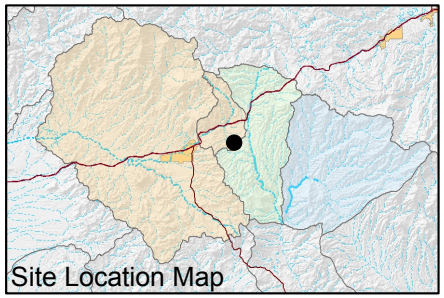
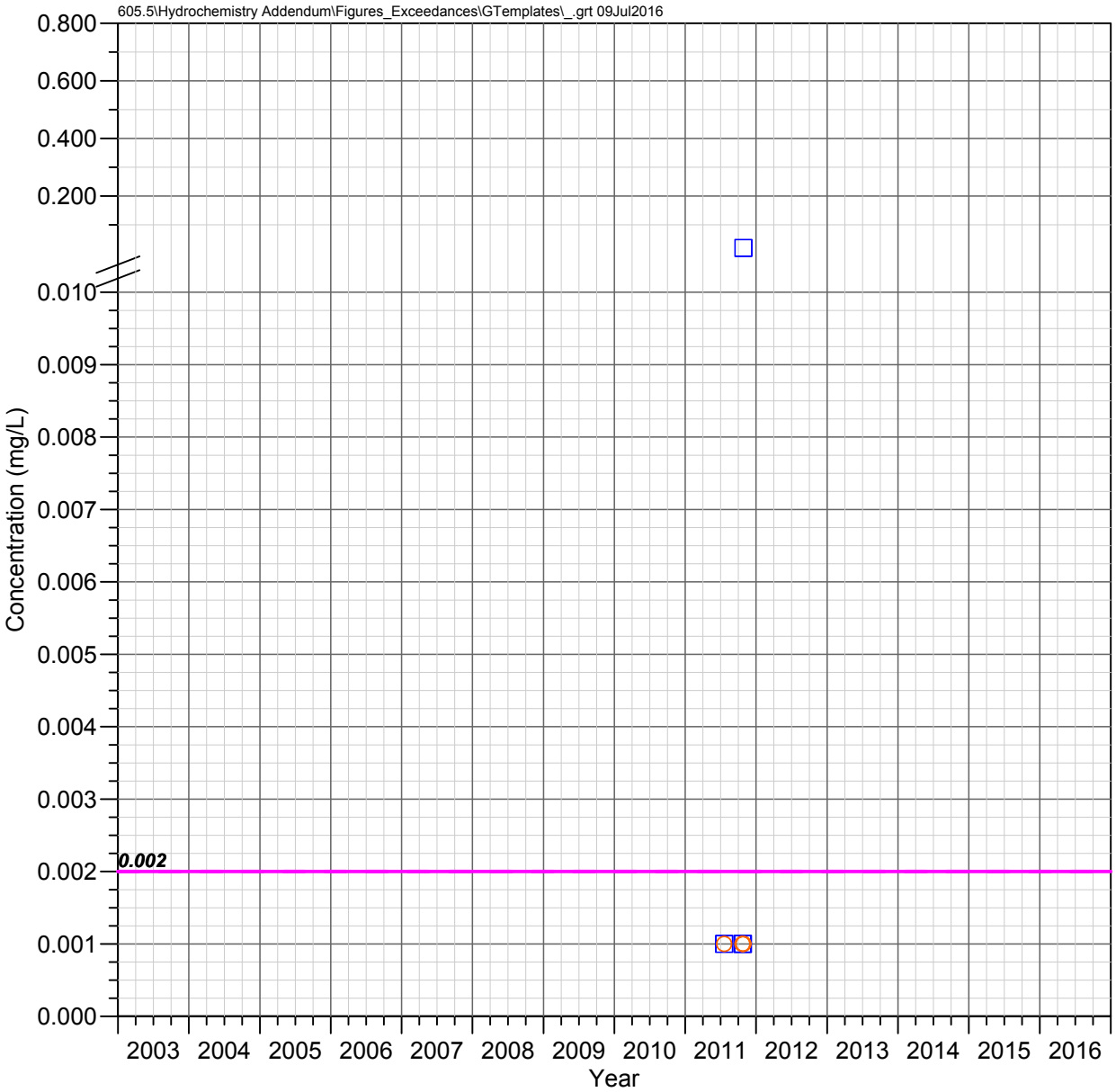


FIGURE E-704. THALLIUM CONCENTRATIONS OBSERVED AT DHRES-01, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-02
Deep Groundwater System

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

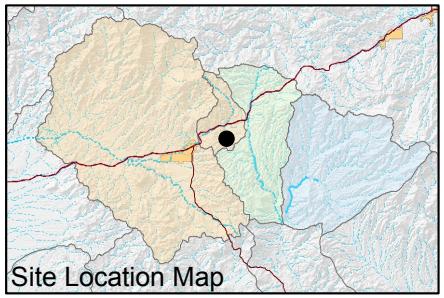
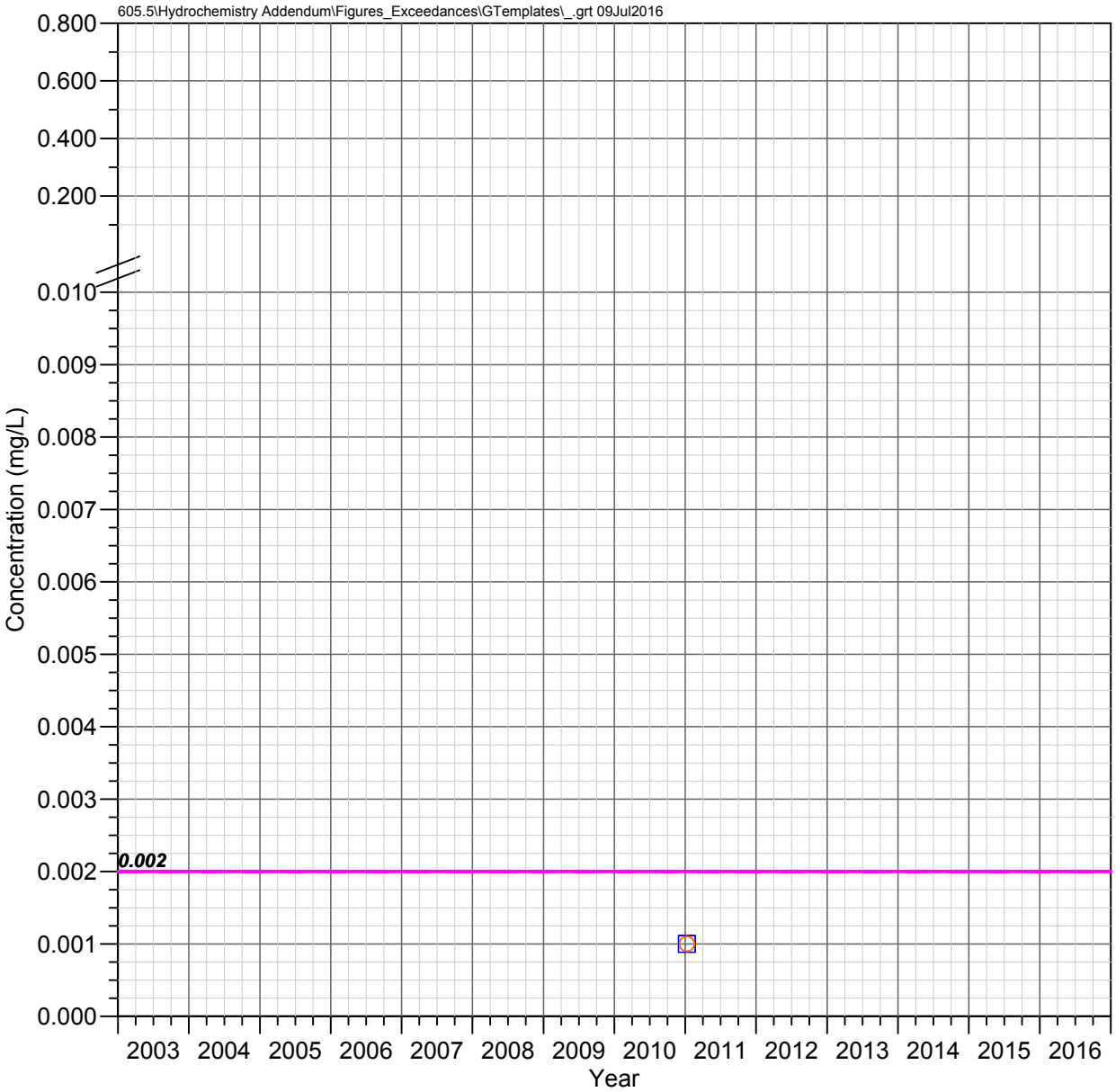


FIGURE E-705. THALLIUM CONCENTRATIONS OBSERVED AT DHRES-02, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-06
Deep Groundwater System

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

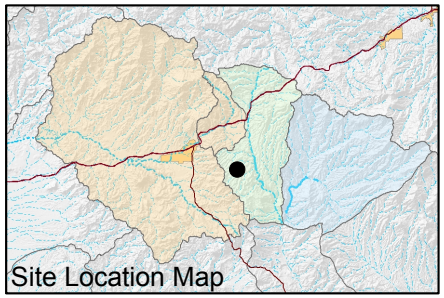
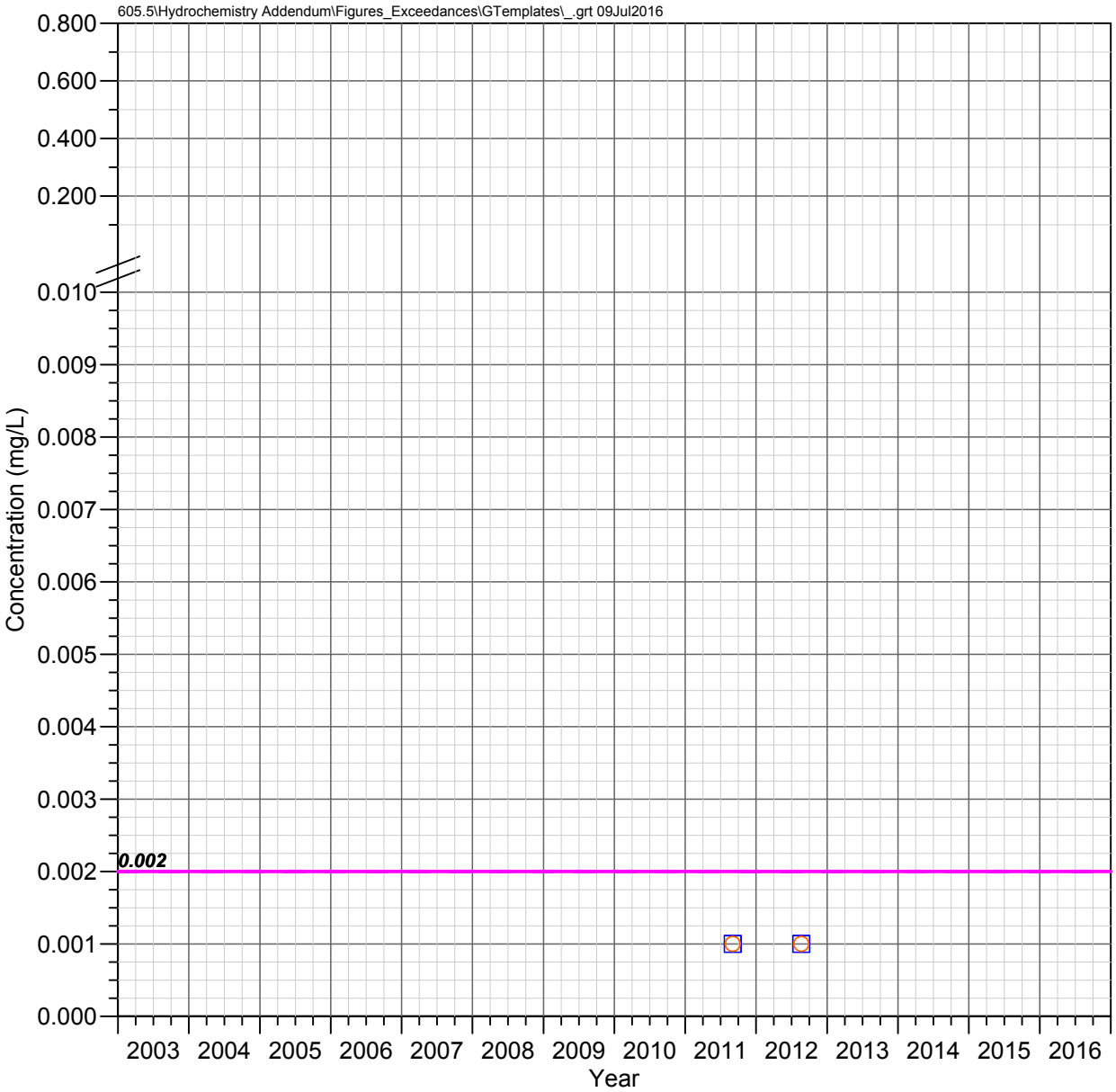


FIGURE E-706. THALLIUM CONCENTRATIONS OBSERVED AT DHRES-06, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-09
Deep Groundwater System

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

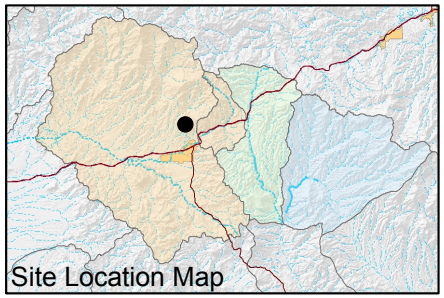
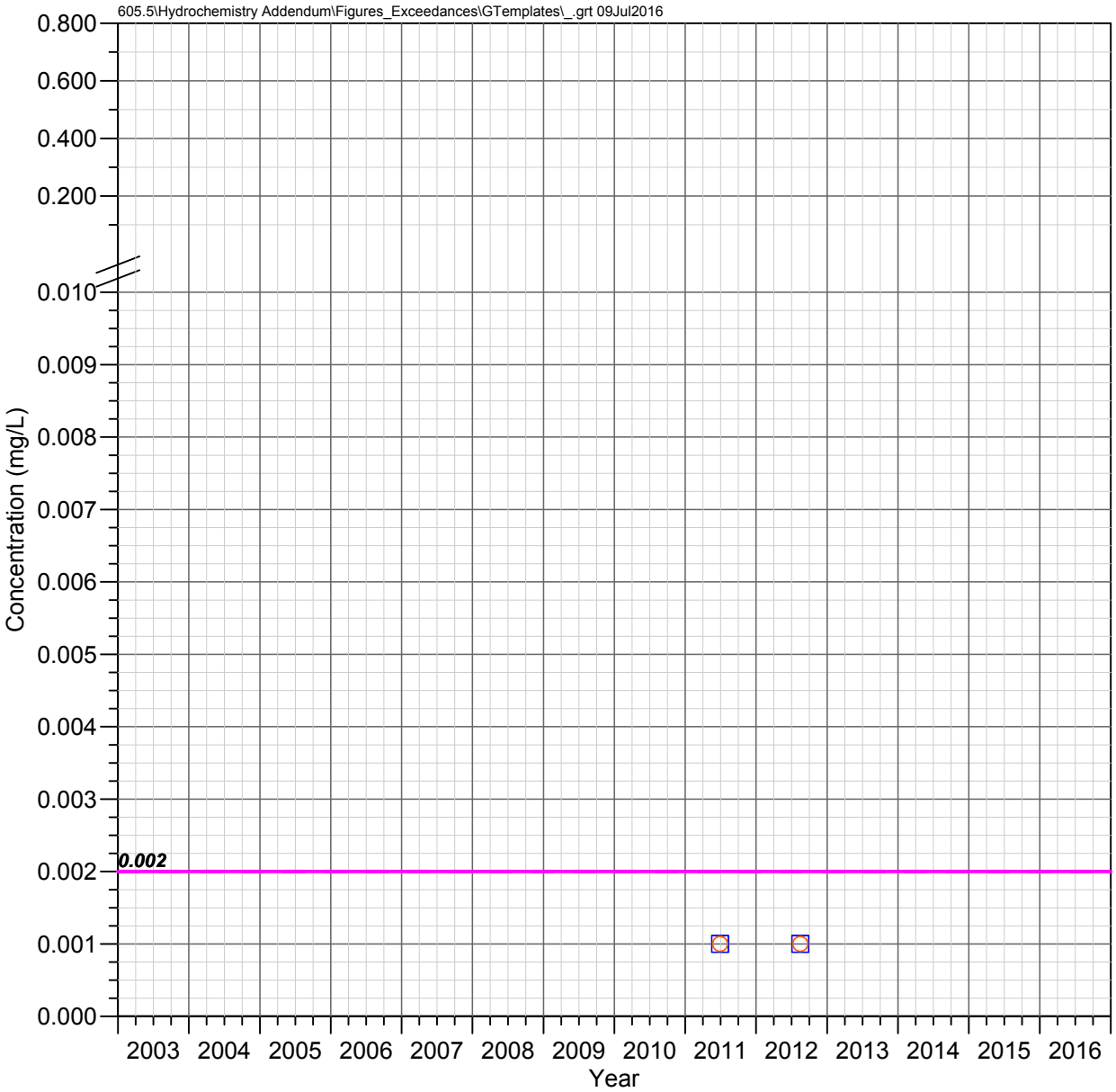


FIGURE E-707. THALLIUM CONCENTRATIONS OBSERVED AT DHRES-09, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-11
Deep Groundwater System

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

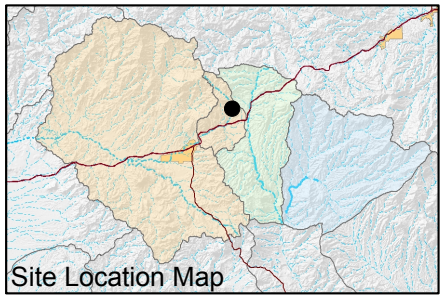
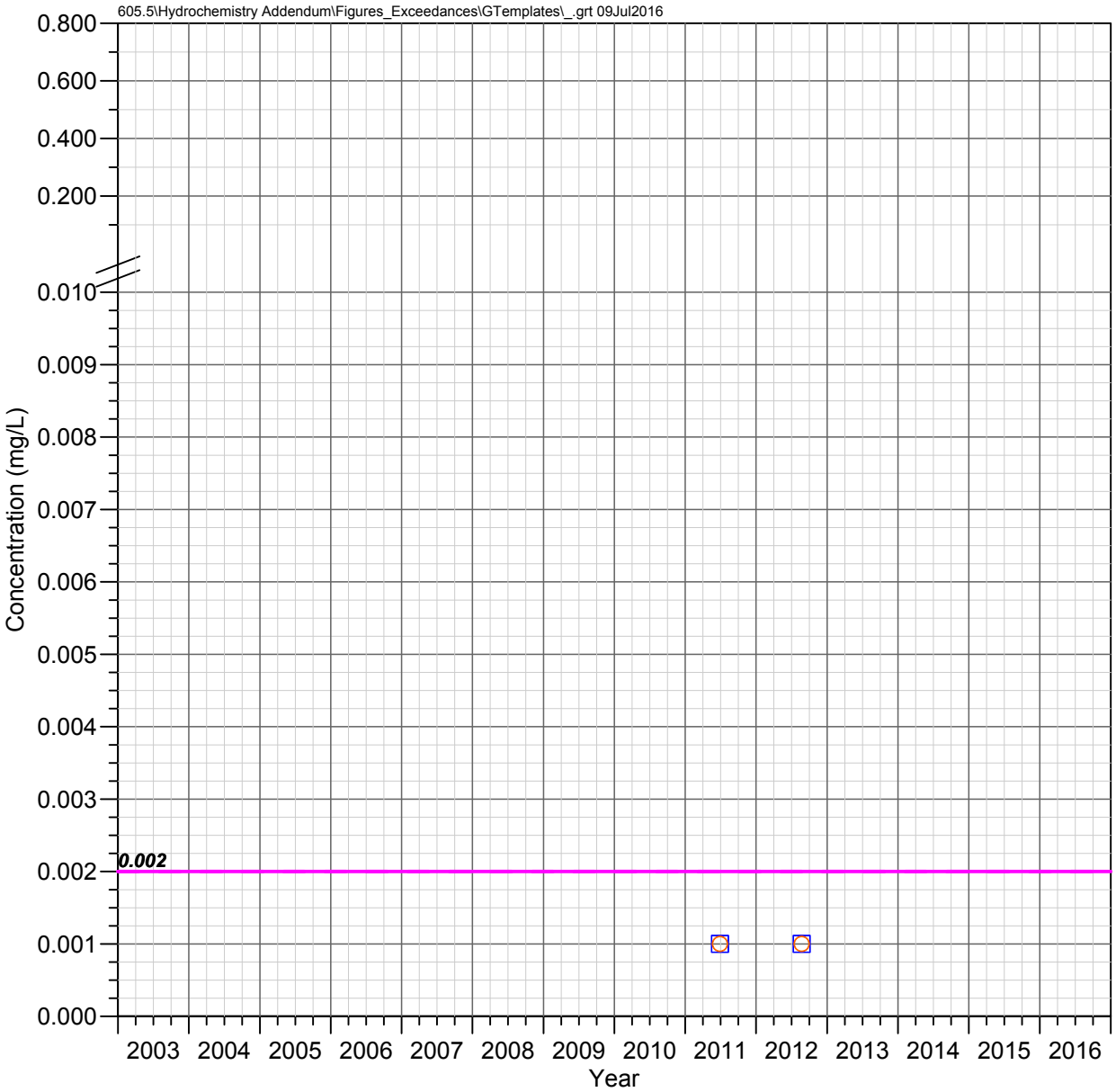


FIGURE E-708. THALLIUM CONCENTRATIONS OBSERVED AT DHRES-11, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-13
Deep Groundwater System

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

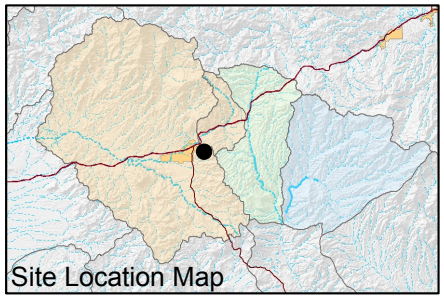
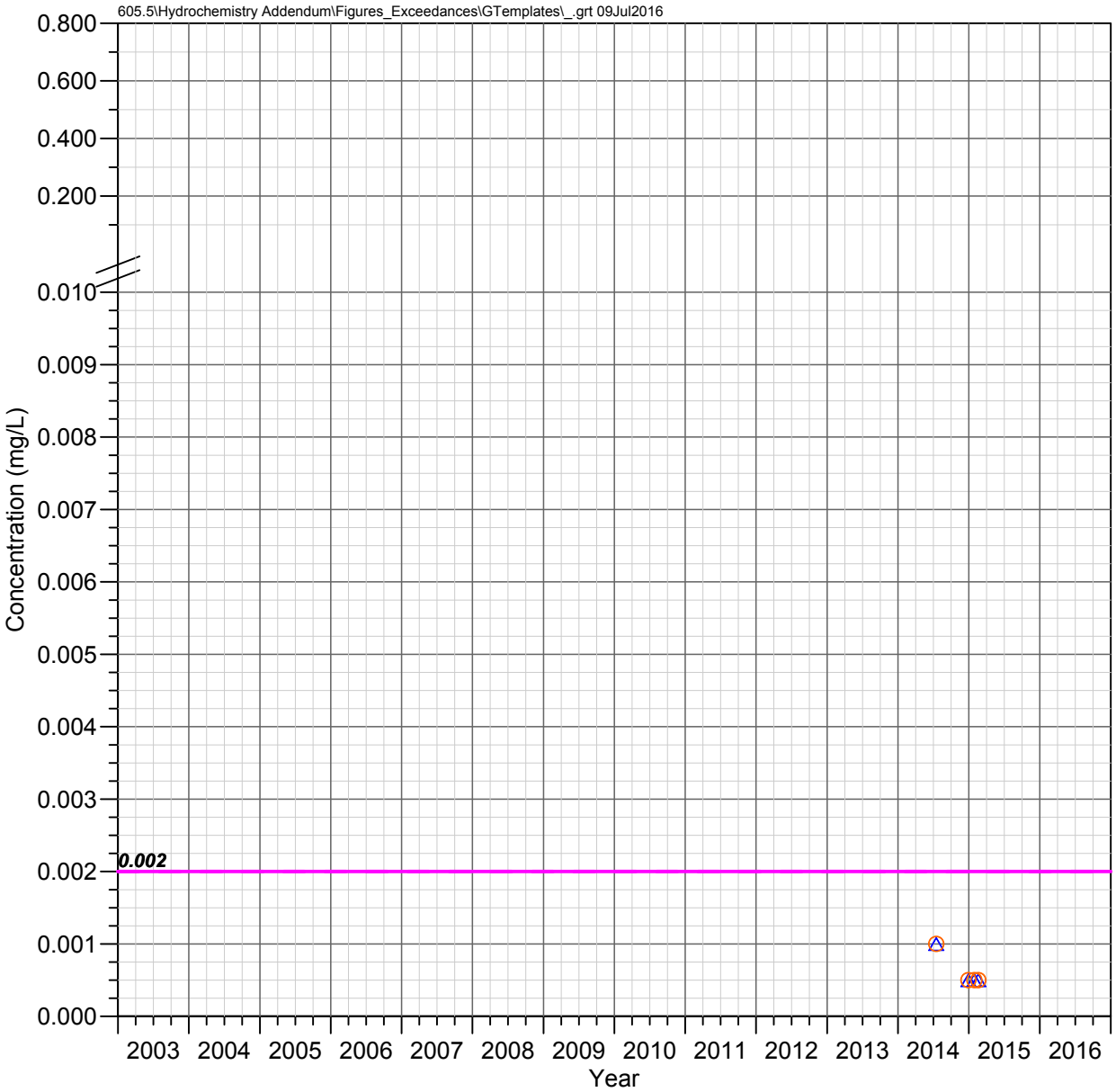


FIGURE E-709. THALLIUM CONCENTRATIONS OBSERVED AT DHRES-13, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-15
Deep Groundwater System

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Numeric Aquifer Water Quality Standards (UNS, 0.002 mg/L)
- EPA Maximum Contaminant Levels (UNS, 0.002 mg/L)

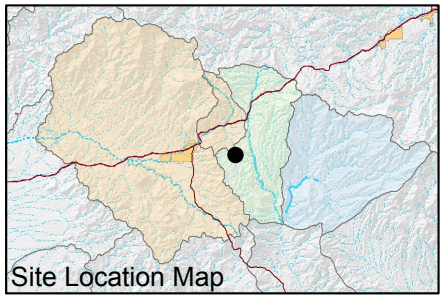
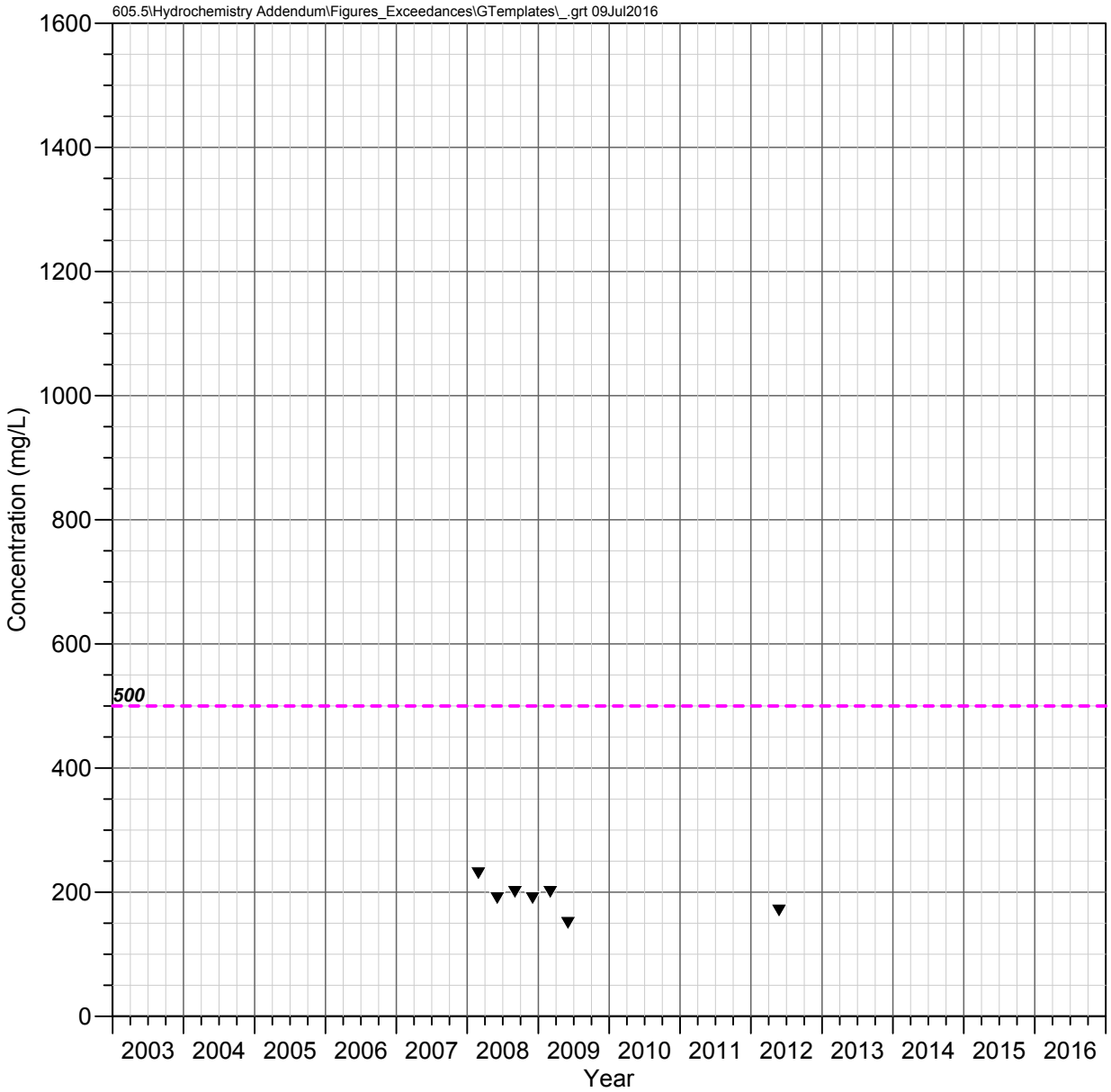


FIGURE E-710. THALLIUM CONCENTRATIONS OBSERVED AT DHRES-15, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Hackberry Windmill Well
Shallow Groundwater System

TOTAL DISSOLVED SOLIDS

Observed Concentrations

▼ Total dissolved solids vaule

Water Quality Standards

EPA Secondary MCL (500 mg/L)

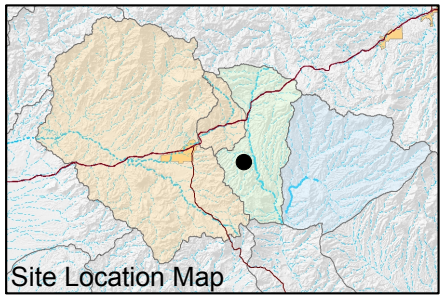
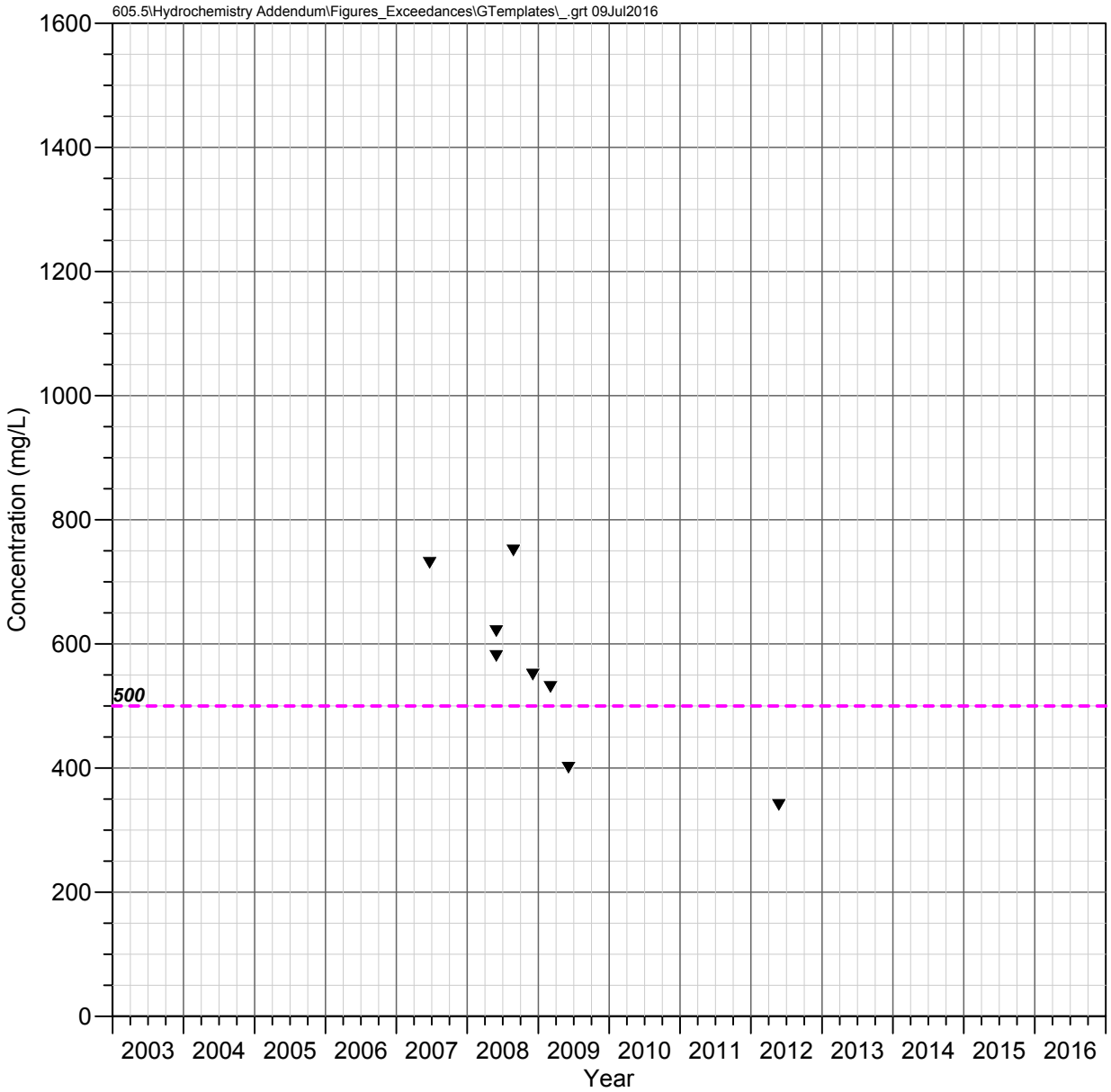


FIGURE E-711. TOTAL DISSOLVED SOLIDS CONCENTRATIONS OBSERVED AT HACKBERRY WINDMILL WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



JI Ranch Corral Well
Shallow Groundwater System

TOTAL DISSOLVED SOLIDS

Observed Concentrations

▼ Total dissolved solids vaule

Water Quality Standards

- - - - EPA Secondary MCL (500 mg/L)

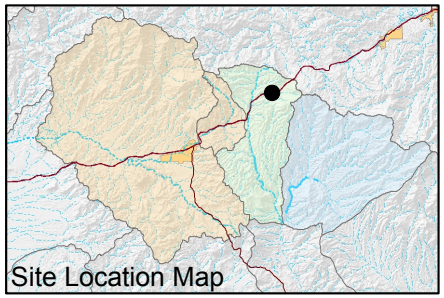
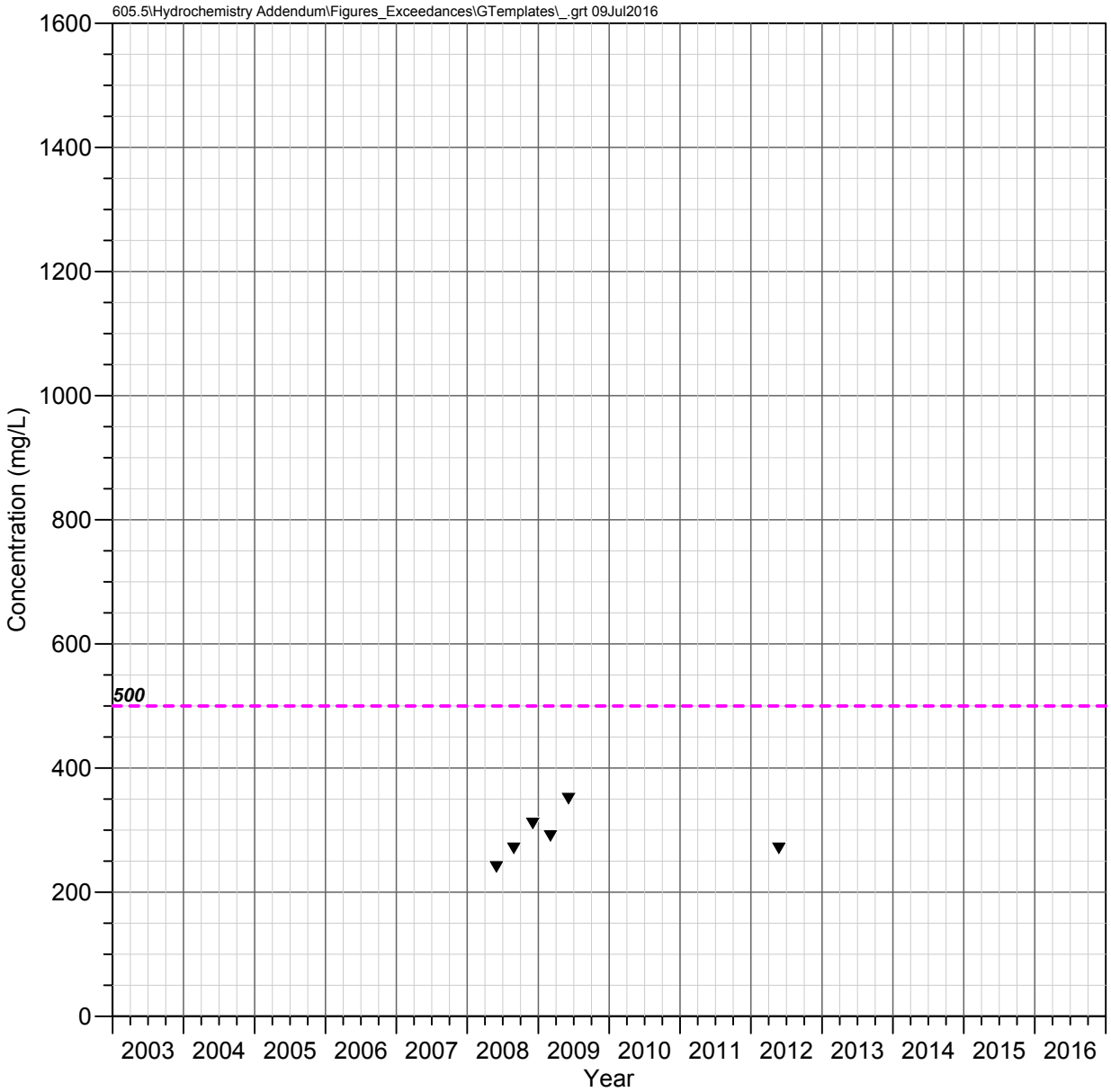


FIGURE E-712. TOTAL DISSOLVED SOLIDS CONCENTRATIONS OBSERVED AT JI RANCH CORRAL WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



JI Ranch Middle Well
Shallow Groundwater System

TOTAL DISSOLVED SOLIDS

Observed Concentrations

▼ Total dissolved solids vaule

Water Quality Standards

EPA Secondary MCL (500 mg/L)

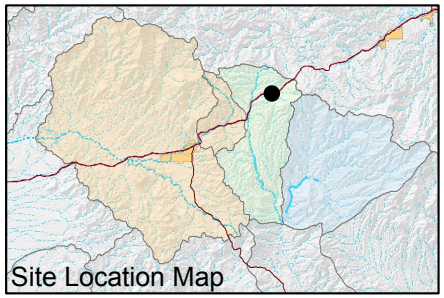
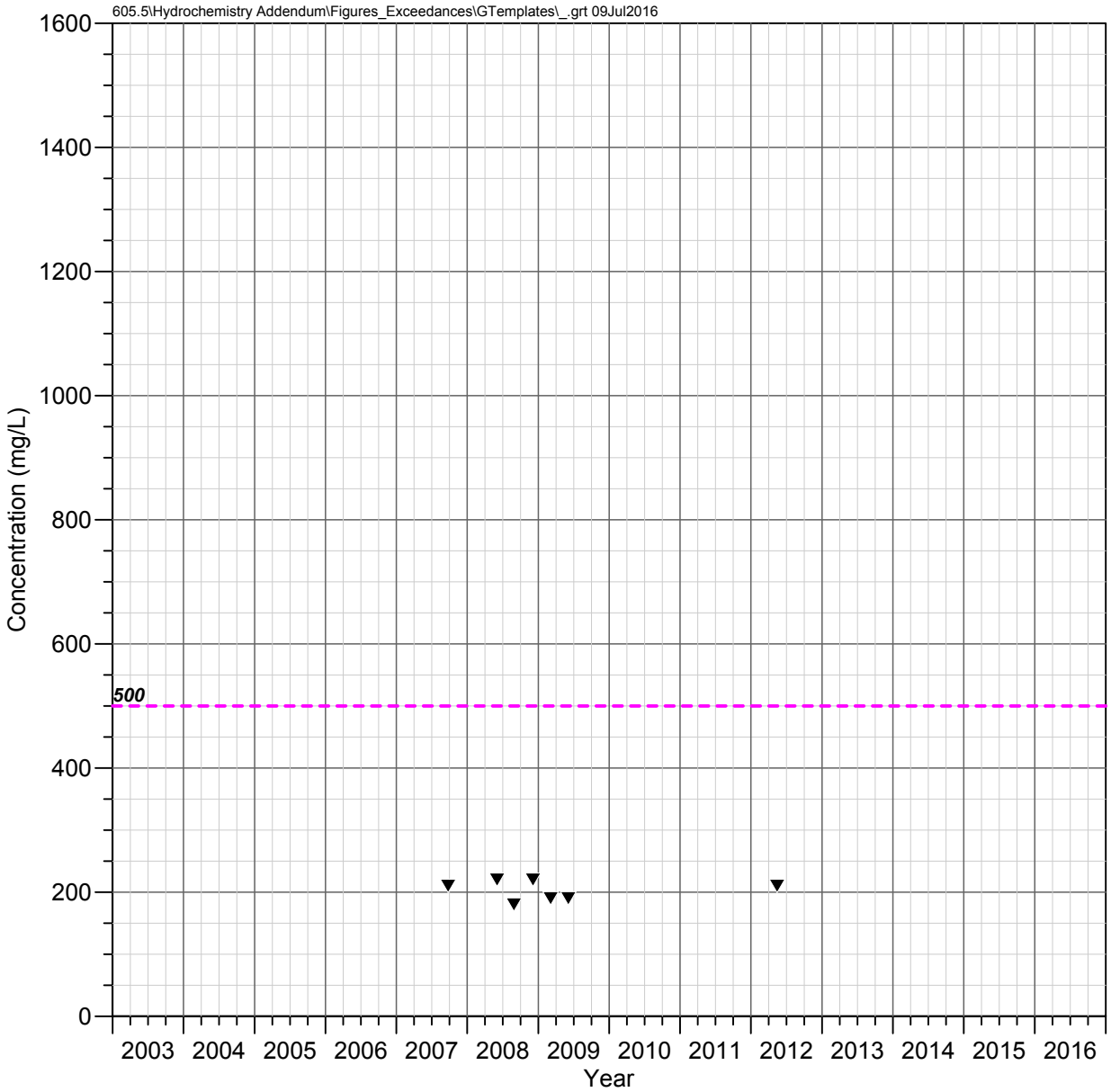


FIGURE E-713. TOTAL DISSOLVED SOLIDS CONCENTRATIONS OBSERVED AT JI RANCH MIDDLE WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



A-06
Apache Leap Tuff Aquifer

TOTAL DISSOLVED SOLIDS

Observed Concentrations

▼ Total dissolved solids vaule

Water Quality Standards

- - - - EPA Secondary MCL (500 mg/L)

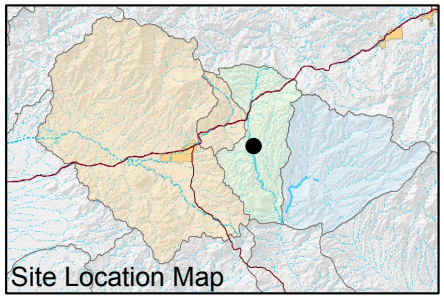
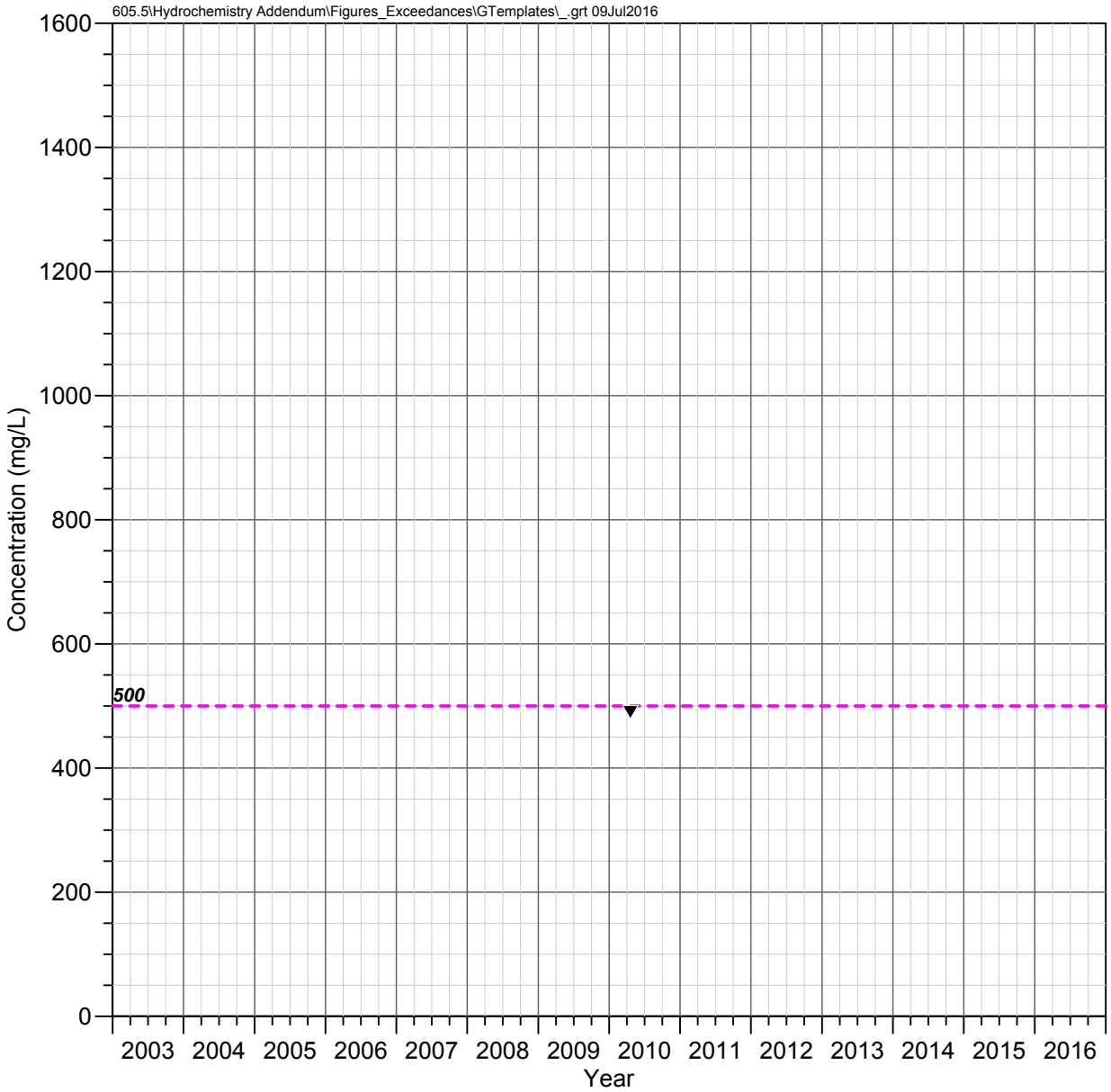


FIGURE E-714. TOTAL DISSOLVED SOLIDS CONCENTRATIONS OBSERVED AT A-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



CT Well
Apache Leap Tuff Aquifer

TOTAL DISSOLVED SOLIDS

Observed Concentrations

▼ Total dissolved solids vaule

Water Quality Standards

- - - - EPA Secondary MCL (500 mg/L)

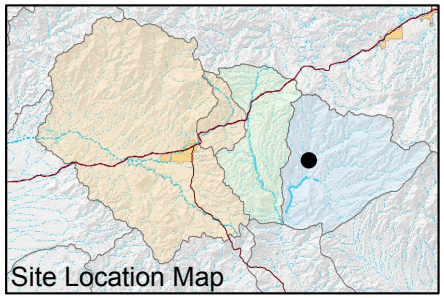
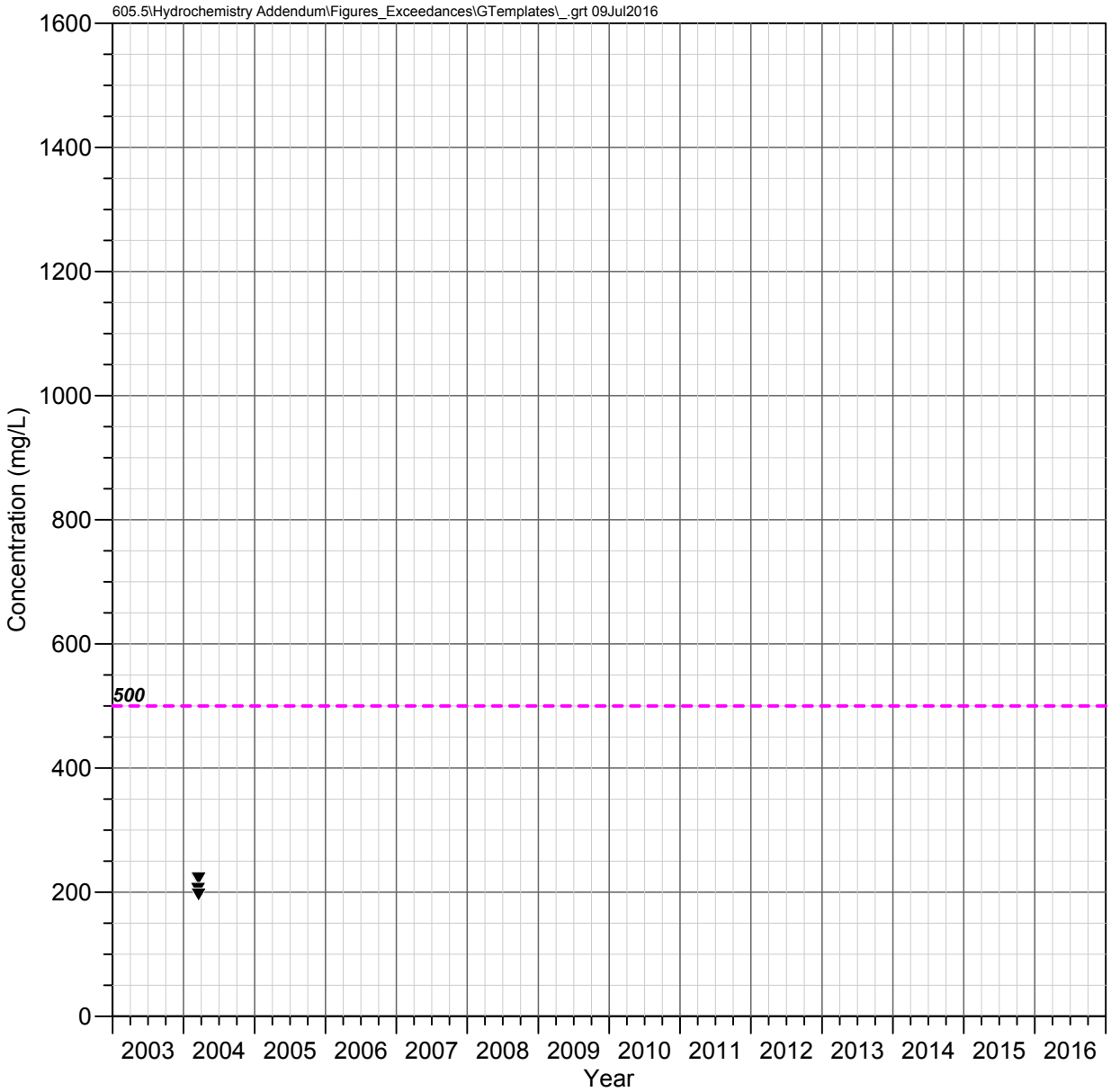


FIGURE E-715. TOTAL DISSOLVED SOLIDS CONCENTRATIONS OBSERVED AT CT WELL, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-01
Apache Leap Tuff Aquifer

TOTAL DISSOLVED SOLIDS

Observed Concentrations

▼ Total dissolved solids vaule

Water Quality Standards

- - - - EPA Secondary MCL (500 mg/L)

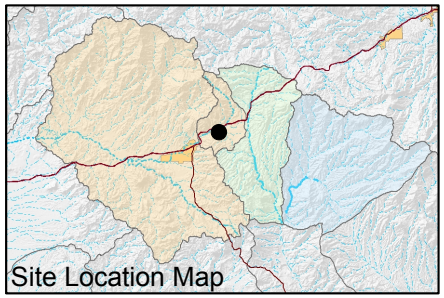
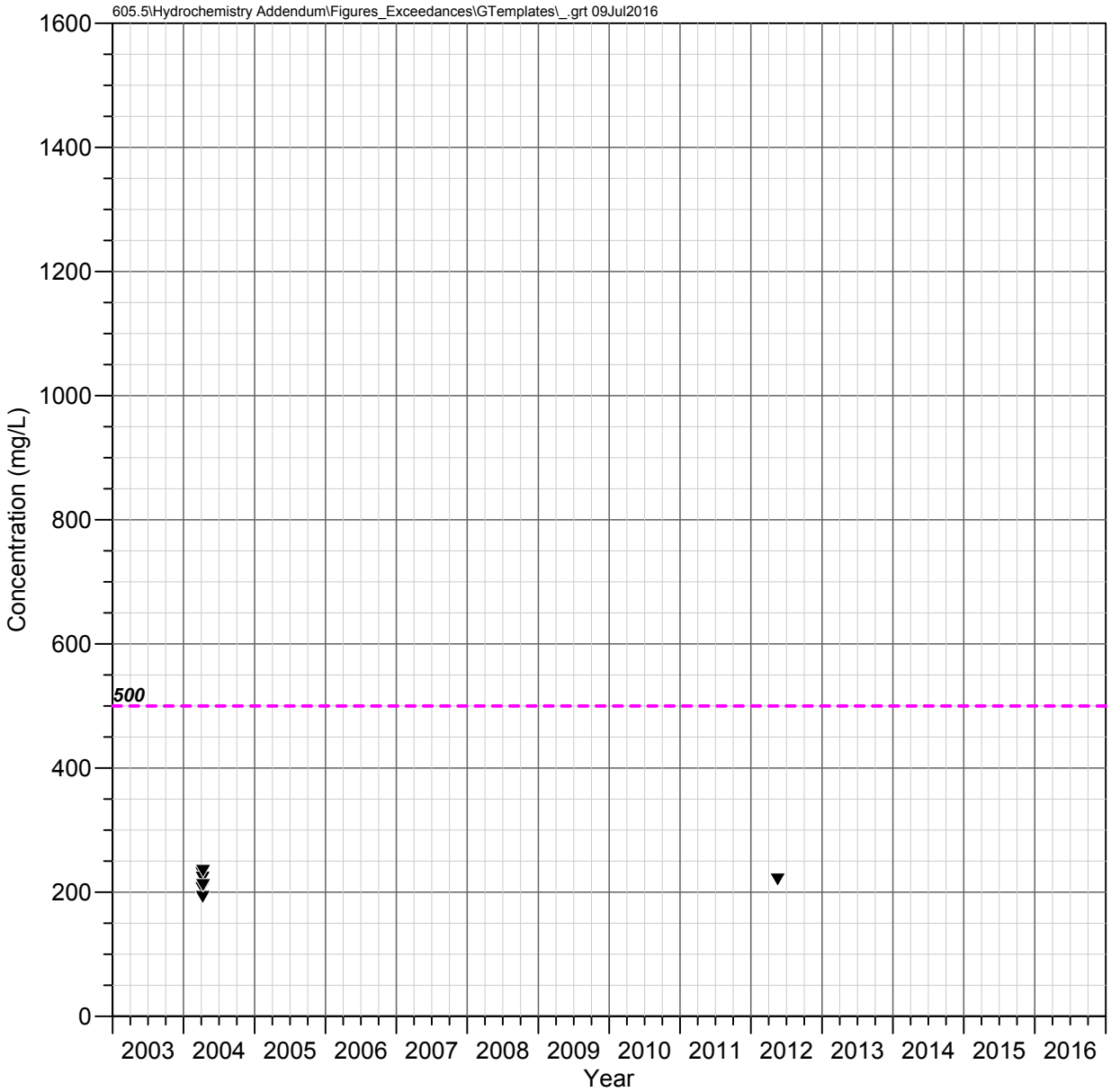


FIGURE E-716. TOTAL DISSOLVED SOLIDS CONCENTRATIONS OBSERVED AT HRES-01, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-02
Apache Leap Tuff Aquifer

TOTAL DISSOLVED SOLIDS

Observed Concentrations

▼ Total dissolved solids vaule

Water Quality Standards

- - - - EPA Secondary MCL (500 mg/L)

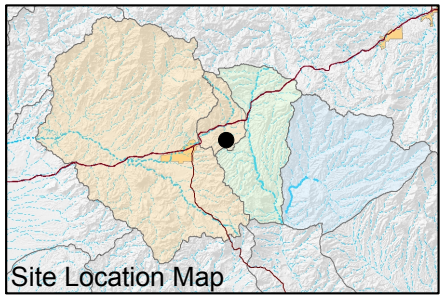
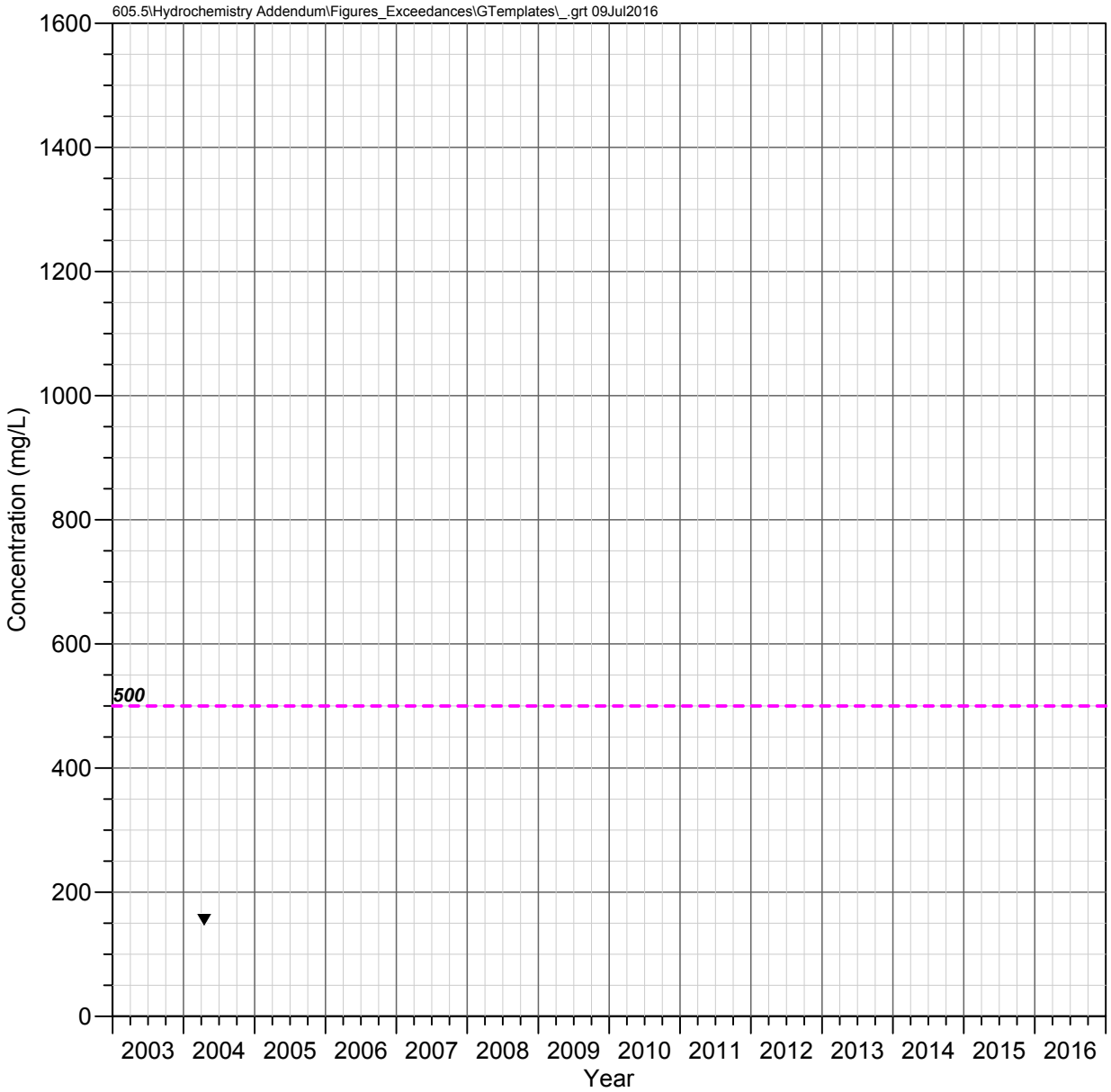


FIGURE E-717. TOTAL DISSOLVED SOLIDS CONCENTRATIONS OBSERVED AT HRES-02, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-03d
Apache Leap Tuff Aquifer

TOTAL DISSOLVED SOLIDS

Observed Concentrations

▼ Total dissolved solids vaule

Water Quality Standards

- - - - EPA Secondary MCL (500 mg/L)

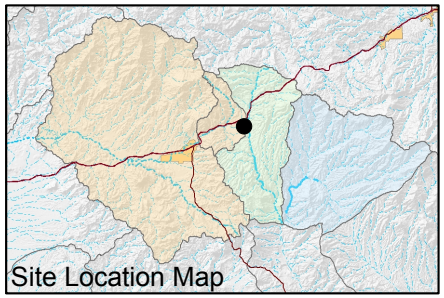
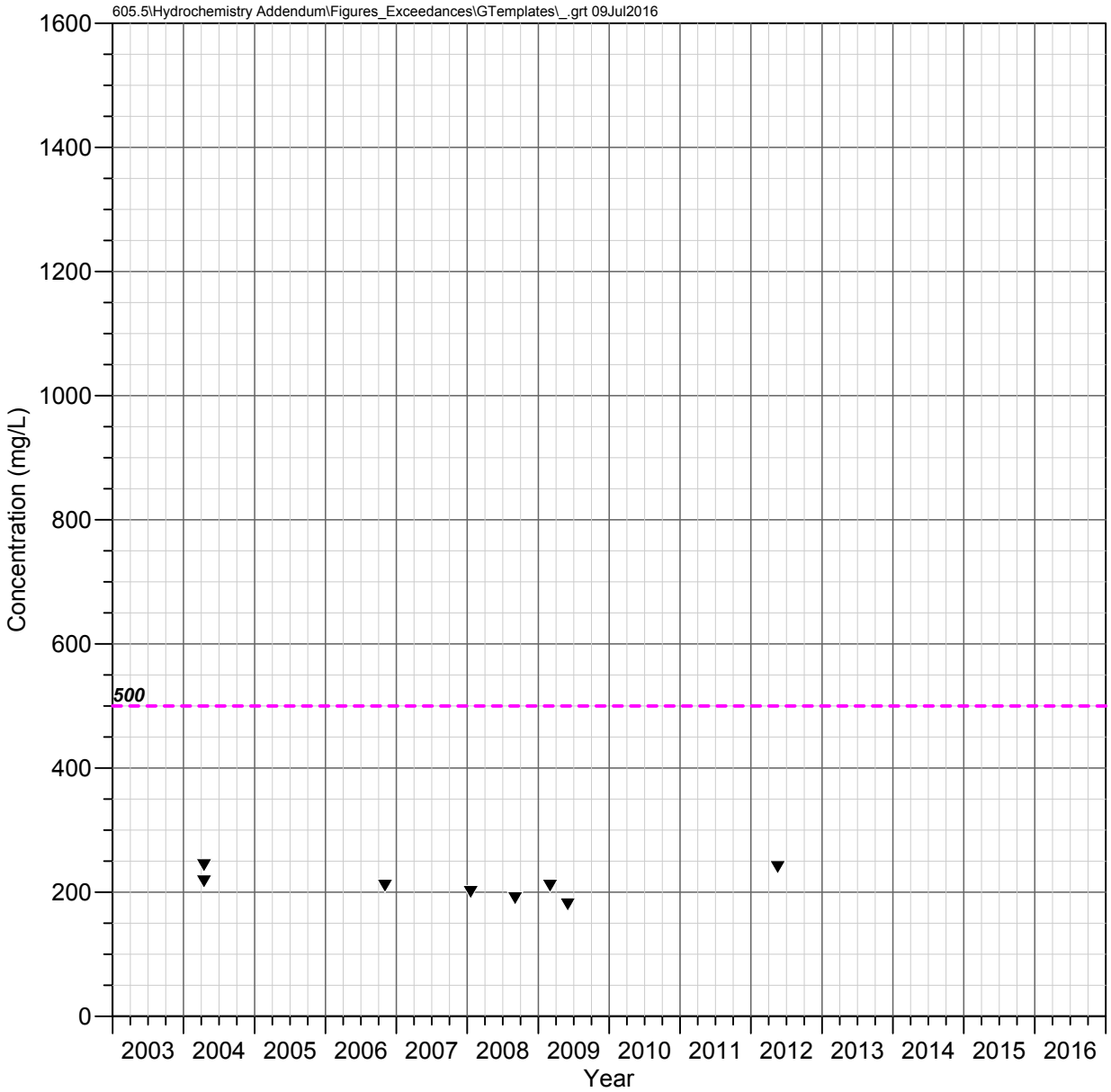


FIGURE E-718. TOTAL DISSOLVED SOLIDS CONCENTRATIONS OBSERVED AT HRES-03D, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-04
Apache Leap Tuff Aquifer

TOTAL DISSOLVED SOLIDS

Observed Concentrations

▼ Total dissolved solids vaule

Water Quality Standards

EPA Secondary MCL (500 mg/L)

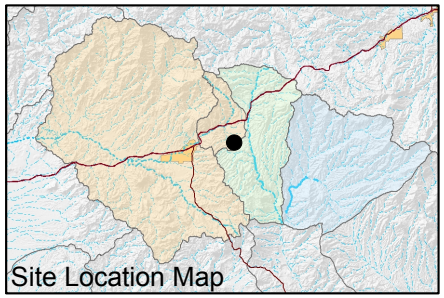
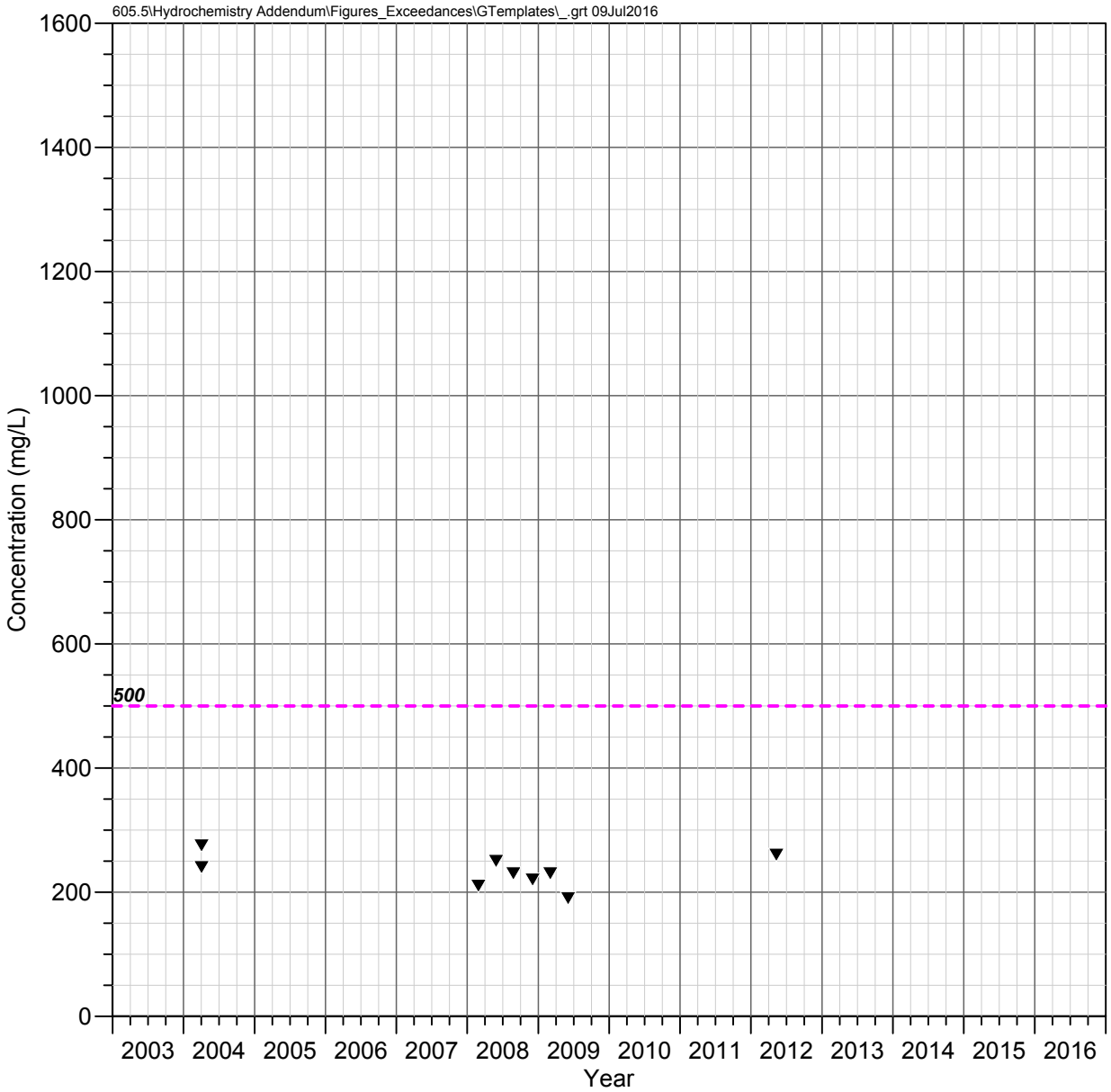


FIGURE E-719. TOTAL DISSOLVED SOLIDS CONCENTRATIONS OBSERVED AT HRES-04, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-05
Apache Leap Tuff Aquifer

TOTAL DISSOLVED SOLIDS

Observed Concentrations

▼ Total dissolved solids vaule

Water Quality Standards

EPA Secondary MCL (500 mg/L)

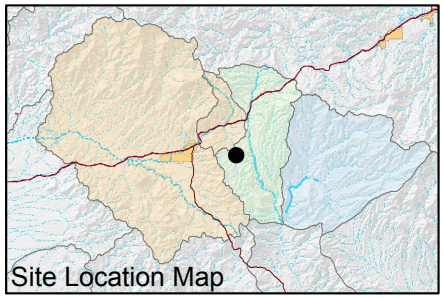
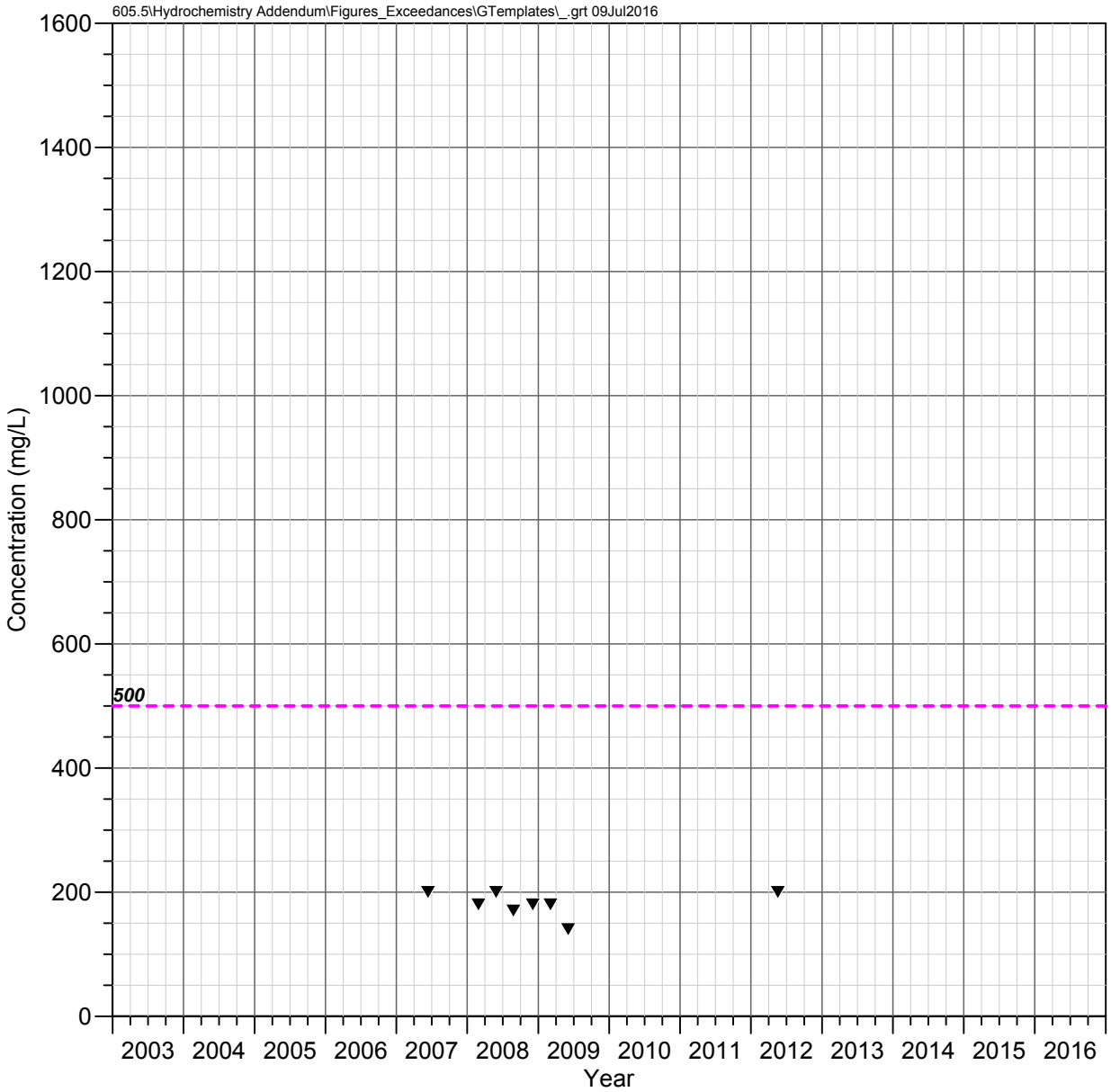


FIGURE E-720. TOTAL DISSOLVED SOLIDS CONCENTRATIONS OBSERVED AT HRES-05, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-06
Apache Leap Tuff Aquifer

TOTAL DISSOLVED SOLIDS

Observed Concentrations

▼ Total dissolved solids vaule

Water Quality Standards

- - - - EPA Secondary MCL (500 mg/L)

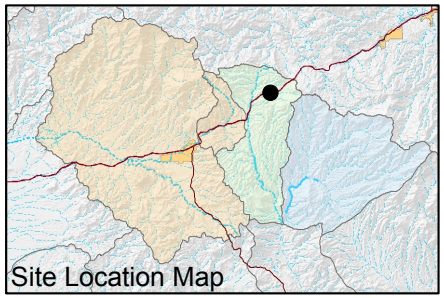
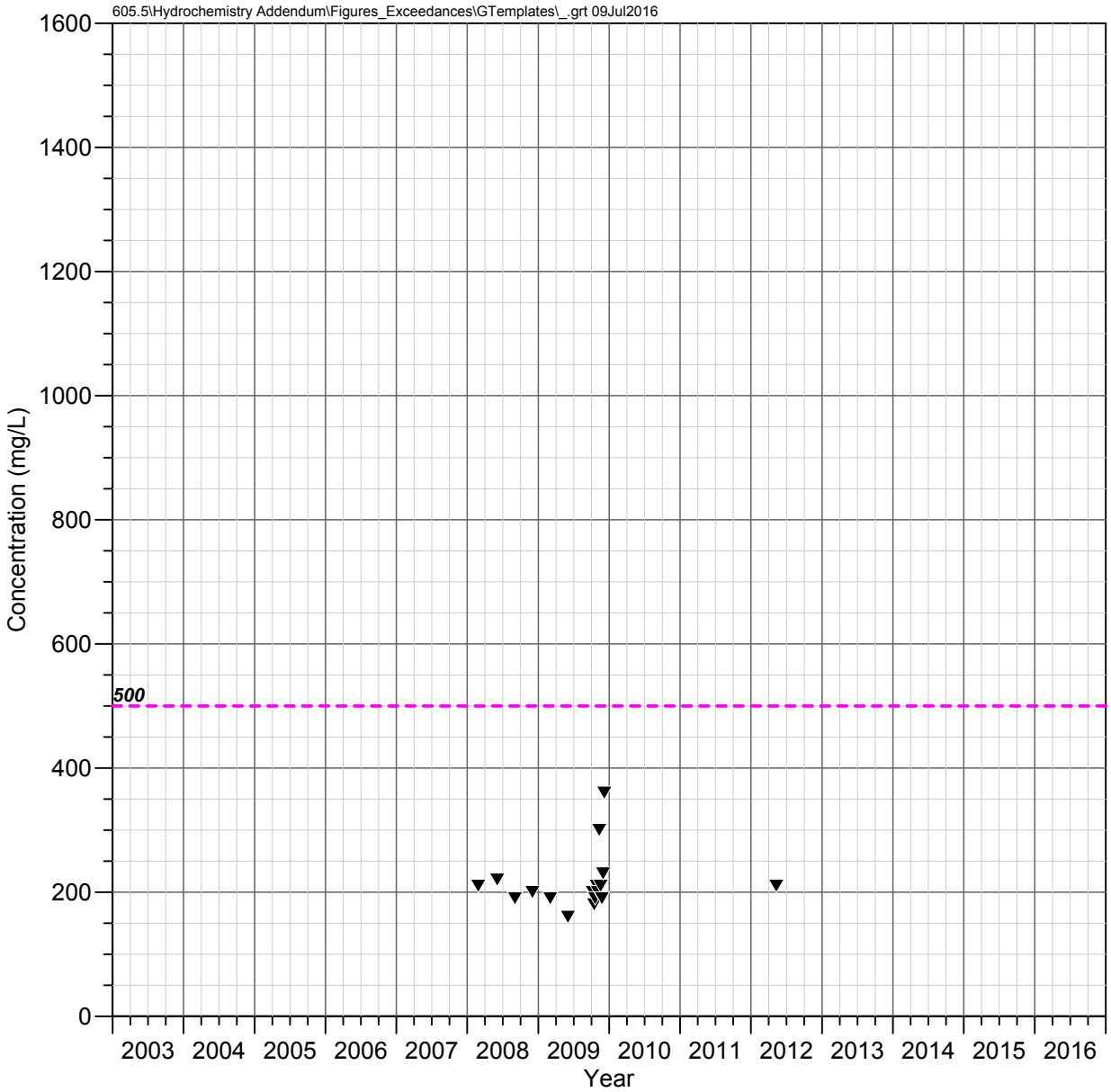


FIGURE E-721. TOTAL DISSOLVED SOLIDS CONCENTRATIONS OBSERVED AT HRES-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-07
Apache Leap Tuff Aquifer

TOTAL DISSOLVED SOLIDS

Observed Concentrations

▼ Total dissolved solids vaule

Water Quality Standards

EPA Secondary MCL (500 mg/L)

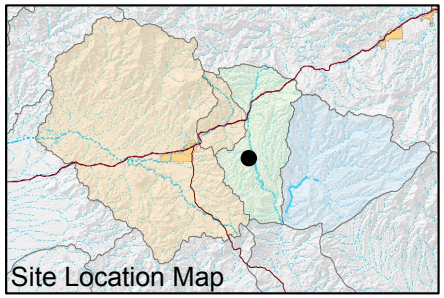
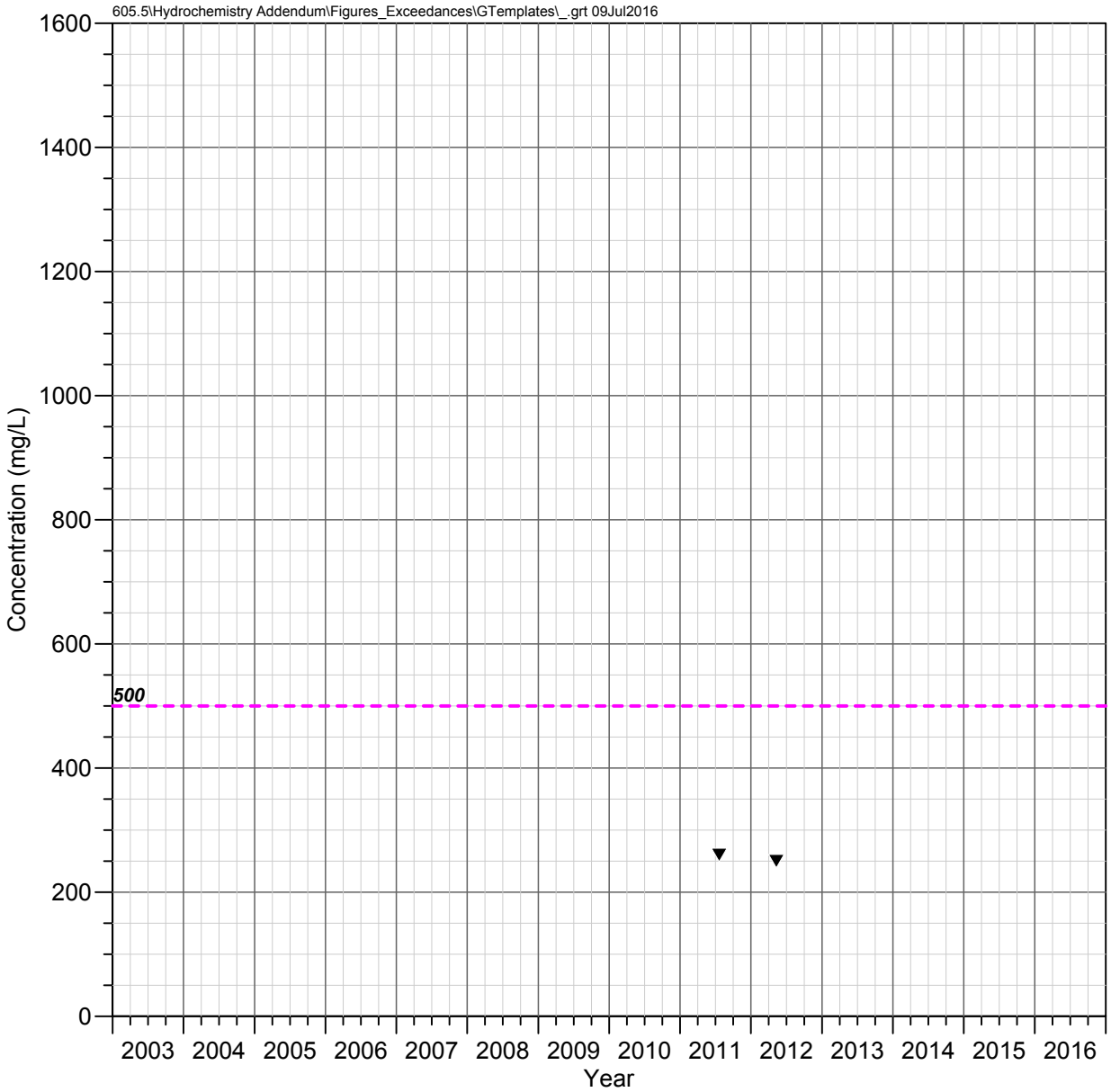


FIGURE E-722. TOTAL DISSOLVED SOLIDS CONCENTRATIONS OBSERVED AT HRES-07, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-08
Apache Leap Tuff Aquifer

TOTAL DISSOLVED SOLIDS

Observed Concentrations

▼ Total dissolved solids vaule

Water Quality Standards

- - - - EPA Secondary MCL (500 mg/L)

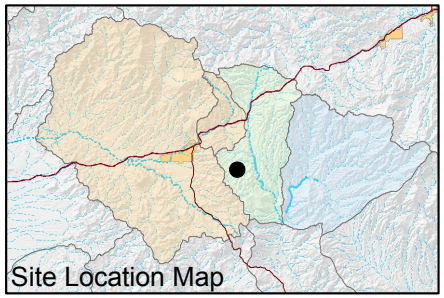
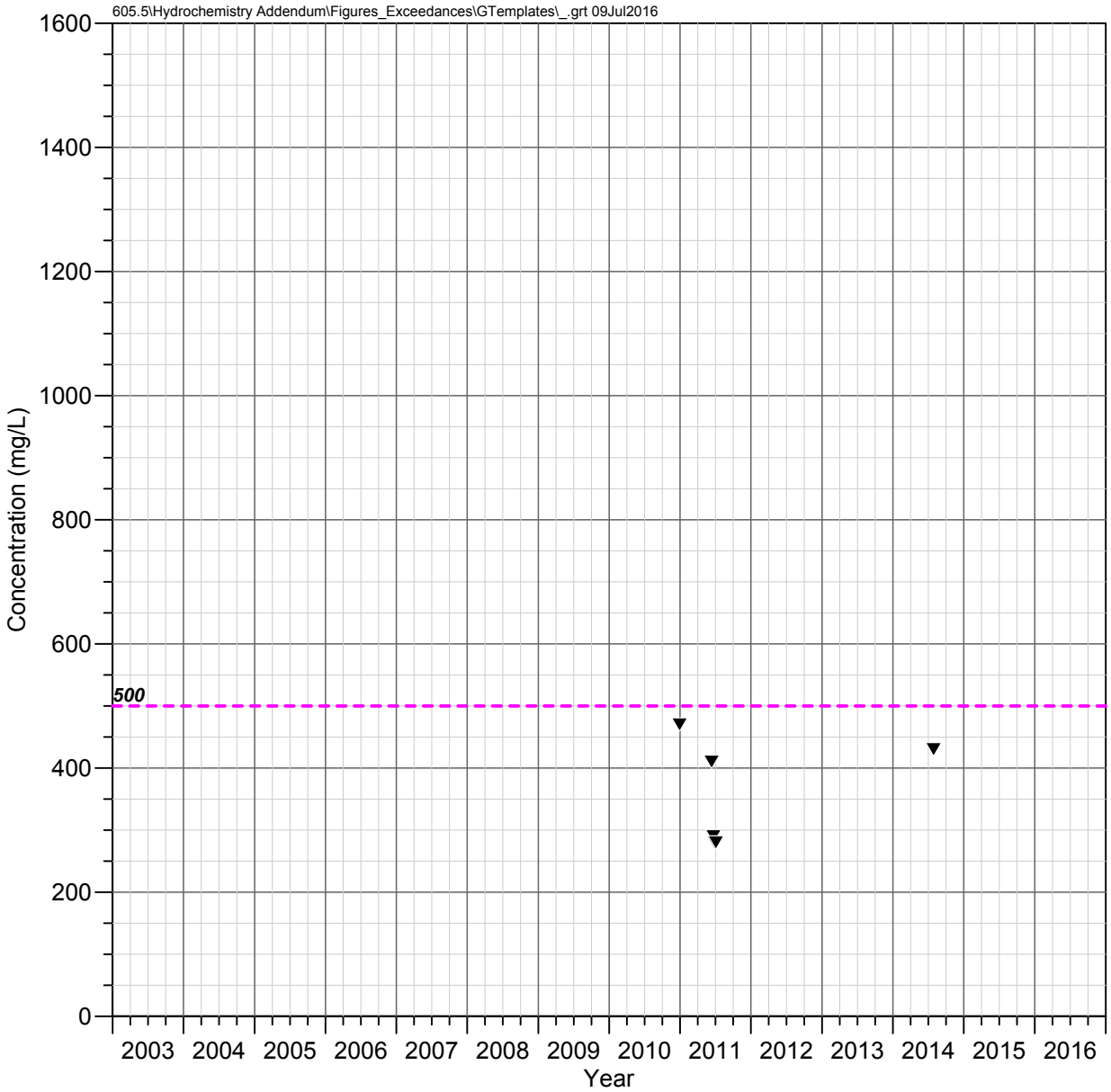


FIGURE E-723. TOTAL DISSOLVED SOLIDS CONCENTRATIONS OBSERVED AT HRES-08, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-09
Apache Leap Tuff Aquifer

TOTAL DISSOLVED SOLIDS

Observed Concentrations

▼ Total dissolved solids vaule

Water Quality Standards

EPA Secondary MCL (500 mg/L)

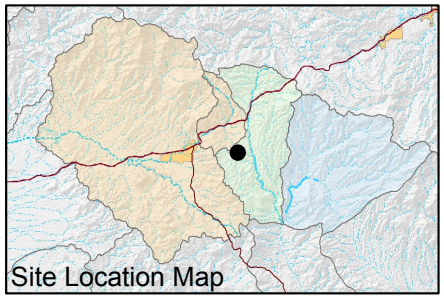
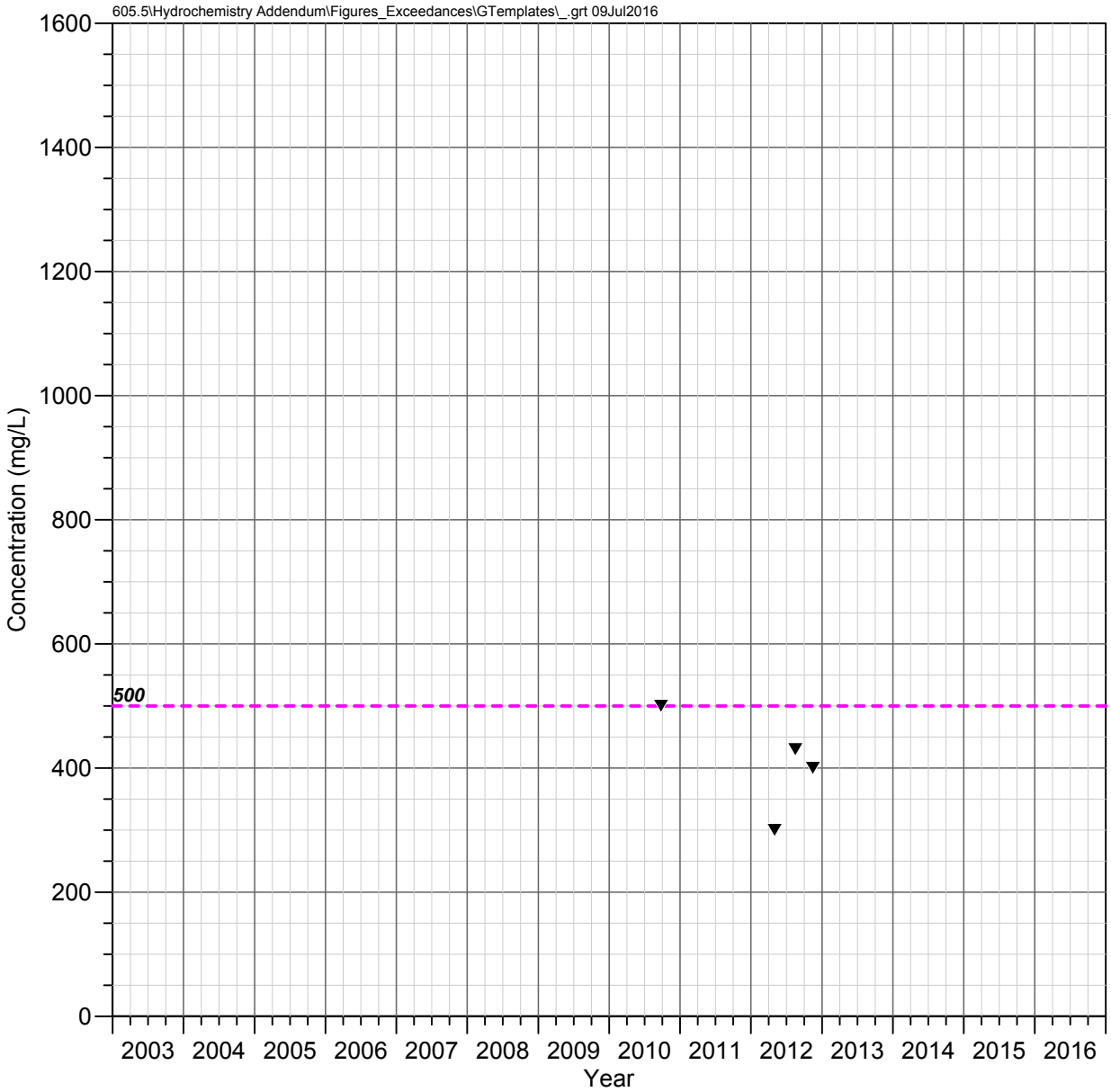


FIGURE E-724. TOTAL DISSOLVED SOLIDS CONCENTRATIONS OBSERVED AT HRES-09, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-10
Apache Leap Tuff Aquifer

TOTAL DISSOLVED SOLIDS

Observed Concentrations

▼ Total dissolved solids vaule

Water Quality Standards

- - - - EPA Secondary MCL (500 mg/L)

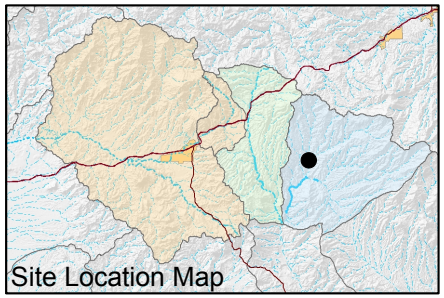
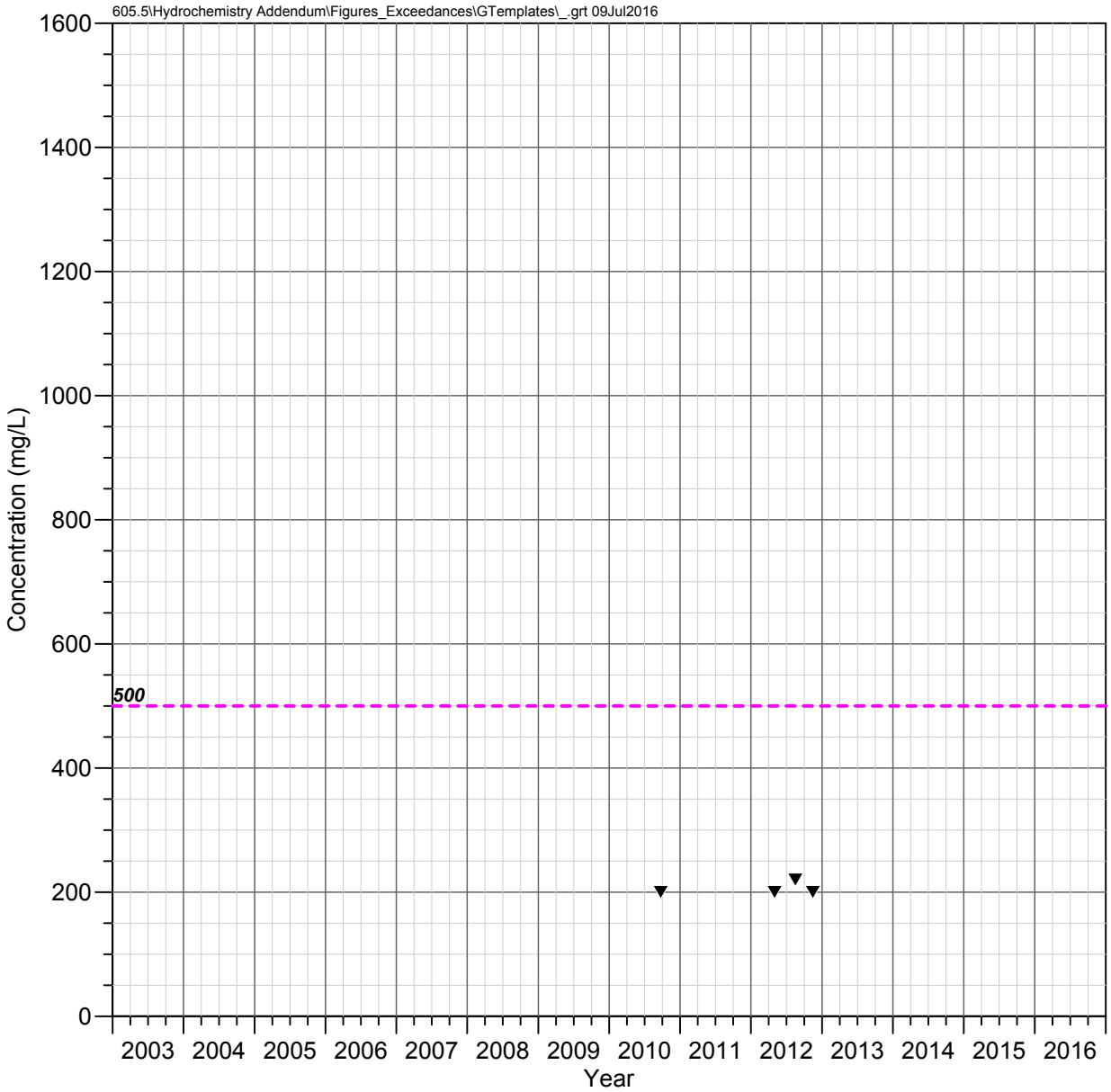


FIGURE E-725. TOTAL DISSOLVED SOLIDS CONCENTRATIONS OBSERVED AT HRES-10, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-11
Apache Leap Tuff Aquifer

TOTAL DISSOLVED SOLIDS

Observed Concentrations

▼ Total dissolved solids vaule

Water Quality Standards

- - - - EPA Secondary MCL (500 mg/L)

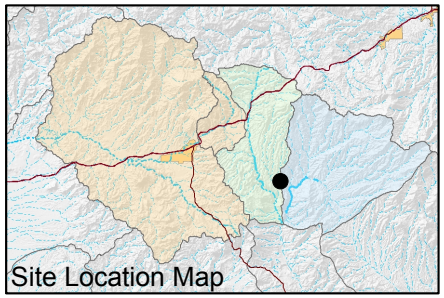
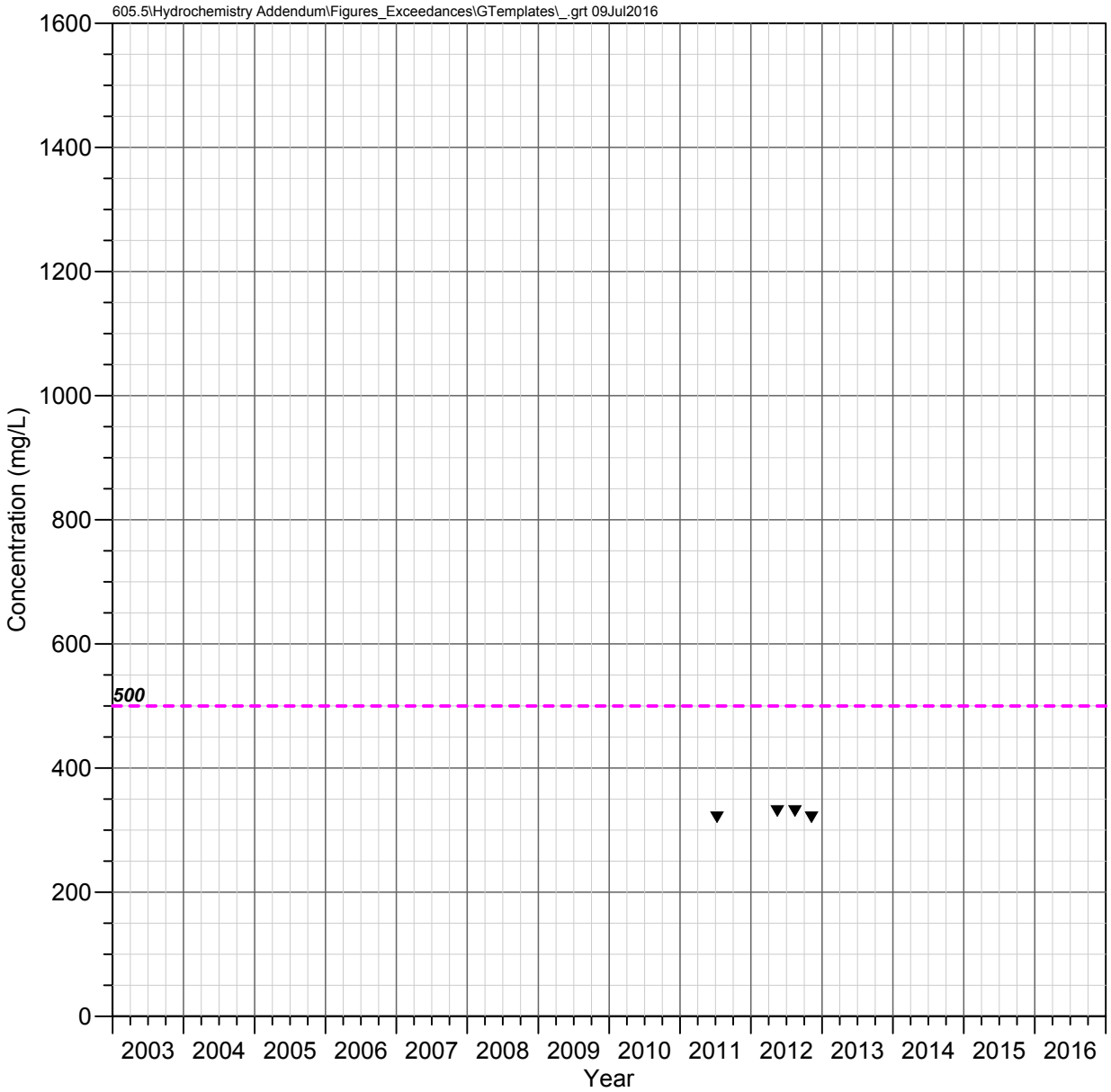


FIGURE E-726. TOTAL DISSOLVED SOLIDS CONCENTRATIONS OBSERVED AT HRES-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-12
Apache Leap Tuff Aquifer

TOTAL DISSOLVED SOLIDS

Observed Concentrations

▼ Total dissolved solids vaule

Water Quality Standards

- - - - EPA Secondary MCL (500 mg/L)

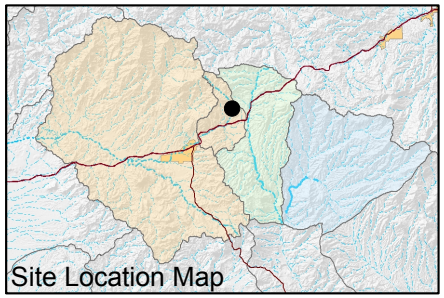
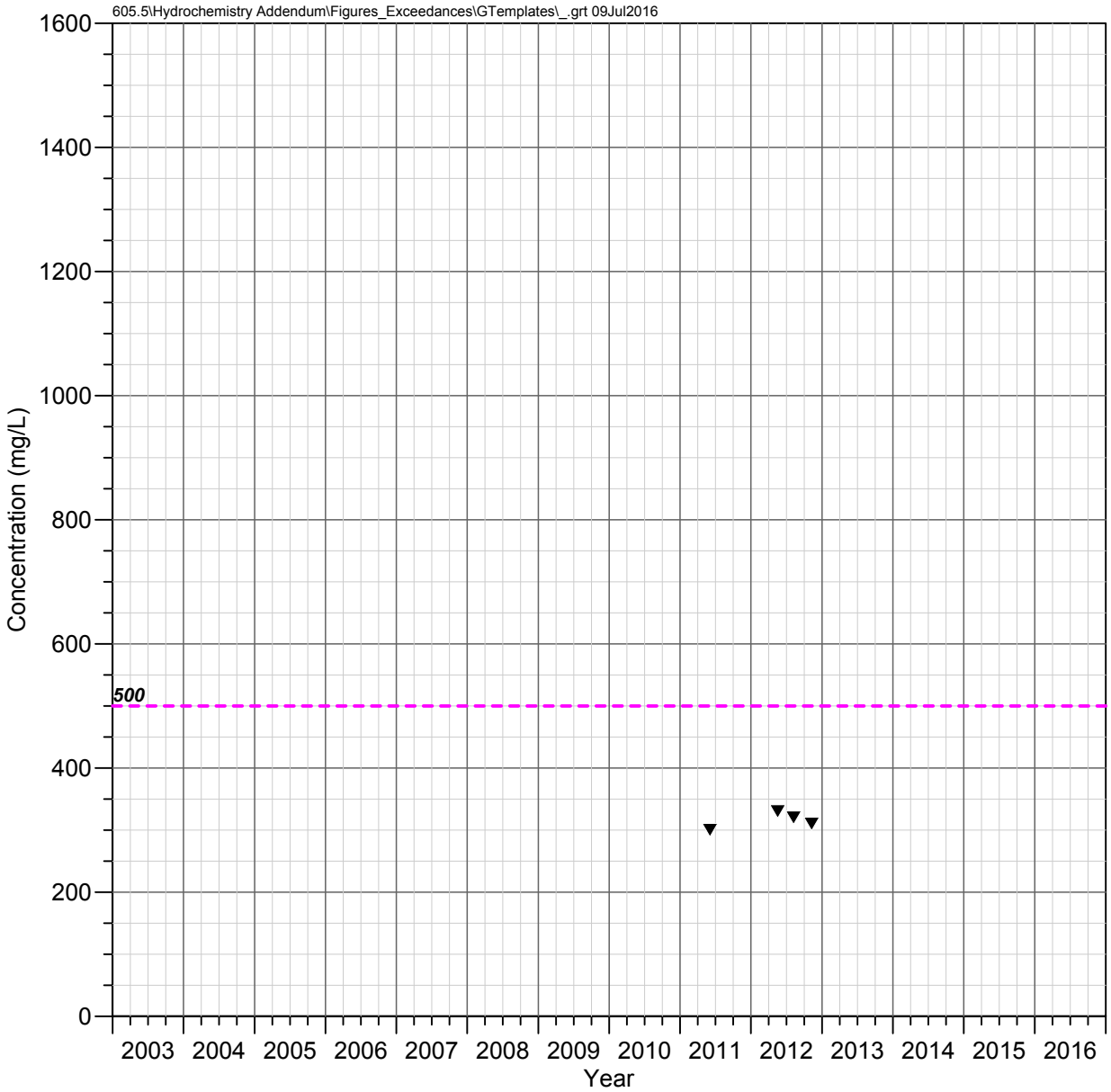


FIGURE E-727. TOTAL DISSOLVED SOLIDS CONCENTRATIONS OBSERVED AT HRES-12, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-13
Apache Leap Tuff Aquifer

TOTAL DISSOLVED SOLIDS

Observed Concentrations

▼ Total dissolved solids vaule

Water Quality Standards

- - - - EPA Secondary MCL (500 mg/L)

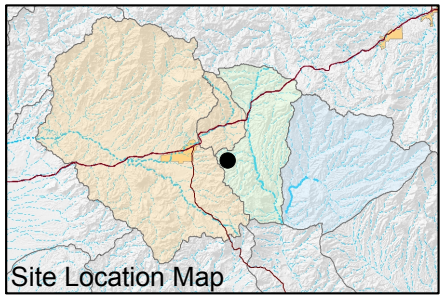
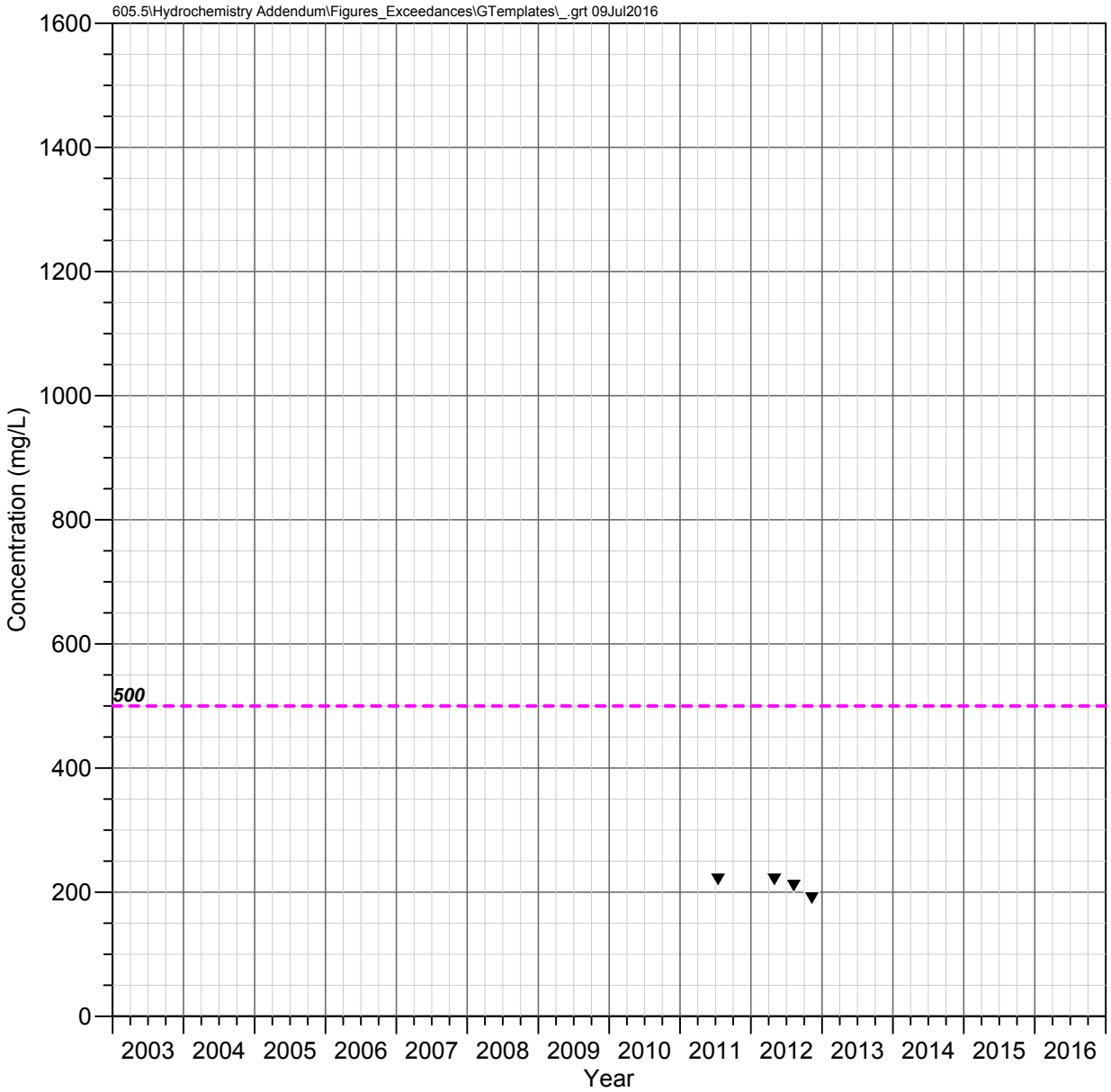


FIGURE E-728. TOTAL DISSOLVED SOLIDS CONCENTRATIONS OBSERVED AT HRES-13, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-14
Apache Leap Tuff Aquifer

TOTAL DISSOLVED SOLIDS

Observed Concentrations

▼ Total dissolved solids vaule

Water Quality Standards

- - - - EPA Secondary MCL (500 mg/L)

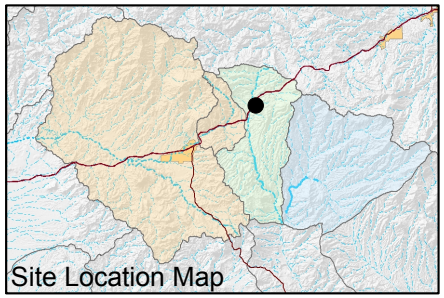
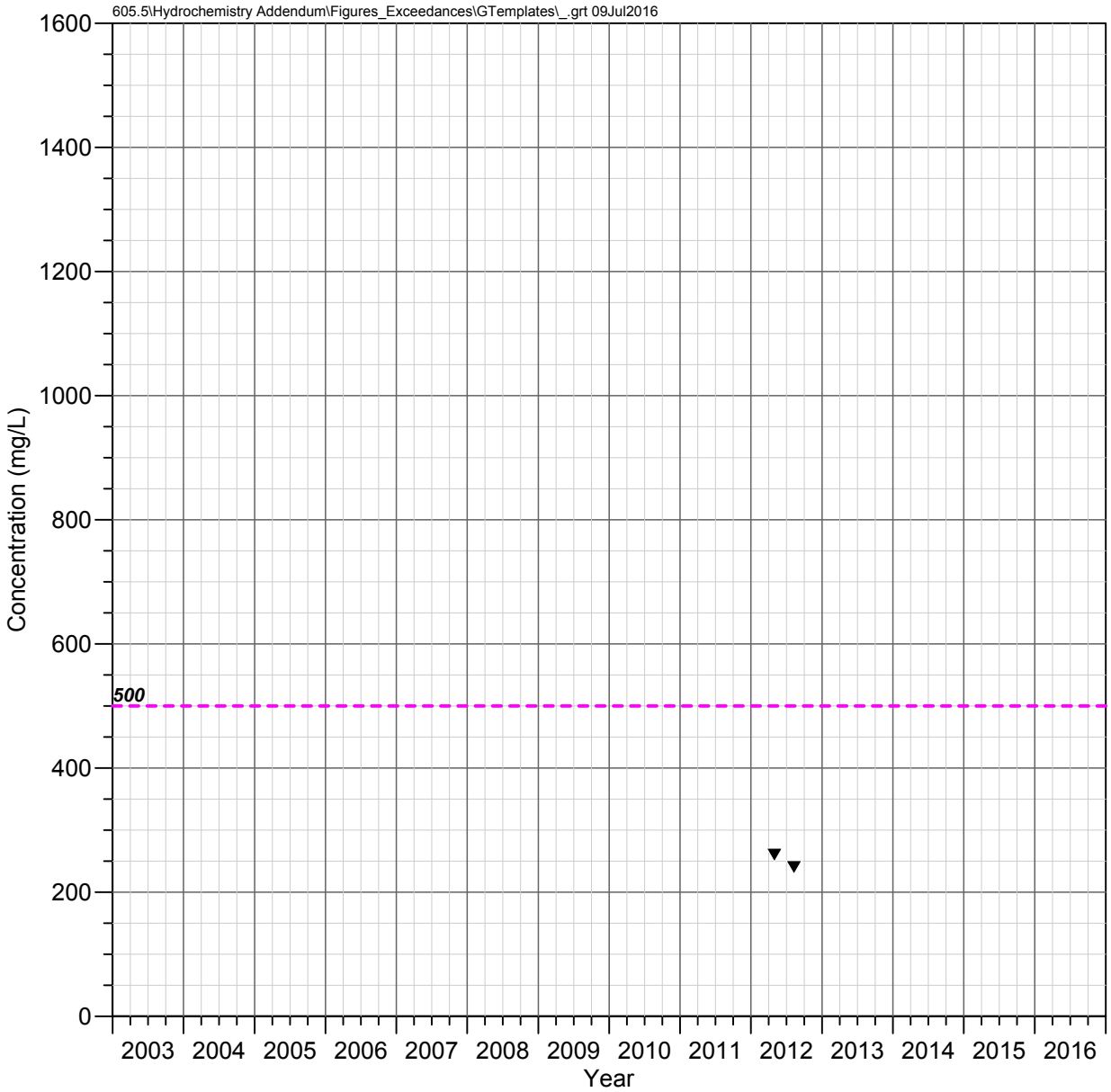


FIGURE E-729. TOTAL DISSOLVED SOLIDS CONCENTRATIONS OBSERVED AT HRES-14, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-15
Apache Leap Tuff Aquifer

TOTAL DISSOLVED SOLIDS

Observed Concentrations

▼ Total dissolved solids vaule

Water Quality Standards

- - - - EPA Secondary MCL (500 mg/L)

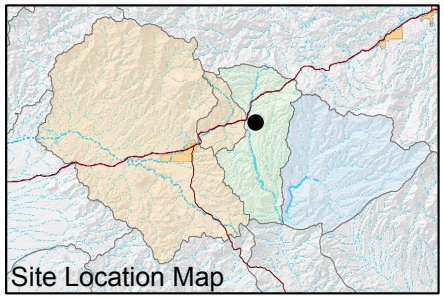
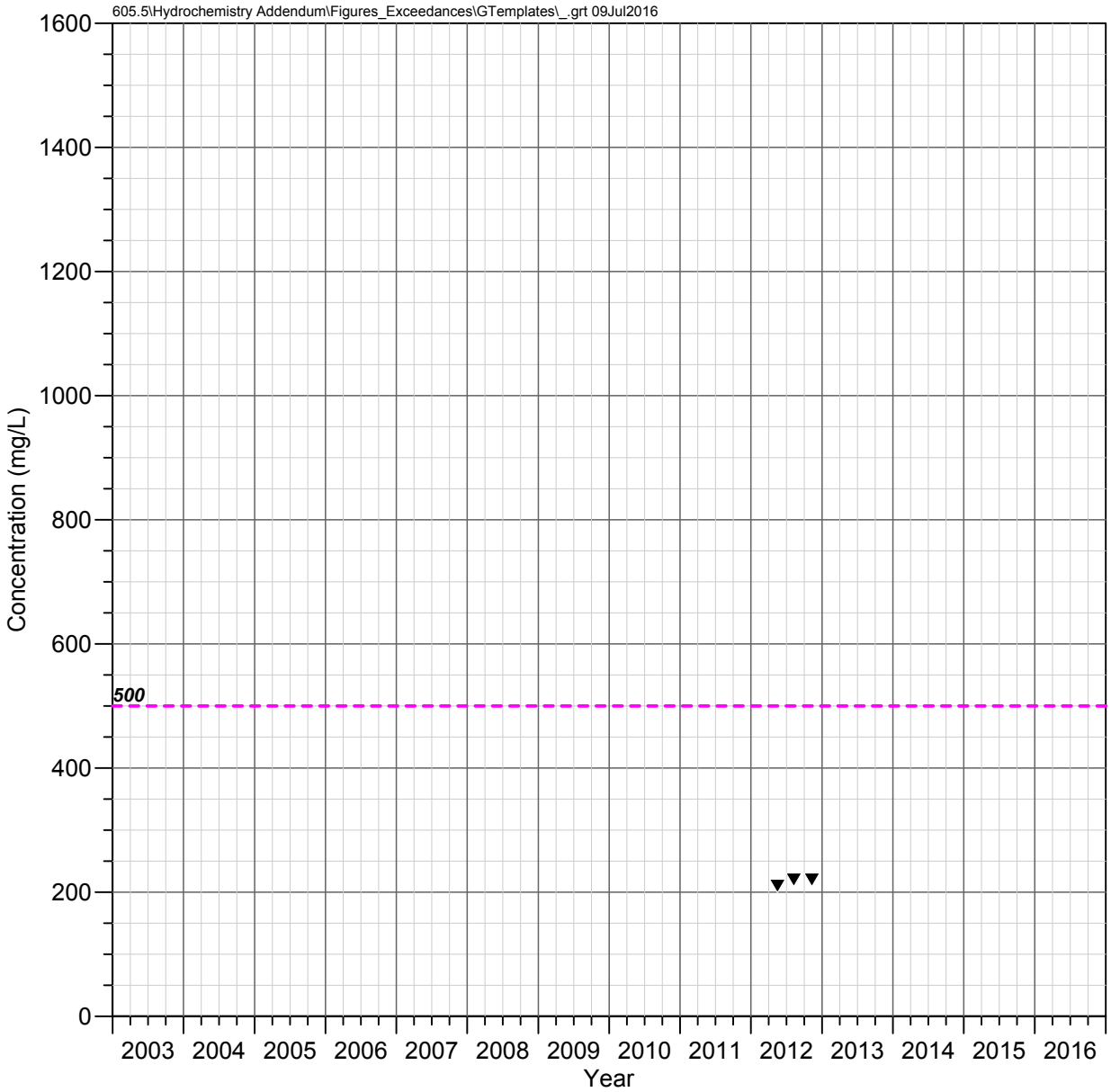


FIGURE E-730. TOTAL DISSOLVED SOLIDS CONCENTRATIONS OBSERVED AT HRES-15, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-17
Apache Leap Tuff Aquifer

TOTAL DISSOLVED SOLIDS

Observed Concentrations

▼ Total dissolved solids vaule

Water Quality Standards

- - - - EPA Secondary MCL (500 mg/L)

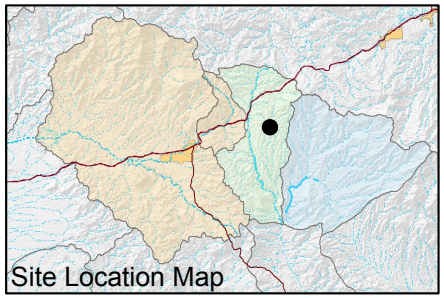
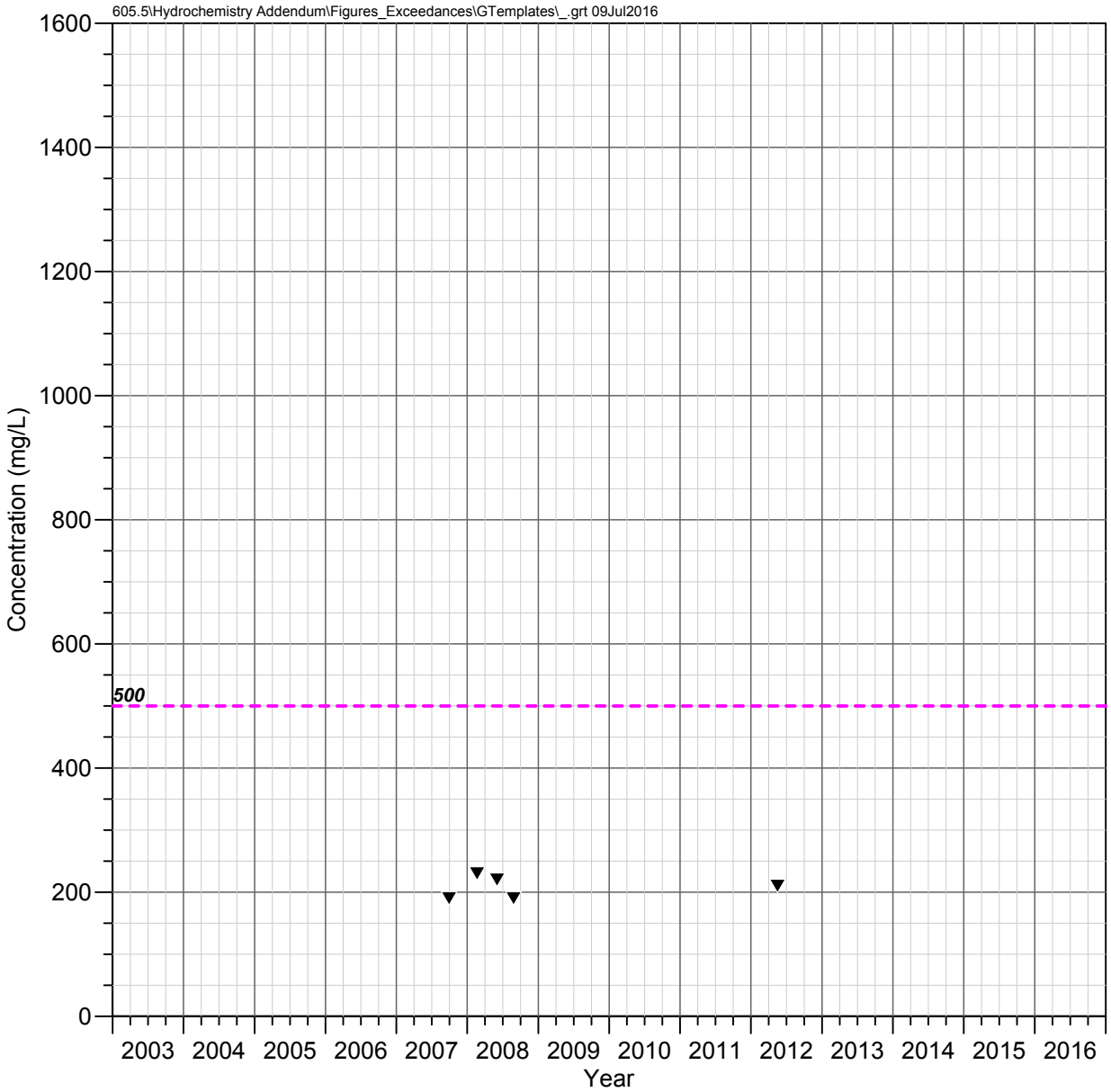


FIGURE E-731. TOTAL DISSOLVED SOLIDS CONCENTRATIONS OBSERVED AT HRES-17, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MJ-11
Apache Leap Tuff Aquifer

TOTAL DISSOLVED SOLIDS

Observed Concentrations

▼ Total dissolved solids vaule

Water Quality Standards

- - - - EPA Secondary MCL (500 mg/L)

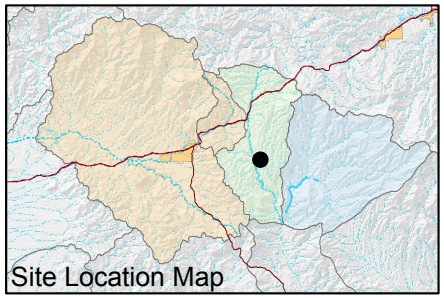
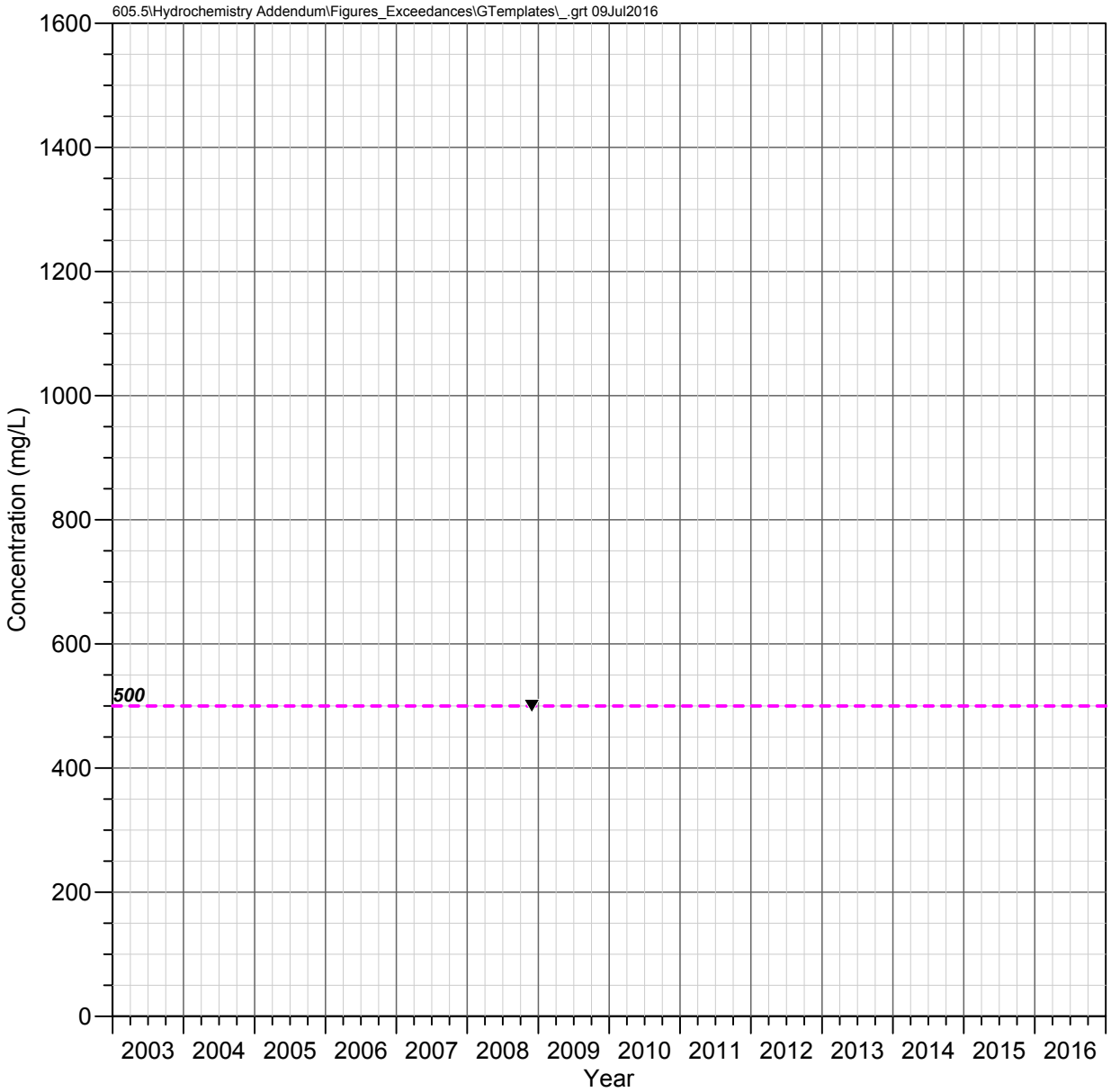


FIGURE E-732. TOTAL DISSOLVED SOLIDS CONCENTRATIONS OBSERVED AT MJ-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-01
Deep Groundwater System

TOTAL DISSOLVED SOLIDS

Observed Concentrations

▼ Total dissolved solids vaule

Water Quality Standards

EPA Secondary MCL (500 mg/L)

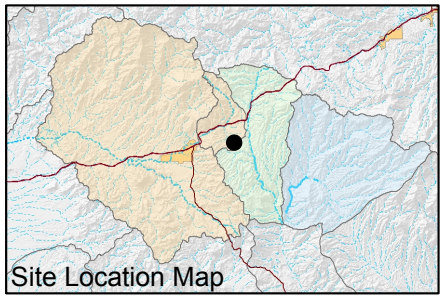
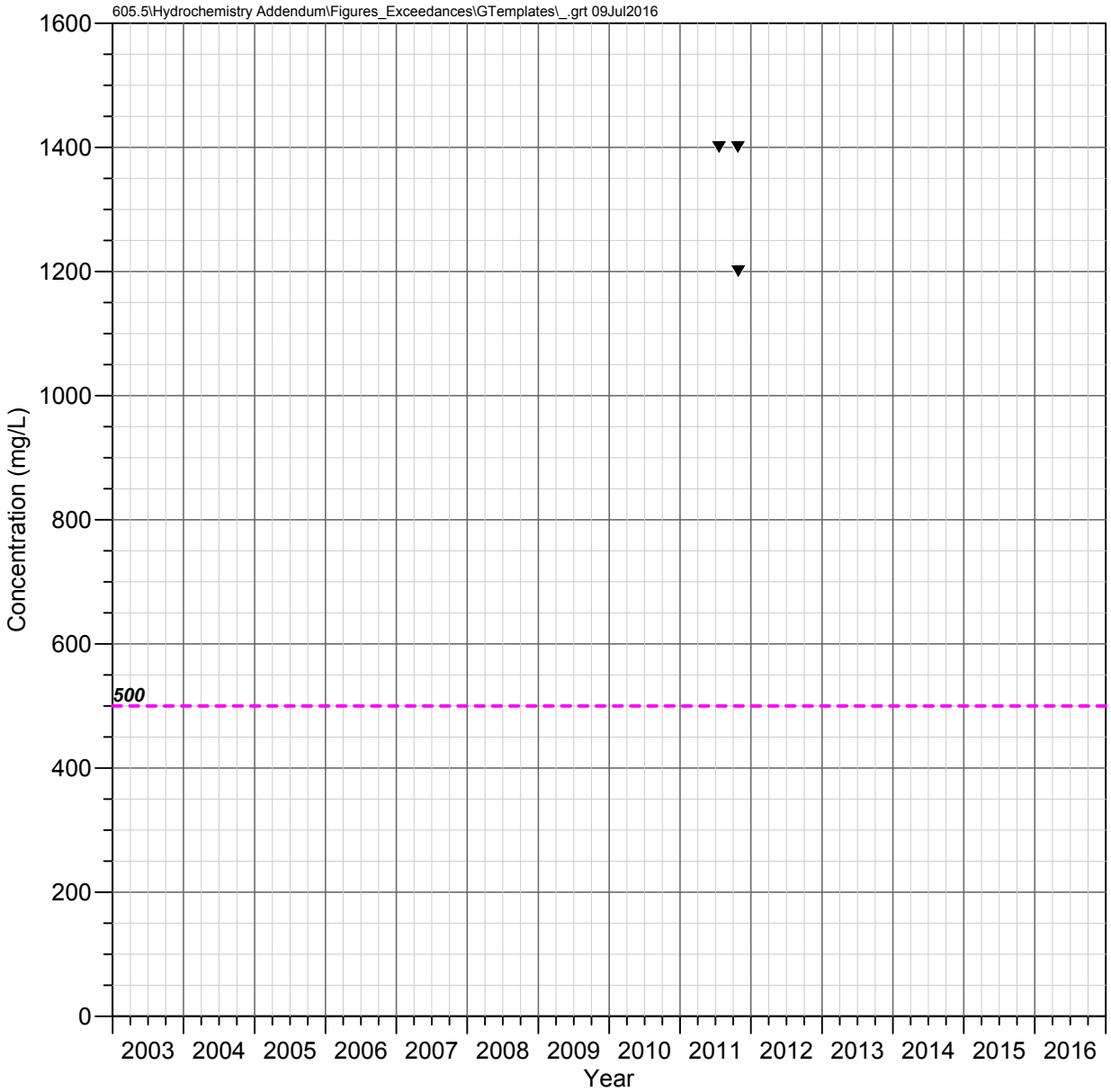


FIGURE E-733. TOTAL DISSOLVED SOLIDS CONCENTRATIONS OBSERVED AT DHRES-01, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-02
Deep Groundwater System

TOTAL DISSOLVED SOLIDS

Observed Concentrations

▼ Total dissolved solids vaule

Water Quality Standards

EPA Secondary MCL (500 mg/L)

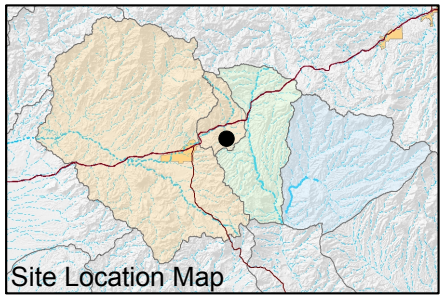
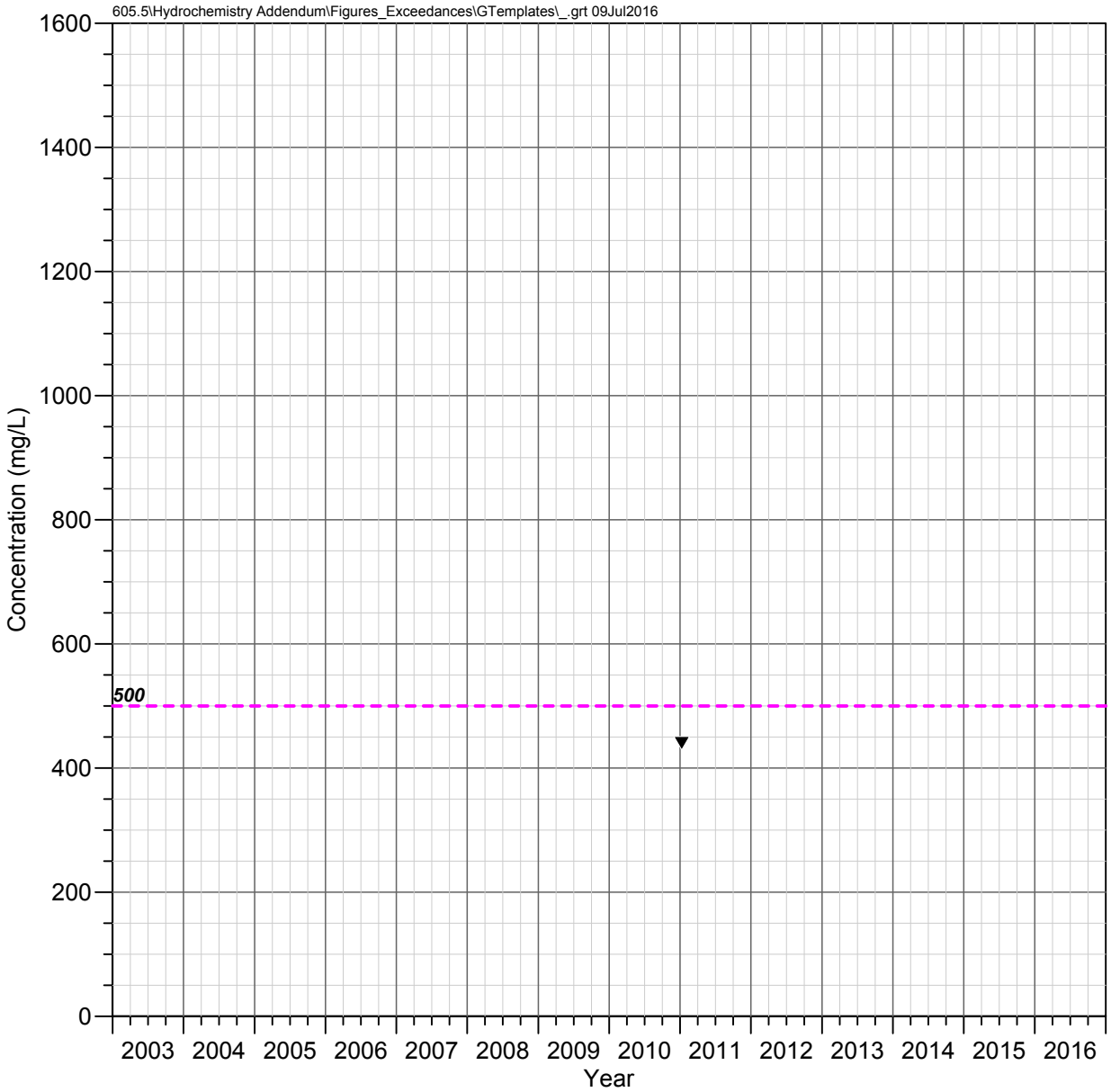


FIGURE E-734. TOTAL DISSOLVED SOLIDS CONCENTRATIONS OBSERVED AT DHRES-02, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-06
Deep Groundwater System

TOTAL DISSOLVED SOLIDS

Observed Concentrations

▼ Total dissolved solids vaule

Water Quality Standards

EPA Secondary MCL (500 mg/L)

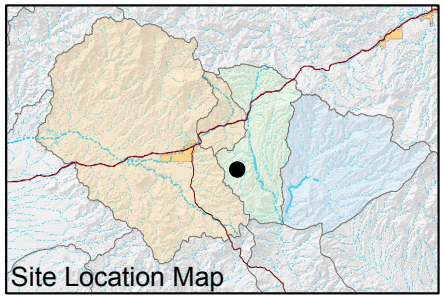
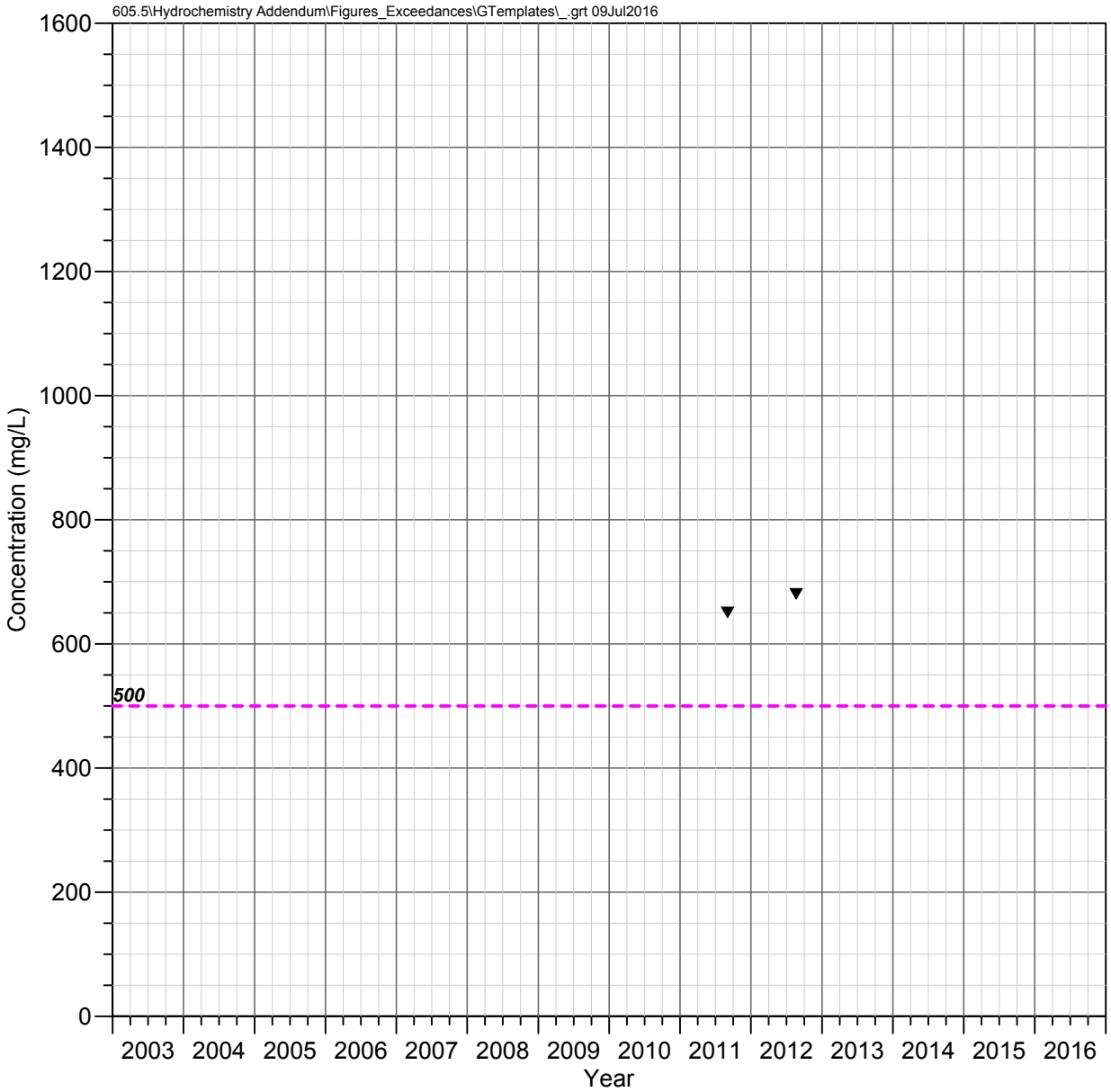


FIGURE E-735. TOTAL DISSOLVED SOLIDS CONCENTRATIONS OBSERVED AT DHRES-06, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-09
Deep Groundwater System

TOTAL DISSOLVED SOLIDS

Observed Concentrations

▼ Total dissolved solids vaule

Water Quality Standards

EPA Secondary MCL (500 mg/L)

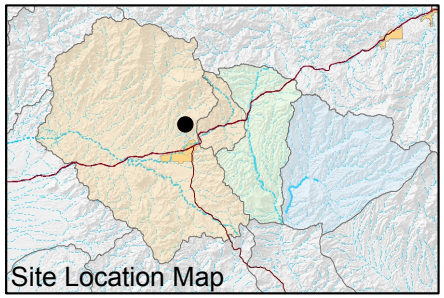
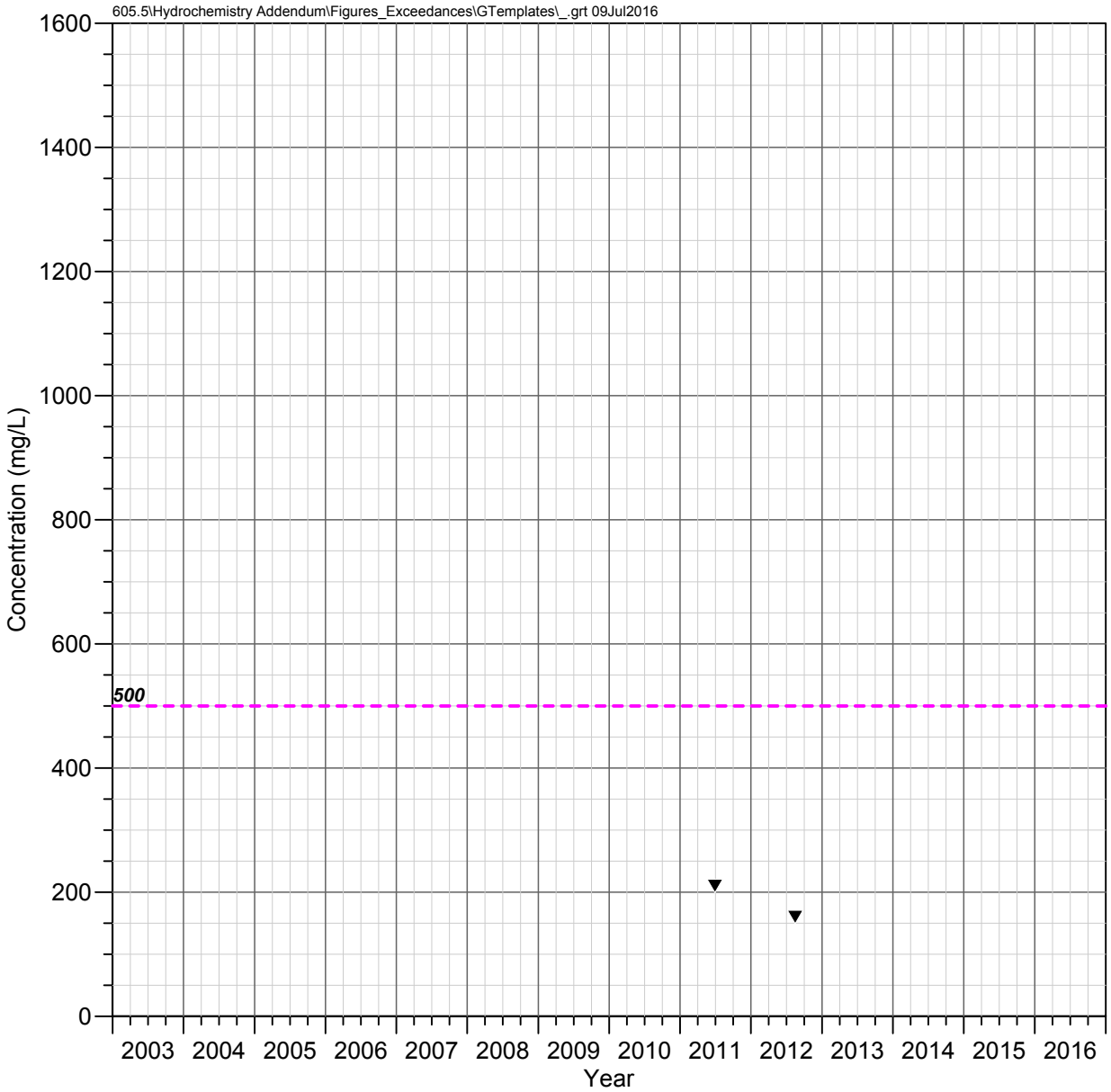


FIGURE E-736. TOTAL DISSOLVED SOLIDS CONCENTRATIONS OBSERVED AT DHRES-09, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-11
Deep Groundwater System

TOTAL DISSOLVED SOLIDS

Observed Concentrations

▼ Total dissolved solids vaule

Water Quality Standards

- - - - EPA Secondary MCL (500 mg/L)

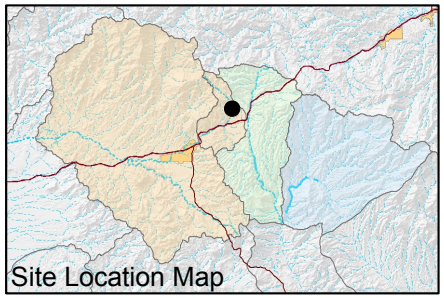
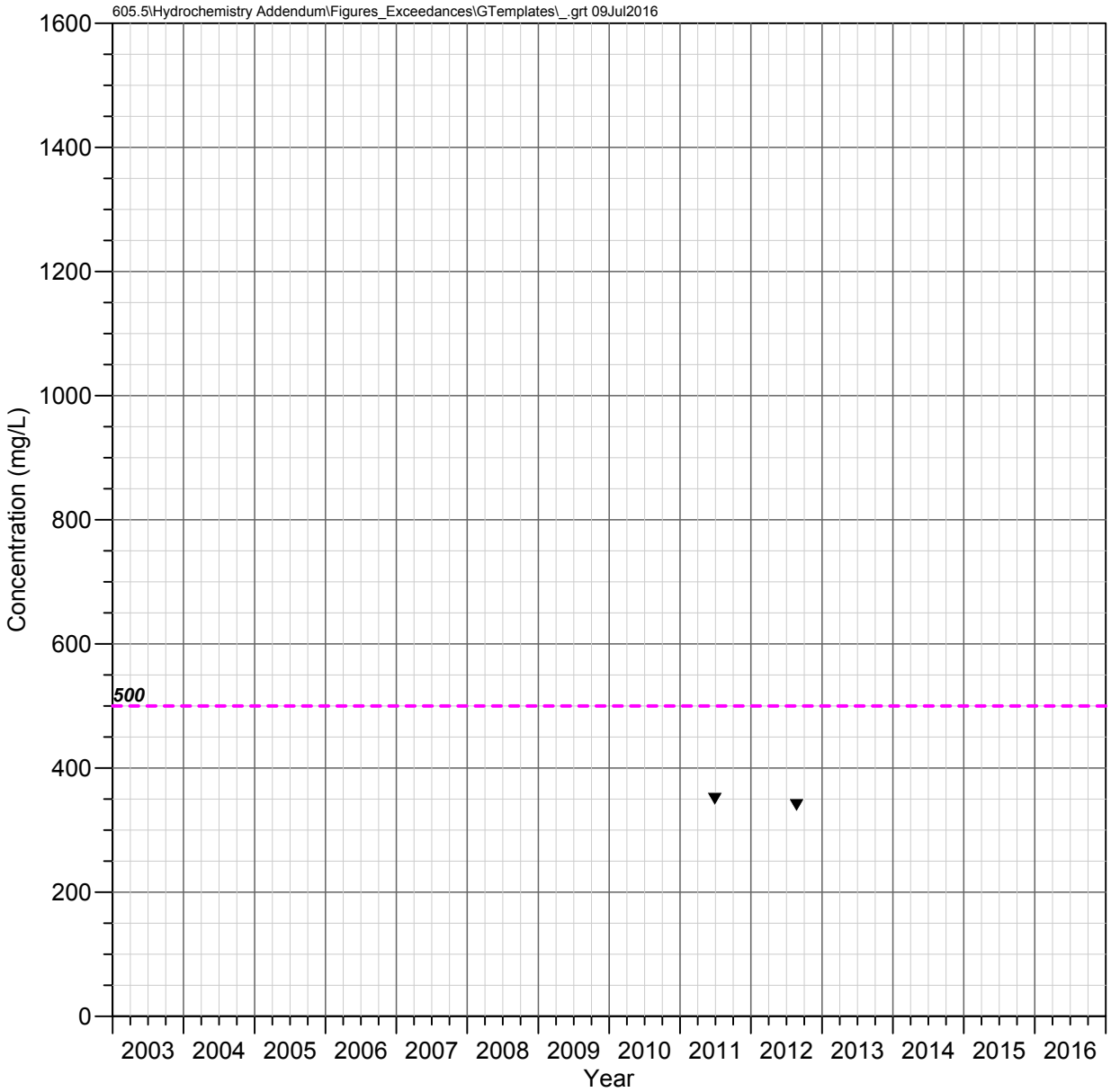


FIGURE E-737. TOTAL DISSOLVED SOLIDS CONCENTRATIONS OBSERVED AT DHRES-11, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-13
Deep Groundwater System

TOTAL DISSOLVED SOLIDS

Observed Concentrations

▼ Total dissolved solids vaule

Water Quality Standards

EPA Secondary MCL (500 mg/L)

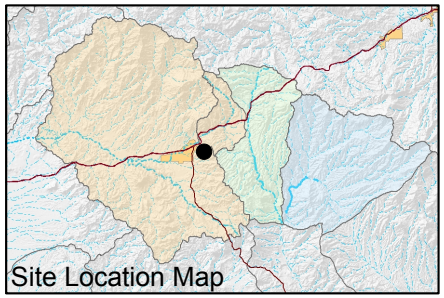
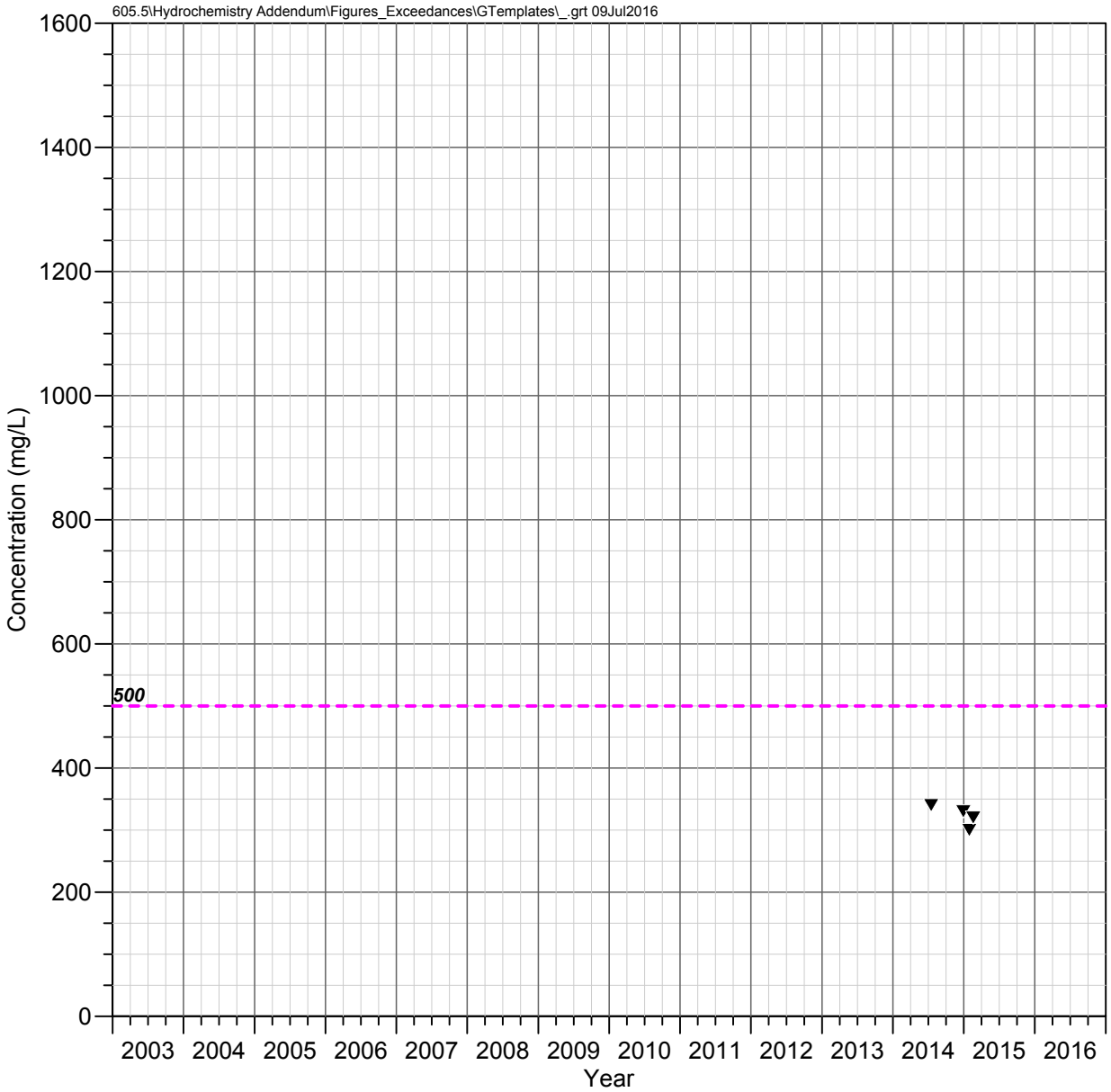


FIGURE E-738. TOTAL DISSOLVED SOLIDS CONCENTRATIONS OBSERVED AT DHRES-13, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-15
Deep Groundwater System

TOTAL DISSOLVED SOLIDS

Observed Concentrations

▼ Total dissolved solids vaule

Water Quality Standards

- - - - EPA Secondary MCL (500 mg/L)

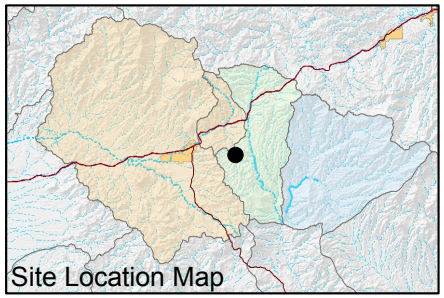
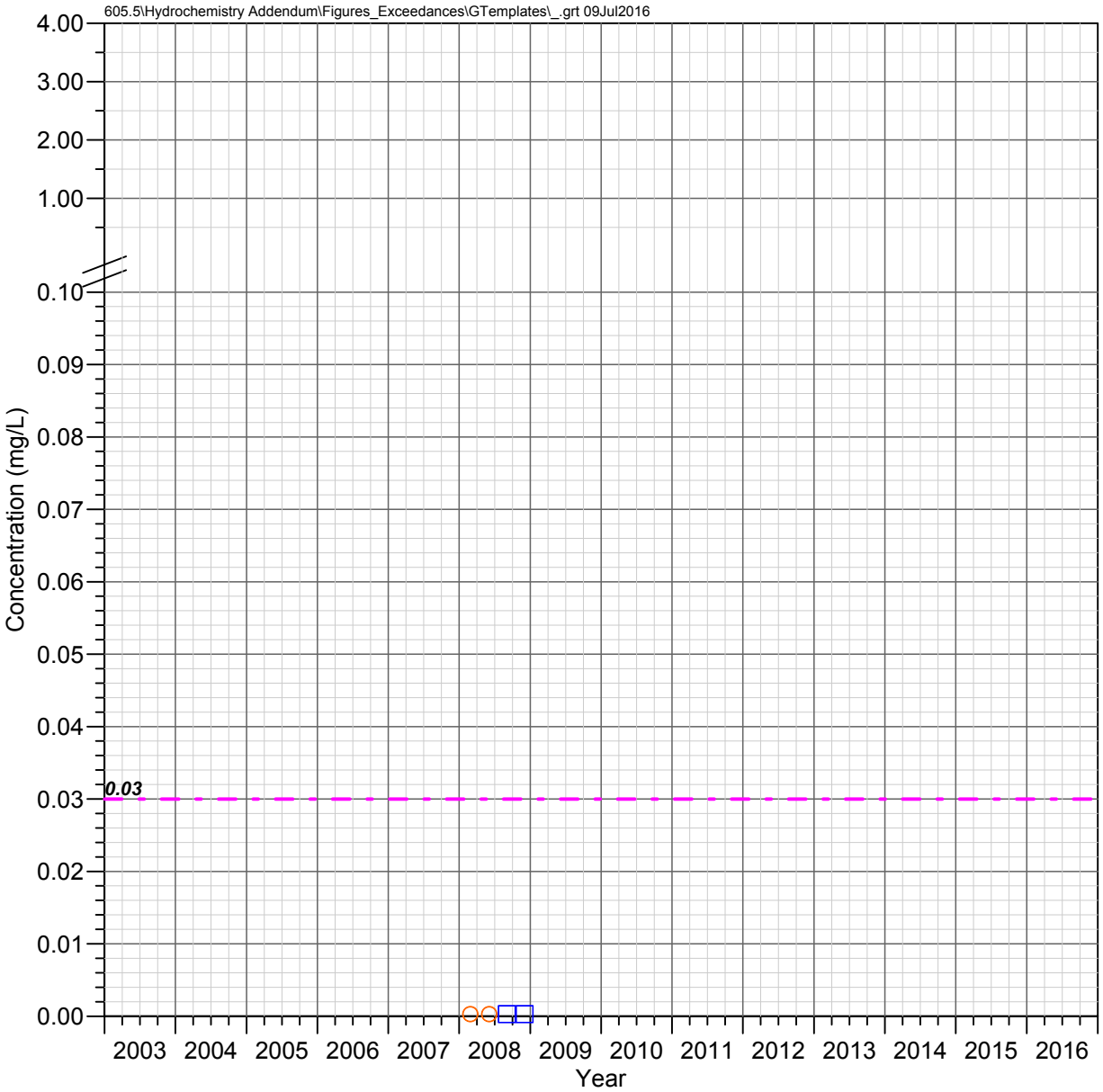


FIGURE E-739. TOTAL DISSOLVED SOLIDS CONCENTRATIONS OBSERVED AT DHRES-15, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Hackberry Windmill Well
Shallow Groundwater System

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— - — EPA Maximum Contaminant Levels (UNS, 0.03 mg/L)

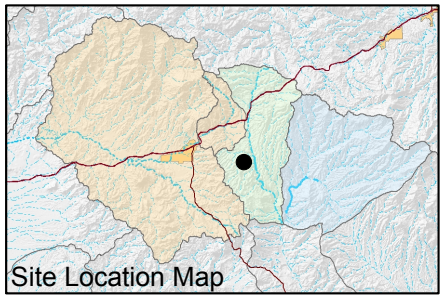
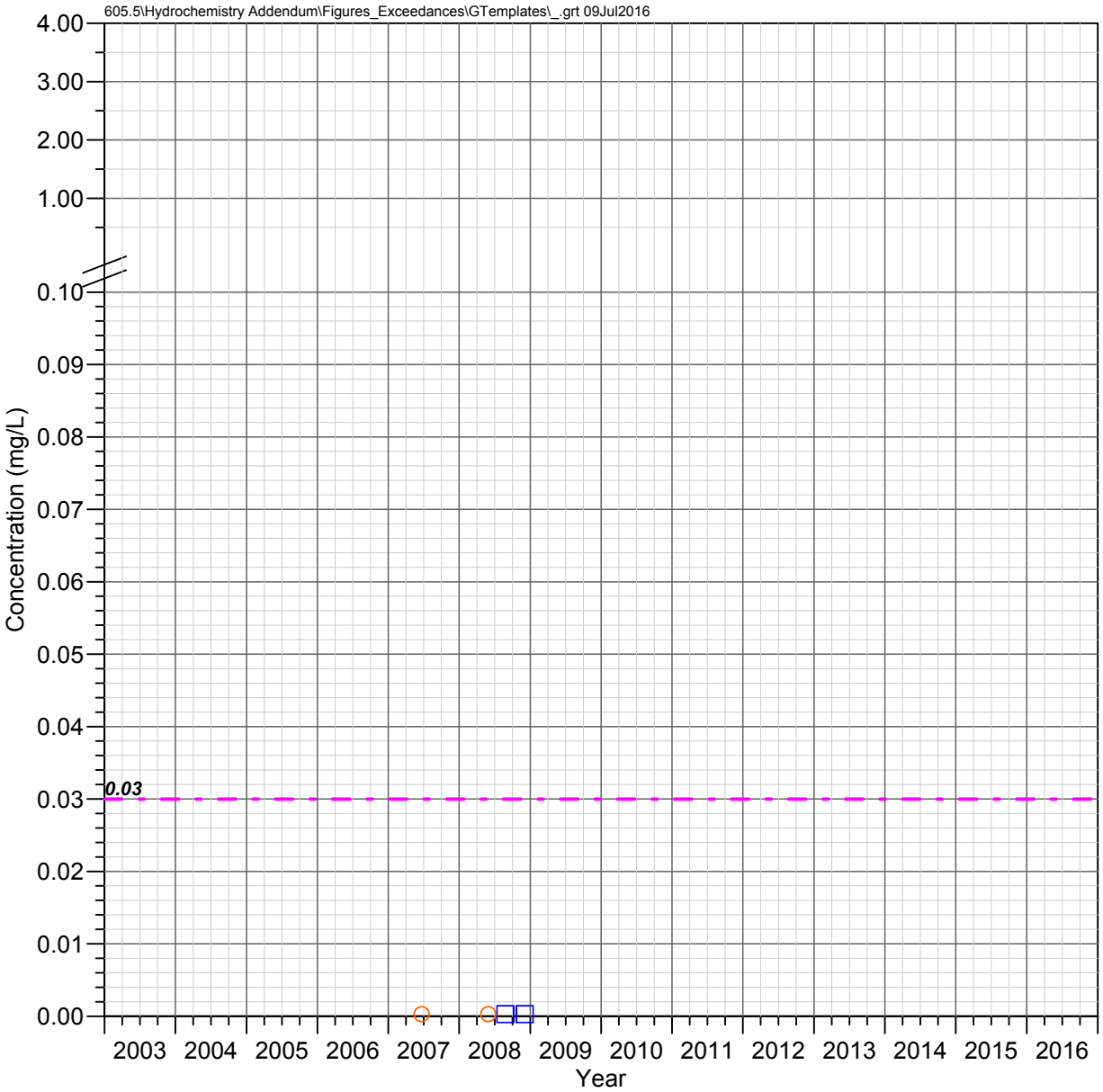


FIGURE E-740. URANIUM CONCENTRATIONS OBSERVED AT HACKBERRY WINDMILL WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



JI Ranch Corral Well Shallow Groundwater System

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

EPA Maximum Contaminant Levels (UNS, 0.03 mg/L)

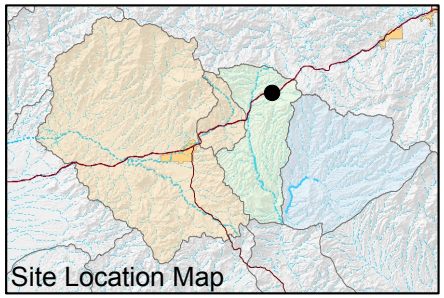
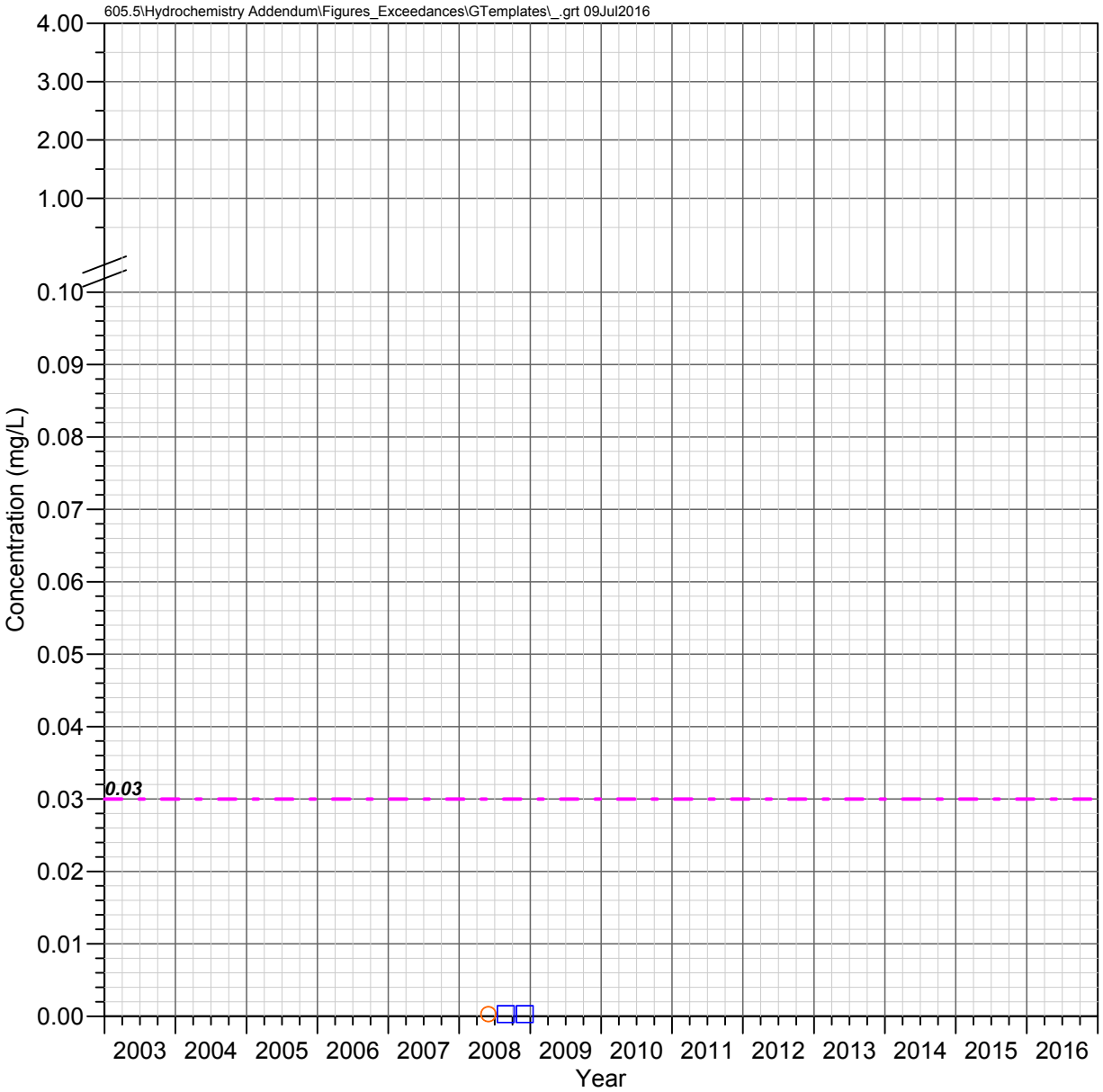


FIGURE E-741. URANIUM CONCENTRATIONS OBSERVED AT JI RANCH CORRAL WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



JI Ranch Middle Well Shallow Groundwater System

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

EPA Maximum Contaminant Levels (UNS, 0.03 mg/L)

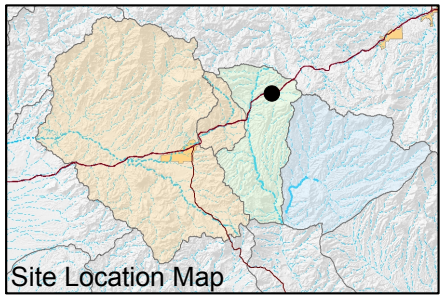
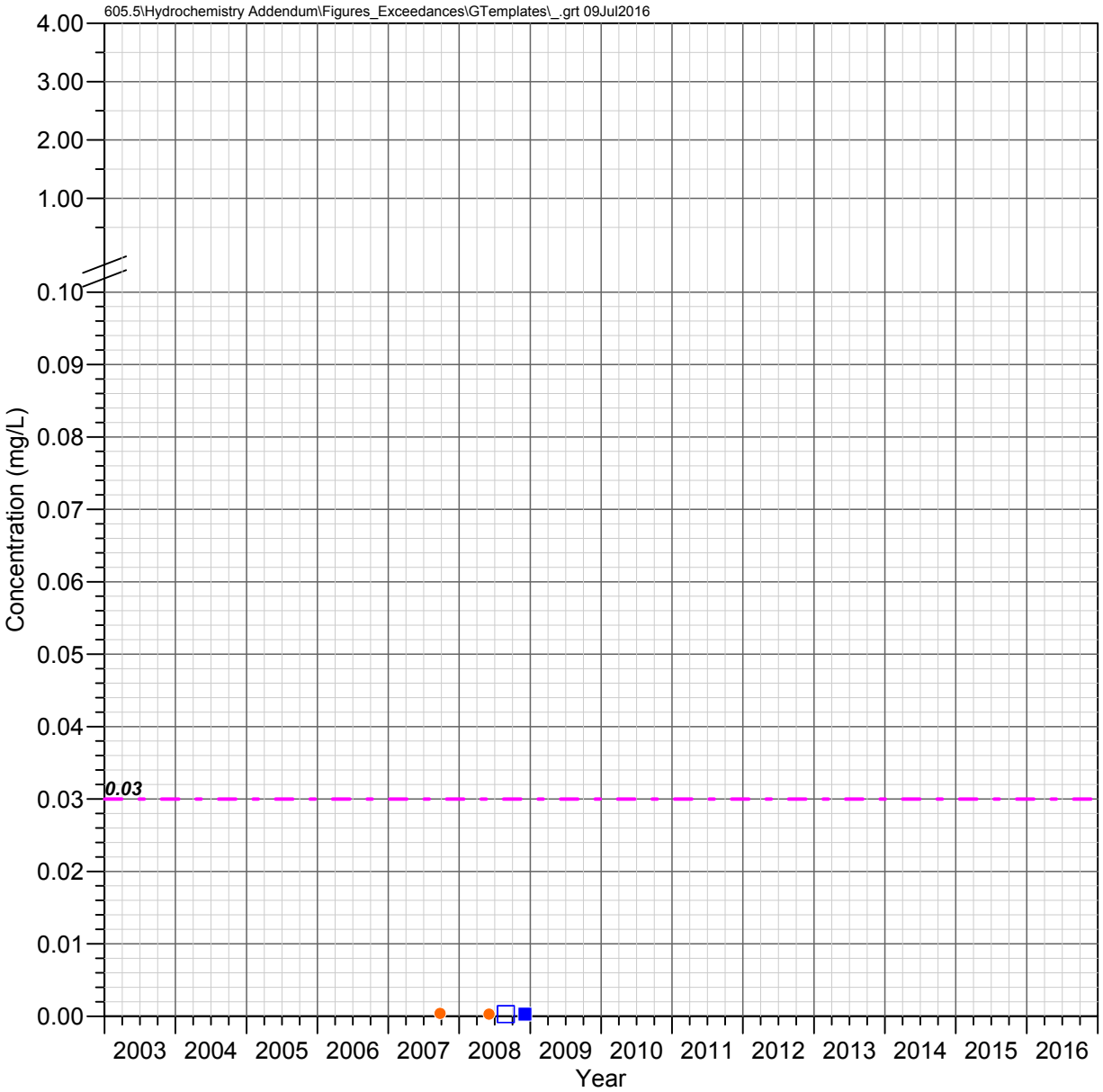


FIGURE E-742. URANIUM CONCENTRATIONS OBSERVED AT JI RANCH MIDDLE WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



A-06
Apache Leap Tuff Aquifer

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— - — EPA Maximum Contaminant Levels (UNS, 0.03 mg/L)

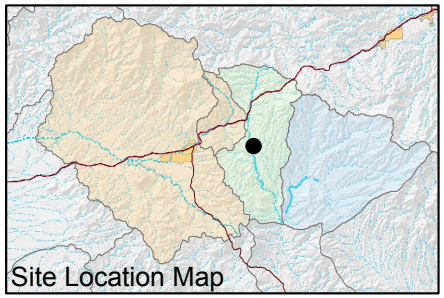
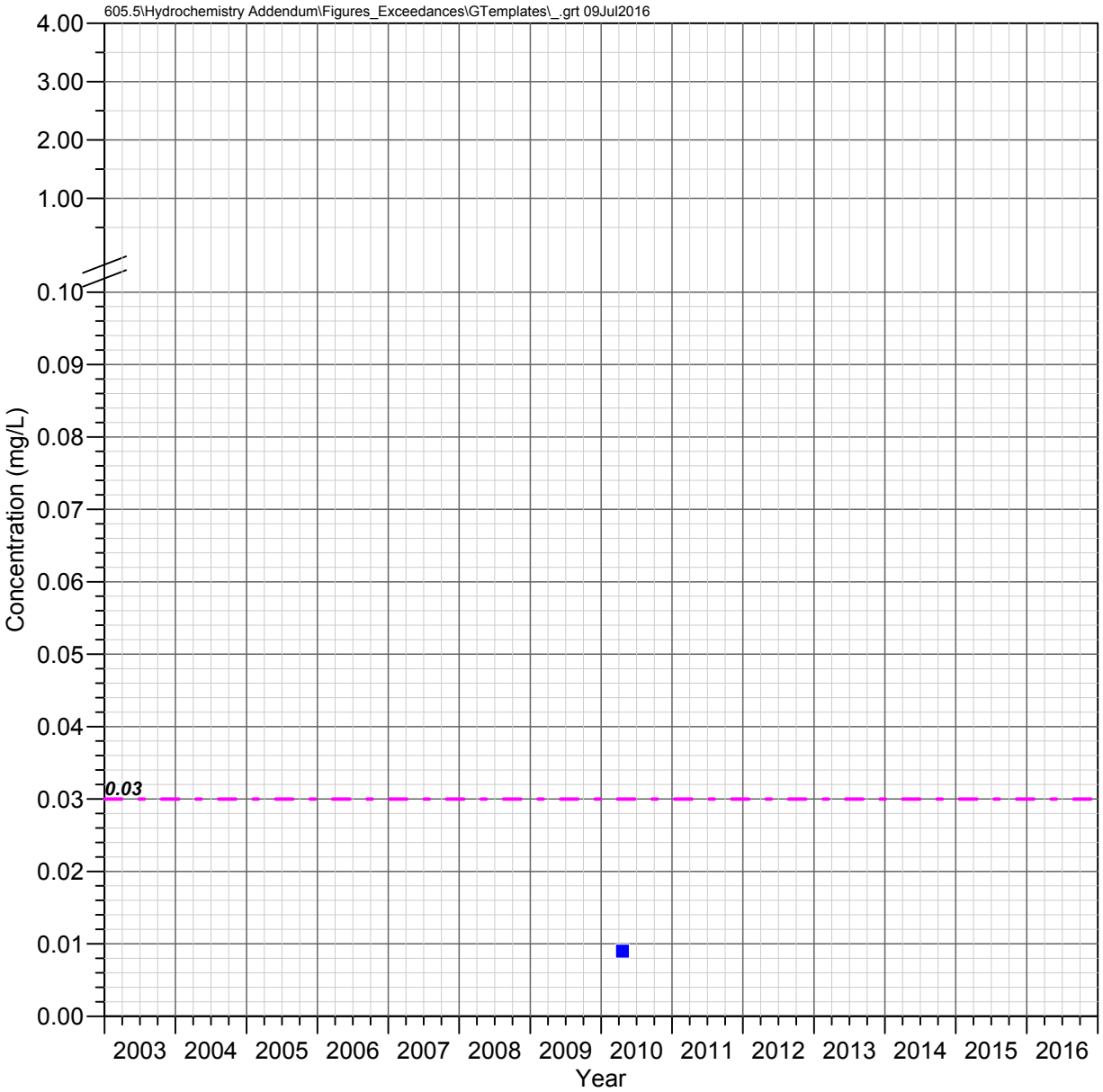


FIGURE E-743. URANIUM CONCENTRATIONS OBSERVED AT A-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



CT Well
Apache Leap Tuff Aquifer

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

EPA Maximum Contaminant Levels (UNS, 0.03 mg/L)

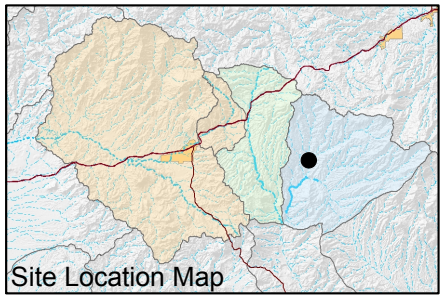
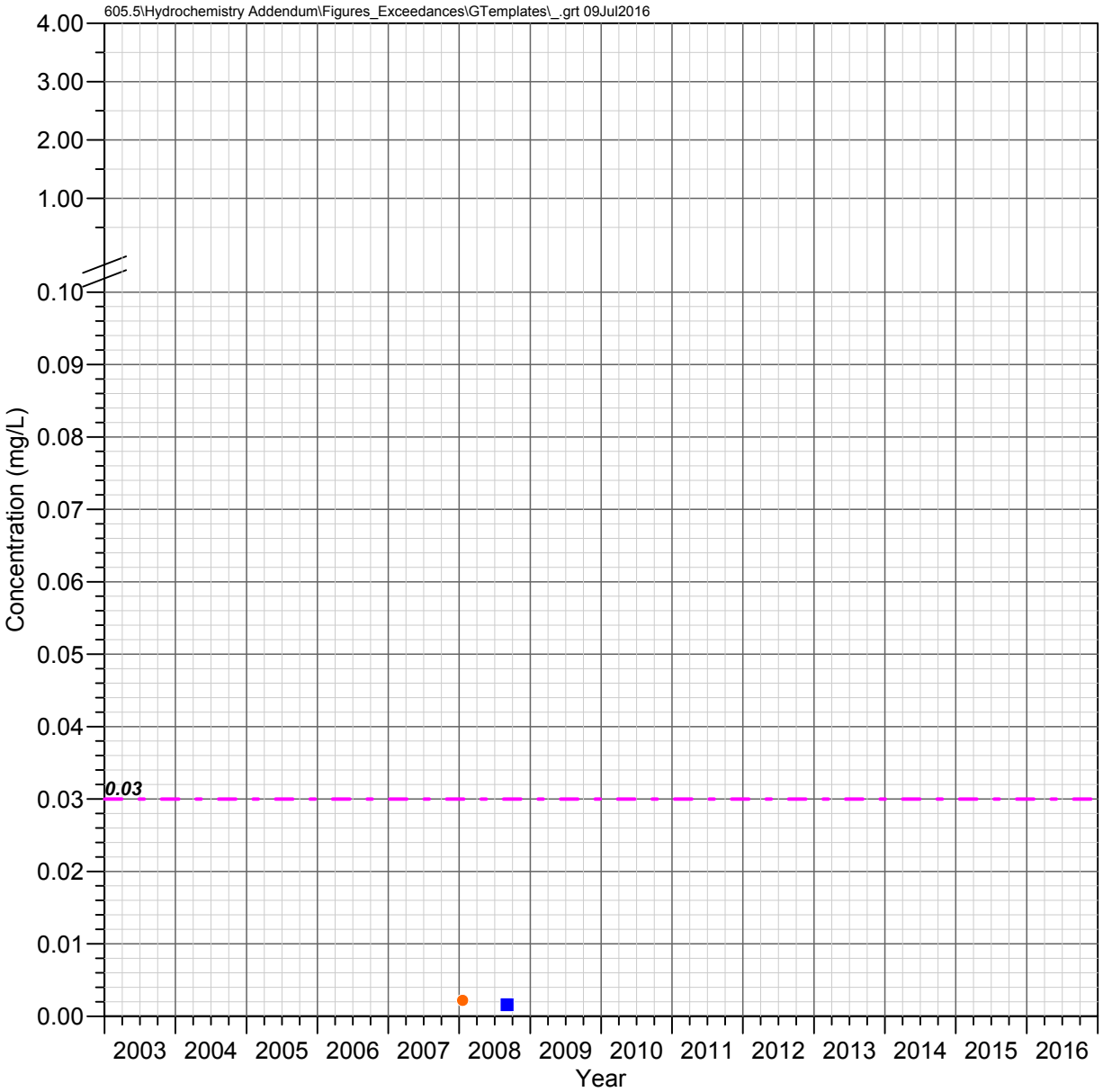


FIGURE E-744. URANIUM CONCENTRATIONS OBSERVED AT CT WELL, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-04
Apache Leap Tuff Aquifer

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

EPA Maximum Contaminant Levels (UNS, 0.03 mg/L)

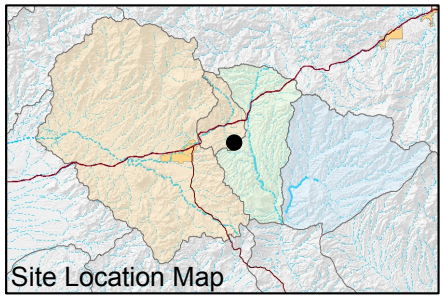
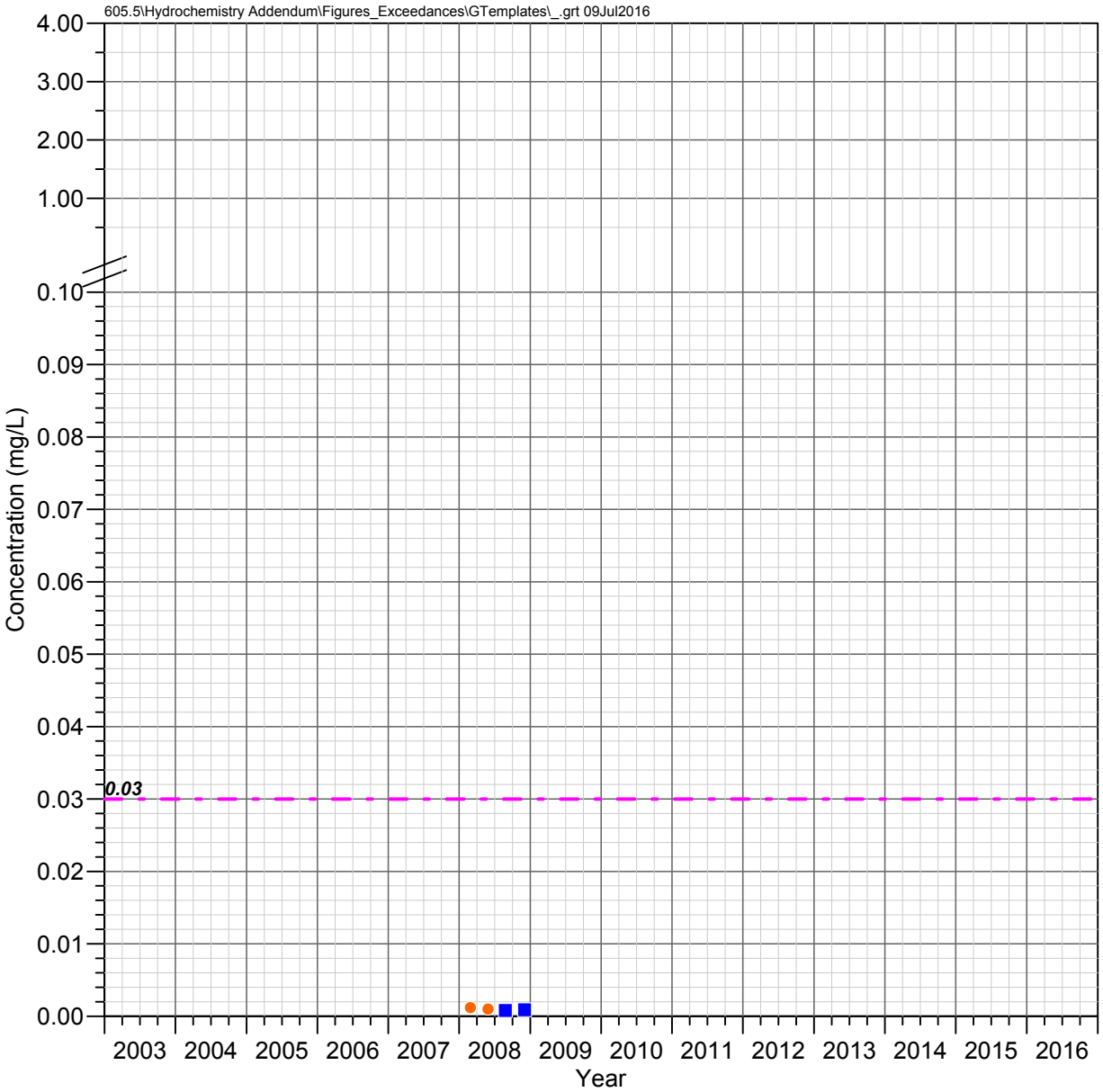


FIGURE E-745. URANIUM CONCENTRATIONS OBSERVED AT HRES-04, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-05
Apache Leap Tuff Aquifer

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— - — EPA Maximum Contaminant Levels (UNS, 0.03 mg/L)

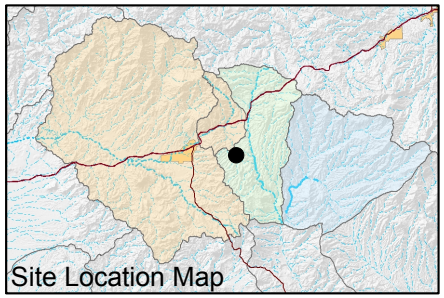
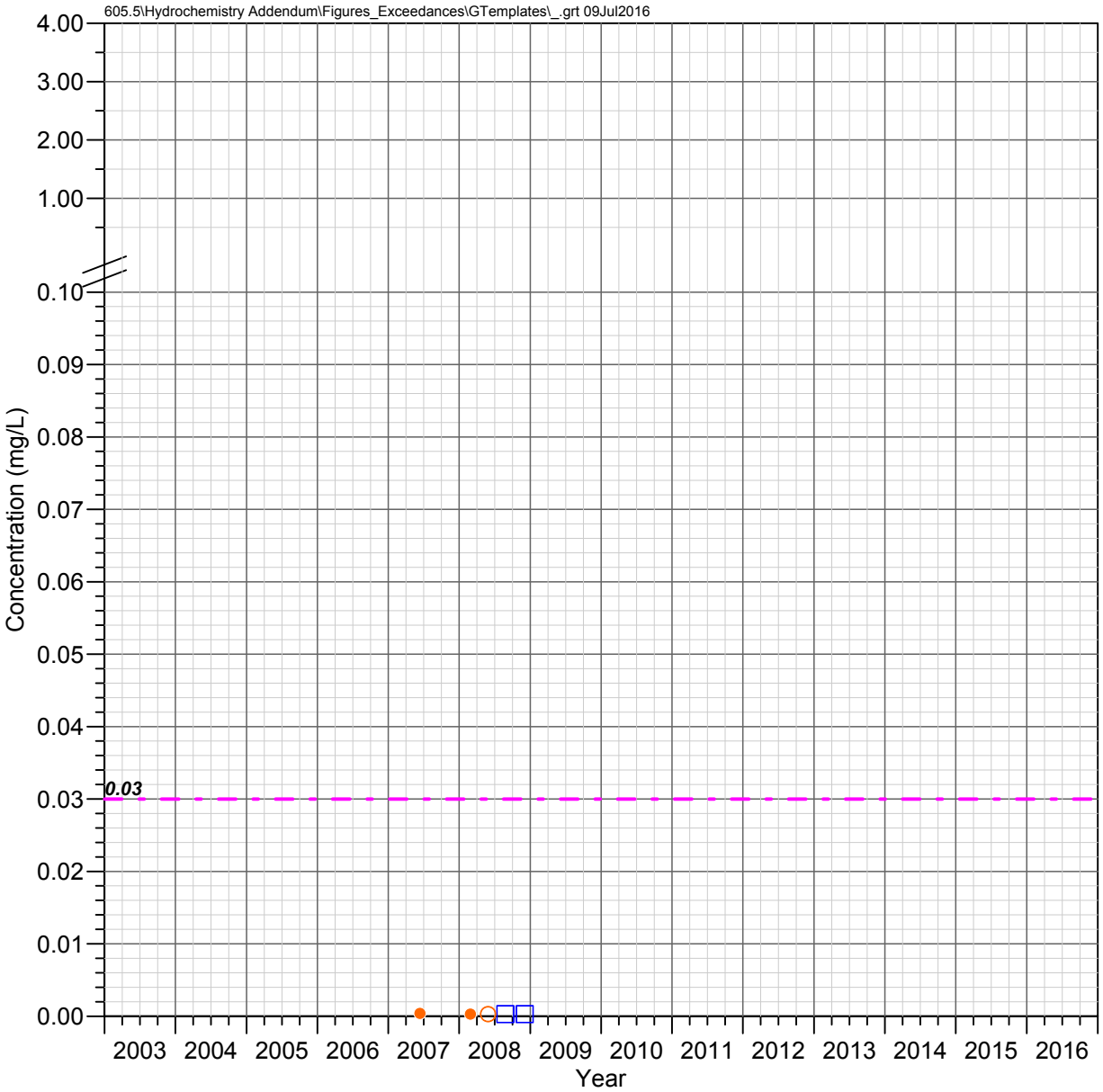


FIGURE E-746. URANIUM CONCENTRATIONS OBSERVED AT HRES-05, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-06
Apache Leap Tuff Aquifer

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— - — EPA Maximum Contaminant Levels (UNS, 0.03 mg/L)

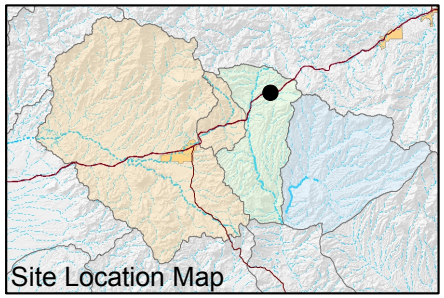
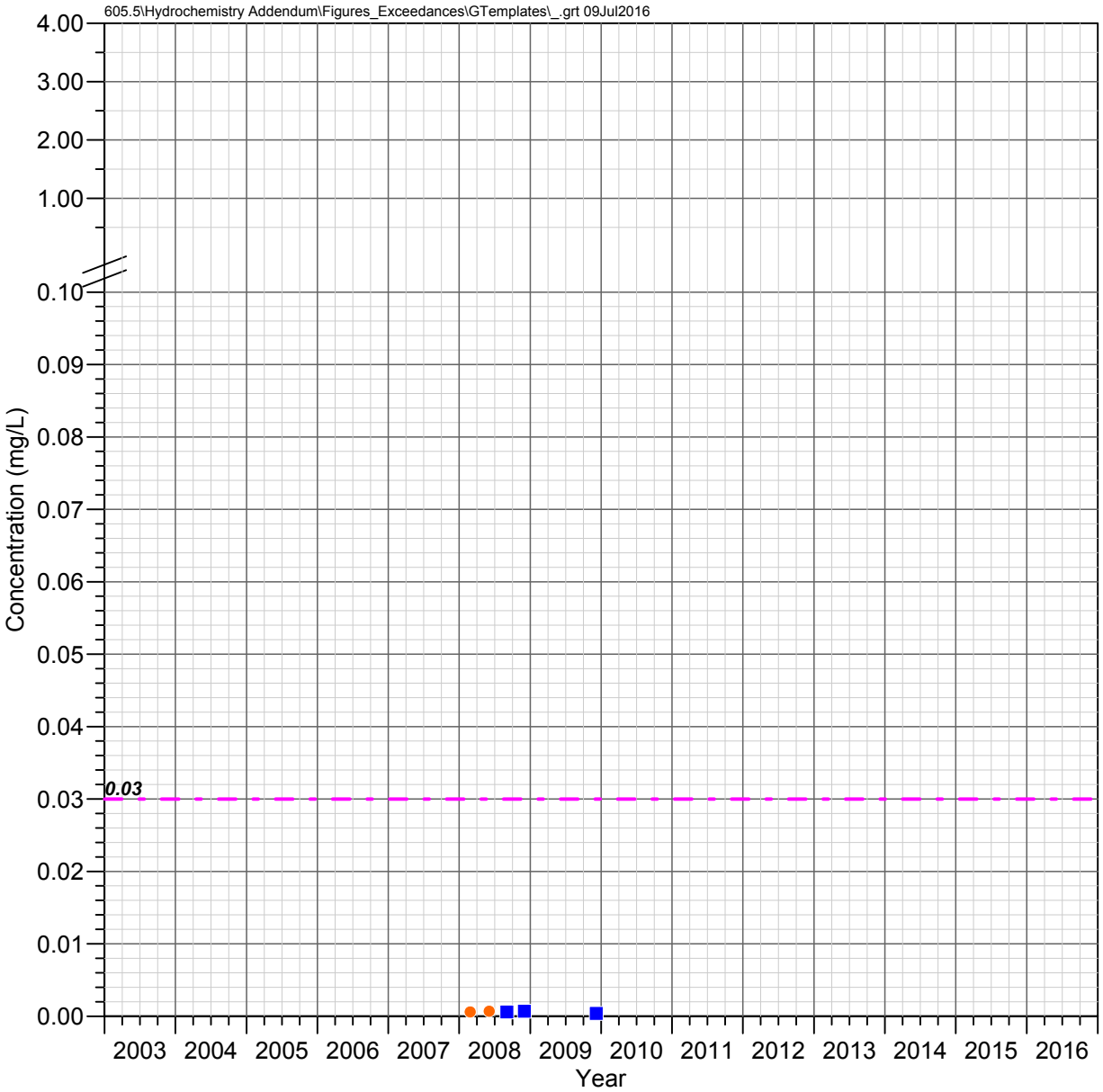


FIGURE E-747. URANIUM CONCENTRATIONS OBSERVED AT HRES-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-07
Apache Leap Tuff Aquifer

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— - — EPA Maximum Contaminant Levels (UNS, 0.03 mg/L)

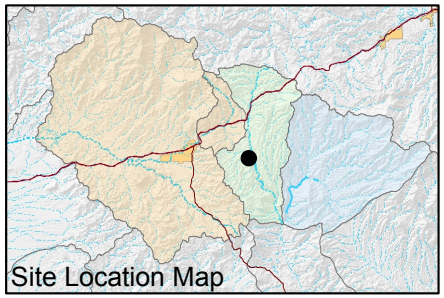
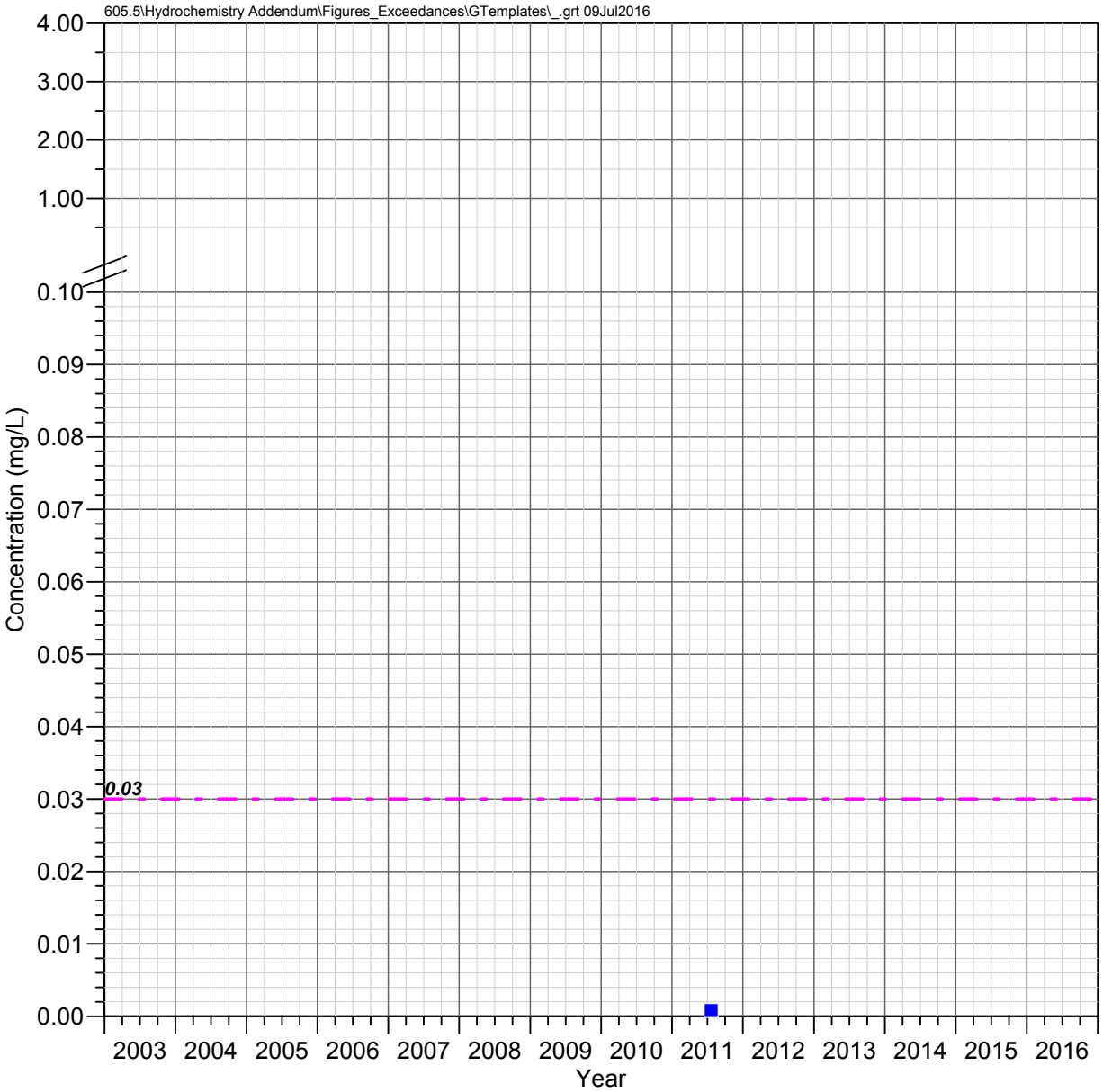


FIGURE E-748. URANIUM CONCENTRATIONS OBSERVED AT HRES-07, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-08
Apache Leap Tuff Aquifer

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

EPA Maximum Contaminant Levels (UNS, 0.03 mg/L)

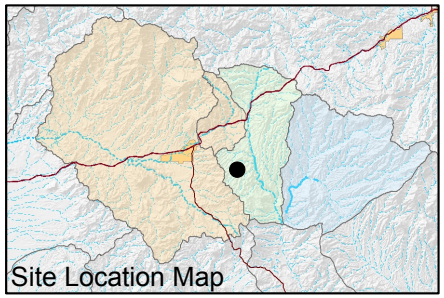
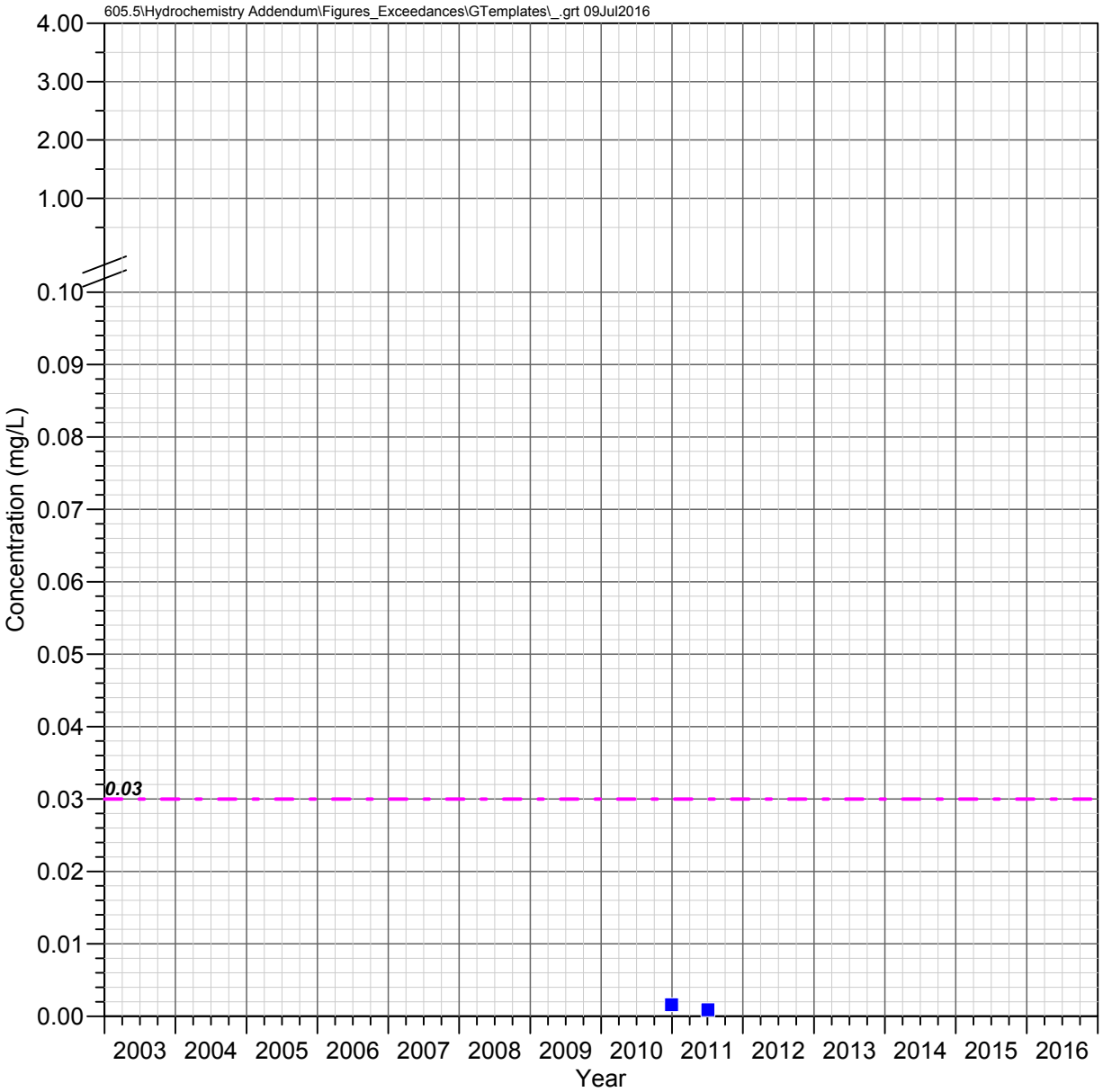


FIGURE E-749. URANIUM CONCENTRATIONS OBSERVED AT HRES-08, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-09
Apache Leap Tuff Aquifer

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— - — EPA Maximum Contaminant Levels (UNS, 0.03 mg/L)

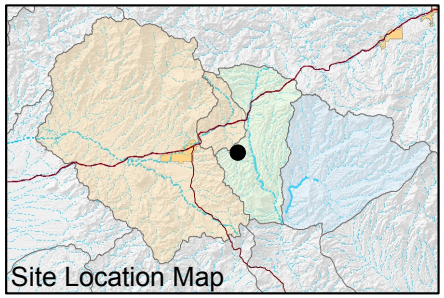
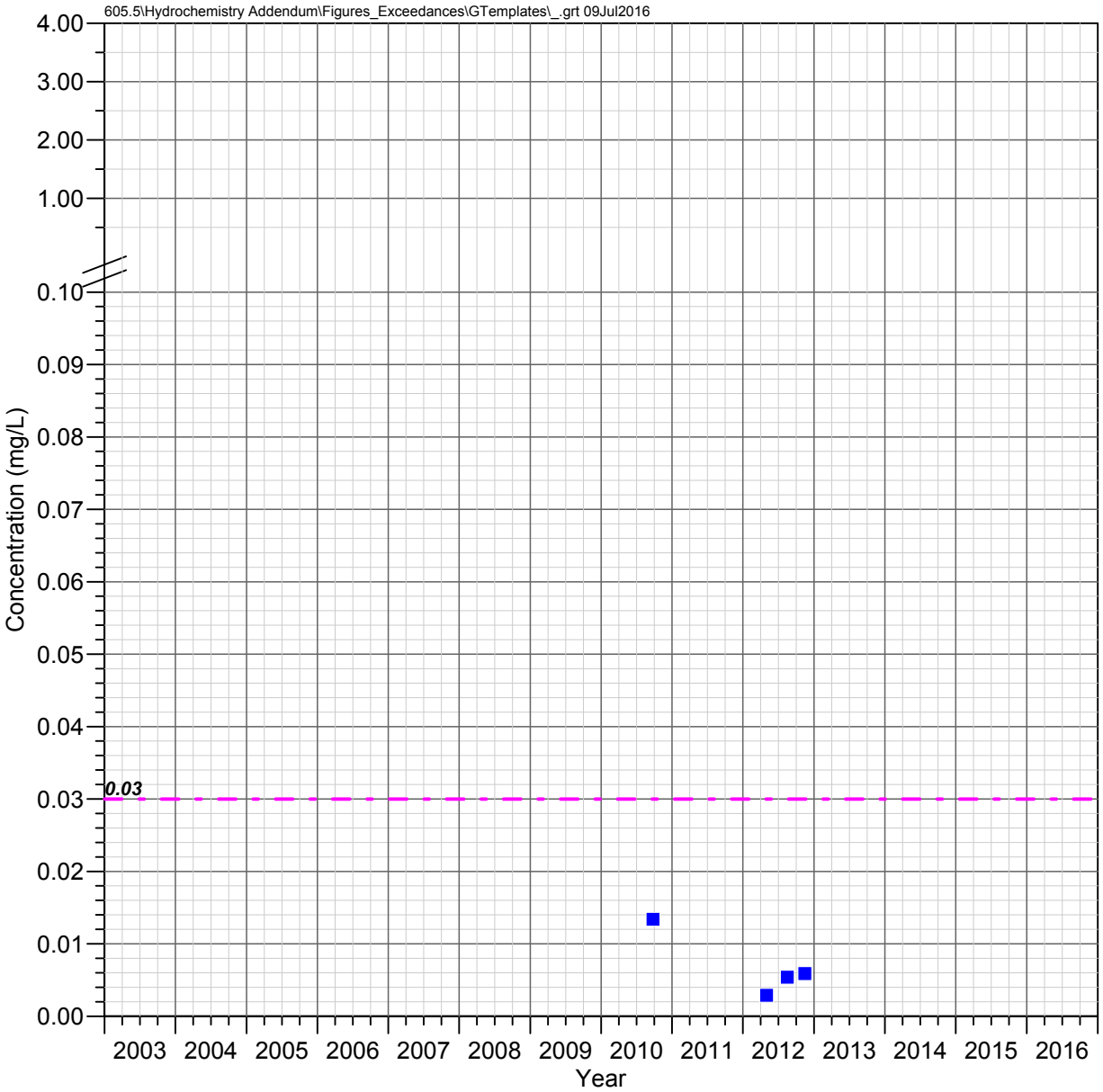


FIGURE E-750. URANIUM CONCENTRATIONS OBSERVED AT HRES-09, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-10
Apache Leap Tuff Aquifer

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— - — EPA Maximum Contaminant Levels (UNS, 0.03 mg/L)

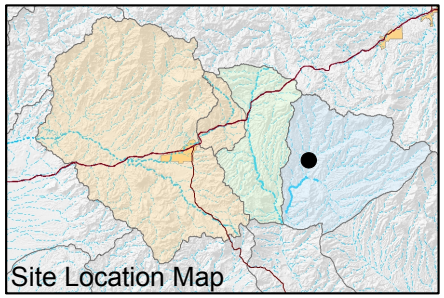
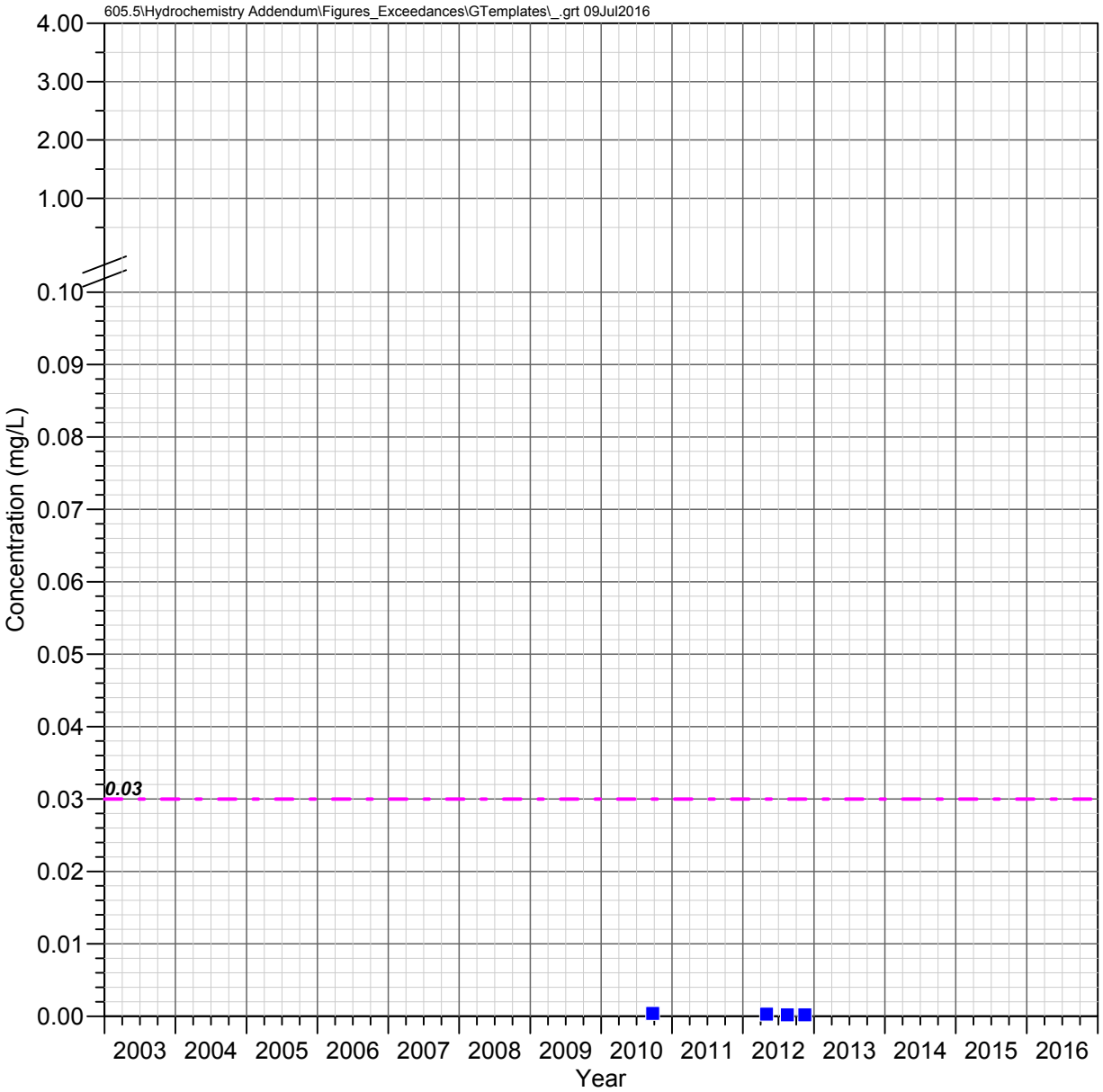


FIGURE E-751. URANIUM CONCENTRATIONS OBSERVED AT HRES-10, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-11
Apache Leap Tuff Aquifer

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

EPA Maximum Contaminant Levels (UNS, 0.03 mg/L)

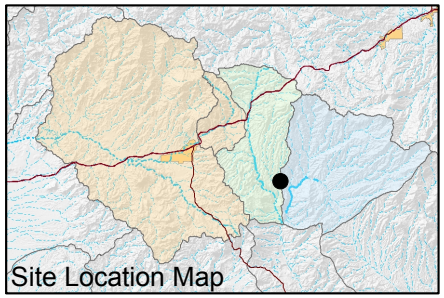
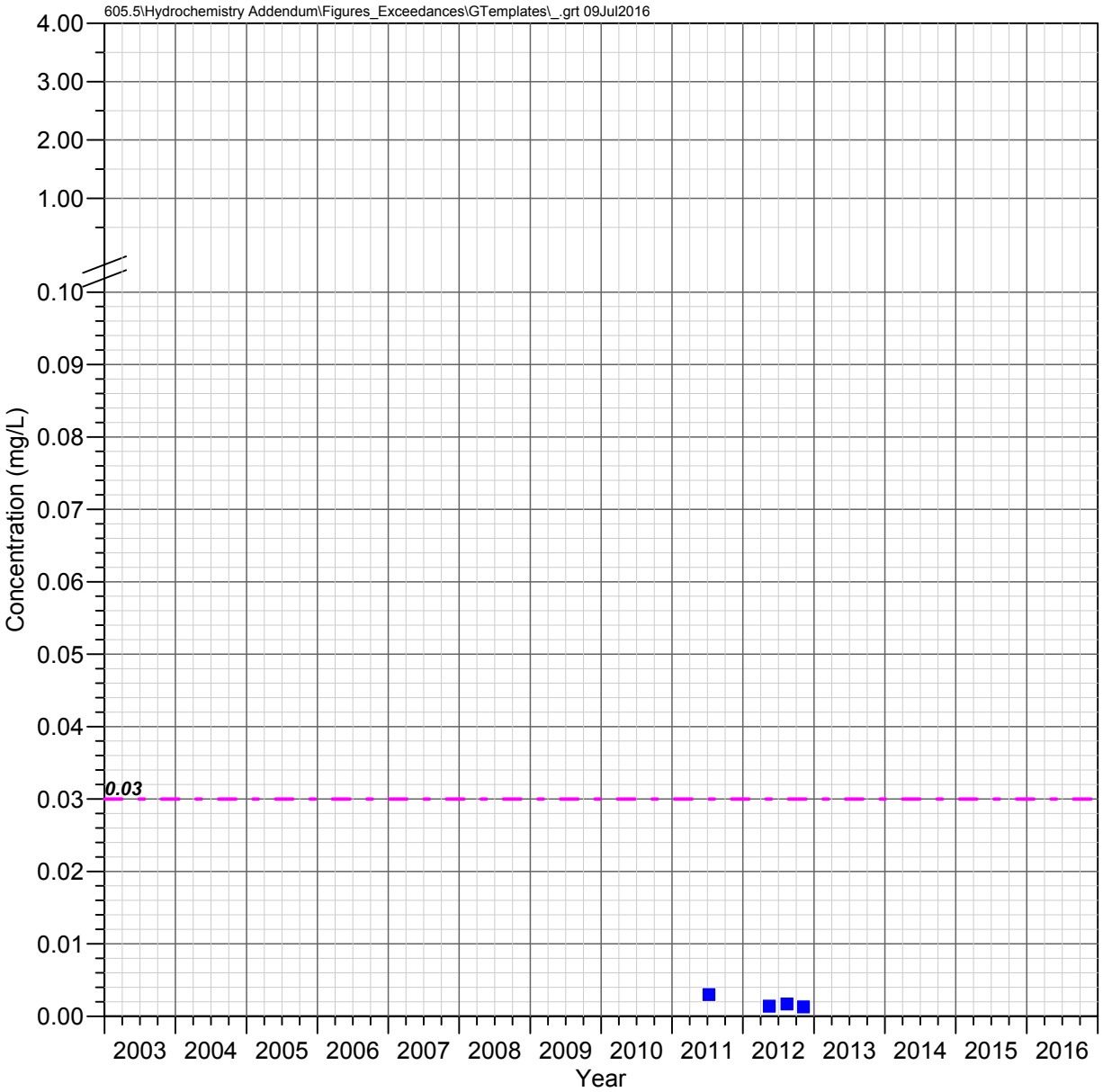


FIGURE E-752. URANIUM CONCENTRATIONS OBSERVED AT HRES-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-12
Apache Leap Tuff Aquifer

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

EPA Maximum Contaminant Levels (UNS, 0.03 mg/L)

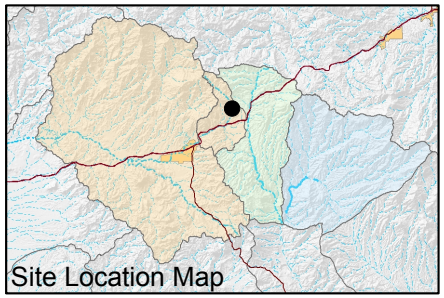
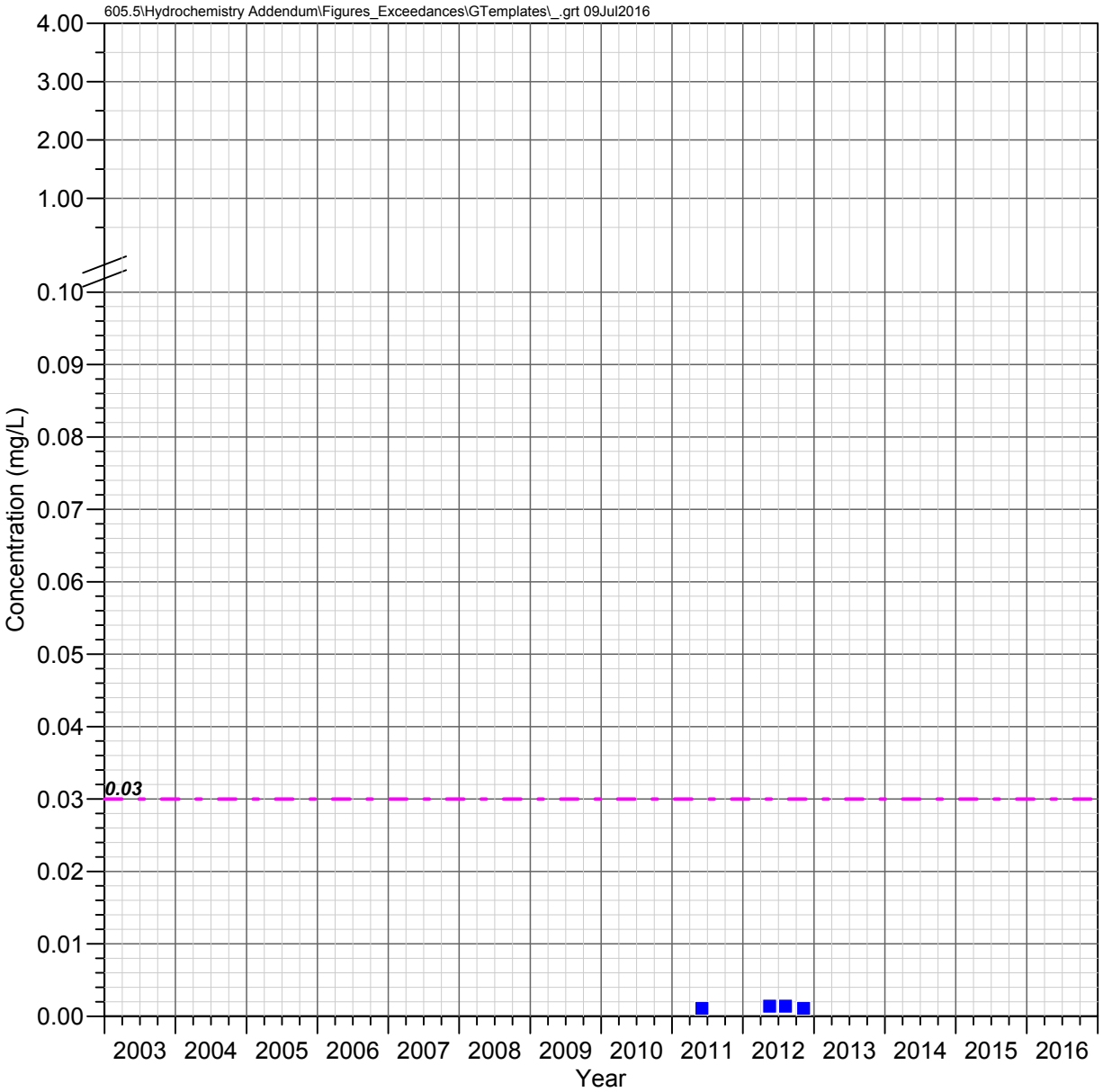


FIGURE E-753. URANIUM CONCENTRATIONS OBSERVED AT HRES-12, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-13
Apache Leap Tuff Aquifer

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— - — EPA Maximum Contaminant Levels (UNS, 0.03 mg/L)

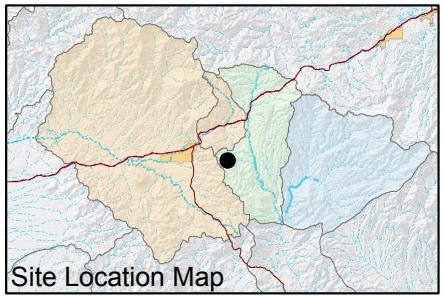
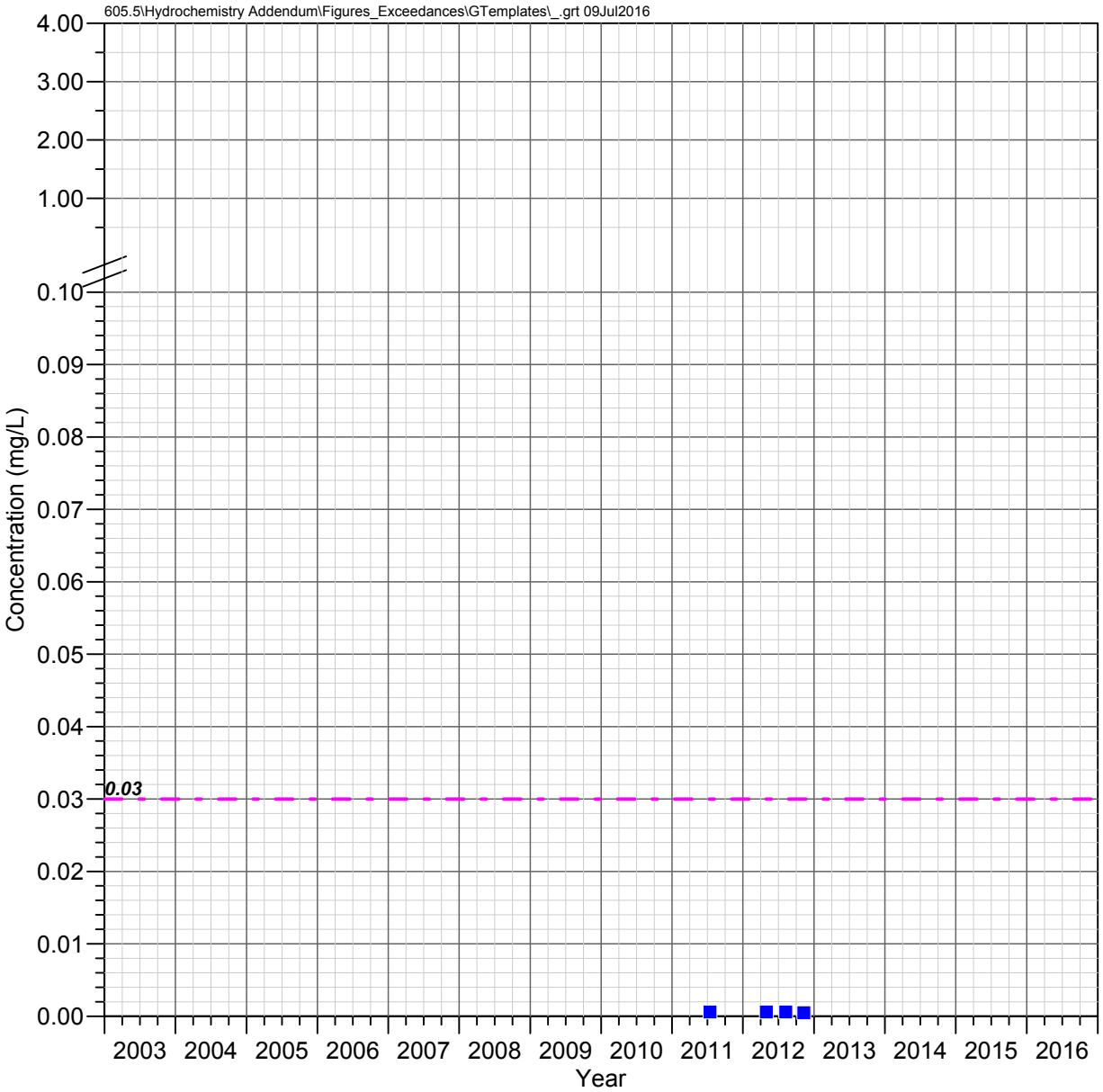


FIGURE E-754. URANIUM CONCENTRATIONS OBSERVED AT HRES-13, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-14
Apache Leap Tuff Aquifer

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

EPA Maximum Contaminant Levels (UNS, 0.03 mg/L)

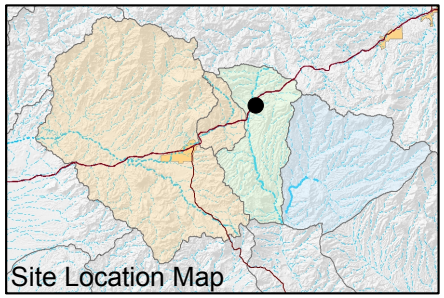
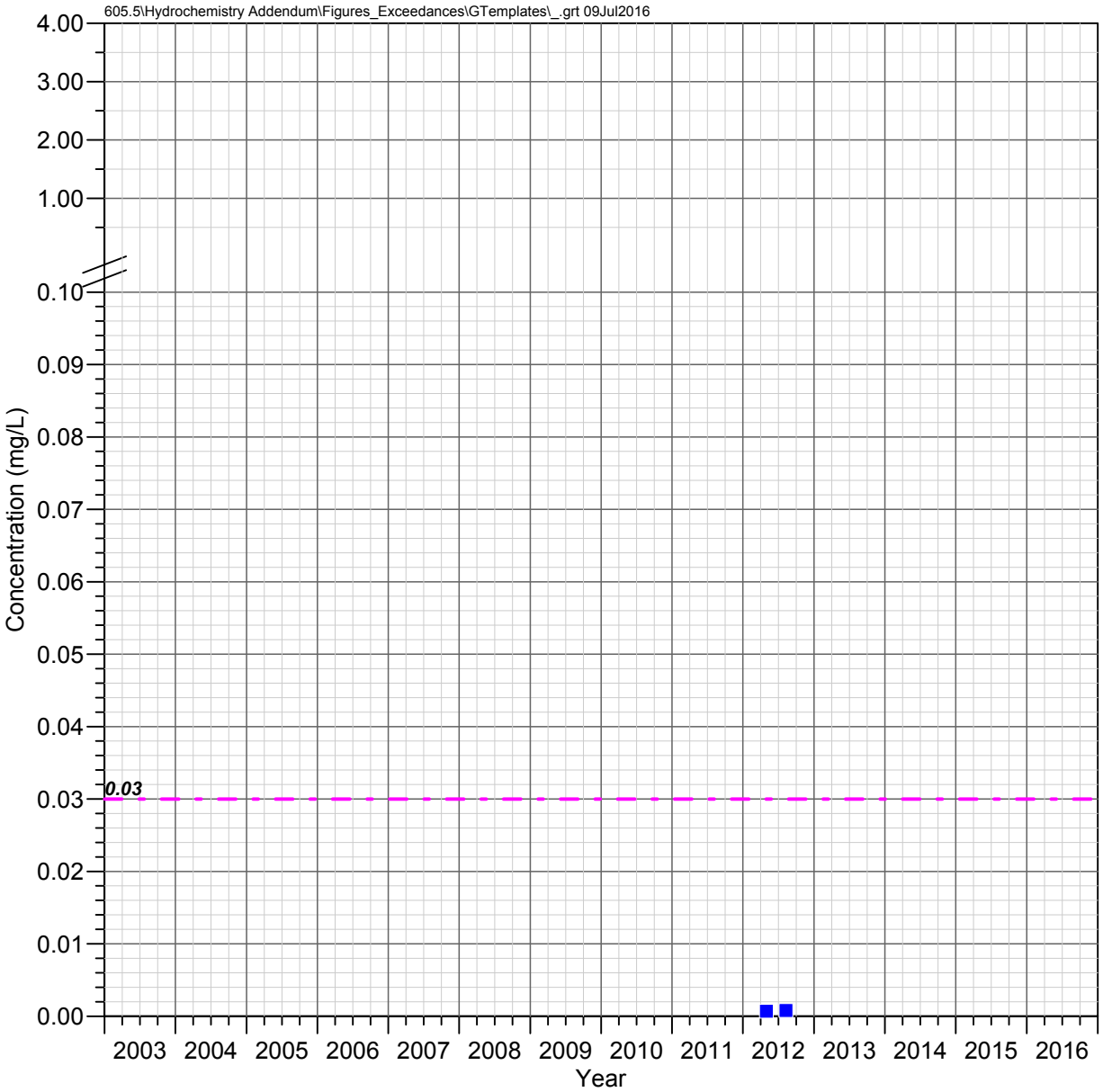


FIGURE E-755. URANIUM CONCENTRATIONS OBSERVED AT HRES-14, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-15
Apache Leap Tuff Aquifer

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

EPA Maximum Contaminant Levels (UNS, 0.03 mg/L)

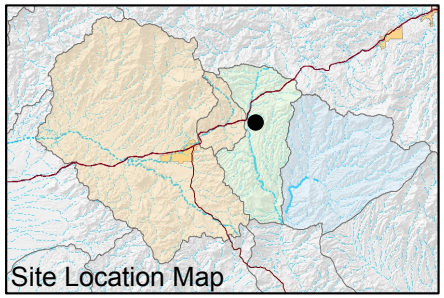
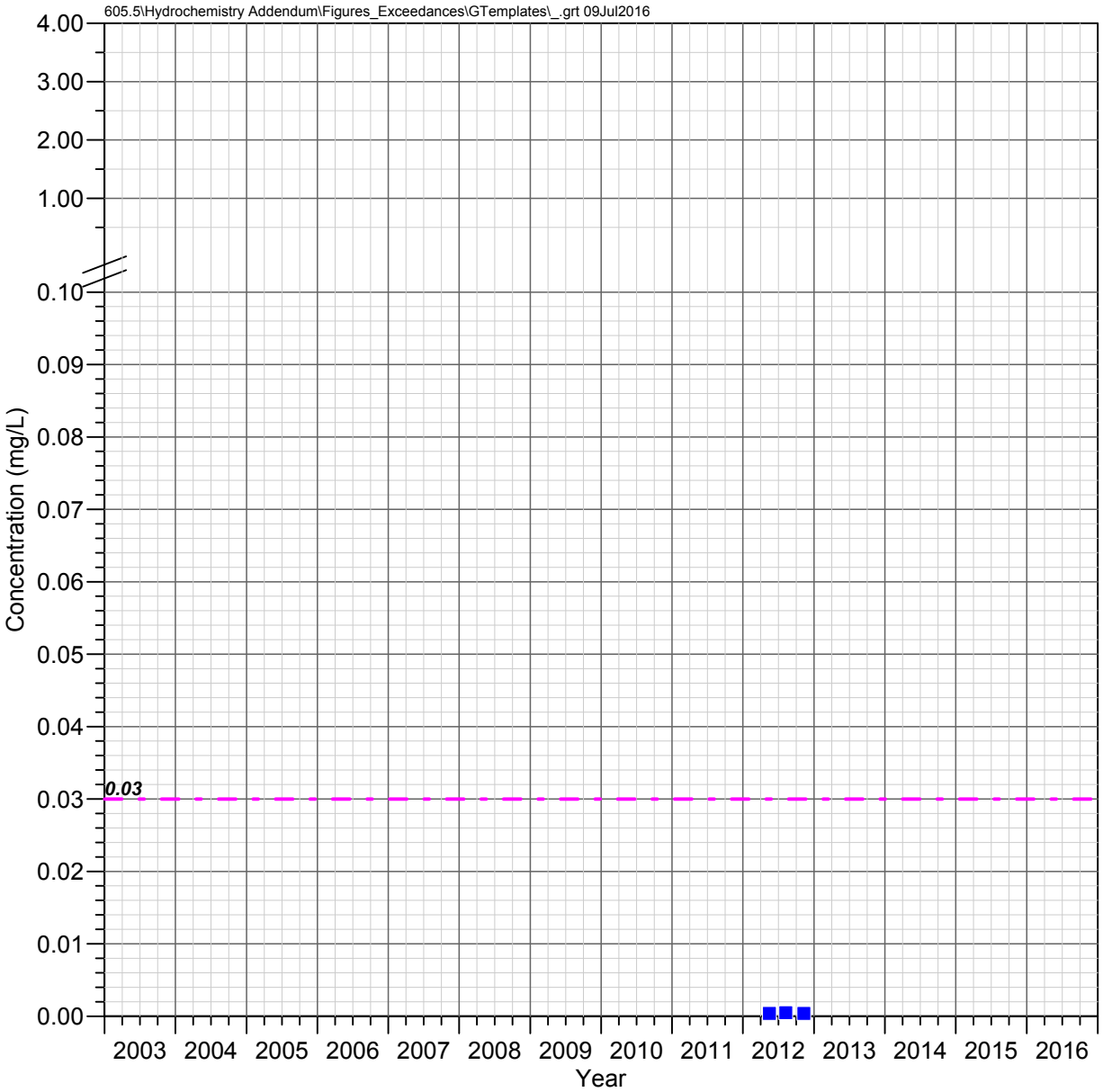


FIGURE E-756. URANIUM CONCENTRATIONS OBSERVED AT HRES-15, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-17
Apache Leap Tuff Aquifer

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— - — EPA Maximum Contaminant Levels (UNS, 0.03 mg/L)

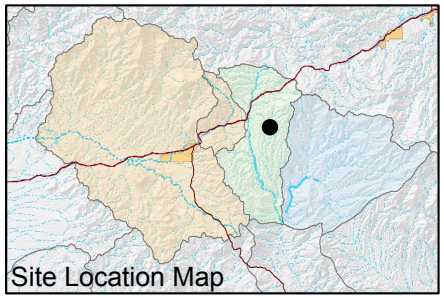
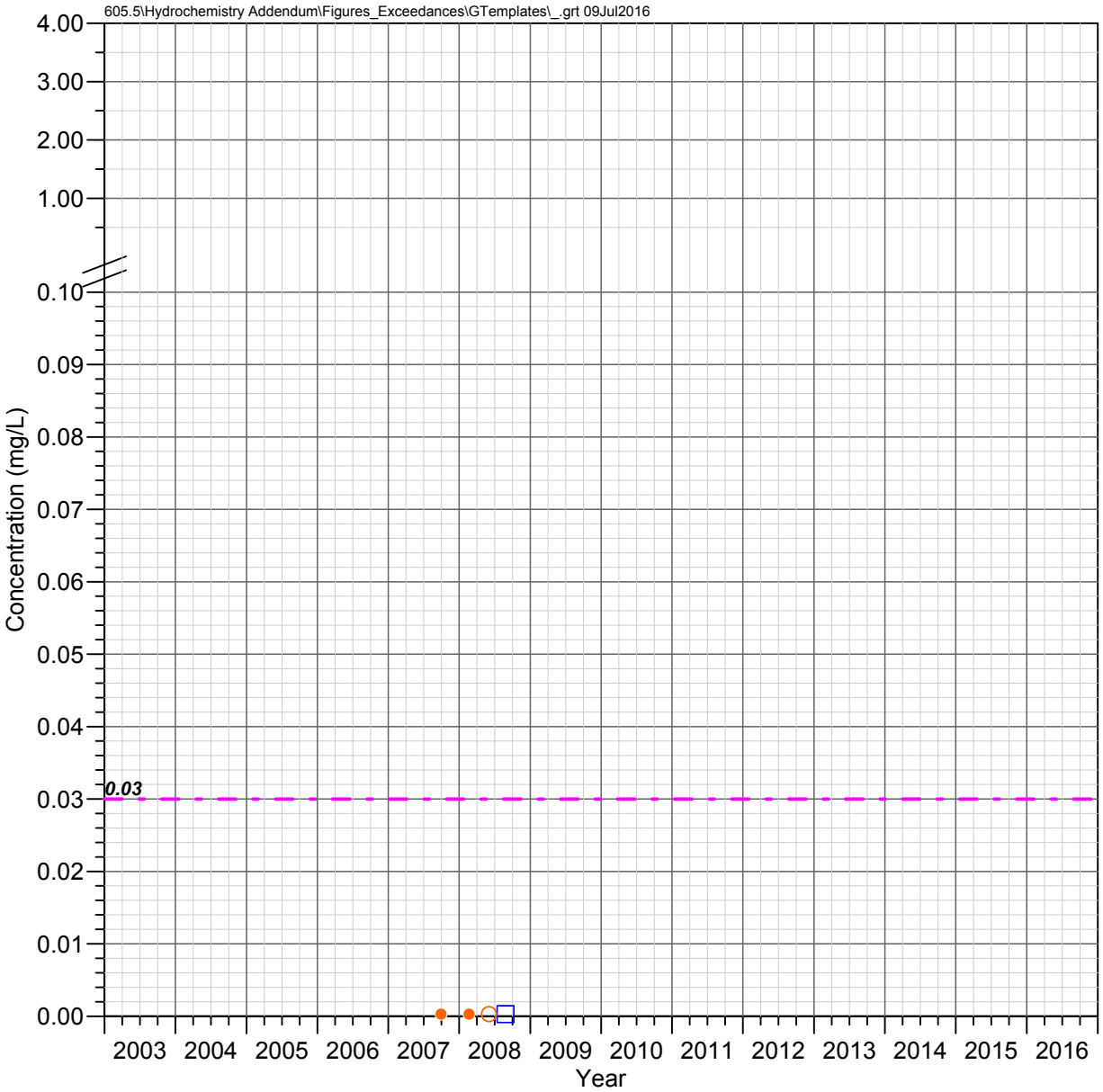


FIGURE E-757. URANIUM CONCENTRATIONS OBSERVED AT HRES-17, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MJ-11
Apache Leap Tuff Aquifer

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— - — EPA Maximum Contaminant Levels (UNS, 0.03 mg/L)

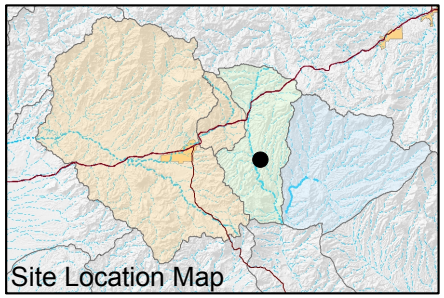
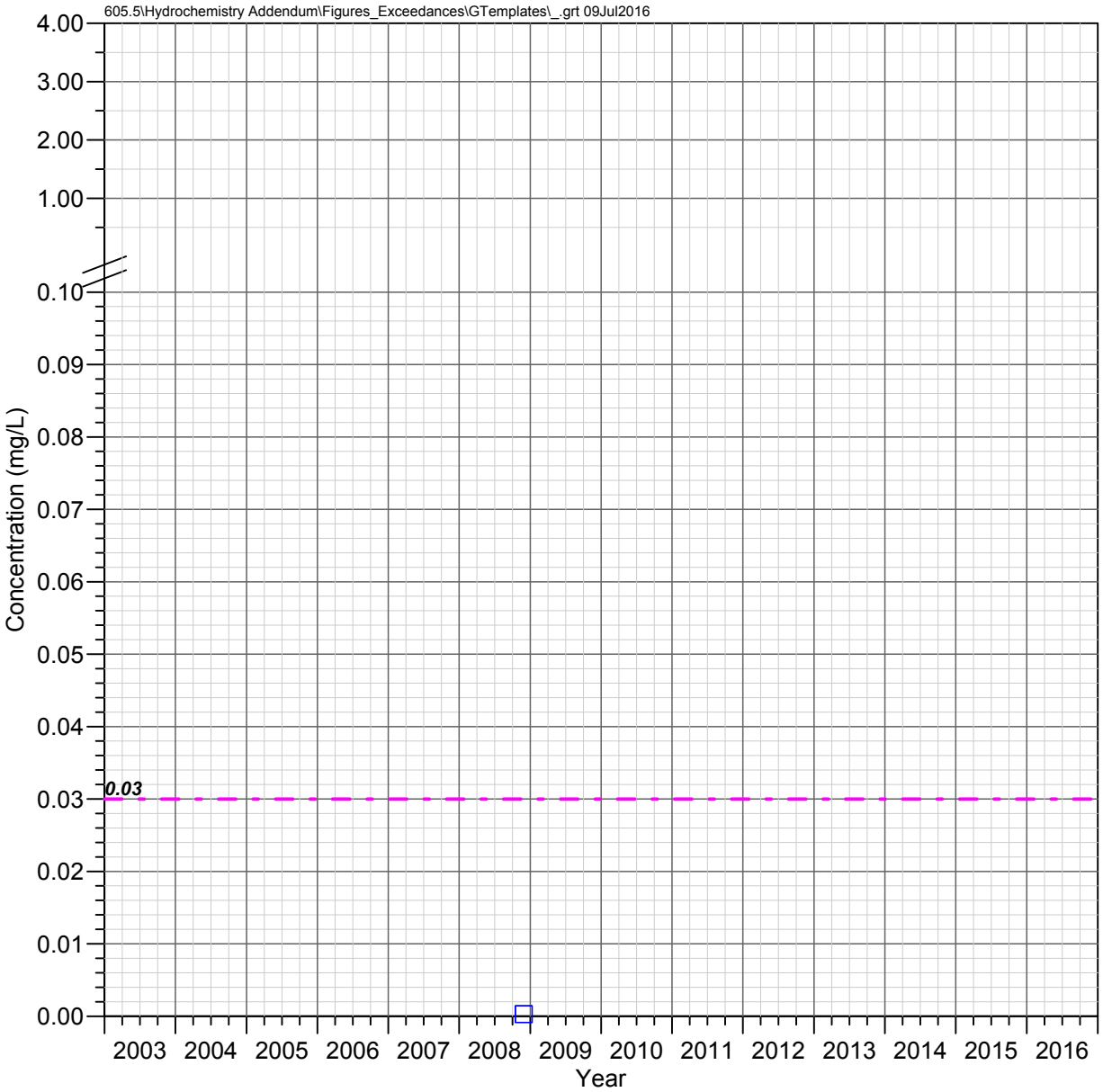


FIGURE E-758. URANIUM CONCENTRATIONS OBSERVED AT MJ-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-01
Deep Groundwater System

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

EPA Maximum Contaminant Levels (UNS, 0.03 mg/L)

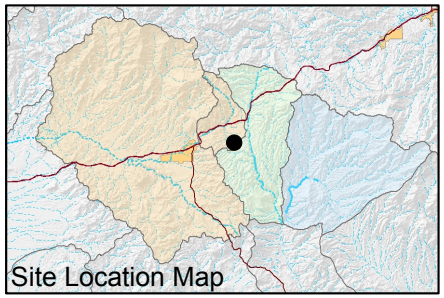
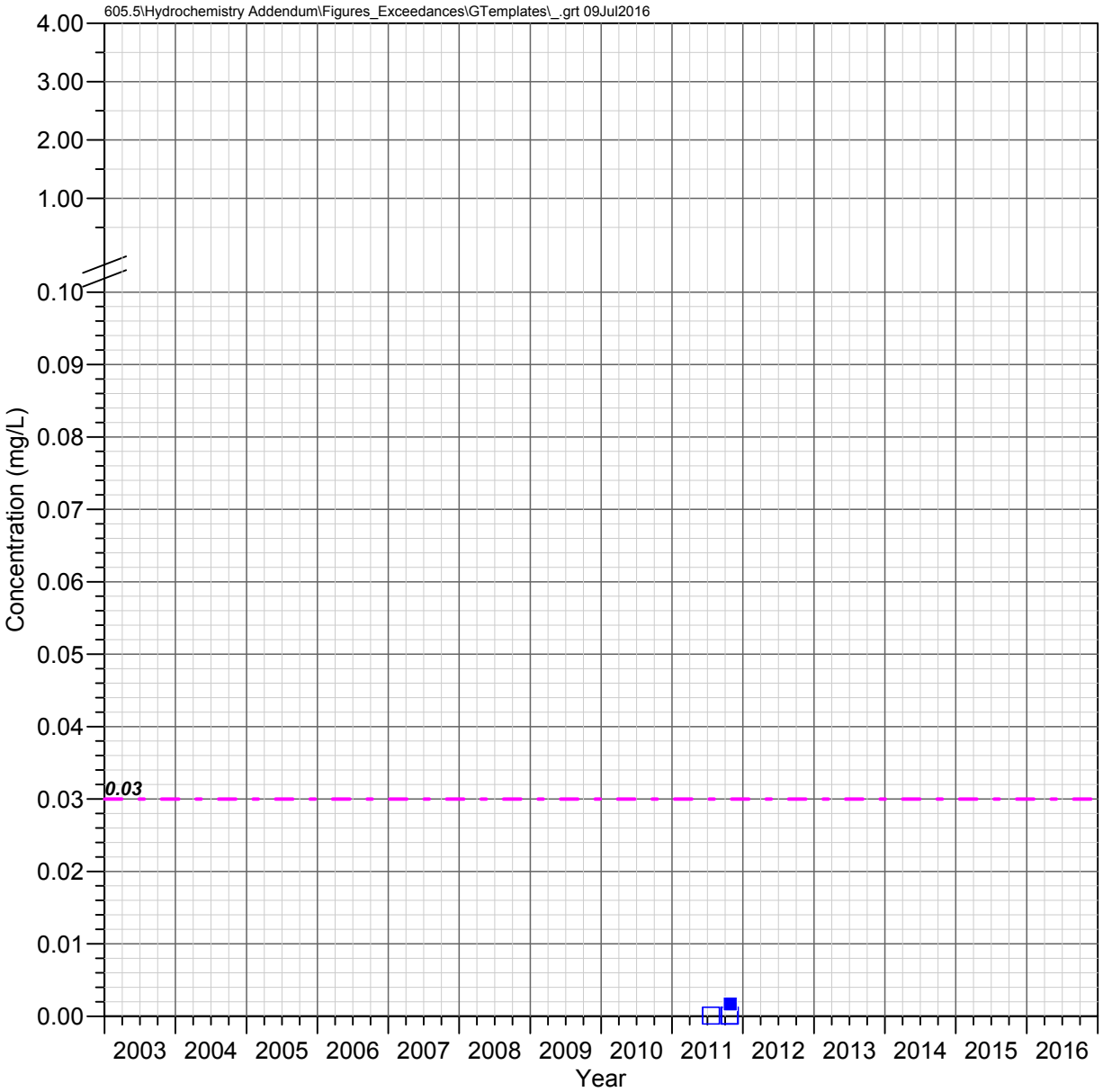


FIGURE E-759. URANIUM CONCENTRATIONS OBSERVED AT DHRES-01, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-02
Deep Groundwater System

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— - — EPA Maximum Contaminant Levels (UNS, 0.03 mg/L)

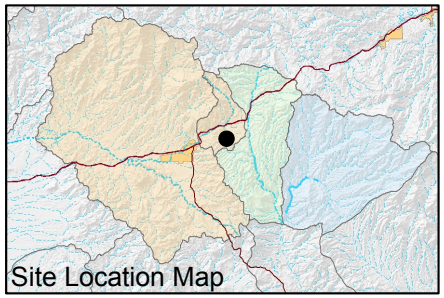
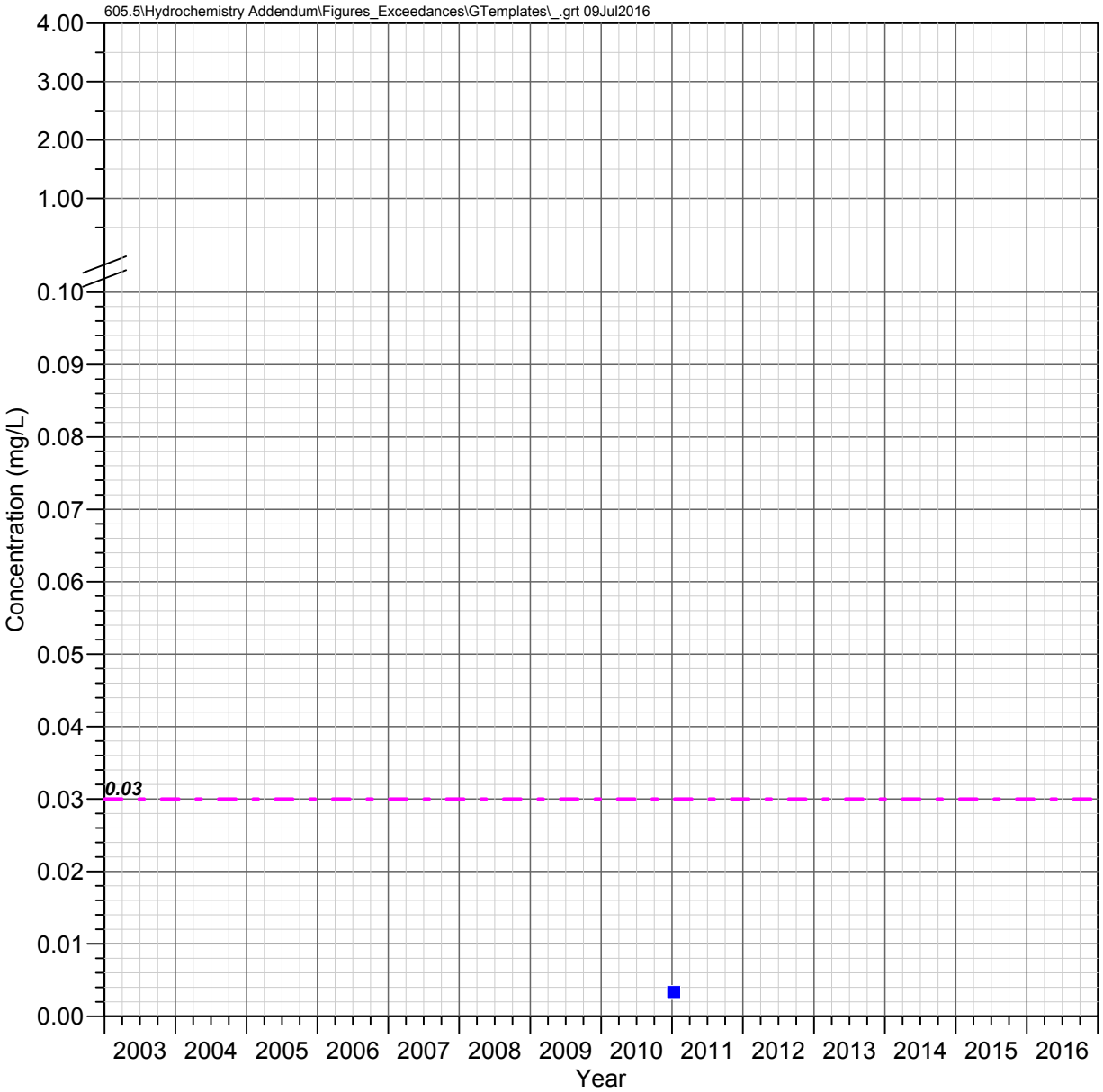


FIGURE E-760. URANIUM CONCENTRATIONS OBSERVED AT DHRES-02, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-06
Deep Groundwater System

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— - — EPA Maximum Contaminant Levels (UNS, 0.03 mg/L)

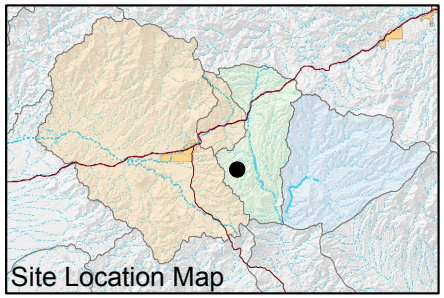
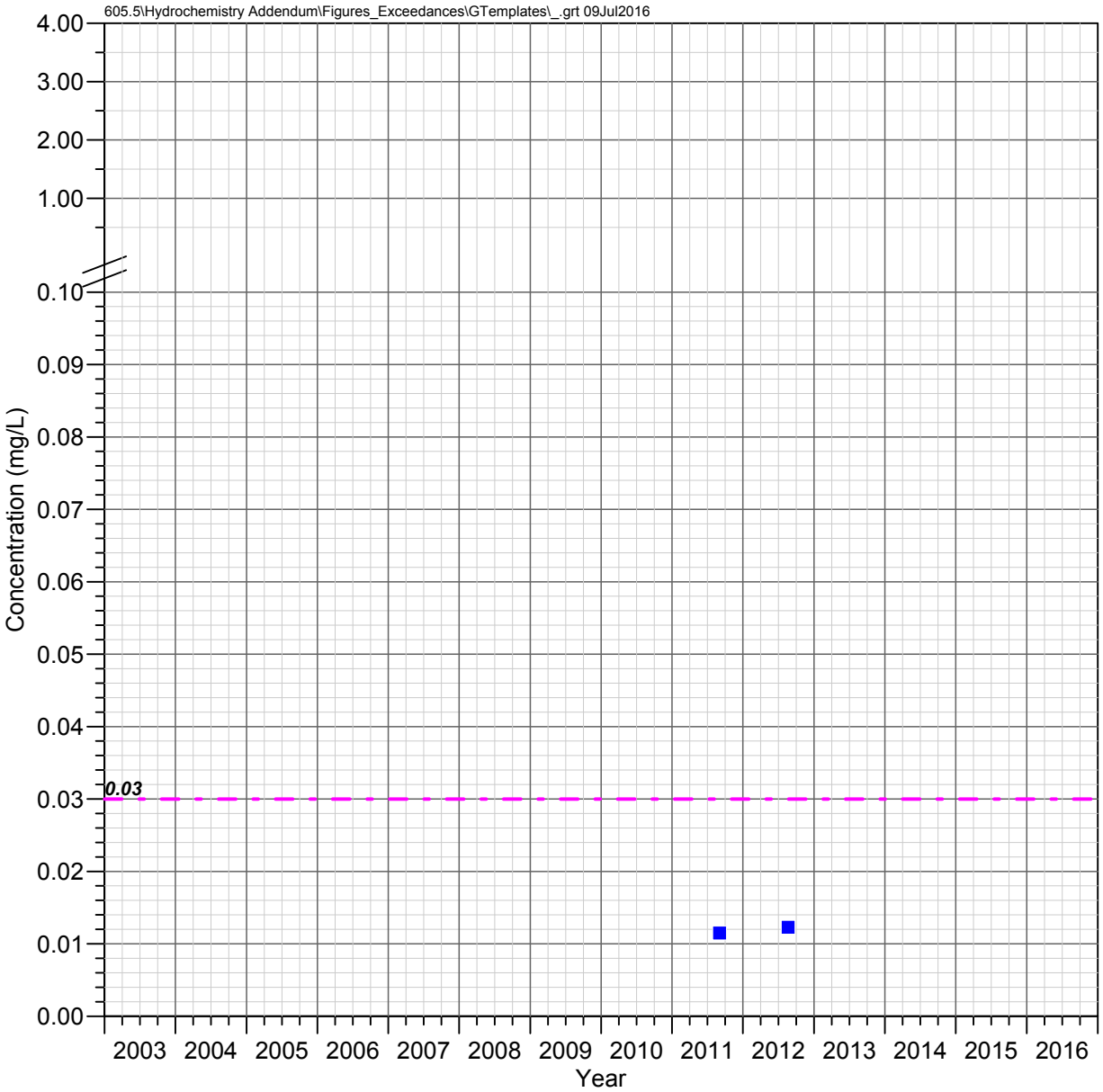


FIGURE E-761. URANIUM CONCENTRATIONS OBSERVED AT DHRES-06, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-09
Deep Groundwater System

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— - — EPA Maximum Contaminant Levels (UNS, 0.03 mg/L)

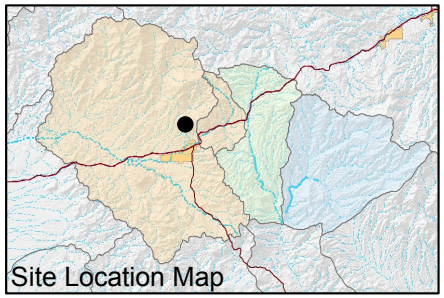
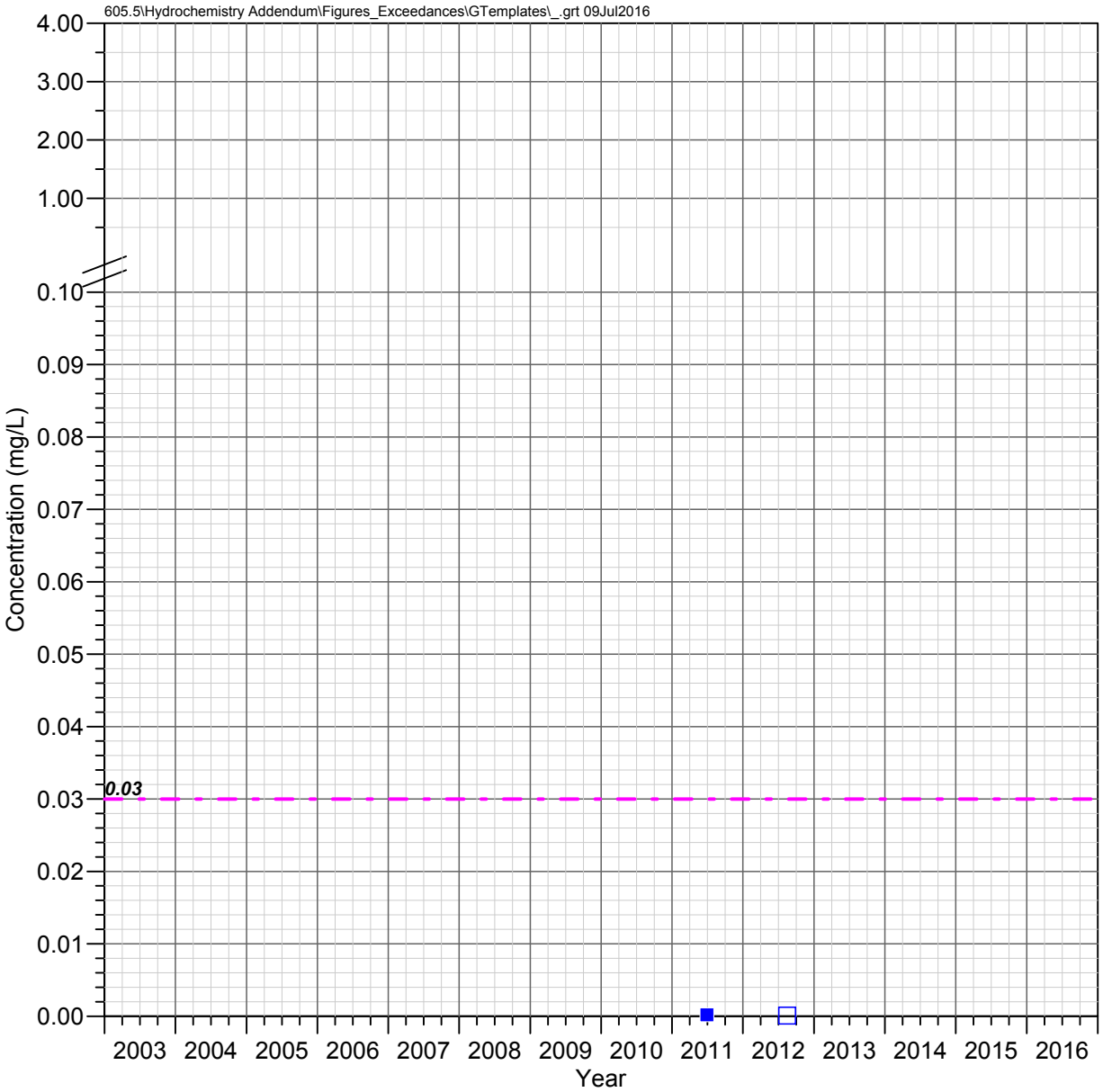


FIGURE E-762. URANIUM CONCENTRATIONS OBSERVED AT DHRES-09, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-11
Deep Groundwater System

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

EPA Maximum Contaminant Levels (UNS, 0.03 mg/L)

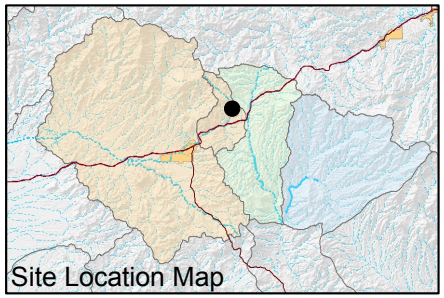
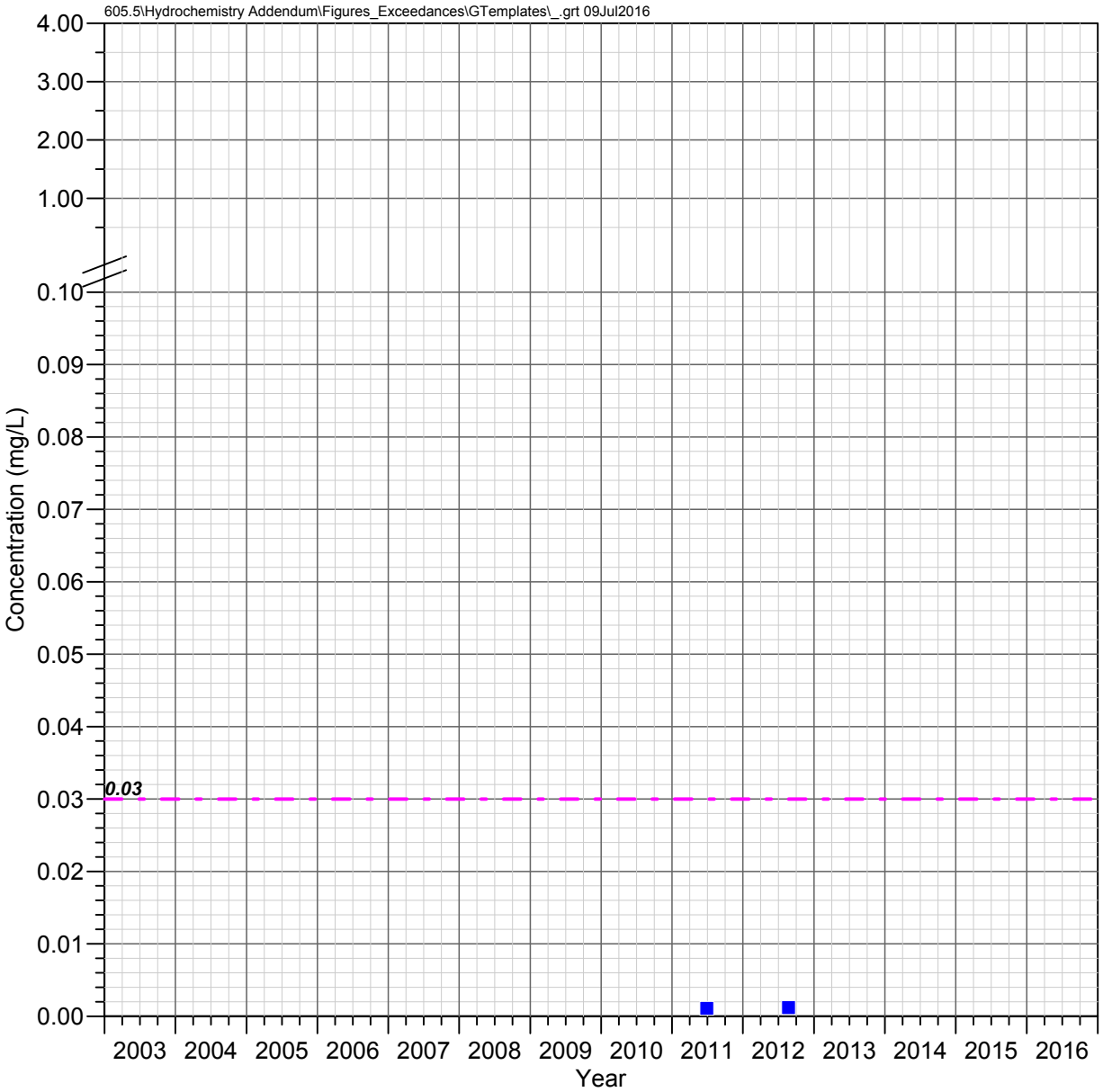


FIGURE E-763. URANIUM CONCENTRATIONS OBSERVED AT DHRES-11, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-13
Deep Groundwater System

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— - — EPA Maximum Contaminant Levels (UNS, 0.03 mg/L)

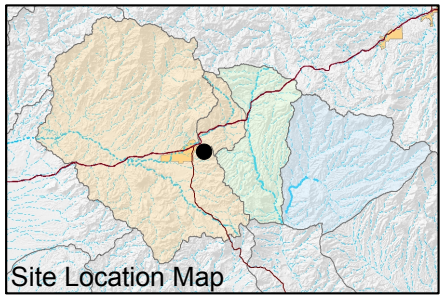
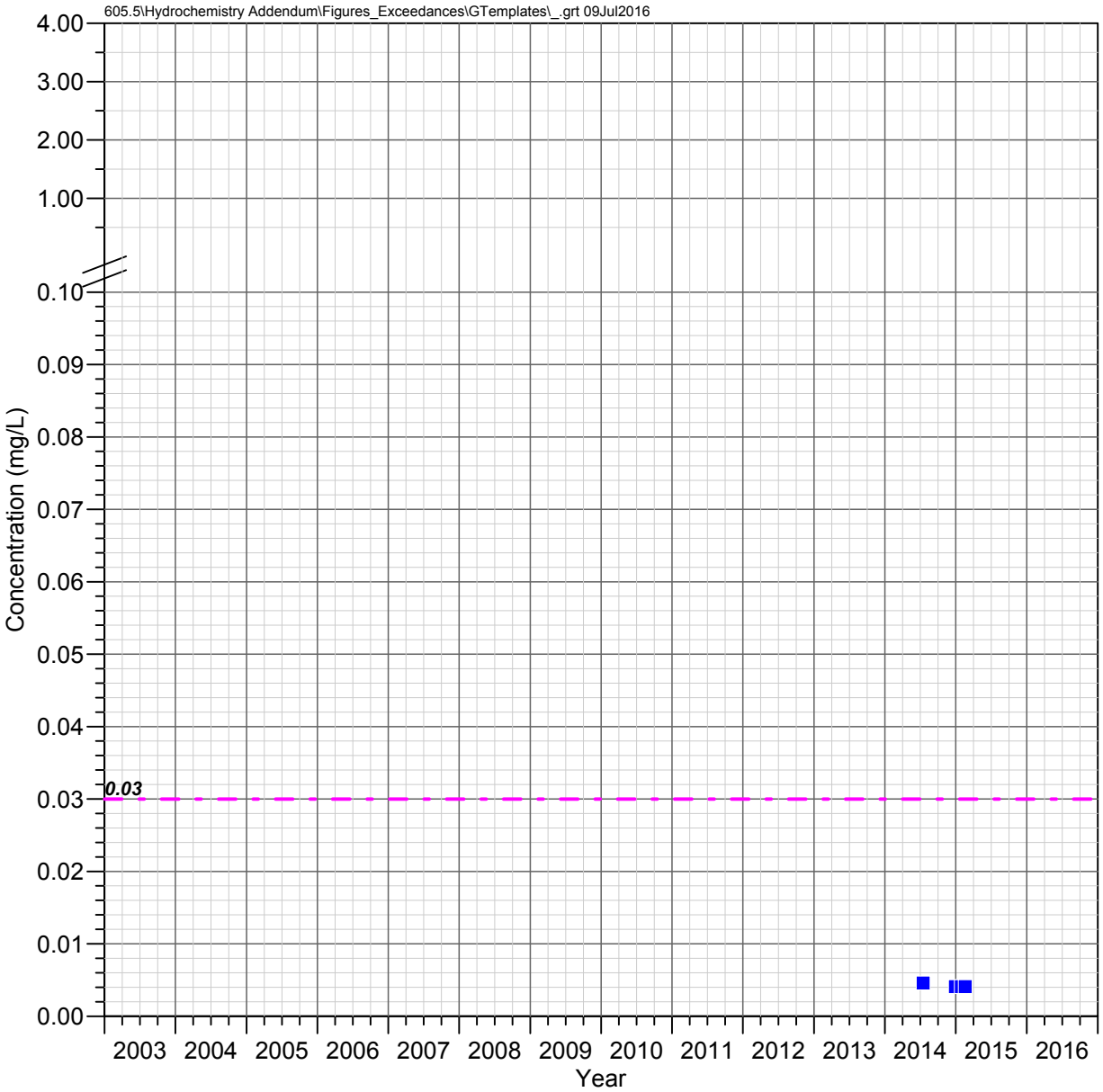


FIGURE E-764. URANIUM CONCENTRATIONS OBSERVED AT DHRES-13, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-15
Deep Groundwater System

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— - — EPA Maximum Contaminant Levels (UNS, 0.03 mg/L)

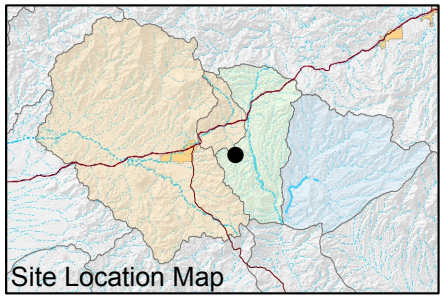
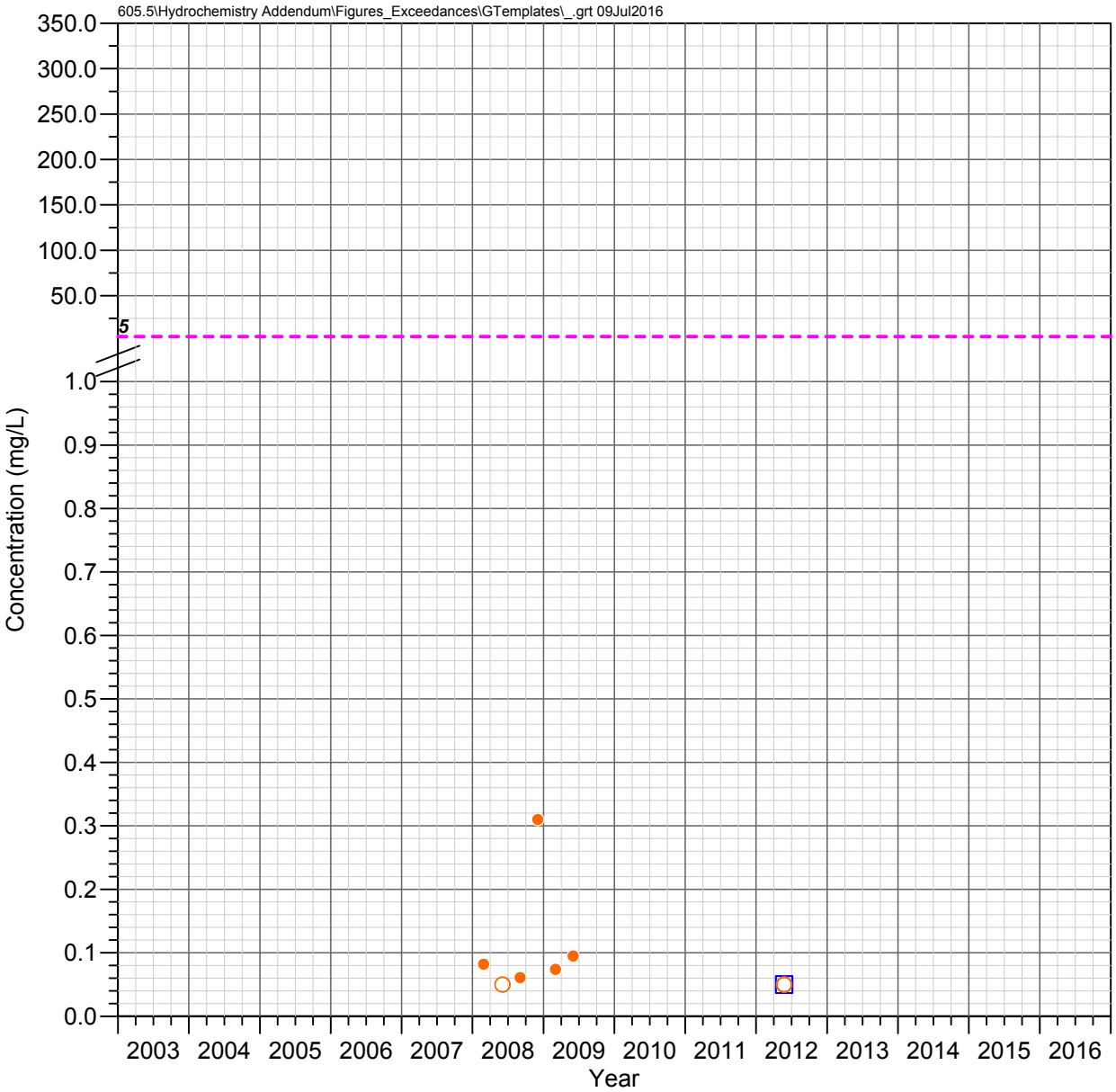


FIGURE E-765. URANIUM CONCENTRATIONS OBSERVED AT DHRES-15, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Hackberry Windmill Well
Shallow Groundwater System

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 5 mg/L)

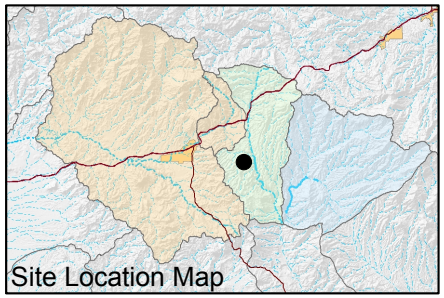
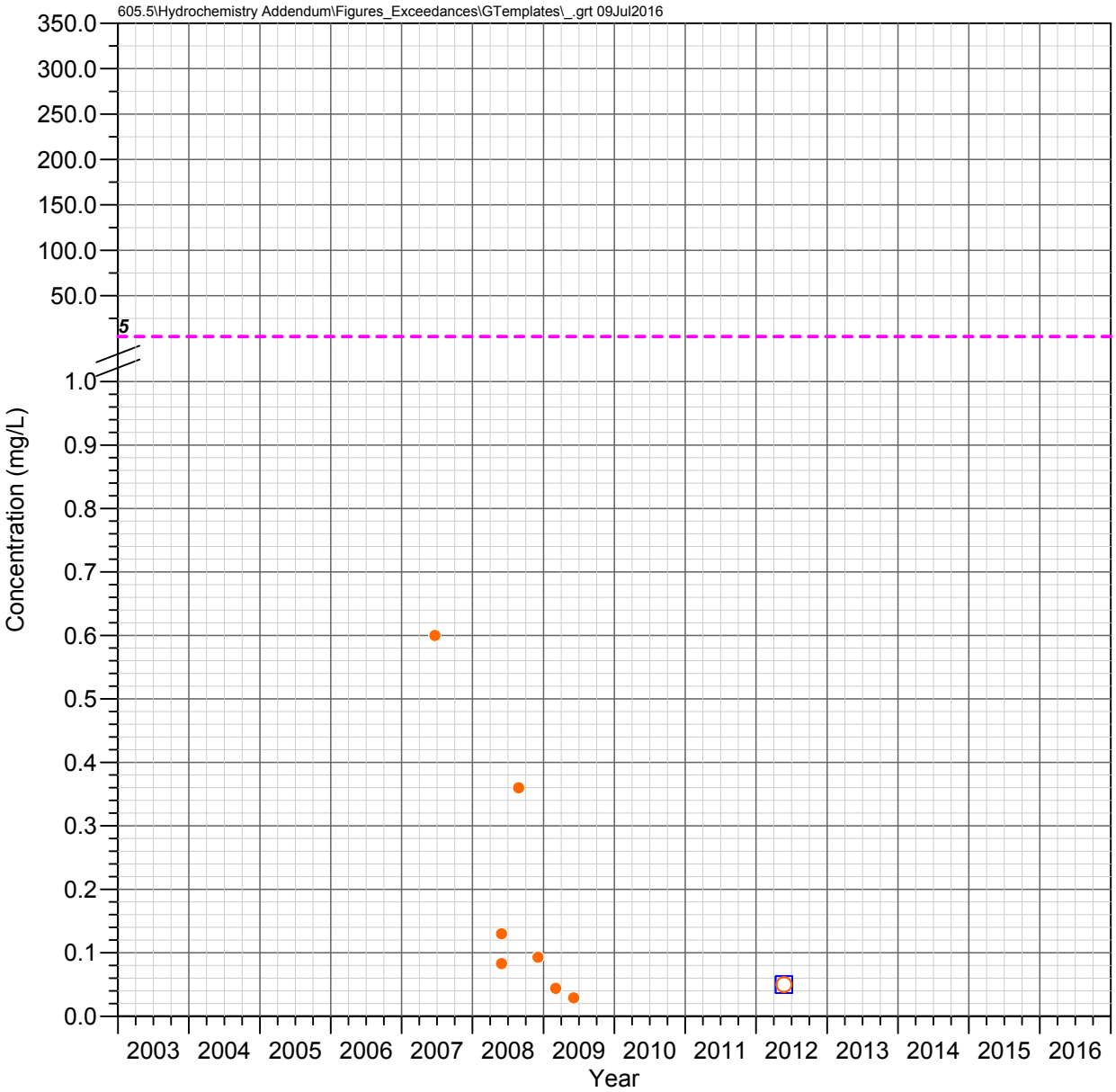


FIGURE E-766. ZINC CONCENTRATIONS OBSERVED AT HACKBERRY WINDMILL WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



JI Ranch Corral Well
Shallow Groundwater System

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 5 mg/L)

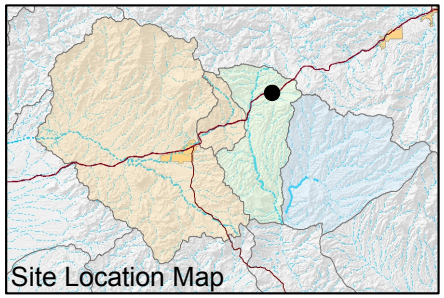
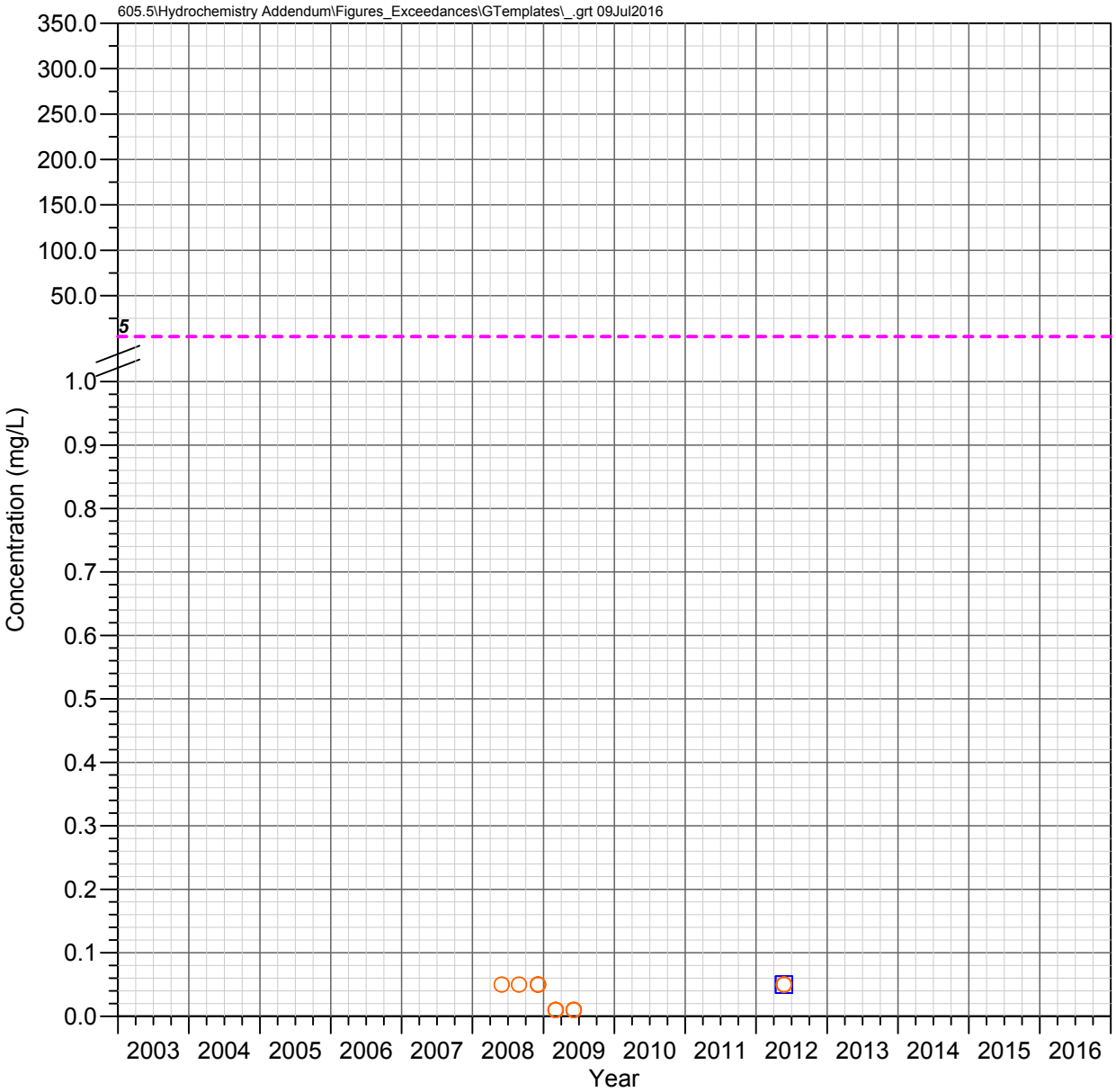


FIGURE E-767. ZINC CONCENTRATIONS OBSERVED AT JI RANCH CORRAL WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



JI Ranch Middle Well Shallow Groundwater System

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 5 mg/L)

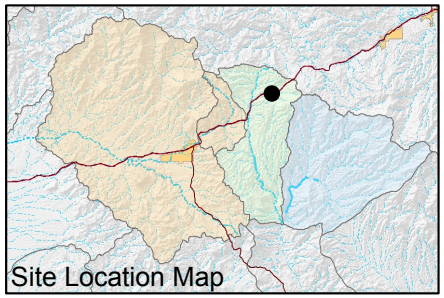
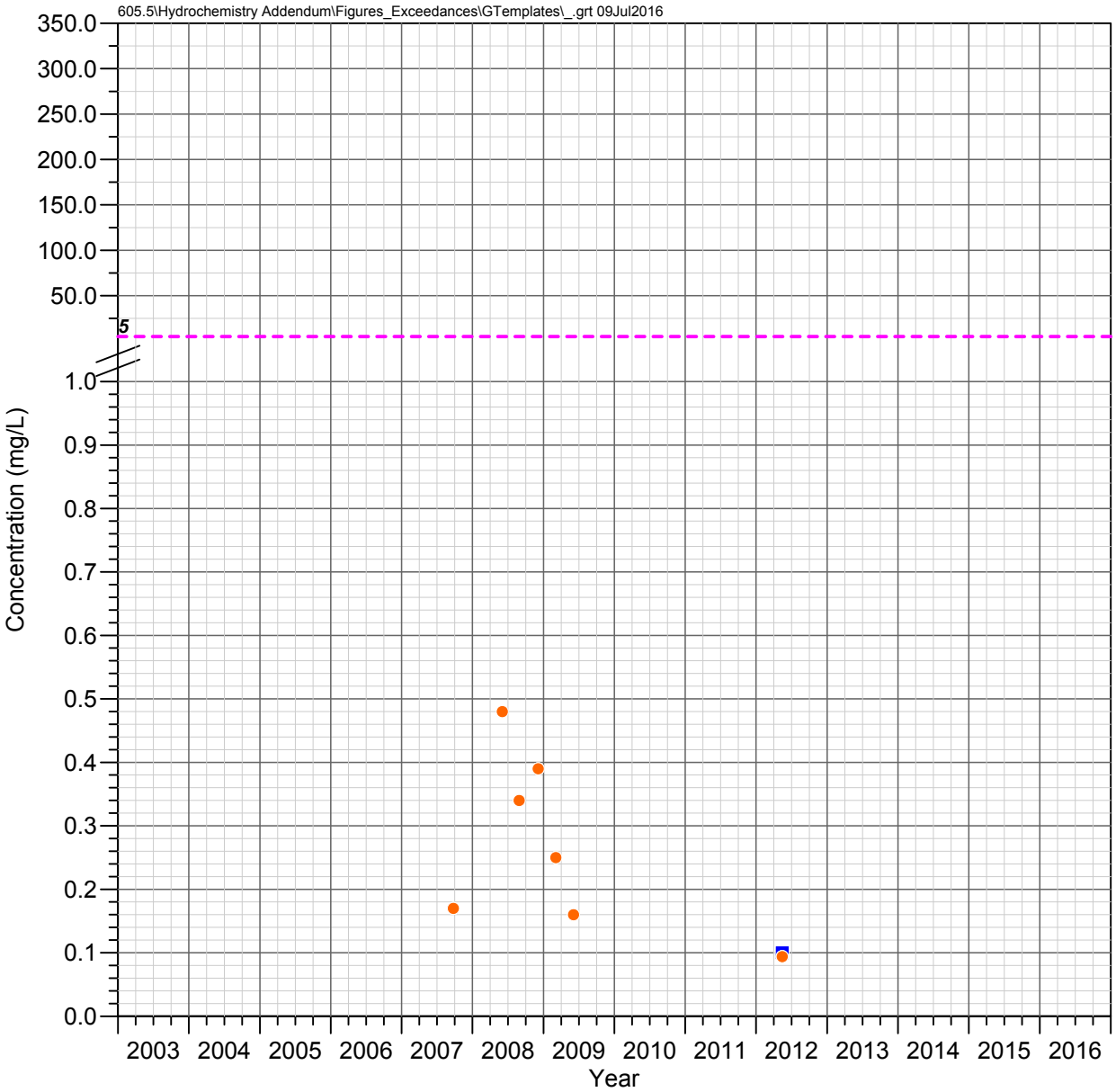


FIGURE E-768. ZINC CONCENTRATIONS OBSERVED AT JI RANCH MIDDLE WELL, SHALLOW GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



A-06
Apache Leap Tuff Aquifer

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 5 mg/L)

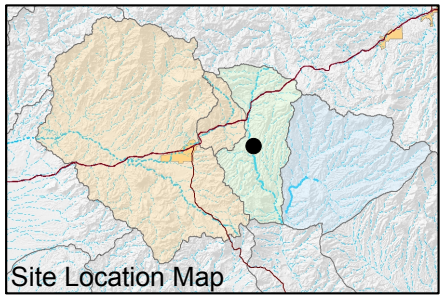
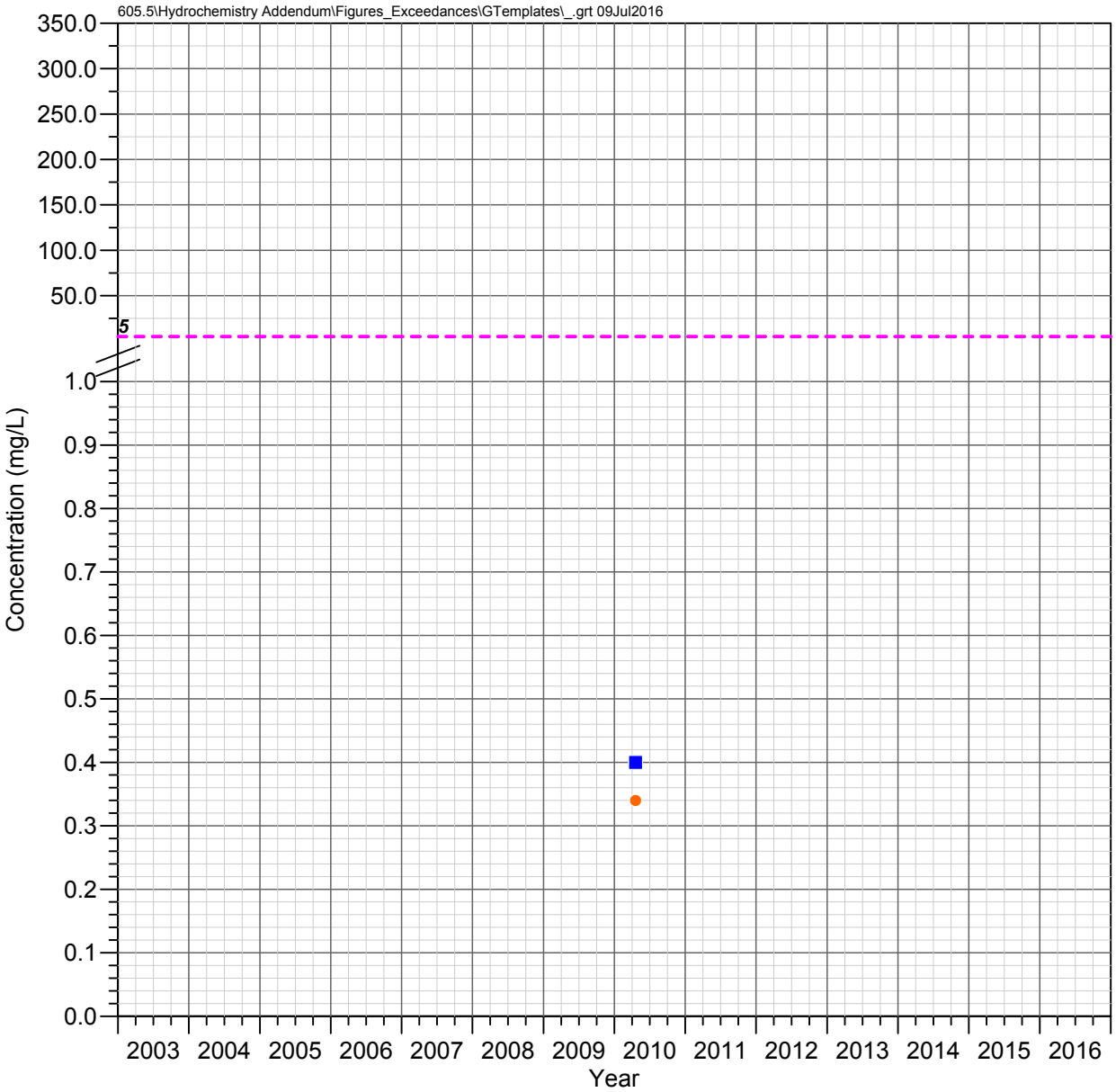


FIGURE E-769. ZINC CONCENTRATIONS OBSERVED AT A-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



CT Well
Apache Leap Tuff Aquifer

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 5 mg/L)

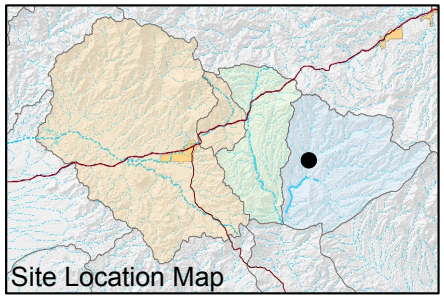
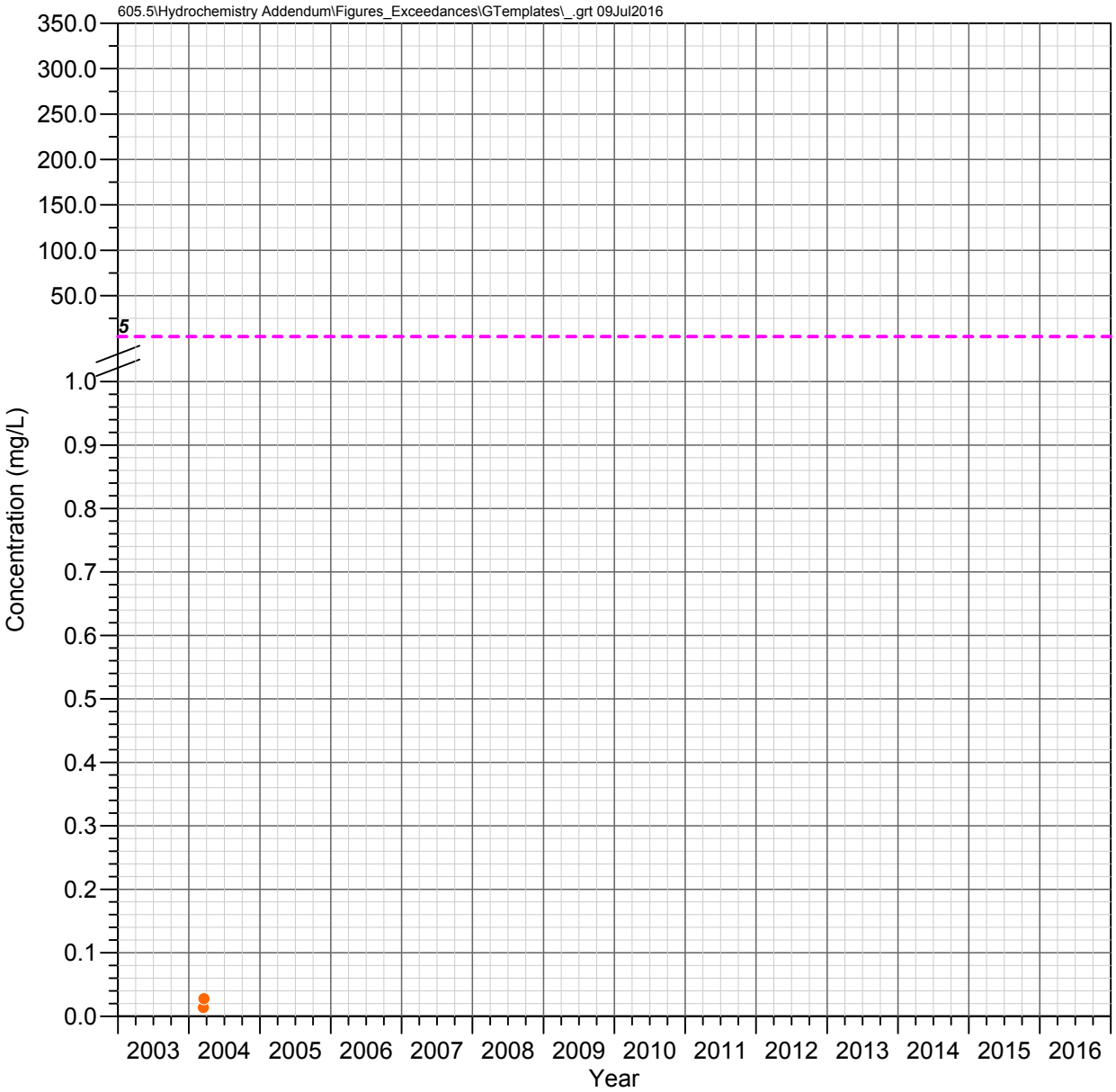


FIGURE E-770. ZINC CONCENTRATIONS OBSERVED AT CT WELL, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-01
Apache Leap Tuff Aquifer

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 5 mg/L)

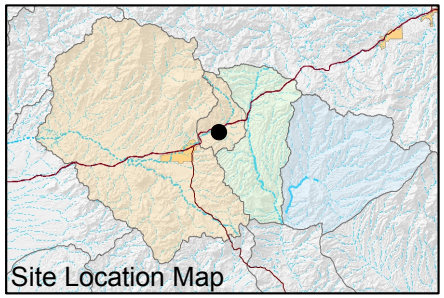
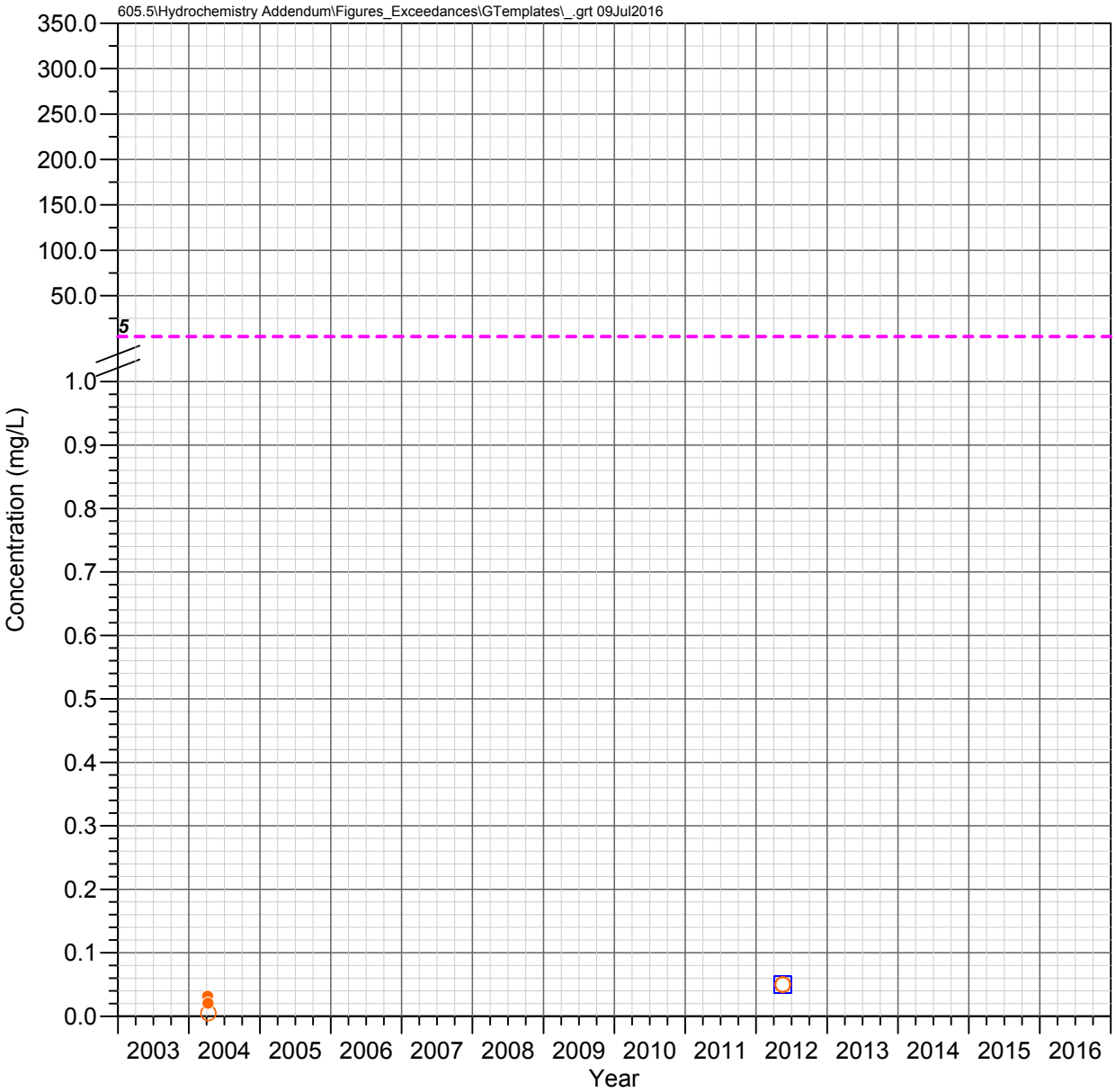


FIGURE E-771. ZINC CONCENTRATIONS OBSERVED AT HRES-01, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-02
Apache Leap Tuff Aquifer

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 5 mg/L)

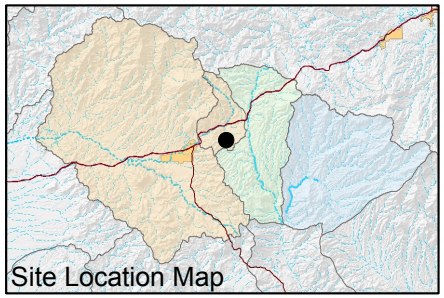
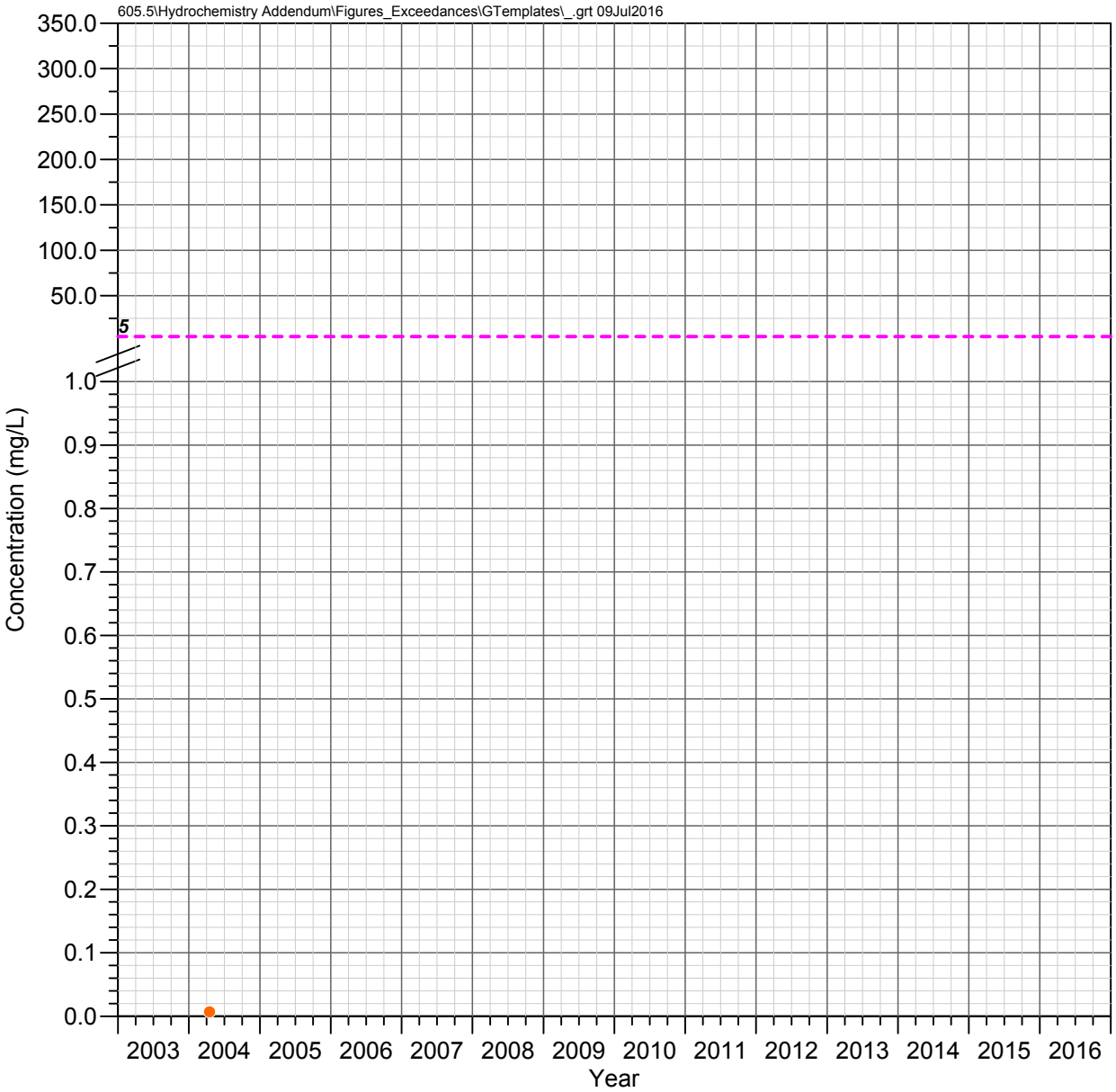


FIGURE E-772. ZINC CONCENTRATIONS OBSERVED AT HRES-02, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-03d
Apache Leap Tuff Aquifer

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 5 mg/L)

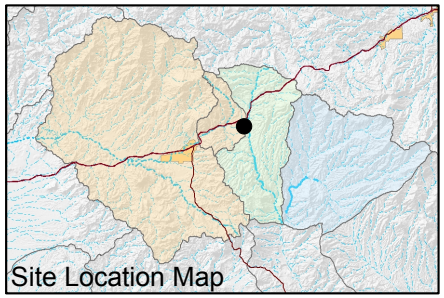
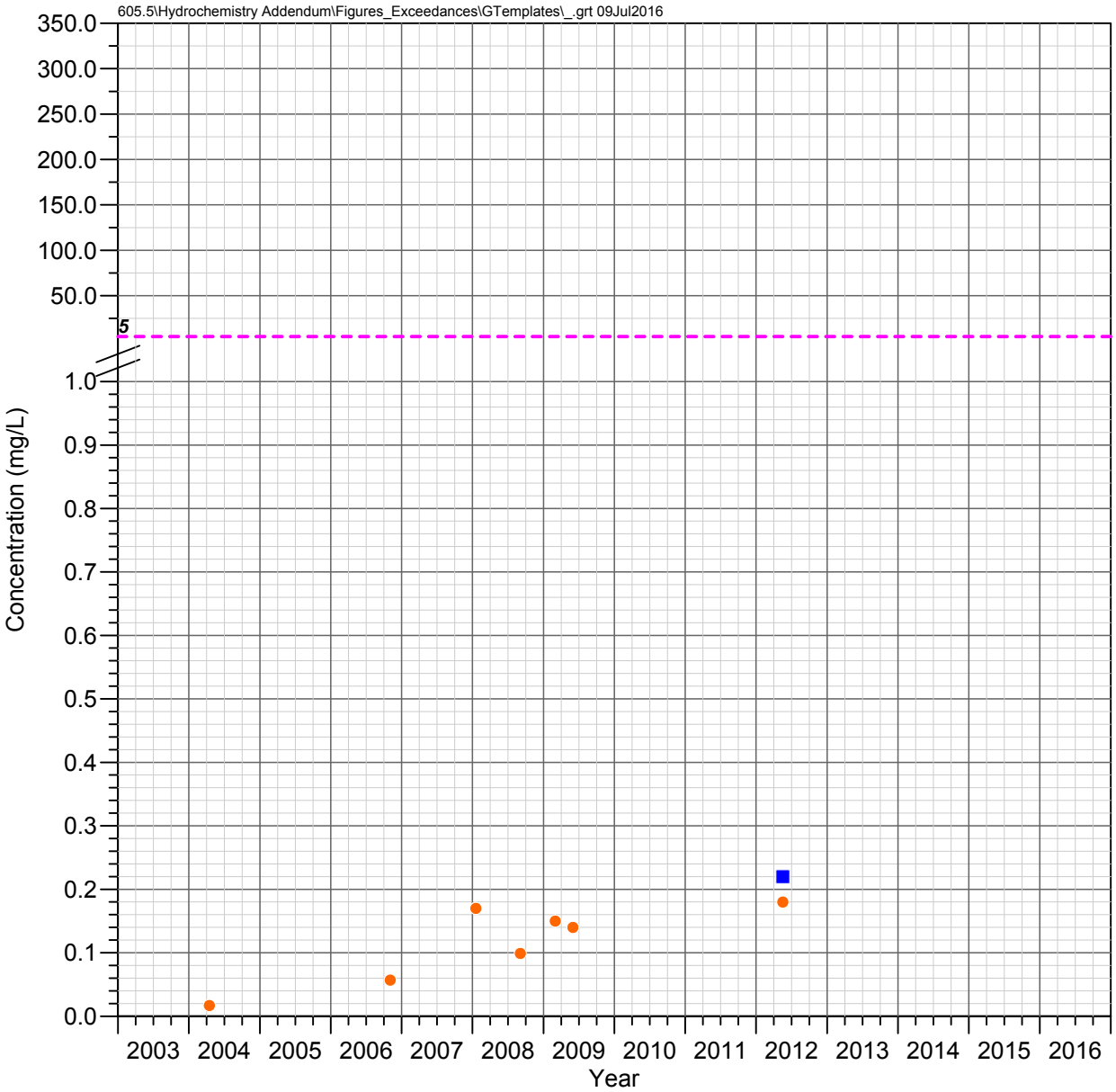


FIGURE E-773. ZINC CONCENTRATIONS OBSERVED AT HRES-03D, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-04
Apache Leap Tuff Aquifer

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 5 mg/L)

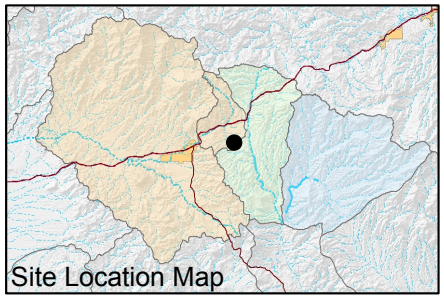
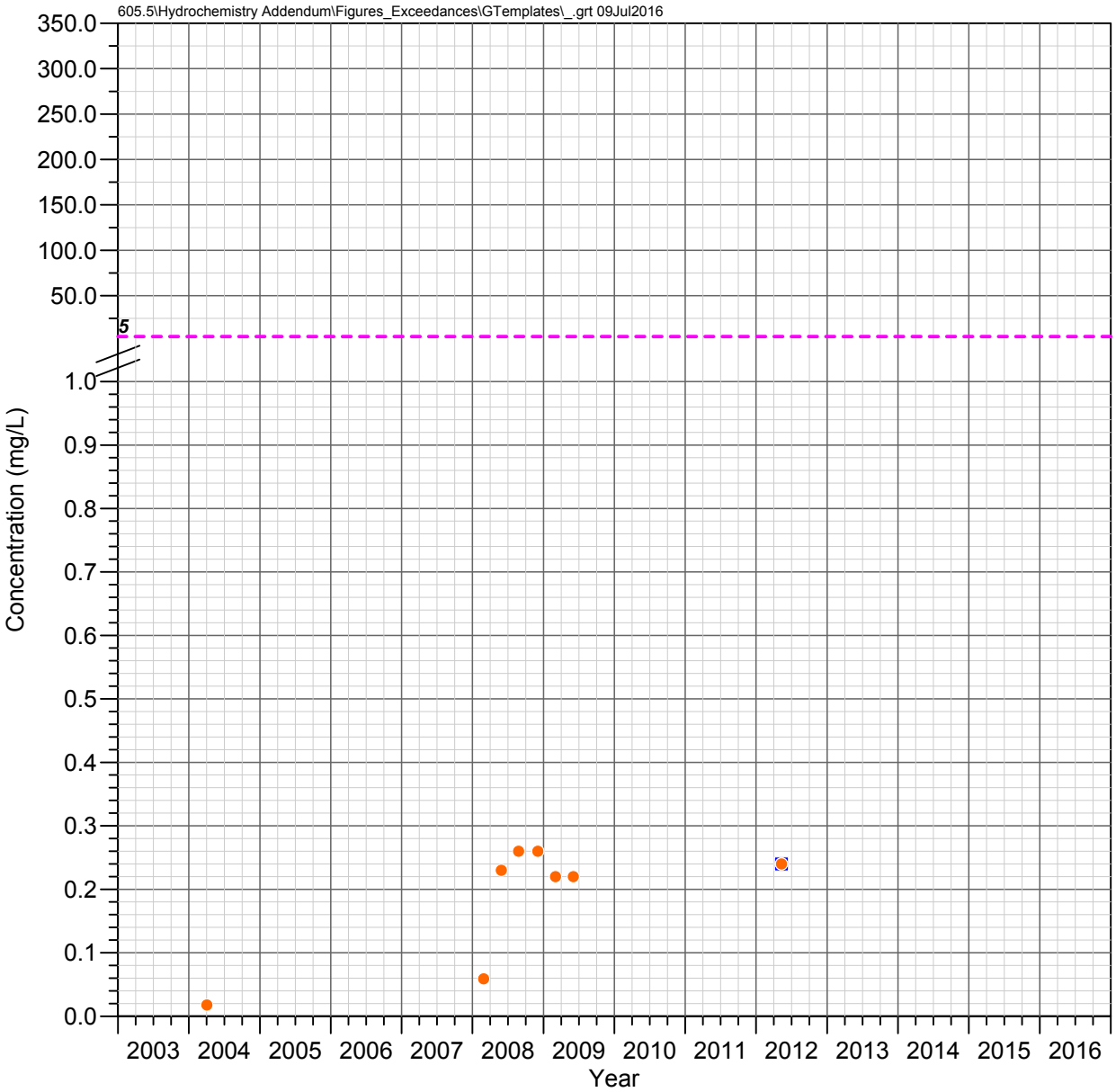


FIGURE E-774. ZINC CONCENTRATIONS OBSERVED AT HRES-04, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-05
Apache Leap Tuff Aquifer

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 5 mg/L)

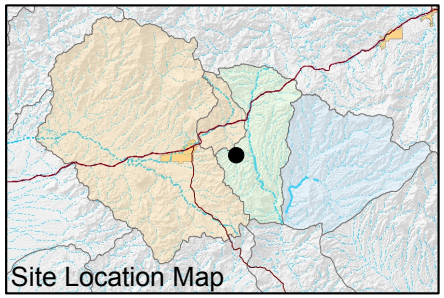
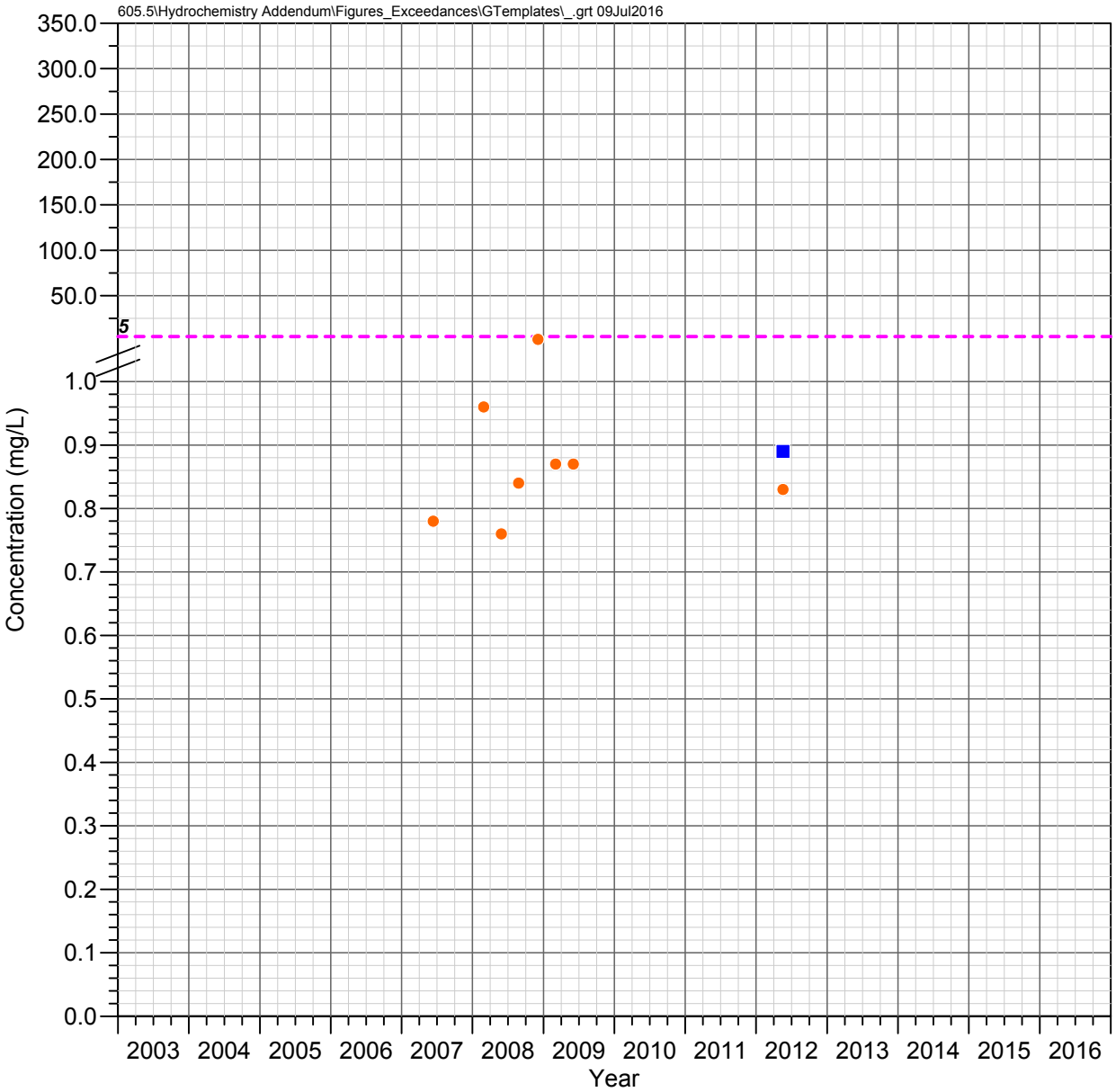


FIGURE E-775. ZINC CONCENTRATIONS OBSERVED AT HRES-05, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-06
Apache Leap Tuff Aquifer

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 5 mg/L)

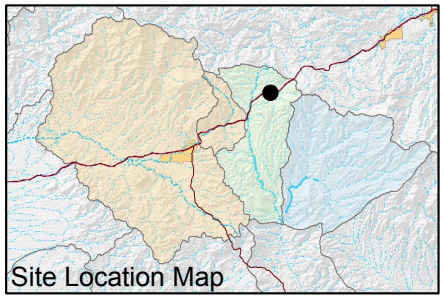
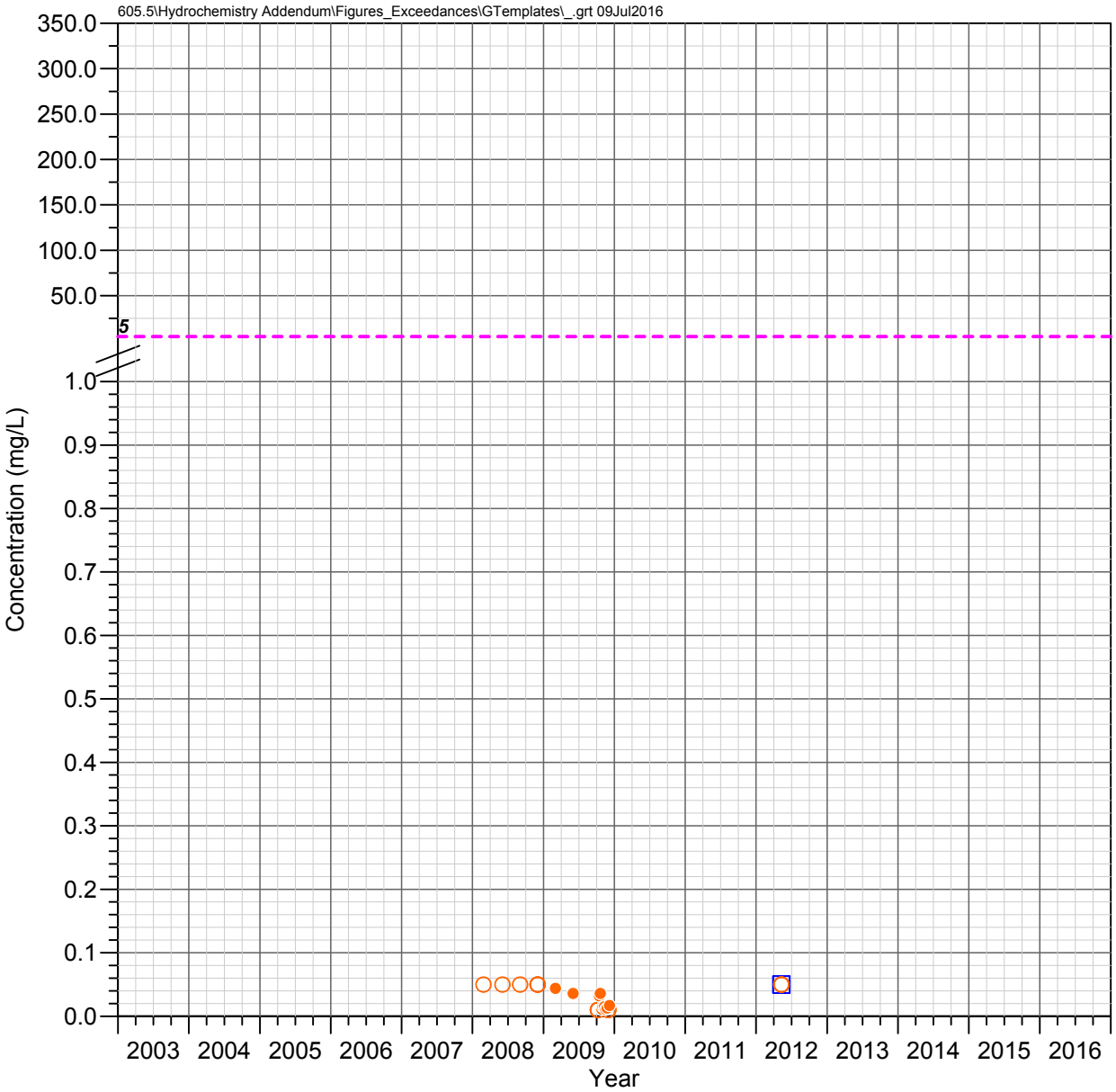


FIGURE E-776. ZINC CONCENTRATIONS OBSERVED AT HRES-06, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-07
Apache Leap Tuff Aquifer

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 5 mg/L)

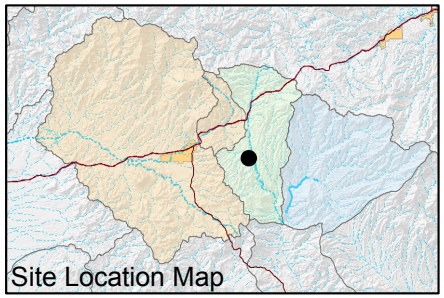
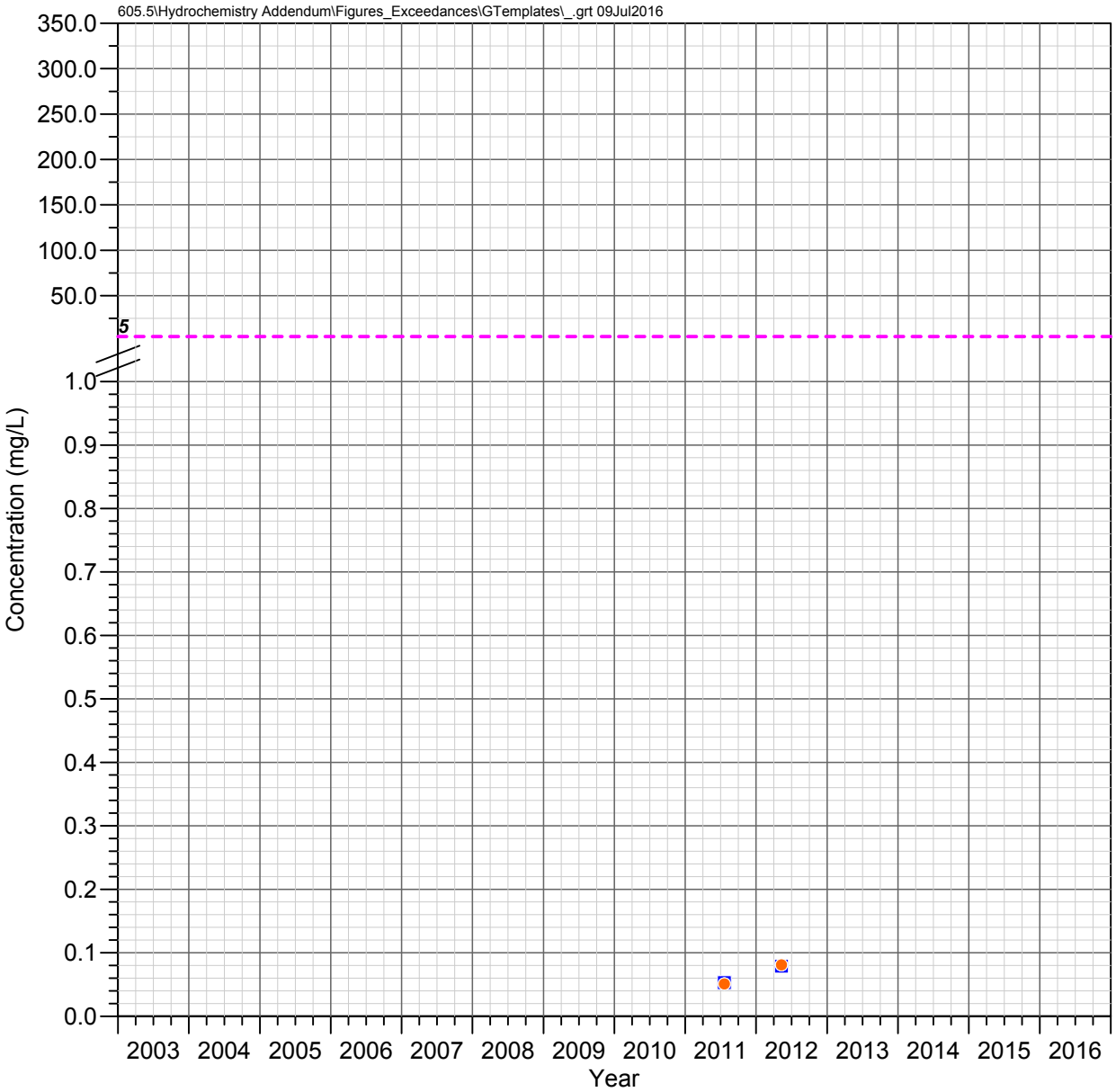


FIGURE E-777. ZINC CONCENTRATIONS OBSERVED AT HRES-07, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-08
Apache Leap Tuff Aquifer

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 5 mg/L)

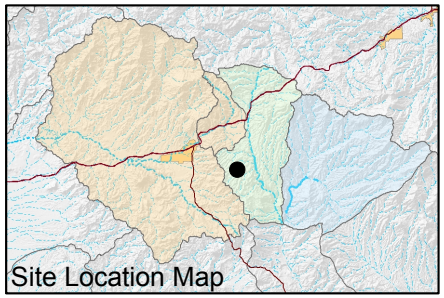
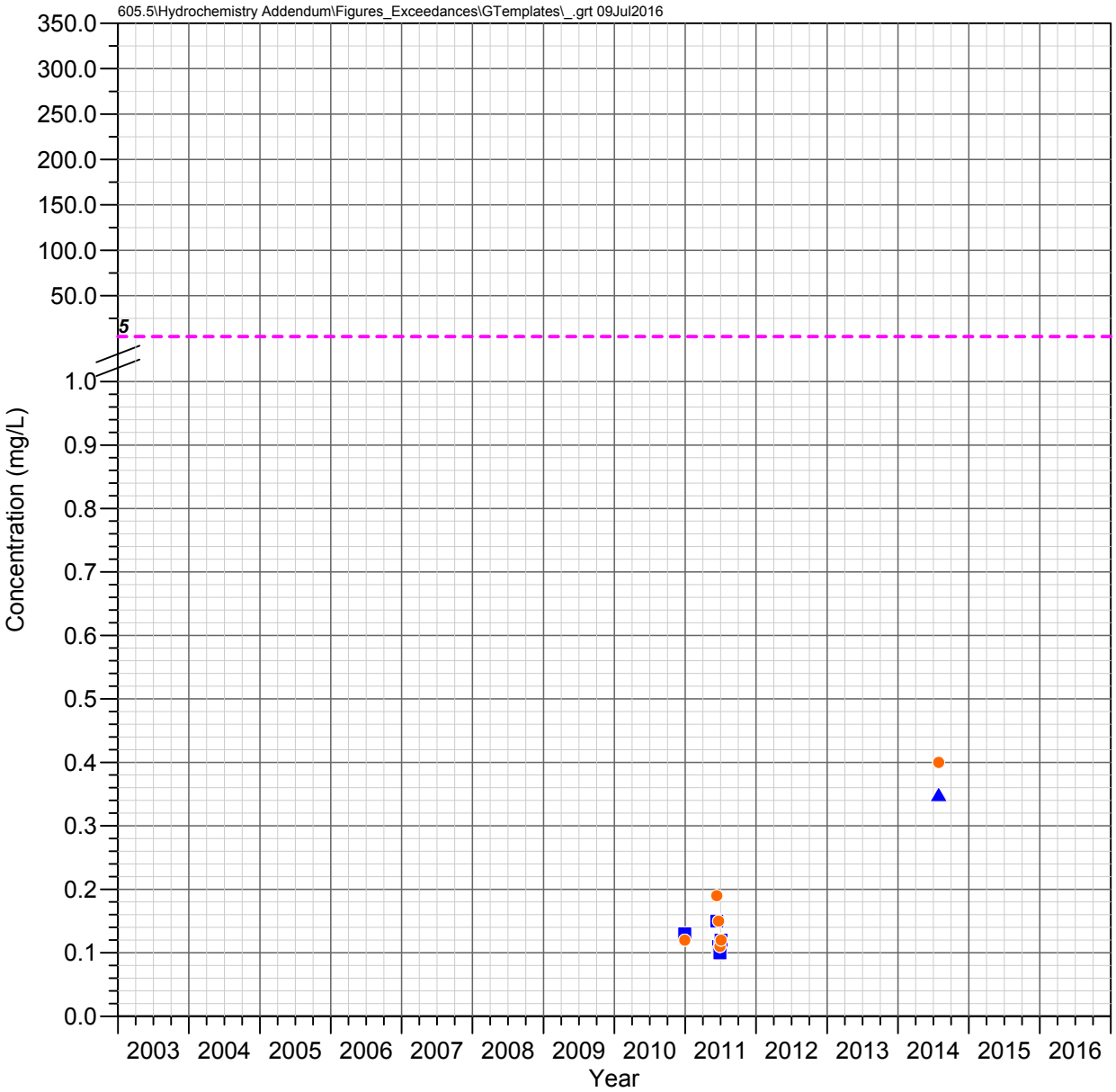


FIGURE E-778. ZINC CONCENTRATIONS OBSERVED AT HRES-08, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-09
Apache Leap Tuff Aquifer

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 5 mg/L)

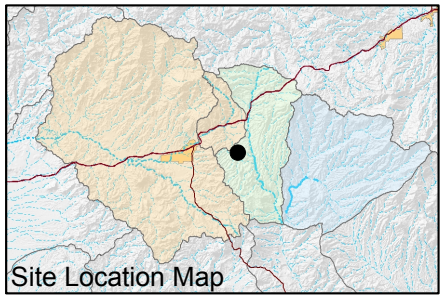
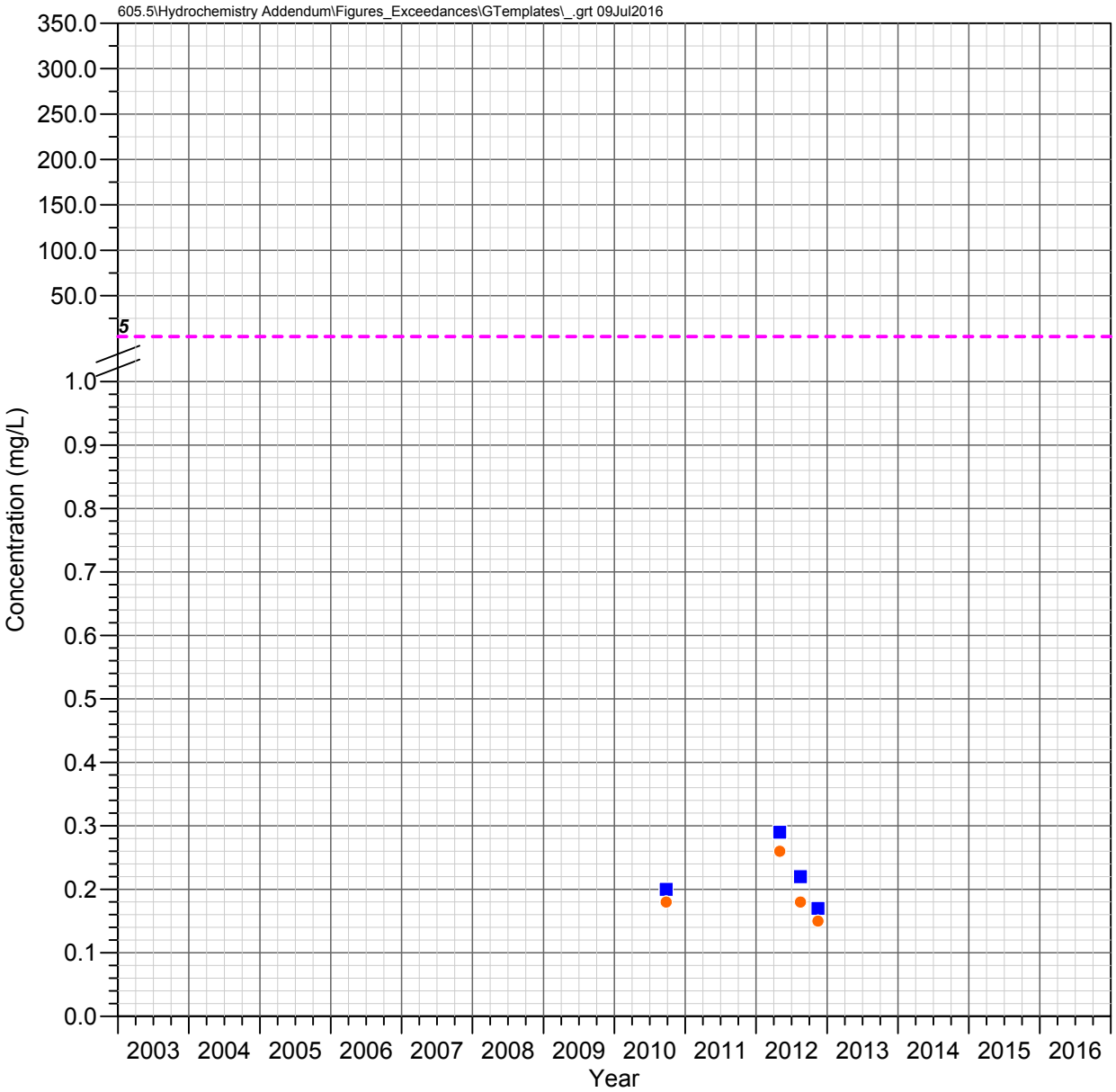


FIGURE E-779. ZINC CONCENTRATIONS OBSERVED AT HRES-09, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-10
Apache Leap Tuff Aquifer

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 5 mg/L)

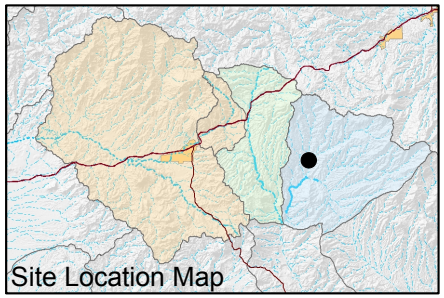
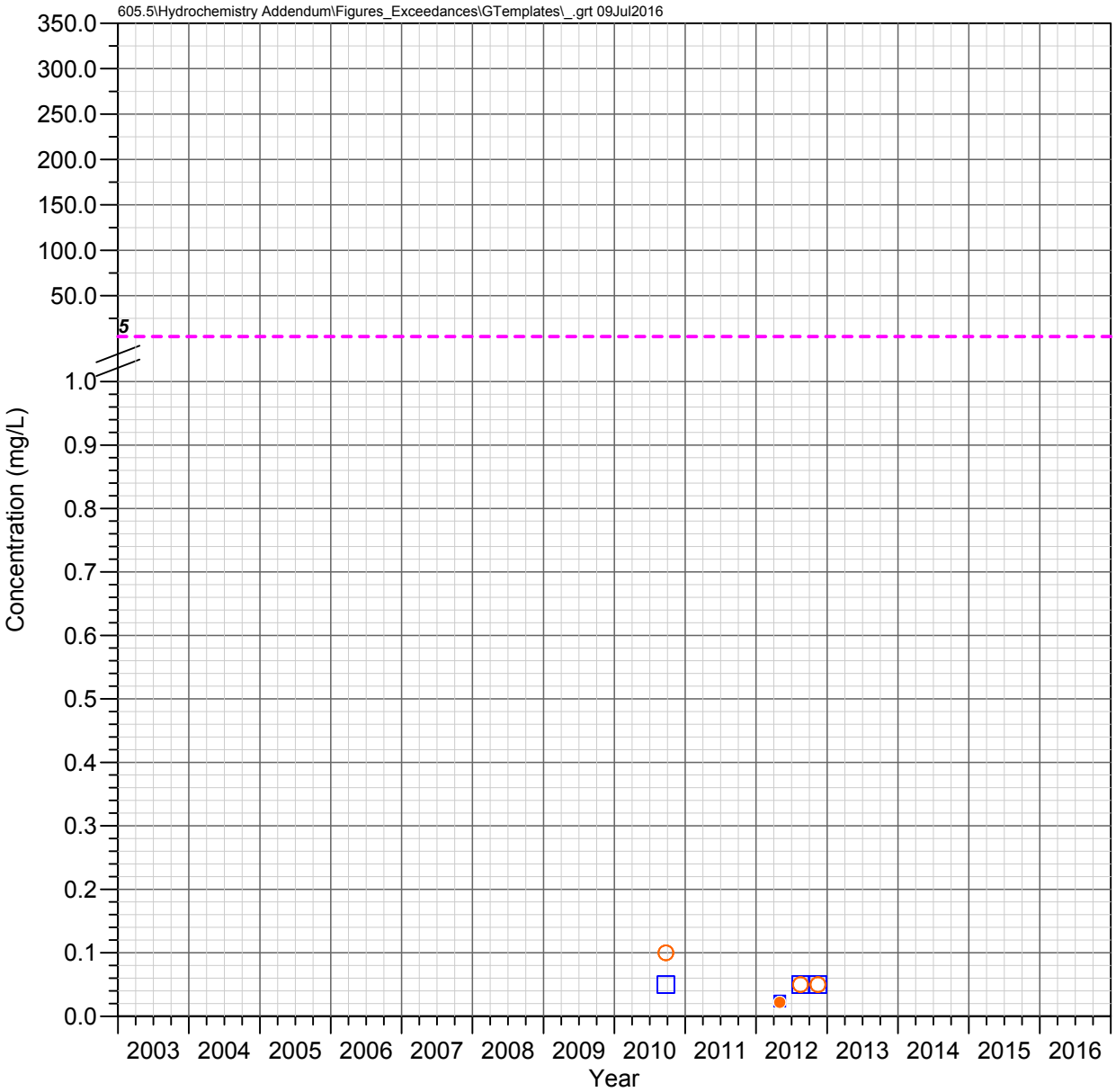


FIGURE E-780. ZINC CONCENTRATIONS OBSERVED AT HRES-10, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-11
Apache Leap Tuff Aquifer

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 5 mg/L)

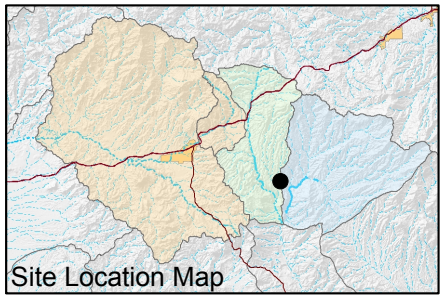
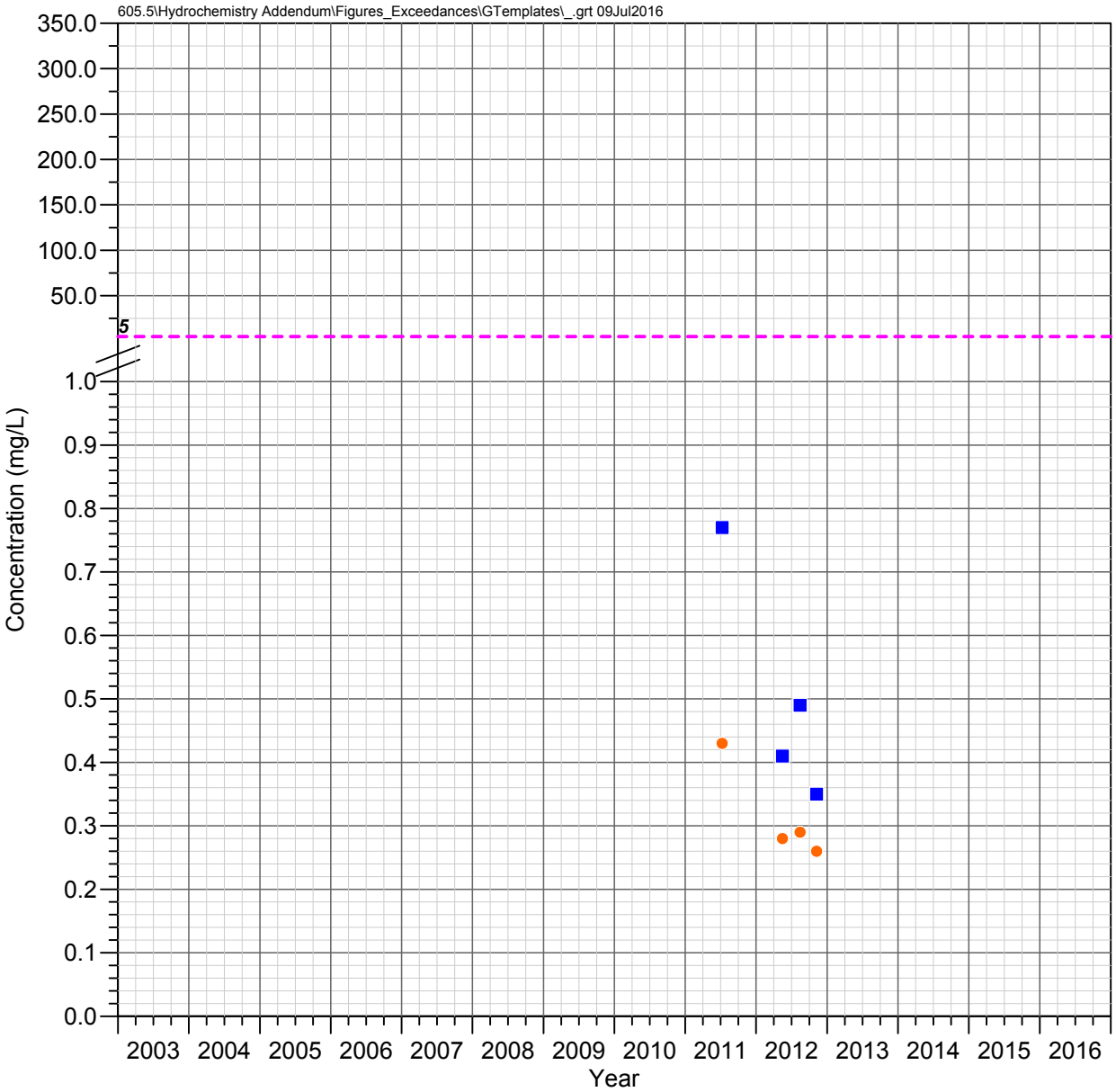


FIGURE E-781. ZINC CONCENTRATIONS OBSERVED AT HRES-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-12
Apache Leap Tuff Aquifer

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 5 mg/L)

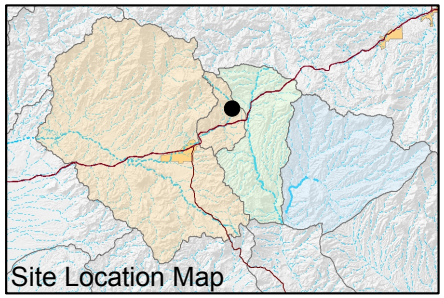
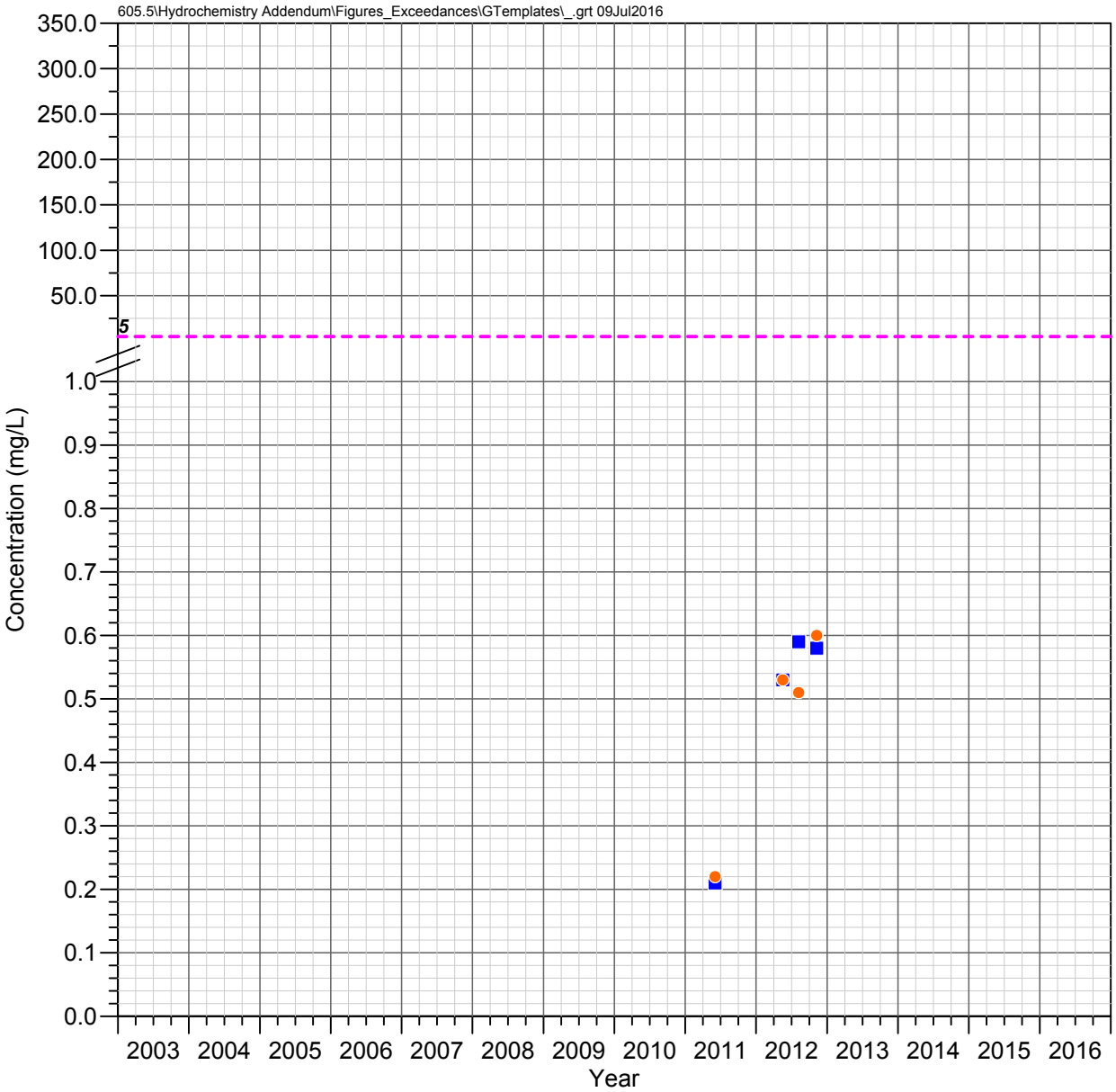


FIGURE E-782. ZINC CONCENTRATIONS OBSERVED AT HRES-12, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-13
Apache Leap Tuff Aquifer

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 5 mg/L)

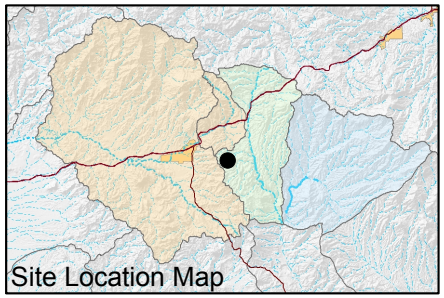
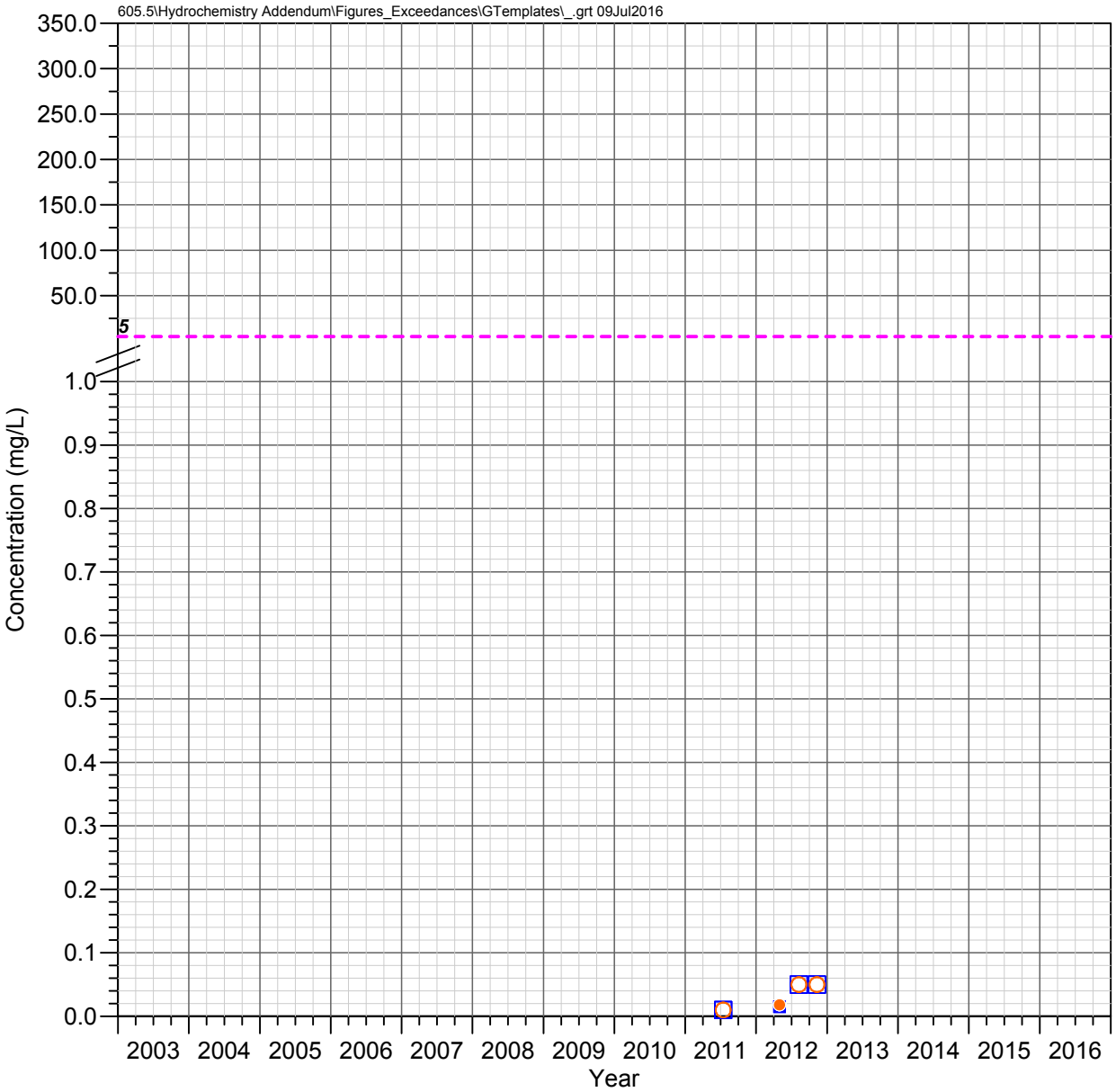


FIGURE E-783. ZINC CONCENTRATIONS OBSERVED AT HRES-13, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-14
Apache Leap Tuff Aquifer

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 5 mg/L)

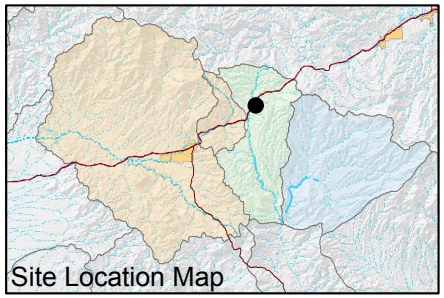
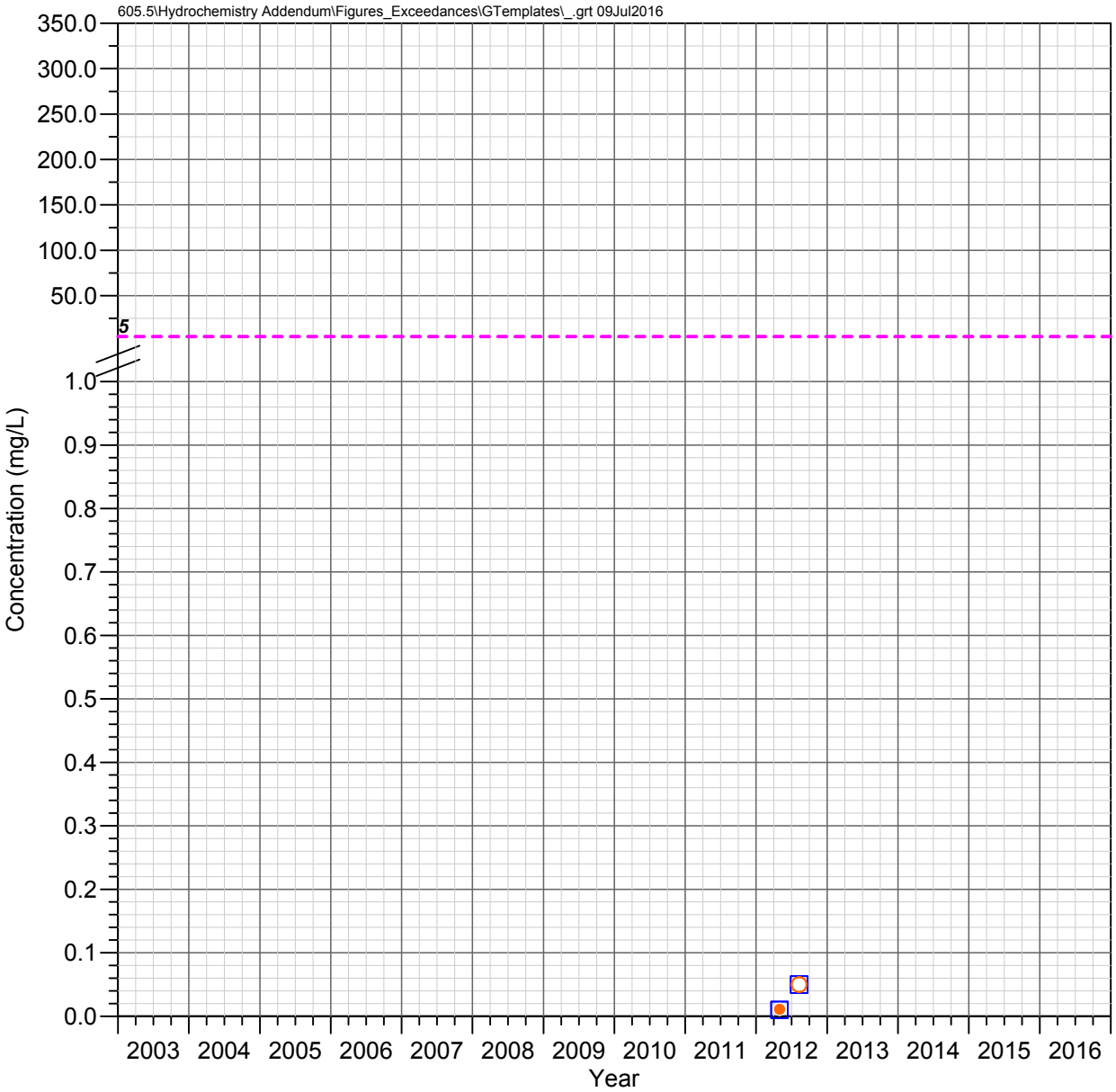


FIGURE E-784. ZINC CONCENTRATIONS OBSERVED AT HRES-14, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-15
Apache Leap Tuff Aquifer

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 5 mg/L)

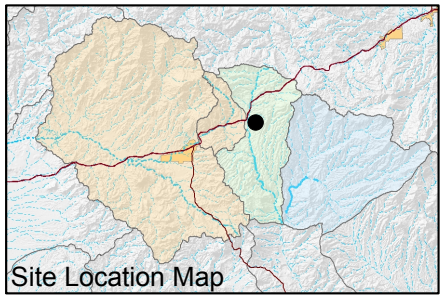
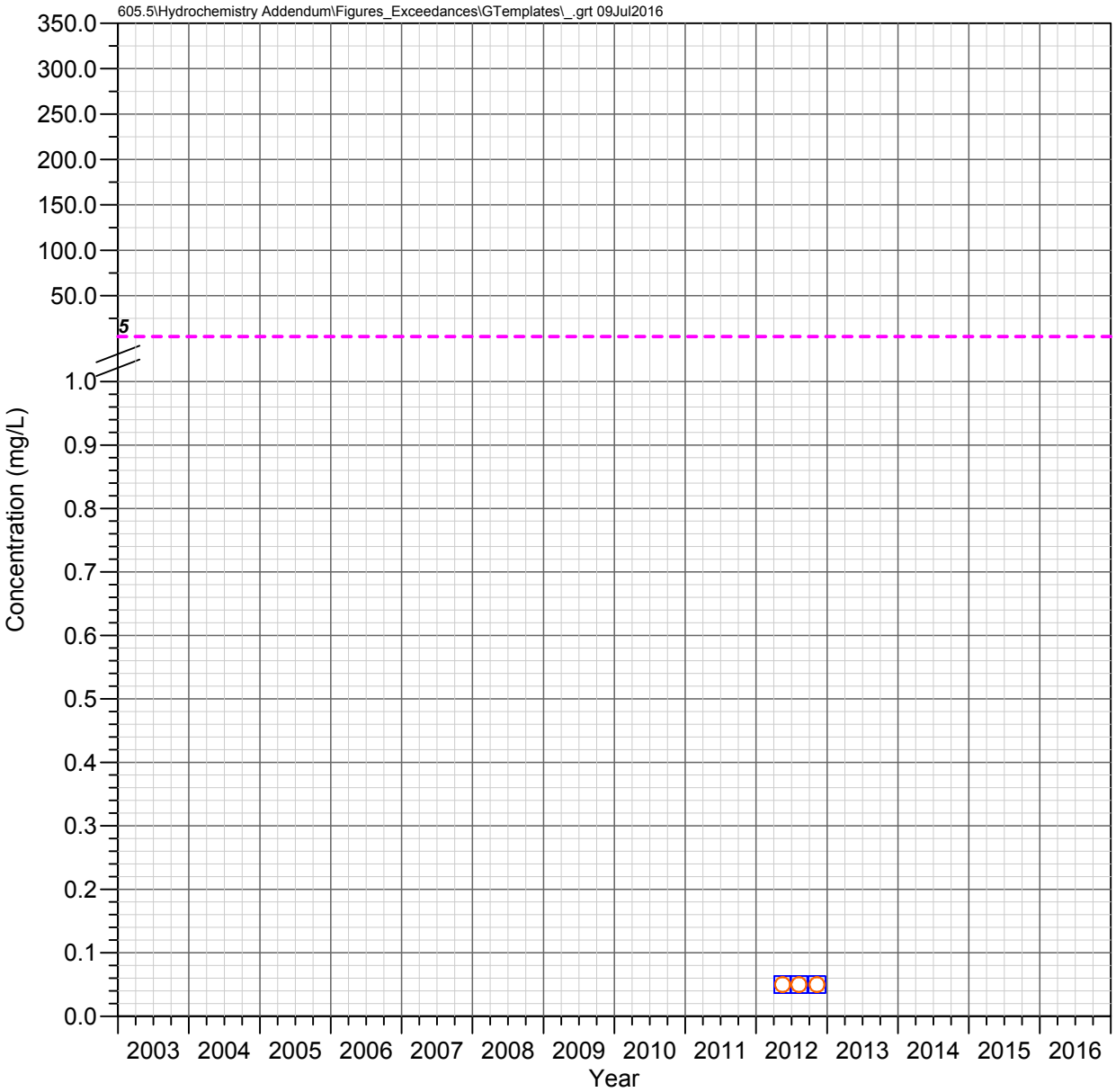


FIGURE E-785. ZINC CONCENTRATIONS OBSERVED AT HRES-15, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



HRES-17
Apache Leap Tuff Aquifer

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 5 mg/L)

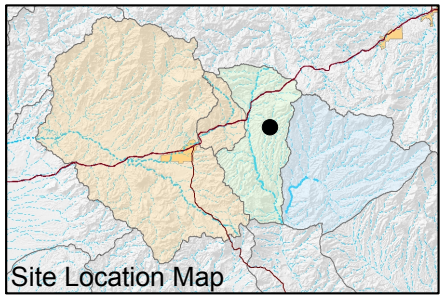
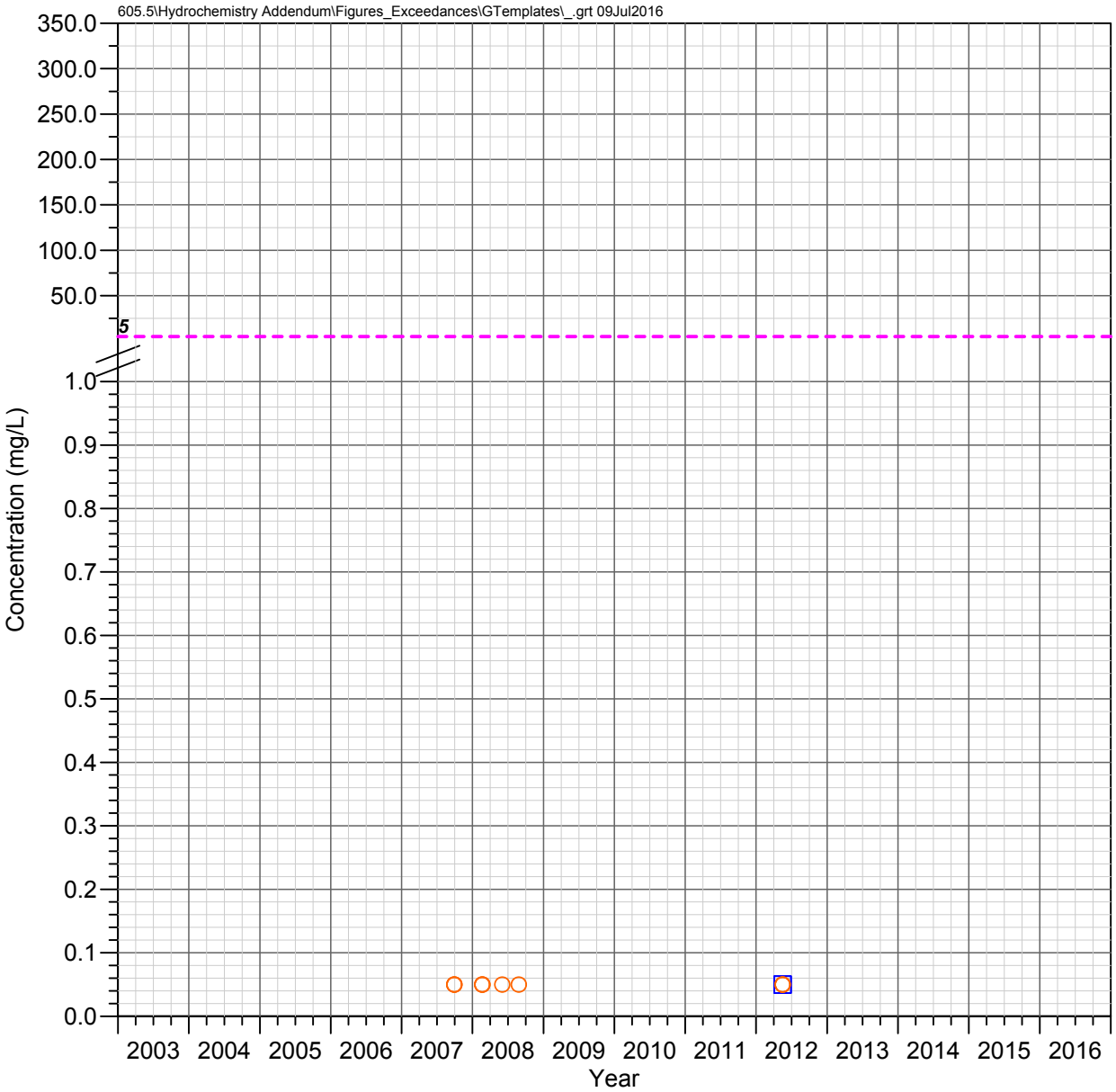


FIGURE E-786. ZINC CONCENTRATIONS OBSERVED AT HRES-17, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MJ-11
Apache Leap Tuff Aquifer

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 5 mg/L)

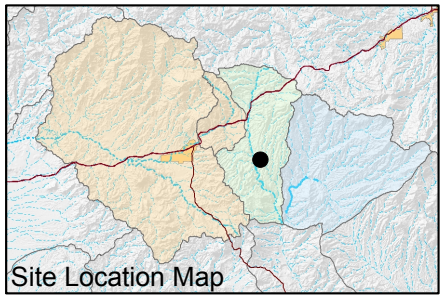
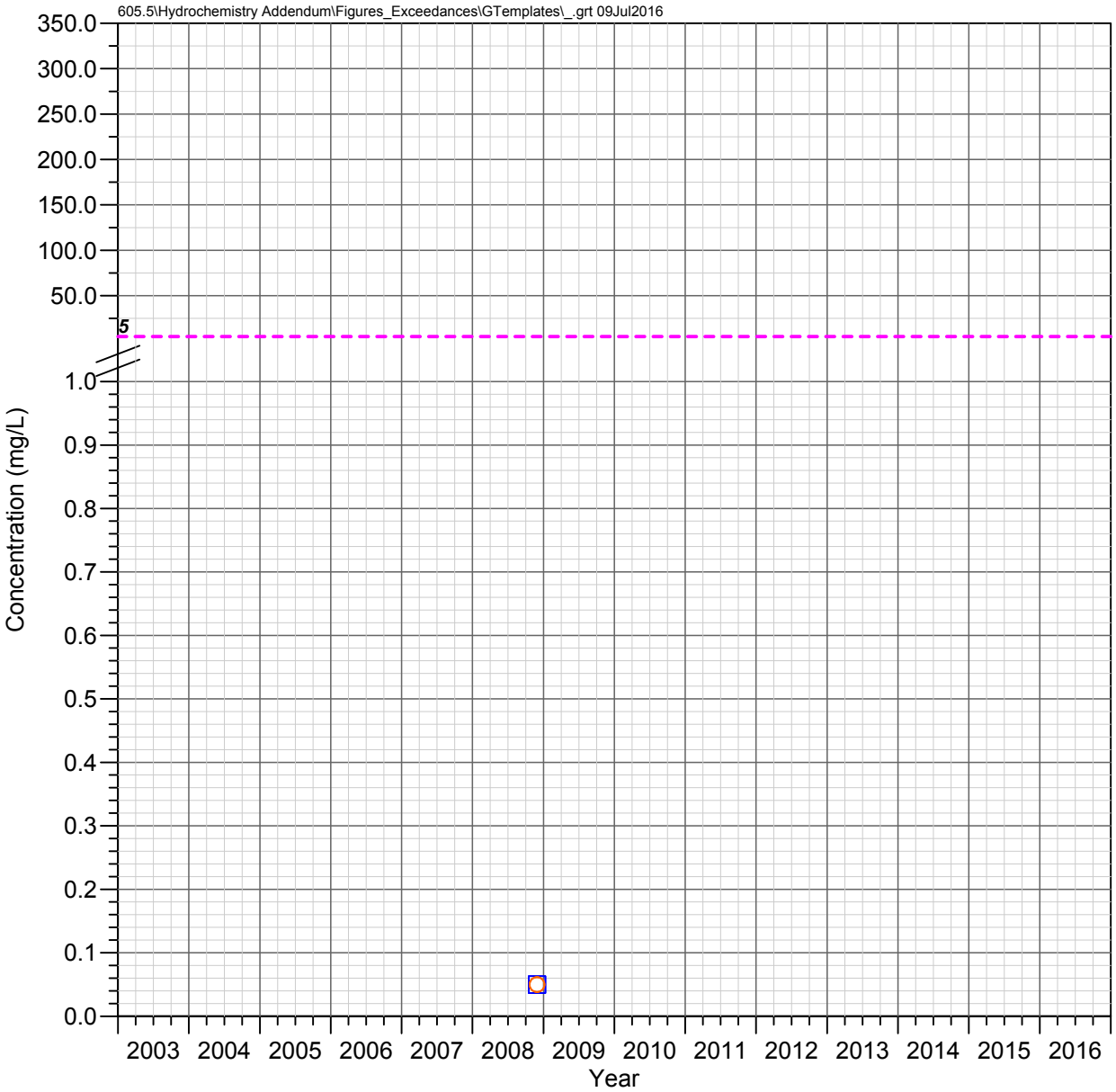


FIGURE E-787. ZINC CONCENTRATIONS OBSERVED AT MJ-11, APACHE LEAP TUFF AQUIFER

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-01
Deep Groundwater System

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 5 mg/L)

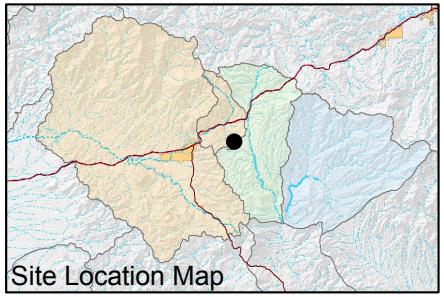
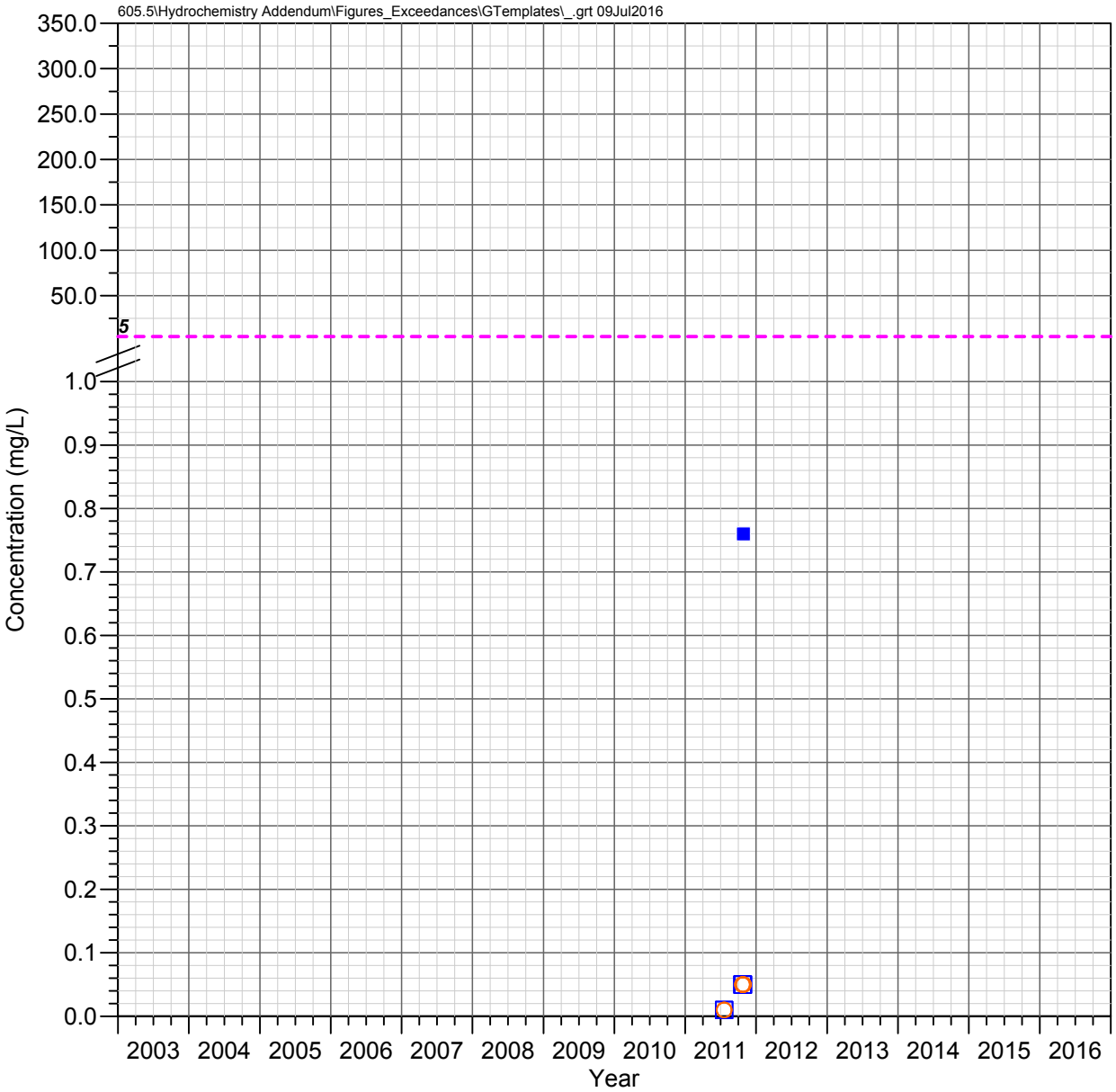


FIGURE E-788. ZINC CONCENTRATIONS OBSERVED AT DHRES-01, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-02
Deep Groundwater System

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- EPA Secondary MCL (UNS, 5 mg/L)

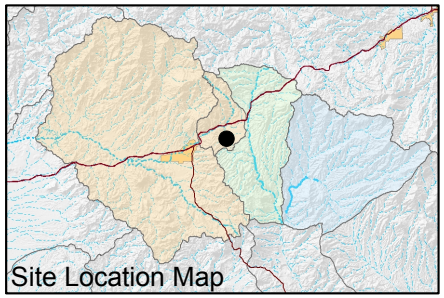
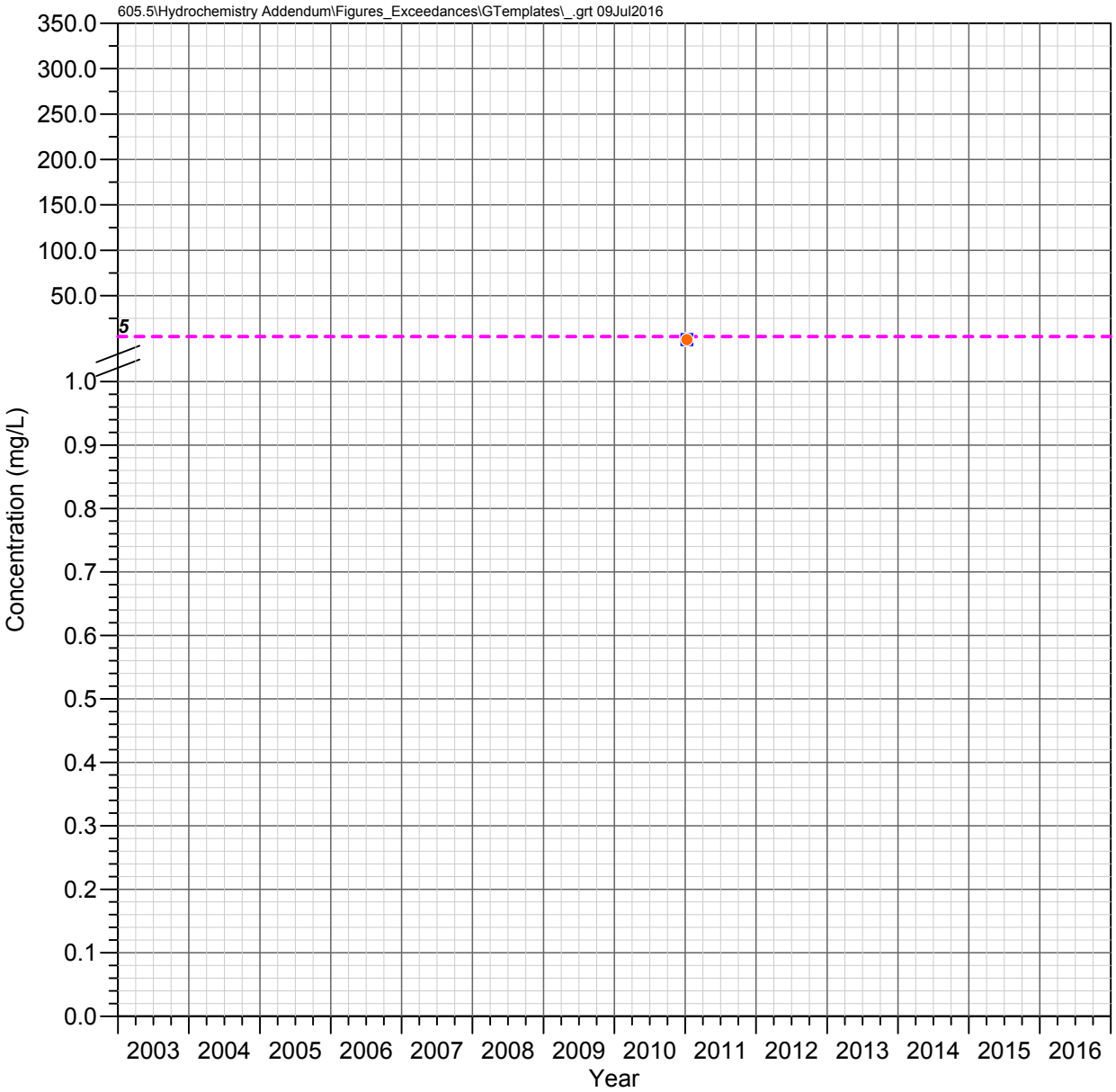


FIGURE E-789. ZINC CONCENTRATIONS OBSERVED AT DHRES-02, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-06
Deep Groundwater System

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 5 mg/L)

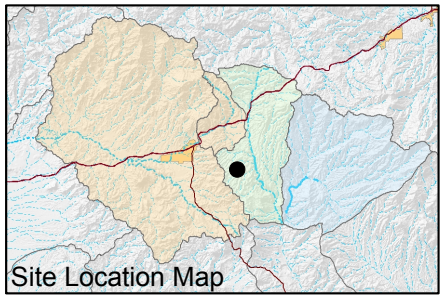
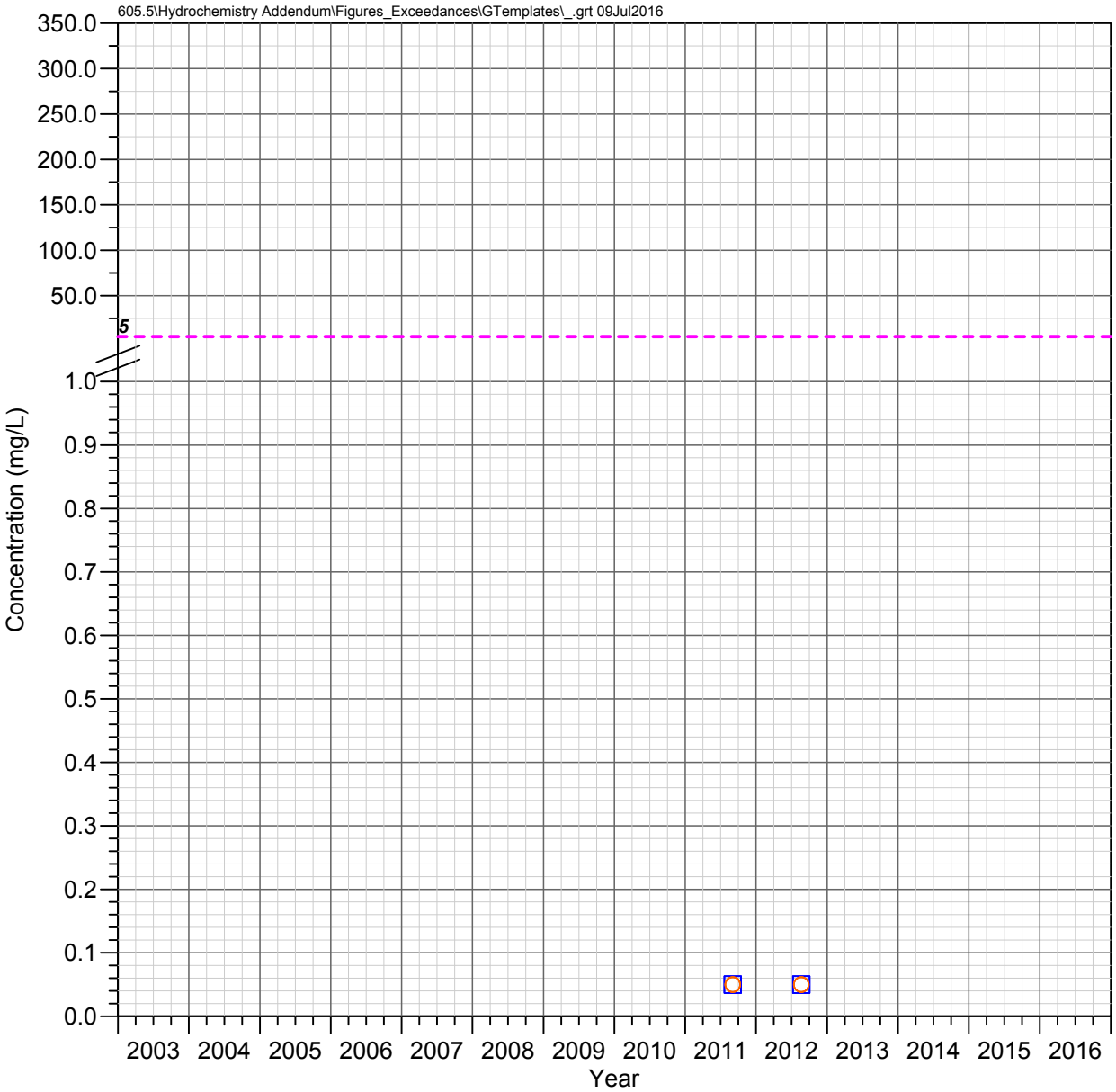


FIGURE E-790. ZINC CONCENTRATIONS OBSERVED AT DHRES-06, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-09
Deep Groundwater System

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 5 mg/L)

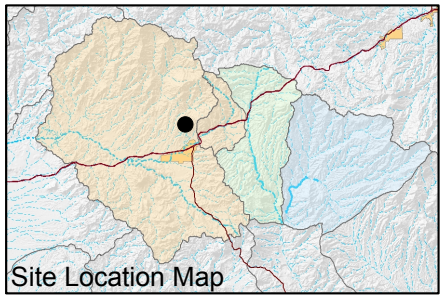
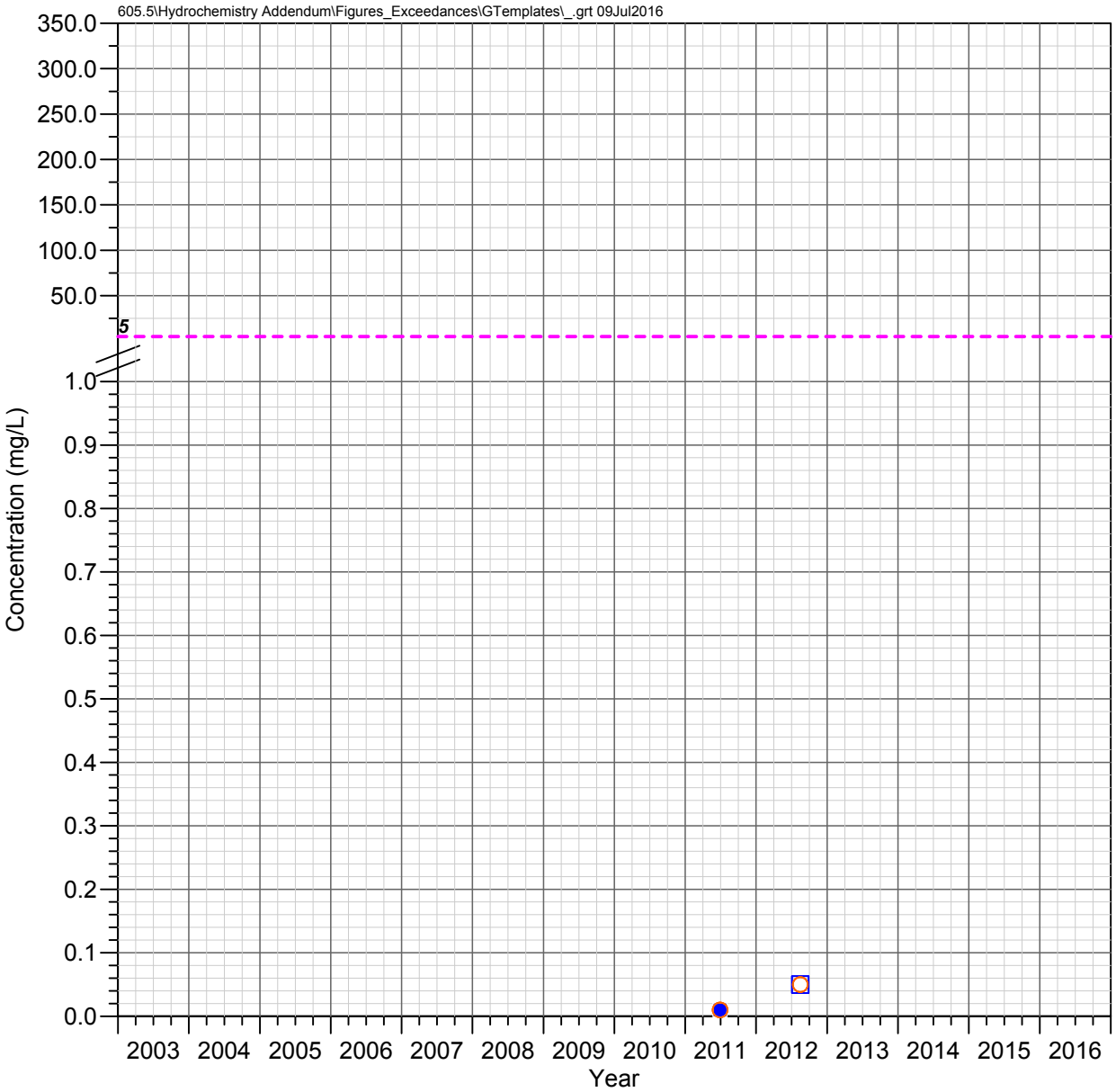


FIGURE E-791. ZINC CONCENTRATIONS OBSERVED AT DHRES-09, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-11
Deep Groundwater System

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 5 mg/L)

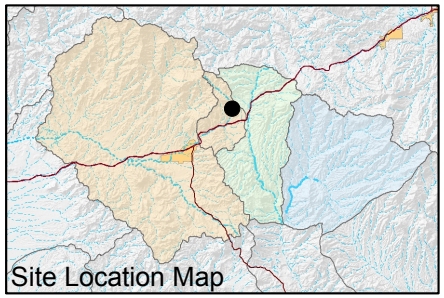
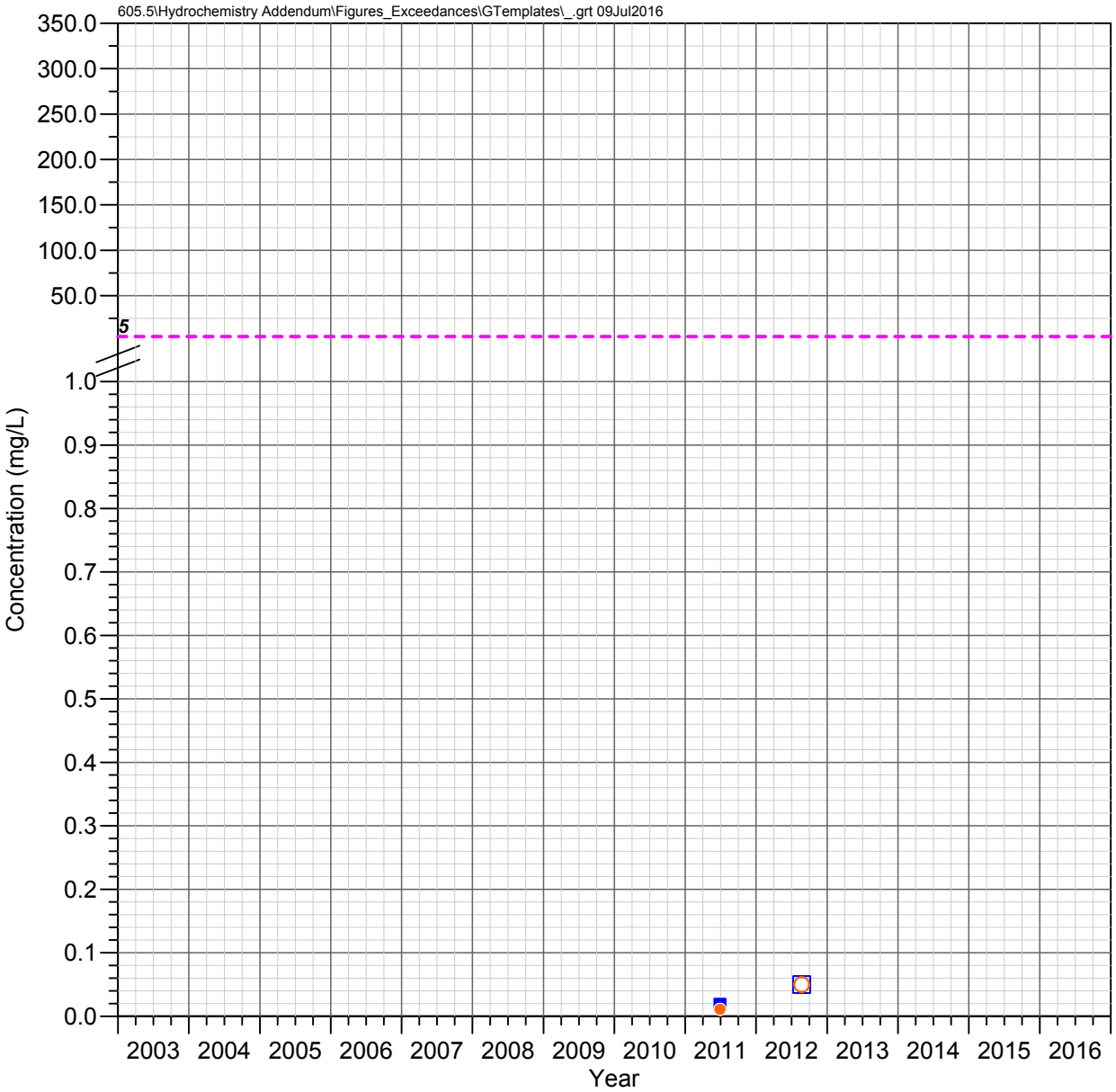


FIGURE E-792. ZINC CONCENTRATIONS OBSERVED AT DHRES-11, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-13
Deep Groundwater System

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 5 mg/L)

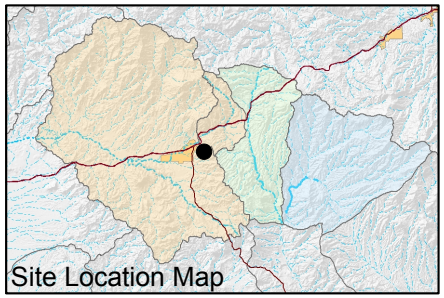
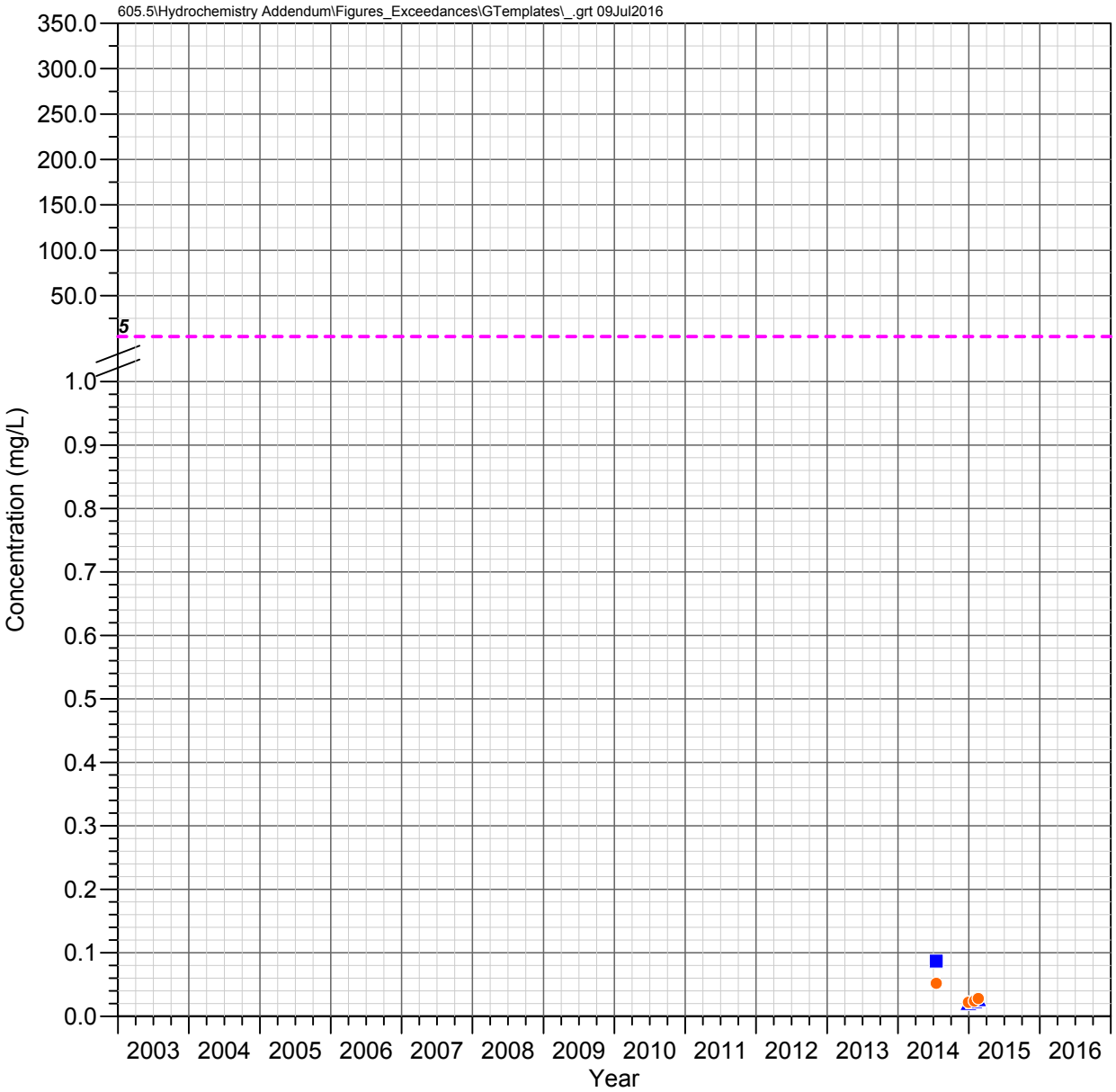


FIGURE E-793. ZINC CONCENTRATIONS OBSERVED AT DHRES-13, DEEP GROUNDWATER SYSTEM

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DHRES-15
Deep Groundwater System

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - EPA Secondary MCL (UNS, 5 mg/L)

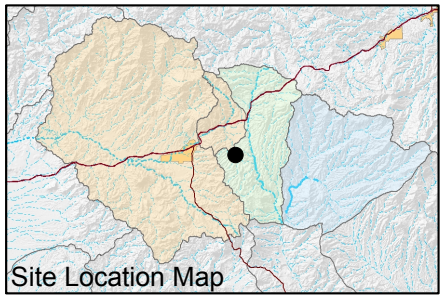


FIGURE E-794. ZINC CONCENTRATIONS OBSERVED AT DHRES-15, DEEP GROUNDWATER SYSTEM

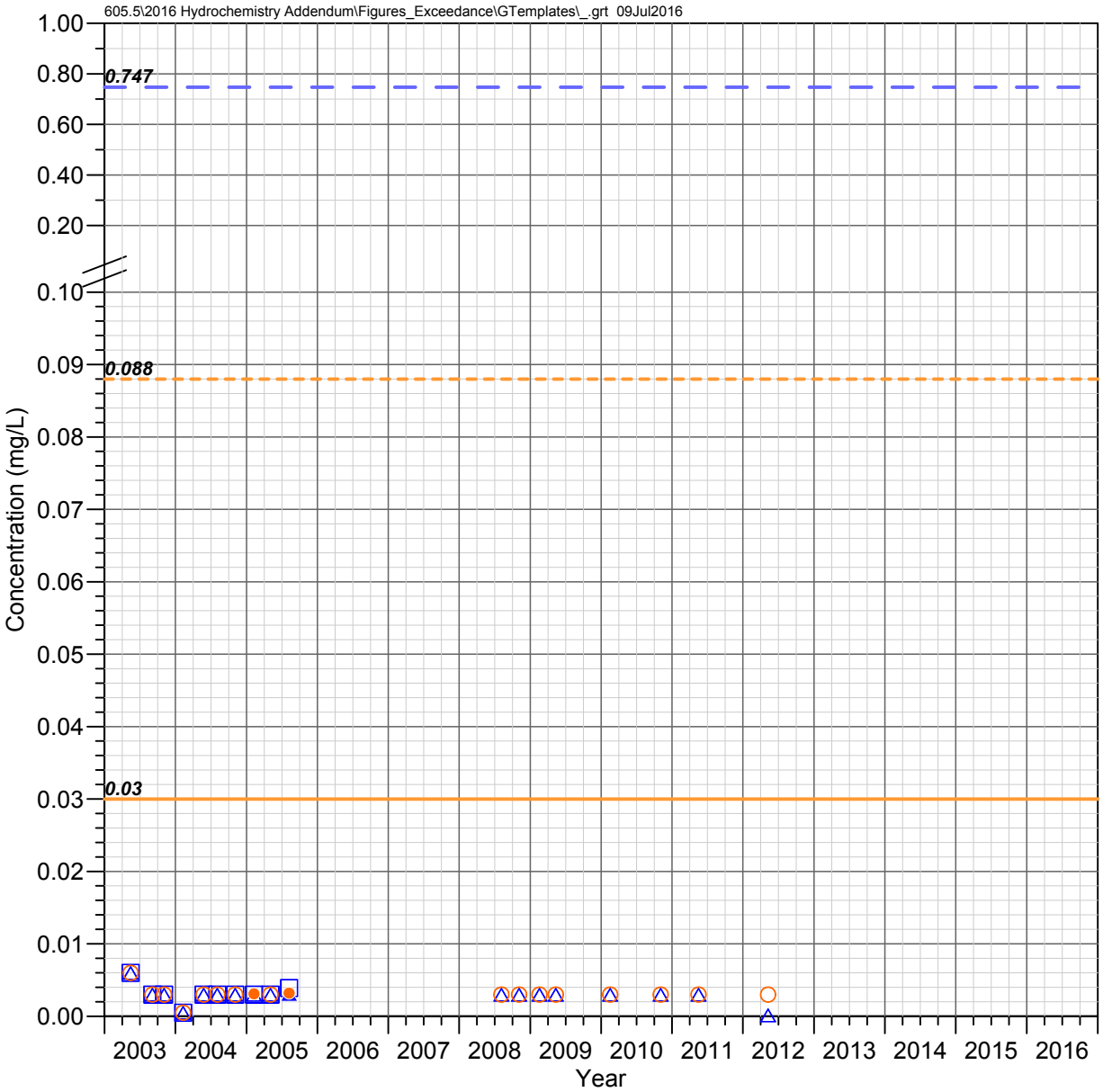
Resolution Copper Mining

MONTGOMERY & ASSOCIATES

MONTGOMERY & ASSOCIATES

Appendix F

TIME-SERIES PLOTS OF HYDROCHEMICAL RESULTS COMPARED TO REGULATORY STANDARDS – SURFACE WATER



Pump Station Spring (QC 30.7 C)
Queen Creek Watershed

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Partial Body Contact (TRC, 0.747 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.088 mg/L)

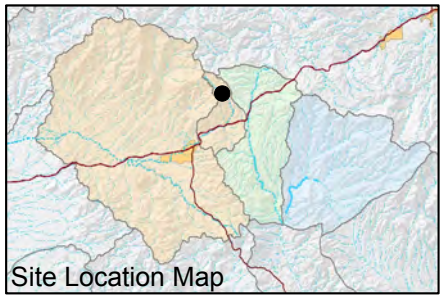
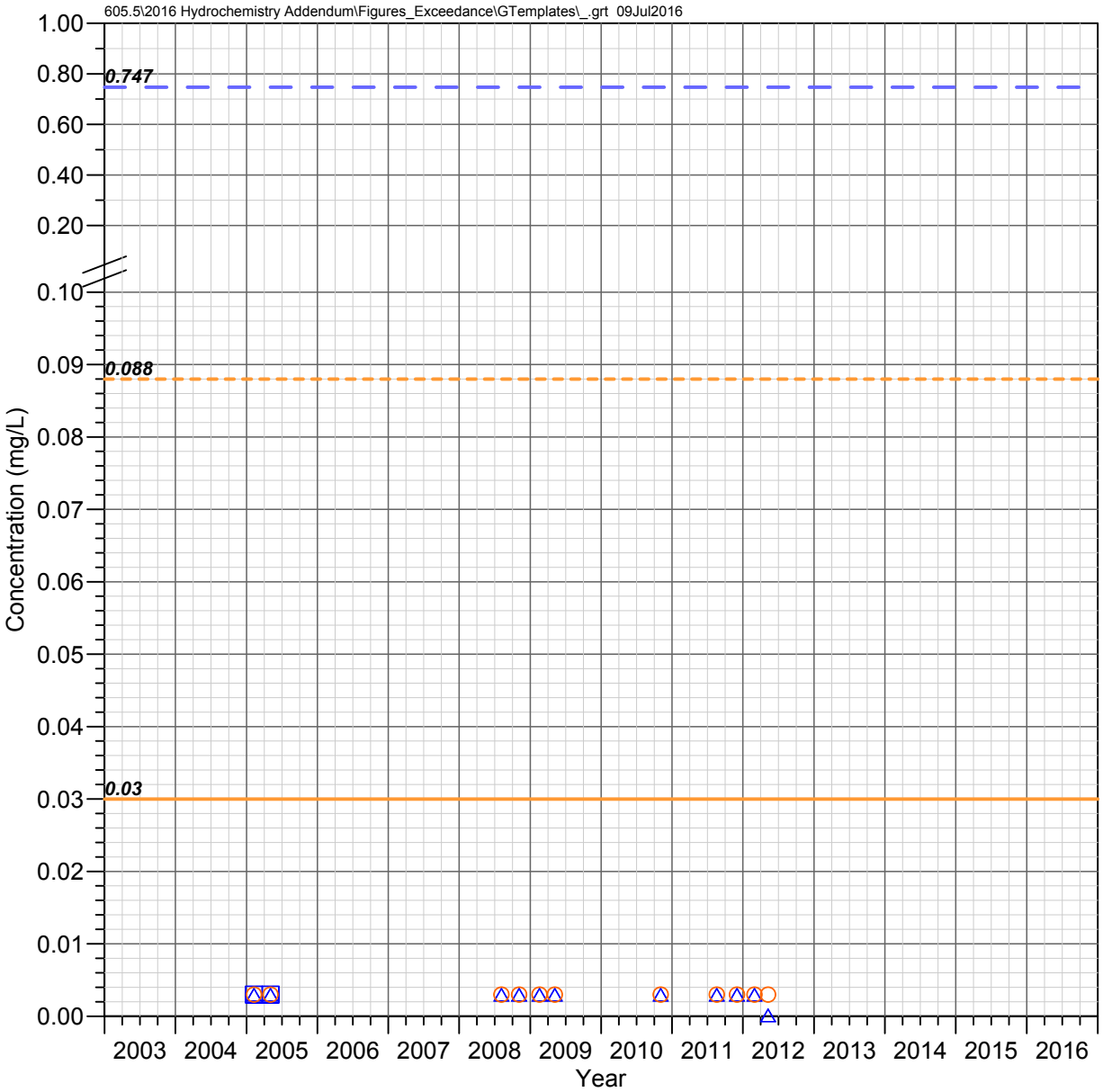


FIGURE F-001. ANTIMONY CONCENTRATIONS OBSERVED AT PUMP STATION SPRING (QC 30.7 C), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 27.3 C
Queen Creek Watershed

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Partial Body Contact (TRC, 0.747 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.088 mg/L)

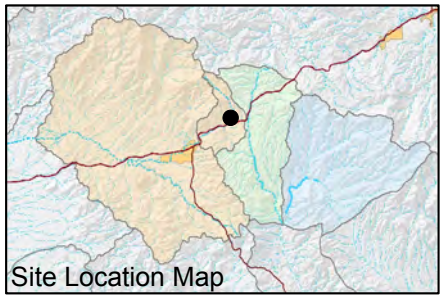
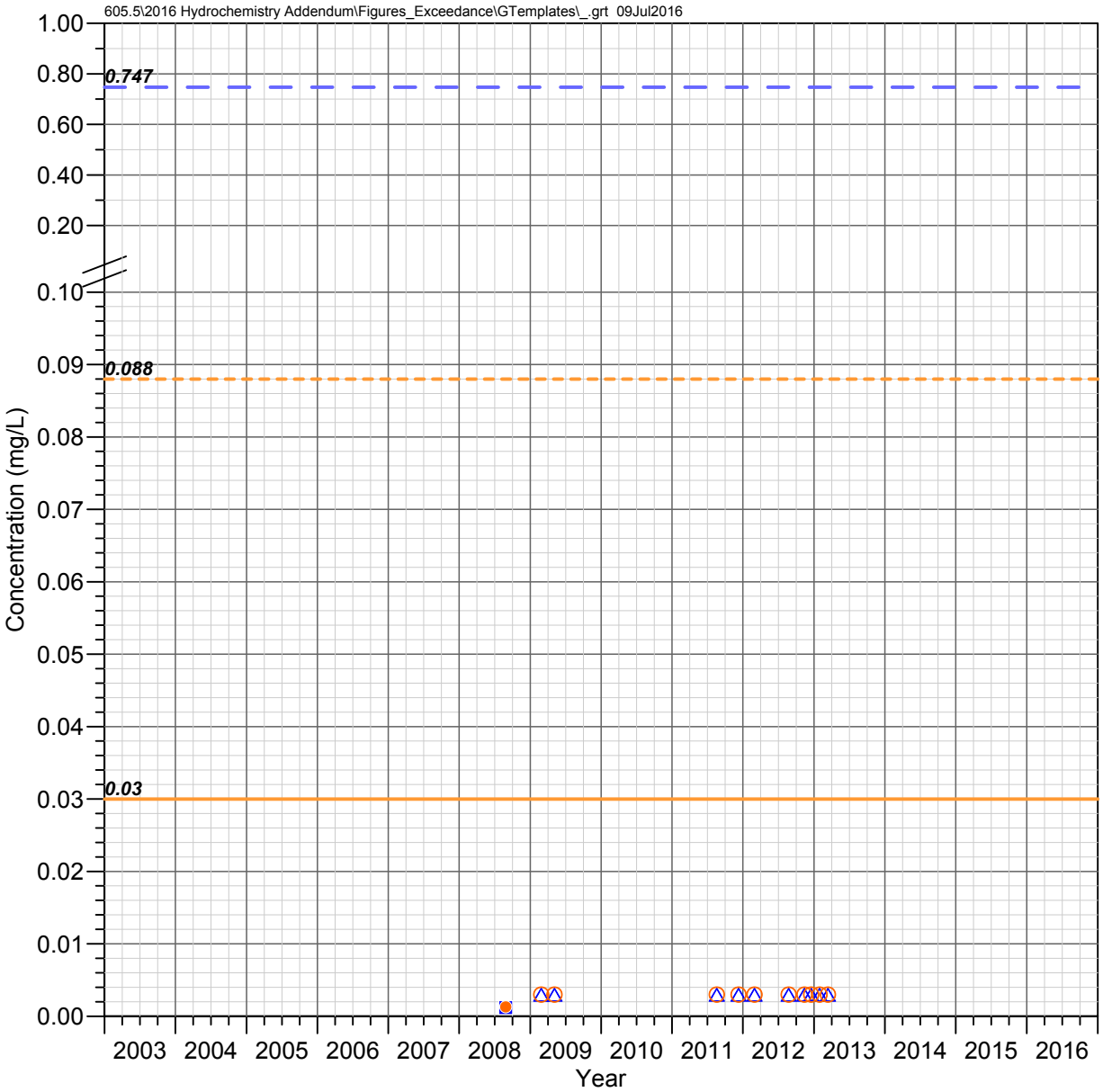


FIGURE F-002. ANTIMONY CONCENTRATIONS OBSERVED AT QC 27.3 C, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Oak Flat Wash
Queen Creek Watershed

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Partial Body Contact (TRC, 0.747 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.088 mg/L)

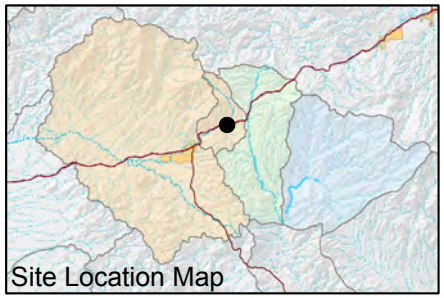
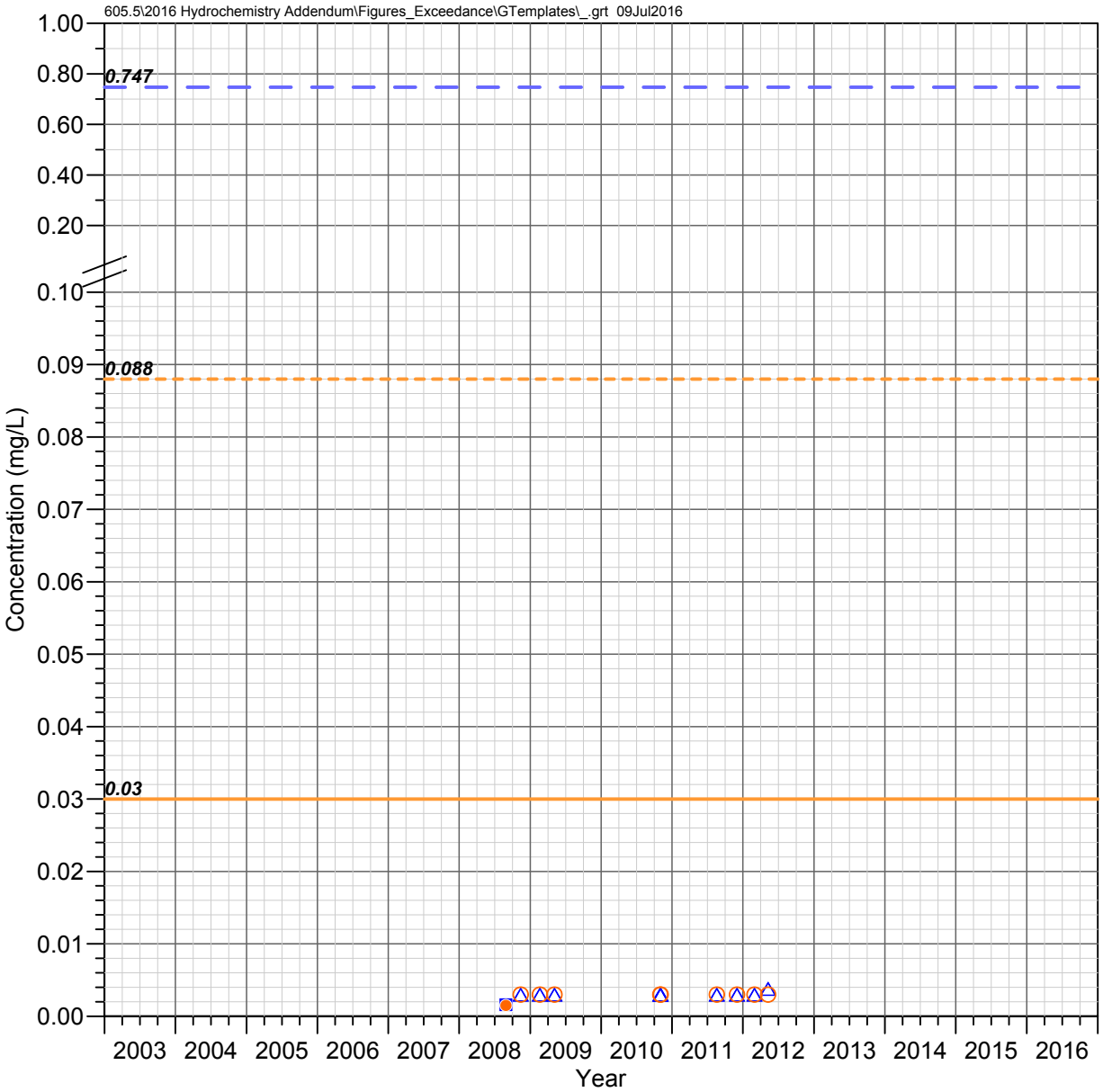


FIGURE F-003. ANTIMONY CONCENTRATIONS OBSERVED AT OAK FLAT WASH, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Number 9 Wash
Queen Creek Watershed

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Partial Body Contact (TRC, 0.747 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.088 mg/L)

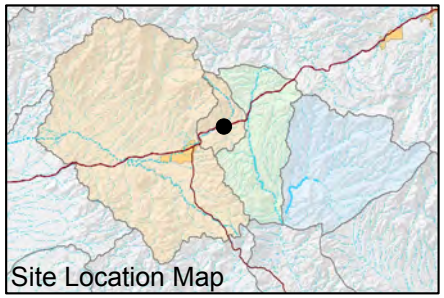
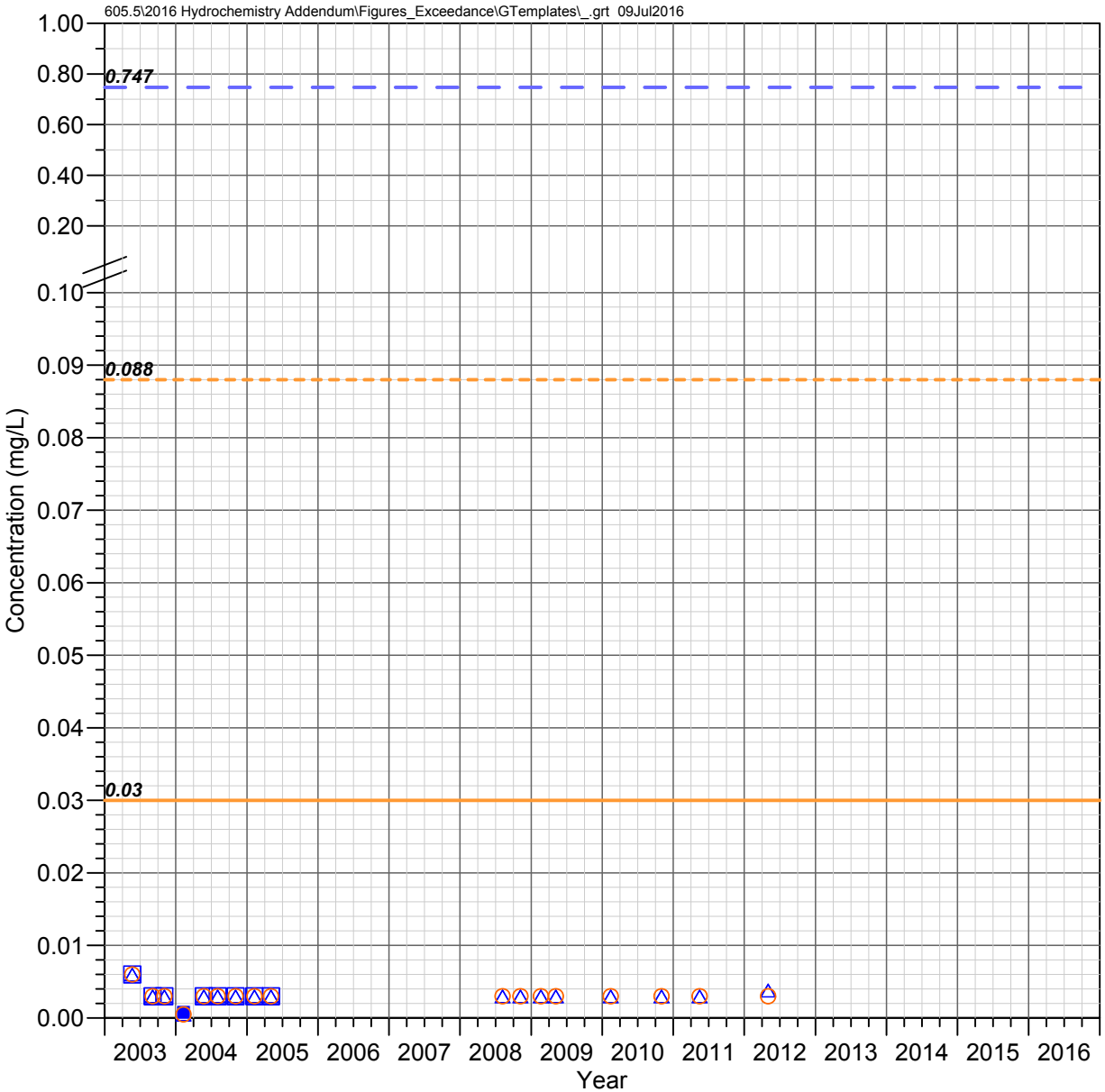


FIGURE F-004. ANTIMONY CONCENTRATIONS OBSERVED AT NUMBER 9 WASH, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Boulder Hole (QC 23.6 C)
Queen Creek Watershed

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Partial Body Contact (TRC, 0.747 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.088 mg/L)

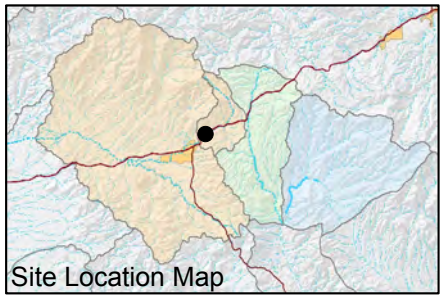
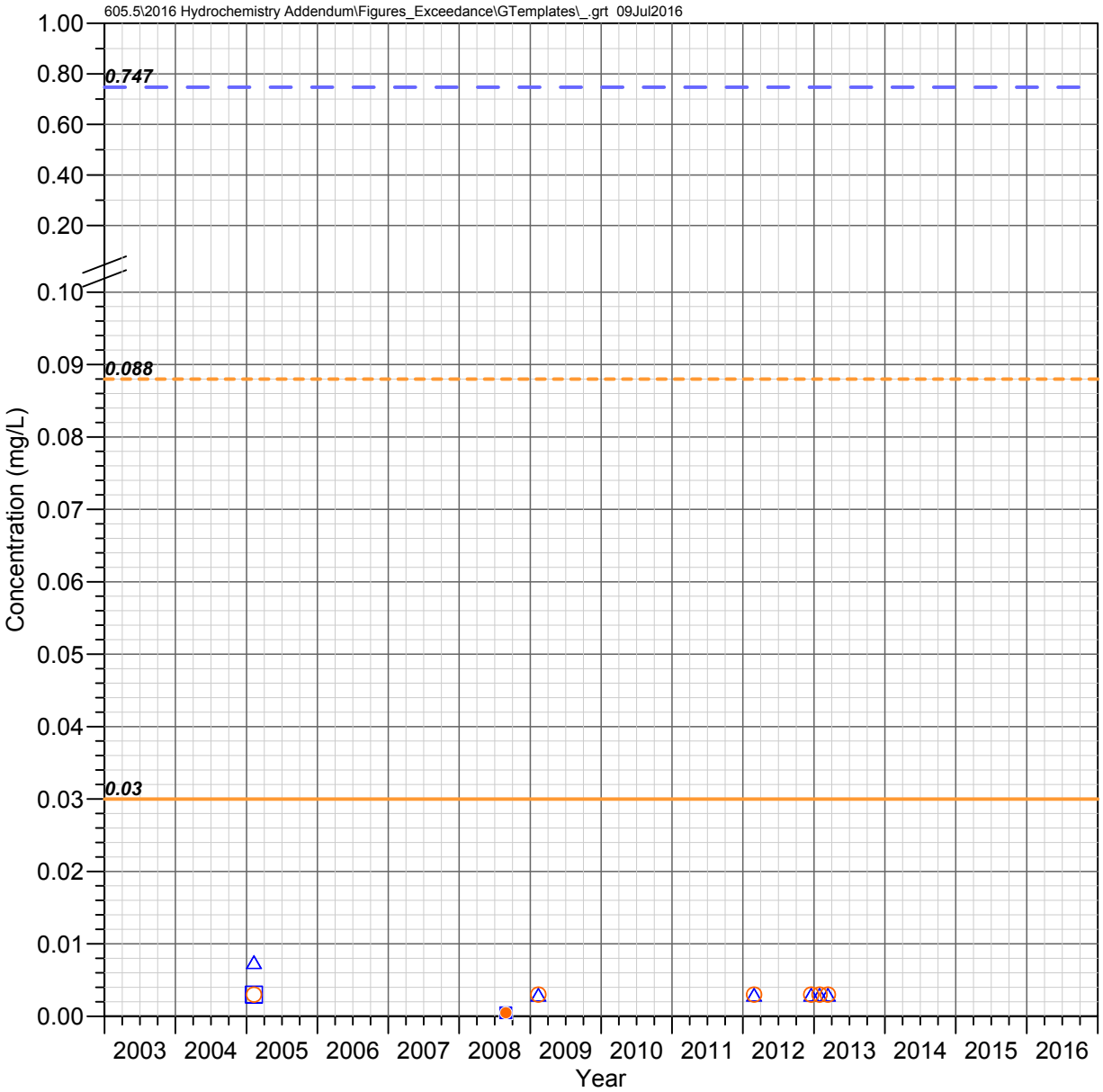


FIGURE F-005. ANTIMONY CONCENTRATIONS OBSERVED AT BOULDER HOLE (QC 23.6 C), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 22.6 E (Karst Spring)
Queen Creek Watershed

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Partial Body Contact (TRC, 0.747 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.088 mg/L)

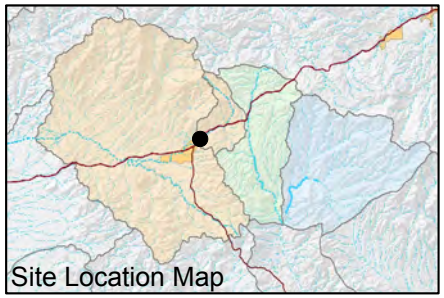
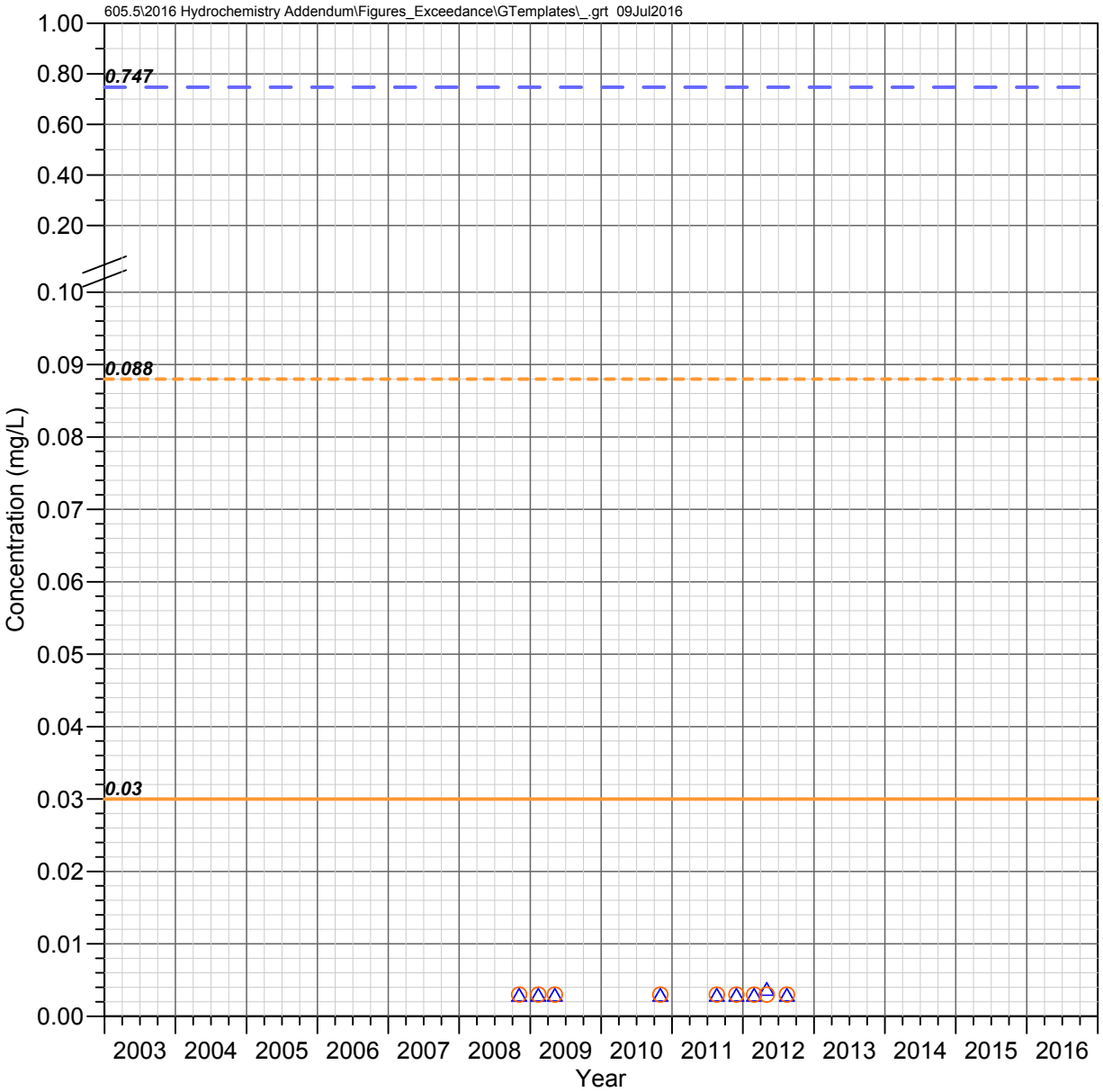


FIGURE F-006. ANTIMONY CONCENTRATIONS OBSERVED AT QC 22.6 E (KARST SPRING), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 21.7 C (Magma Avenue)
Queen Creek Watershed

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Partial Body Contact (TRC, 0.747 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.088 mg/L)

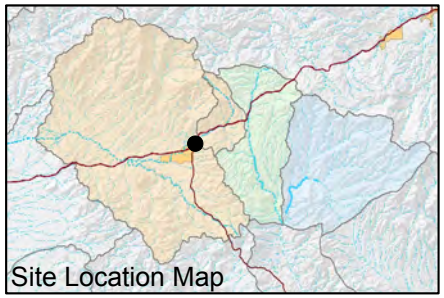
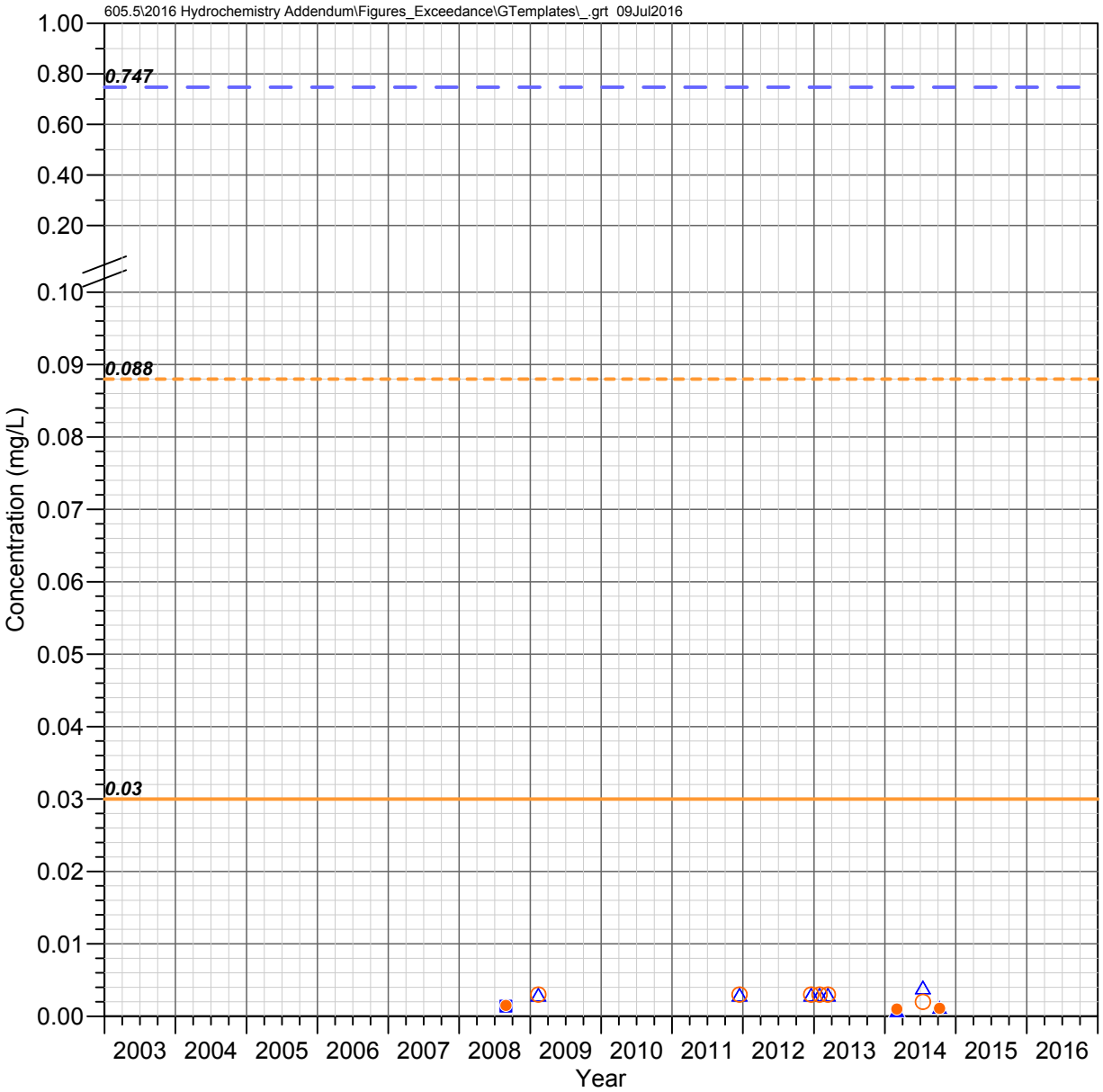


FIGURE F-007. ANTIMONY CONCENTRATIONS OBSERVED AT QC 21.7 C (MAGMA AVENUE), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 19.7 C
Queen Creek Watershed

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Partial Body Contact (TRC, 0.747 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.088 mg/L)

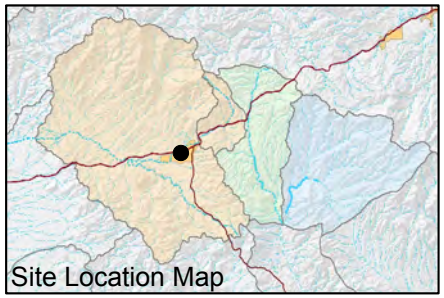
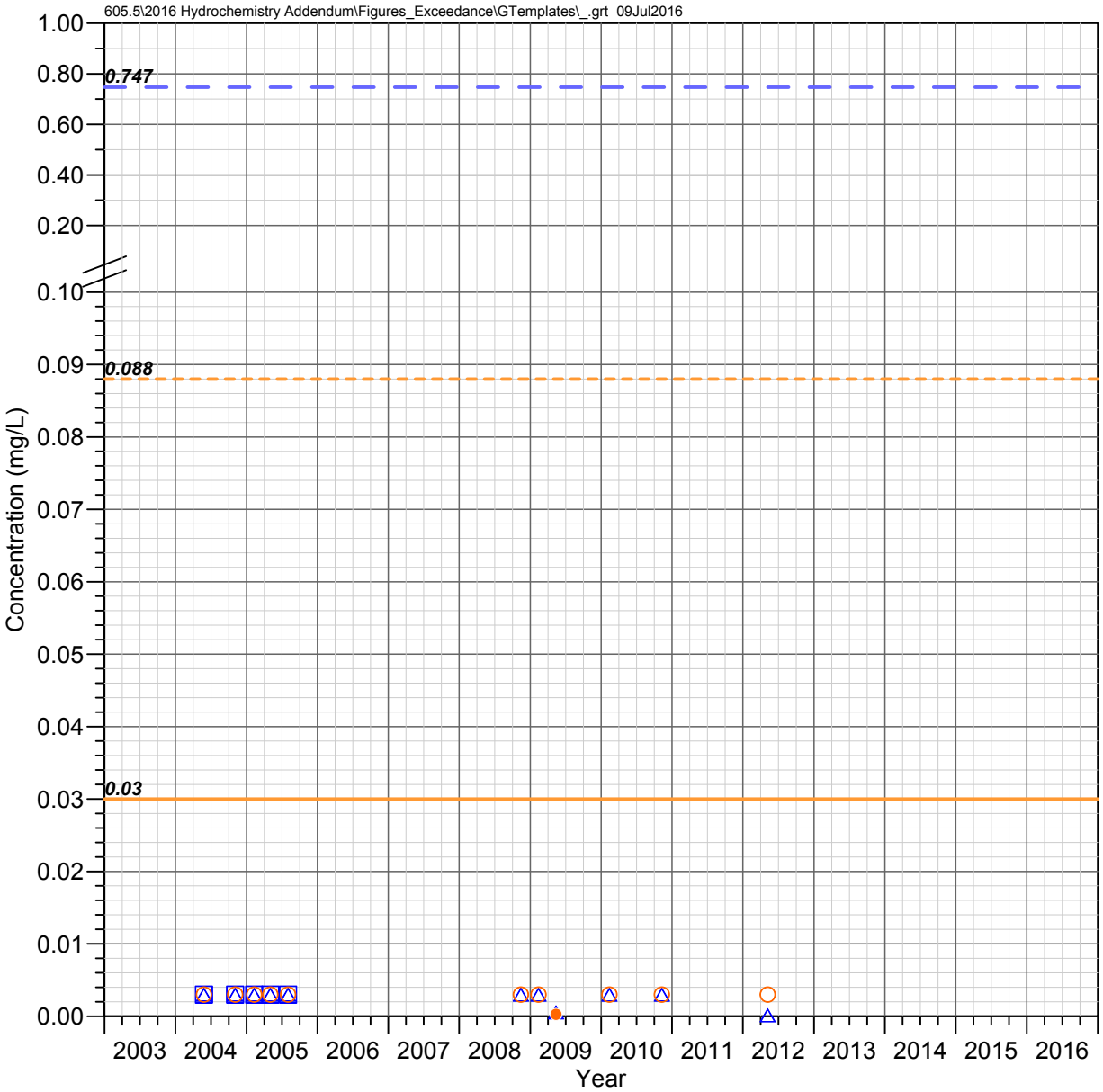


FIGURE F-008. ANTIMONY CONCENTRATIONS OBSERVED AT QC 19.7 C, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Bored Spring
Queen Creek Watershed

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Partial Body Contact (TRC, 0.747 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.088 mg/L)

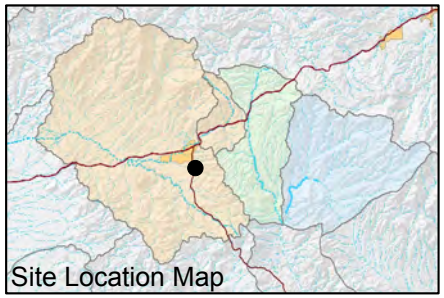
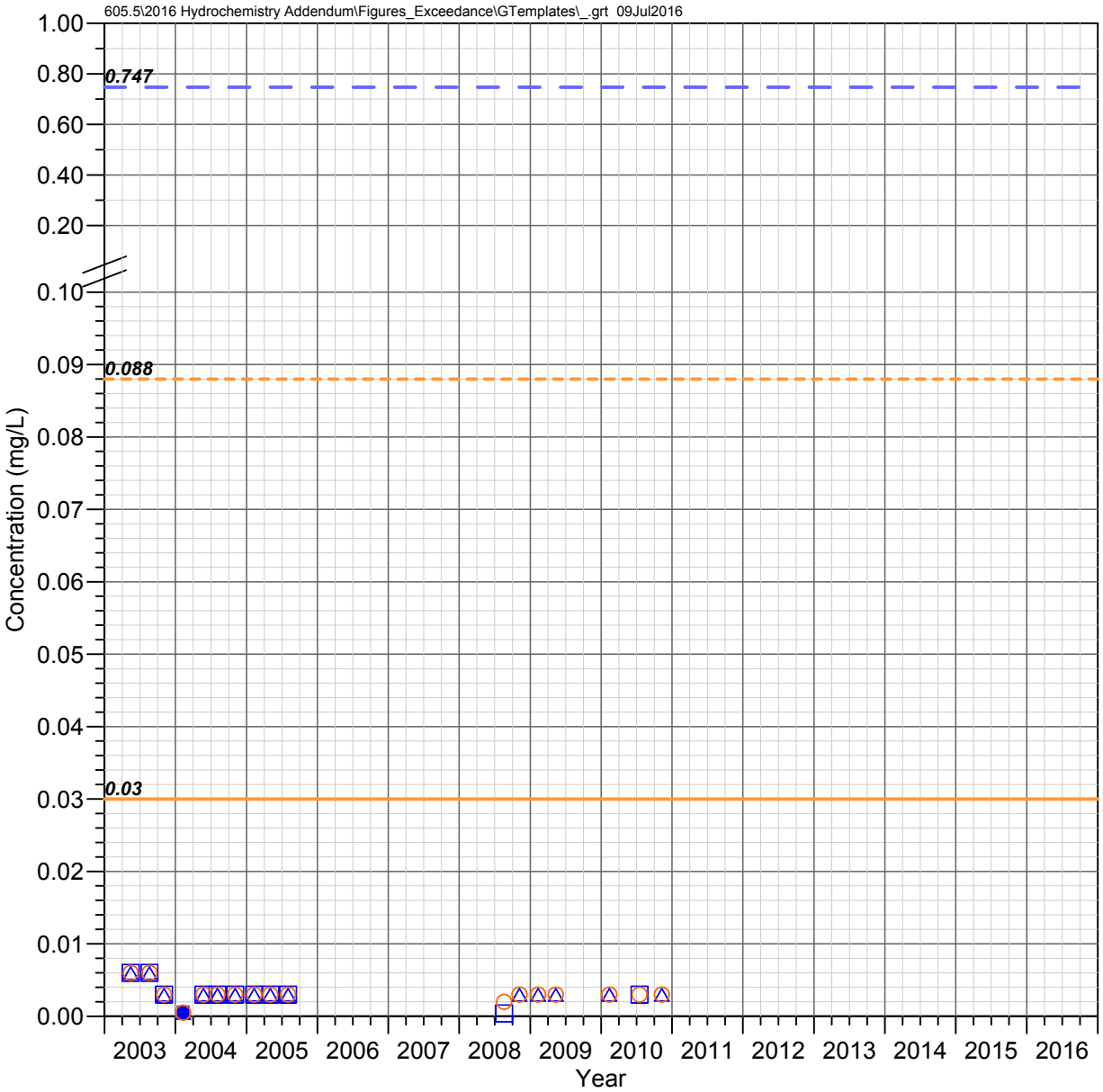


FIGURE F-009. ANTIMONY CONCENTRATIONS OBSERVED AT BORED SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Hidden Spring
Queen Creek Watershed

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Partial Body Contact (TRC, 0.747 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.088 mg/L)

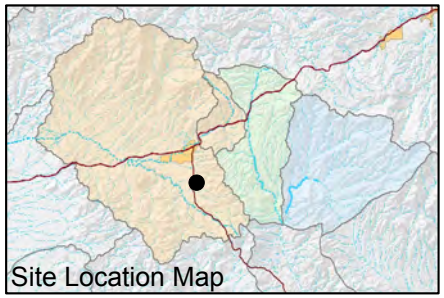
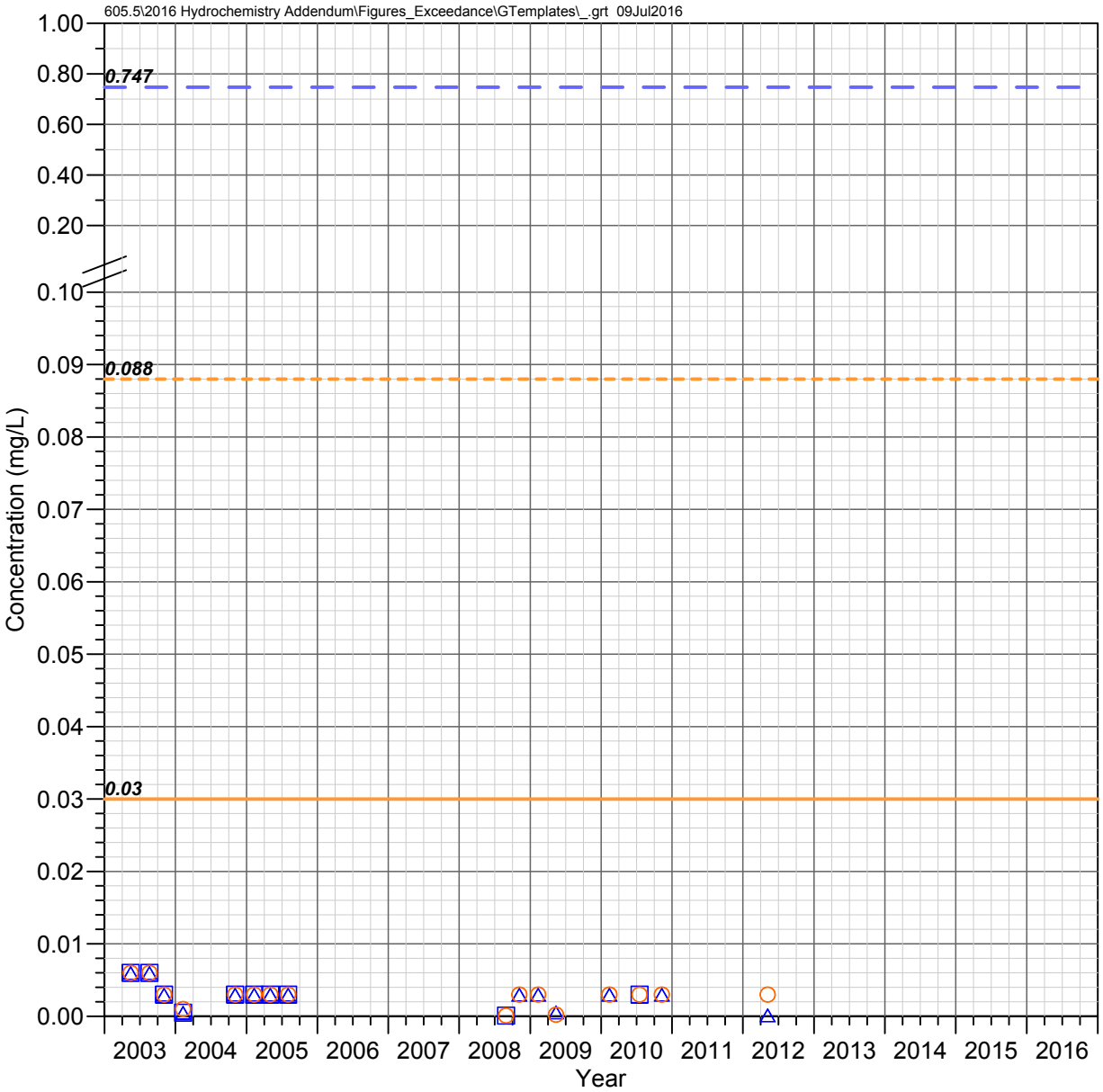


FIGURE F-010. ANTIMONY CONCENTRATIONS OBSERVED AT HIDDEN SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Kane Spring
Queen Creek Watershed

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Partial Body Contact (TRC, 0.747 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.088 mg/L)

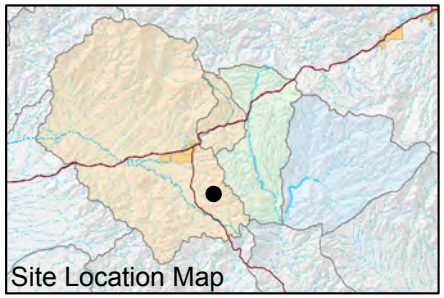
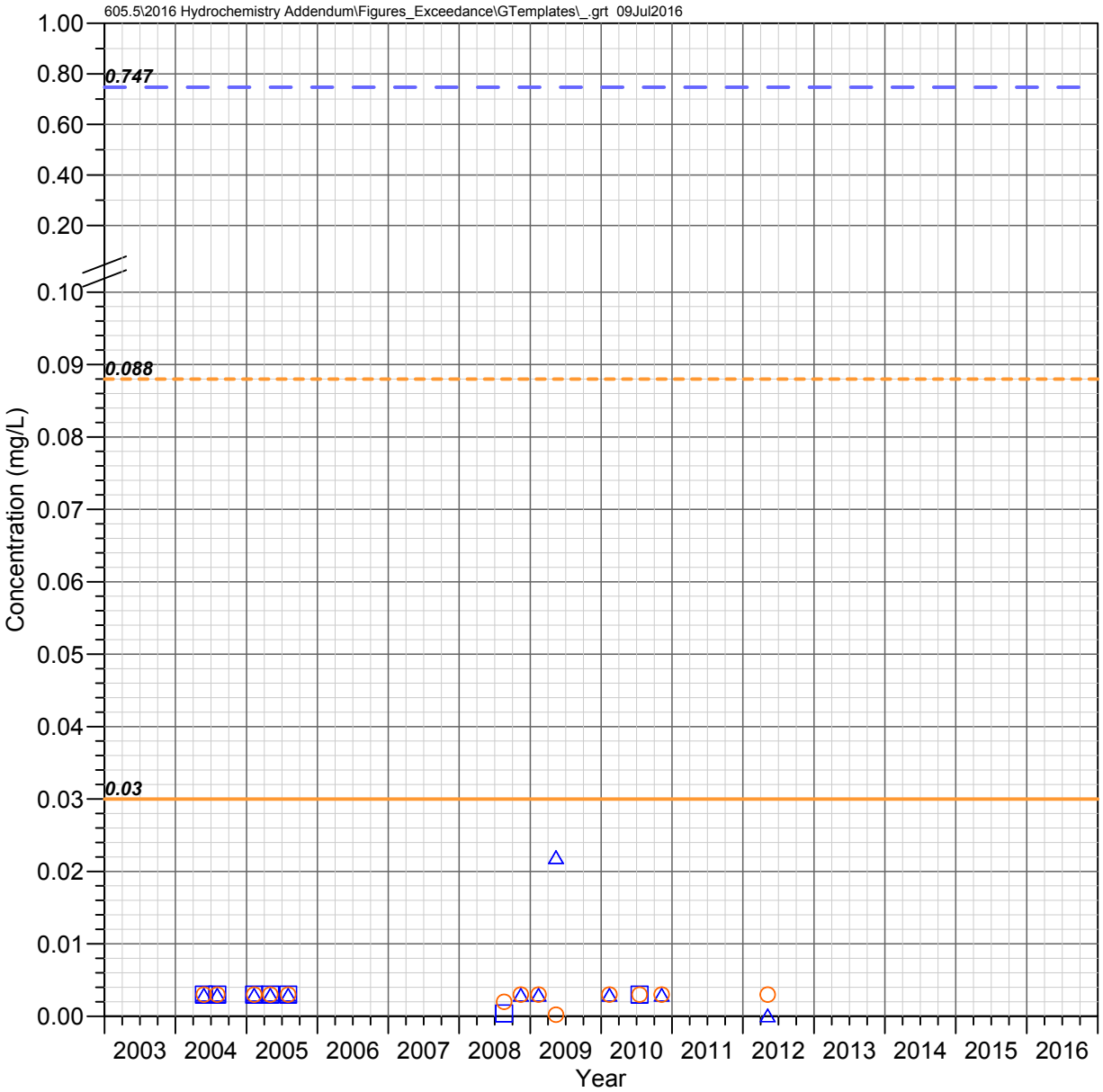


FIGURE F-011. ANTIMONY CONCENTRATIONS OBSERVED AT KANE SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Blue Spring
Queen Creek Watershed

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Partial Body Contact (TRC, 0.747 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.088 mg/L)

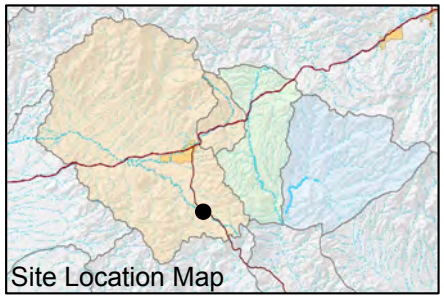
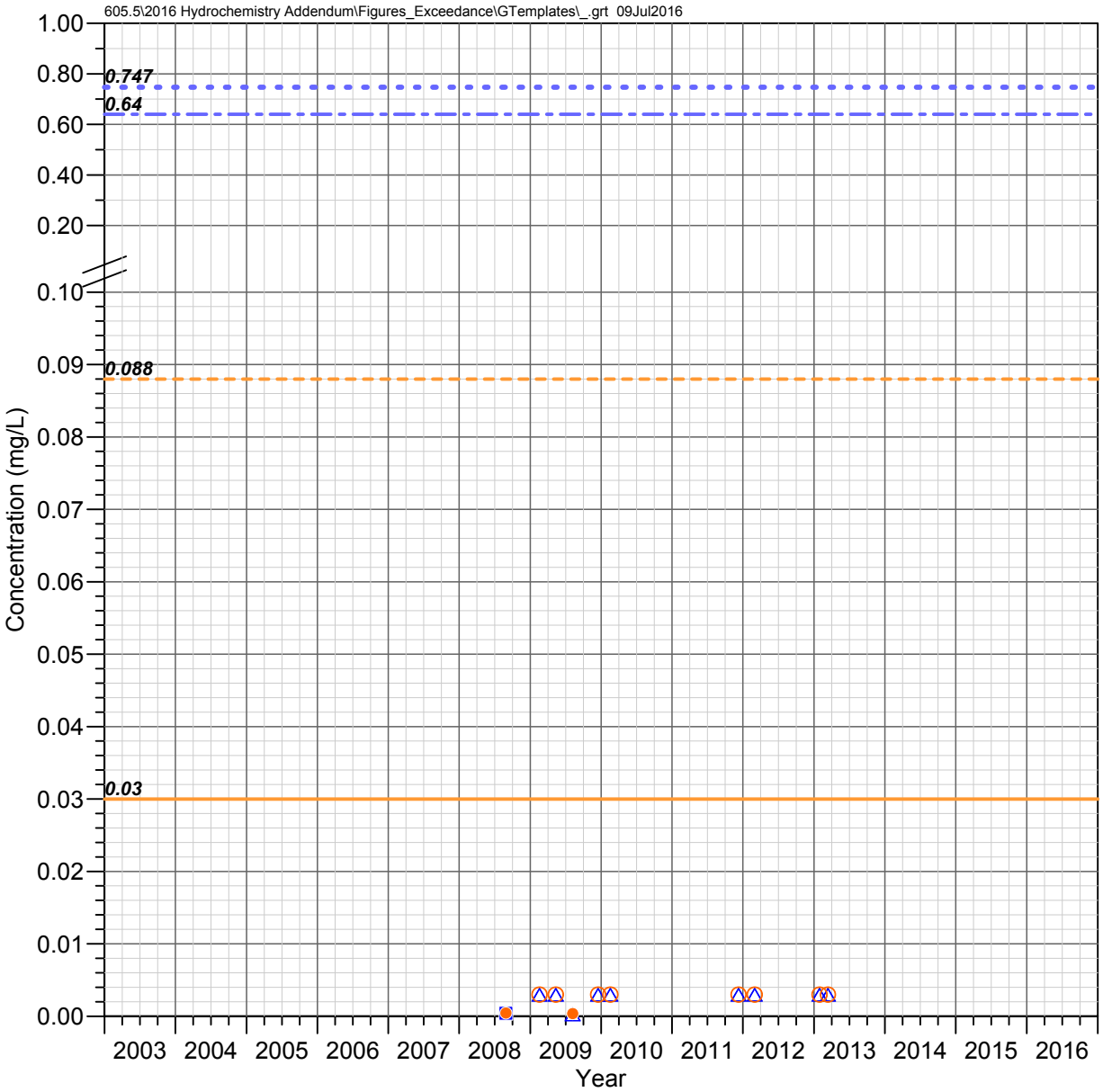


FIGURE F-012. ANTIMONY CONCENTRATIONS OBSERVED AT BLUE SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



IC 1.0 C
Devils Canyon Watershed

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.747 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.088 mg/L)
- AZ Fish Consumption (TRC, 0.64 mg/L)

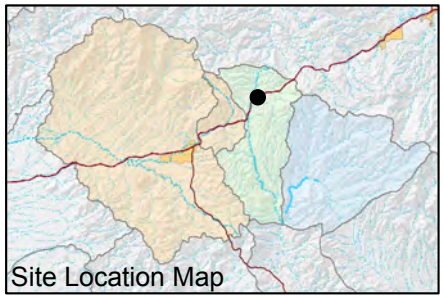
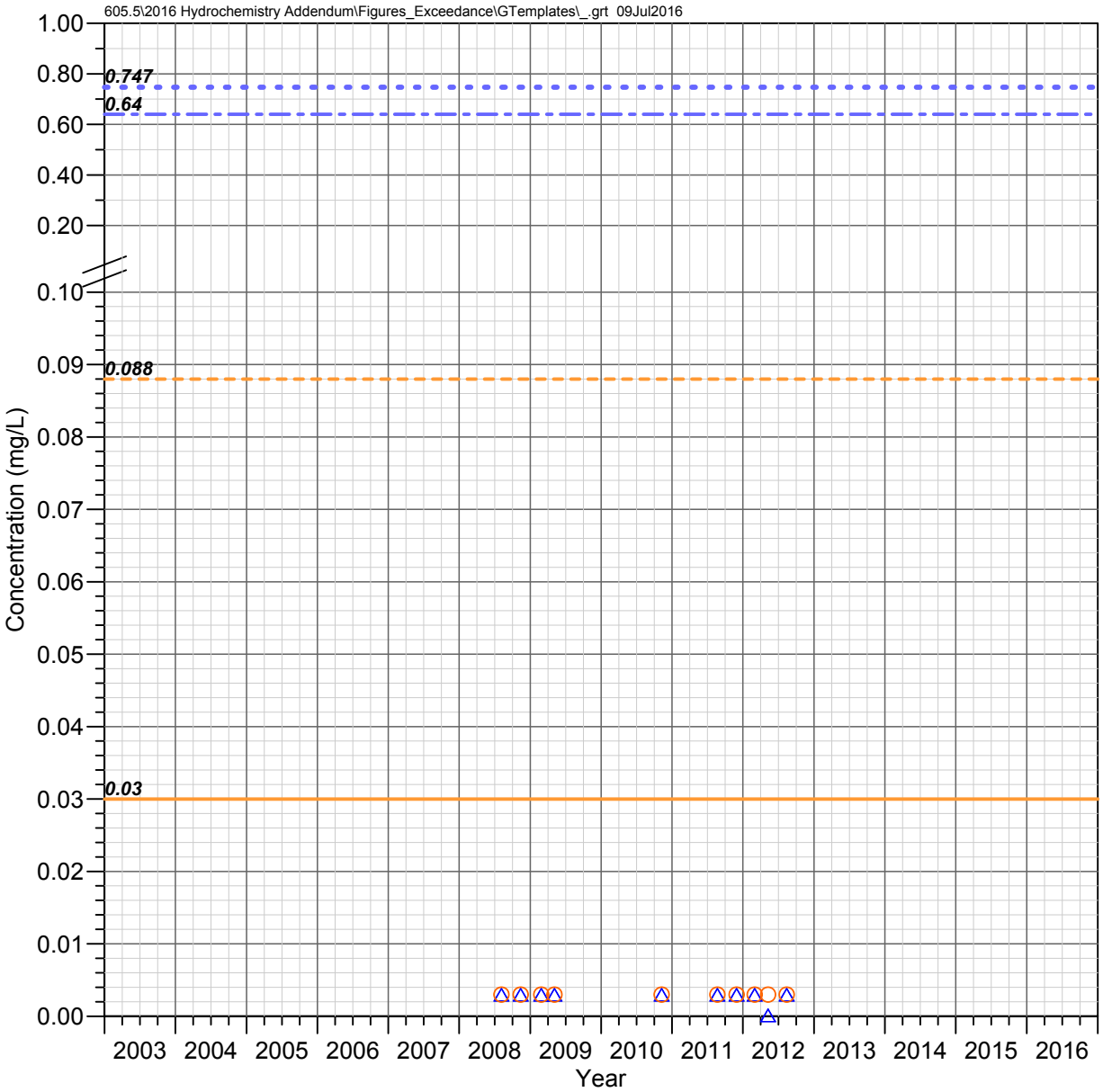


FIGURE F-013. ANTIMONY CONCENTRATIONS OBSERVED AT IC 1.0 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 15.5 C
Devils Canyon Watershed

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.747 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.088 mg/L)
- AZ Fish Consumption (TRC, 0.64 mg/L)

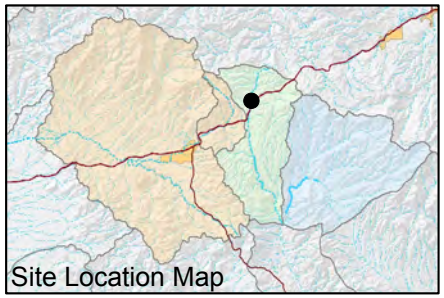
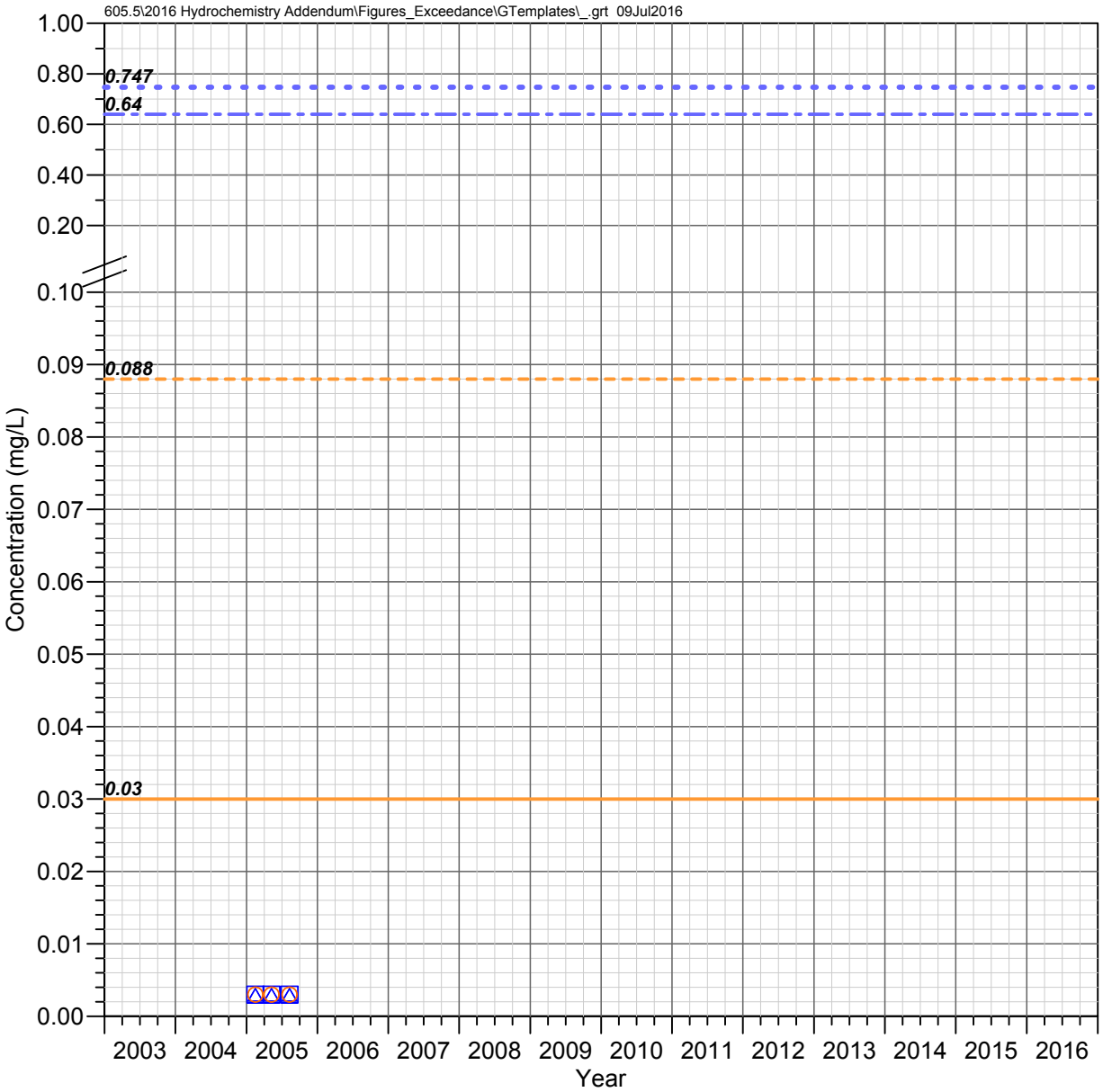


FIGURE F-014. ANTIMONY CONCENTRATIONS OBSERVED AT DC 15.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 15.2 C
Devils Canyon Watershed

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; DIS = Dissolved

- AZ Full Body Contact (TRC, 0.747 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.088 mg/L)
- AZ Fish Consumption (TRC, 0.64 mg/L)

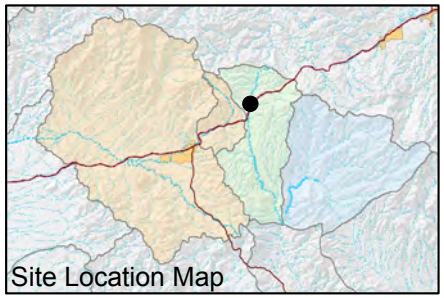
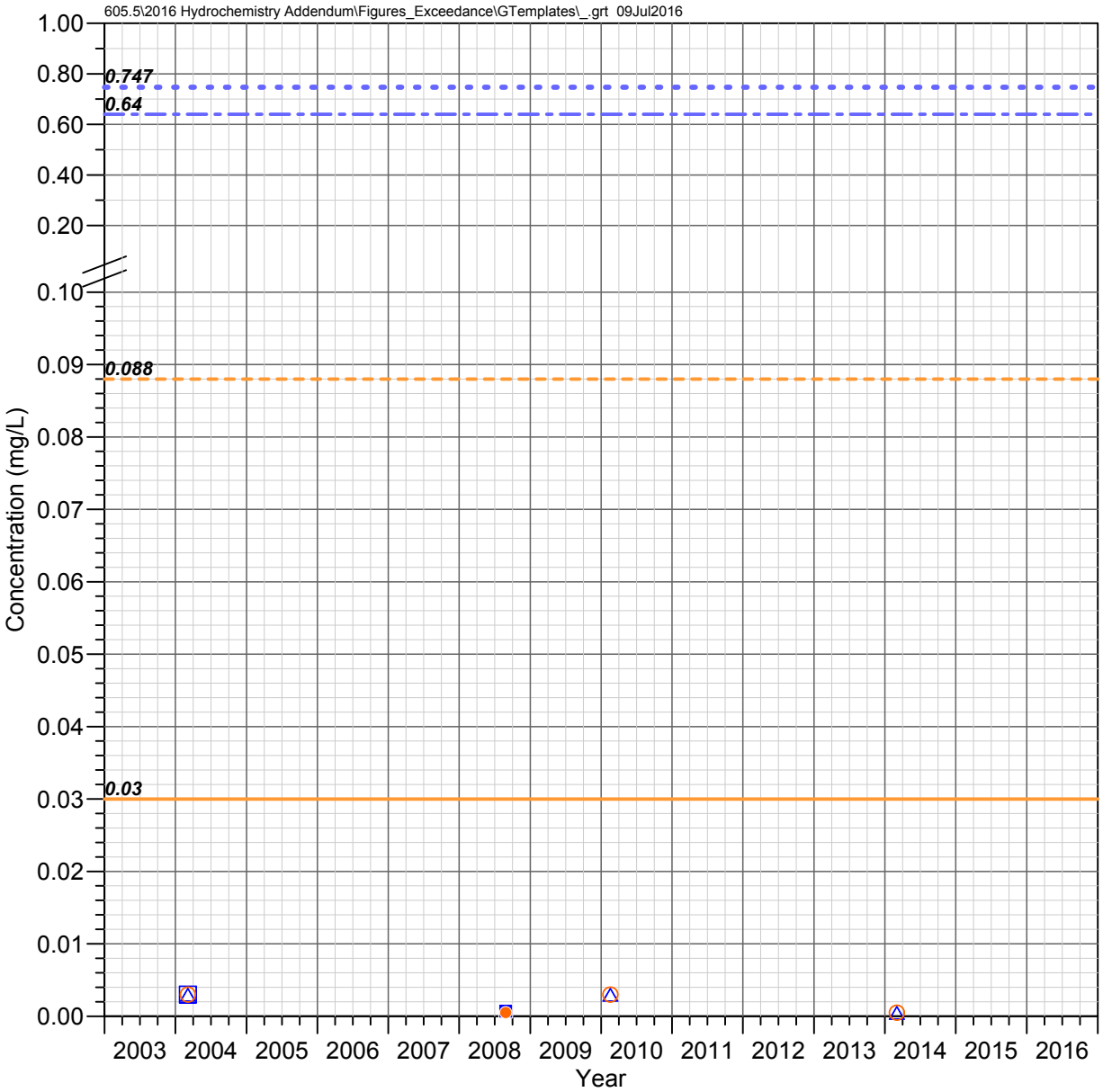


FIGURE F-015. ANTIMONY CONCENTRATIONS OBSERVED AT DC 15.2 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 14.7 C
Devils Canyon Watershed

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.747 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.088 mg/L)
- AZ Fish Consumption (TRC, 0.64 mg/L)

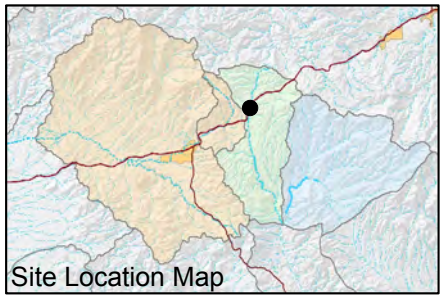
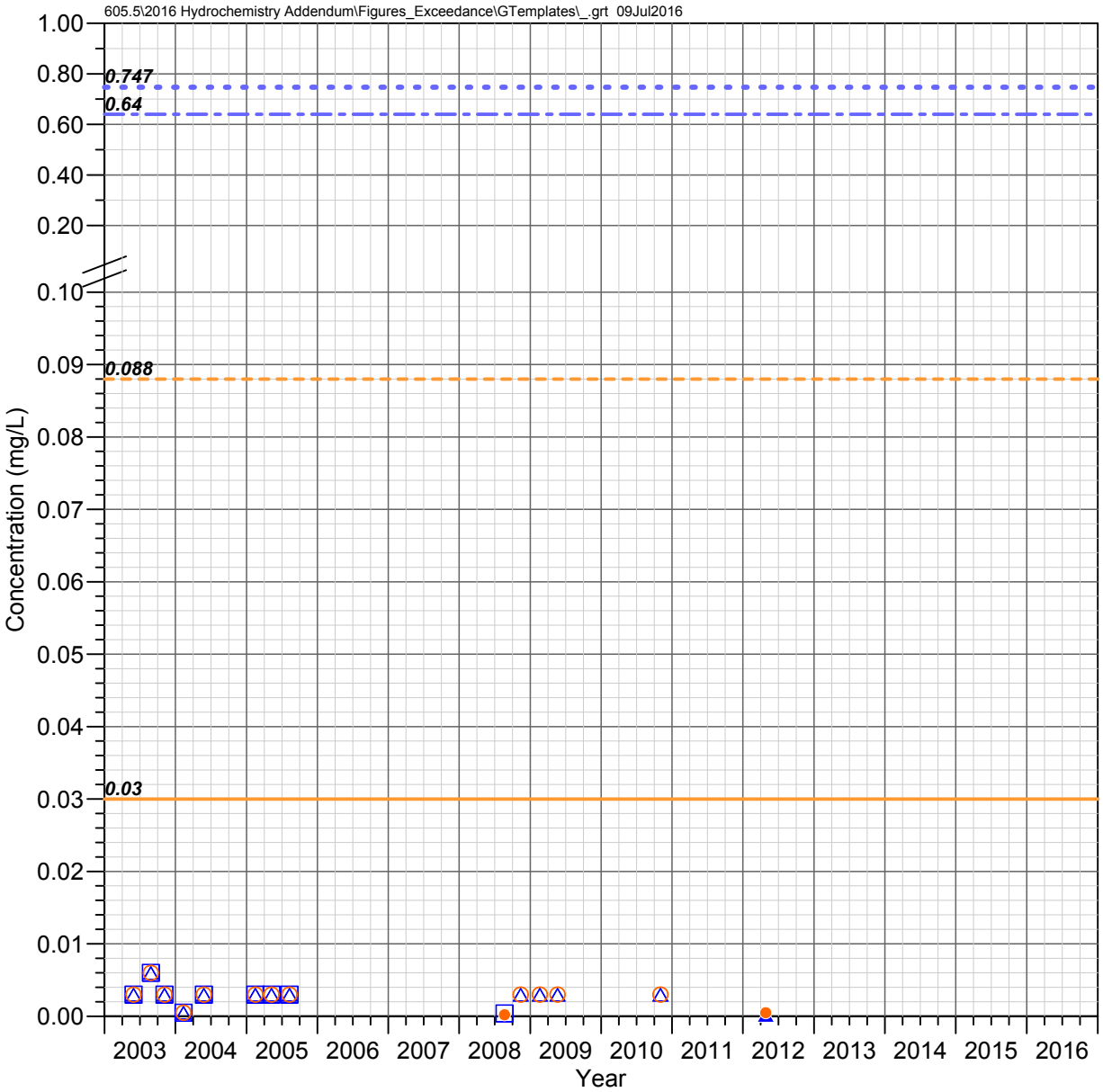


FIGURE F-016. ANTIMONY CONCENTRATIONS OBSERVED AT DC 14.7 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 13.5 C
Devils Canyon Watershed

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.747 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.088 mg/L)
- AZ Fish Consumption (TRC, 0.64 mg/L)

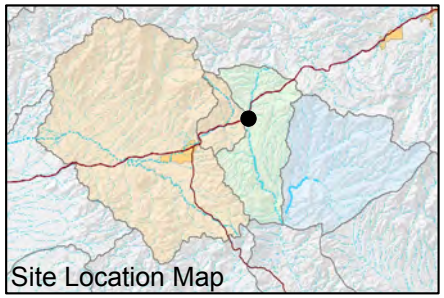
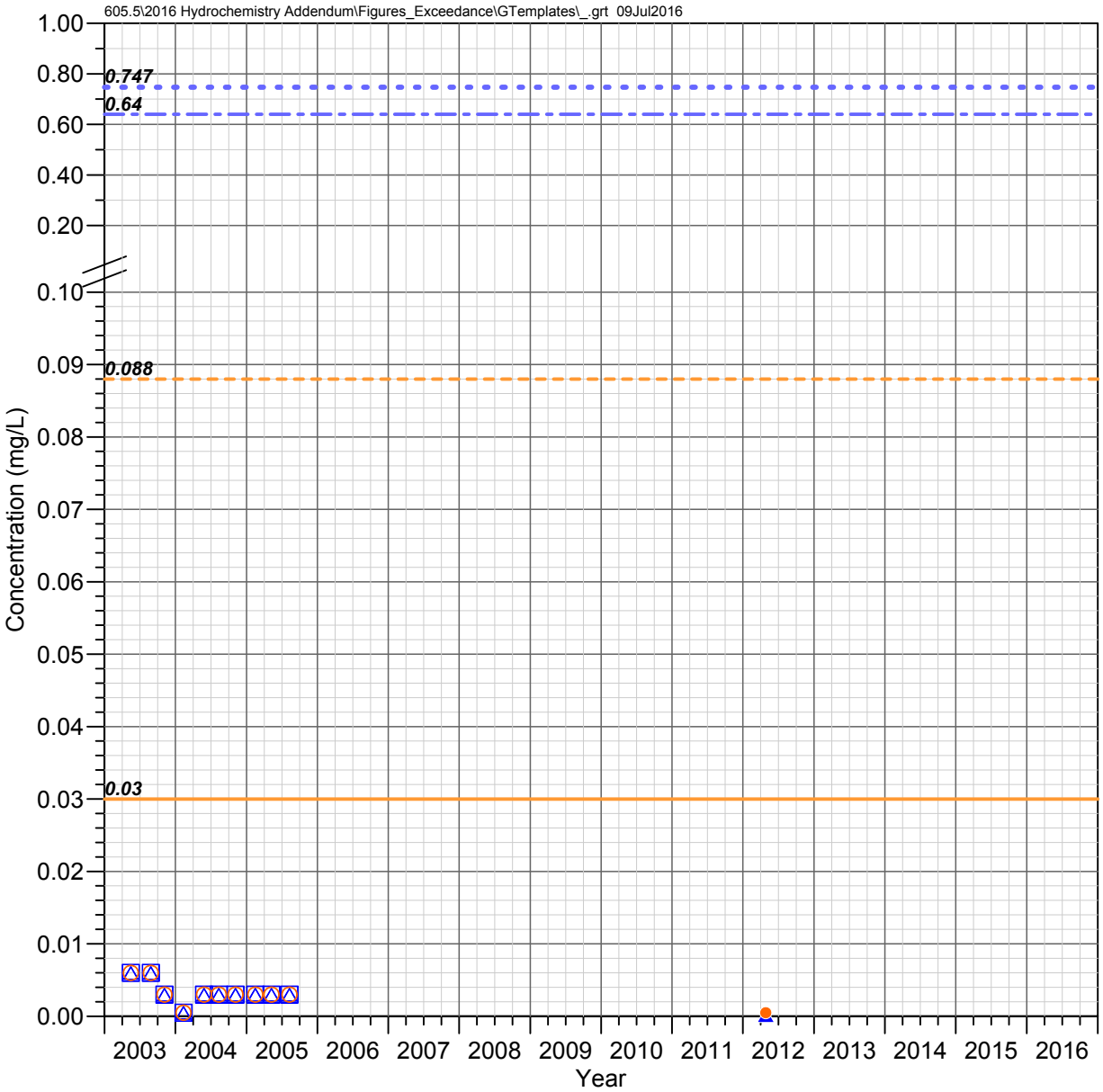


FIGURE F-017. ANTIMONY CONCENTRATIONS OBSERVED AT DC 13.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 10.9 C
Devils Canyon Watershed

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; DIS = Dissolved

- AZ Full Body Contact (TRC, 0.747 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.088 mg/L)
- AZ Fish Consumption (TRC, 0.64 mg/L)

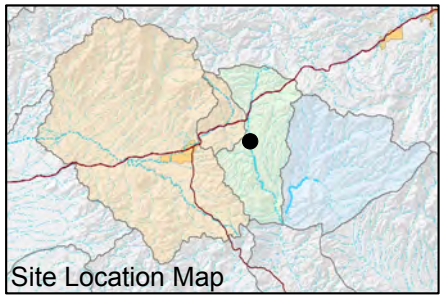
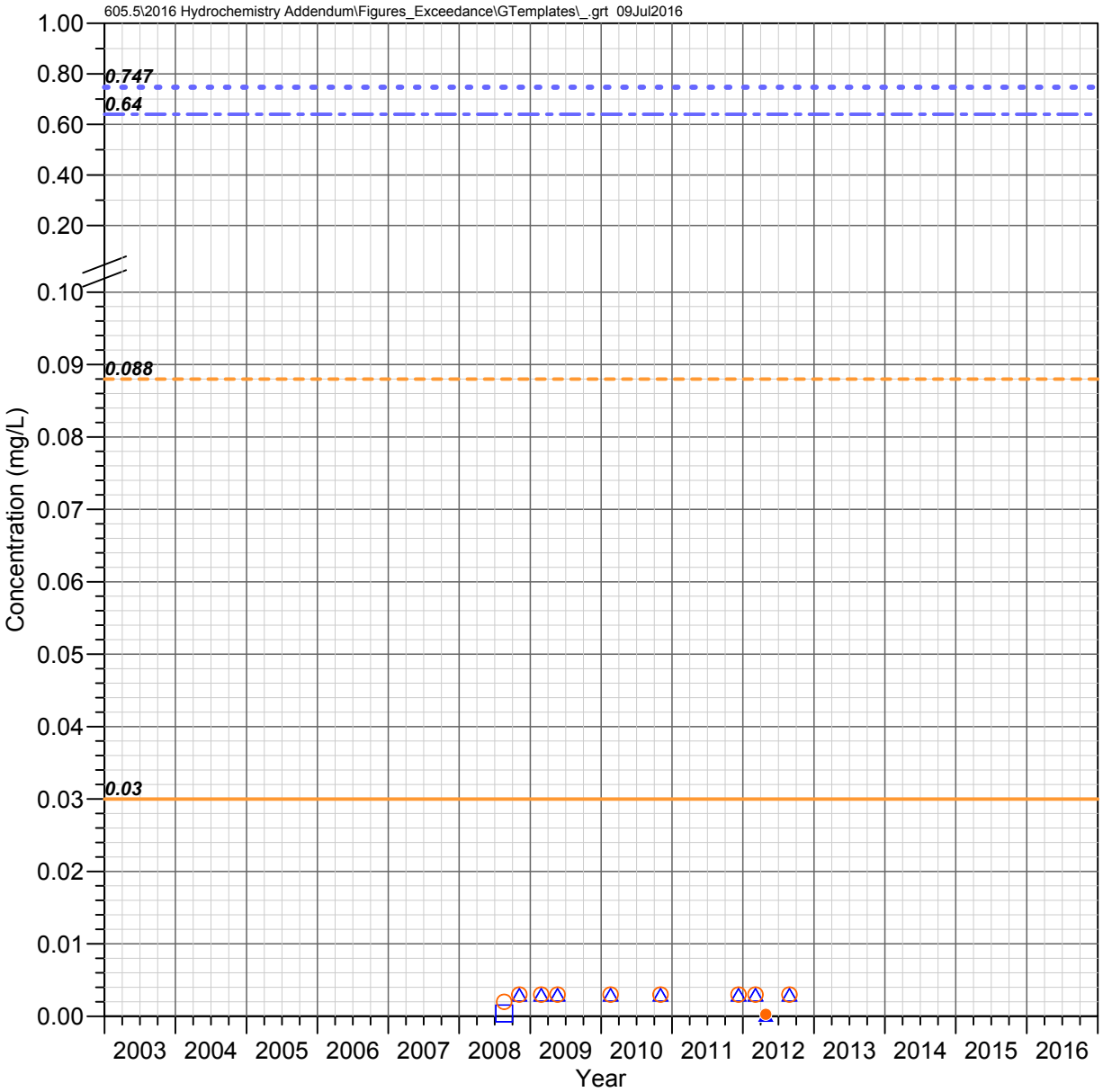


FIGURE F-018. ANTIMONY CONCENTRATIONS OBSERVED AT DC 10.9 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



RR 1.5 C
Devils Canyon Watershed

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; DIS = Dissolved

- AZ Full Body Contact (TRC, 0.747 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.088 mg/L)
- AZ Fish Consumption (TRC, 0.64 mg/L)

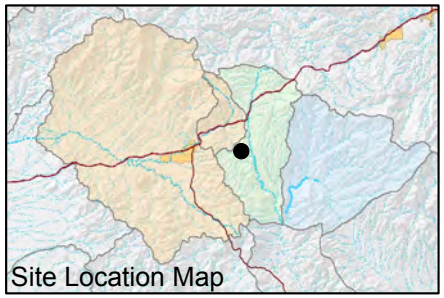
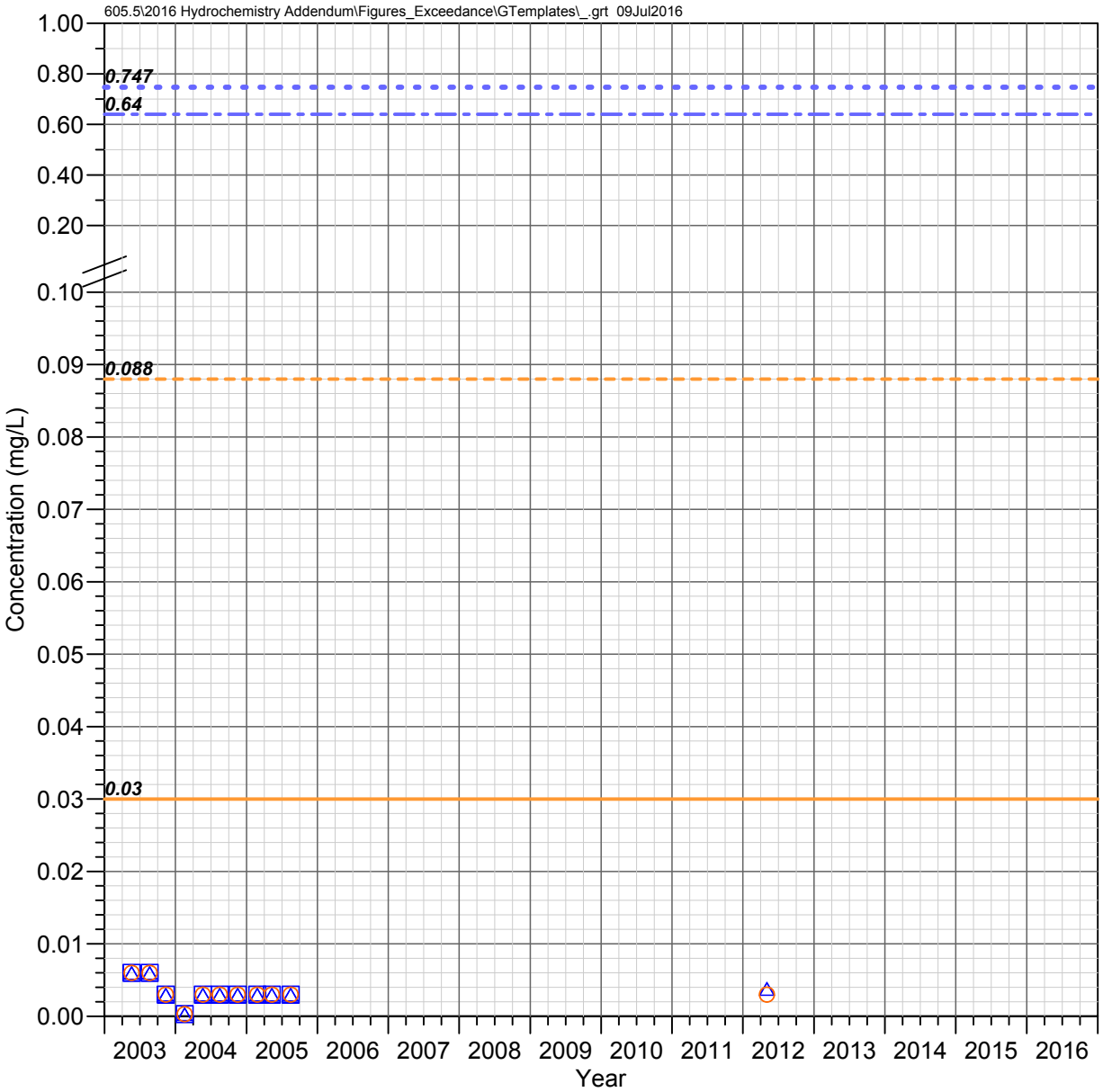


FIGURE F-019. ANTIMONY CONCENTRATIONS OBSERVED AT RR 1.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.8 C
Devils Canyon Watershed

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; DIS = Dissolved

- AZ Full Body Contact (TRC, 0.747 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.088 mg/L)
- AZ Fish Consumption (TRC, 0.64 mg/L)

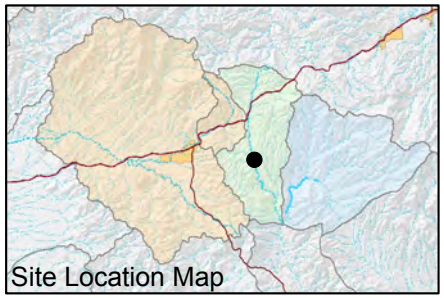
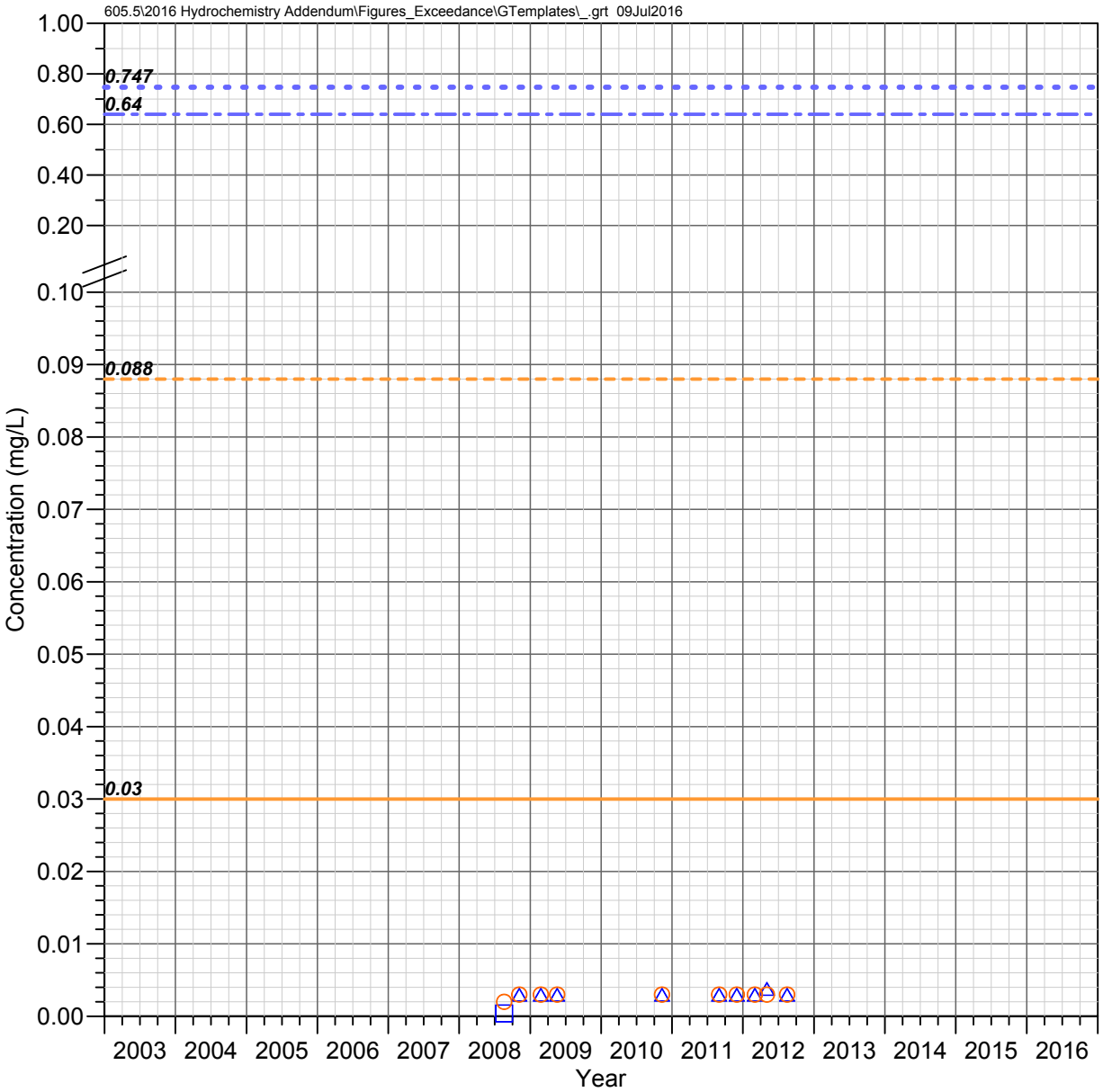


FIGURE F-020. ANTIMONY CONCENTRATIONS OBSERVED AT DC 8.8 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



H 0.1 C
Devils Canyon Watershed

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; DIS = Dissolved

- AZ Full Body Contact (TRC, 0.747 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.088 mg/L)
- AZ Fish Consumption (TRC, 0.64 mg/L)

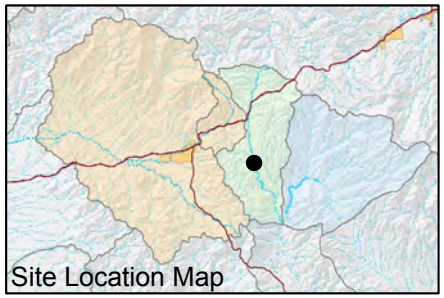
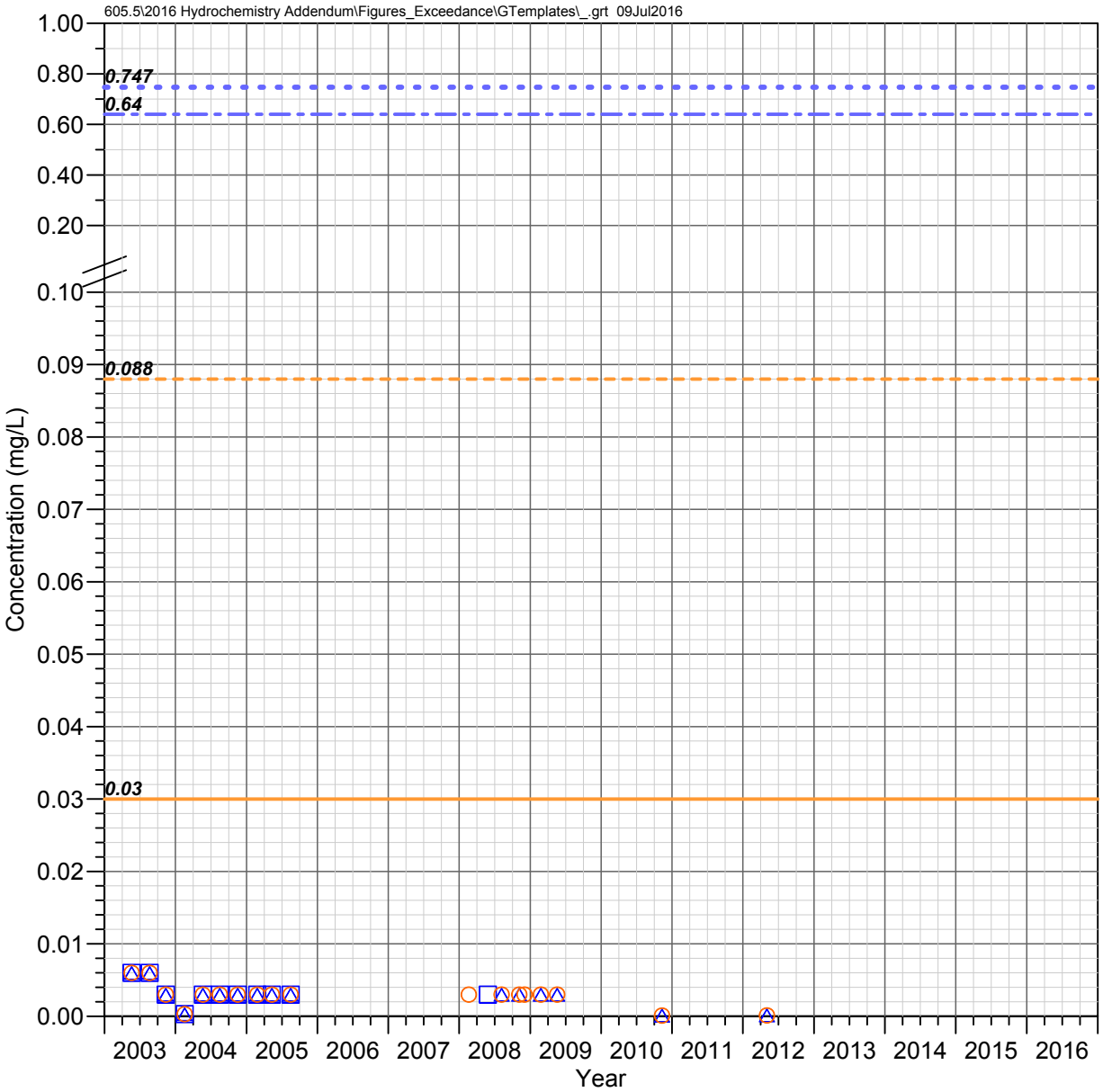


FIGURE F-021. ANTIMONY CONCENTRATIONS OBSERVED AT H 0.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.2 W
Devils Canyon Watershed

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.747 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.088 mg/L)
- AZ Fish Consumption (TRC, 0.64 mg/L)

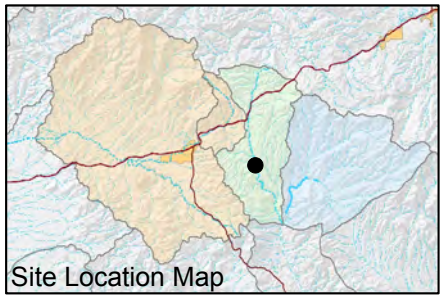
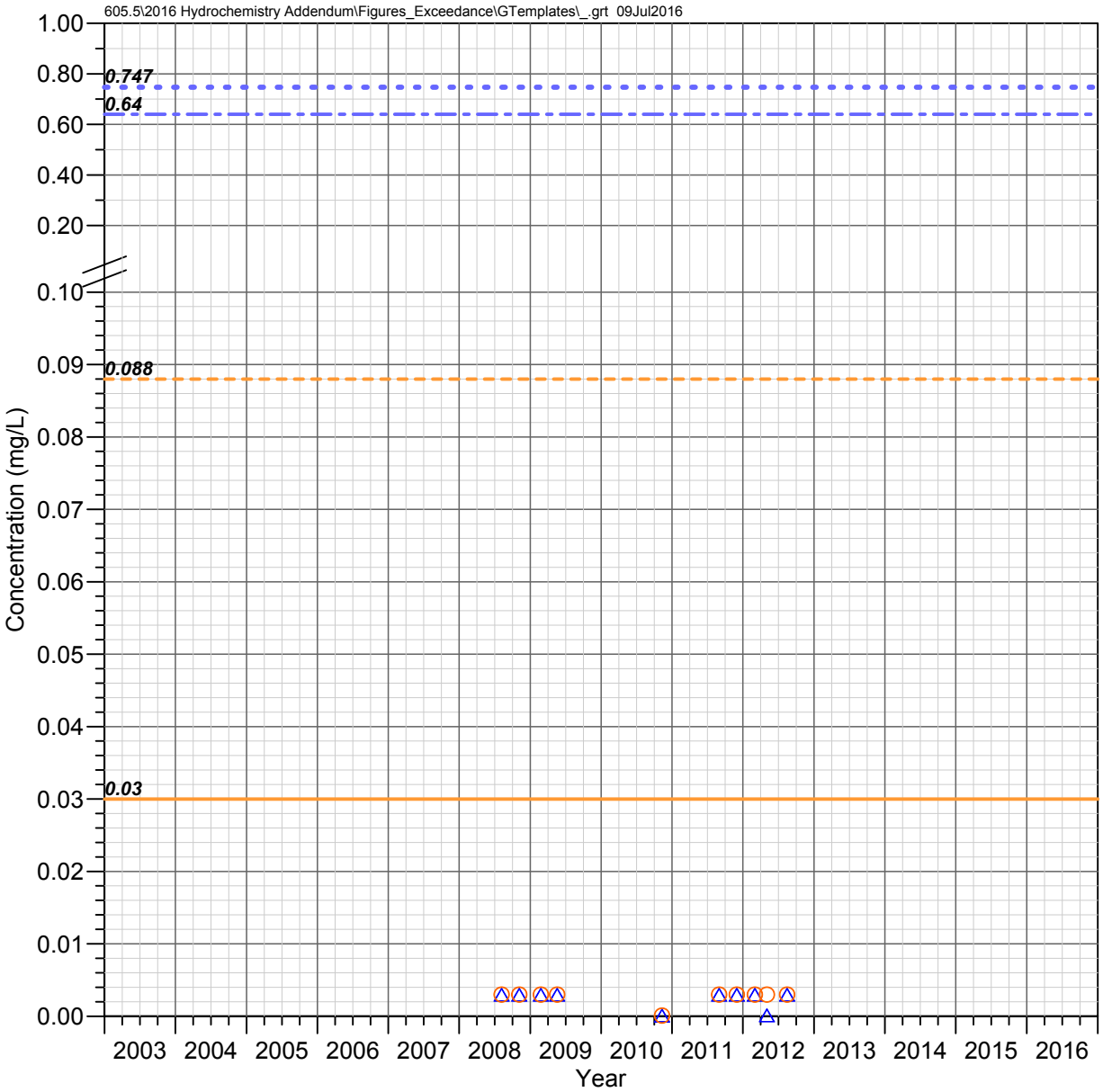


FIGURE F-022. ANTIMONY CONCENTRATIONS OBSERVED AT DC 8.2 W, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.1 C
Devils Canyon Watershed

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; DIS = Dissolved

- AZ Full Body Contact (TRC, 0.747 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.088 mg/L)
- AZ Fish Consumption (TRC, 0.64 mg/L)

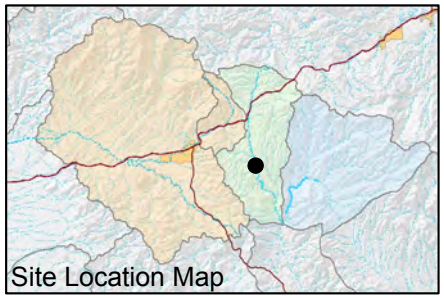
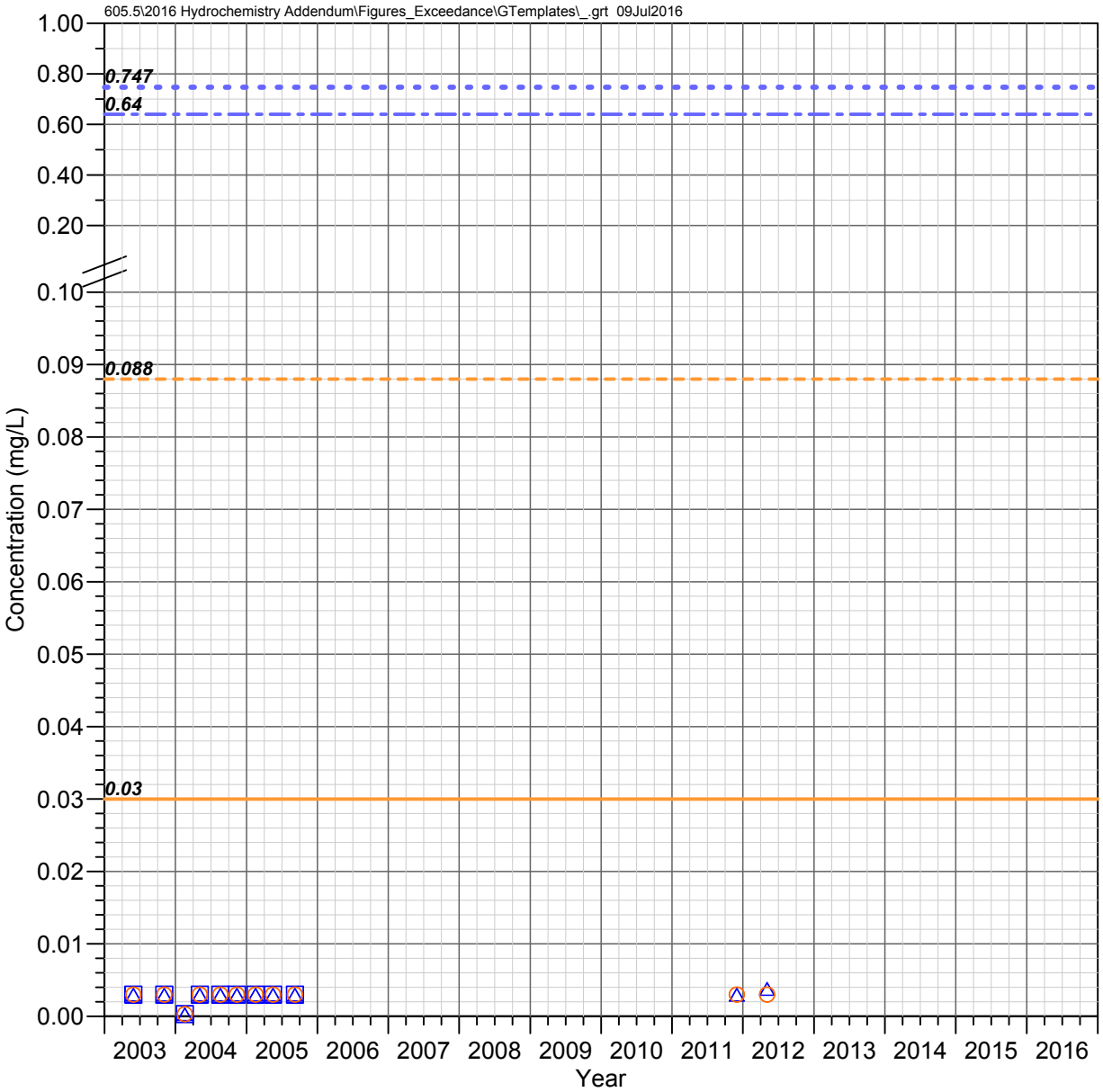


FIGURE F-023. ANTIMONY CONCENTRATIONS OBSERVED AT DC 8.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 7.1 C
Devils Canyon Watershed

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; DIS = Dissolved

- AZ Full Body Contact (TRC, 0.747 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.088 mg/L)
- AZ Fish Consumption (TRC, 0.64 mg/L)

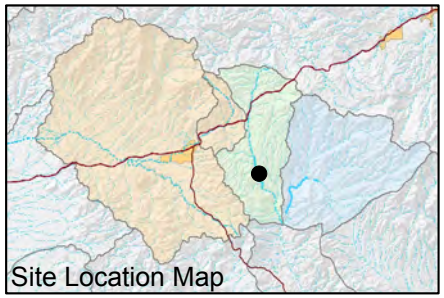
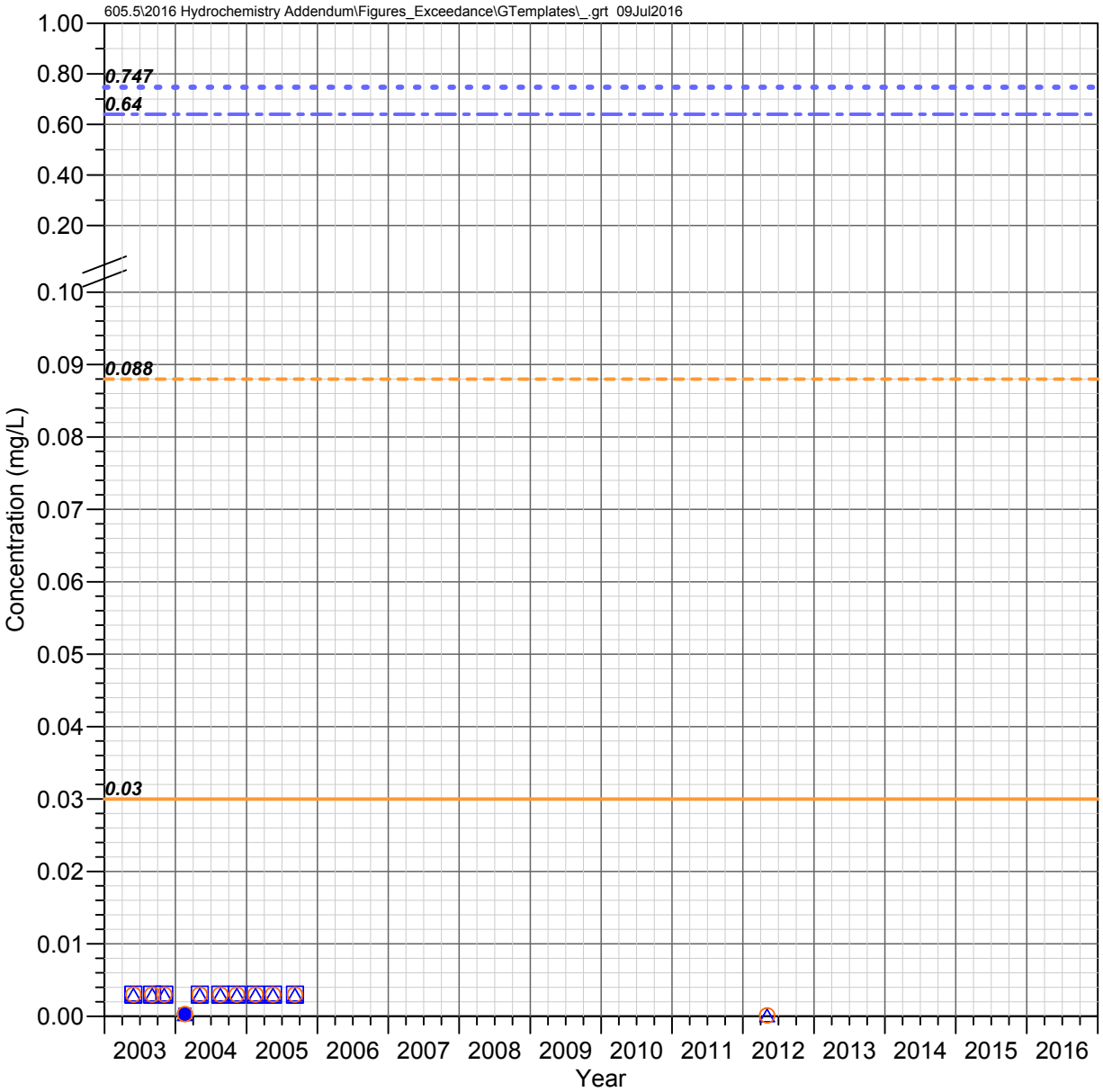


FIGURE F-024. ANTIMONY CONCENTRATIONS OBSERVED AT DC 7.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.6 W (DCT 6.6 W)
Devils Canyon Watershed

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; DIS = Dissolved

- AZ Full Body Contact (TRC, 0.747 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.088 mg/L)
- AZ Fish Consumption (TRC, 0.64 mg/L)

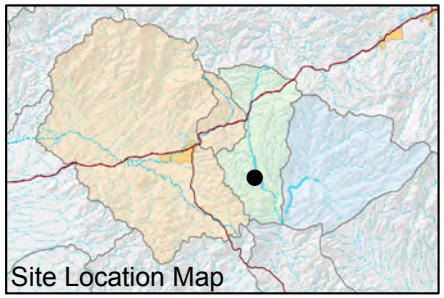
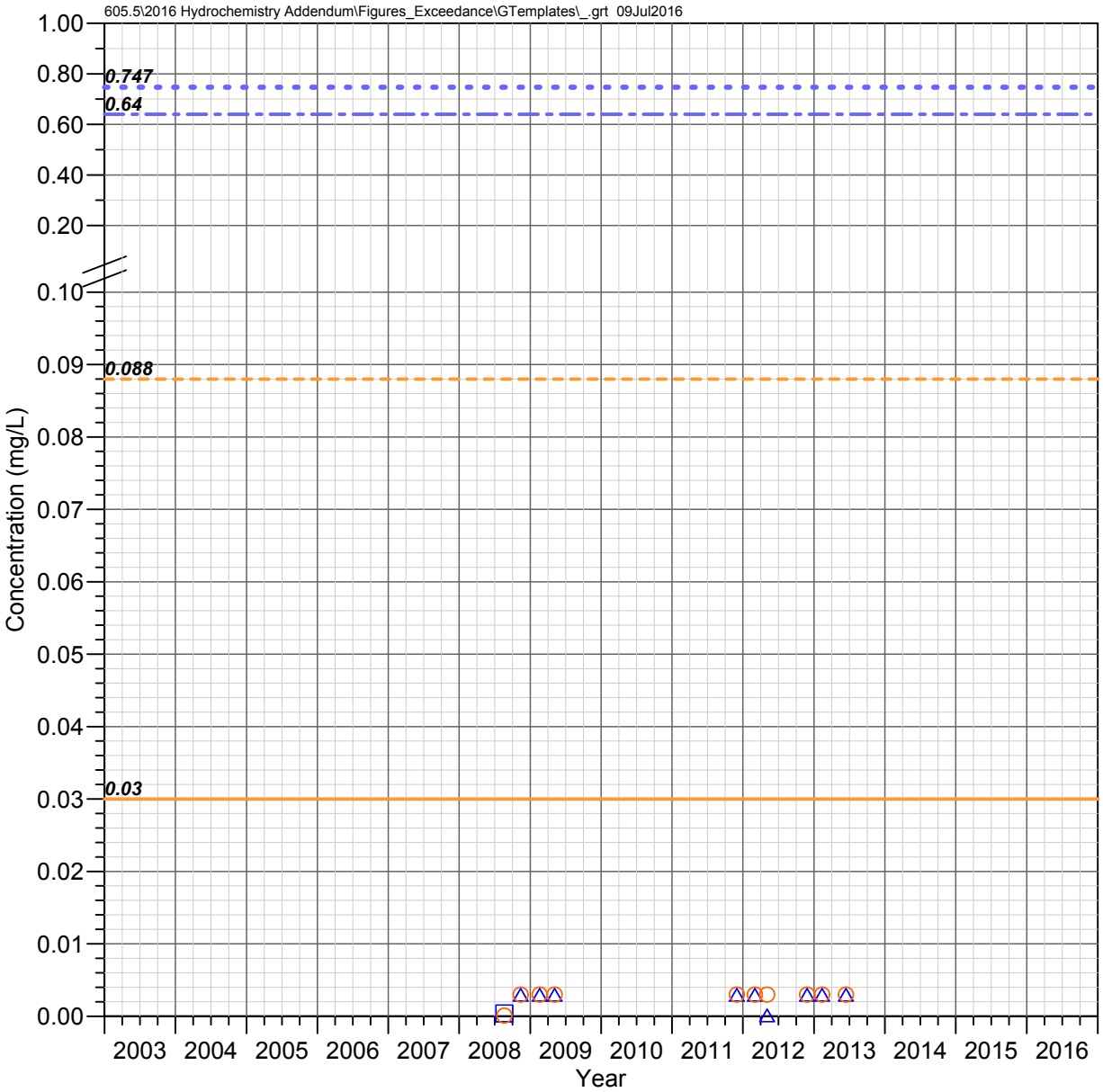


FIGURE F-025. ANTIMONY CONCENTRATIONS OBSERVED AT DC 6.6 W (DCT 6.6 W), DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.14 C
Devils Canyon Watershed

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.747 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.088 mg/L)
- AZ Fish Consumption (TRC, 0.64 mg/L)

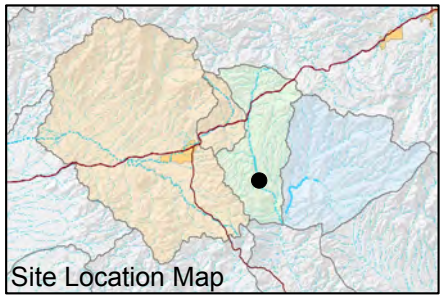
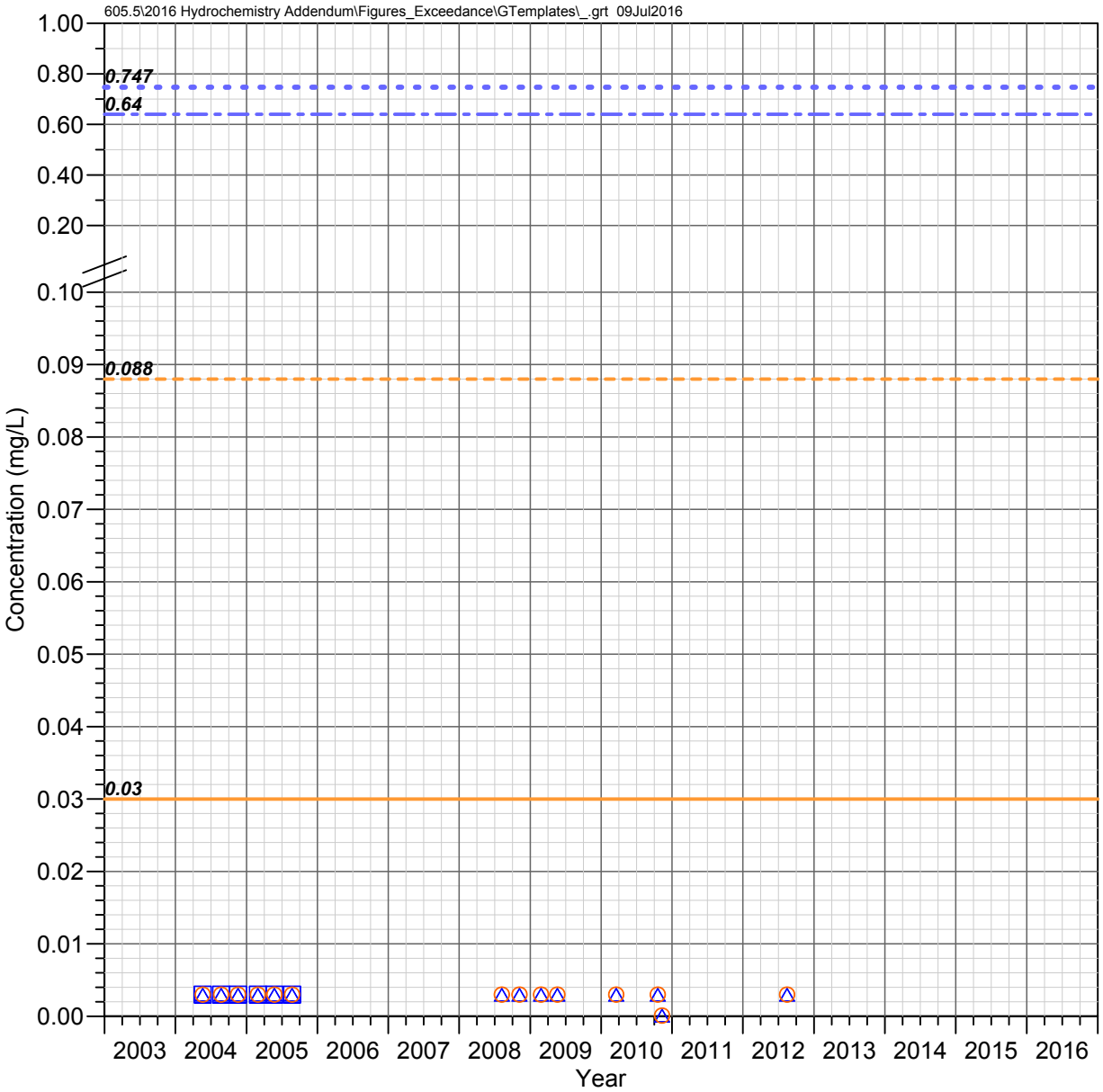


FIGURE F-026. ANTIMONY CONCENTRATIONS OBSERVED AT DC 6.14 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.1 E
Devils Canyon Watershed

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; DIS = Dissolved

- AZ Full Body Contact (TRC, 0.747 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.088 mg/L)
- AZ Fish Consumption (TRC, 0.64 mg/L)

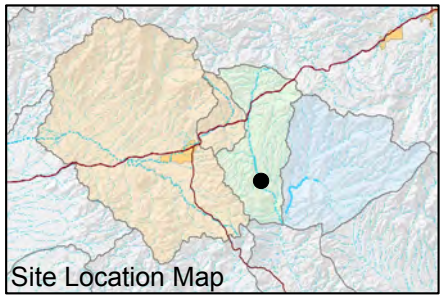
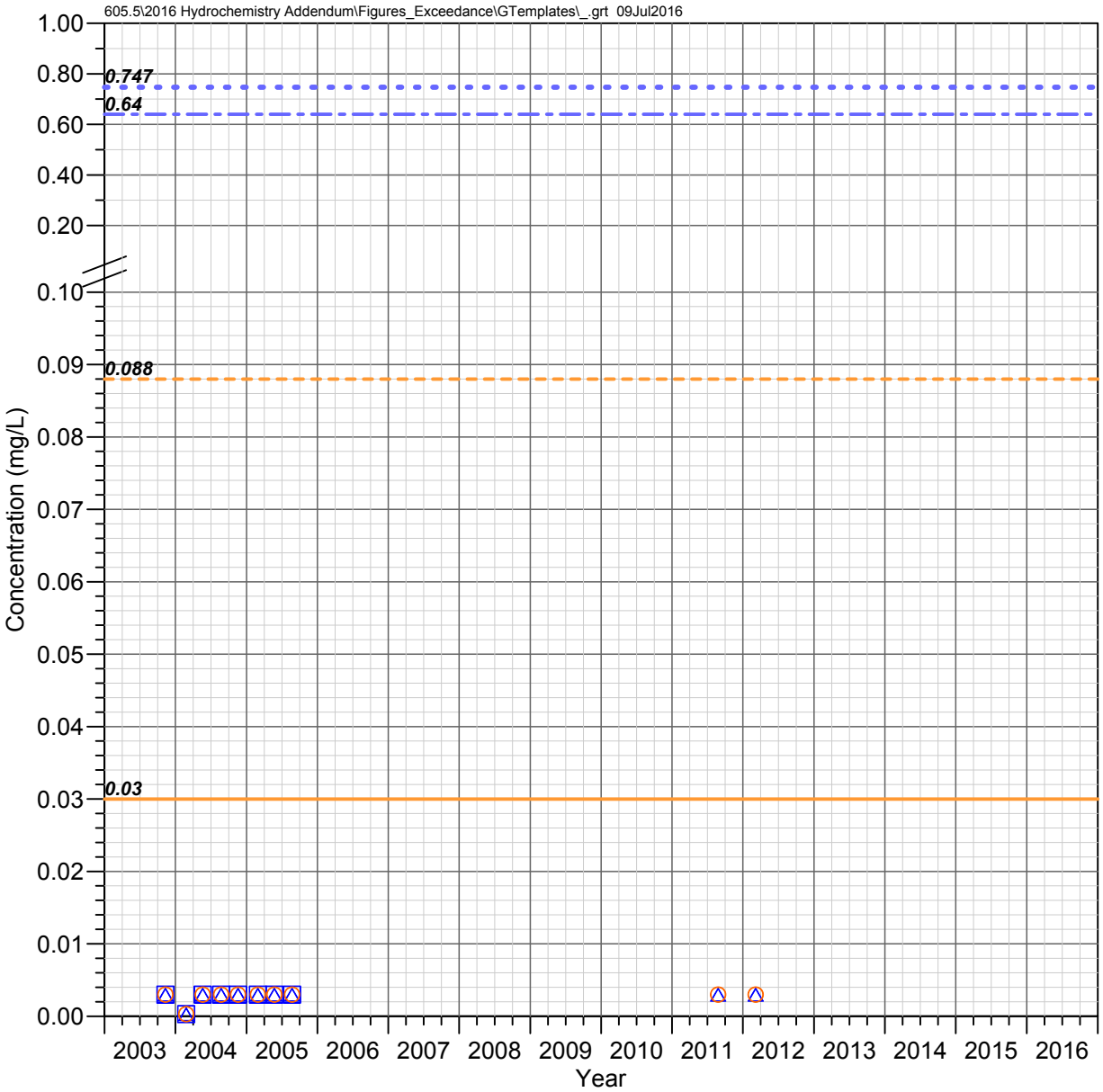


FIGURE F-027. ANTIMONY CONCENTRATIONS OBSERVED AT DC 6.1 E, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 5.5 C
Devils Canyon Watershed

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; DIS = Dissolved

- AZ Full Body Contact (TRC, 0.747 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.088 mg/L)
- AZ Fish Consumption (TRC, 0.64 mg/L)

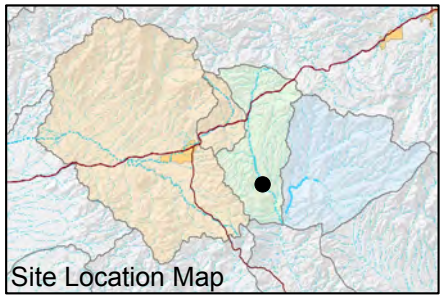
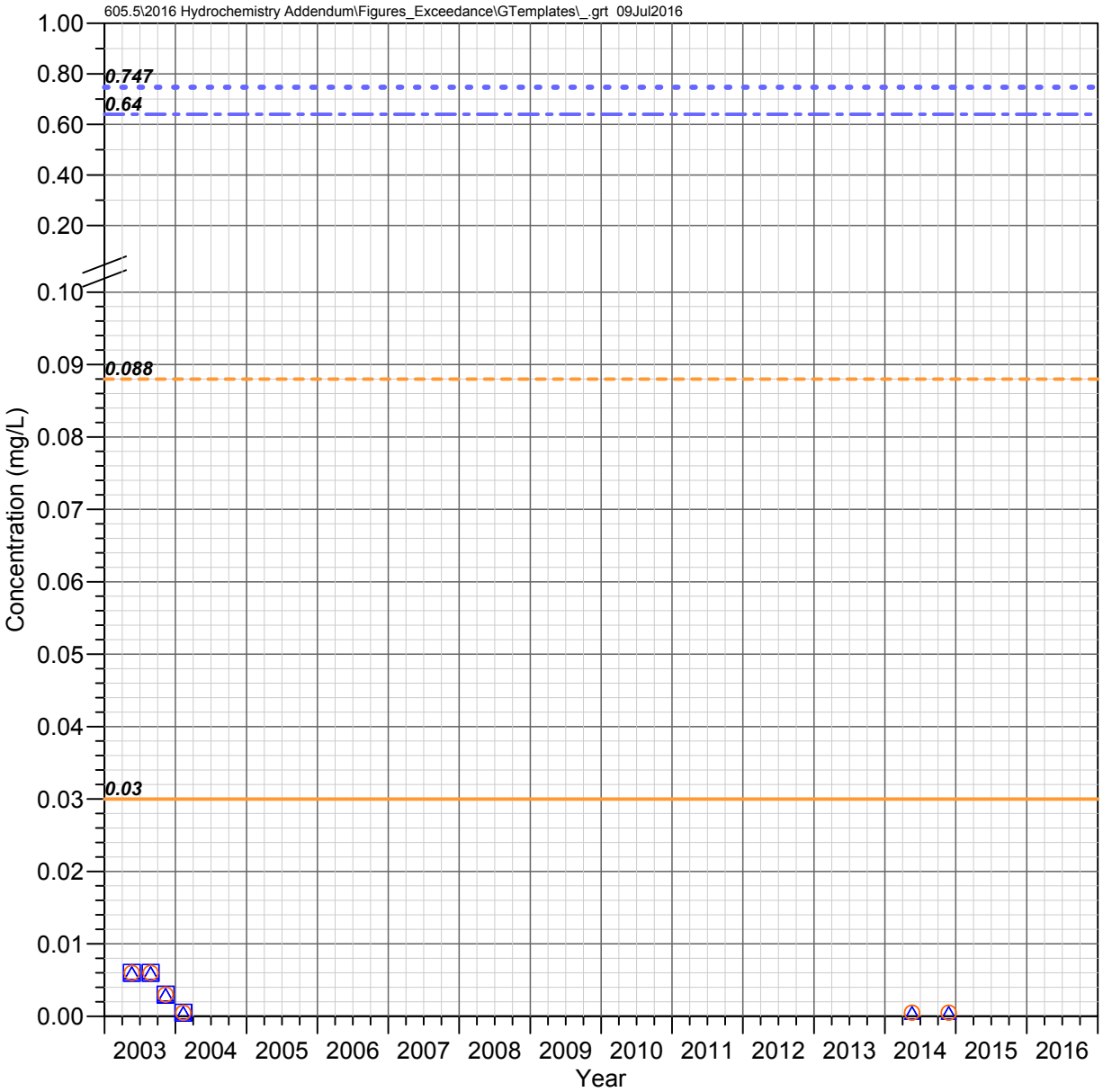


FIGURE F-028. ANTIMONY CONCENTRATIONS OBSERVED AT DC 5.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 4.1 E
Devils Canyon Watershed

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; DIS = Dissolved

- AZ Full Body Contact (TRC, 0.747 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.088 mg/L)
- AZ Fish Consumption (TRC, 0.64 mg/L)

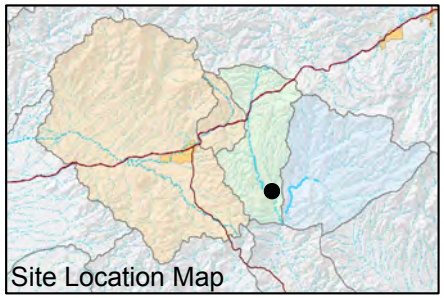
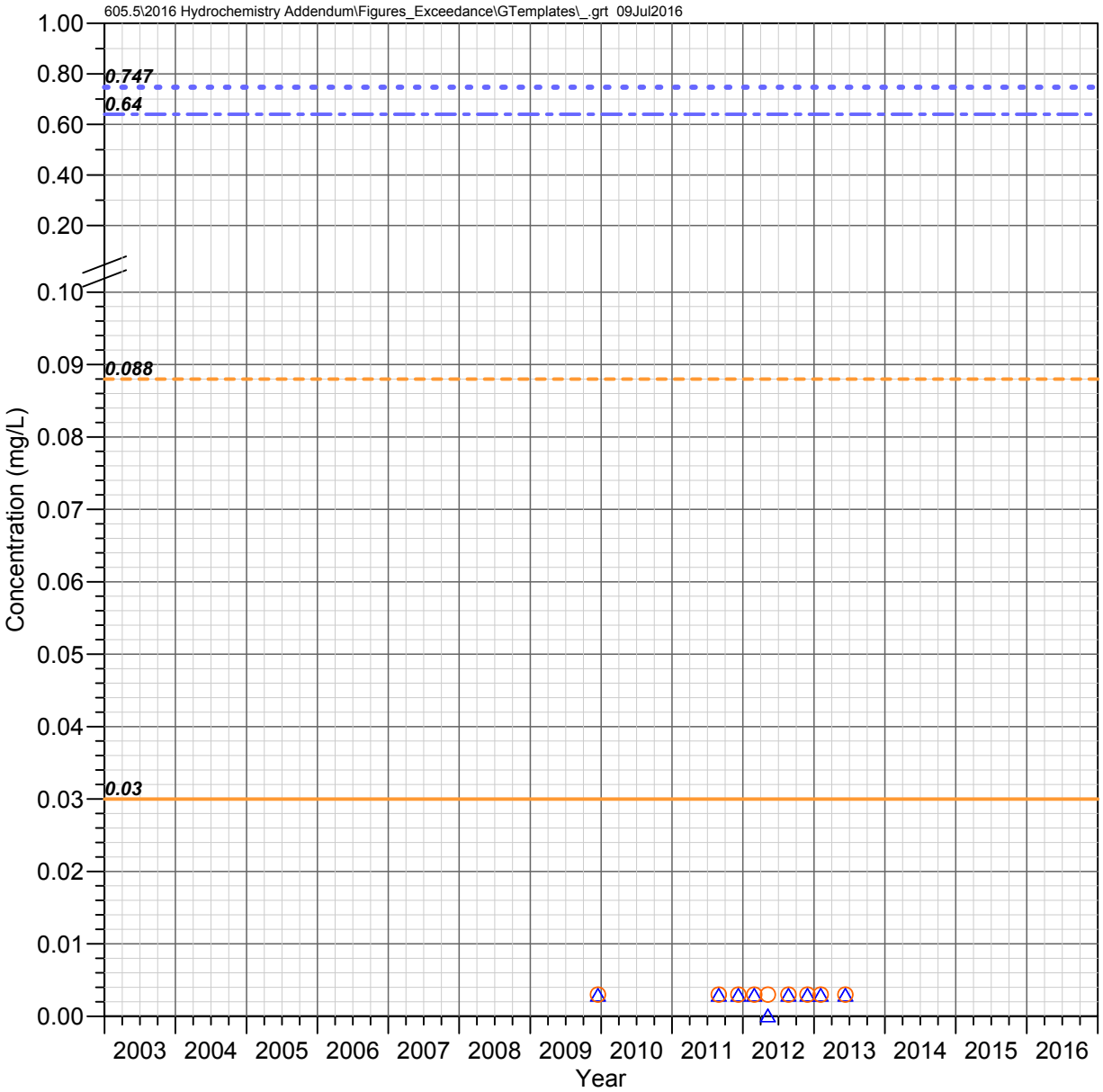


FIGURE F-029. ANTIMONY CONCENTRATIONS OBSERVED AT DC 4.1 E, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Government Springs Mineral Creek Watershed

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; DIS = Dissolved

- AZ Full Body Contact (TRC, 0.747 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.088 mg/L)
- AZ Fish Consumption (TRC, 0.64 mg/L)

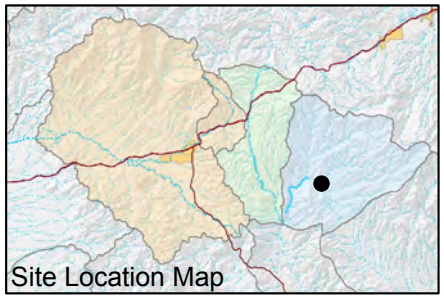
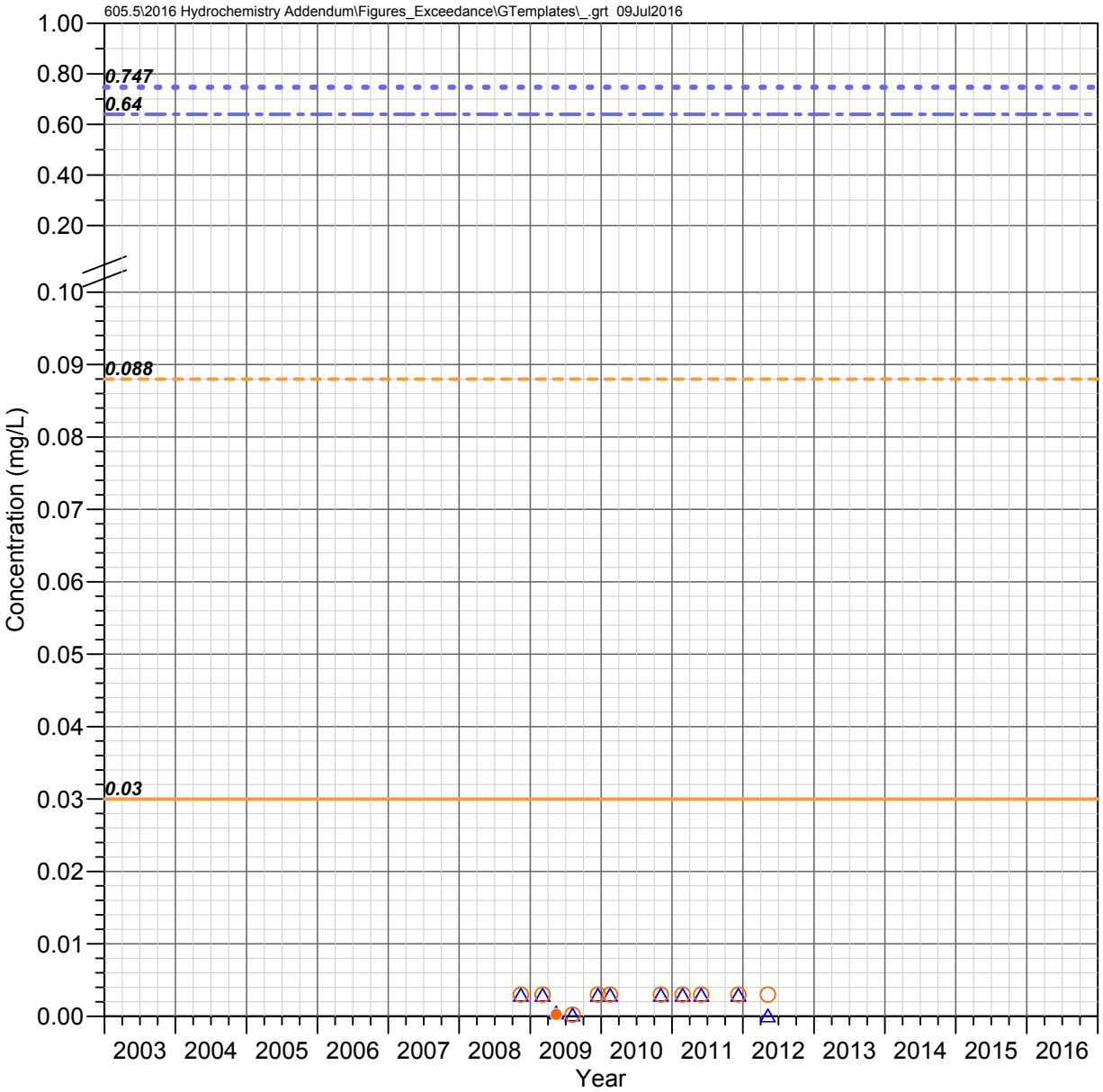


FIGURE F-030. ANTIMONY CONCENTRATIONS OBSERVED AT GOVERNMENT SPRINGS, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 8.4 C
Mineral Creek Watershed

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.747 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.088 mg/L)
- AZ Fish Consumption (TRC, 0.64 mg/L)

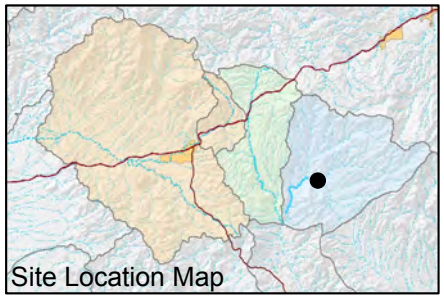
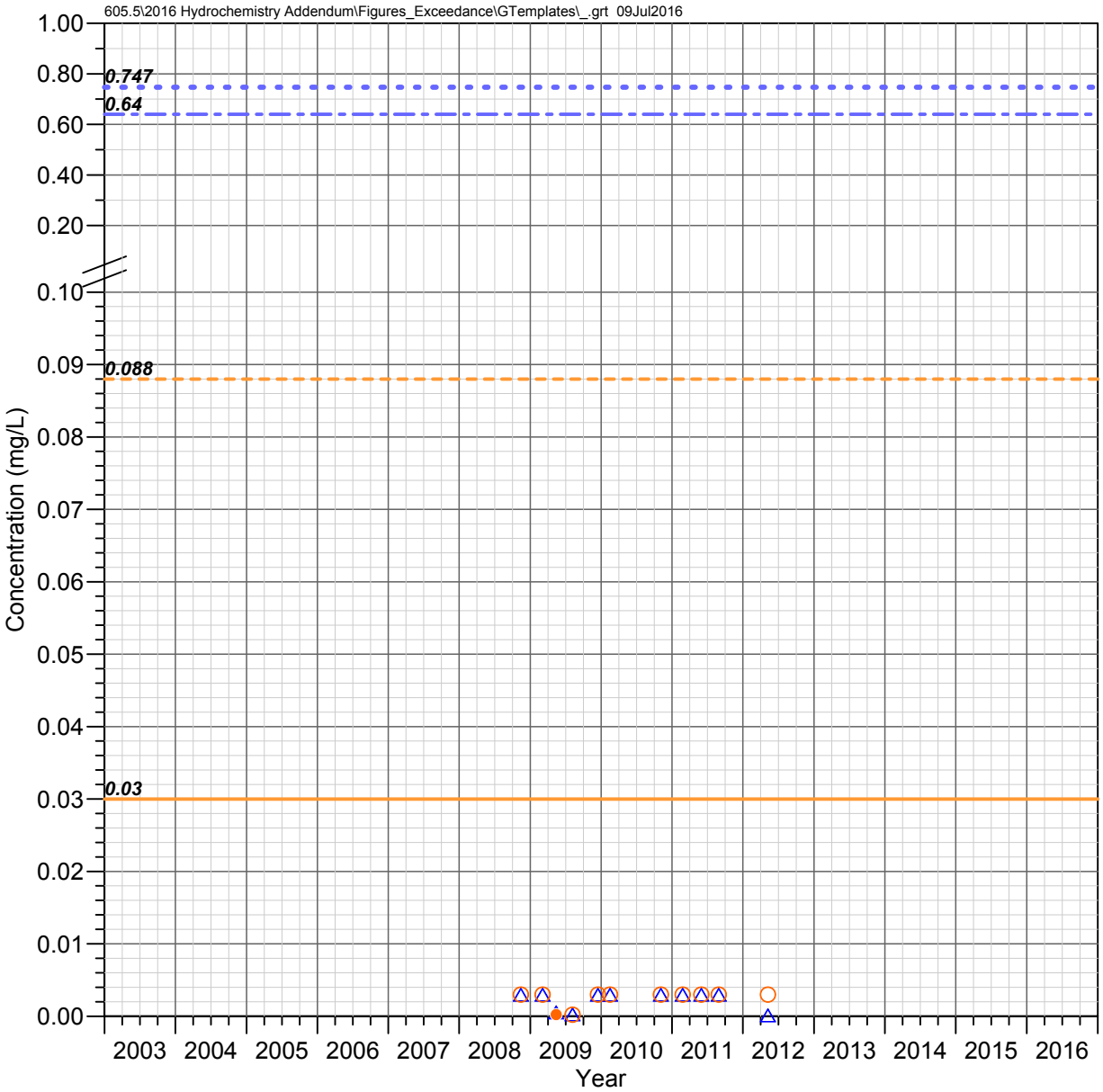


FIGURE F-031. ANTIMONY CONCENTRATIONS OBSERVED AT MC 8.4 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



LF 0.2 C
Mineral Creek Watershed

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.747 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.088 mg/L)
- AZ Fish Consumption (TRC, 0.64 mg/L)

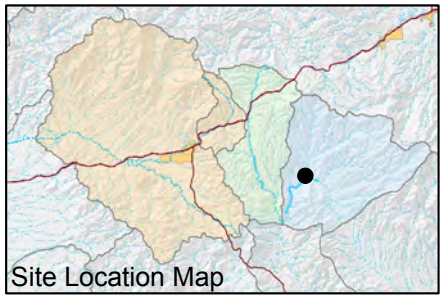
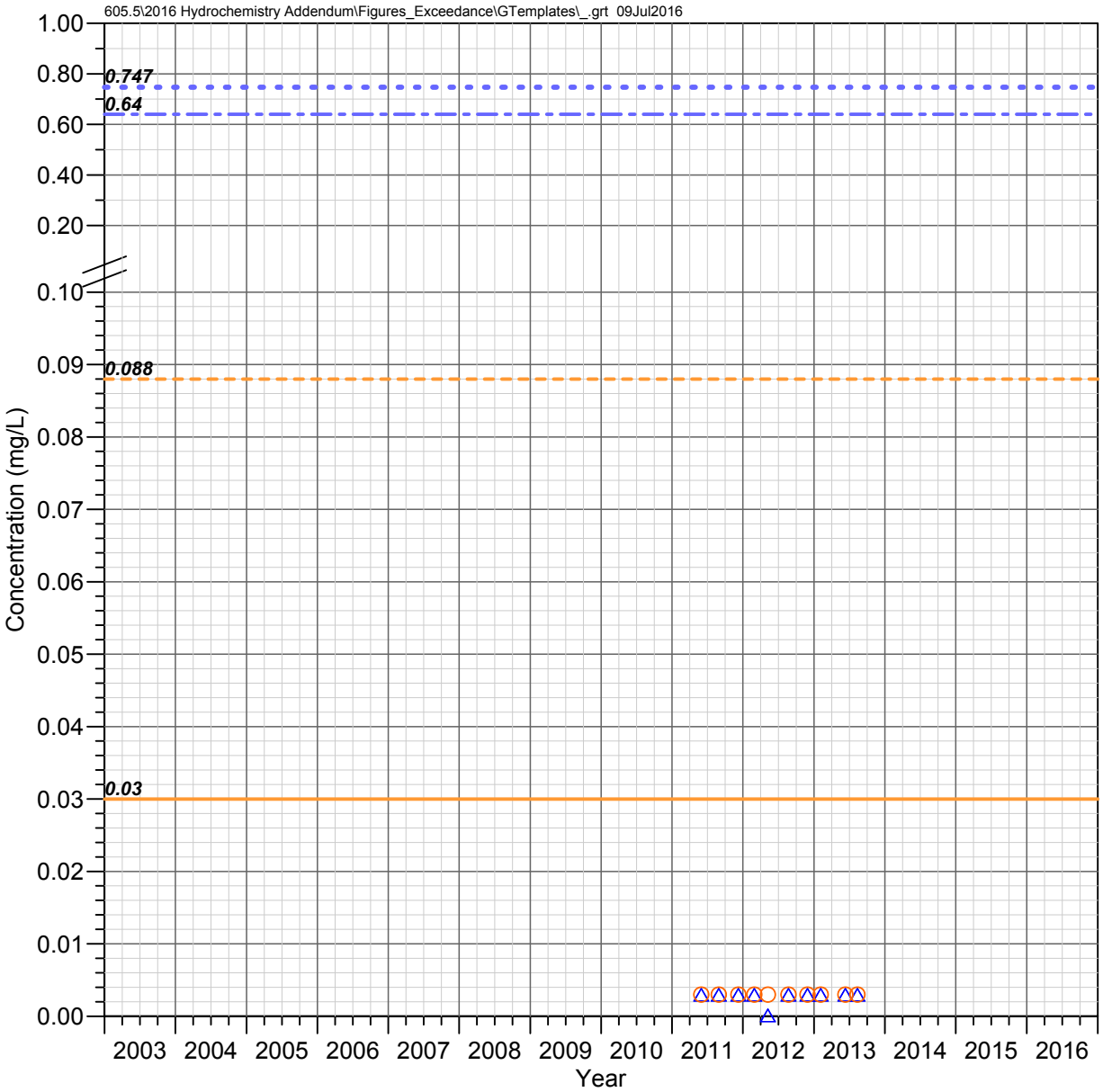


FIGURE F-032. ANTIMONY CONCENTRATIONS OBSERVED AT LF 0.2 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 5.2 C
Mineral Creek Watershed

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.747 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.088 mg/L)
- AZ Fish Consumption (TRC, 0.64 mg/L)

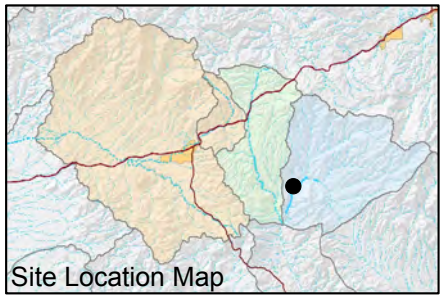
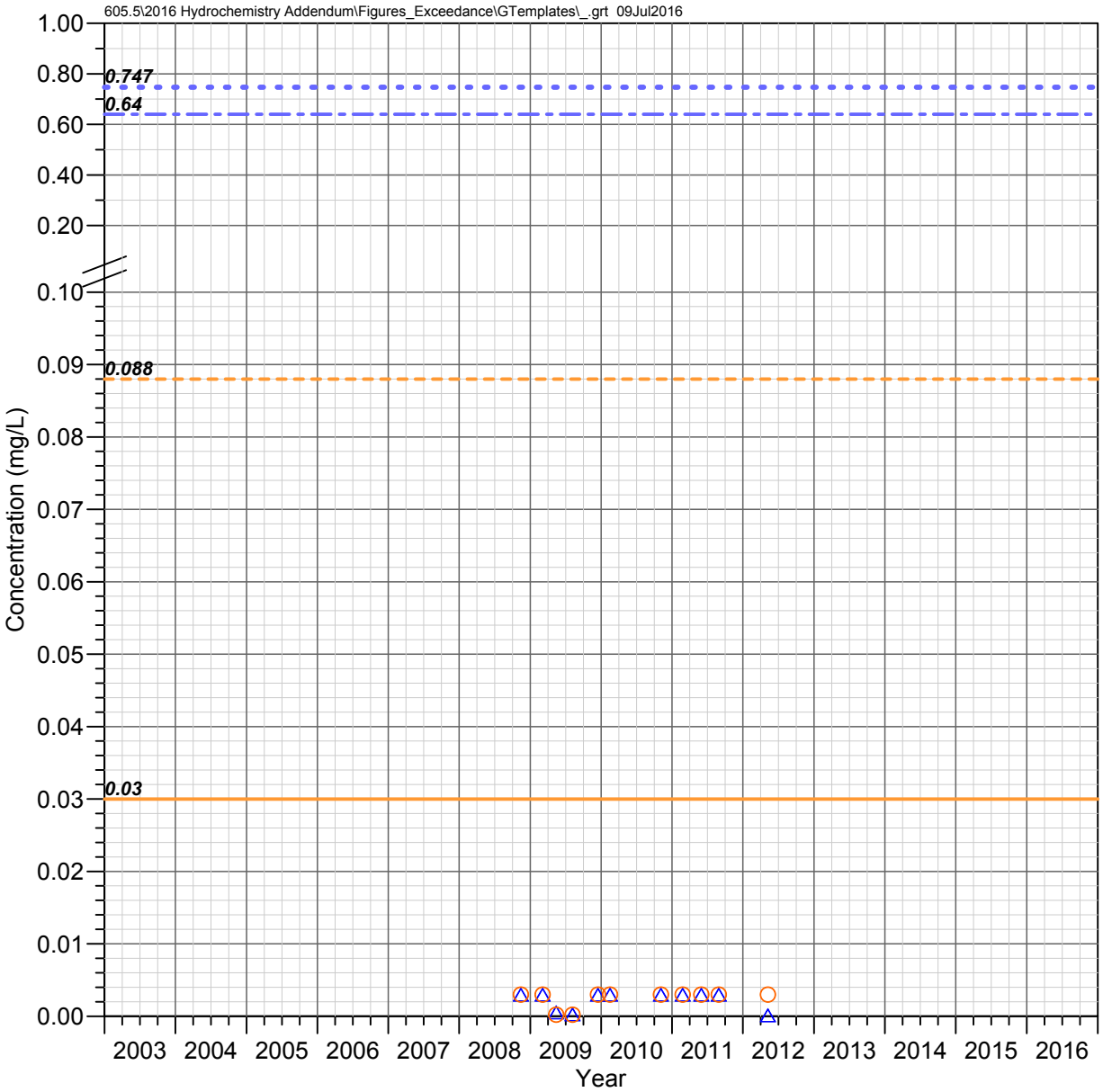


FIGURE F-033. ANTIMONY CONCENTRATIONS OBSERVED AT MC 5.2 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 3.4 W (Wet Leg Spring)
Mineral Creek Watershed

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; DIS = Dissolved

- AZ Full Body Contact (TRC, 0.747 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.088 mg/L)
- AZ Fish Consumption (TRC, 0.64 mg/L)

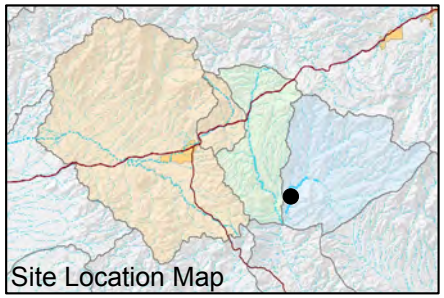
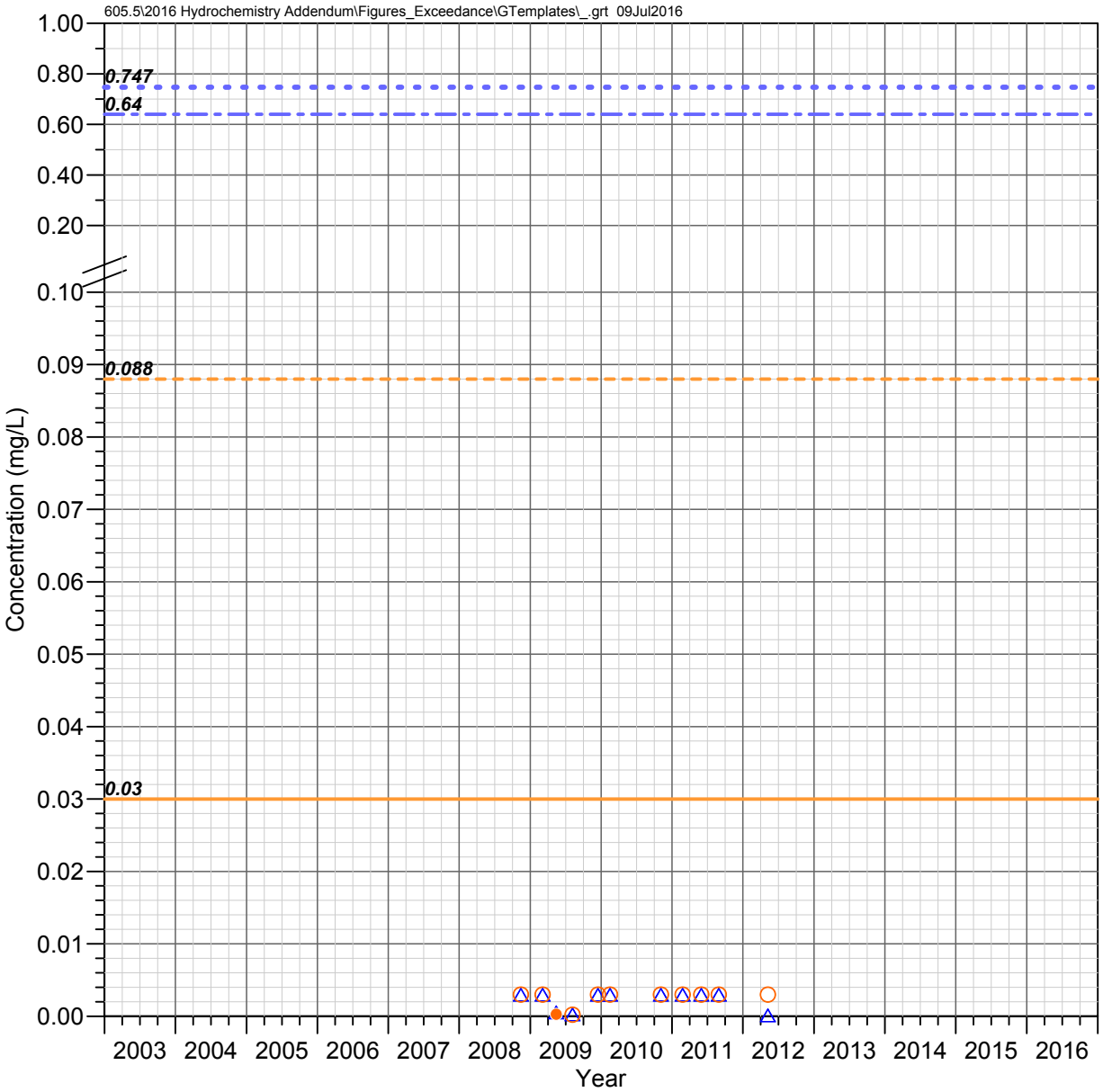


FIGURE F-034. ANTIMONY CONCENTRATIONS OBSERVED AT MC 3.4 W (WET LEG SPRING), MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 3.3 C (Lower Mineral)
Mineral Creek Watershed

ANTIMONY

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.747 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.088 mg/L)
- AZ Fish Consumption (TRC, 0.64 mg/L)

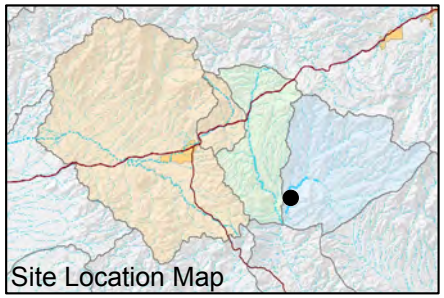
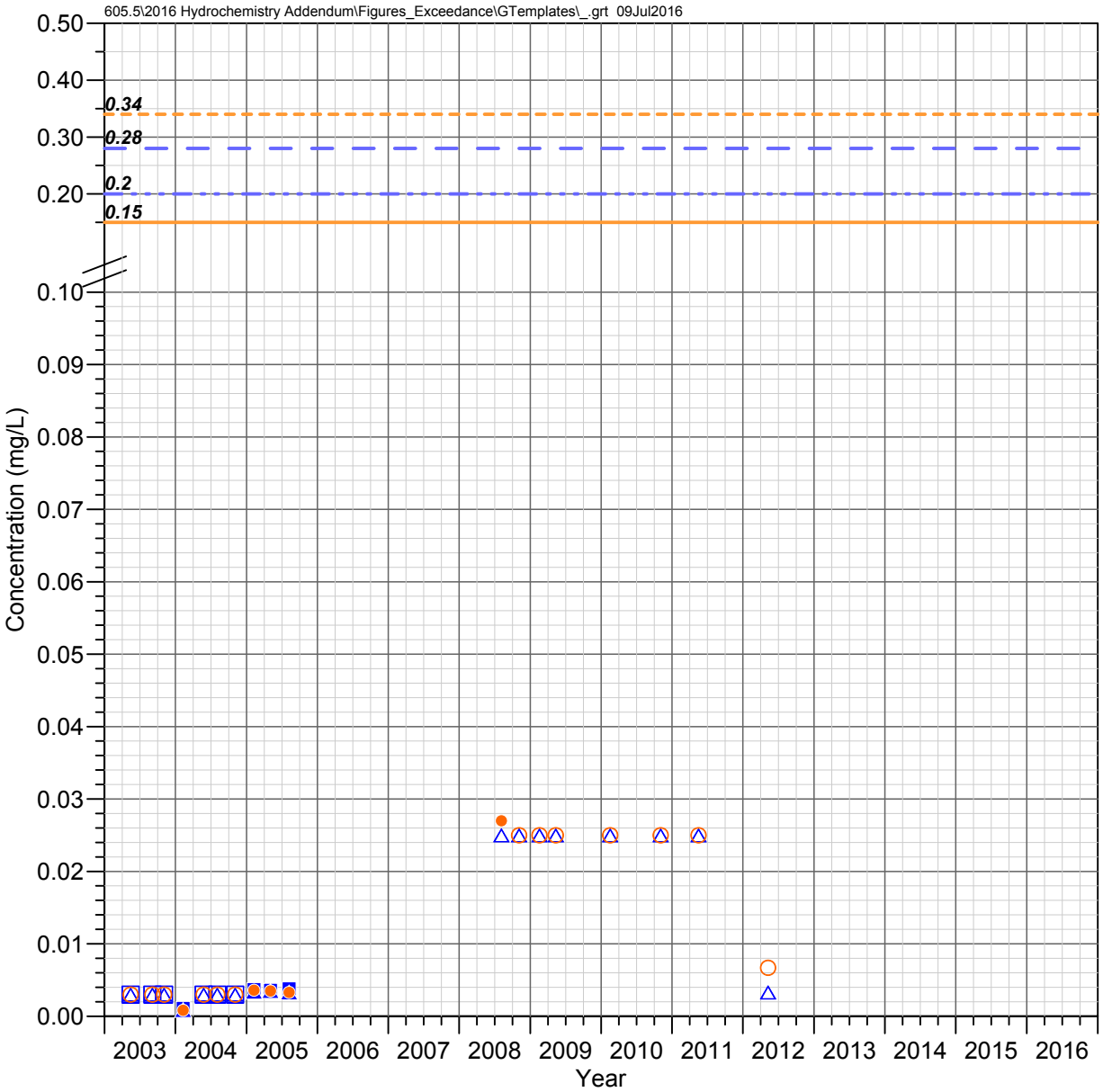


FIGURE F-035. ANTIMONY CONCENTRATIONS OBSERVED AT MC 3.3 C (LOWER MINERAL), MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Pump Station Spring (QC 30.7 C)
Queen Creek Watershed

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Partial Body Contact (TRC, 0.28 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.34 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.2 mg/L)

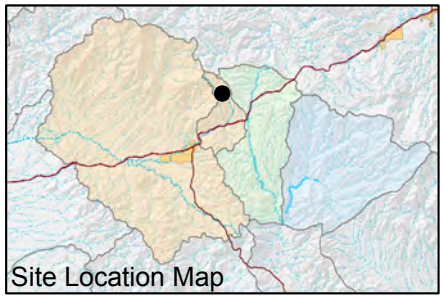
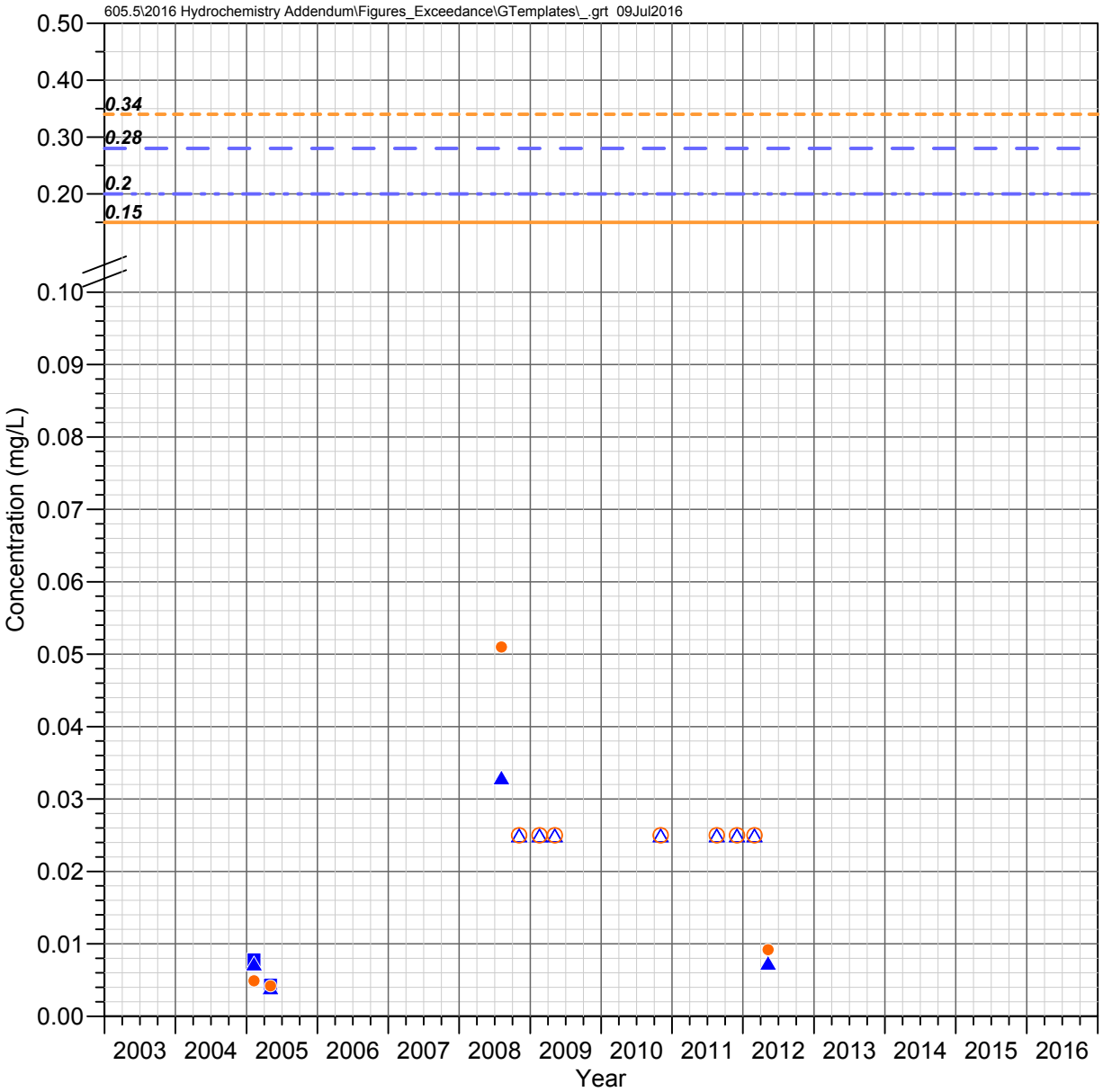


FIGURE F-036. ARSENIC CONCENTRATIONS OBSERVED AT PUMP STATION SPRING (QC 30.7 C), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 27.3 C
Queen Creek Watershed

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Partial Body Contact (TRC, 0.28 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.34 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.2 mg/L)

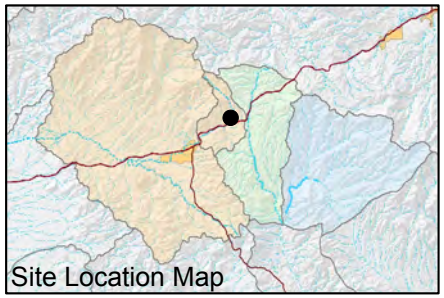
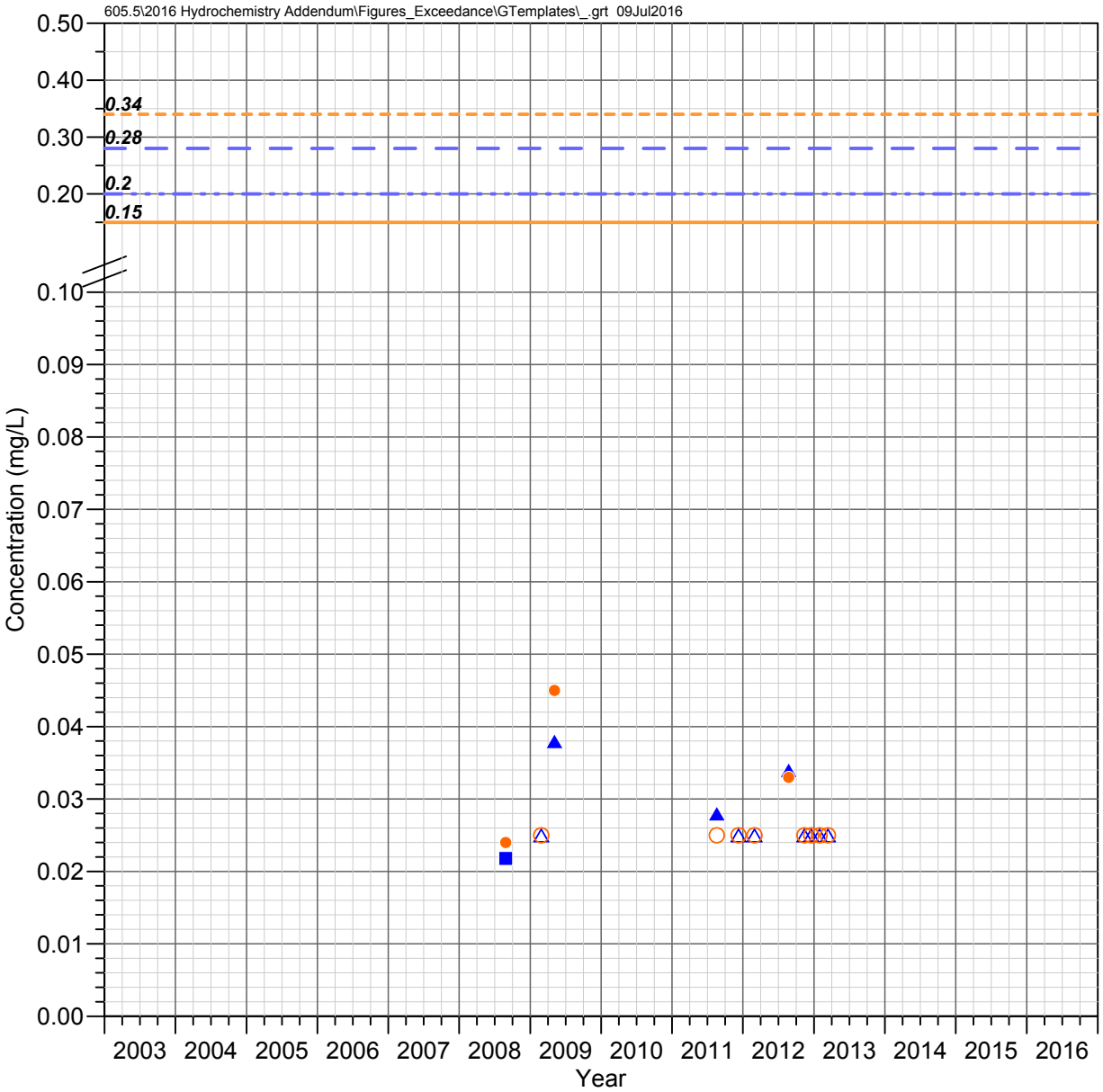


FIGURE F-037. ARSENIC CONCENTRATIONS OBSERVED AT QC 27.3 C, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Oak Flat Wash
Queen Creek Watershed

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Partial Body Contact (TRC, 0.28 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.34 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.2 mg/L)

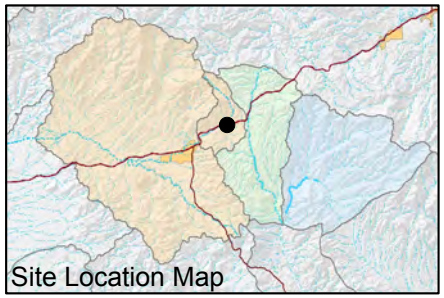
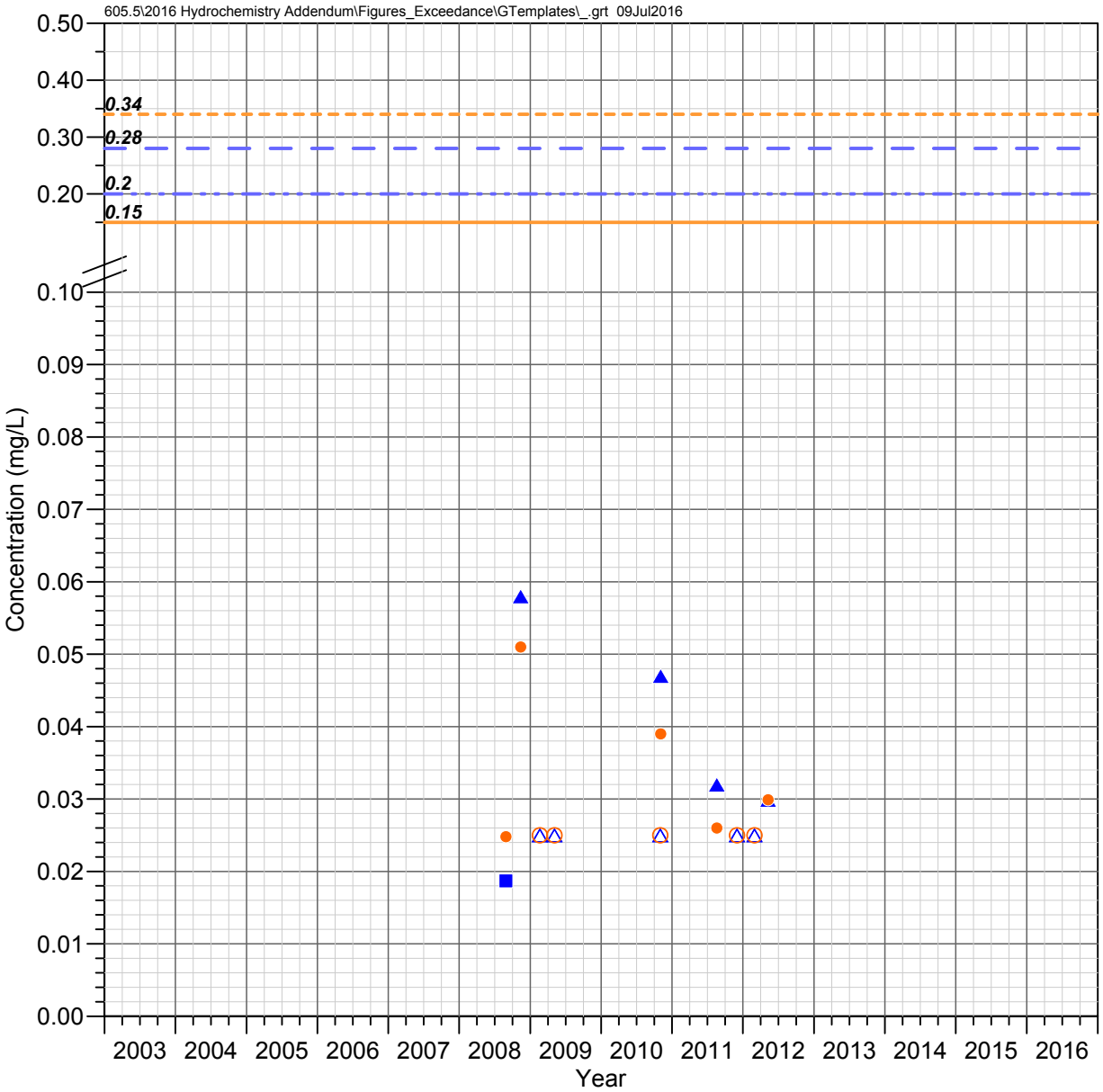


FIGURE F-038. ARSENIC CONCENTRATIONS OBSERVED AT OAK FLAT WASH, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Number 9 Wash
Queen Creek Watershed

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Partial Body Contact (TRC, 0.28 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.34 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.2 mg/L)

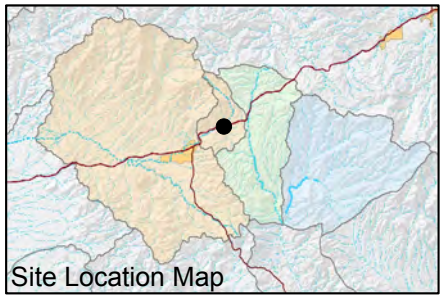
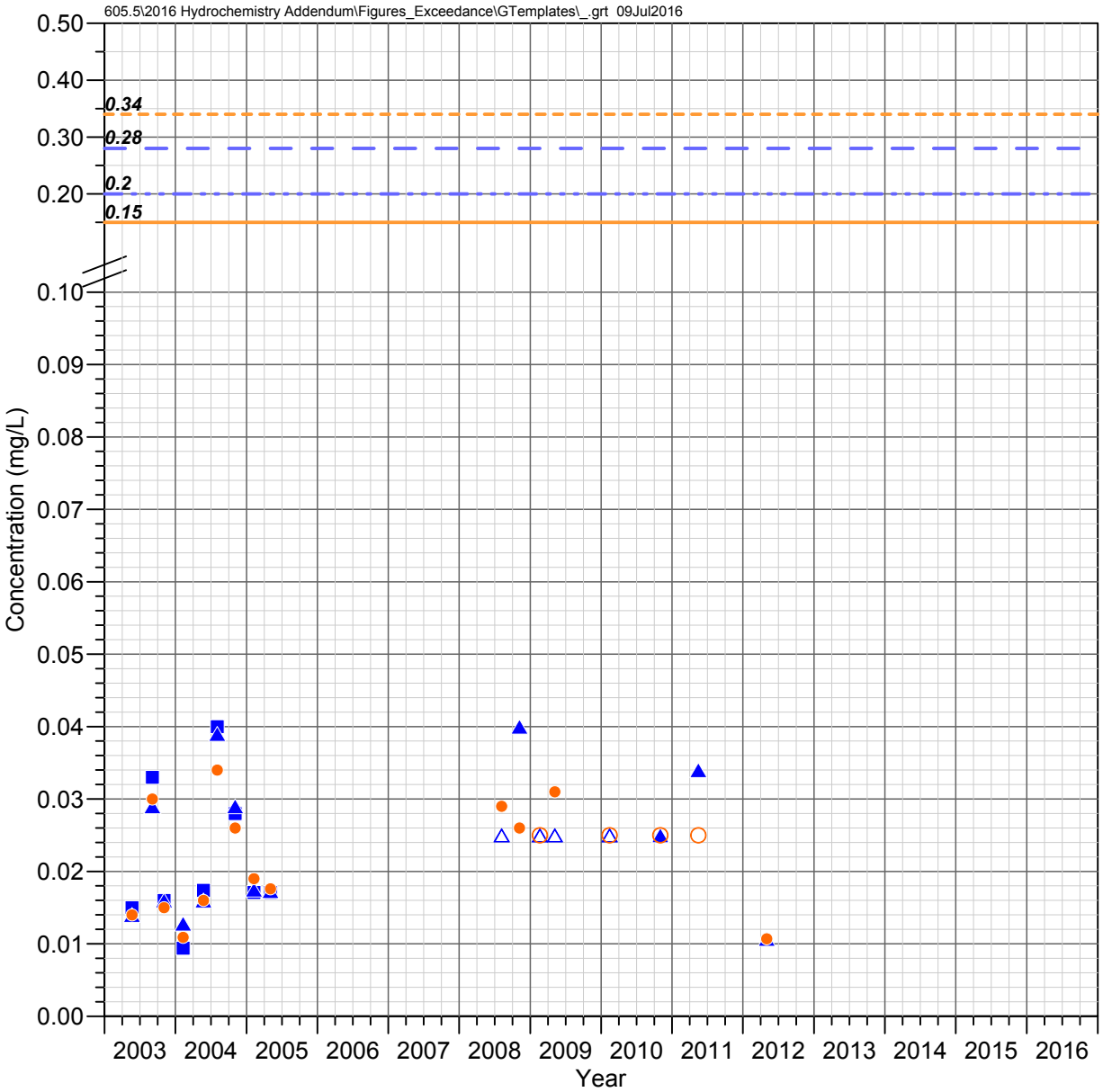


FIGURE F-039. ARSENIC CONCENTRATIONS OBSERVED AT NUMBER 9 WASH, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Boulder Hole (QC 23.6 C)
Queen Creek Watershed

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Partial Body Contact (TRC, 0.28 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.34 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.2 mg/L)

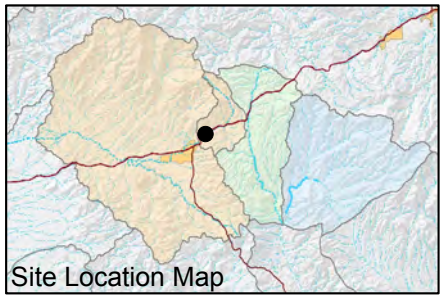
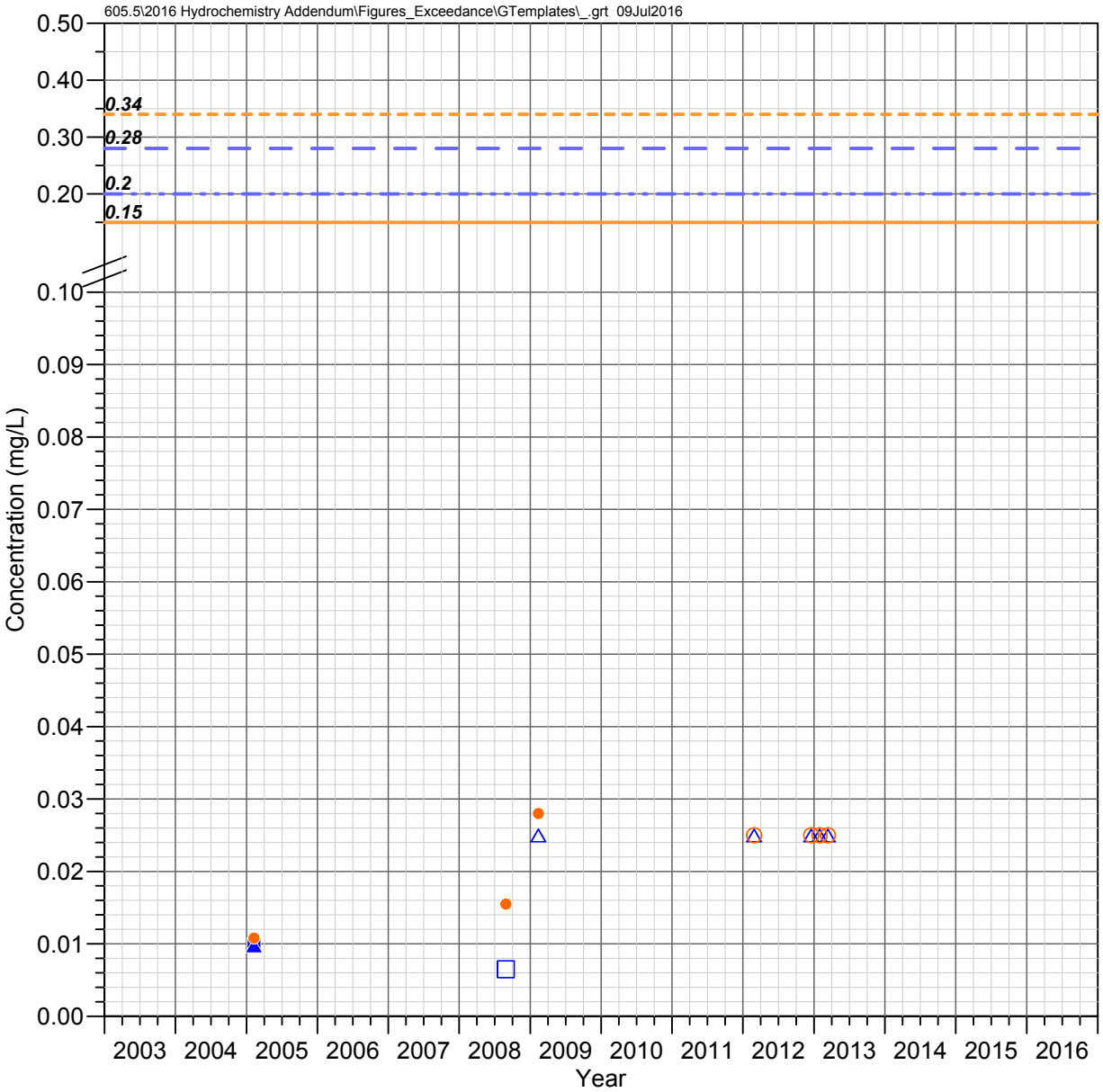


FIGURE F-040. ARSENIC CONCENTRATIONS OBSERVED AT BOULDER HOLE (QC 23.6 C), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 22.6 E (Karst Spring) Queen Creek Watershed

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Partial Body Contact (TRC, 0.28 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.34 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.2 mg/L)

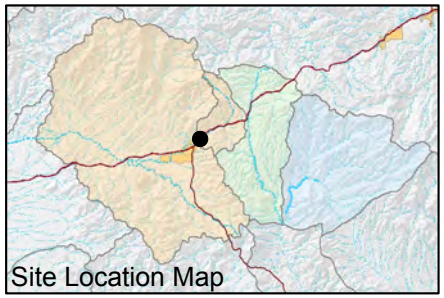
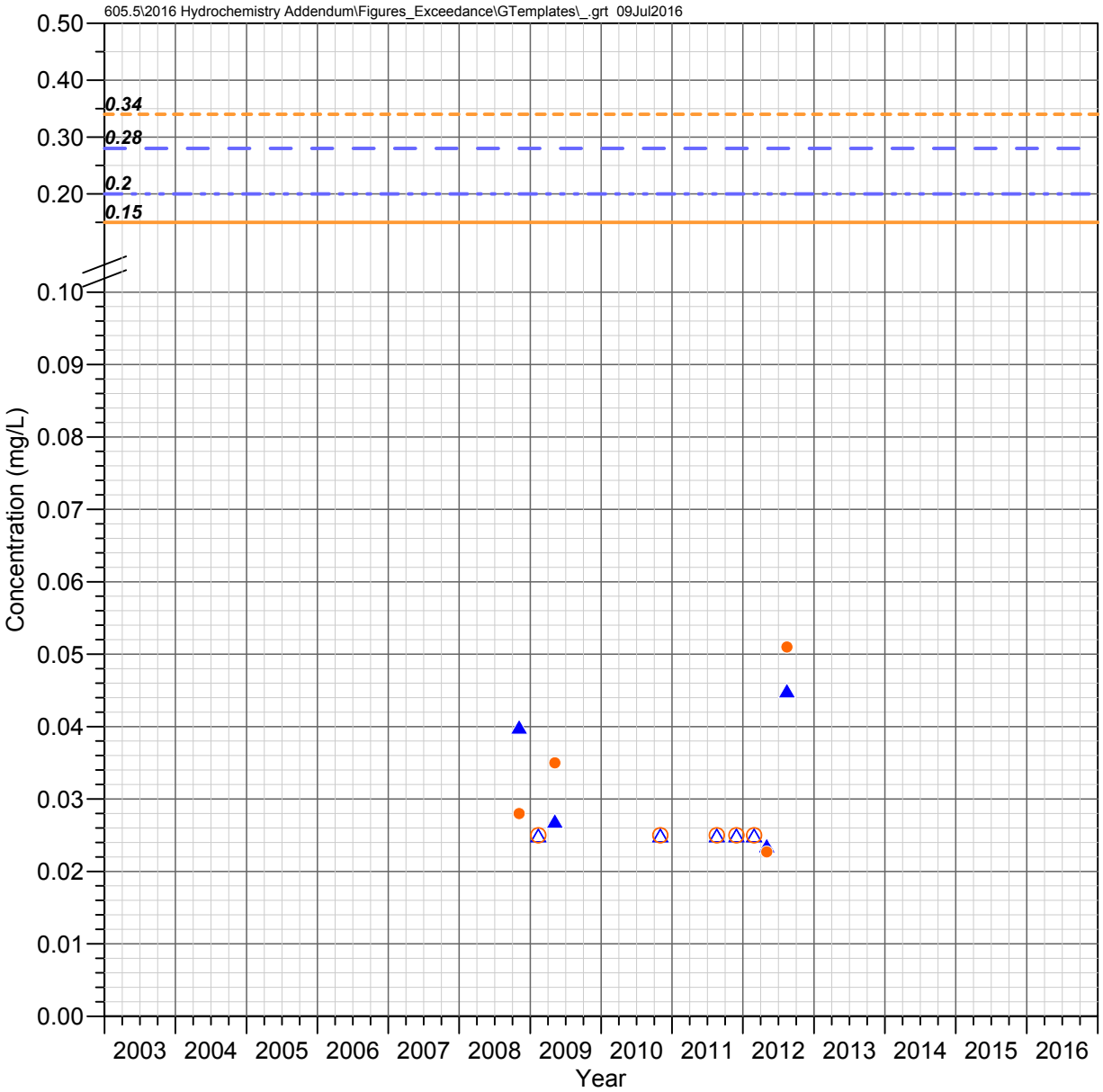


FIGURE F-041. ARSENIC CONCENTRATIONS OBSERVED AT QC 22.6 E (KARST SPRING), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 21.7 C (Magma Avenue)
Queen Creek Watershed

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Partial Body Contact (TRC, 0.28 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.34 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.2 mg/L)

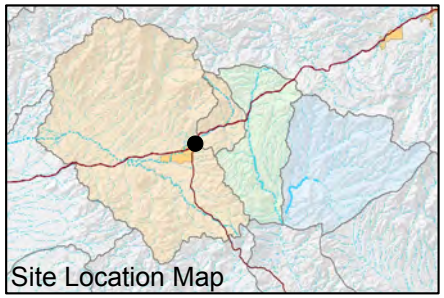
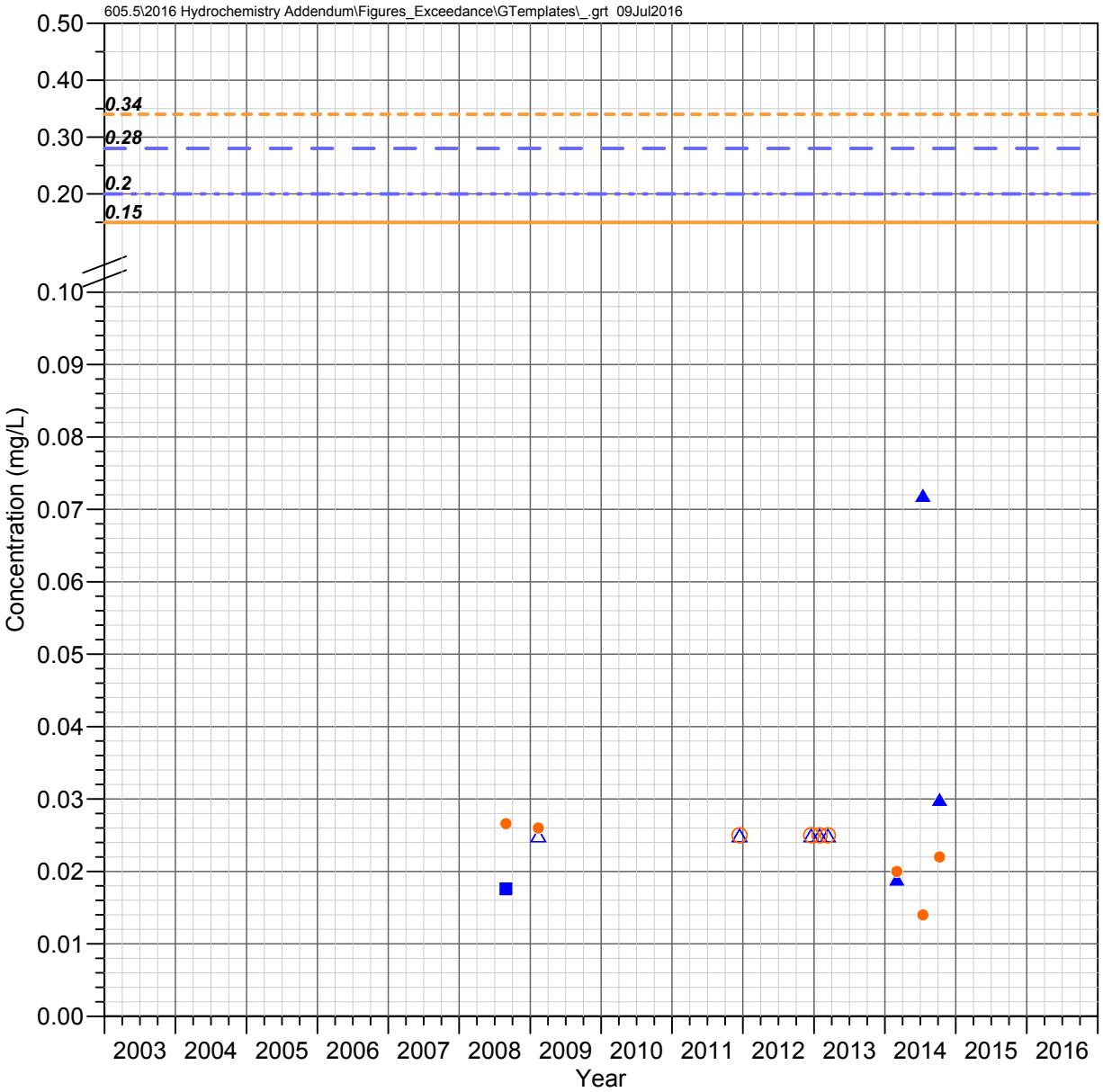


FIGURE F-042. ARSENIC CONCENTRATIONS OBSERVED AT QC 21.7 C (MAGMA AVENUE), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 19.7 C
Queen Creek Watershed

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; DIS = Dissolved

- AZ Partial Body Contact (TRC, 0.28 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.34 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.2 mg/L)

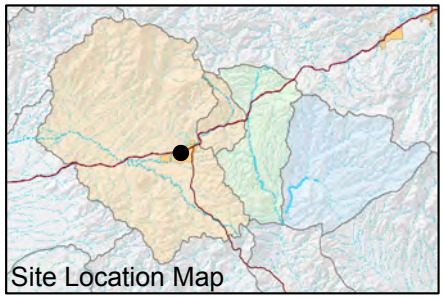
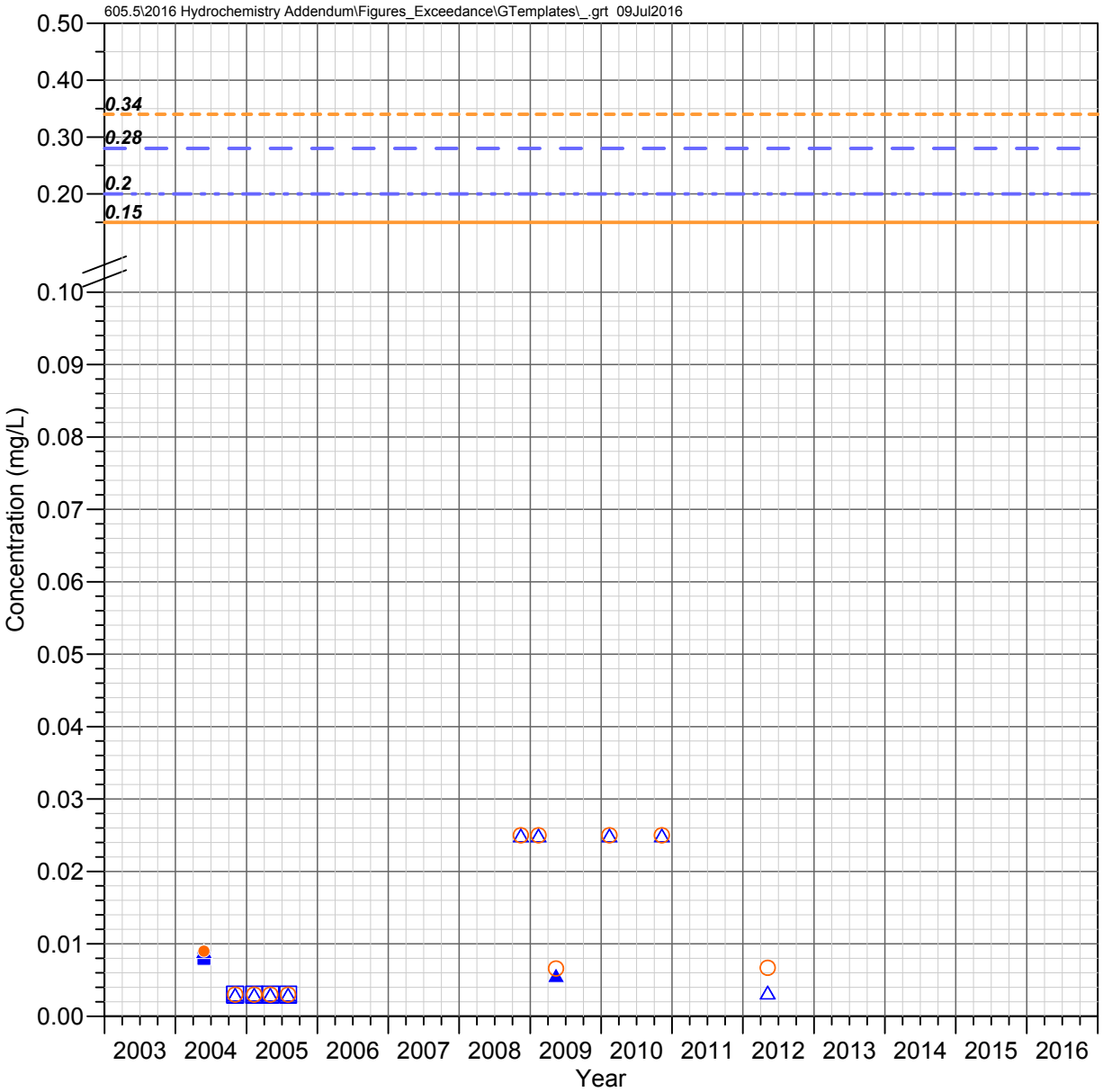


FIGURE F-043. ARSENIC CONCENTRATIONS OBSERVED AT QC 19.7 C, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Bored Spring
Queen Creek Watershed

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Partial Body Contact (TRC, 0.28 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.34 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.2 mg/L)

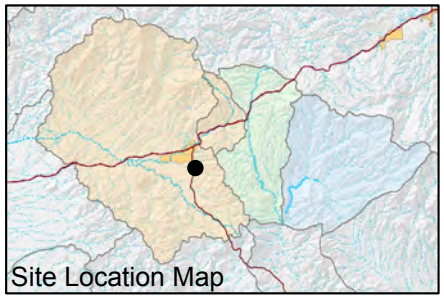
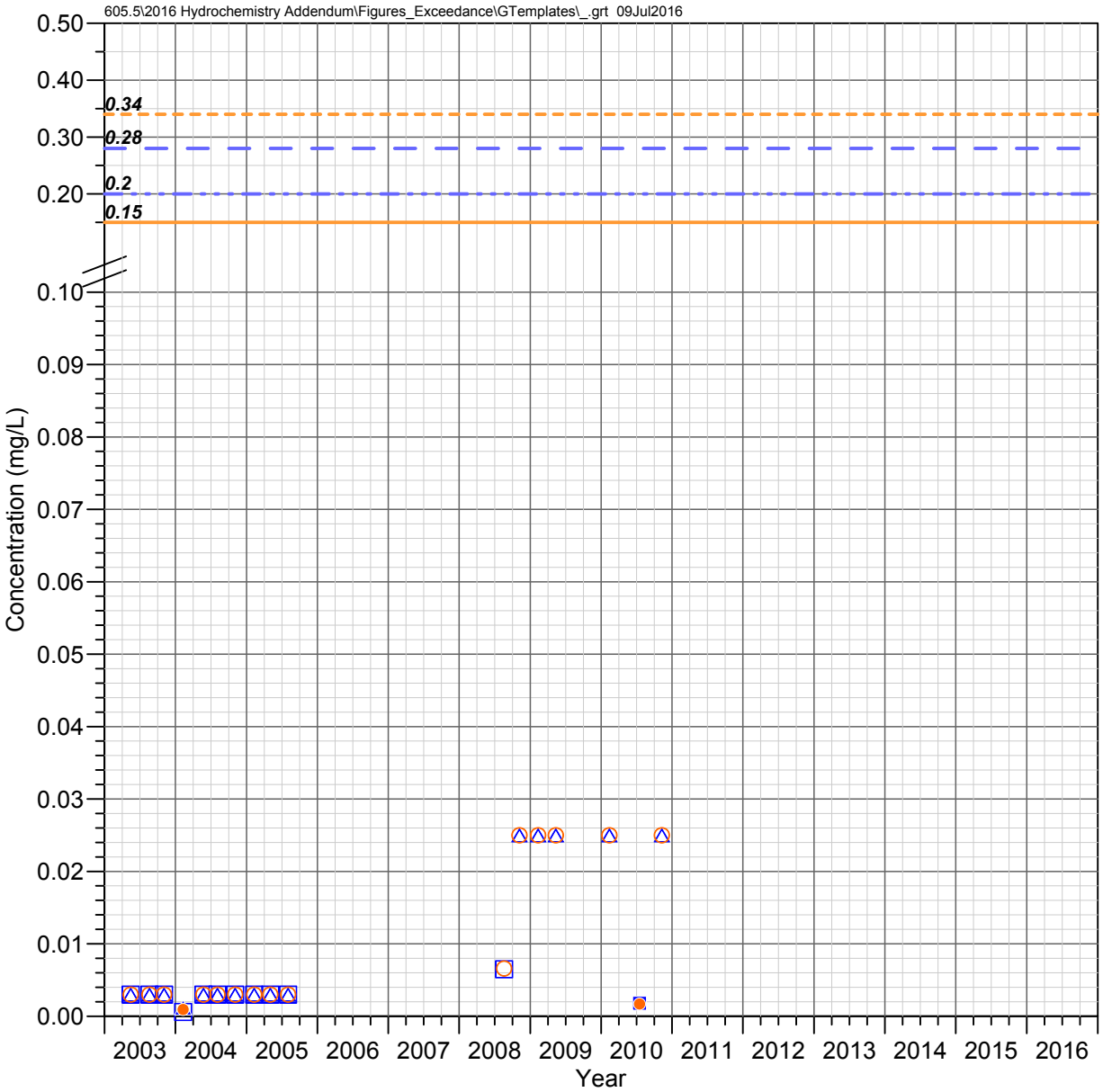


FIGURE F-044. ARSENIC CONCENTRATIONS OBSERVED AT BORED SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Hidden Spring
Queen Creek Watershed

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Partial Body Contact (TRC, 0.28 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.34 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.2 mg/L)

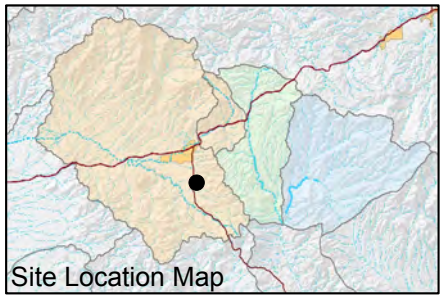
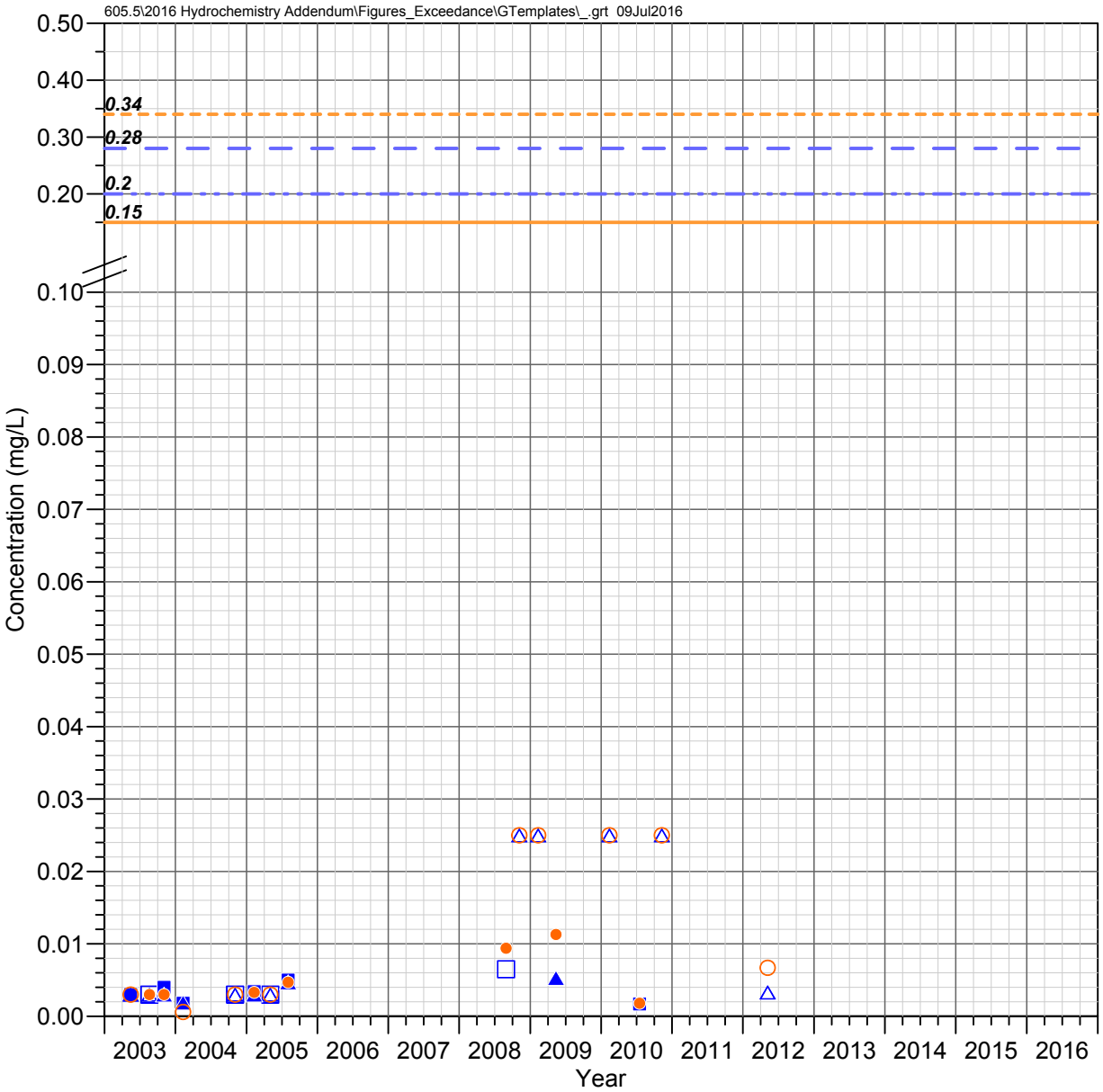


FIGURE F-045. ARSENIC CONCENTRATIONS OBSERVED AT HIDDEN SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Kane Spring
Queen Creek Watershed

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Partial Body Contact (TRC, 0.28 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.34 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.2 mg/L)

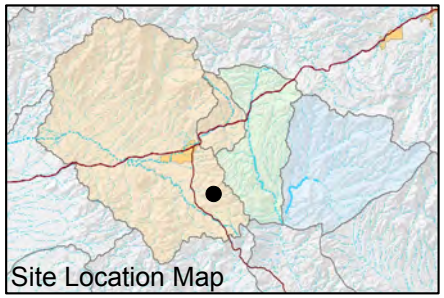
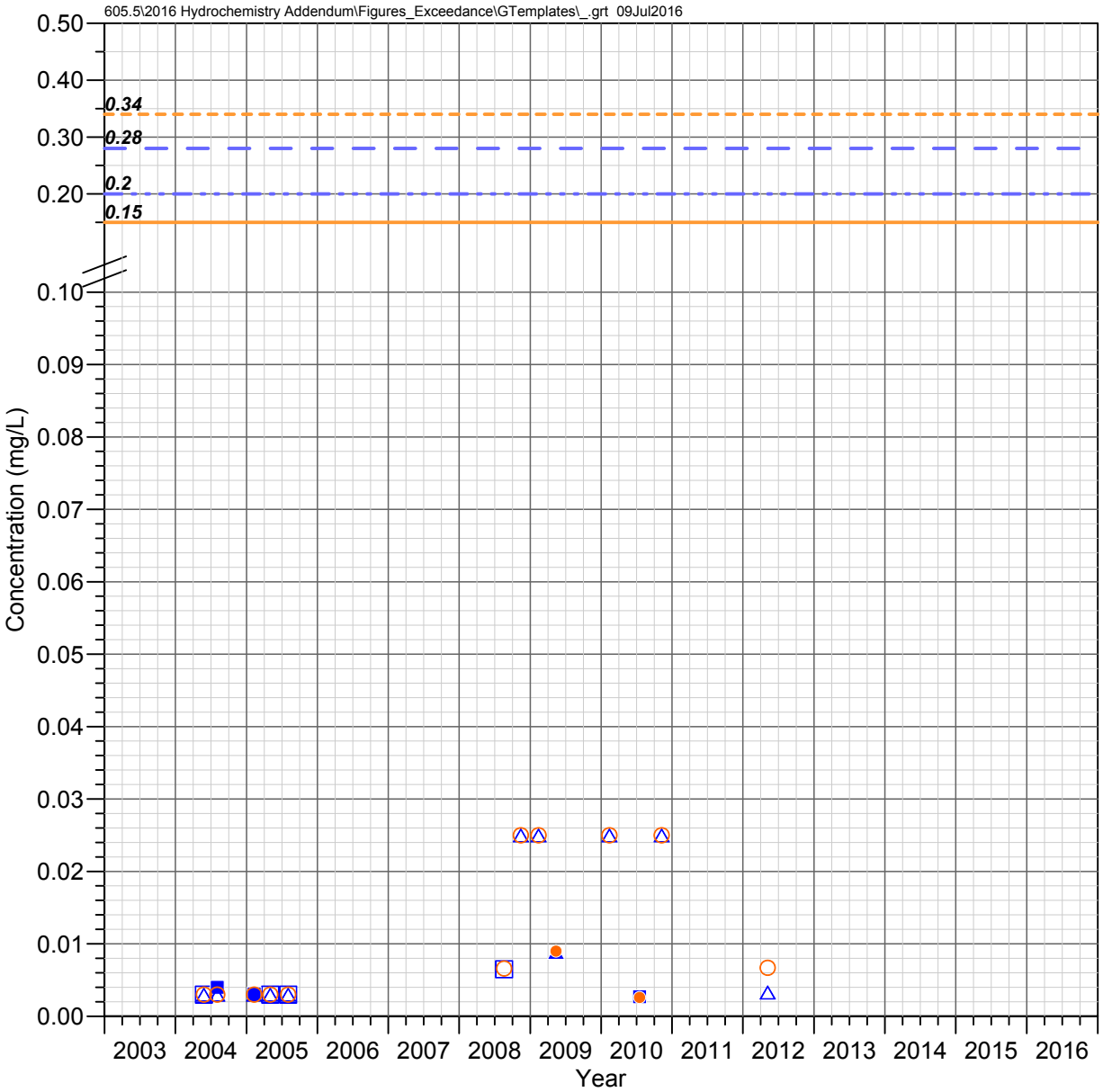


FIGURE F-046. ARSENIC CONCENTRATIONS OBSERVED AT KANE SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Blue Spring
Queen Creek Watershed

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Partial Body Contact (TRC, 0.28 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.34 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.2 mg/L)

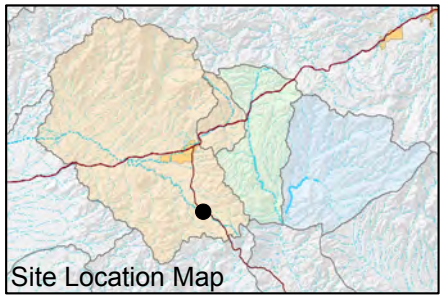
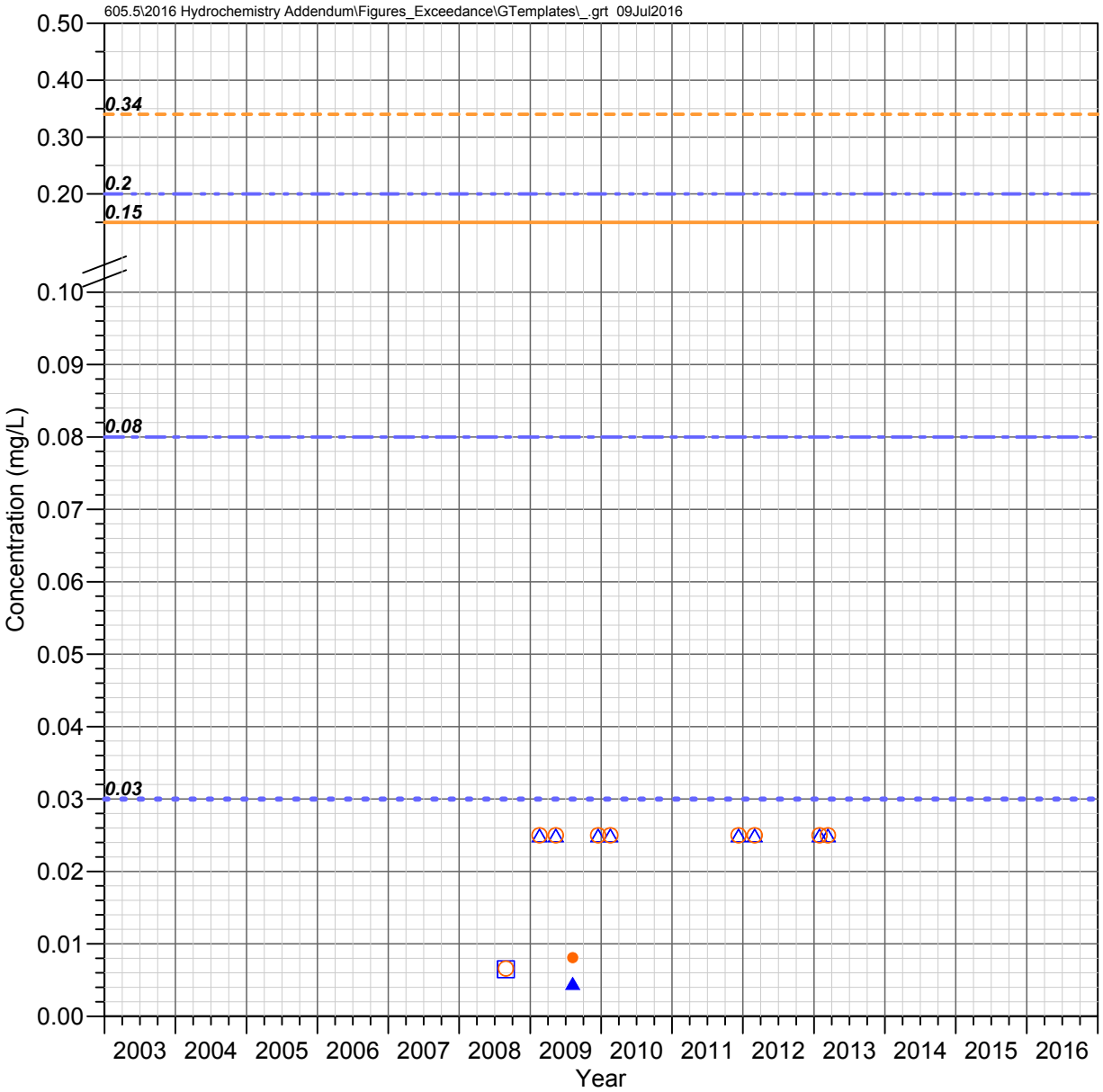


FIGURE F-047. ARSENIC CONCENTRATIONS OBSERVED AT BLUE SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



IC 1.0 C
Devils Canyon Watershed

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.34 mg/L)
- AZ Fish Consumption (TRC, 0.08 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.2 mg/L)

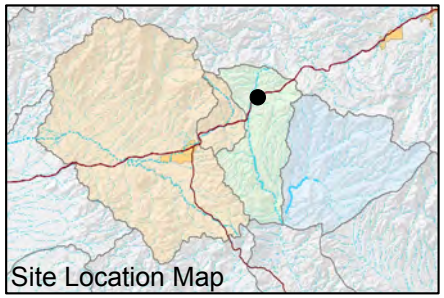
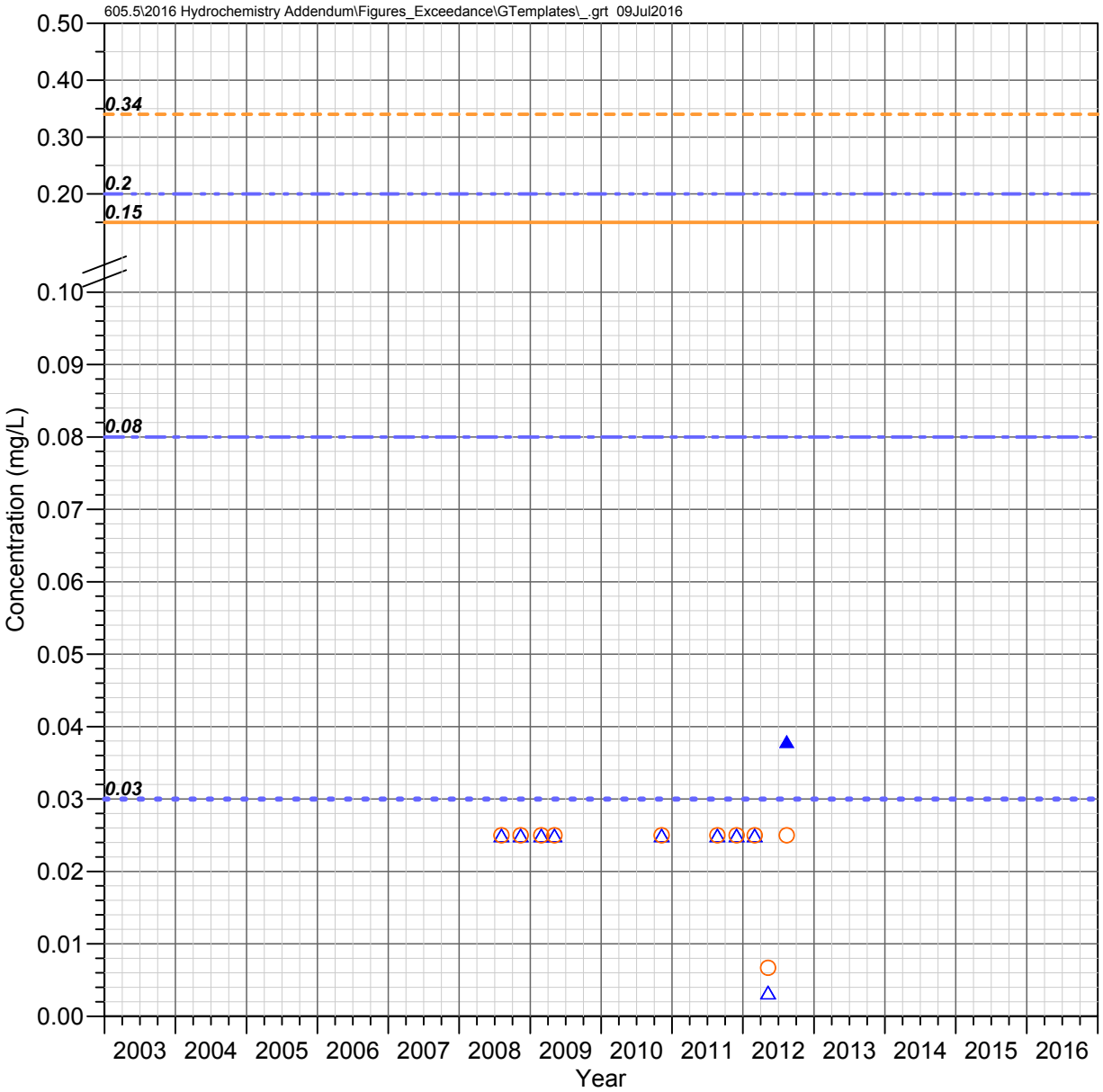


FIGURE F-048. ARSENIC CONCENTRATIONS OBSERVED AT IC 1.0 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 15.5 C
Devils Canyon Watershed

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.34 mg/L)
- AZ Fish Consumption (TRC, 0.08 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.2 mg/L)

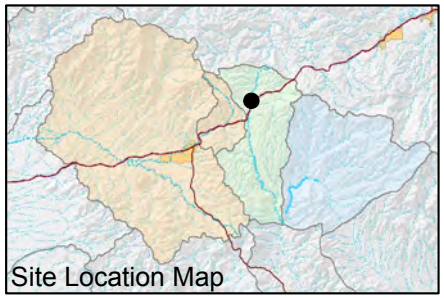
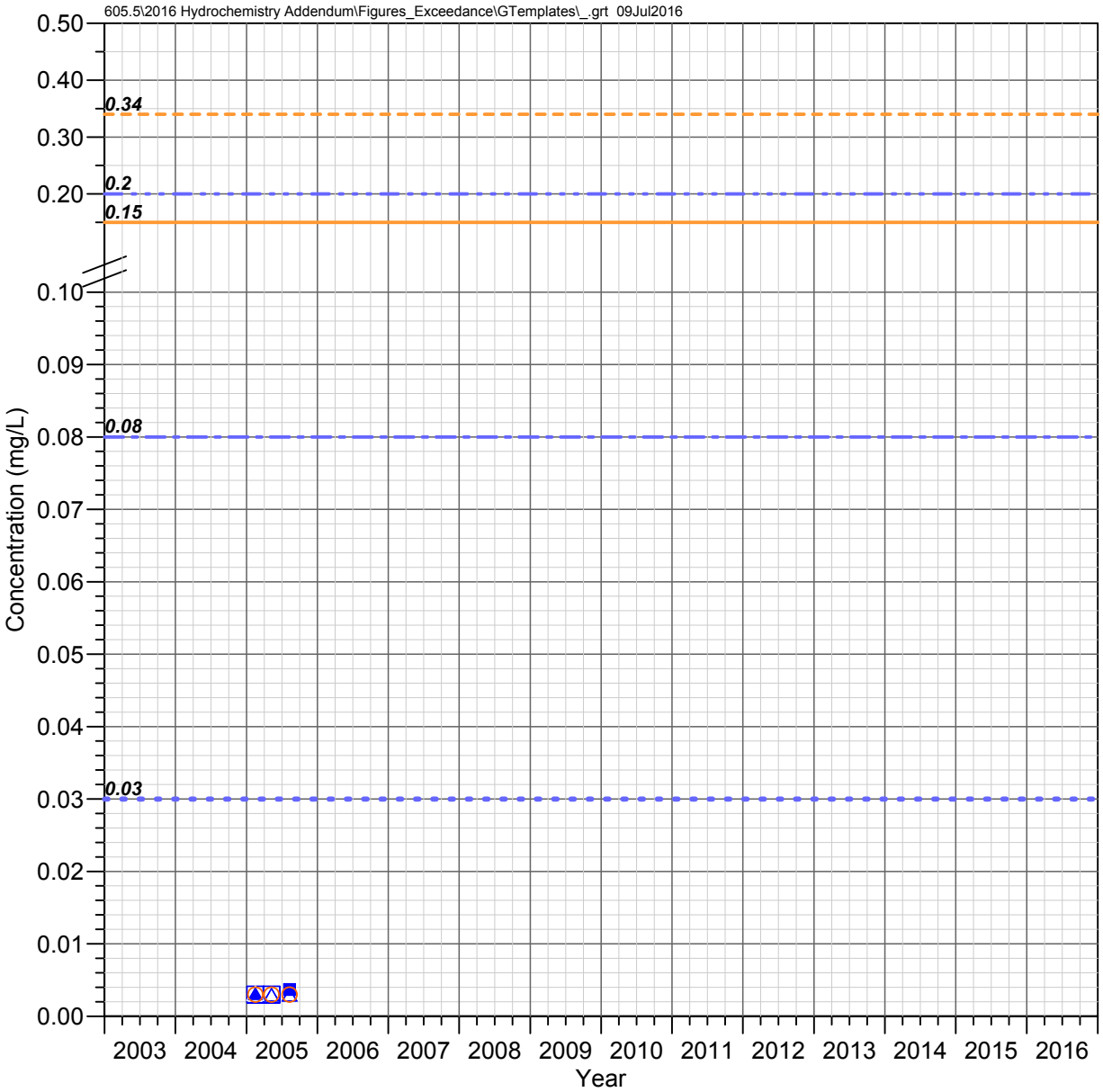


FIGURE F-049. ARSENIC CONCENTRATIONS OBSERVED AT DC 15.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 15.2 C
Devils Canyon Watershed

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; DIS = Dissolved

- AZ Full Body Contact (TRC, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.34 mg/L)
- AZ Fish Consumption (TRC, 0.08 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.2 mg/L)

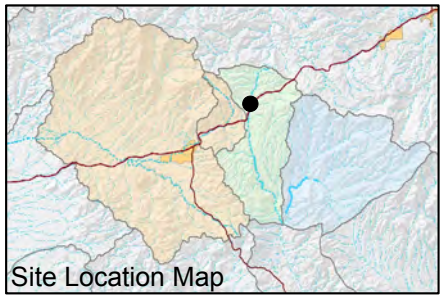
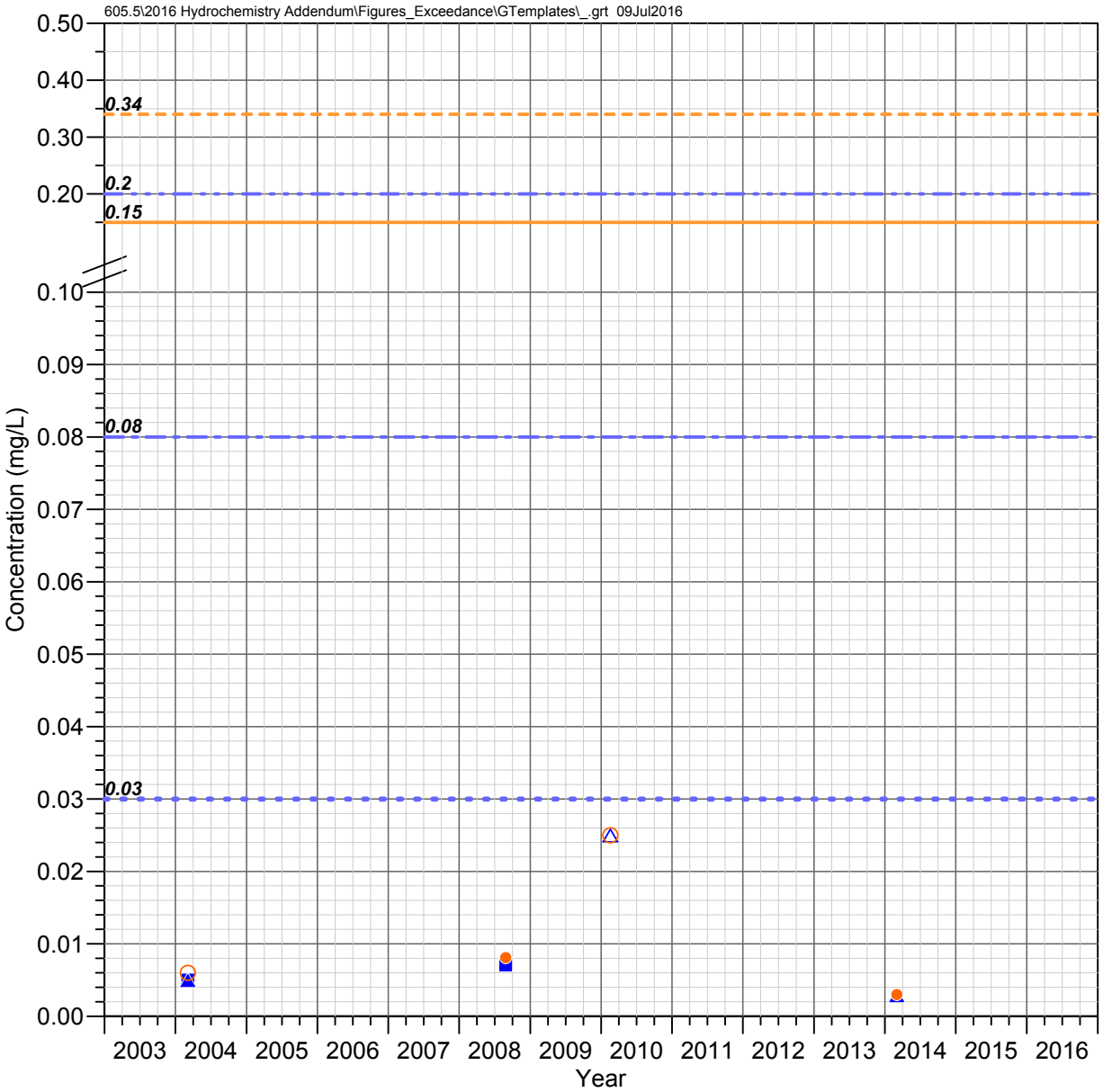


FIGURE F-050. ARSENIC CONCENTRATIONS OBSERVED AT DC 15.2 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 14.7 C
Devils Canyon Watershed

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; DIS = Dissolved

- AZ Full Body Contact (TRC, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.34 mg/L)
- AZ Fish Consumption (TRC, 0.08 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.2 mg/L)

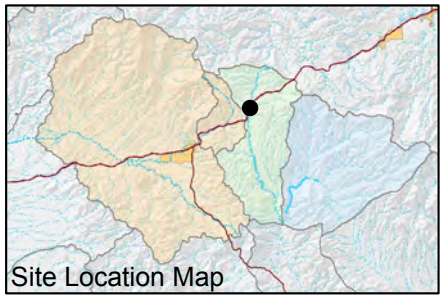
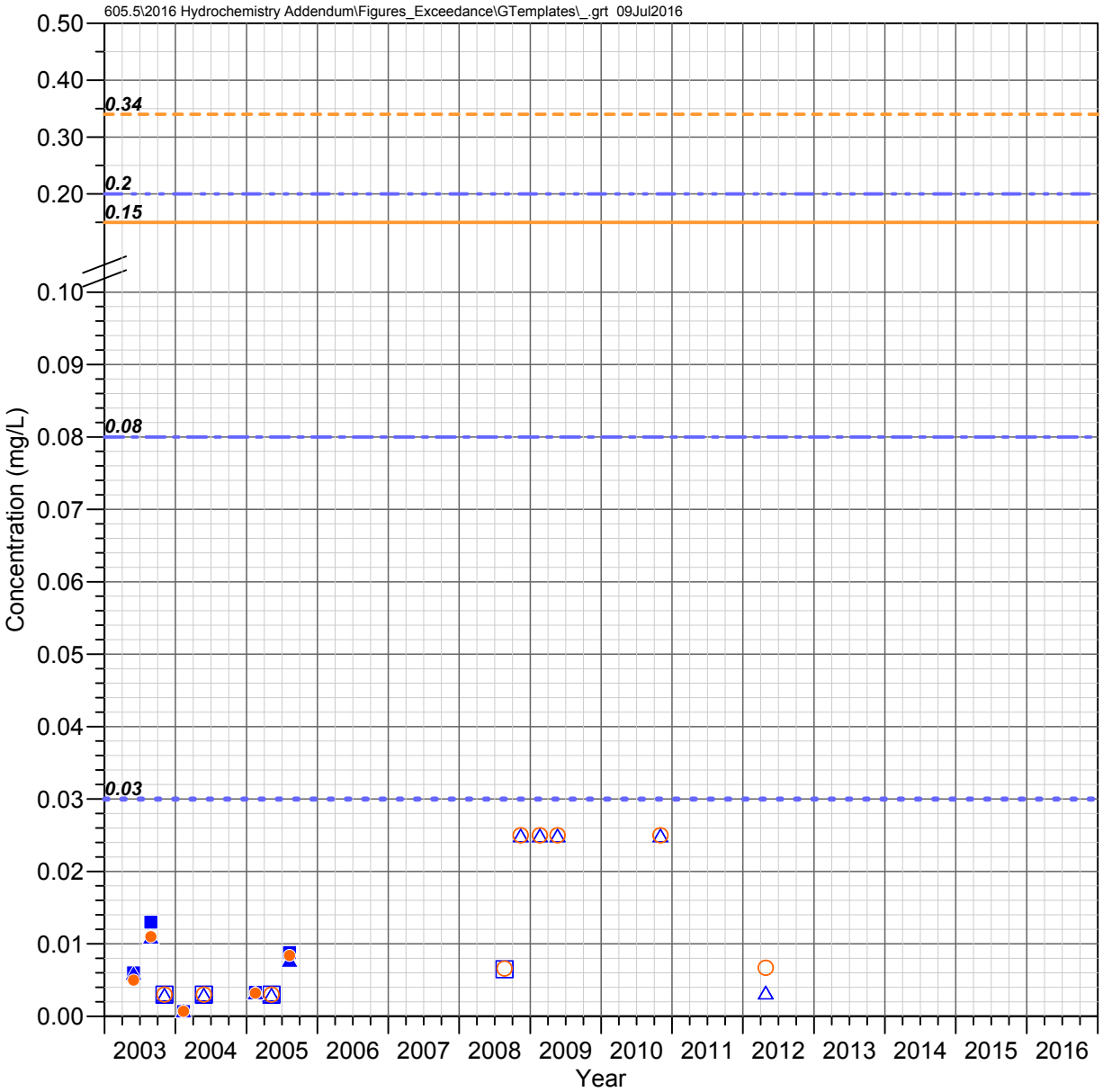


FIGURE F-051. ARSENIC CONCENTRATIONS OBSERVED AT DC 14.7 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 13.5 C
Devils Canyon Watershed

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; DIS = Dissolved

- AZ Full Body Contact (TRC, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.34 mg/L)
- AZ Fish Consumption (TRC, 0.08 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.2 mg/L)

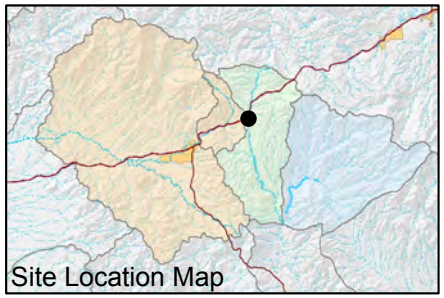
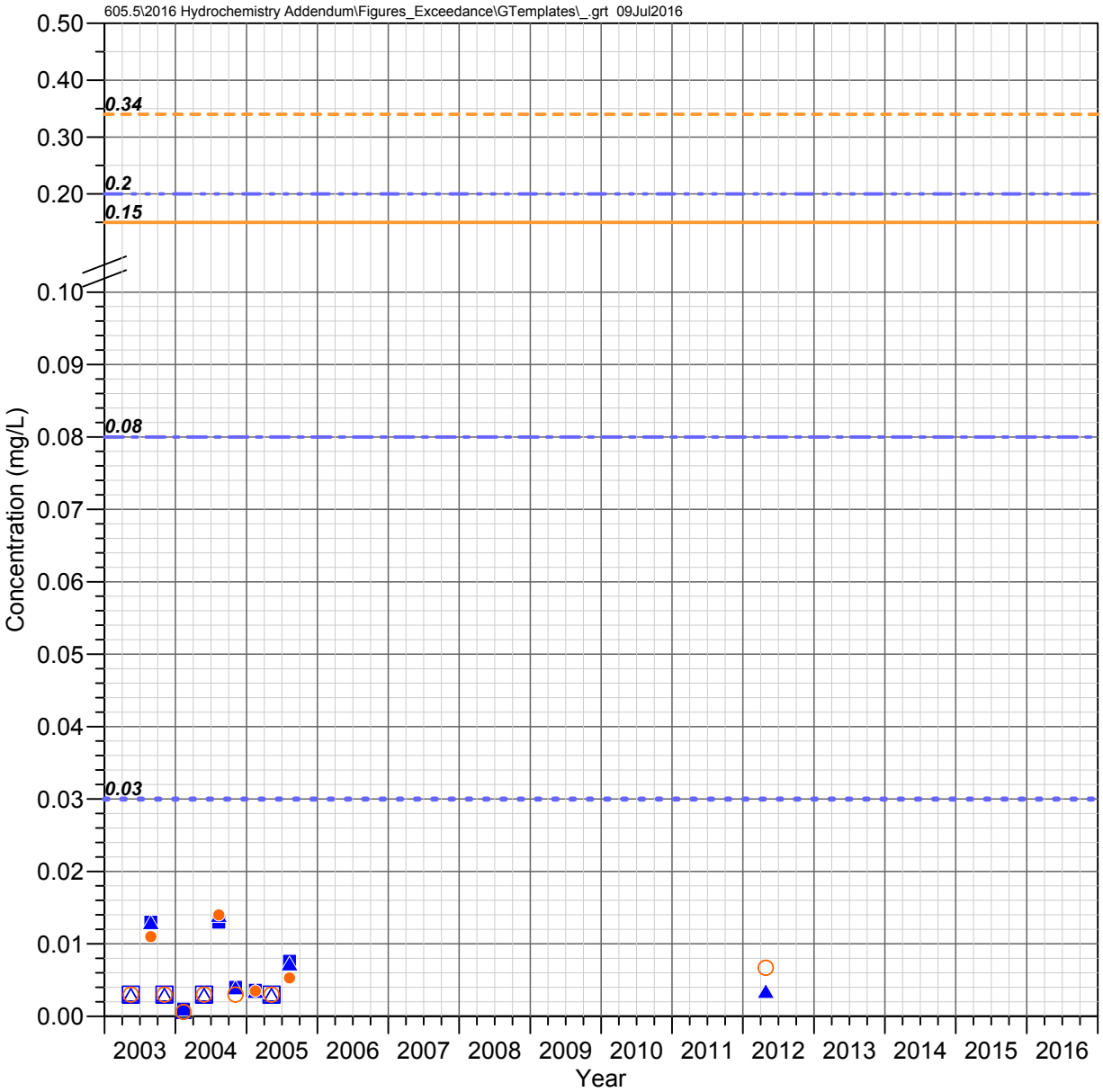


FIGURE F-052. ARSENIC CONCENTRATIONS OBSERVED AT DC 13.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 10.9 C
Devils Canyon Watershed

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; DIS = Dissolved

- AZ Full Body Contact (TRC, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.34 mg/L)
- AZ Fish Consumption (TRC, 0.08 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.2 mg/L)

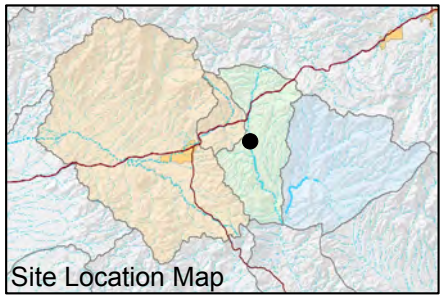
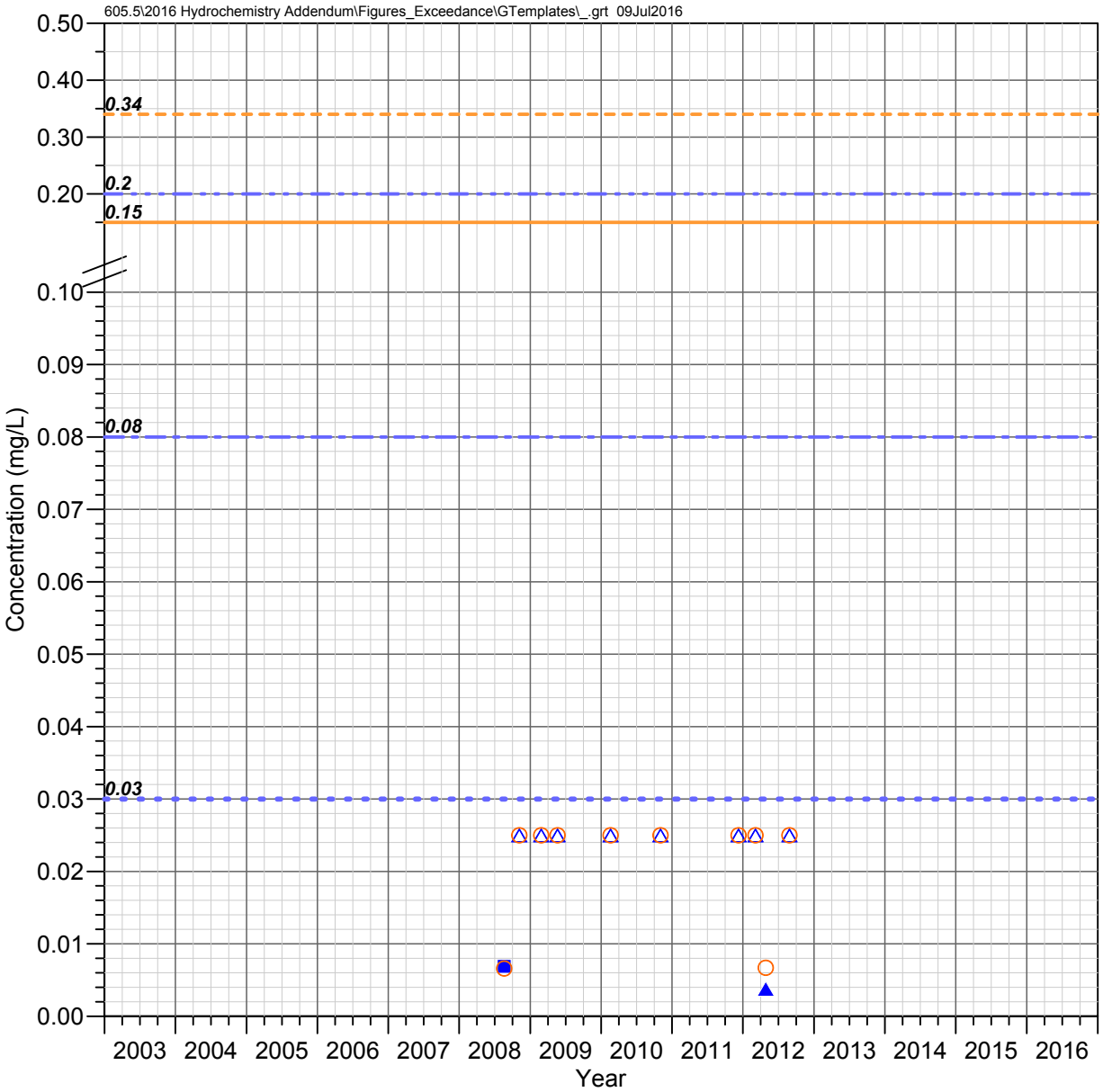


FIGURE F-053. ARSENIC CONCENTRATIONS OBSERVED AT DC 10.9 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



RR 1.5 C
Devils Canyon Watershed

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; DIS = Dissolved

- AZ Full Body Contact (TRC, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.34 mg/L)
- AZ Fish Consumption (TRC, 0.08 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.2 mg/L)

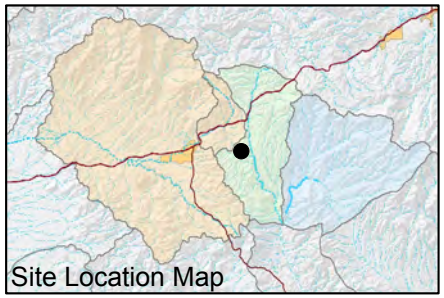
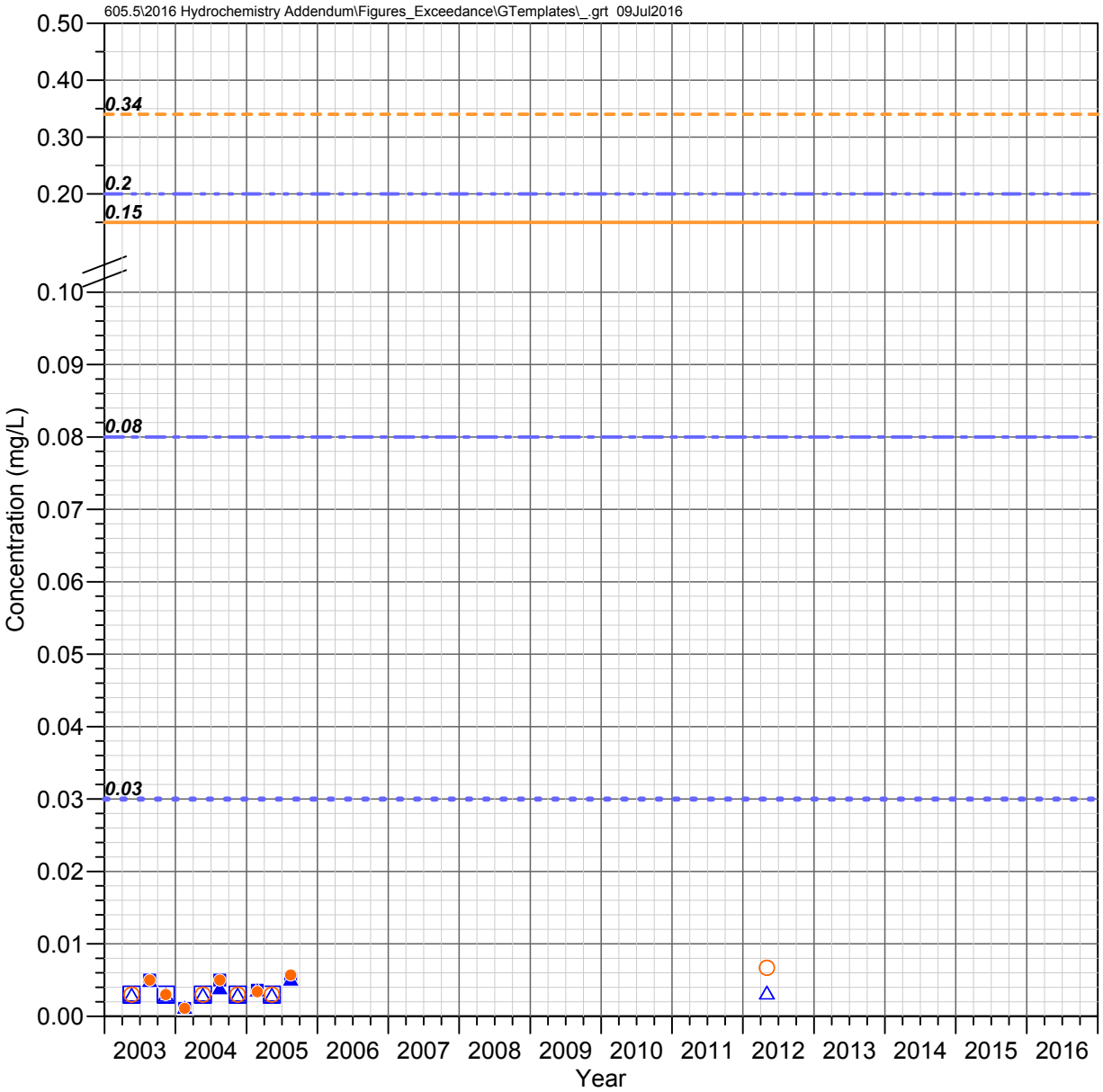


FIGURE F-054. ARSENIC CONCENTRATIONS OBSERVED AT RR 1.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.8 C
Devils Canyon Watershed

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.34 mg/L)
- AZ Fish Consumption (TRC, 0.08 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.2 mg/L)

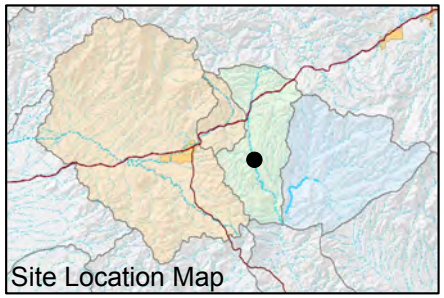
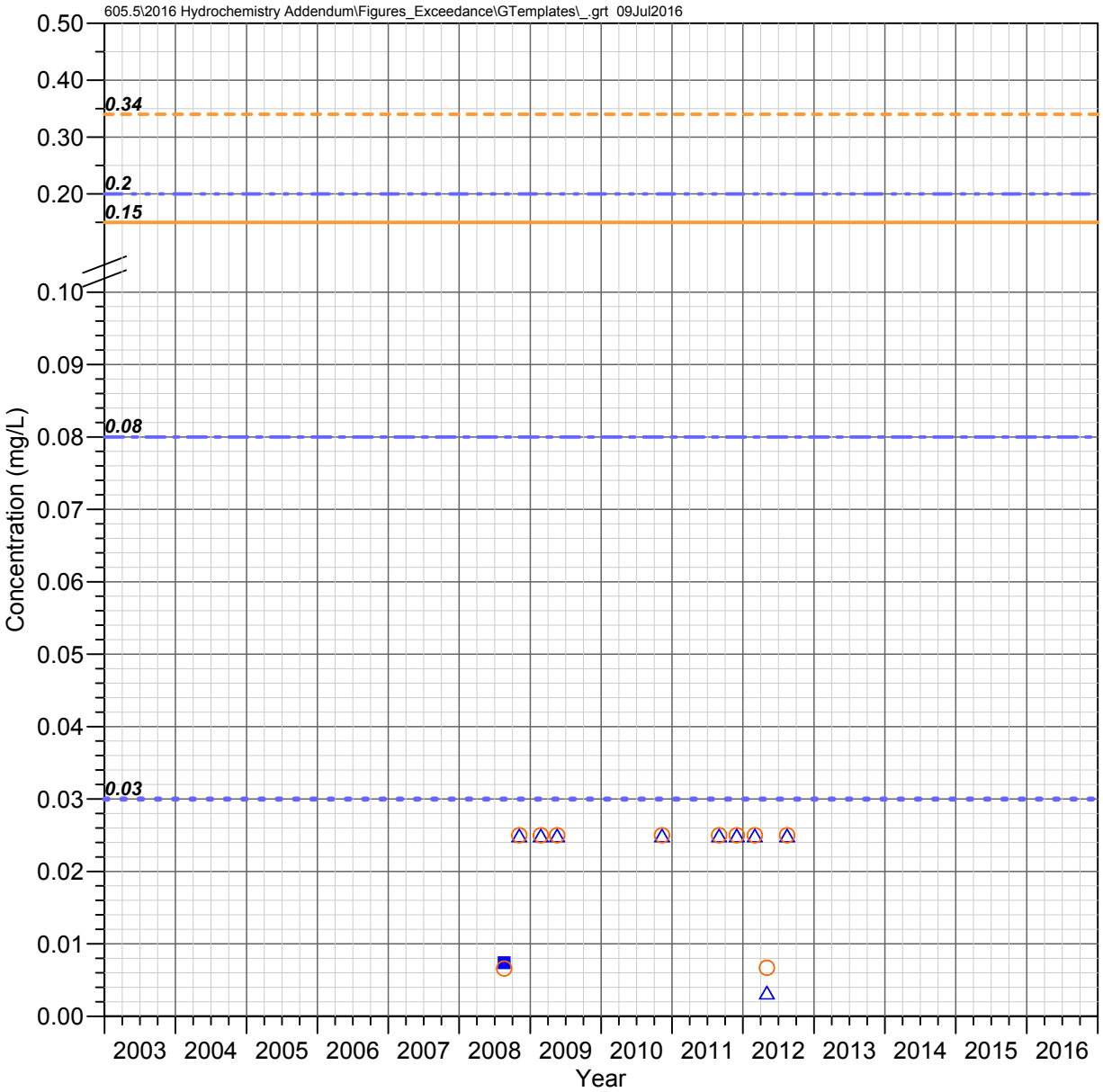


FIGURE F-055. ARSENIC CONCENTRATIONS OBSERVED AT DC 8.8 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



H 0.1 C
Devils Canyon Watershed

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.34 mg/L)
- AZ Fish Consumption (TRC, 0.08 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.2 mg/L)

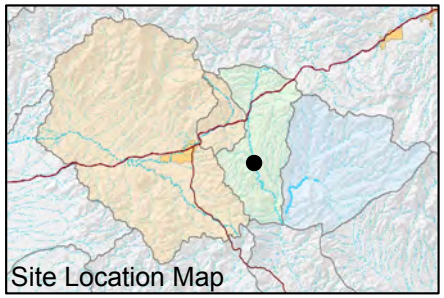
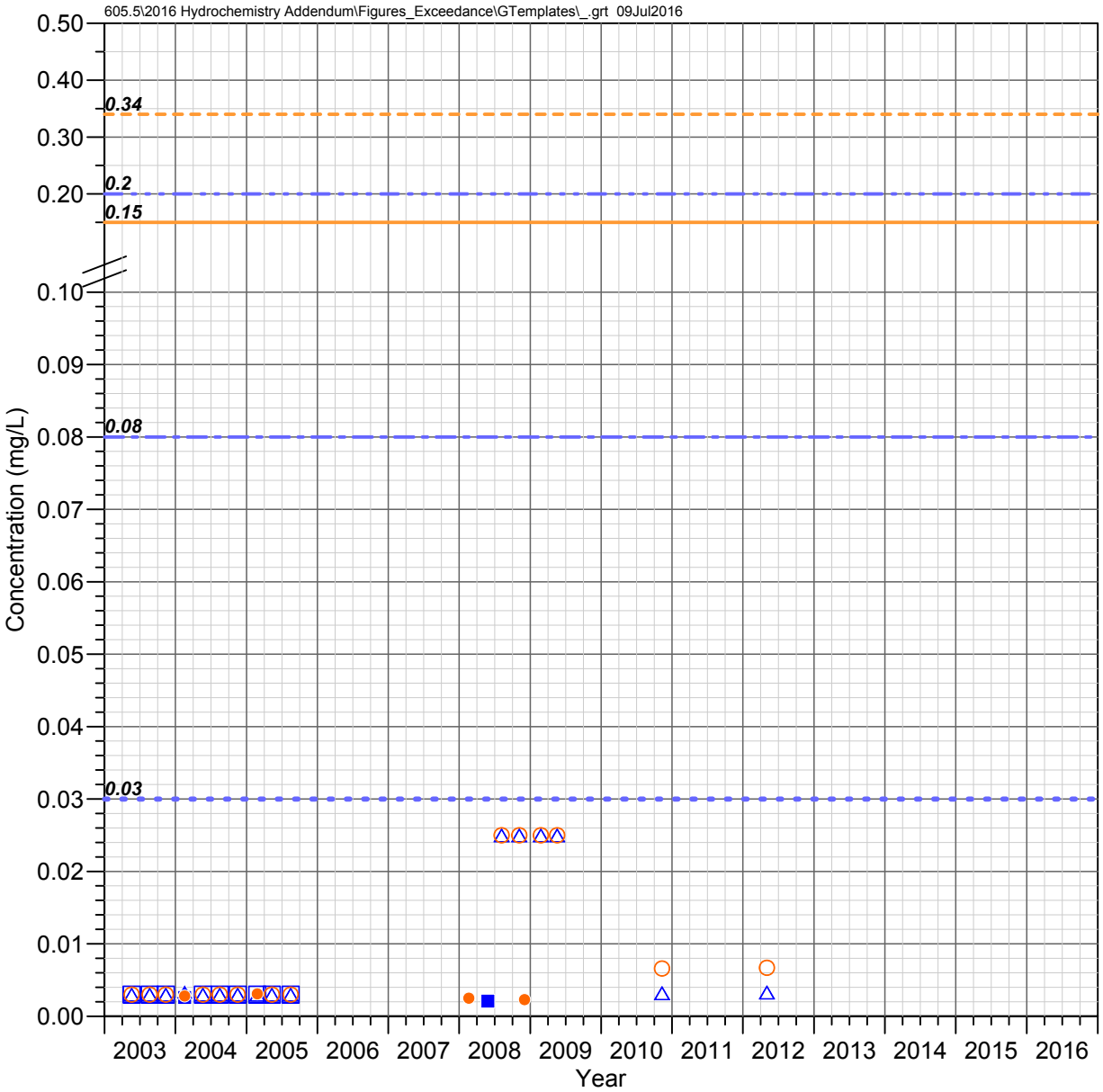


FIGURE F-056. ARSENIC CONCENTRATIONS OBSERVED AT H 0.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.2 W
Devils Canyon Watershed

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; DIS = Dissolved

- AZ Full Body Contact (TRC, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.34 mg/L)
- AZ Fish Consumption (TRC, 0.08 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.2 mg/L)

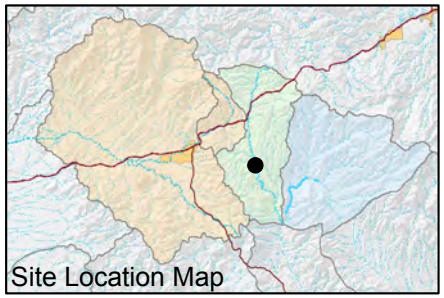
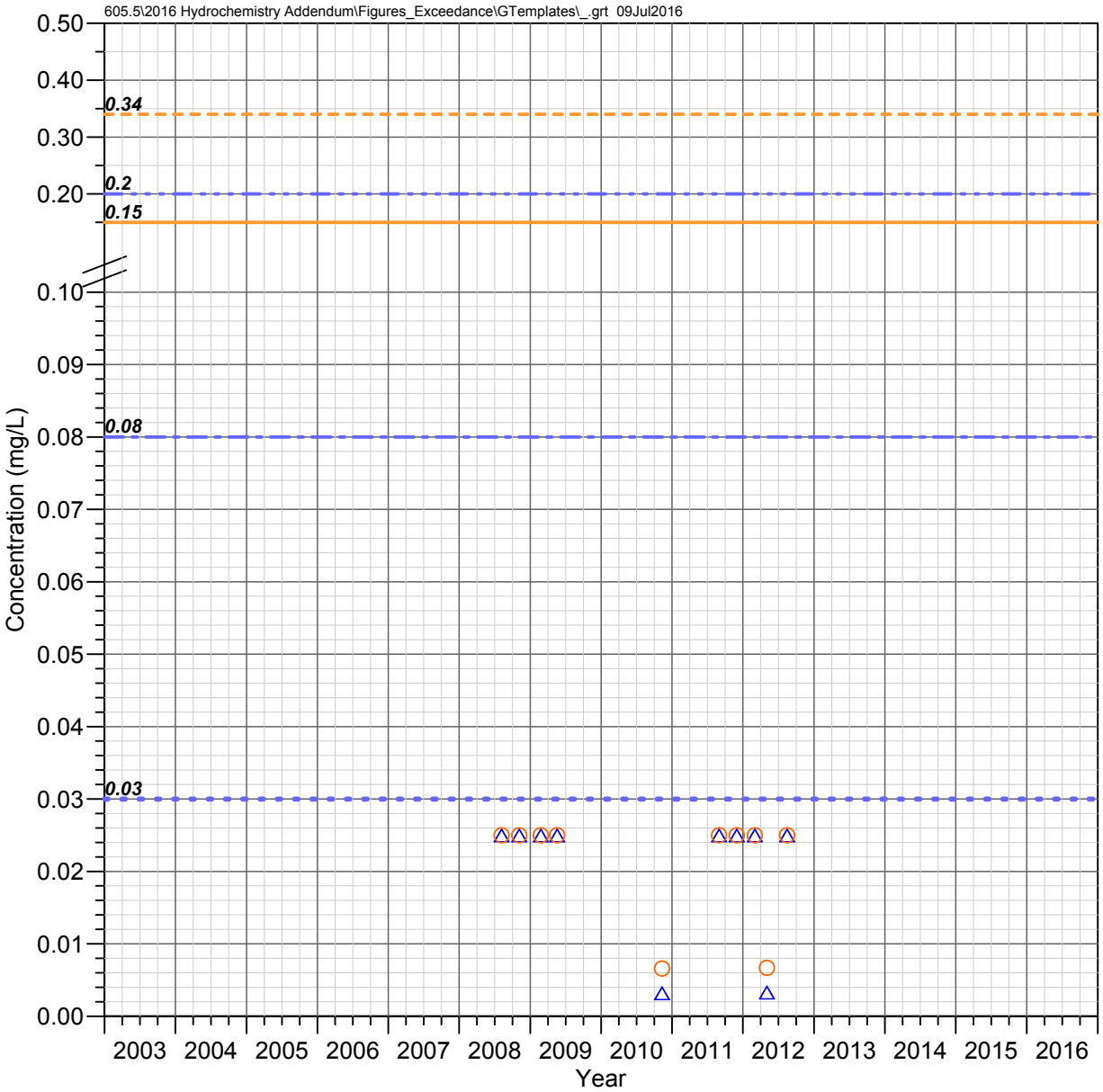


FIGURE F-057. ARSENIC CONCENTRATIONS OBSERVED AT DC 8.2 W, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.1 C
Devils Canyon Watershed

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; DIS = Dissolved

- AZ Full Body Contact (TRC, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.34 mg/L)
- AZ Fish Consumption (TRC, 0.08 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.2 mg/L)

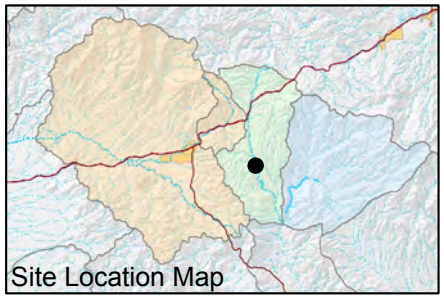
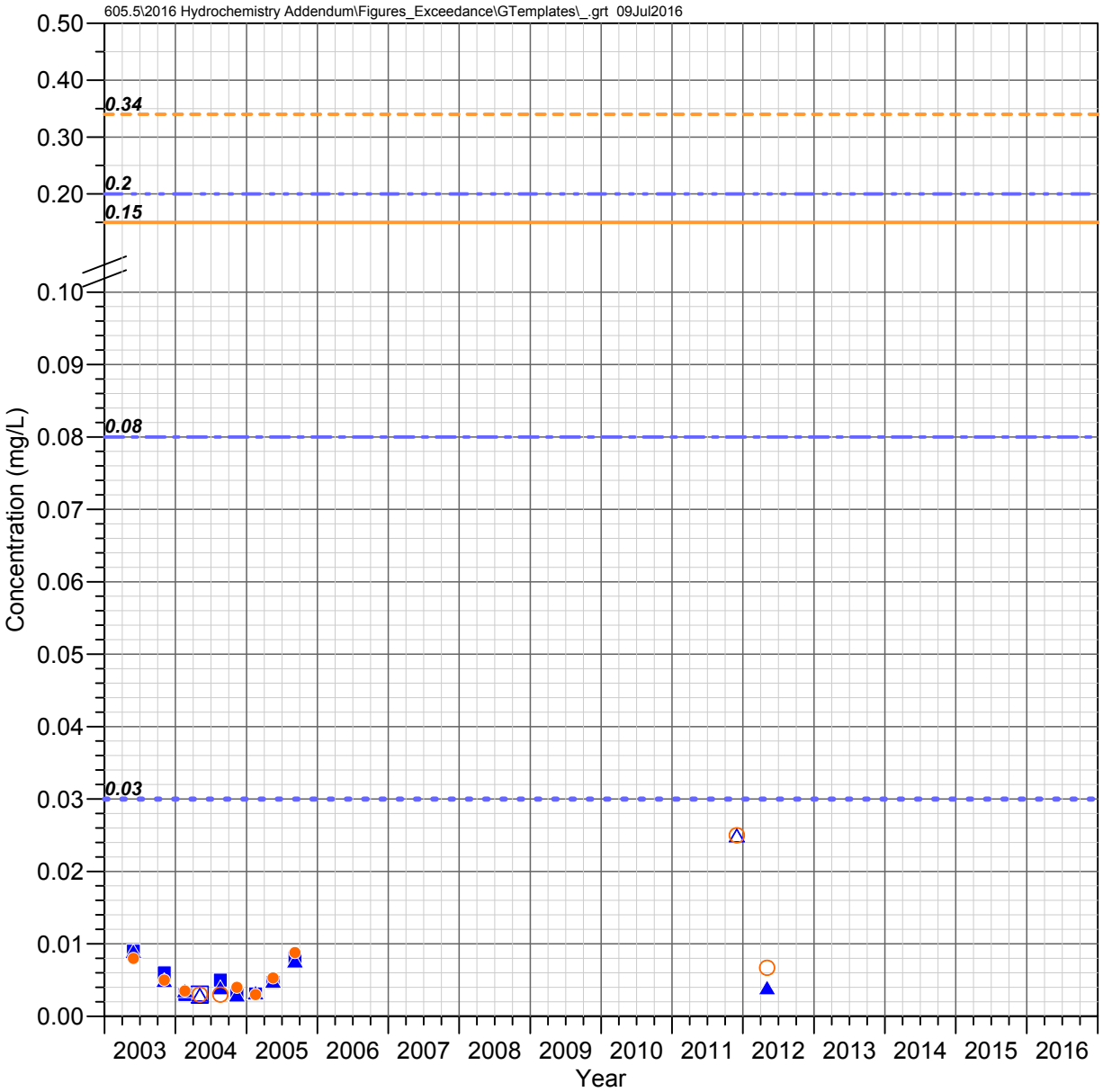


FIGURE F-058. ARSENIC CONCENTRATIONS OBSERVED AT DC 8.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 7.1 C
Devils Canyon Watershed

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.34 mg/L)
- AZ Fish Consumption (TRC, 0.08 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.2 mg/L)

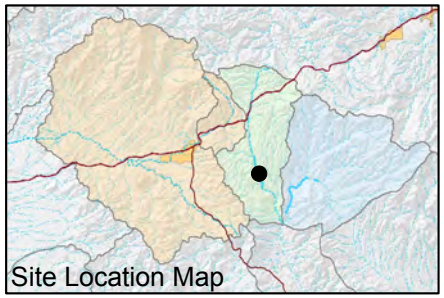
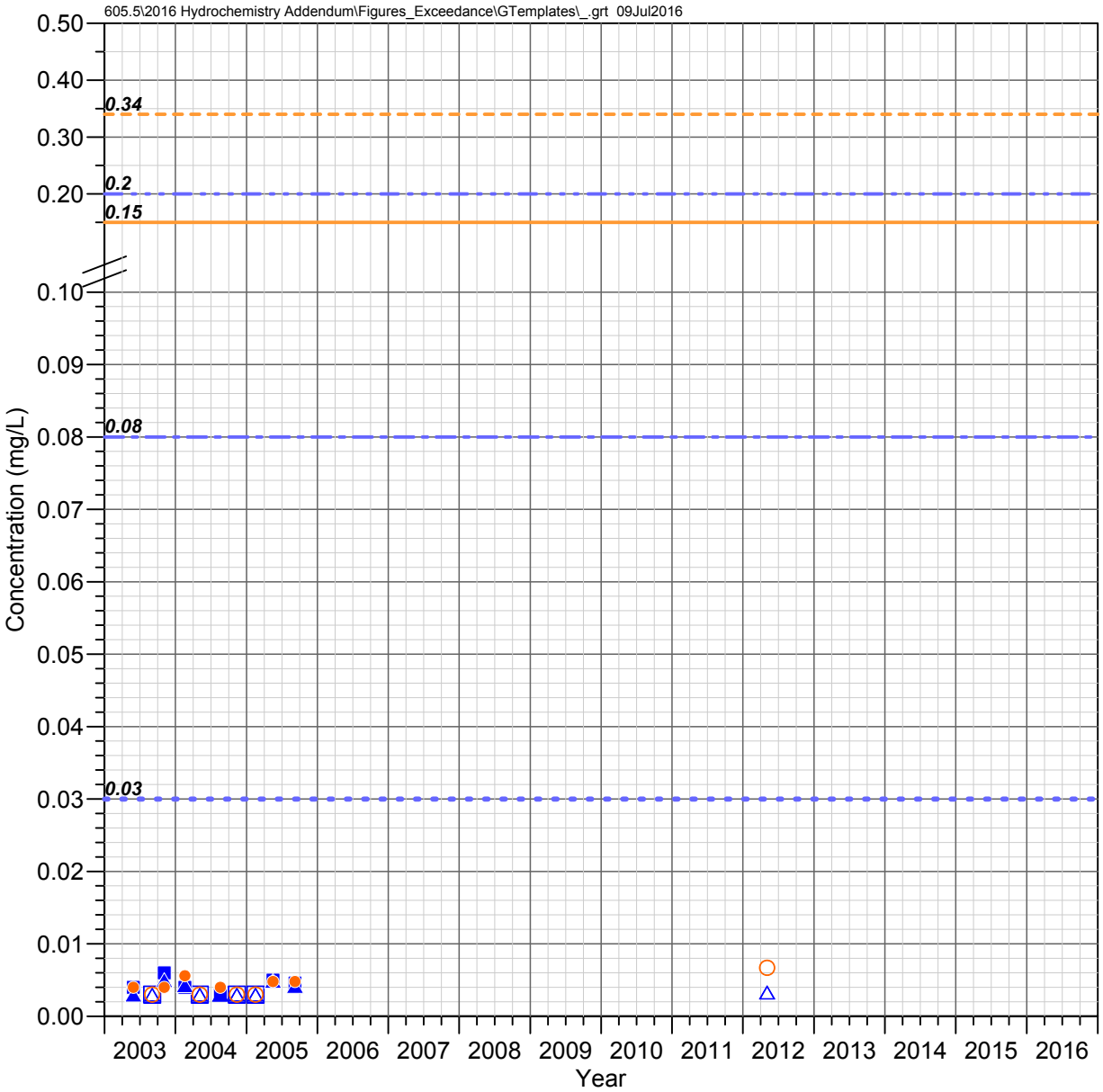


FIGURE F-059. ARSENIC CONCENTRATIONS OBSERVED AT DC 7.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.6 W (DCT 6.6 W)
Devils Canyon Watershed

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.34 mg/L)
- AZ Fish Consumption (TRC, 0.08 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.2 mg/L)

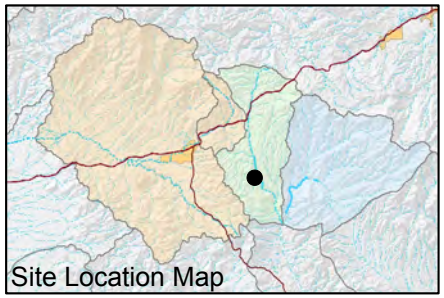
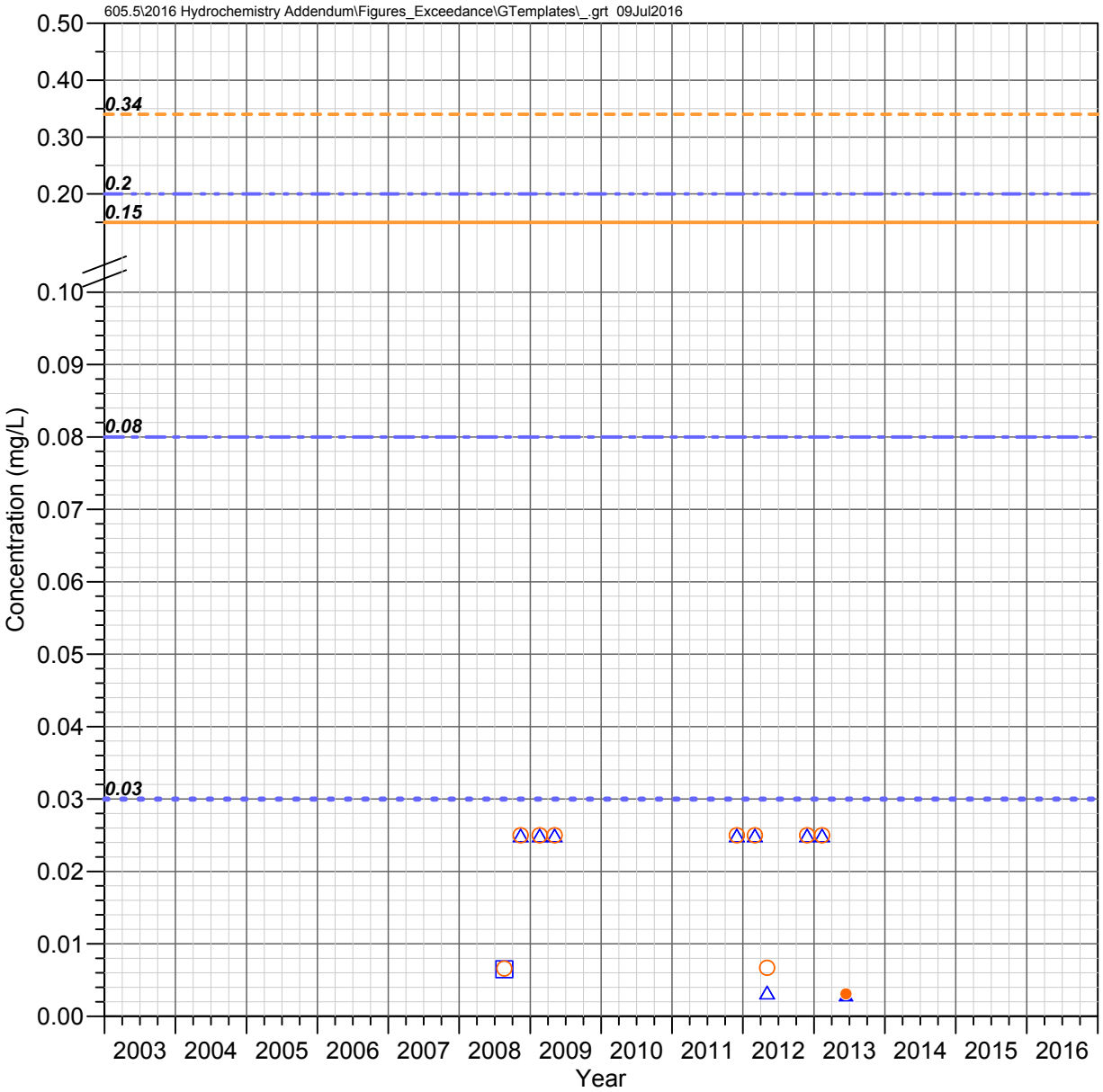


FIGURE F-060. ARSENIC CONCENTRATIONS OBSERVED AT DC 6.6 W (DCT 6.6 W), DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.14 C
Devils Canyon Watershed

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; DIS = Dissolved

- AZ Full Body Contact (TRC, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.34 mg/L)
- AZ Fish Consumption (TRC, 0.08 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.2 mg/L)

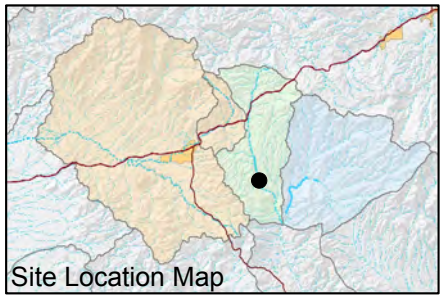
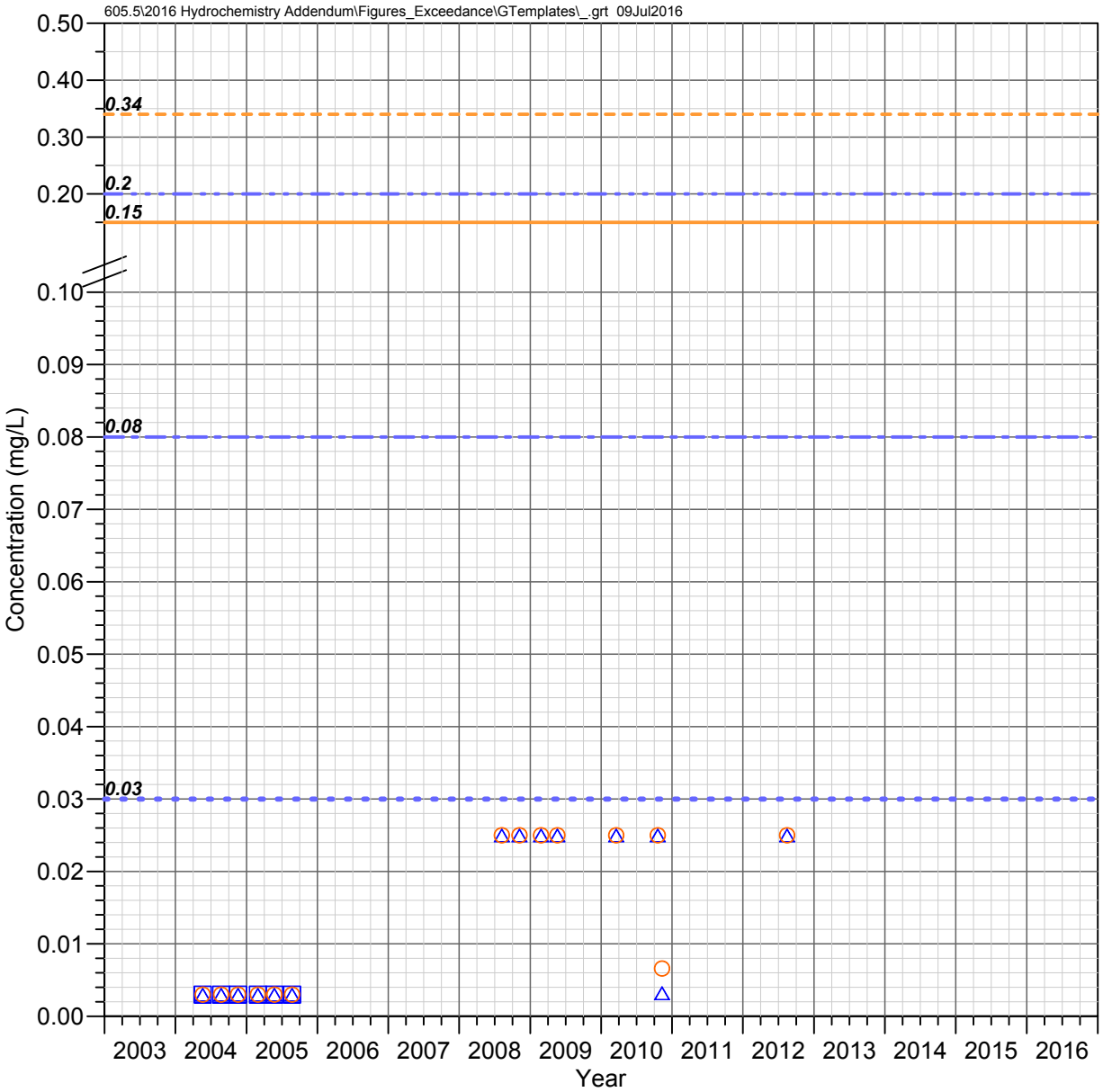


FIGURE F-061. ARSENIC CONCENTRATIONS OBSERVED AT DC 6.14 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.1 E
Devils Canyon Watershed

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; DIS = Dissolved

- AZ Full Body Contact (TRC, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.34 mg/L)
- AZ Fish Consumption (TRC, 0.08 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.2 mg/L)

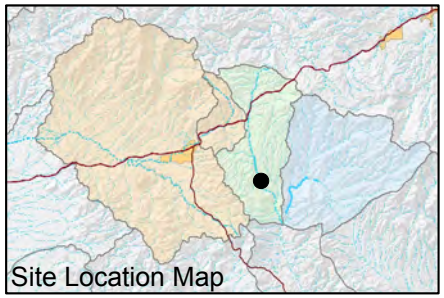
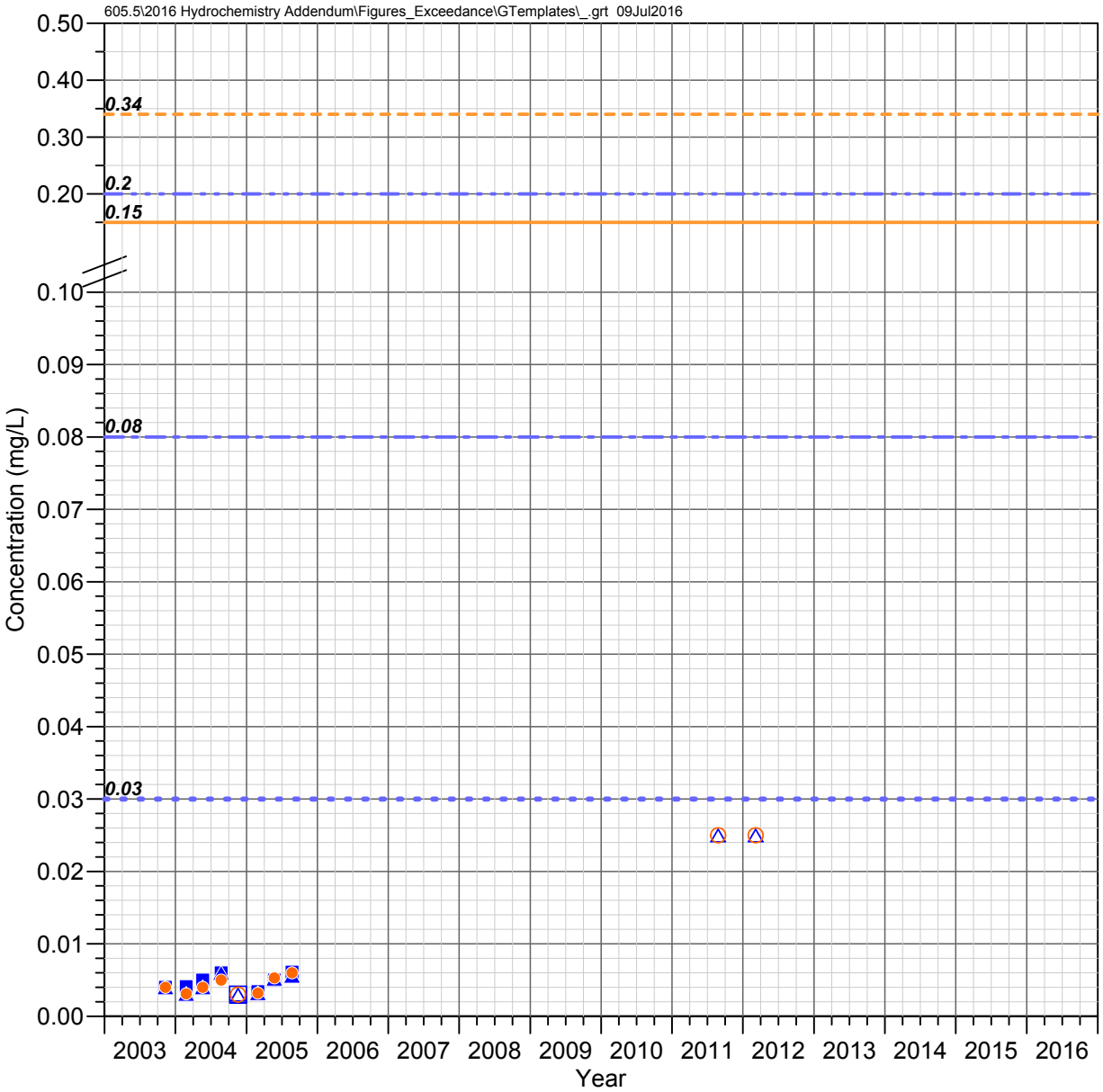


FIGURE F-062. ARSENIC CONCENTRATIONS OBSERVED AT DC 6.1 E, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 5.5 C
Devils Canyon Watershed

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; DIS = Dissolved

- AZ Full Body Contact (TRC, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.34 mg/L)
- AZ Fish Consumption (TRC, 0.08 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.2 mg/L)

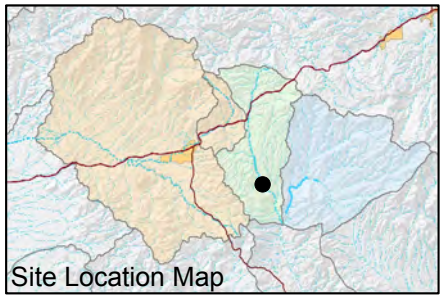
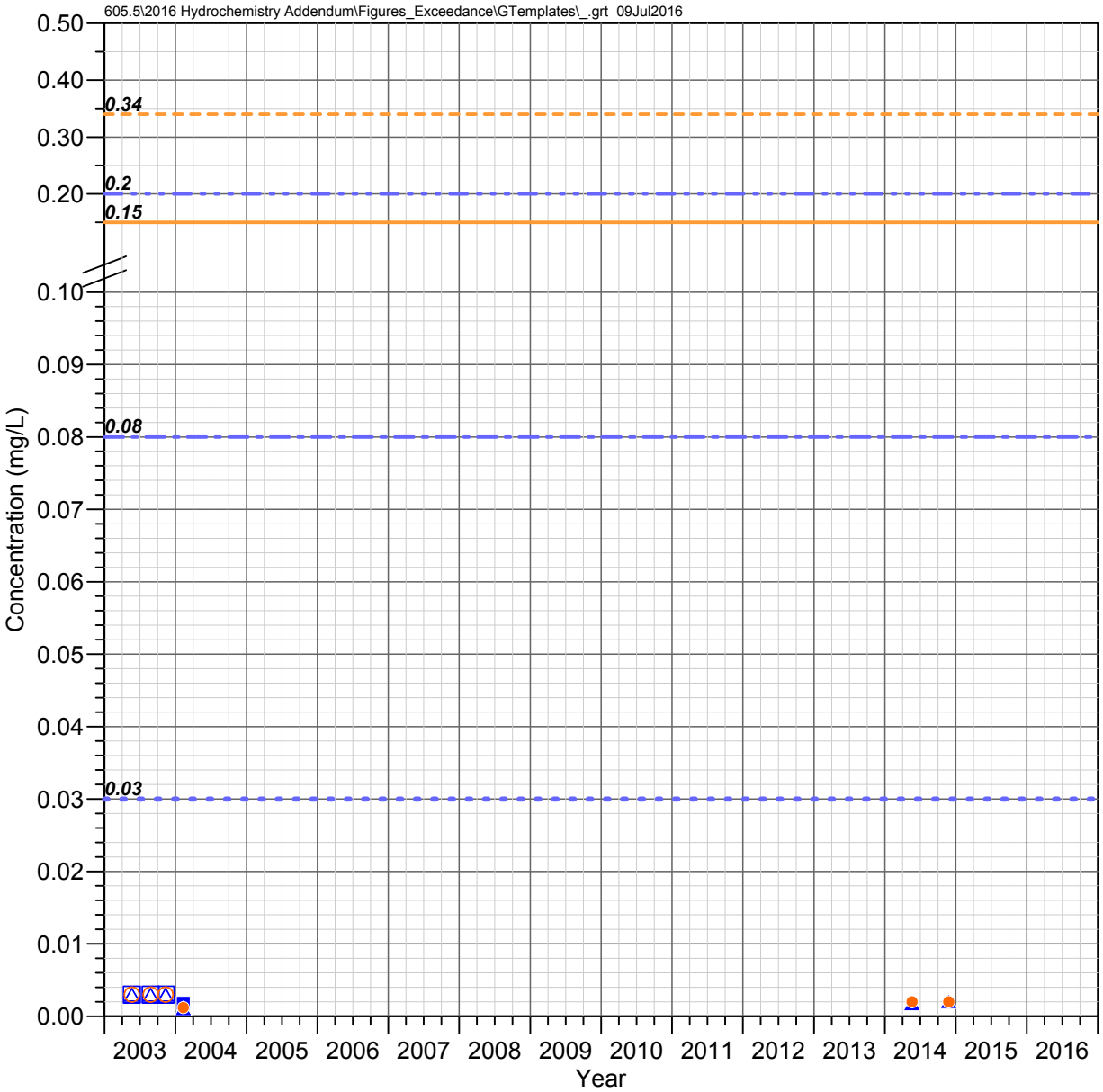


FIGURE F-063. ARSENIC CONCENTRATIONS OBSERVED AT DC 5.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 4.1 E
Devils Canyon Watershed

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; DIS = Dissolved

- AZ Full Body Contact (TRC, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.34 mg/L)
- AZ Fish Consumption (TRC, 0.08 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.2 mg/L)

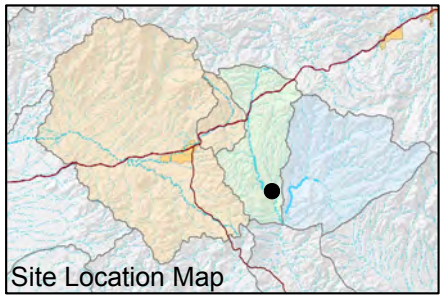
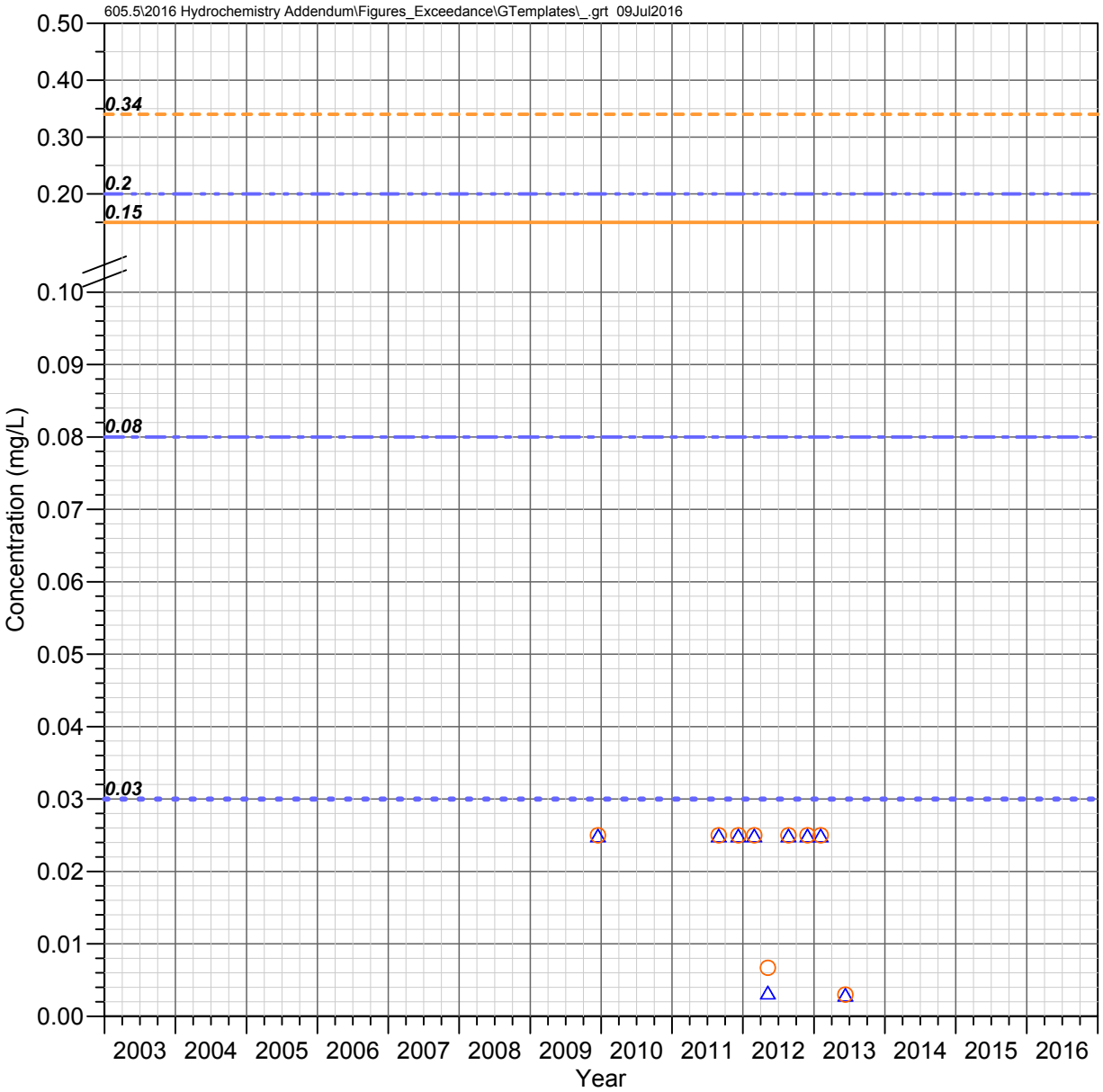


FIGURE F-064. ARSENIC CONCENTRATIONS OBSERVED AT DC 4.1 E, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Government Springs Mineral Creek Watershed

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.34 mg/L)
- AZ Fish Consumption (TRC, 0.08 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.2 mg/L)

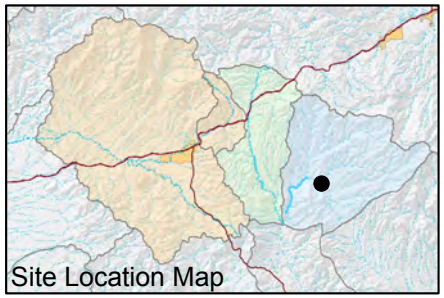
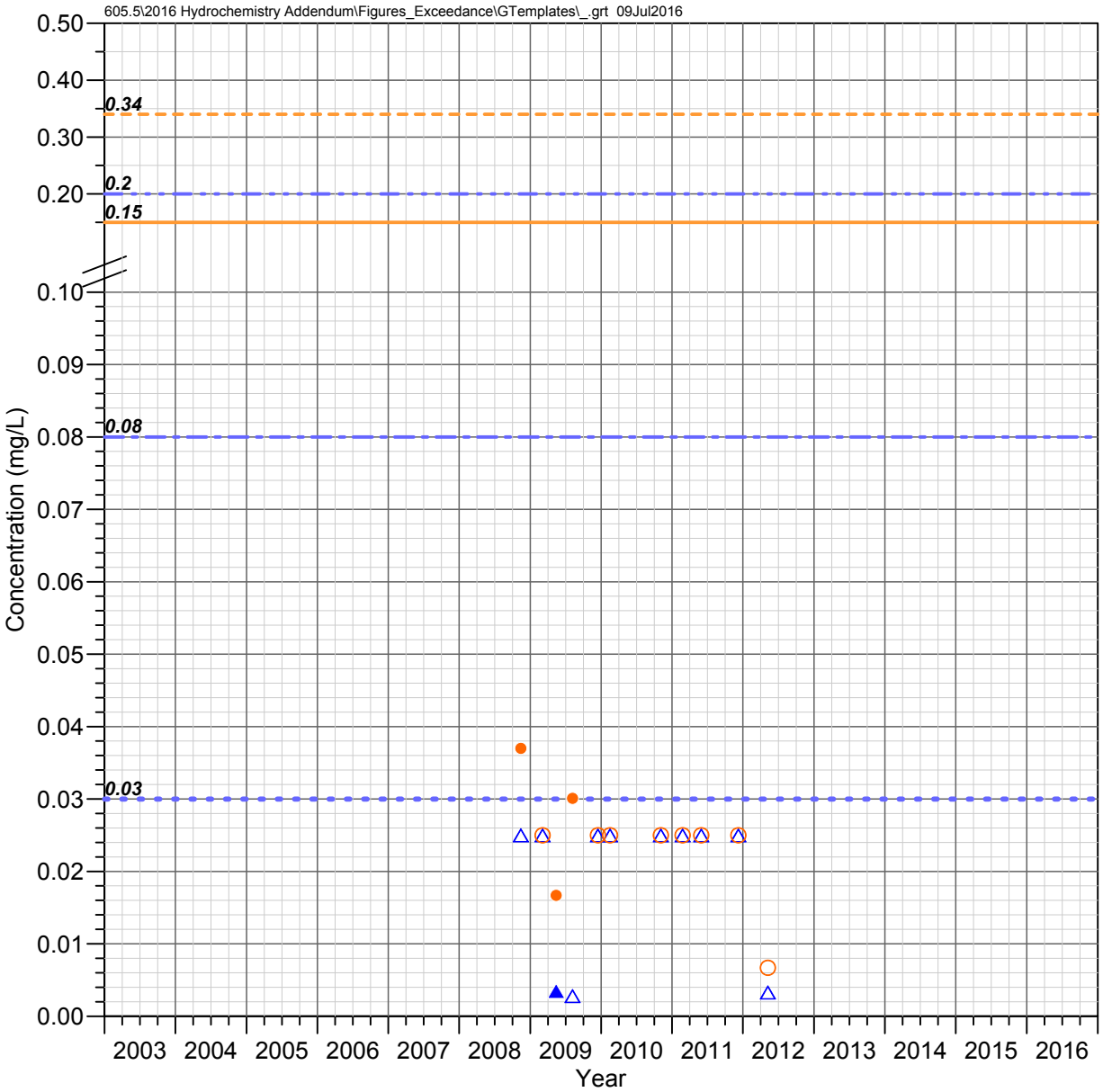


FIGURE F-065. ARSENIC CONCENTRATIONS OBSERVED AT GOVERNMENT SPRINGS, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 8.4 C
Mineral Creek Watershed

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; DIS = Dissolved

- AZ Full Body Contact (TRC, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.34 mg/L)
- AZ Fish Consumption (TRC, 0.08 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.2 mg/L)

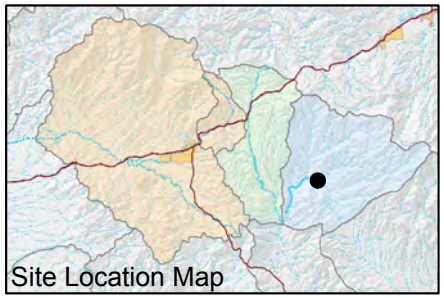
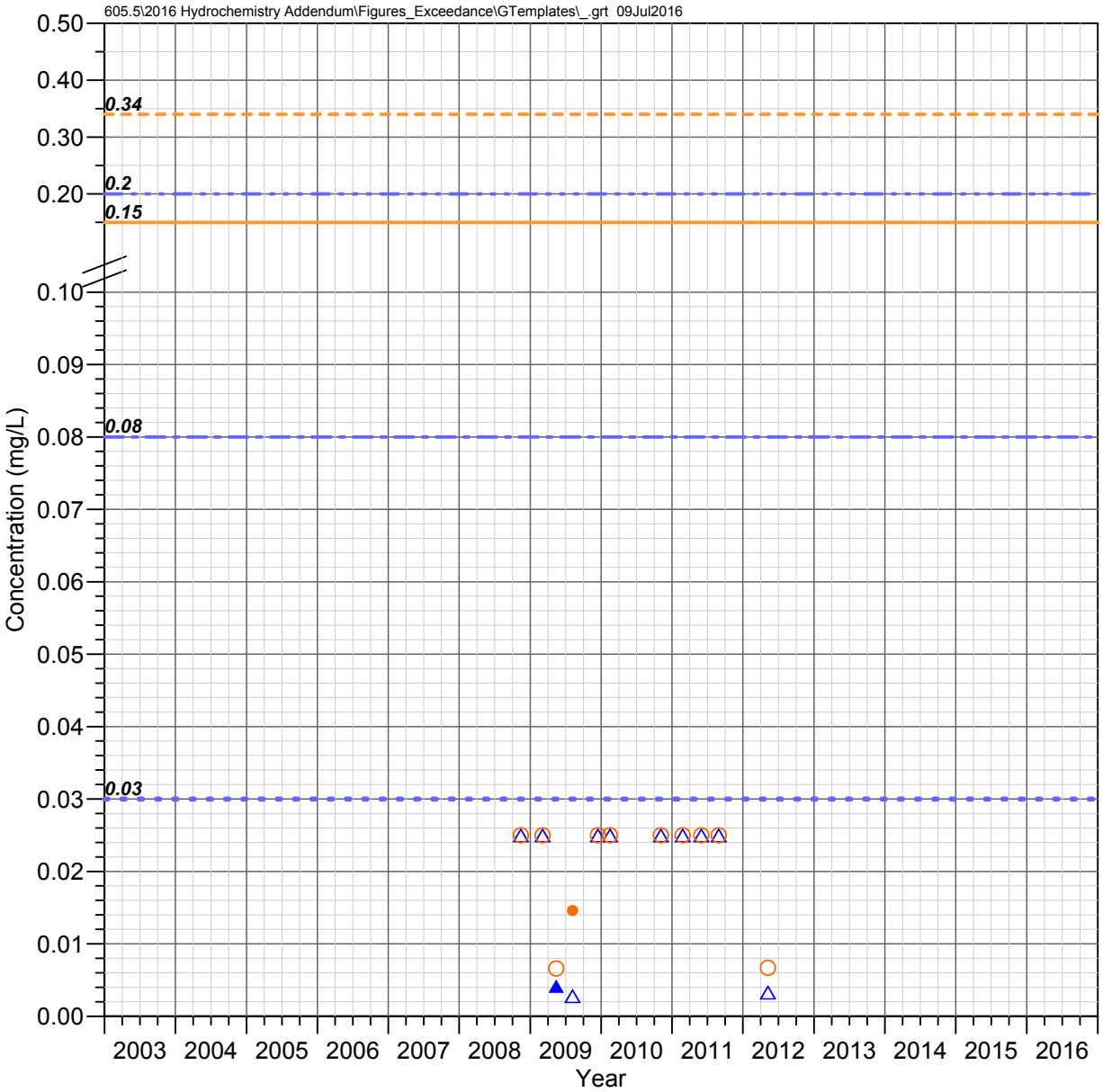


FIGURE F-066. ARSENIC CONCENTRATIONS OBSERVED AT MC 8.4 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



LF 0.2 C
Mineral Creek Watershed

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.34 mg/L)
- AZ Fish Consumption (TRC, 0.08 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.2 mg/L)

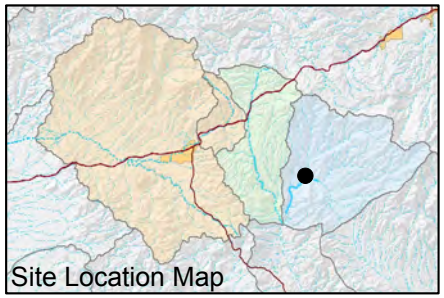
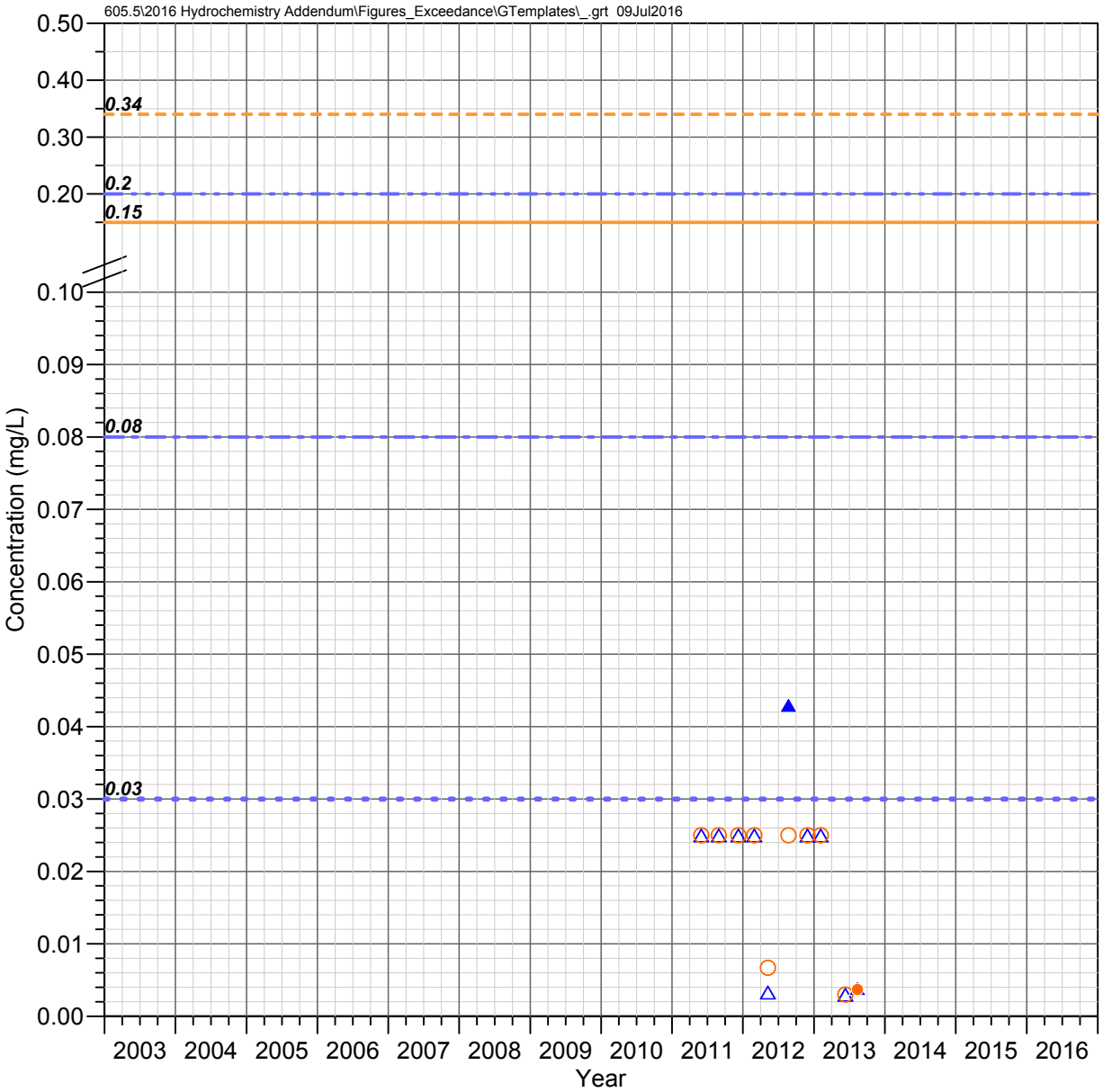


FIGURE F-067. ARSENIC CONCENTRATIONS OBSERVED AT LF 0.2 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 5.2 C
Mineral Creek Watershed

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; DIS = Dissolved

- AZ Full Body Contact (TRC, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.34 mg/L)
- AZ Fish Consumption (TRC, 0.08 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.2 mg/L)

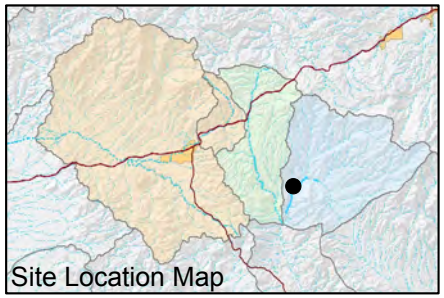
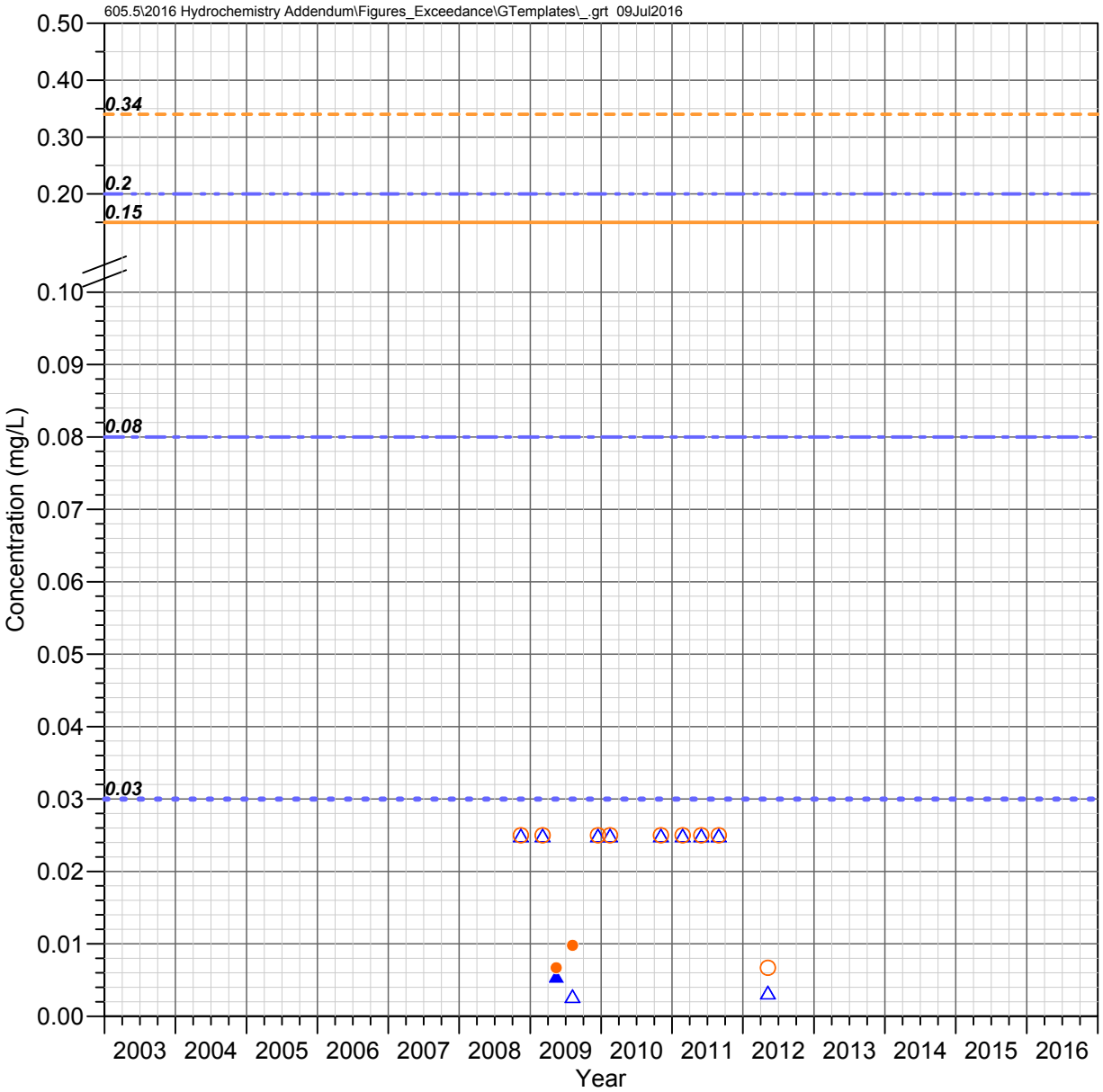


FIGURE F-068. ARSENIC CONCENTRATIONS OBSERVED AT MC 5.2 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 3.4 W (Wet Leg Spring)
Mineral Creek Watershed

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.34 mg/L)
- AZ Fish Consumption (TRC, 0.08 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.2 mg/L)

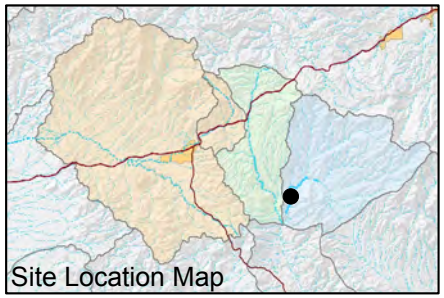
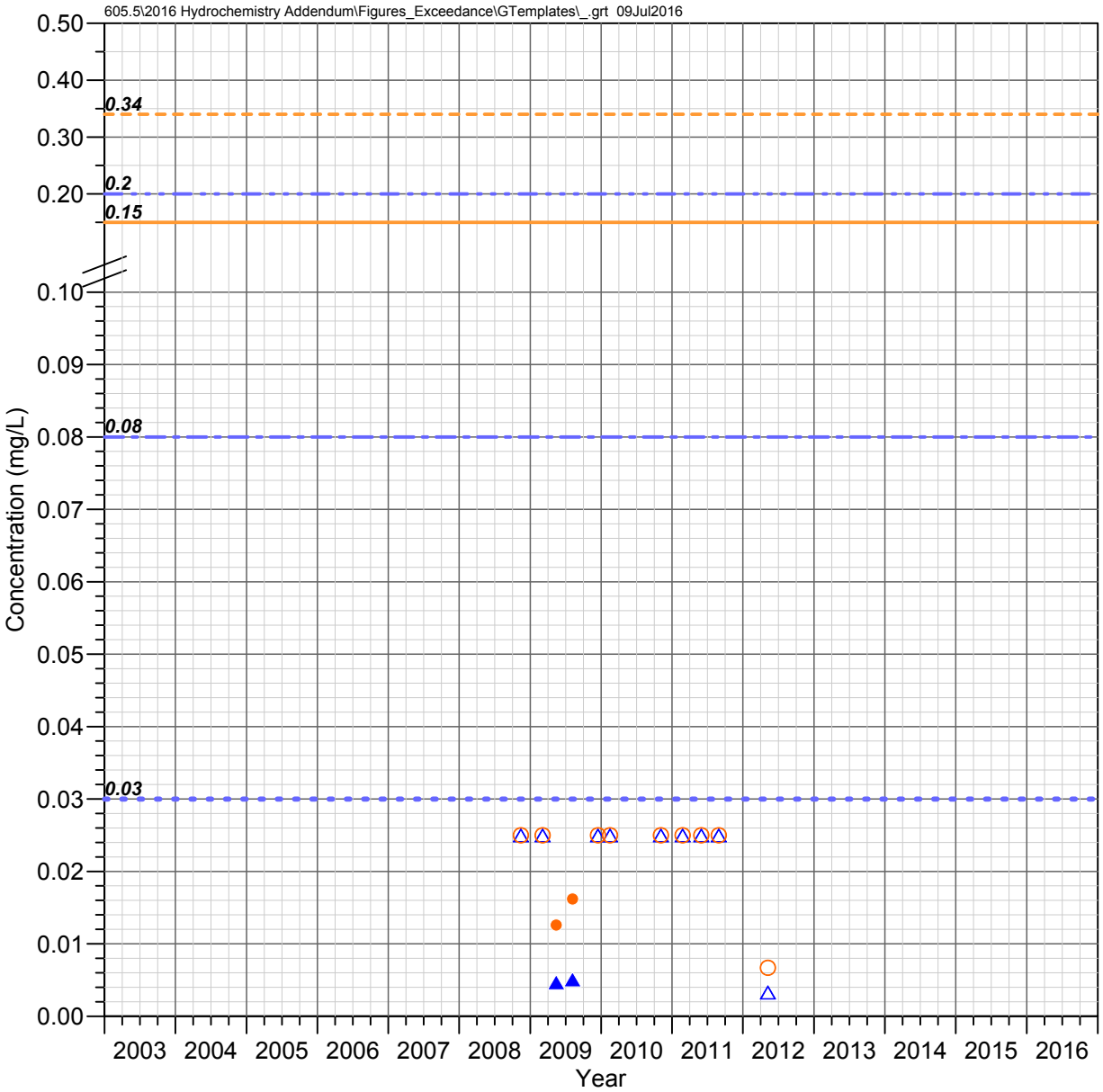


FIGURE F-069. ARSENIC CONCENTRATIONS OBSERVED AT MC 3.4 W (WET LEG SPRING), MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 3.3 C (Lower Mineral)
Mineral Creek Watershed

ARSENIC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; DIS = Dissolved

- AZ Full Body Contact (TRC, 0.03 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.34 mg/L)
- AZ Fish Consumption (TRC, 0.08 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.2 mg/L)

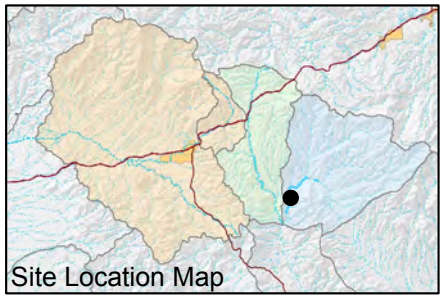
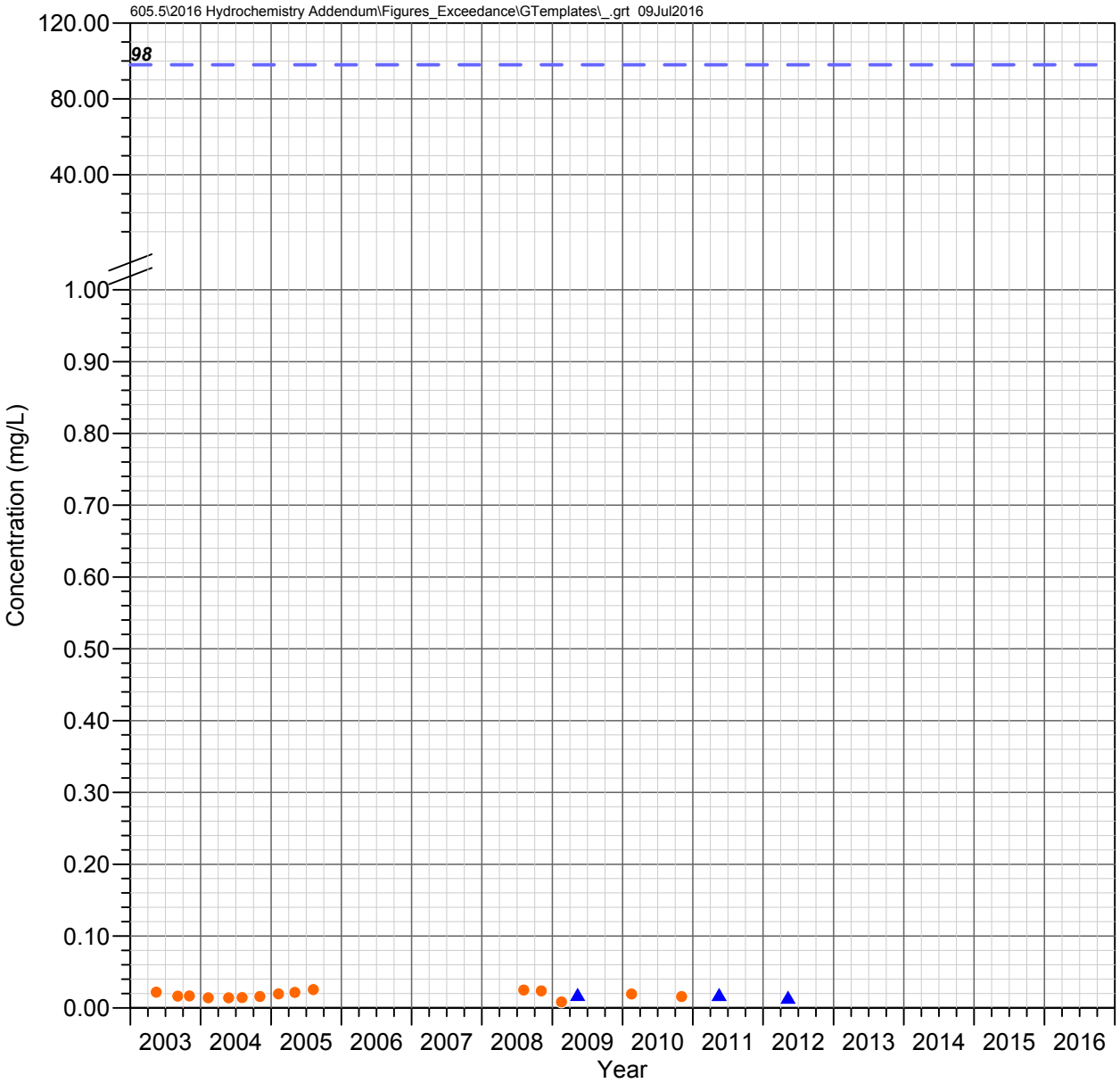


FIGURE F-070. ARSENIC CONCENTRATIONS OBSERVED AT MC 3.3 C (LOWER MINERAL), MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Pump Station Spring (QC 30.7 C)
Queen Creek Watershed

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

— — AZ Partial Body Contact (TRC, 98 mg/L)

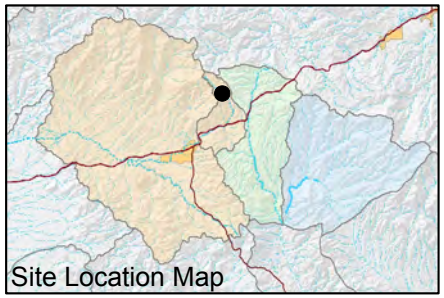
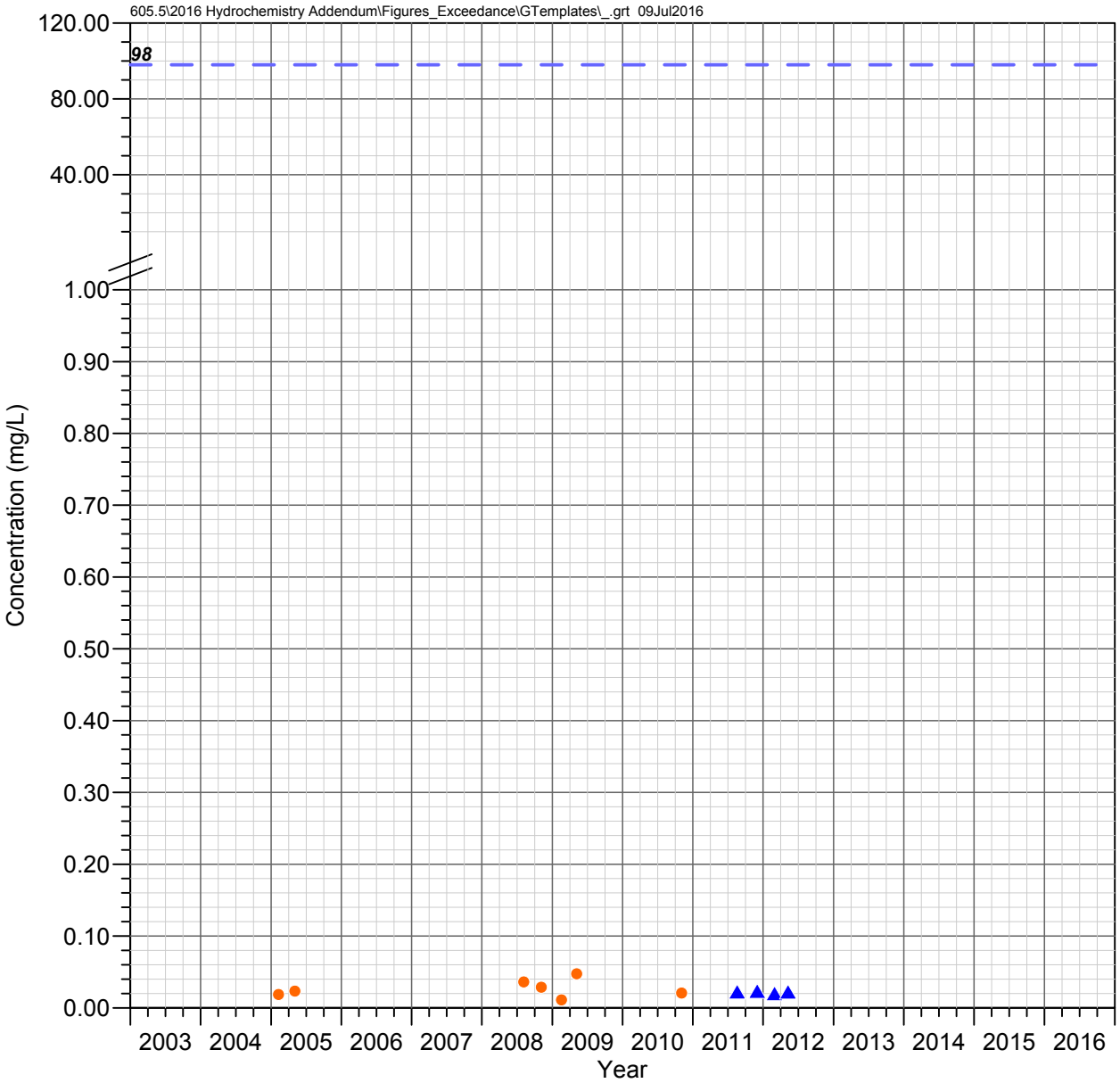


FIGURE F-071. BARIUM CONCENTRATIONS OBSERVED AT PUMP STATION SPRING (QC 30.7 C), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 27.3 C
Queen Creek Watershed

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

— — AZ Partial Body Contact (TRC, 98 mg/L)

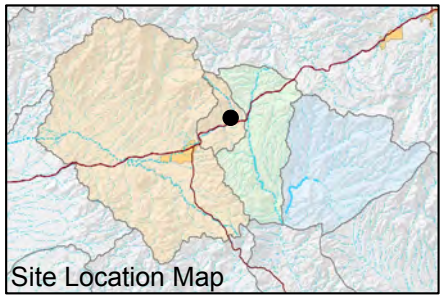
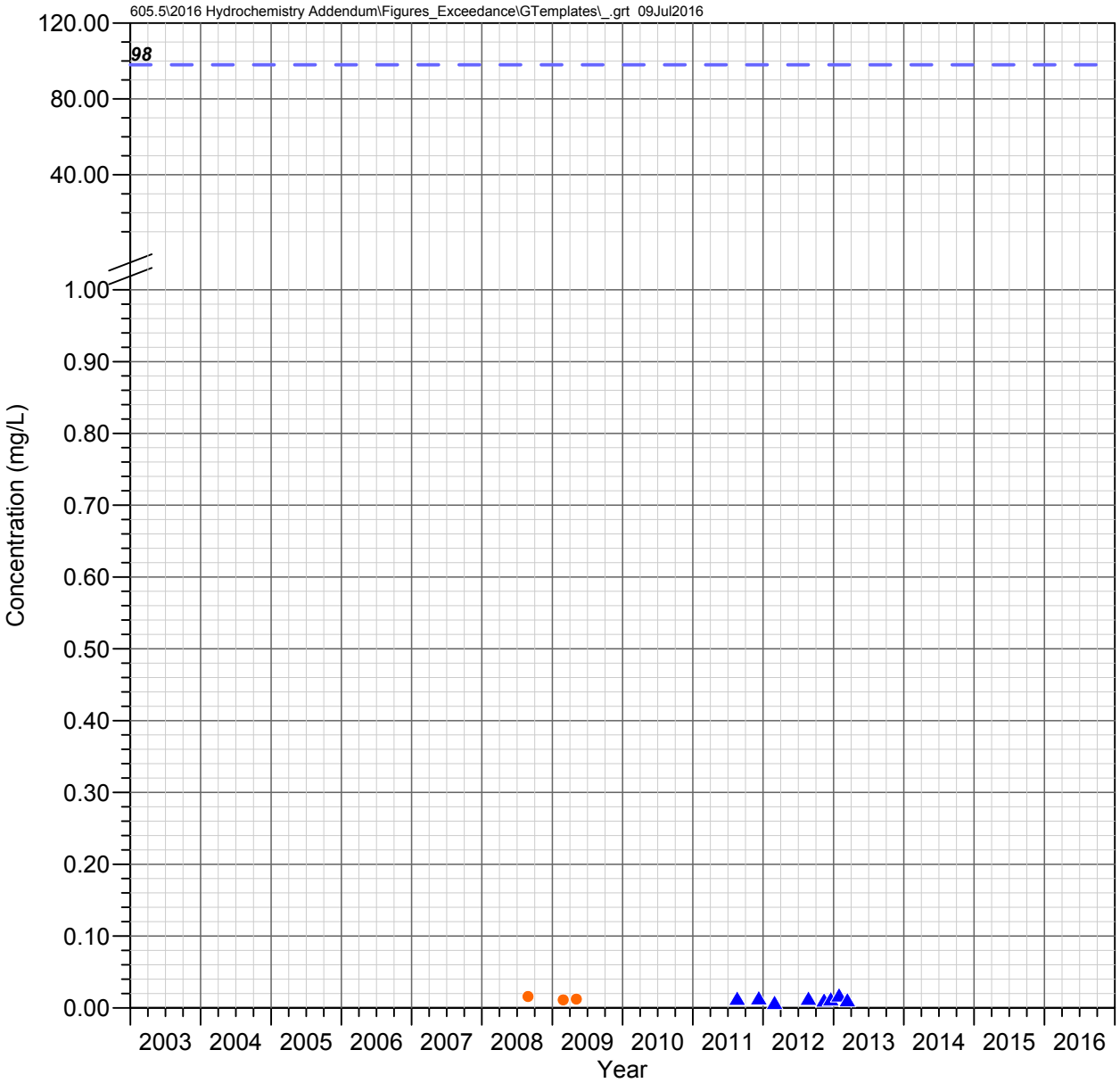


FIGURE F-072. BARIUM CONCENTRATIONS OBSERVED AT QC 27.3 C, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Oak Flat Wash
Queen Creek Watershed

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

— — AZ Partial Body Contact (TRC, 98 mg/L)

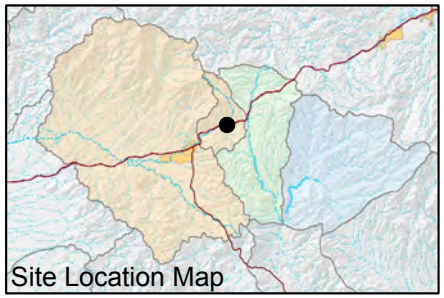
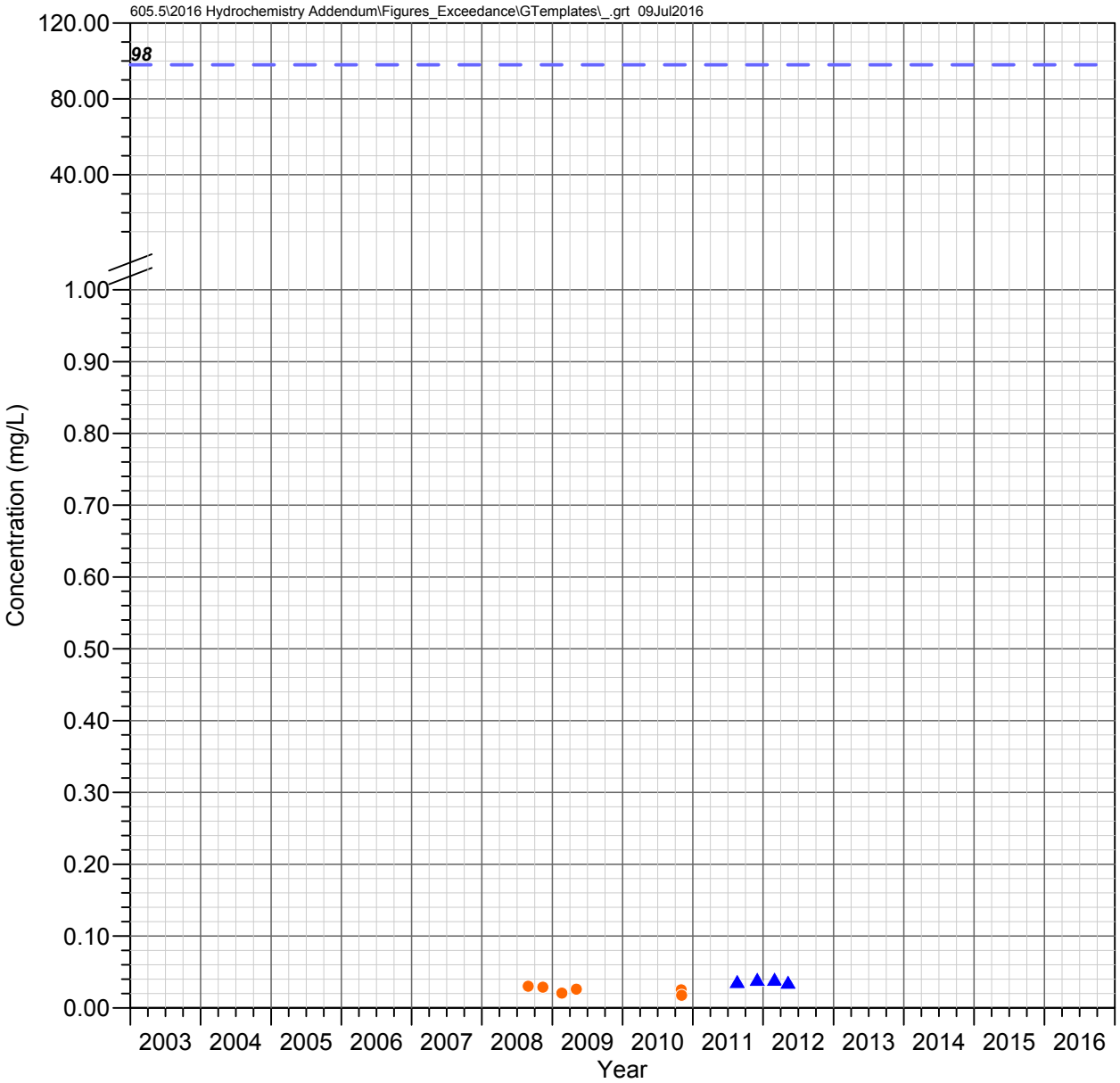


FIGURE F-073. BARIUM CONCENTRATIONS OBSERVED AT OAK FLAT WASH, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Number 9 Wash
Queen Creek Watershed

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

— — AZ Partial Body Contact (TRC, 98 mg/L)

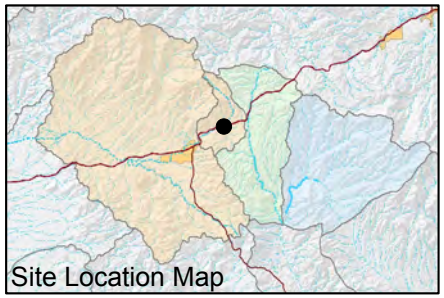
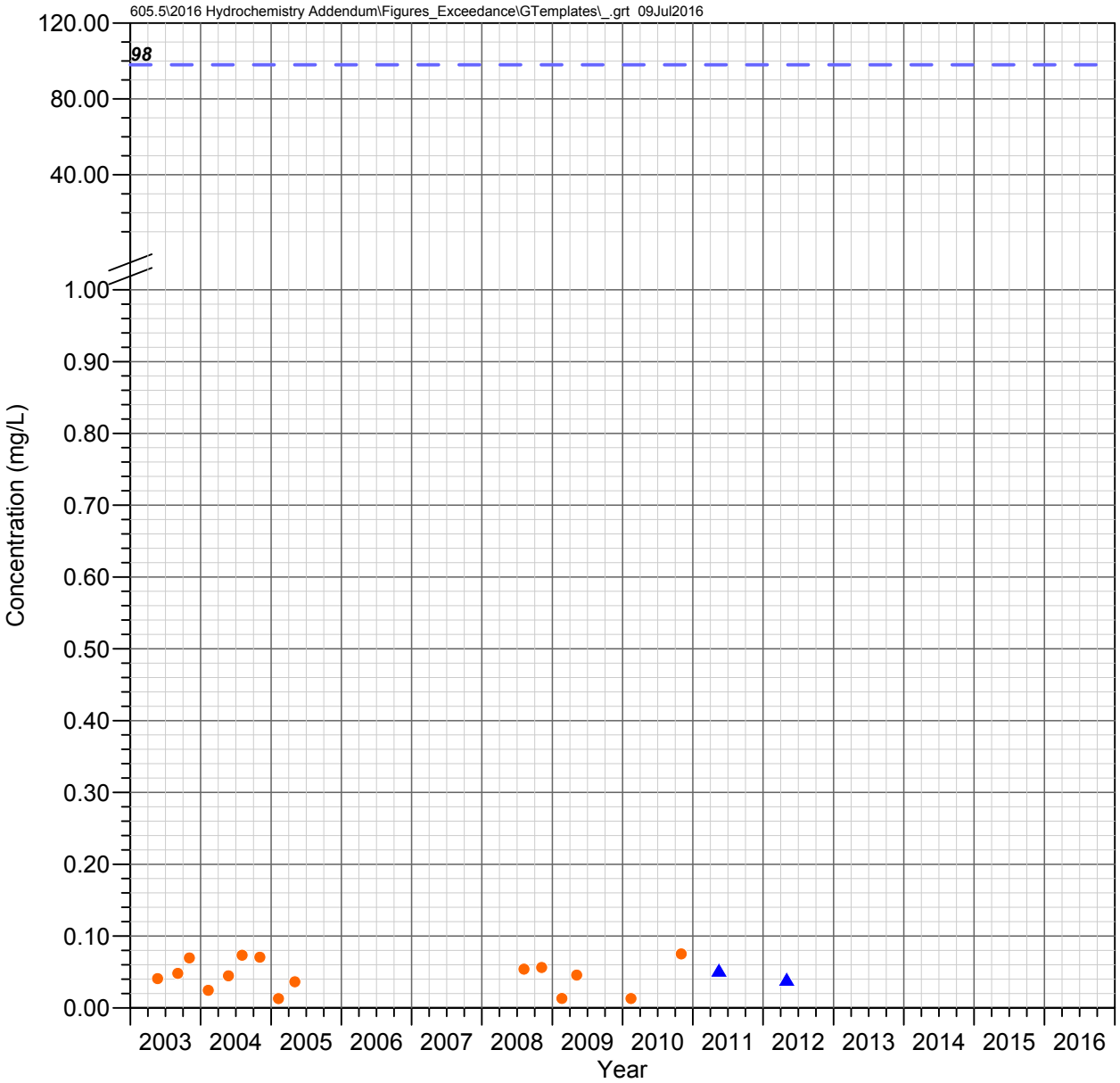


FIGURE F-074. BARIUM CONCENTRATIONS OBSERVED AT NUMBER 9 WASH, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Boulder Hole (QC 23.6 C)
Queen Creek Watershed

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

— — AZ Partial Body Contact (TRC, 98 mg/L)

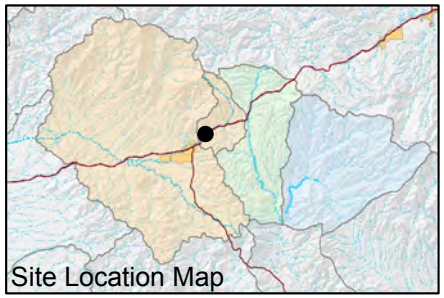
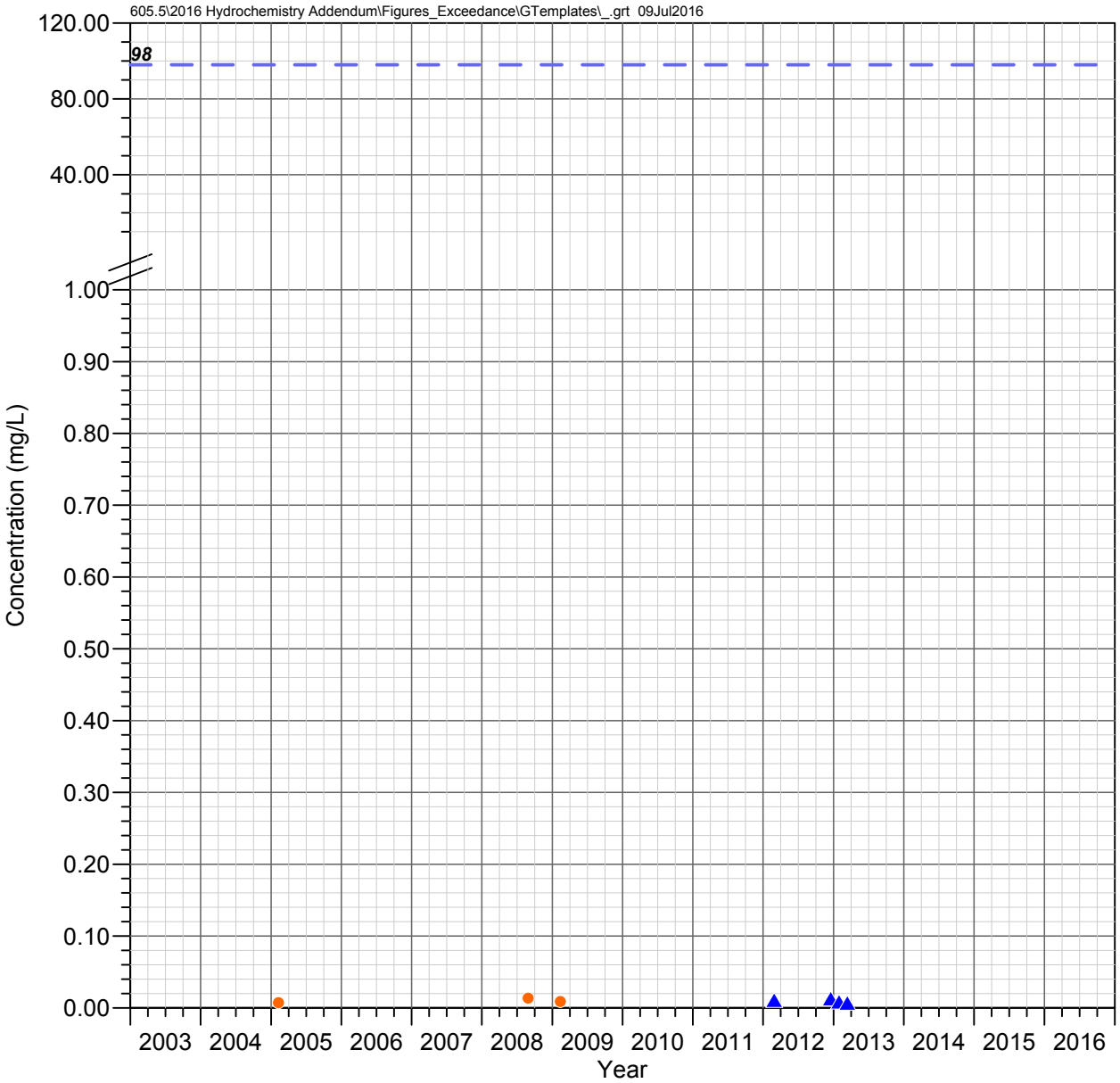


FIGURE F-075. BARIUM CONCENTRATIONS OBSERVED AT BOULDER HOLE (QC 23.6 C), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 22.6 E (Karst Spring)
Queen Creek Watershed

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

— — AZ Partial Body Contact (TRC, 98 mg/L)

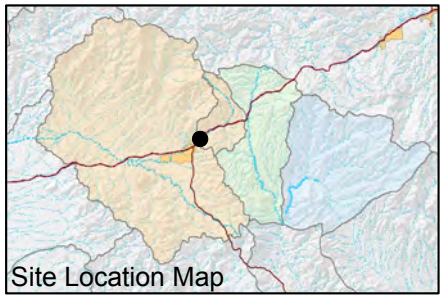
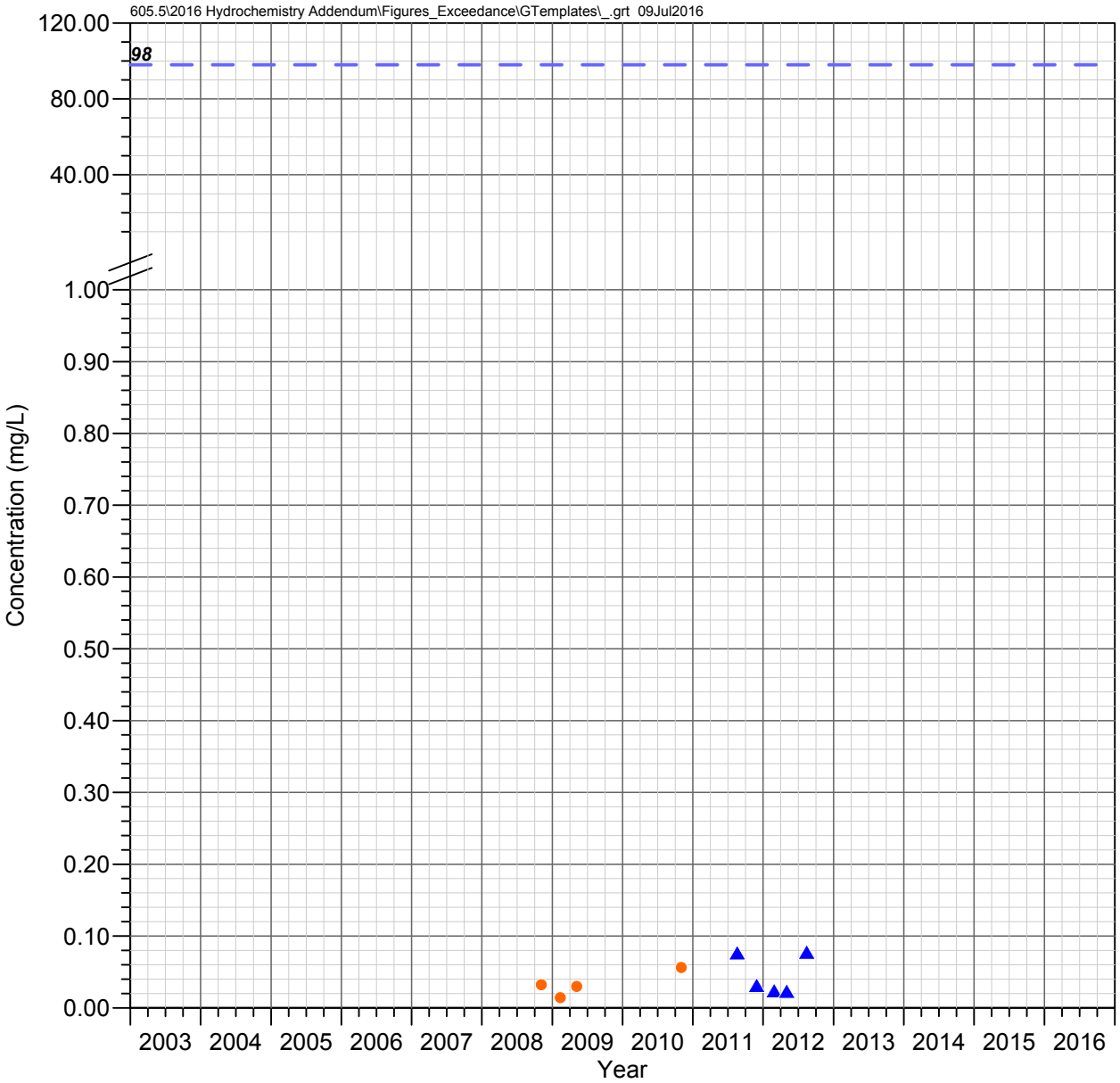


FIGURE F-076. BARIUM CONCENTRATIONS OBSERVED AT QC 22.6 E (KARST SPRING), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 21.7 C (Magma Avenue)
Queen Creek Watershed

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

— — AZ Partial Body Contact (TRC, 98 mg/L)

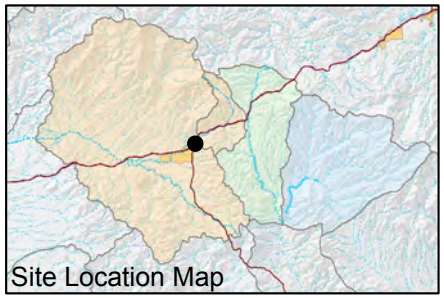
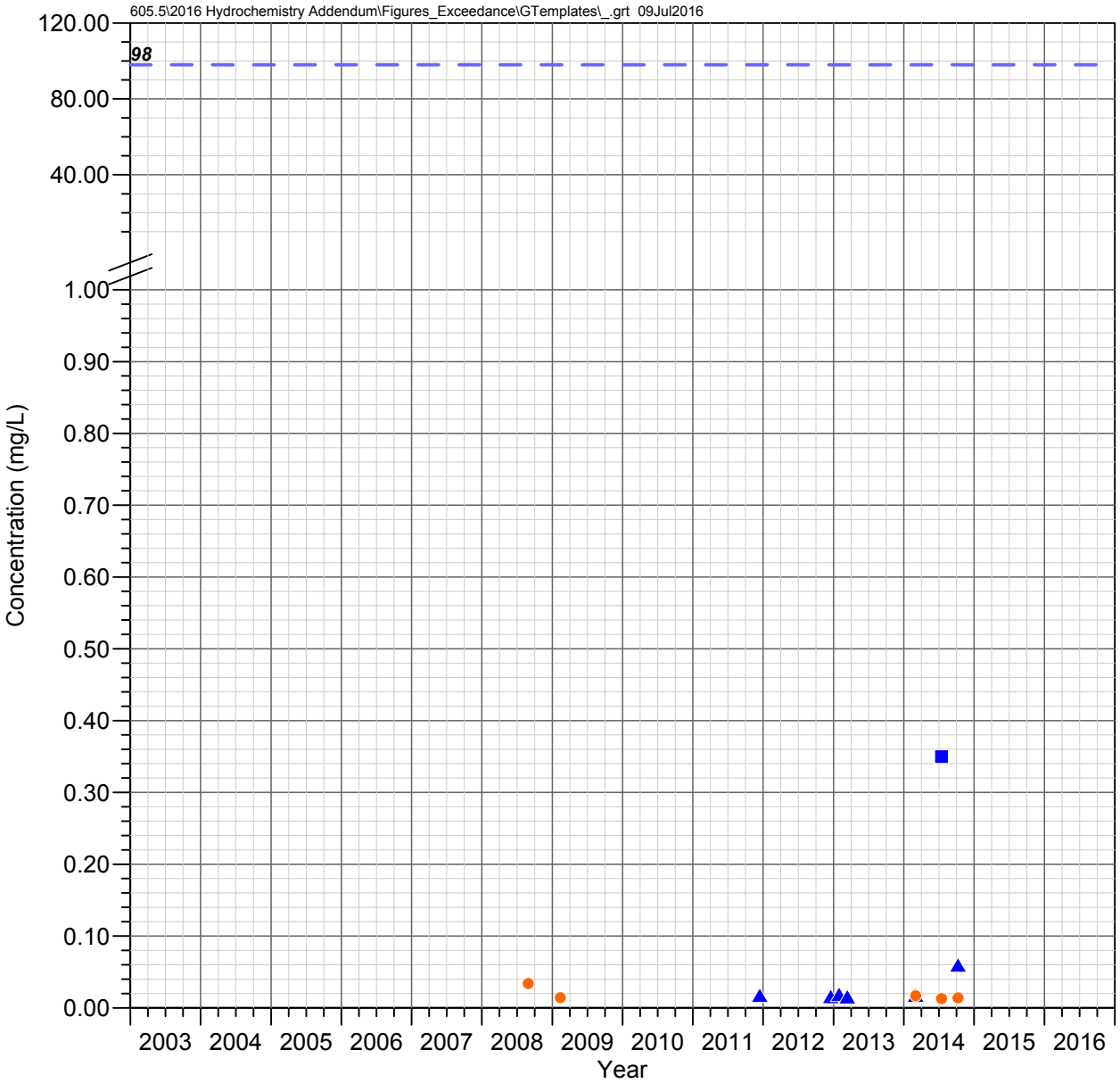


FIGURE F-077. BARIUM CONCENTRATIONS OBSERVED AT QC 21.7 C (MAGMA AVENUE), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 19.7 C
Queen Creek Watershed

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

— — AZ Partial Body Contact (TRC, 98 mg/L)

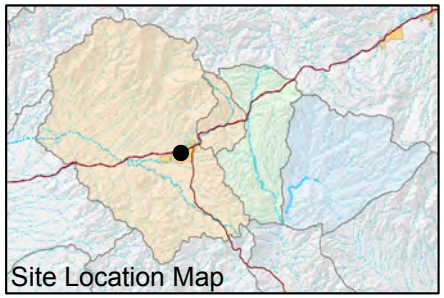
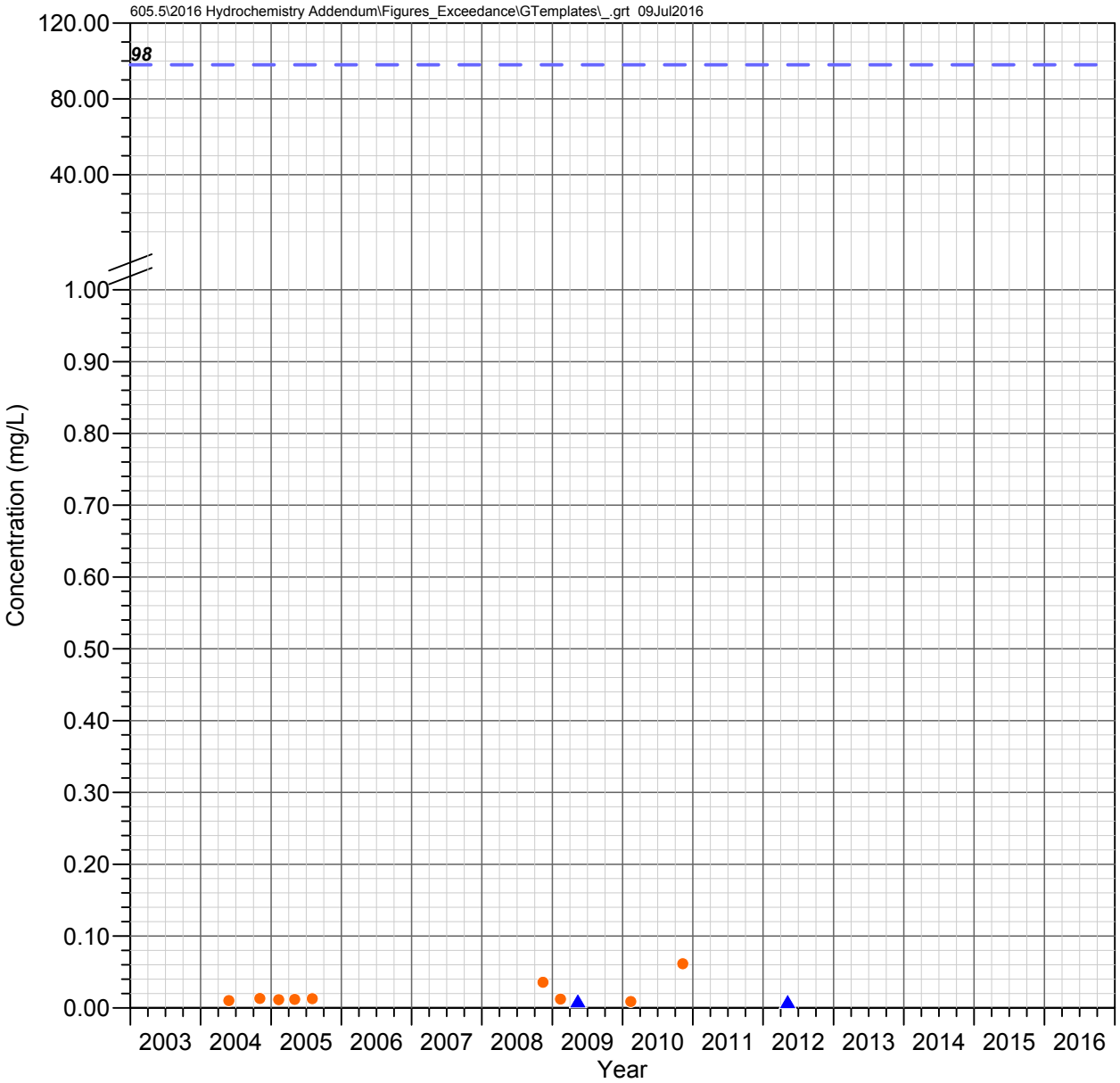


FIGURE F-078. BARIUM CONCENTRATIONS OBSERVED AT QC 19.7 C, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Bored Spring
Queen Creek Watershed

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

— — AZ Partial Body Contact (TRC, 98 mg/L)

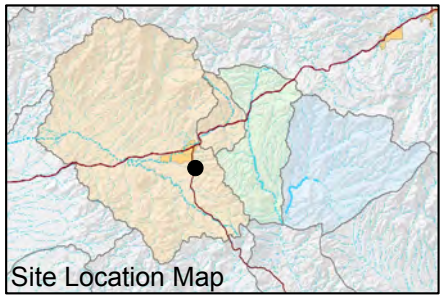
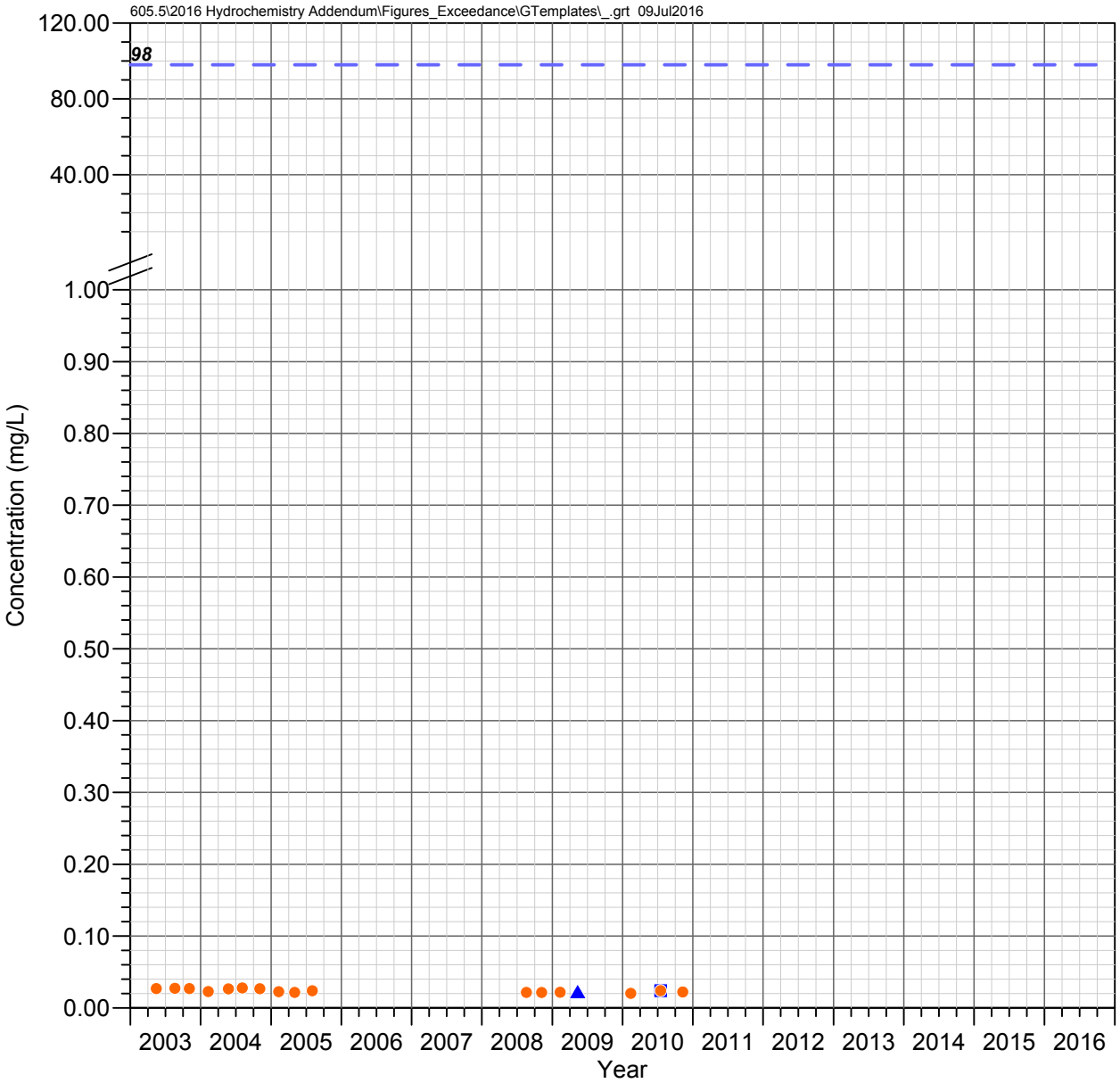


FIGURE F-079. BARIUM CONCENTRATIONS OBSERVED AT BORED SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Hidden Spring
Queen Creek Watershed

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

— — AZ Partial Body Contact (TRC, 98 mg/L)

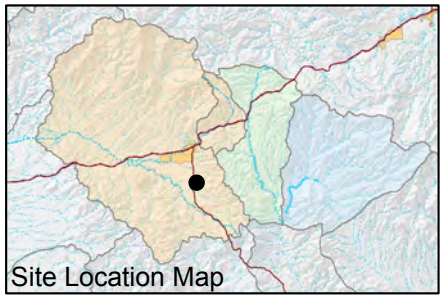
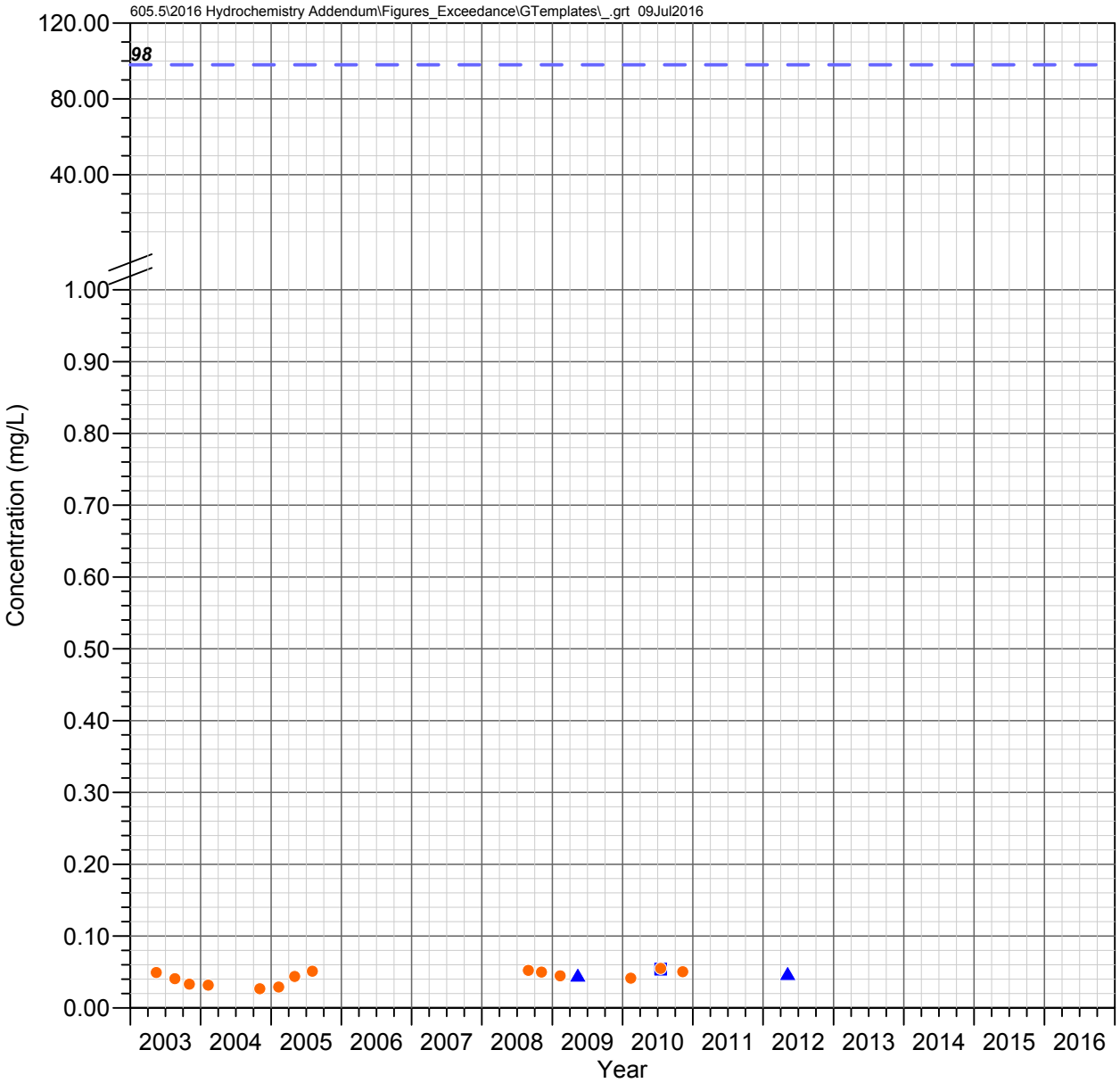


FIGURE F-080. BARIUM CONCENTRATIONS OBSERVED AT HIDDEN SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Kane Spring
Queen Creek Watershed

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

— — AZ Partial Body Contact (TRC, 98 mg/L)

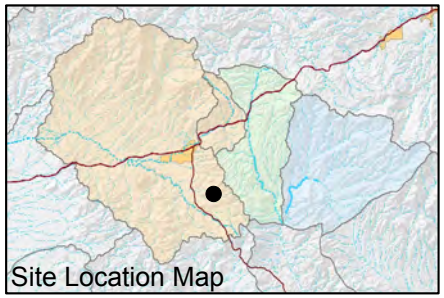
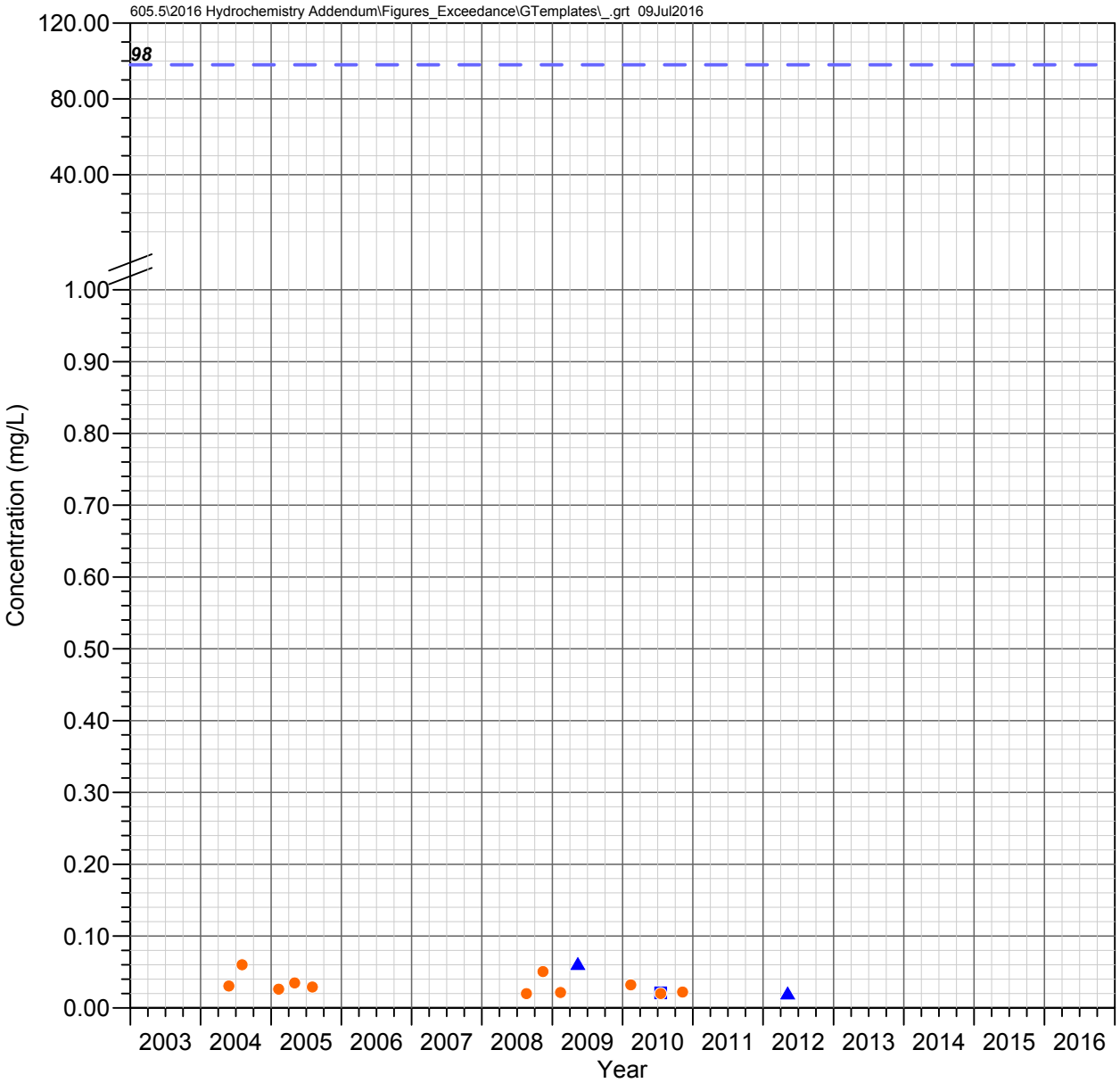


FIGURE F-081. BARIUM CONCENTRATIONS OBSERVED AT KANE SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Blue Spring
Queen Creek Watershed

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

— — AZ Partial Body Contact (TRC, 98 mg/L)

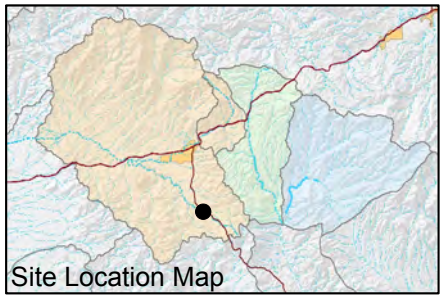
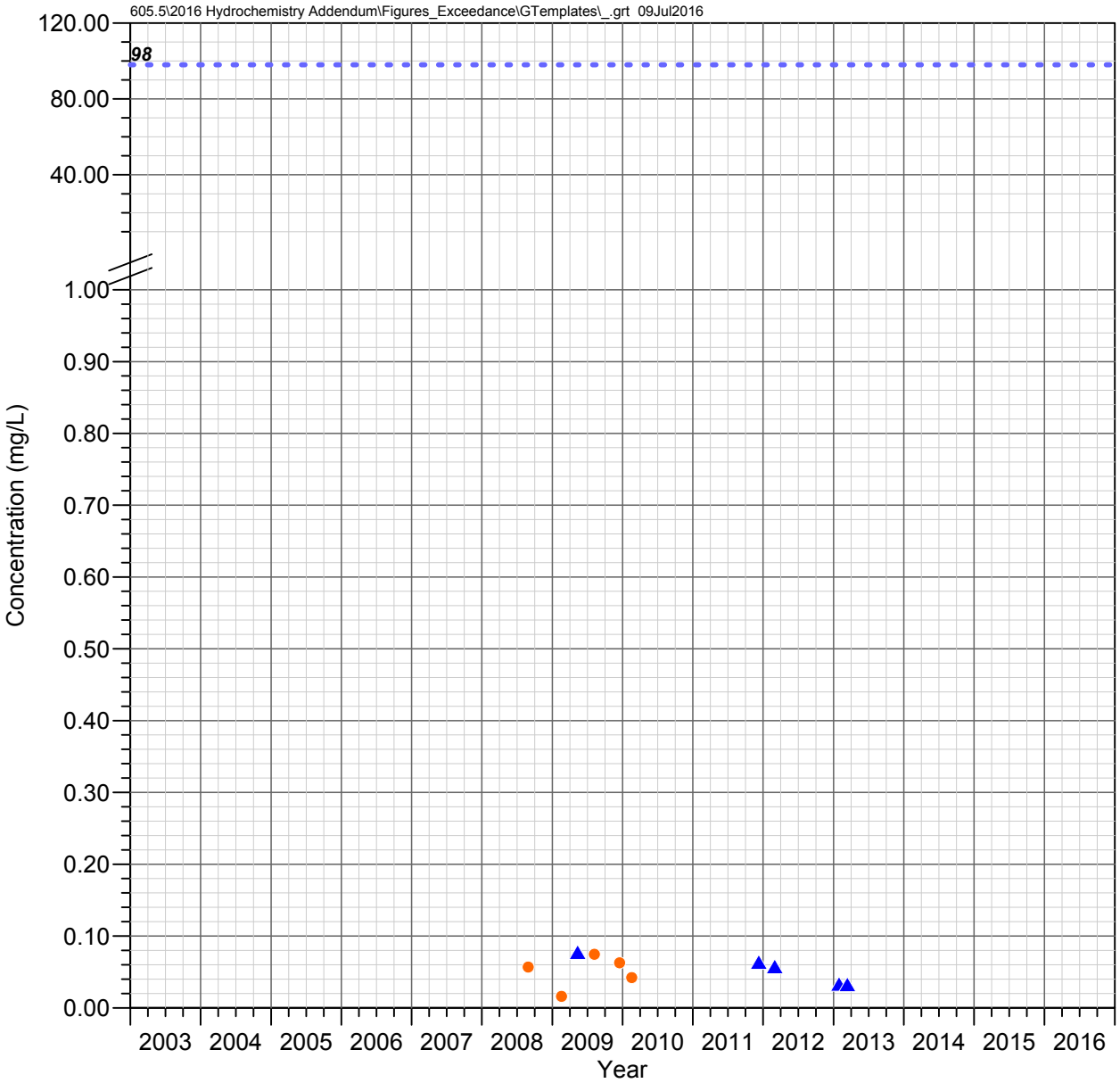


FIGURE F-082. BARIUM CONCENTRATIONS OBSERVED AT BLUE SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



IC 1.0 C
Devils Canyon Watershed

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- - - - AZ Full Body Contact (TRC, 98 mg/L)

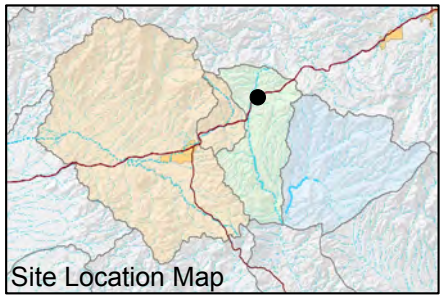
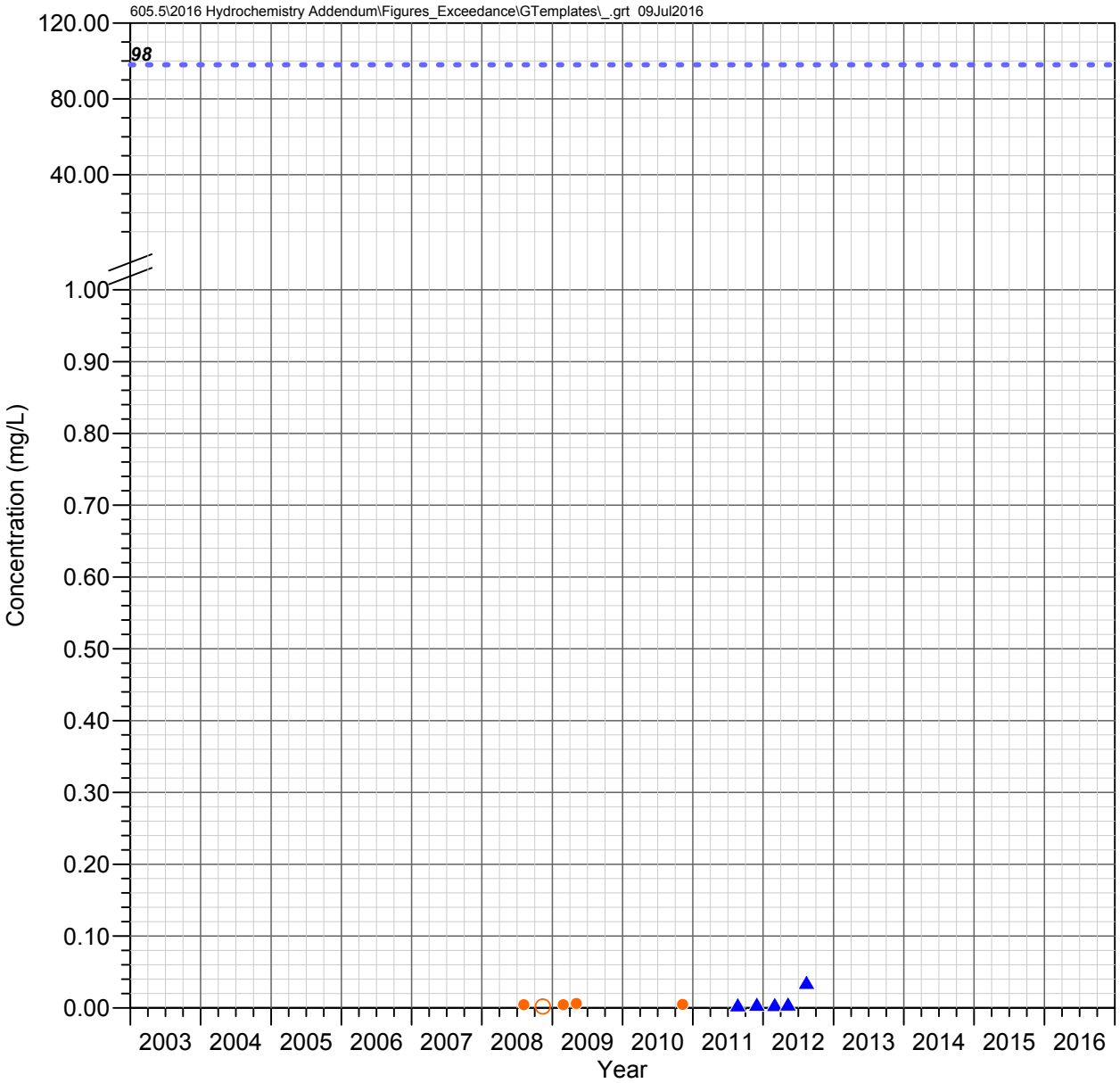


FIGURE F-083. BARIUM CONCENTRATIONS OBSERVED AT IC 1.0 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 15.5 C
Devils Canyon Watershed

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- - - - AZ Full Body Contact (TRC, 98 mg/L)

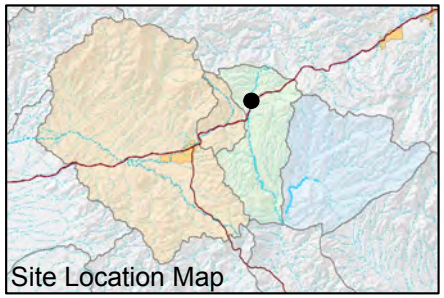
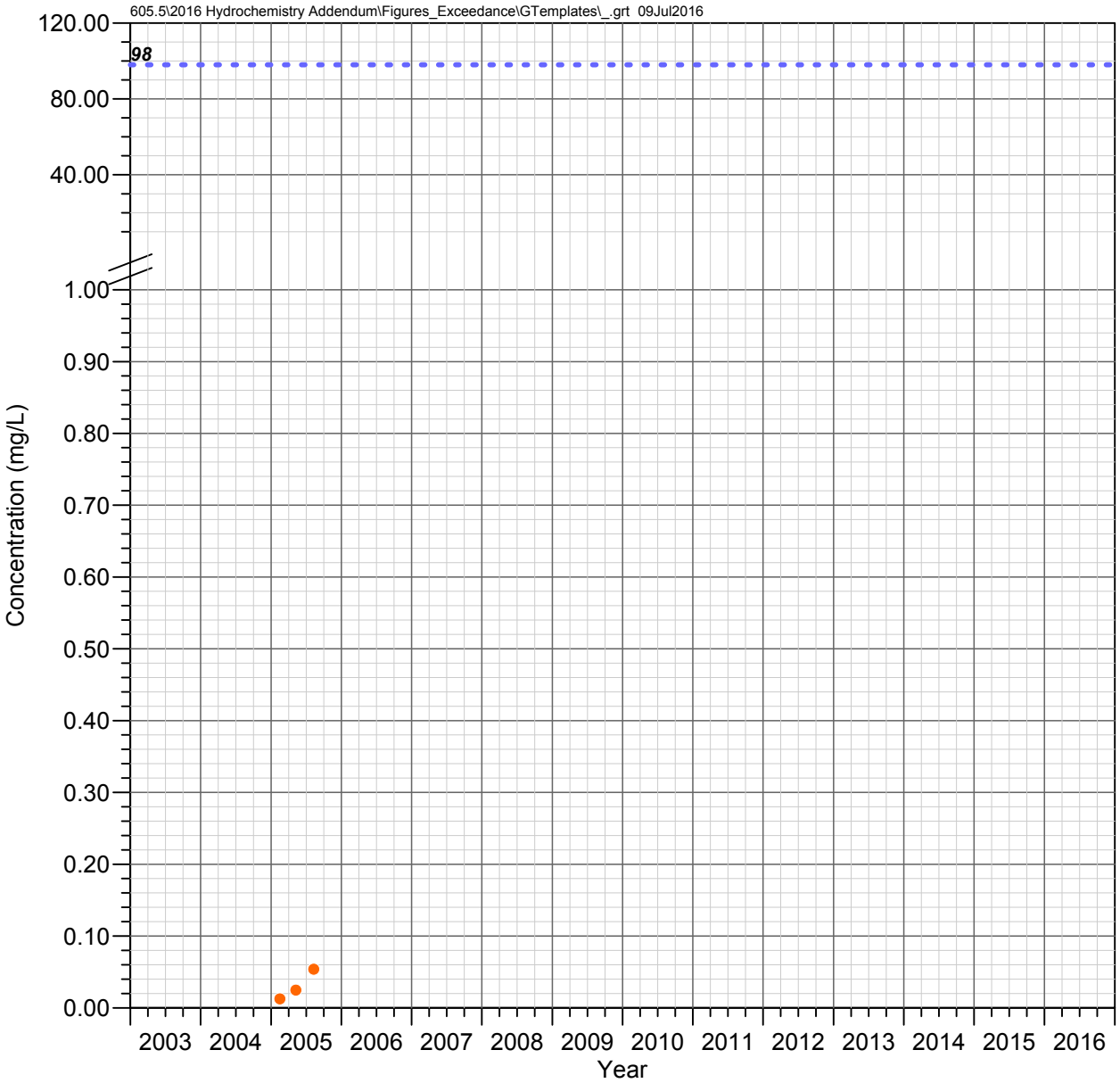


FIGURE F-084. BARIUM CONCENTRATIONS OBSERVED AT DC 15.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 15.2 C
Devils Canyon Watershed

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- - - - AZ Full Body Contact (TRC, 98 mg/L)

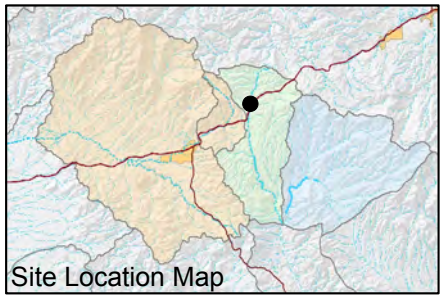
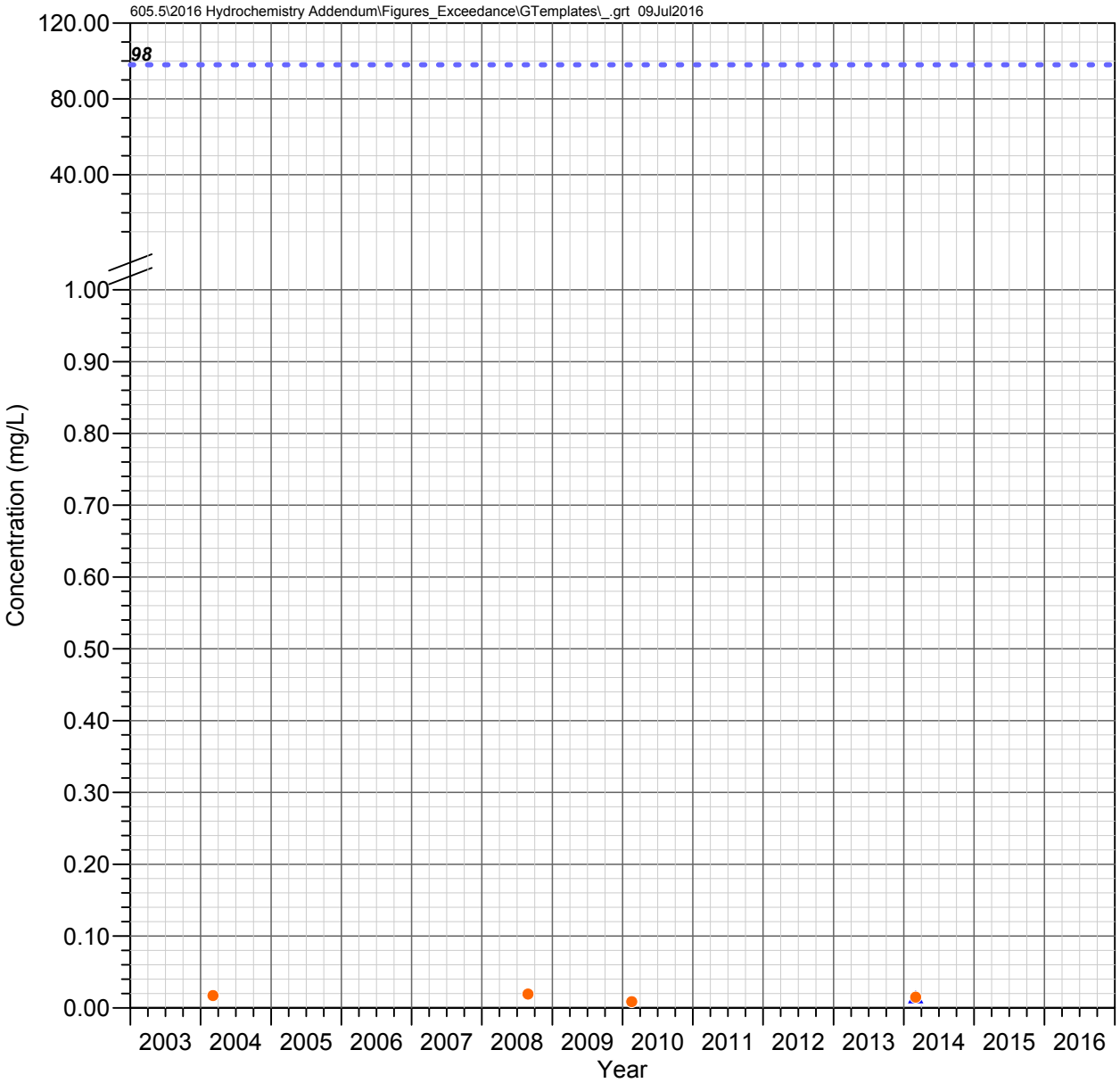


FIGURE F-085. BARIUM CONCENTRATIONS OBSERVED AT DC 15.2 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 14.7 C
Devils Canyon Watershed

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- - - - AZ Full Body Contact (TRC, 98 mg/L)

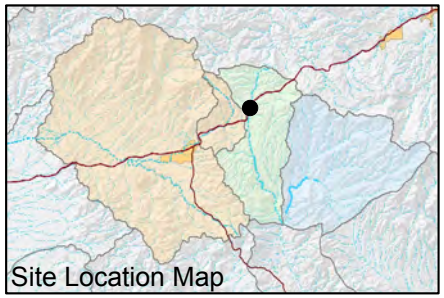
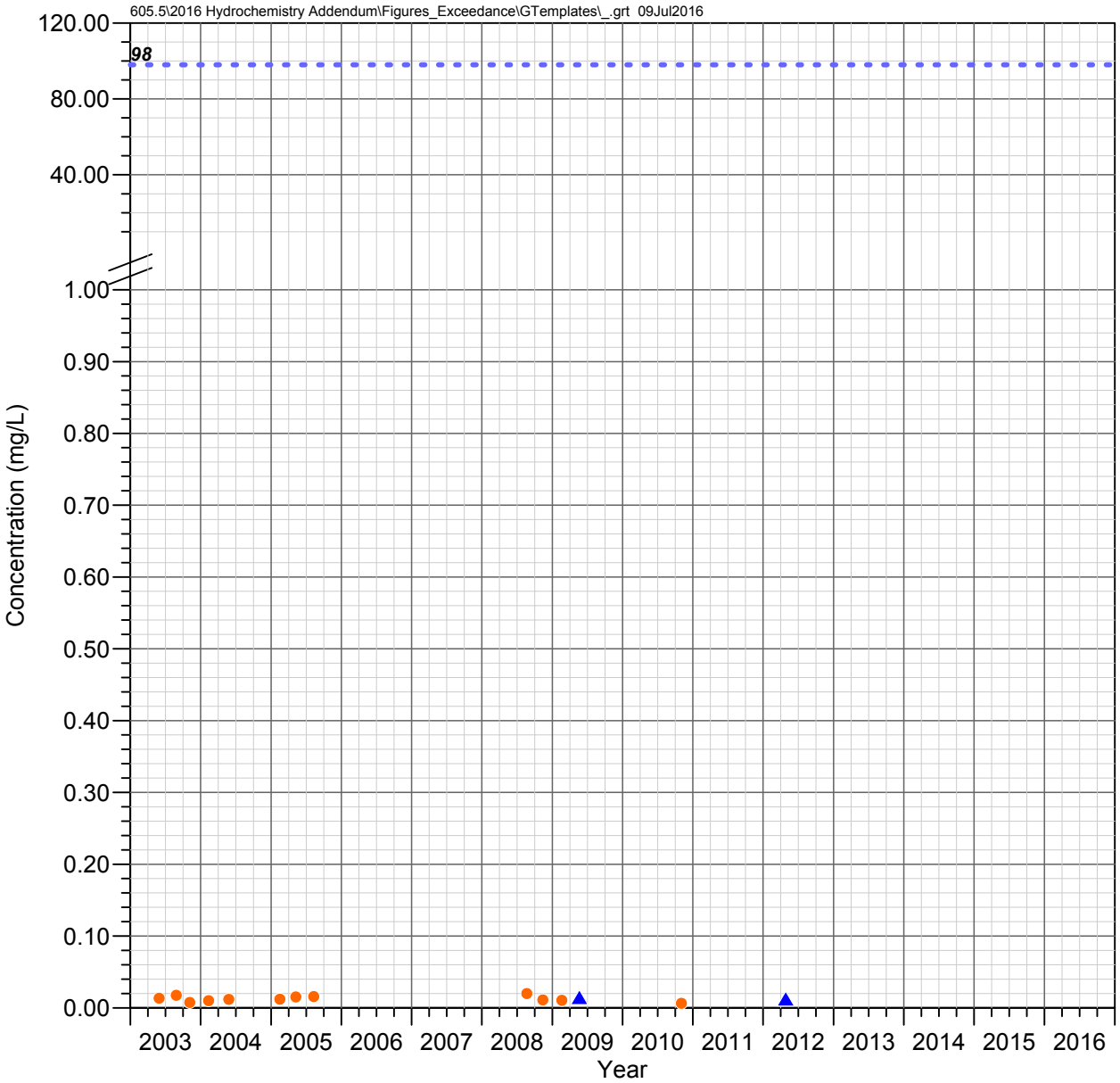


FIGURE F-086. BARIUM CONCENTRATIONS OBSERVED AT DC 14.7 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 13.5 C
Devils Canyon Watershed

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- - - - AZ Full Body Contact (TRC, 98 mg/L)

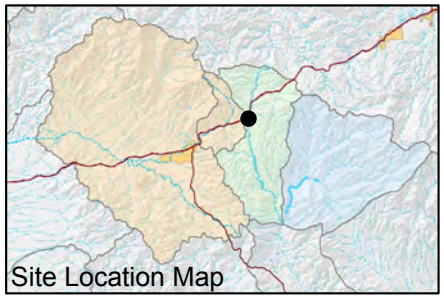
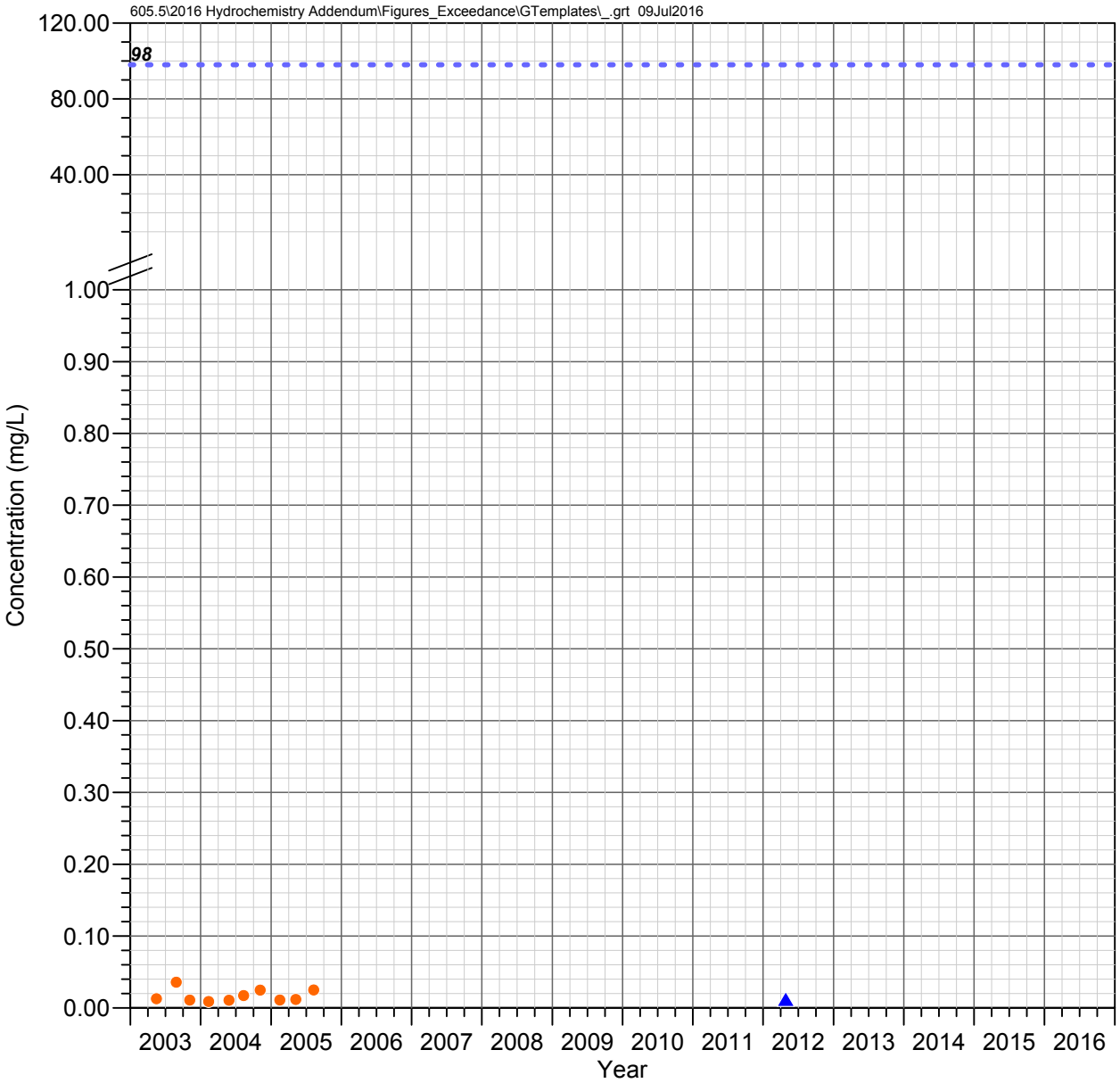


FIGURE F-087. BARIUM CONCENTRATIONS OBSERVED AT DC 13.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 10.9 C
Devils Canyon Watershed

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- - - - AZ Full Body Contact (TRC, 98 mg/L)

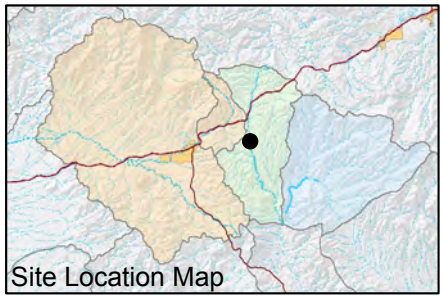
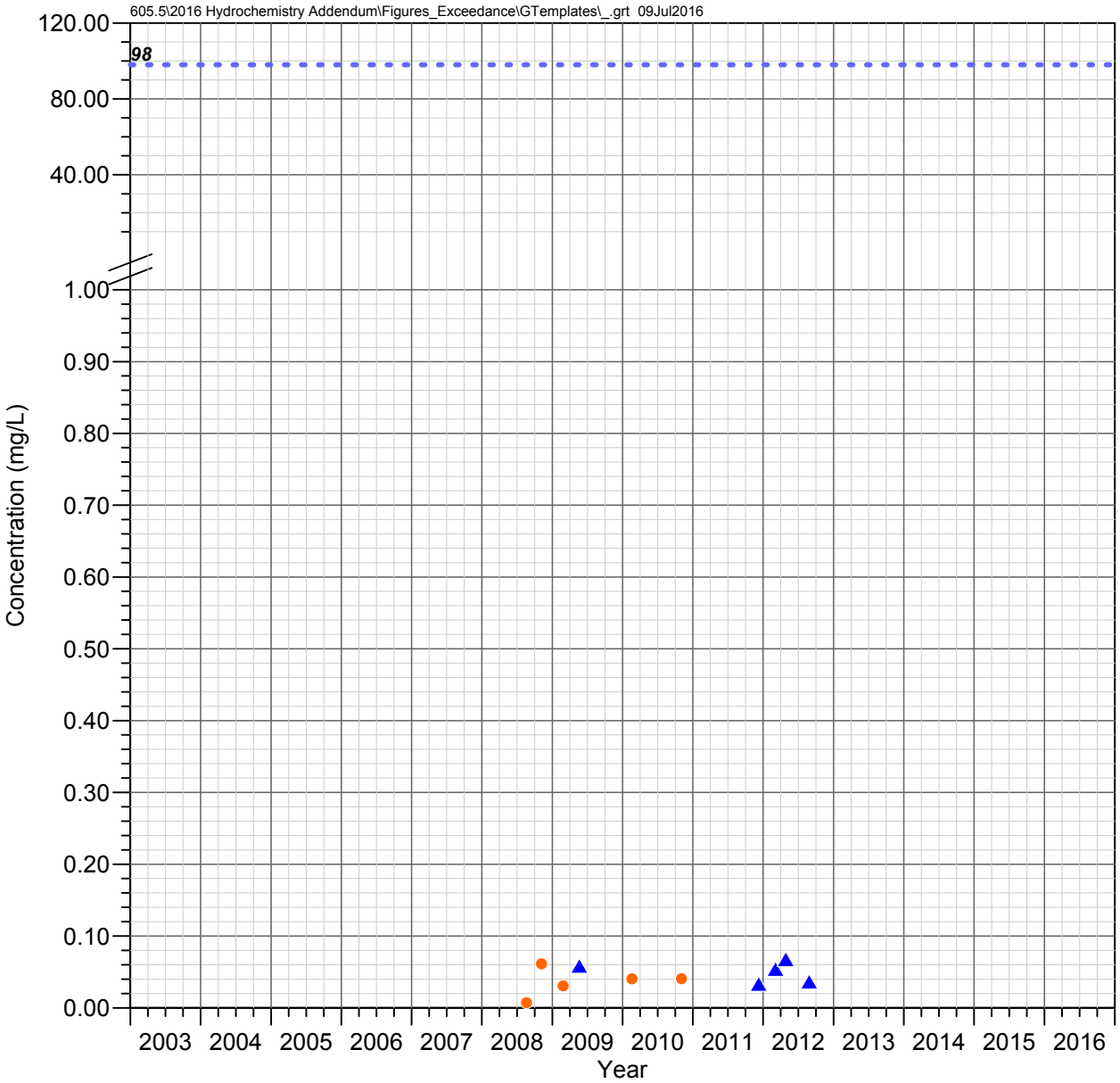


FIGURE F-088. BARIUM CONCENTRATIONS OBSERVED AT DC 10.9 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



RR 1.5 C
Devils Canyon Watershed

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- - - - AZ Full Body Contact (TRC, 98 mg/L)

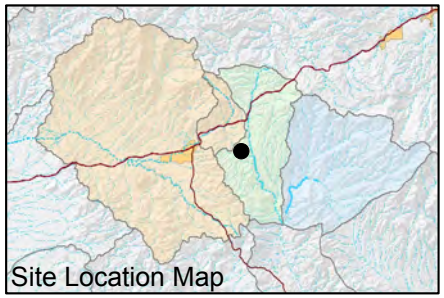
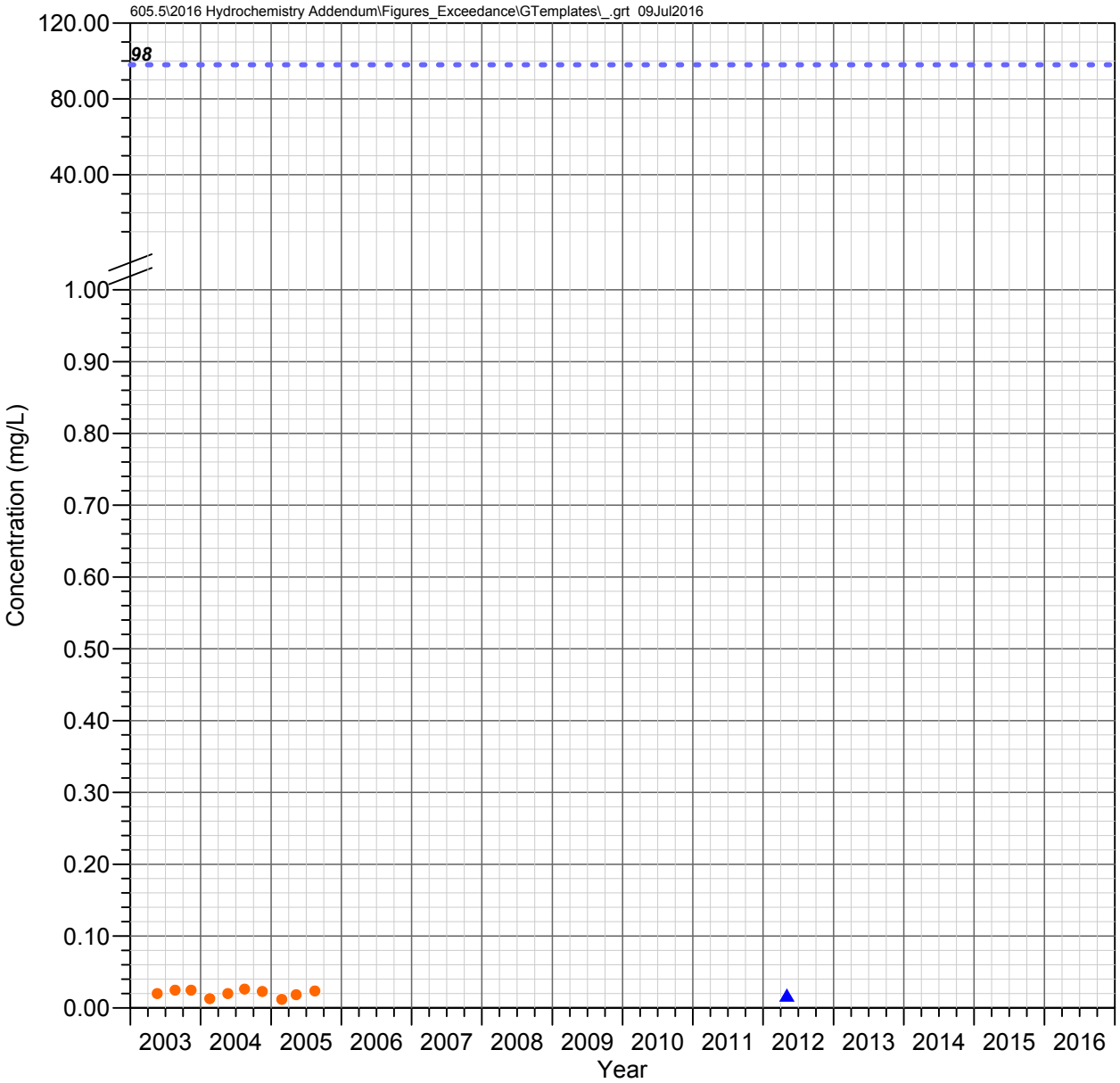


FIGURE F-089. BARIUM CONCENTRATIONS OBSERVED AT RR 1.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.8 C
Devils Canyon Watershed

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- - - - AZ Full Body Contact (TRC, 98 mg/L)

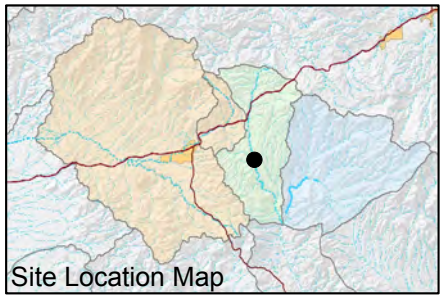
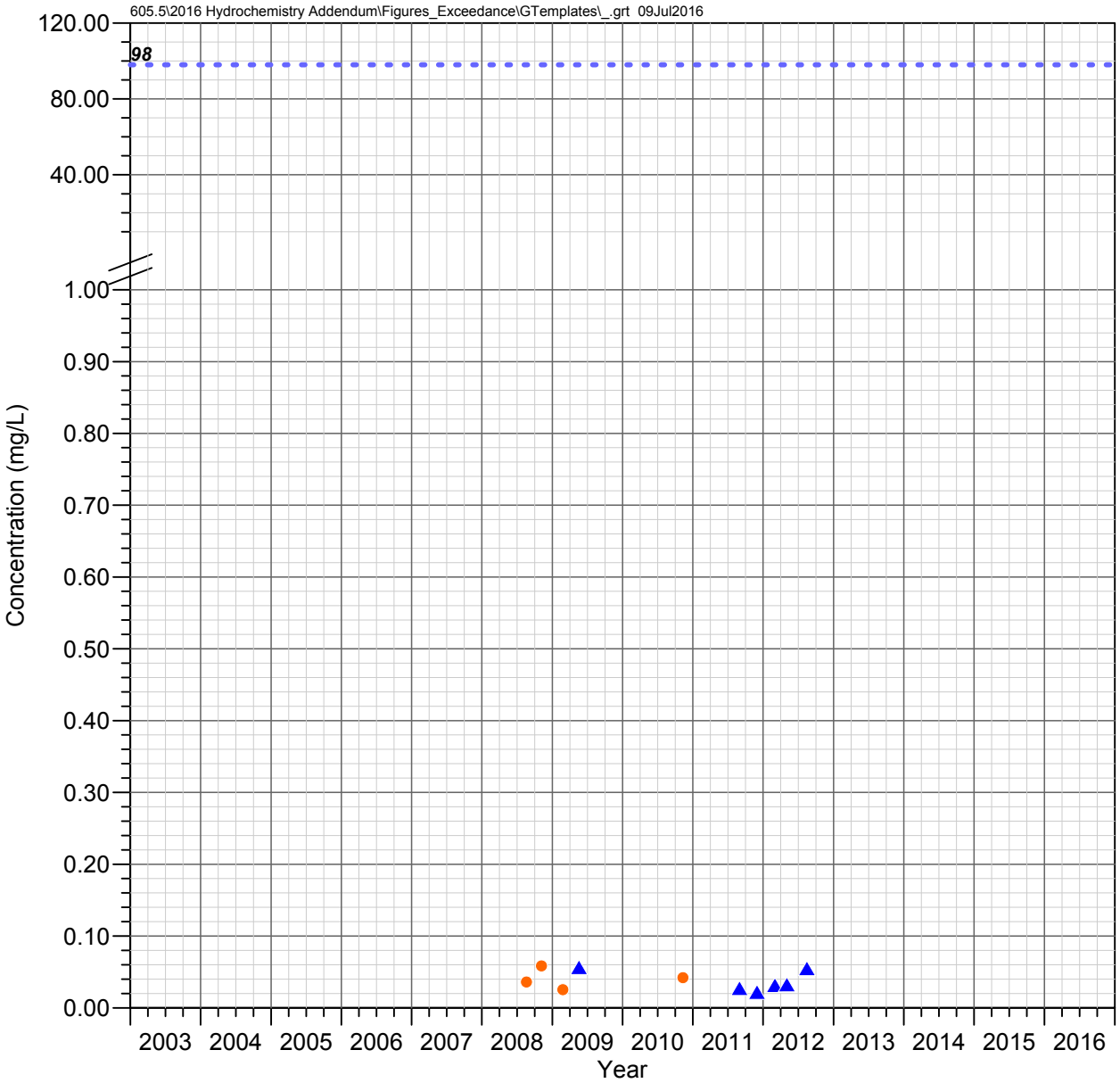


FIGURE F-090. BARIUM CONCENTRATIONS OBSERVED AT DC 8.8 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



H 0.1 C
Devils Canyon Watershed

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- - - - AZ Full Body Contact (TRC, 98 mg/L)

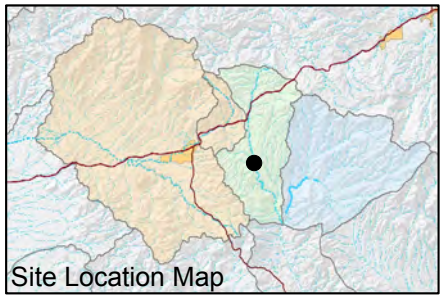
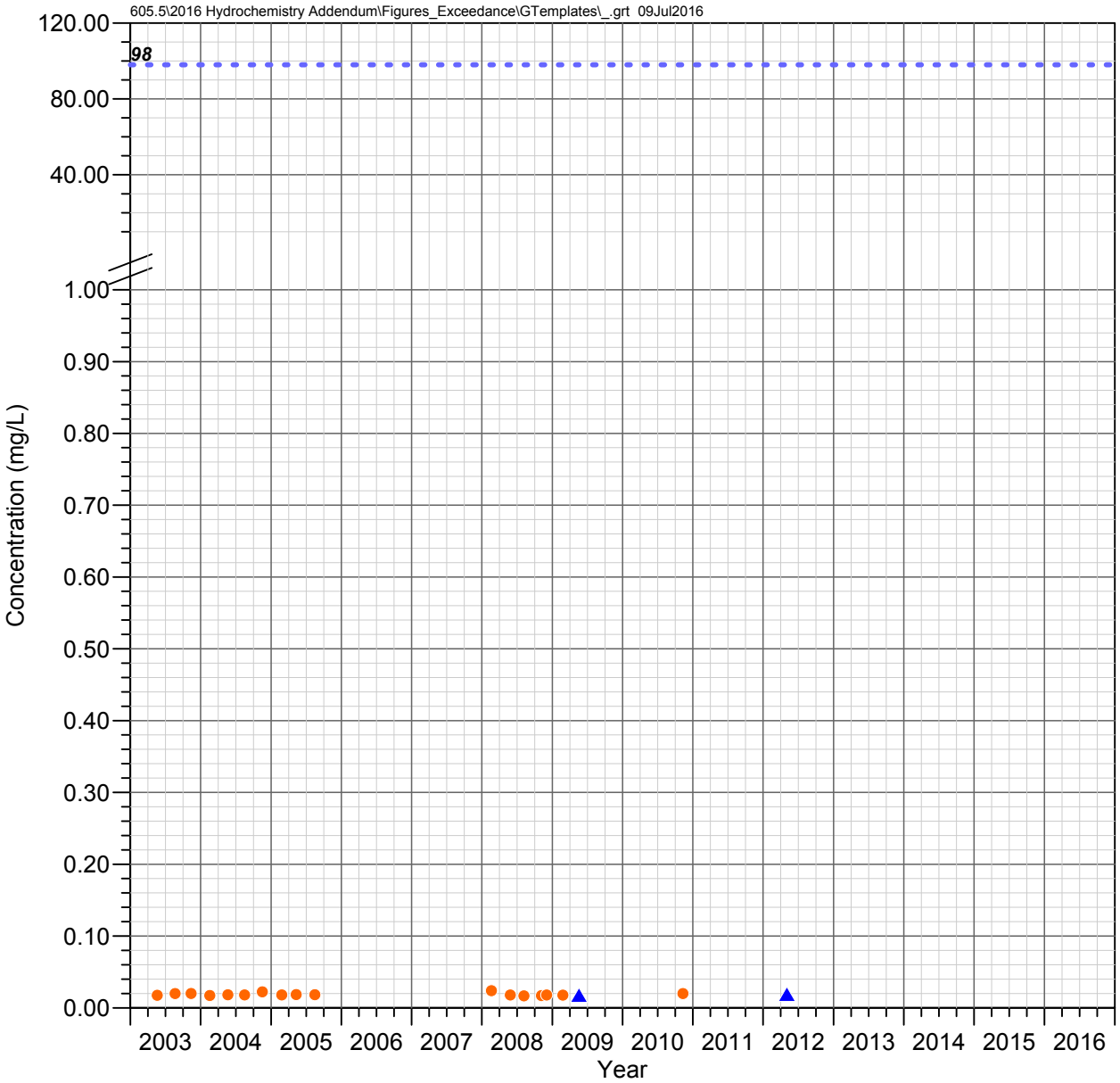


FIGURE F-091. BARIUM CONCENTRATIONS OBSERVED AT H 0.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.2 W
Devils Canyon Watershed

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- - - - AZ Full Body Contact (TRC, 98 mg/L)

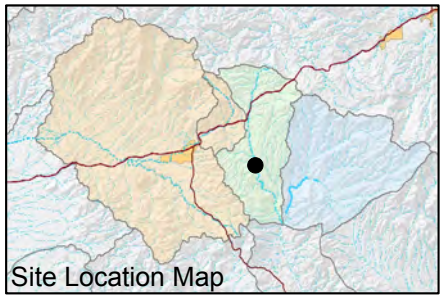
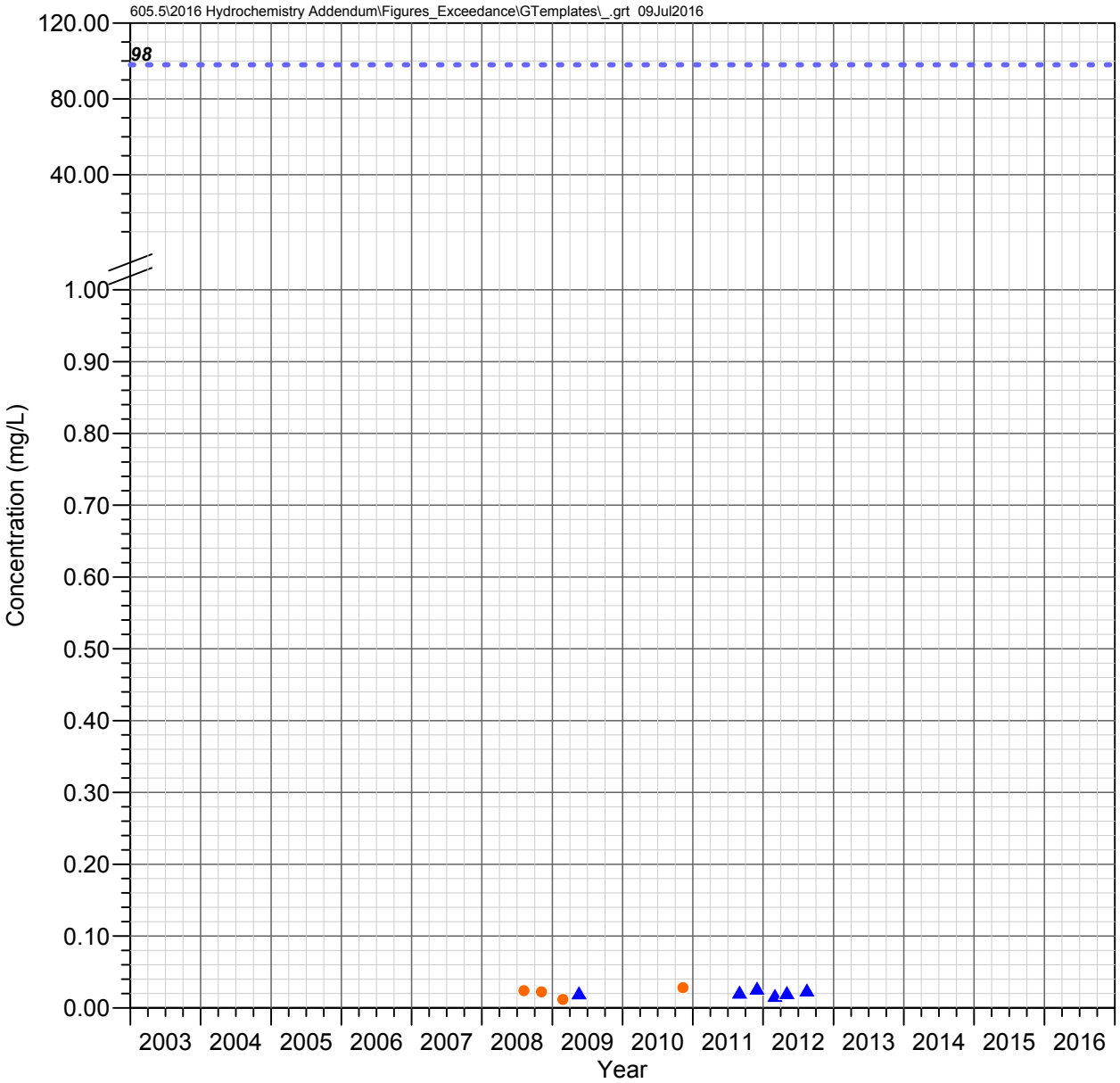


FIGURE F-092. BARIUM CONCENTRATIONS OBSERVED AT DC 8.2 W, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.1 C
Devils Canyon Watershed

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- - - - AZ Full Body Contact (TRC, 98 mg/L)

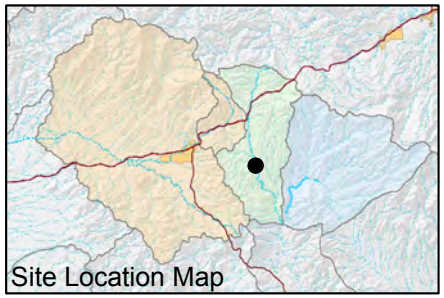
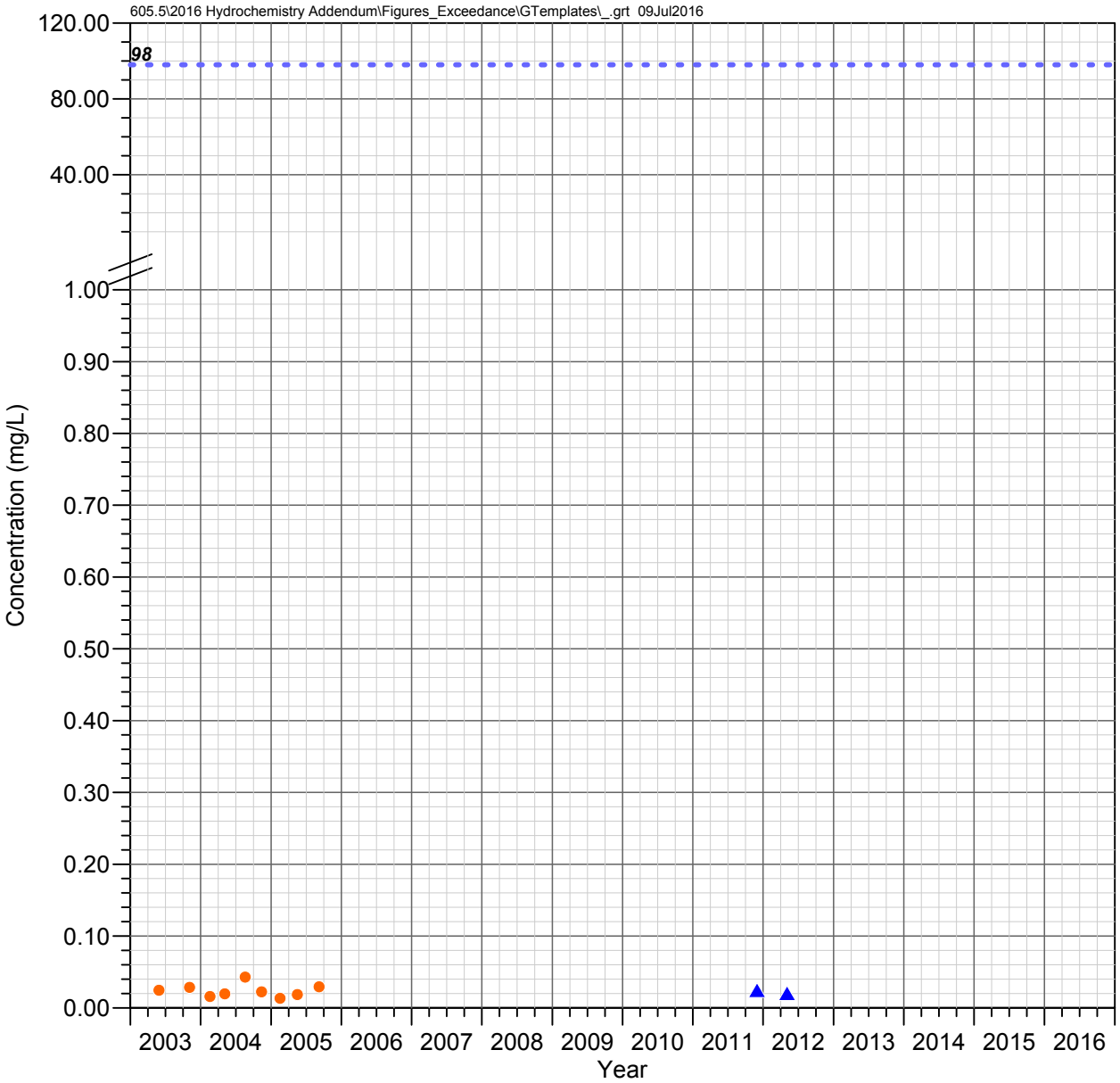


FIGURE F-093. BARIUM CONCENTRATIONS OBSERVED AT DC 8.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 7.1 C
Devils Canyon Watershed

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- - - - AZ Full Body Contact (TRC, 98 mg/L)

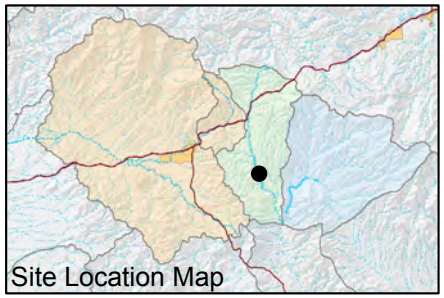
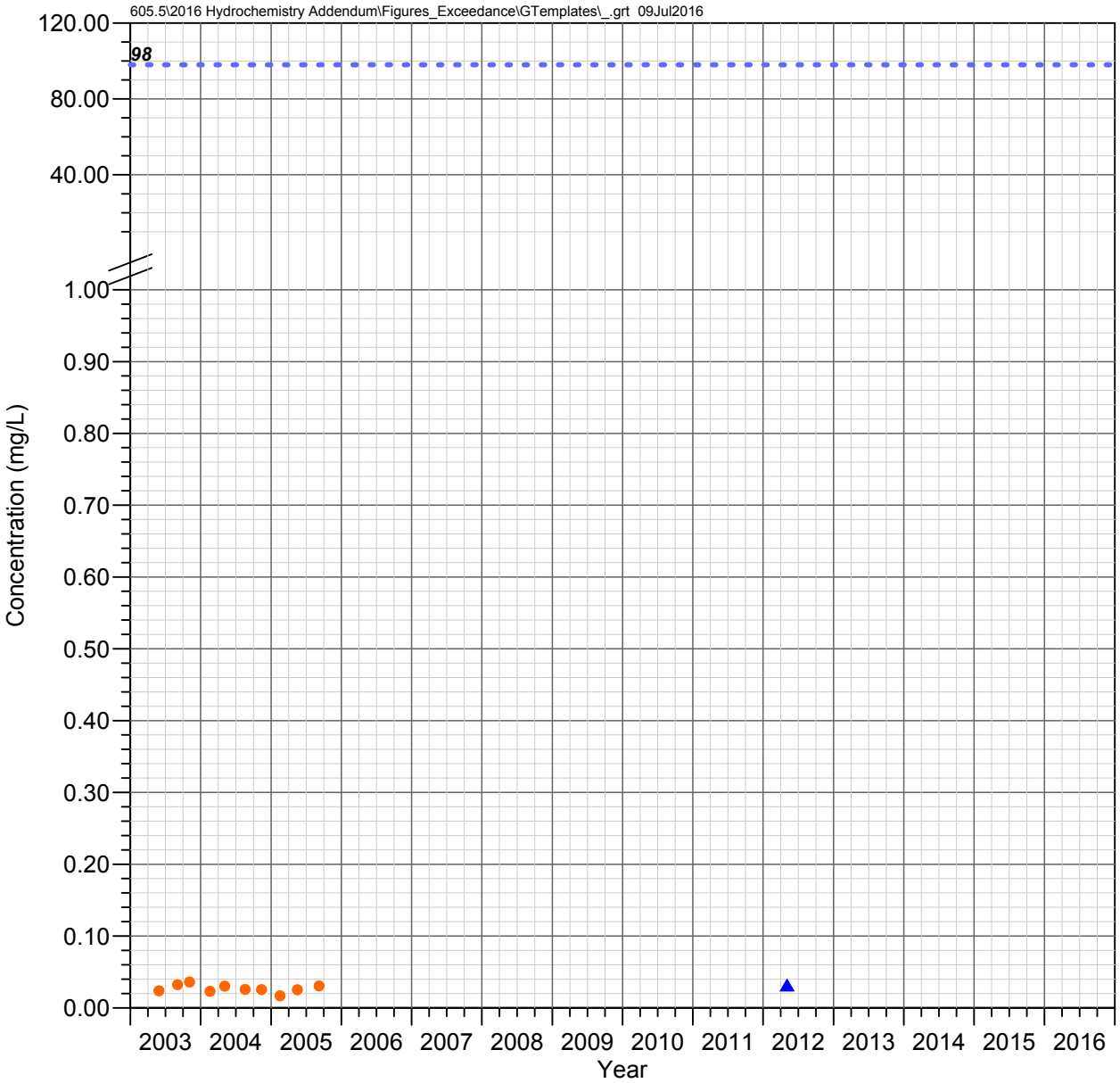


FIGURE F-094. BARIUM CONCENTRATIONS OBSERVED AT DC 7.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.6 W (DCT 6.6 W)
Devils Canyon Watershed

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- - - - AZ Full Body Contact (TRC, 98 mg/L)

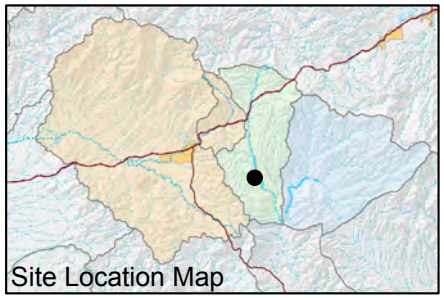
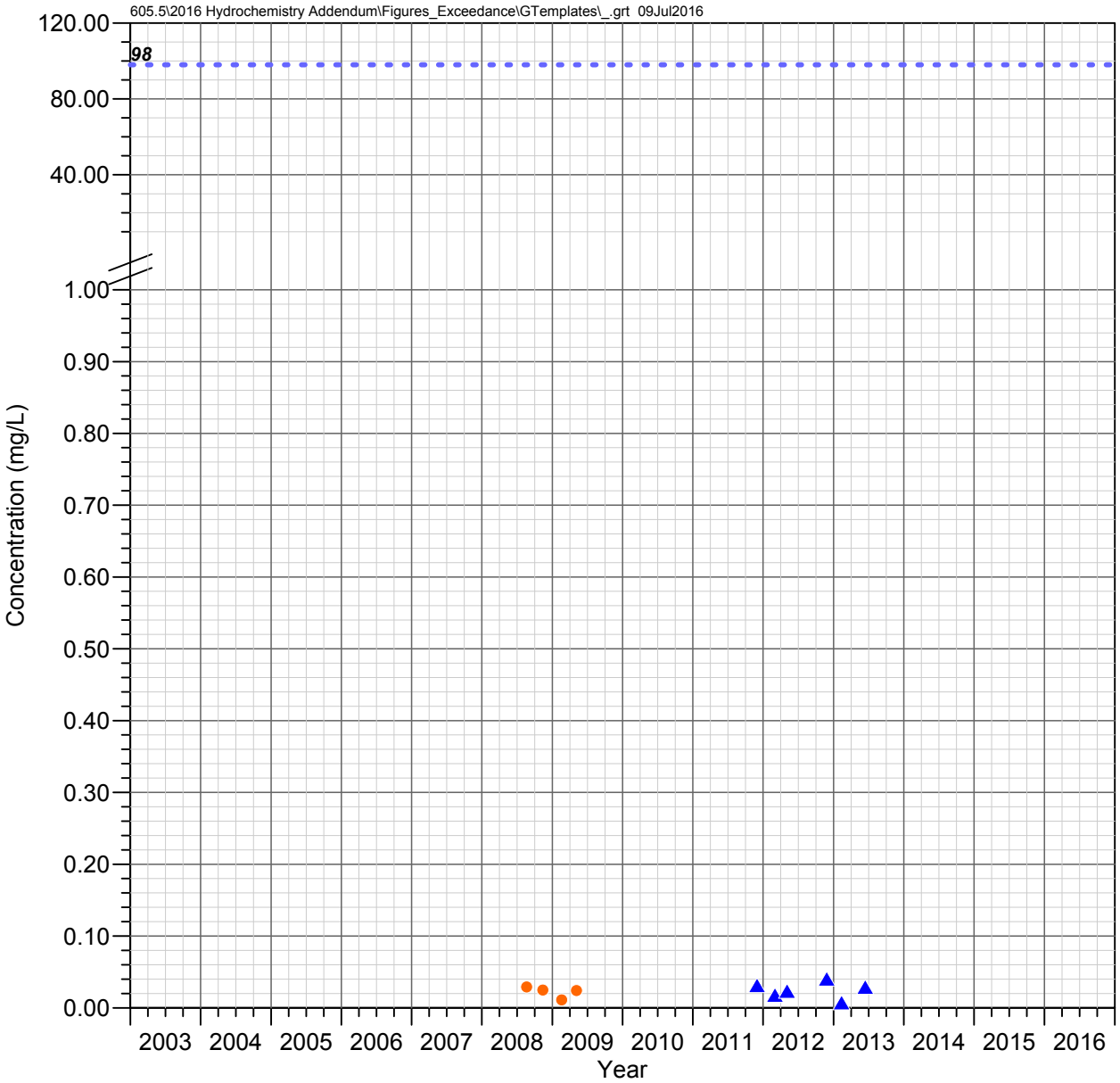


FIGURE F-095. BARIUM CONCENTRATIONS OBSERVED AT DC 6.6 W (DCT 6.6 W), DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.14 C
Devils Canyon Watershed

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- - - - AZ Full Body Contact (TRC, 98 mg/L)

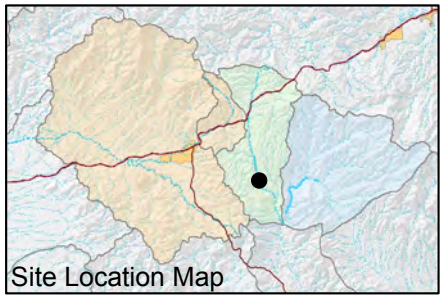
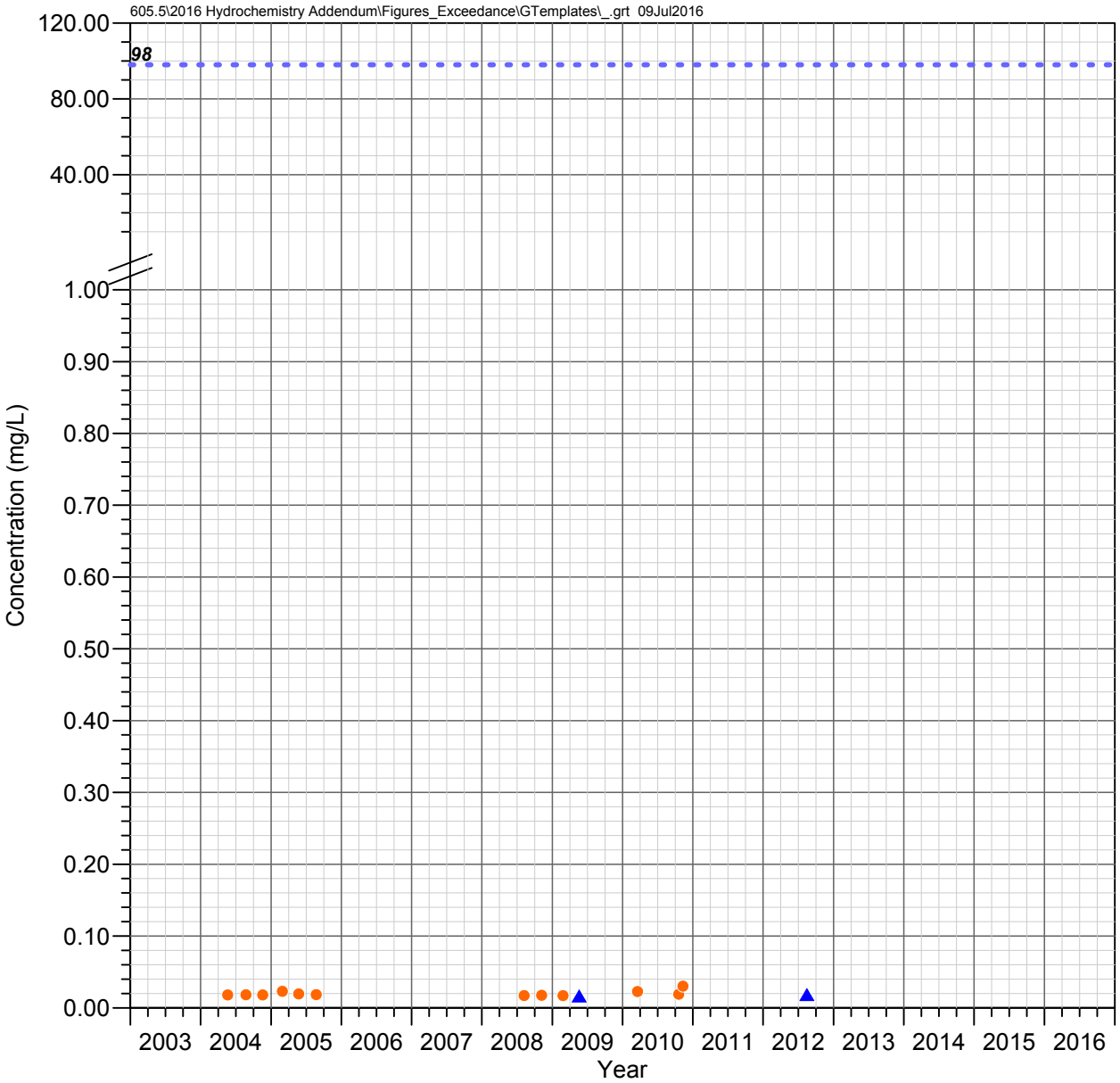


FIGURE F-096. BARIUM CONCENTRATIONS OBSERVED AT DC 6.14 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.1 E
Devils Canyon Watershed

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- - - - AZ Full Body Contact (TRC, 98 mg/L)

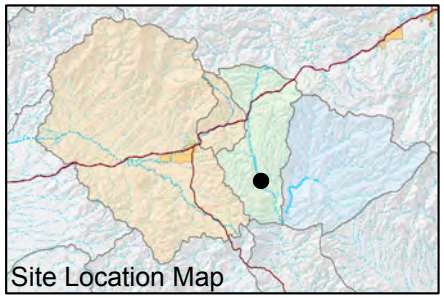
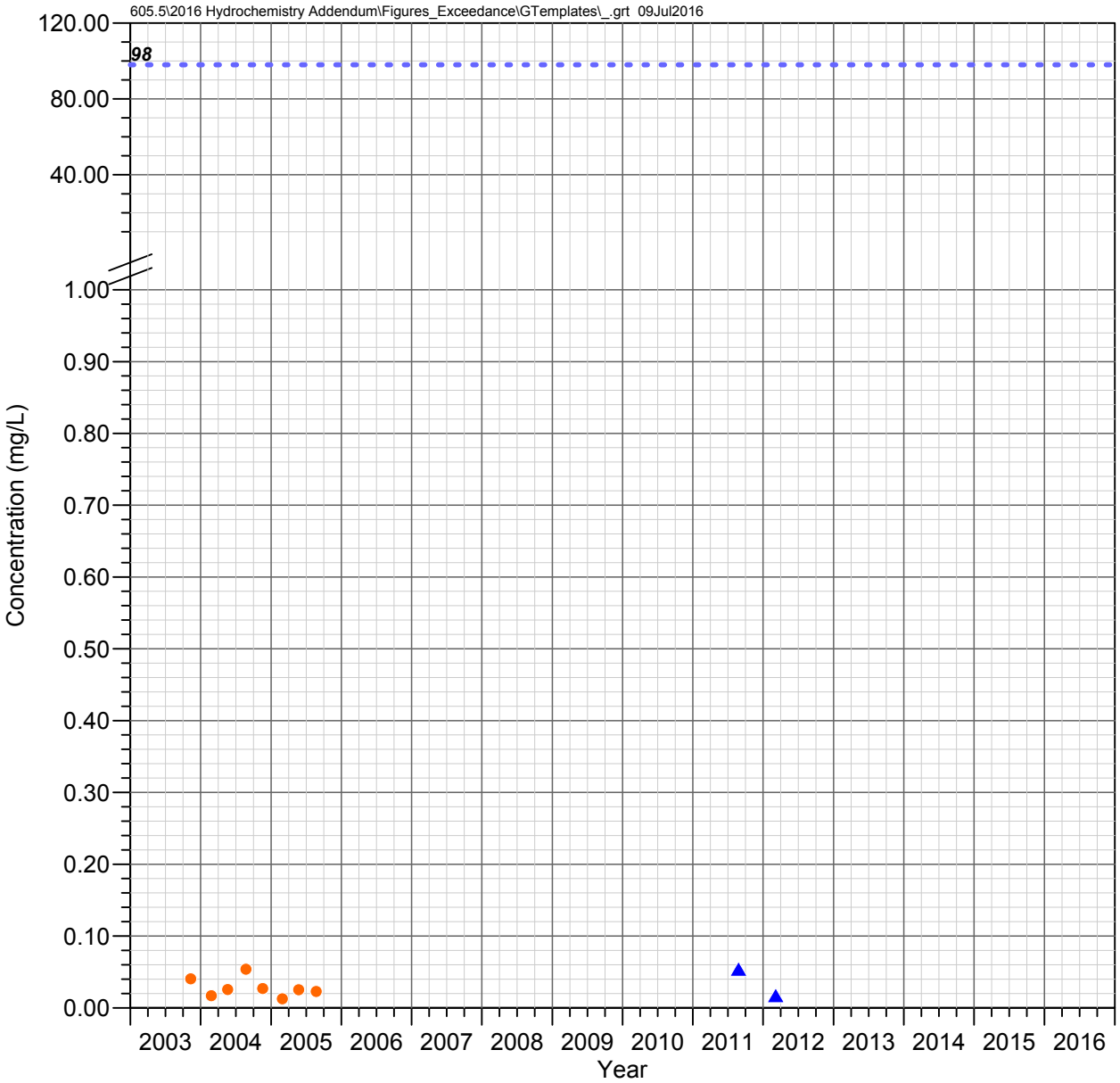


FIGURE F-097. BARIUM CONCENTRATIONS OBSERVED AT DC 6.1 E, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 5.5 C
Devils Canyon Watershed

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- - - - AZ Full Body Contact (TRC, 98 mg/L)

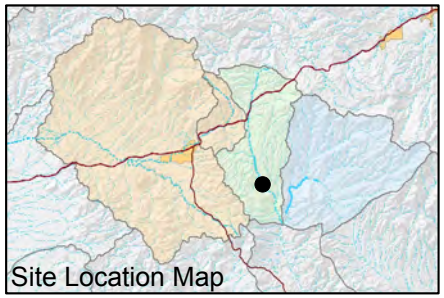
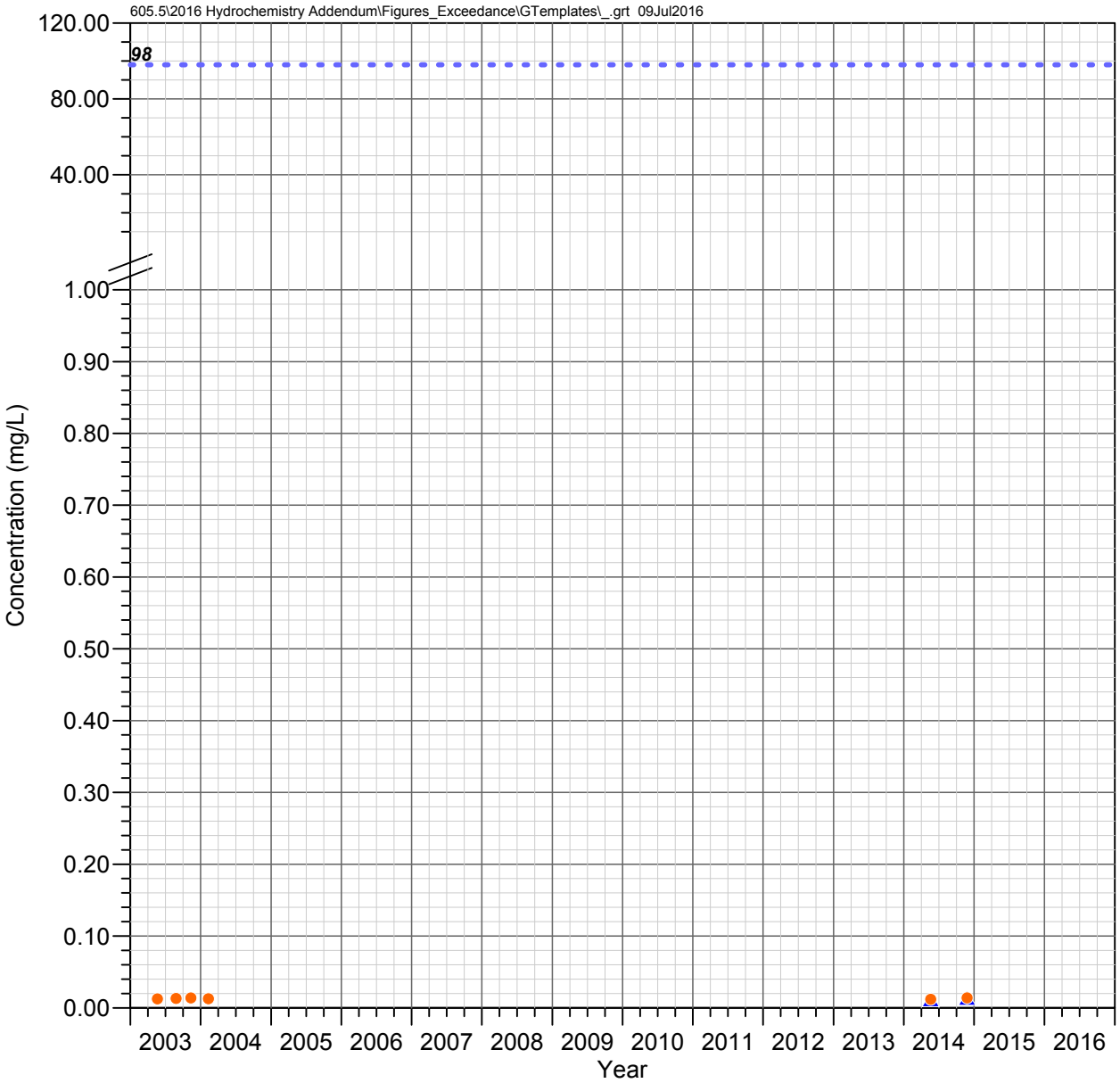


FIGURE F-098. BARIUM CONCENTRATIONS OBSERVED AT DC 5.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 4.1 E
Devils Canyon Watershed

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- - - - AZ Full Body Contact (TRC, 98 mg/L)

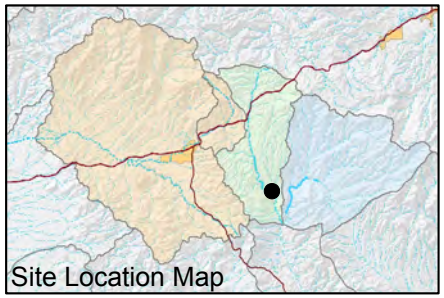
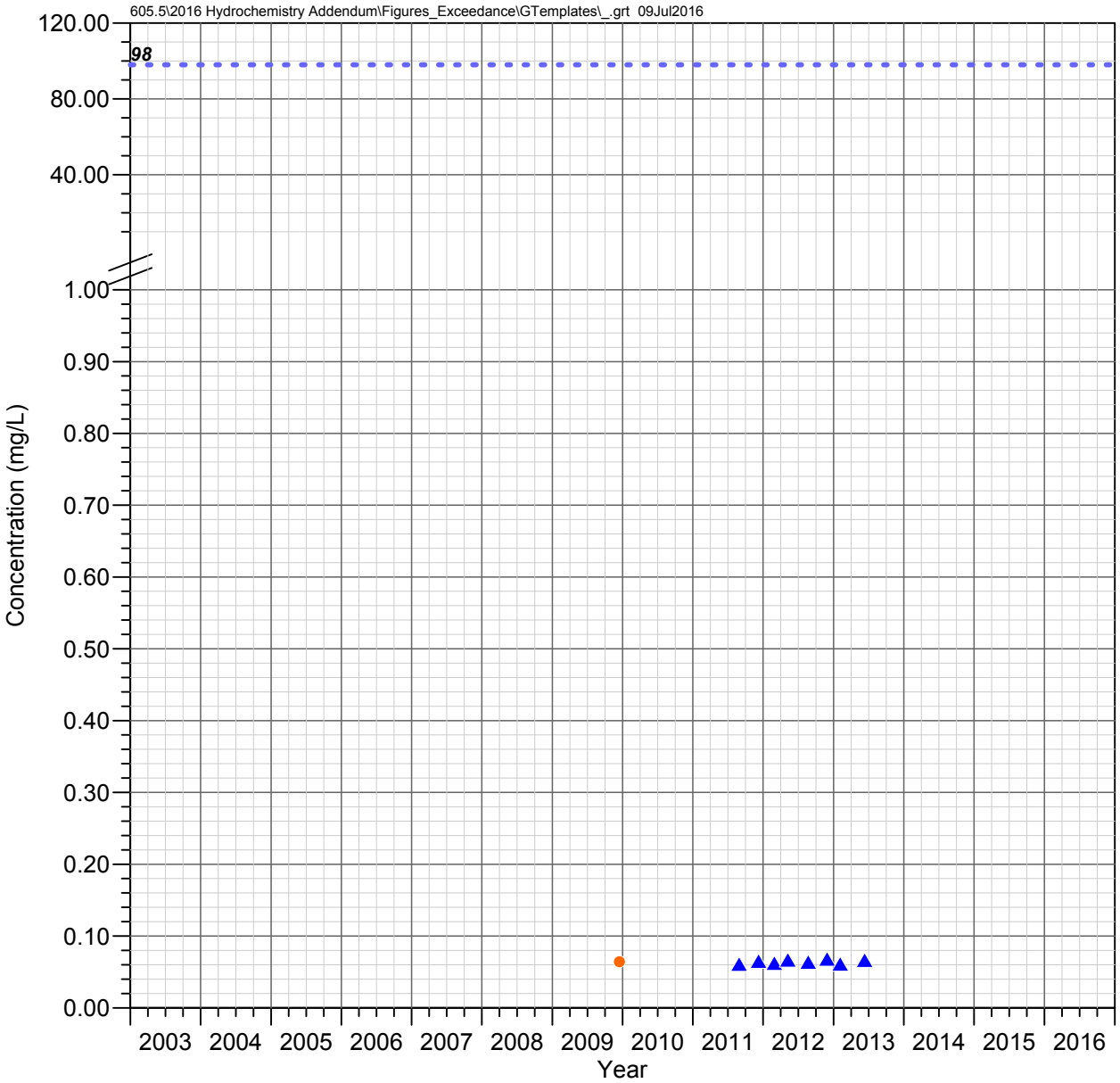


FIGURE F-099. BARIUM CONCENTRATIONS OBSERVED AT DC 4.1 E, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Government Springs
Mineral Creek Watershed

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- - - - AZ Full Body Contact (TRC, 98 mg/L)

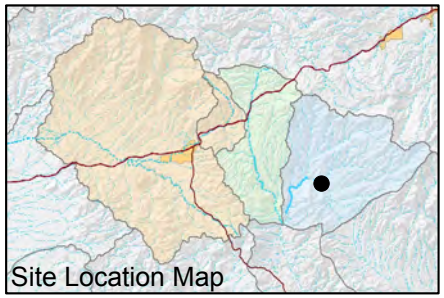
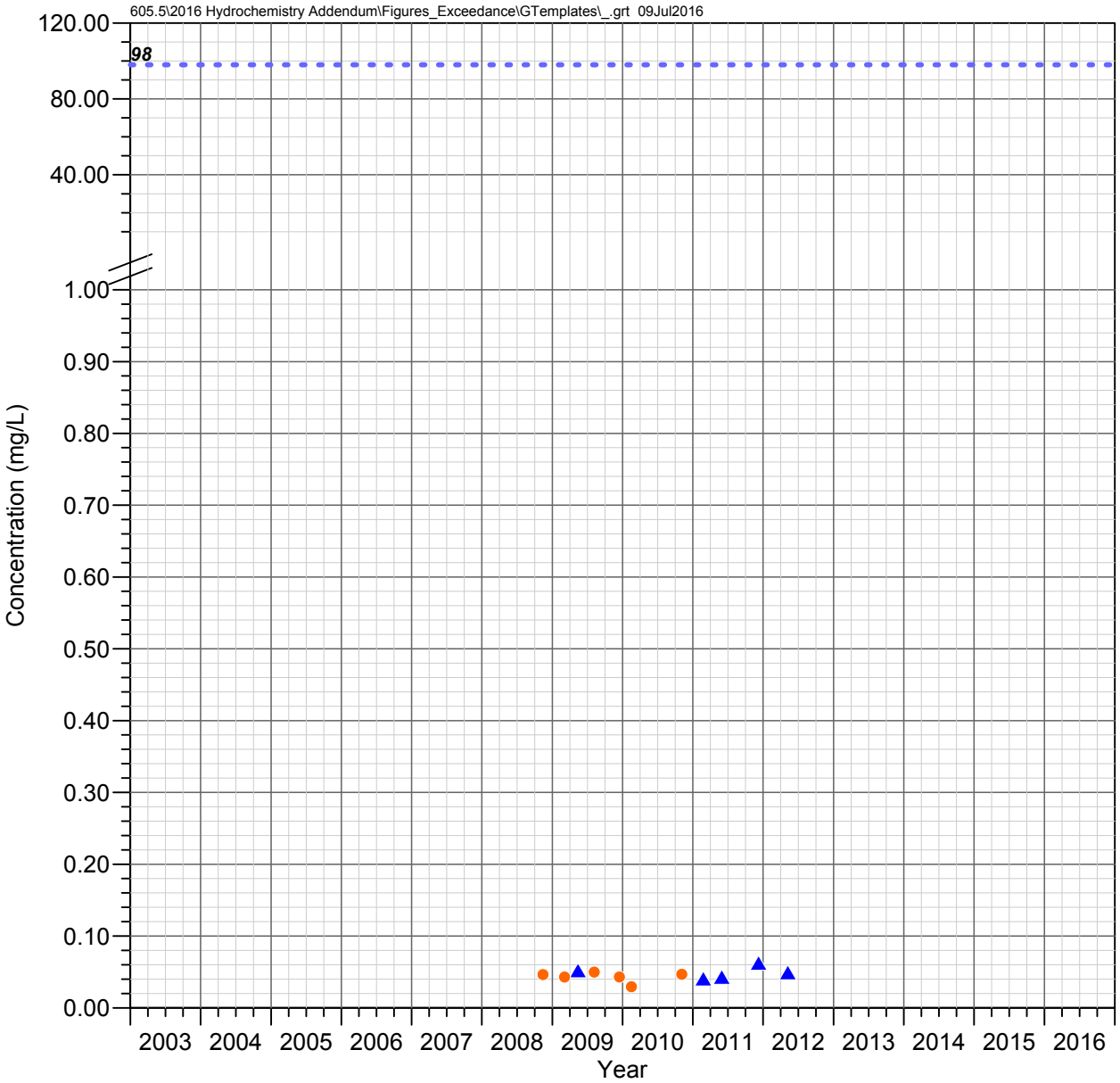


FIGURE F-100. BARIUM CONCENTRATIONS OBSERVED AT GOVERNMENT SPRINGS, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 8.4 C
Mineral Creek Watershed

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- - - - AZ Full Body Contact (TRC, 98 mg/L)

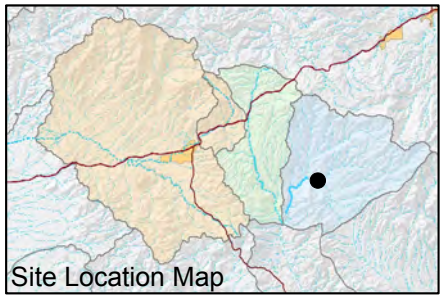
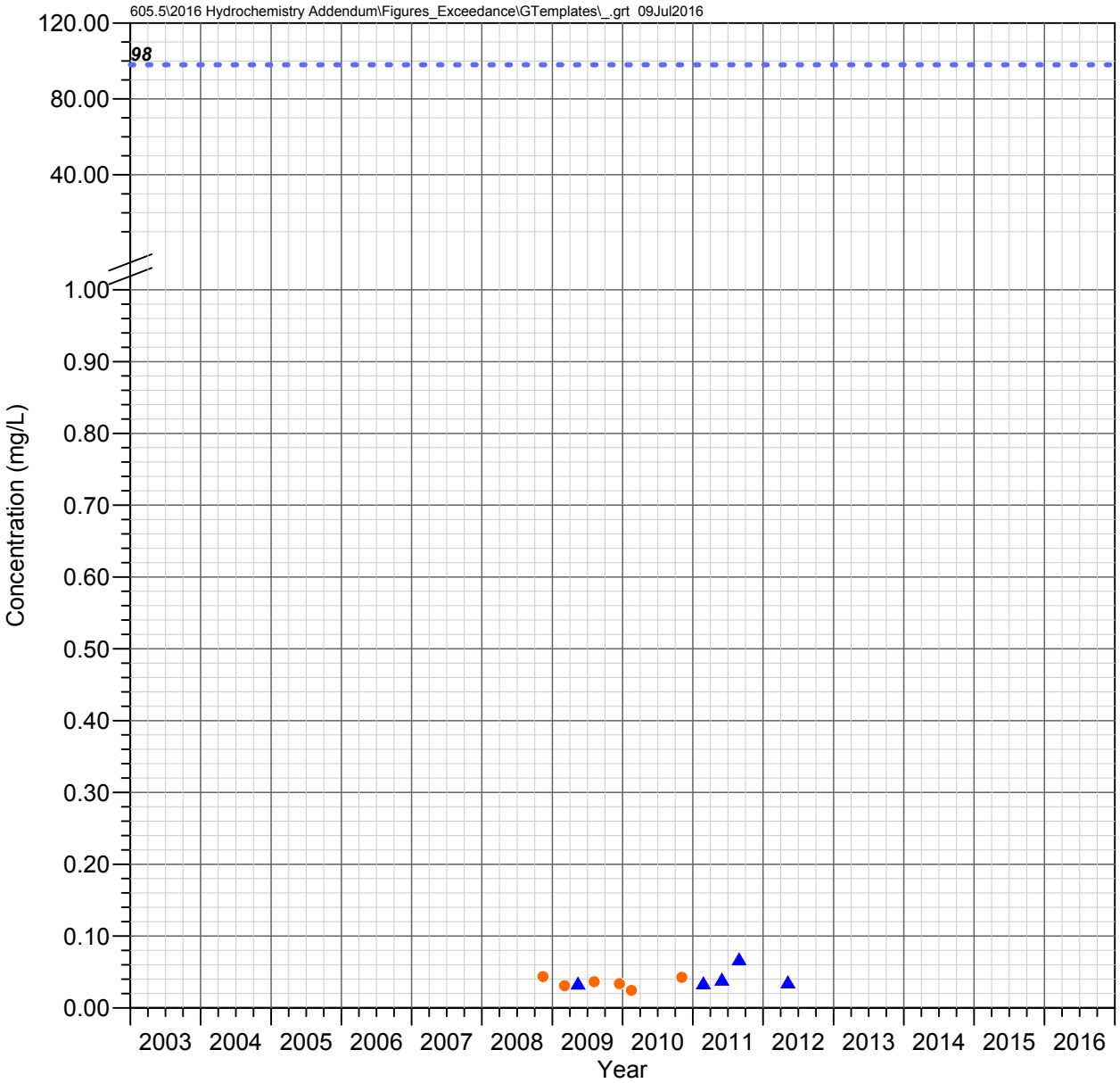


FIGURE F-101. BARIUM CONCENTRATIONS OBSERVED AT MC 8.4 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



LF 0.2 C
Mineral Creek Watershed

BARIUM

Observed Concentrations
*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards **(filter analysis dependent)**
TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 98 mg/L)

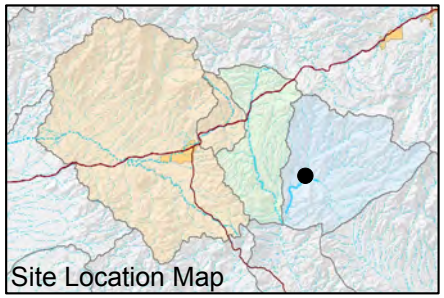
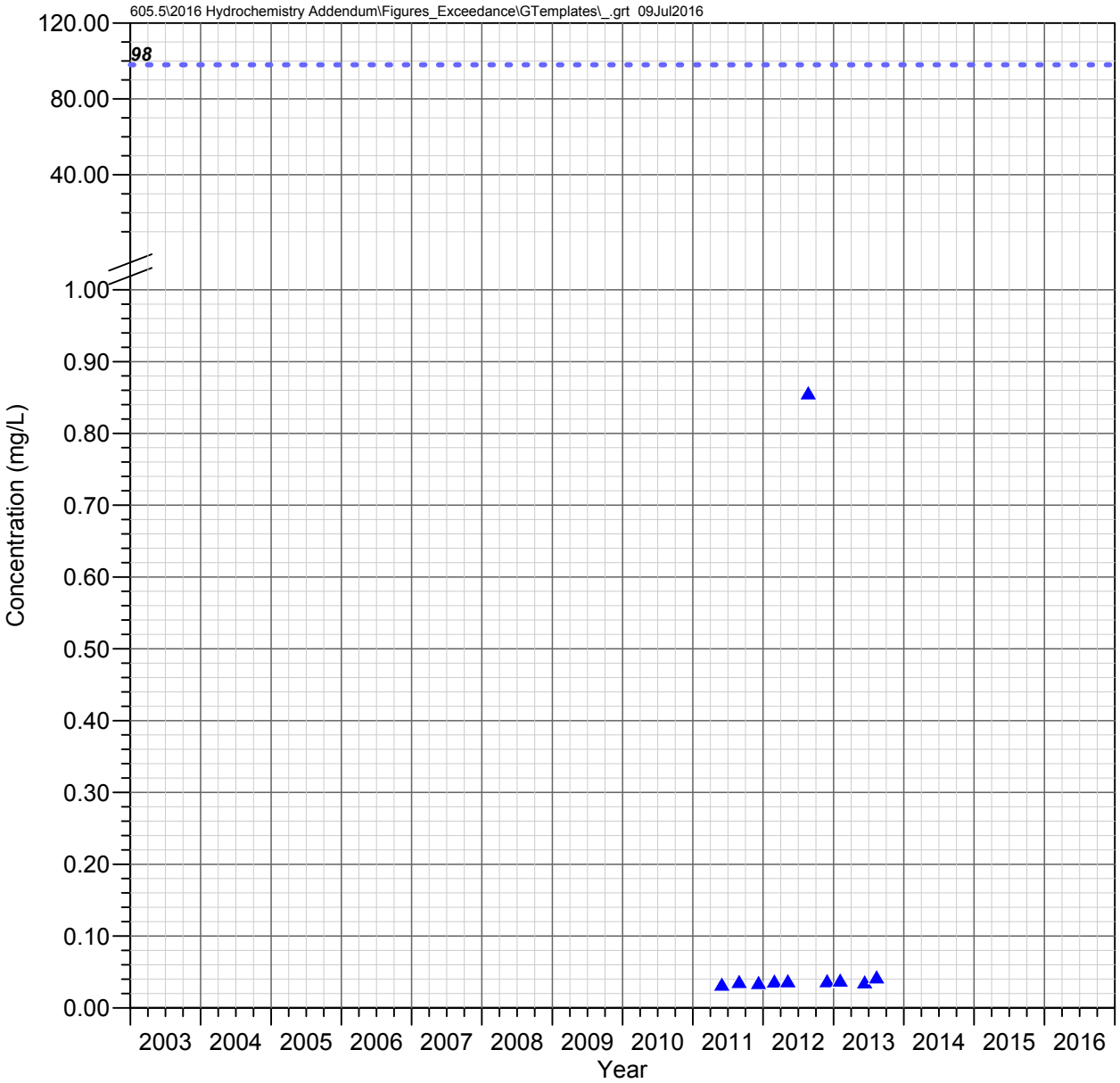


FIGURE F-102. BARIUM CONCENTRATIONS OBSERVED AT LF 0.2 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 5.2 C
Mineral Creek Watershed

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- - - - AZ Full Body Contact (TRC, 98 mg/L)

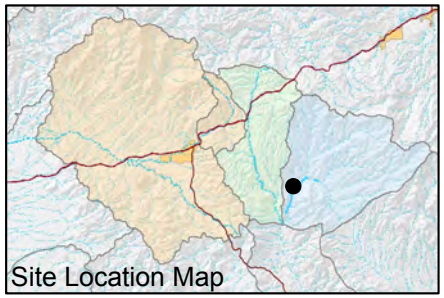
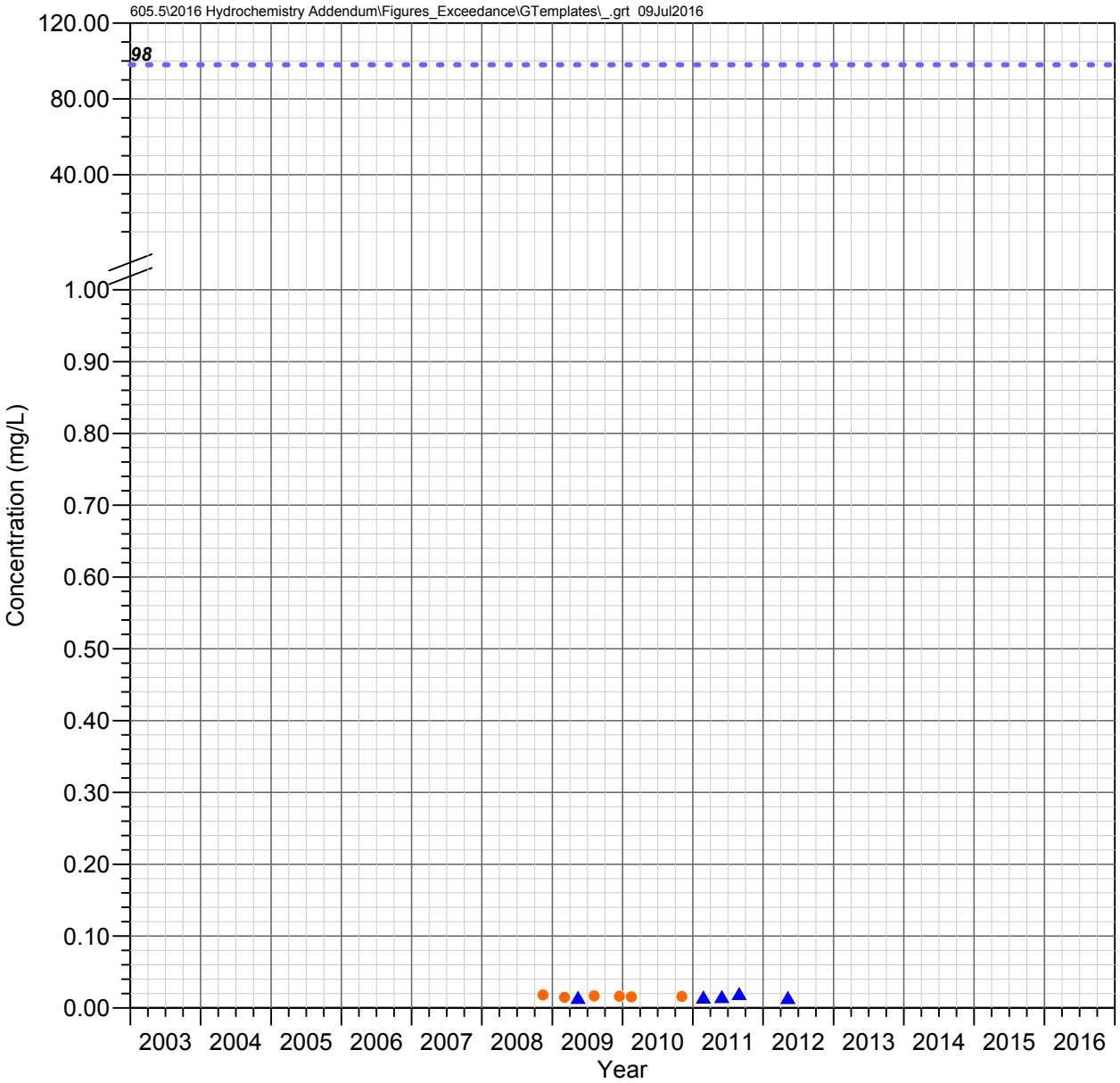


FIGURE F-103. BARIUM CONCENTRATIONS OBSERVED AT MC 5.2 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 3.4 W (Wet Leg Spring)
Mineral Creek Watershed

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- - - - AZ Full Body Contact (TRC, 98 mg/L)

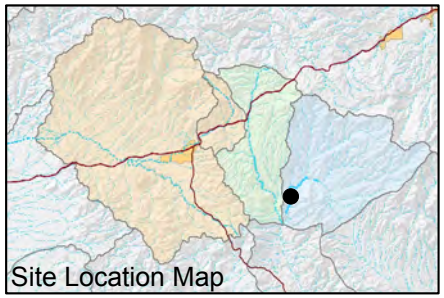
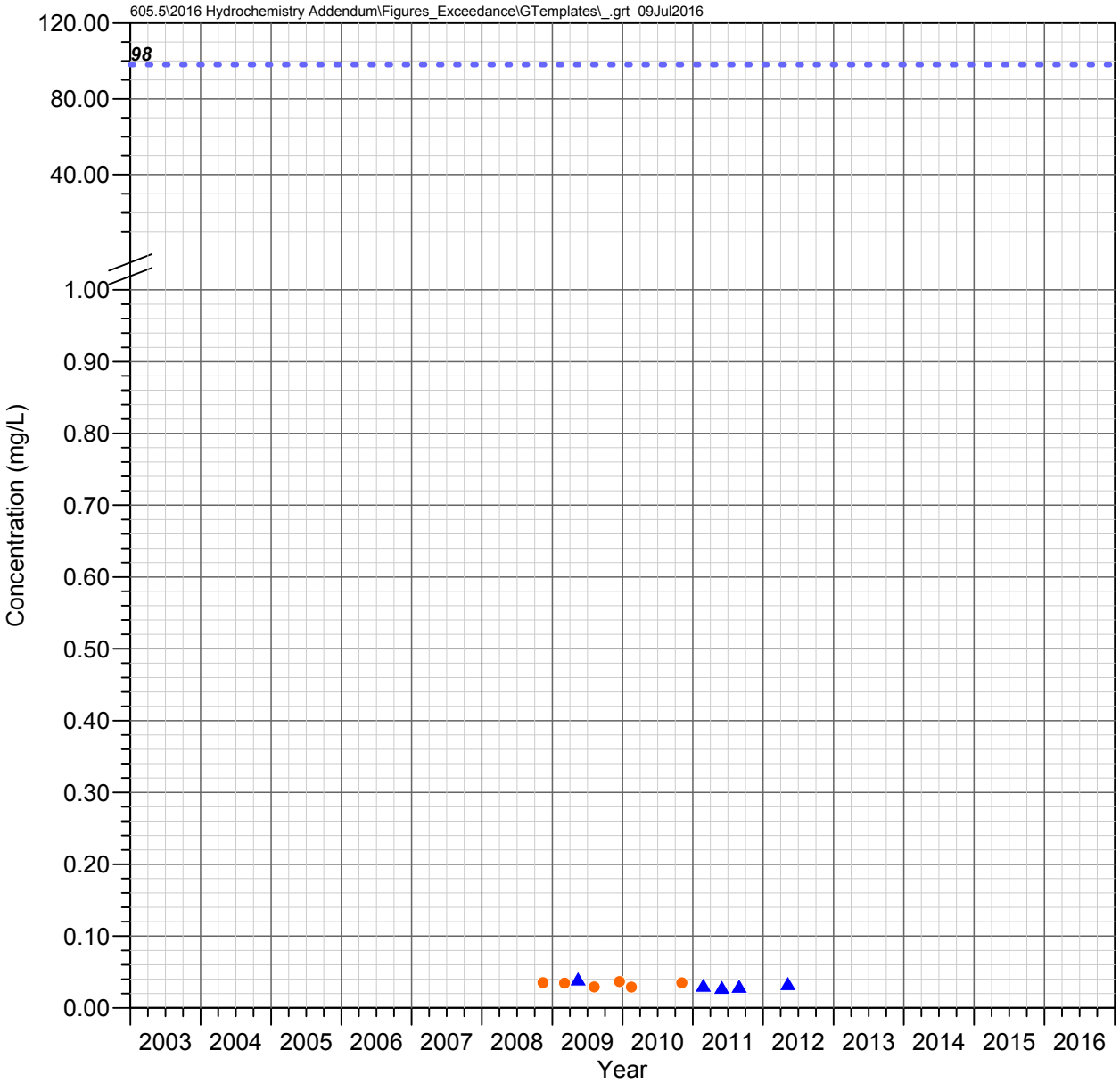


FIGURE F-104. BARIUM CONCENTRATIONS OBSERVED AT MC 3.4 W (WET LEG SPRING), MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 3.3 C (Lower Mineral)
Mineral Creek Watershed

BARIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- - - - AZ Full Body Contact (TRC, 98 mg/L)

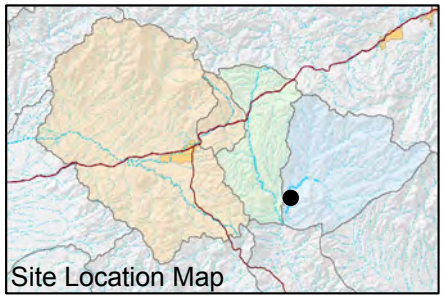
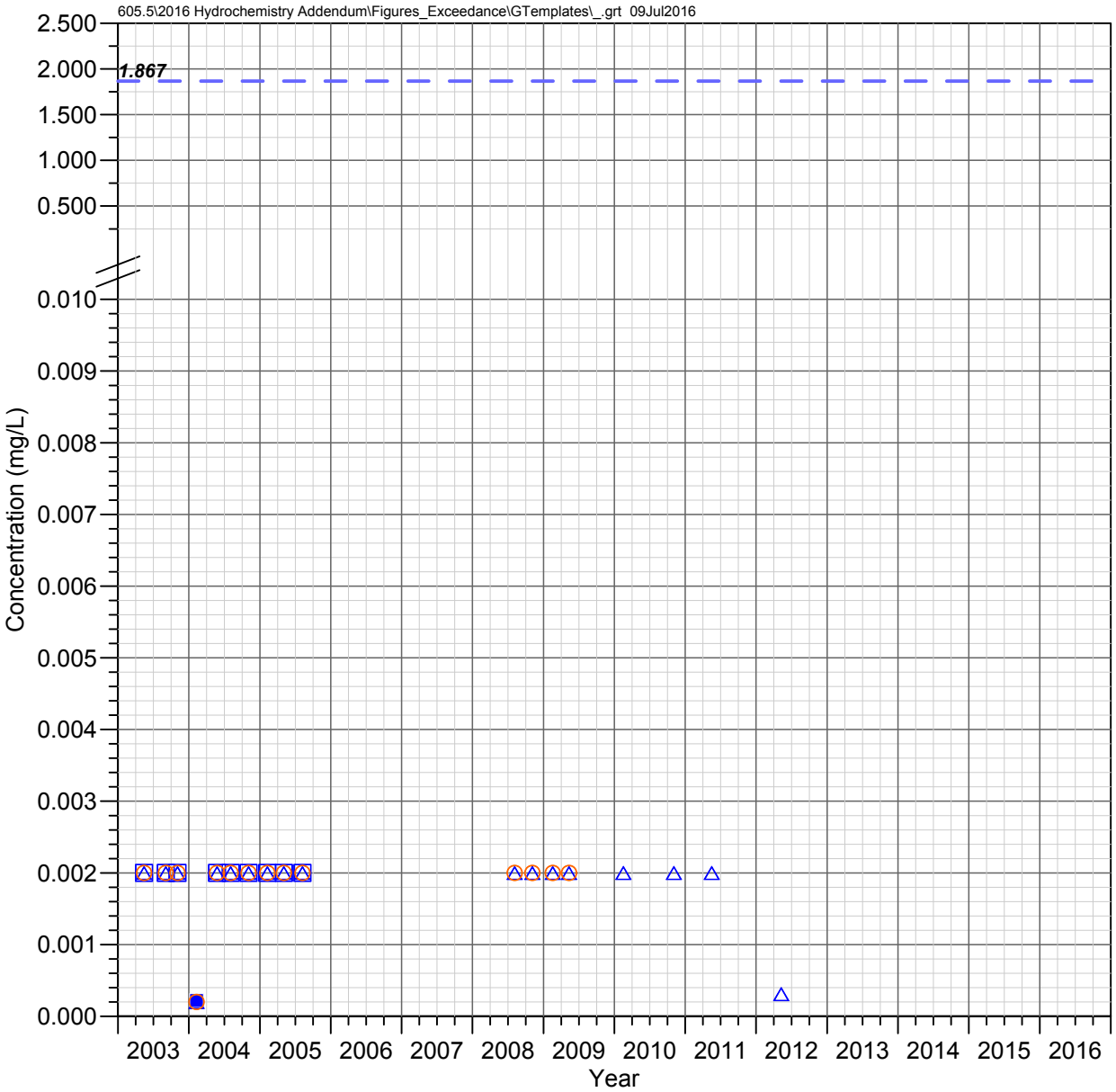


FIGURE F-105. BARIUM CONCENTRATIONS OBSERVED AT MC 3.3 C (LOWER MINERAL), MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Pump Station Spring (QC 30.7 C)
Queen Creek Watershed

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

— — AZ Partial Body Contact (TRC, 1.867 mg/L)

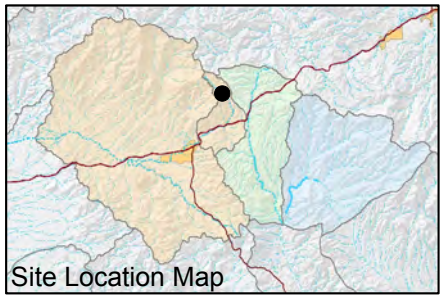
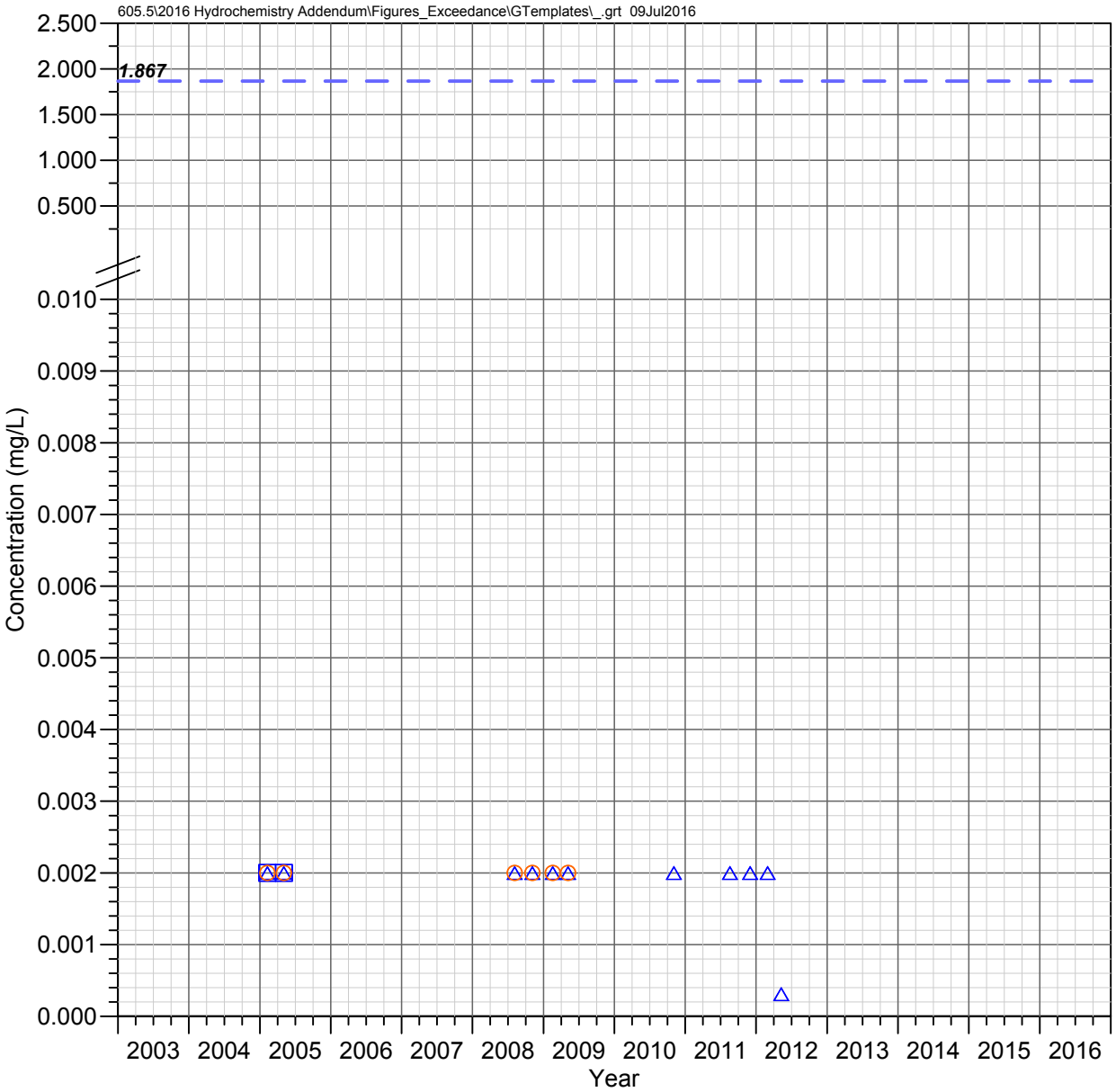


FIGURE F-106. BERYLLIUM CONCENTRATIONS OBSERVED AT PUMP STATION SPRING (QC 30.7 C), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 27.3 C
Queen Creek Watershed

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

— — AZ Partial Body Contact (TRC, 1.867 mg/L)

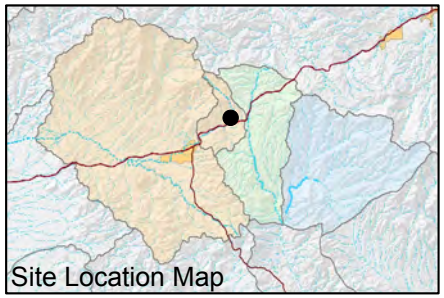
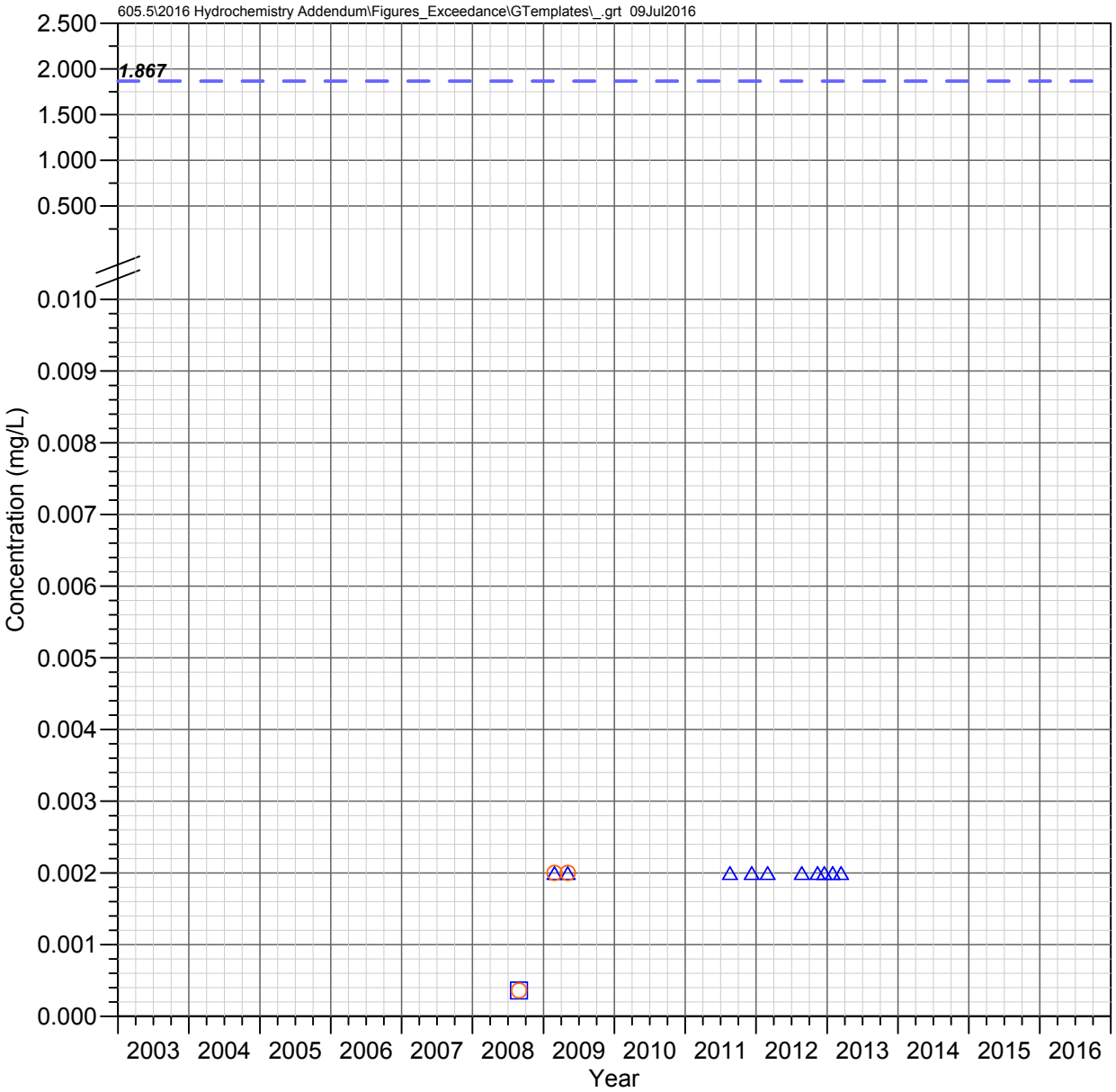


FIGURE F-107. BERYLLIUM CONCENTRATIONS OBSERVED AT QC 27.3 C, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Oak Flat Wash
Queen Creek Watershed

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

— — AZ Partial Body Contact (TRC, 1.867 mg/L)

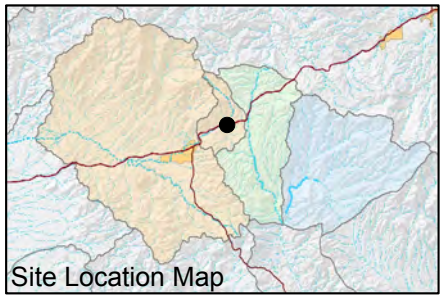
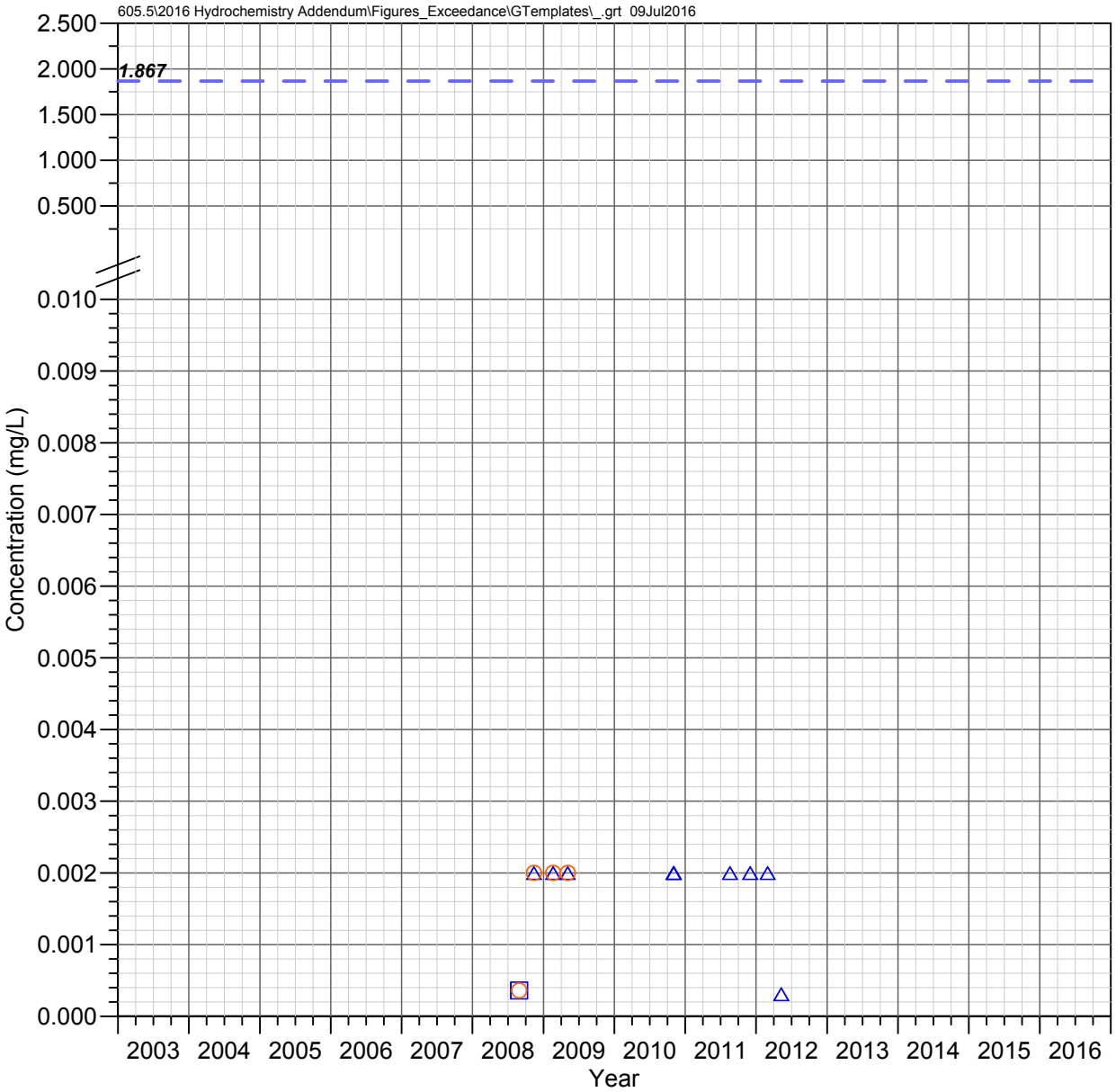


FIGURE F-108. BERYLLIUM CONCENTRATIONS OBSERVED AT OAK FLAT WASH, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Number 9 Wash
Queen Creek Watershed

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

— — AZ Partial Body Contact (TRC, 1.867 mg/L)

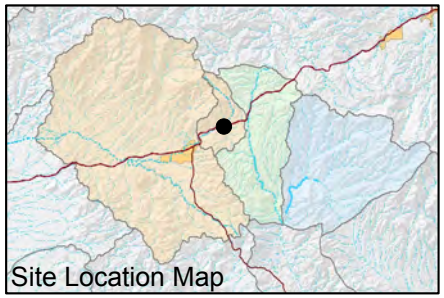
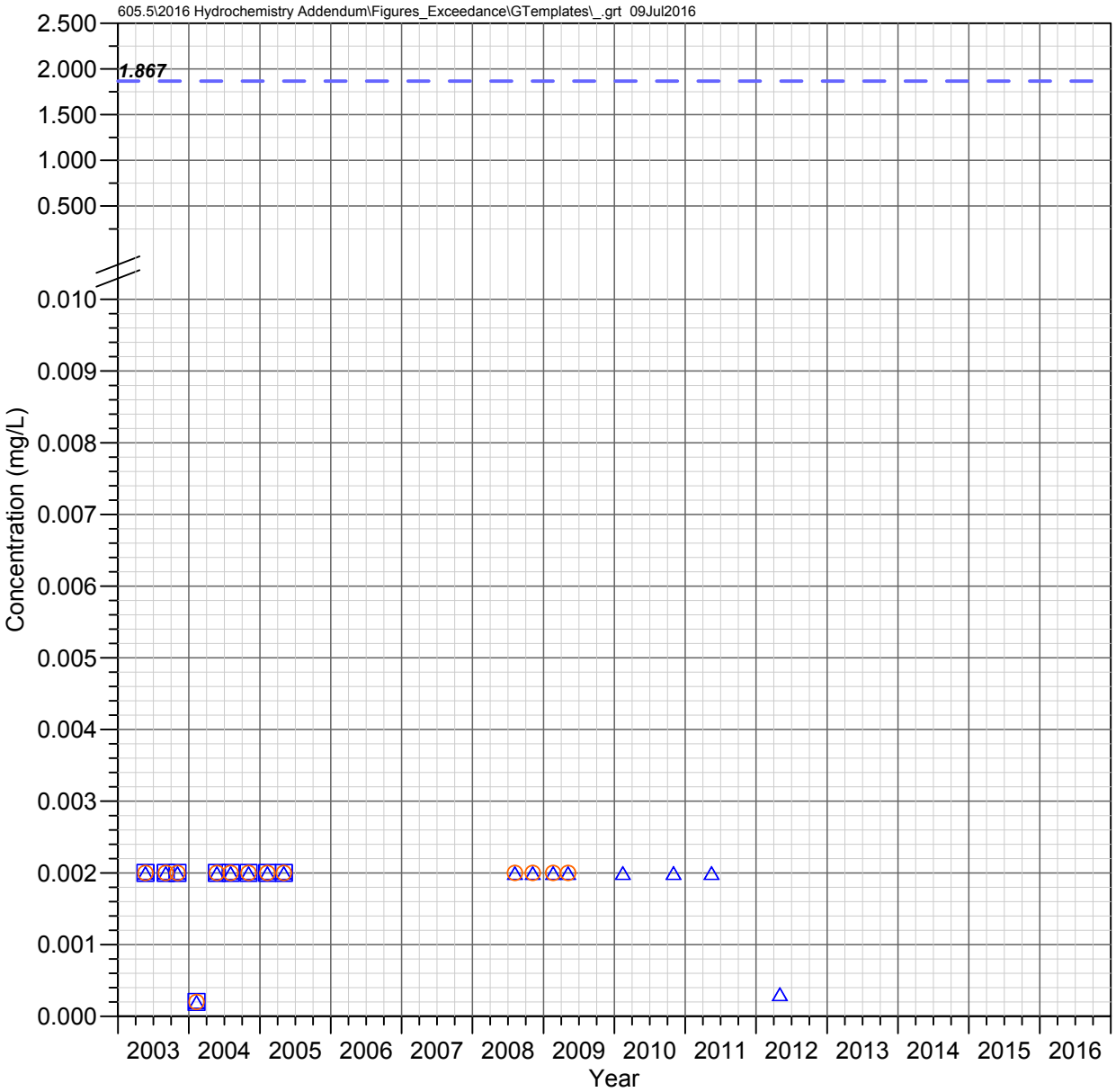


FIGURE F-109. BERYLLIUM CONCENTRATIONS OBSERVED AT NUMBER 9 WASH, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Boulder Hole (QC 23.6 C)
Queen Creek Watershed

BERYLLIUM

Observed Concentrations
*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards **(filter analysis dependent)**
TRC = Total or Total Recoverable

AZ Partial Body Contact (TRC, 1.867 mg/L)

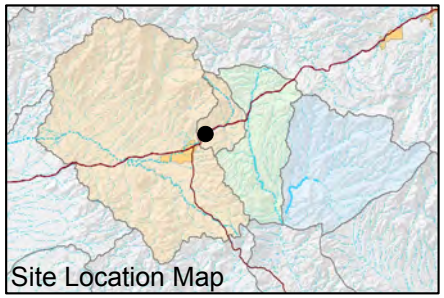
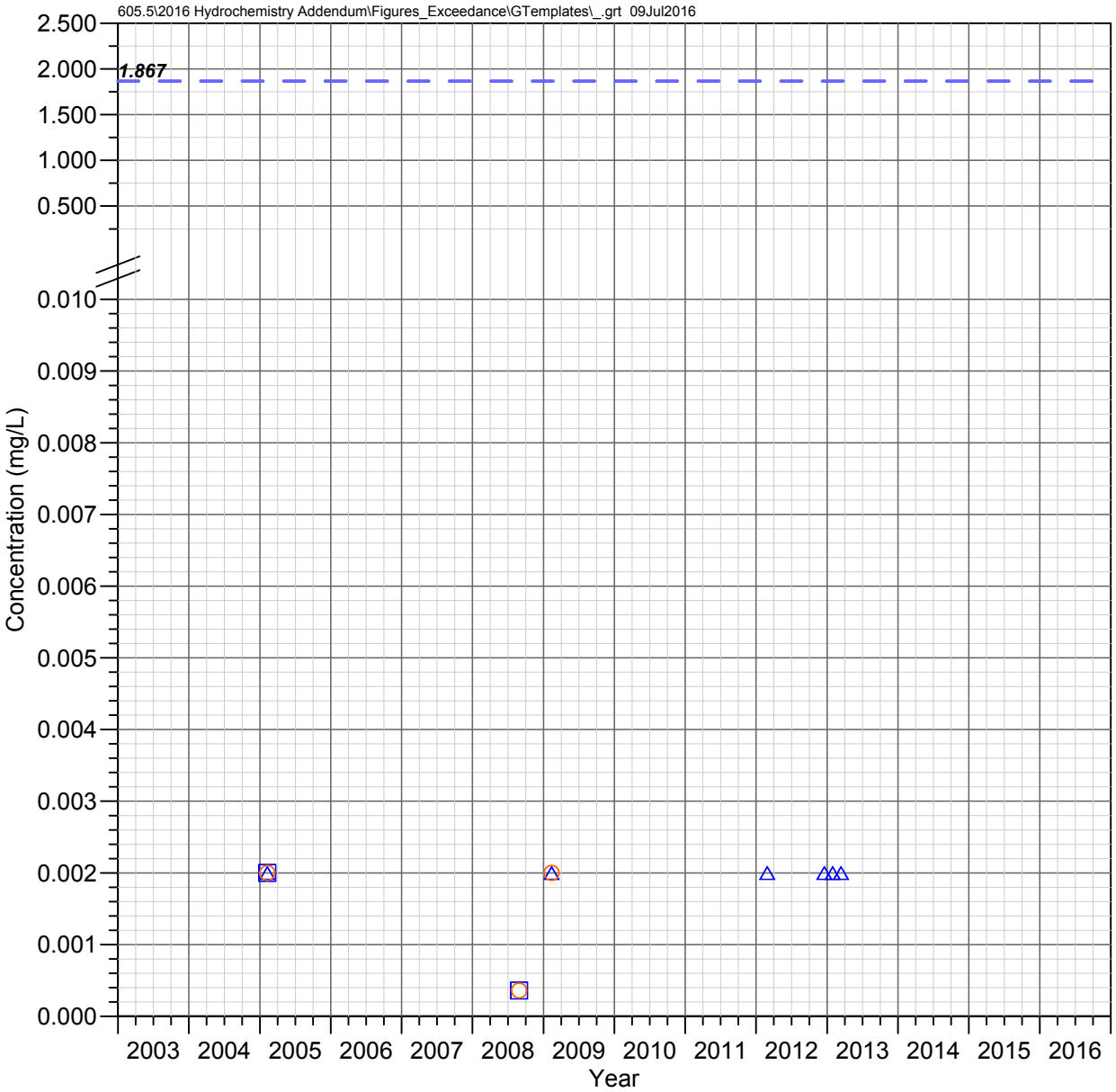


FIGURE F-110. BERYLLIUM CONCENTRATIONS OBSERVED AT BOULDER HOLE (QC 23.6 C), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 22.6 E (Karst Spring)
Queen Creek Watershed

BERYLLIUM

Observed Concentrations
*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards **(filter analysis dependent)**
TRC = Total or Total Recoverable

- AZ Partial Body Contact (TRC, 1.867 mg/L)

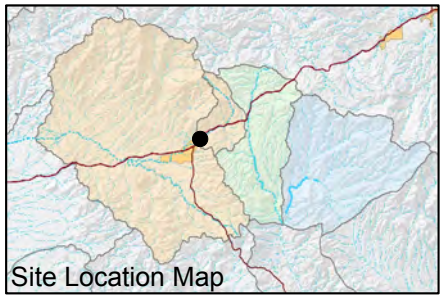
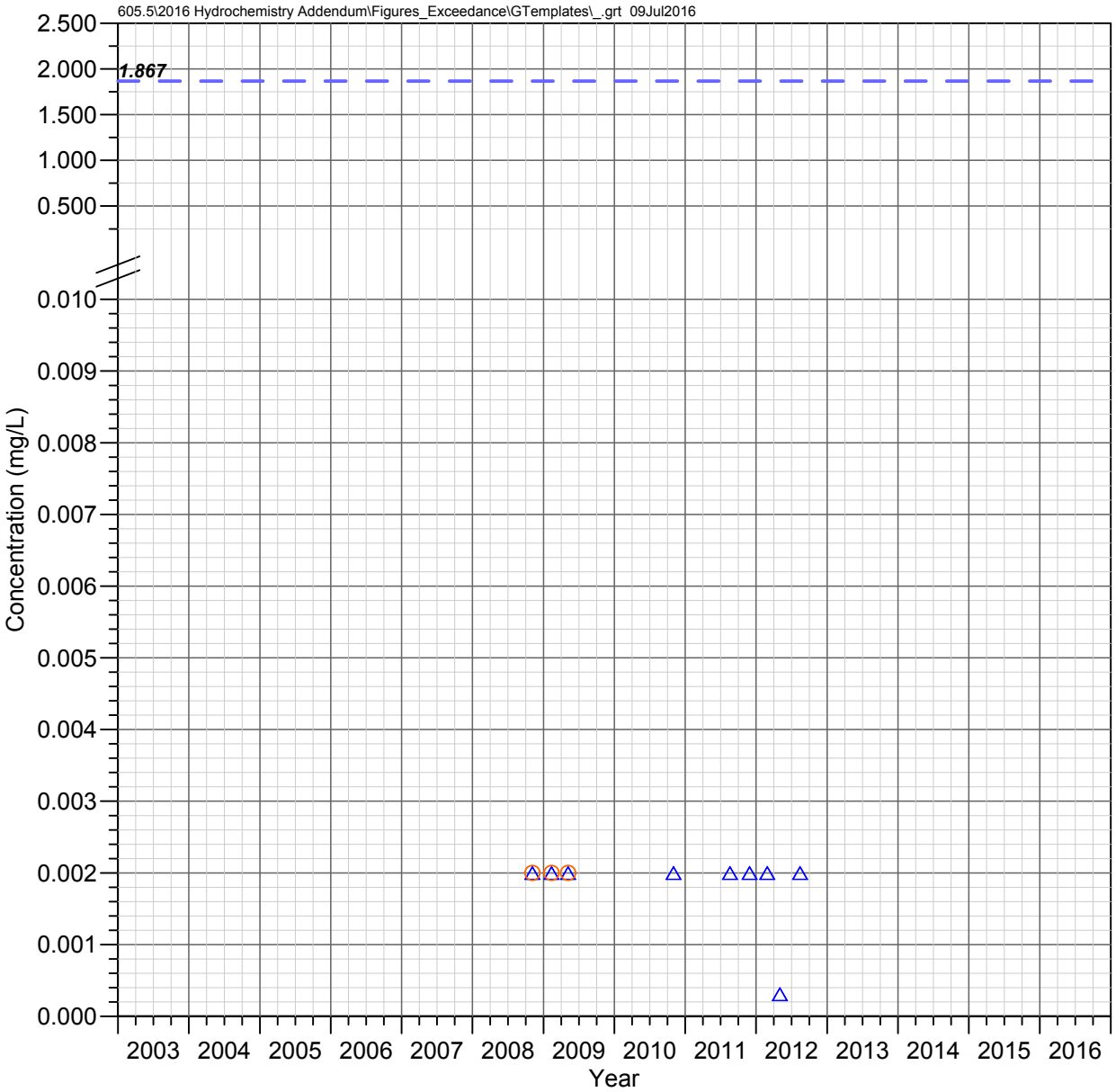


FIGURE F-111. BERYLLIUM CONCENTRATIONS OBSERVED AT QC 22.6 E (KARST SPRING), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 21.7 C (Magma Avenue)
Queen Creek Watershed

BERYLLIUM

Observed Concentrations
*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards **(filter analysis dependent)**
TRC = Total or Total Recoverable

AZ Partial Body Contact (TRC, 1.867 mg/L)

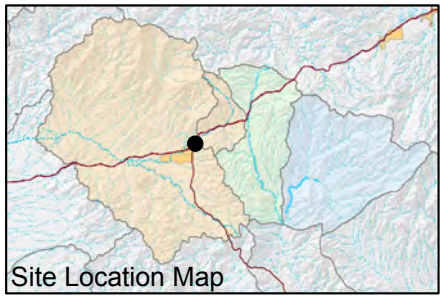
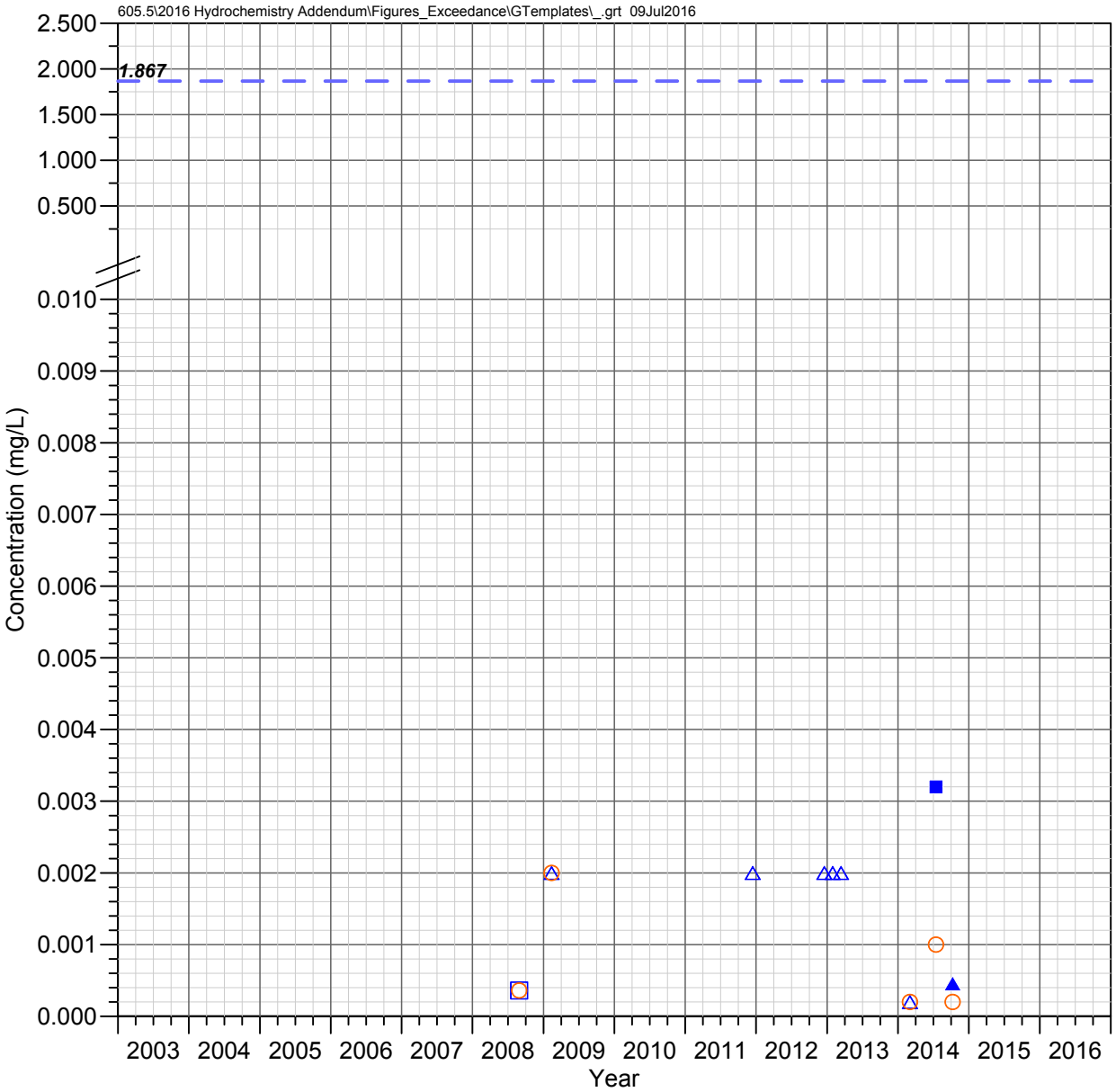


FIGURE F-112. BERYLLIUM CONCENTRATIONS OBSERVED AT QC 21.7 C (MAGMA AVENUE), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 19.7 C
Queen Creek Watershed

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

— — AZ Partial Body Contact (TRC, 1.867 mg/L)

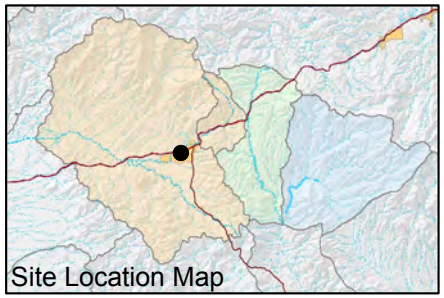
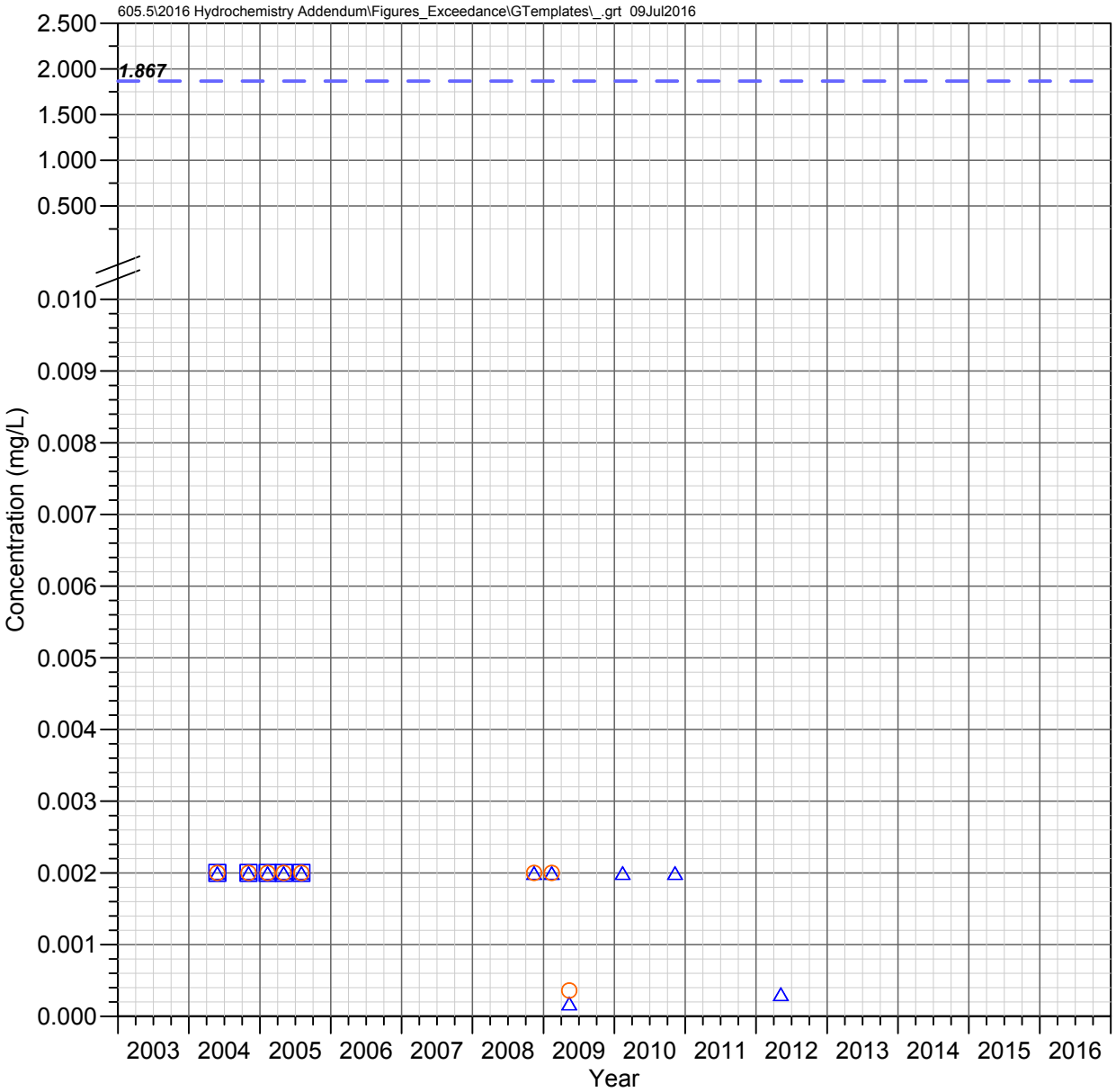


FIGURE F-113. BERYLLIUM CONCENTRATIONS OBSERVED AT QC 19.7 C, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Bored Spring
Queen Creek Watershed

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

— — AZ Partial Body Contact (TRC, 1.867 mg/L)

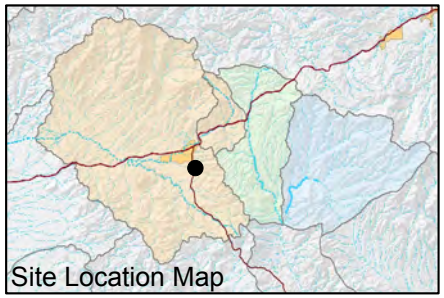
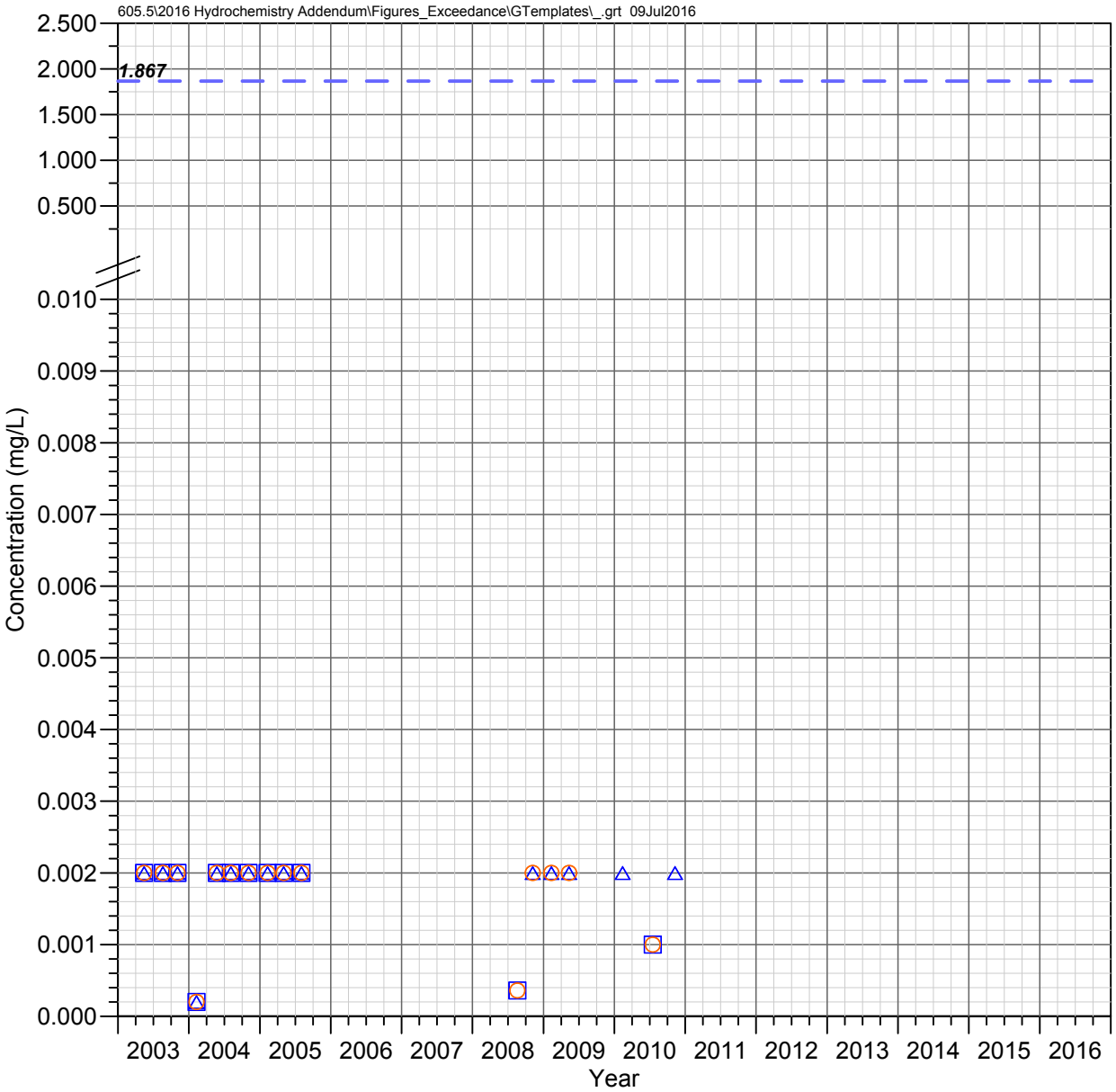


FIGURE F-114. BERYLLIUM CONCENTRATIONS OBSERVED AT BORED SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Hidden Spring
Queen Creek Watershed

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

— — AZ Partial Body Contact (TRC, 1.867 mg/L)

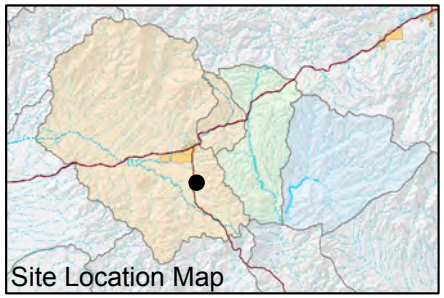
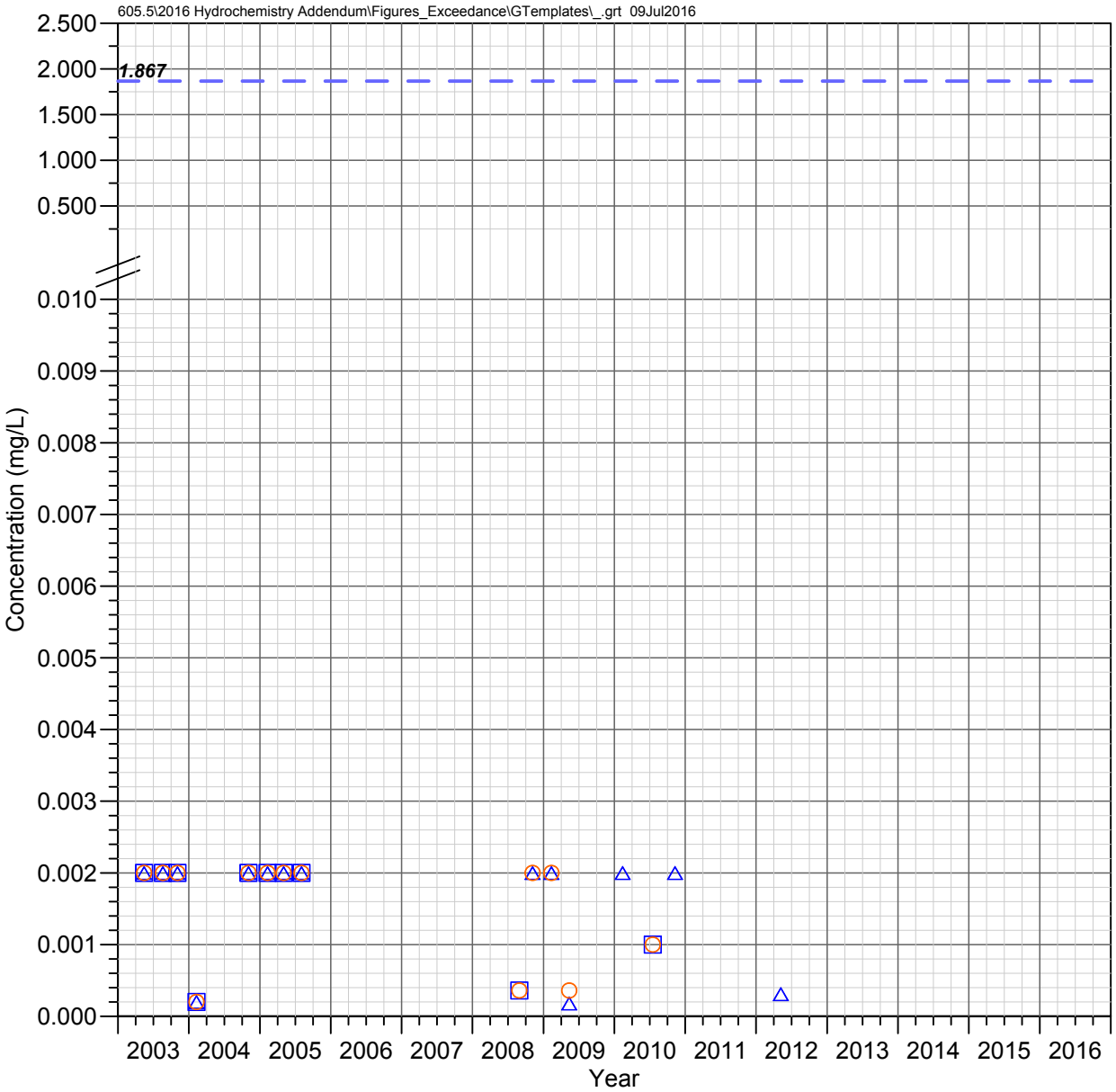


FIGURE F-115. BERYLLIUM CONCENTRATIONS OBSERVED AT HIDDEN SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Kane Spring
Queen Creek Watershed

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

— — AZ Partial Body Contact (TRC, 1.867 mg/L)

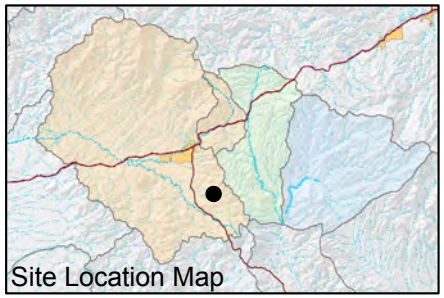
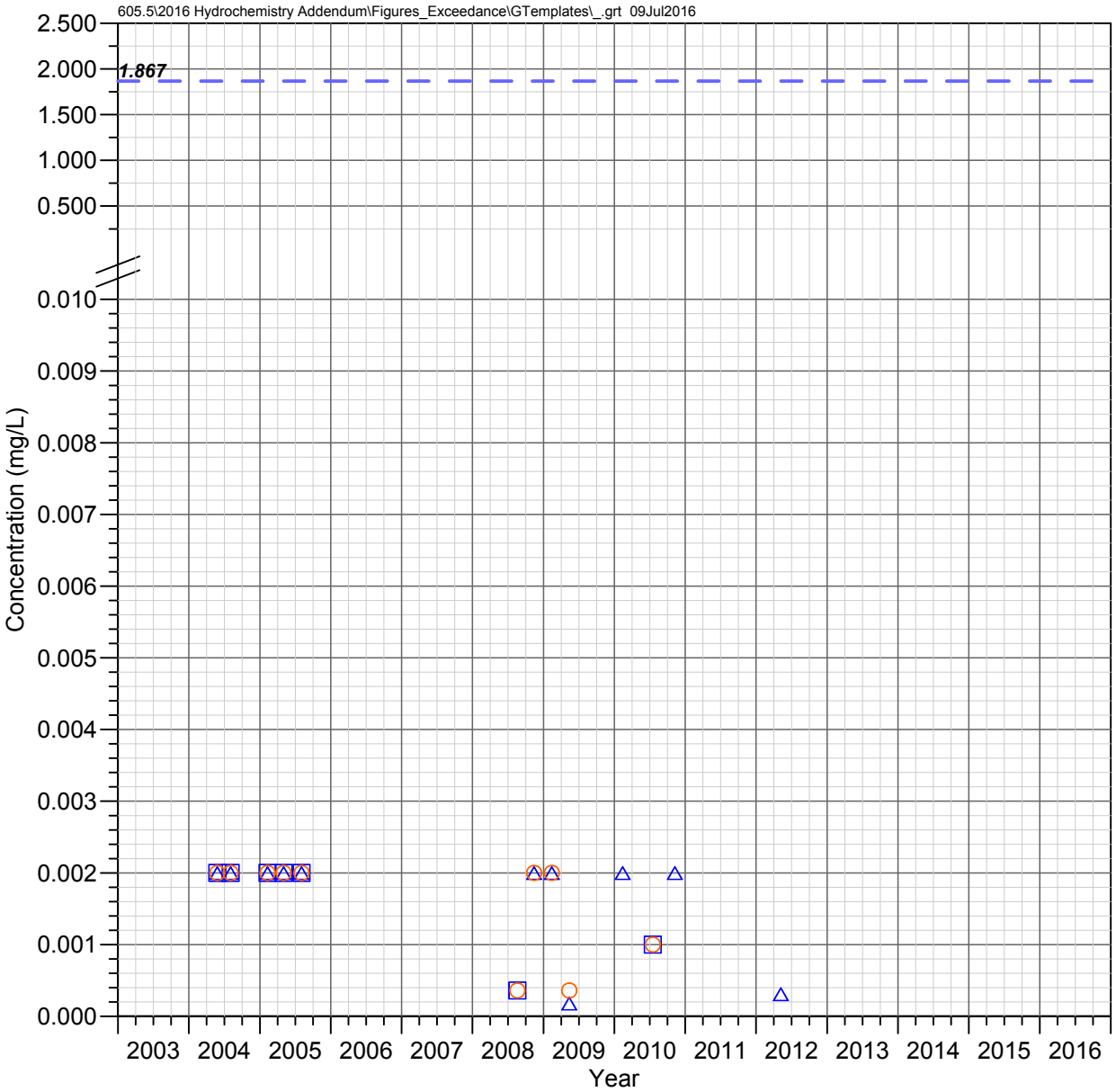


FIGURE F-116. BERYLLIUM CONCENTRATIONS OBSERVED AT KANE SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Blue Spring
Queen Creek Watershed

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

— — AZ Partial Body Contact (TRC, 1.867 mg/L)

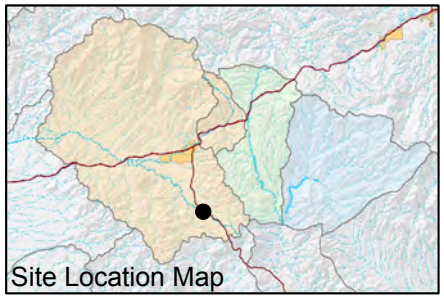
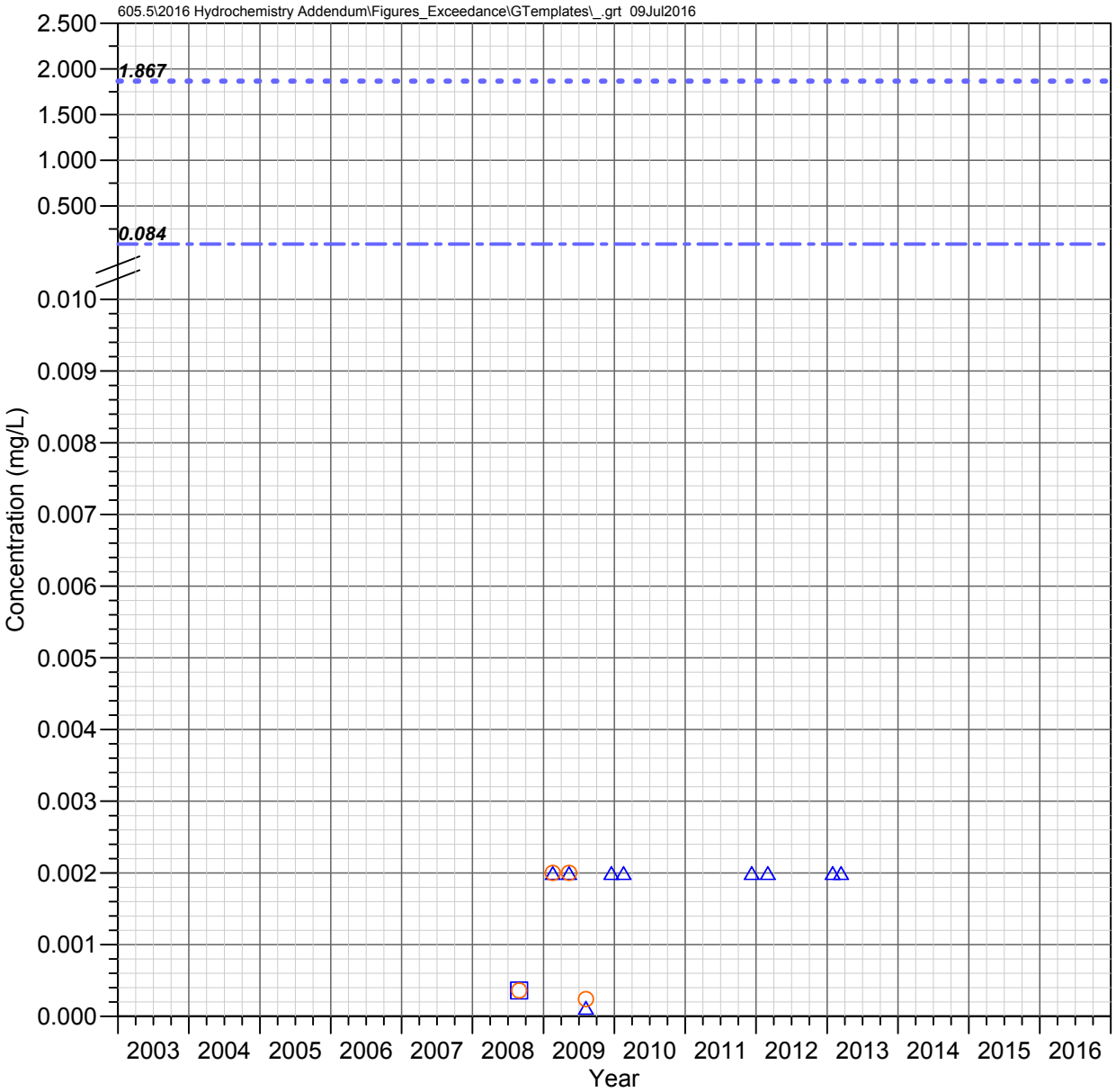


FIGURE F-117. BERYLLIUM CONCENTRATIONS OBSERVED AT BLUE SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



IC 1.0 C
Devils Canyon Watershed

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 1.867 mg/L)
- AZ Fish Consumption (TRC, 0.084 mg/L)

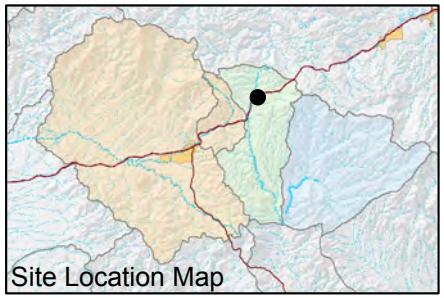
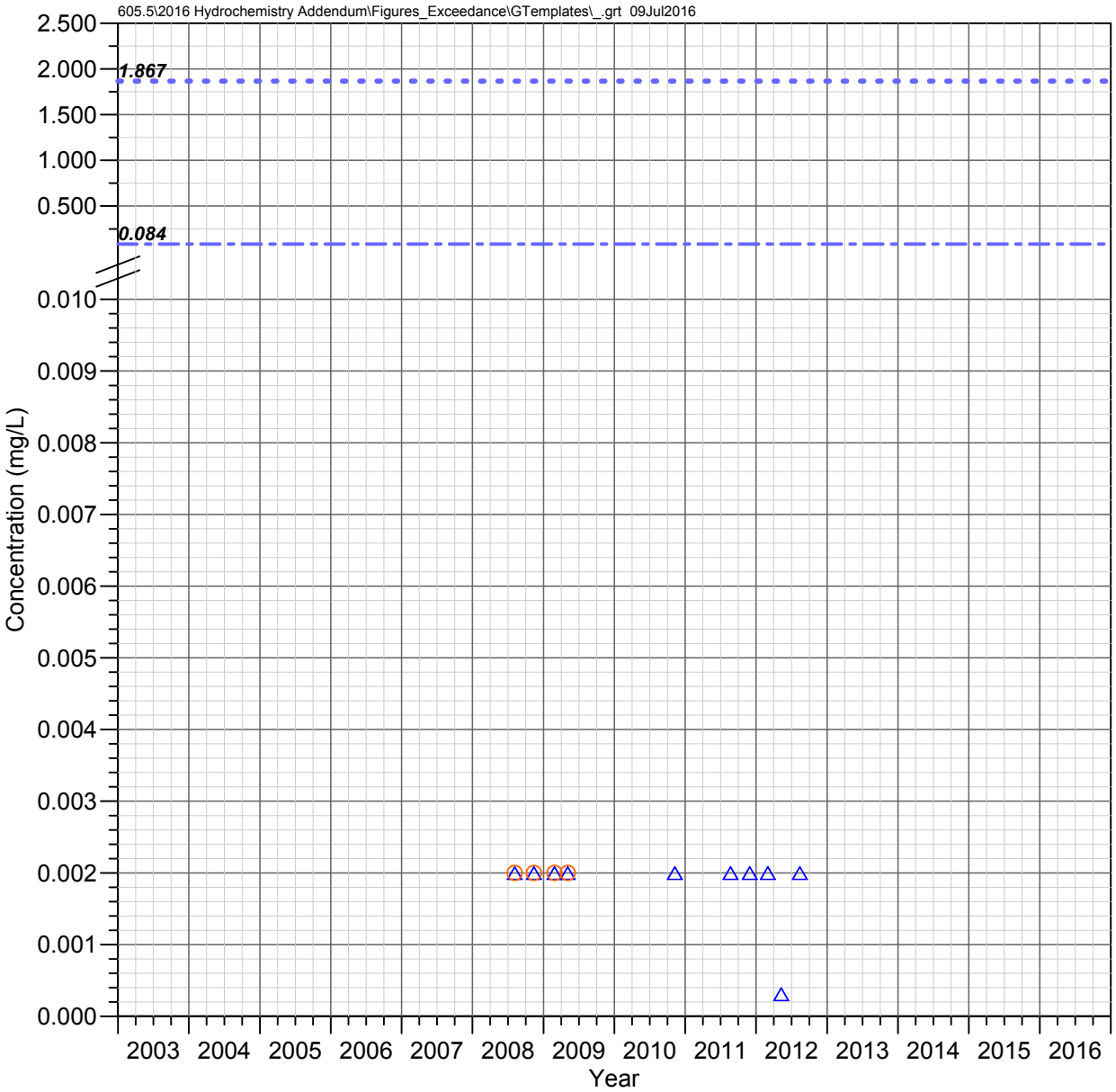


FIGURE F-118. BERYLLIUM CONCENTRATIONS OBSERVED AT IC 1.0 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 15.5 C
Devils Canyon Watershed

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 1.867 mg/L)
- AZ Fish Consumption (TRC, 0.084 mg/L)

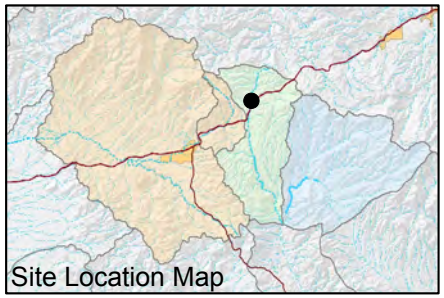
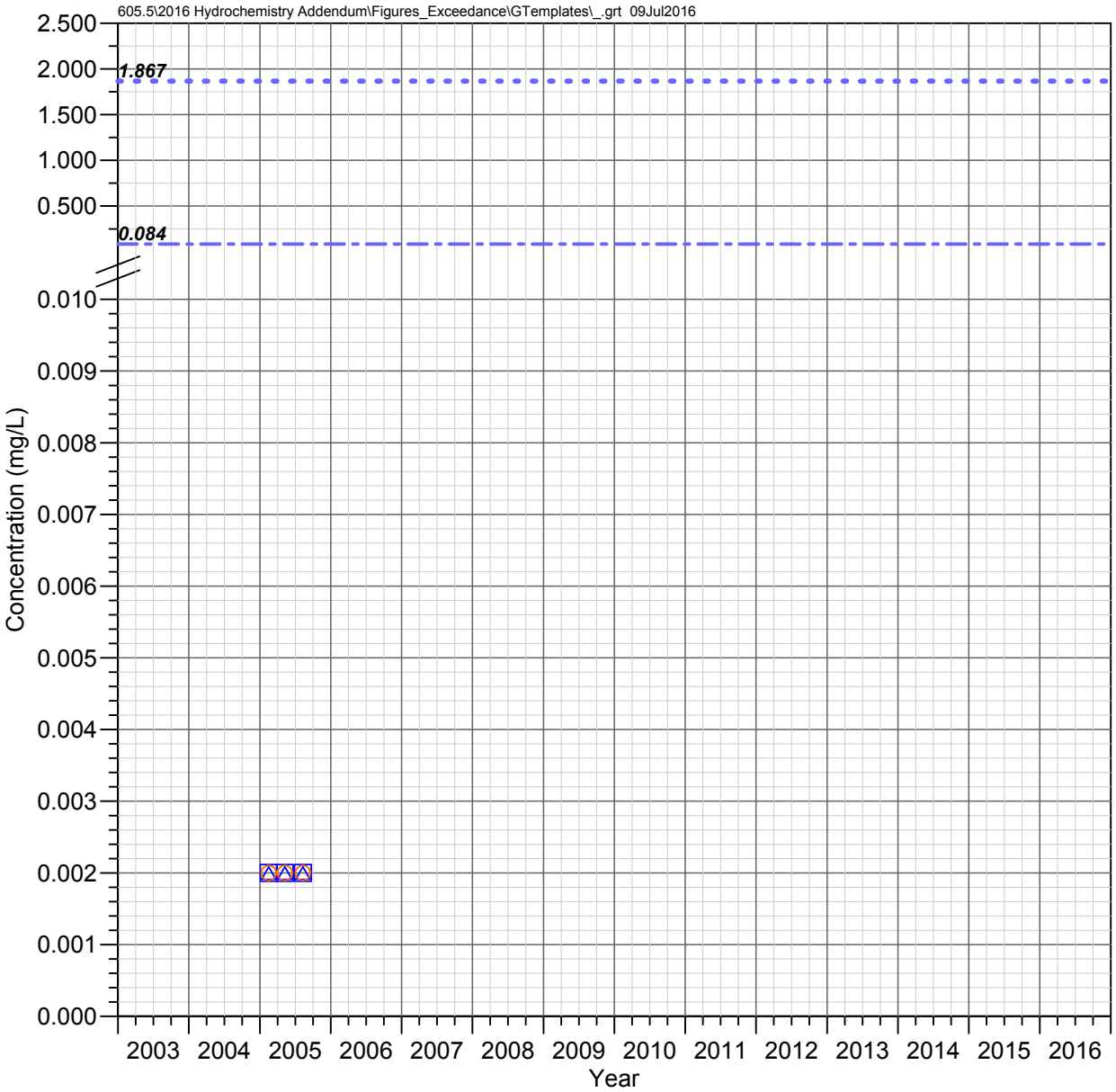


FIGURE F-119. BERYLLIUM CONCENTRATIONS OBSERVED AT DC 15.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 15.2 C
Devils Canyon Watershed

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 1.867 mg/L)
- AZ Fish Consumption (TRC, 0.084 mg/L)

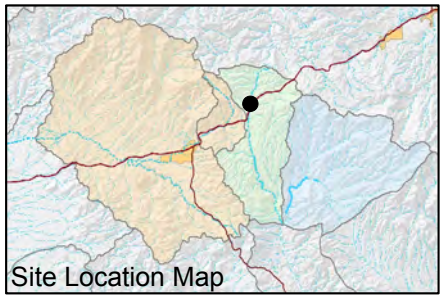
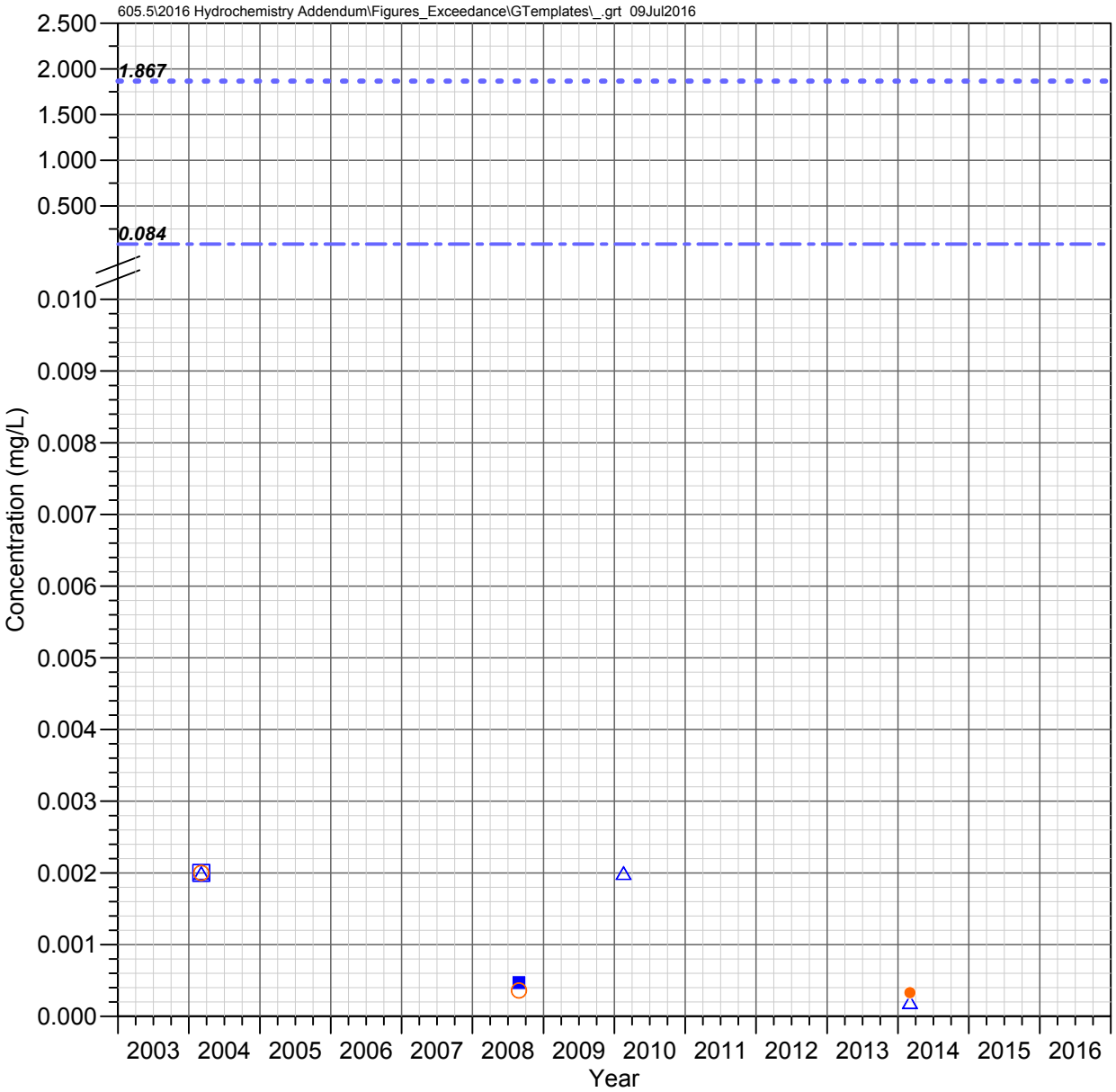


FIGURE F-120. BERYLLIUM CONCENTRATIONS OBSERVED AT DC 15.2 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 14.7 C
Devils Canyon Watershed

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 1.867 mg/L)
- AZ Fish Consumption (TRC, 0.084 mg/L)

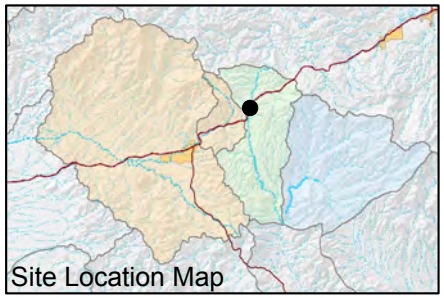
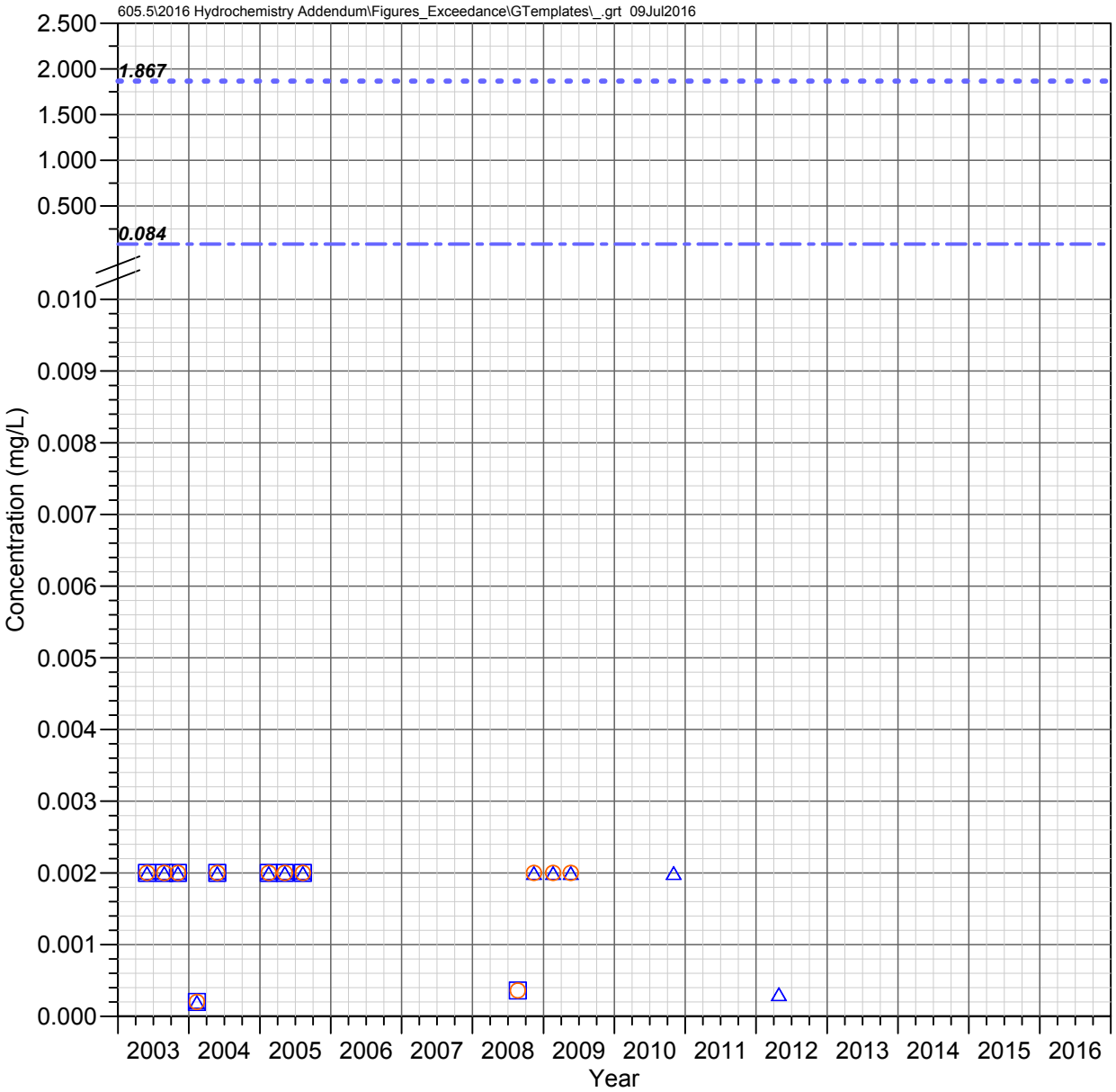


FIGURE F-121. BERYLLIUM CONCENTRATIONS OBSERVED AT DC 14.7 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 13.5 C
Devils Canyon Watershed

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 1.867 mg/L)
- AZ Fish Consumption (TRC, 0.084 mg/L)

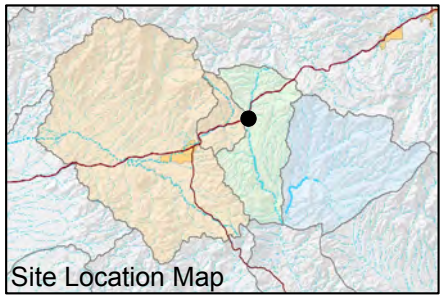
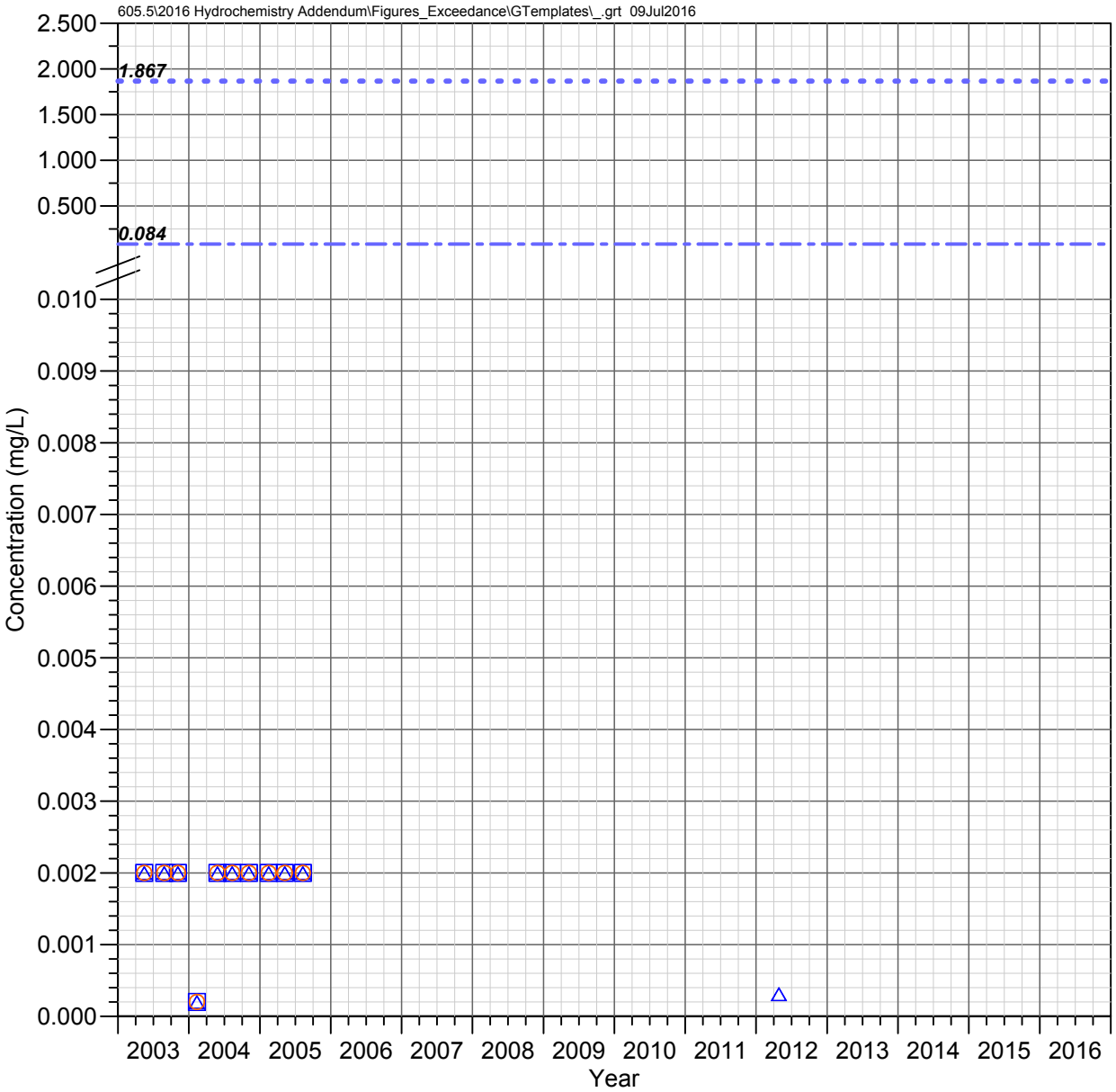


FIGURE F-122. BERYLLIUM CONCENTRATIONS OBSERVED AT DC 13.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 10.9 C
Devils Canyon Watershed

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 1.867 mg/L)
- AZ Fish Consumption (TRC, 0.084 mg/L)

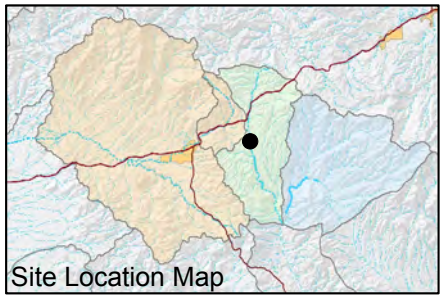
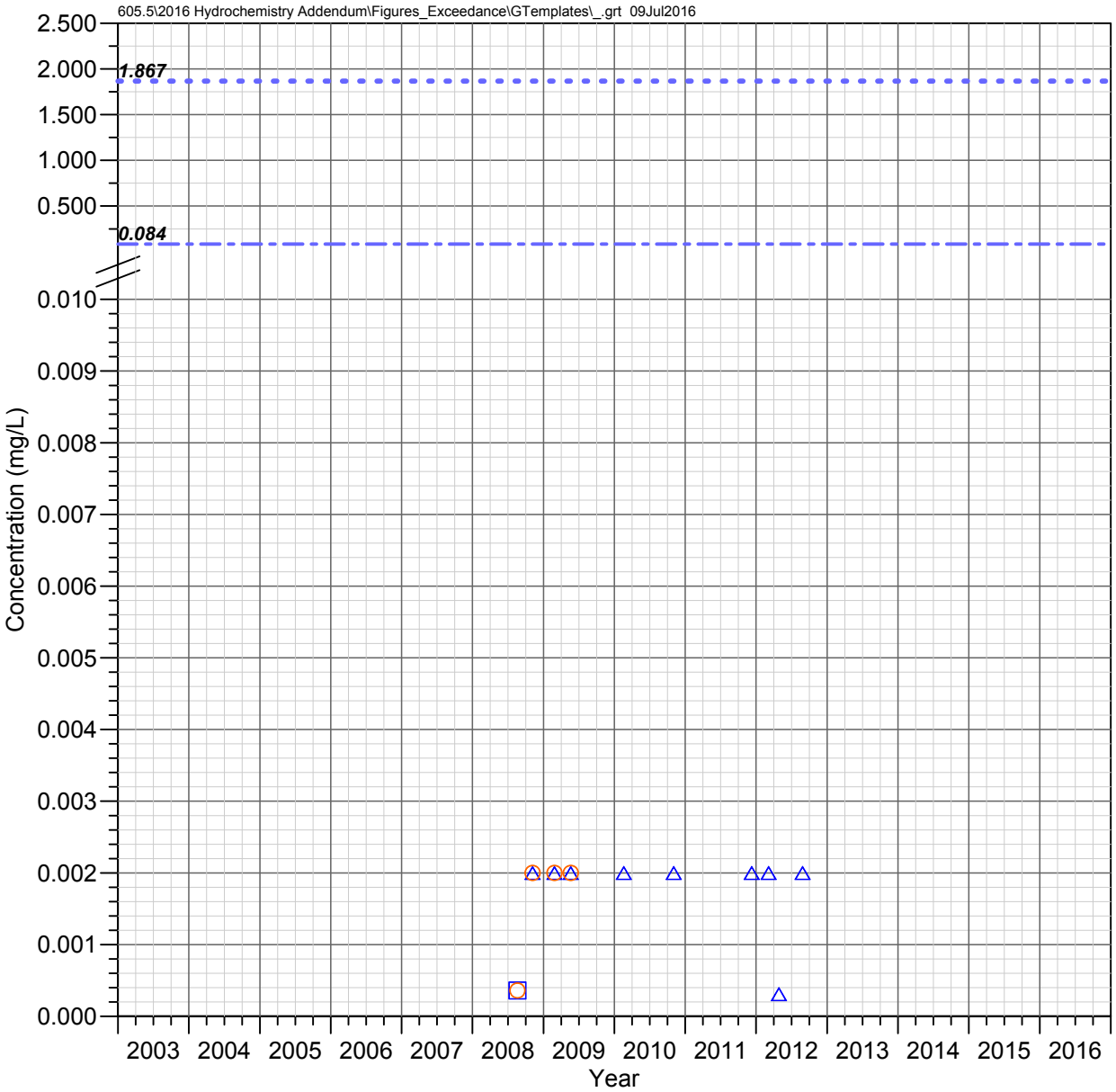


FIGURE F-123. BERYLLIUM CONCENTRATIONS OBSERVED AT DC 10.9 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



RR 1.5 C
Devils Canyon Watershed

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 1.867 mg/L)
- AZ Fish Consumption (TRC, 0.084 mg/L)

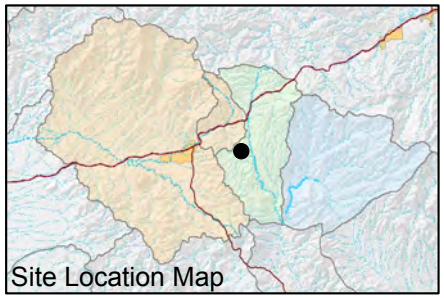
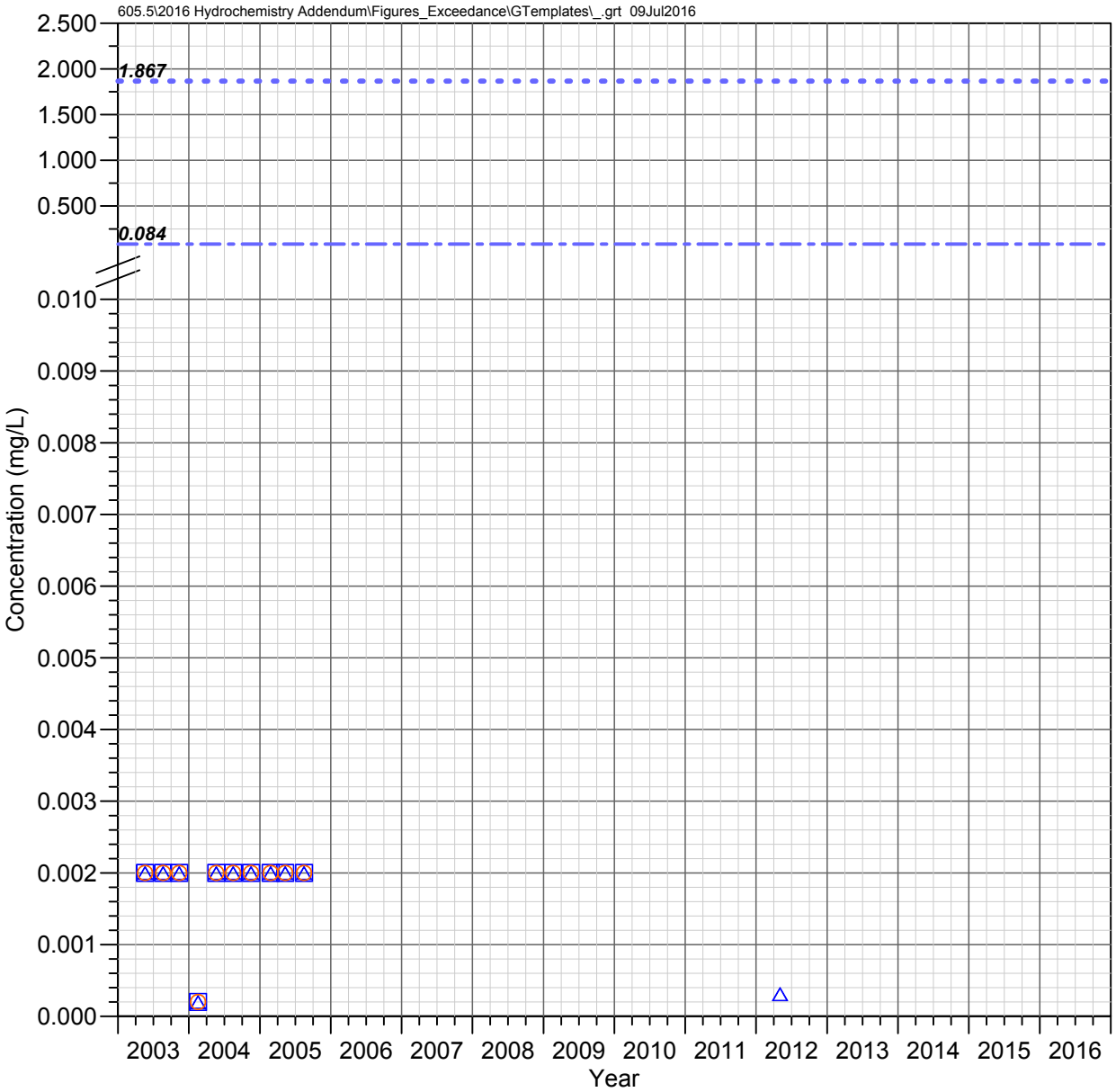


FIGURE F-124. BERYLLIUM CONCENTRATIONS OBSERVED AT RR 1.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.8 C
Devils Canyon Watershed

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 1.867 mg/L)
- AZ Fish Consumption (TRC, 0.084 mg/L)

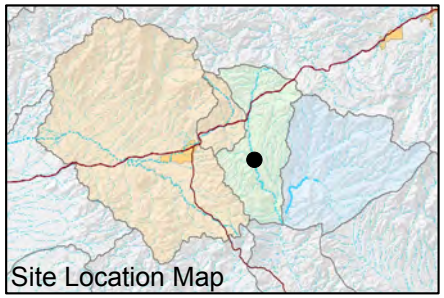
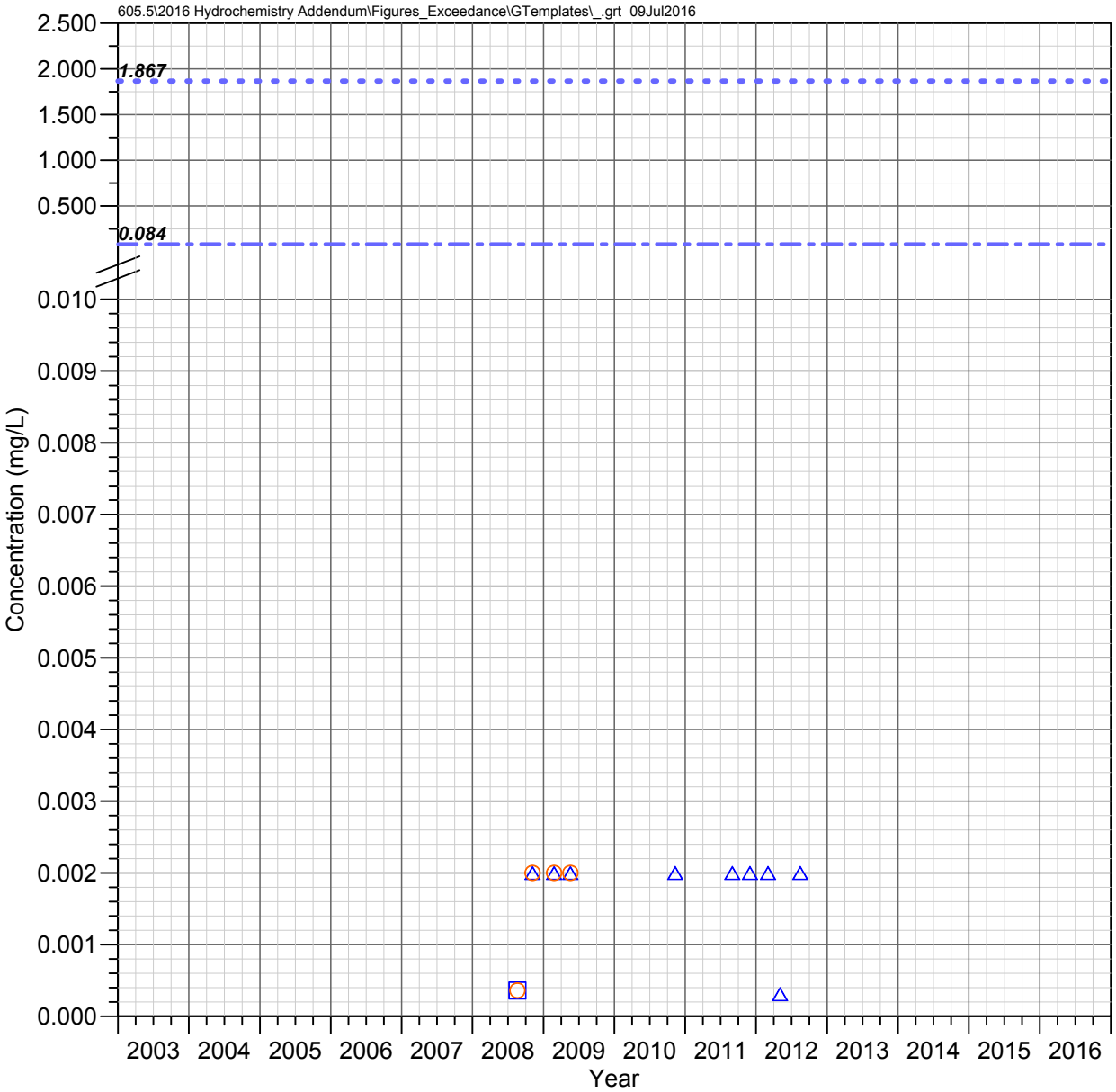


FIGURE F-125. BERYLLIUM CONCENTRATIONS OBSERVED AT DC 8.8 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



H 0.1 C
Devils Canyon Watershed

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 1.867 mg/L)
- AZ Fish Consumption (TRC, 0.084 mg/L)

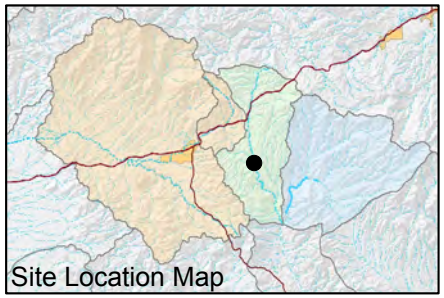
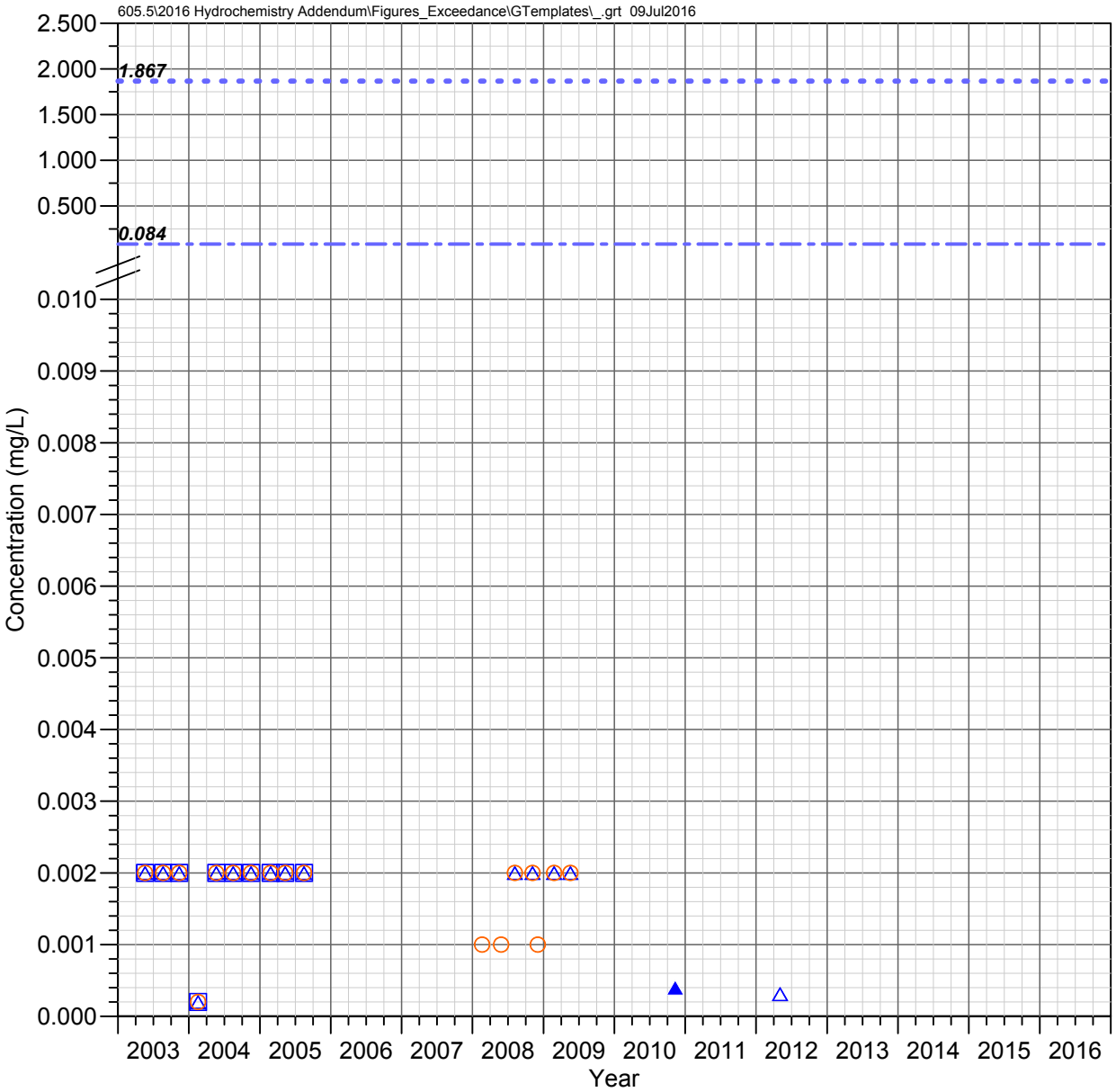


FIGURE F-126. BERYLLIUM CONCENTRATIONS OBSERVED AT H 0.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.2 W
Devils Canyon Watershed

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 1.867 mg/L)
- AZ Fish Consumption (TRC, 0.084 mg/L)

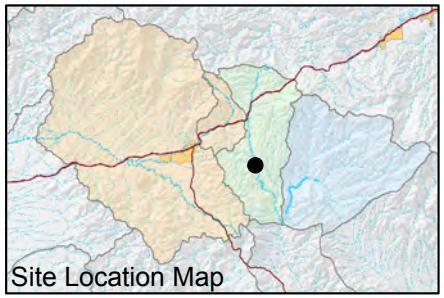
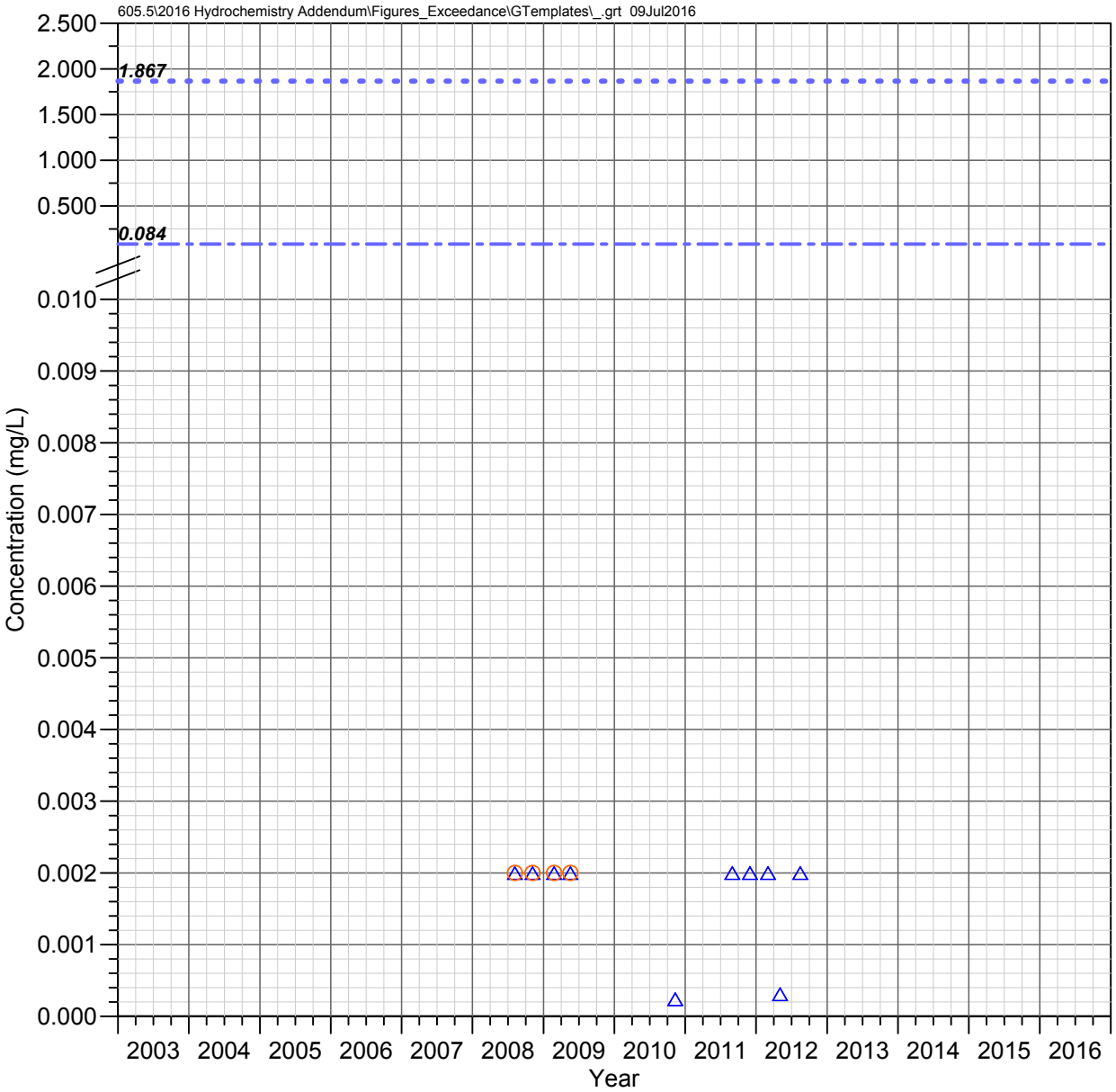


FIGURE F-127. BERYLLIUM CONCENTRATIONS OBSERVED AT DC 8.2 W, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.1 C
Devils Canyon Watershed

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 1.867 mg/L)
- AZ Fish Consumption (TRC, 0.084 mg/L)

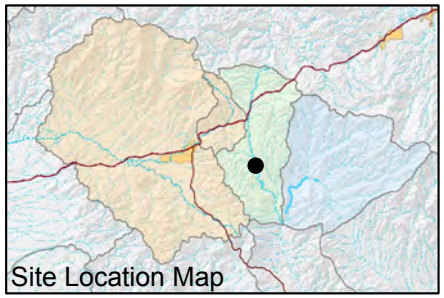
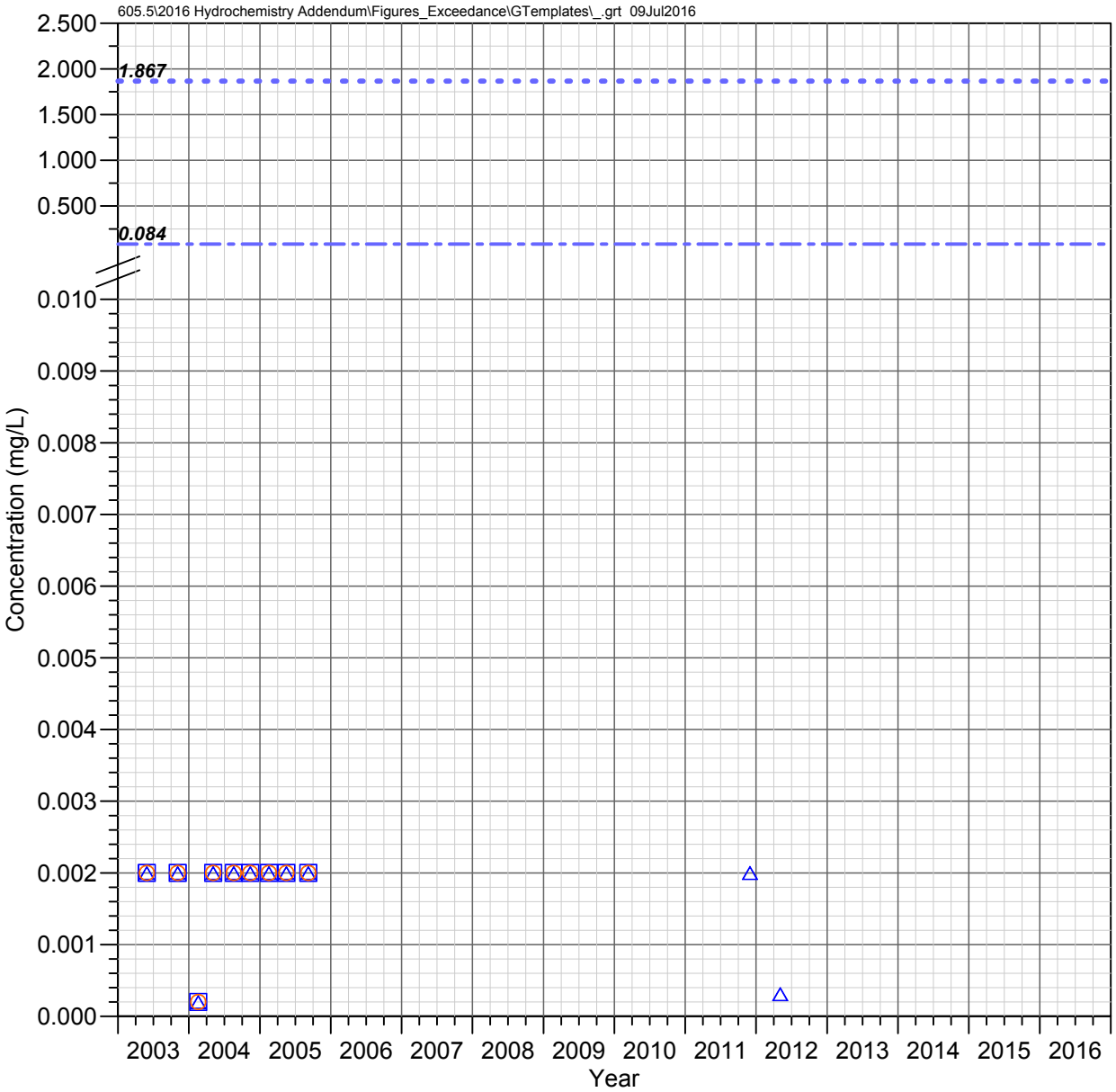


FIGURE F-128. BERYLLIUM CONCENTRATIONS OBSERVED AT DC 8.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 7.1 C
Devils Canyon Watershed

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 1.867 mg/L)
- AZ Fish Consumption (TRC, 0.084 mg/L)

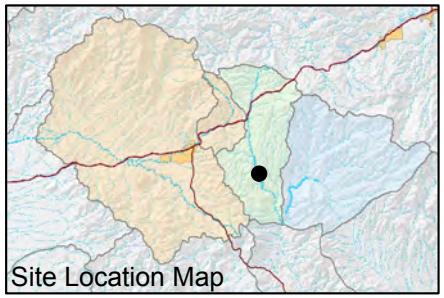
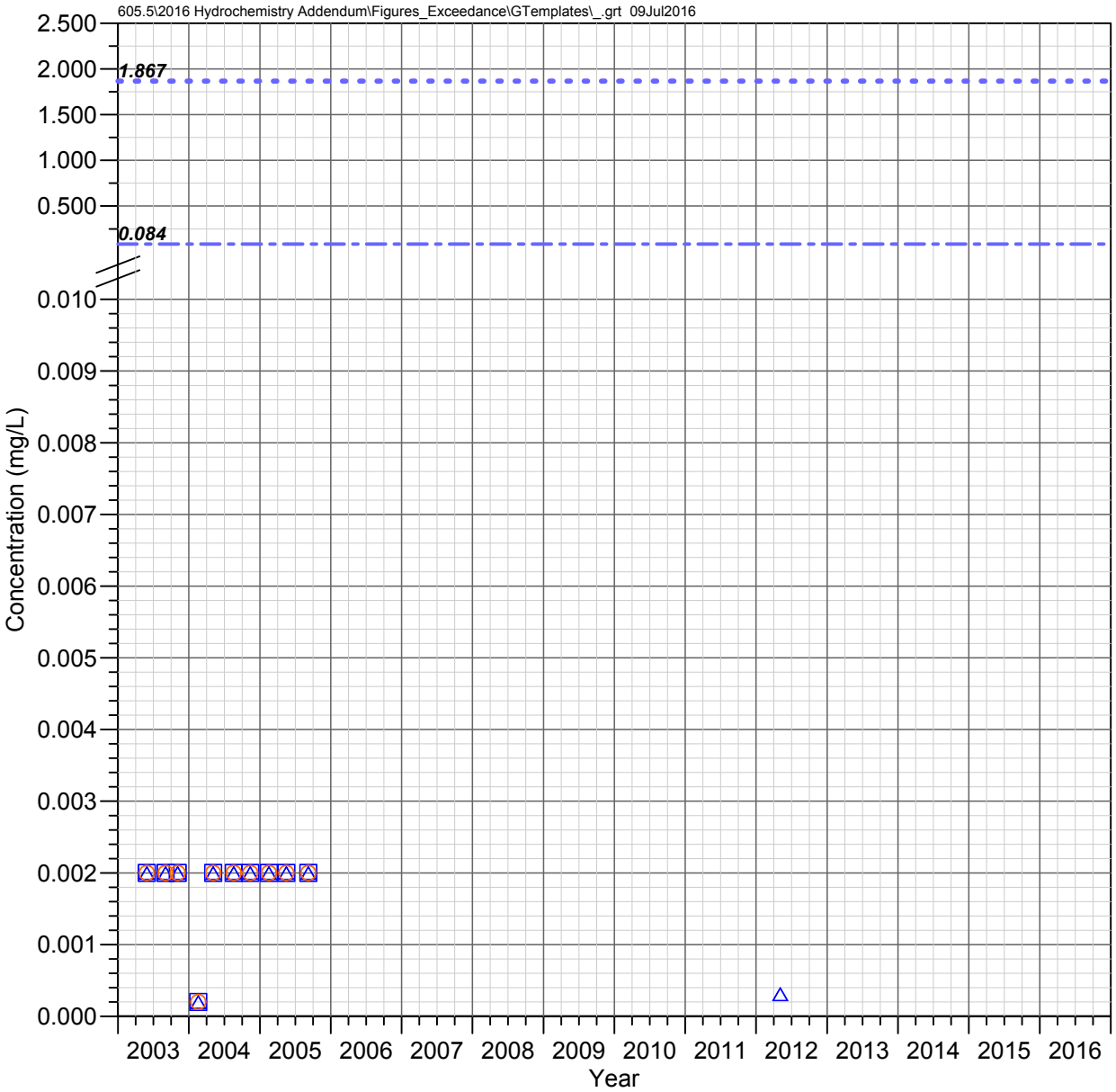


FIGURE F-129. BERYLLIUM CONCENTRATIONS OBSERVED AT DC 7.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.6 W (DCT 6.6 W)
Devils Canyon Watershed

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 1.867 mg/L)
- AZ Fish Consumption (TRC, 0.084 mg/L)

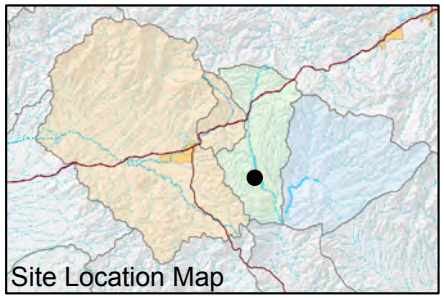
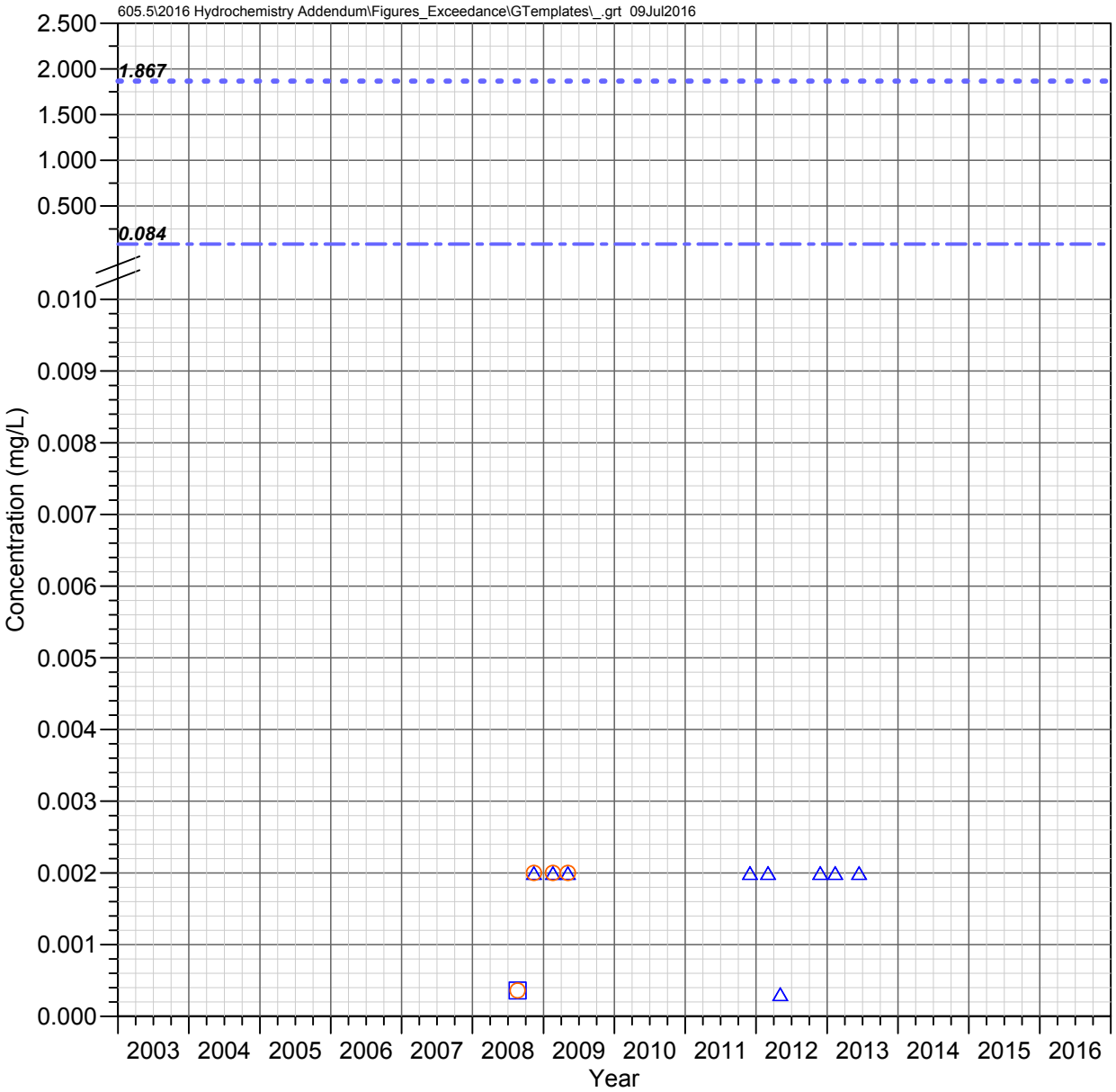


FIGURE F-130. BERYLLIUM CONCENTRATIONS OBSERVED AT DC 6.6 W (DCT 6.6 W), DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.14 C
Devils Canyon Watershed

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 1.867 mg/L)
- AZ Fish Consumption (TRC, 0.084 mg/L)

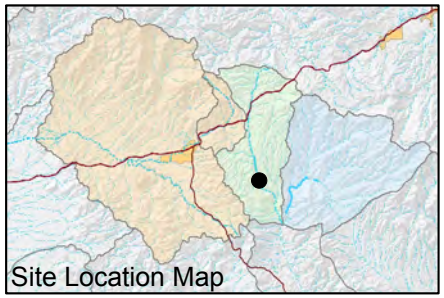
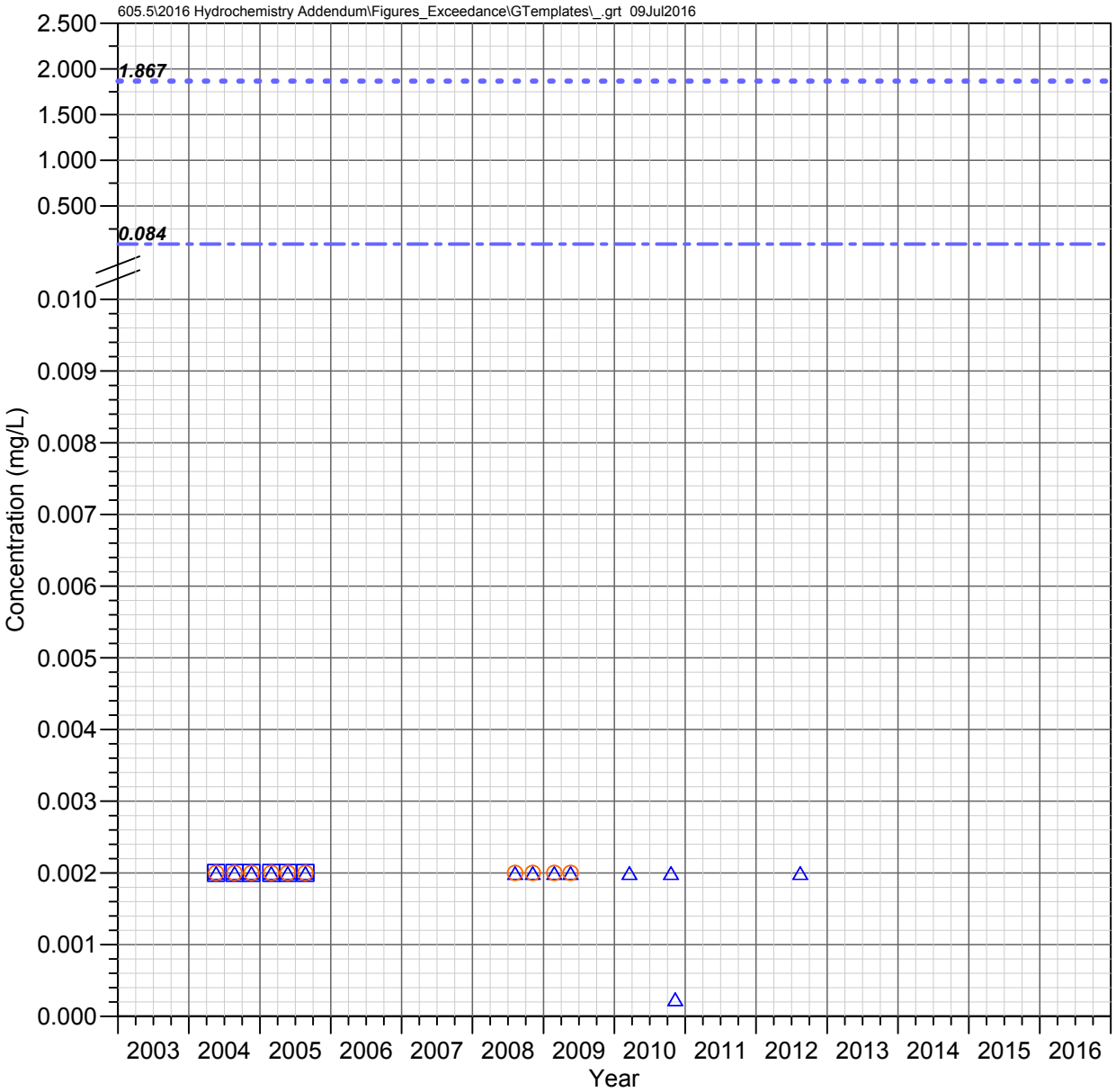


FIGURE F-131. BERYLLIUM CONCENTRATIONS OBSERVED AT DC 6.14 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.1 E
Devils Canyon Watershed

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 1.867 mg/L)
- AZ Fish Consumption (TRC, 0.084 mg/L)

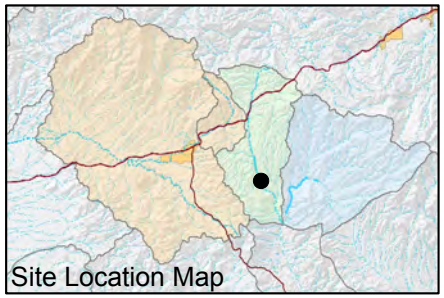
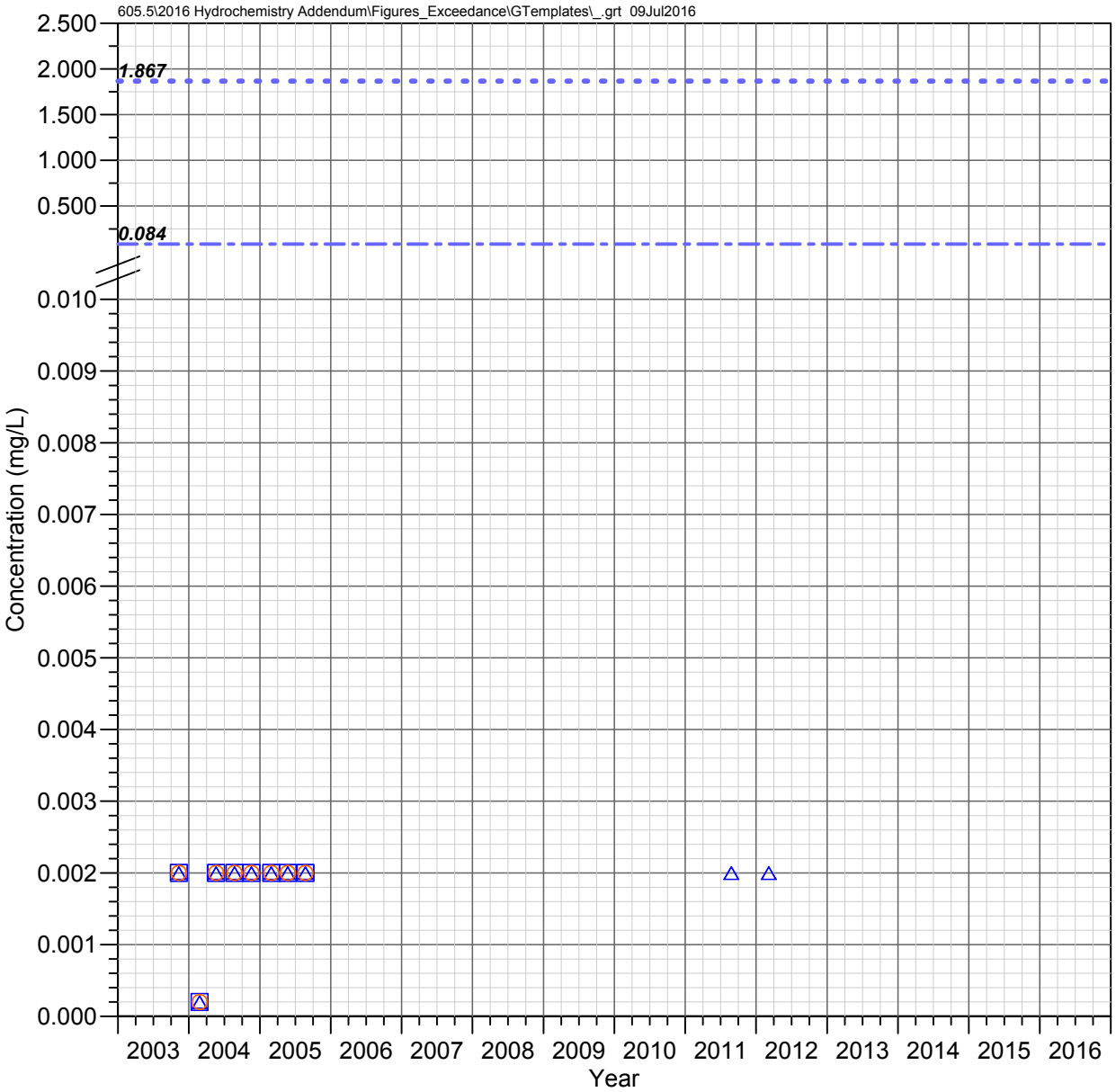


FIGURE F-132. BERYLLIUM CONCENTRATIONS OBSERVED AT DC 6.1 E, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 5.5 C
Devils Canyon Watershed

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 1.867 mg/L)
- AZ Fish Consumption (TRC, 0.084 mg/L)

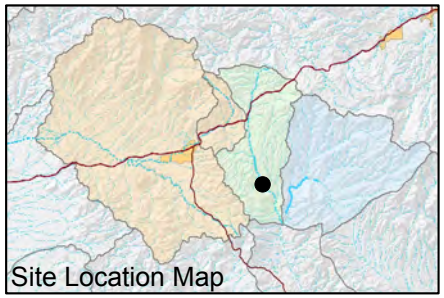
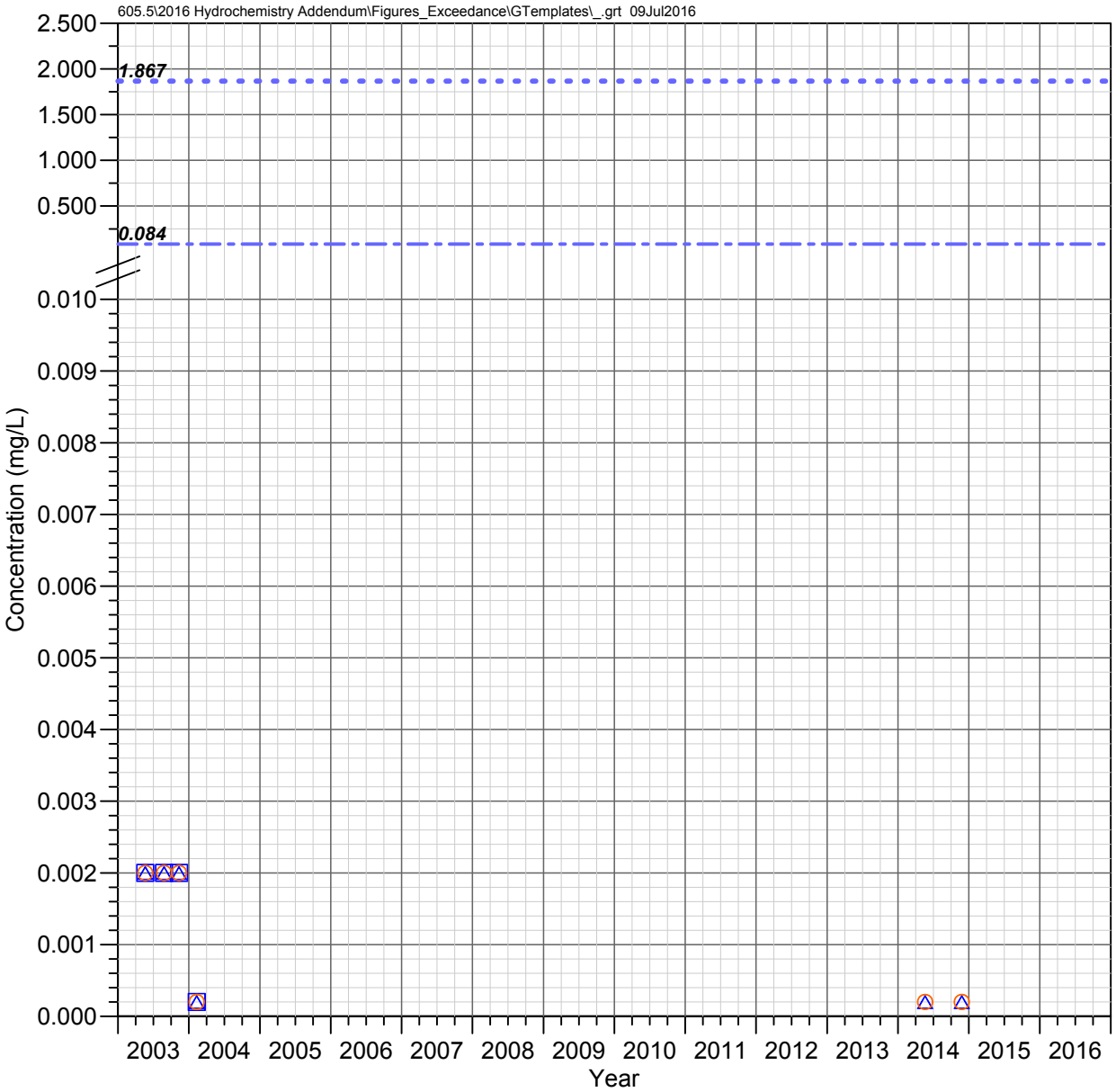


FIGURE F-133. BERYLLIUM CONCENTRATIONS OBSERVED AT DC 5.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 4.1 E
Devils Canyon Watershed

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 1.867 mg/L)
- AZ Fish Consumption (TRC, 0.084 mg/L)

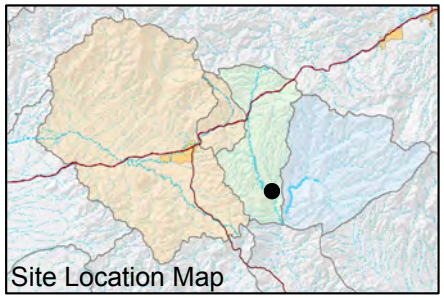
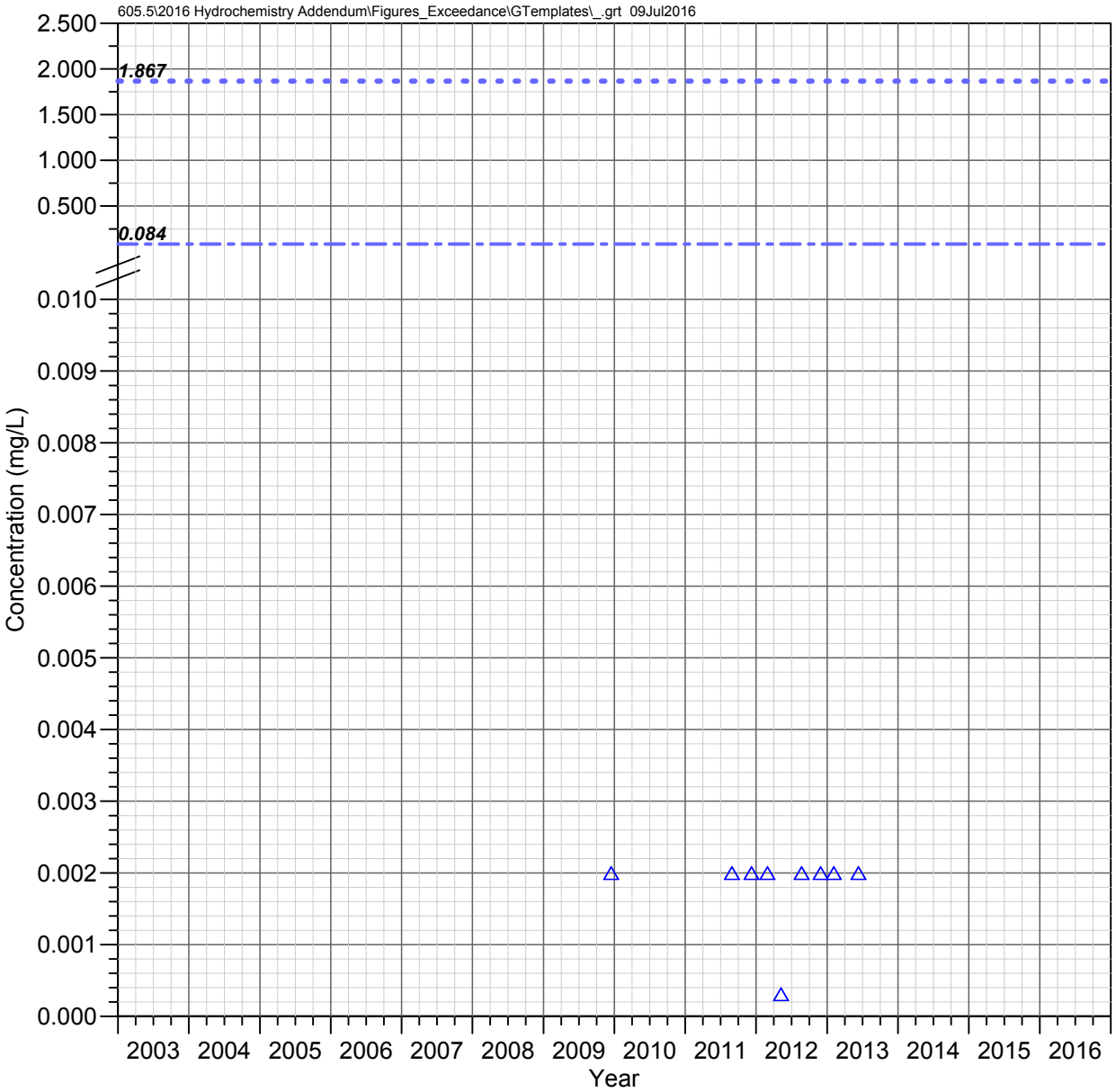


FIGURE F-134. BERYLLIUM CONCENTRATIONS OBSERVED AT DC 4.1 E, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Government Springs
Mineral Creek Watershed

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 1.867 mg/L)
- AZ Fish Consumption (TRC, 0.084 mg/L)

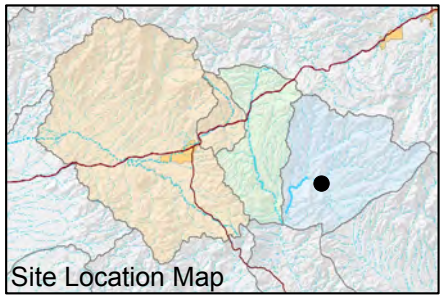
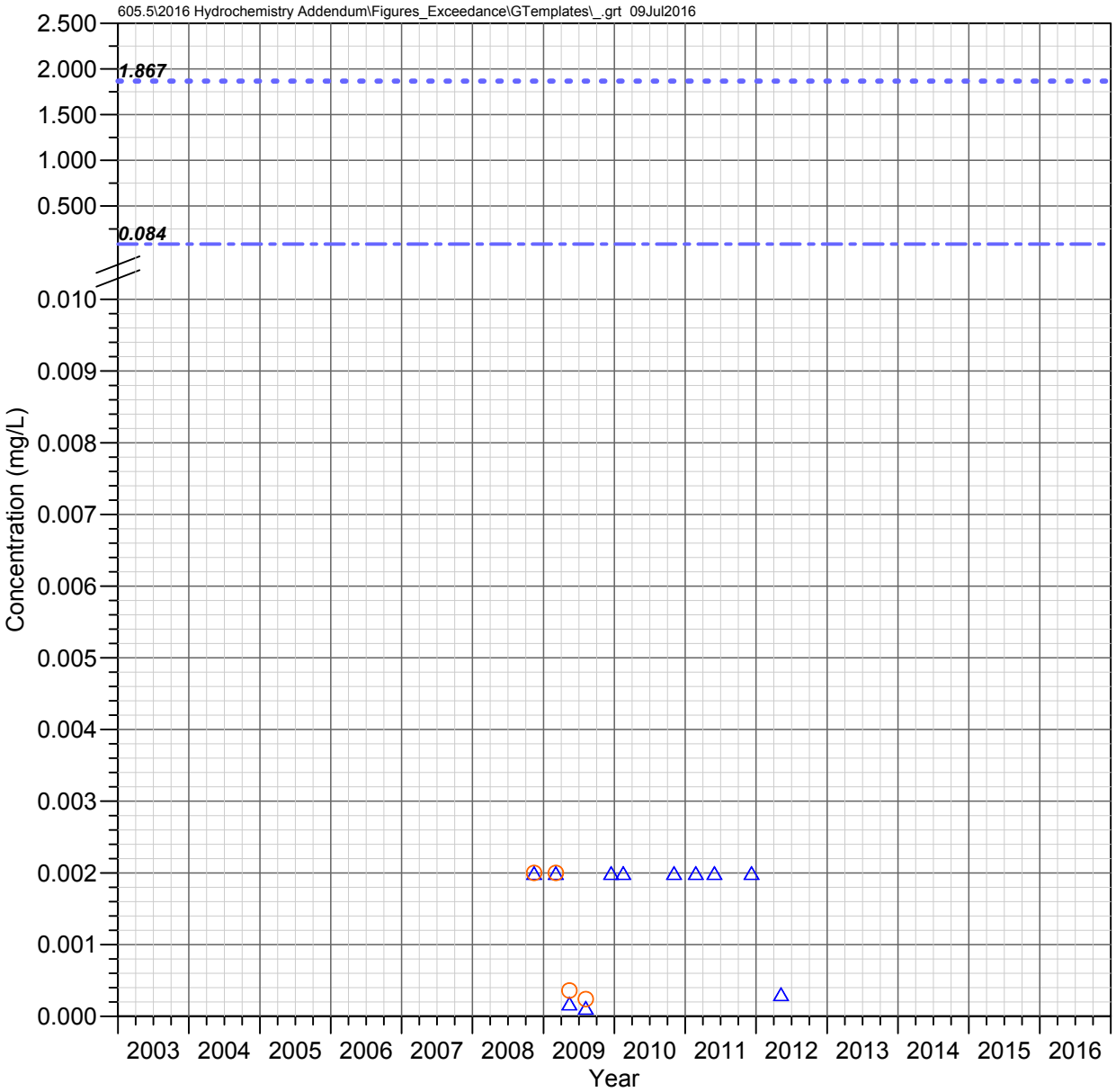


FIGURE F-135. BERYLLIUM CONCENTRATIONS OBSERVED AT GOVERNMENT SPRINGS, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 8.4 C
Mineral Creek Watershed

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 1.867 mg/L)
- AZ Fish Consumption (TRC, 0.084 mg/L)

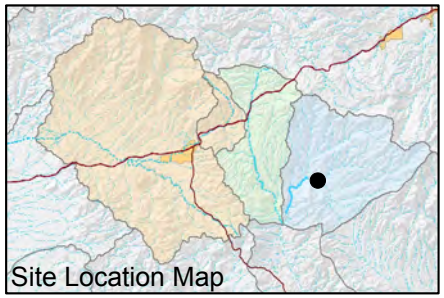
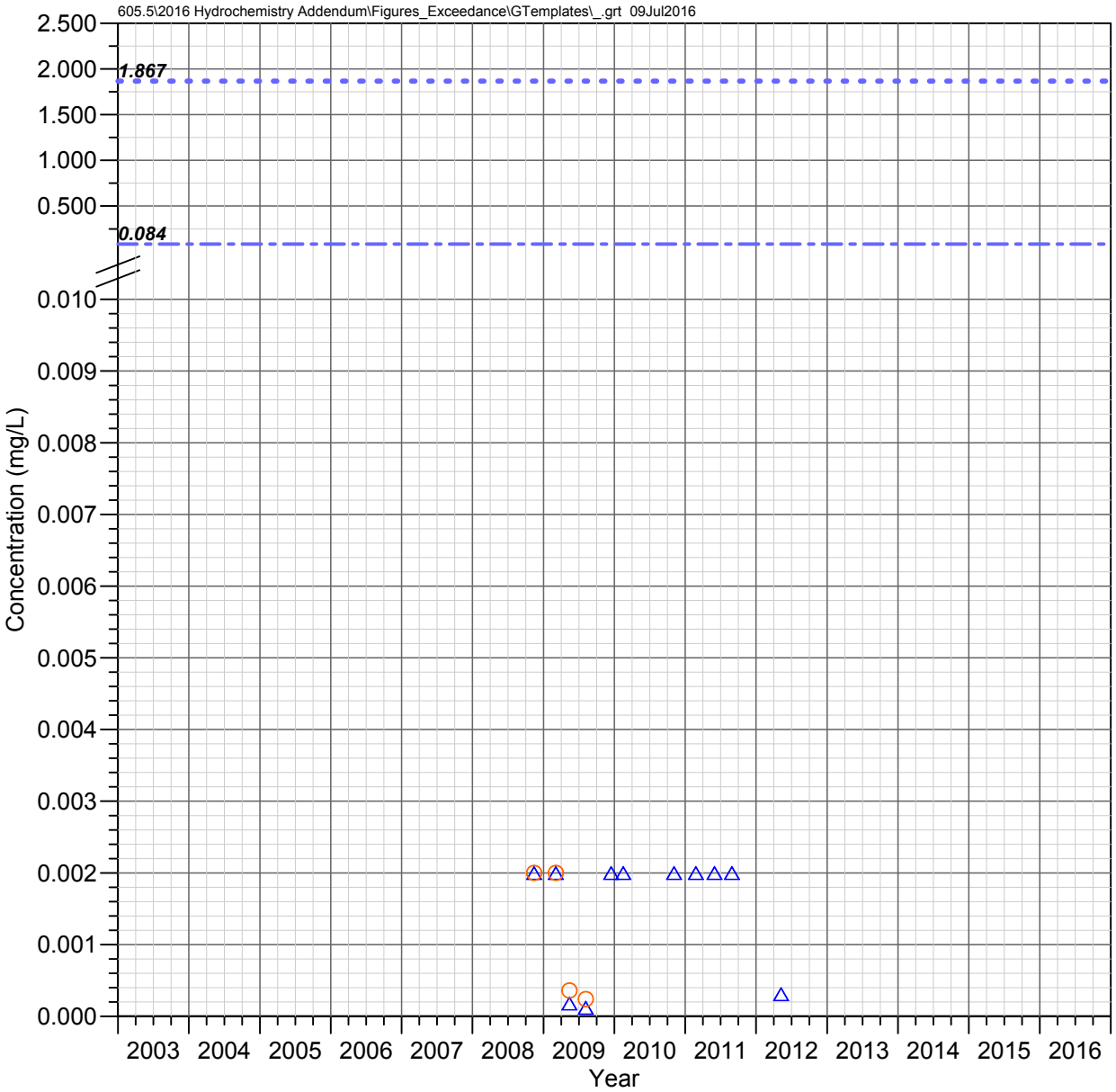


FIGURE F-136. BERYLLIUM CONCENTRATIONS OBSERVED AT MC 8.4 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



LF 0.2 C
Mineral Creek Watershed

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 1.867 mg/L)
- AZ Fish Consumption (TRC, 0.084 mg/L)

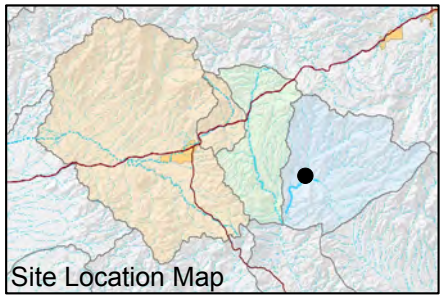
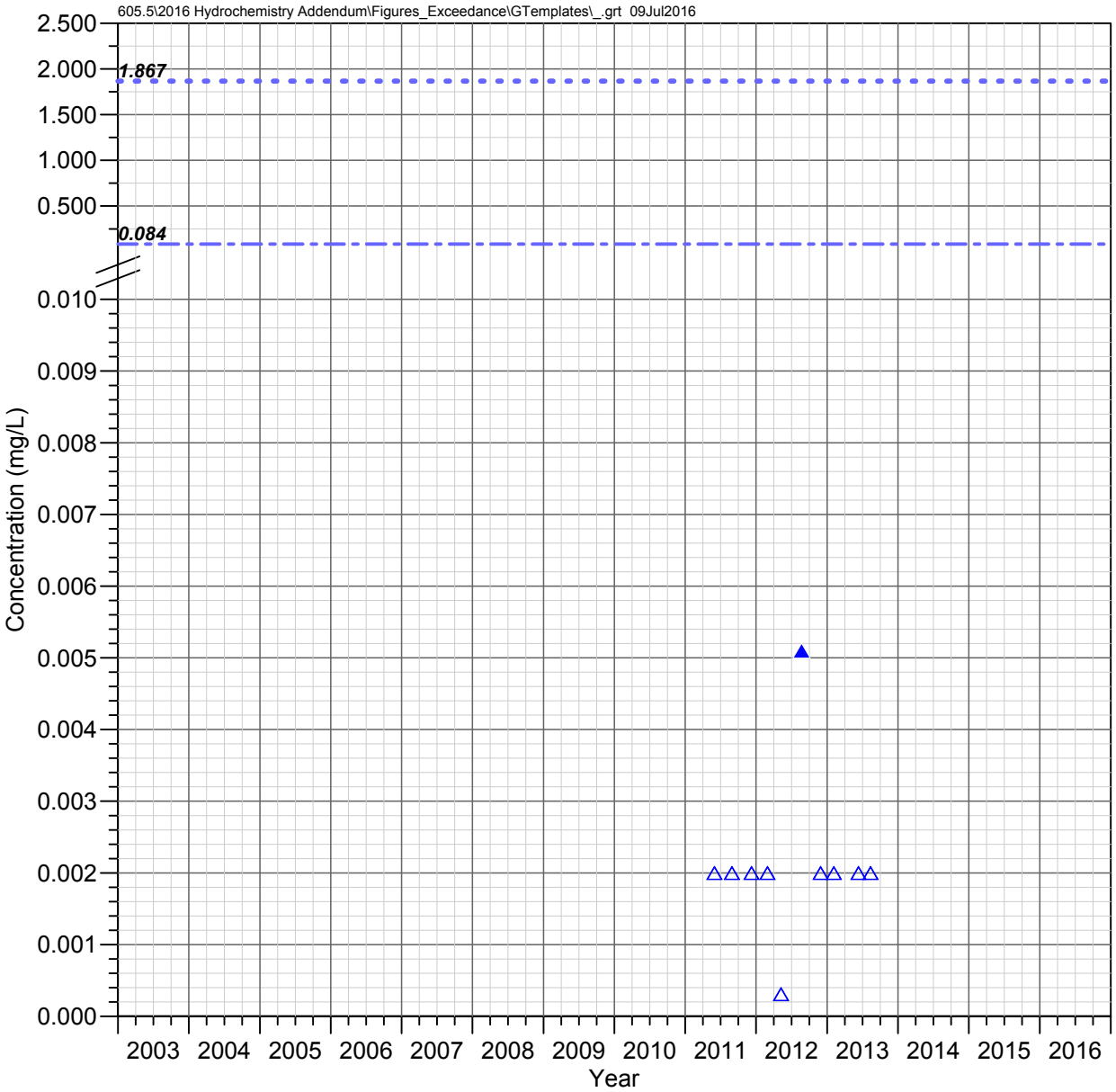


FIGURE F-137. BERYLLIUM CONCENTRATIONS OBSERVED AT LF 0.2 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 5.2 C
Mineral Creek Watershed

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 1.867 mg/L)
- AZ Fish Consumption (TRC, 0.084 mg/L)

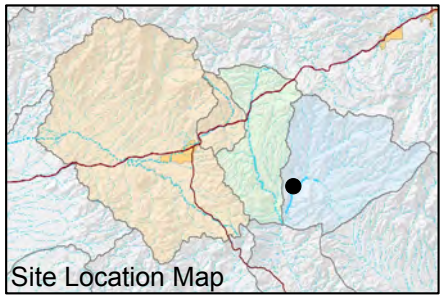
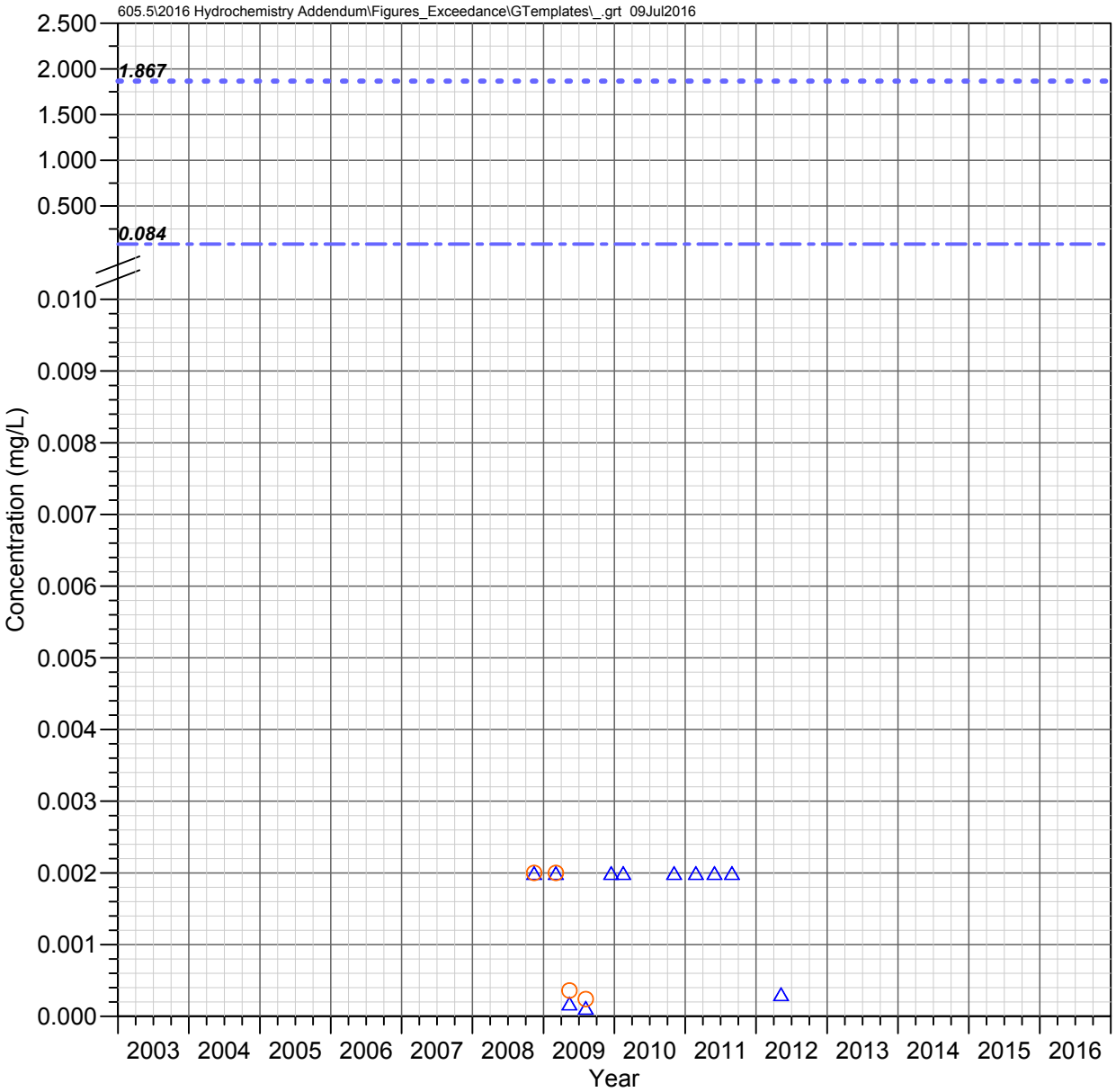


FIGURE F-138. BERYLLIUM CONCENTRATIONS OBSERVED AT MC 5.2 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 3.4 W (Wet Leg Spring)
Mineral Creek Watershed

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 1.867 mg/L)
- AZ Fish Consumption (TRC, 0.084 mg/L)

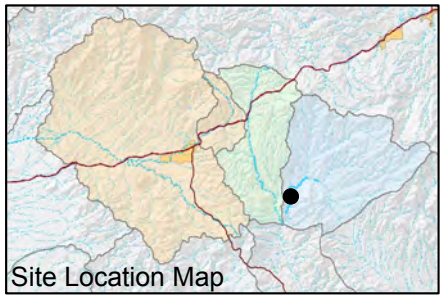
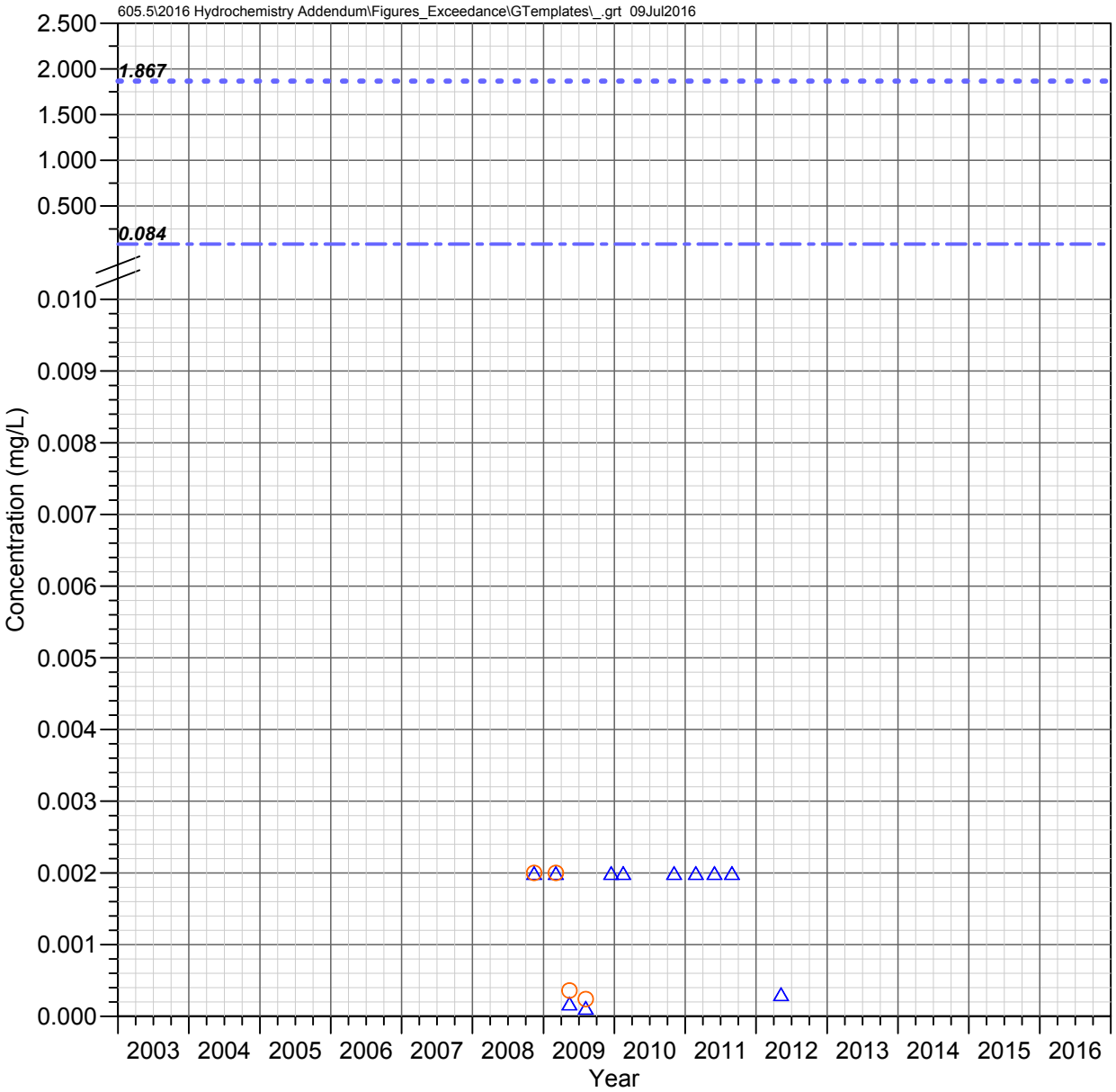


FIGURE F-139. BERYLLIUM CONCENTRATIONS OBSERVED AT MC 3.4 W (WET LEG SPRING), MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 3.3 C (Lower Mineral)
Mineral Creek Watershed

BERYLLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 1.867 mg/L)
- AZ Fish Consumption (TRC, 0.084 mg/L)

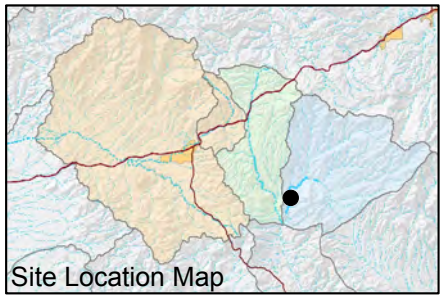
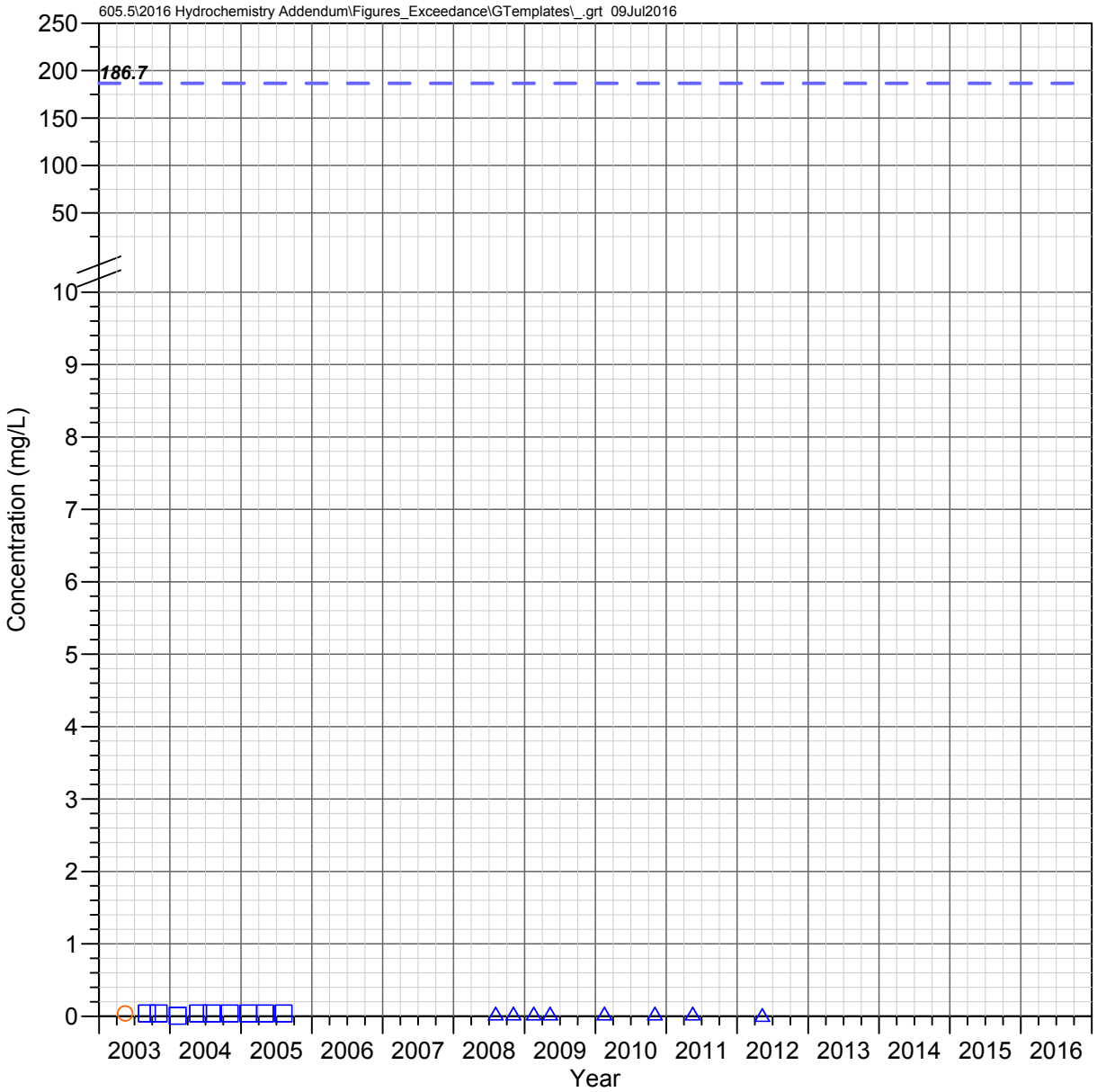


FIGURE F-140. BERYLLIUM CONCENTRATIONS OBSERVED AT MC 3.3 C (LOWER MINERAL), MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Pump Station Spring (QC 30.7 C)
Queen Creek Watershed

BORON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

— — AZ Partial Body Contact (TRC, 186.667 mg/L)

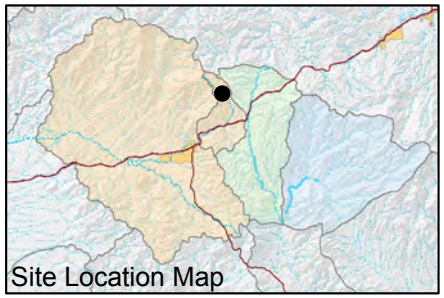
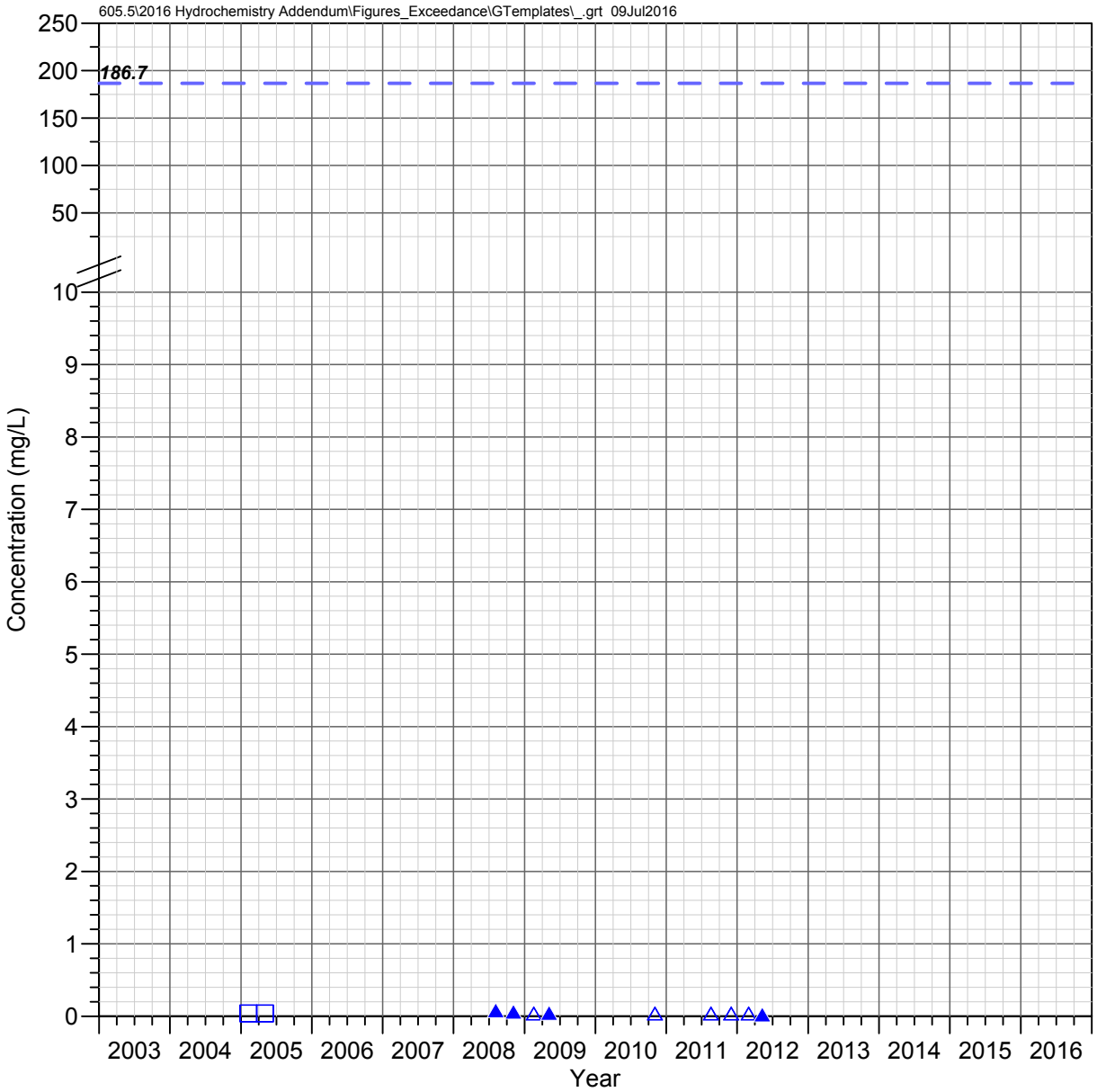


FIGURE F-141. BORON CONCENTRATIONS OBSERVED AT PUMP STATION SPRING (QC 30.7 C), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 27.3 C
Queen Creek Watershed

BORON

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Partial Body Contact (TRC, 186.667 mg/L)

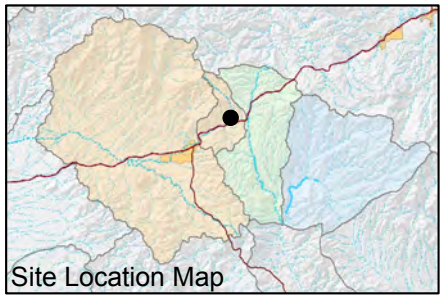
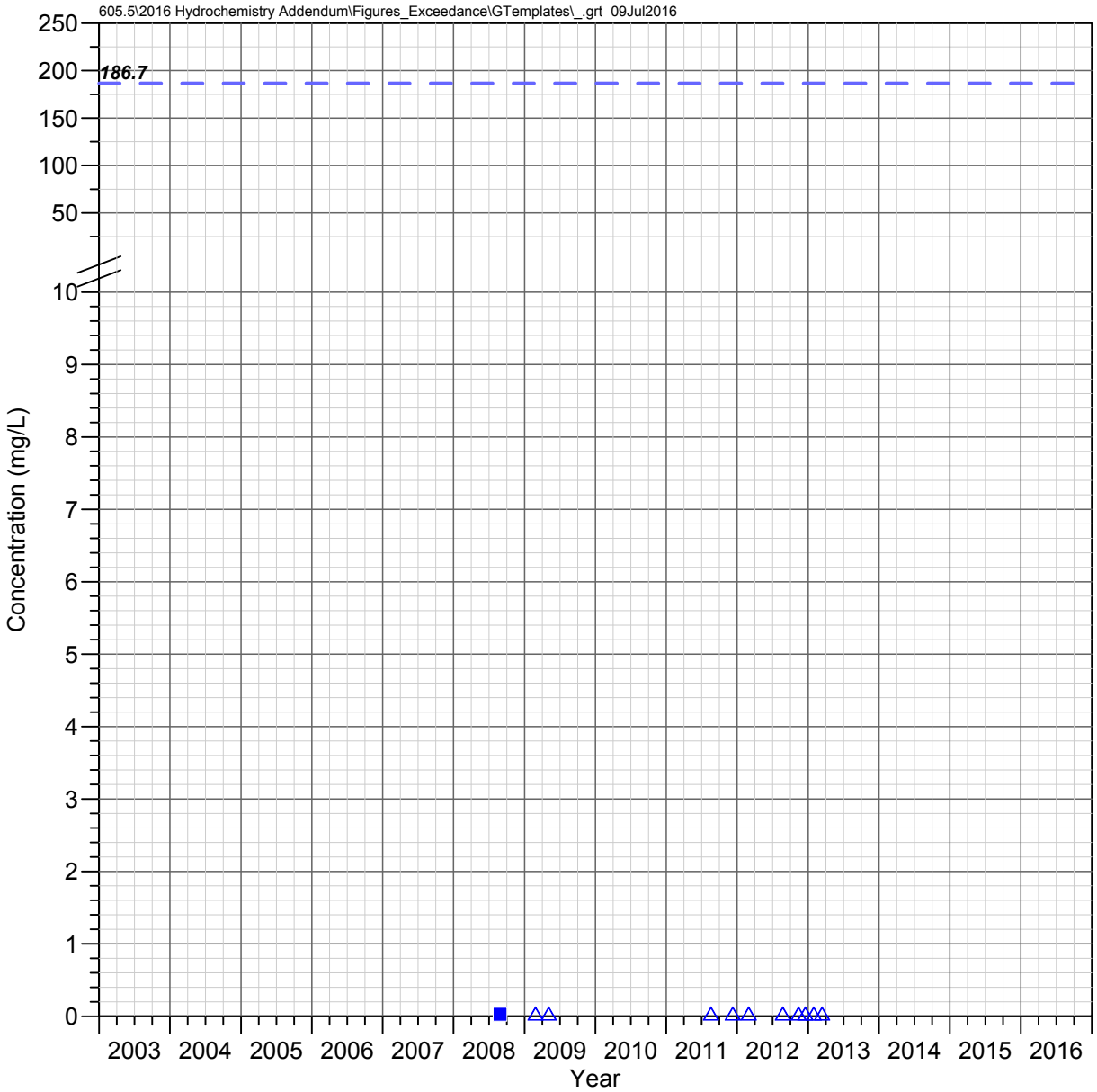


FIGURE F-142. BORON CONCENTRATIONS OBSERVED AT QC 27.3 C, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Oak Flat Wash
Queen Creek Watershed

BORON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

— — AZ Partial Body Contact (TRC, 186.667 mg/L)

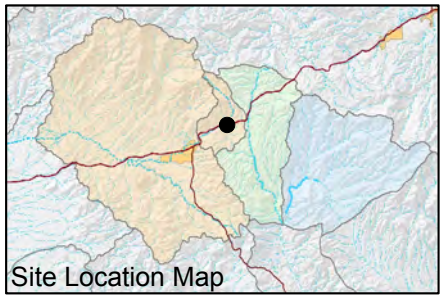
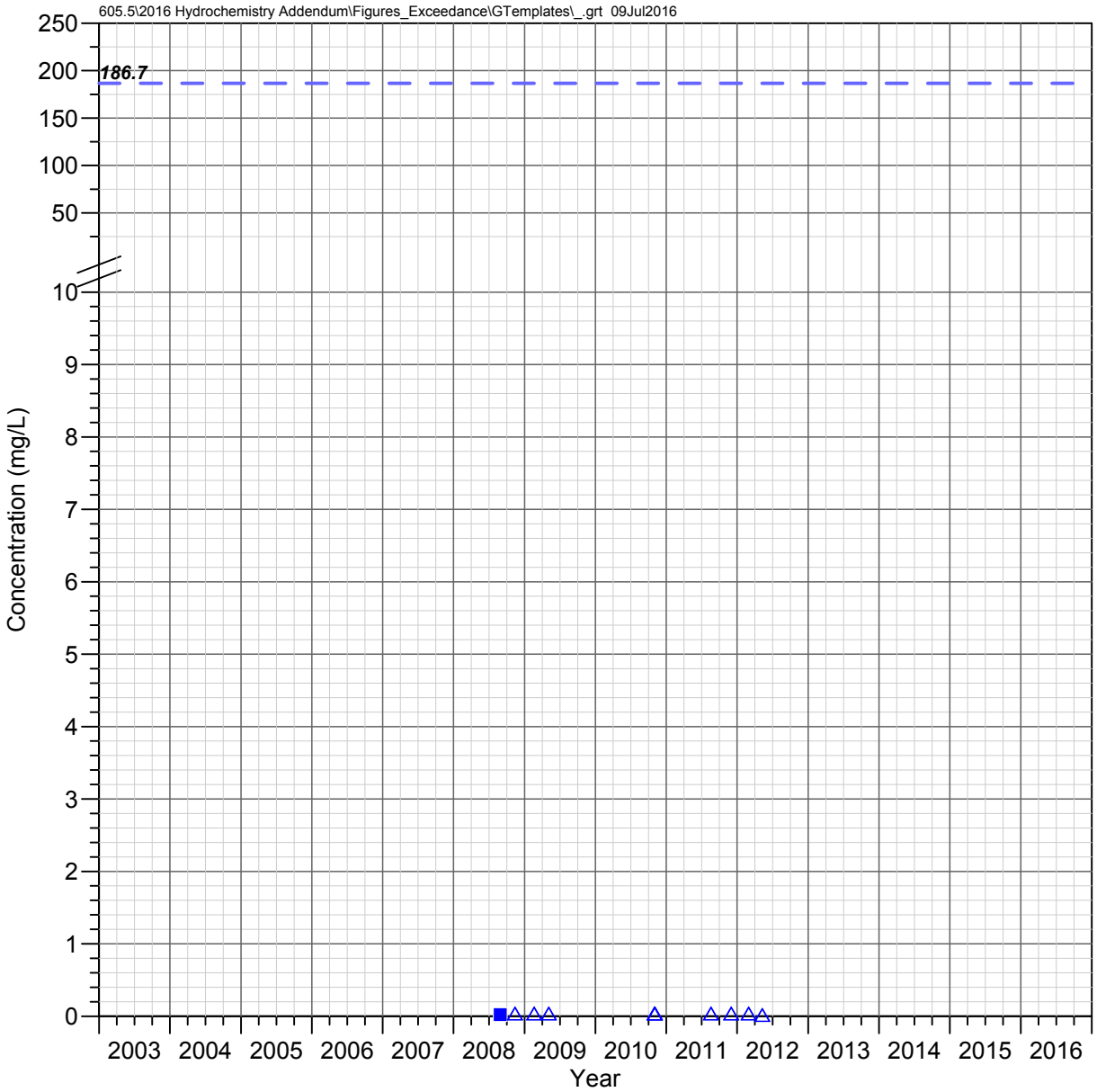


FIGURE F-143. BORON CONCENTRATIONS OBSERVED AT OAK FLAT WASH, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Number 9 Wash
Queen Creek Watershed

BORON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

— — AZ Partial Body Contact (TRC, 186.667 mg/L)

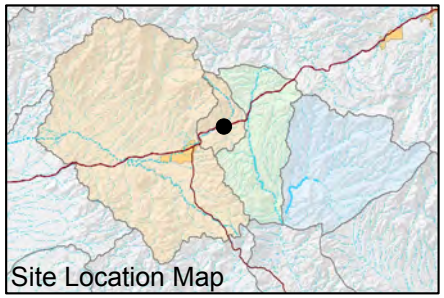
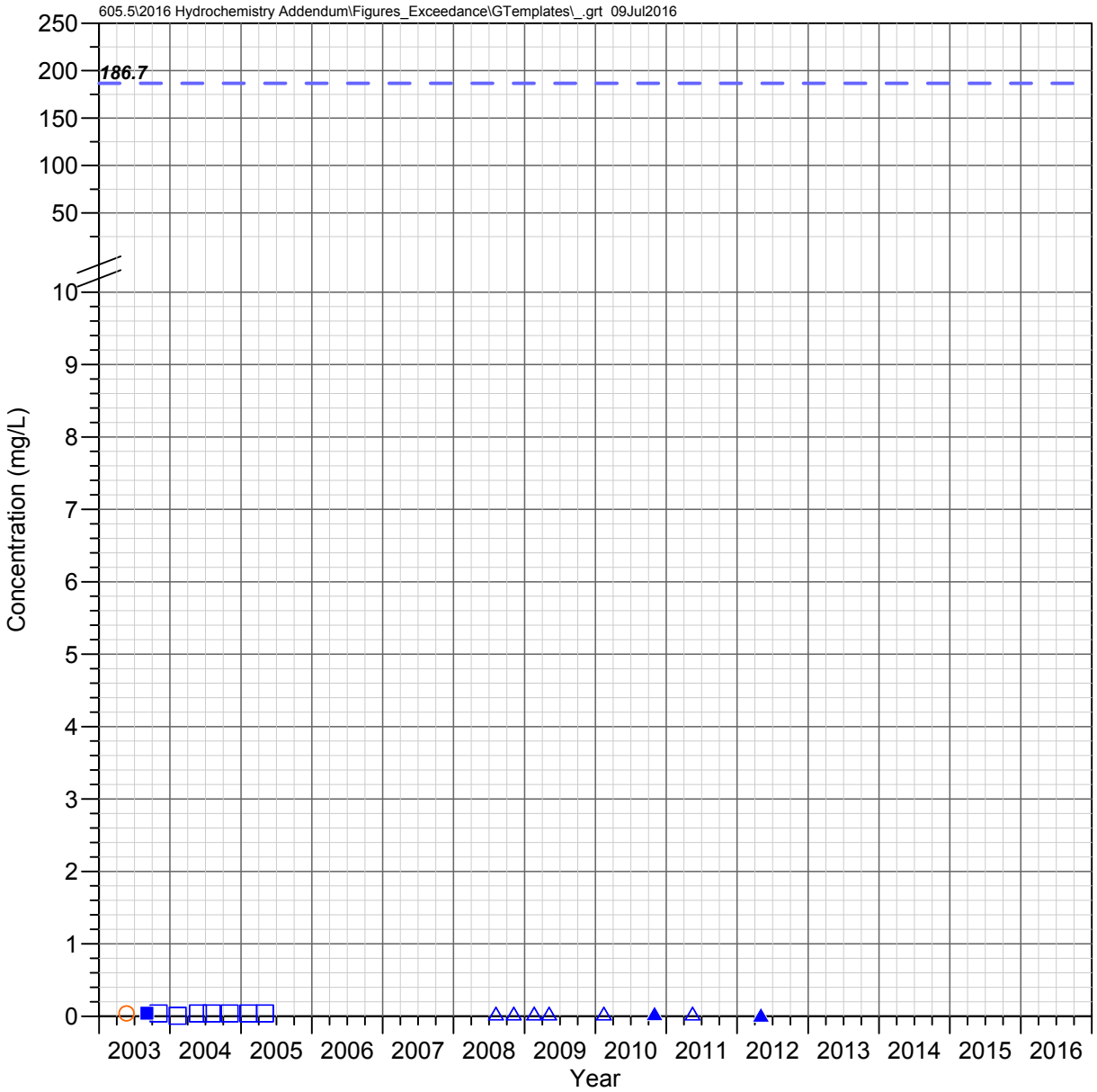


FIGURE F-144. BORON CONCENTRATIONS OBSERVED AT NUMBER 9 WASH, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Boulder Hole (QC 23.6 C)
Queen Creek Watershed

BORON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

— — AZ Partial Body Contact (TRC, 186.667 mg/L)

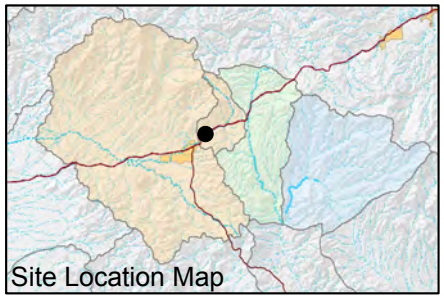
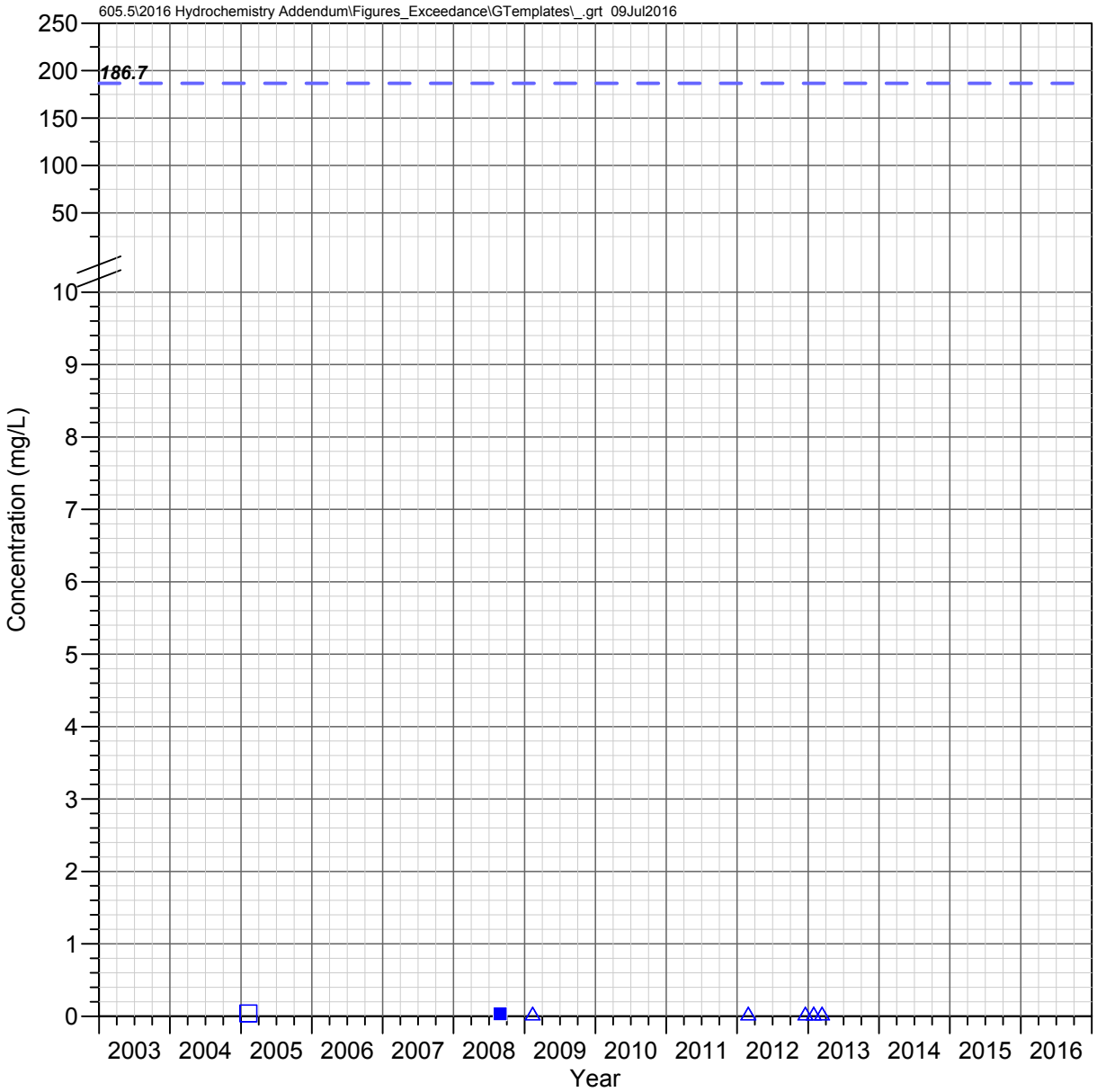


FIGURE F-145. BORON CONCENTRATIONS OBSERVED AT BOULDER HOLE (QC 23.6 C), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 22.6 E (Karst Spring)
Queen Creek Watershed

BORON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

— — AZ Partial Body Contact (TRC, 186.667 mg/L)

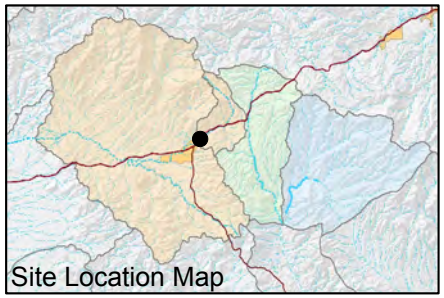
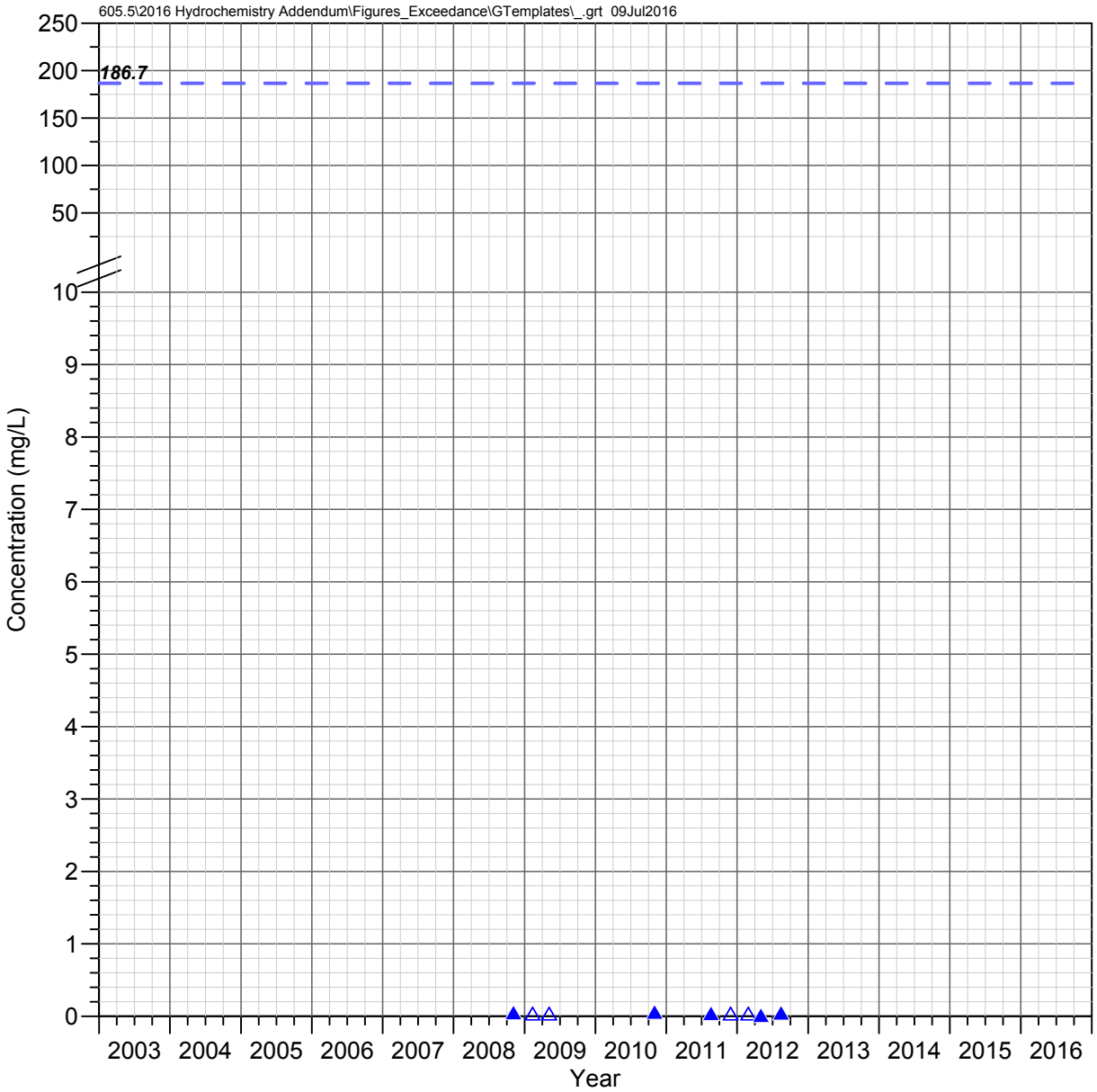


FIGURE F-146. BORON CONCENTRATIONS OBSERVED AT QC 22.6 E (KARST SPRING), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 21.7 C (Magma Avenue)
Queen Creek Watershed

BORON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

— — AZ Partial Body Contact (TRC, 186.667 mg/L)

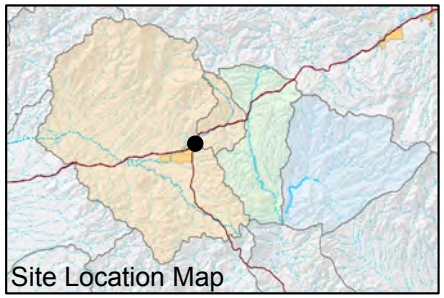
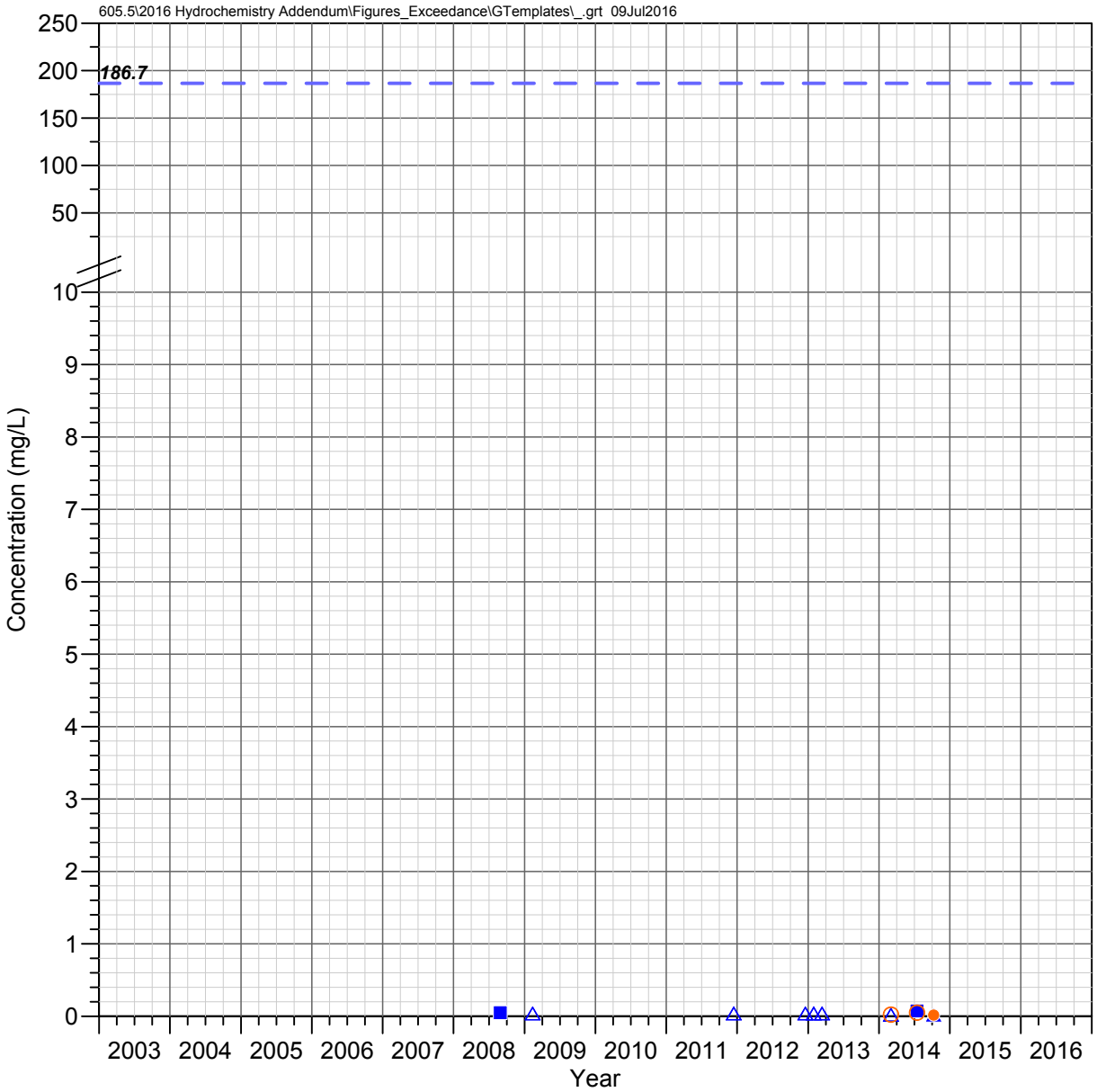


FIGURE F-147. BORON CONCENTRATIONS OBSERVED AT QC 21.7 C (MAGMA AVENUE), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 19.7 C
Queen Creek Watershed

BORON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- — — AZ Partial Body Contact (TRC, 186.667 mg/L)

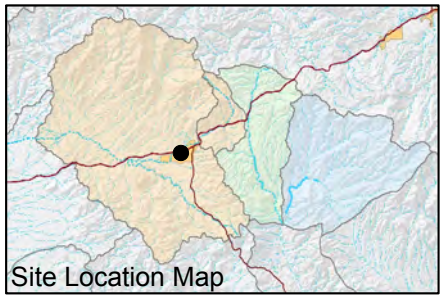
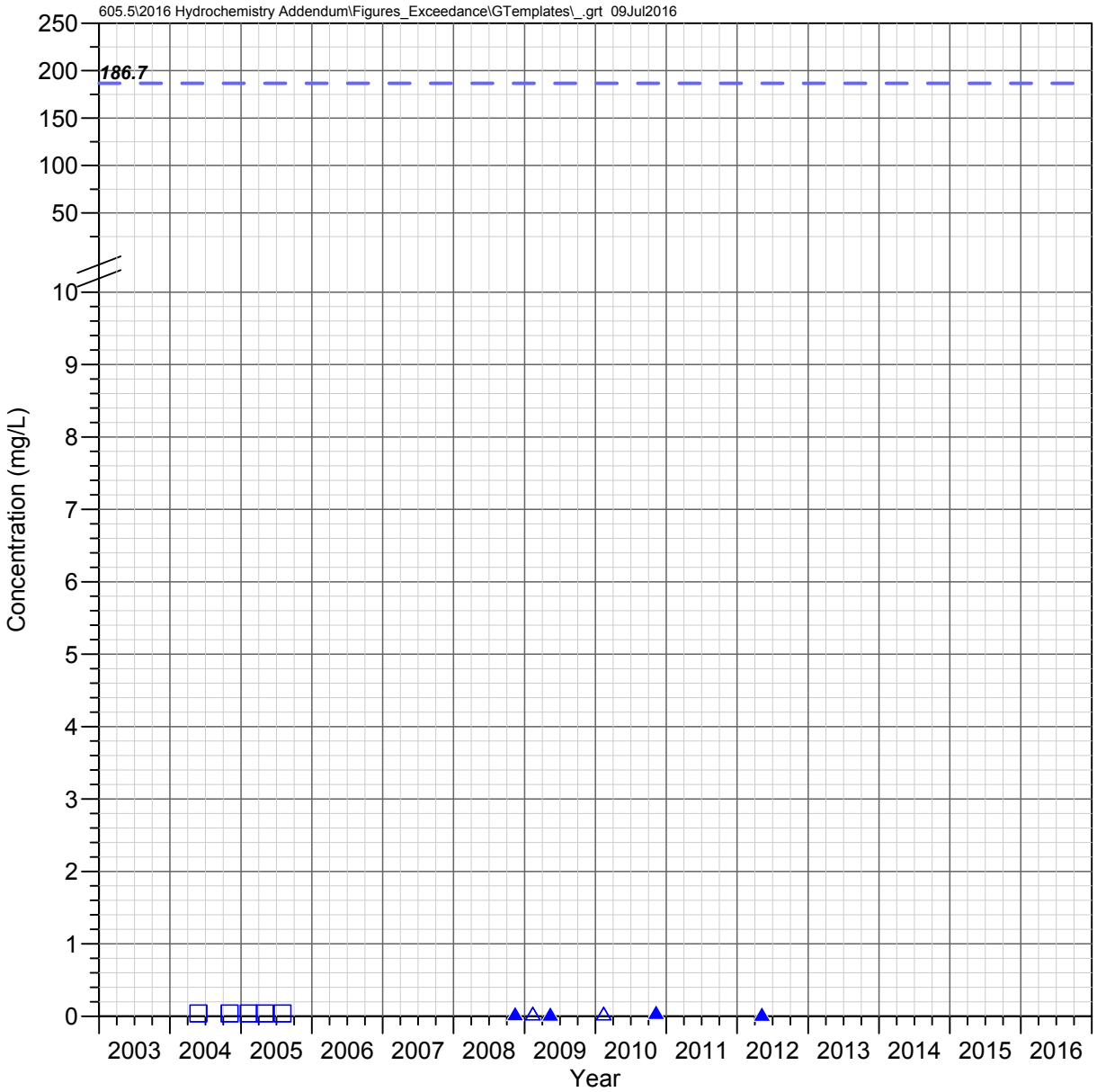


FIGURE F-148. BORON CONCENTRATIONS OBSERVED AT QC 19.7 C, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Bored Spring
Queen Creek Watershed

BORON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

— — AZ Partial Body Contact (TRC, 186.667 mg/L)

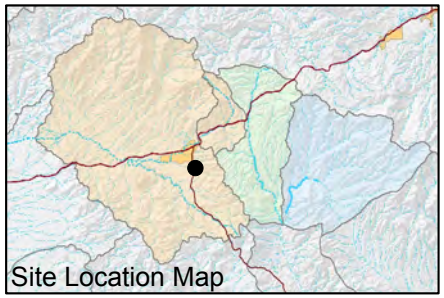
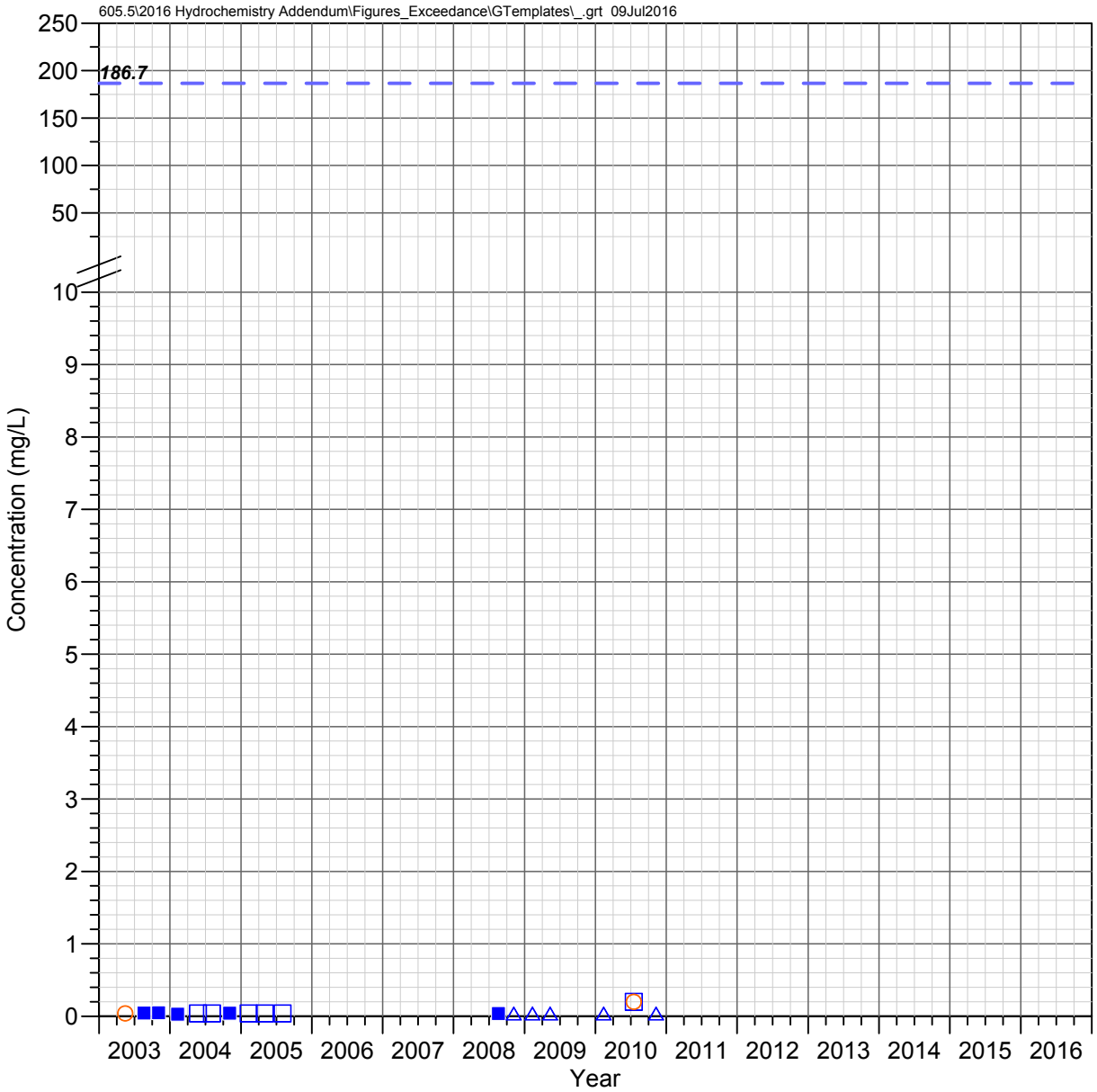


FIGURE F-149. BORON CONCENTRATIONS OBSERVED AT BORED SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Hidden Spring
Queen Creek Watershed

BORON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

— — AZ Partial Body Contact (TRC, 186.667 mg/L)

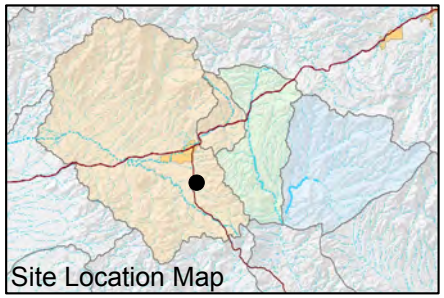
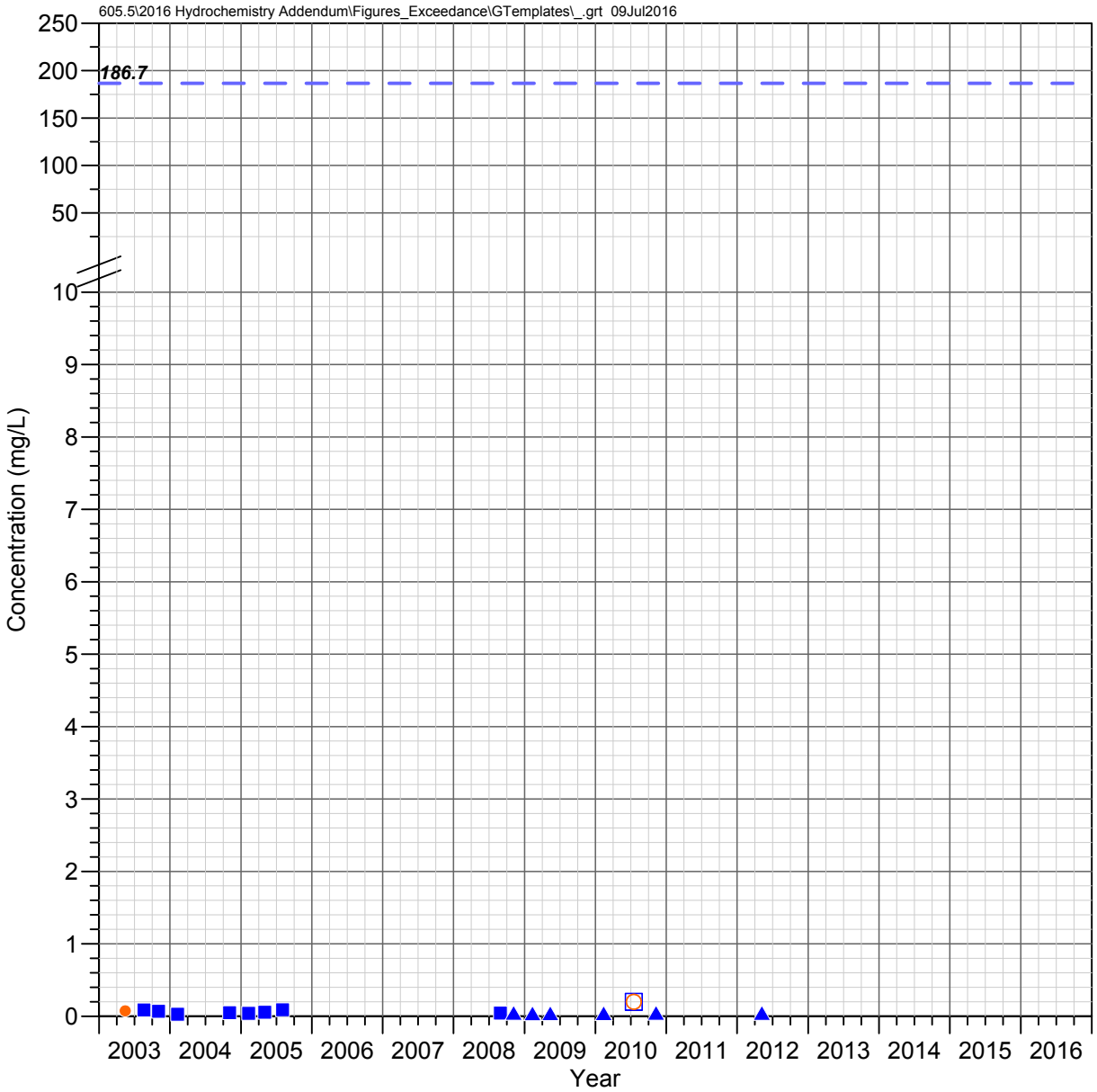


FIGURE F-150. BORON CONCENTRATIONS OBSERVED AT HIDDEN SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Kane Spring
Queen Creek Watershed

BORON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

— — AZ Partial Body Contact (TRC, 186.667 mg/L)

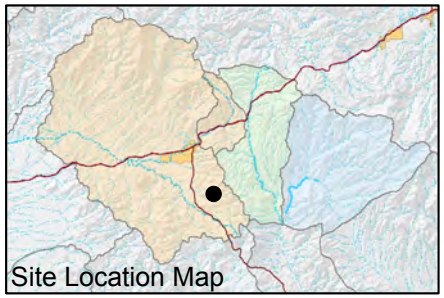
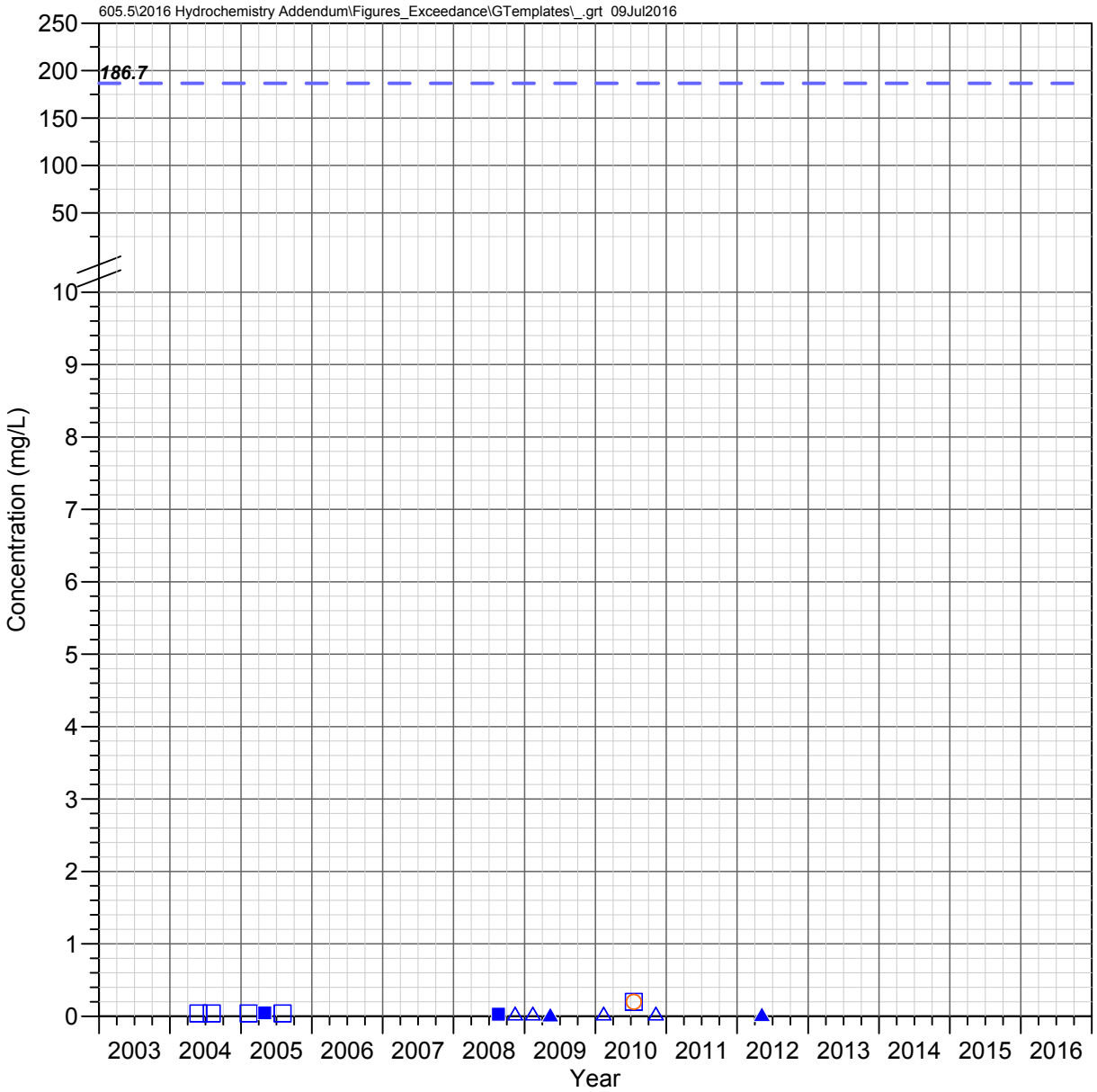


FIGURE F-151. BORON CONCENTRATIONS OBSERVED AT KANE SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Blue Spring
Queen Creek Watershed

BORON

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Partial Body Contact (TRC, 186.667 mg/L)

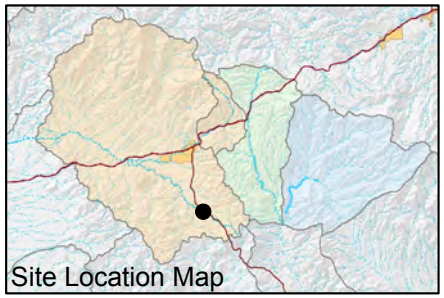
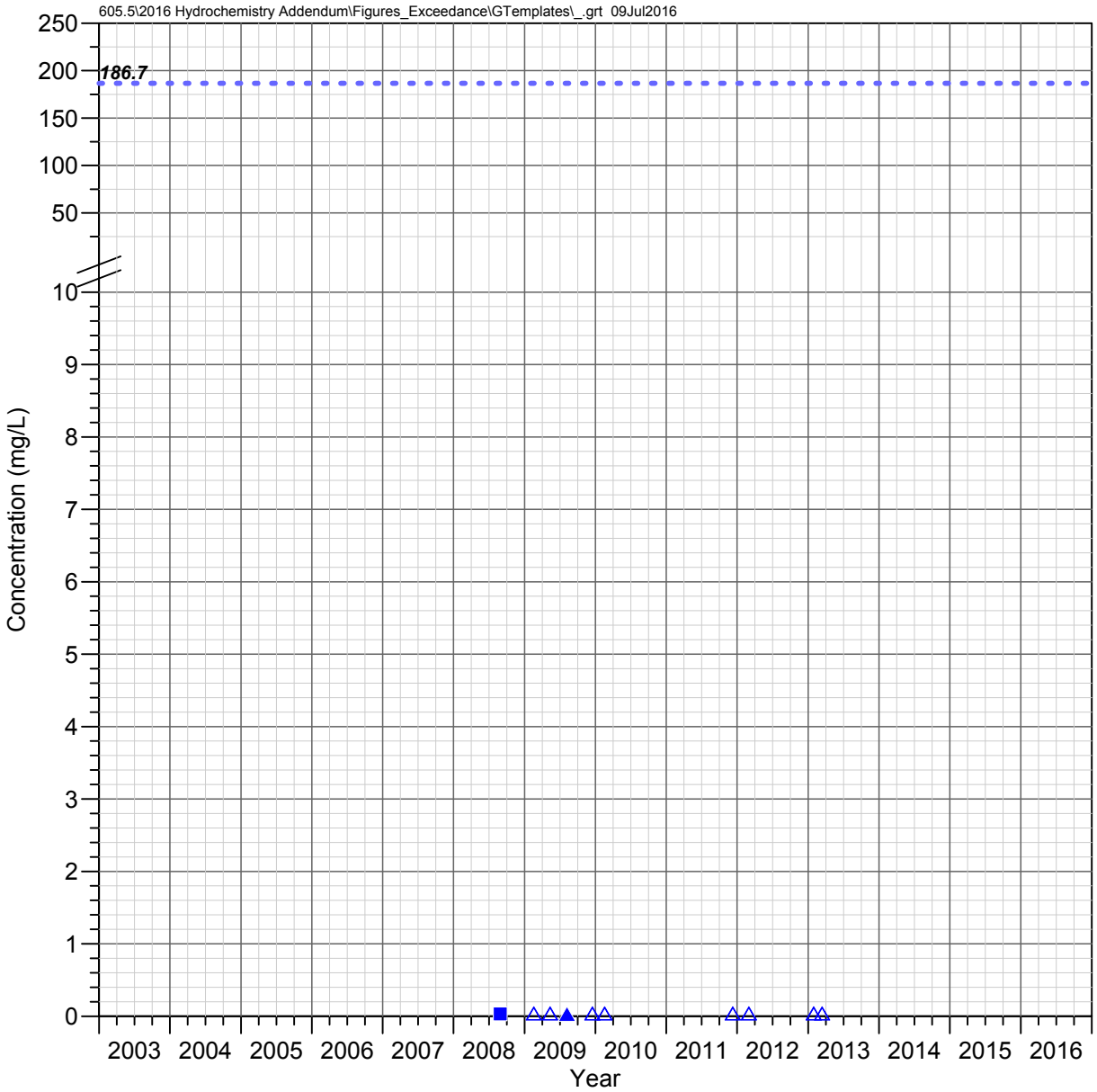


FIGURE F-152. BORON CONCENTRATIONS OBSERVED AT BLUE SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



IC 1.0 C
Devils Canyon Watershed

BORON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- - - - AZ Full Body Contact (TRC, 186.667 mg/L)

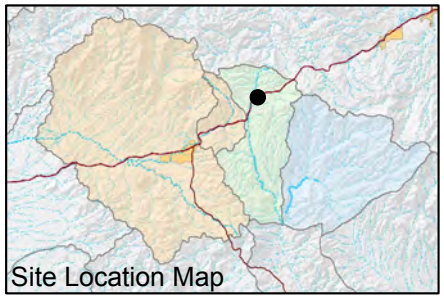
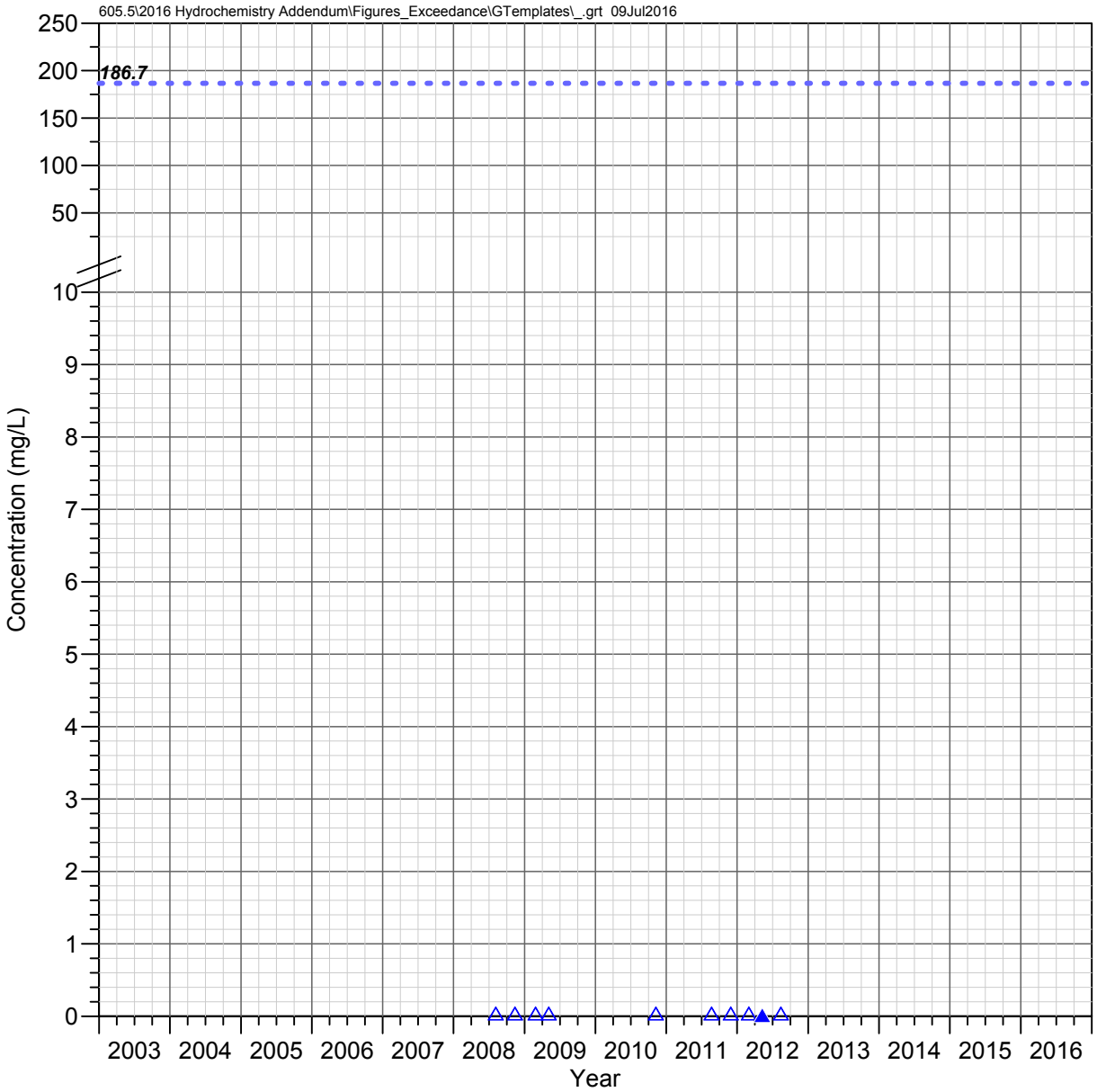


FIGURE F-153. BORON CONCENTRATIONS OBSERVED AT IC 1.0 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 15.5 C
Devils Canyon Watershed

BORON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- - - - AZ Full Body Contact (TRC, 186.667 mg/L)

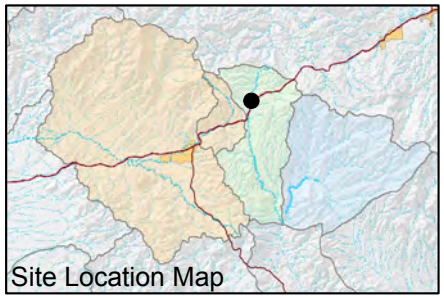
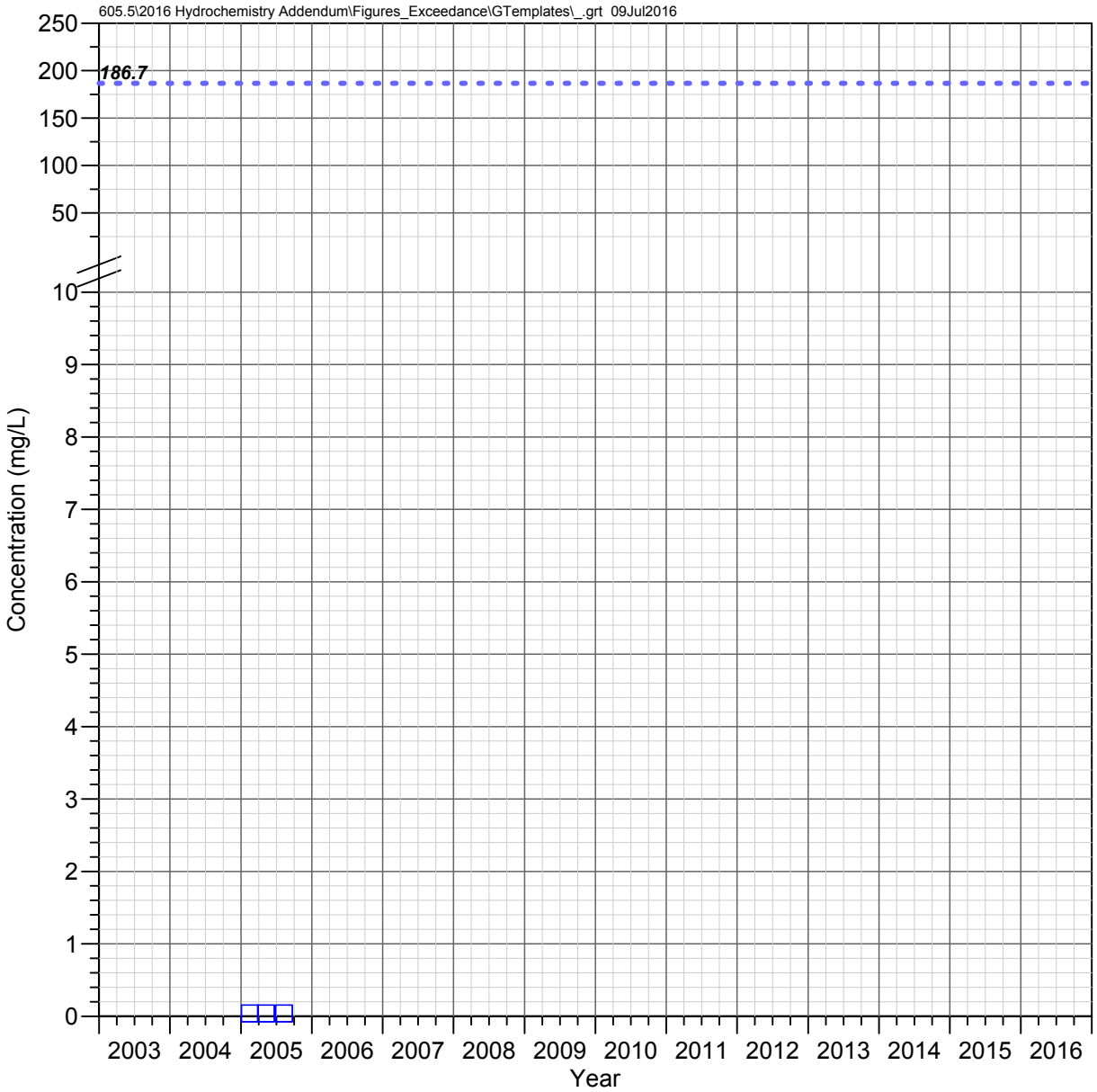


FIGURE F-154. BORON CONCENTRATIONS OBSERVED AT DC 15.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 15.2 C
Devils Canyon Watershed

BORON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- - - - AZ Full Body Contact (TRC, 186.667 mg/L)

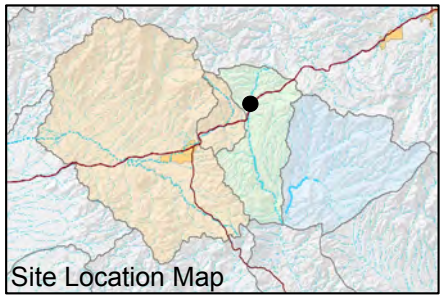
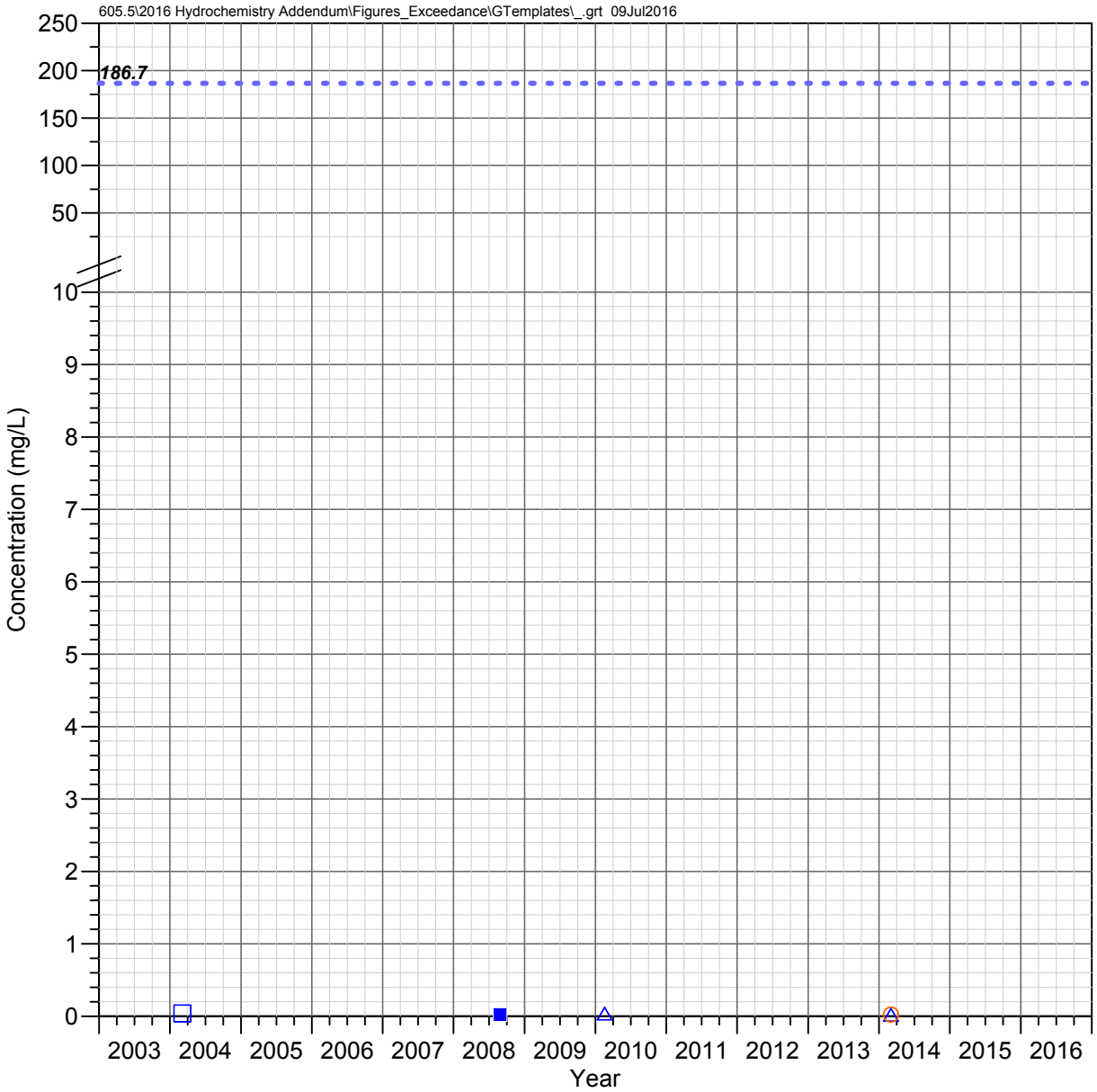


FIGURE F-155. BORON CONCENTRATIONS OBSERVED AT DC 15.2 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 14.7 C
Devils Canyon Watershed

BORON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- - - - AZ Full Body Contact (TRC, 186.667 mg/L)

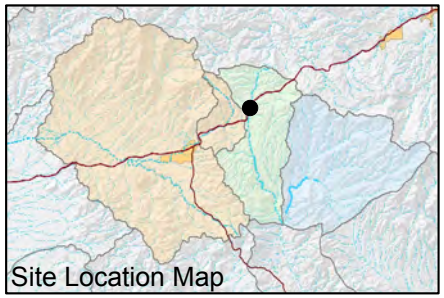
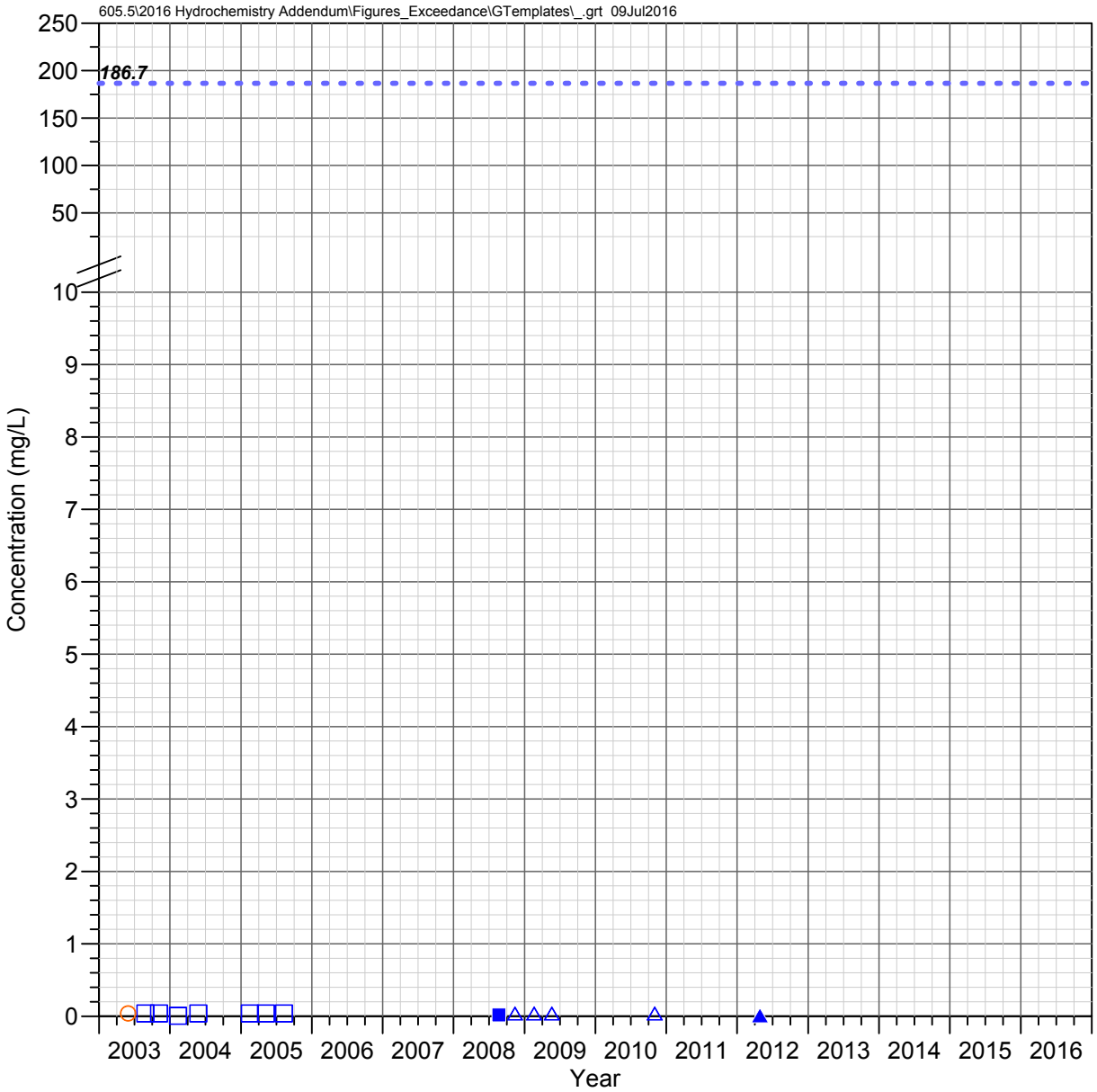


FIGURE F-156. BORON CONCENTRATIONS OBSERVED AT DC 14.7 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 13.5 C
Devils Canyon Watershed

BORON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- - - - AZ Full Body Contact (TRC, 186.667 mg/L)

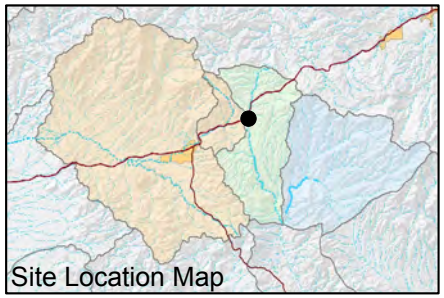
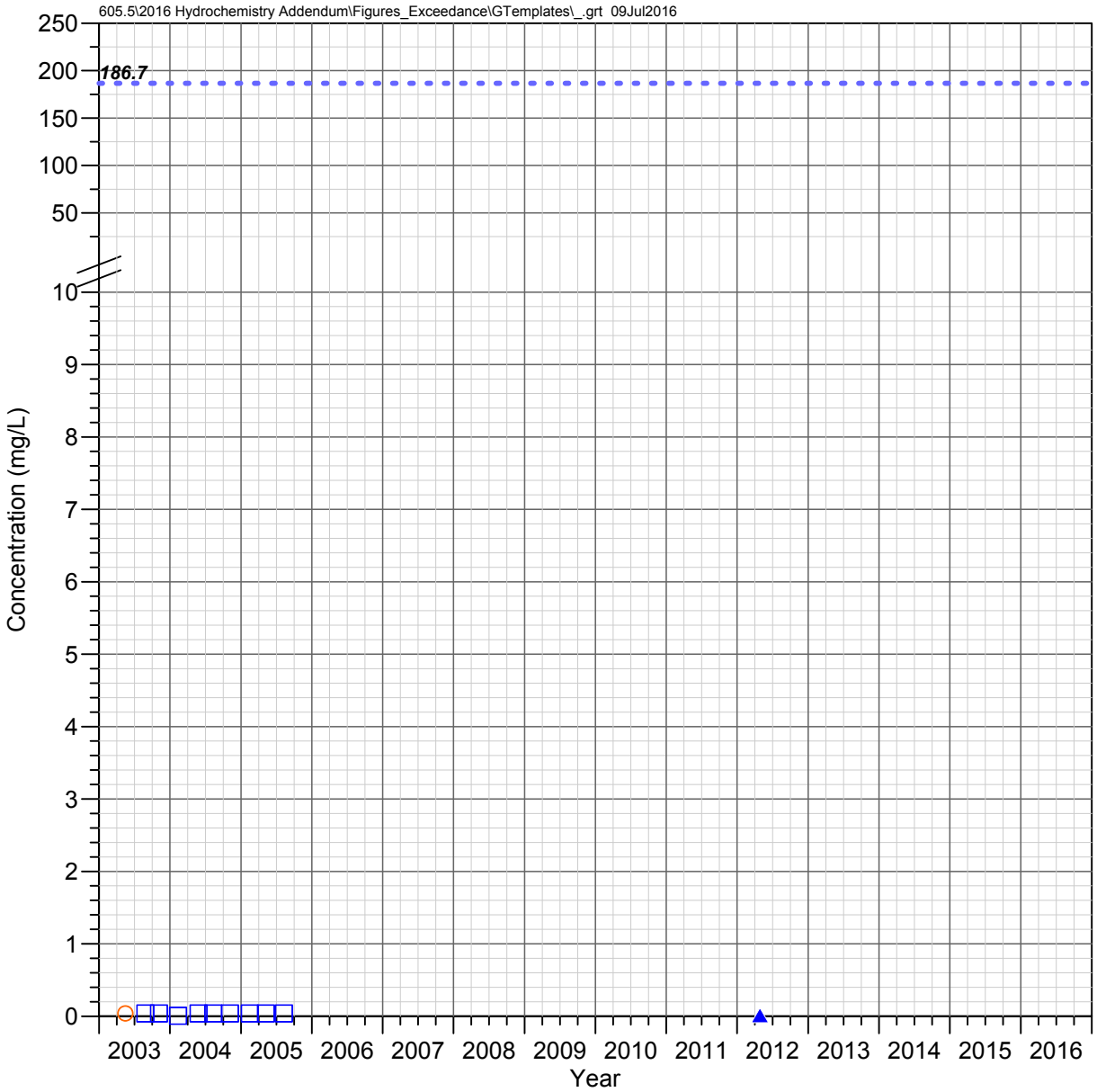


FIGURE F-157. BORON CONCENTRATIONS OBSERVED AT DC 13.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 10.9 C
Devils Canyon Watershed

BORON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- - - - AZ Full Body Contact (TRC, 186.667 mg/L)

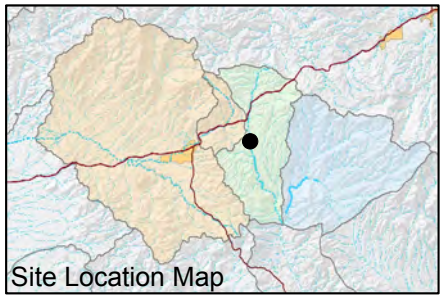
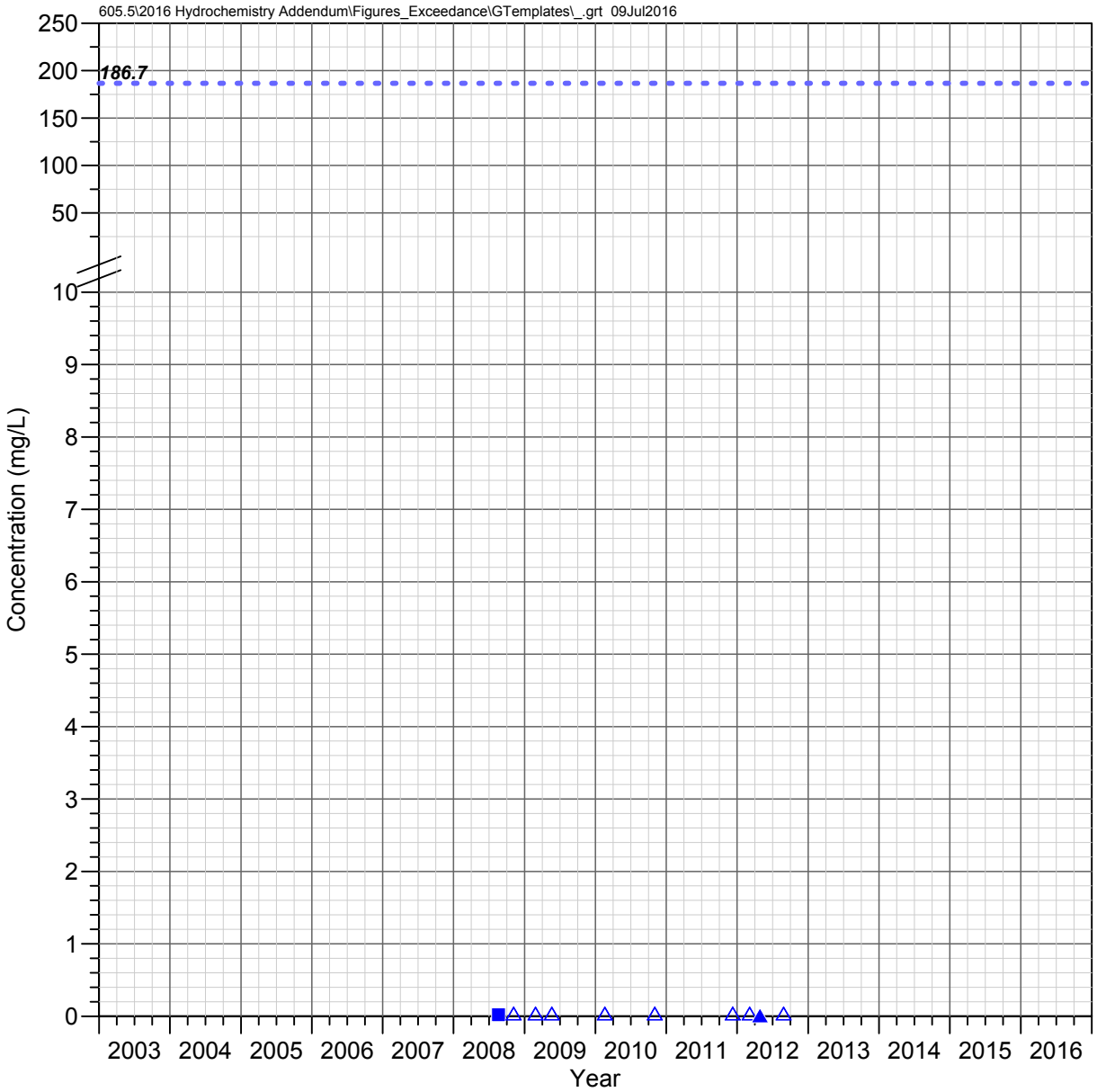


FIGURE F-158. BORON CONCENTRATIONS OBSERVED AT DC 10.9 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



RR 1.5 C
Devils Canyon Watershed

BORON

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 186.667 mg/L)

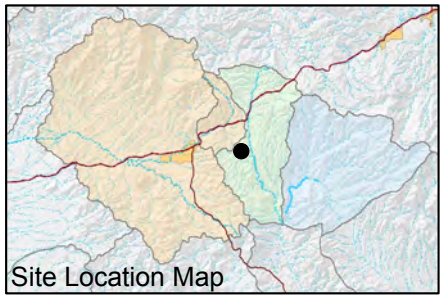
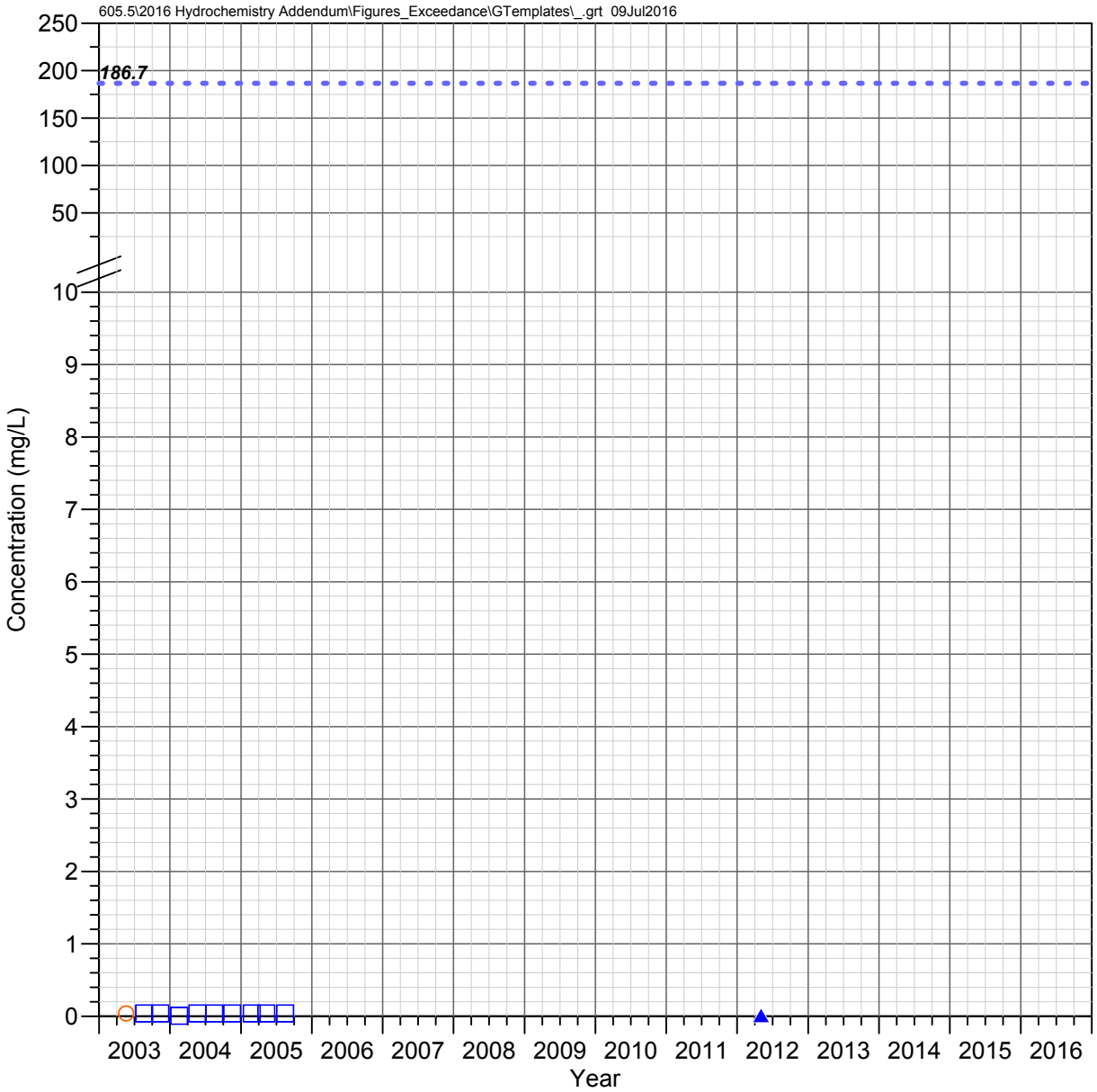


FIGURE F-159. BORON CONCENTRATIONS OBSERVED AT RR 1.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.8 C
Devils Canyon Watershed

BORON

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 186.667 mg/L)

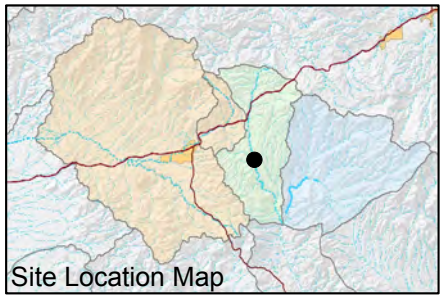
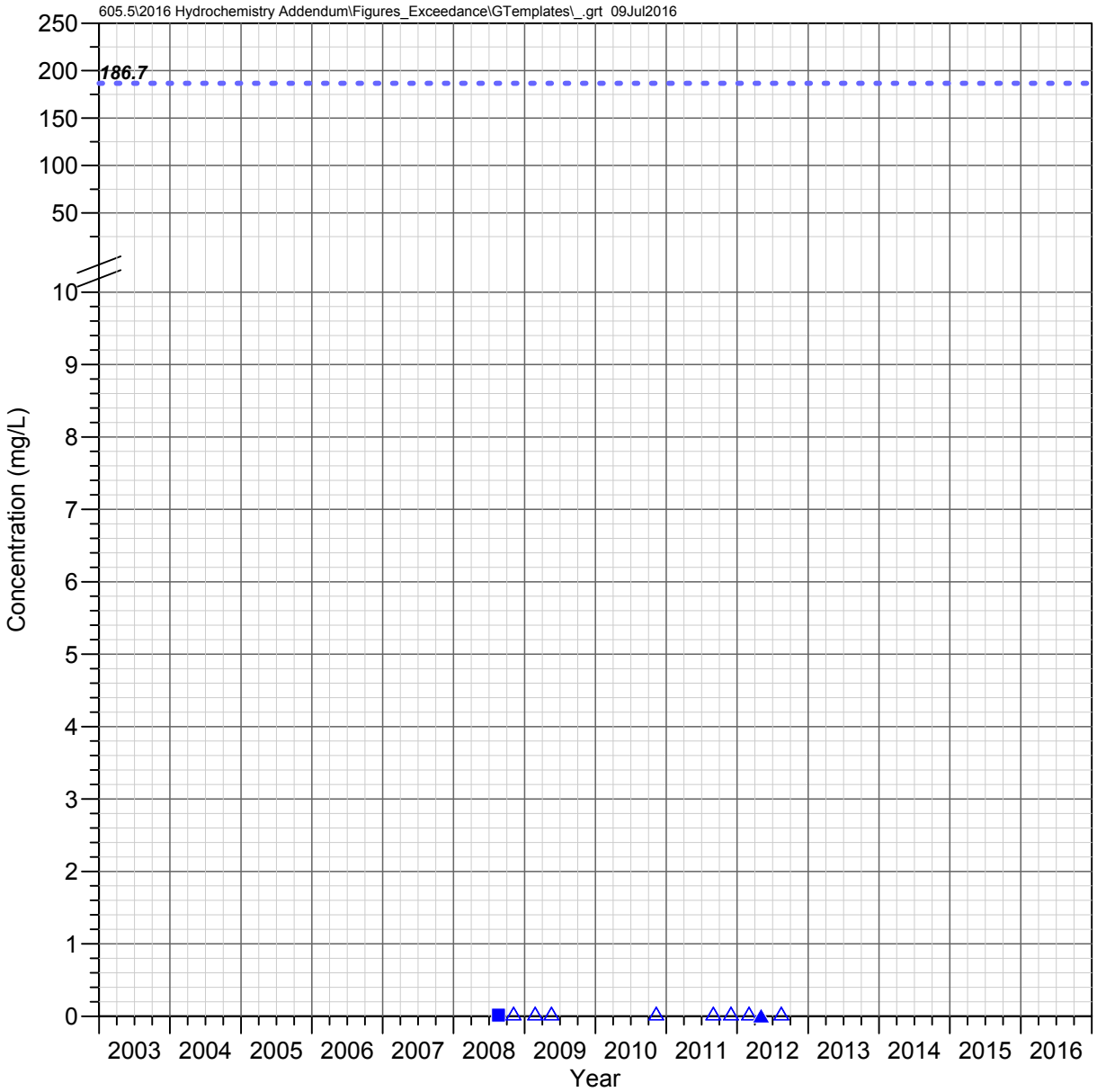


FIGURE F-160. BORON CONCENTRATIONS OBSERVED AT DC 8.8 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



H 0.1 C
Devils Canyon Watershed

BORON

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 186.667 mg/L)

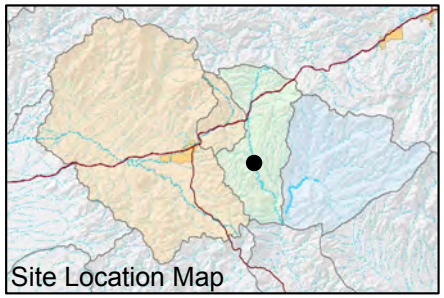
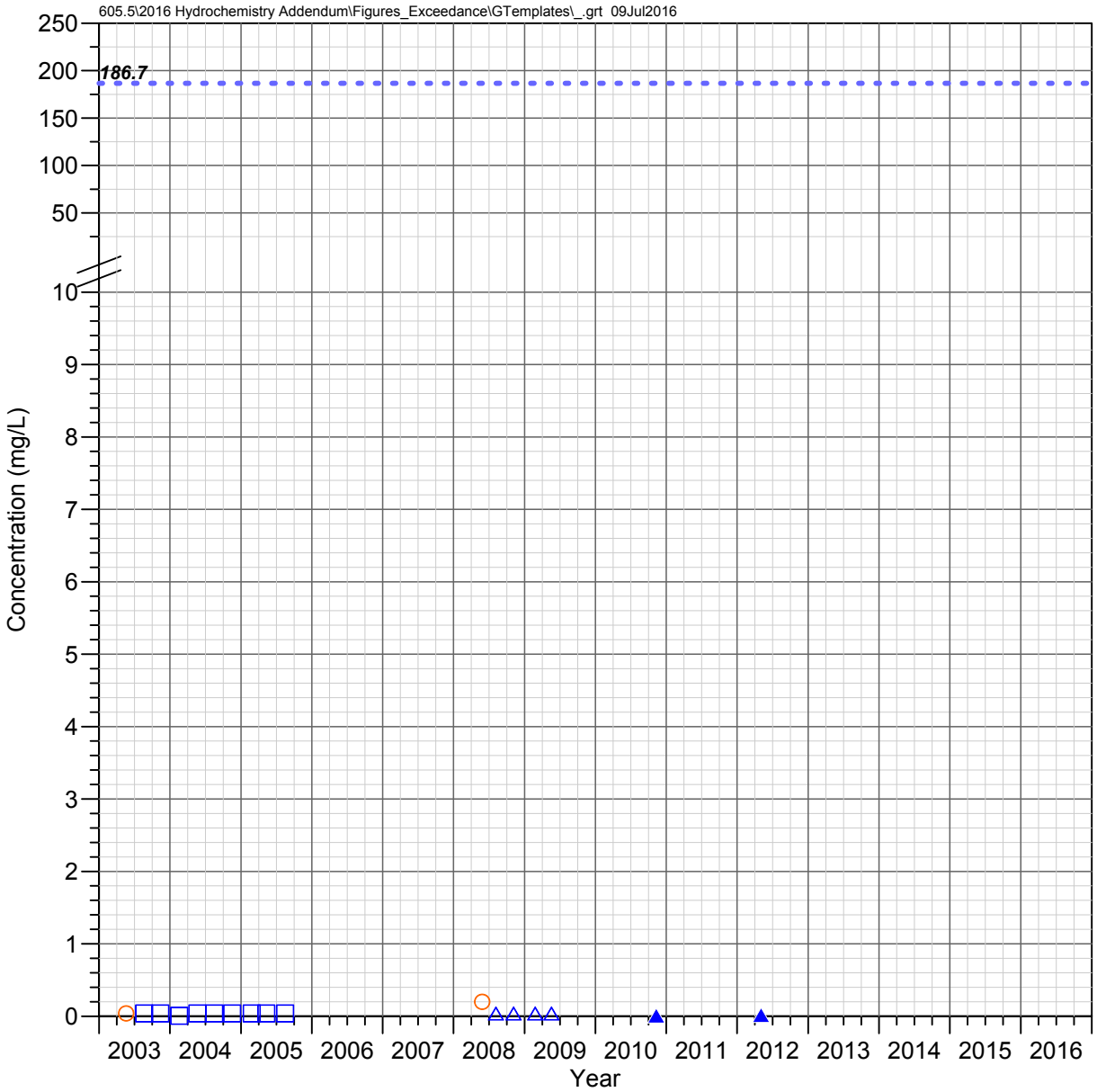


FIGURE F-161. BORON CONCENTRATIONS OBSERVED AT H 0.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.2 W
Devils Canyon Watershed

BORON

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 186.667 mg/L)

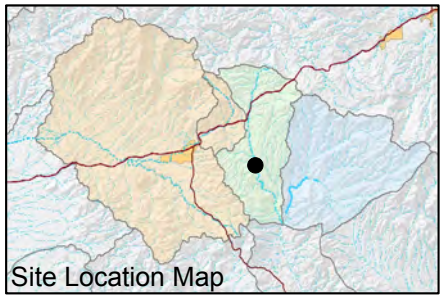
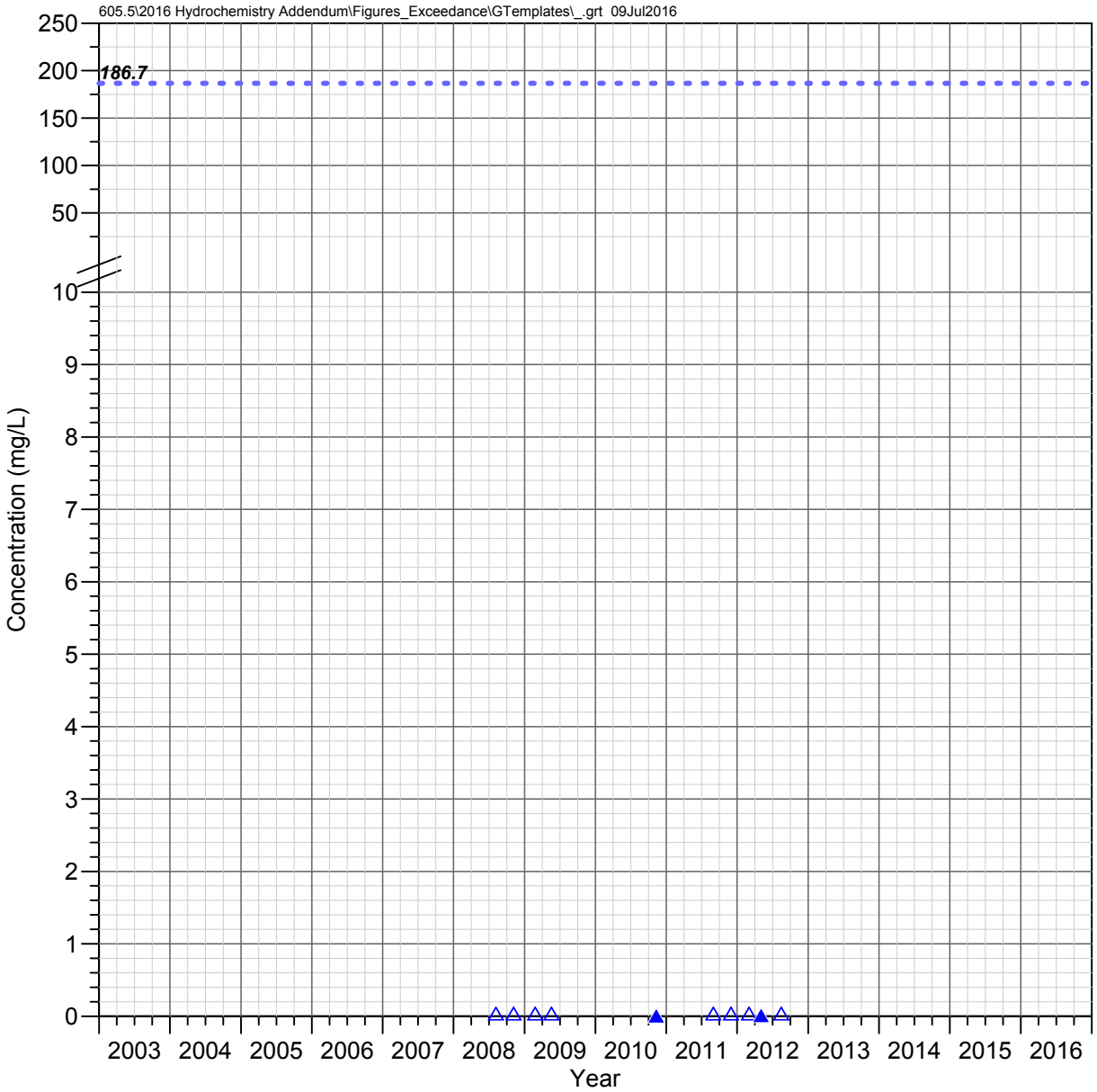


FIGURE F-162. BORON CONCENTRATIONS OBSERVED AT DC 8.2 W, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.1 C
Devils Canyon Watershed

BORON

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 186.667 mg/L)

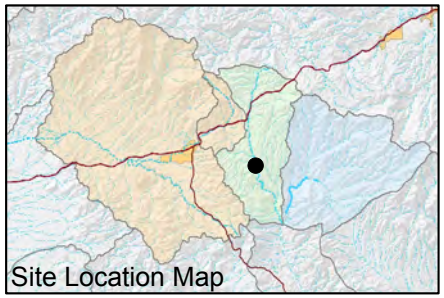
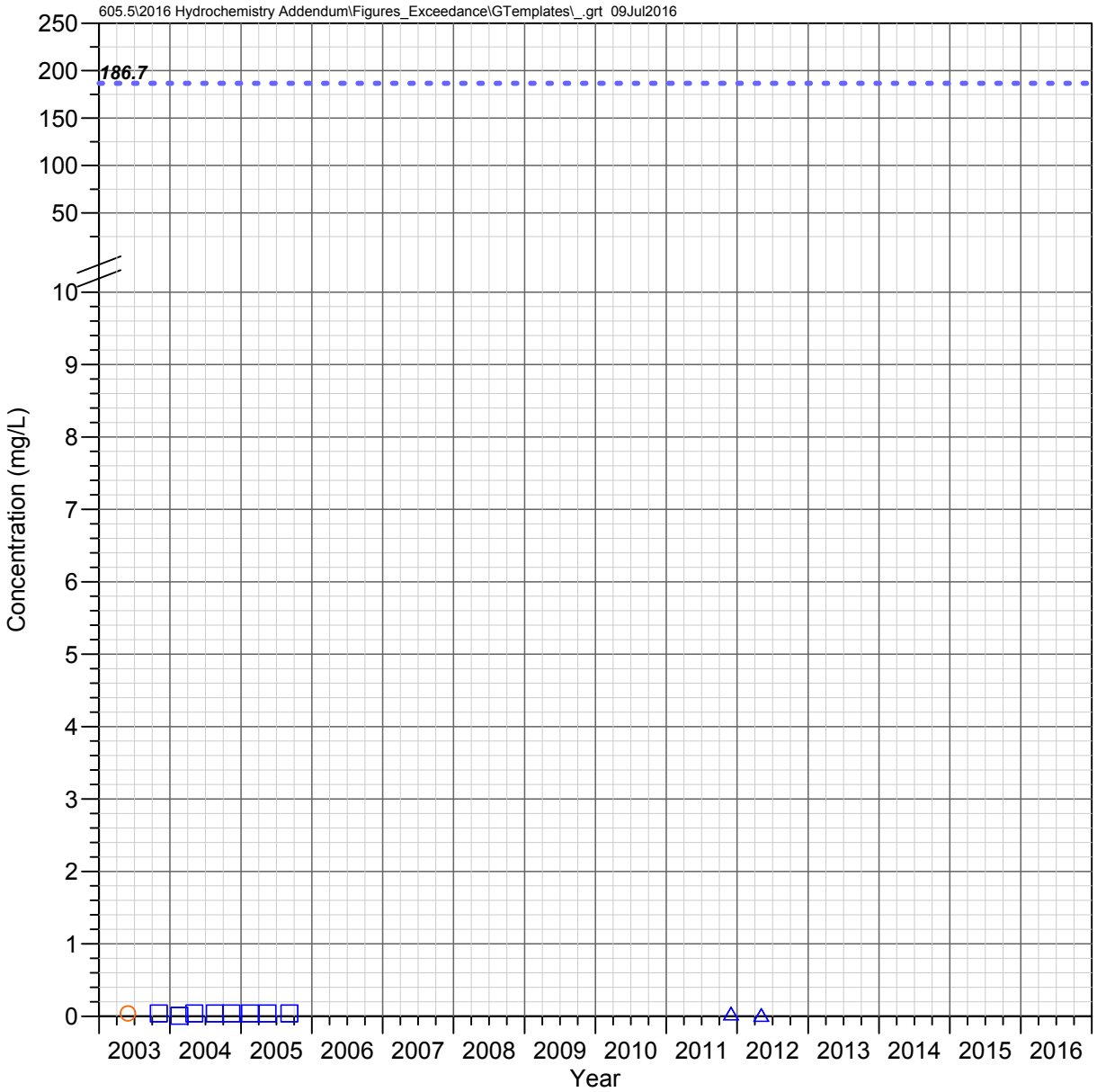


FIGURE F-163. BORON CONCENTRATIONS OBSERVED AT DC 8.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 7.1 C
Devils Canyon Watershed

BORON

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 186.667 mg/L)

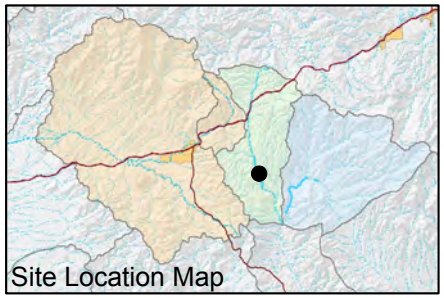
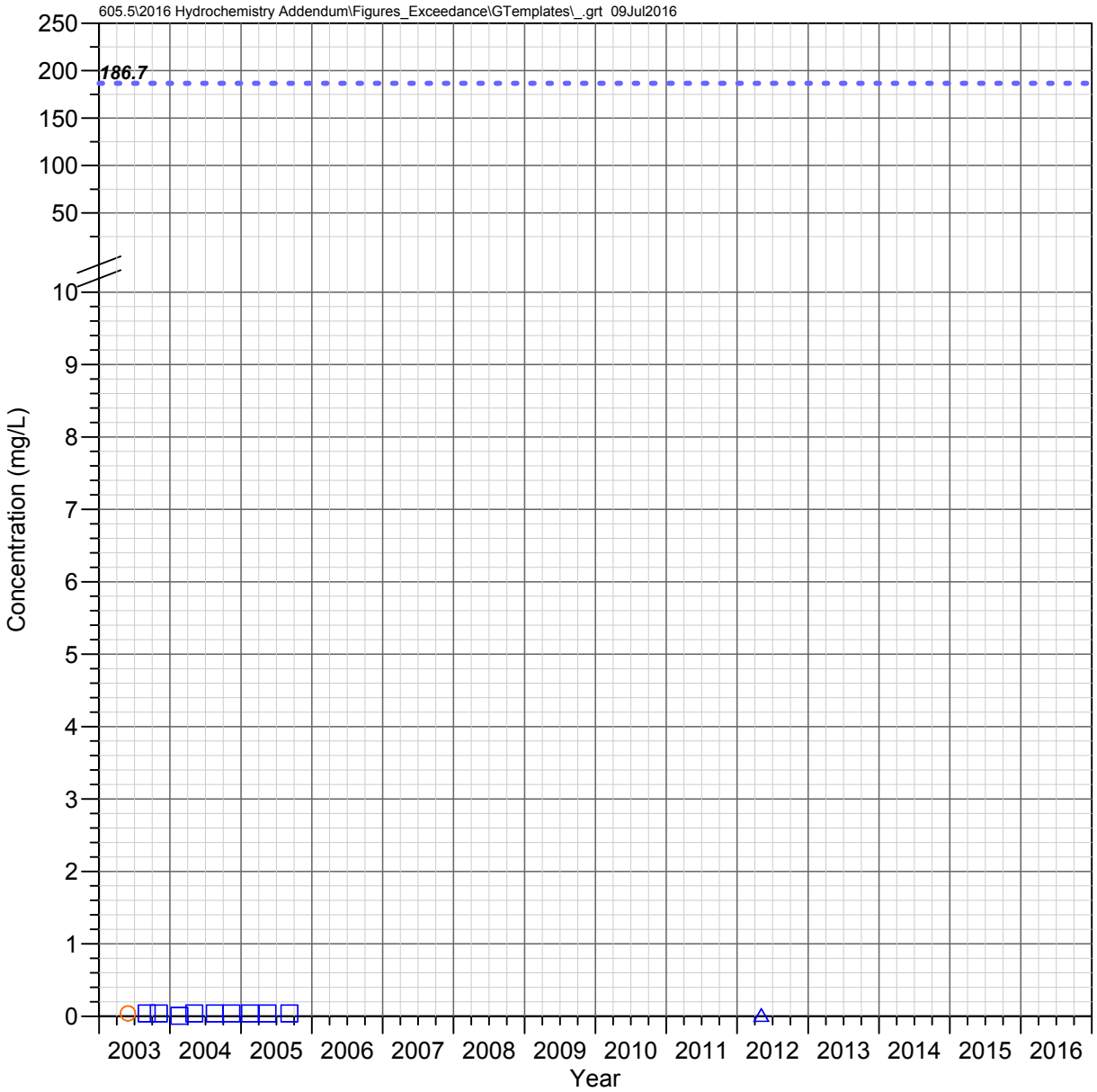


FIGURE F-164. BORON CONCENTRATIONS OBSERVED AT DC 7.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.6 W (DCT 6.6 W)
Devils Canyon Watershed

BORON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- - - - AZ Full Body Contact (TRC, 186.667 mg/L)

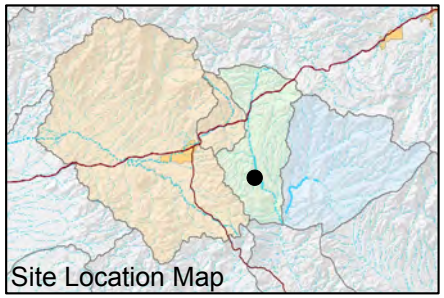
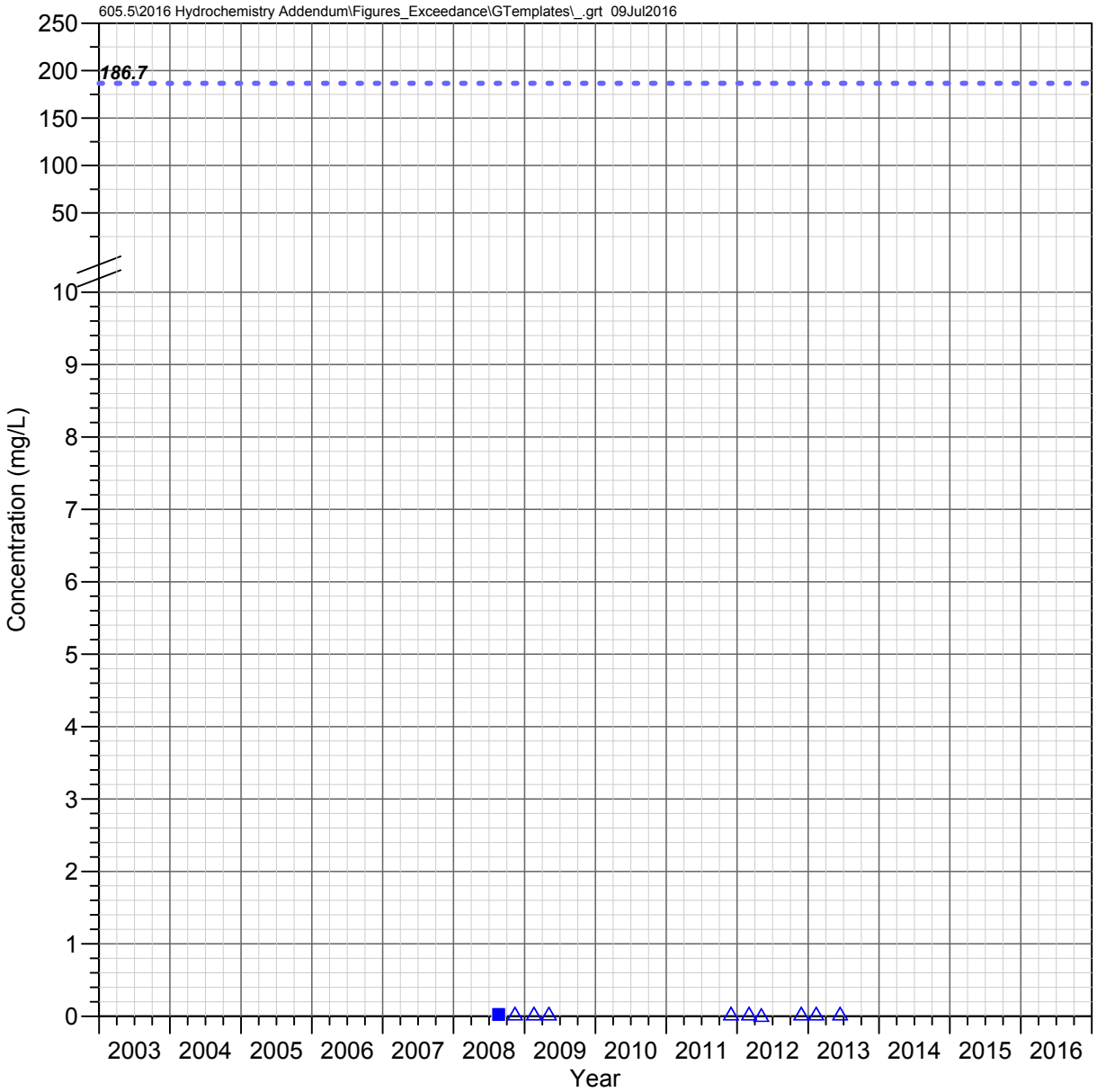


FIGURE F-165. BORON CONCENTRATIONS OBSERVED AT DC 6.6 W (DCT 6.6 W), DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.14 C
Devils Canyon Watershed

BORON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- - - - AZ Full Body Contact (TRC, 186.667 mg/L)

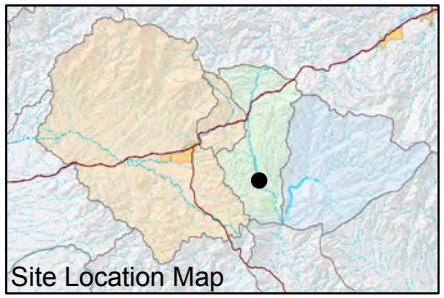
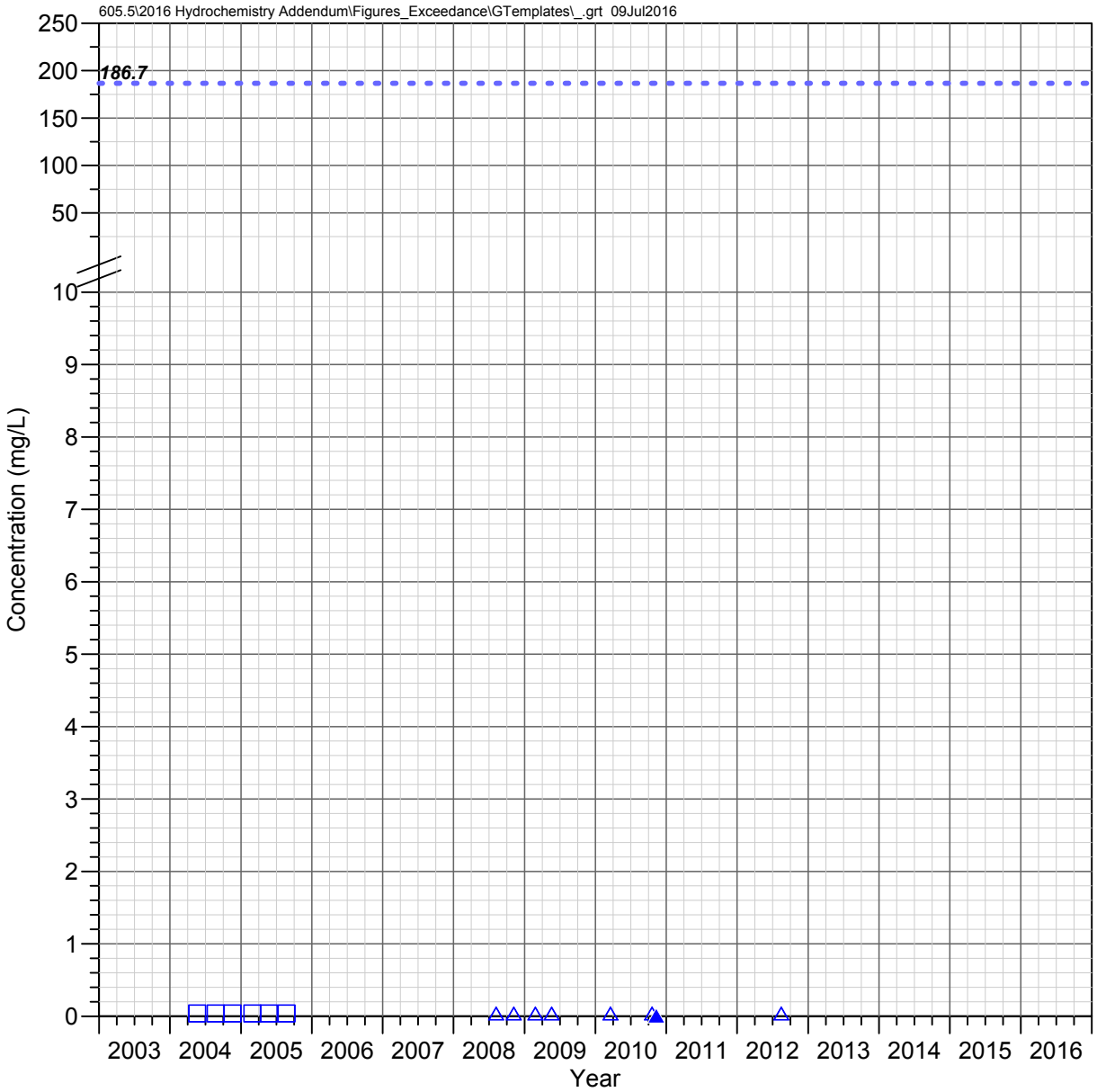


FIGURE F-166. BORON CONCENTRATIONS OBSERVED AT DC 6.14 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.1 E
Devils Canyon Watershed

BORON

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 186.667 mg/L)

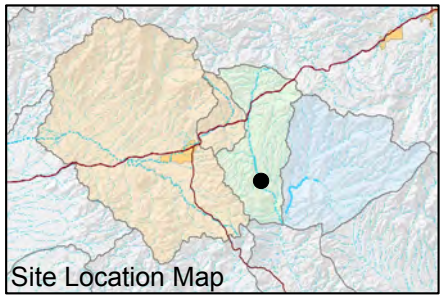
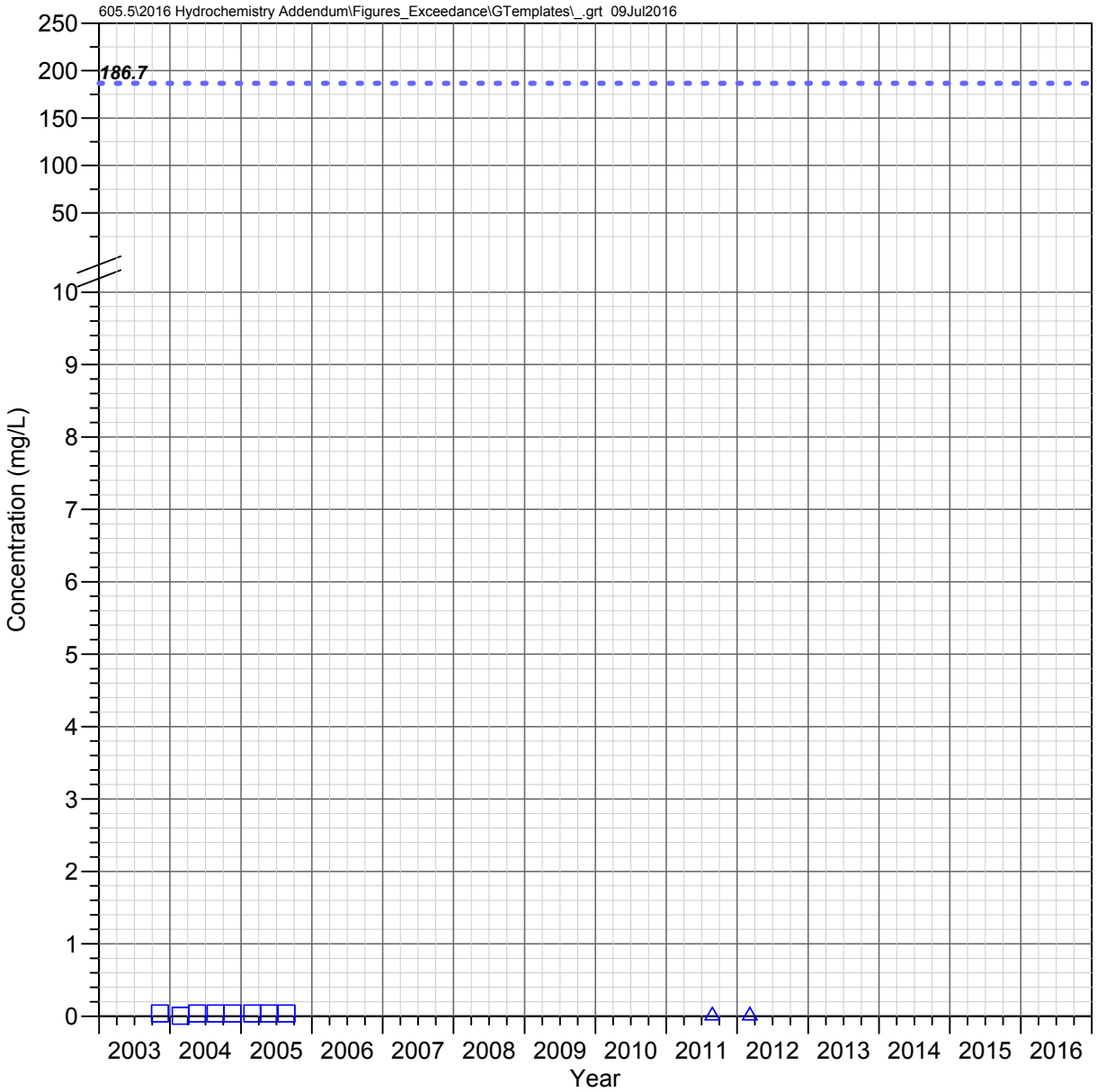


FIGURE F-167. BORON CONCENTRATIONS OBSERVED AT DC 6.1 E, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 5.5 C
Devils Canyon Watershed

BORON

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 186.667 mg/L)

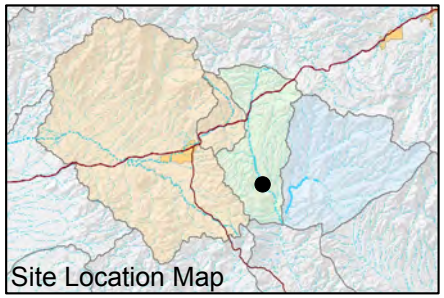
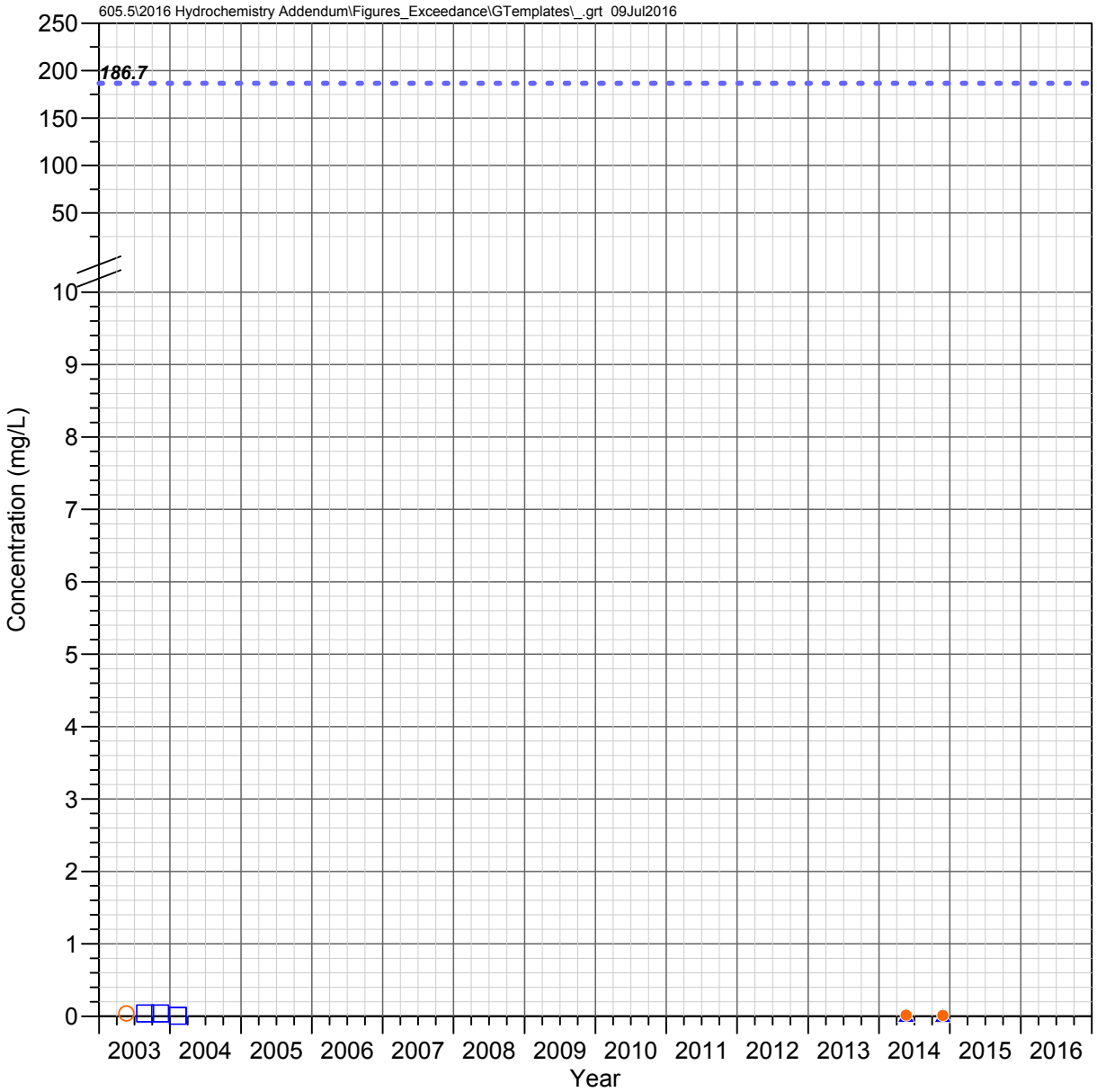


FIGURE F-168. BORON CONCENTRATIONS OBSERVED AT DC 5.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 4.1 E
Devils Canyon Watershed

BORON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- - - - AZ Full Body Contact (TRC, 186.667 mg/L)

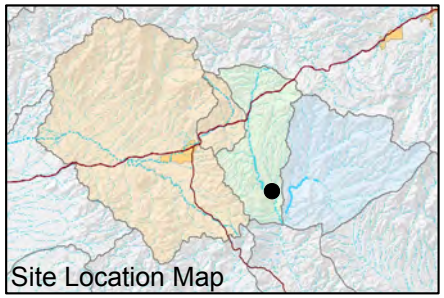
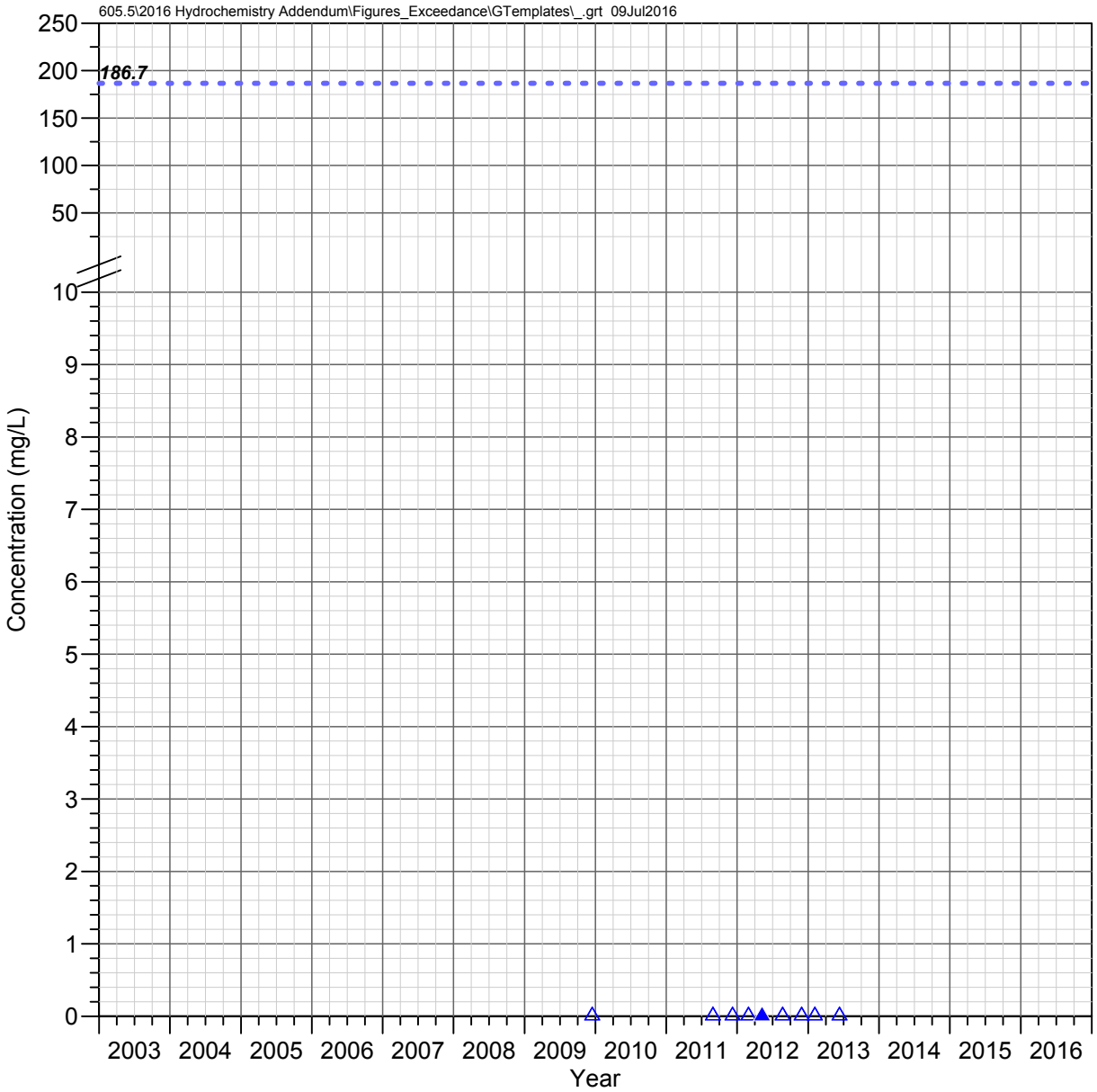


FIGURE F-169. BORON CONCENTRATIONS OBSERVED AT DC 4.1 E, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Government Springs
Mineral Creek Watershed

BORON

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 186.667 mg/L)

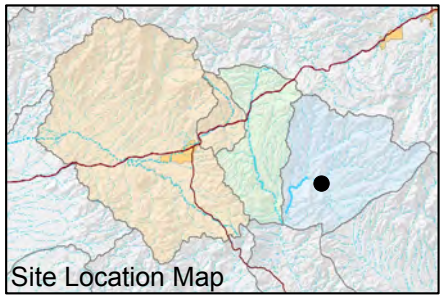
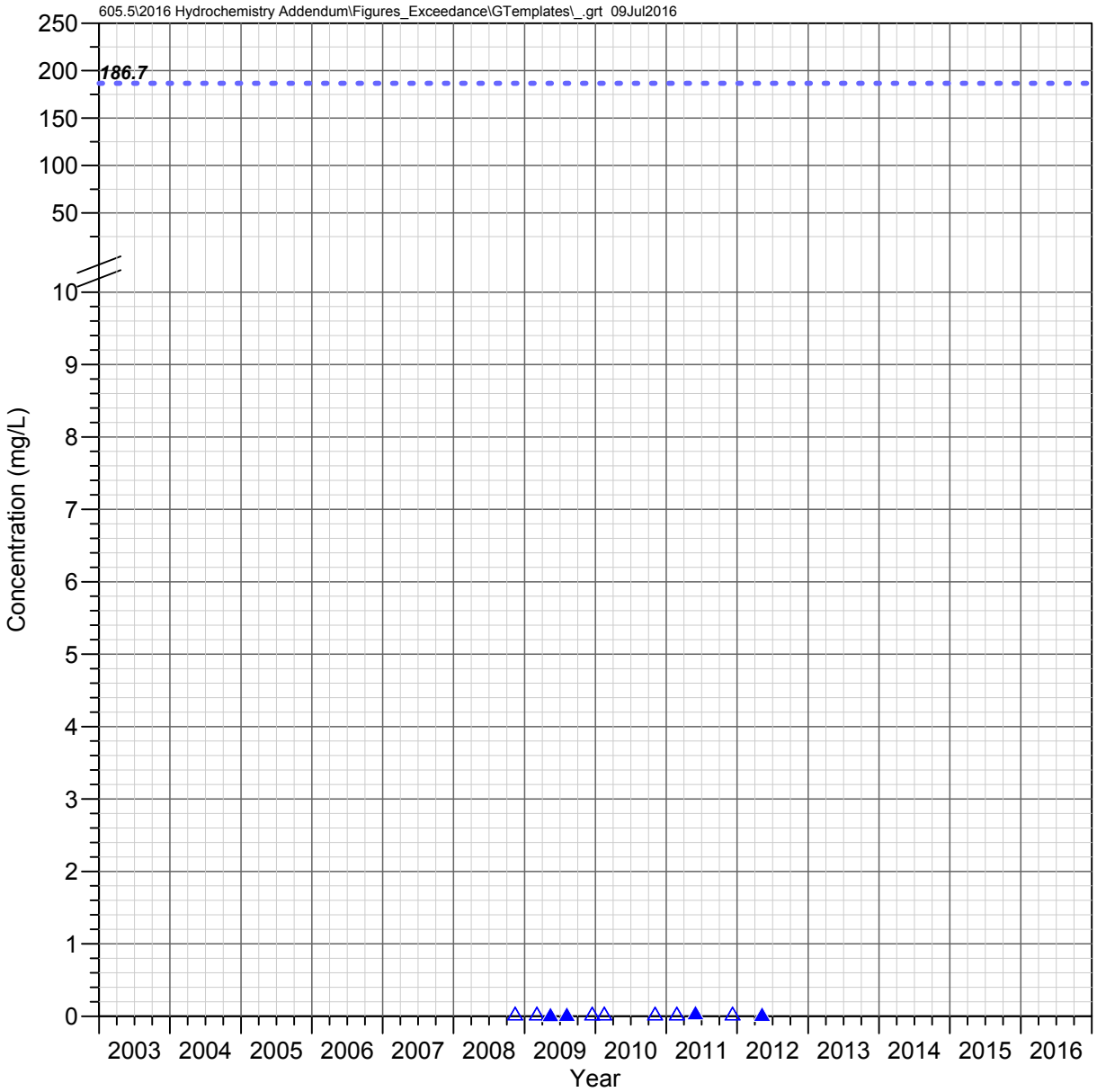


FIGURE F-170. BORON CONCENTRATIONS OBSERVED AT GOVERNMENT SPRINGS, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 8.4 C
Mineral Creek Watershed

BORON

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 186.667 mg/L)

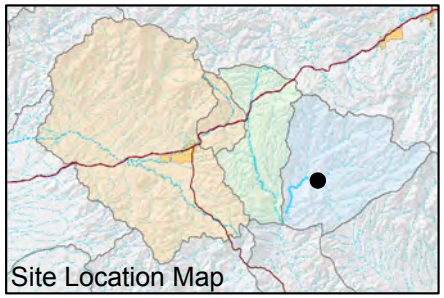
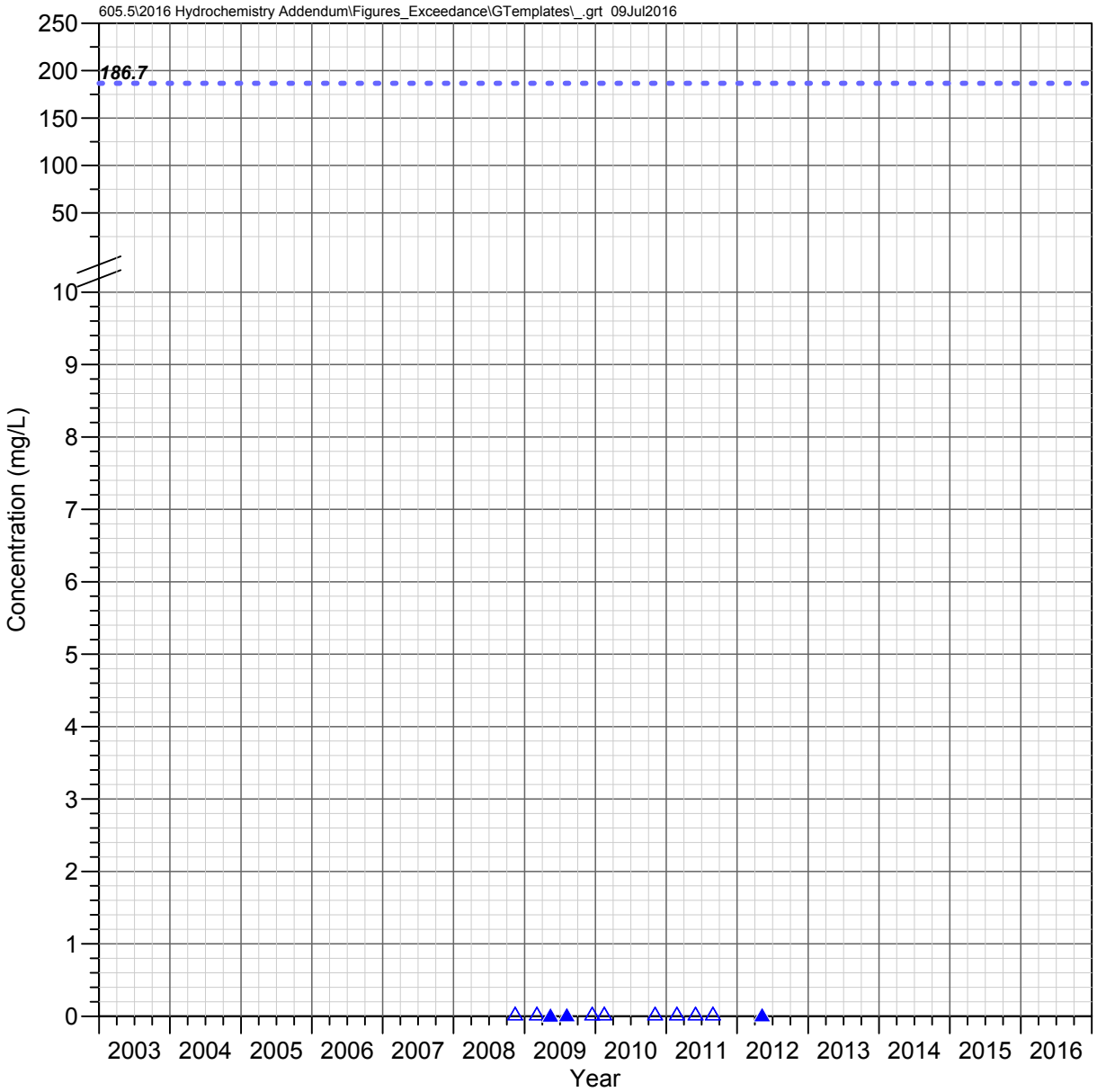


FIGURE F-171. BORON CONCENTRATIONS OBSERVED AT MC 8.4 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



LF 0.2 C
Mineral Creek Watershed

BORON

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 186.667 mg/L)

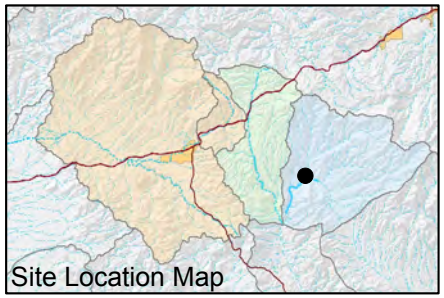
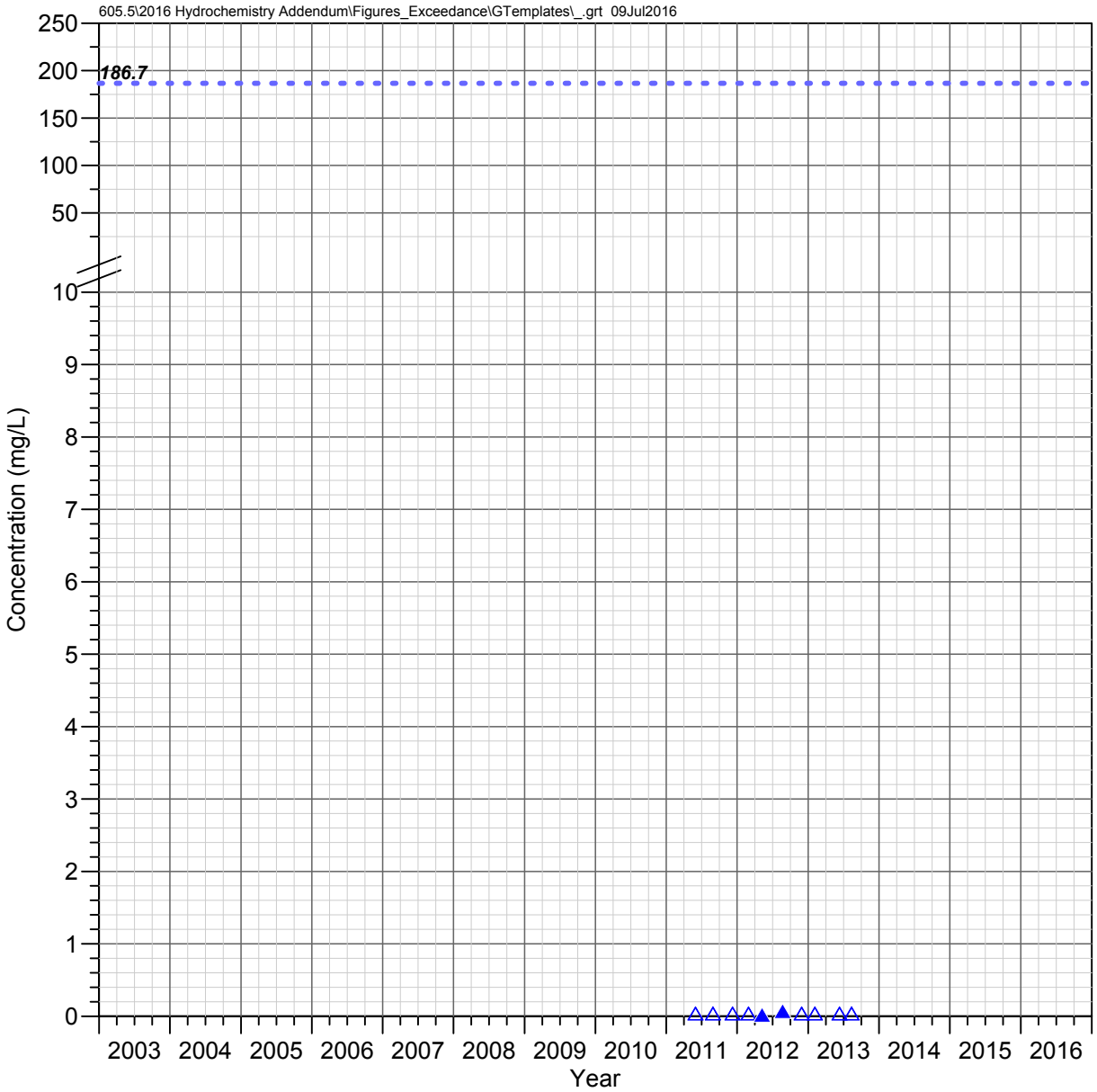


FIGURE F-172. BORON CONCENTRATIONS OBSERVED AT LF 0.2 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 5.2 C
Mineral Creek Watershed

BORON

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 186.667 mg/L)

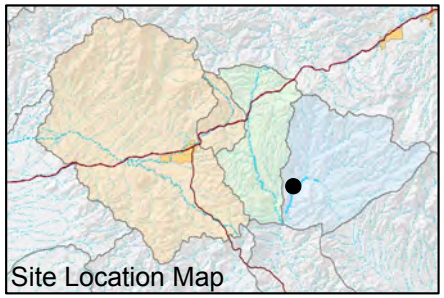
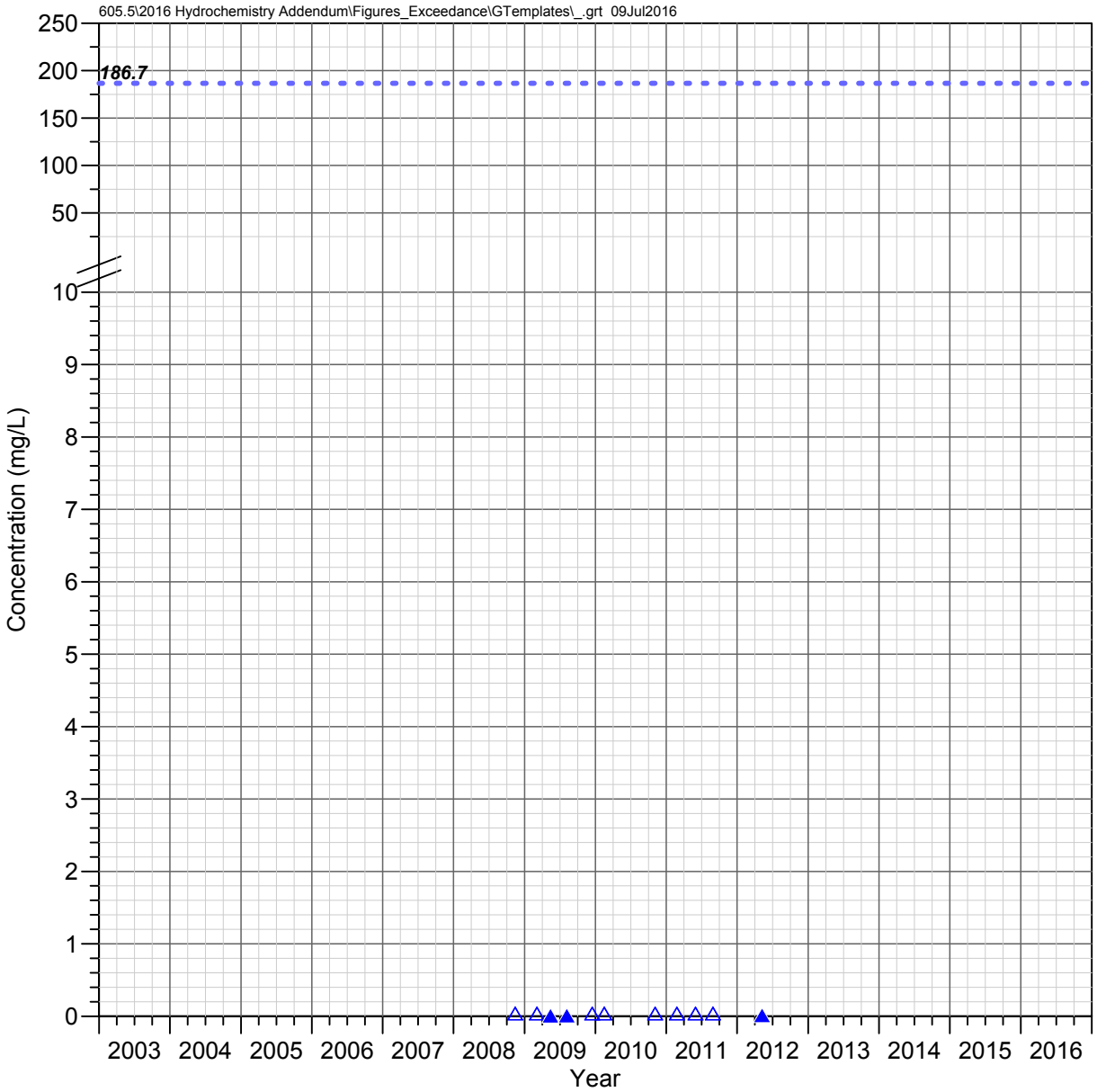


FIGURE F-173. BORON CONCENTRATIONS OBSERVED AT MC 5.2 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 3.4 W (Wet Leg Spring)
Mineral Creek Watershed

BORON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- - - - AZ Full Body Contact (TRC, 186.667 mg/L)

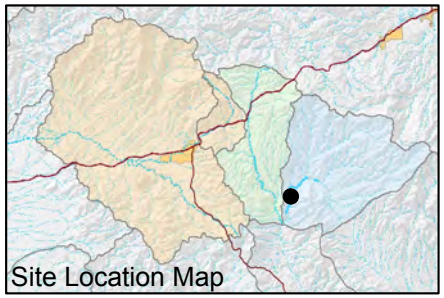
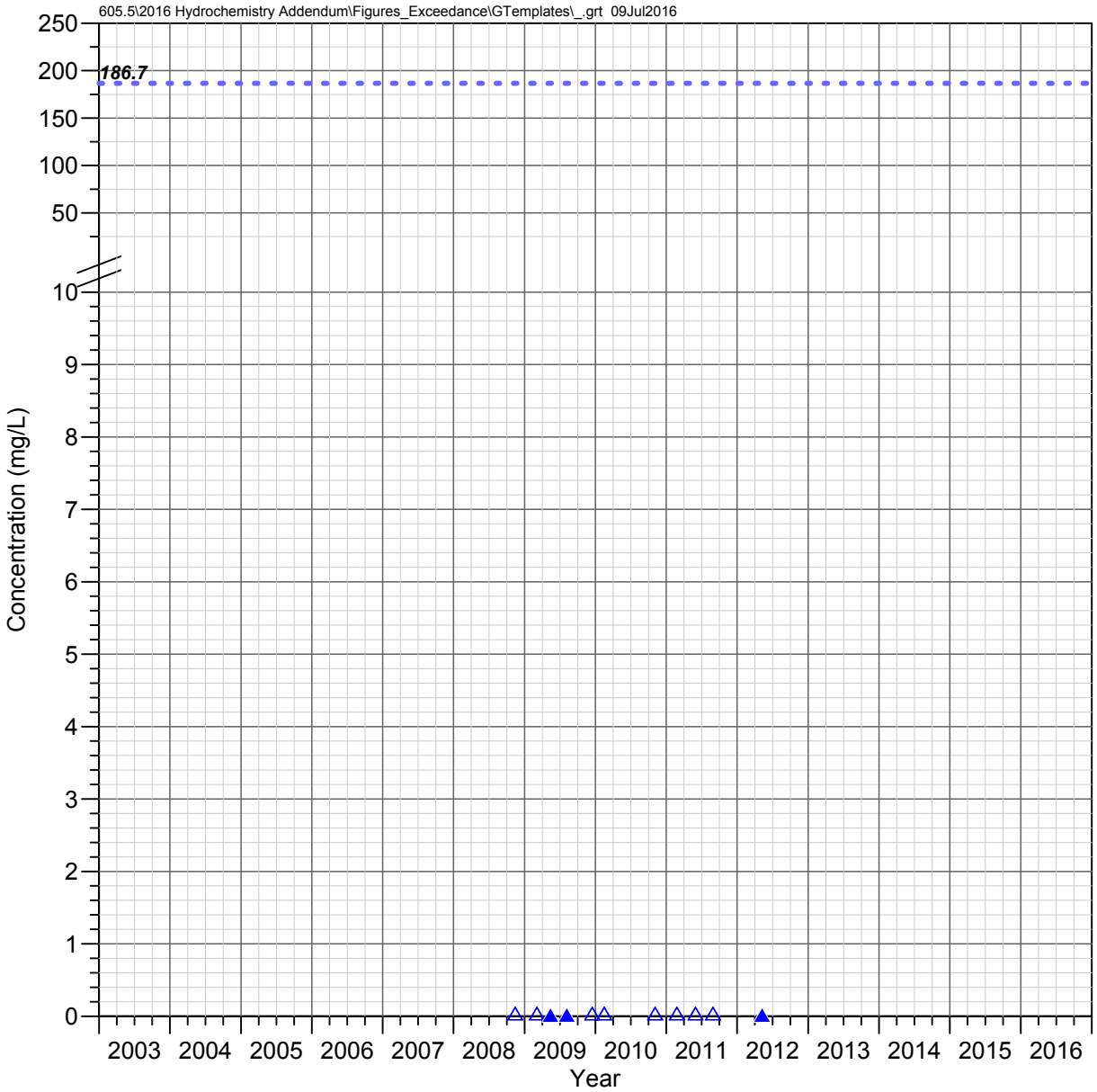


FIGURE F-174. BORON CONCENTRATIONS OBSERVED AT MC 3.4 W (WET LEG SPRING), MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 3.3 C (Lower Mineral)
Mineral Creek Watershed

BORON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- - - - AZ Full Body Contact (TRC, 186.667 mg/L)

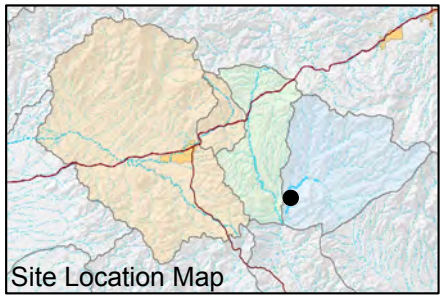
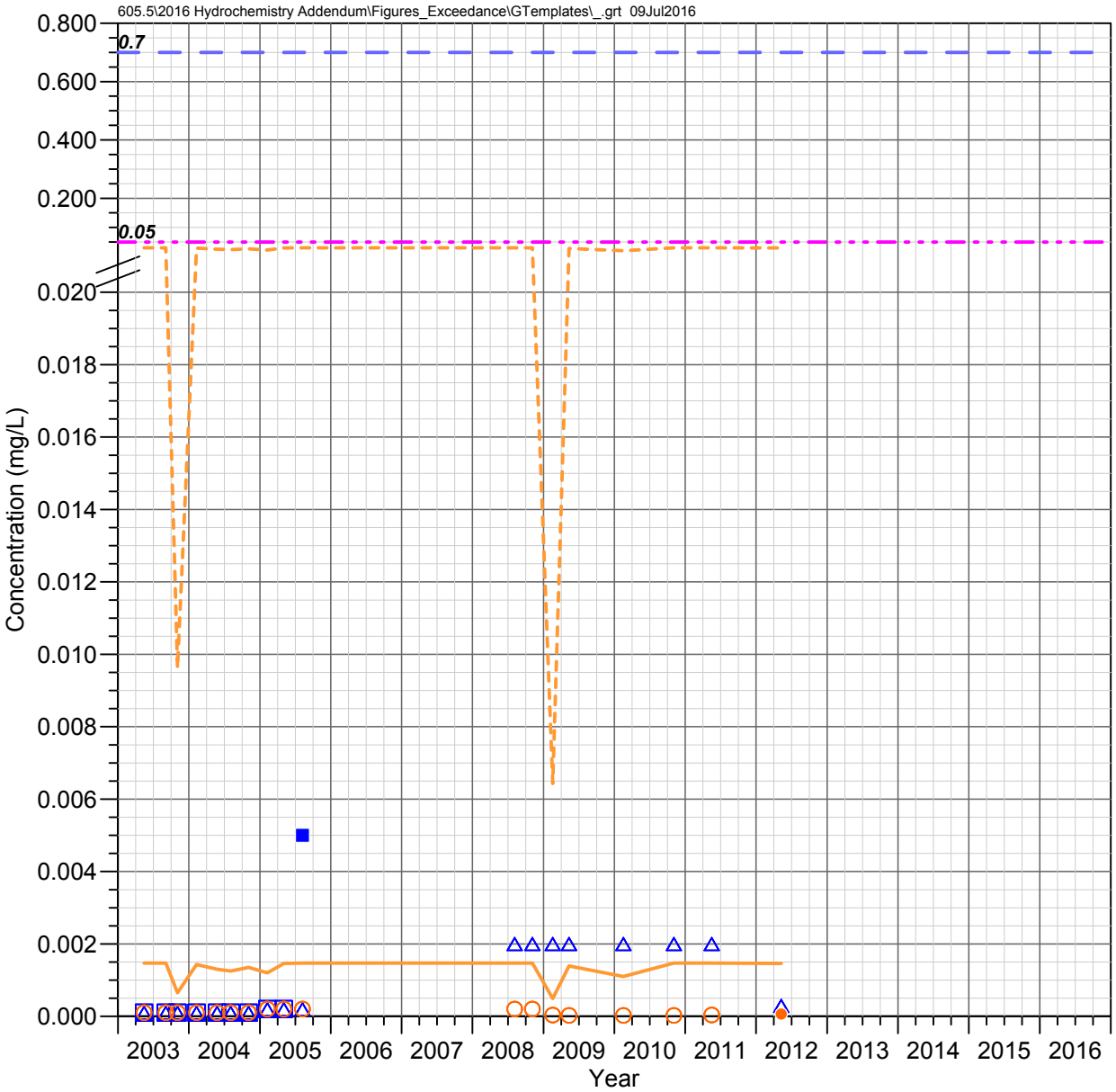


FIGURE F-175. BORON CONCENTRATIONS OBSERVED AT MC 3.3 C (LOWER MINERAL), MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Pump Station Spring (QC 30.7 C)
Queen Creek Watershed

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent

- AZ Partial Body Contact (TRC, 0.7 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Agricultural Livestock Watering (UNS, 0.05 mg/L)

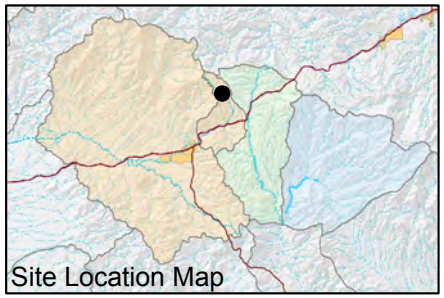
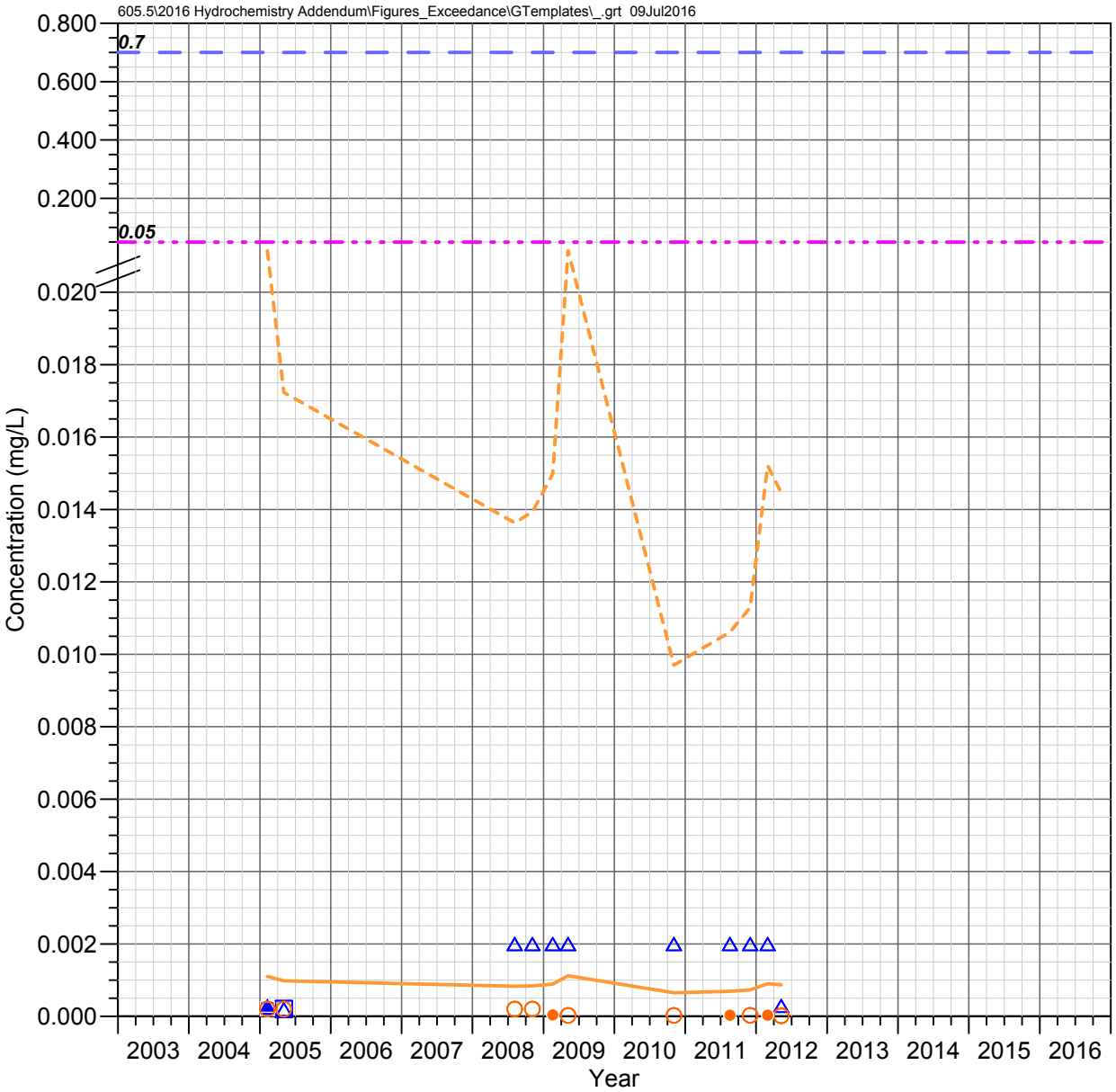


FIGURE F-176. CADMIUM CONCENTRATIONS OBSERVED AT PUMP STATION SPRING (QC 30.7 C), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 27.3 C
Queen Creek Watershed

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent

- AZ Partial Body Contact (TRC, 0.7 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Agricultural Livestock Watering (UNS, 0.05 mg/L)

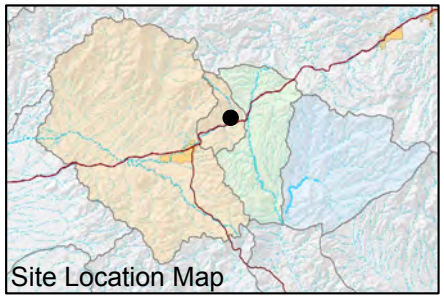
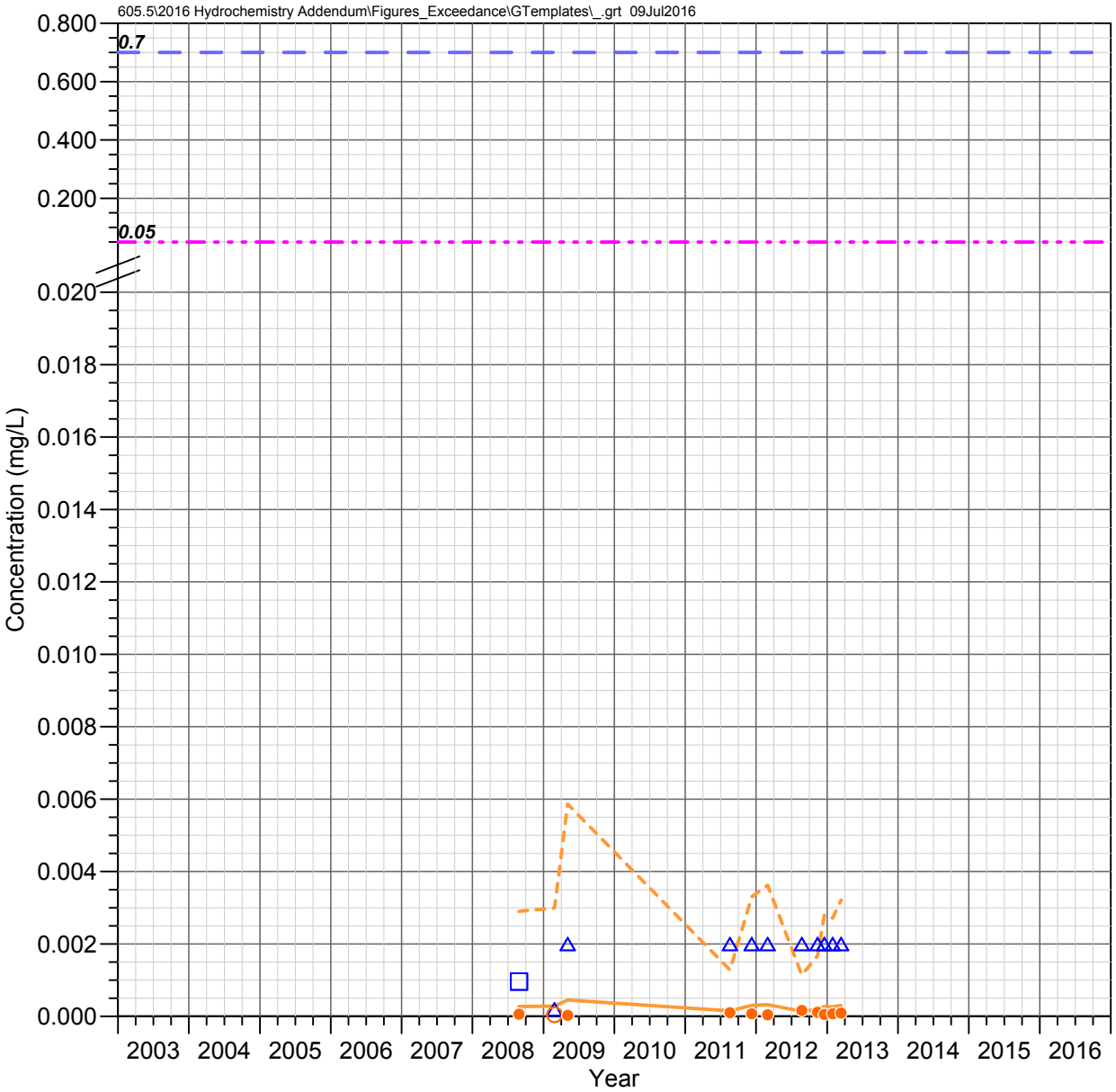


FIGURE F-177. CADMIUM CONCENTRATIONS OBSERVED AT QC 27.3 C, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Oak Flat Wash
Queen Creek Watershed

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent

- AZ Partial Body Contact (TRC, 0.7 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Agricultural Livestock Watering (UNS, 0.05 mg/L)

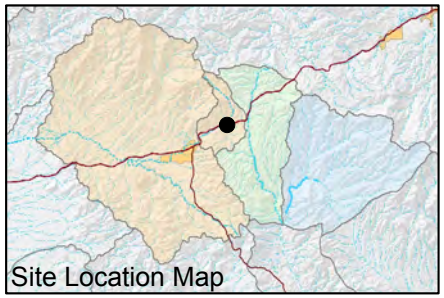
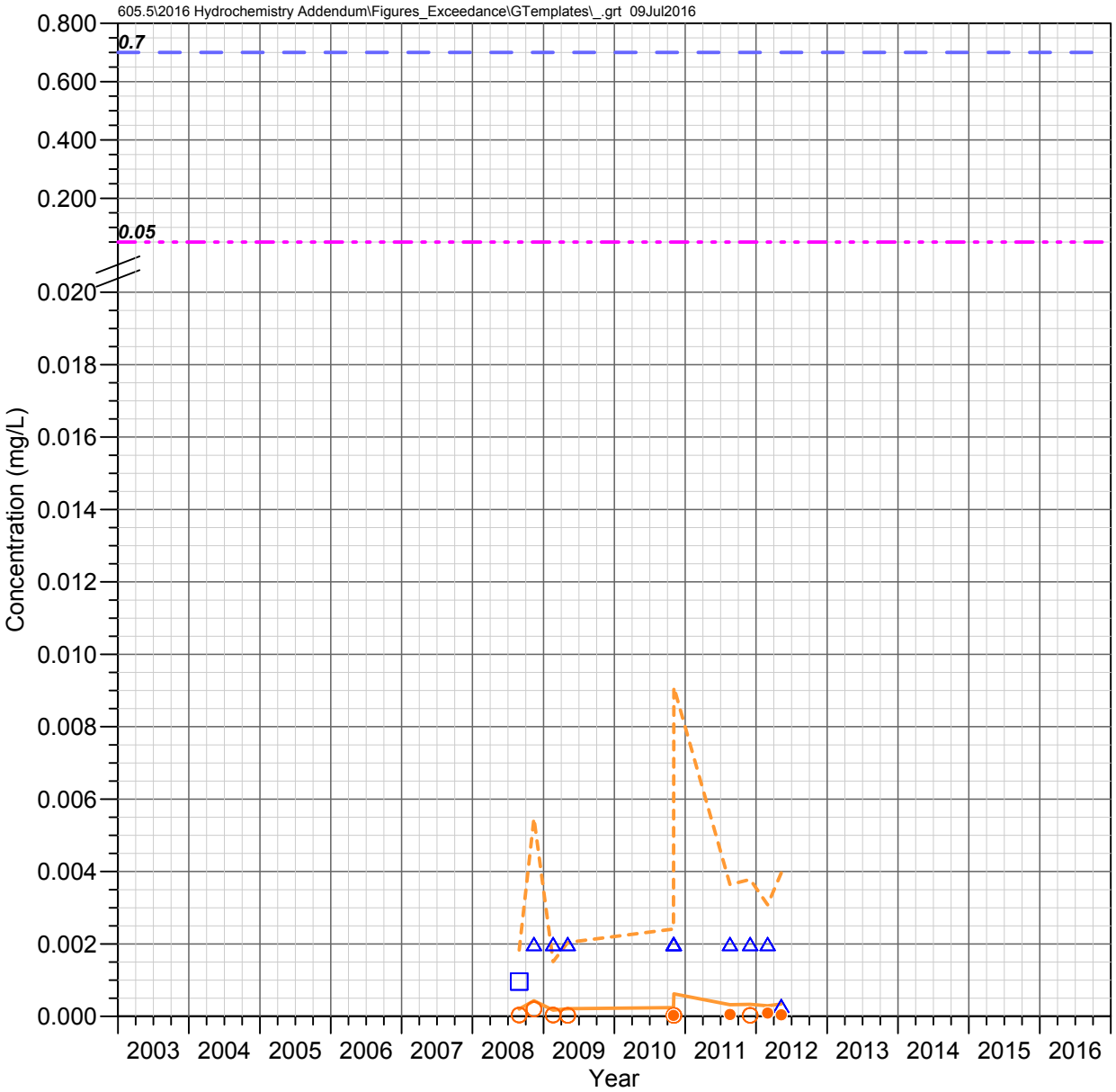


FIGURE F-178. CADMIUM CONCENTRATIONS OBSERVED AT OAK FLAT WASH, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Number 9 Wash
Queen Creek Watershed

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent

- AZ Partial Body Contact (TRC, 0.7 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Agricultural Livestock Watering (UNS, 0.05 mg/L)

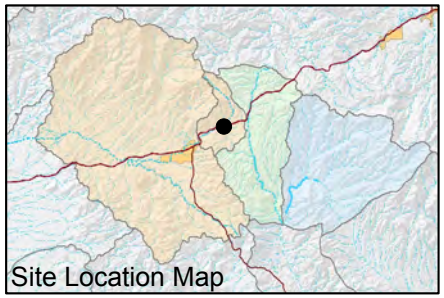


FIGURE F-179. CADMIUM CONCENTRATIONS OBSERVED AT NUMBER 9 WASH, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES

Boulder Hole (QC 23.6 C)
Queen Creek Watershed

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent

- AZ Partial Body Contact (TRC, 0.7 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Agricultural Livestock Watering (UNS, 0.05 mg/L)

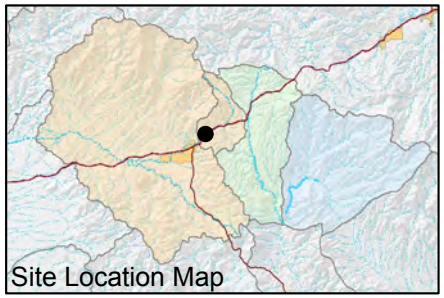
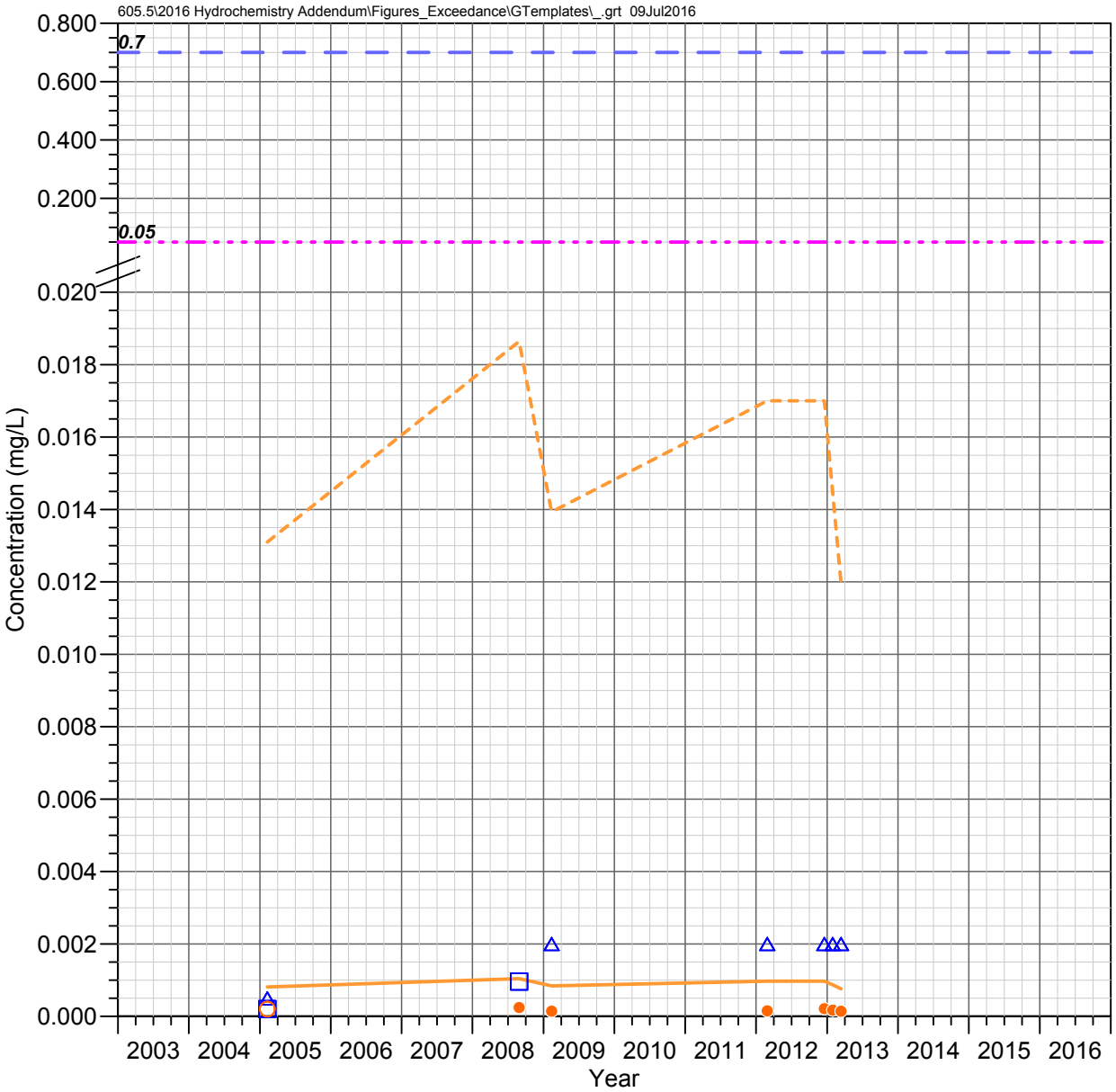


FIGURE F-180. CADMIUM CONCENTRATIONS OBSERVED AT BOULDER HOLE (QC 23.6 C), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 22.6 E (Karst Spring)
Queen Creek Watershed

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent

- AZ Partial Body Contact (TRC, 0.7 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Agricultural Livestock Watering (UNS, 0.05 mg/L)

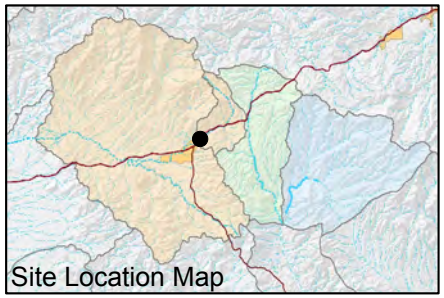
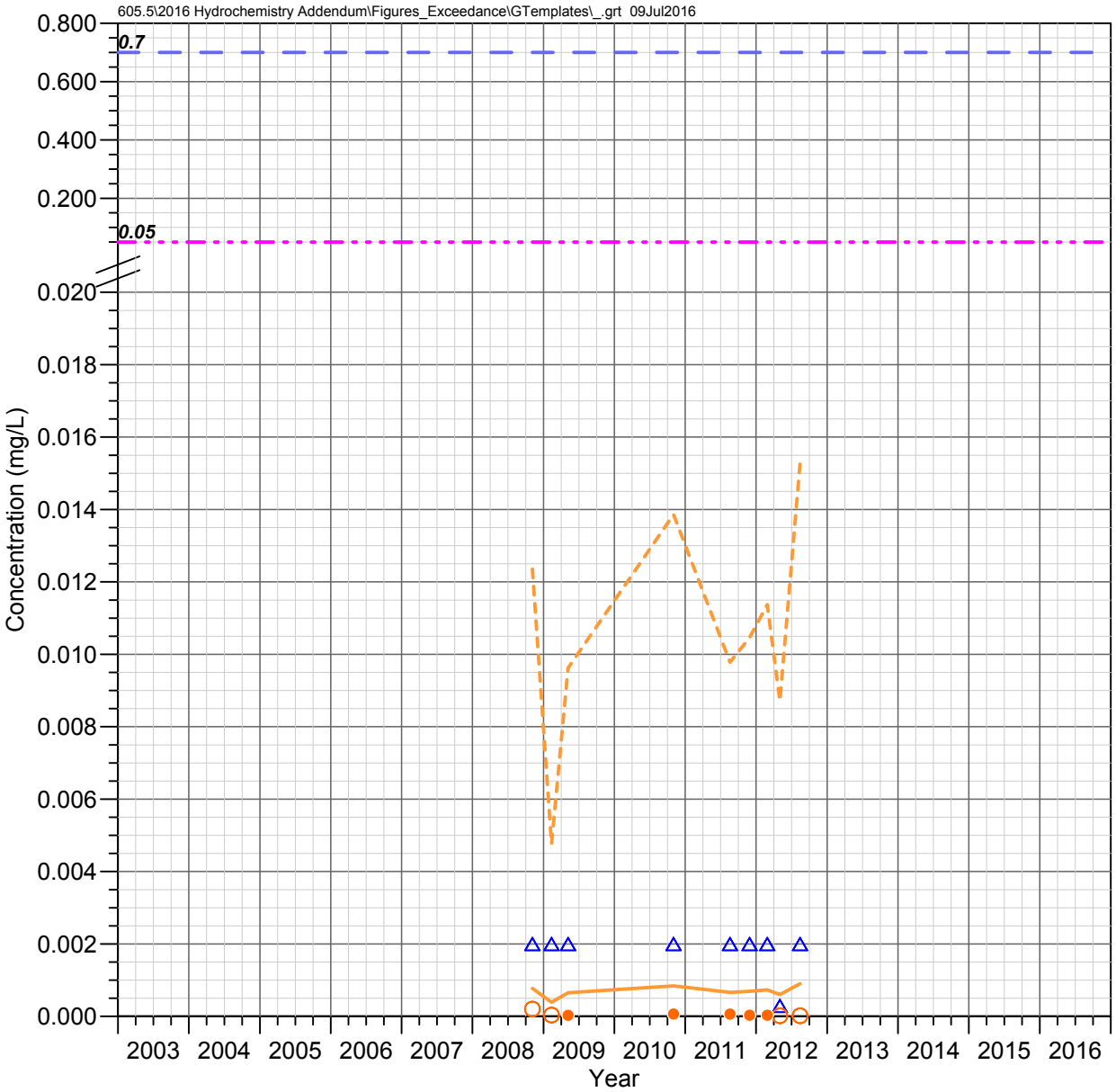


FIGURE F-181. CADMIUM CONCENTRATIONS OBSERVED AT QC 22.6 E (KARST SPRING), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 21.7 C (Magma Avenue)
Queen Creek Watershed

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent

- AZ Partial Body Contact (TRC, 0.7 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Agricultural Livestock Watering (UNS, 0.05 mg/L)

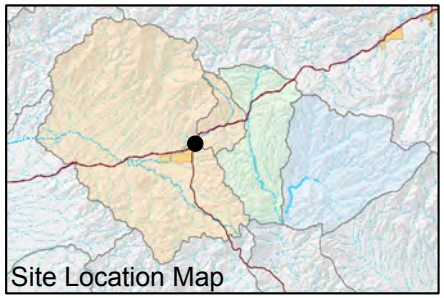
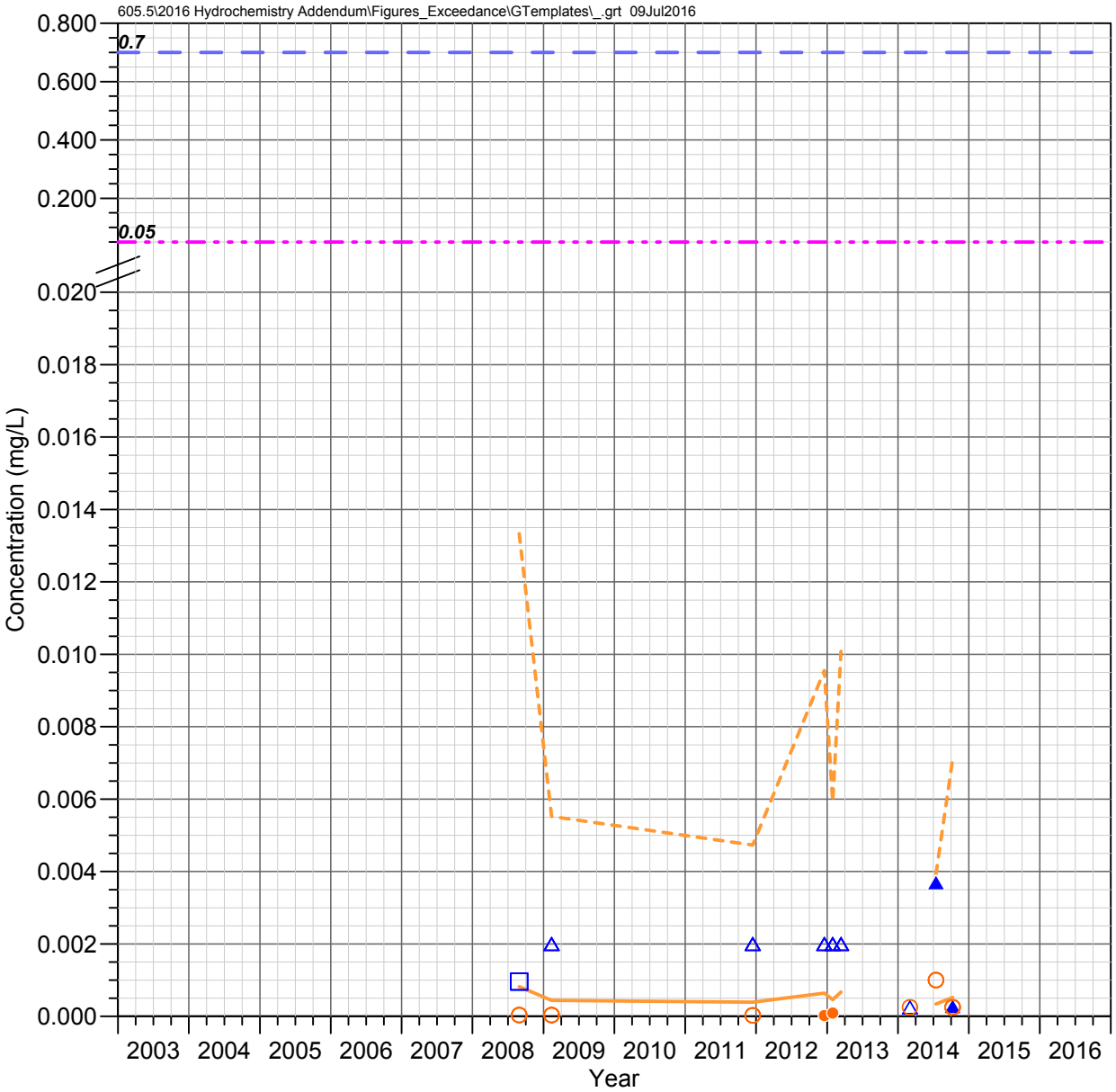


FIGURE F-182. CADMIUM CONCENTRATIONS OBSERVED AT QC 21.7 C (MAGMA AVENUE), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 19.7 C
Queen Creek Watershed

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent

- AZ Partial Body Contact (TRC, 0.7 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Agricultural Livestock Watering (UNS, 0.05 mg/L)

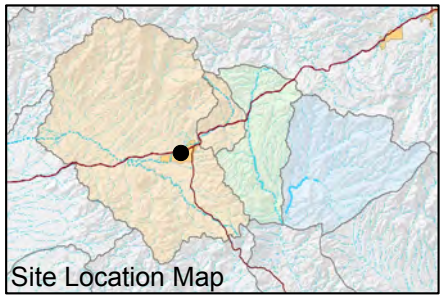
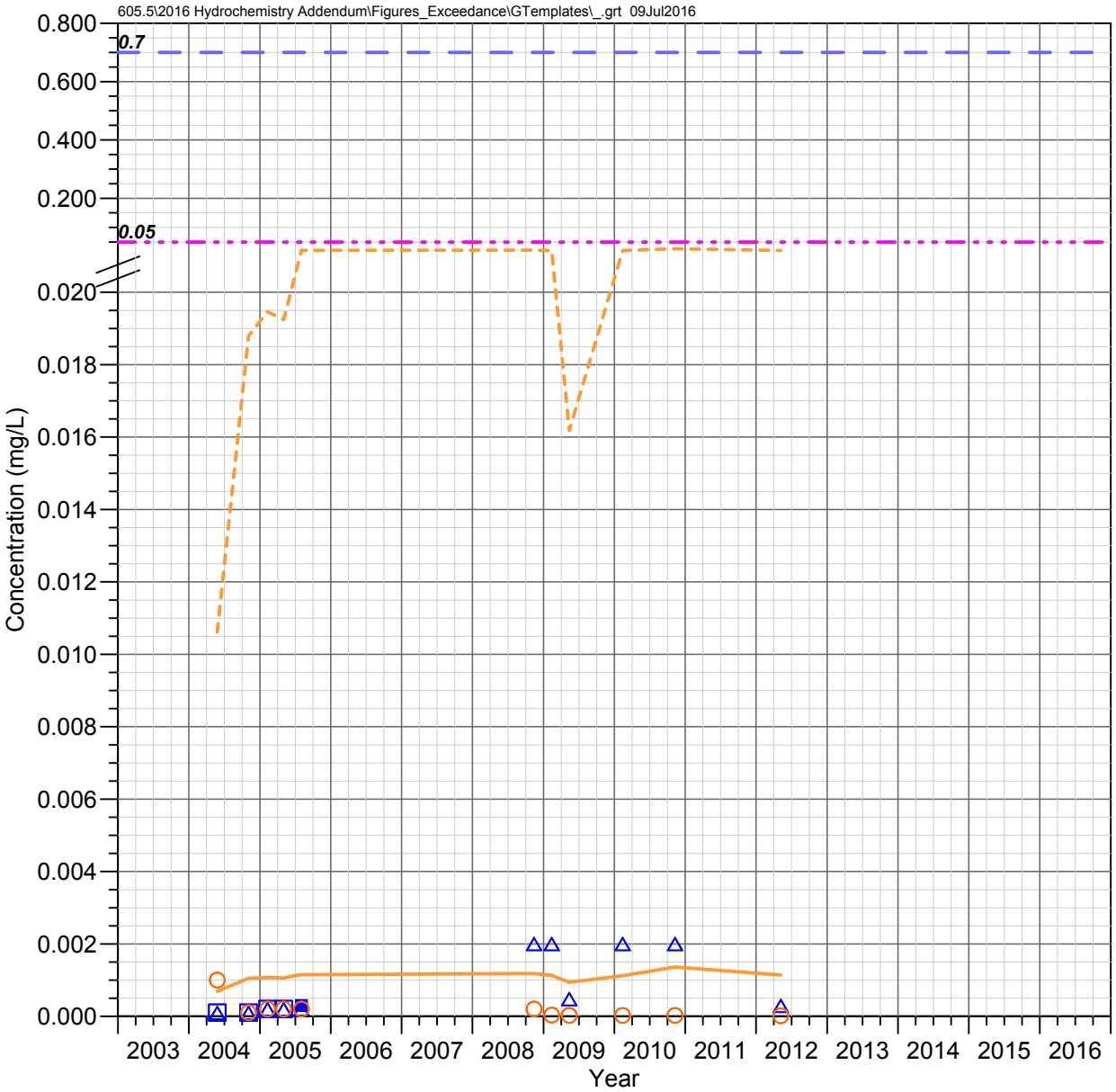


FIGURE F-183. CADMIUM CONCENTRATIONS OBSERVED AT QC 19.7 C, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Bored Spring
Queen Creek Watershed

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent

- AZ Partial Body Contact (TRC, 0.7 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Agricultural Livestock Watering (UNS, 0.05 mg/L)

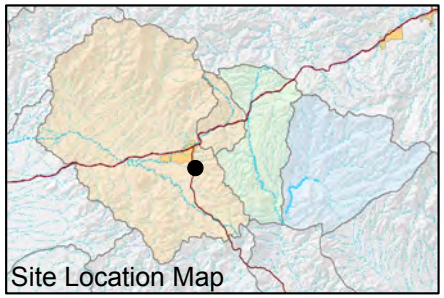
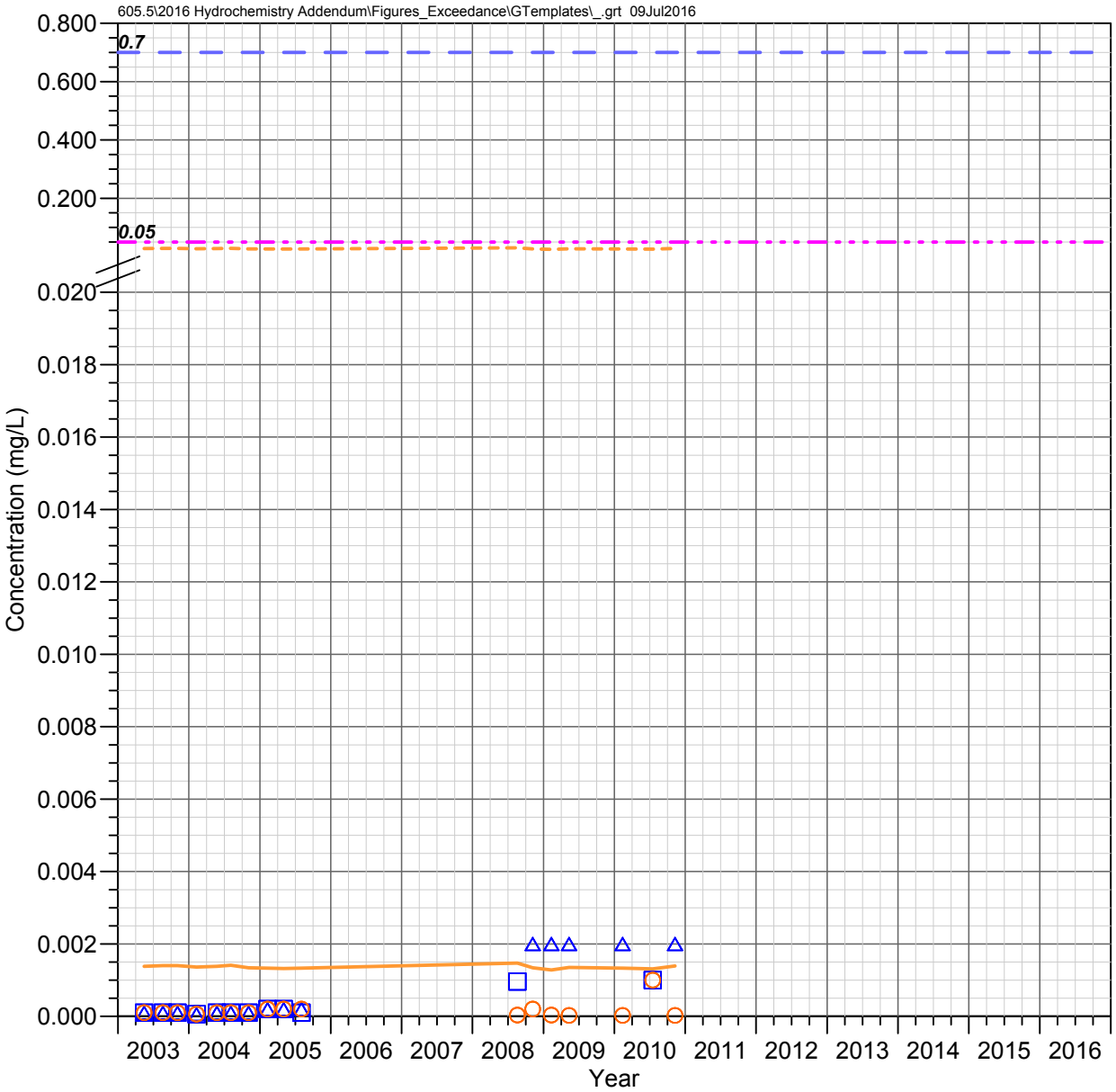


FIGURE F-184. CADMIUM CONCENTRATIONS OBSERVED AT BORED SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Hidden Spring
Queen Creek Watershed

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent

- AZ Partial Body Contact (TRC, 0.7 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Agricultural Livestock Watering (UNS, 0.05 mg/L)

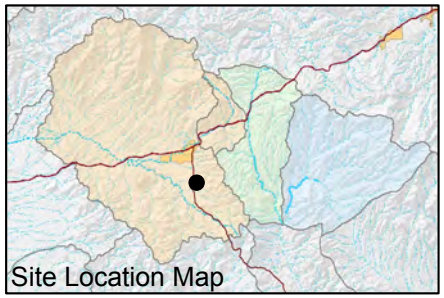
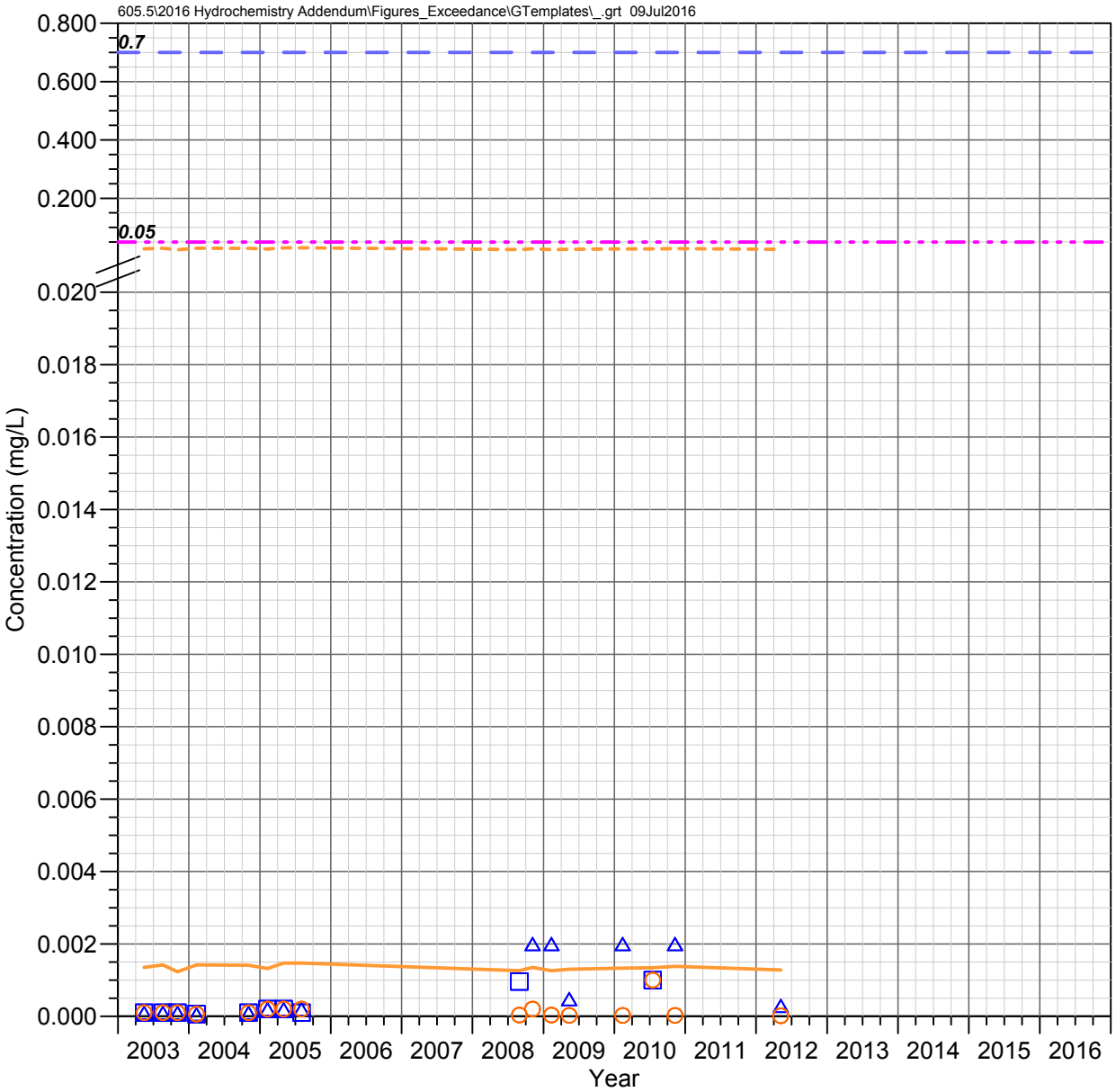


FIGURE F-185. CADMIUM CONCENTRATIONS OBSERVED AT HIDDEN SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Kane Spring
Queen Creek Watershed

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent

- AZ Partial Body Contact (TRC, 0.7 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Agricultural Livestock Watering (UNS, 0.05 mg/L)

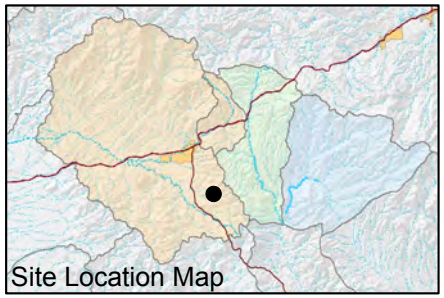
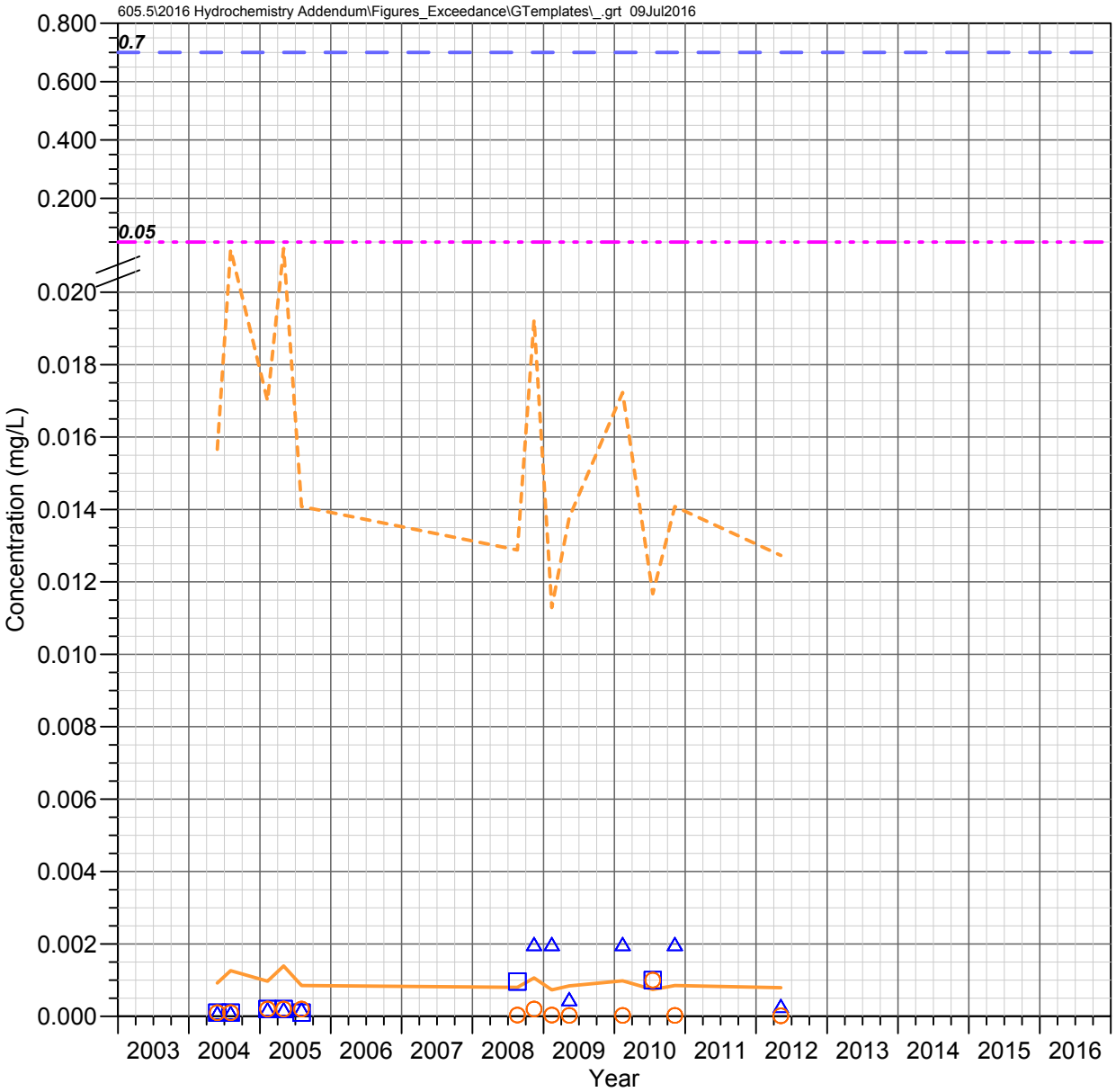


FIGURE F-186. CADMIUM CONCENTRATIONS OBSERVED AT KANE SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Blue Spring
Queen Creek Watershed

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent

- AZ Partial Body Contact (TRC, 0.7 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Agricultural Livestock Watering (UNS, 0.05 mg/L)

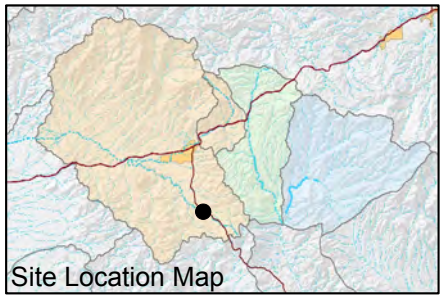
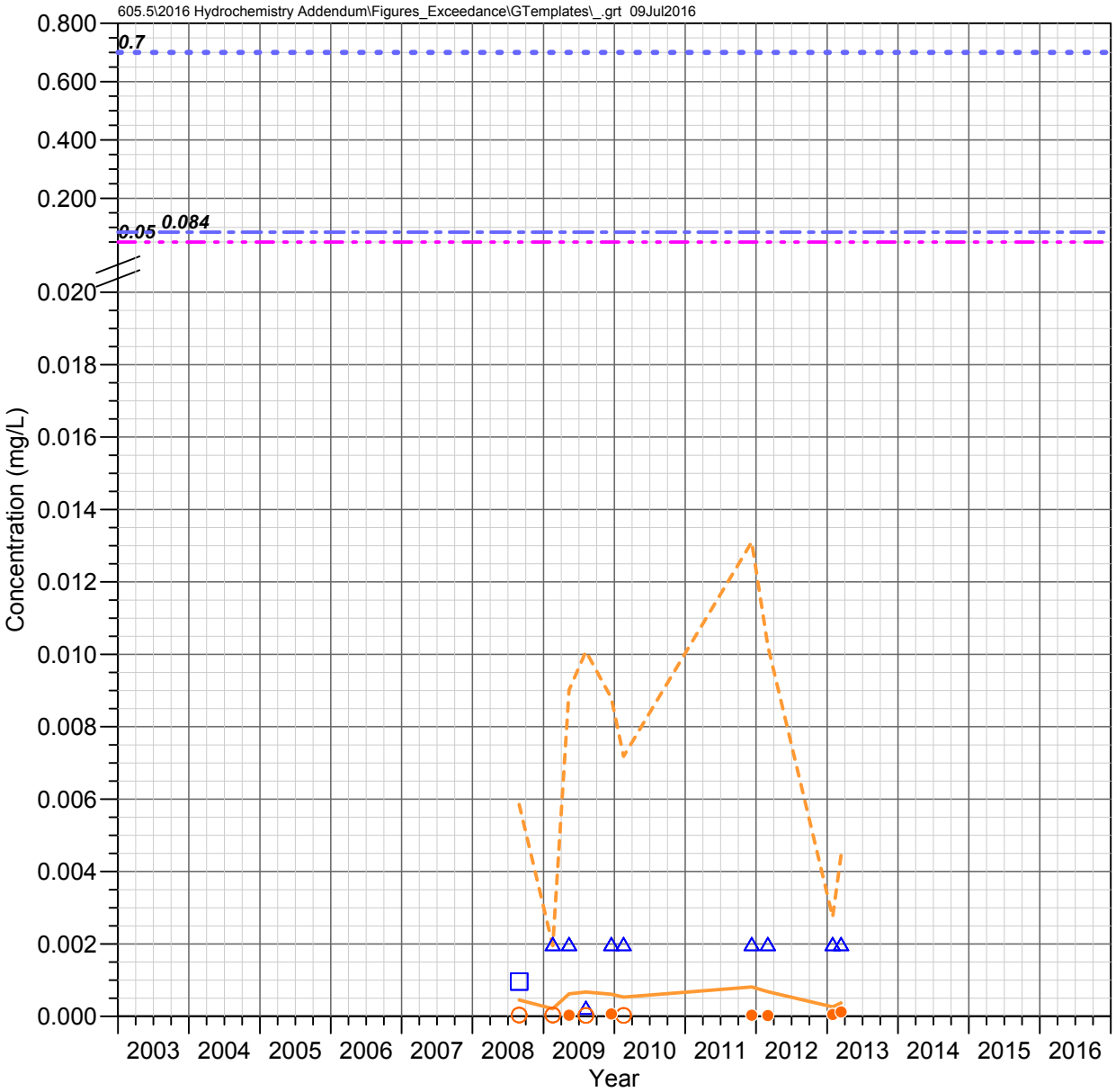


FIGURE F-187. CADMIUM CONCENTRATIONS OBSERVED AT BLUE SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



IC 1.0 C
Devils Canyon Watershed

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent

- AZ Full Body Contact (TRC, 0.7 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Fish Consumption (TRC, 0.084 mg/L)
- AZ Agricultural Livestock Watering (UNS, 0.05 mg/L)

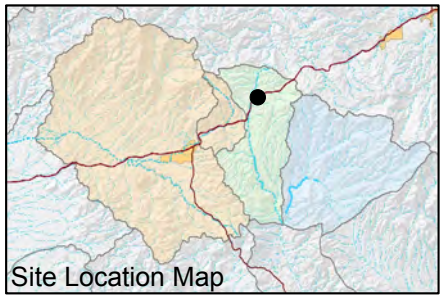
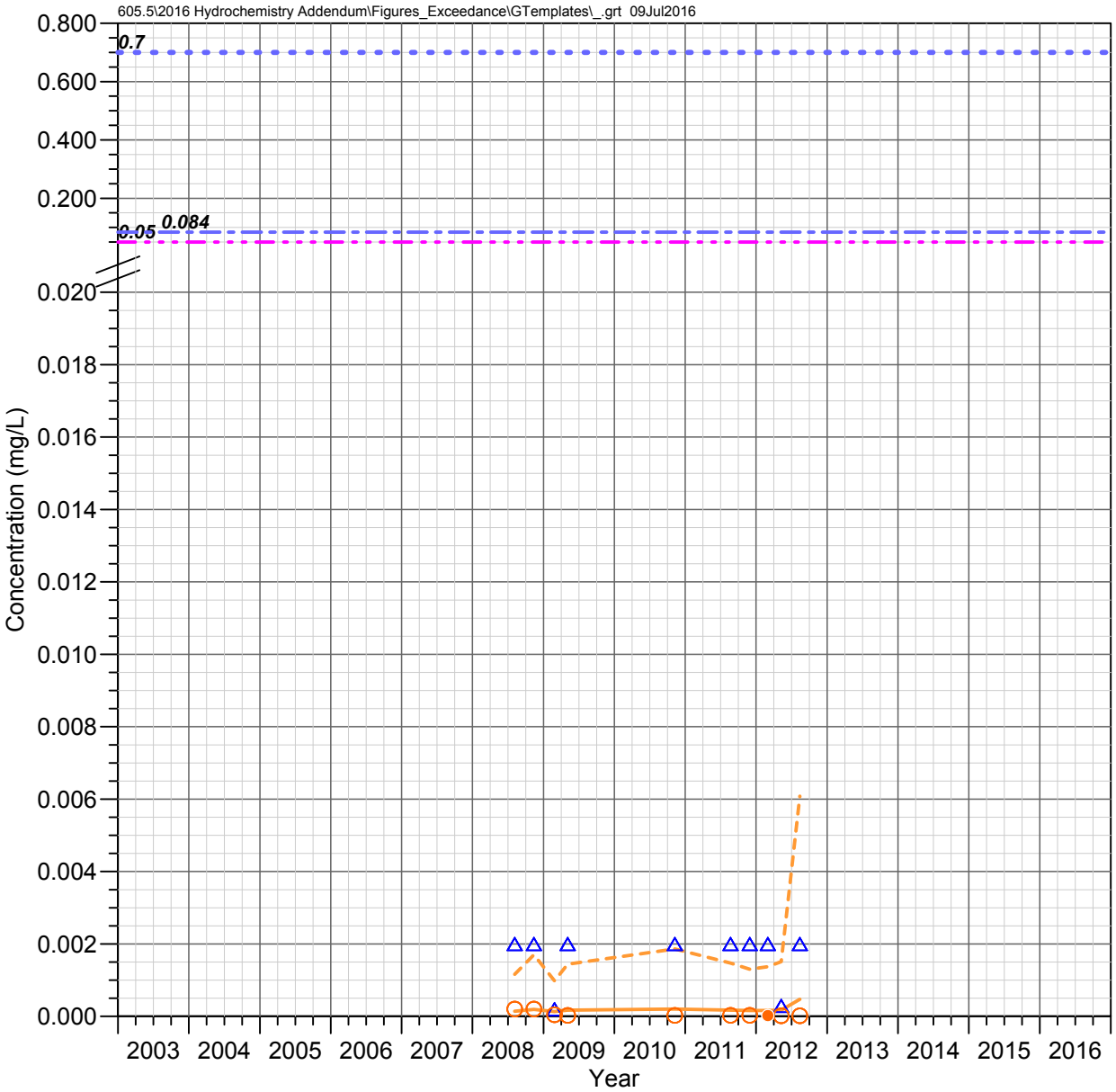


FIGURE F-188. CADMIUM CONCENTRATIONS OBSERVED AT IC 1.0 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 15.5 C
Devils Canyon Watershed

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent

- AZ Full Body Contact (TRC, 0.7 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Fish Consumption (TRC, 0.084 mg/L)
- AZ Agricultural Livestock Watering (UNS, 0.05 mg/L)

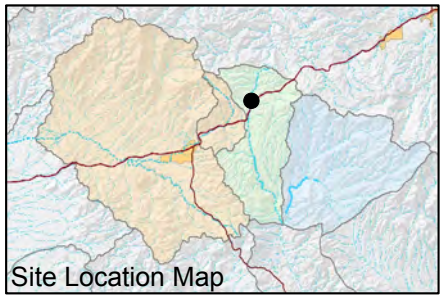
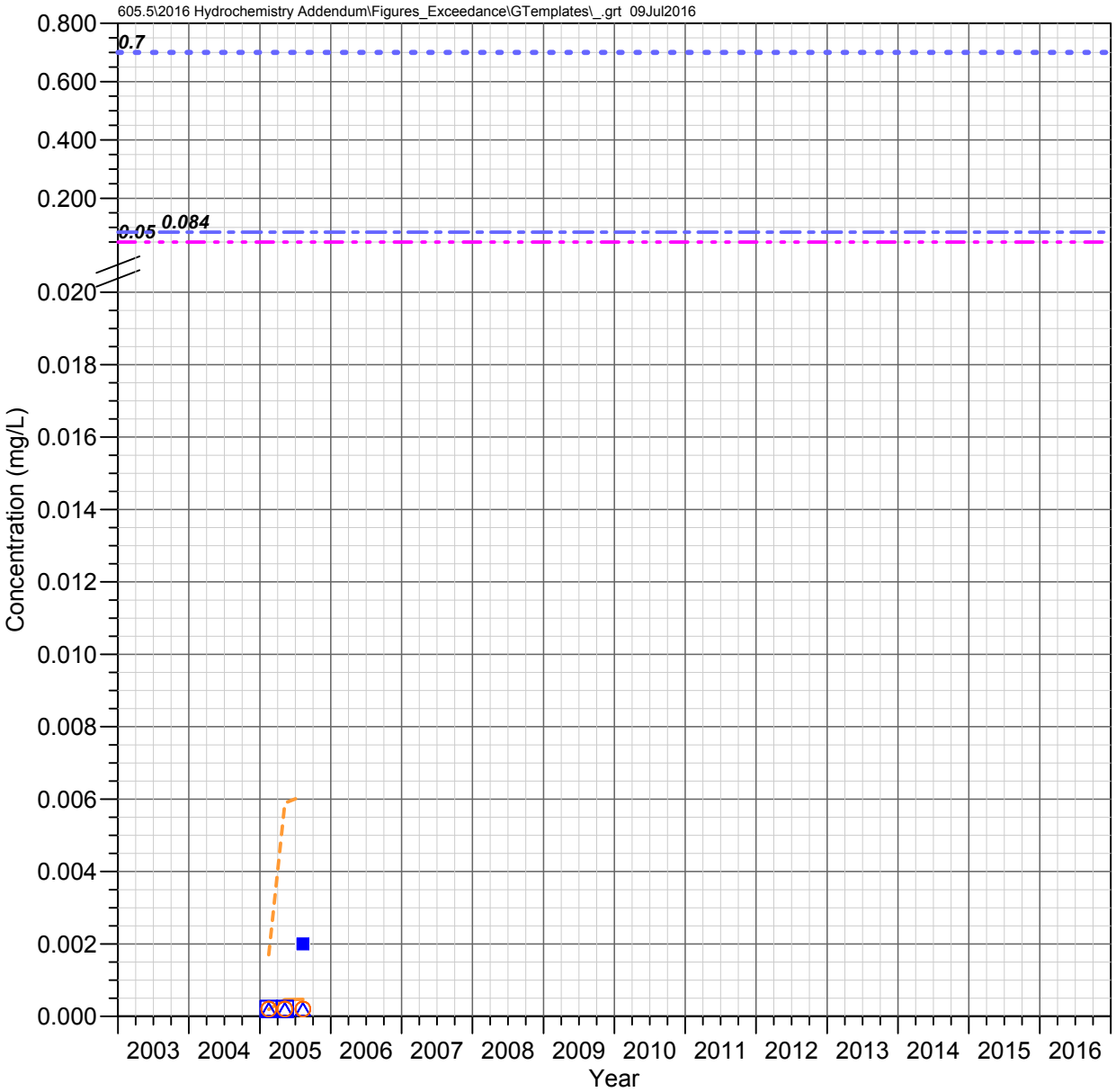


FIGURE F-189. CADMIUM CONCENTRATIONS OBSERVED AT DC 15.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 15.2 C
Devils Canyon Watershed

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent

- AZ Full Body Contact (TRC, 0.7 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Fish Consumption (TRC, 0.084 mg/L)
- AZ Agricultural Livestock Watering (UNS, 0.05 mg/L)

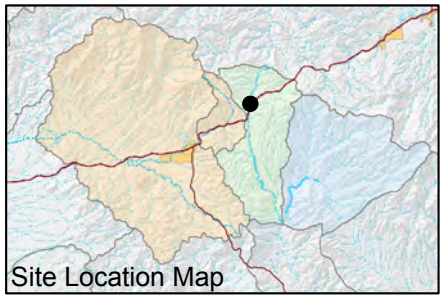
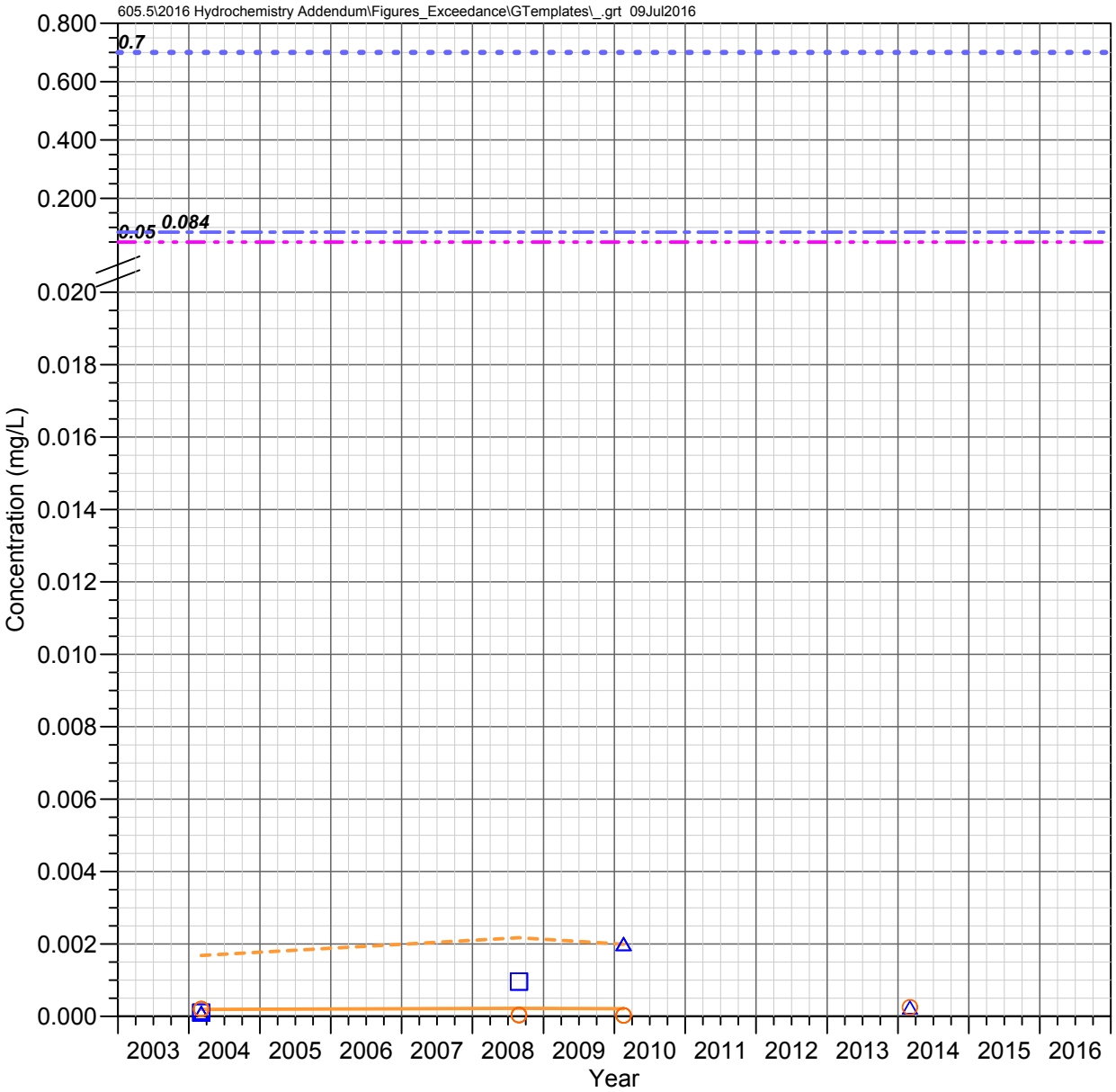


FIGURE F-190. CADMIUM CONCENTRATIONS OBSERVED AT DC 15.2 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 14.7 C
Devils Canyon Watershed

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent

- AZ Full Body Contact (TRC, 0.7 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Fish Consumption (TRC, 0.084 mg/L)
- AZ Agricultural Livestock Watering (UNS, 0.05 mg/L)

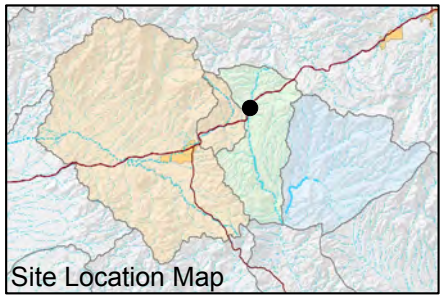
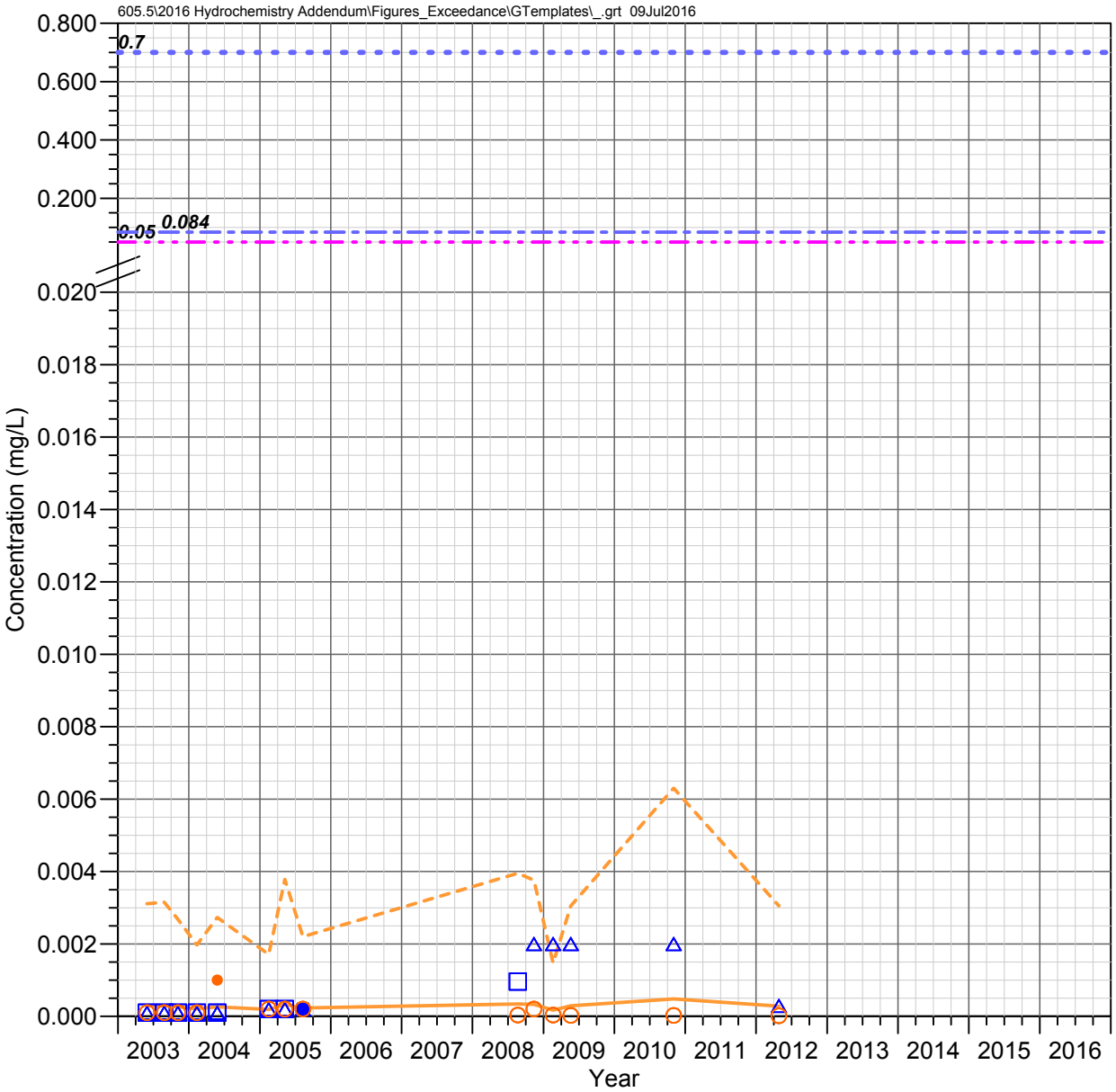


FIGURE F-191. CADMIUM CONCENTRATIONS OBSERVED AT DC 14.7 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 13.5 C
Devils Canyon Watershed

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent

- AZ Full Body Contact (TRC, 0.7 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Fish Consumption (TRC, 0.084 mg/L)
- AZ Agricultural Livestock Watering (UNS, 0.05 mg/L)

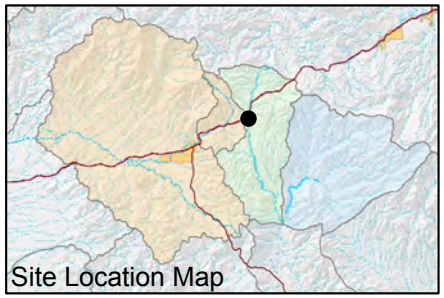
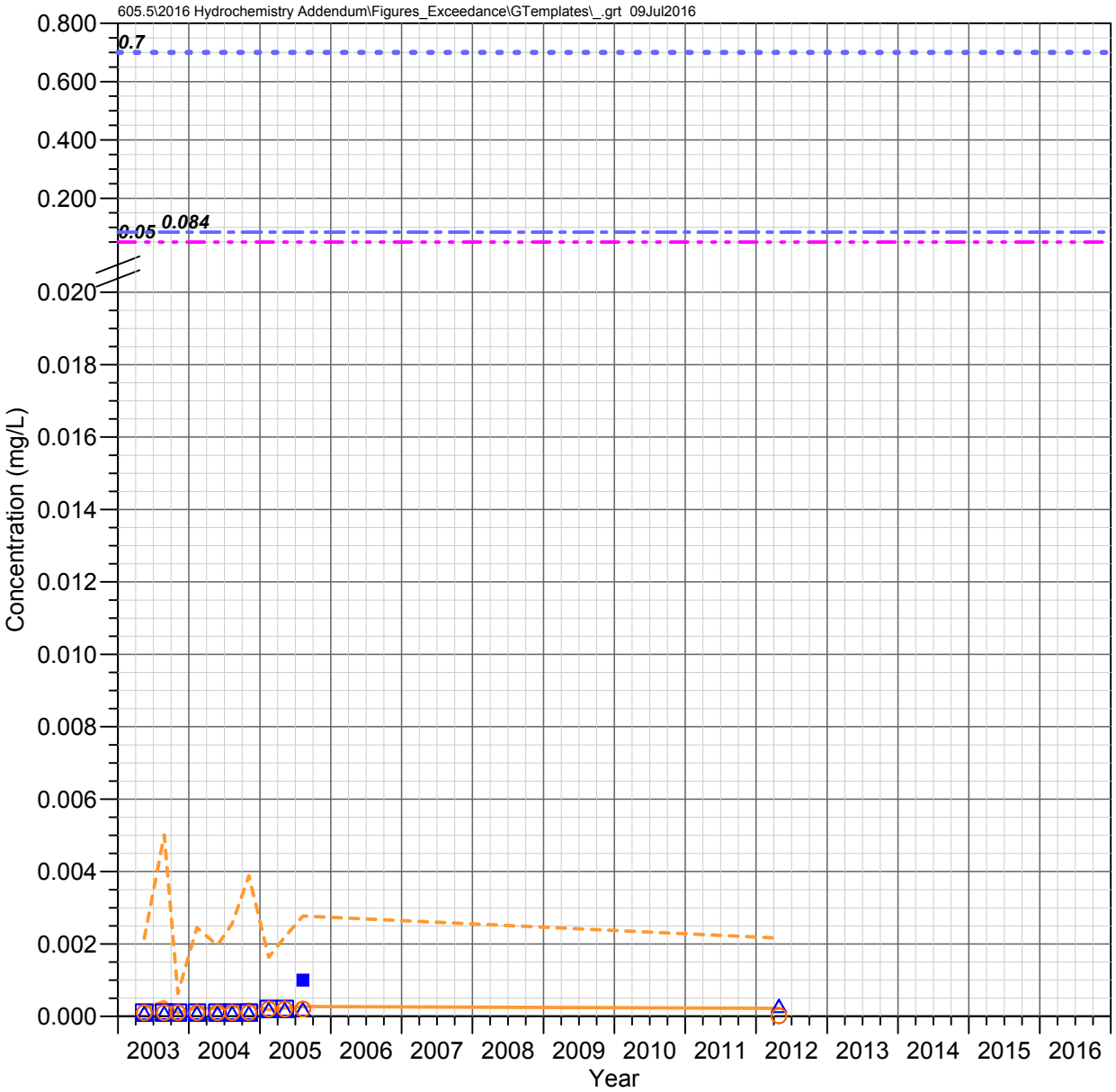


FIGURE F-192. CADMIUM CONCENTRATIONS OBSERVED AT DC 13.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 10.9 C
Devils Canyon Watershed

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent

- AZ Full Body Contact (TRC, 0.7 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Fish Consumption (TRC, 0.084 mg/L)
- AZ Agricultural Livestock Watering (UNS, 0.05 mg/L)

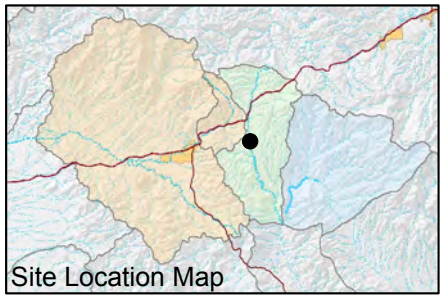
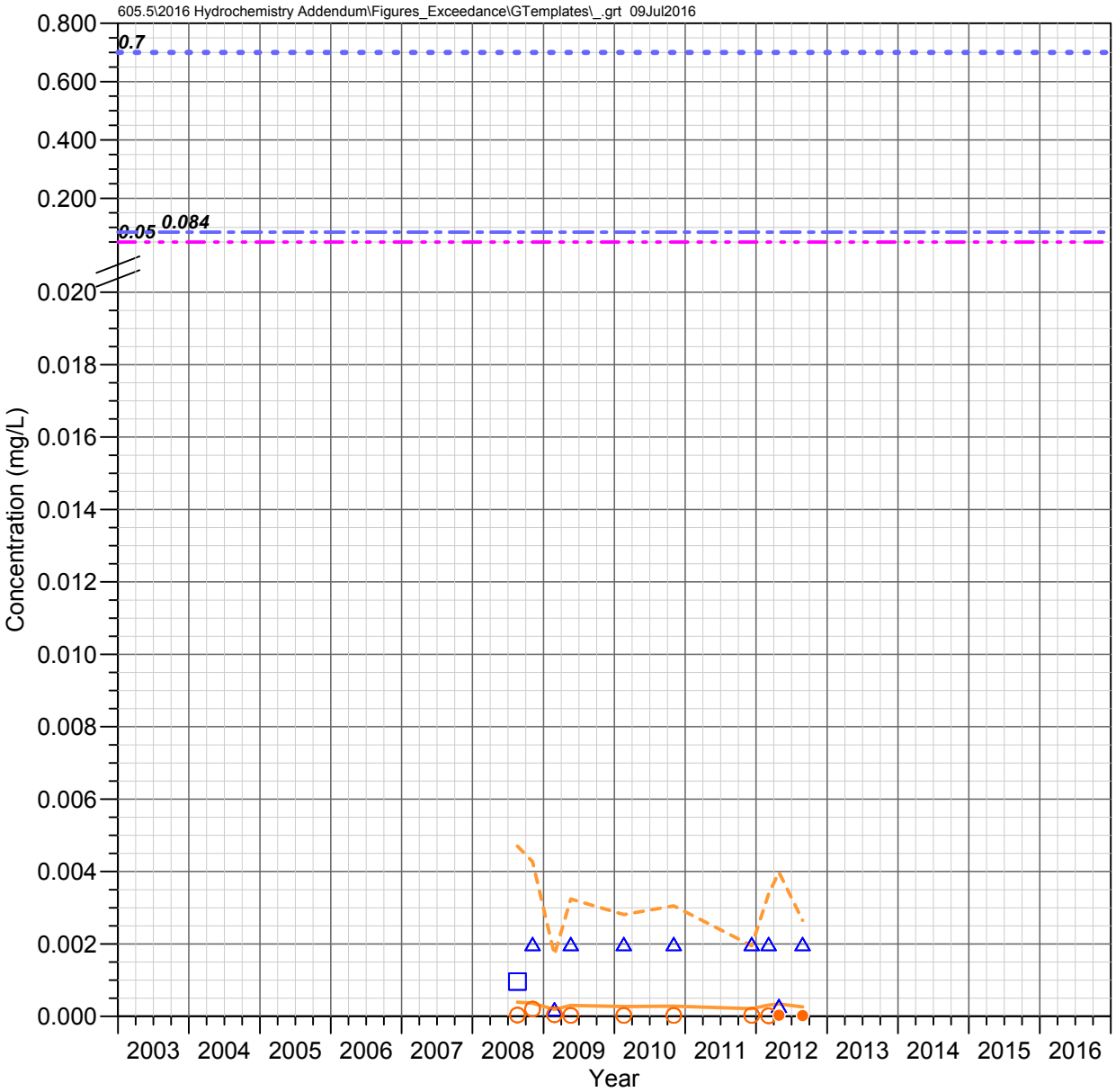


FIGURE F-193. CADMIUM CONCENTRATIONS OBSERVED AT DC 10.9 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



RR 1.5 C
Devils Canyon Watershed

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent

- AZ Full Body Contact (TRC, 0.7 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Fish Consumption (TRC, 0.084 mg/L)
- AZ Agricultural Livestock Watering (UNS, 0.05 mg/L)

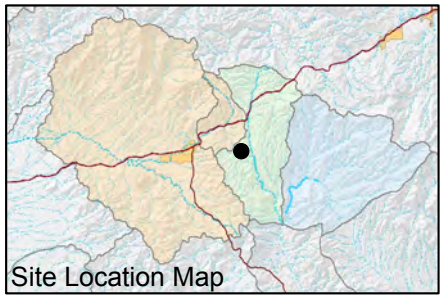
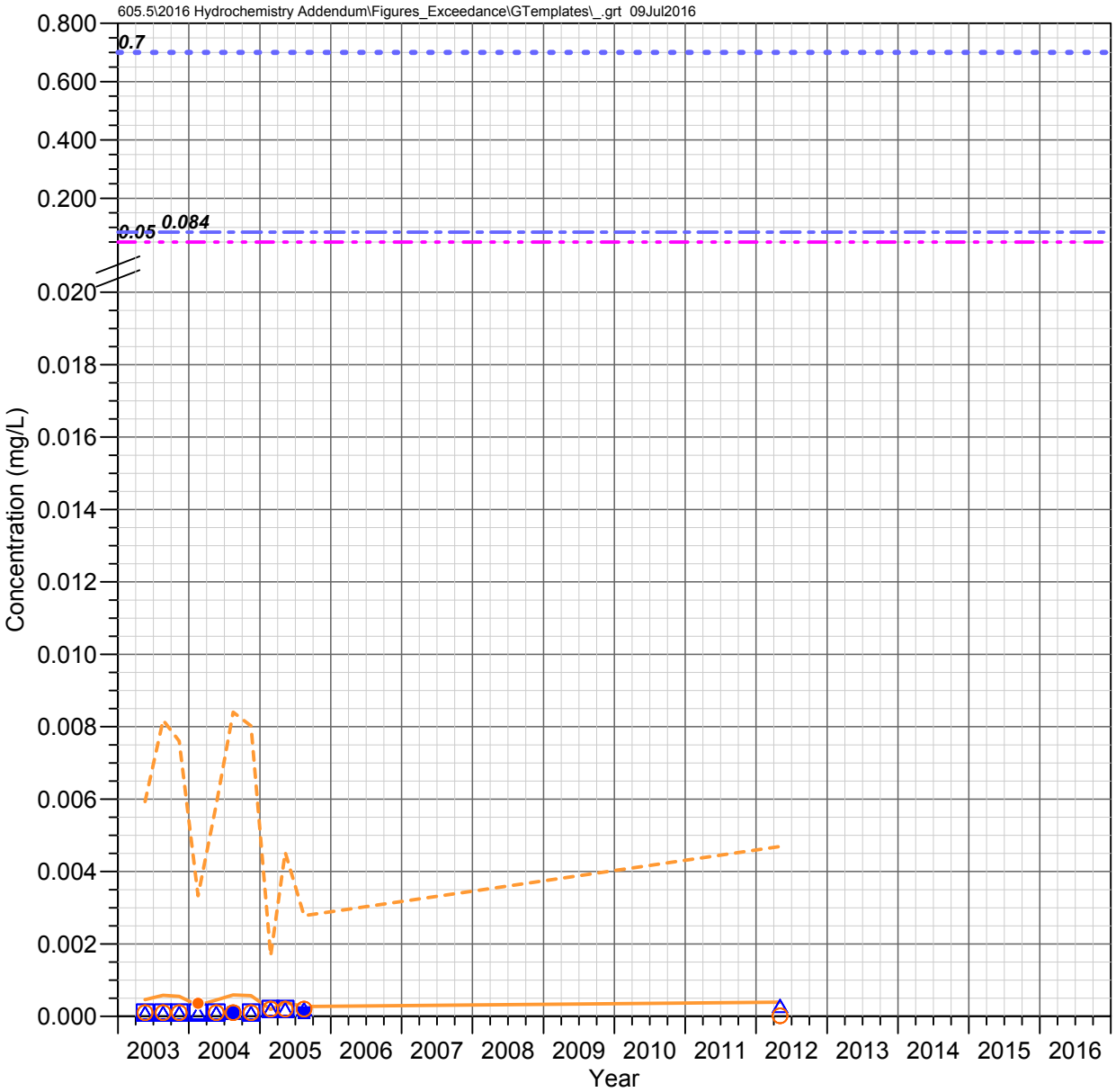


FIGURE F-194. CADMIUM CONCENTRATIONS OBSERVED AT RR 1.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.8 C
Devils Canyon Watershed

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent

- AZ Full Body Contact (TRC, 0.7 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Fish Consumption (TRC, 0.084 mg/L)
- AZ Agricultural Livestock Watering (UNS, 0.05 mg/L)

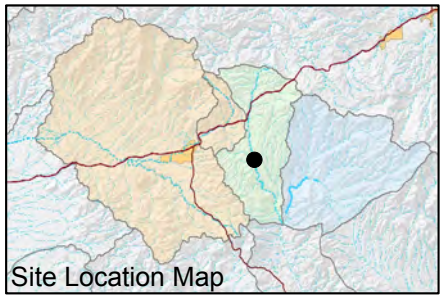
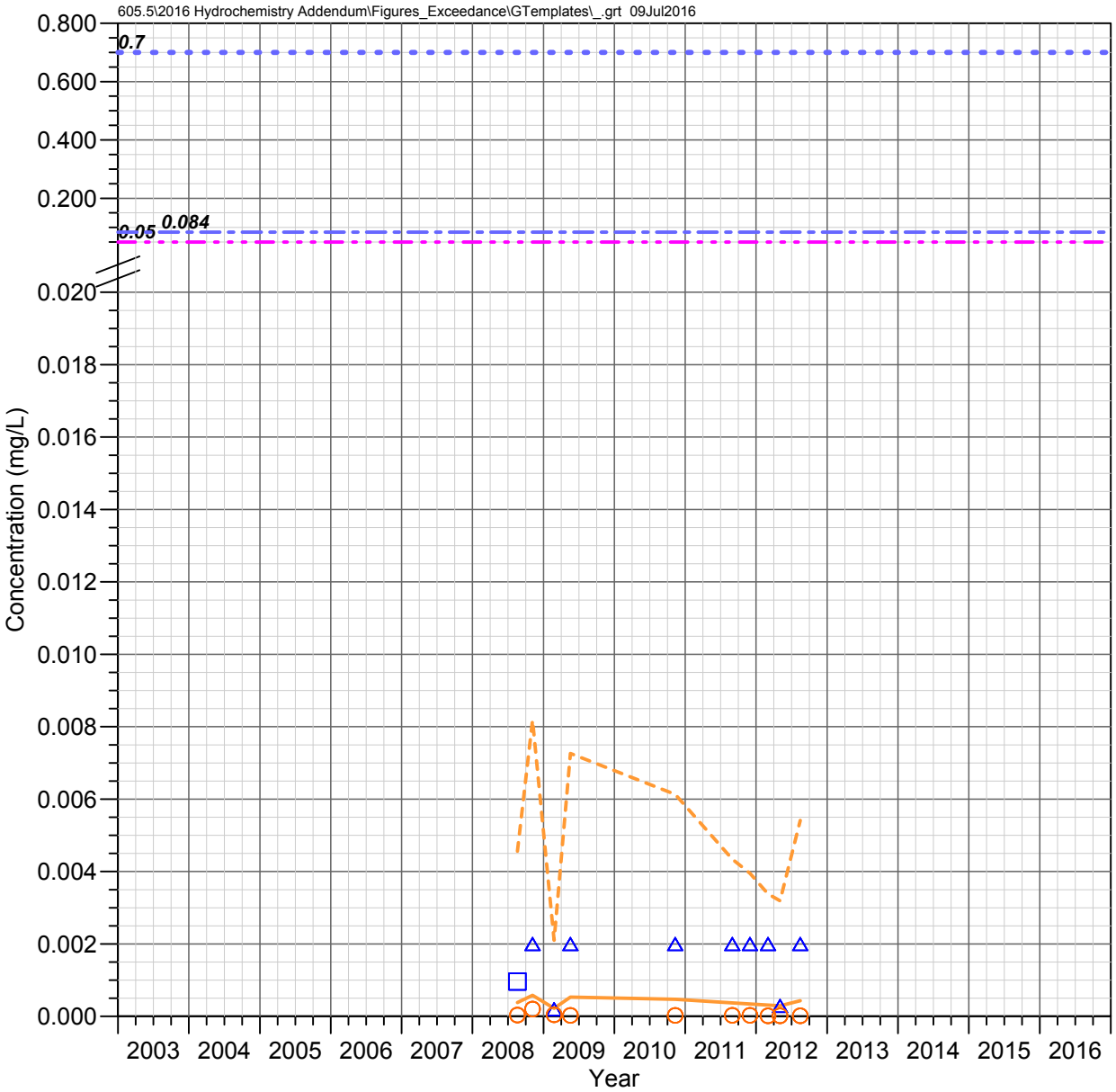


FIGURE F-195. CADMIUM CONCENTRATIONS OBSERVED AT DC 8.8 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



H 0.1 C
Devils Canyon Watershed

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent

- AZ Full Body Contact (TRC, 0.7 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Fish Consumption (TRC, 0.084 mg/L)
- AZ Agricultural Livestock Watering (UNS, 0.05 mg/L)

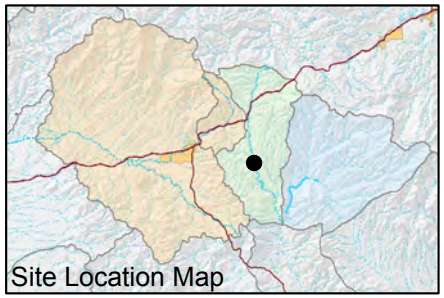
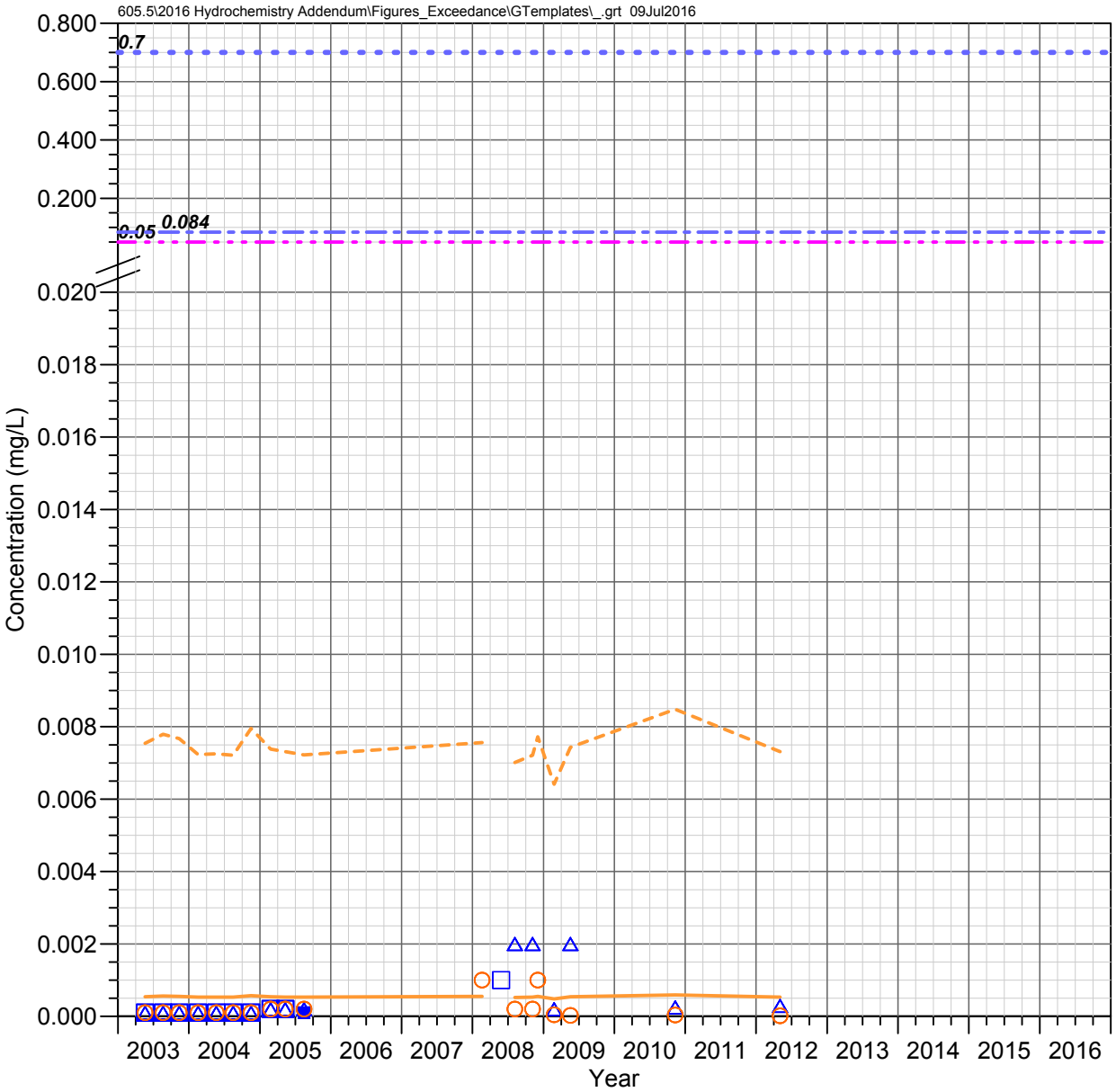


FIGURE F-196. CADMIUM CONCENTRATIONS OBSERVED AT H 0.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.2 W
Devils Canyon Watershed

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent

- AZ Full Body Contact (TRC, 0.7 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Fish Consumption (TRC, 0.084 mg/L)
- AZ Agricultural Livestock Watering (UNS, 0.05 mg/L)

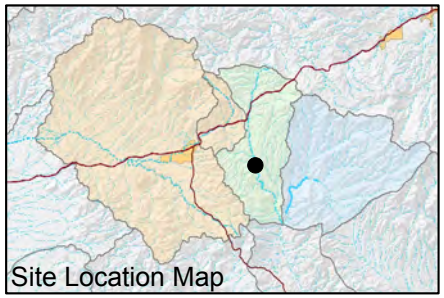
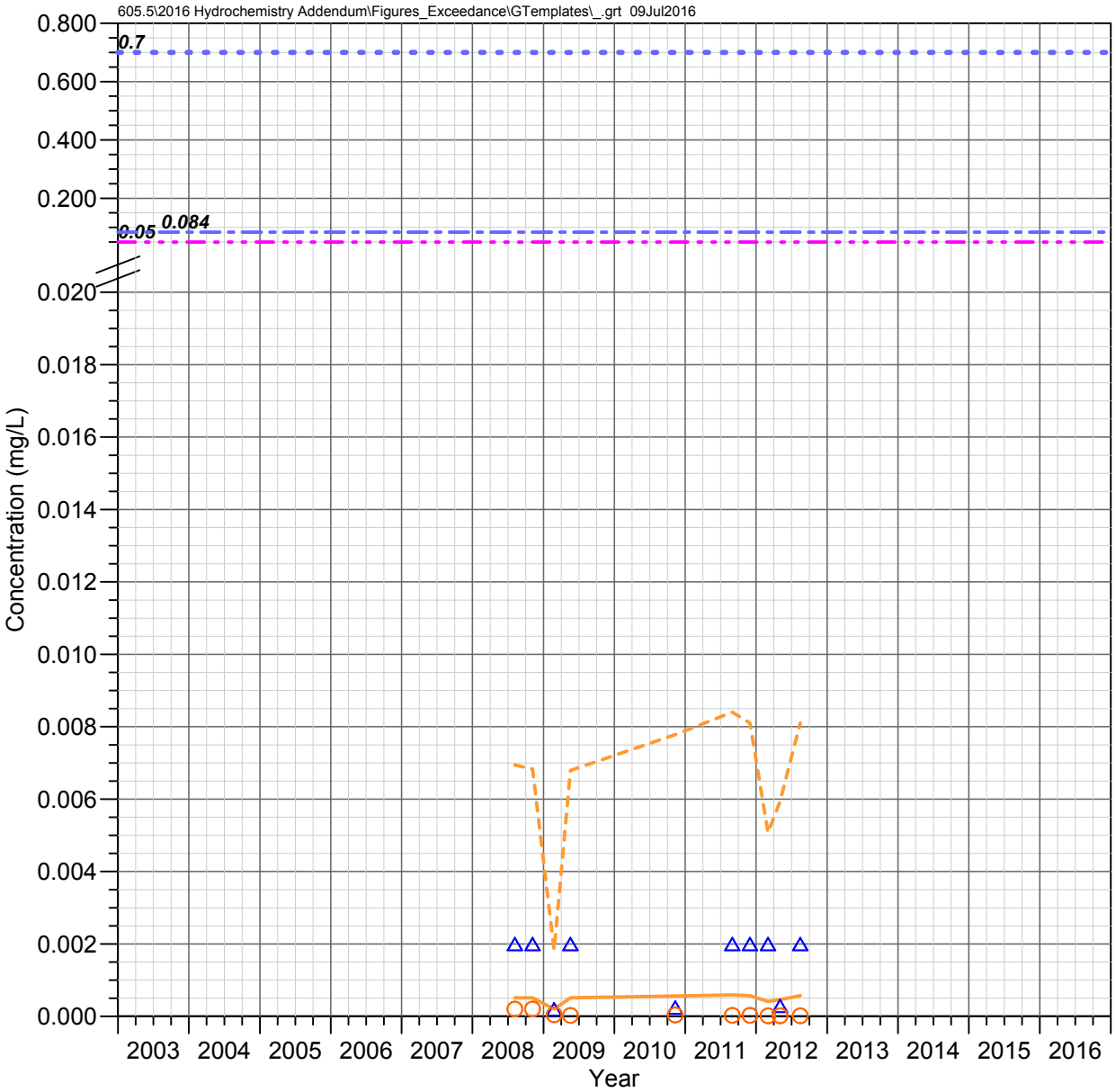


FIGURE F-197. CADMIUM CONCENTRATIONS OBSERVED AT DC 8.2 W, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.1 C
Devils Canyon Watershed

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent

- AZ Full Body Contact (TRC, 0.7 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Fish Consumption (TRC, 0.084 mg/L)
- AZ Agricultural Livestock Watering (UNS, 0.05 mg/L)

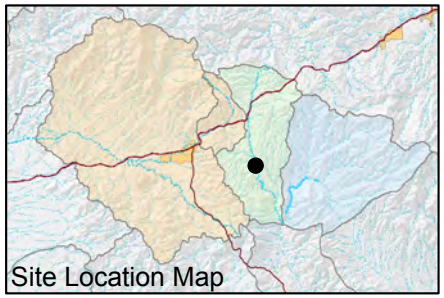
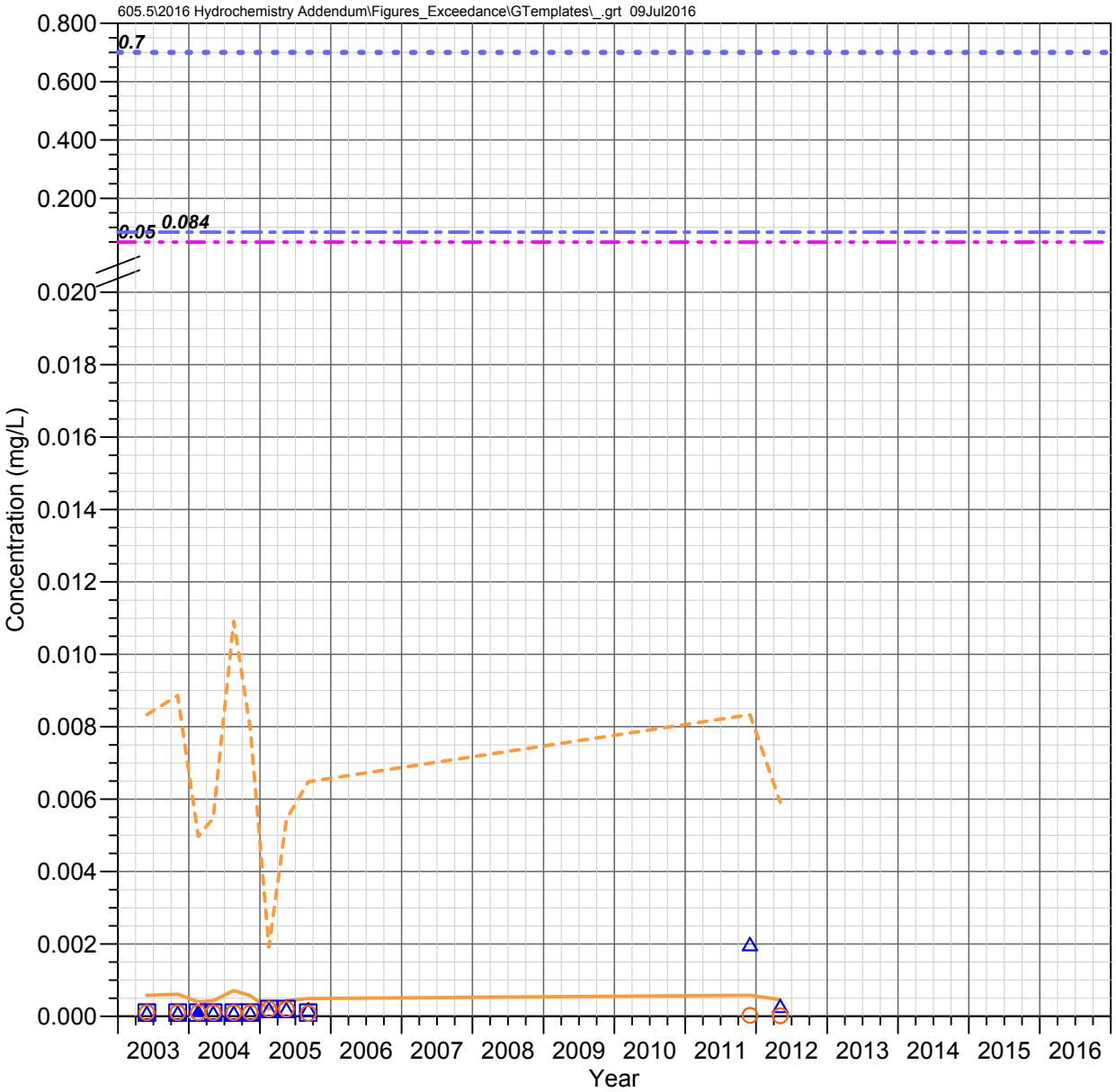


FIGURE F-198. CADMIUM CONCENTRATIONS OBSERVED AT DC 8.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 7.1 C
Devils Canyon Watershed

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent

- AZ Full Body Contact (TRC, 0.7 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Fish Consumption (TRC, 0.084 mg/L)
- AZ Agricultural Livestock Watering (UNS, 0.05 mg/L)

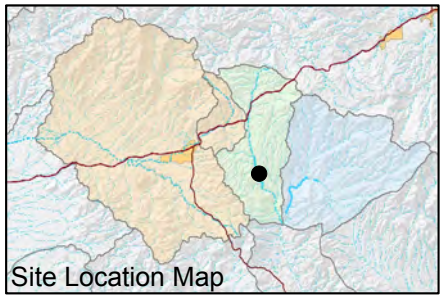
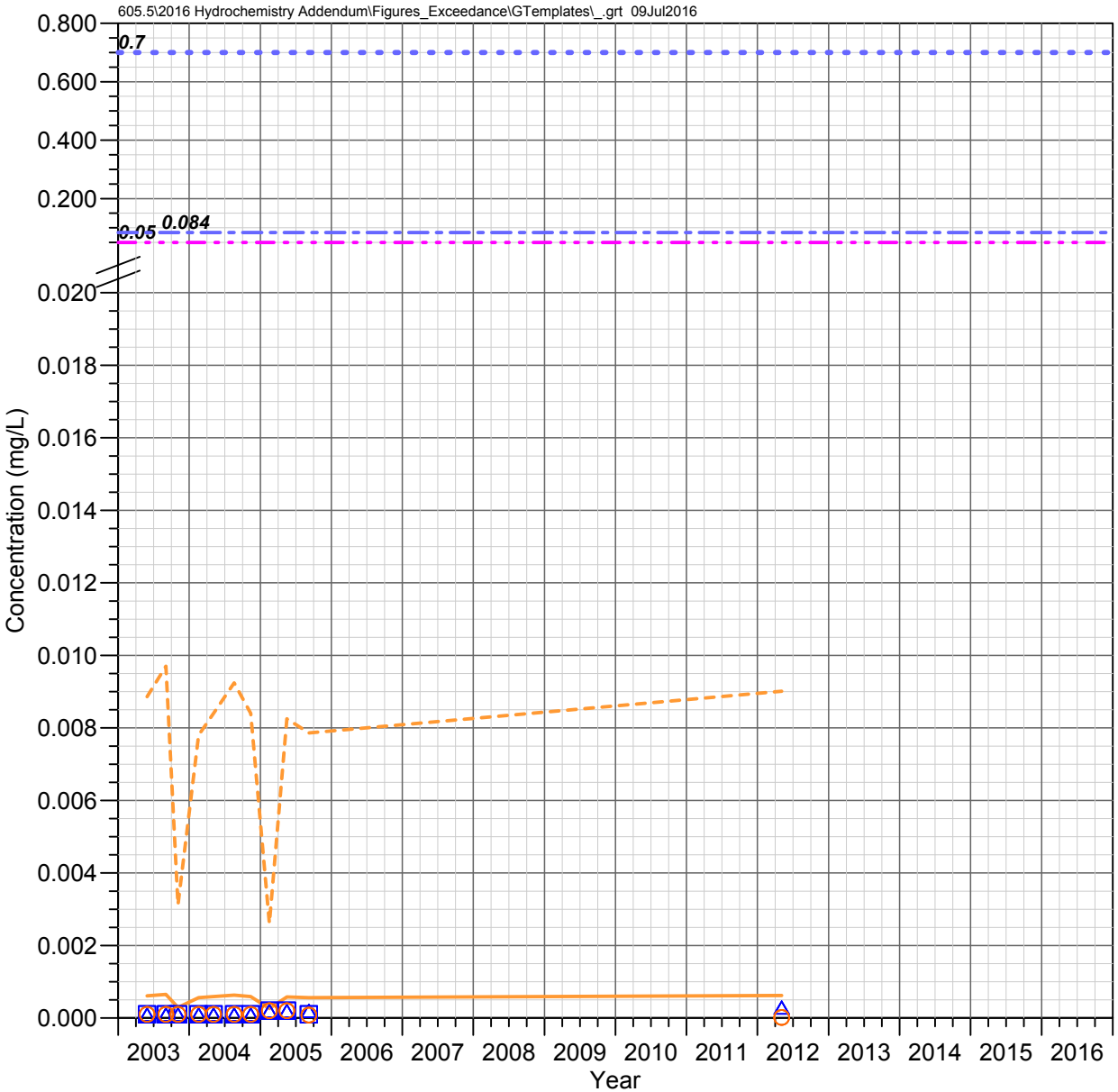


FIGURE F-199. CADMIUM CONCENTRATIONS OBSERVED AT DC 7.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.6 W (DCT 6.6 W)
Devils Canyon Watershed

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent

- AZ Full Body Contact (TRC, 0.7 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Fish Consumption (TRC, 0.084 mg/L)
- AZ Agricultural Livestock Watering (UNS, 0.05 mg/L)

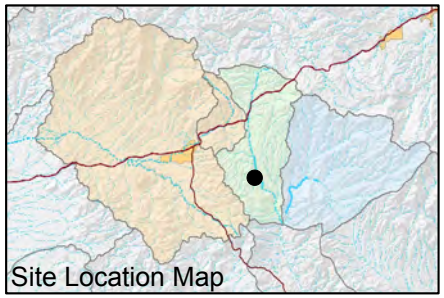
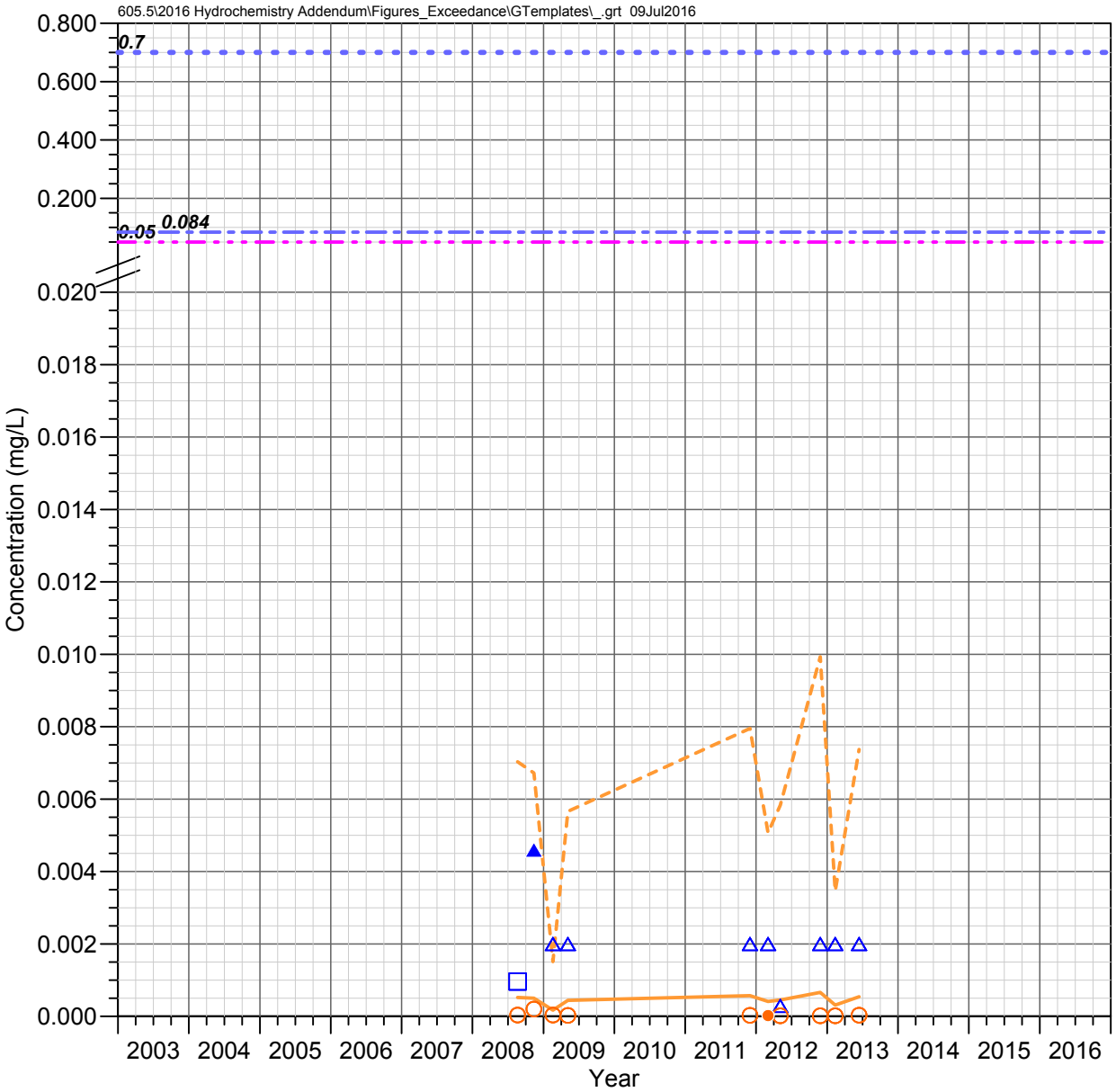


FIGURE F-200. CADMIUM CONCENTRATIONS OBSERVED AT DC 6.6 W (DCT 6.6 W), DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.14 C
Devils Canyon Watershed

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent

- AZ Full Body Contact (TRC, 0.7 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Fish Consumption (TRC, 0.084 mg/L)
- AZ Agricultural Livestock Watering (UNS, 0.05 mg/L)

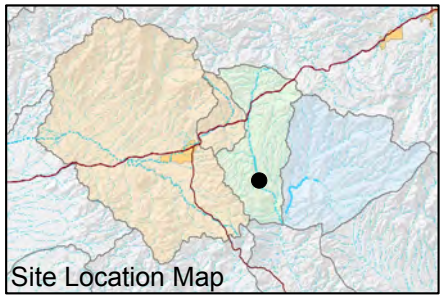
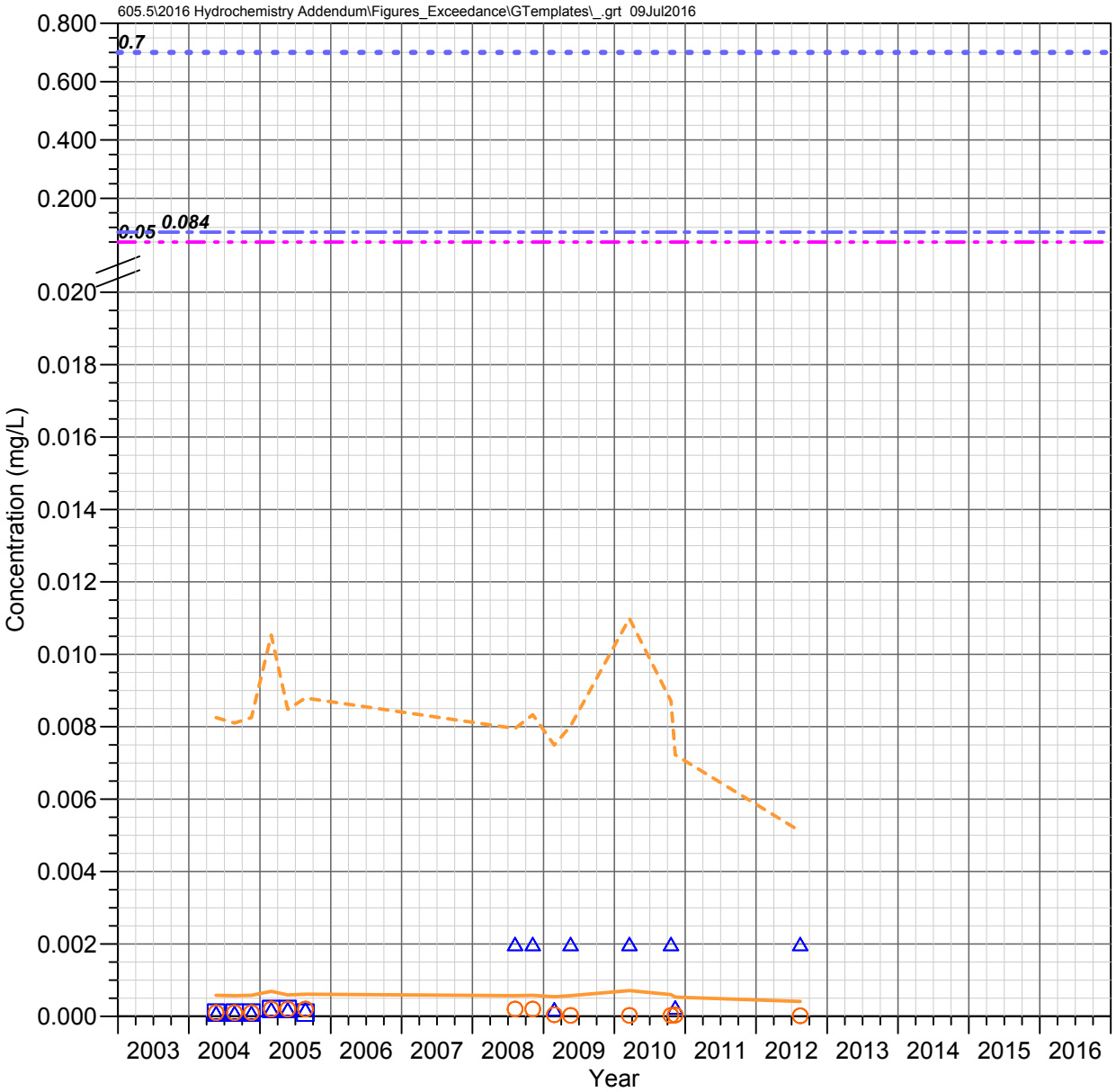


FIGURE F-201. CADMIUM CONCENTRATIONS OBSERVED AT DC 6.14 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.1 E
Devils Canyon Watershed

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent

- AZ Full Body Contact (TRC, 0.7 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Fish Consumption (TRC, 0.084 mg/L)
- AZ Agricultural Livestock Watering (UNS, 0.05 mg/L)

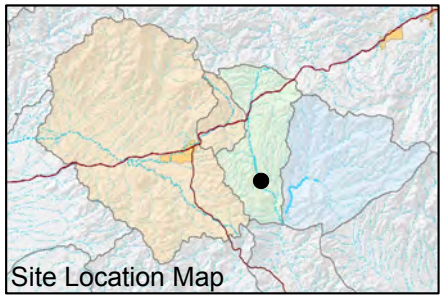
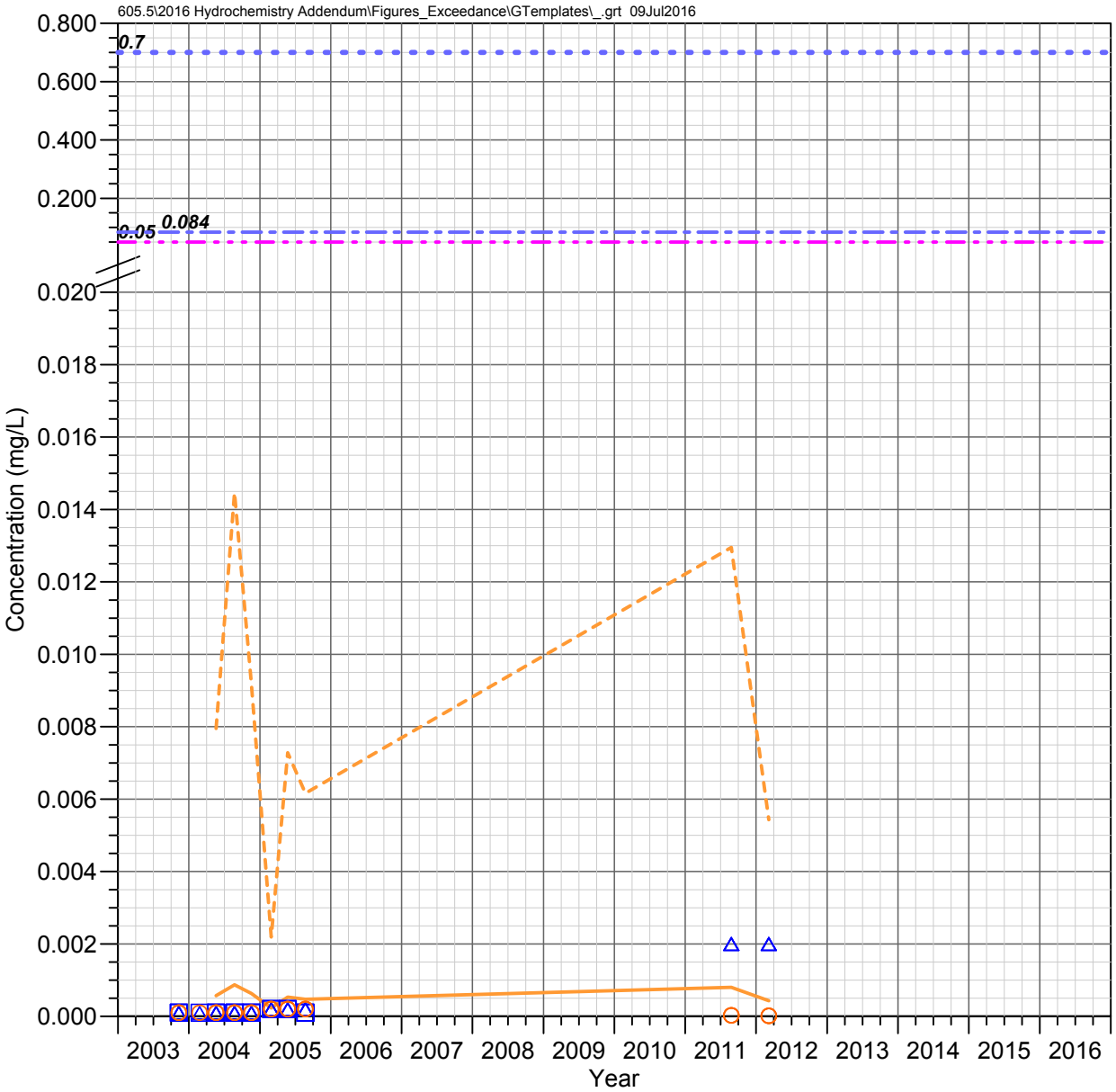


FIGURE F-202. CADMIUM CONCENTRATIONS OBSERVED AT DC 6.1 E, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 5.5 C
Devils Canyon Watershed

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent

- AZ Full Body Contact (TRC, 0.7 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Fish Consumption (TRC, 0.084 mg/L)
- AZ Agricultural Livestock Watering (UNS, 0.05 mg/L)

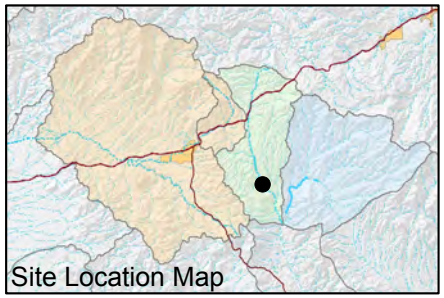
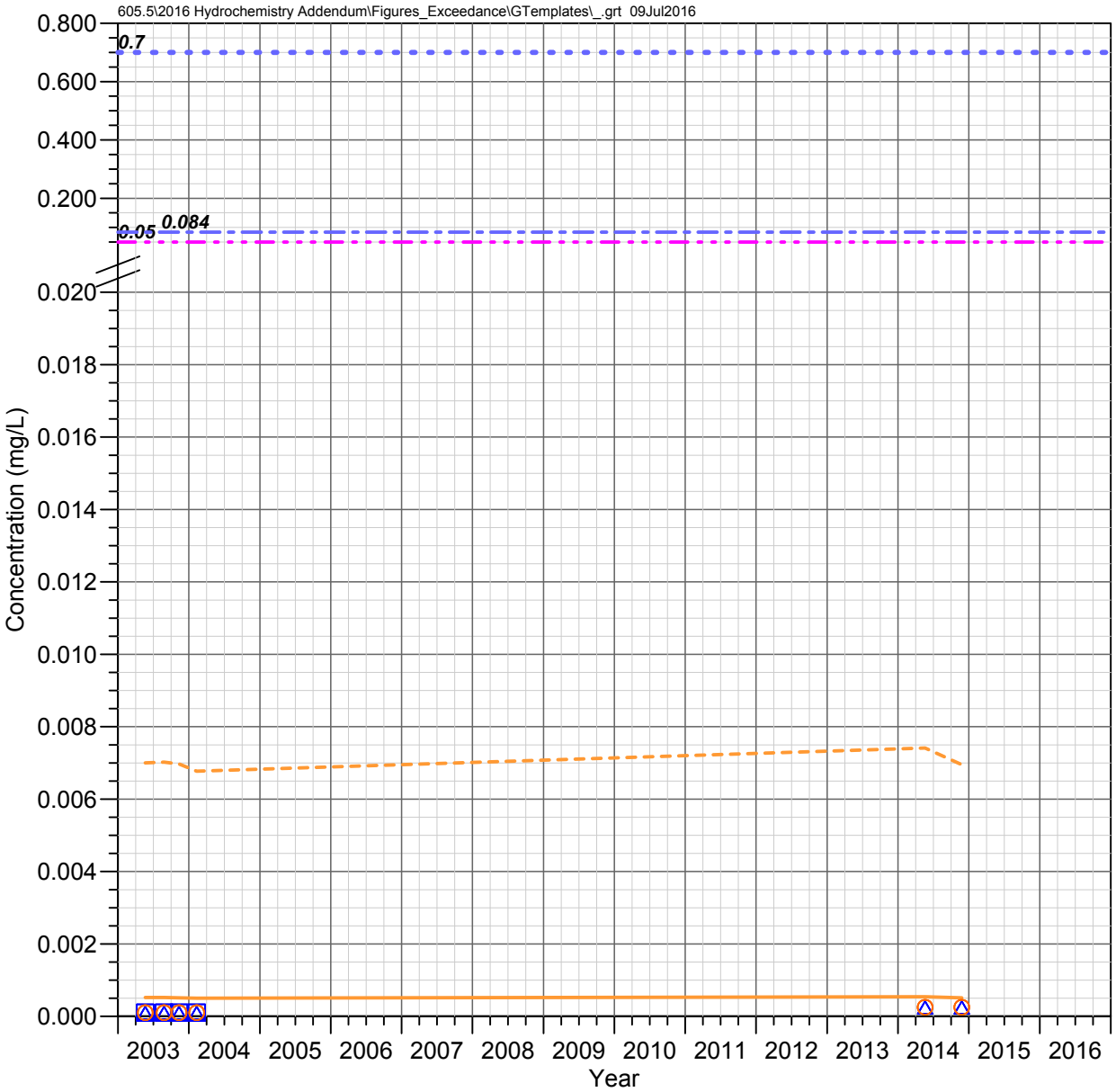


FIGURE F-203. CADMIUM CONCENTRATIONS OBSERVED AT DC 5.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 4.1 E
Devils Canyon Watershed

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent

- AZ Full Body Contact (TRC, 0.7 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Fish Consumption (TRC, 0.084 mg/L)
- AZ Agricultural Livestock Watering (UNS, 0.05 mg/L)

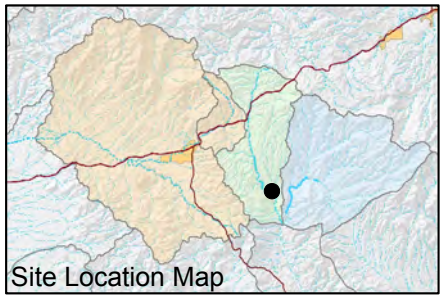
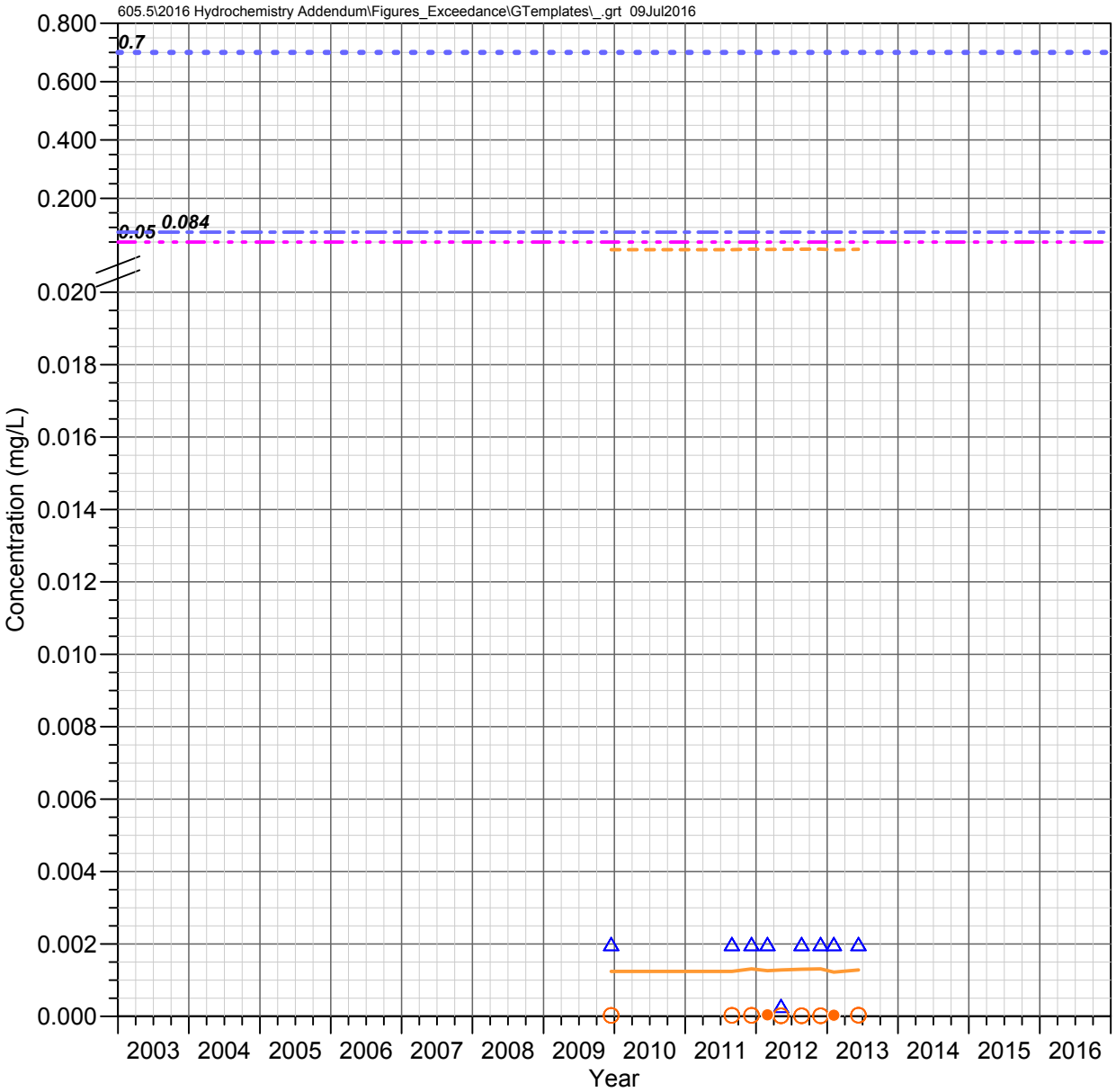


FIGURE F-204. CADMIUM CONCENTRATIONS OBSERVED AT DC 4.1 E, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Government Springs
Mineral Creek Watershed

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent

- AZ Full Body Contact (TRC, 0.7 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Fish Consumption (TRC, 0.084 mg/L)
- AZ Agricultural Livestock Watering (UNS, 0.05 mg/L)

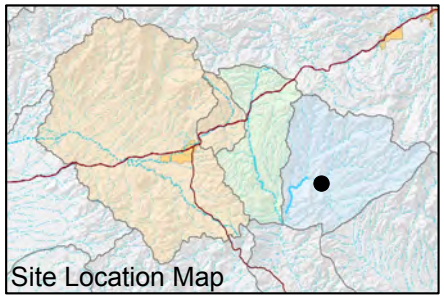
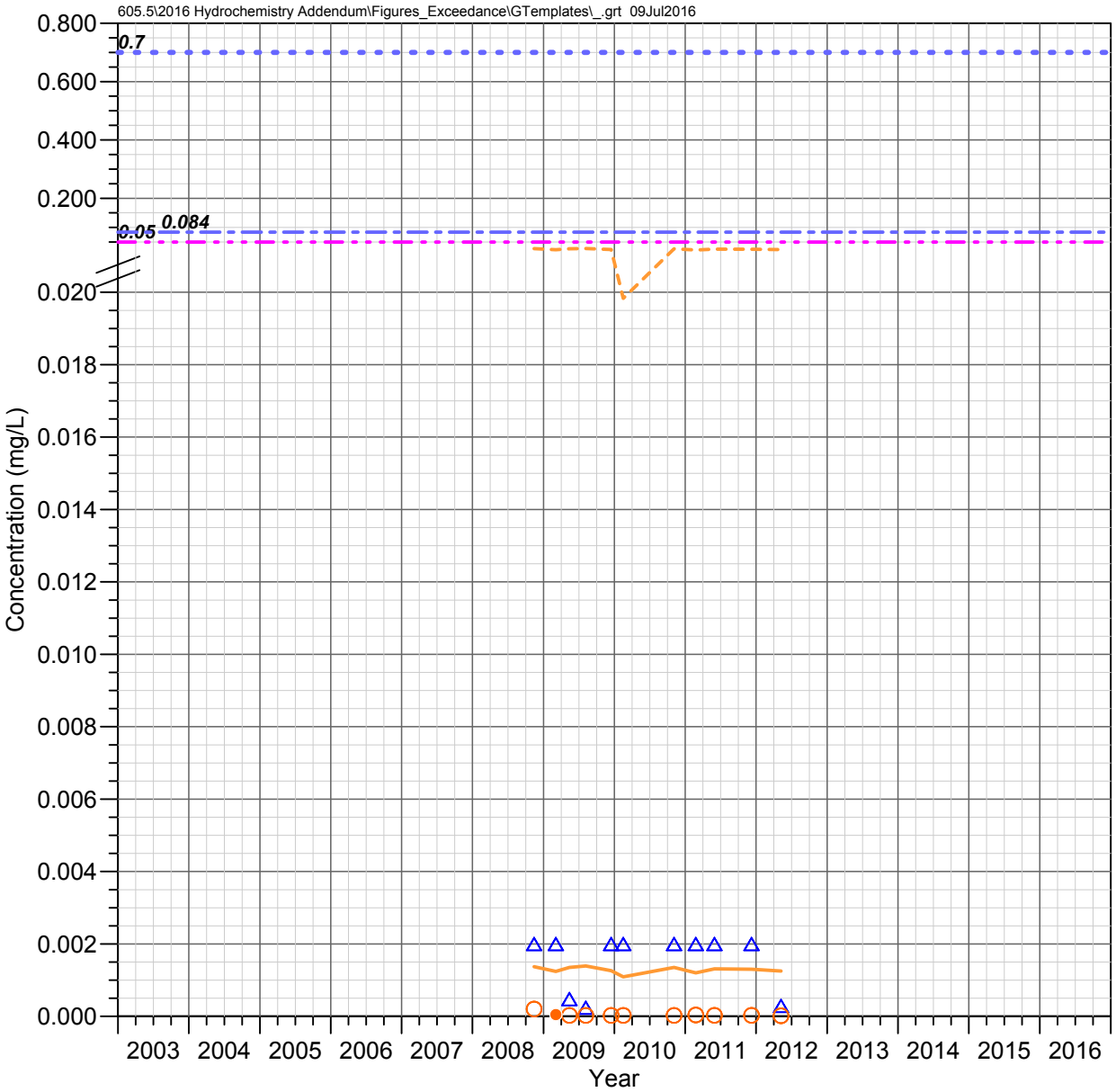


FIGURE F-205. CADMIUM CONCENTRATIONS OBSERVED AT GOVERNMENT SPRINGS, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 8.4 C
Mineral Creek Watershed

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent

- AZ Full Body Contact (TRC, 0.7 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Fish Consumption (TRC, 0.084 mg/L)
- AZ Agricultural Livestock Watering (UNS, 0.05 mg/L)

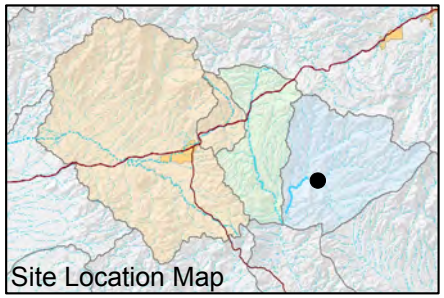
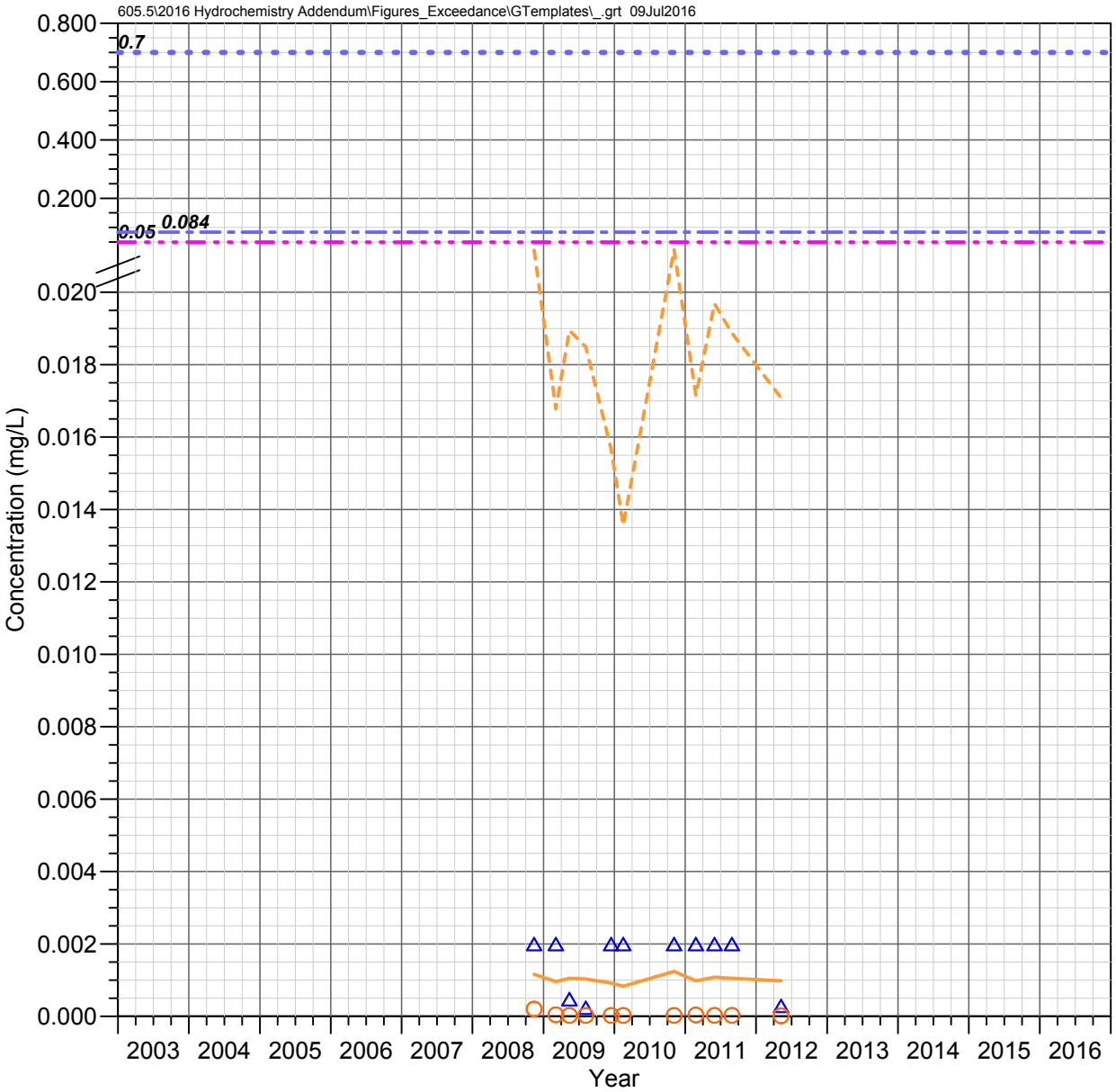


FIGURE F-206. CADMIUM CONCENTRATIONS OBSERVED AT MC 8.4 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



LF 0.2 C
Mineral Creek Watershed

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent

- AZ Full Body Contact (TRC, 0.7 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Fish Consumption (TRC, 0.084 mg/L)
- AZ Agricultural Livestock Watering (UNS, 0.05 mg/L)

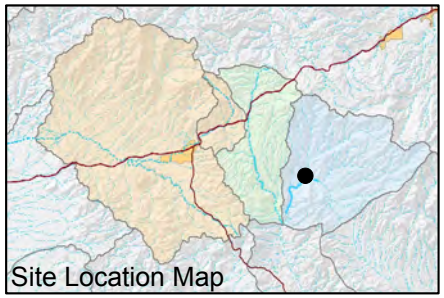
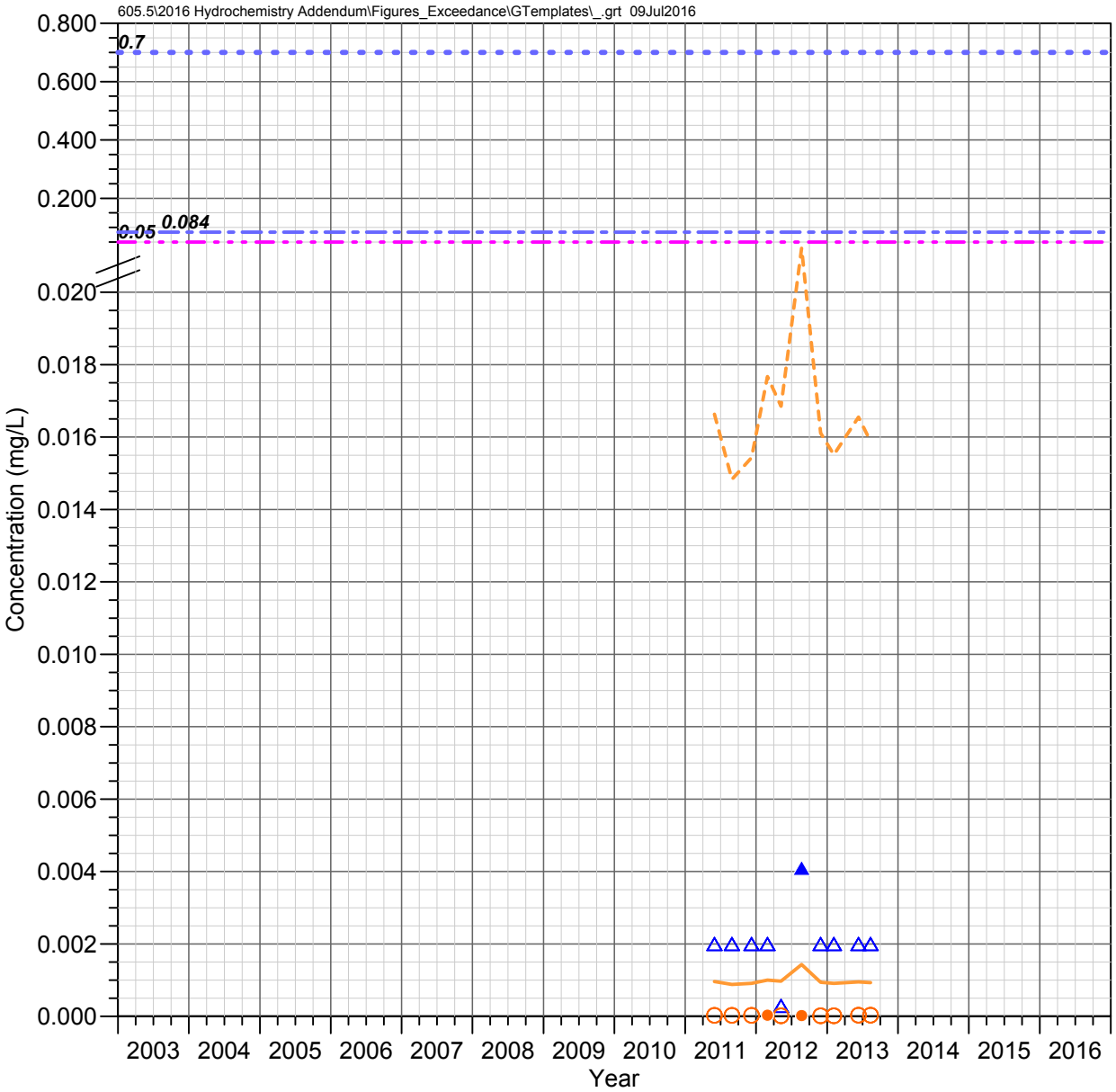


FIGURE F-207. CADMIUM CONCENTRATIONS OBSERVED AT LF 0.2 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 5.2 C
Mineral Creek Watershed

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent

- AZ Full Body Contact (TRC, 0.7 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Fish Consumption (TRC, 0.084 mg/L)
- AZ Agricultural Livestock Watering (UNS, 0.05 mg/L)

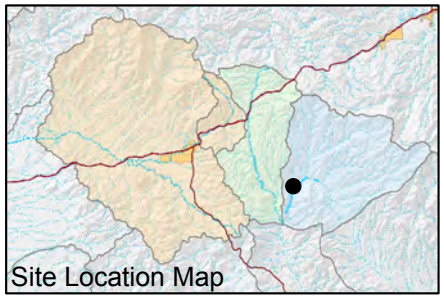
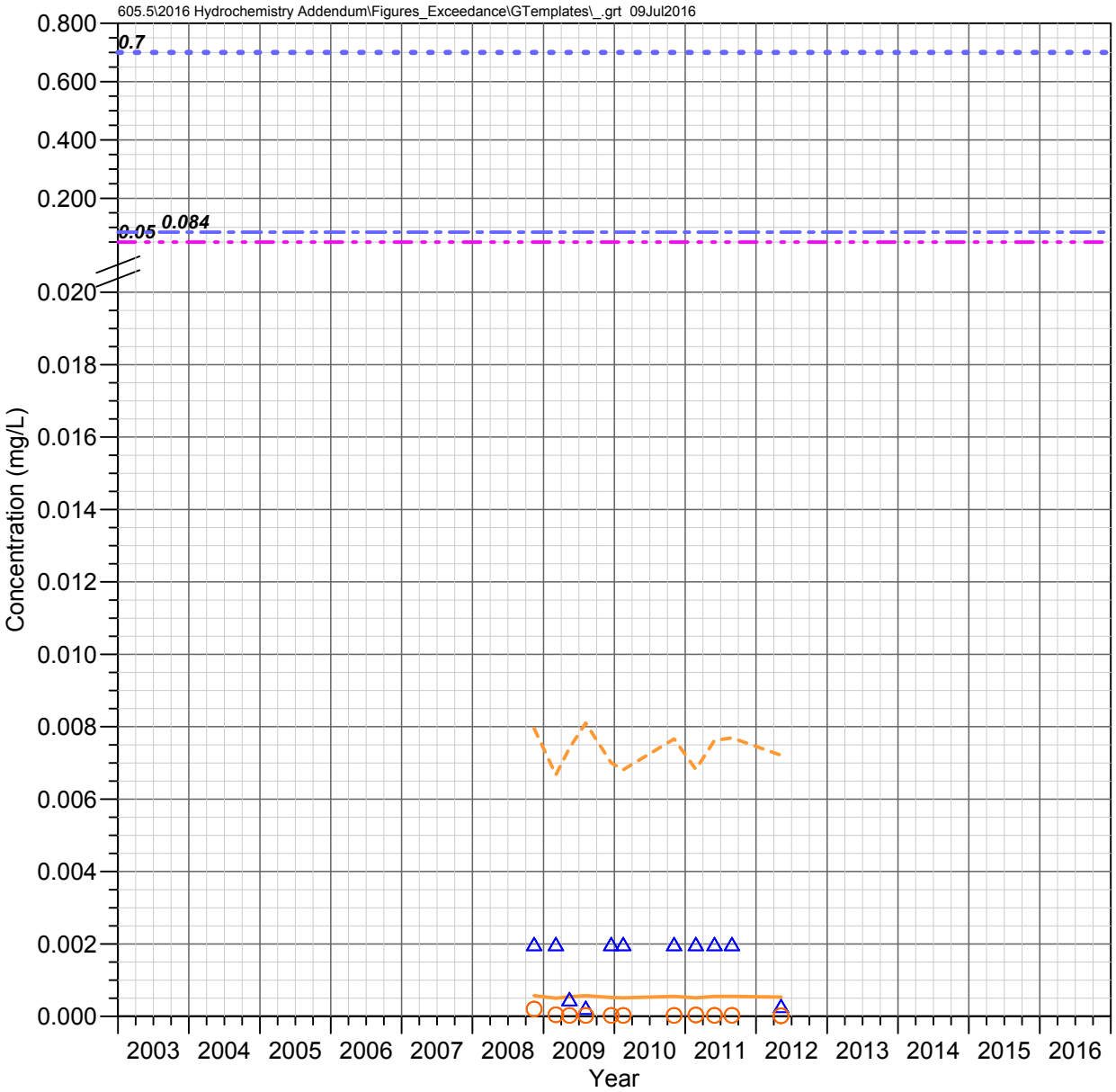


FIGURE F-208. CADMIUM CONCENTRATIONS OBSERVED AT MC 5.2 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 3.4 W (Wet Leg Spring)
Mineral Creek Watershed

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent

- AZ Full Body Contact (TRC, 0.7 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Fish Consumption (TRC, 0.084 mg/L)
- AZ Agricultural Livestock Watering (UNS, 0.05 mg/L)

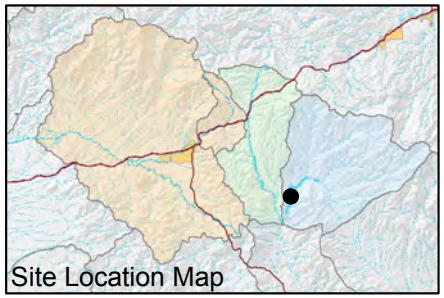
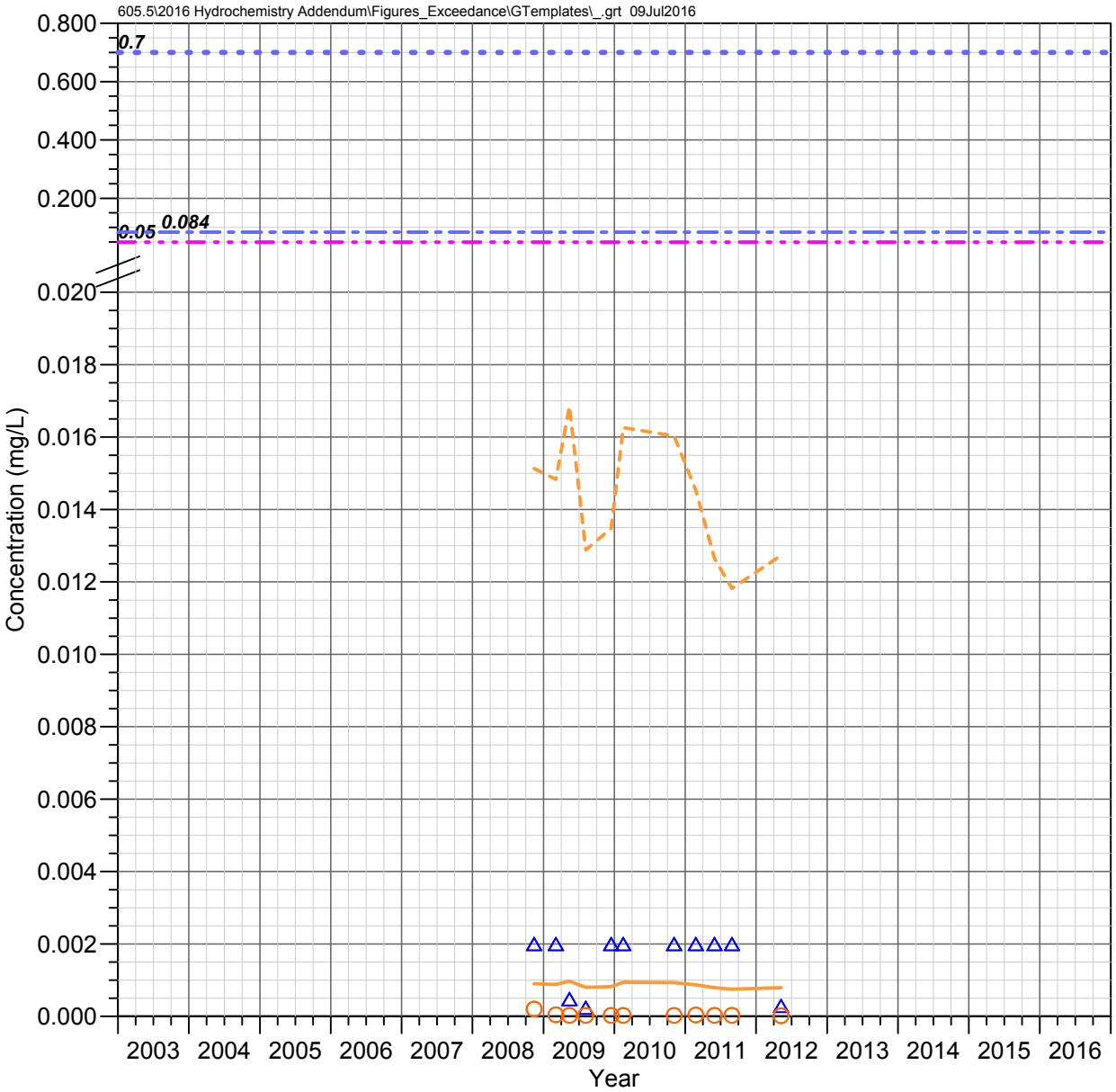


FIGURE F-209. CADMIUM CONCENTRATIONS OBSERVED AT MC 3.4 W (WET LEG SPRING), MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 3.3 C (Lower Mineral)
Mineral Creek Watershed

CADMIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent

- AZ Full Body Contact (TRC, 0.7 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Fish Consumption (TRC, 0.084 mg/L)
- AZ Agricultural Livestock Watering (UNS, 0.05 mg/L)

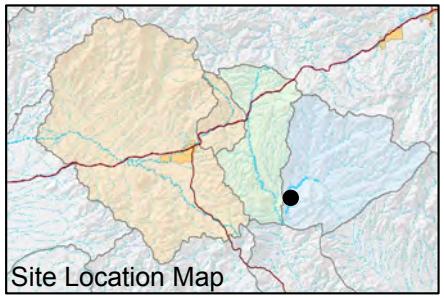
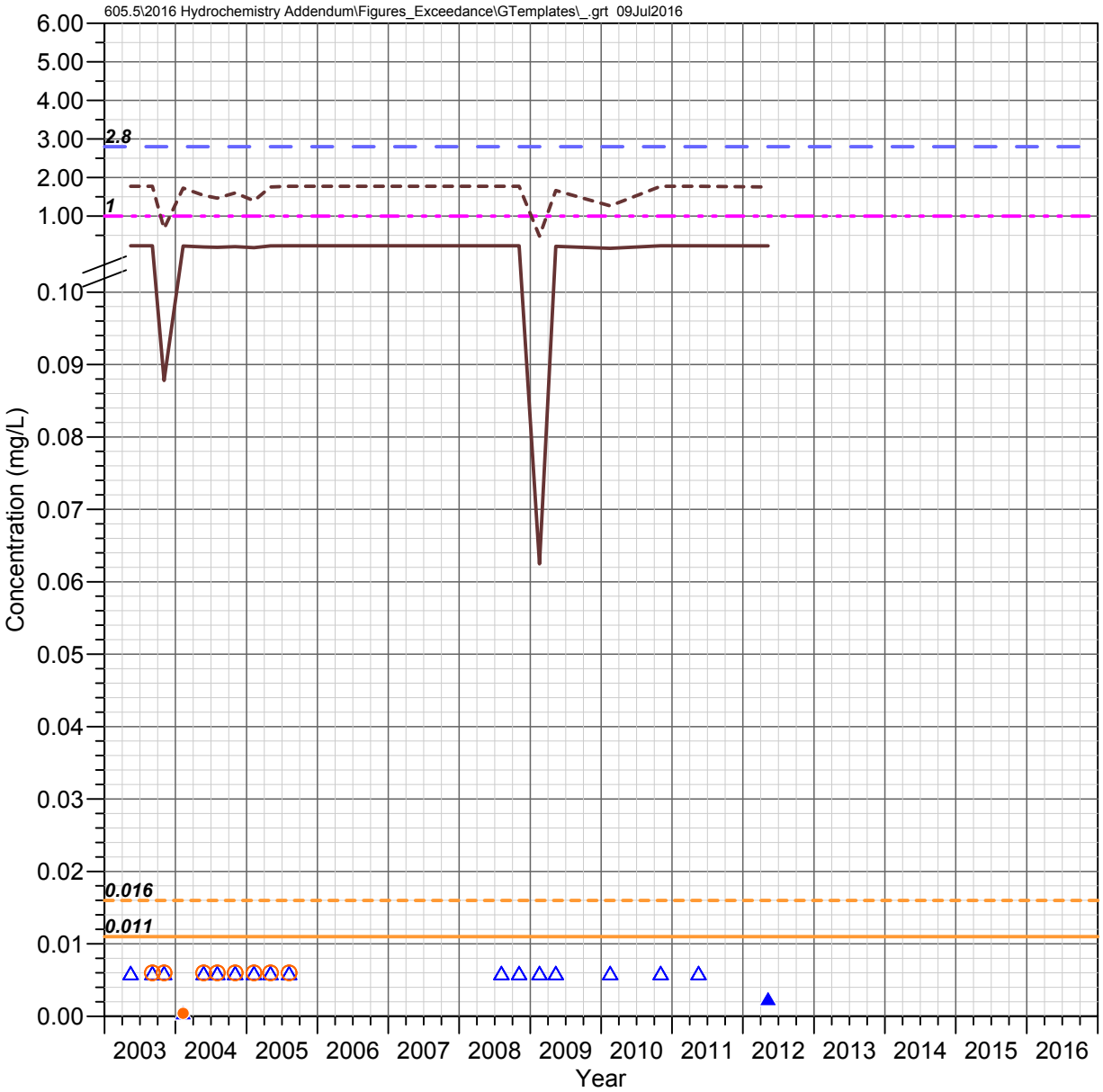


FIGURE F-210. CADMIUM CONCENTRATIONS OBSERVED AT MC 3.3 C (LOWER MINERAL), MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Pump Station Spring (QC 30.7 C)
Queen Creek Watershed

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent
*Chromium; **Hexavalent Chromium; ***Trivalent Chromium

- AZ Partial Body Contact (TRC, 2.8 mg/L)**
- AZ Partial Body Contact (TRC, 1400 mg/L)***
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.011mg/L)**
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)***
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.016 mg/L)**
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)***
- AZ Agricultural Livestock Watering (UNS, 1 mg/L)*

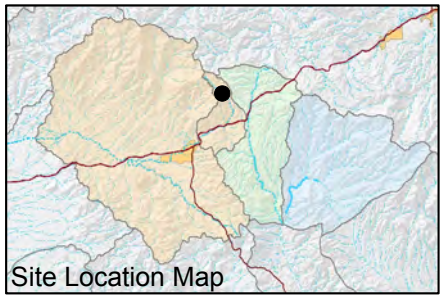
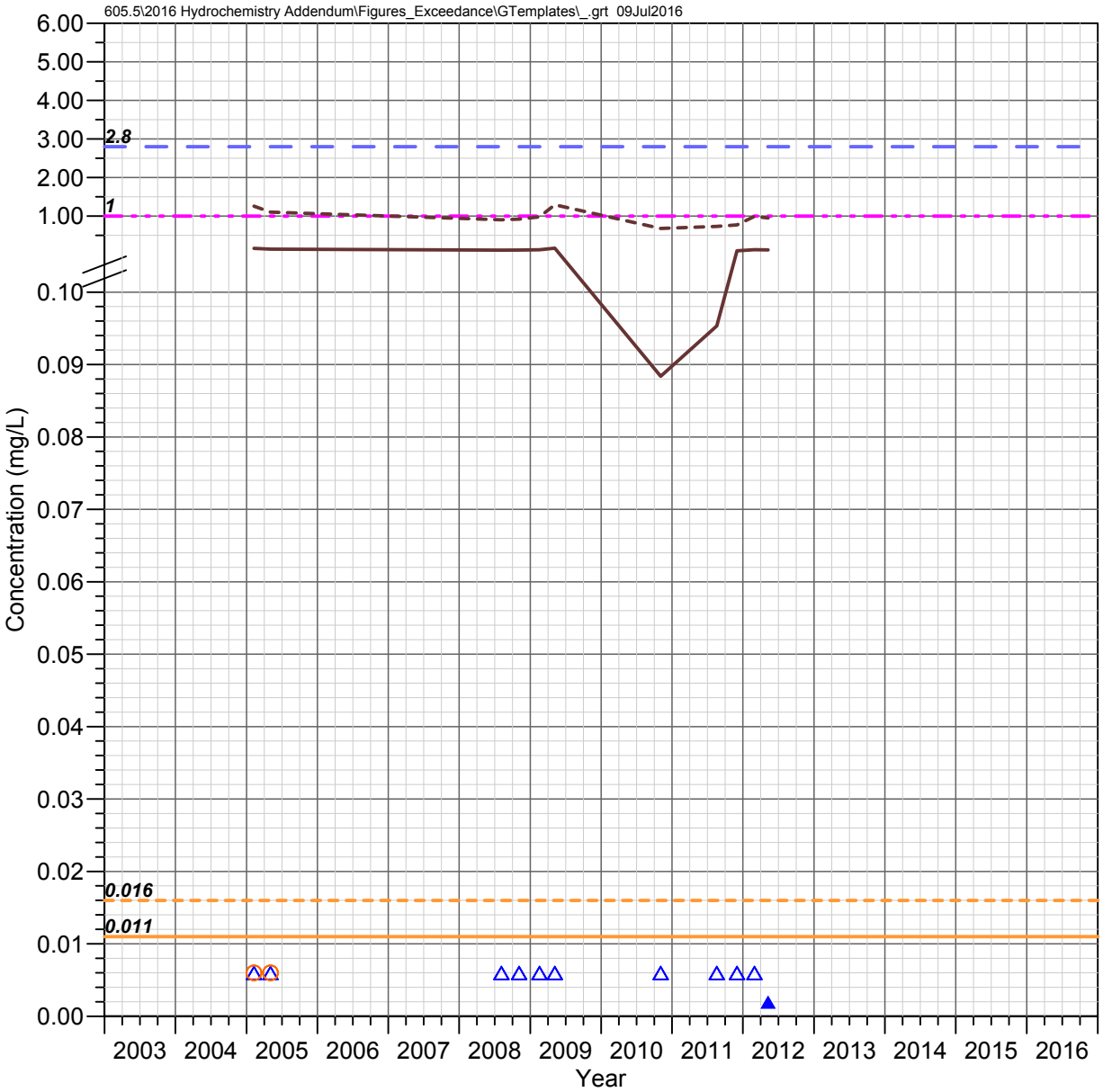


FIGURE F-211. CHROMIUM CONCENTRATIONS OBSERVED AT PUMP STATION SPRING (QC 30.7 C), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 27.3 C
Queen Creek Watershed

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent
*Chromium; **Hexavalent Chromium; ***Trivalent Chromium

- AZ Partial Body Contact (TRC, 2.8 mg/L)**
- AZ Partial Body Contact (TRC, 1400 mg/L)***
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.011mg/L)**
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)***
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.016 mg/L)**
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)***
- AZ Agricultural Livestock Watering (UNS, 1 mg/L)*

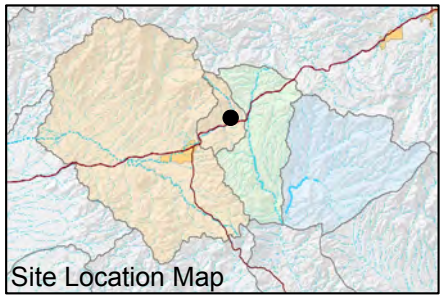
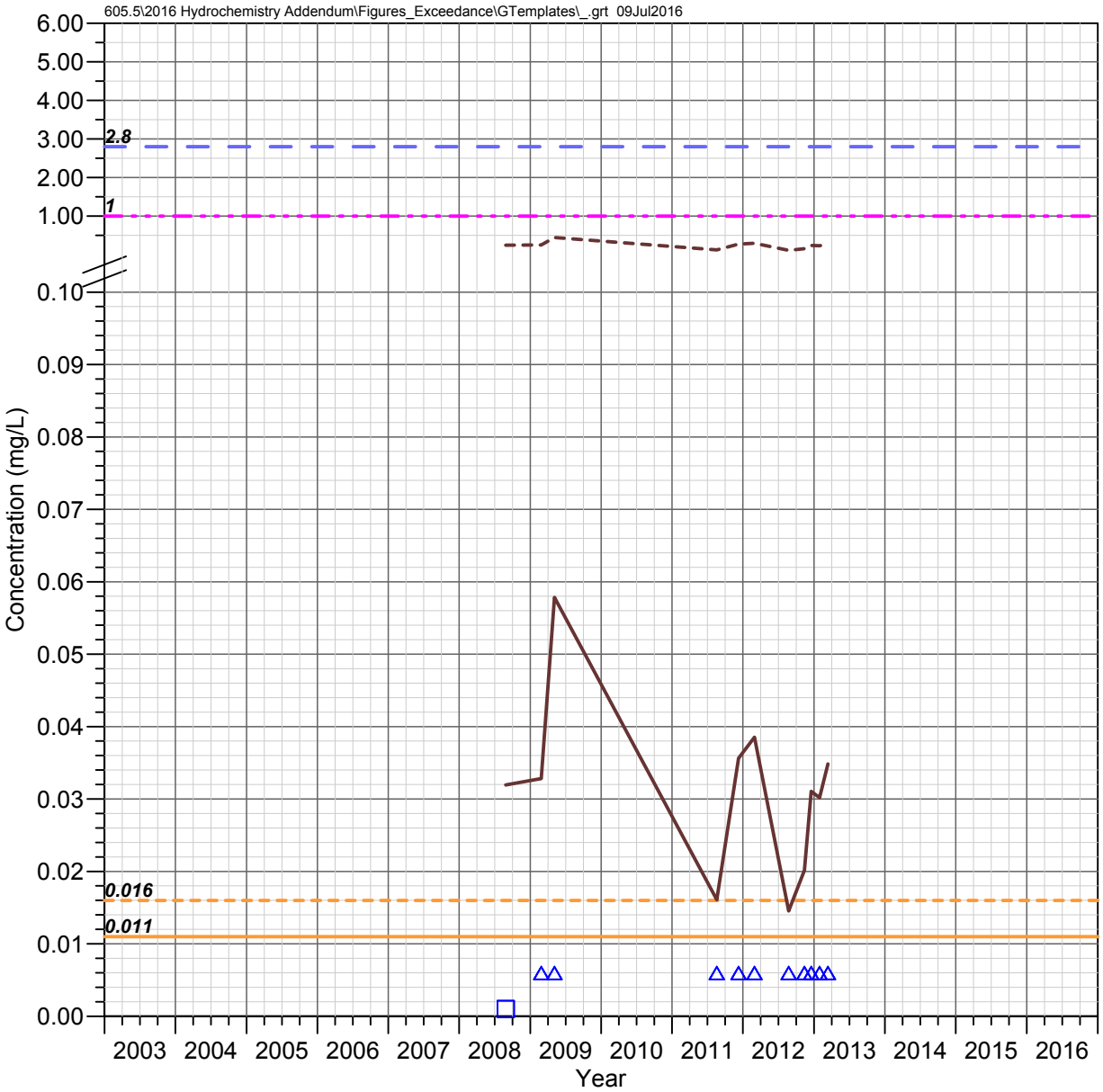


FIGURE F-212. CHROMIUM CONCENTRATIONS OBSERVED AT QC 27.3 C, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Oak Flat Wash
Queen Creek Watershed

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent
*Chromium; **Hexavalent Chromium; ***Trivalent Chromium

- AZ Partial Body Contact (TRC, 2.8 mg/L)**
- AZ Partial Body Contact (TRC, 1400 mg/L)***
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.011mg/L)**
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)***
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.016 mg/L)**
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)***
- AZ Agricultural Livestock Watering (UNS, 1 mg/L)*

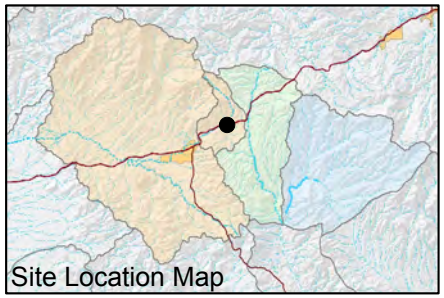
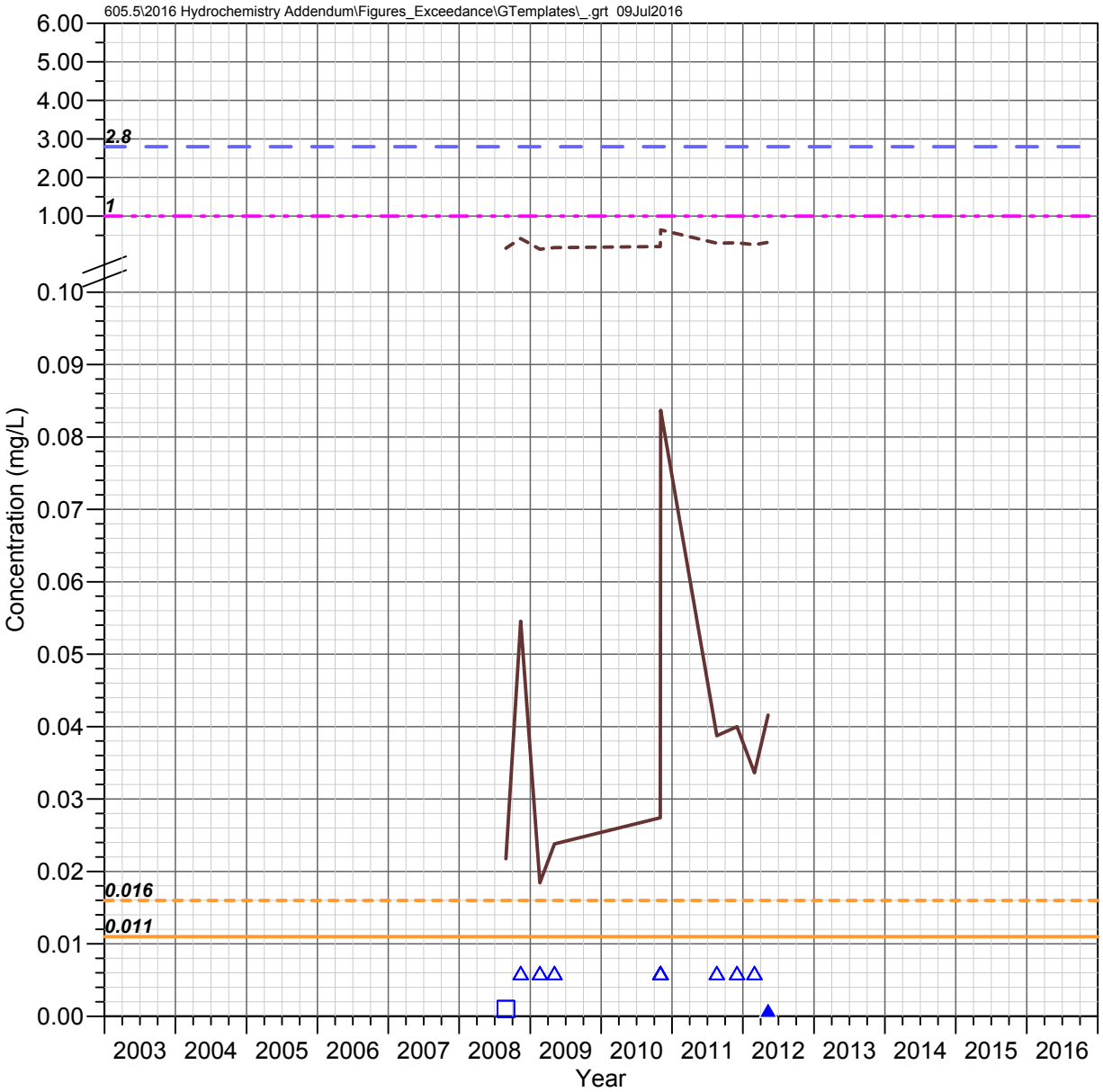


FIGURE F-213. CHROMIUM CONCENTRATIONS OBSERVED AT OAK FLAT WASH, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Number 9 Wash
Queen Creek Watershed

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent
*Chromium; **Hexavalent Chromium; ***Trivalent Chromium

- AZ Partial Body Contact (TRC, 2.8 mg/L)**
- AZ Partial Body Contact (TRC, 1400 mg/L)***
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.011mg/L)**
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)***
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.016 mg/L)**
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)***
- AZ Agricultural Livestock Watering (UNS, 1 mg/L)*

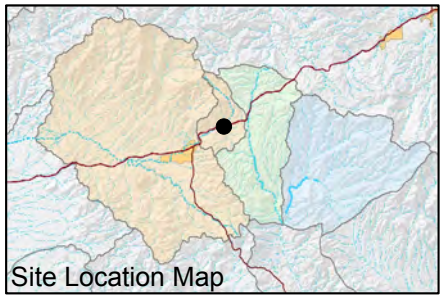
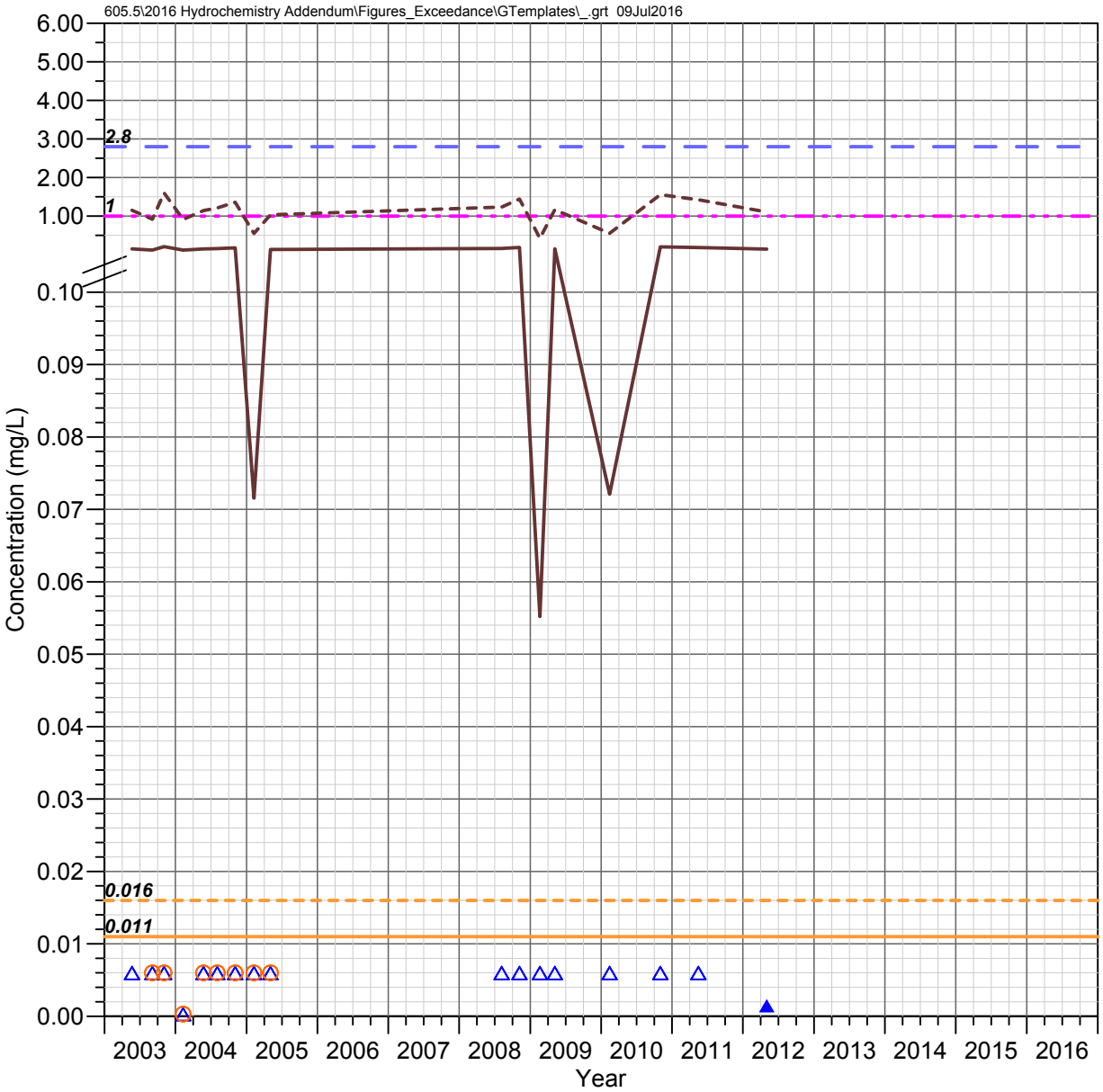


FIGURE F-214. CHROMIUM CONCENTRATIONS OBSERVED AT NUMBER 9 WASH, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Boulder Hole (QC 23.6 C)
Queen Creek Watershed

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent
*Chromium; **Hexavalent Chromium; ***Trivalent Chromium

- AZ Partial Body Contact (TRC, 2.8 mg/L)**
- AZ Partial Body Contact (TRC, 1400 mg/L)***
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.011mg/L)**
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)***
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.016 mg/L)**
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)***
- AZ Agricultural Livestock Watering (UNS, 1 mg/L)*

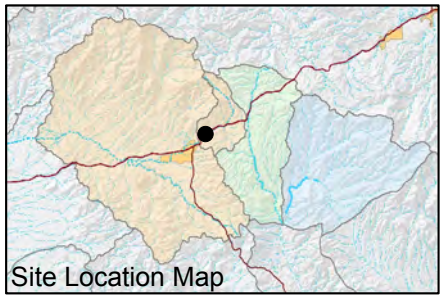
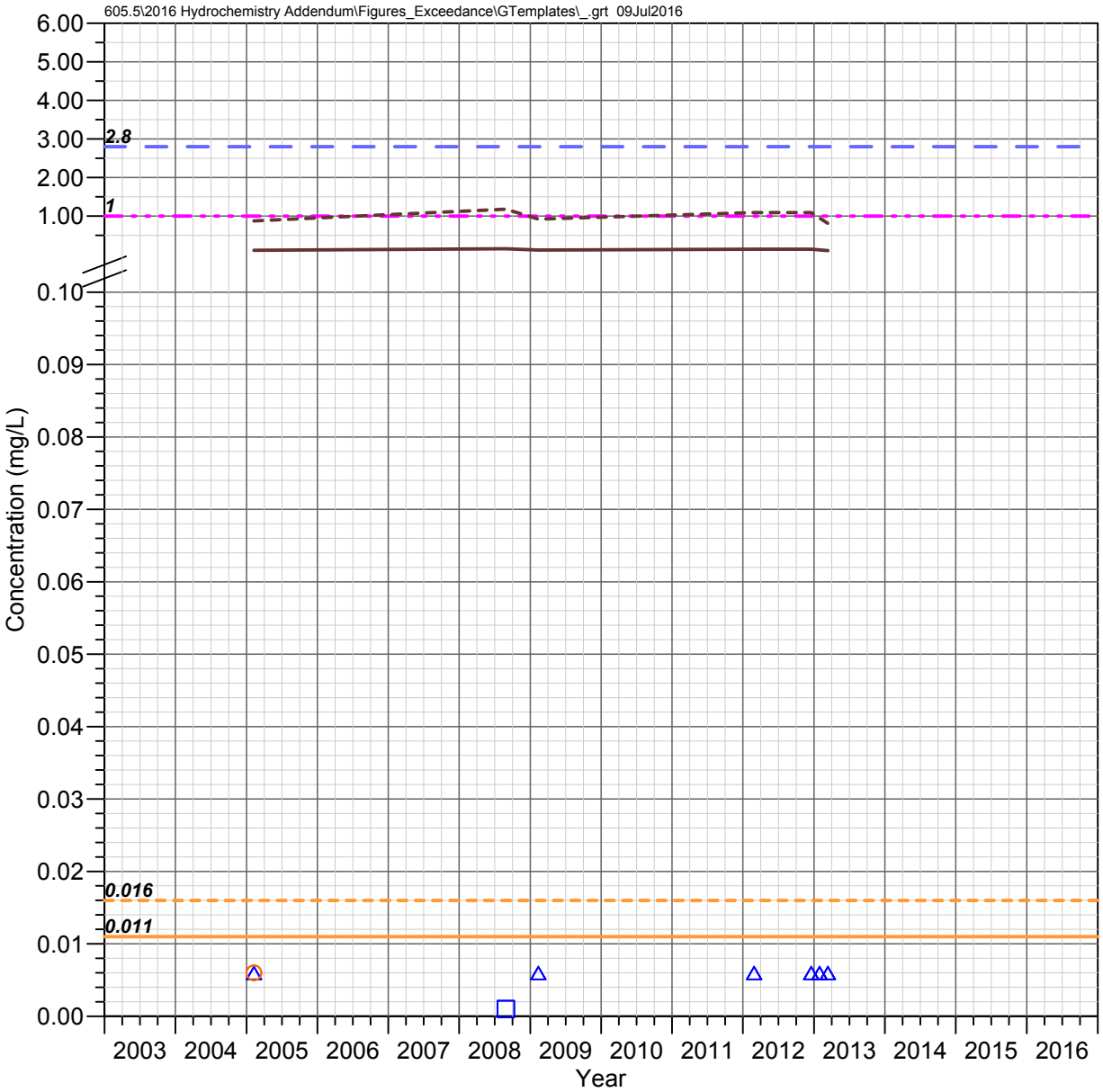


FIGURE F-215. CHROMIUM CONCENTRATIONS OBSERVED AT BOULDER HOLE (QC 23.6 C), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 22.6 E (Karst Spring)
Queen Creek Watershed

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent
*Chromium; **Hexavalent Chromium; ***Trivalent Chromium

- AZ Partial Body Contact (TRC, 2.8 mg/L)**
- AZ Partial Body Contact (TRC, 1400 mg/L)***
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.011mg/L)**
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)***
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.016 mg/L)**
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)***
- AZ Agricultural Livestock Watering (UNS, 1 mg/L)*

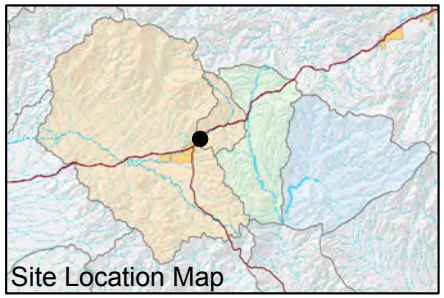
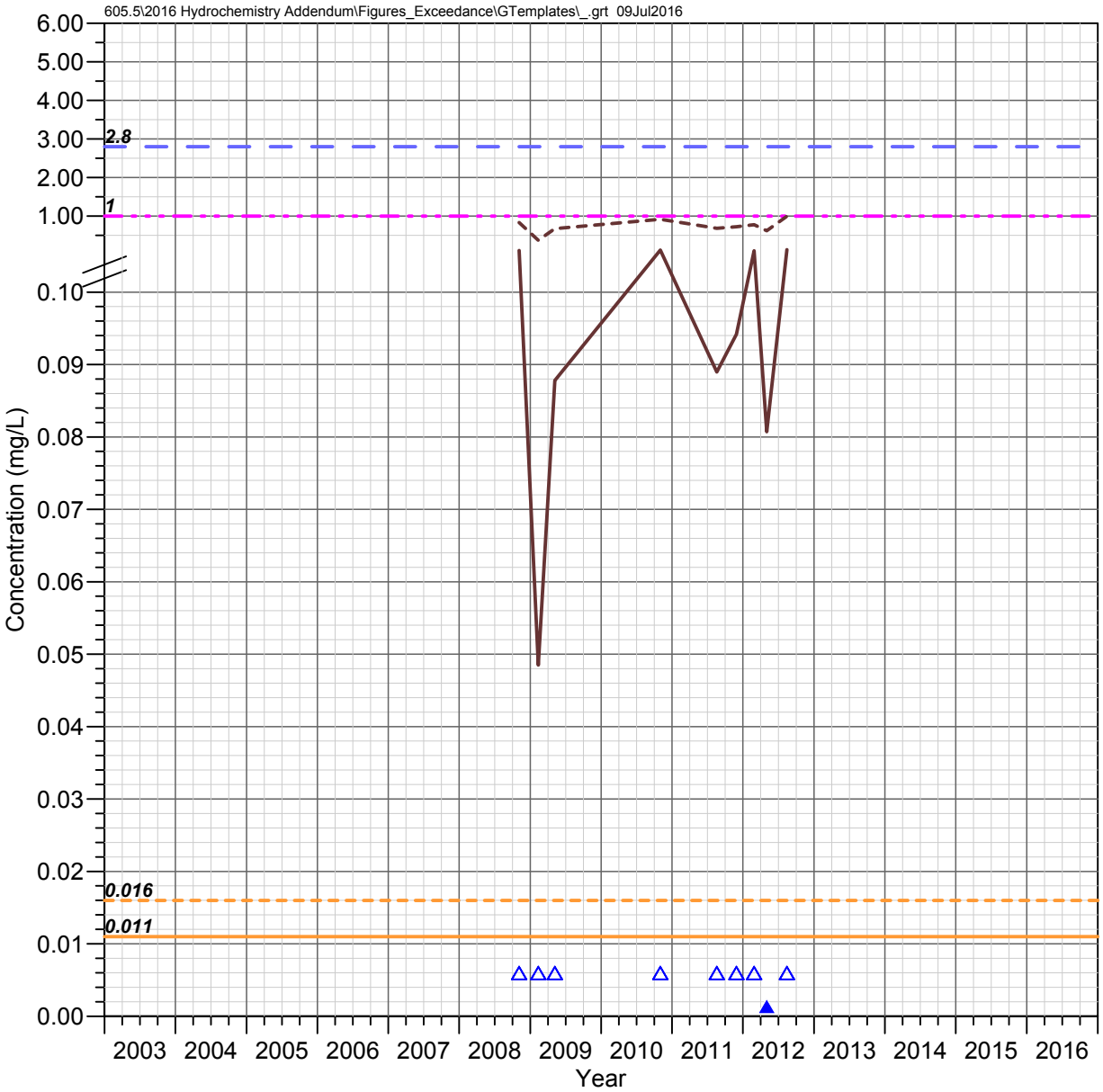


FIGURE F-216. CHROMIUM CONCENTRATIONS OBSERVED AT QC 22.6 E (KARST SPRING), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 21.7 C (Magma Avenue) Queen Creek Watershed

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent
*Chromium; **Hexavalent Chromium; ***Trivalent Chromium

- AZ Partial Body Contact (TRC, 2.8 mg/L)**
- AZ Partial Body Contact (TRC, 1400 mg/L)***
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.011mg/L)**
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)***
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.016 mg/L)**
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)***
- AZ Agricultural Livestock Watering (UNS, 1 mg/L)*

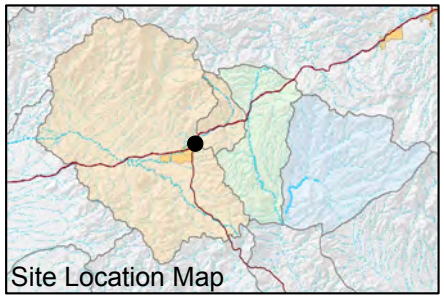
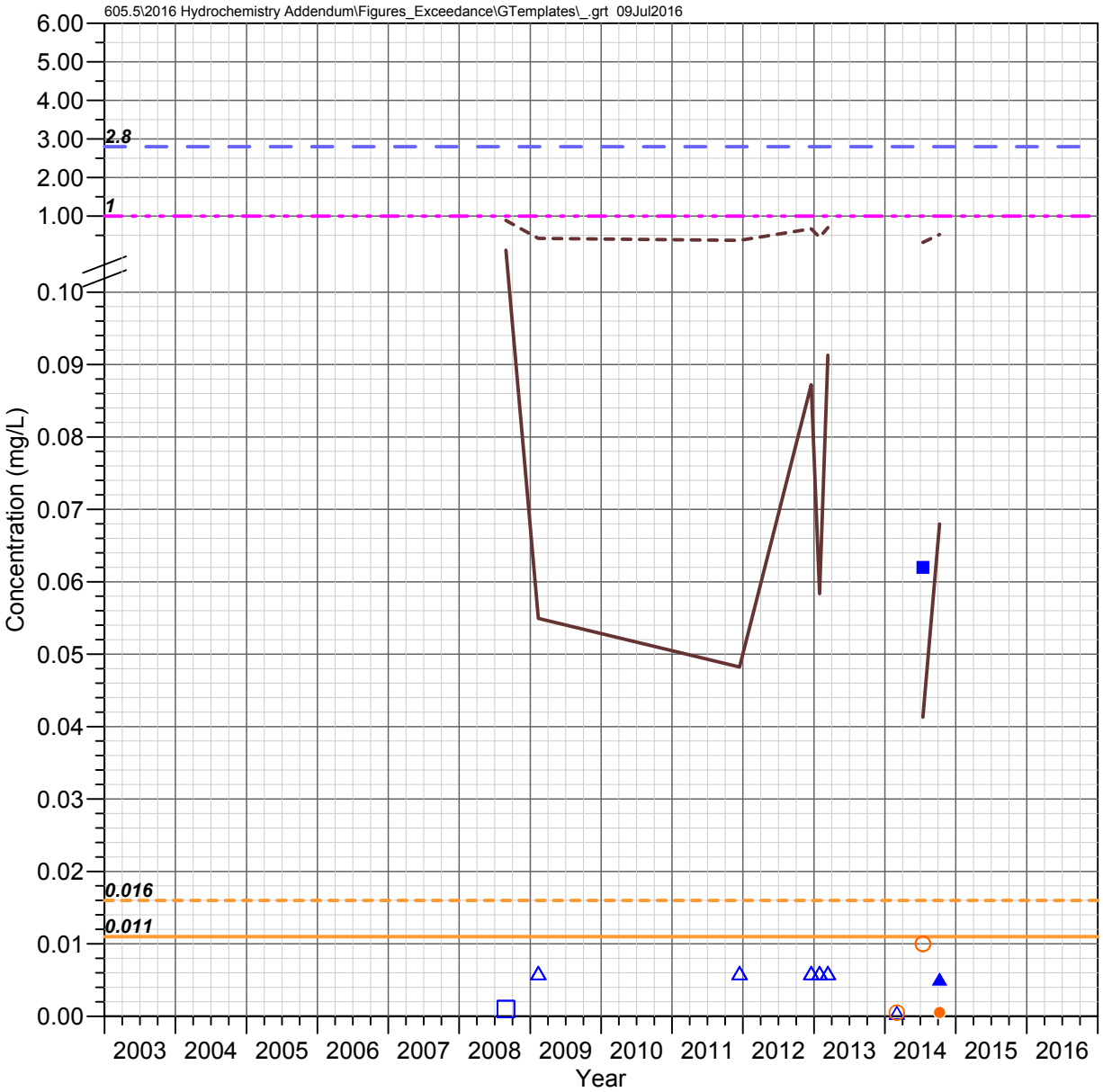


FIGURE F-217. CHROMIUM CONCENTRATIONS OBSERVED AT QC 21.7 C (MAGMA AVENUE), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 19.7 C
Queen Creek Watershed

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent
*Chromium; **Hexavalent Chromium; ***Trivalent Chromium

- AZ Partial Body Contact (TRC, 2.8 mg/L)**
- AZ Partial Body Contact (TRC, 1400 mg/L)***
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.011mg/L)**
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)***
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.016 mg/L)**
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)***
- AZ Agricultural Livestock Watering (UNS, 1 mg/L)*

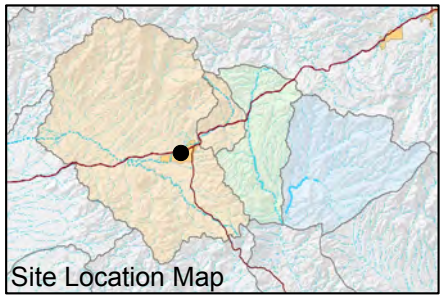
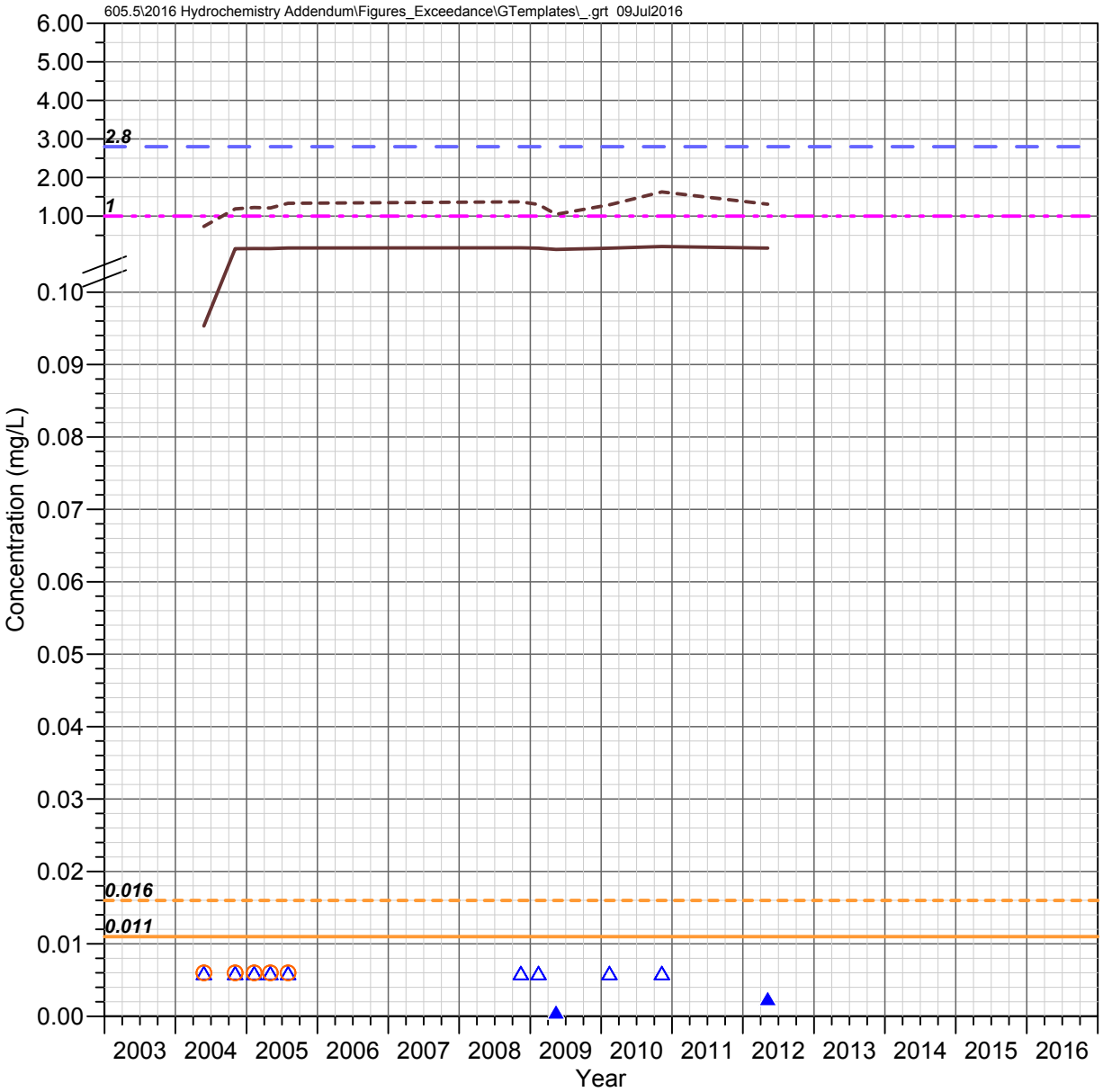


FIGURE F-218. CHROMIUM CONCENTRATIONS OBSERVED AT QC 19.7 C, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Bored Spring
Queen Creek Watershed

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent
*Chromium; **Hexavalent Chromium; ***Trivalent Chromium

- AZ Partial Body Contact (TRC, 2.8 mg/L)**
- AZ Partial Body Contact (TRC, 1400 mg/L)***
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.011mg/L)**
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)***
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.016 mg/L)**
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)***
- AZ Agricultural Livestock Watering (UNS, 1 mg/L)*

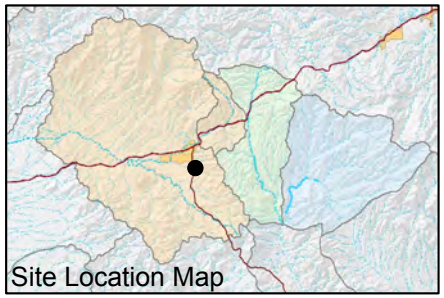
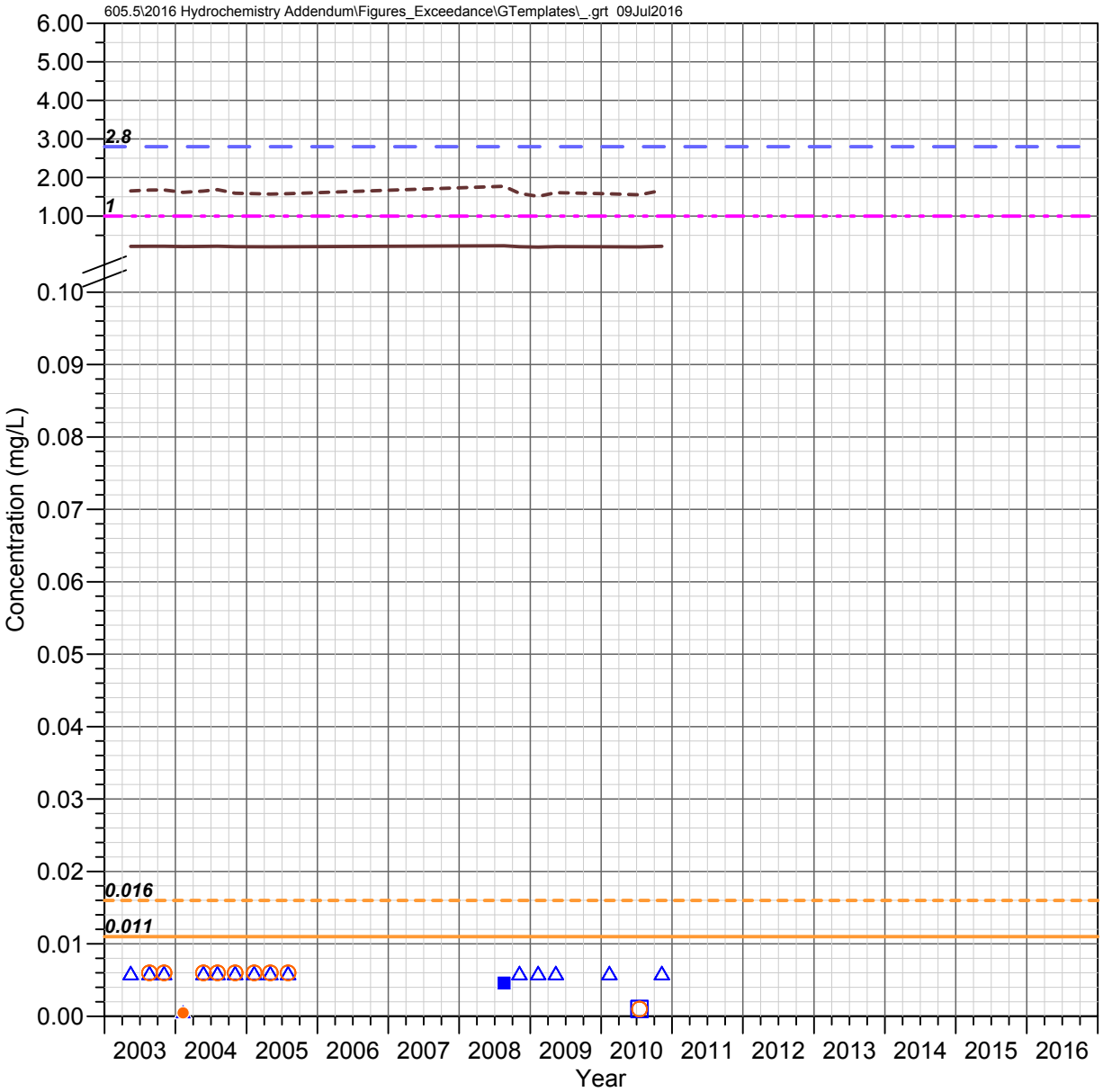


FIGURE F-219. CHROMIUM CONCENTRATIONS OBSERVED AT BORED SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Hidden Spring
Queen Creek Watershed

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent
*Chromium; **Hexavalent Chromium; ***Trivalent Chromium

- AZ Partial Body Contact (TRC, 2.8 mg/L)**
- AZ Partial Body Contact (TRC, 1400 mg/L)***
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.011mg/L)**
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)***
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.016 mg/L)**
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)***
- AZ Agricultural Livestock Watering (UNS, 1 mg/L)*

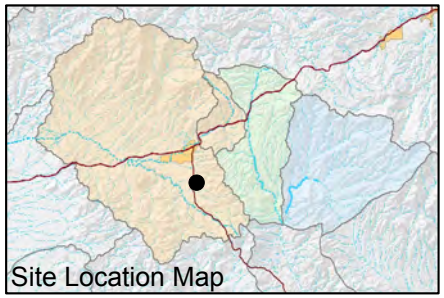
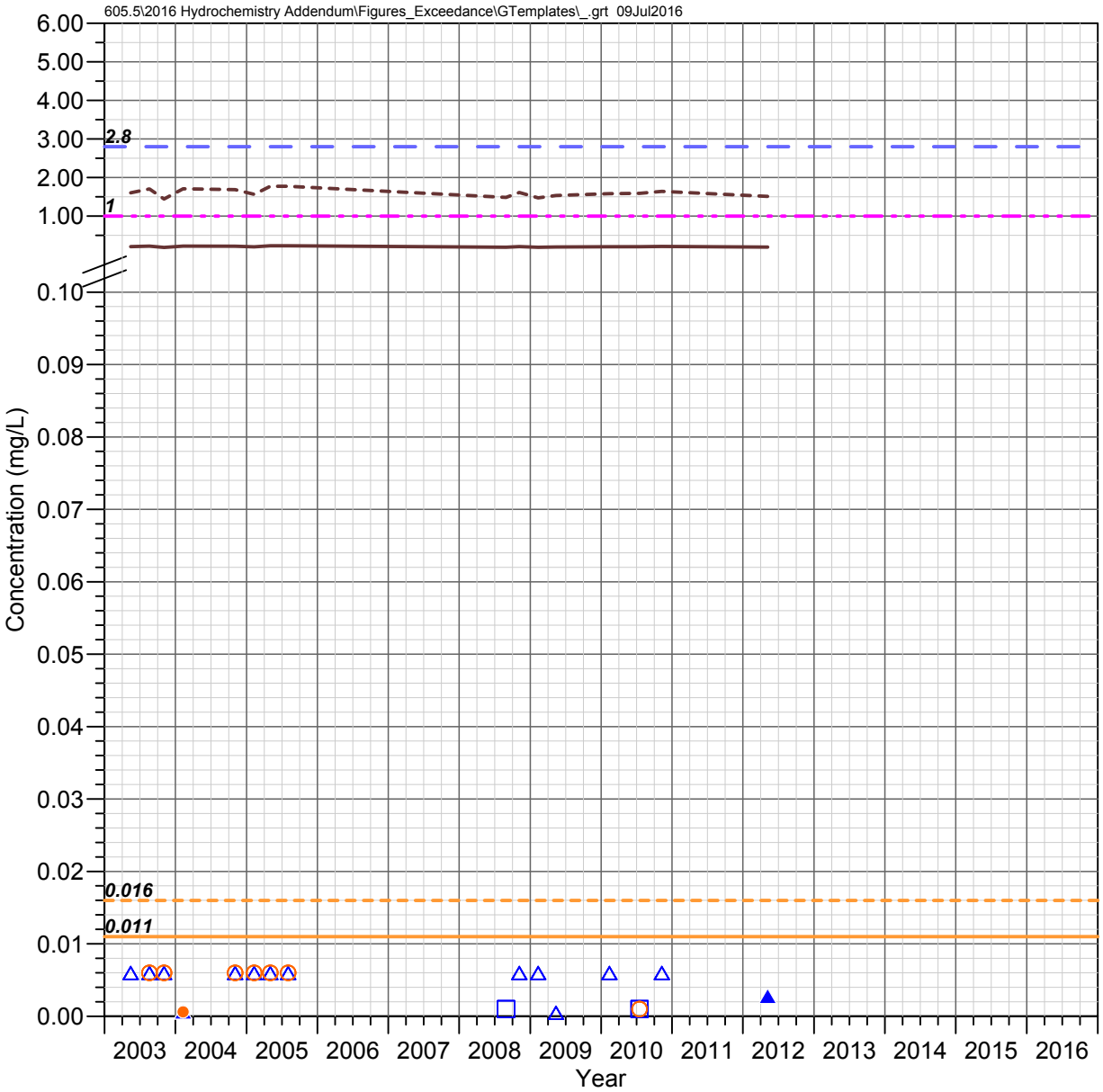


FIGURE F-220. CHROMIUM CONCENTRATIONS OBSERVED AT HIDDEN SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Kane Spring
Queen Creek Watershed

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent
*Chromium; **Hexavalent Chromium; ***Trivalent Chromium

- AZ Partial Body Contact (TRC, 2.8 mg/L)**
- AZ Partial Body Contact (TRC, 1400 mg/L)***
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.011mg/L)**
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)***
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.016 mg/L)**
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)***
- AZ Agricultural Livestock Watering (UNS, 1 mg/L)*

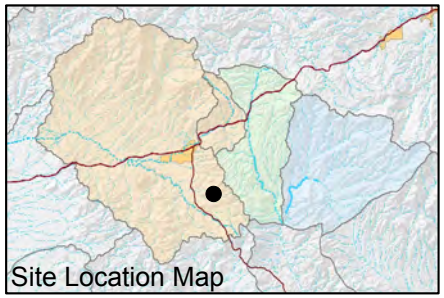
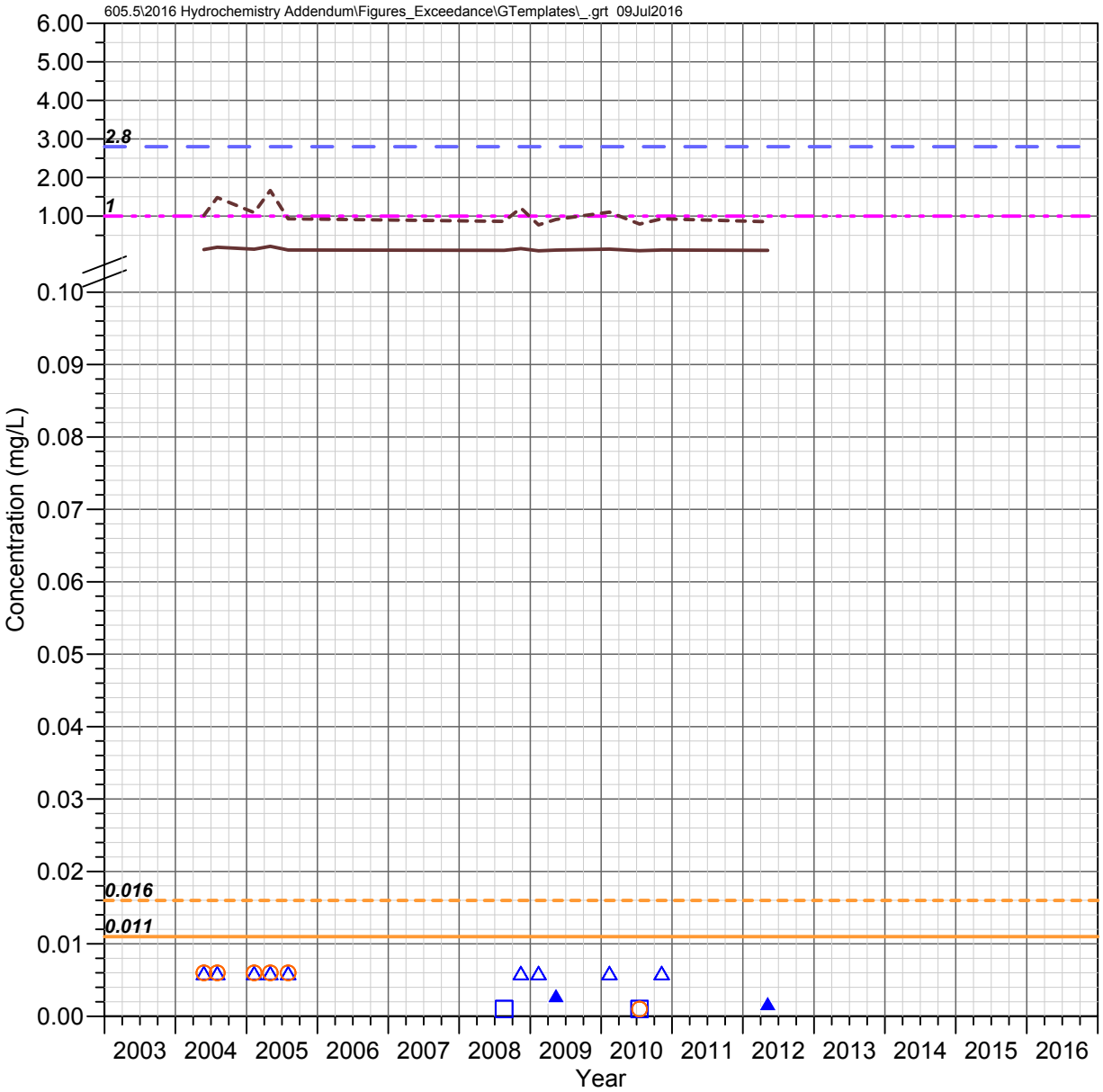


FIGURE F-221. CHROMIUM CONCENTRATIONS OBSERVED AT KANE SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Blue Spring
Queen Creek Watershed

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent
*Chromium; **Hexavalent Chromium; ***Trivalent Chromium

- AZ Partial Body Contact (TRC, 2.8 mg/L)**
- AZ Partial Body Contact (TRC, 1400 mg/L)***
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.011mg/L)**
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)***
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.016 mg/L)**
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)***
- AZ Agricultural Livestock Watering (UNS, 1 mg/L)*

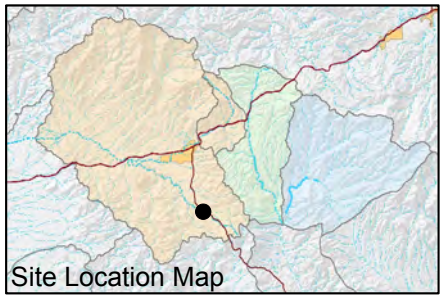
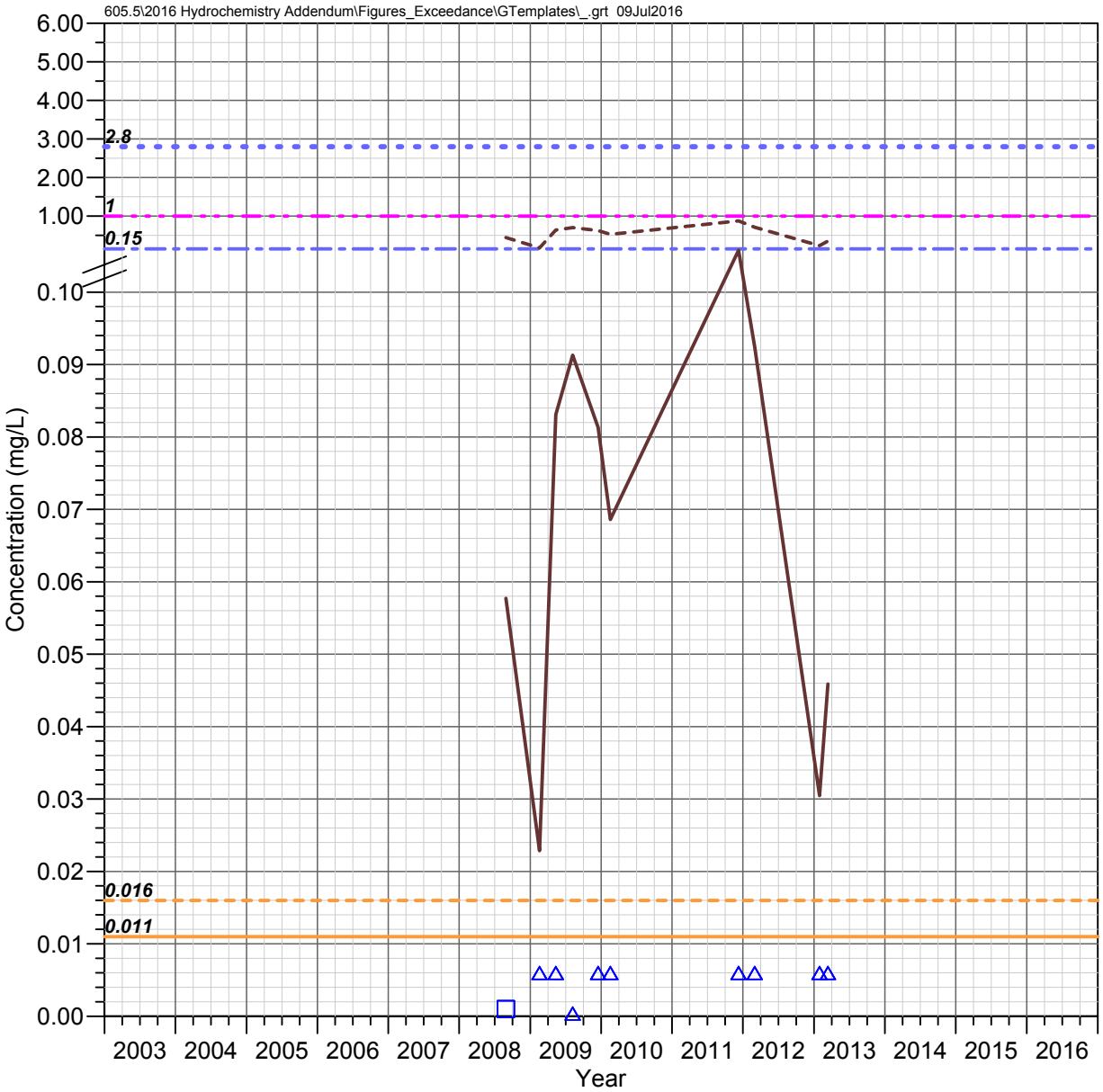


FIGURE F-222. CHROMIUM CONCENTRATIONS OBSERVED AT BLUE SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



IC 1.0 C
Devils Canyon Watershed

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent
*Chromium; **Hexavalent Chromium; ***Trivalent Chromium

- AZ Full Body Contact (TRC, 2.8 mg/L)**
- AZ Full Body Contact (TRC, 1400 mg/L)***
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.011mg/L)**
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)***
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.016 mg/L)**
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)***
- AZ Fish Consumption (TRC, 0.15 mg/L)**
- AZ Fish Consumption (TRC, 75 mg/L)***
- AZ Agricultural Livestock Watering (UNS, 1 mg/L)*

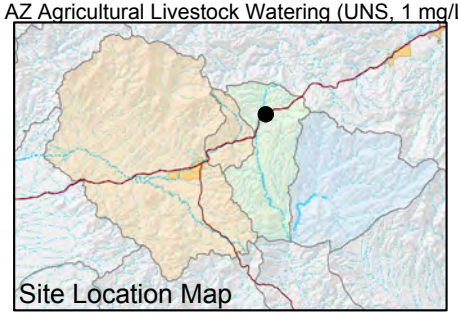
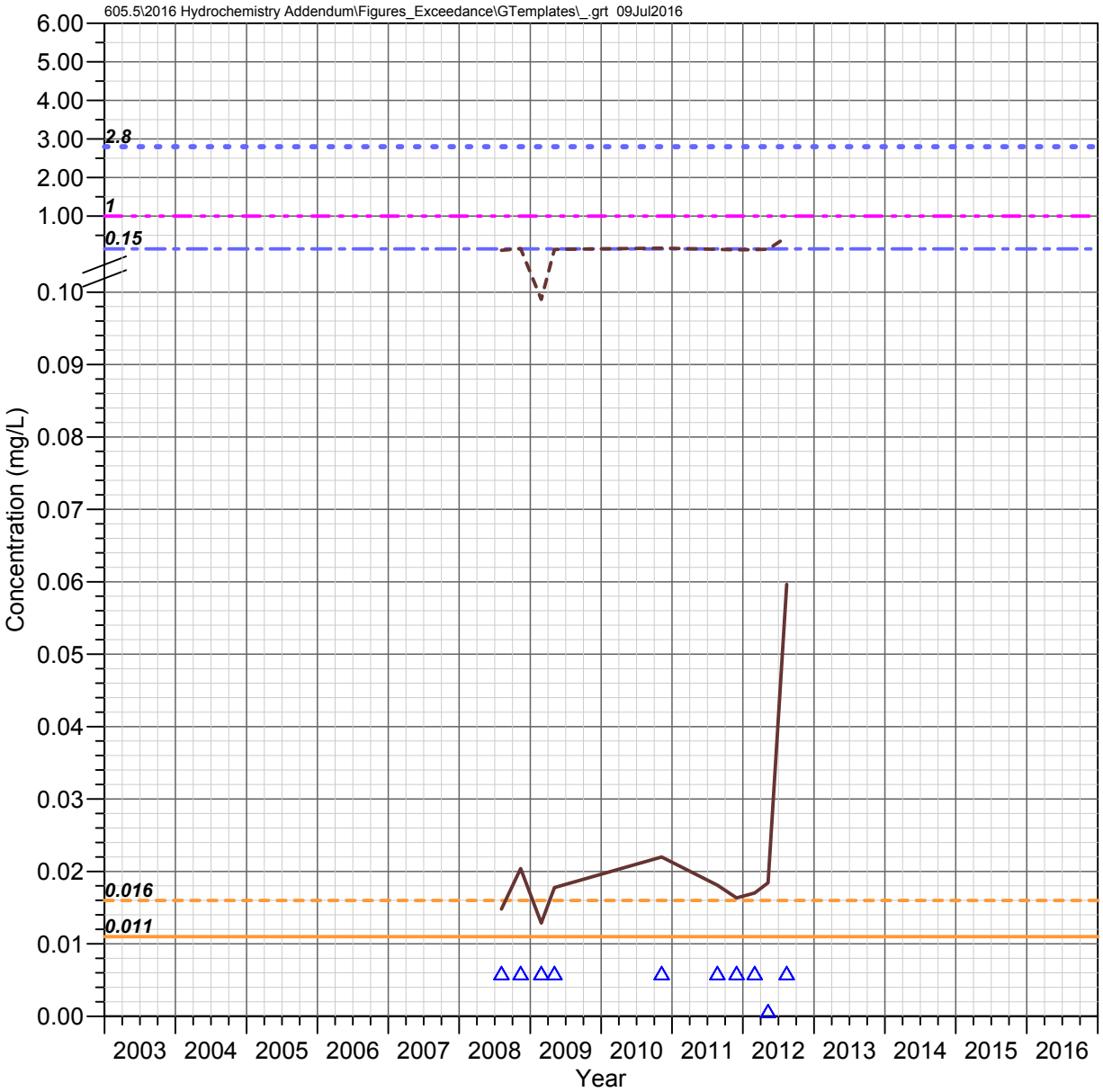


FIGURE F-223. CHROMIUM CONCENTRATIONS OBSERVED AT IC 1.0 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 15.5 C
Devils Canyon Watershed

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent
*Chromium; **Hexavalent Chromium; ***Trivalent Chromium

- AZ Full Body Contact (TRC, 2.8 mg/L)**
- AZ Full Body Contact (TRC, 1400 mg/L)***
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.011mg/L)**
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)***
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.016 mg/L)**
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)***
- AZ Fish Consumption (TRC, 0.15 mg/L)**
- AZ Fish Consumption (TRC, 75 mg/L)***
- AZ Agricultural Livestock Watering (UNS, 1 mg/L)*

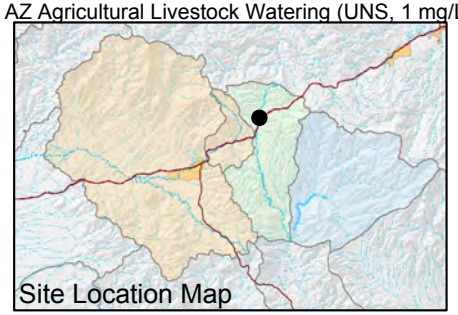
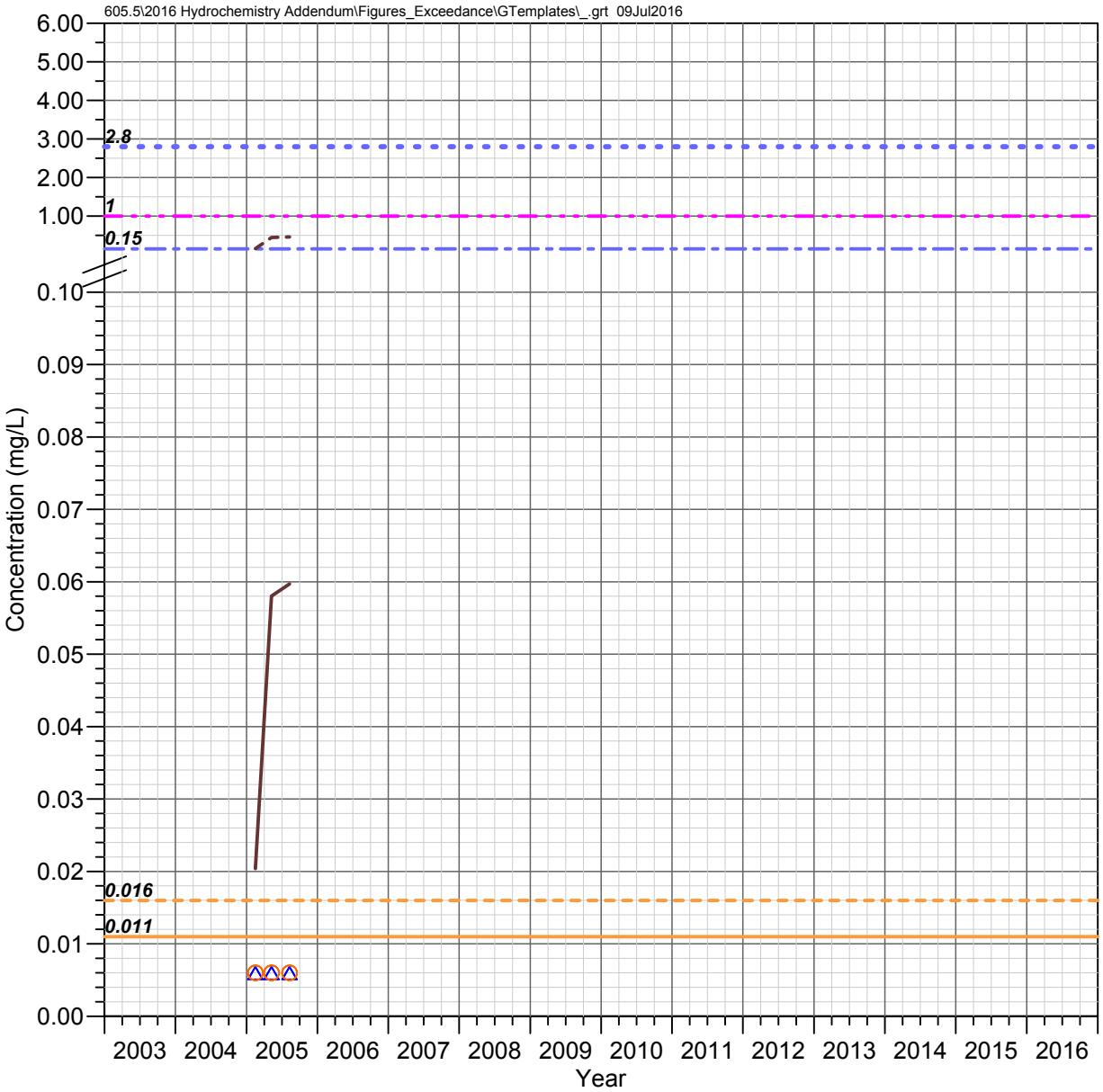


FIGURE F-224. CHROMIUM CONCENTRATIONS OBSERVED AT DC 15.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 15.2 C
Devils Canyon Watershed

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent
*Chromium; **Hexavalent Chromium; ***Trivalent Chromium

- AZ Full Body Contact (TRC, 2.8 mg/L)**
- AZ Full Body Contact (TRC, 1400 mg/L)***
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.011mg/L)**
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)***
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.016 mg/L)**
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)***
- AZ Fish Consumption (TRC, 0.15 mg/L)**
- AZ Fish Consumption (TRC, 75 mg/L)***
- AZ Agricultural Livestock Watering (UNS, 1 mg/L)*

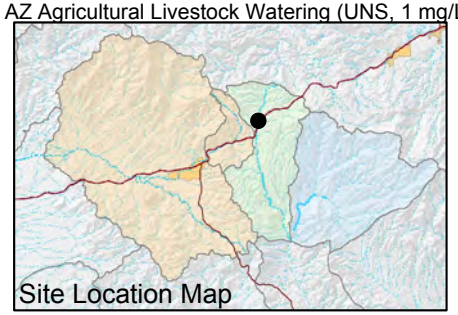
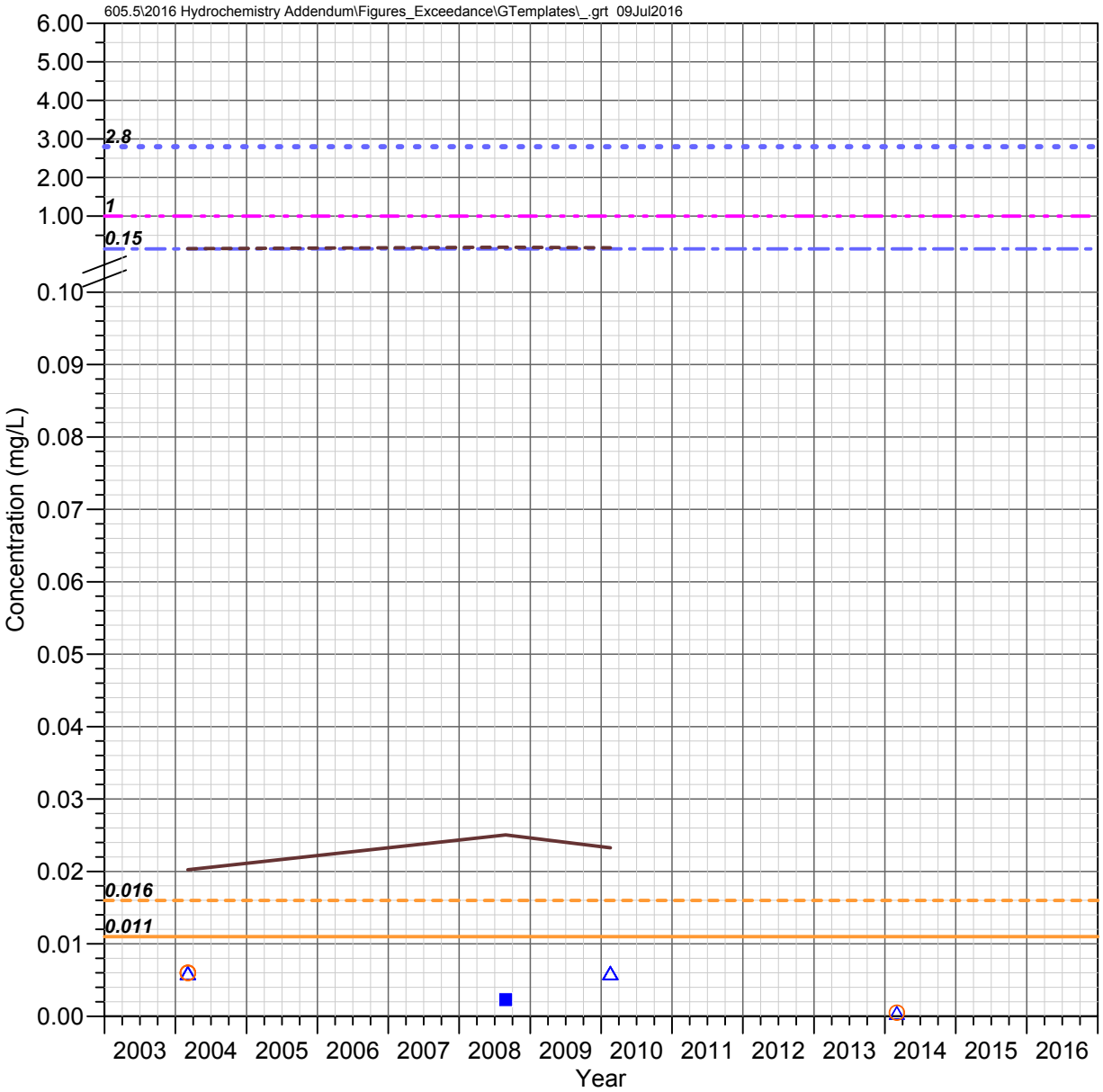


FIGURE F-225. CHROMIUM CONCENTRATIONS OBSERVED AT DC 15.2 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 14.7 C
Devils Canyon Watershed

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent
*Chromium; **Hexavalent Chromium; ***Trivalent Chromium

- AZ Full Body Contact (TRC, 2.8 mg/L)**
- AZ Full Body Contact (TRC, 1400 mg/L)***
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.011mg/L)**
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)***
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.016 mg/L)**
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)***
- AZ Fish Consumption (TRC, 0.15 mg/L)**
- AZ Fish Consumption (TRC, 75 mg/L)***
- AZ Agricultural Livestock Watering (UNS, 1 mg/L)*

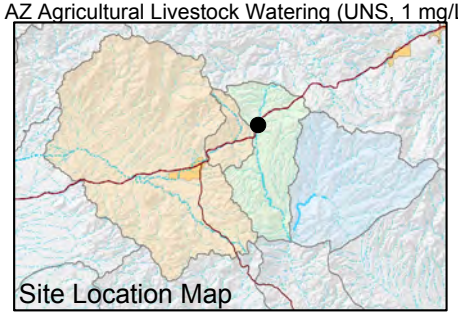
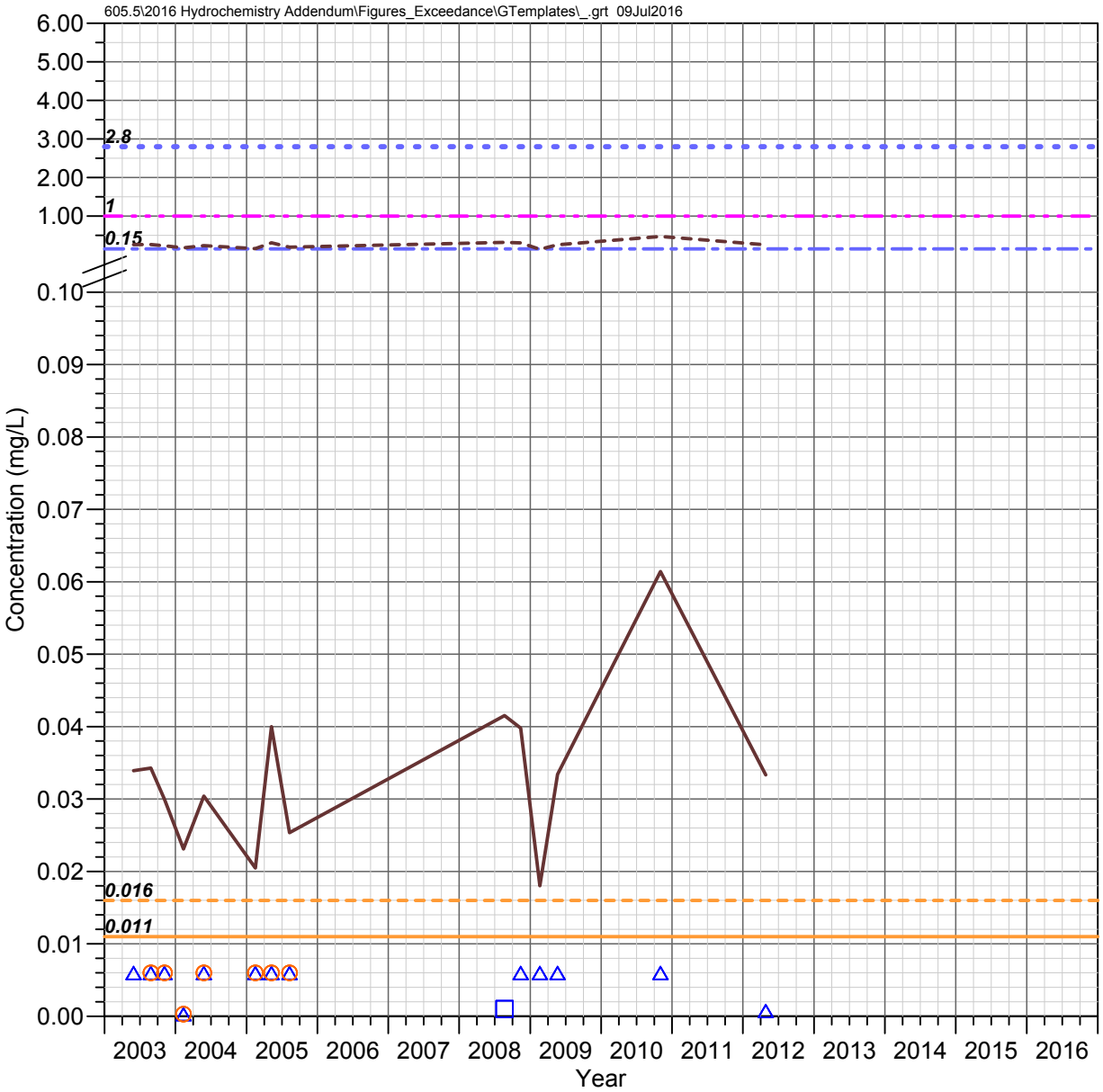


FIGURE F-226. CHROMIUM CONCENTRATIONS OBSERVED AT DC 14.7 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 13.5 C
Devils Canyon Watershed

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent
*Chromium; **Hexavalent Chromium; ***Trivalent Chromium

- AZ Full Body Contact (TRC, 2.8 mg/L)**
- AZ Full Body Contact (TRC, 1400 mg/L)***
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.011mg/L)**
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)***
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.016 mg/L)**
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)***
- AZ Fish Consumption (TRC, 0.15 mg/L)**
- AZ Fish Consumption (TRC, 75 mg/L)***
- AZ Agricultural Livestock Watering (UNS, 1 mg/L)*

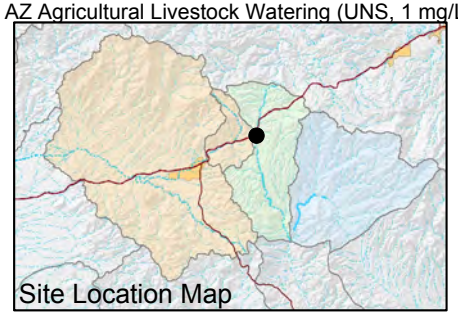
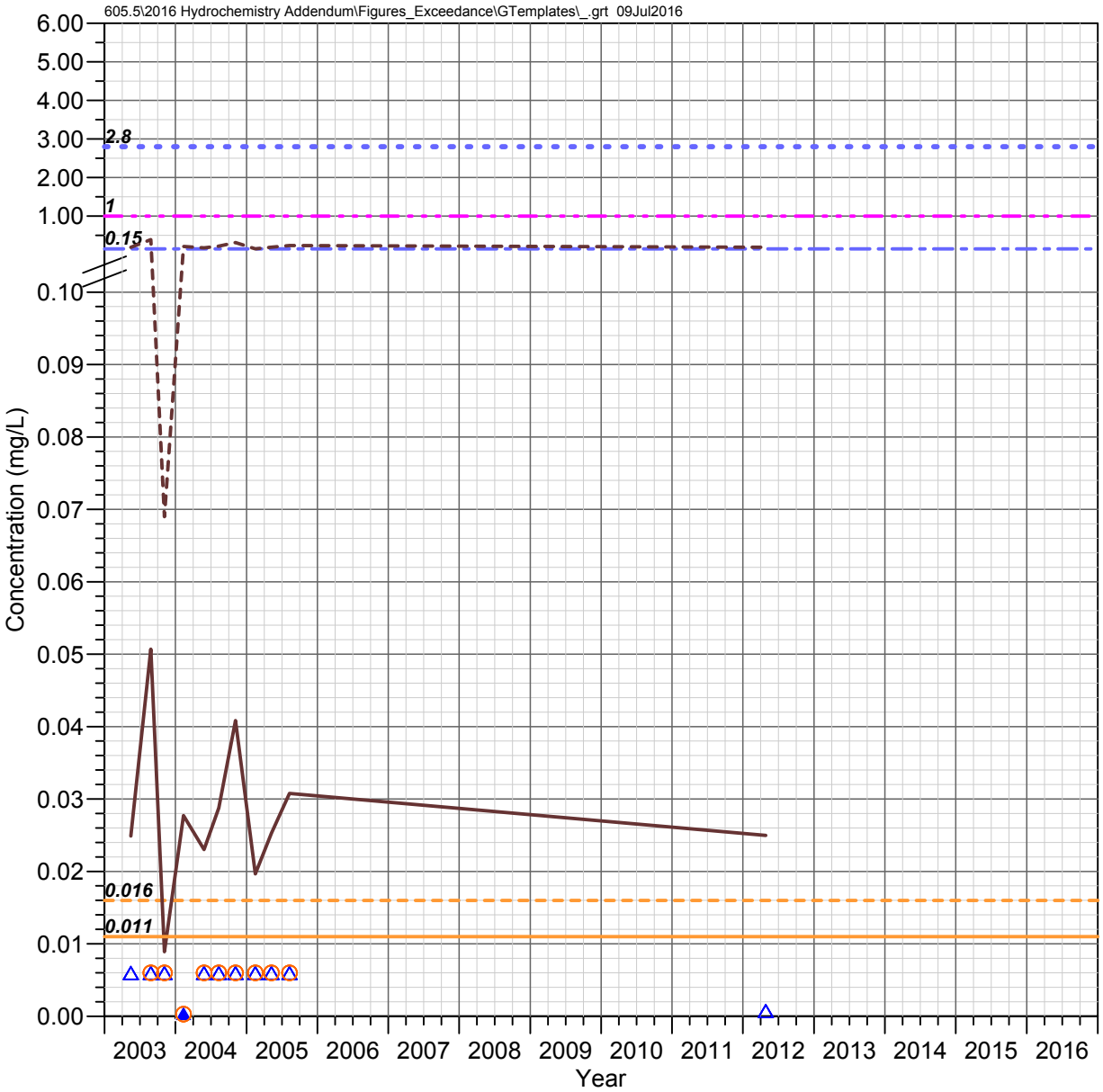


FIGURE F-227. CHROMIUM CONCENTRATIONS OBSERVED AT DC 13.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 10.9 C
Devils Canyon Watershed

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent
*Chromium; **Hexavalent Chromium; ***Trivalent Chromium

- AZ Full Body Contact (TRC, 2.8 mg/L)**
- AZ Full Body Contact (TRC, 1400 mg/L)***
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.011mg/L)**
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)***
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.016 mg/L)**
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)***
- AZ Fish Consumption (TRC, 0.15 mg/L)**
- AZ Fish Consumption (TRC, 75 mg/L)***
- AZ Agricultural Livestock Watering (UNS, 1 mg/L)*

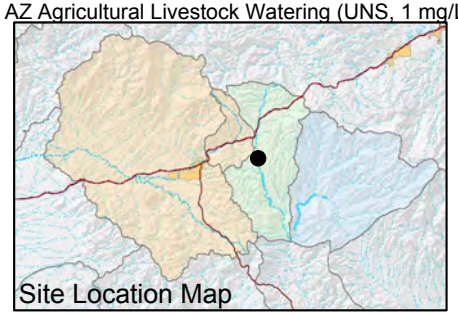
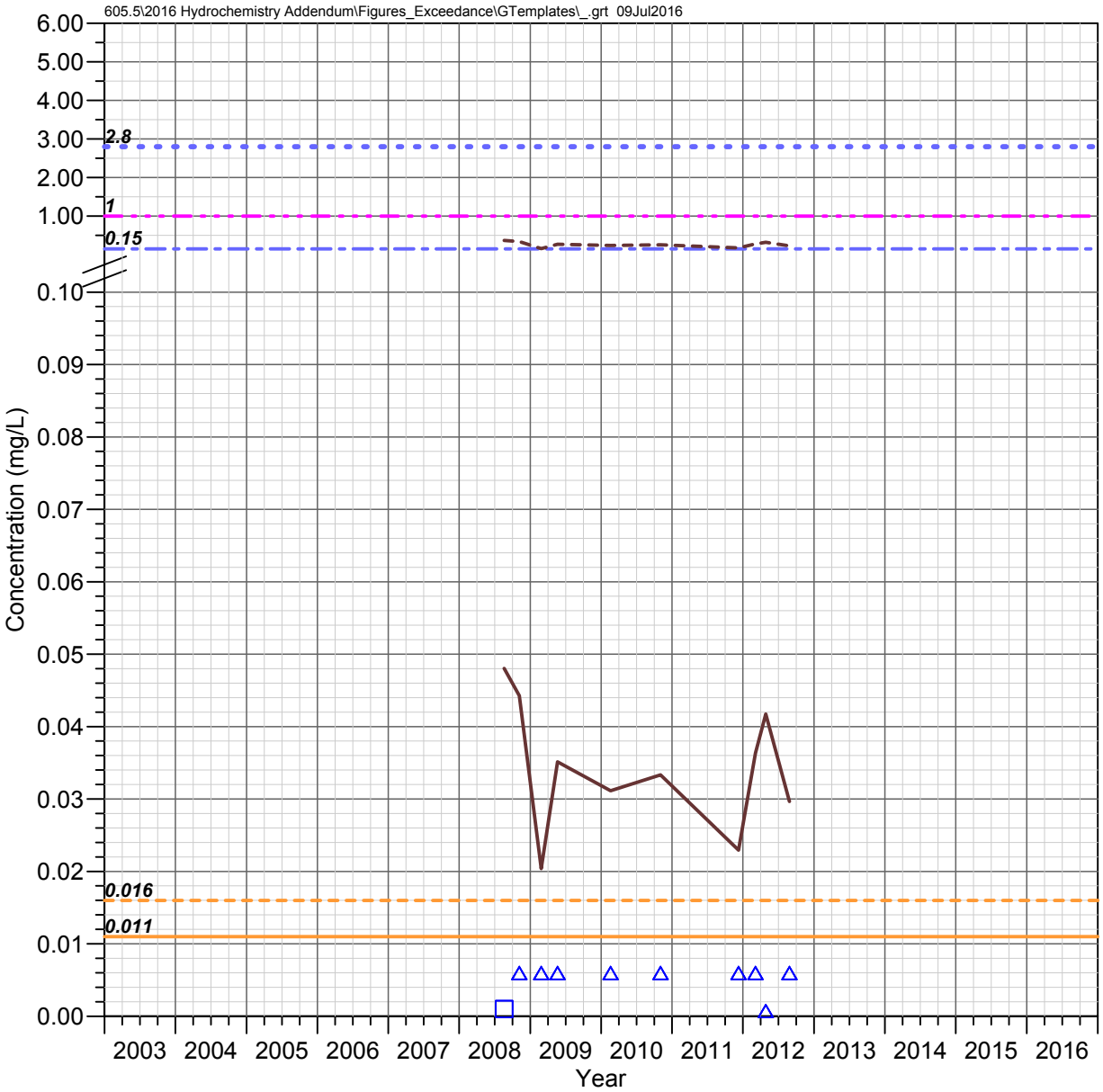


FIGURE F-228. CHROMIUM CONCENTRATIONS OBSERVED AT DC 10.9 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



RR 1.5 C
Devils Canyon Watershed

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent
*Chromium; **Hexavalent Chromium; ***Trivalent Chromium

- AZ Full Body Contact (TRC, 2.8 mg/L)**
- AZ Full Body Contact (TRC, 1400 mg/L)***
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.011mg/L)**
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)***
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.016 mg/L)**
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)***
- AZ Fish Consumption (TRC, 0.15 mg/L)**
- AZ Fish Consumption (TRC, 75 mg/L)***
- AZ Agricultural Livestock Watering (UNS, 1 mg/L)*

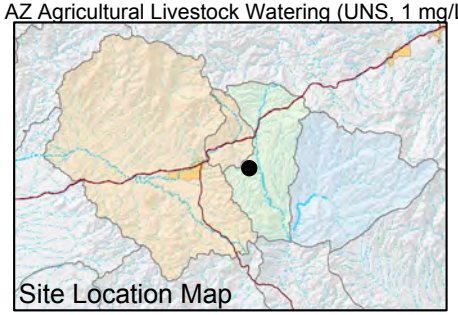
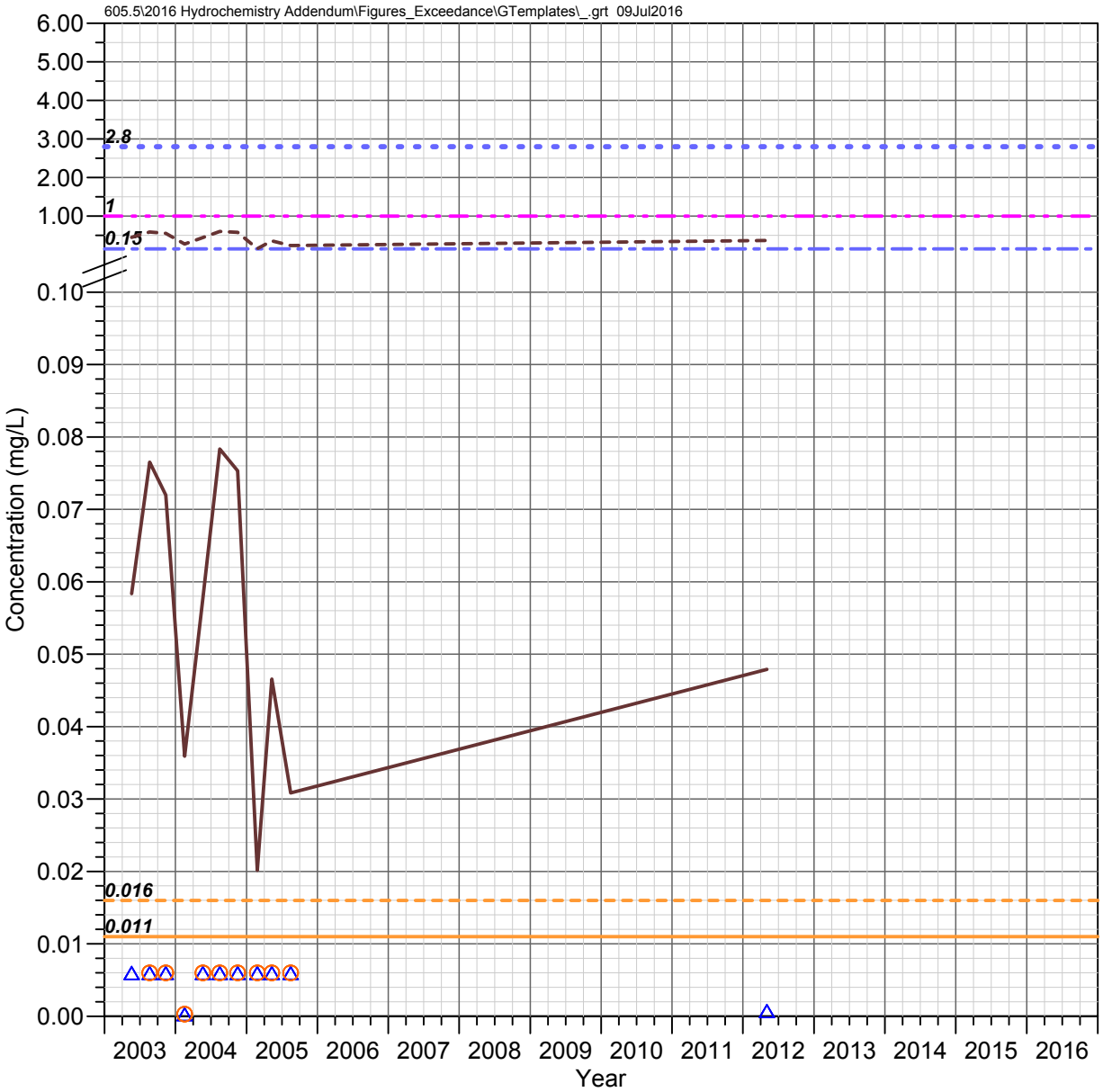


FIGURE F-229. CHROMIUM CONCENTRATIONS OBSERVED AT RR 1.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.8 C
Devils Canyon Watershed

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent
*Chromium; **Hexavalent Chromium; ***Trivalent Chromium

- AZ Full Body Contact (TRC, 2.8 mg/L)**
- AZ Full Body Contact (TRC, 1400 mg/L)***
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.011mg/L)**
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)***
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.016 mg/L)**
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)***
- AZ Fish Consumption (TRC, 0.15 mg/L)**
- AZ Fish Consumption (TRC, 75 mg/L)***
- AZ Agricultural Livestock Watering (UNS, 1 mg/L)*

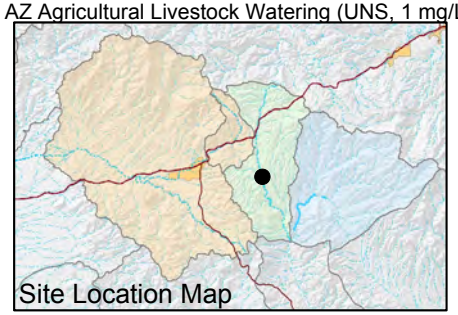
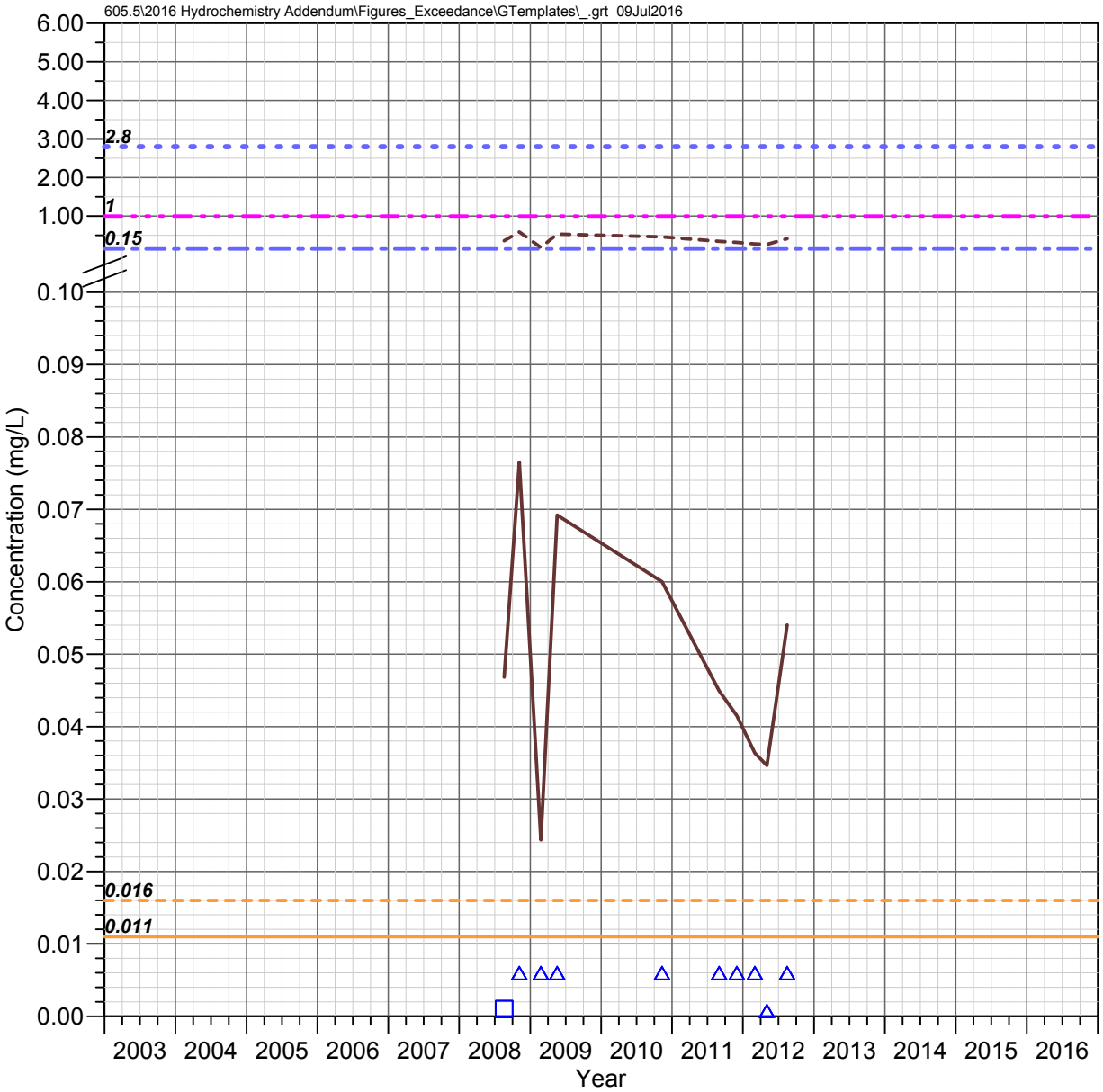


FIGURE F-230. CHROMIUM CONCENTRATIONS OBSERVED AT DC 8.8 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



H 0.1 C
Devils Canyon Watershed

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent
*Chromium; **Hexavalent Chromium; ***Trivalent Chromium

- AZ Full Body Contact (TRC, 2.8 mg/L)**
- AZ Full Body Contact (TRC, 1400 mg/L)***
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.011mg/L)**
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)***
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.016 mg/L)**
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)***
- AZ Fish Consumption (TRC, 0.15 mg/L)**
- AZ Fish Consumption (TRC, 75 mg/L)***
- AZ Agricultural Livestock Watering (UNS, 1 mg/L)*

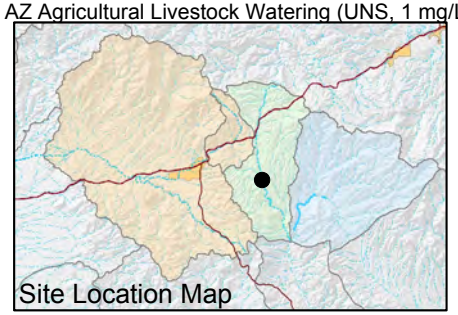
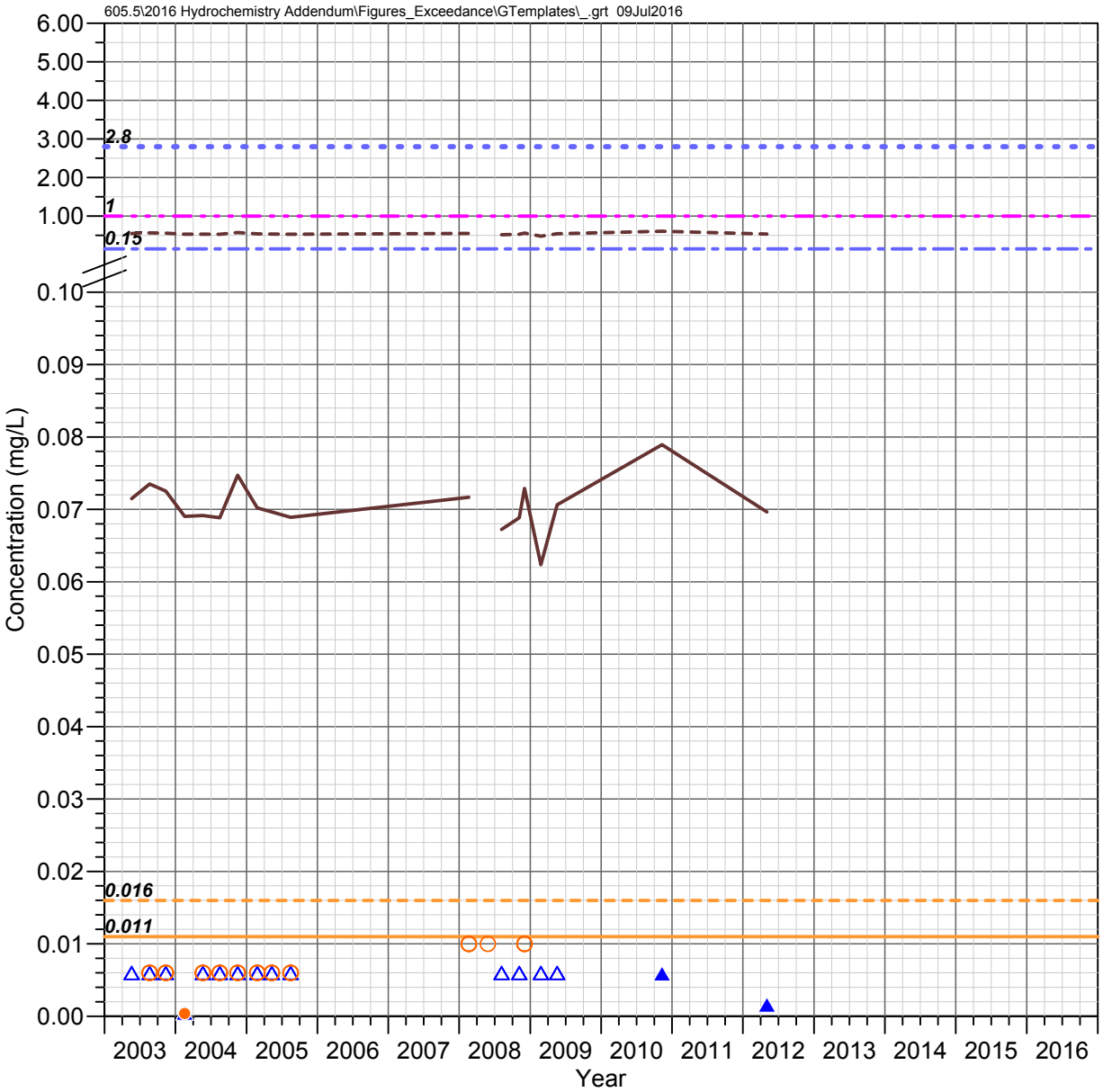


FIGURE F-231. CHROMIUM CONCENTRATIONS OBSERVED AT H 0.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.2 W
Devils Canyon Watershed

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent
*Chromium; **Hexavalent Chromium; ***Trivalent Chromium

- AZ Full Body Contact (TRC, 2.8 mg/L)**
- AZ Full Body Contact (TRC, 1400 mg/L)***
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.011mg/L)**
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)***
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.016 mg/L)**
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)***
- AZ Fish Consumption (TRC, 0.15 mg/L)**
- AZ Fish Consumption (TRC, 75 mg/L)***
- AZ Agricultural Livestock Watering (UNS, 1 mg/L)*

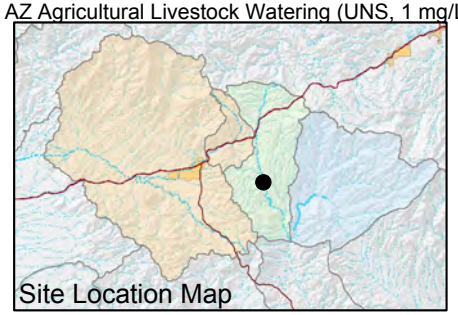
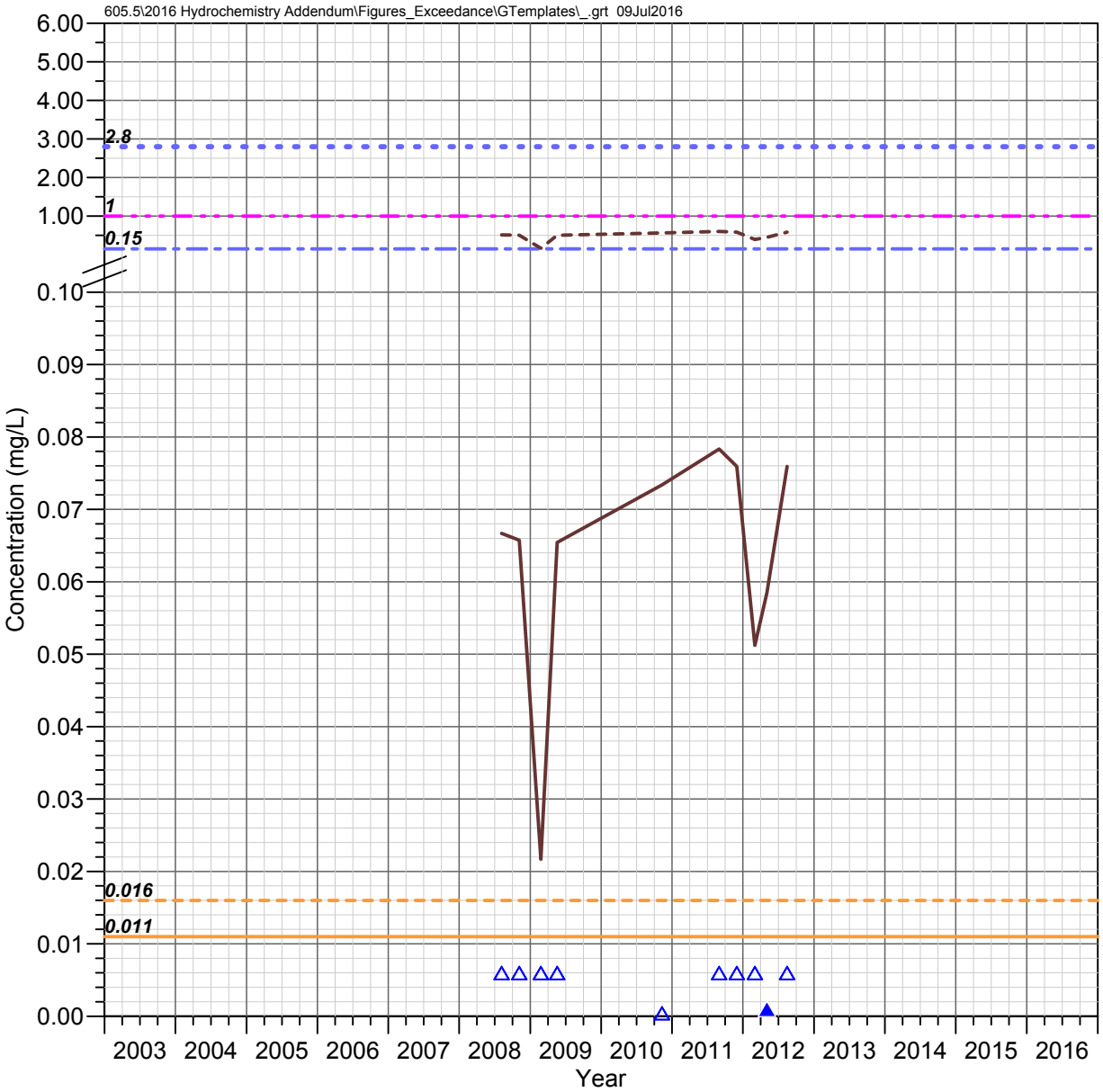


FIGURE F-232. CHROMIUM CONCENTRATIONS OBSERVED AT DC 8.2 W, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.1 C
Devils Canyon Watershed

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent
*Chromium; **Hexavalent Chromium; ***Trivalent Chromium

- AZ Full Body Contact (TRC, 2.8 mg/L)**
- AZ Full Body Contact (TRC, 1400 mg/L)***
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.011mg/L)**
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)***
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.016 mg/L)**
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)***
- AZ Fish Consumption (TRC, 0.15 mg/L)**
- AZ Fish Consumption (TRC, 75 mg/L)***
- AZ Agricultural Livestock Watering (UNS, 1 mg/L)*

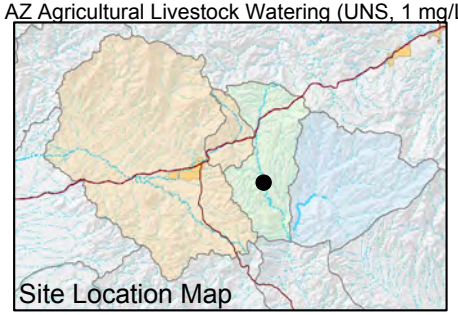
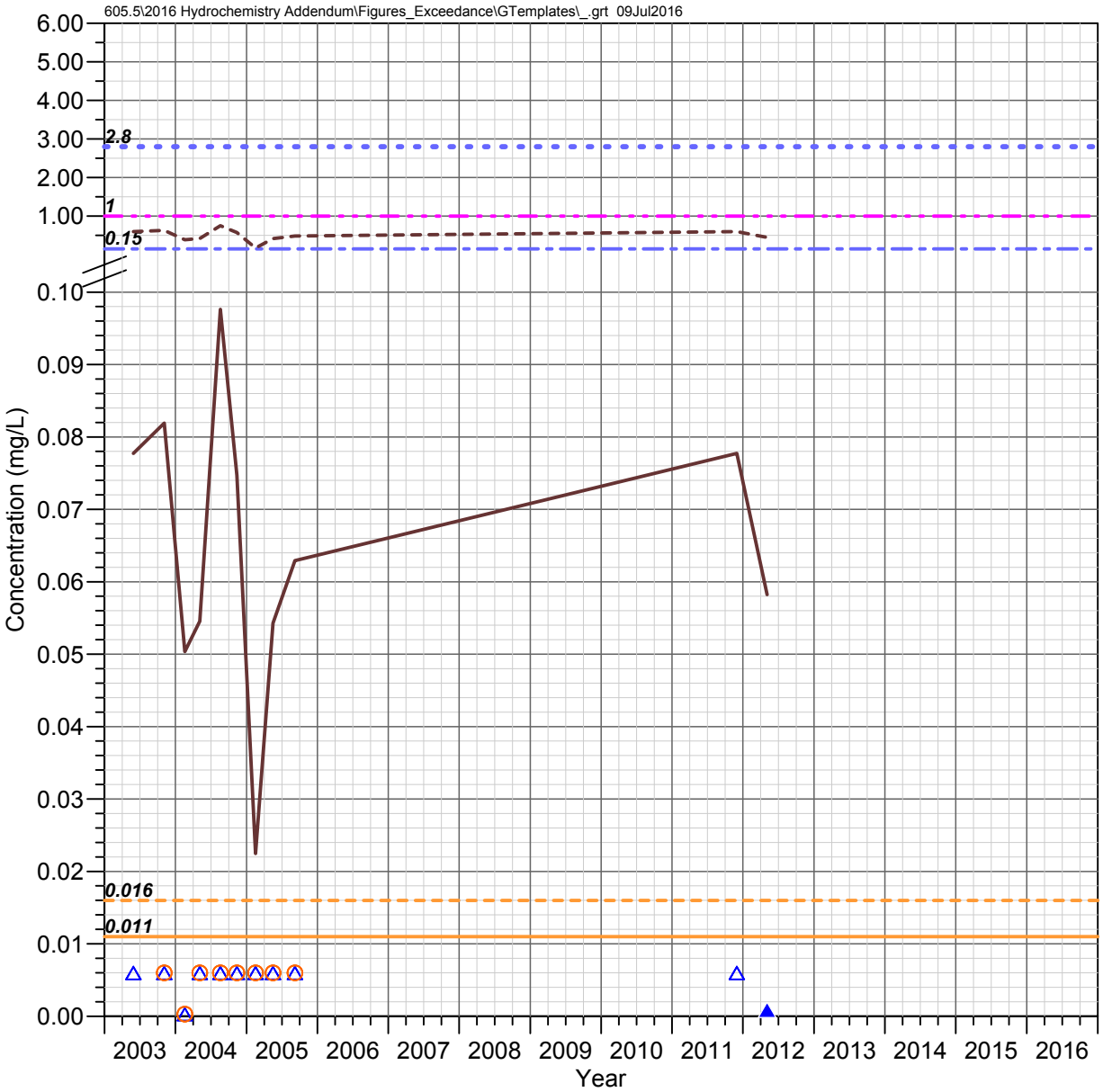


FIGURE F-233. CHROMIUM CONCENTRATIONS OBSERVED AT DC 8.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 7.1 C
Devils Canyon Watershed

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent
*Chromium; **Hexavalent Chromium; ***Trivalent Chromium

- AZ Full Body Contact (TRC, 2.8 mg/L)**
- AZ Full Body Contact (TRC, 1400 mg/L)***
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.011mg/L)**
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)***
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.016 mg/L)**
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)***
- AZ Fish Consumption (TRC, 0.15 mg/L)**
- AZ Fish Consumption (TRC, 75 mg/L)***
- AZ Agricultural Livestock Watering (UNS, 1 mg/L)*

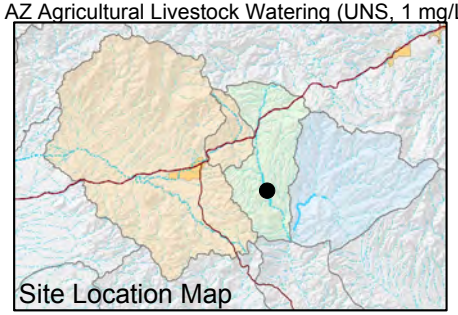
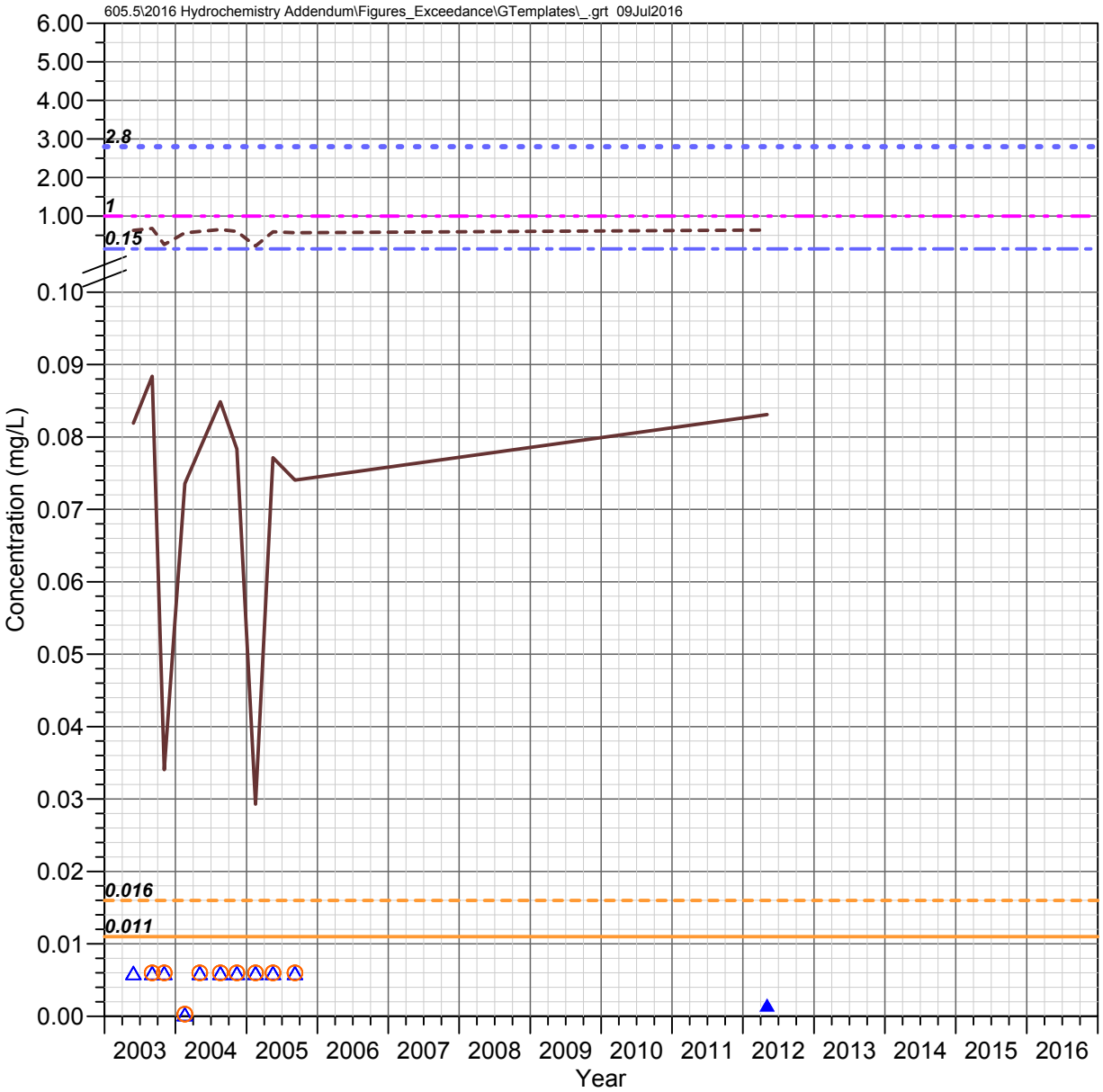


FIGURE F-234. CHROMIUM CONCENTRATIONS OBSERVED AT DC 7.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.6 W (DCT 6.6 W)
Devils Canyon Watershed

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent
*Chromium; **Hexavalent Chromium; ***Trivalent Chromium

- AZ Full Body Contact (TRC, 2.8 mg/L)**
- AZ Full Body Contact (TRC, 1400 mg/L)***
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.011mg/L)**
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)***
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.016 mg/L)**
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)***
- AZ Fish Consumption (TRC, 0.15 mg/L)**
- AZ Fish Consumption (TRC, 75 mg/L)***
- AZ Agricultural Livestock Watering (UNS, 1 mg/L)*

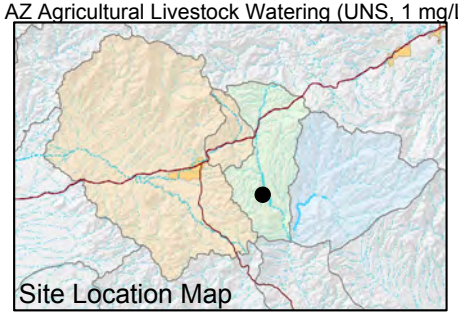
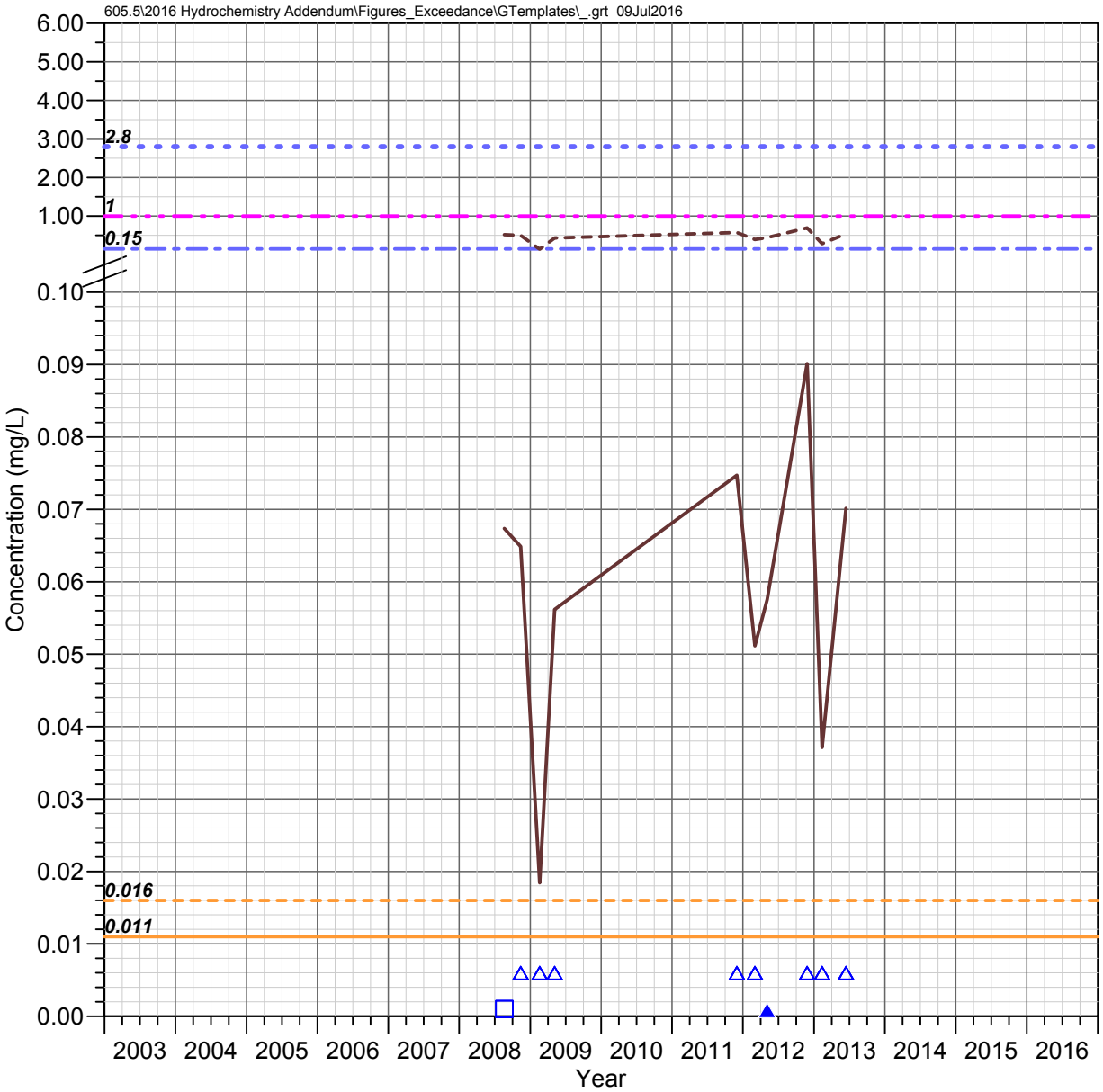


FIGURE F-235. CHROMIUM CONCENTRATIONS OBSERVED AT DC 6.6 W (DCT 6.6 W), DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.14 C
Devils Canyon Watershed

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent
*Chromium; **Hexavalent Chromium; ***Trivalent Chromium

- AZ Full Body Contact (TRC, 2.8 mg/L)**
- AZ Full Body Contact (TRC, 1400 mg/L)***
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.011mg/L)**
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)***
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.016 mg/L)**
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)***
- AZ Fish Consumption (TRC, 0.15 mg/L)**
- AZ Fish Consumption (TRC, 75 mg/L)***
- AZ Agricultural Livestock Watering (UNS, 1 mg/L)*

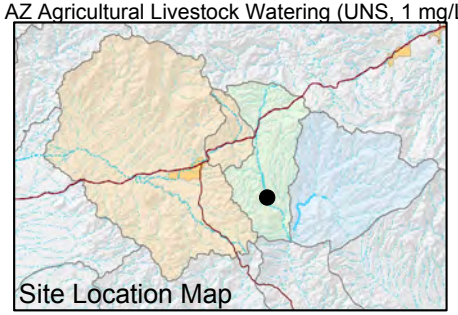
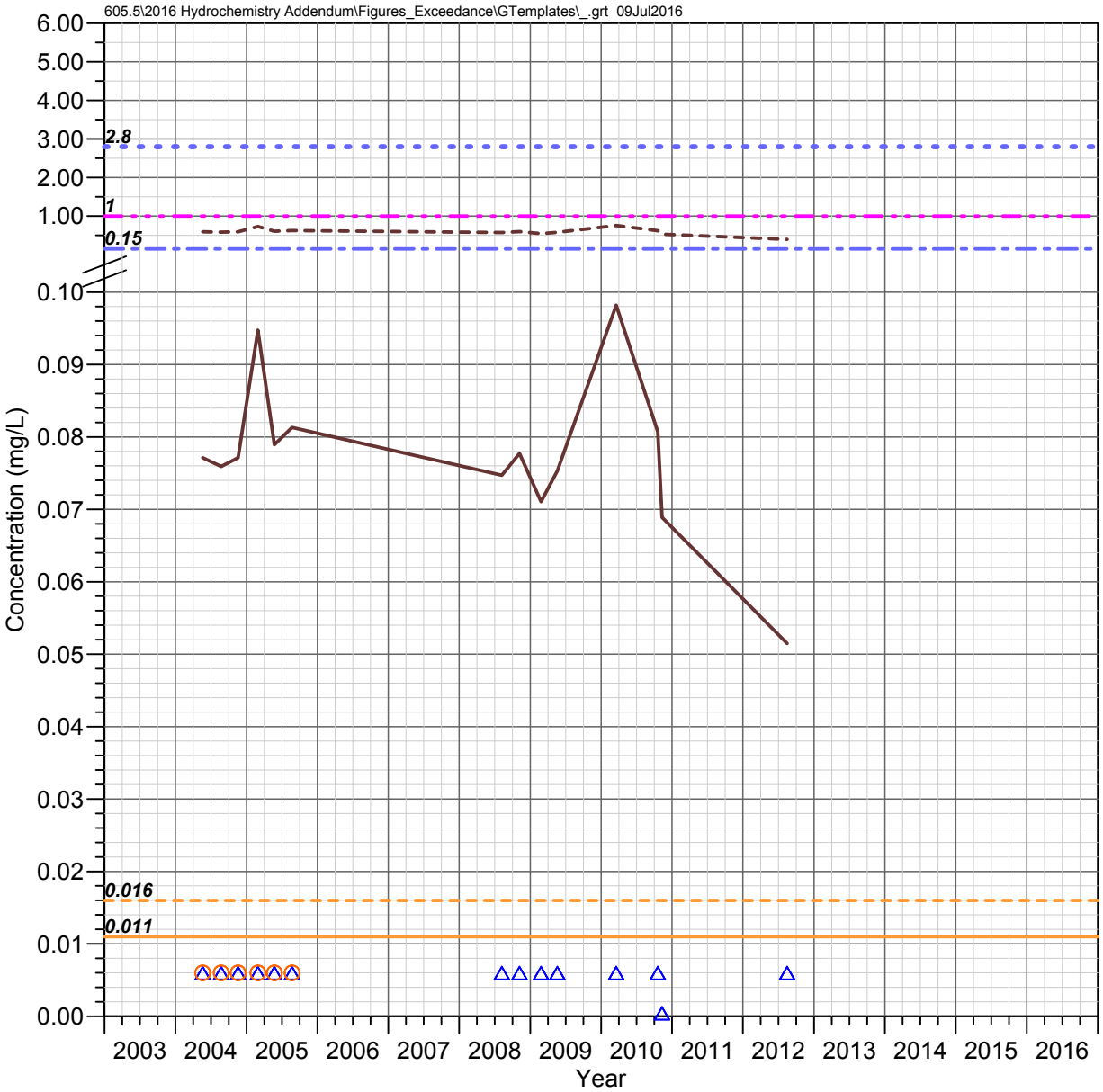


FIGURE F-236. CHROMIUM CONCENTRATIONS OBSERVED AT DC 6.14 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.1 E
Devils Canyon Watershed

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent
*Chromium; **Hexavalent Chromium; ***Trivalent Chromium

- AZ Full Body Contact (TRC, 2.8 mg/L)**
- AZ Full Body Contact (TRC, 1400 mg/L)***
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.011mg/L)**
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)***
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.016 mg/L)**
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)***
- AZ Fish Consumption (TRC, 0.15 mg/L)**
- AZ Fish Consumption (TRC, 75 mg/L)***
- AZ Agricultural Livestock Watering (UNS, 1 mg/L)*

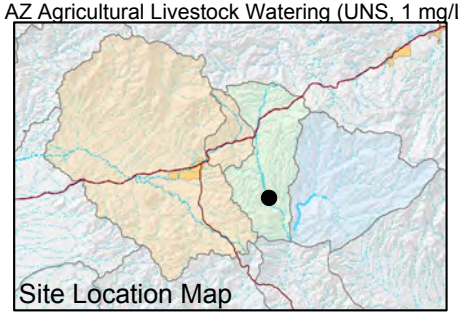
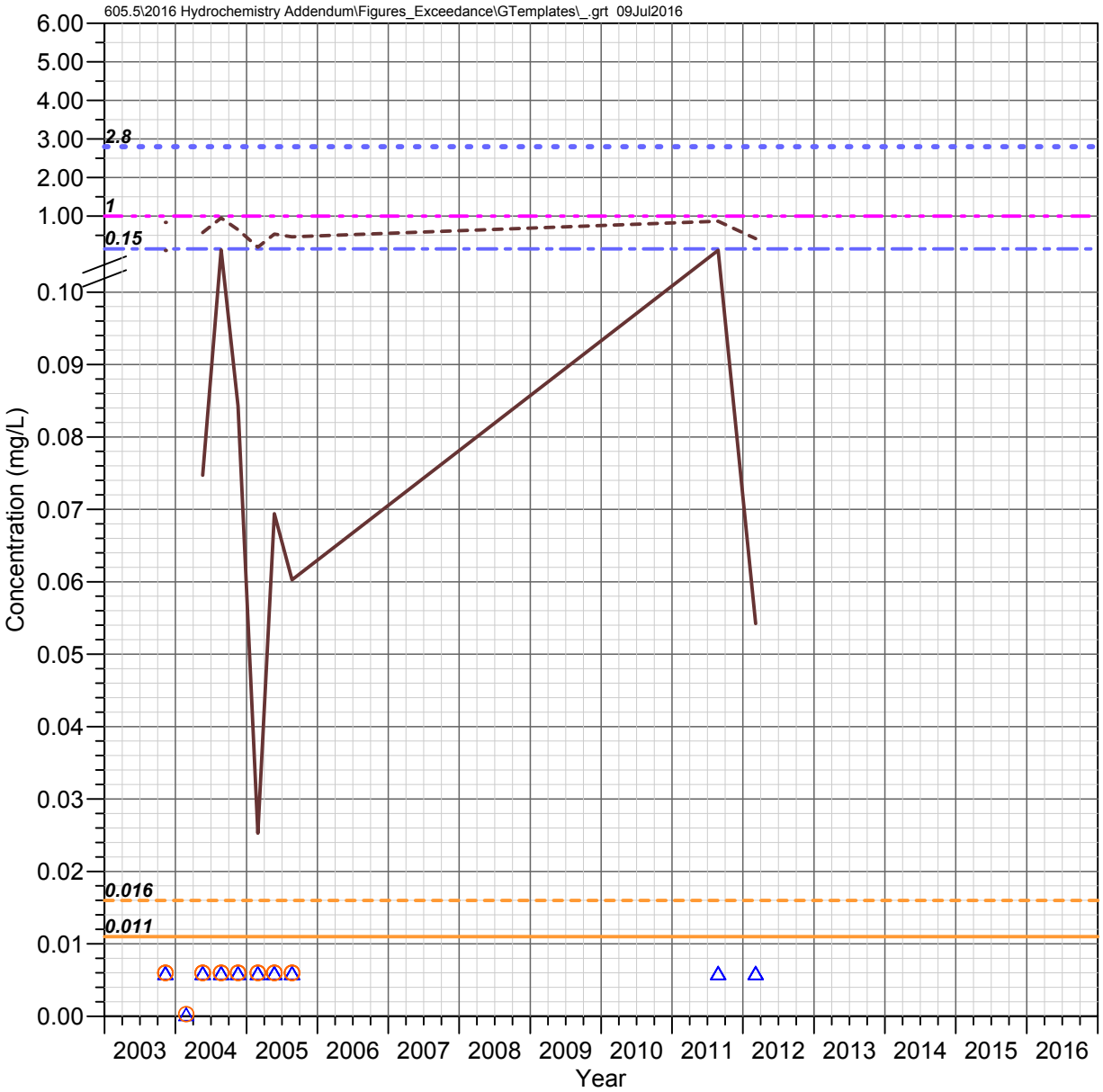


FIGURE F-237. CHROMIUM CONCENTRATIONS OBSERVED AT DC 6.1 E, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 5.5 C
Devils Canyon Watershed

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent
*Chromium; **Hexavalent Chromium; ***Trivalent Chromium

- AZ Full Body Contact (TRC, 2.8 mg/L)**
- AZ Full Body Contact (TRC, 1400 mg/L)***
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.011mg/L)**
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)***
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.016 mg/L)**
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)***
- AZ Fish Consumption (TRC, 0.15 mg/L)**
- AZ Fish Consumption (TRC, 75 mg/L)***
- AZ Agricultural Livestock Watering (UNS, 1 mg/L)*

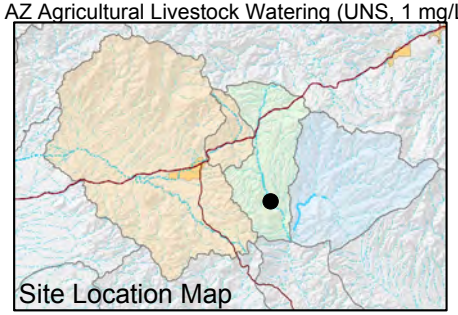
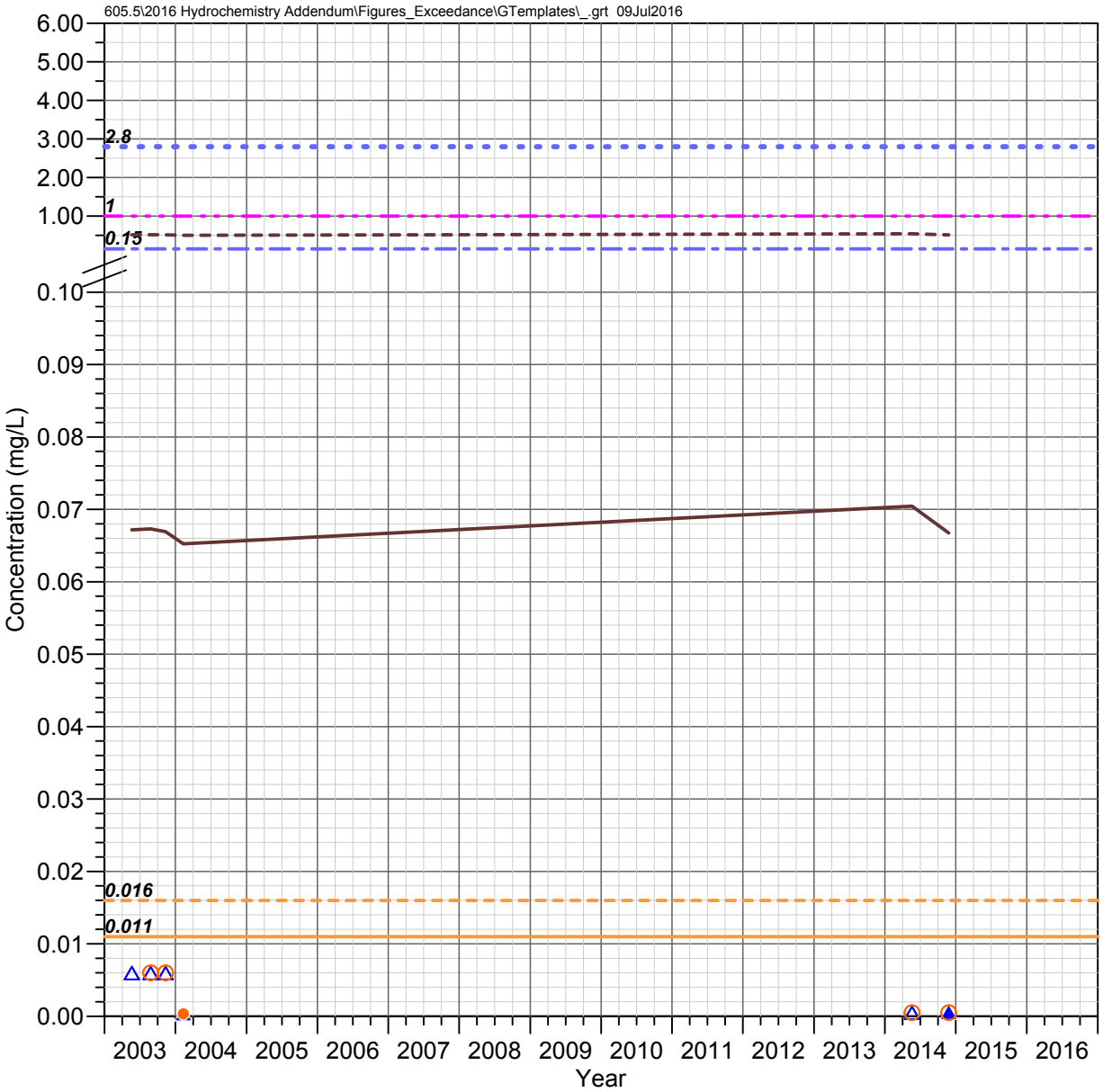


FIGURE F-238. CHROMIUM CONCENTRATIONS OBSERVED AT DC 5.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 4.1 E
Devils Canyon Watershed

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent
*Chromium; **Hexavalent Chromium; ***Trivalent Chromium

- AZ Full Body Contact (TRC, 2.8 mg/L)**
- AZ Full Body Contact (TRC, 1400 mg/L)***
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.011mg/L)**
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)***
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.016 mg/L)**
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)***
- AZ Fish Consumption (TRC, 0.15 mg/L)**
- AZ Fish Consumption (TRC, 75 mg/L)***
- AZ Agricultural Livestock Watering (UNS, 1 mg/L)*

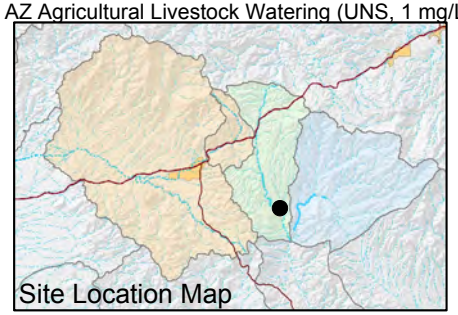
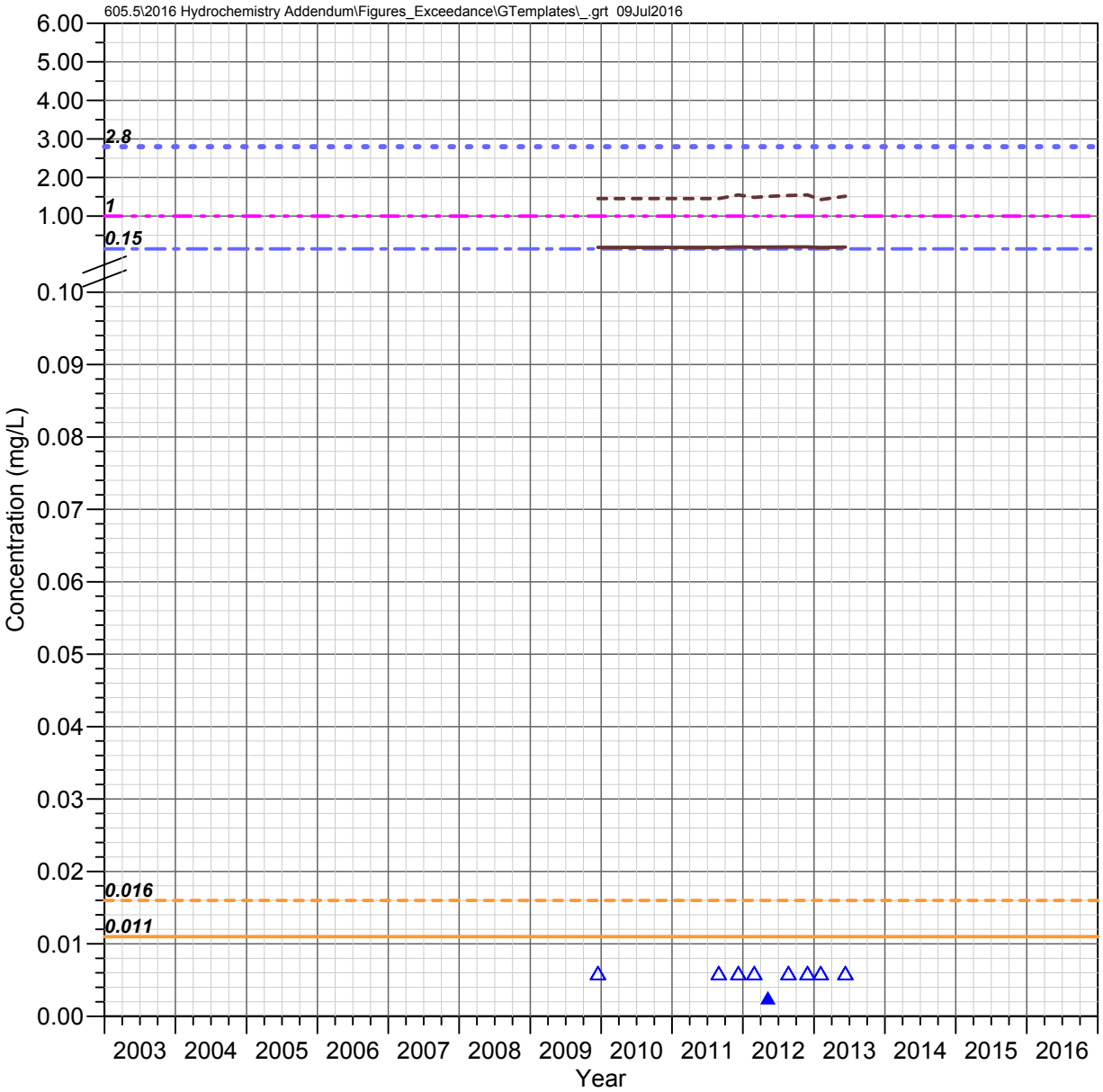


FIGURE F-239. CHROMIUM CONCENTRATIONS OBSERVED AT DC 4.1 E, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Government Springs Mineral Creek Watershed

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent
*Chromium; **Hexavalent Chromium; ***Trivalent Chromium

- AZ Full Body Contact (TRC, 2.8 mg/L)**
- AZ Full Body Contact (TRC, 1400 mg/L)***
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.011mg/L)**
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)***
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.016 mg/L)**
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)***
- AZ Fish Consumption (TRC, 0.15 mg/L)**
- AZ Fish Consumption (TRC, 75 mg/L)***
- AZ Agricultural Livestock Watering (UNS, 1 mg/L)*

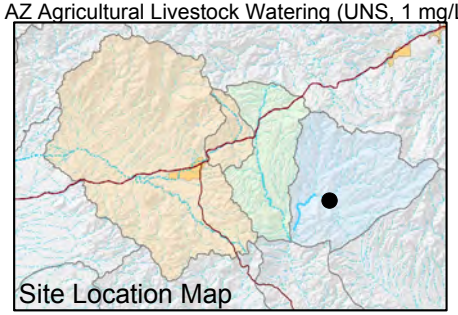
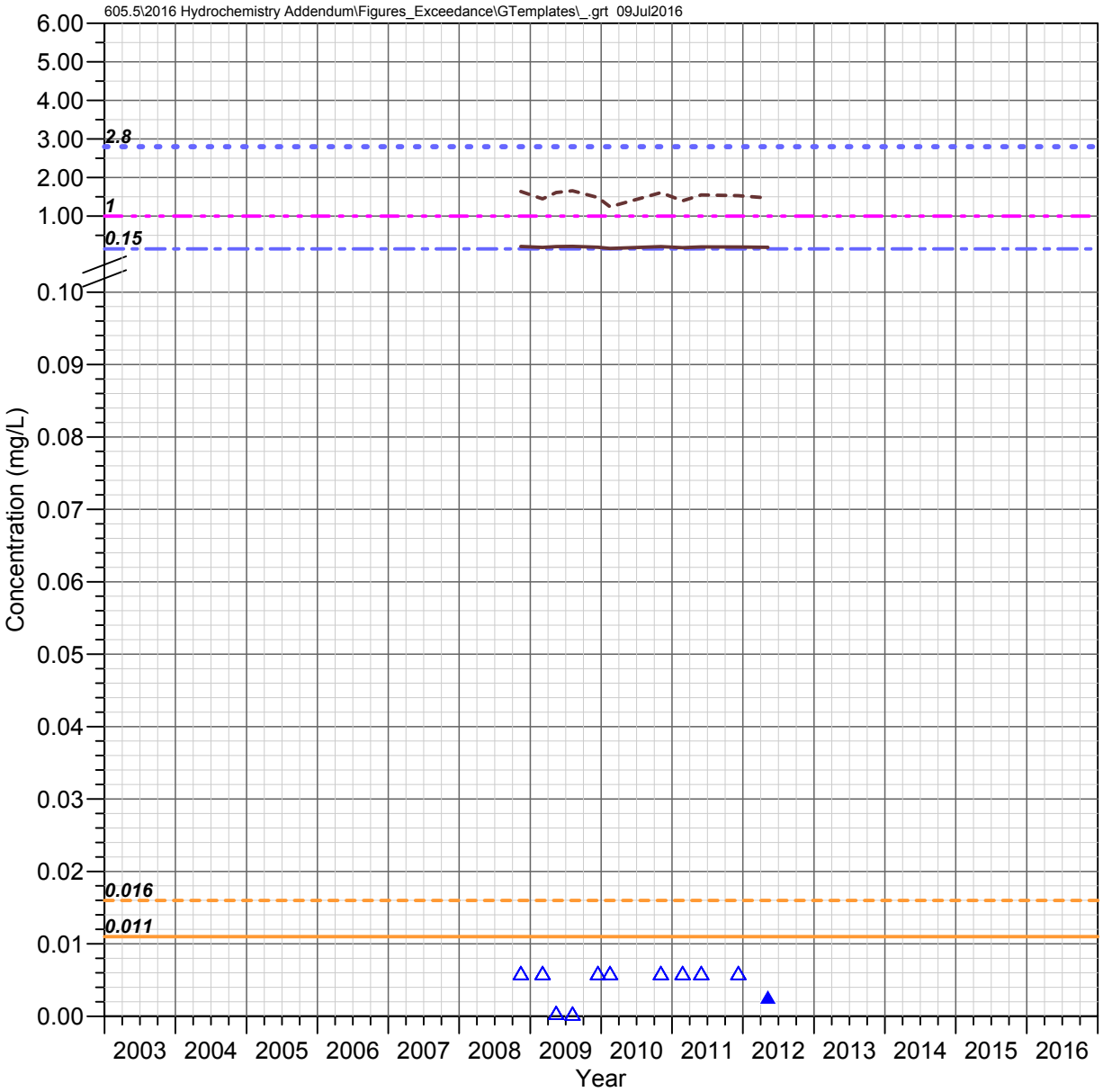


FIGURE F-240. CHROMIUM CONCENTRATIONS OBSERVED AT GOVERNMENT SPRINGS, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 8.4 C
Mineral Creek Watershed

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent
*Chromium; **Hexavalent Chromium; ***Trivalent Chromium

- AZ Full Body Contact (TRC, 2.8 mg/L)**
- AZ Full Body Contact (TRC, 1400 mg/L)***
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.011mg/L)**
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)***
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.016 mg/L)**
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)***
- AZ Fish Consumption (TRC, 0.15 mg/L)**
- AZ Fish Consumption (TRC, 75 mg/L)***
- AZ Agricultural Livestock Watering (UNS, 1 mg/L)*

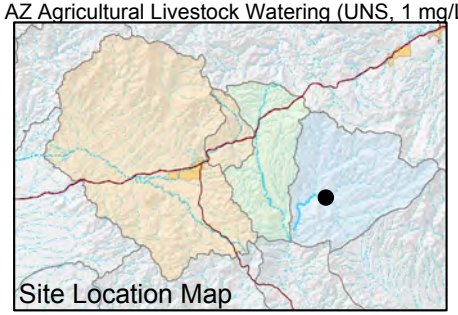
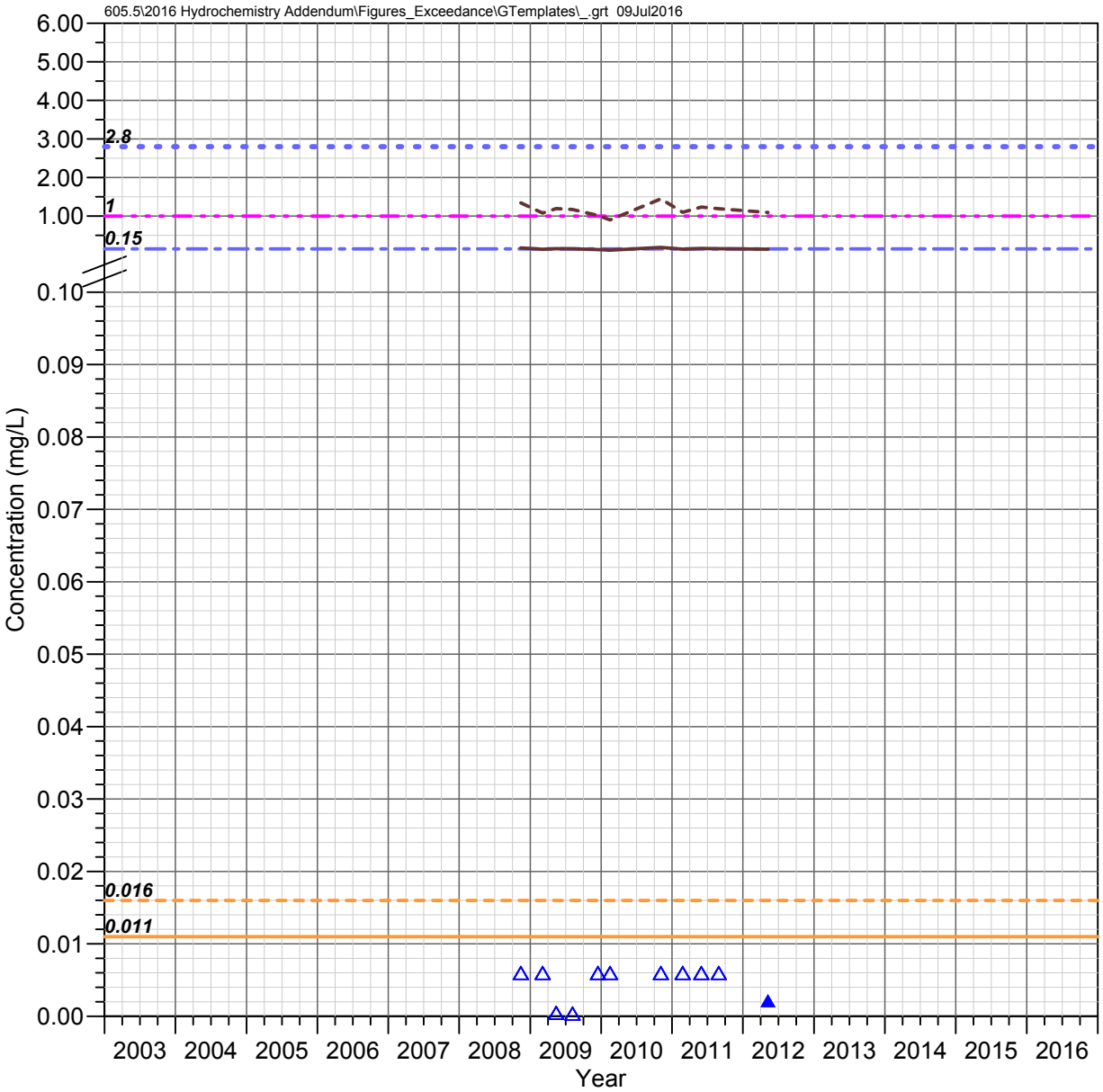


FIGURE F-241. CHROMIUM CONCENTRATIONS OBSERVED AT MC 8.4 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



LF 0.2 C
Mineral Creek Watershed

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent
*Chromium; **Hexavalent Chromium; ***Trivalent Chromium

- AZ Full Body Contact (TRC, 2.8 mg/L)**
- AZ Full Body Contact (TRC, 1400 mg/L)***
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.011mg/L)**
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)***
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.016 mg/L)**
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)***
- AZ Fish Consumption (TRC, 0.15 mg/L)**
- AZ Fish Consumption (TRC, 75 mg/L)***
- AZ Agricultural Livestock Watering (UNS, 1 mg/L)*

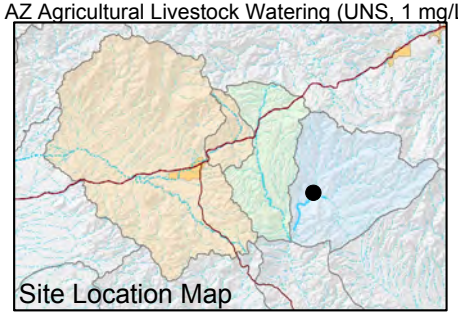
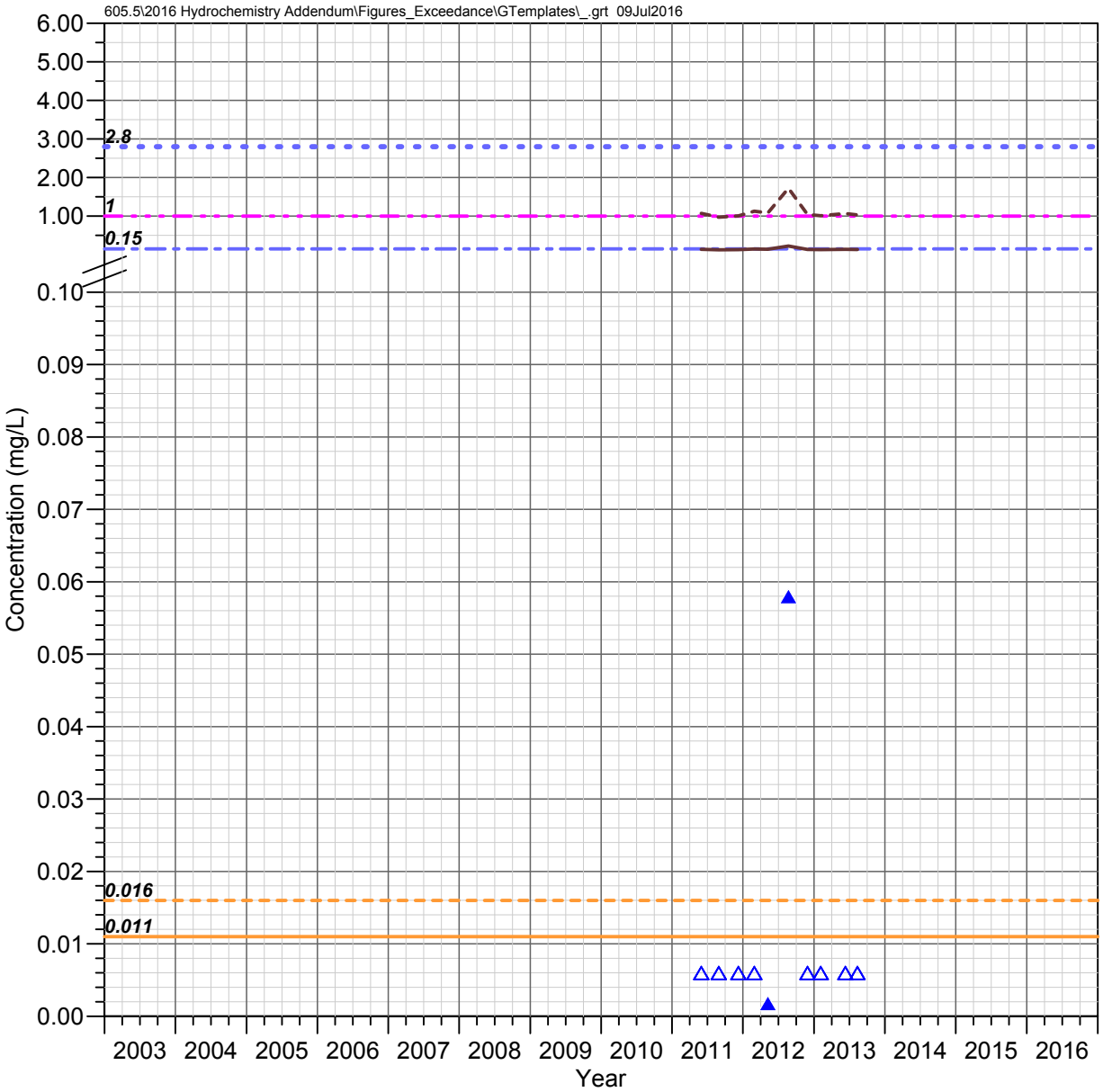


FIGURE F-242. CHROMIUM CONCENTRATIONS OBSERVED AT LF 0.2 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 5.2 C
Mineral Creek Watershed

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent
*Chromium; **Hexavalent Chromium; ***Trivalent Chromium

- AZ Full Body Contact (TRC, 2.8 mg/L)**
- AZ Full Body Contact (TRC, 1400 mg/L)***
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.011mg/L)**
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)***
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.016 mg/L)**
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)***
- AZ Fish Consumption (TRC, 0.15 mg/L)**
- AZ Fish Consumption (TRC, 75 mg/L)***
- AZ Agricultural Livestock Watering (UNS, 1 mg/L)*

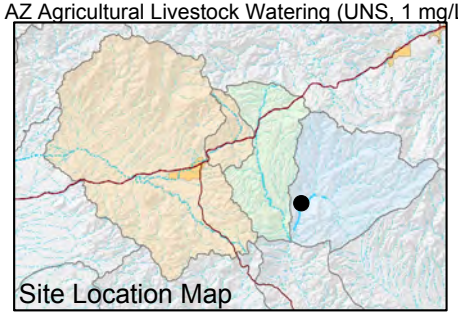
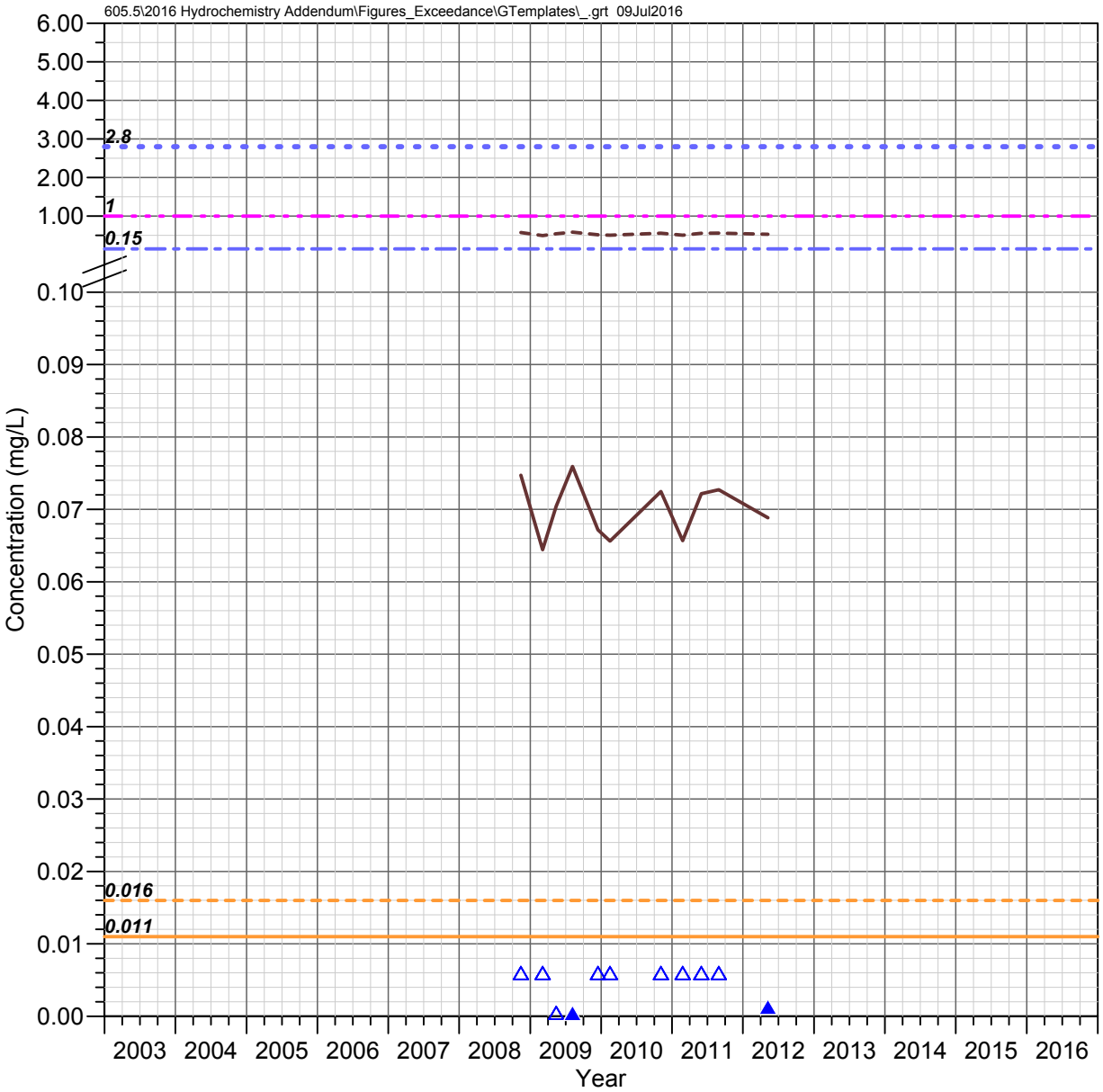


FIGURE F-243. CHROMIUM CONCENTRATIONS OBSERVED AT MC 5.2 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 3.4 W (Wet Leg Spring)
Mineral Creek Watershed

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent
*Chromium; **Hexavalent Chromium; ***Trivalent Chromium

- AZ Full Body Contact (TRC, 2.8 mg/L)**
- AZ Full Body Contact (TRC, 1400 mg/L)***
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.011mg/L)**
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)***
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.016 mg/L)**
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)***
- AZ Fish Consumption (TRC, 0.15 mg/L)**
- AZ Fish Consumption (TRC, 75 mg/L)***
- AZ Agricultural Livestock Watering (UNS, 1 mg/L)*

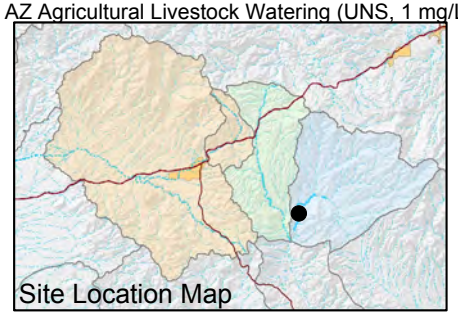
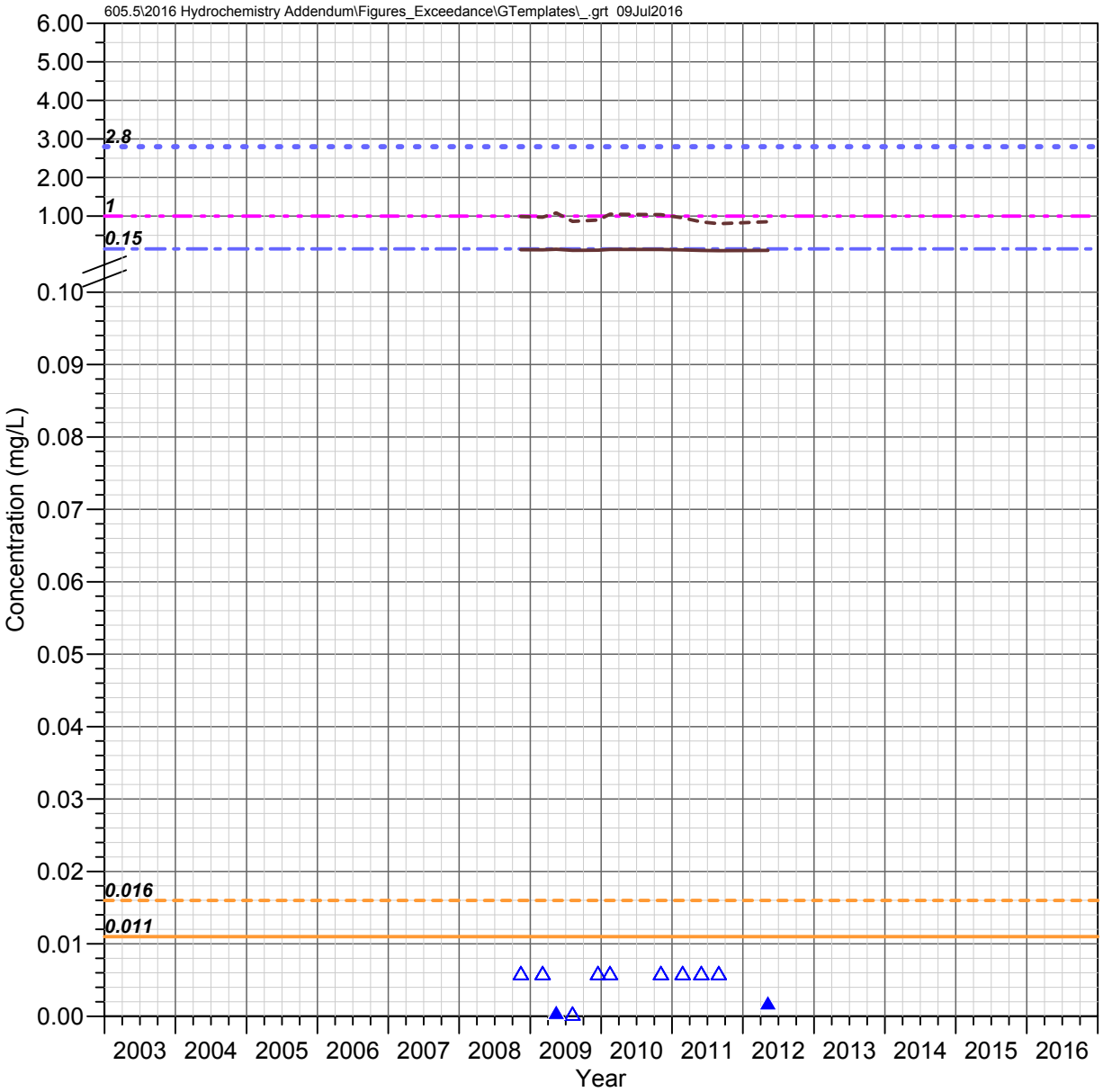


FIGURE F-244. CHROMIUM CONCENTRATIONS OBSERVED AT MC 3.4 W (WET LEG SPRING), MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 3.3 C (Lower Mineral)
Mineral Creek Watershed

CHROMIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
UNS = Unspecified; **HRD** = Hardness Dependent
*Chromium; **Hexavalent Chromium; ***Trivalent Chromium

- AZ Full Body Contact (TRC, 2.8 mg/L)**
- AZ Full Body Contact (TRC, 1400 mg/L)***
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.011mg/L)**
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)***
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.016 mg/L)**
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)***
- AZ Fish Consumption (TRC, 0.15 mg/L)**
- AZ Fish Consumption (TRC, 75 mg/L)***
- AZ Agricultural Livestock Watering (UNS, 1 mg/L)*

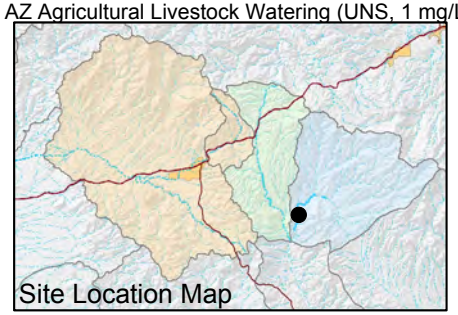
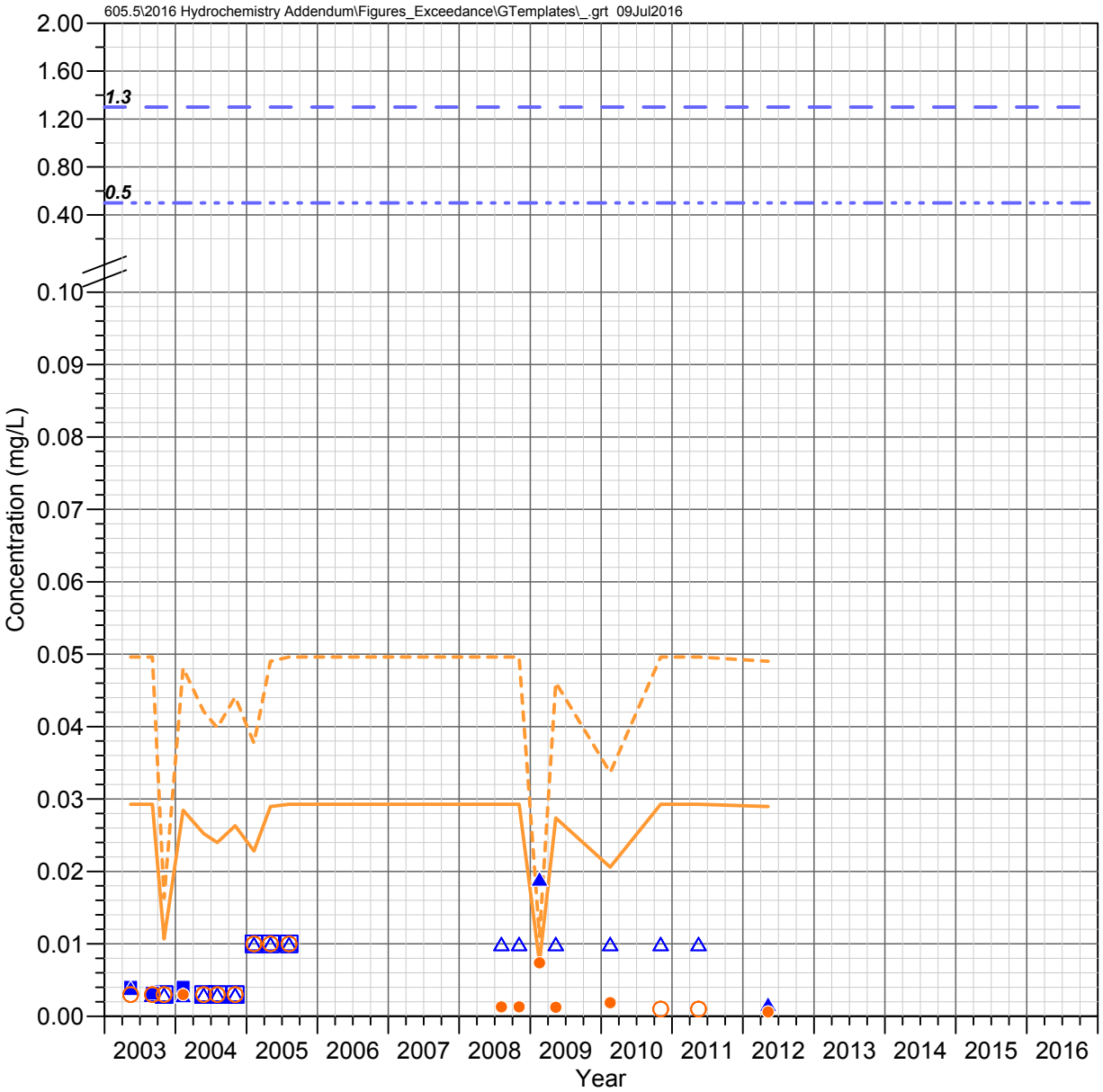


FIGURE F-245. CHROMIUM CONCENTRATIONS OBSERVED AT MC 3.3 C (LOWER MINERAL), MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Pump Station Spring (QC 30.7 C)
Queen Creek Watershed

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 1.3 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Agricultural Livestock Watering (TRC, 0.5 mg/L)

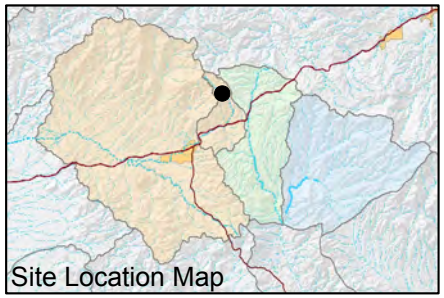
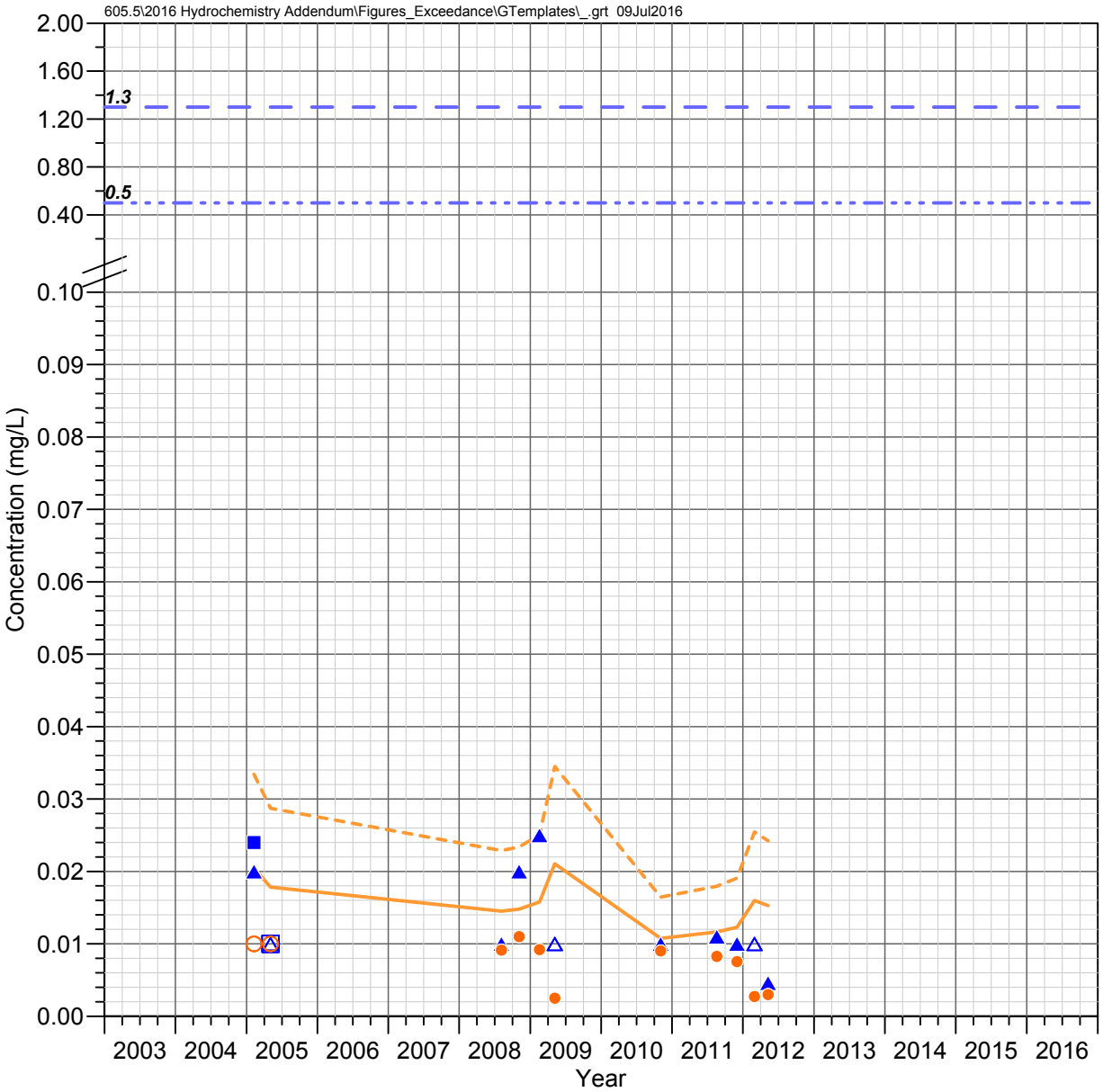


FIGURE F-246. COPPER CONCENTRATIONS OBSERVED AT PUMP STATION SPRING (QC 30.7 C), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 27.3 C
Queen Creek Watershed

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 1.3 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Agricultural Livestock Watering (TRC, 0.5 mg/L)

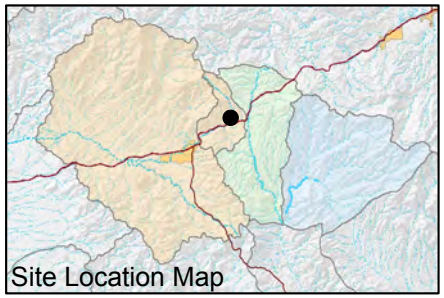
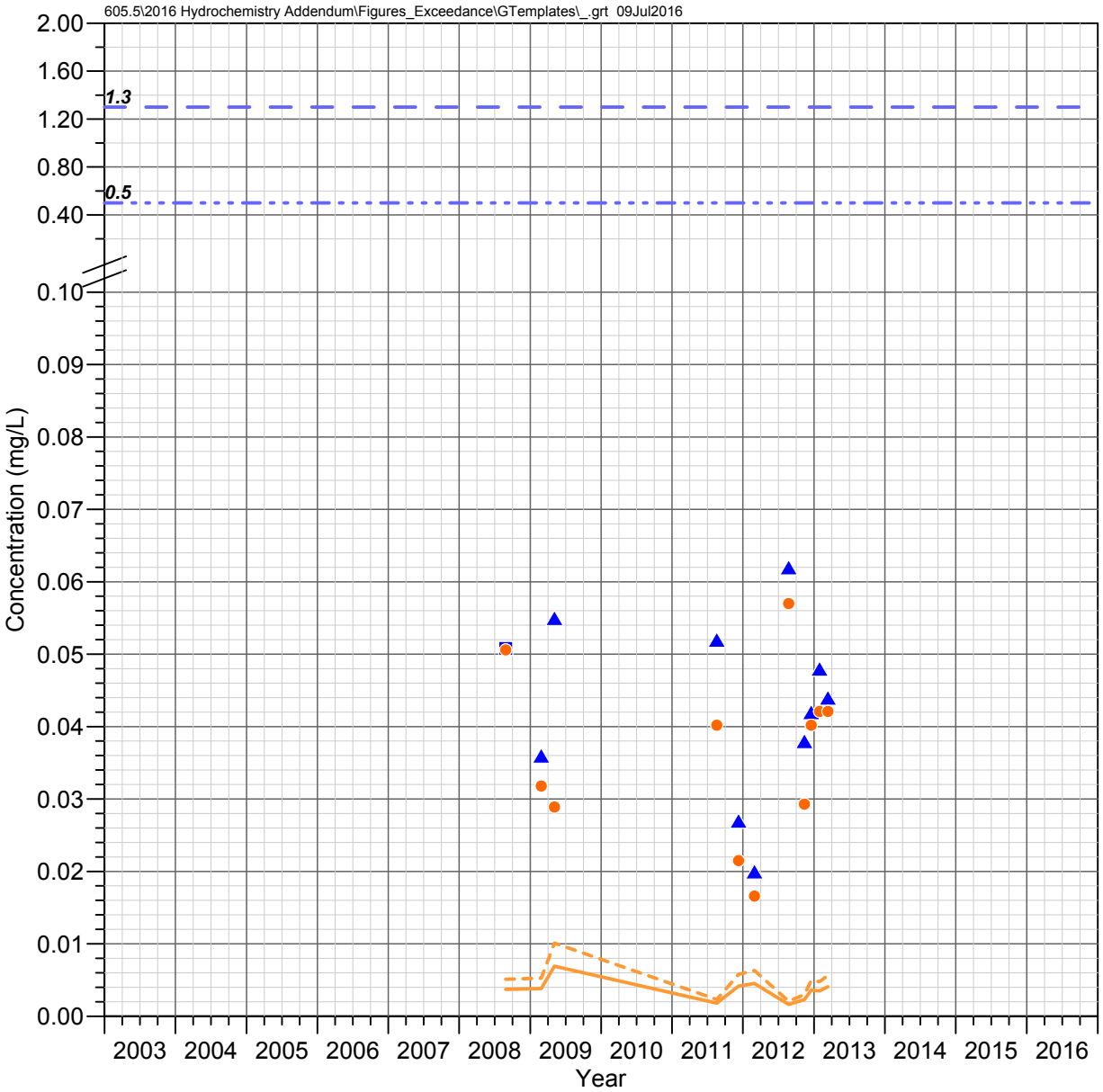


FIGURE F-247. COPPER CONCENTRATIONS OBSERVED AT QC 27.3 C, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Oak Flat Wash
Queen Creek Watershed

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 1.3 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Agricultural Livestock Watering (TRC, 0.5 mg/L)

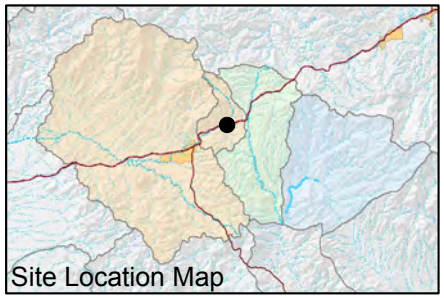
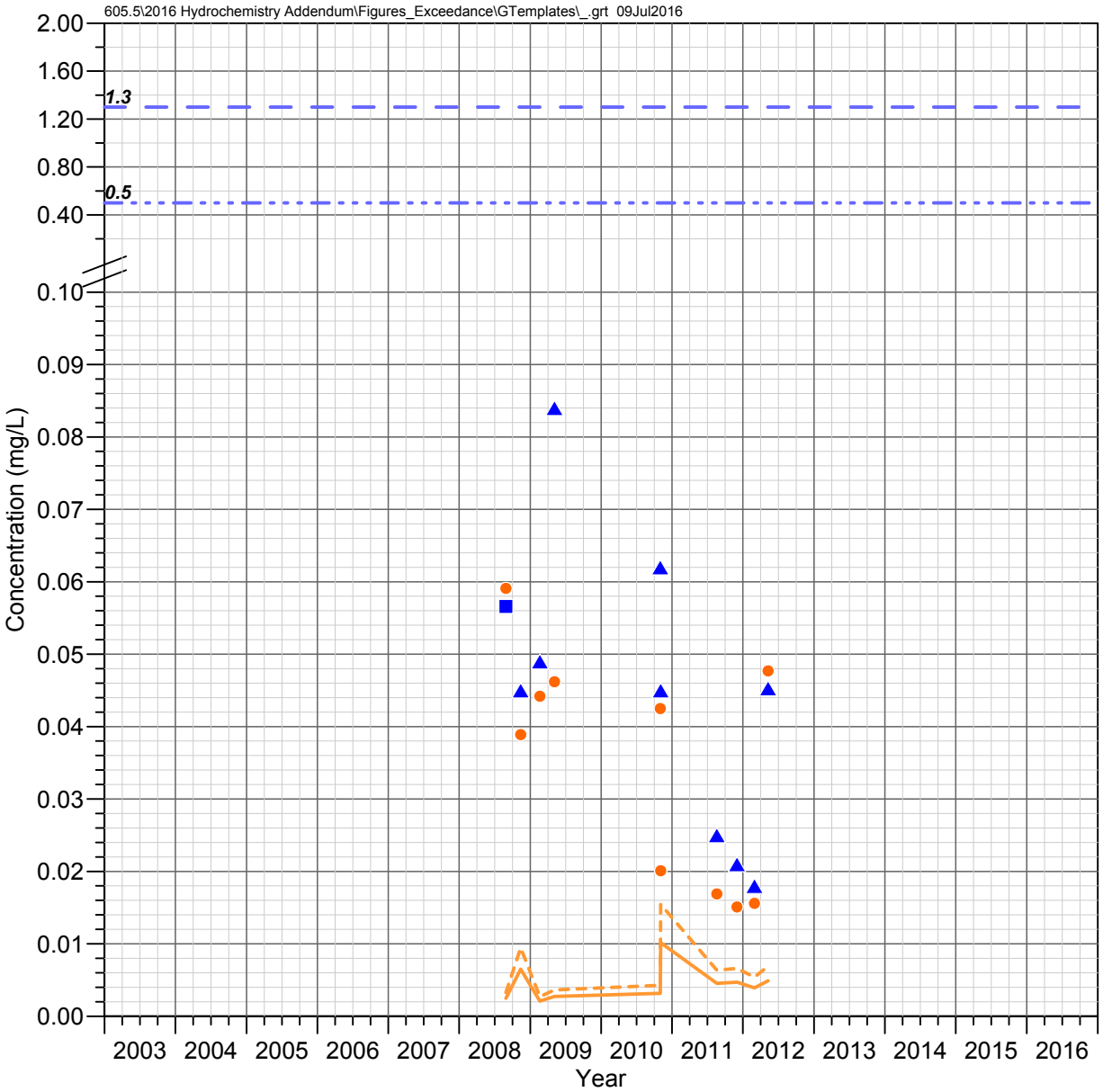


FIGURE F-248. COPPER CONCENTRATIONS OBSERVED AT OAK FLAT WASH, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Number 9 Wash
Queen Creek Watershed

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 1.3 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Agricultural Livestock Watering (TRC, 0.5 mg/L)

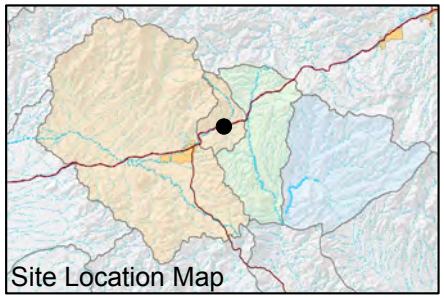
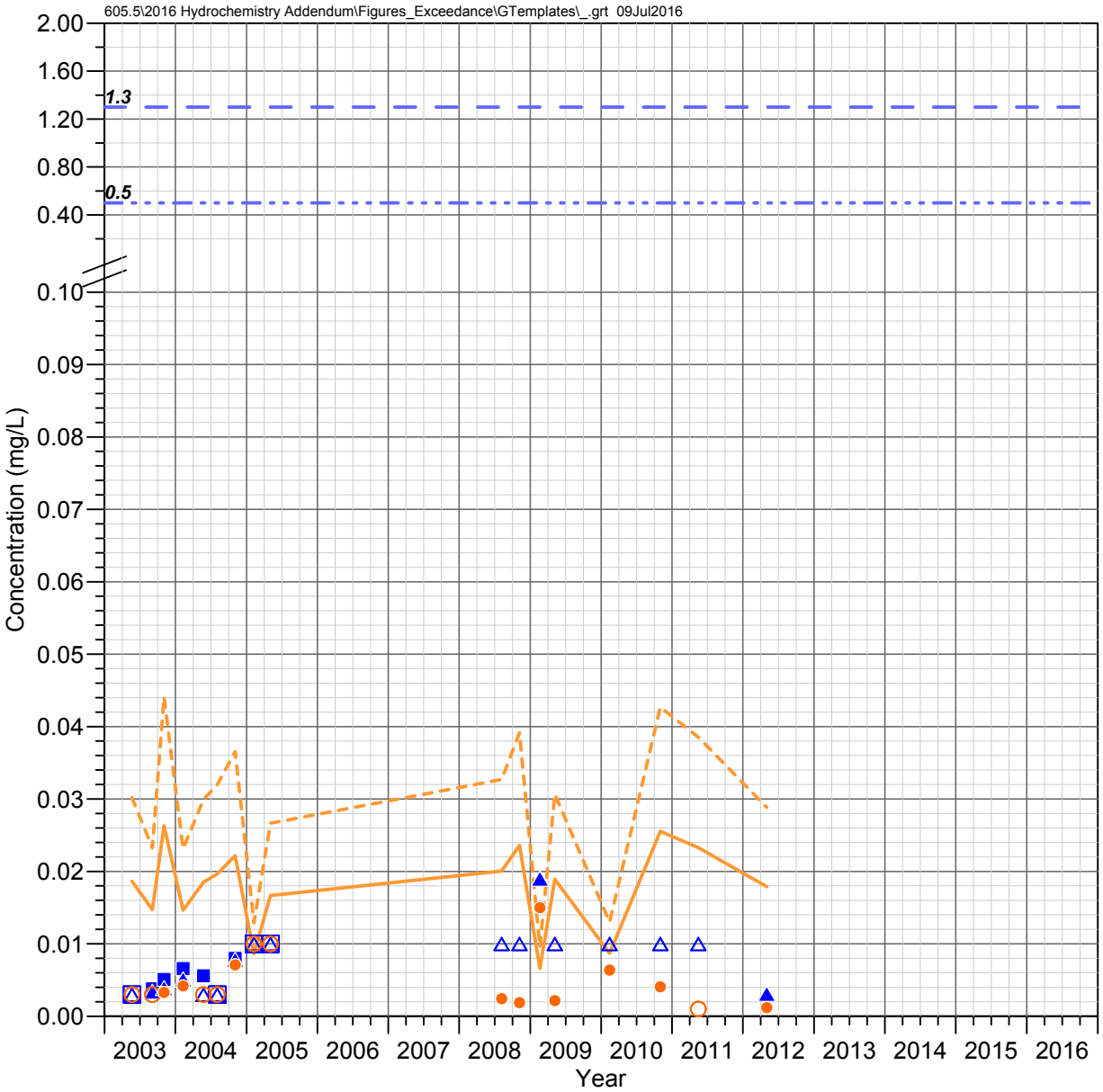


FIGURE F-249. COPPER CONCENTRATIONS OBSERVED AT NUMBER 9 WASH, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Boulder Hole (QC 23.6 C)
Queen Creek Watershed

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 1.3 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Agricultural Livestock Watering (TRC, 0.5 mg/L)

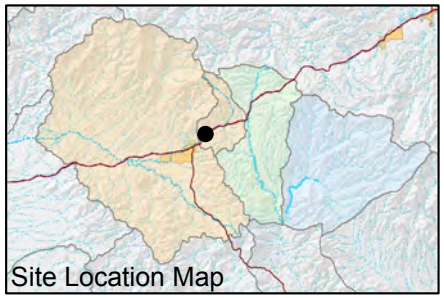
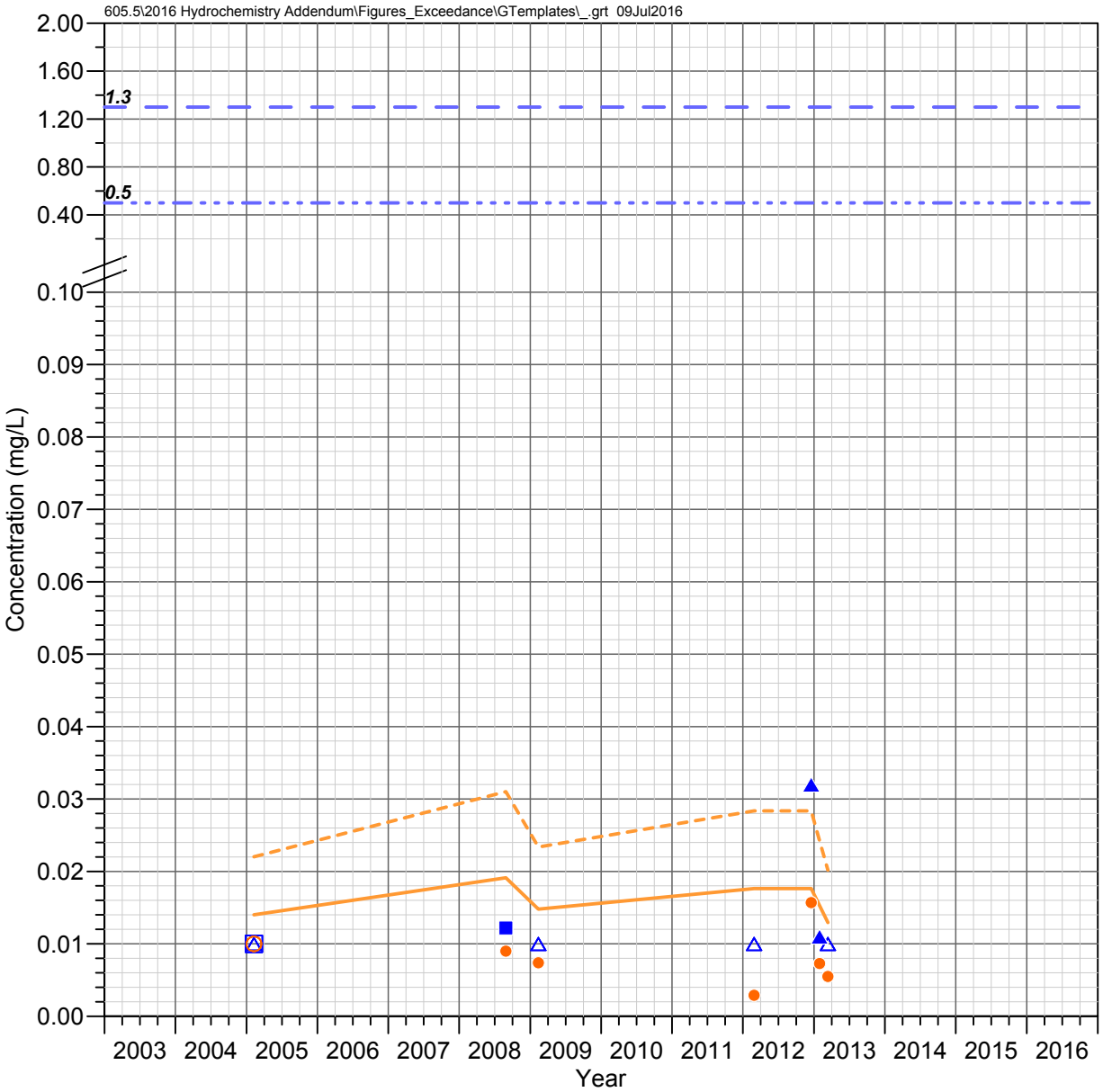


FIGURE F-250. COPPER CONCENTRATIONS OBSERVED AT BOULDER HOLE (QC 23.6 C), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 22.6 E (Karst Spring)
Queen Creek Watershed

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 1.3 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Agricultural Livestock Watering (TRC, 0.5 mg/L)

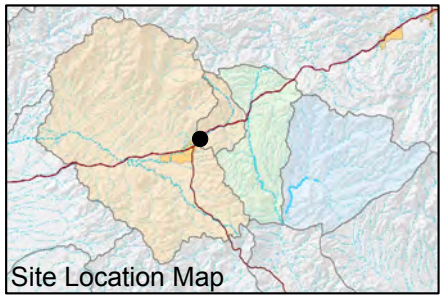
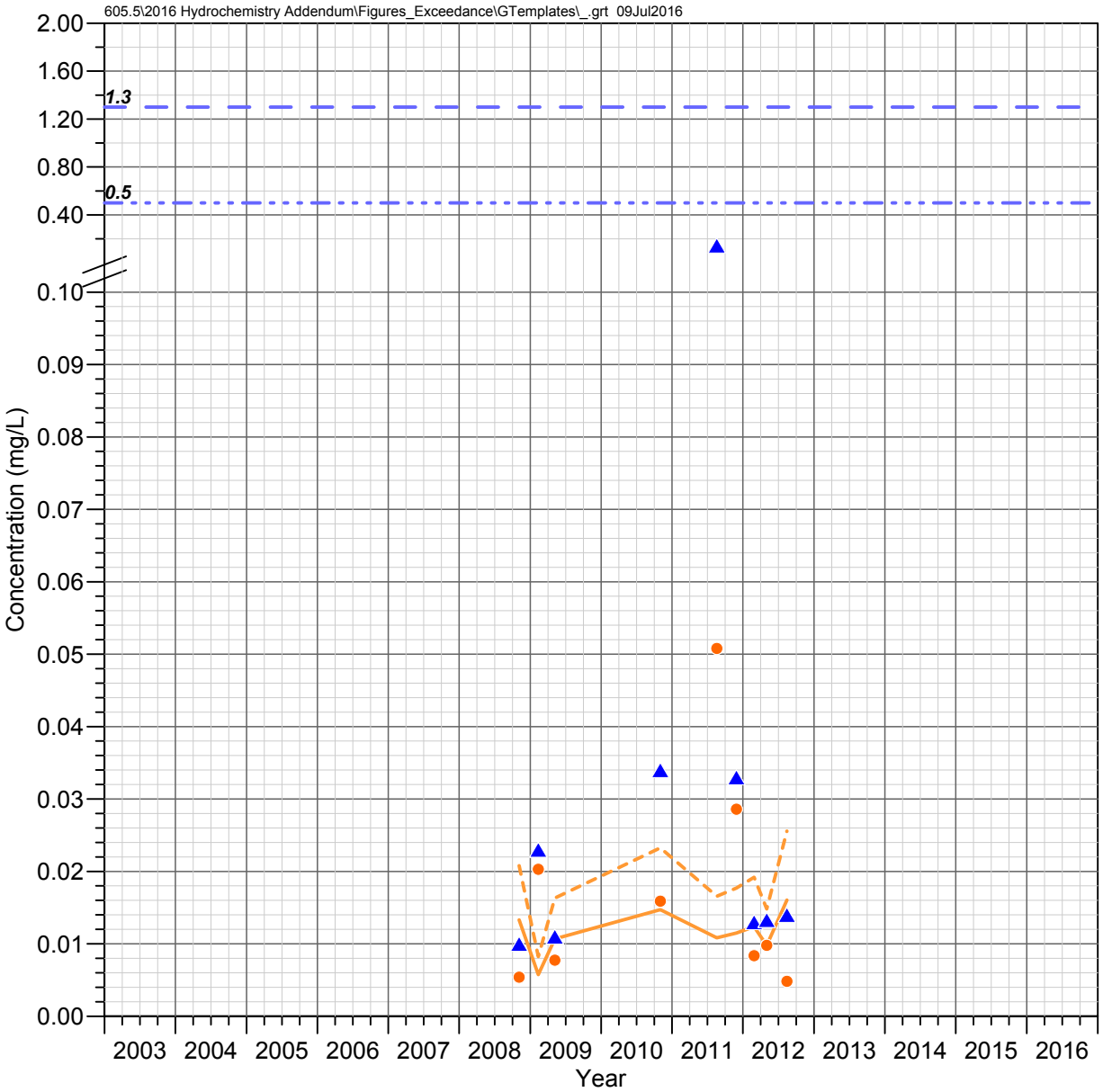


FIGURE F-251. COPPER CONCENTRATIONS OBSERVED AT QC 22.6 E (KARST SPRING), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 21.7 C (Magma Avenue)
Queen Creek Watershed

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 1.3 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Agricultural Livestock Watering (TRC, 0.5 mg/L)

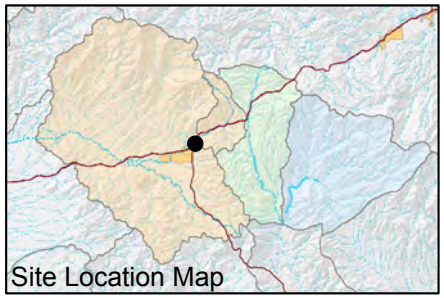
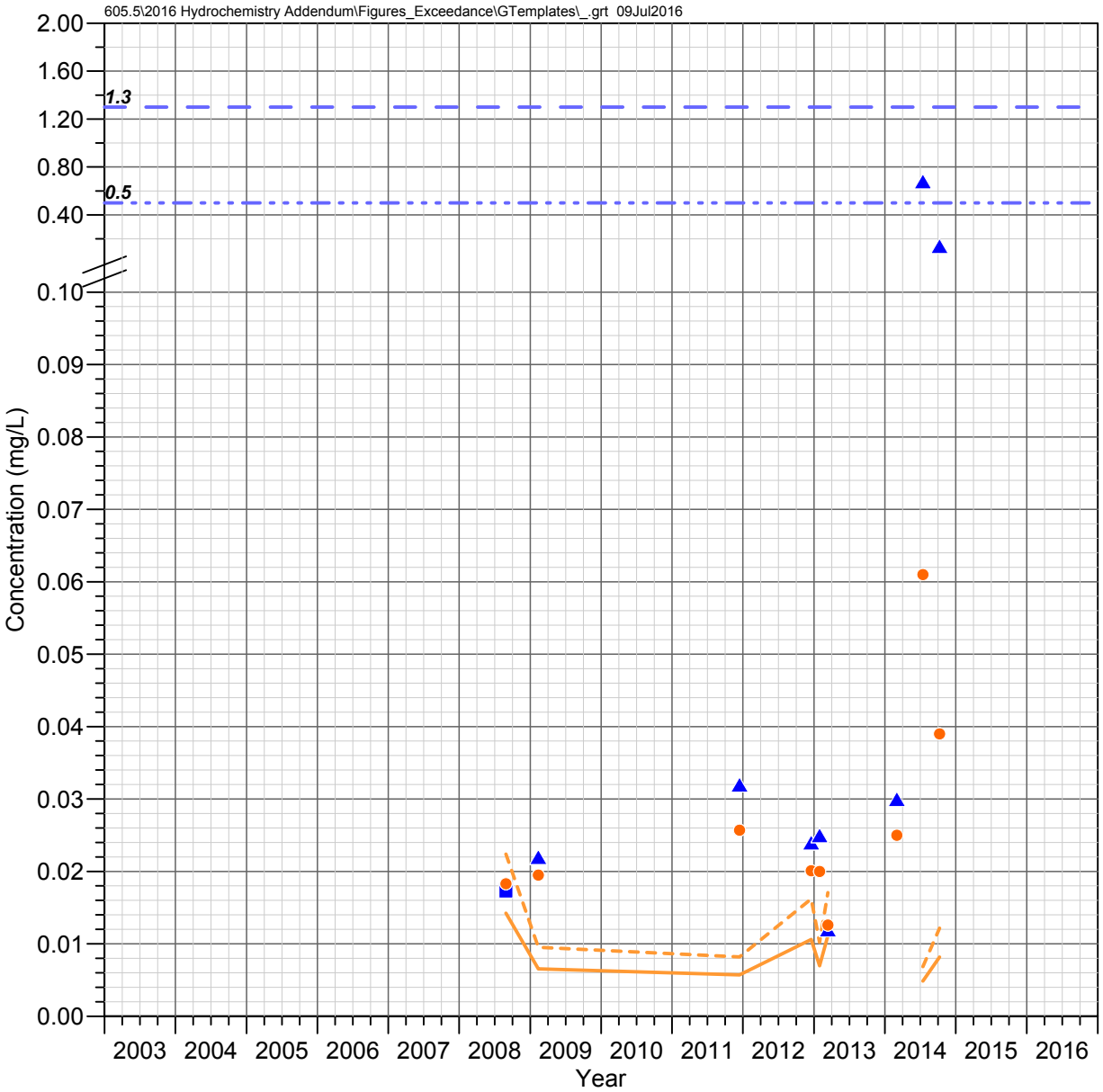


FIGURE F-252. COPPER CONCENTRATIONS OBSERVED AT QC 21.7 C (MAGMA AVENUE), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 19.7 C
Queen Creek Watershed

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 1.3 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Agricultural Livestock Watering (TRC, 0.5 mg/L)

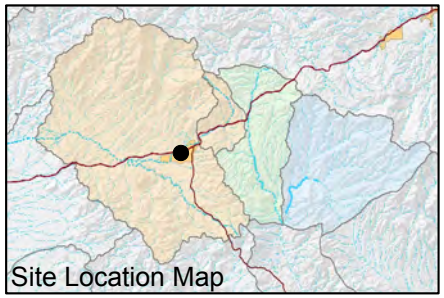
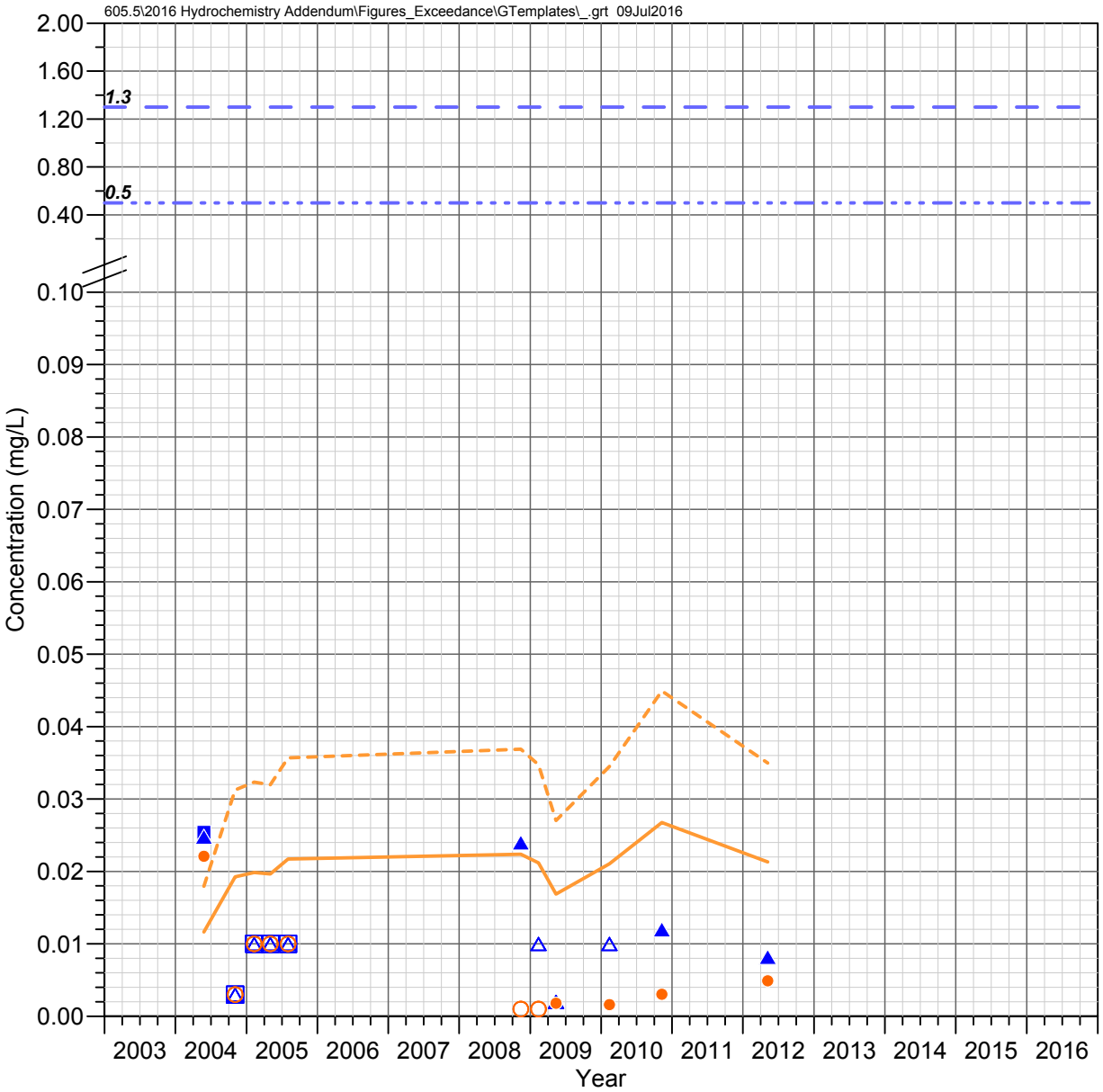


FIGURE F-253. COPPER CONCENTRATIONS OBSERVED AT QC 19.7 C, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Bored Spring
Queen Creek Watershed

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 1.3 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Agricultural Livestock Watering (TRC, 0.5 mg/L)

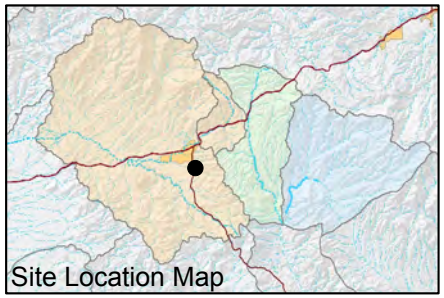
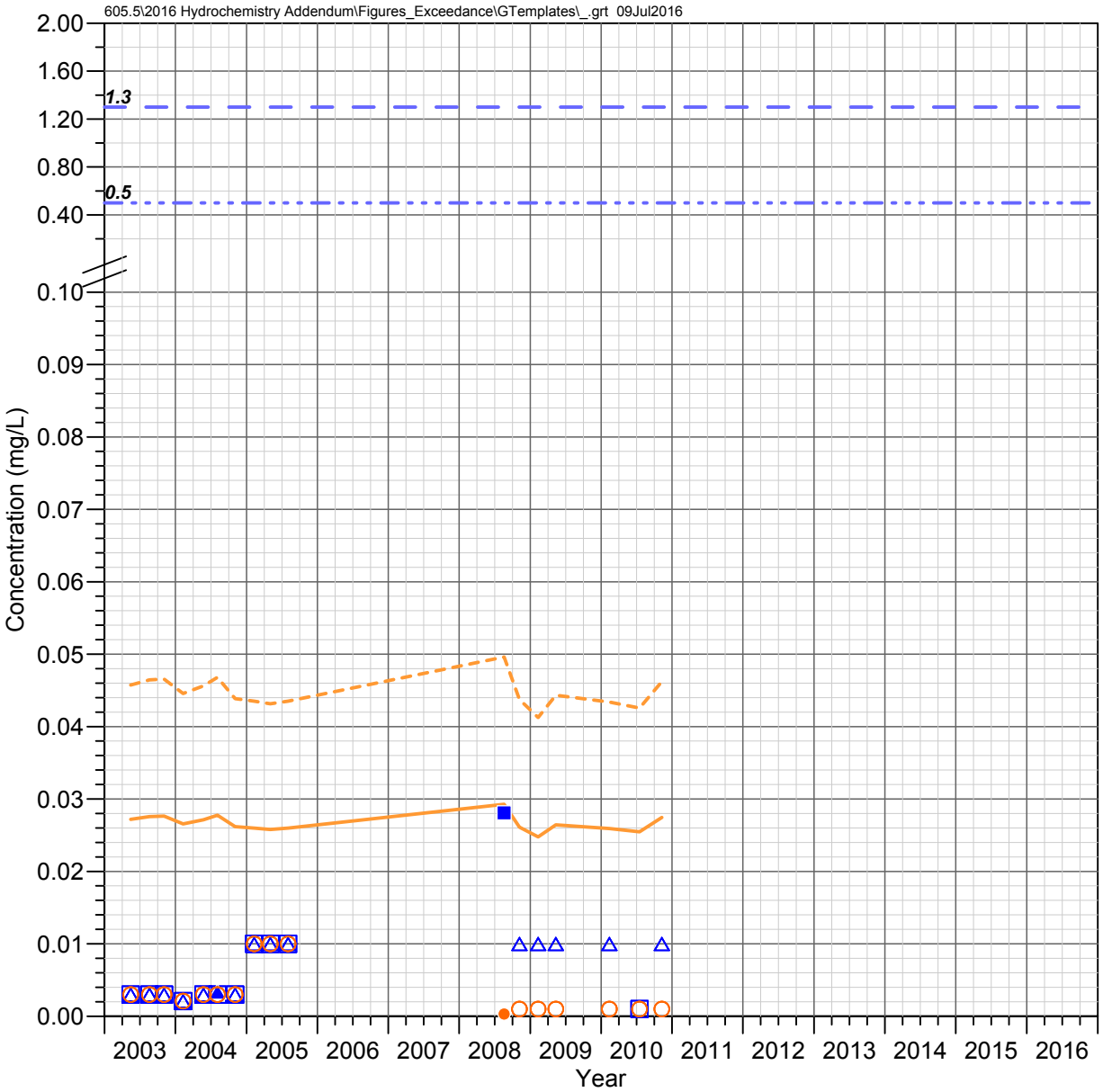


FIGURE F-254. COPPER CONCENTRATIONS OBSERVED AT BORED SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Hidden Spring
Queen Creek Watershed

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 1.3 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Agricultural Livestock Watering (TRC, 0.5 mg/L)

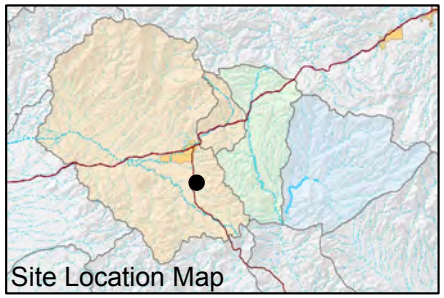
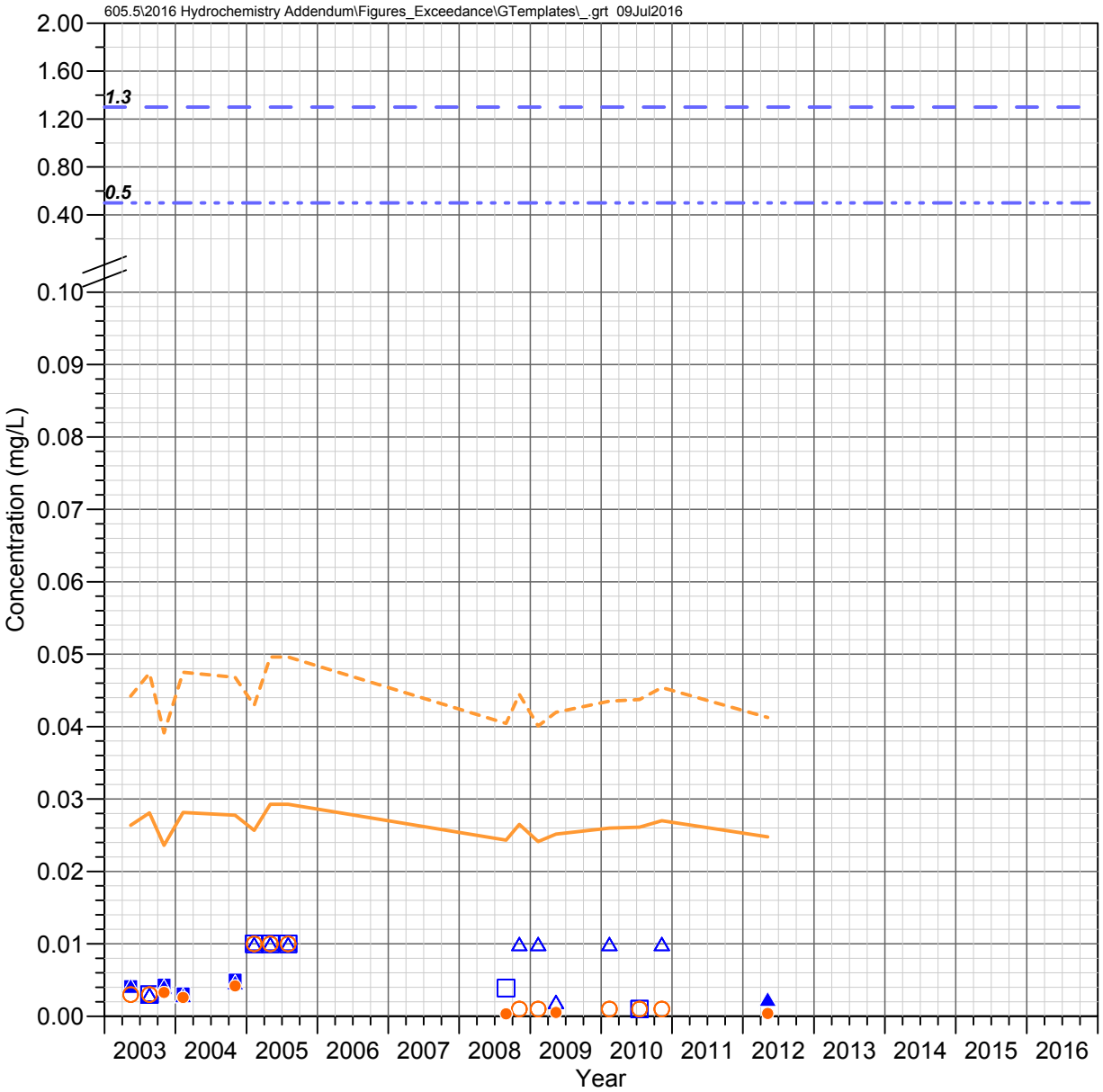


FIGURE F-255. COPPER CONCENTRATIONS OBSERVED AT HIDDEN SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Kane Spring
Queen Creek Watershed

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 1.3 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Agricultural Livestock Watering (TRC, 0.5 mg/L)

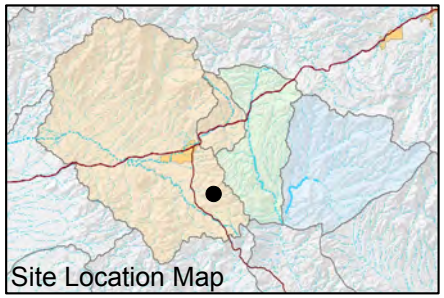
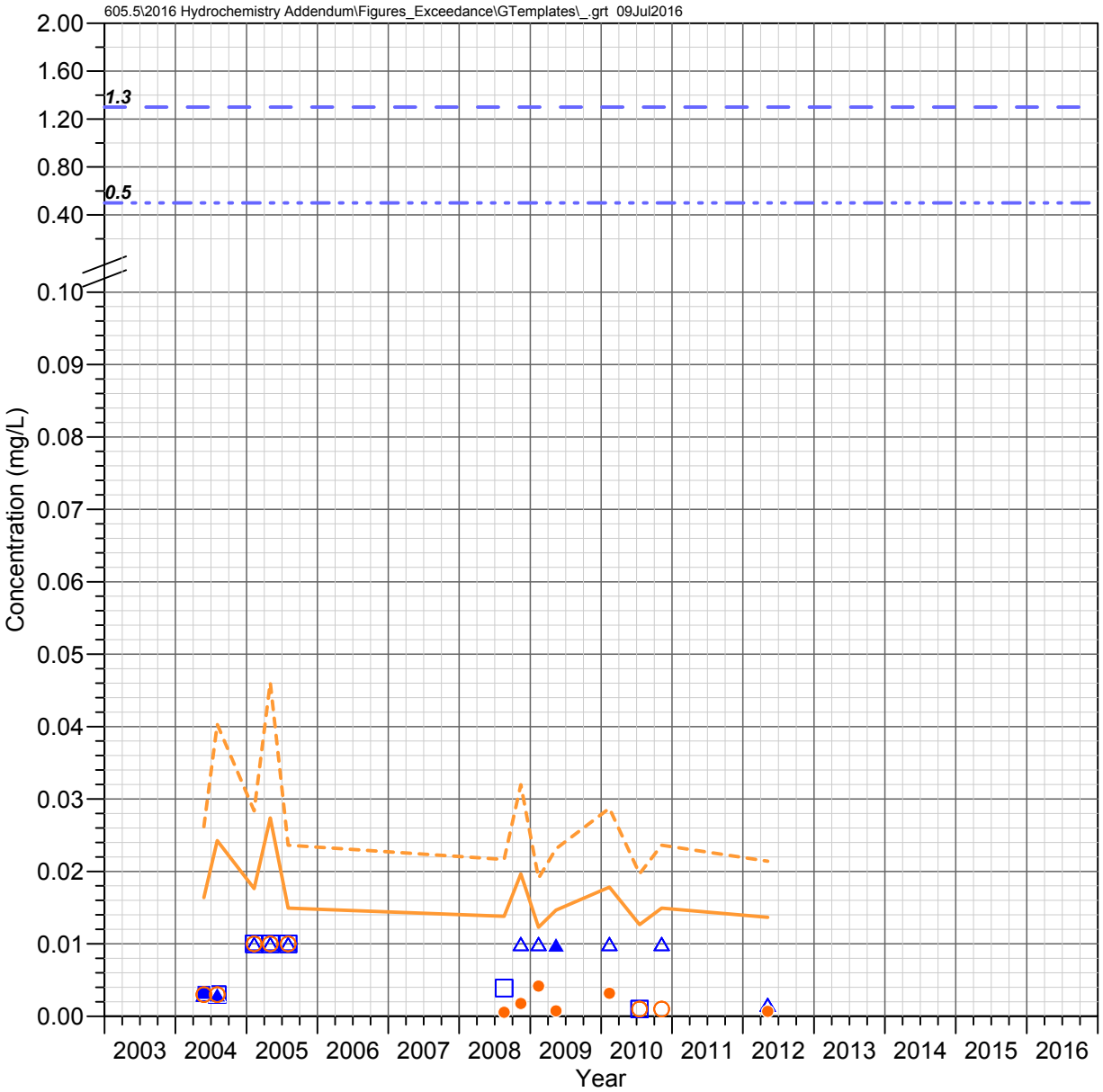


FIGURE F-256. COPPER CONCENTRATIONS OBSERVED AT KANE SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Blue Spring
Queen Creek Watershed

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 1.3 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Agricultural Livestock Watering (TRC, 0.5 mg/L)

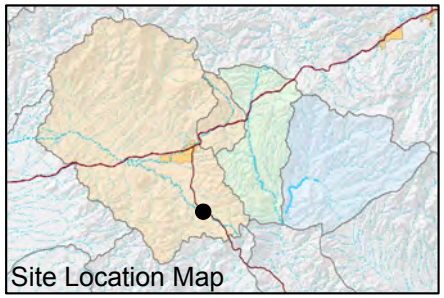
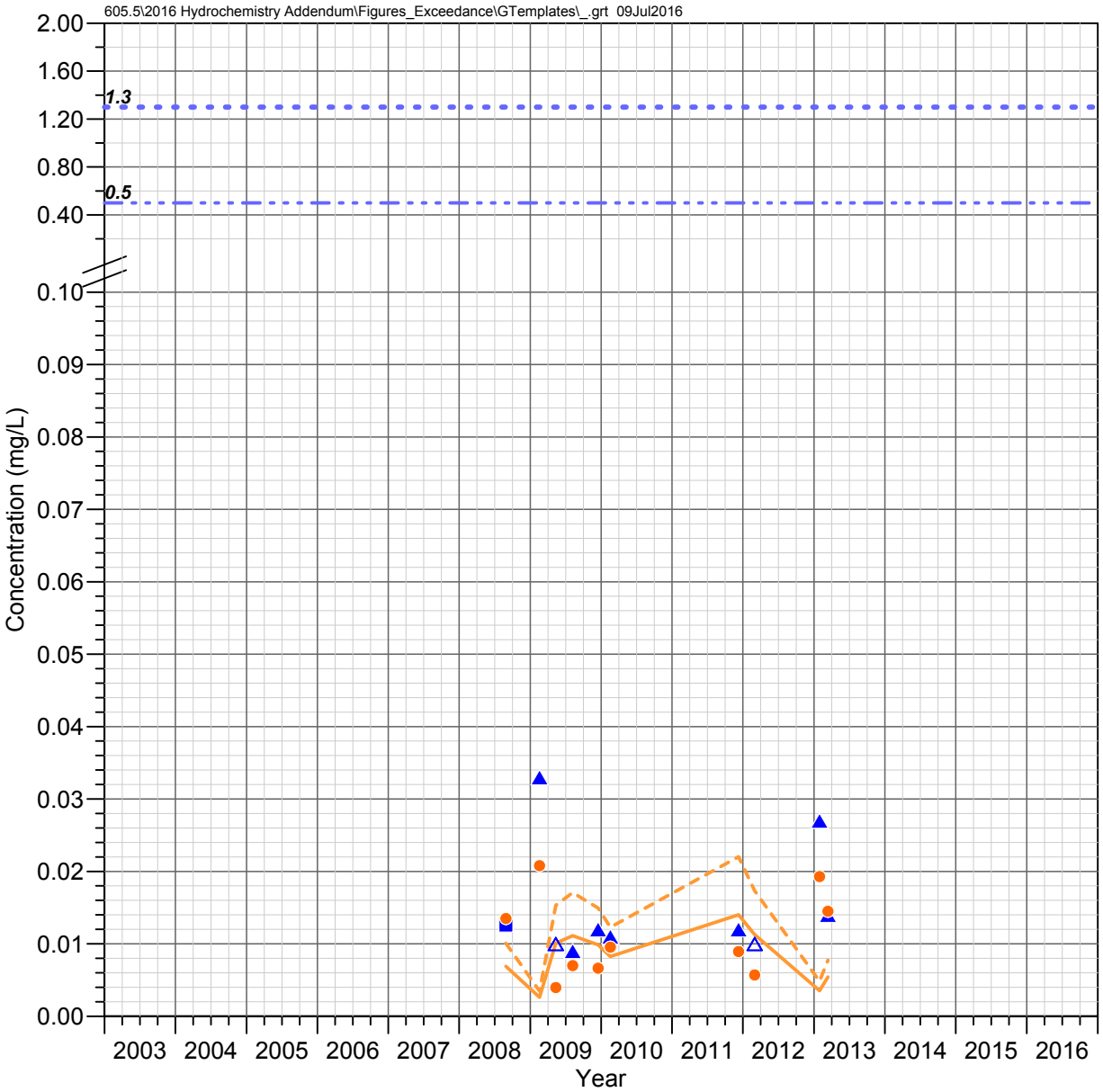


FIGURE F-257. COPPER CONCENTRATIONS OBSERVED AT BLUE SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



IC 1.0 C
Devils Canyon Watershed

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 1.3 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Agricultural Livestock Watering (TRC, 0.5 mg/L)

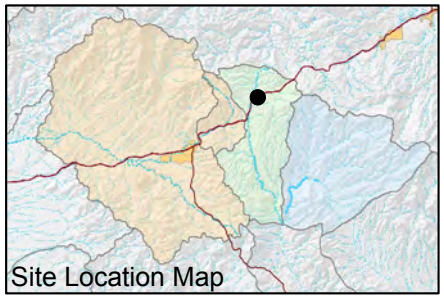
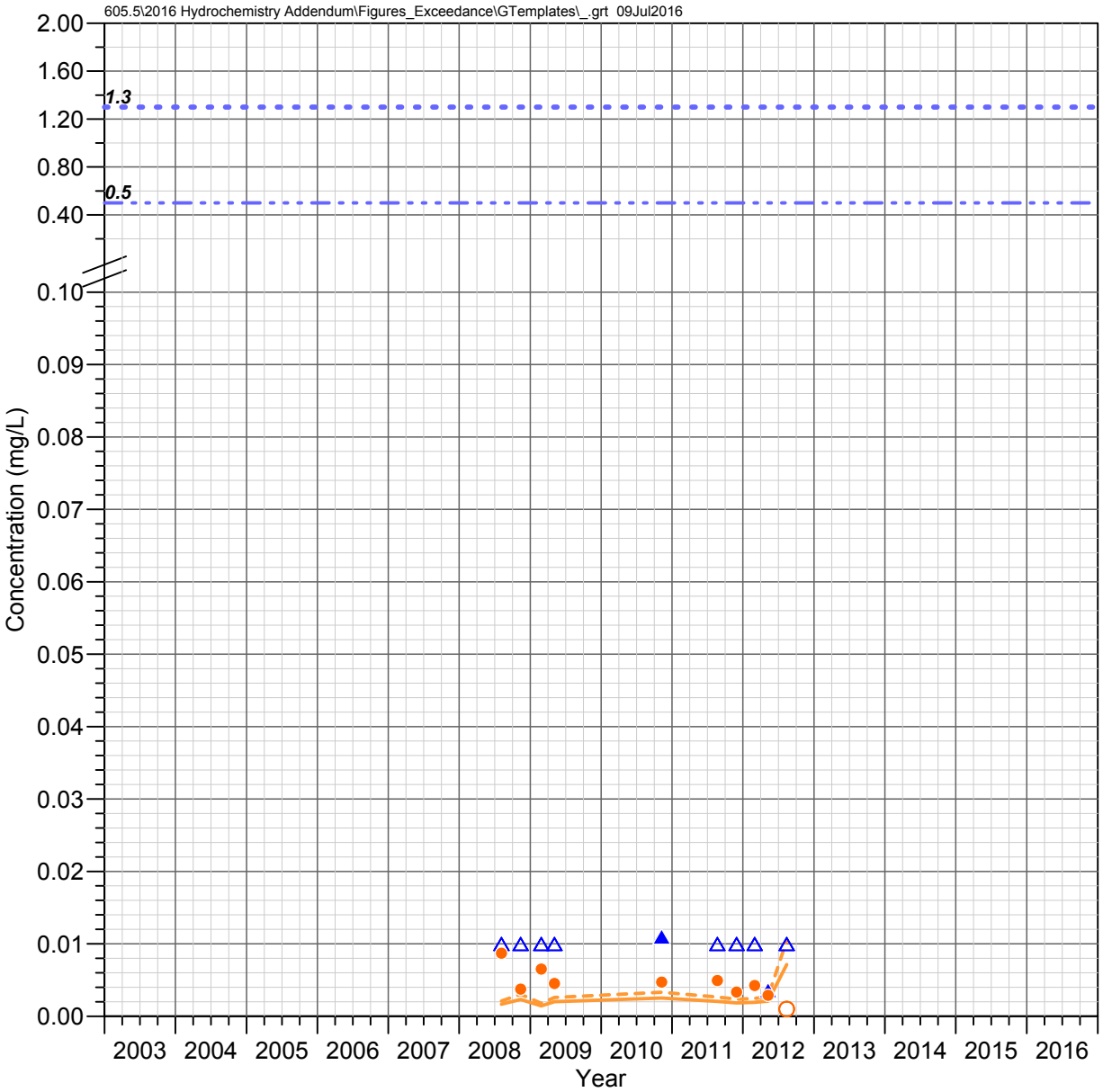


FIGURE F-258. COPPER CONCENTRATIONS OBSERVED AT IC 1.0 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 15.5 C
Devils Canyon Watershed

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 1.3 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Agricultural Livestock Watering (TRC, 0.5 mg/L)

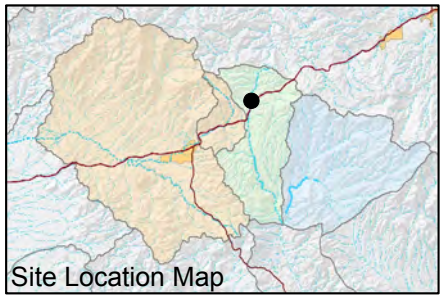
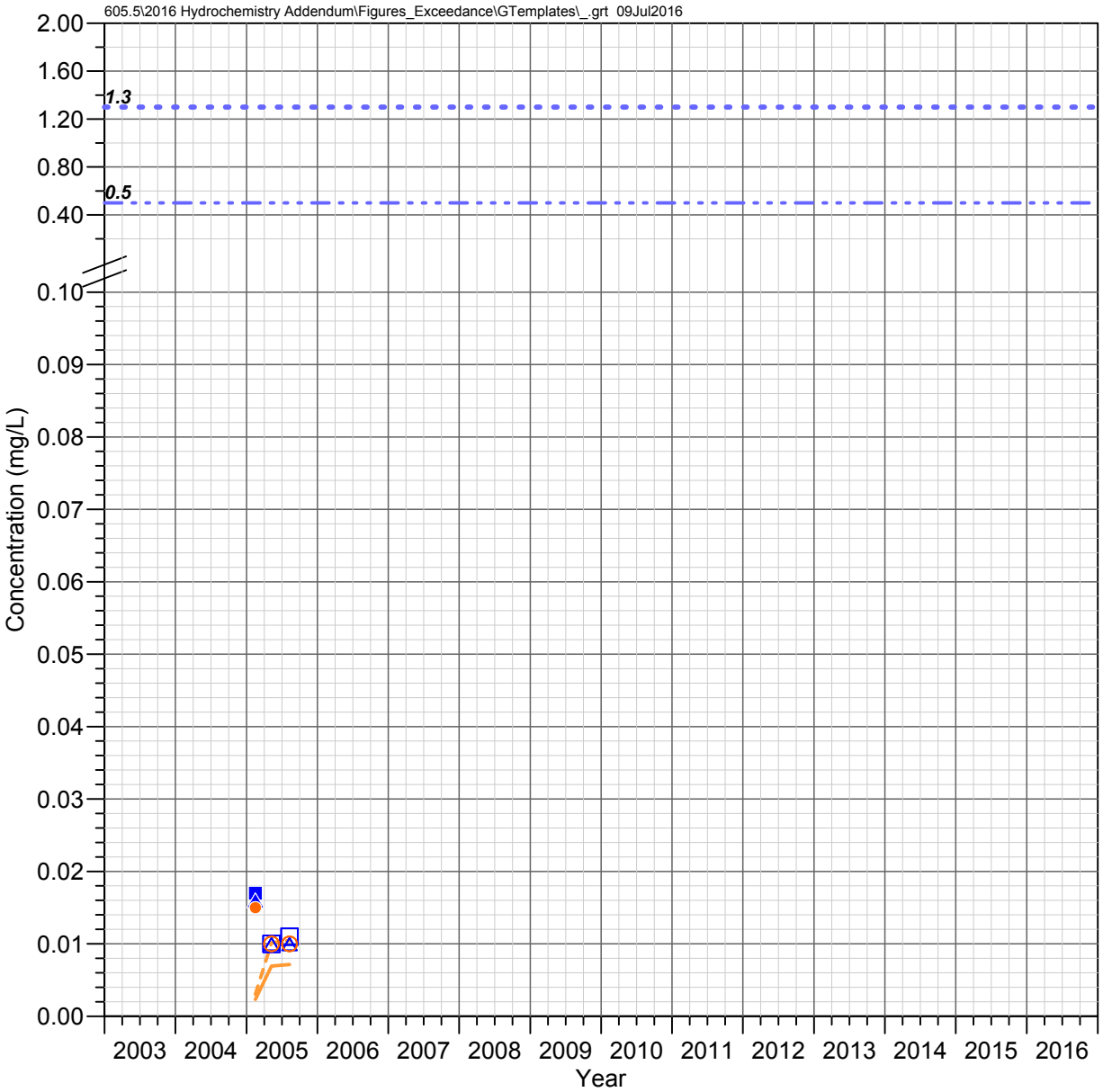


FIGURE F-259. COPPER CONCENTRATIONS OBSERVED AT DC 15.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 15.2 C
Devils Canyon Watershed

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 1.3 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Agricultural Livestock Watering (TRC, 0.5 mg/L)

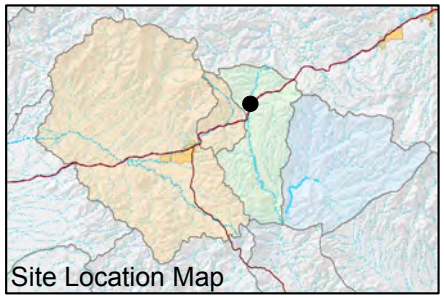
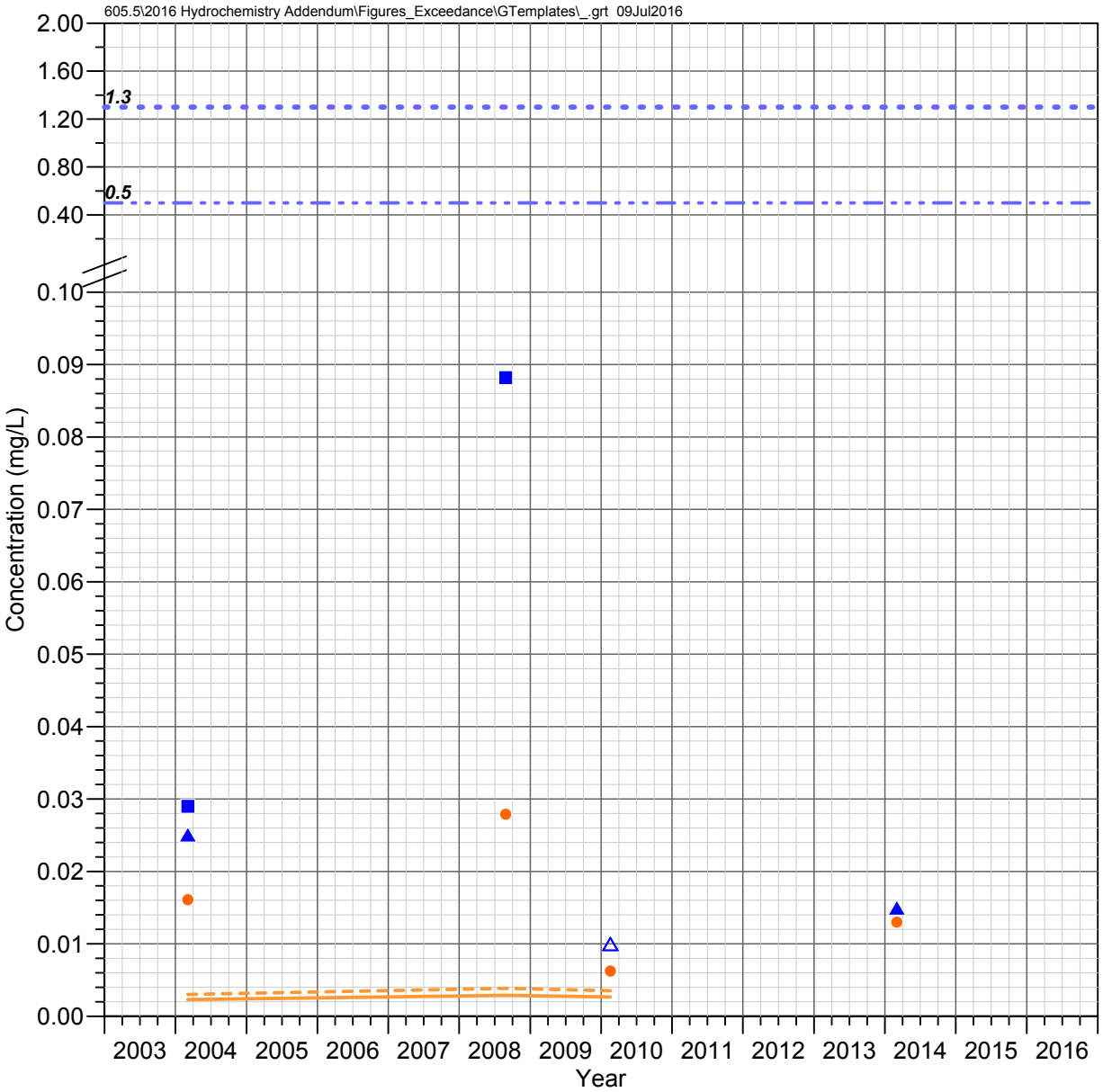


FIGURE F-260. COPPER CONCENTRATIONS OBSERVED AT DC 15.2 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 14.7 C
Devils Canyon Watershed

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 1.3 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Agricultural Livestock Watering (TRC, 0.5 mg/L)

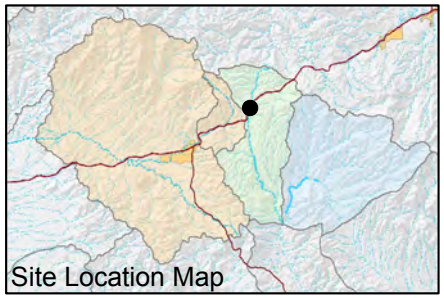
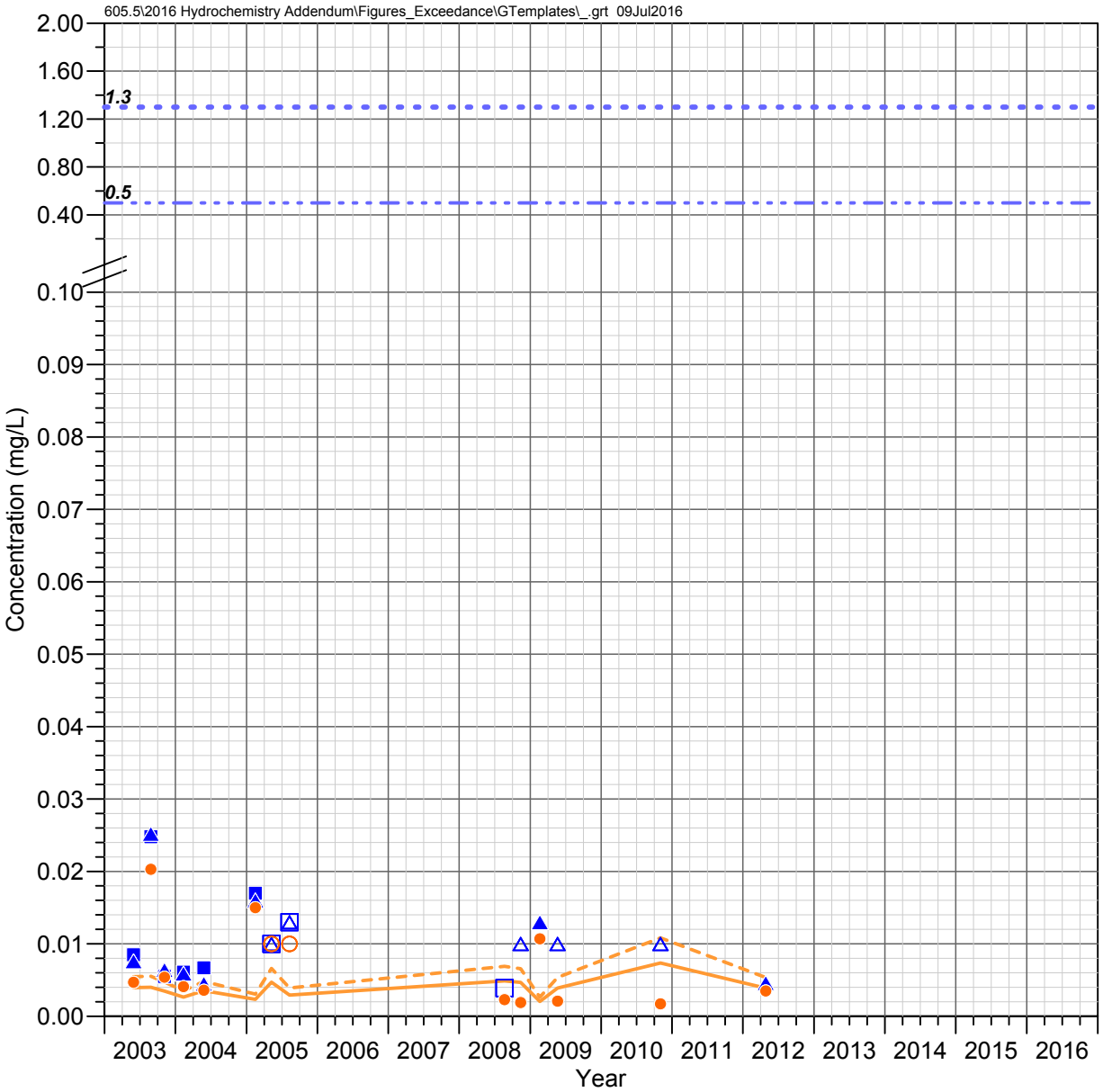


FIGURE F-261. COPPER CONCENTRATIONS OBSERVED AT DC 14.7 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 13.5 C
Devils Canyon Watershed

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 1.3 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Agricultural Livestock Watering (TRC, 0.5 mg/L)

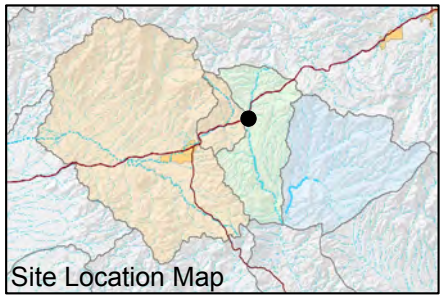
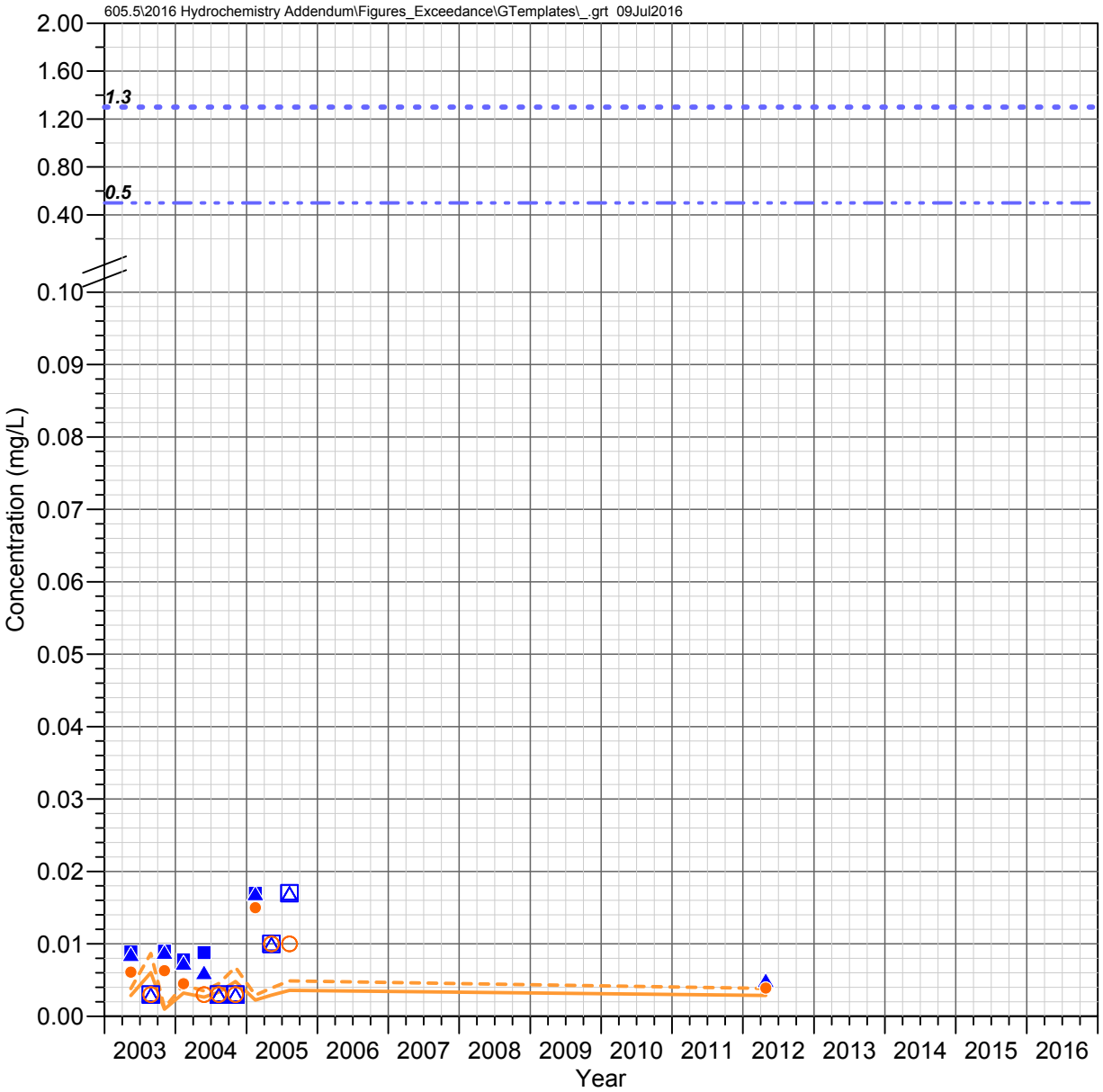


FIGURE F-262. COPPER CONCENTRATIONS OBSERVED AT DC 13.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 10.9 C
Devils Canyon Watershed

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 1.3 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Agricultural Livestock Watering (TRC, 0.5 mg/L)

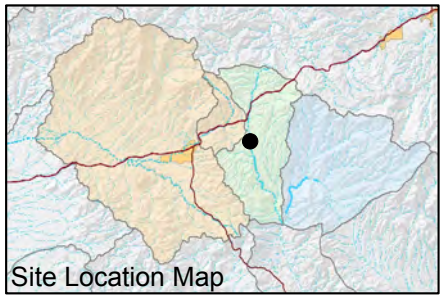
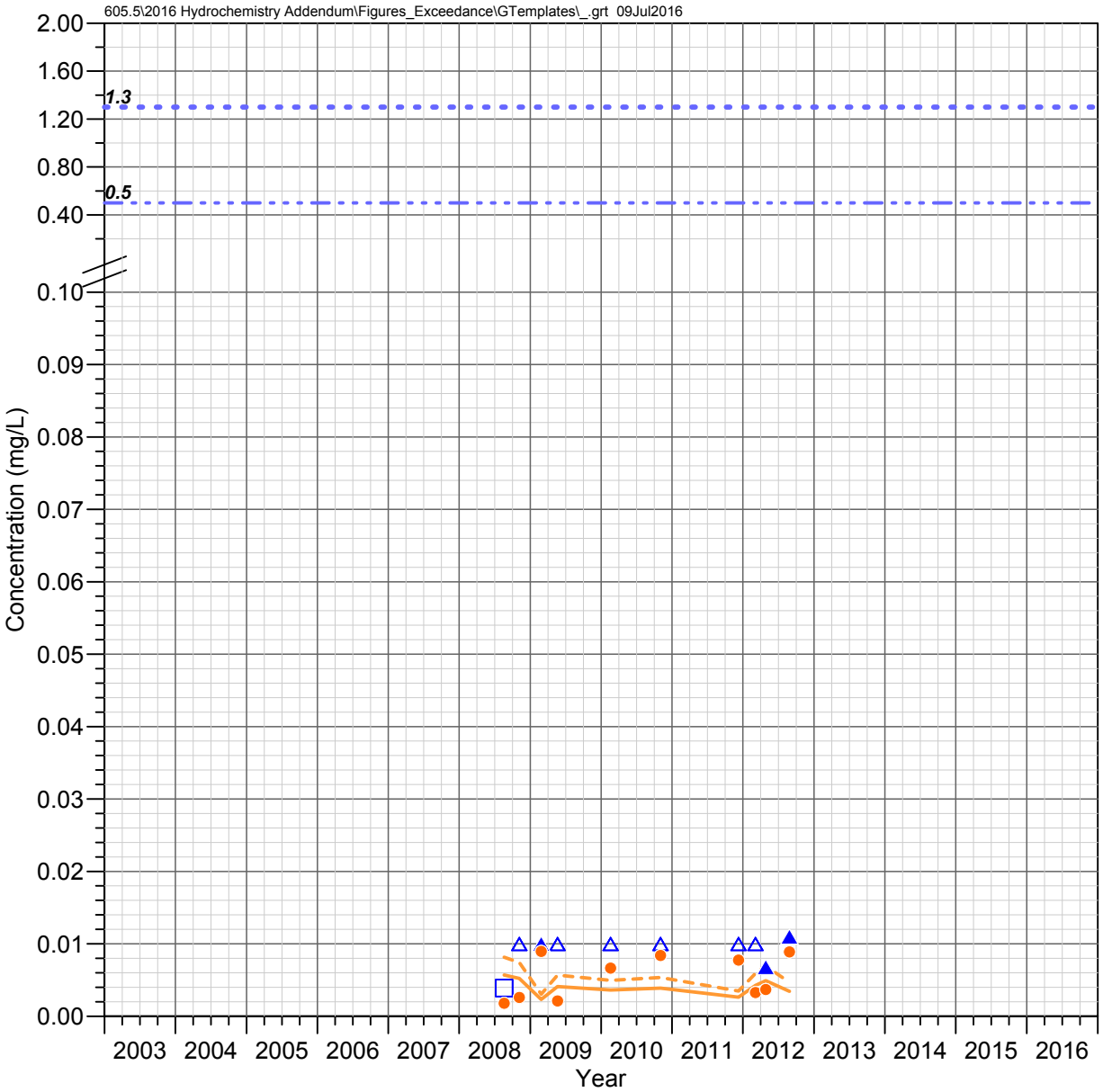


FIGURE F-263. COPPER CONCENTRATIONS OBSERVED AT DC 10.9 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



RR 1.5 C
Devils Canyon Watershed

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 1.3 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Agricultural Livestock Watering (TRC, 0.5 mg/L)

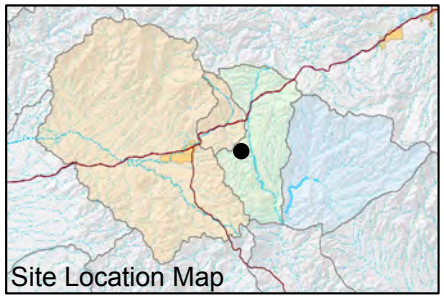
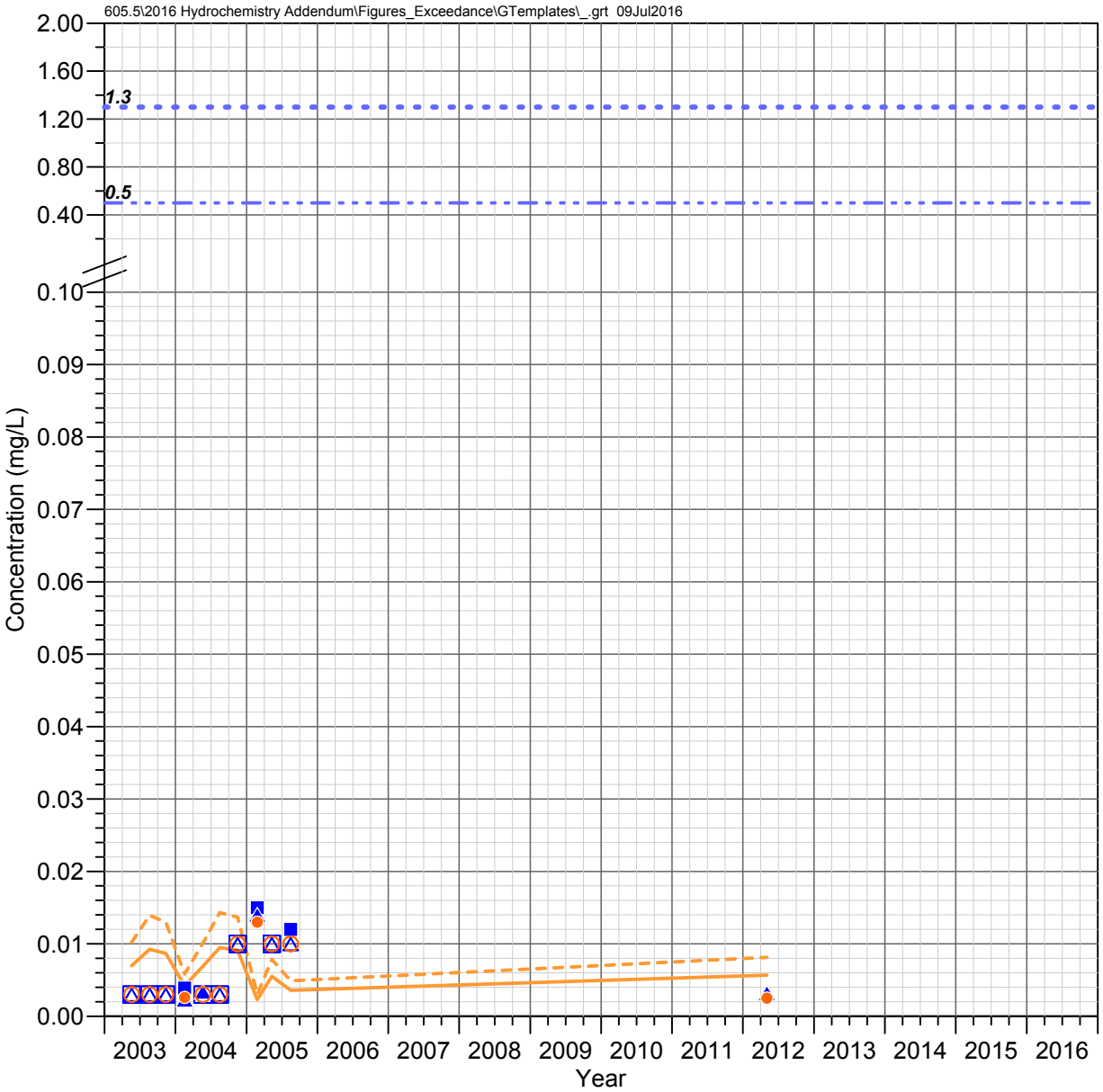


FIGURE F-264. COPPER CONCENTRATIONS OBSERVED AT RR 1.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.8 C
Devils Canyon Watershed

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 1.3 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Agricultural Livestock Watering (TRC, 0.5 mg/L)

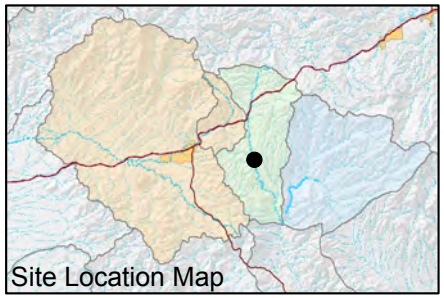
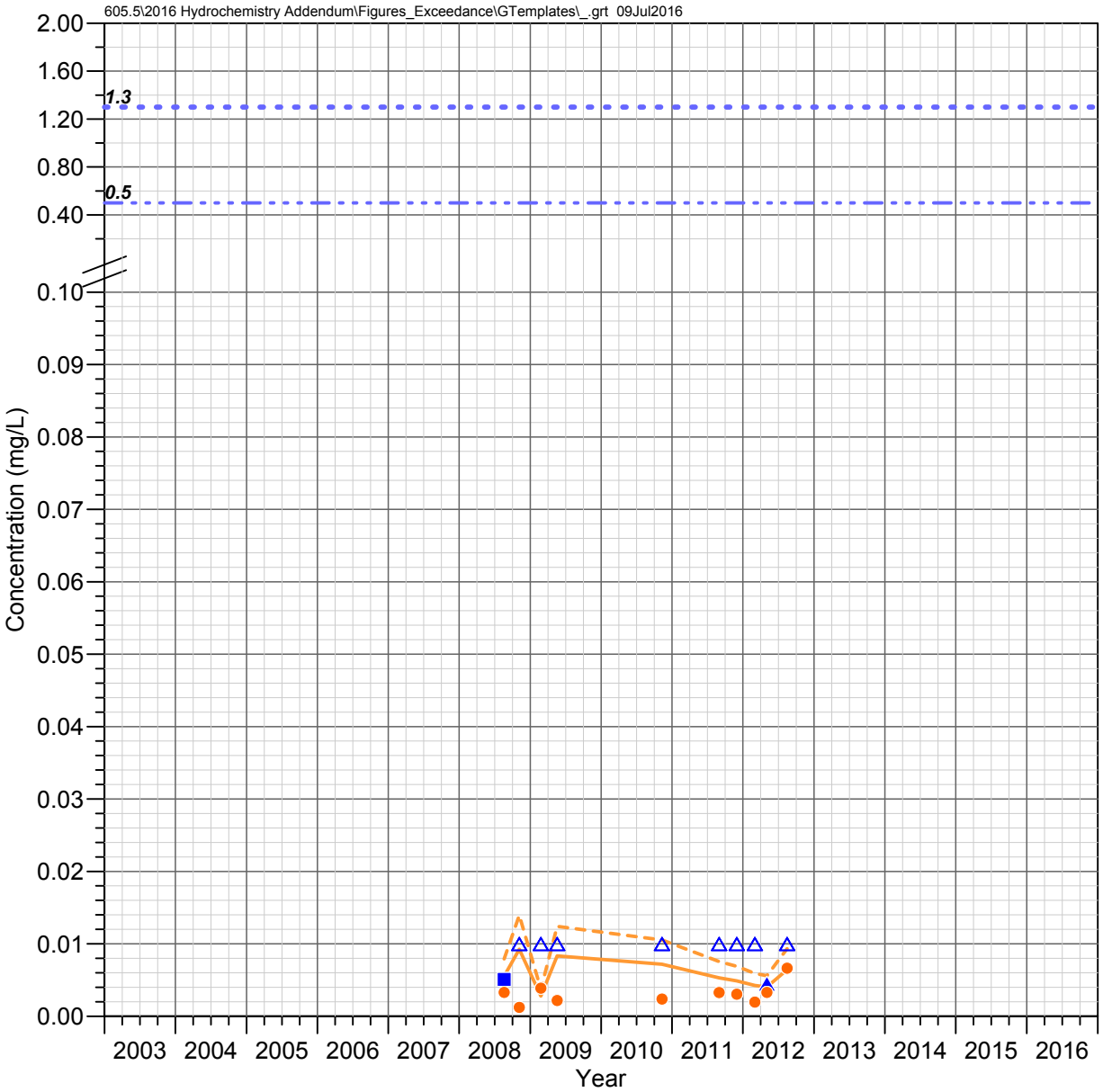


FIGURE F-265. COPPER CONCENTRATIONS OBSERVED AT DC 8.8 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



H 0.1 C
Devils Canyon Watershed

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 1.3 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Agricultural Livestock Watering (TRC, 0.5 mg/L)

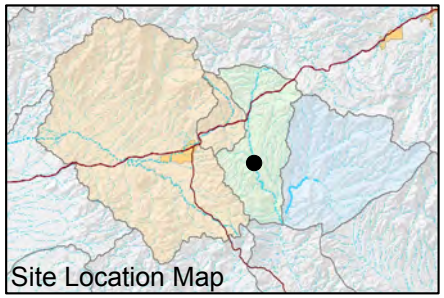
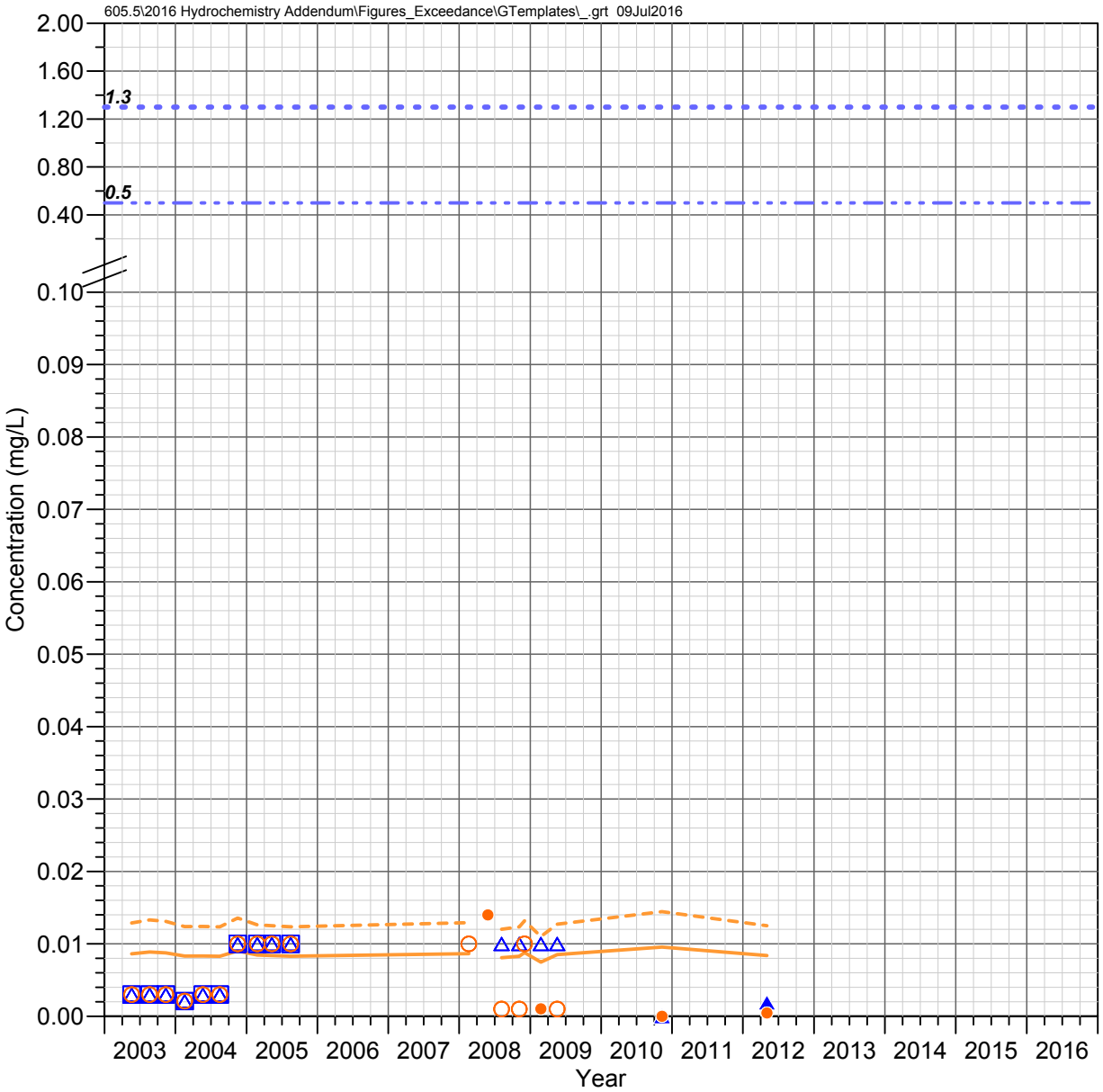


FIGURE F-266. COPPER CONCENTRATIONS OBSERVED AT H 0.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.2 W
Devils Canyon Watershed

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 1.3 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Agricultural Livestock Watering (TRC, 0.5 mg/L)

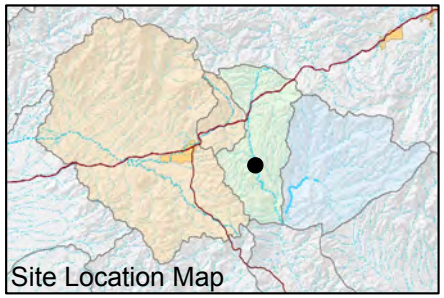
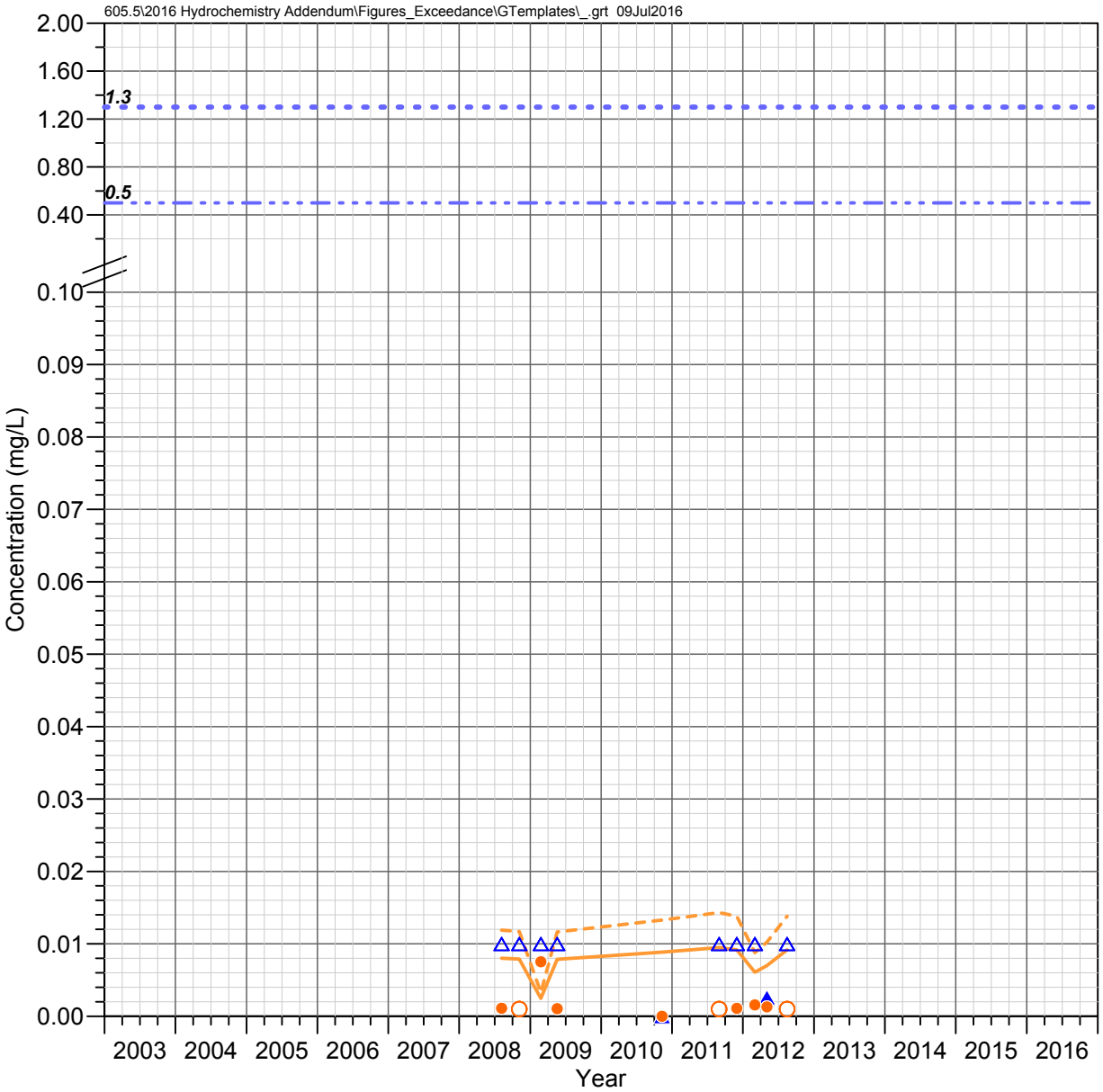


FIGURE F-267. COPPER CONCENTRATIONS OBSERVED AT DC 8.2 W, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.1 C
Devils Canyon Watershed

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 1.3 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Agricultural Livestock Watering (TRC, 0.5 mg/L)

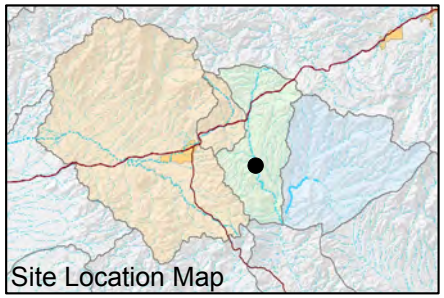
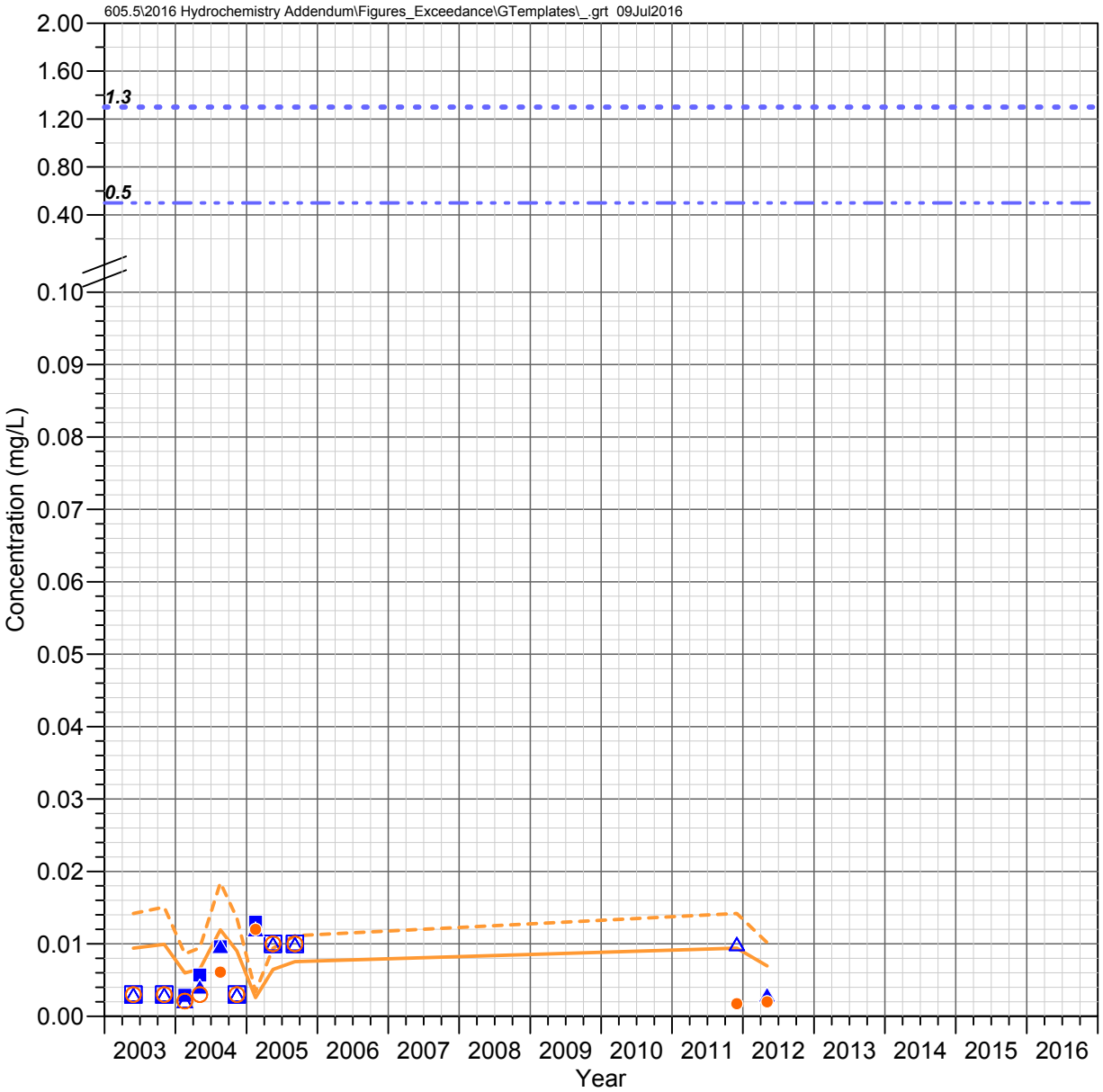


FIGURE F-268. COPPER CONCENTRATIONS OBSERVED AT DC 8.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 7.1 C
Devils Canyon Watershed

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 1.3 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Agricultural Livestock Watering (TRC, 0.5 mg/L)

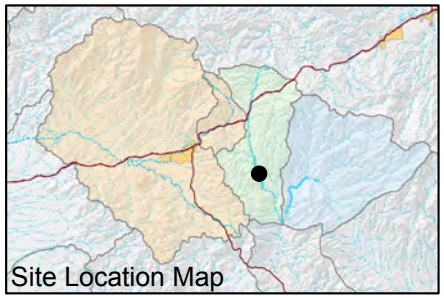
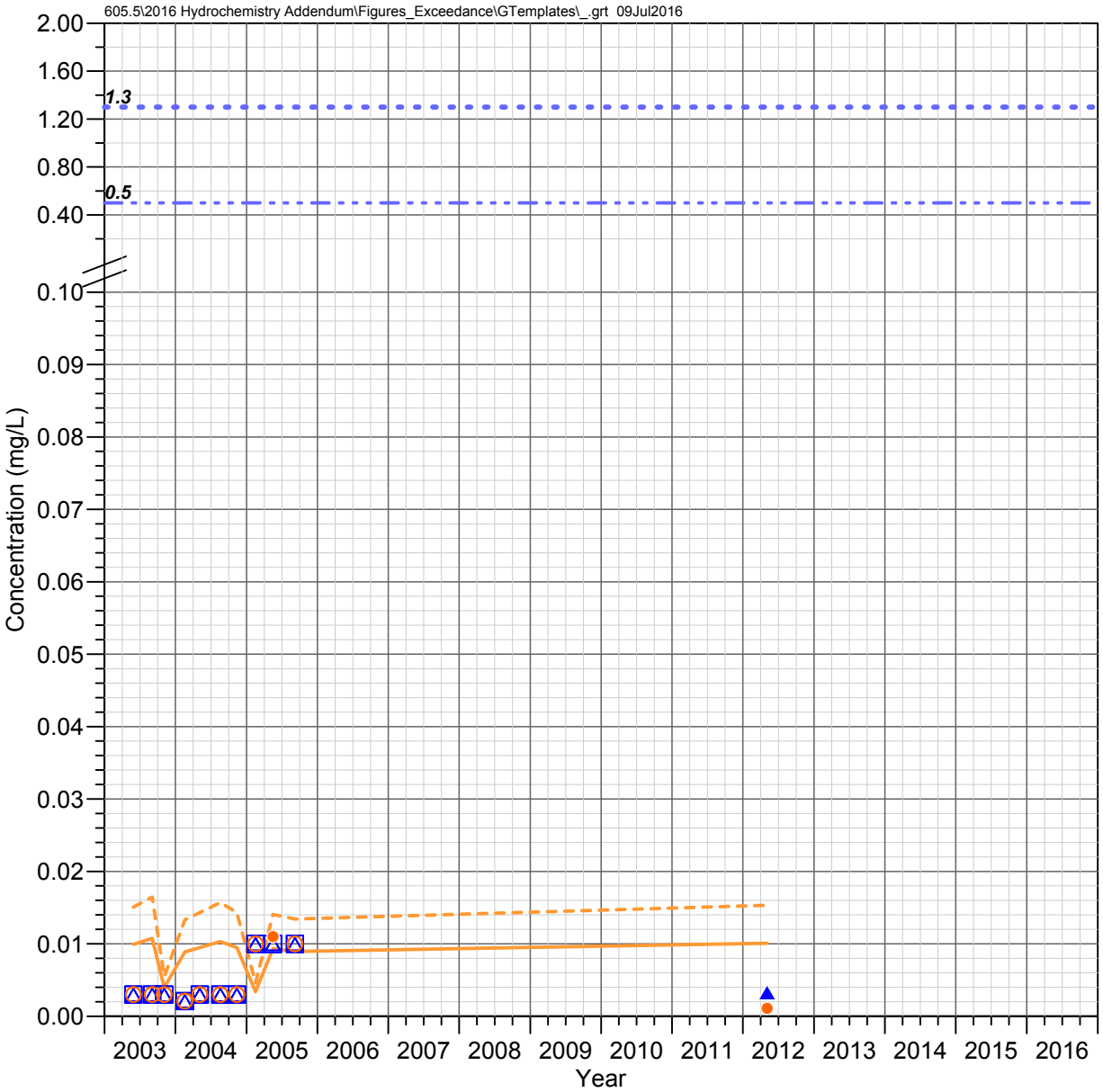


FIGURE F-269. COPPER CONCENTRATIONS OBSERVED AT DC 7.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.6 W (DCT 6.6 W)
Devils Canyon Watershed

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 1.3 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Agricultural Livestock Watering (TRC, 0.5 mg/L)

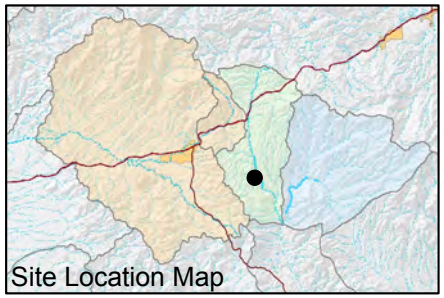
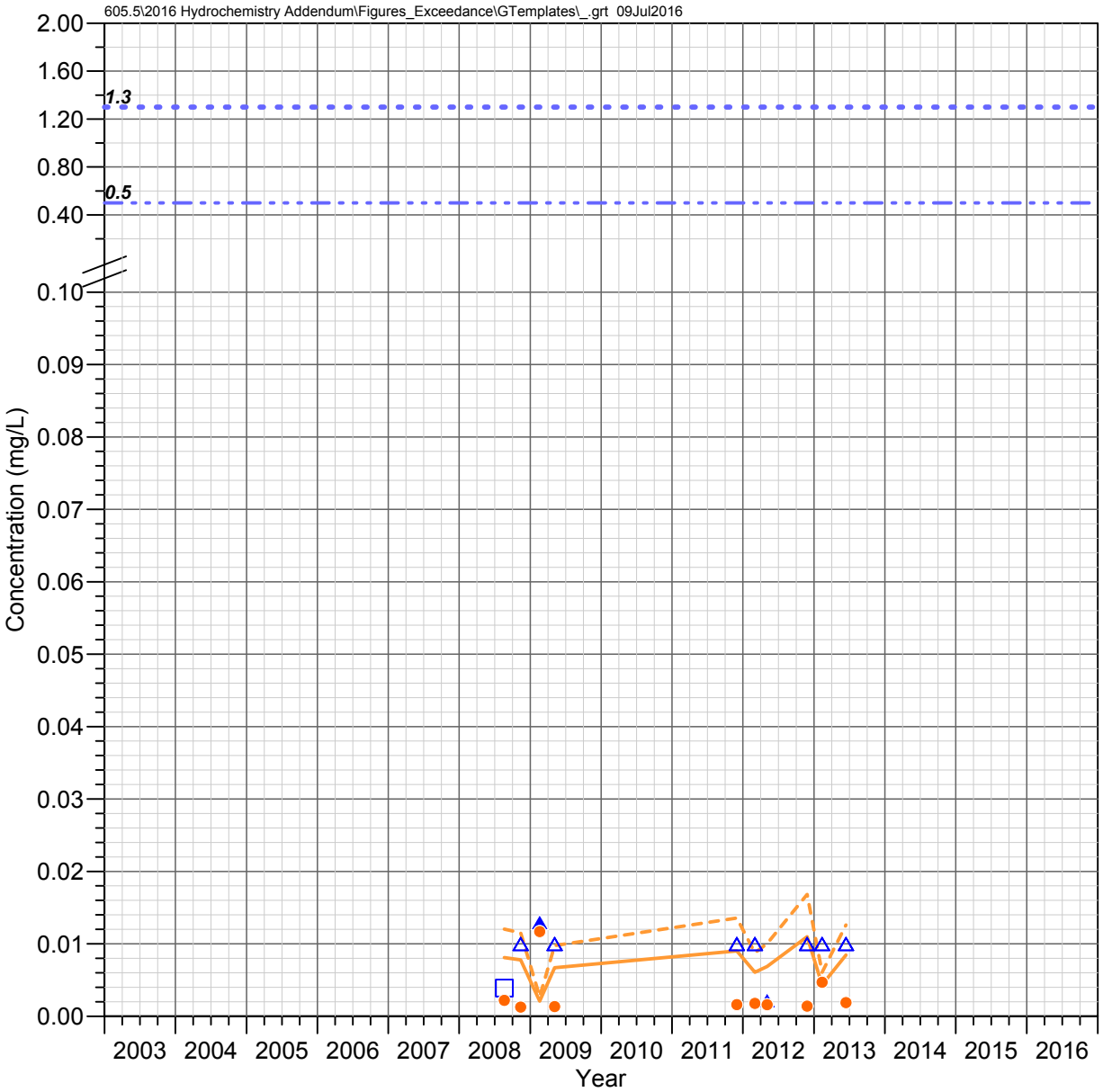


FIGURE F-270. COPPER CONCENTRATIONS OBSERVED AT DC 6.6 W (DCT 6.6 W), DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.14 C
Devils Canyon Watershed

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 1.3 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Agricultural Livestock Watering (TRC, 0.5 mg/L)

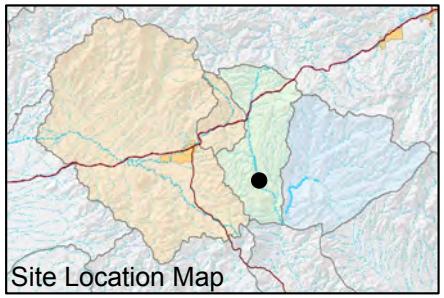
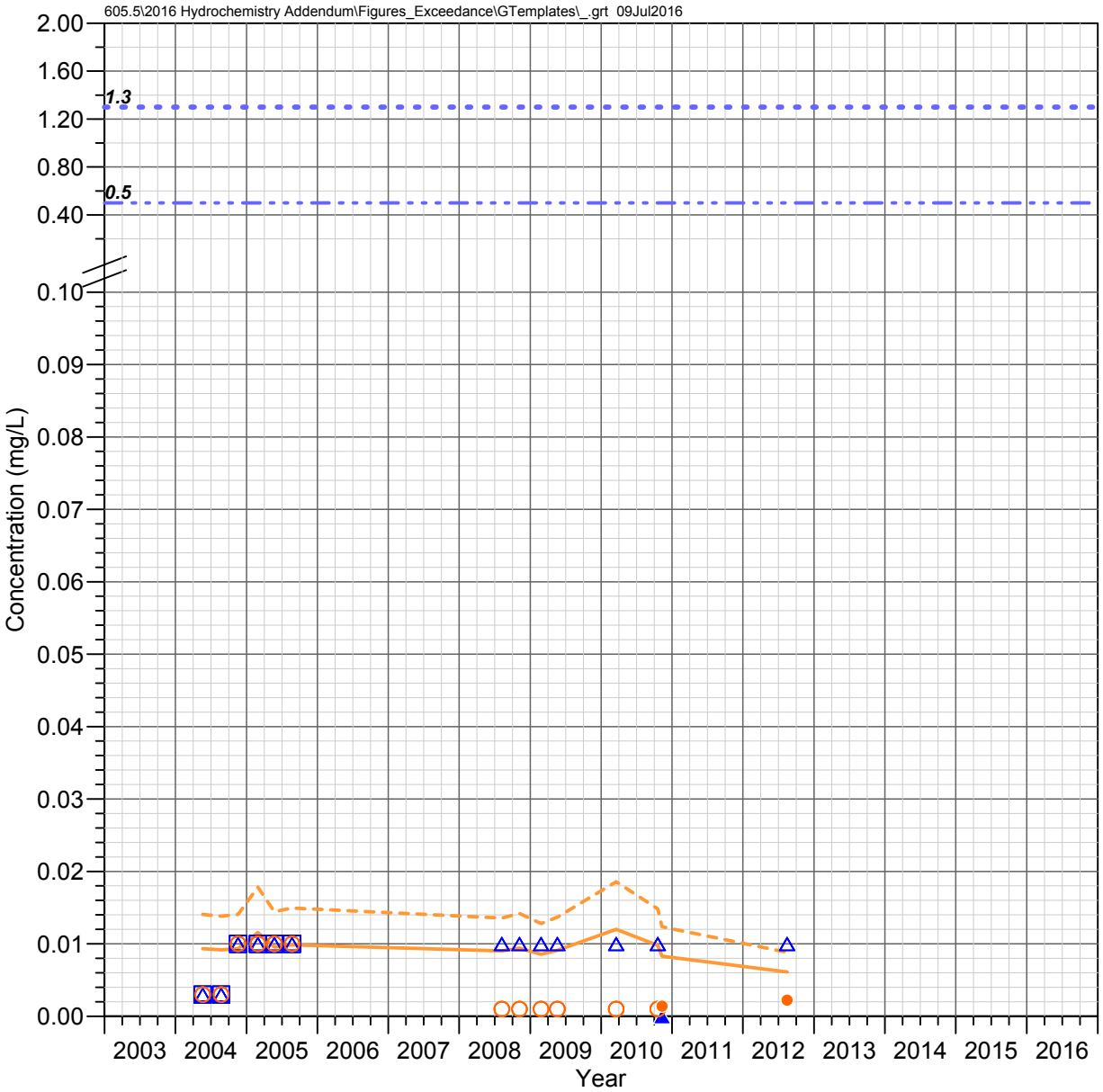


FIGURE F-271. COPPER CONCENTRATIONS OBSERVED AT DC 6.14 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.1 E
Devils Canyon Watershed

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 1.3 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Agricultural Livestock Watering (TRC, 0.5 mg/L)

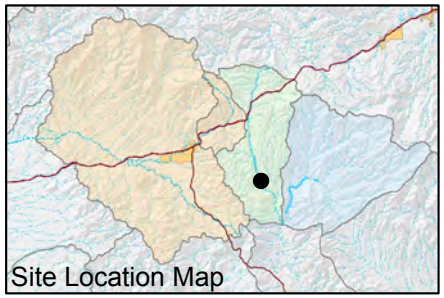
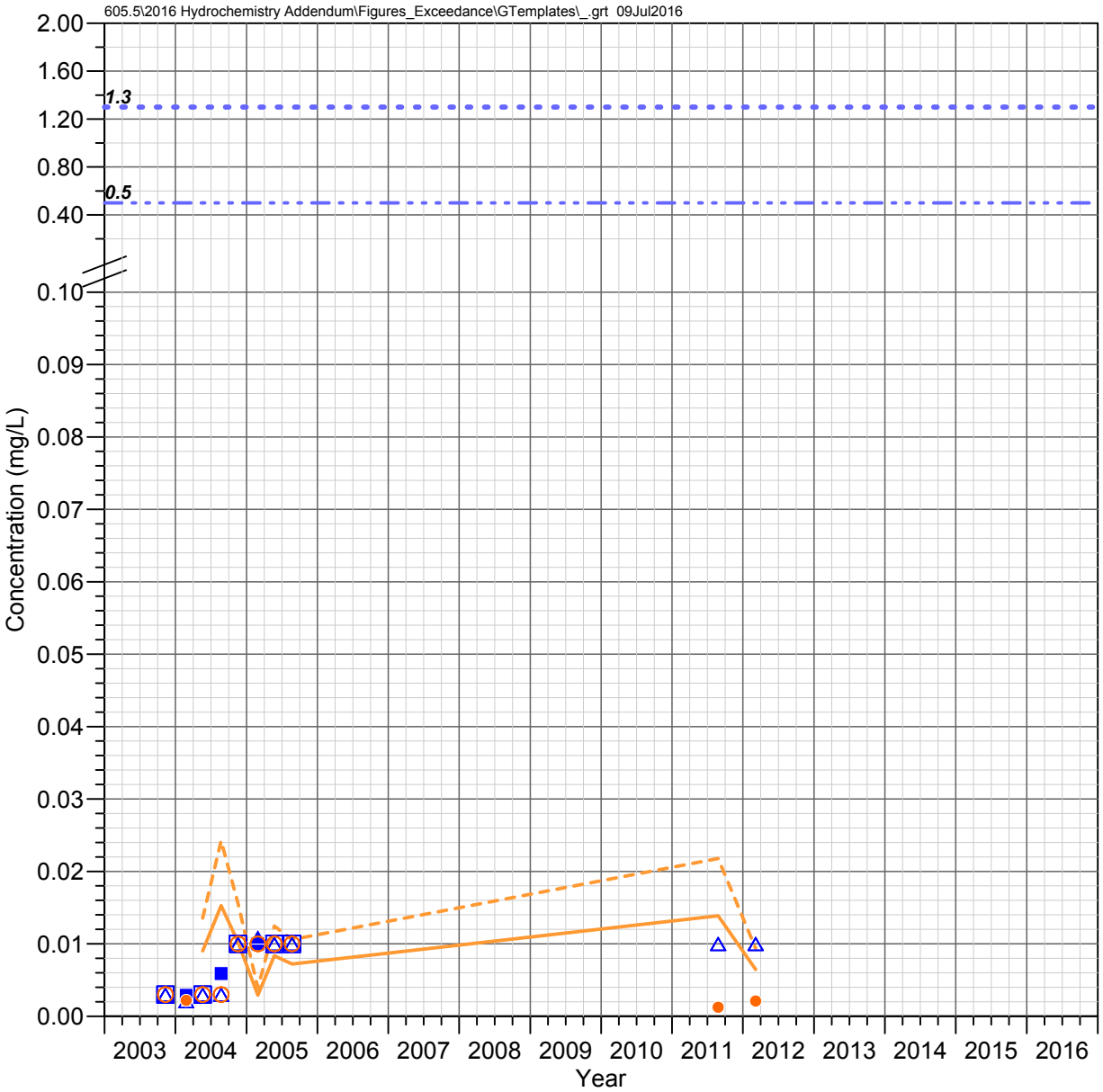


FIGURE F-272. COPPER CONCENTRATIONS OBSERVED AT DC 6.1 E, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 5.5 C
Devils Canyon Watershed

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 1.3 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Agricultural Livestock Watering (TRC, 0.5 mg/L)

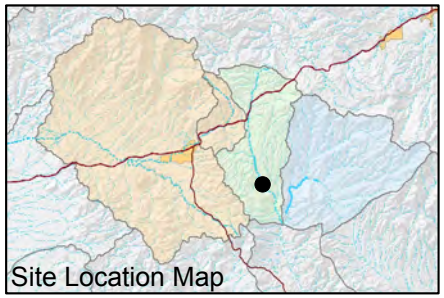
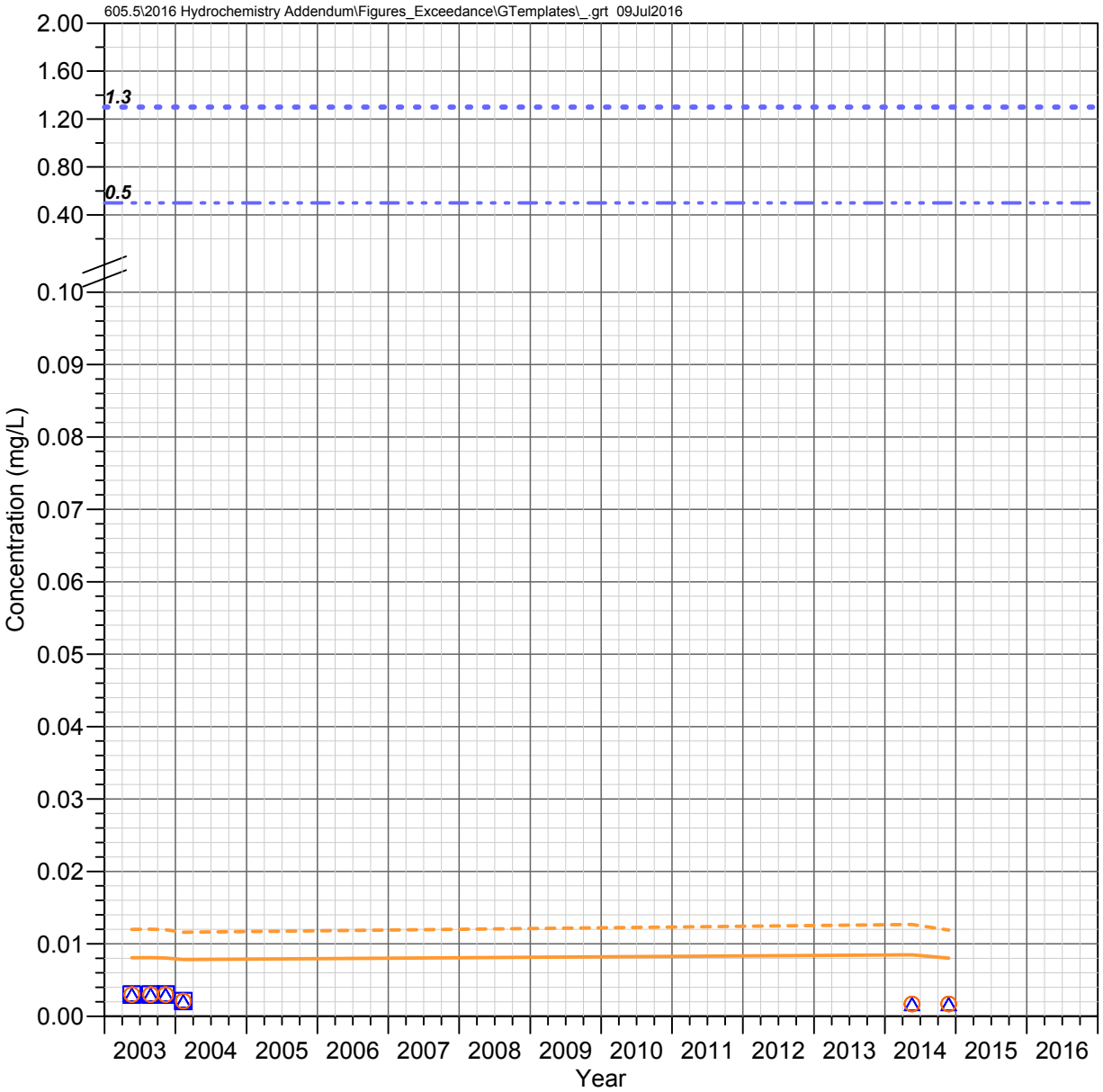


FIGURE F-273. COPPER CONCENTRATIONS OBSERVED AT DC 5.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 4.1 E
Devils Canyon Watershed

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 1.3 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Agricultural Livestock Watering (TRC, 0.5 mg/L)

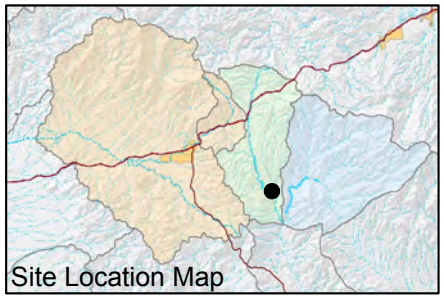
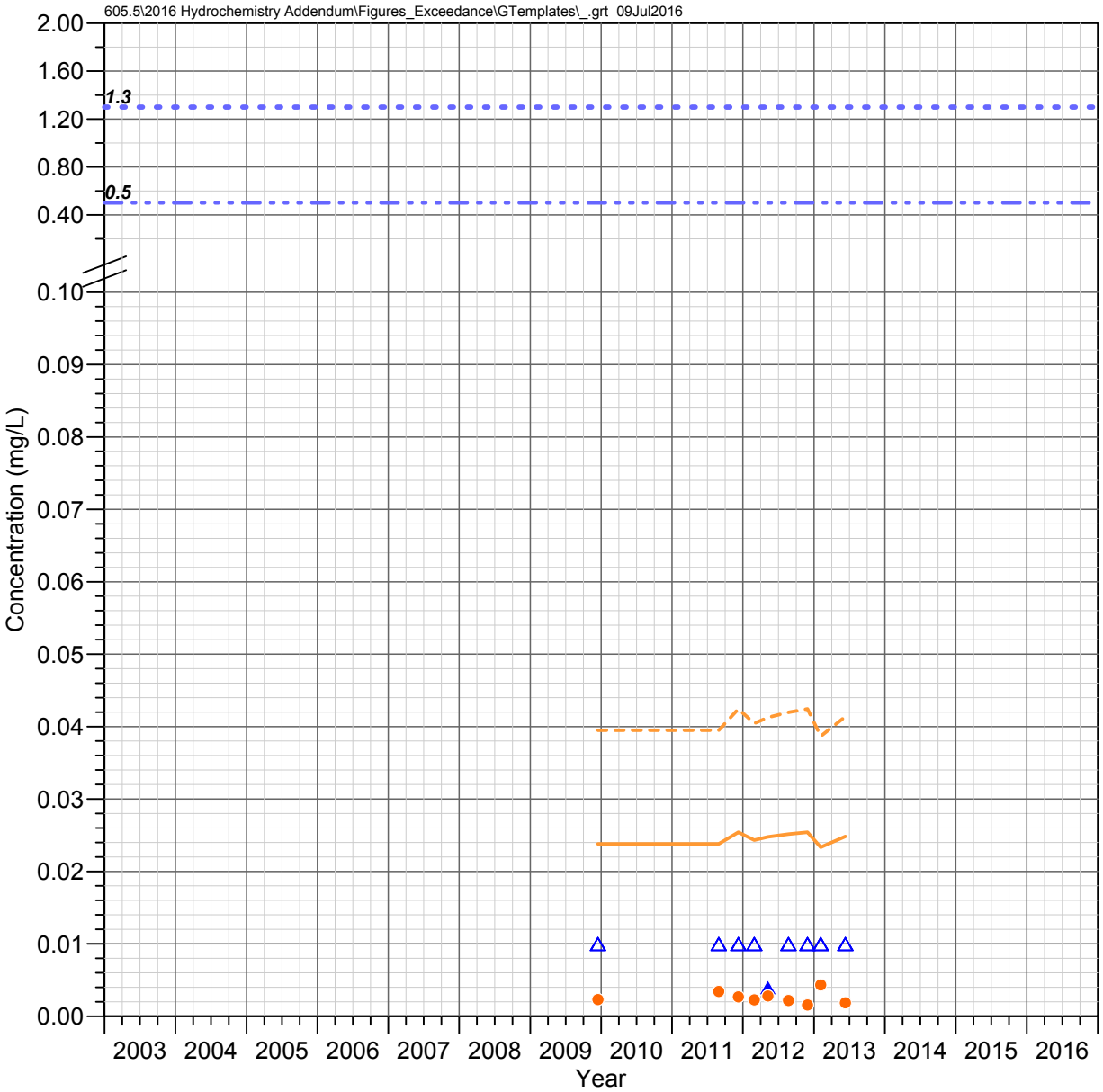


FIGURE F-274. COPPER CONCENTRATIONS OBSERVED AT DC 4.1 E, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Government Springs
Mineral Creek Watershed

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 1.3 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Agricultural Livestock Watering (TRC, 0.5 mg/L)

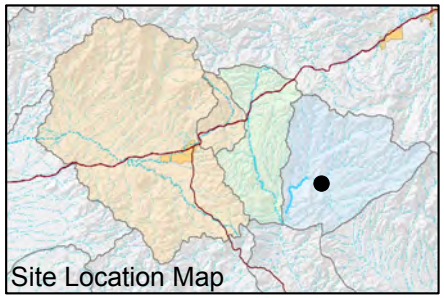
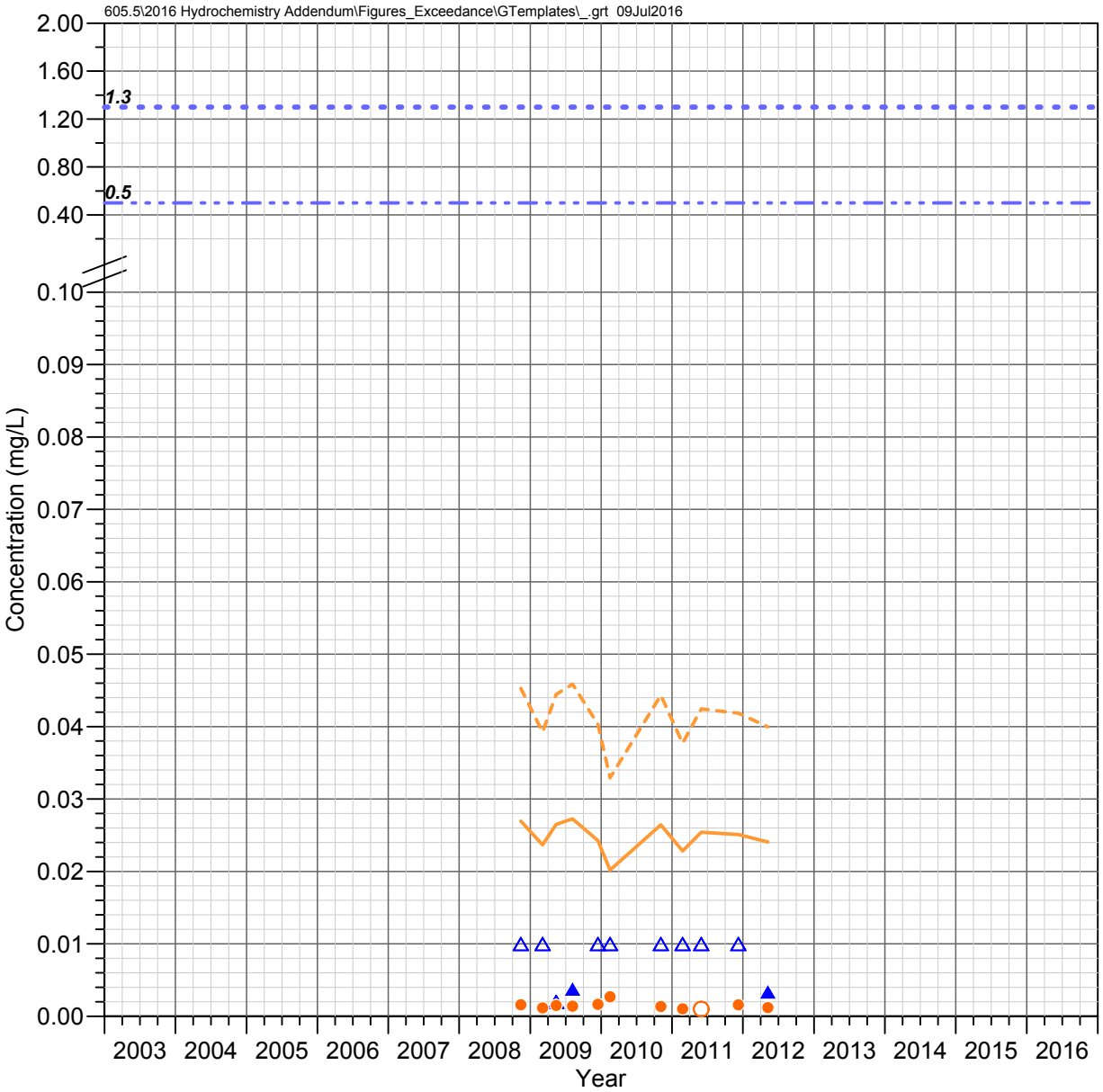


FIGURE F-275. COPPER CONCENTRATIONS OBSERVED AT GOVERNMENT SPRINGS, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 8.4 C
Mineral Creek Watershed

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 1.3 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Agricultural Livestock Watering (TRC, 0.5 mg/L)

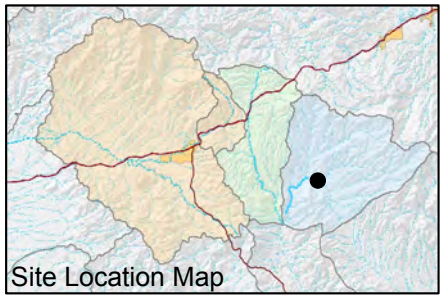
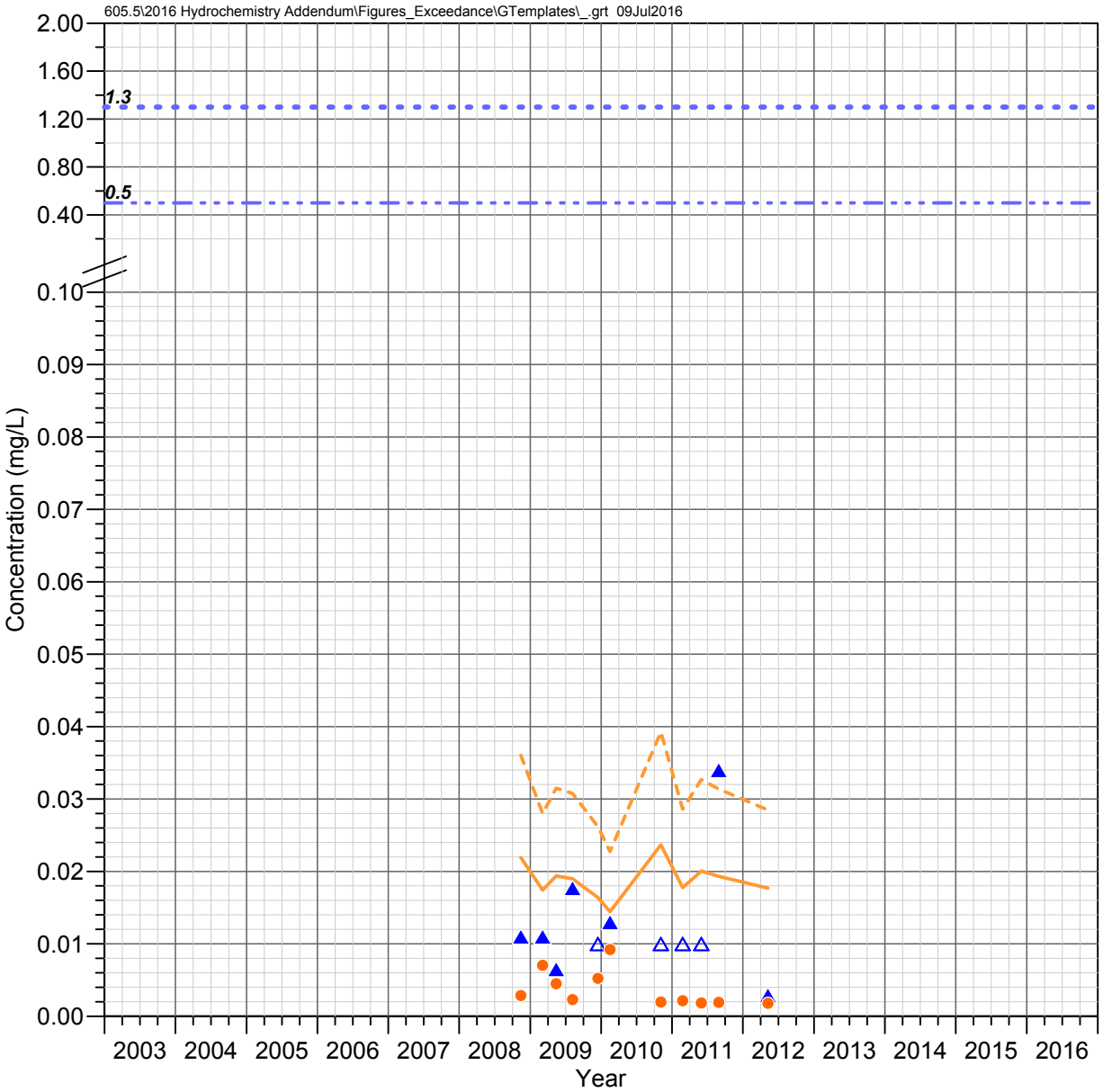


FIGURE F-276. COPPER CONCENTRATIONS OBSERVED AT MC 8.4 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



LF 0.2 C
Mineral Creek Watershed

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 1.3 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Agricultural Livestock Watering (TRC, 0.5 mg/L)

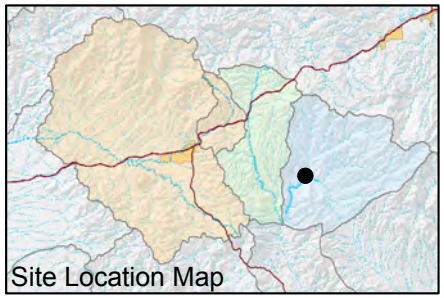
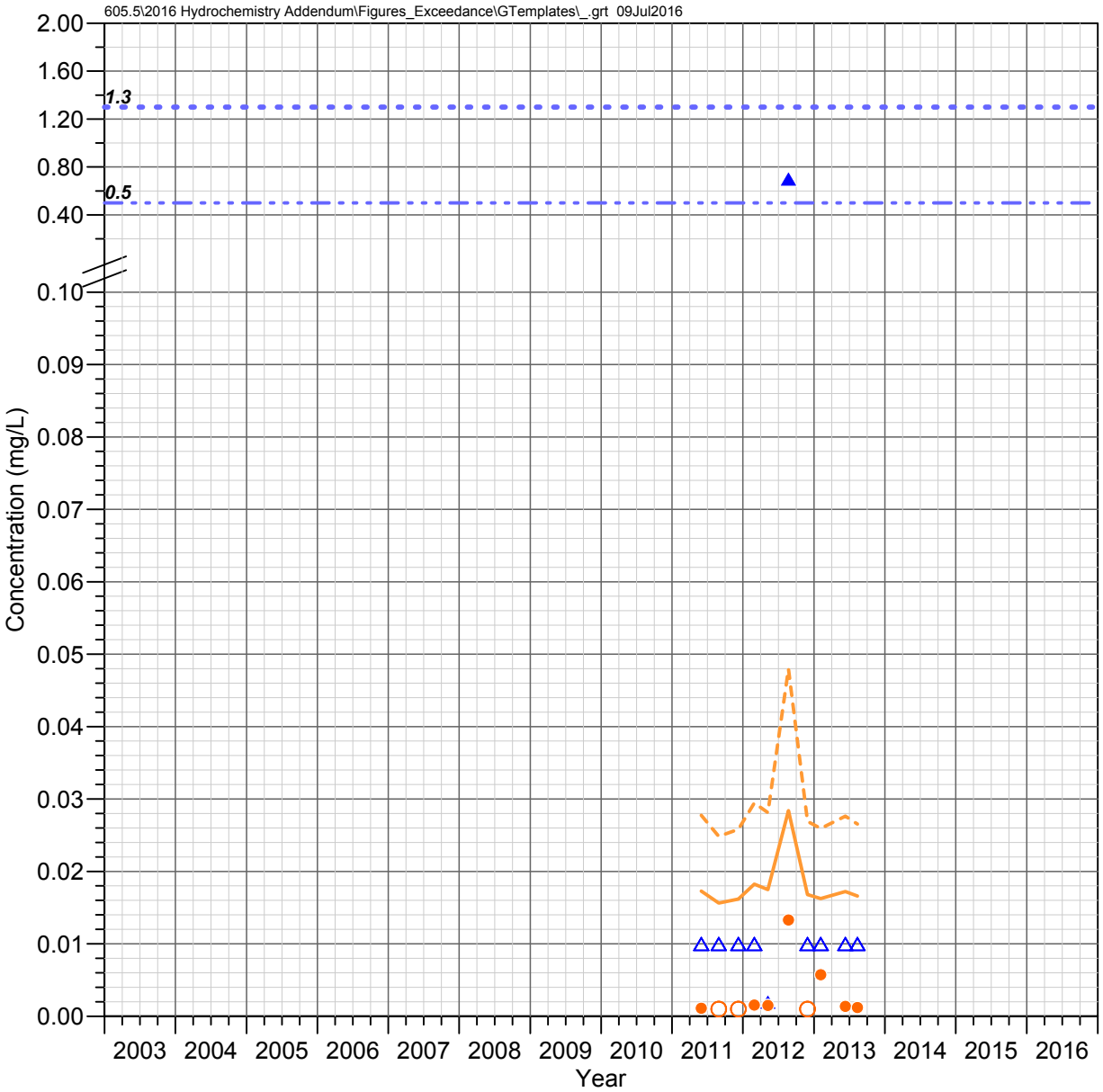


FIGURE F-277. COPPER CONCENTRATIONS OBSERVED AT LF 0.2 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 5.2 C
Mineral Creek Watershed

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 1.3 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Agricultural Livestock Watering (TRC, 0.5 mg/L)

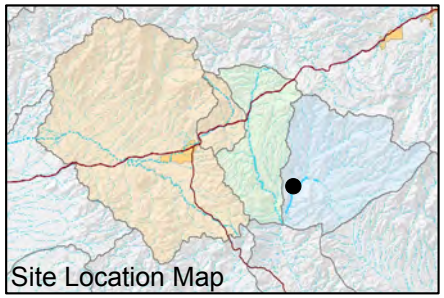
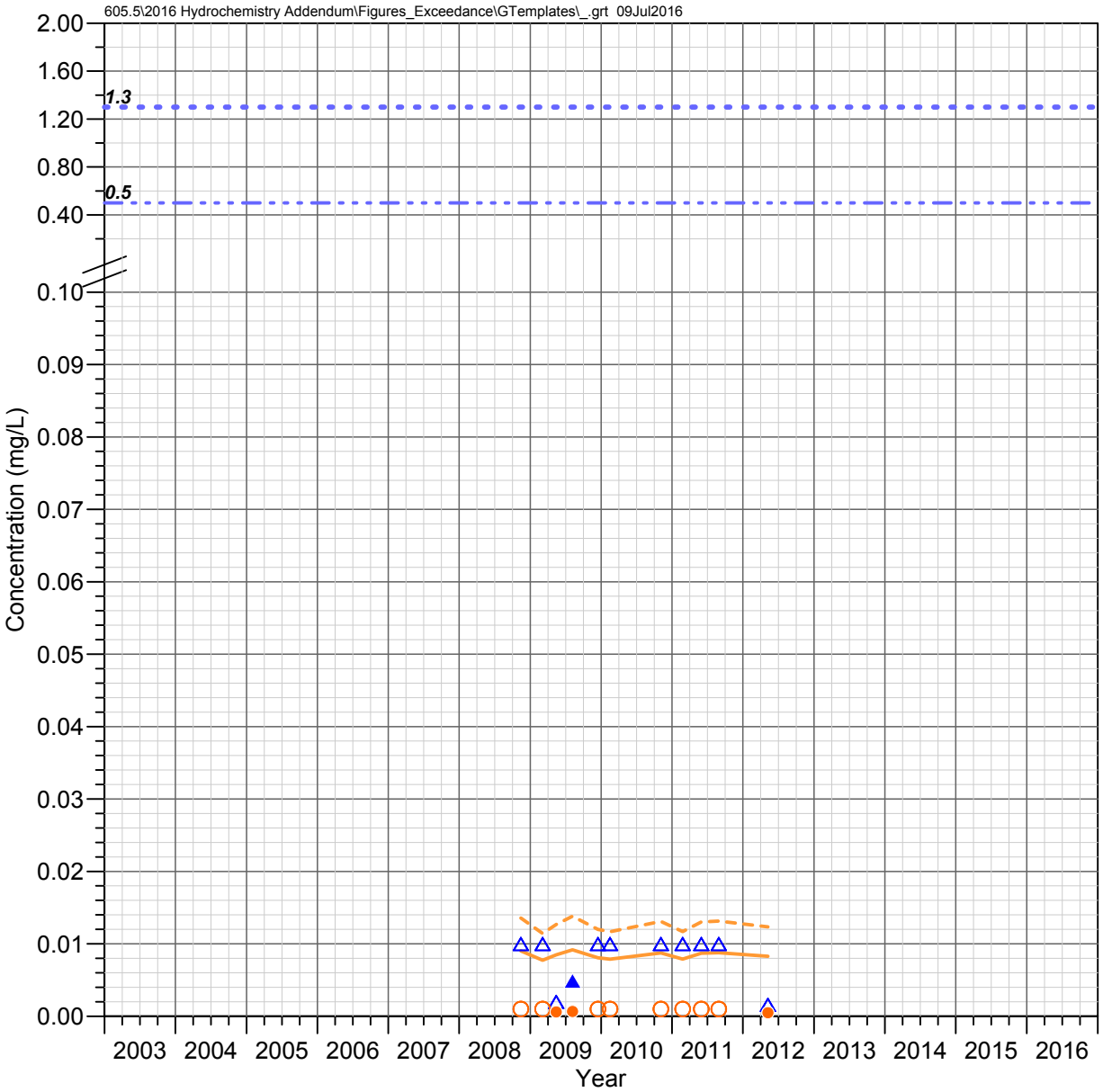


FIGURE F-278. COPPER CONCENTRATIONS OBSERVED AT MC 5.2 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 3.4 W (Wet Leg Spring)
Mineral Creek Watershed

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 1.3 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Agricultural Livestock Watering (TRC, 0.5 mg/L)

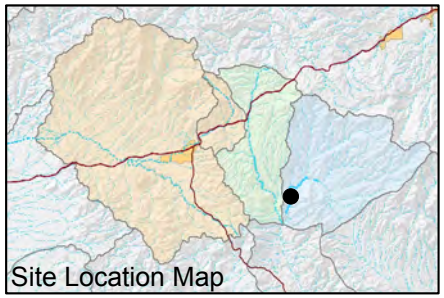
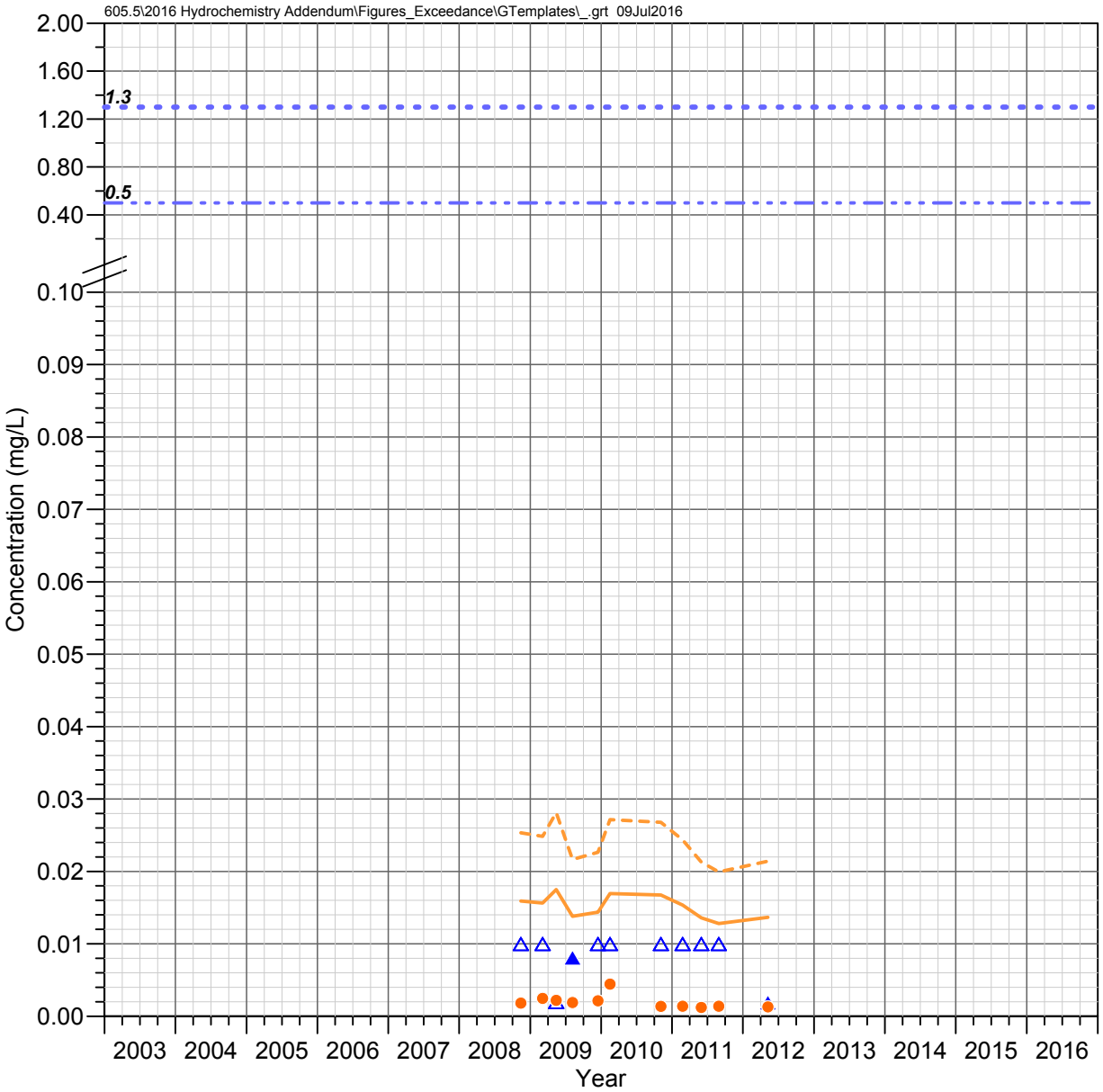


FIGURE F-279. COPPER CONCENTRATIONS OBSERVED AT MC 3.4 W (WET LEG SPRING), MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 3.3 C (Lower Mineral)
Mineral Creek Watershed

COPPER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 1.3 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD)
- AZ Agricultural Livestock Watering (TRC, 0.5 mg/L)

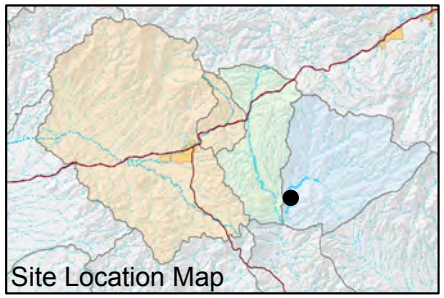
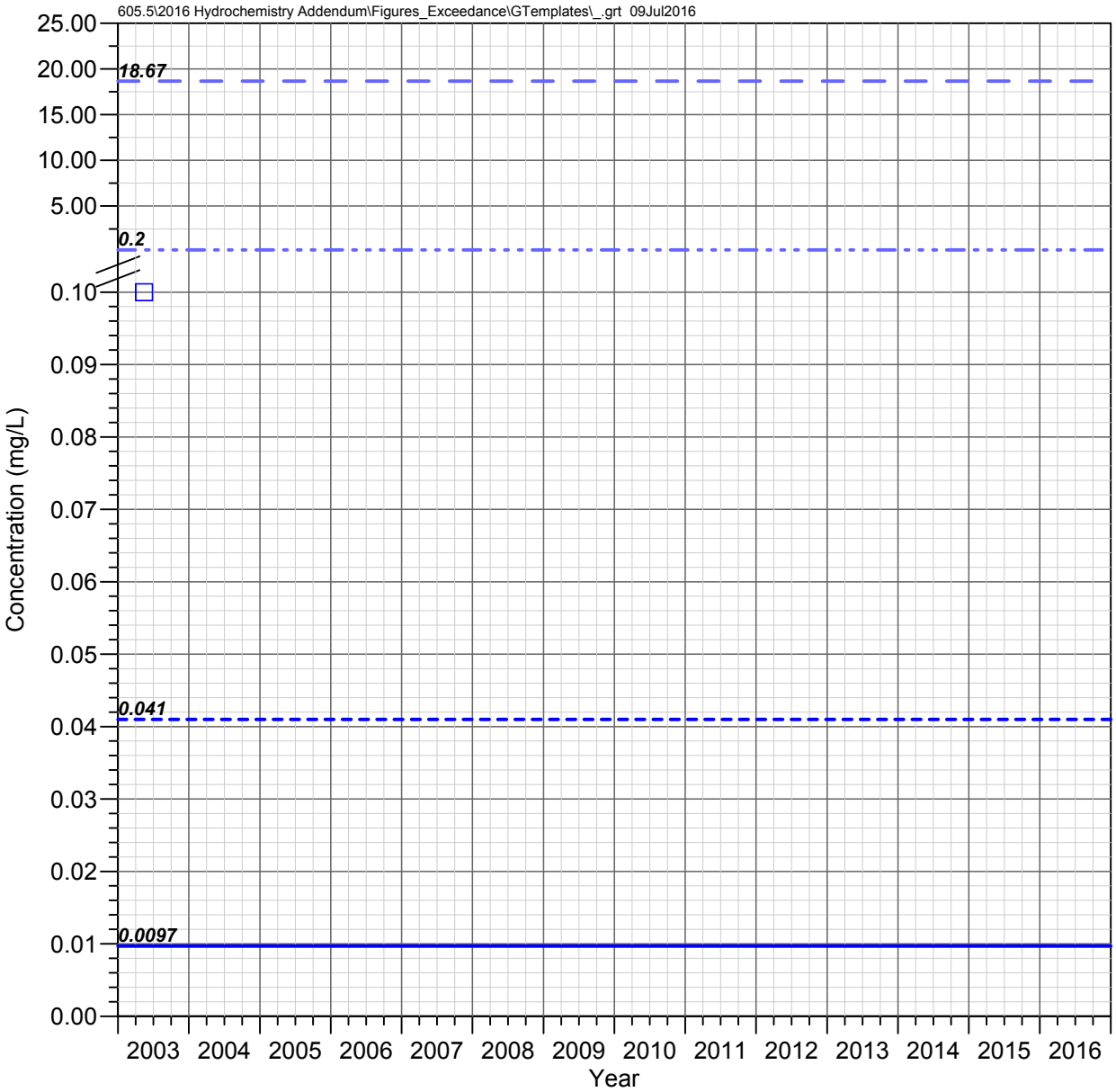


FIGURE F-280. COPPER CONCENTRATIONS OBSERVED AT MC 3.3 C (LOWER MINERAL), MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Pump Station Spring (QC 30.7 C)
Queen Creek Watershed

FREE CYANIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Partial Body Contact (TRC, 18.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (TRC, 0.0097 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (TRC, 0.041 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.2 mg/L)

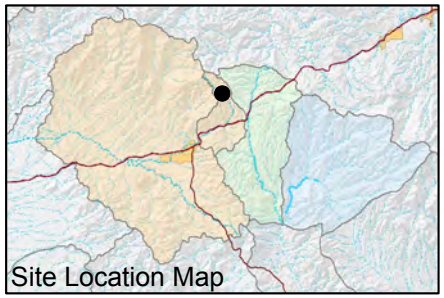
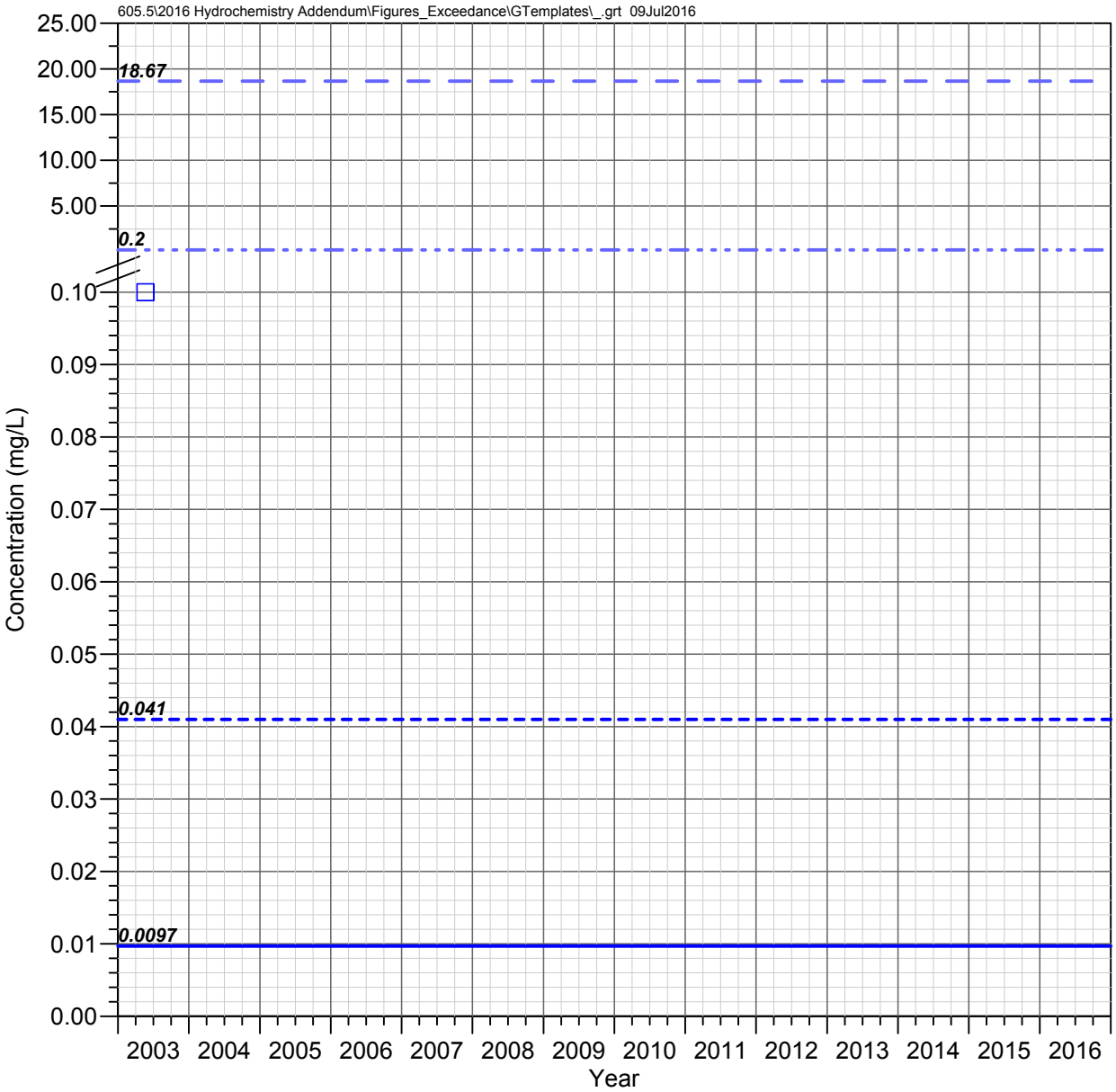


FIGURE F-281. FREE CYANIDE CONCENTRATIONS OBSERVED AT PUMP STATION SPRING (QC 30.7 C), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Boulder Hole (QC 23.6 C)
Queen Creek Watershed

FREE CYANIDE

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Partial Body Contact (TRC, 18.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (TRC, 0.0097 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (TRC, 0.041 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.2 mg/L)

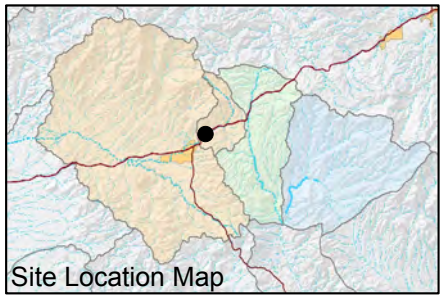
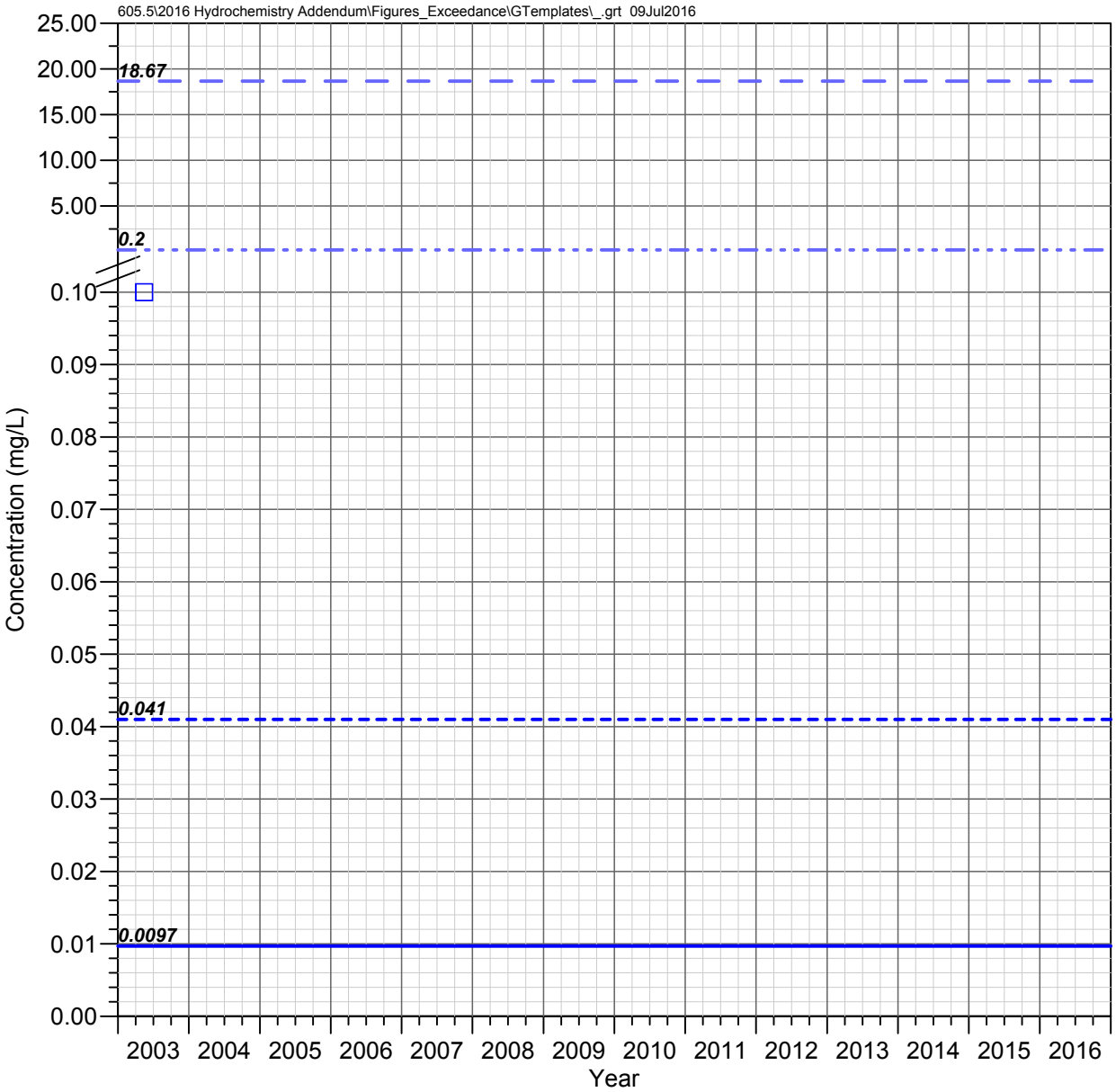


FIGURE F-282. FREE CYANIDE CONCENTRATIONS OBSERVED AT BOULDER HOLE (QC 23.6 C), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Hidden Spring
Queen Creek Watershed

FREE CYANIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Partial Body Contact (TRC, 18.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (TRC, 0.0097 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (TRC, 0.041 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.2 mg/L)

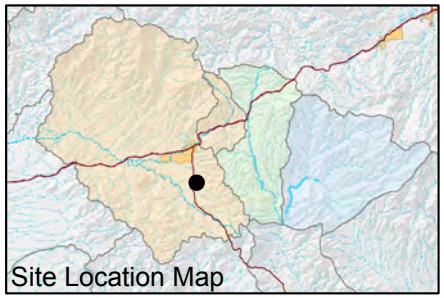
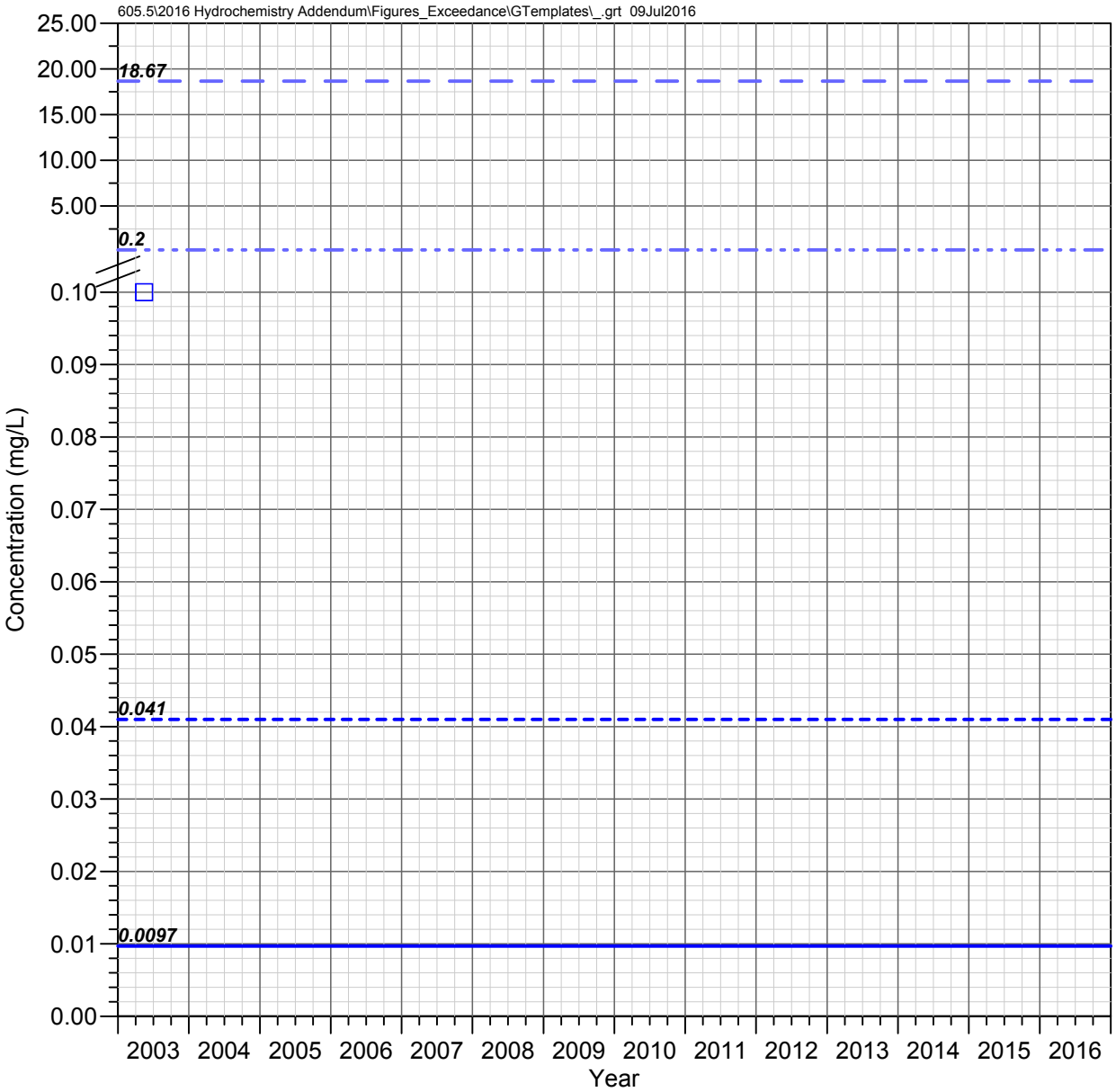


FIGURE F-283. FREE CYANIDE CONCENTRATIONS OBSERVED AT HIDDEN SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Kane Spring
Queen Creek Watershed

FREE CYANIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Partial Body Contact (TRC, 18.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (TRC, 0.0097 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (TRC, 0.041 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.2 mg/L)

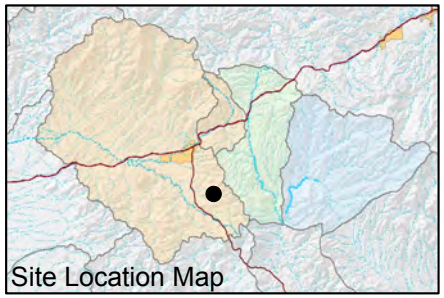
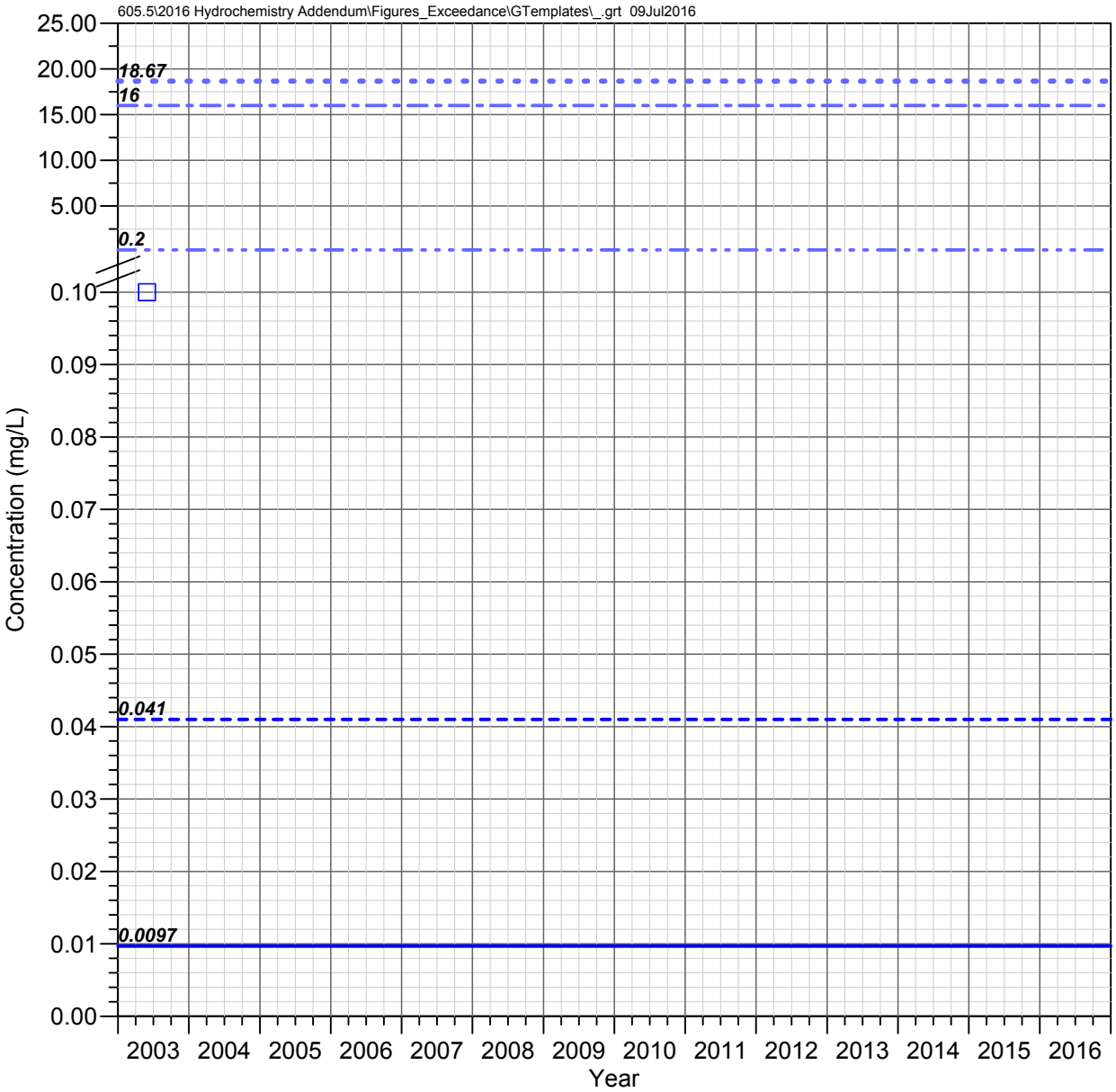


FIGURE F-284. FREE CYANIDE CONCENTRATIONS OBSERVED AT KANE SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 13.5 C
Devils Canyon Watershed

FREE CYANIDE

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 18.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (TRC, 0.0097 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (TRC, 0.041 mg/L)
- AZ Fish Consumption (TRC, 16 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.2 mg/L)

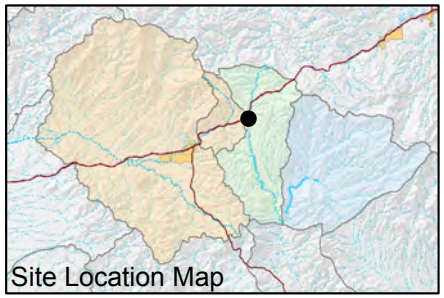
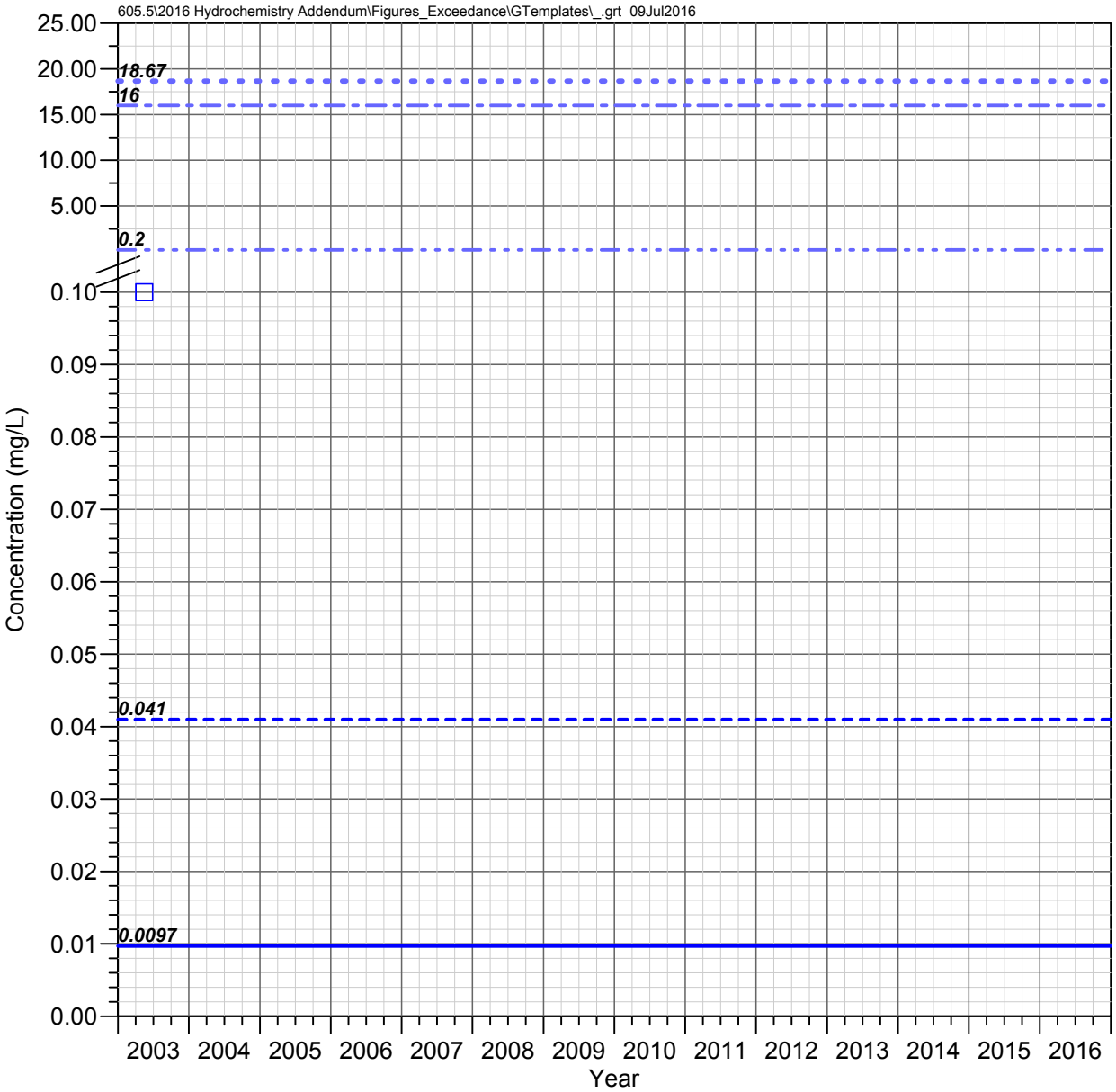


FIGURE F-285. FREE CYANIDE CONCENTRATIONS OBSERVED AT DC 13.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 10.9 C
Devils Canyon Watershed

FREE CYANIDE

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 18.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (TRC, 0.0097 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (TRC, 0.041 mg/L)
- AZ Fish Consumption (TRC, 16 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.2 mg/L)

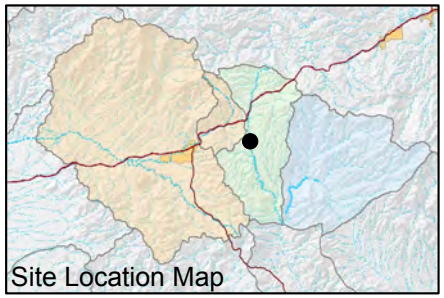
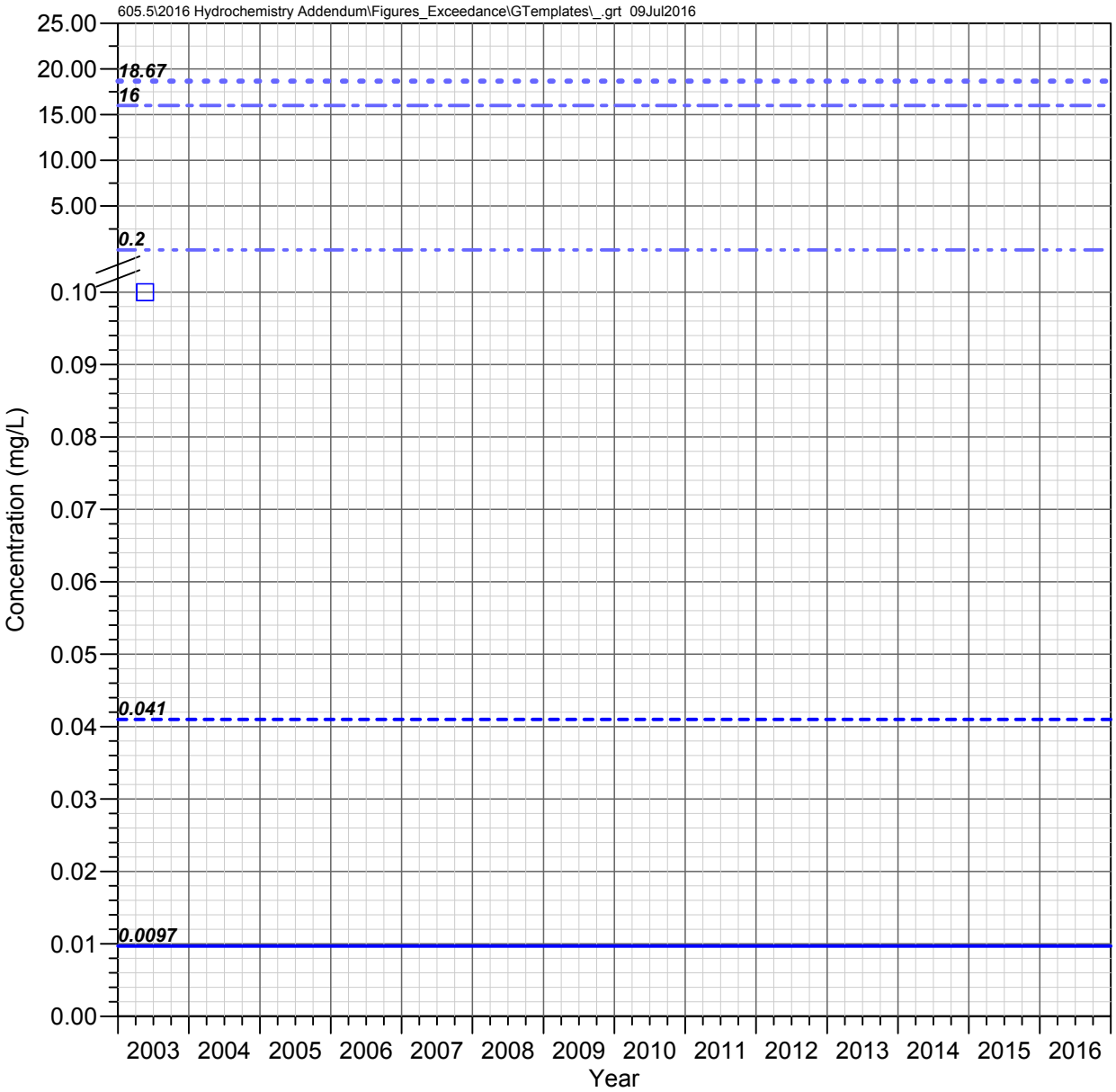


FIGURE F-286. FREE CYANIDE CONCENTRATIONS OBSERVED AT DC 10.9 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.8 C
Devils Canyon Watershed

FREE CYANIDE

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 18.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (TRC, 0.0097 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (TRC, 0.041 mg/L)
- AZ Fish Consumption (TRC, 16 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.2 mg/L)

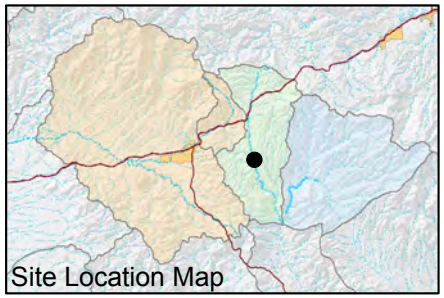
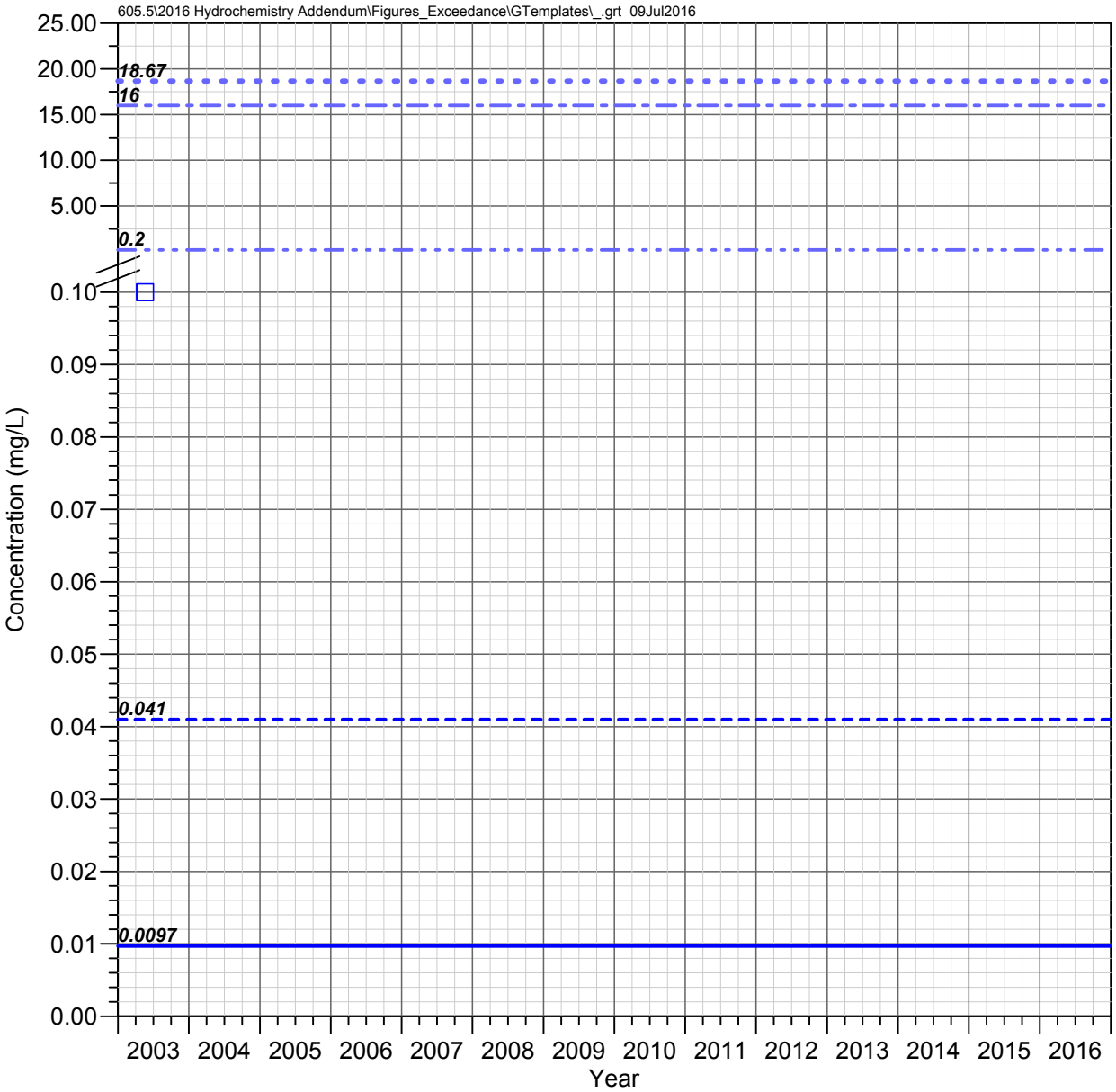


FIGURE F-287. FREE CYANIDE CONCENTRATIONS OBSERVED AT DC 8.8 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.2 W
Devils Canyon Watershed

FREE CYANIDE

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 18.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (TRC, 0.0097 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (TRC, 0.041 mg/L)
- AZ Fish Consumption (TRC, 16 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.2 mg/L)

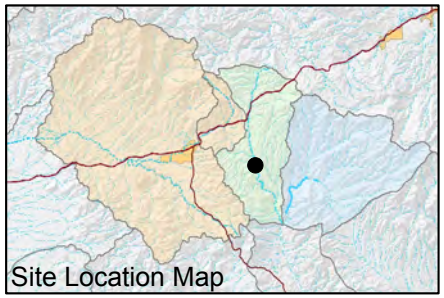
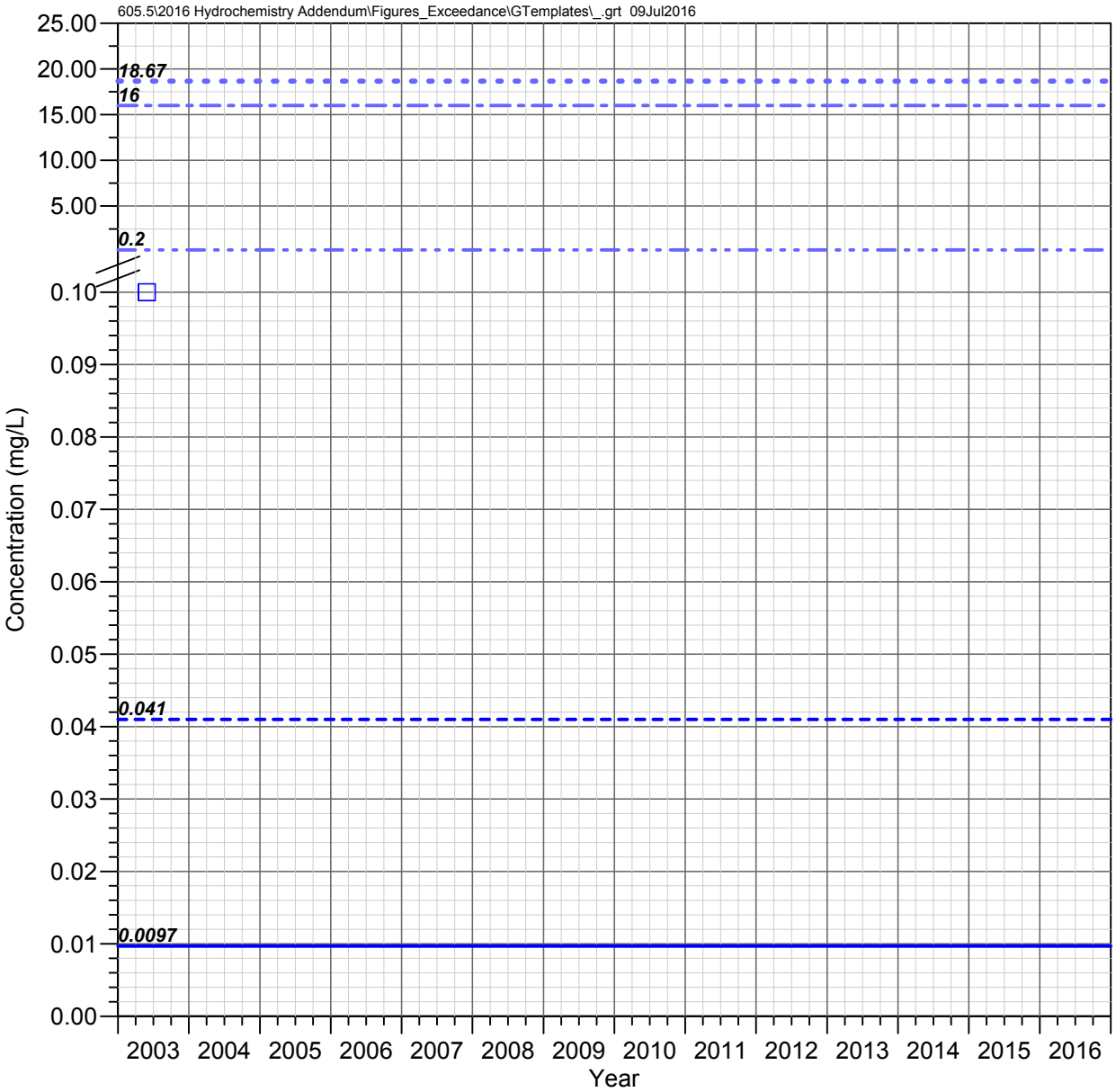


FIGURE F-288. FREE CYANIDE CONCENTRATIONS OBSERVED AT DC 8.2 W, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 7.1 C
Devils Canyon Watershed

FREE CYANIDE

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 18.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (TRC, 0.0097 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (TRC, 0.041 mg/L)
- AZ Fish Consumption (TRC, 16 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.2 mg/L)

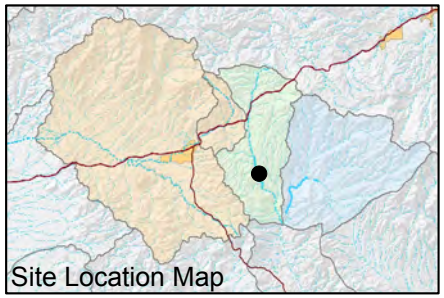
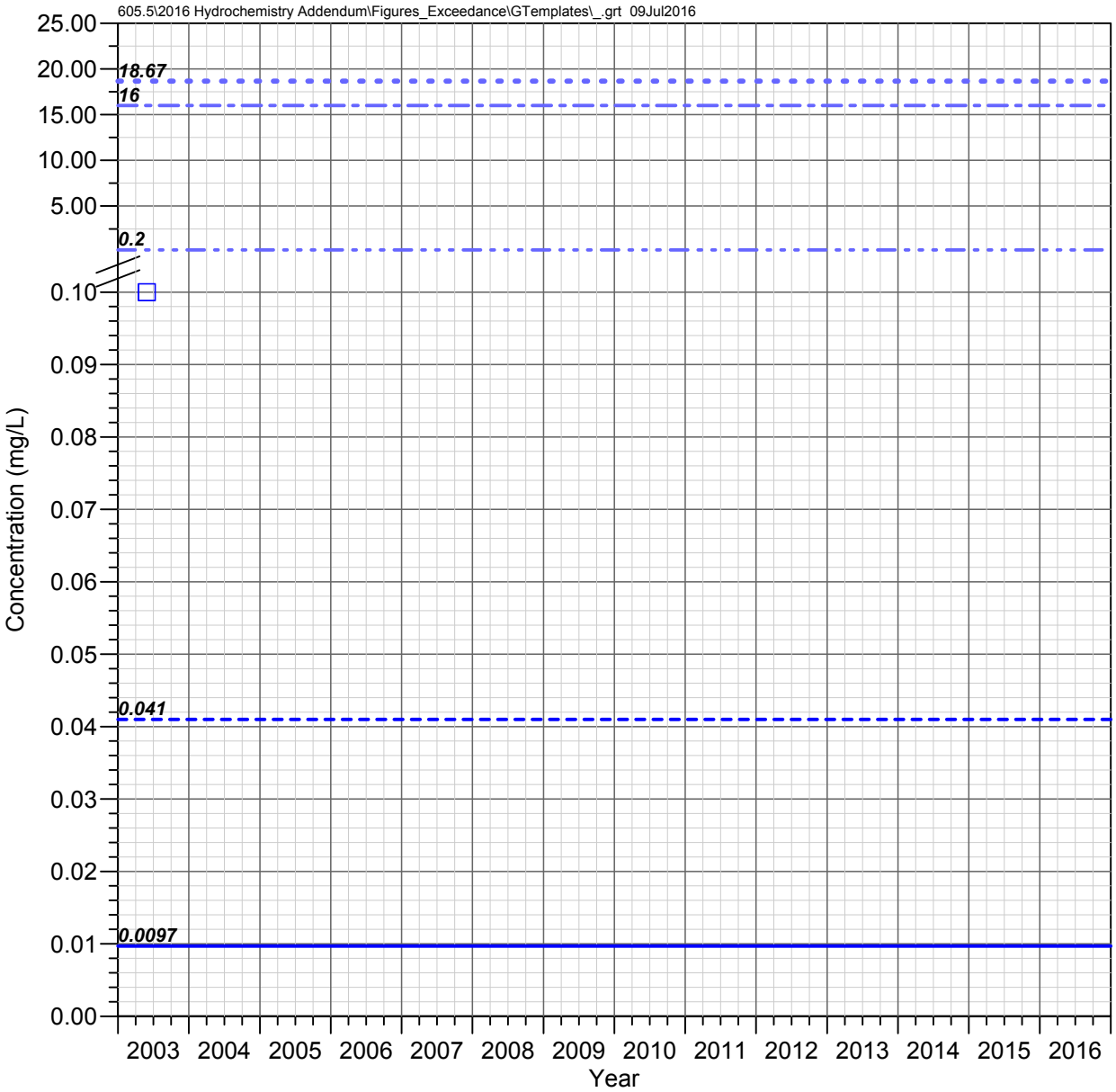


FIGURE F-289. FREE CYANIDE CONCENTRATIONS OBSERVED AT DC 7.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.6 W (DCT 6.6 W)
Devils Canyon Watershed

FREE CYANIDE

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 18.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (TRC, 0.0097 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (TRC, 0.041 mg/L)
- AZ Fish Consumption (TRC, 16 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.2 mg/L)

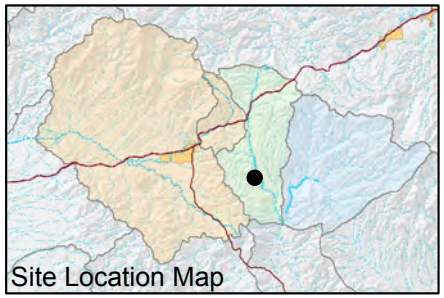
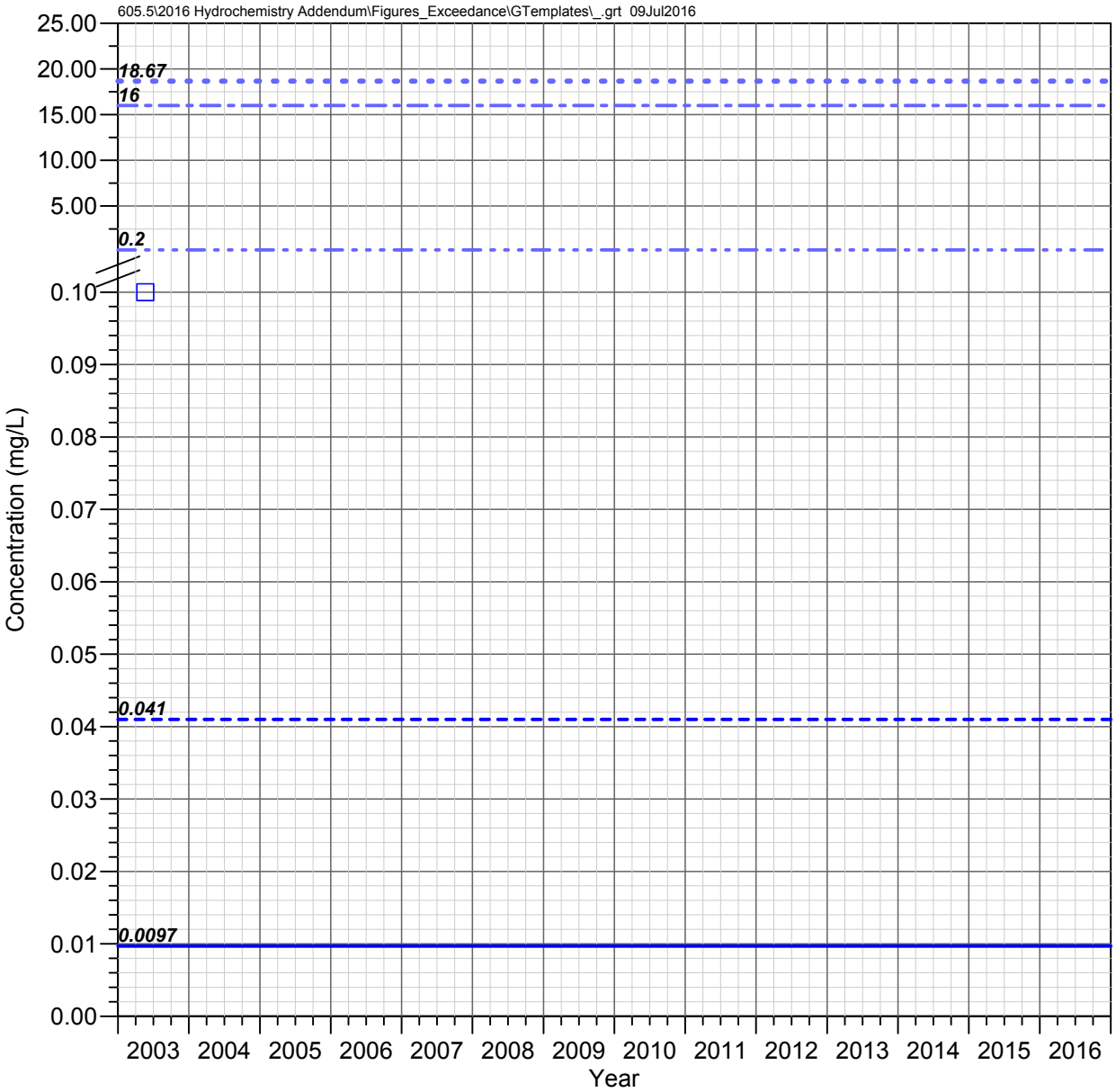


FIGURE F-290. FREE CYANIDE CONCENTRATIONS OBSERVED AT DC 6.6 W (DCT 6.6 W), DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 4.1 E
Devils Canyon Watershed

FREE CYANIDE

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 18.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (TRC, 0.0097 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (TRC, 0.041 mg/L)
- AZ Fish Consumption (TRC, 16 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.2 mg/L)

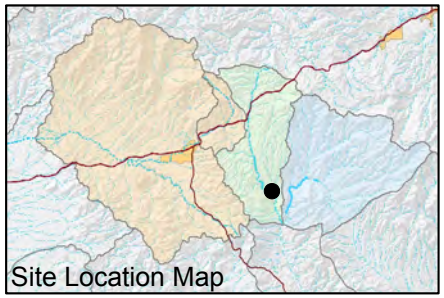
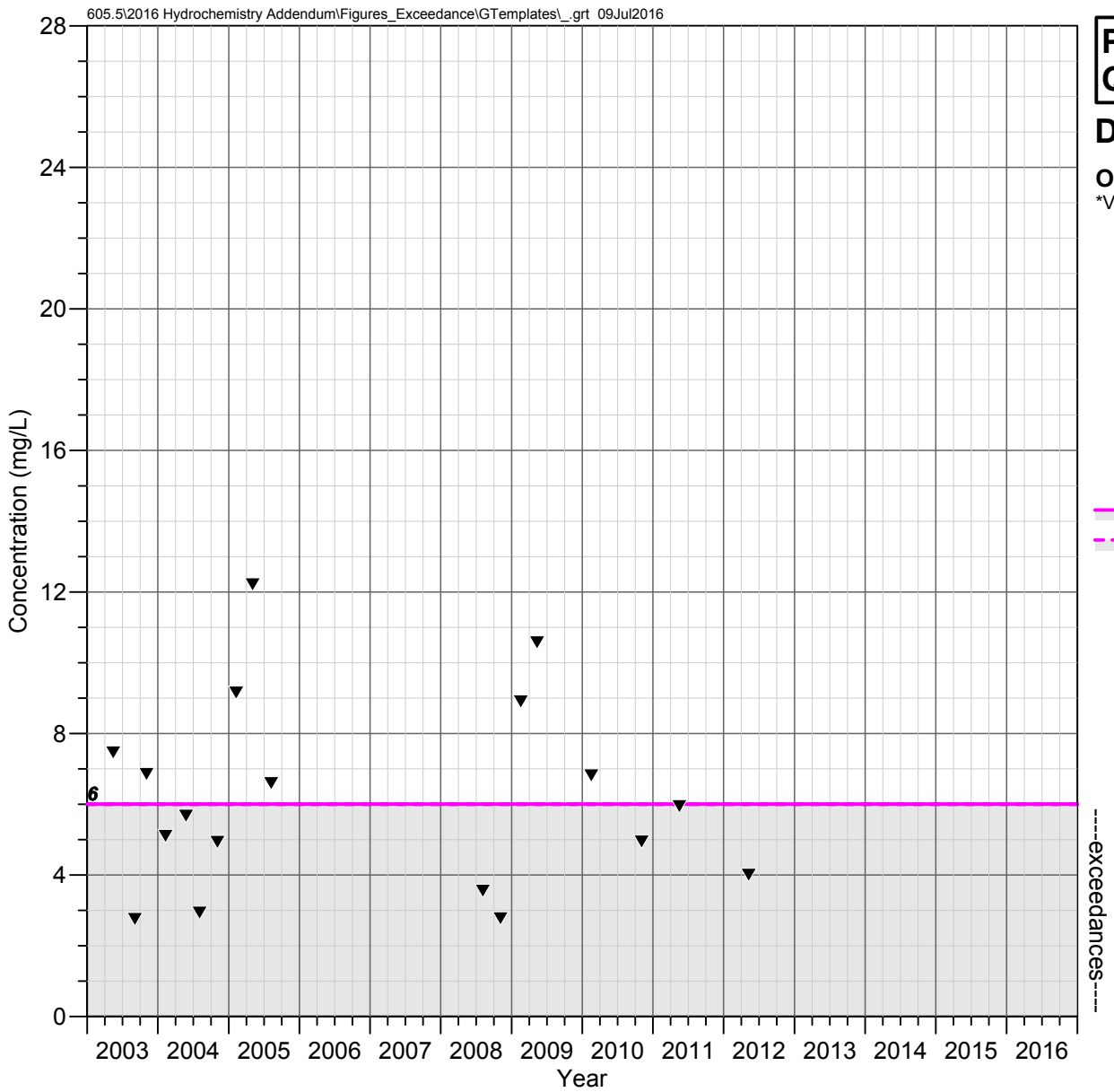


FIGURE F-291. FREE CYANIDE CONCENTRATIONS OBSERVED AT DC 4.1 E, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Pump Station Spring (QC 30.7 C)
Queen Creek Watershed

DISSOLVED OXYGEN

Observed Concentrations

*Value shown at the reported detection limit

▼ Detected Value

▽ Below Detection Limit*

Water Quality Standards

AZ Aquatic and Wildlife - Warm Water Chronic (min of 6 mg/L)

AZ Aquatic and Wildlife - Warm Water Acute (min of 6 mg/L)

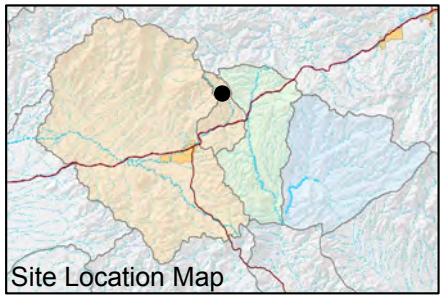
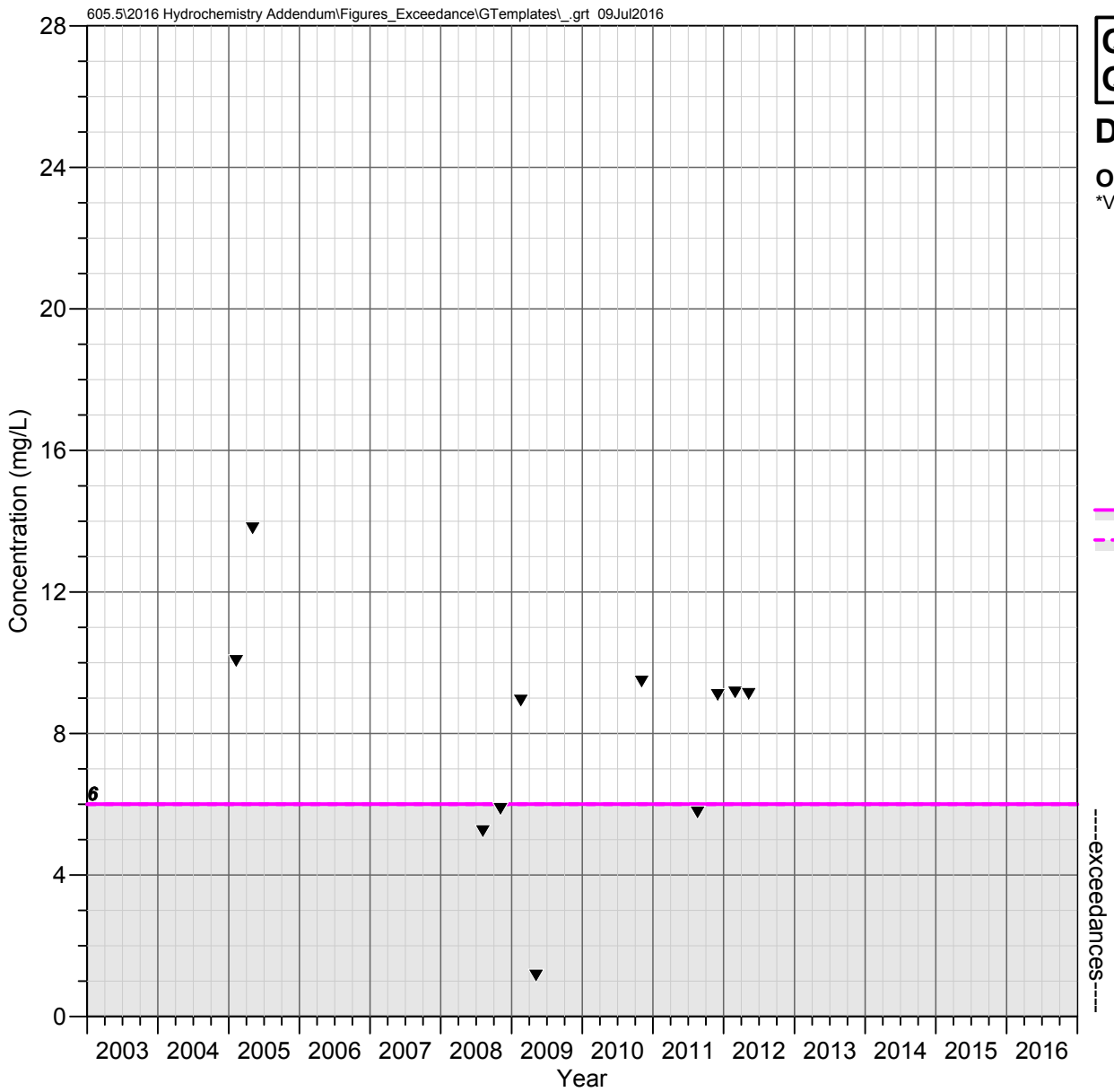


FIGURE F-292. DISSOLVED OXYGEN CONCENTRATIONS OBSERVED AT PUMP STATION SPRING (QC 30.7 C), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 27.3 C
Queen Creek Watershed

DISSOLVED OXYGEN

Observed Concentrations
*Value shown at the reported detection limit

▼ Detected Value
▽ Below Detection Limit*

Water Quality Standards

AZ Aquatic and Wildlife - Warm Water Chronic (min of 6 mg/L)
AZ Aquatic and Wildlife - Warm Water Acute (min of 6 mg/L)

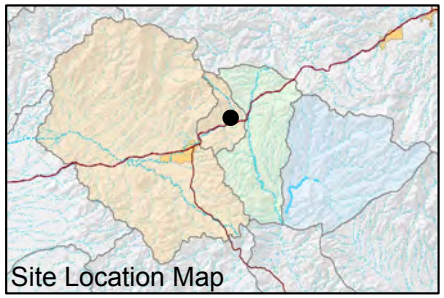
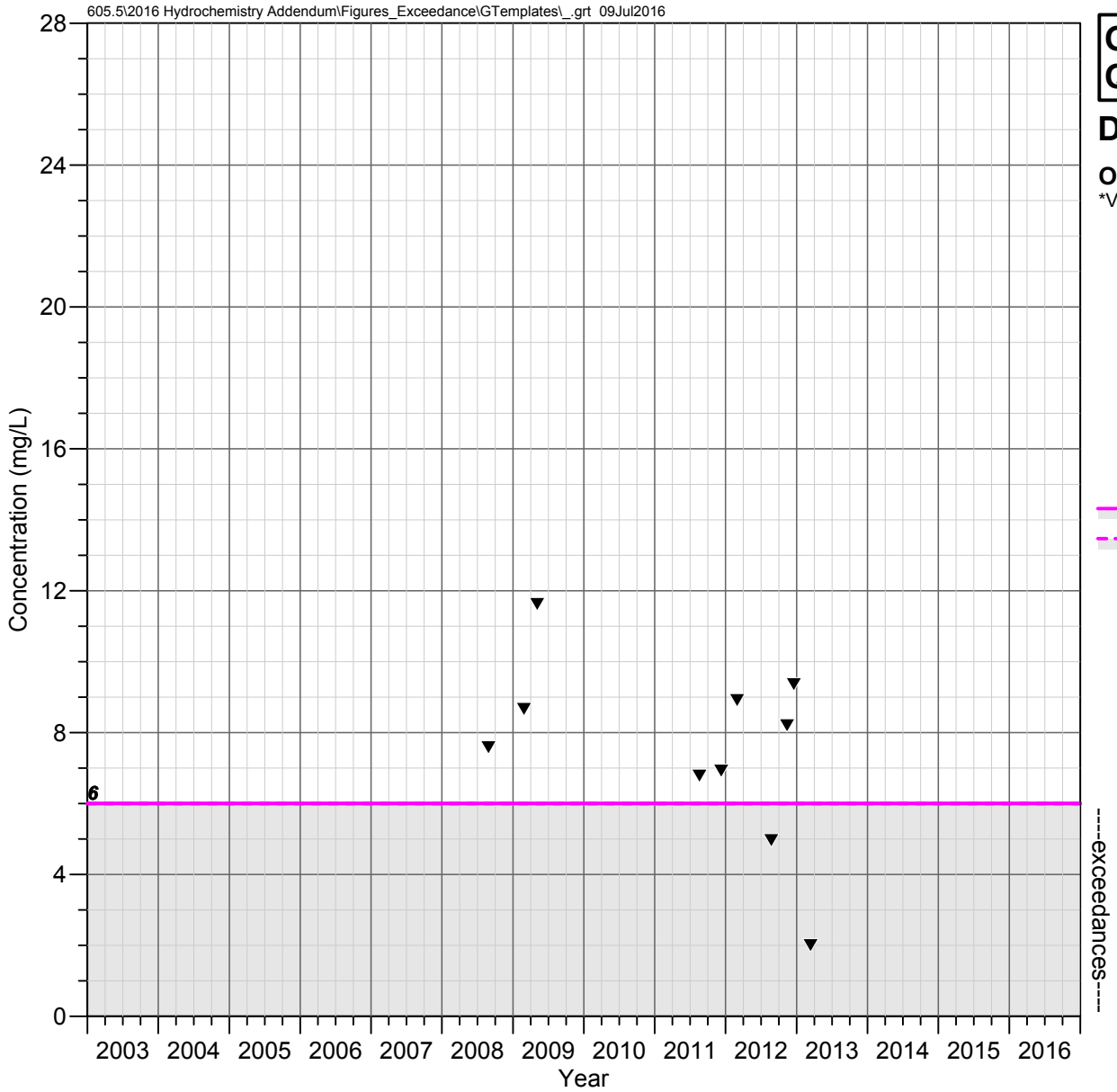


FIGURE F-293. DISSOLVED OXYGEN CONCENTRATIONS OBSERVED AT QC 27.3 C, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Oak Flat Wash
Queen Creek Watershed

DISSOLVED OXYGEN

Observed Concentrations

*Value shown at the reported detection limit

▼ Detected Value

▽ Below Detection Limit*

Water Quality Standards

AZ Aquatic and Wildlife - Warm Water Chronic (min of 6 mg/L)

AZ Aquatic and Wildlife - Warm Water Acute (min of 6 mg/L)

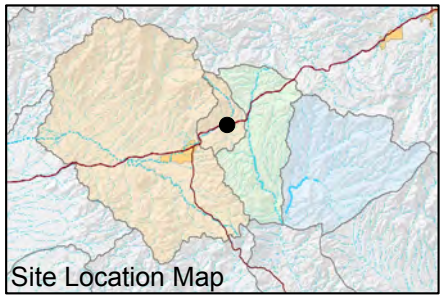
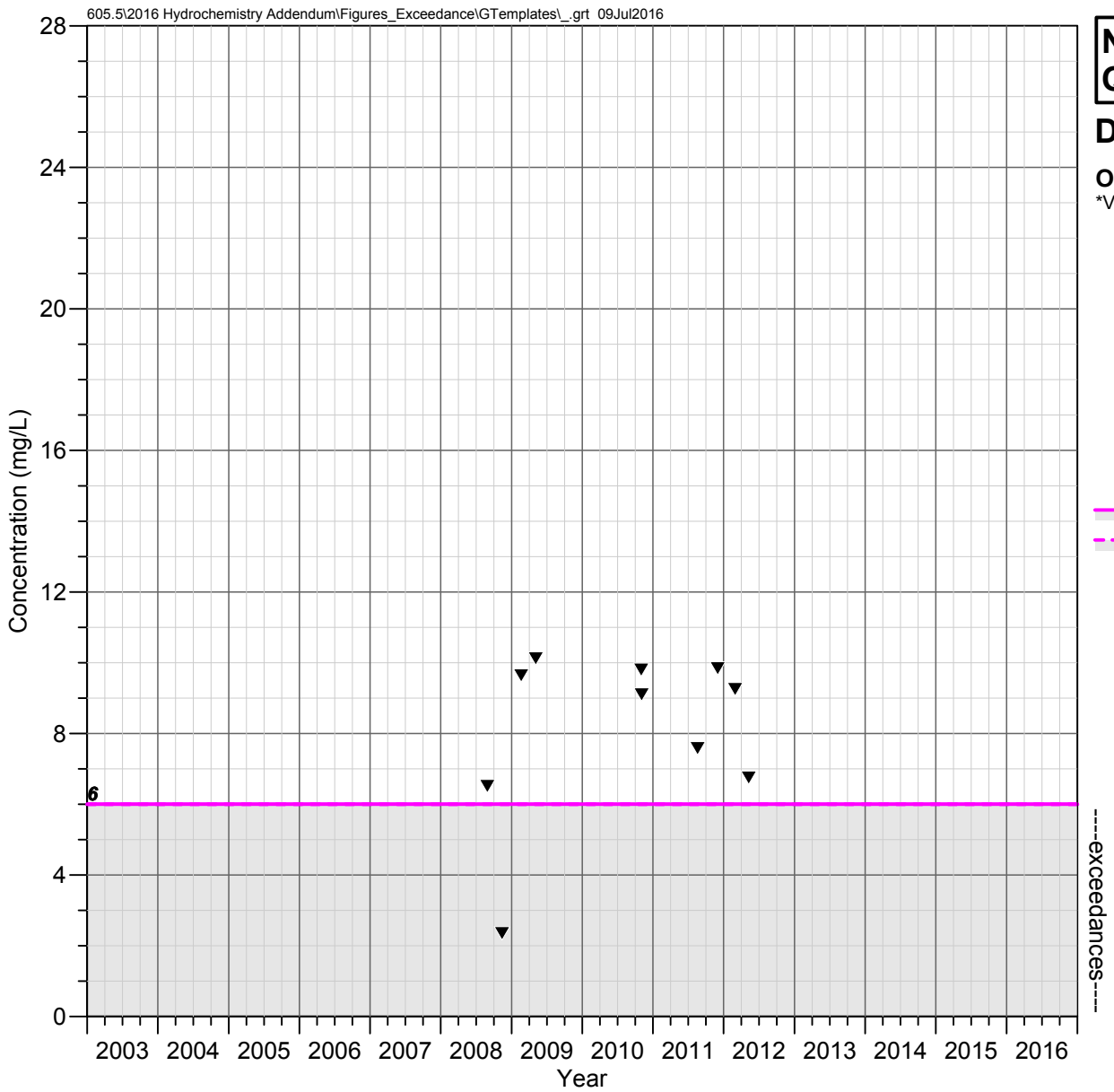


FIGURE F-294. DISSOLVED OXYGEN CONCENTRATIONS OBSERVED AT OAK FLAT WASH, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Number 9 Wash
Queen Creek Watershed

DISSOLVED OXYGEN

Observed Concentrations

*Value shown at the reported detection limit

▼ Detected Value

▽ Below Detection Limit*

Water Quality Standards

AZ Aquatic and Wildlife - Warm Water Chronic (min of 6 mg/L)

AZ Aquatic and Wildlife - Warm Water Acute (min of 6 mg/L)

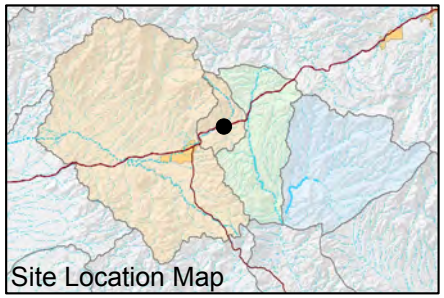
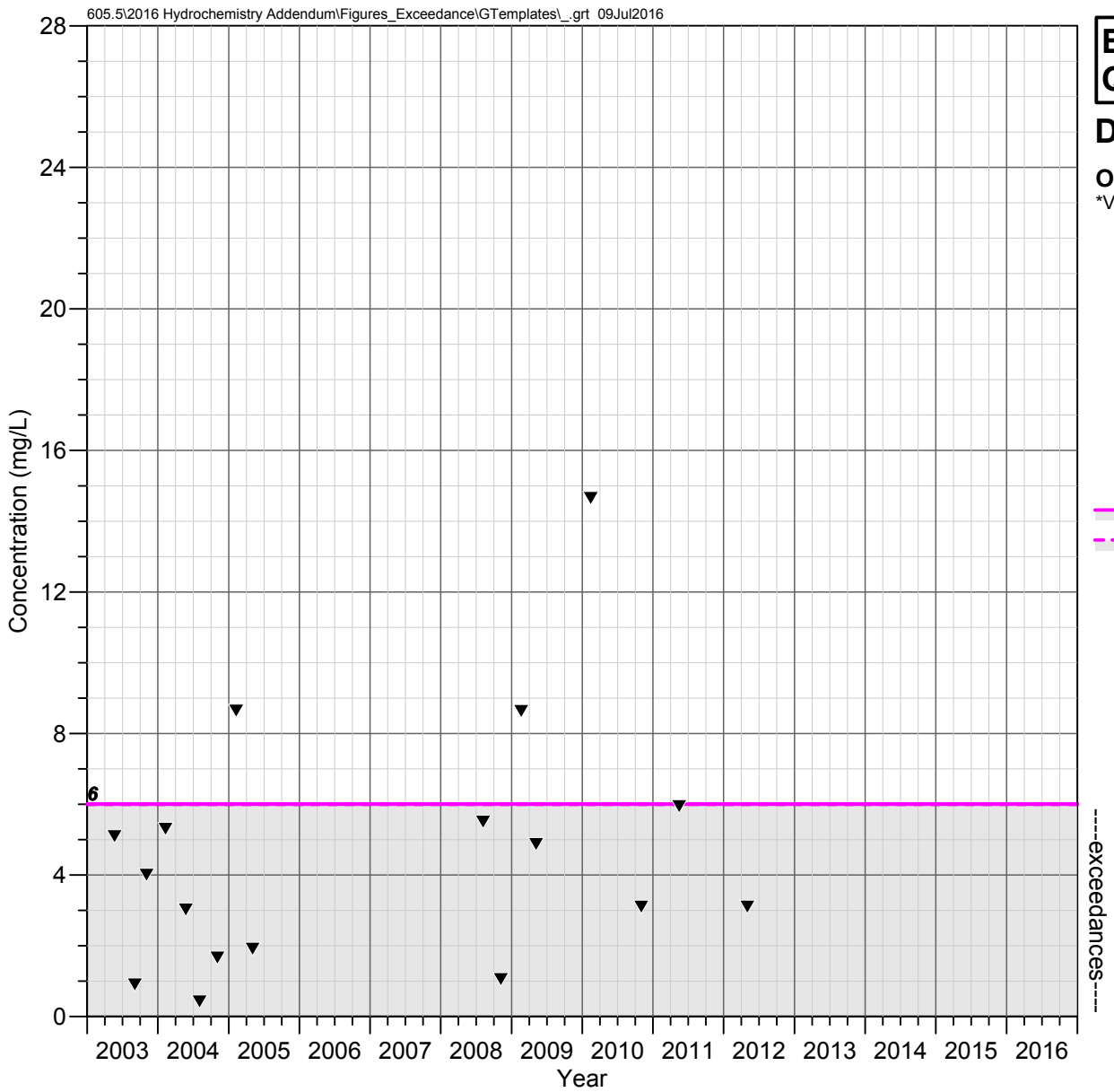


FIGURE F-295. DISSOLVED OXYGEN CONCENTRATIONS OBSERVED AT NUMBER 9 WASH, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Boulder Hole (QC 23.6 C)
Queen Creek Watershed

DISSOLVED OXYGEN

Observed Concentrations

*Value shown at the reported detection limit

▼ Detected Value

▽ Below Detection Limit*

Water Quality Standards

AZ Aquatic and Wildlife - Warm Water Chronic (min of 6 mg/L)

AZ Aquatic and Wildlife - Warm Water Acute (min of 6 mg/L)

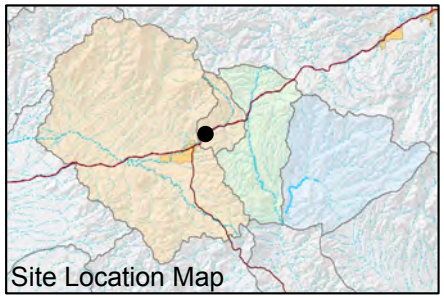
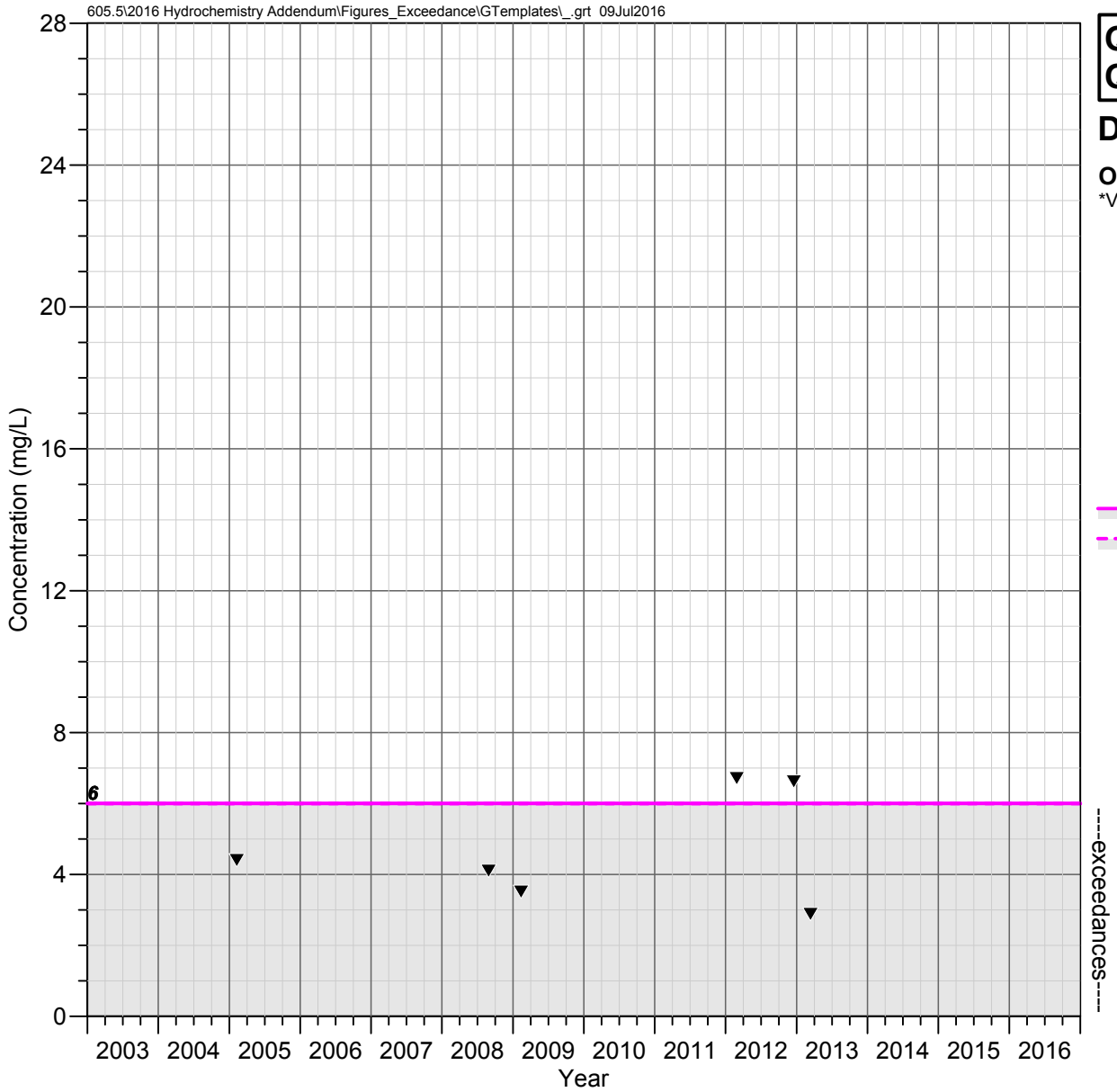


FIGURE F-296. DISSOLVED OXYGEN CONCENTRATIONS OBSERVED AT BOULDER HOLE (QC 23.6 C), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 22.6 E (Karst Spring)
Queen Creek Watershed

DISSOLVED OXYGEN

Observed Concentrations

*Value shown at the reported detection limit

▼ Detected Value

▽ Below Detection Limit*

Water Quality Standards

AZ Aquatic and Wildlife - Warm Water Chronic (min of 6 mg/L)

AZ Aquatic and Wildlife - Warm Water Acute (min of 6 mg/L)

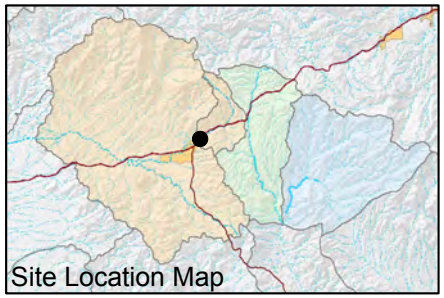
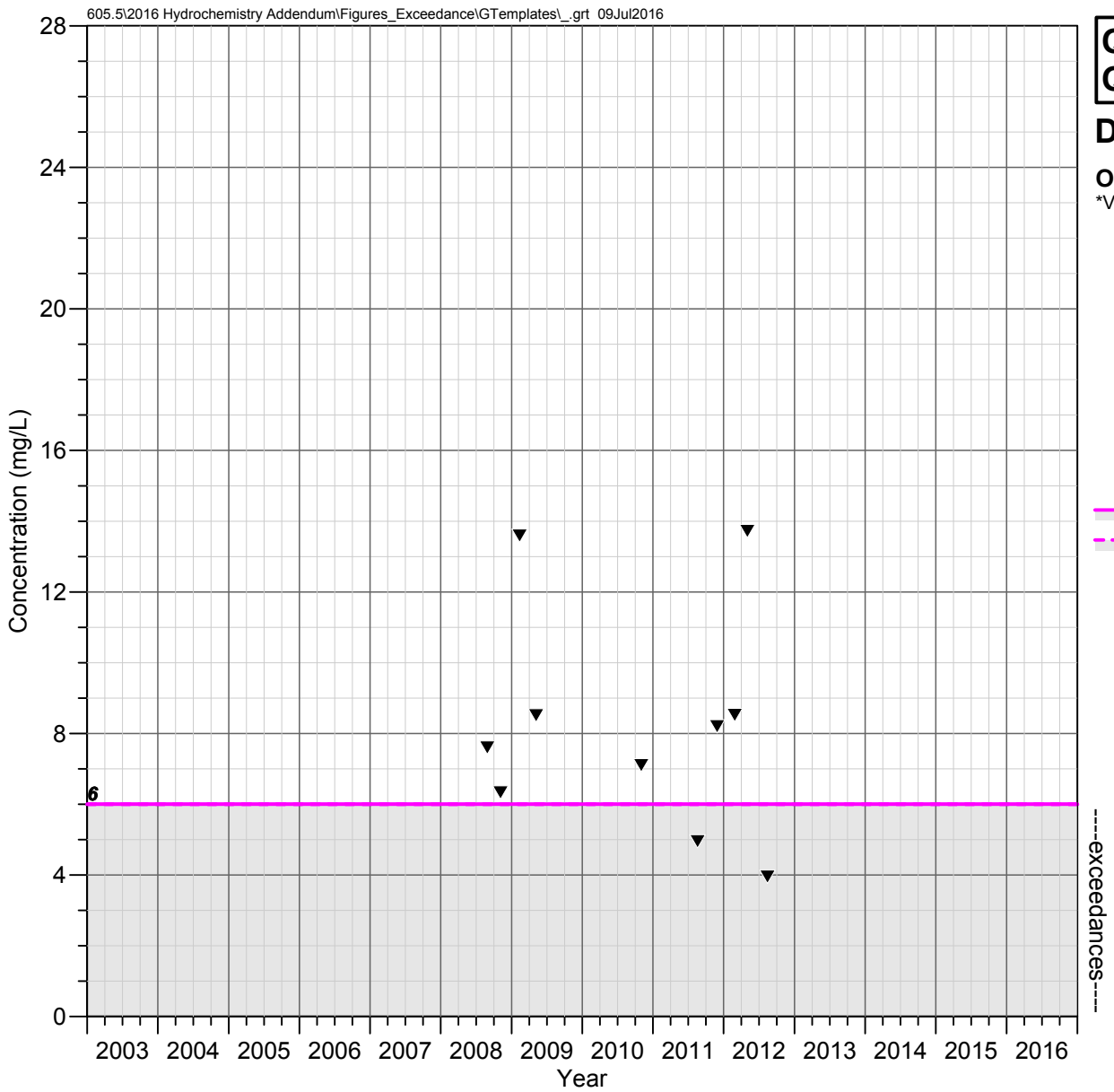


FIGURE F-297. DISSOLVED OXYGEN CONCENTRATIONS OBSERVED AT QC 22.6 E (KARST SPRING), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 21.7 C (Magma Avenue)
Queen Creek Watershed

DISSOLVED OXYGEN

Observed Concentrations

*Value shown at the reported detection limit

▼ Detected Value

▽ Below Detection Limit*

Water Quality Standards

AZ Aquatic and Wildlife - Warm Water Chronic (min of 6 mg/L)

AZ Aquatic and Wildlife - Warm Water Acute (min of 6 mg/L)

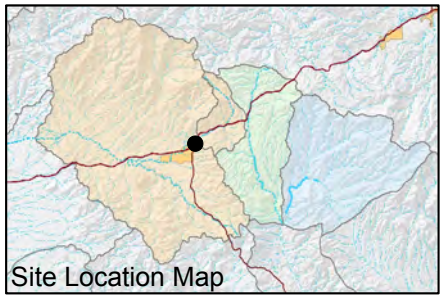
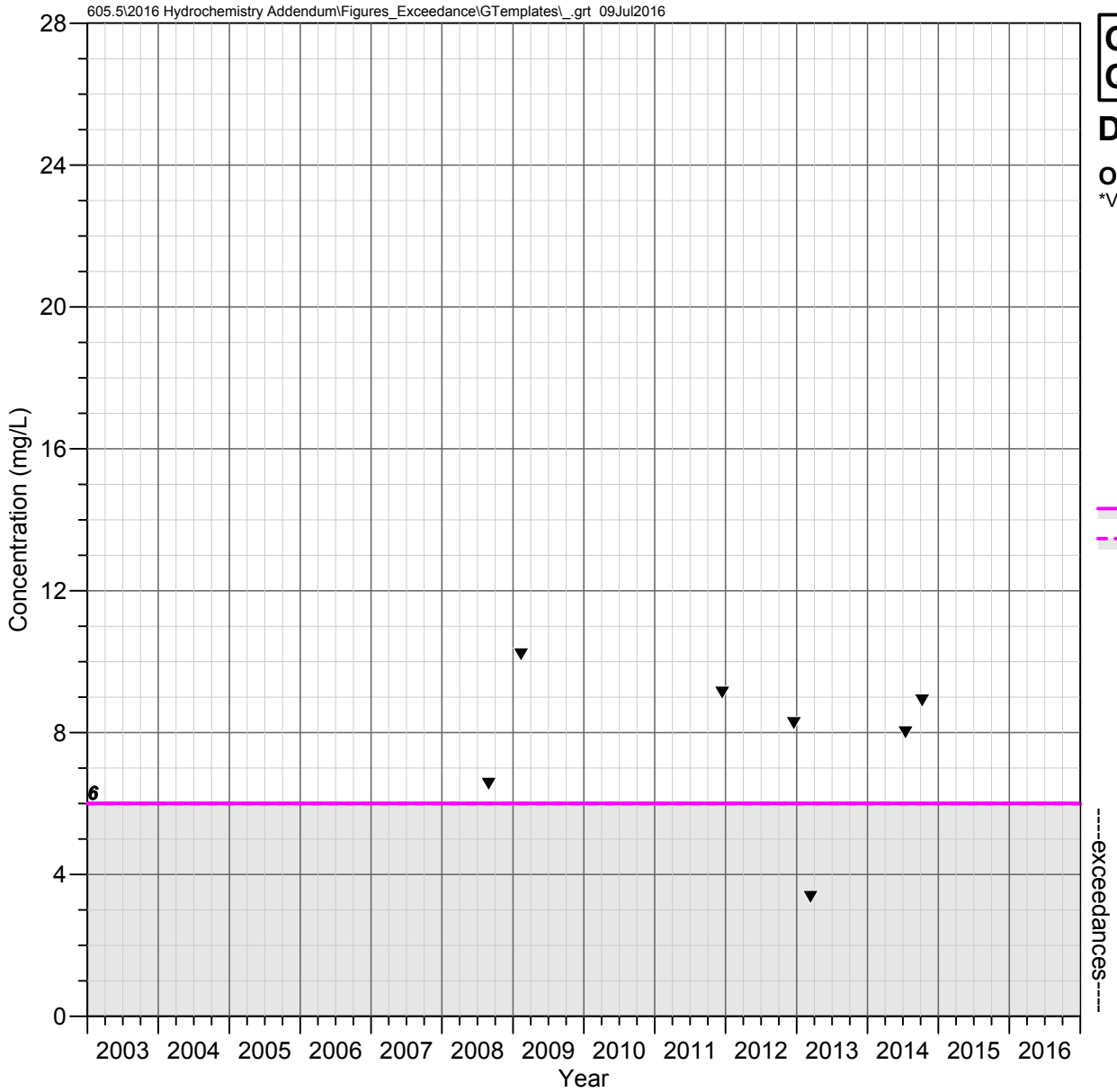


FIGURE F-298. DISSOLVED OXYGEN CONCENTRATIONS OBSERVED AT QC 21.7 C (MAGMA AVENUE), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 19.7 C
Queen Creek Watershed

DISSOLVED OXYGEN

Observed Concentrations

*Value shown at the reported detection limit

▼ Detected Value

▽ Below Detection Limit*

Water Quality Standards

AZ Aquatic and Wildlife - Warm Water Chronic (min of 6 mg/L)

AZ Aquatic and Wildlife - Warm Water Acute (min of 6 mg/L)

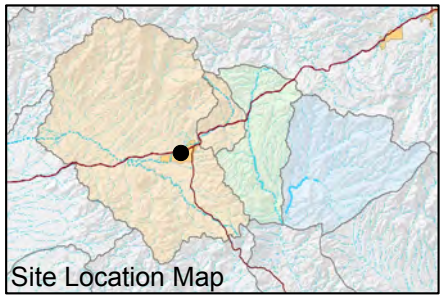
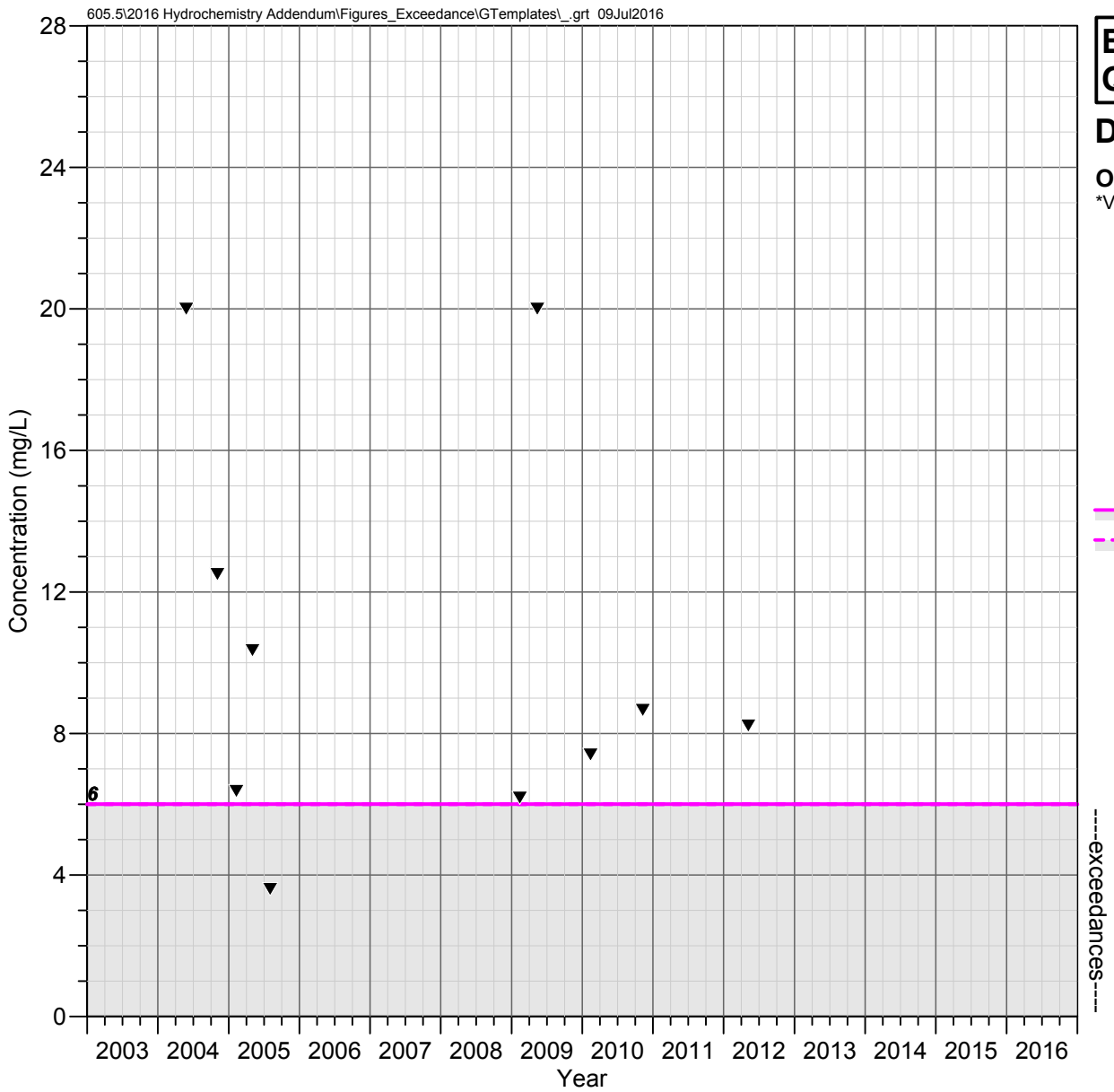


FIGURE F-299. DISSOLVED OXYGEN CONCENTRATIONS OBSERVED AT QC 19.7 C, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Bored Spring
Queen Creek Watershed

DISSOLVED OXYGEN

Observed Concentrations

*Value shown at the reported detection limit

▼ Detected Value

▽ Below Detection Limit*

Water Quality Standards

AZ Aquatic and Wildlife - Warm Water Chronic (min of 6 mg/L)

AZ Aquatic and Wildlife - Warm Water Acute (min of 6 mg/L)

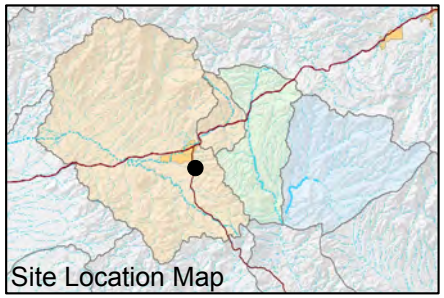
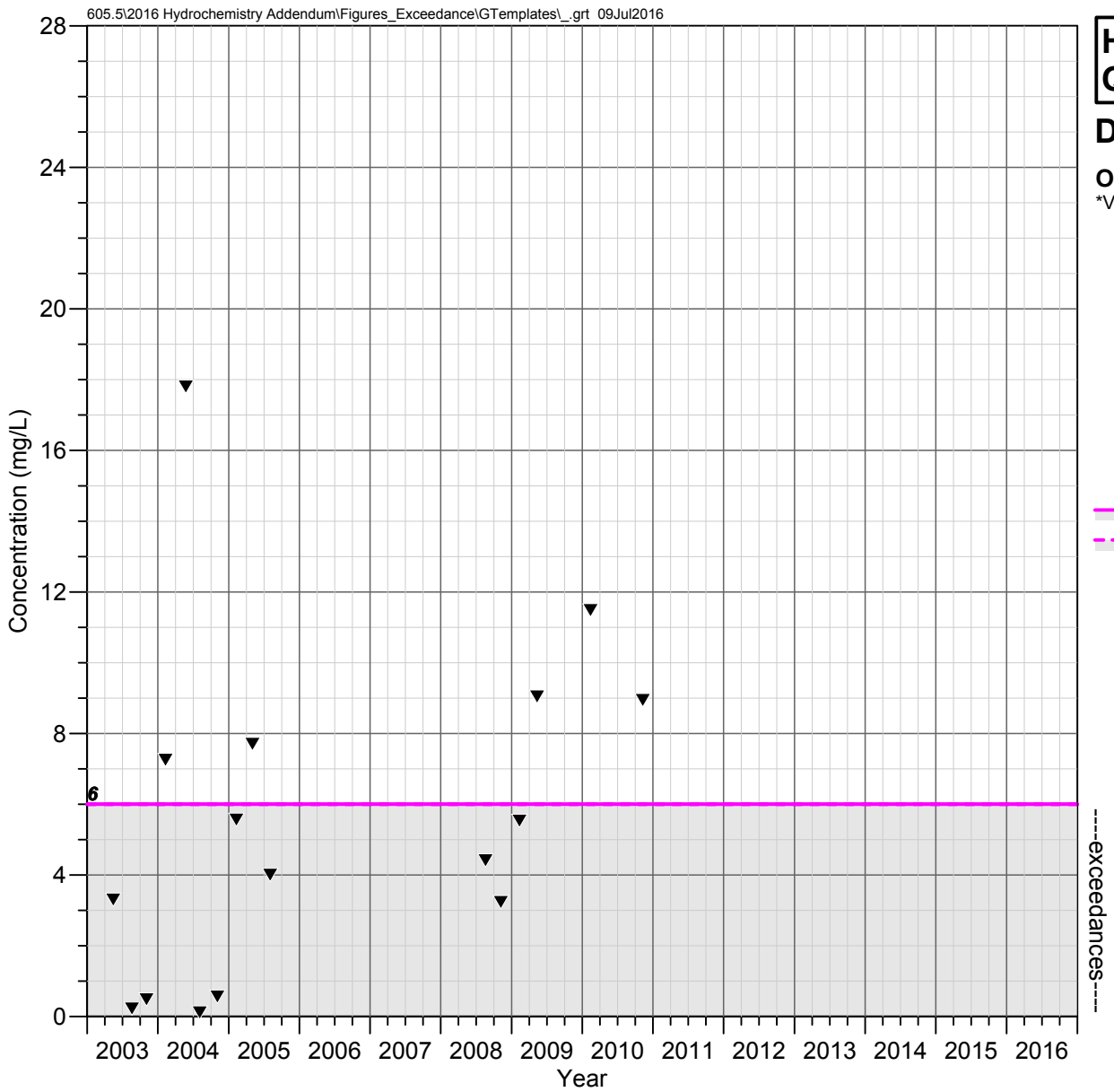


FIGURE F-300. DISSOLVED OXYGEN CONCENTRATIONS OBSERVED AT BORED SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Hidden Spring
Queen Creek Watershed

DISSOLVED OXYGEN

Observed Concentrations

*Value shown at the reported detection limit

▼ Detected Value

▽ Below Detection Limit*

Water Quality Standards

AZ Aquatic and Wildlife - Warm Water Chronic (min of 6 mg/L)

AZ Aquatic and Wildlife - Warm Water Acute (min of 6 mg/L)

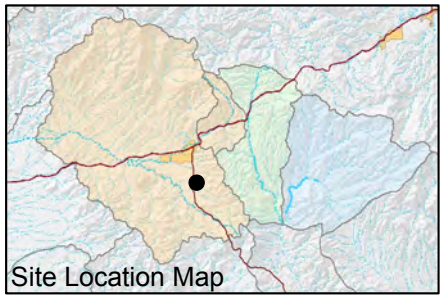
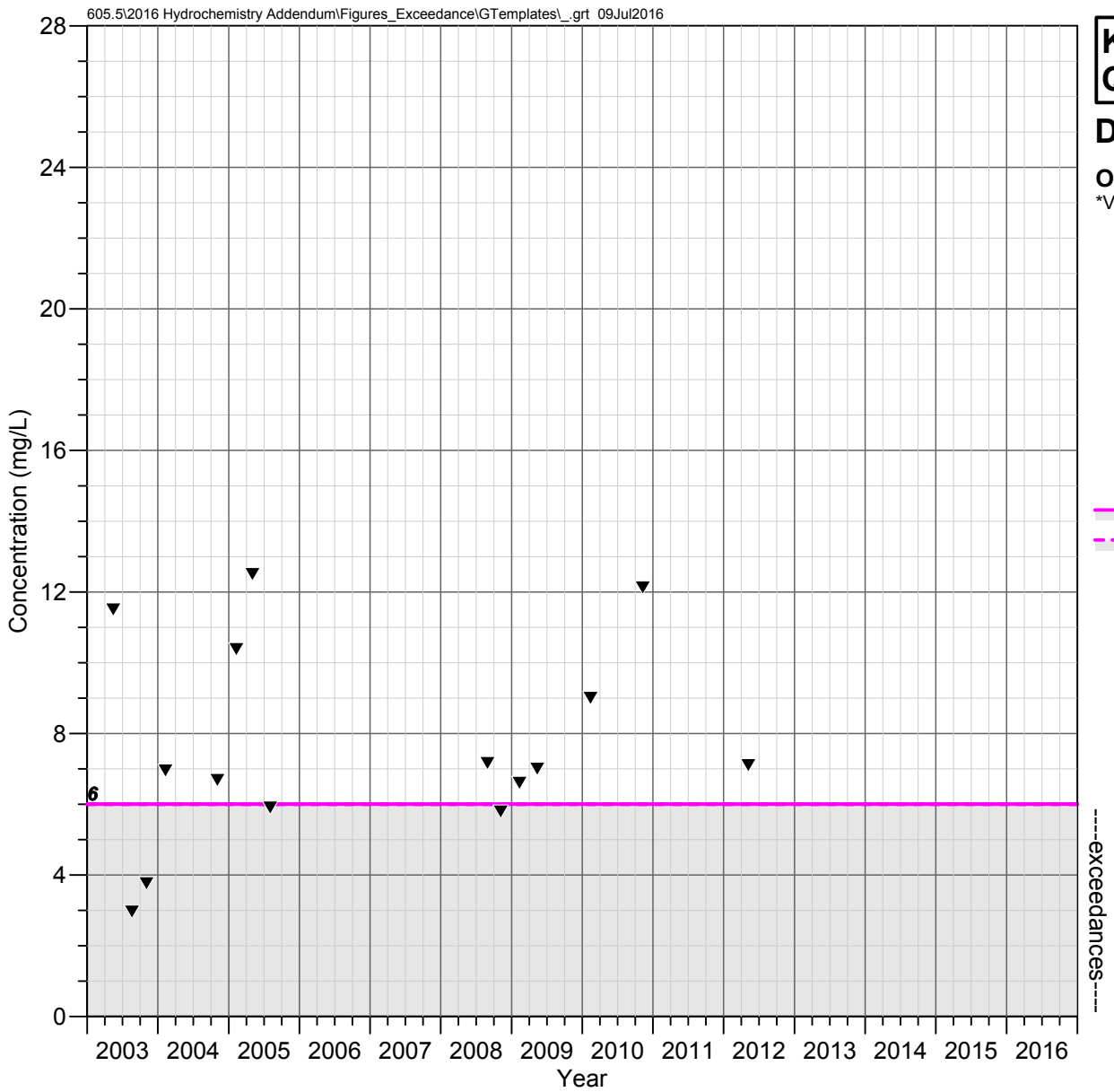


FIGURE F-301. DISSOLVED OXYGEN CONCENTRATIONS OBSERVED AT HIDDEN SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Kane Spring
Queen Creek Watershed

DISSOLVED OXYGEN

Observed Concentrations

*Value shown at the reported detection limit

▼ Detected Value

▽ Below Detection Limit*

Water Quality Standards

AZ Aquatic and Wildlife - Warm Water Chronic (min of 6 mg/L)

AZ Aquatic and Wildlife - Warm Water Acute (min of 6 mg/L)

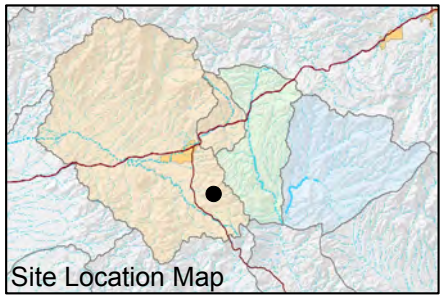
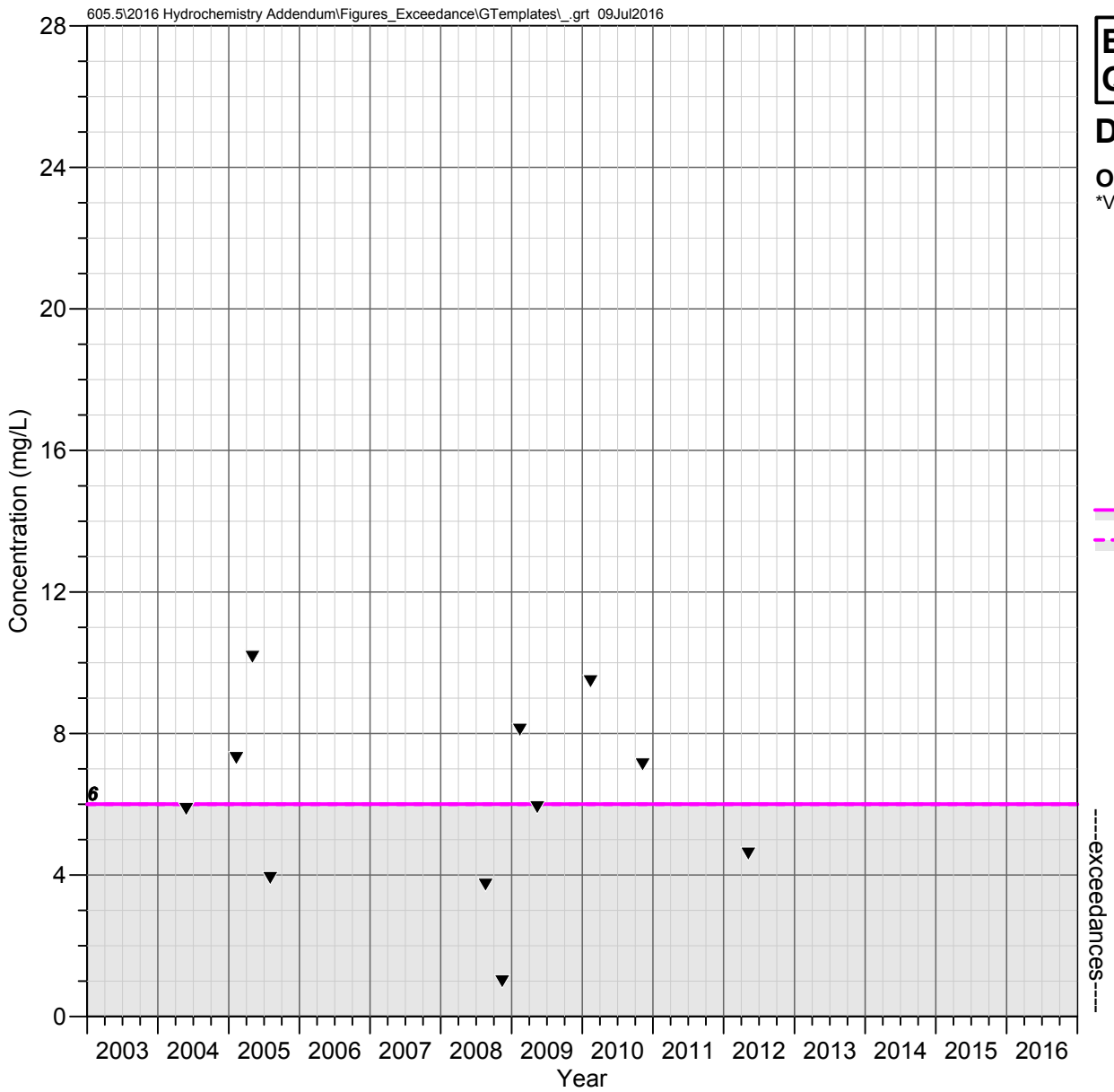


FIGURE F-302. DISSOLVED OXYGEN CONCENTRATIONS OBSERVED AT KANE SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Blue Spring
Queen Creek Watershed

DISSOLVED OXYGEN

Observed Concentrations

*Value shown at the reported detection limit

▼ Detected Value

▽ Below Detection Limit*

Water Quality Standards

AZ Aquatic and Wildlife - Warm Water Chronic (min of 6 mg/L)

AZ Aquatic and Wildlife - Warm Water Acute (min of 6 mg/L)

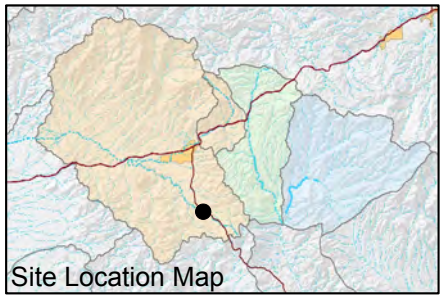
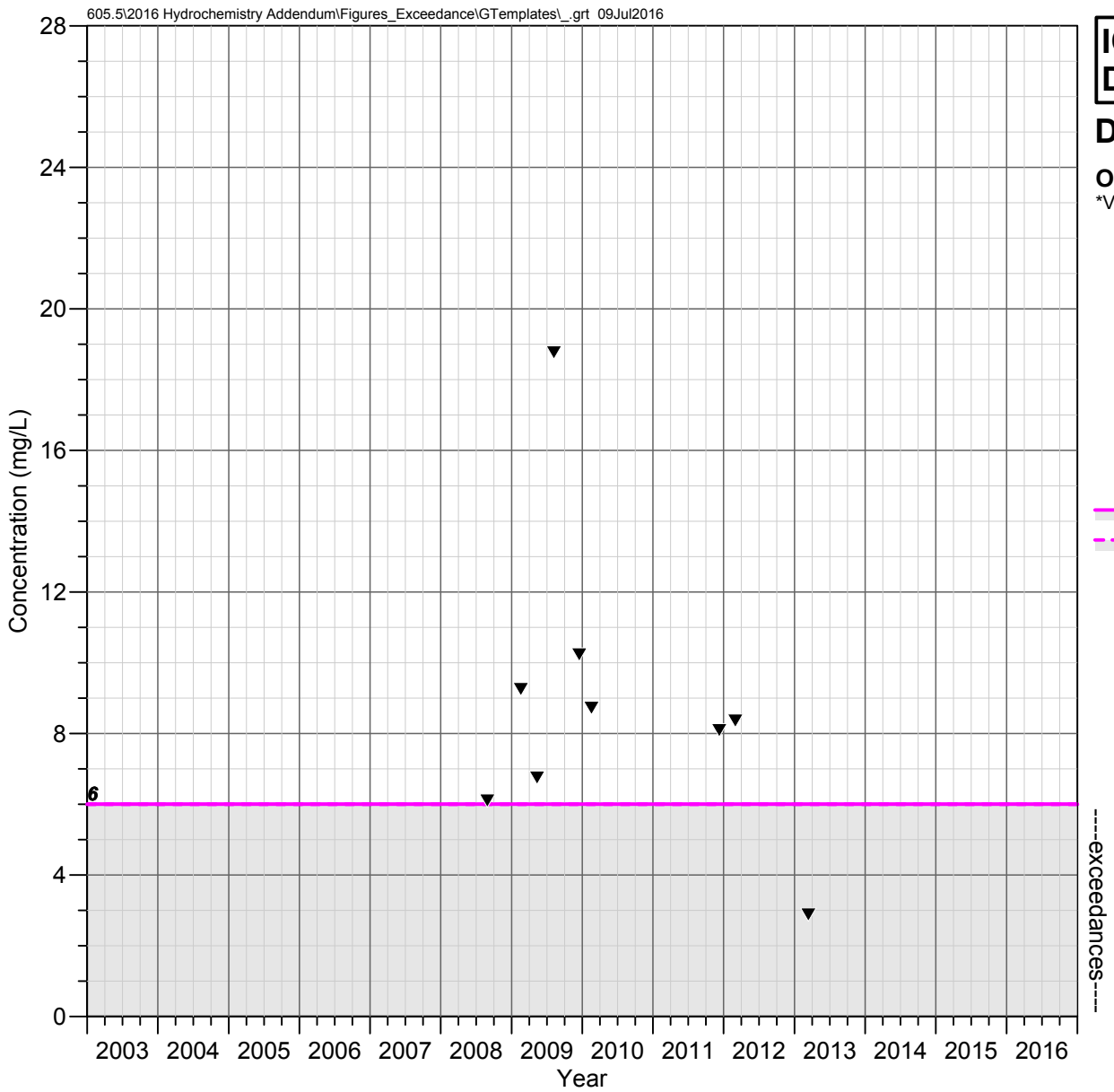


FIGURE F-303. DISSOLVED OXYGEN CONCENTRATIONS OBSERVED AT BLUE SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



IC 1.0 C
Devils Canyon Watershed

DISSOLVED OXYGEN

Observed Concentrations
*Value shown at the reported detection limit

▼ Detected Value
▽ Below Detection Limit*

Water Quality Standards

AZ Aquatic and Wildlife - Warm Water Chronic (min of 6 mg/L)
AZ Aquatic and Wildlife - Warm Water Acute (min of 6 mg/L)

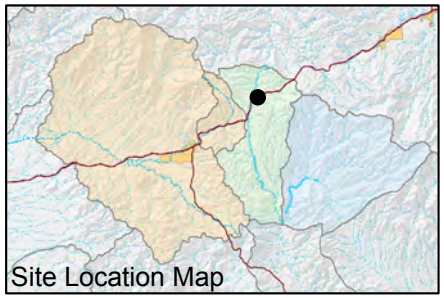
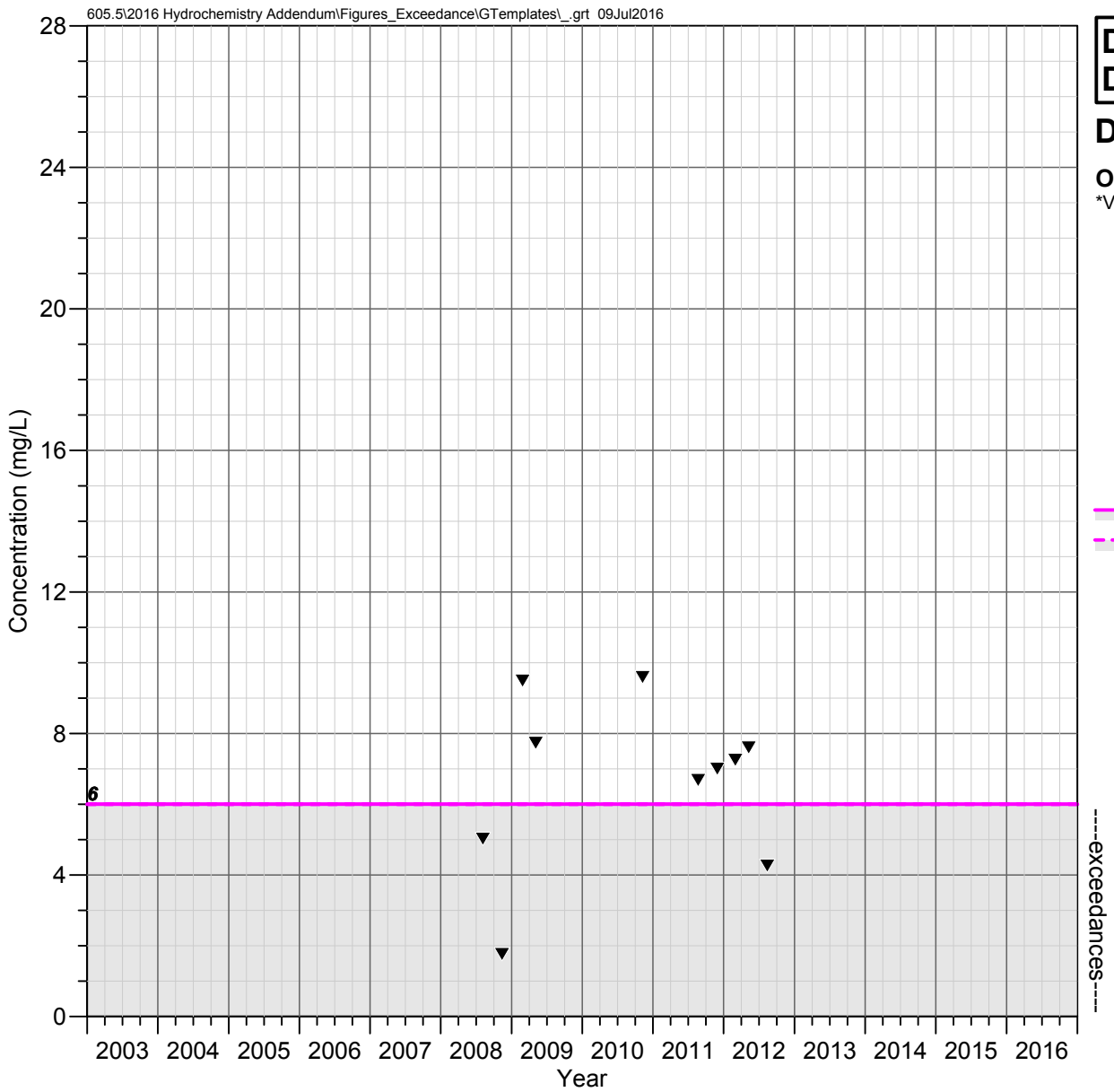


FIGURE F-304. DISSOLVED OXYGEN CONCENTRATIONS OBSERVED AT IC 1.0 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 15.5 C
Devils Canyon Watershed

DISSOLVED OXYGEN

Observed Concentrations
*Value shown at the reported detection limit

▼ Detected Value
▽ Below Detection Limit*

Water Quality Standards

AZ Aquatic and Wildlife - Warm Water Chronic (min of 6 mg/L)
AZ Aquatic and Wildlife - Warm Water Acute (min of 6 mg/L)

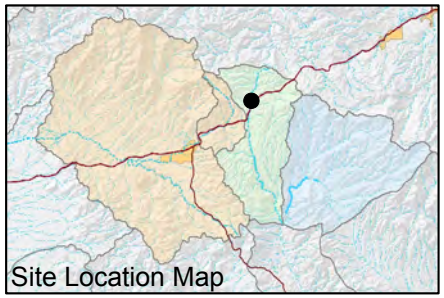
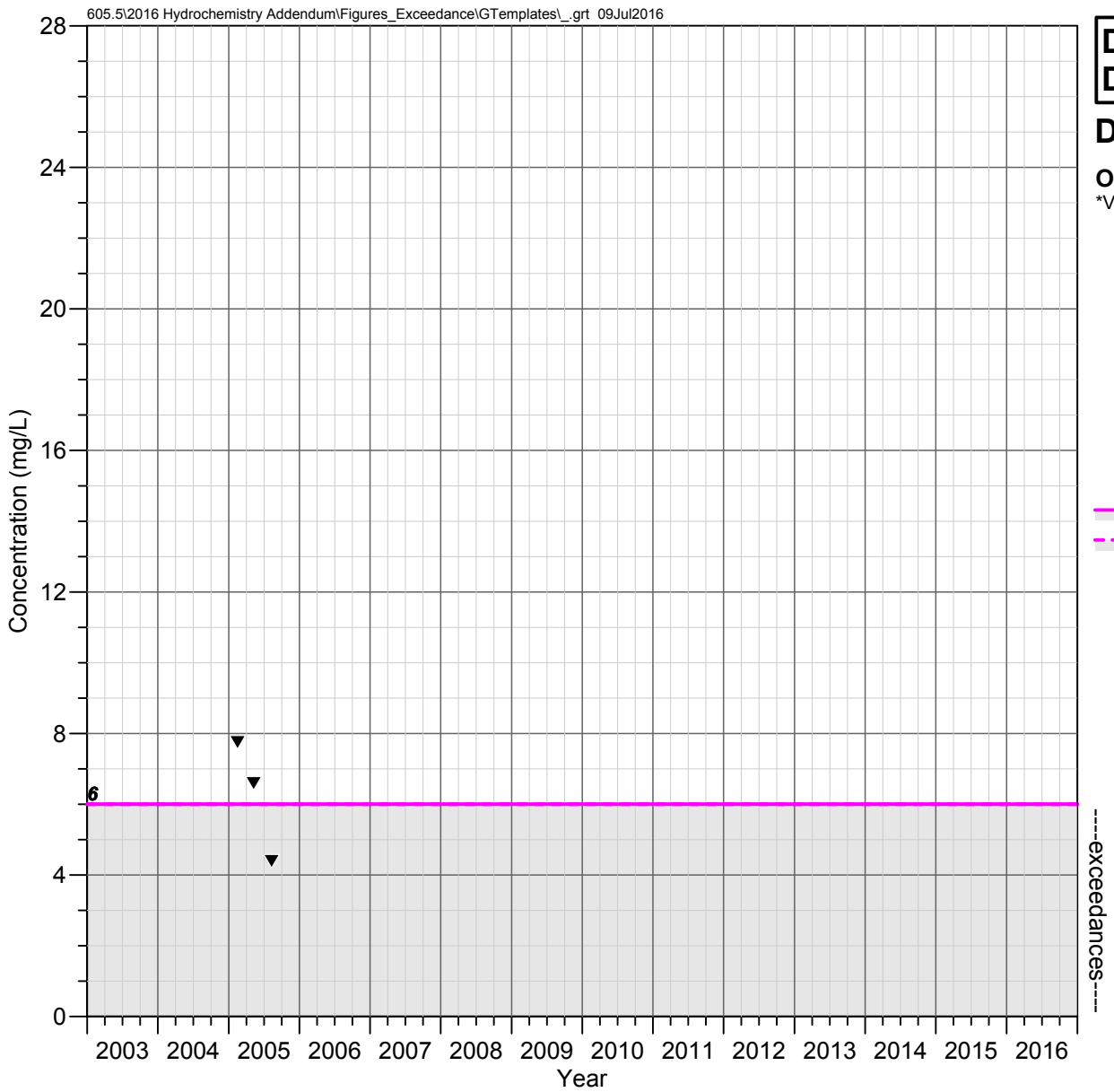


FIGURE F-305. DISSOLVED OXYGEN CONCENTRATIONS OBSERVED AT DC 15.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 15.2 C
Devils Canyon Watershed

DISSOLVED OXYGEN

Observed Concentrations
*Value shown at the reported detection limit

▼ Detected Value
▽ Below Detection Limit*

Water Quality Standards

AZ Aquatic and Wildlife - Warm Water Chronic (min of 6 mg/L)
AZ Aquatic and Wildlife - Warm Water Acute (min of 6 mg/L)

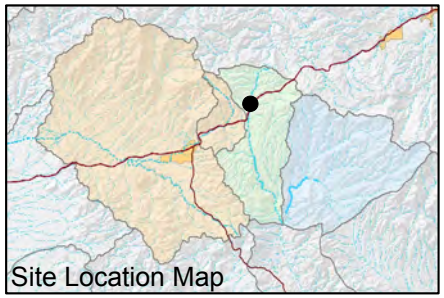
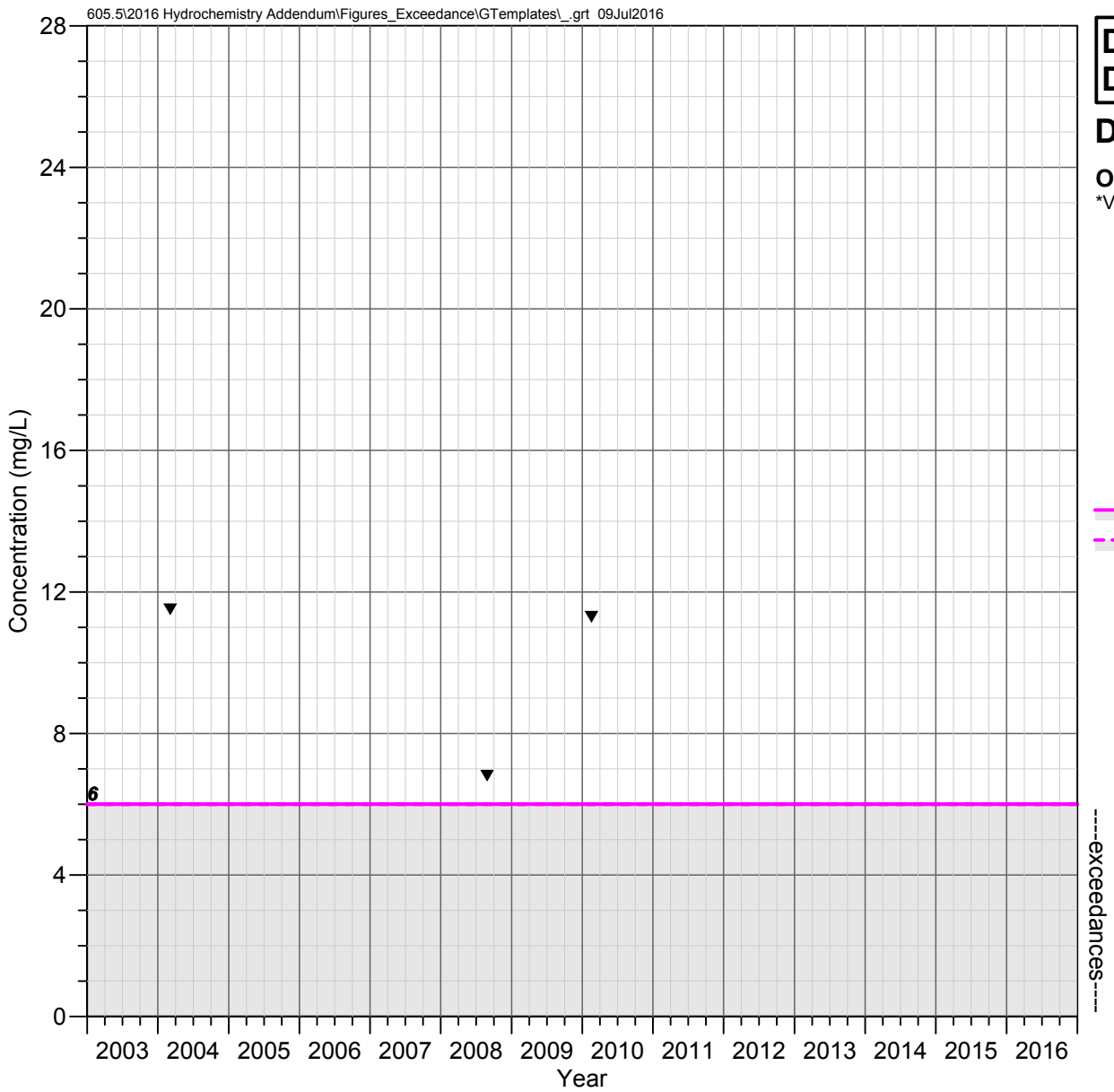


FIGURE F-306. DISSOLVED OXYGEN CONCENTRATIONS OBSERVED AT DC 15.2 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 14.7 C
Devils Canyon Watershed

DISSOLVED OXYGEN

Observed Concentrations
*Value shown at the reported detection limit

▼ Detected Value
▽ Below Detection Limit*

Water Quality Standards

AZ Aquatic and Wildlife - Warm Water Chronic (min of 6 mg/L)
AZ Aquatic and Wildlife - Warm Water Acute (min of 6 mg/L)

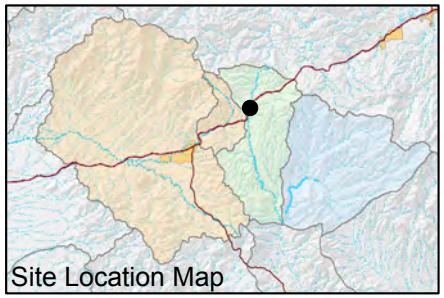
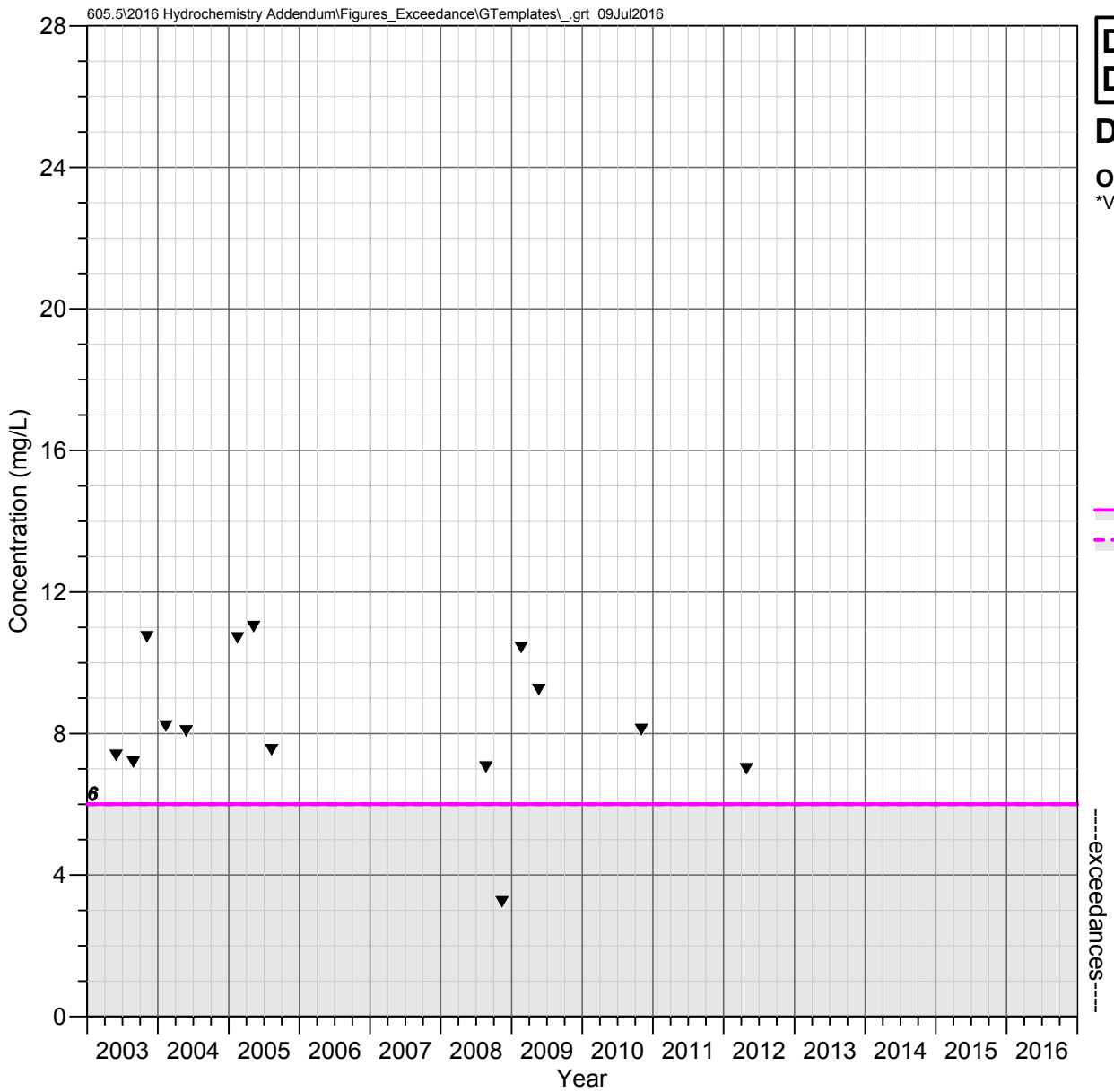


FIGURE F-307. DISSOLVED OXYGEN CONCENTRATIONS OBSERVED AT DC 14.7 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 13.5 C
Devils Canyon Watershed

DISSOLVED OXYGEN

Observed Concentrations
*Value shown at the reported detection limit

▼ Detected Value
▽ Below Detection Limit*

Water Quality Standards

AZ Aquatic and Wildlife - Warm Water Chronic (min of 6 mg/L)
AZ Aquatic and Wildlife - Warm Water Acute (min of 6 mg/L)

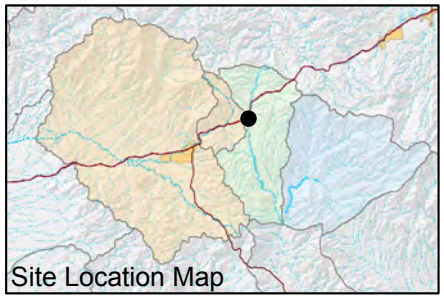
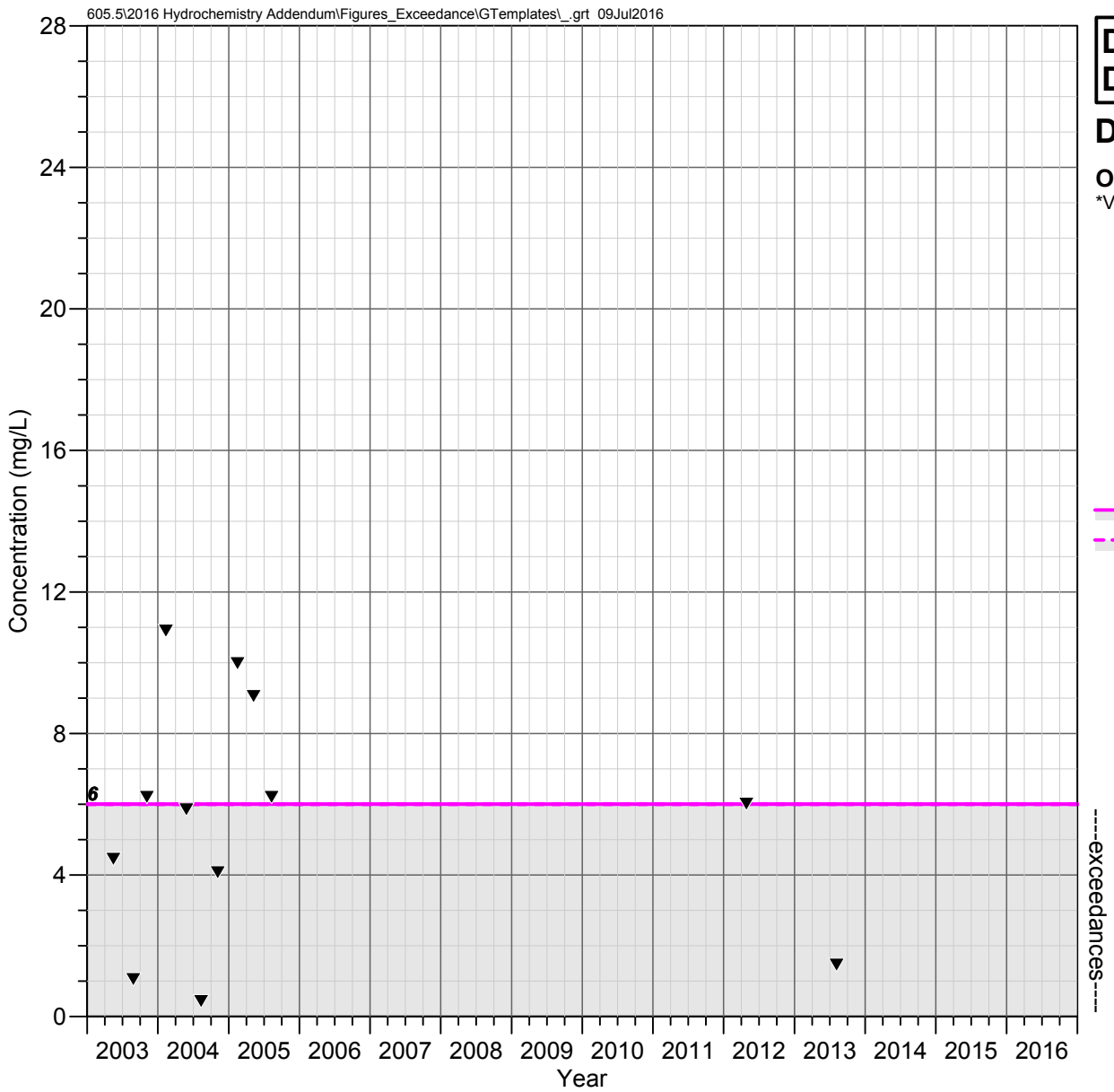


FIGURE F-308. DISSOLVED OXYGEN CONCENTRATIONS OBSERVED AT DC 13.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 10.9 C
Devils Canyon Watershed

DISSOLVED OXYGEN

Observed Concentrations
*Value shown at the reported detection limit

▼ Detected Value
▽ Below Detection Limit*

Water Quality Standards

AZ Aquatic and Wildlife - Warm Water Chronic (min of 6 mg/L)
AZ Aquatic and Wildlife - Warm Water Acute (min of 6 mg/L)

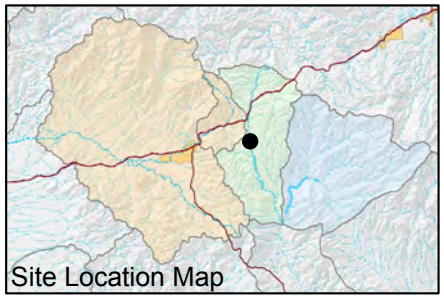
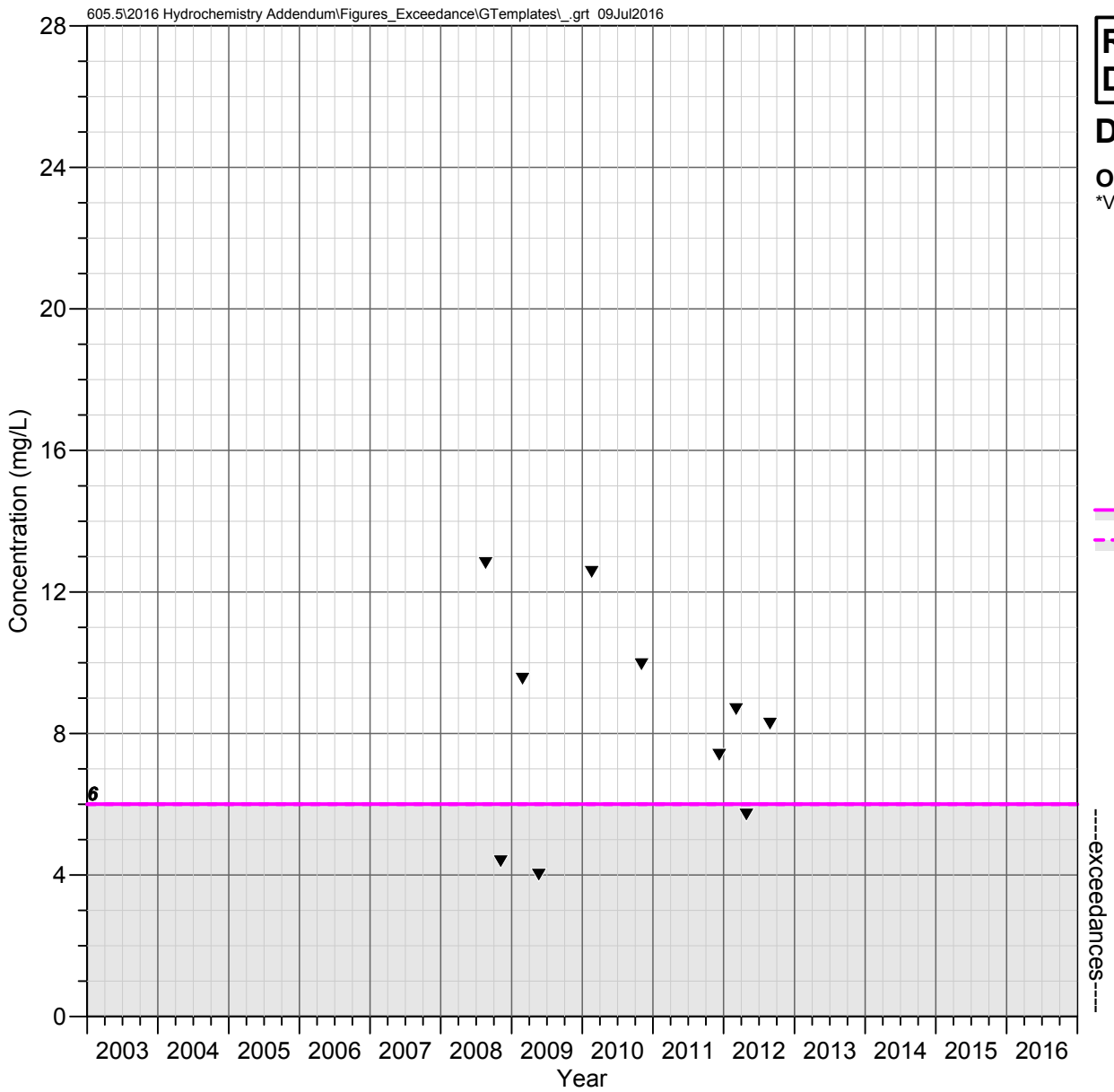


FIGURE F-309. DISSOLVED OXYGEN CONCENTRATIONS OBSERVED AT DC 10.9 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



RR 1.5 C
Devils Canyon Watershed

DISSOLVED OXYGEN

Observed Concentrations
*Value shown at the reported detection limit

▼ Detected Value
▽ Below Detection Limit*

Water Quality Standards

AZ Aquatic and Wildlife - Warm Water Chronic (min of 6 mg/L)
AZ Aquatic and Wildlife - Warm Water Acute (min of 6 mg/L)

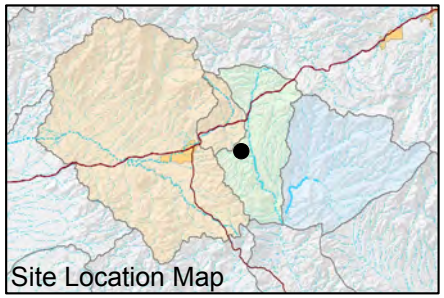
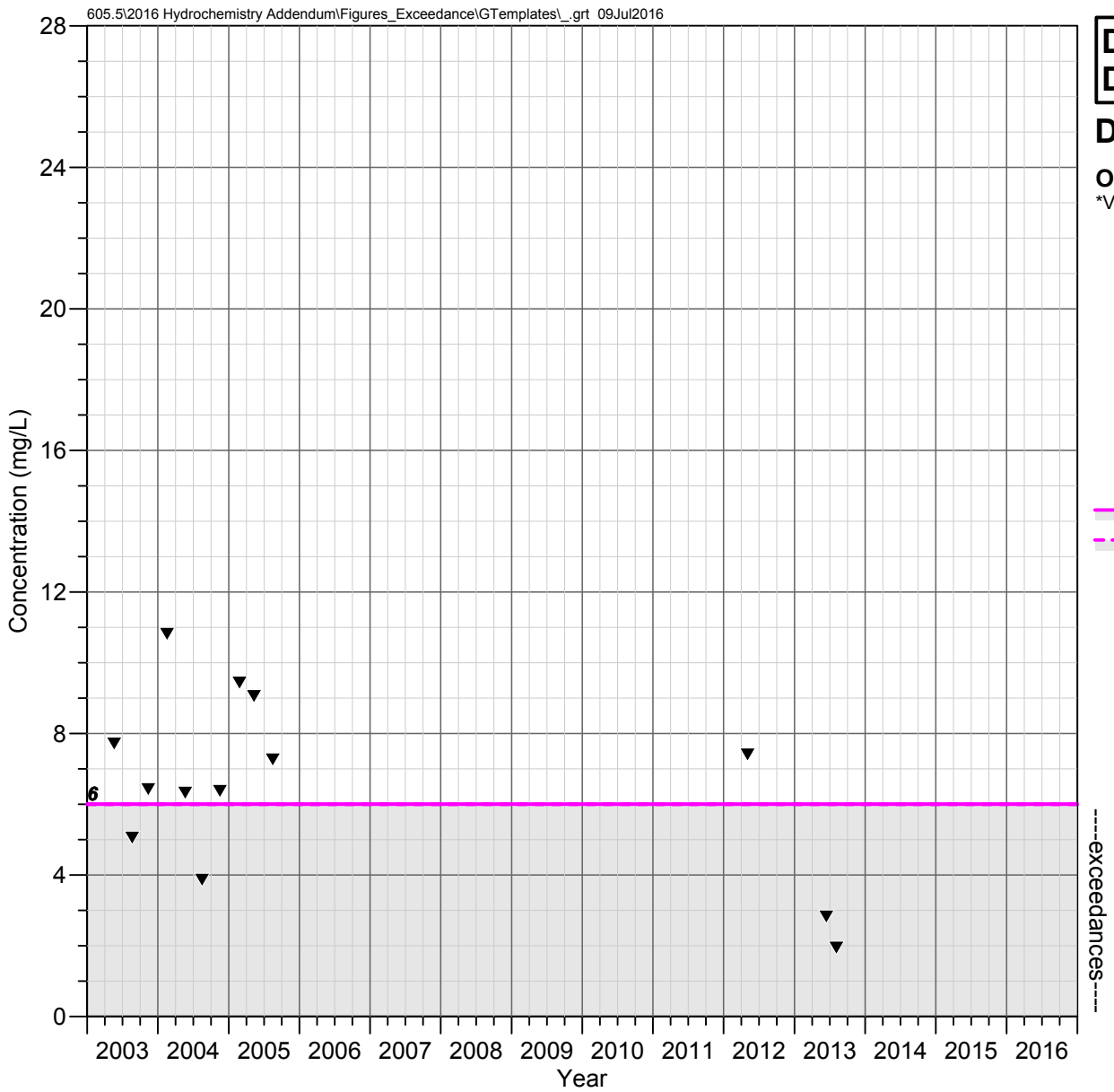


FIGURE F-310. DISSOLVED OXYGEN CONCENTRATIONS OBSERVED AT RR 1.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.8 C
Devils Canyon Watershed

DISSOLVED OXYGEN

Observed Concentrations
*Value shown at the reported detection limit

▼ Detected Value
▽ Below Detection Limit*

Water Quality Standards

AZ Aquatic and Wildlife - Warm Water Chronic (min of 6 mg/L)
AZ Aquatic and Wildlife - Warm Water Acute (min of 6 mg/L)

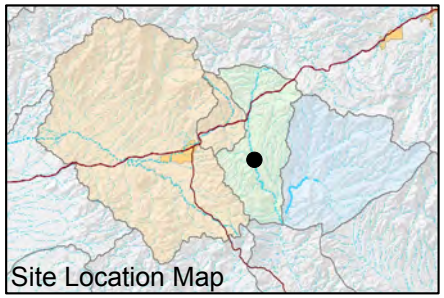
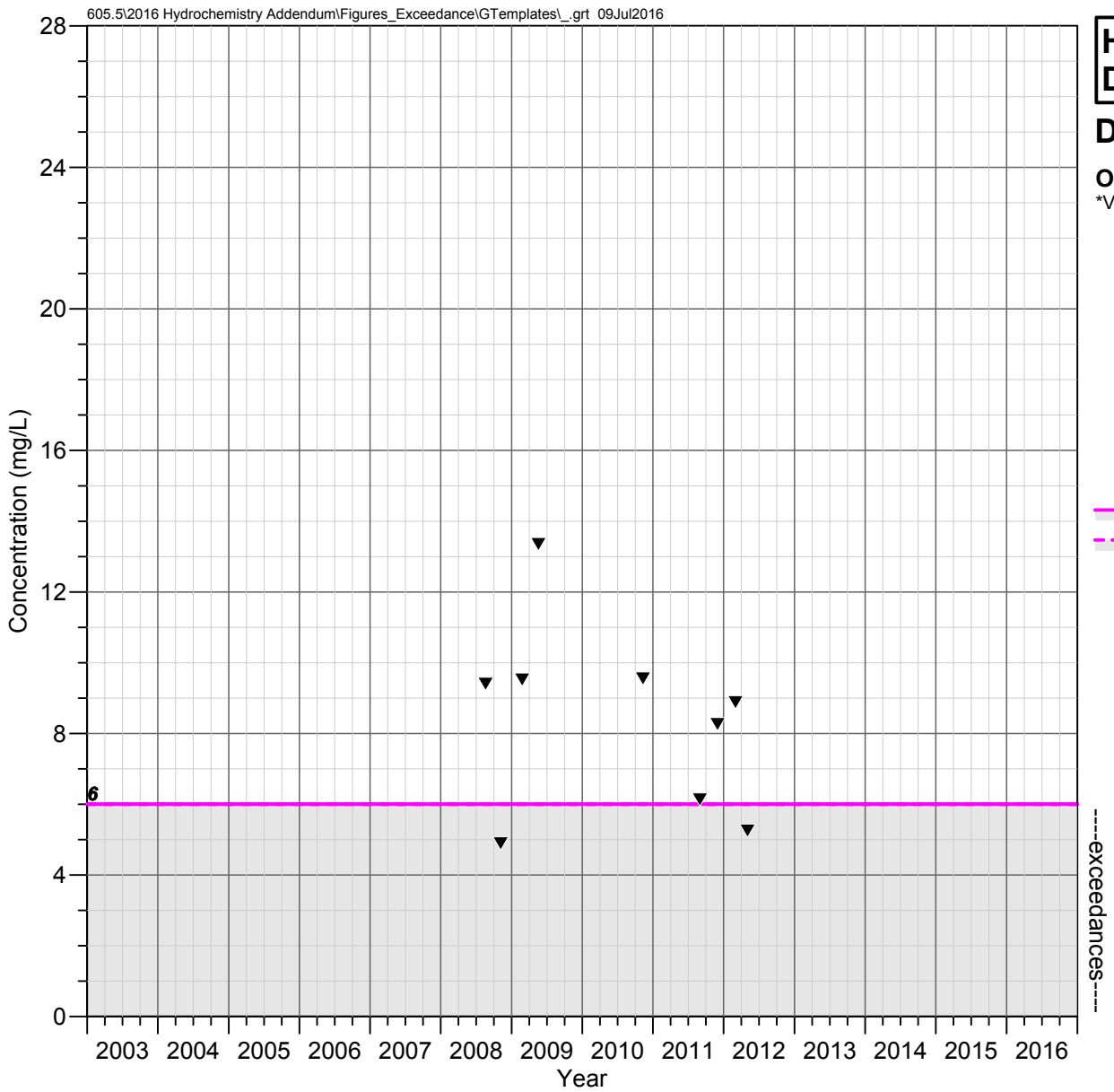


FIGURE F-311. DISSOLVED OXYGEN CONCENTRATIONS OBSERVED AT DC 8.8 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



H 0.1 C
Devils Canyon Watershed

DISSOLVED OXYGEN

Observed Concentrations
*Value shown at the reported detection limit

▼ Detected Value
▽ Below Detection Limit*

Water Quality Standards

AZ Aquatic and Wildlife - Warm Water Chronic (min of 6 mg/L)
AZ Aquatic and Wildlife - Warm Water Acute (min of 6 mg/L)

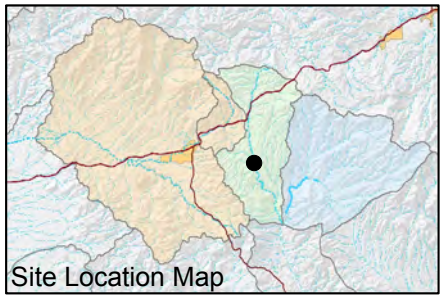
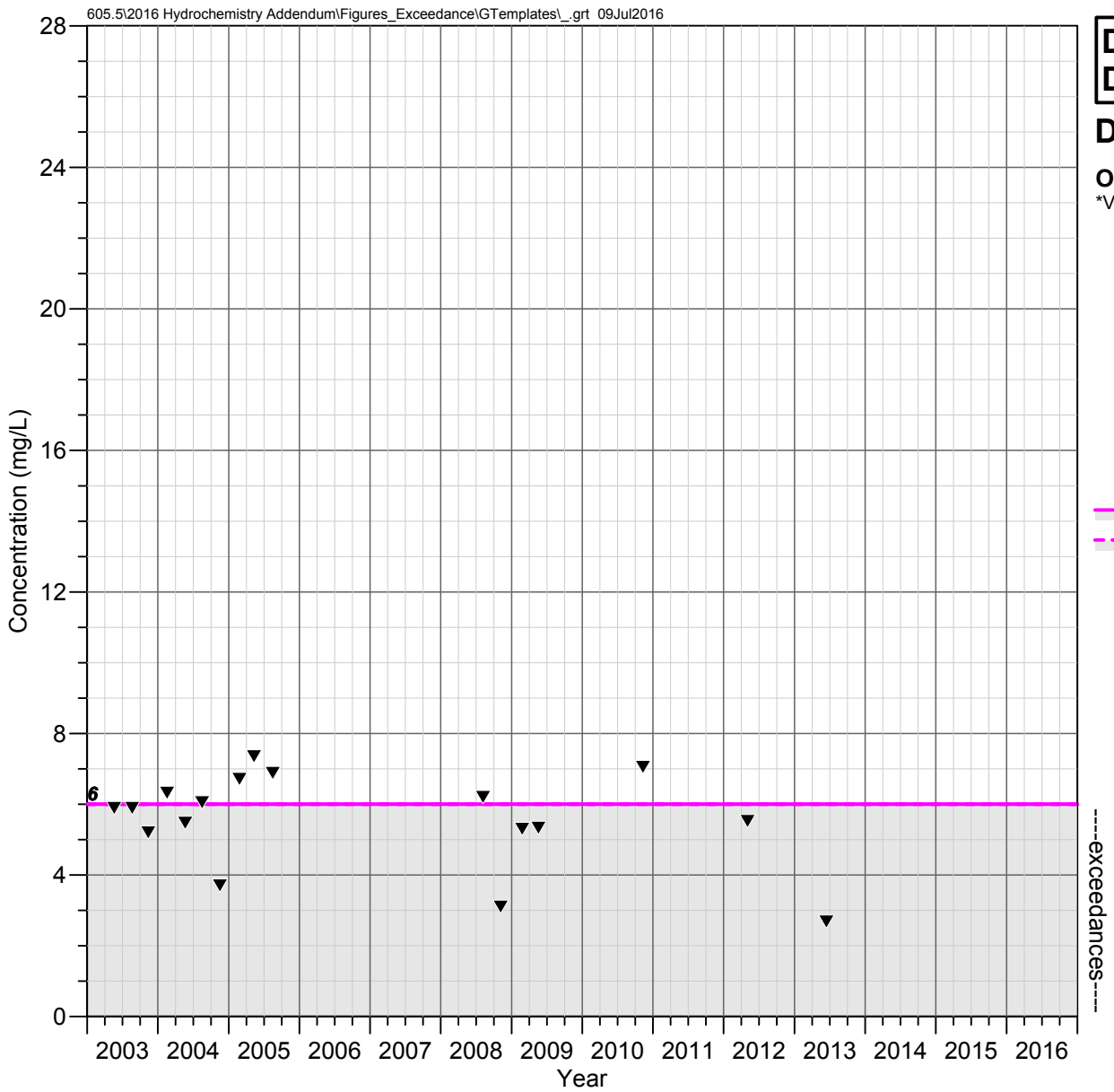


FIGURE F-312. DISSOLVED OXYGEN CONCENTRATIONS OBSERVED AT H 0.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.2 W
Devils Canyon Watershed

DISSOLVED OXYGEN

Observed Concentrations
*Value shown at the reported detection limit

▼ Detected Value
▽ Below Detection Limit*

Water Quality Standards

AZ Aquatic and Wildlife - Warm Water Chronic (min of 6 mg/L)
AZ Aquatic and Wildlife - Warm Water Acute (min of 6 mg/L)

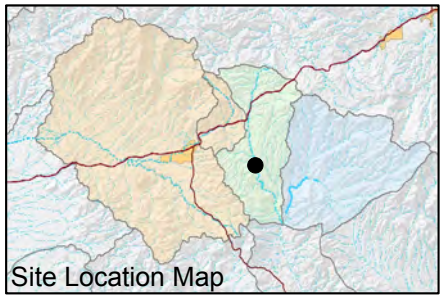
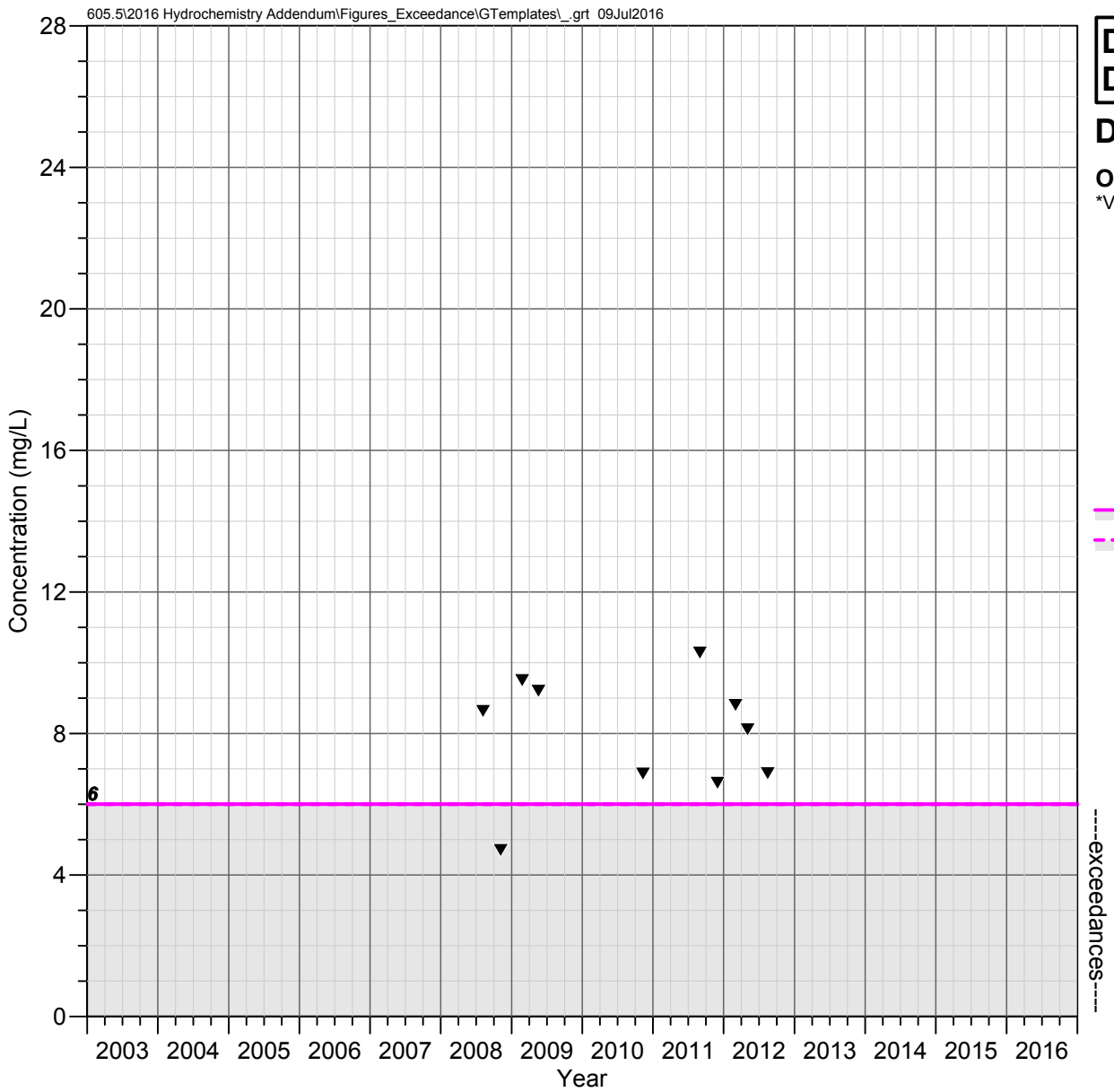


FIGURE F-313. DISSOLVED OXYGEN CONCENTRATIONS OBSERVED AT DC 8.2 W, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.1 C
Devils Canyon Watershed

DISSOLVED OXYGEN

Observed Concentrations
*Value shown at the reported detection limit

▼ Detected Value
▽ Below Detection Limit*

Water Quality Standards

AZ Aquatic and Wildlife - Warm Water Chronic (min of 6 mg/L)
AZ Aquatic and Wildlife - Warm Water Acute (min of 6 mg/L)

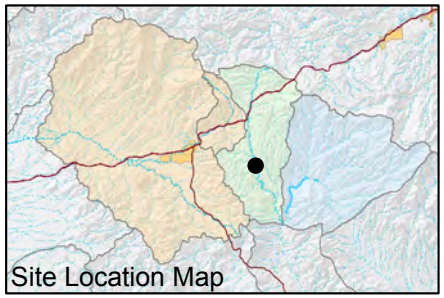
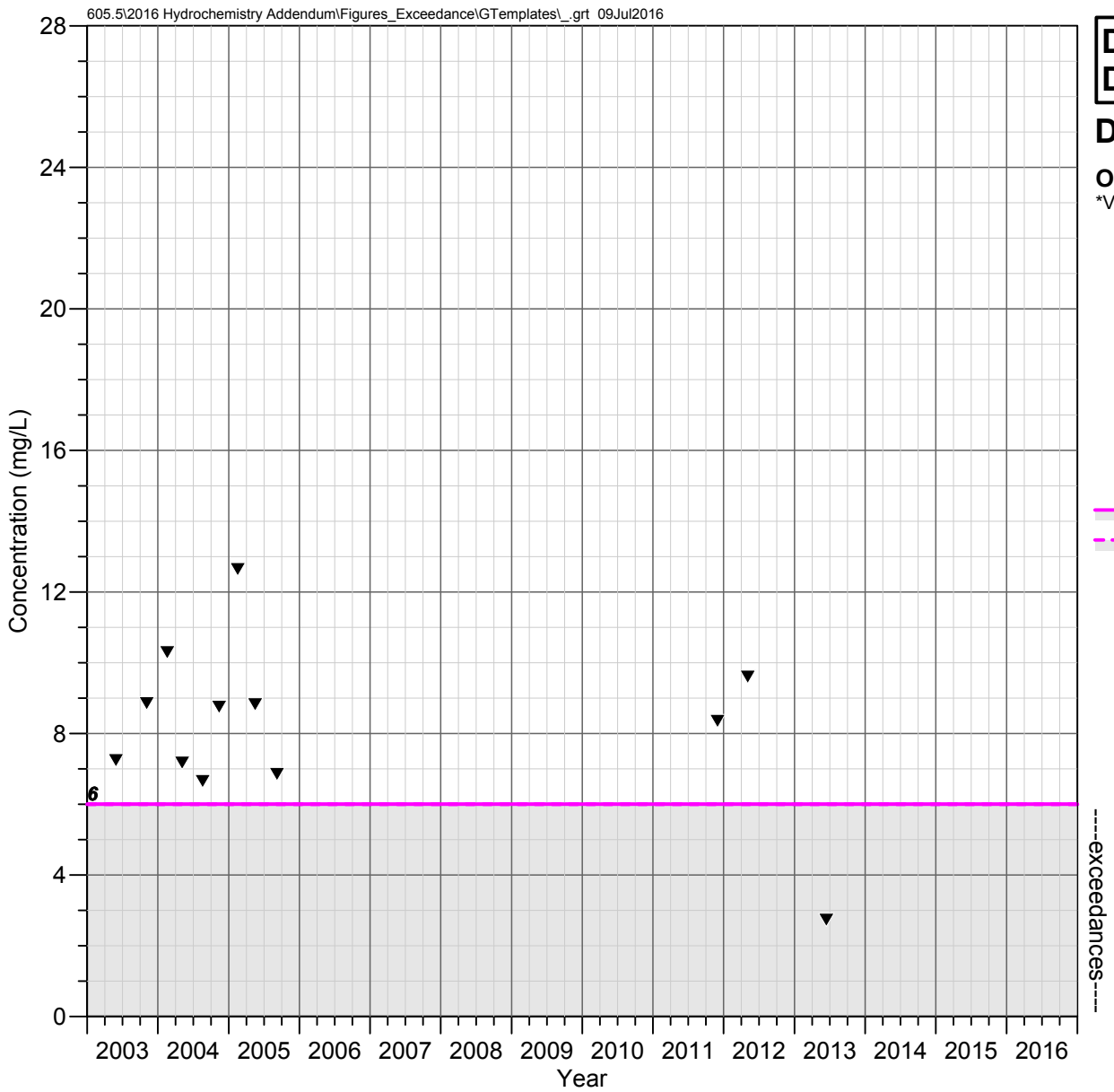


FIGURE F-314. DISSOLVED OXYGEN CONCENTRATIONS OBSERVED AT DC 8.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 7.1 C
Devils Canyon Watershed

DISSOLVED OXYGEN

Observed Concentrations
*Value shown at the reported detection limit

▼ Detected Value
▽ Below Detection Limit*

Water Quality Standards

AZ Aquatic and Wildlife - Warm Water Chronic (min of 6 mg/L)
AZ Aquatic and Wildlife - Warm Water Acute (min of 6 mg/L)

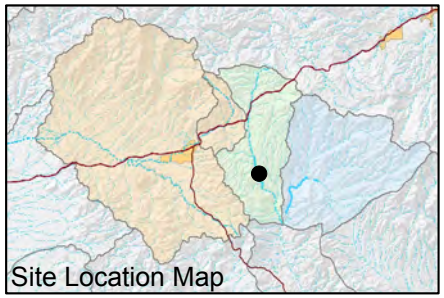
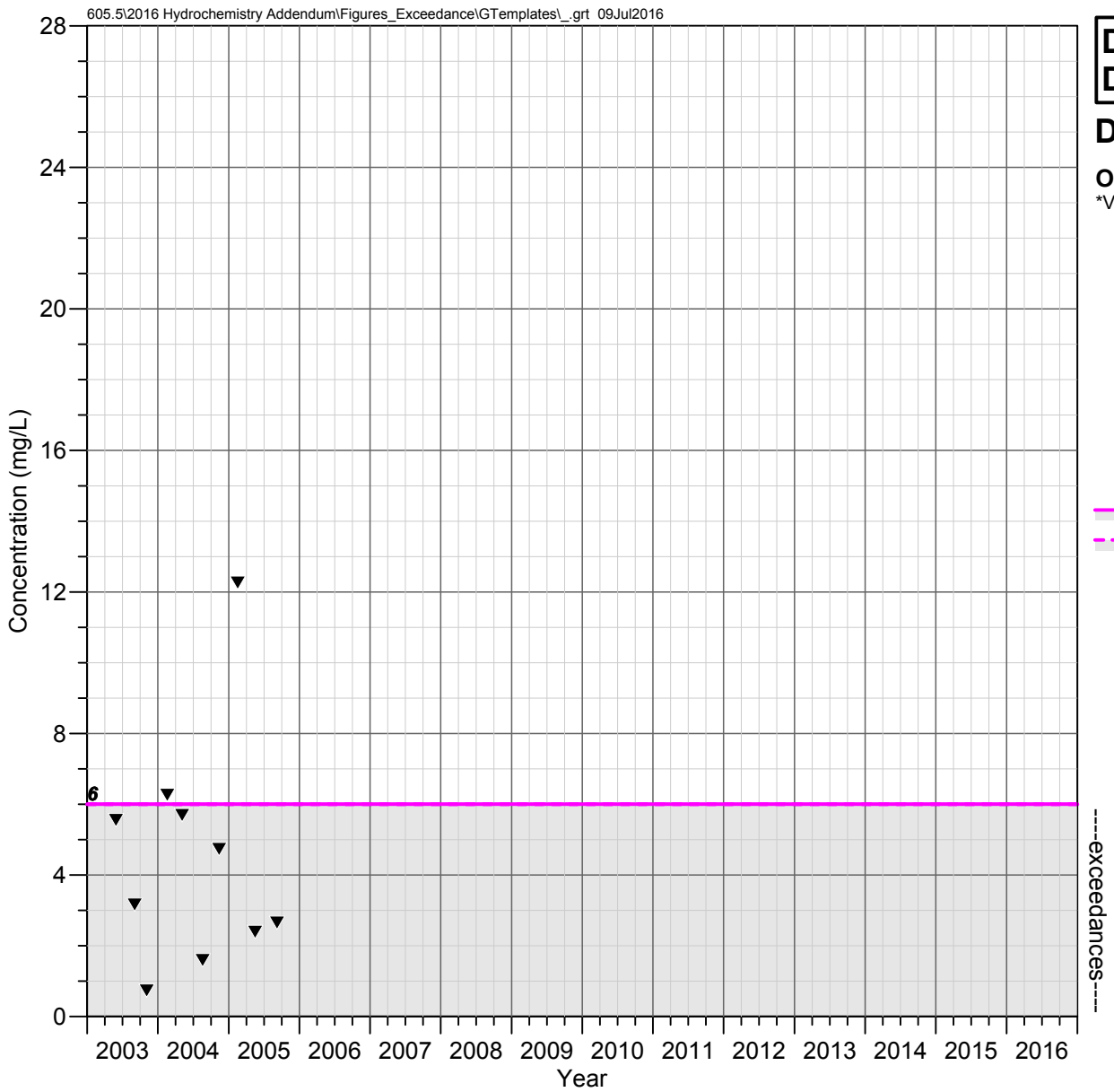


FIGURE F-315. DISSOLVED OXYGEN CONCENTRATIONS OBSERVED AT DC 7.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.6 W (DCT 6.6 W)
Devils Canyon Watershed

DISSOLVED OXYGEN

Observed Concentrations
*Value shown at the reported detection limit

▼ Detected Value
▽ Below Detection Limit*

Water Quality Standards

AZ Aquatic and Wildlife - Warm Water Chronic (min of 6 mg/L)
AZ Aquatic and Wildlife - Warm Water Acute (min of 6 mg/L)

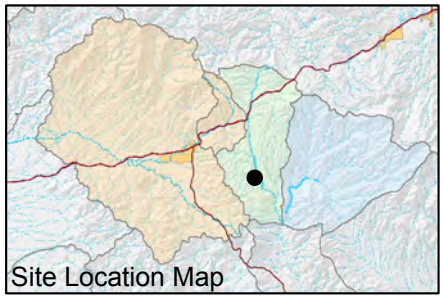
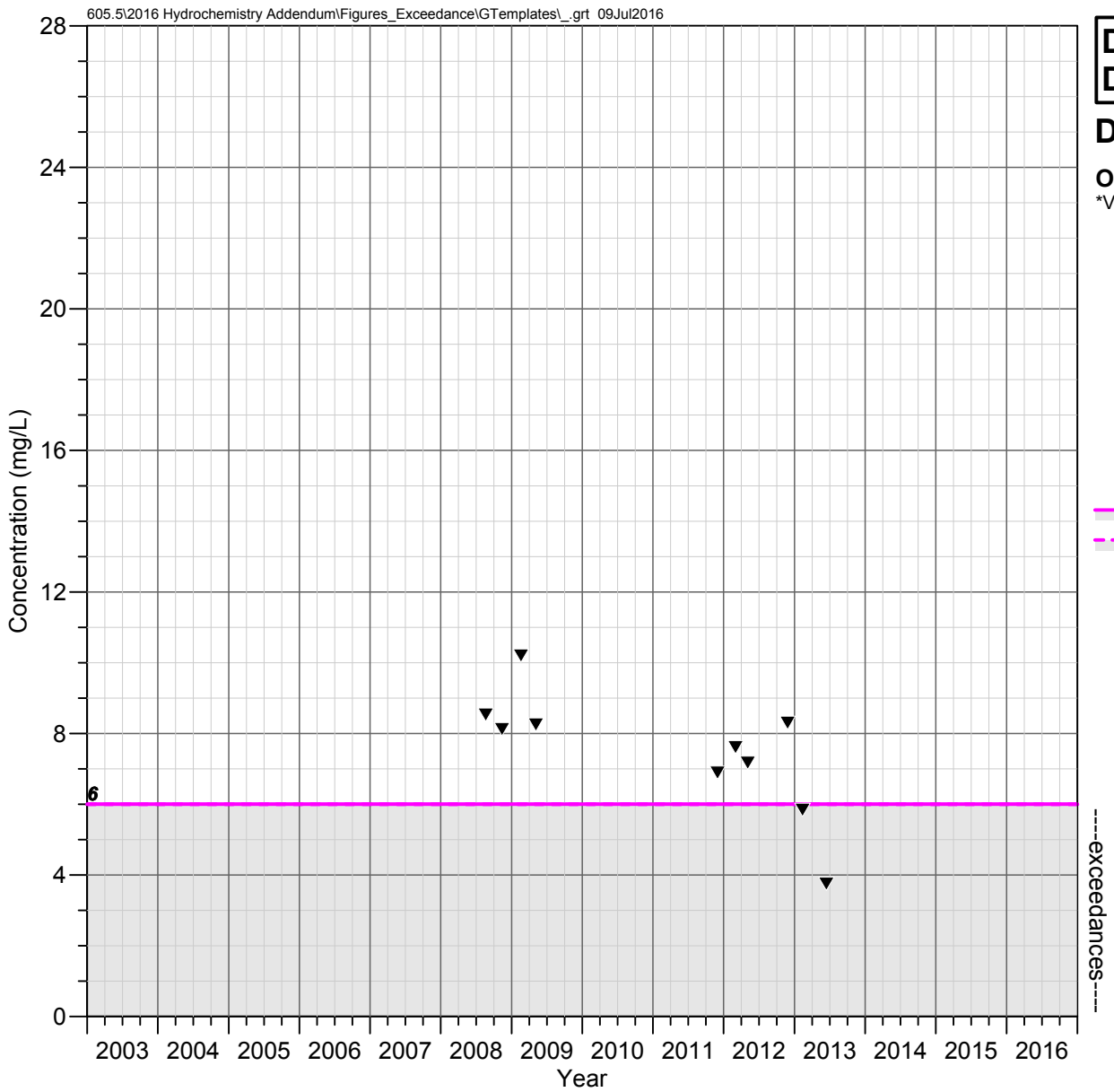


FIGURE F-316. DISSOLVED OXYGEN CONCENTRATIONS OBSERVED AT DC 6.6 W (DCT 6.6 W), DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.14 C
Devils Canyon Watershed

DISSOLVED OXYGEN

Observed Concentrations
*Value shown at the reported detection limit

▼ Detected Value
▽ Below Detection Limit*

Water Quality Standards

AZ Aquatic and Wildlife - Warm Water Chronic (min of 6 mg/L)
AZ Aquatic and Wildlife - Warm Water Acute (min of 6 mg/L)

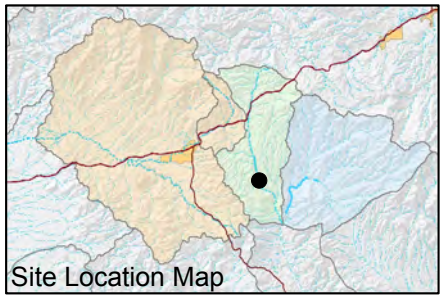
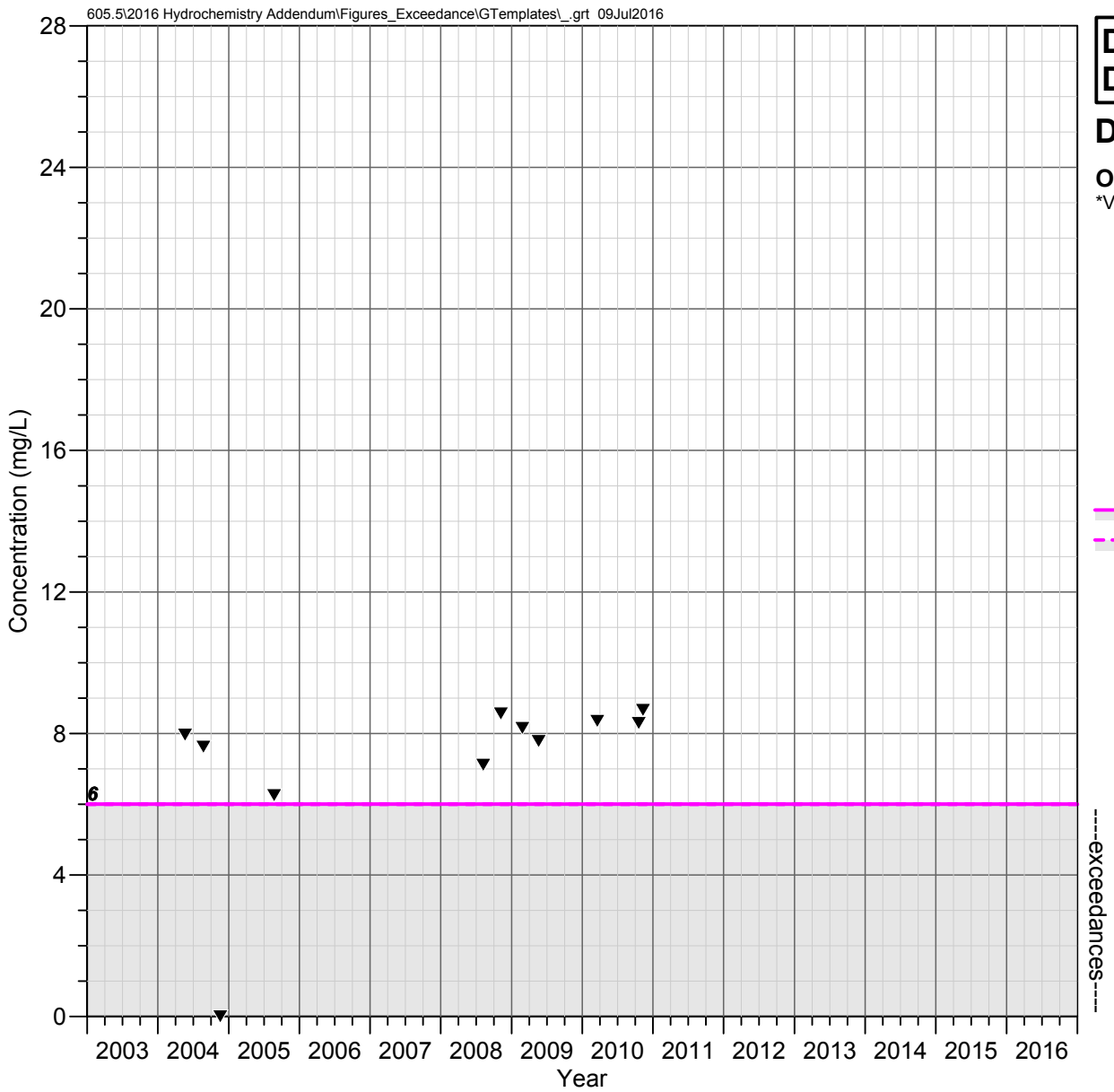


FIGURE F-317. DISSOLVED OXYGEN CONCENTRATIONS OBSERVED AT DC 6.14 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.1 E
Devils Canyon Watershed

DISSOLVED OXYGEN

Observed Concentrations
*Value shown at the reported detection limit

▼ Detected Value
▽ Below Detection Limit*

Water Quality Standards

AZ Aquatic and Wildlife - Warm Water Chronic (min of 6 mg/L)
AZ Aquatic and Wildlife - Warm Water Acute (min of 6 mg/L)

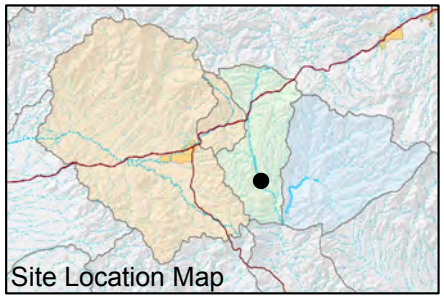
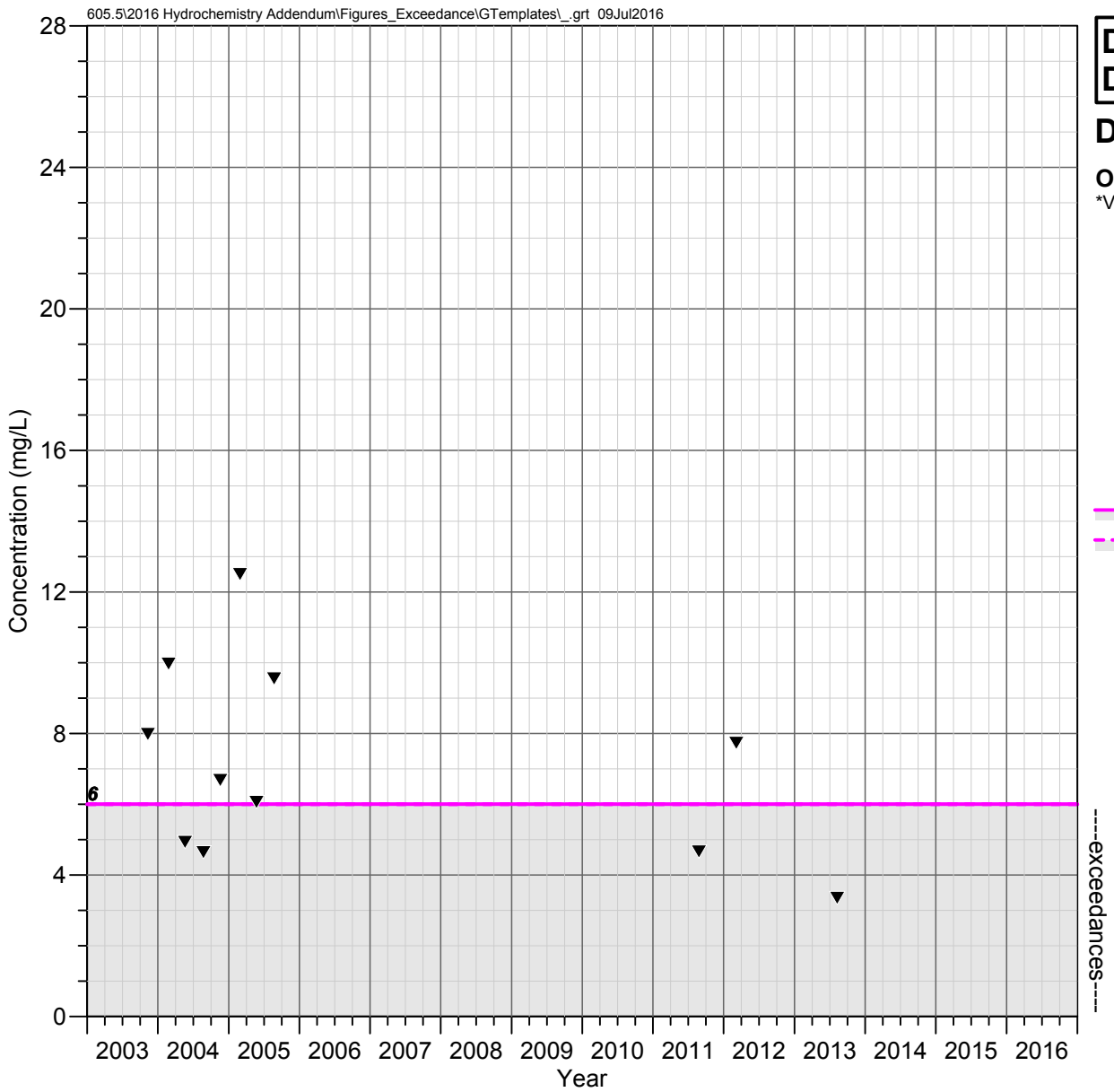


FIGURE F-318. DISSOLVED OXYGEN CONCENTRATIONS OBSERVED AT DC 6.1 E, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 5.5 C
Devils Canyon Watershed

DISSOLVED OXYGEN

Observed Concentrations
*Value shown at the reported detection limit

▼ Detected Value
▽ Below Detection Limit*

Water Quality Standards

AZ Aquatic and Wildlife - Warm Water Chronic (min of 6 mg/L)
AZ Aquatic and Wildlife - Warm Water Acute (min of 6 mg/L)

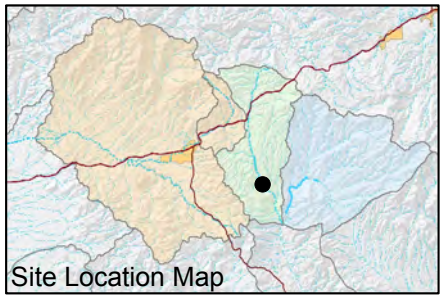
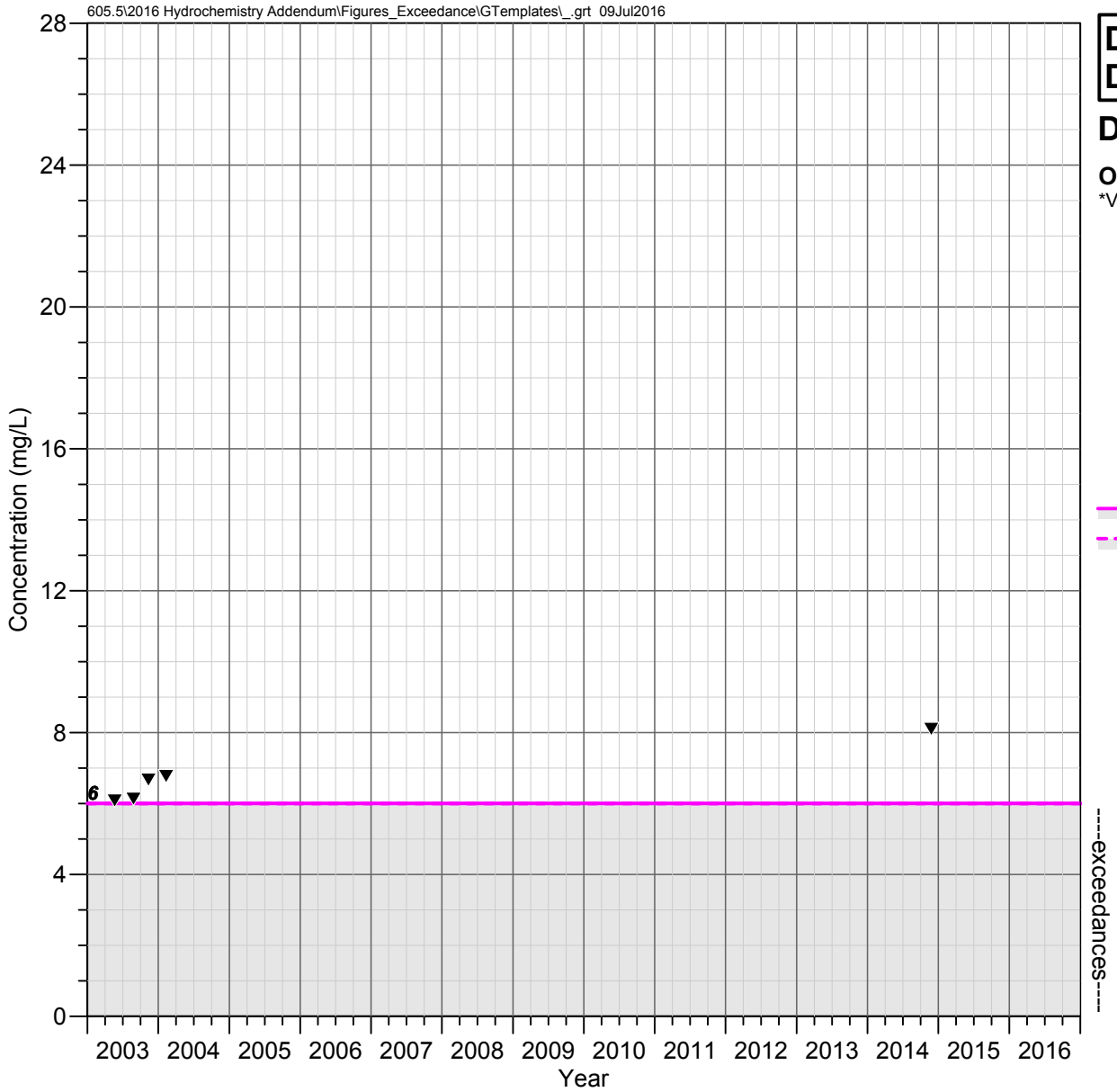


FIGURE F-319. DISSOLVED OXYGEN CONCENTRATIONS OBSERVED AT DC 5.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 4.1 E
Devils Canyon Watershed

DISSOLVED OXYGEN

Observed Concentrations

*Value shown at the reported detection limit

▼ Detected Value

▽ Below Detection Limit*

Water Quality Standards

AZ Aquatic and Wildlife - Warm Water Chronic (min of 6 mg/L)

AZ Aquatic and Wildlife - Warm Water Acute (min of 6 mg/L)

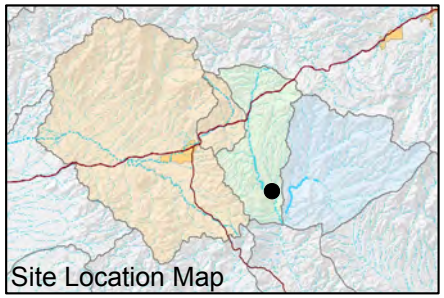
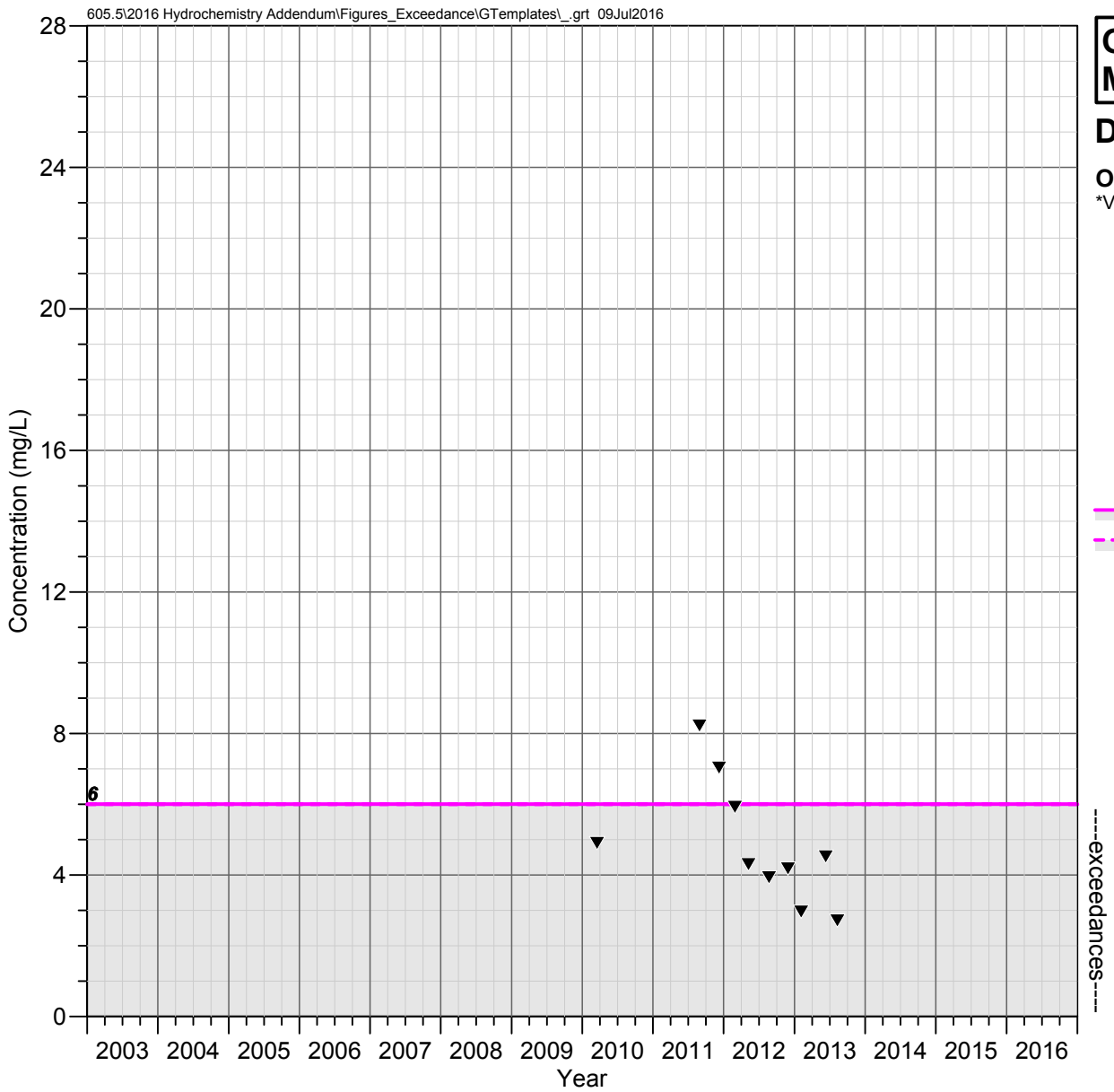


FIGURE F-320. DISSOLVED OXYGEN CONCENTRATIONS OBSERVED AT DC 4.1 E, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Government Springs
Mineral Creek Watershed

DISSOLVED OXYGEN

Observed Concentrations

*Value shown at the reported detection limit

▼ Detected Value

▽ Below Detection Limit*

Water Quality Standards

AZ Aquatic and Wildlife - Warm Water Chronic (min of 6 mg/L)

AZ Aquatic and Wildlife - Warm Water Acute (min of 6 mg/L)

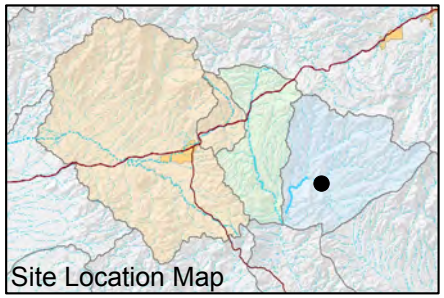
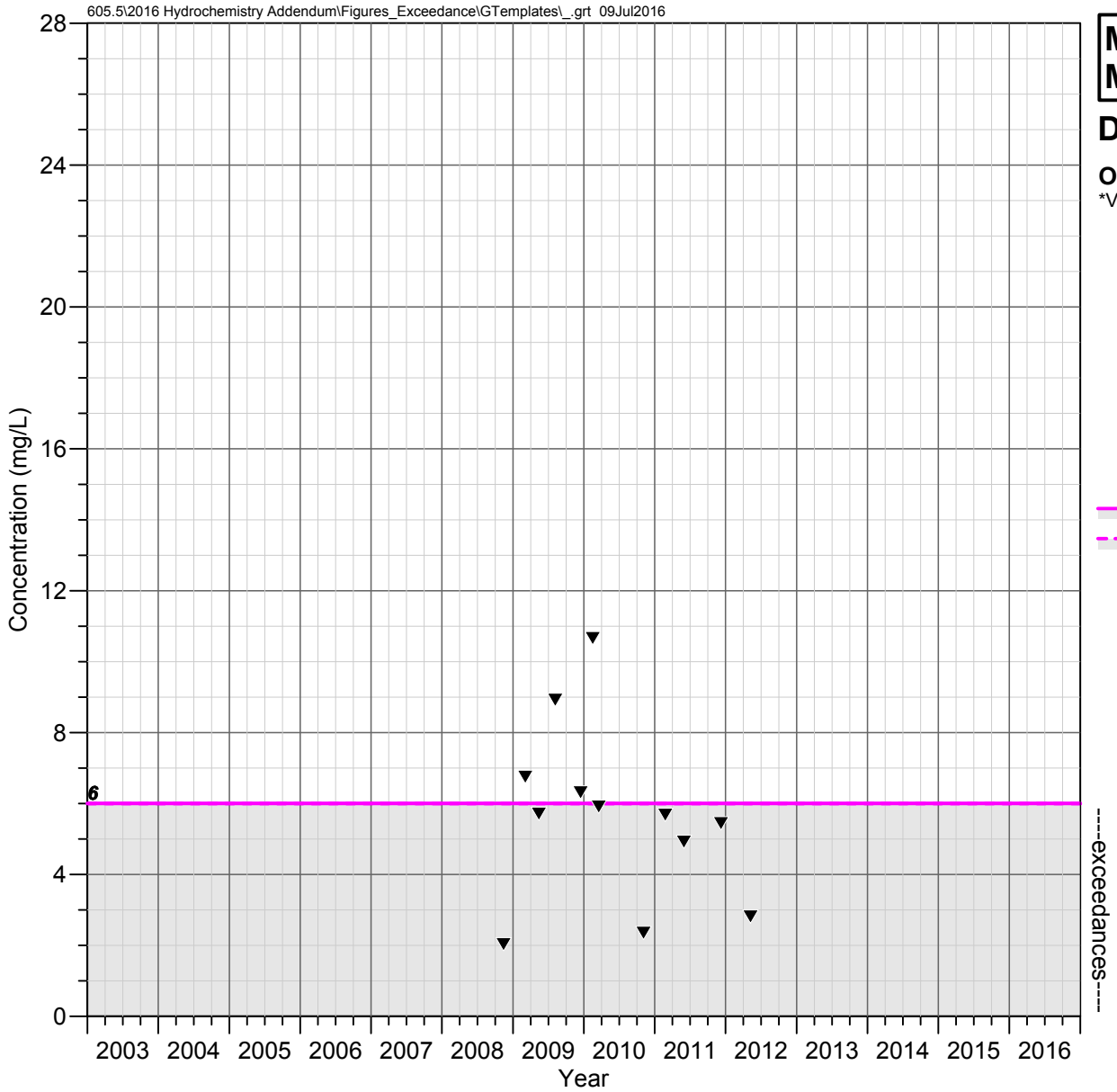


FIGURE F-321. DISSOLVED OXYGEN CONCENTRATIONS OBSERVED AT GOVERNMENT SPRINGS, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 8.4 C
Mineral Creek Watershed

DISSOLVED OXYGEN

Observed Concentrations

*Value shown at the reported detection limit

▼ Detected Value

▽ Below Detection Limit*

Water Quality Standards

AZ Aquatic and Wildlife - Warm Water Chronic (min of 6 mg/L)

AZ Aquatic and Wildlife - Warm Water Acute (min of 6 mg/L)

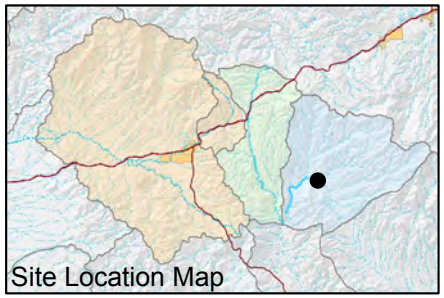
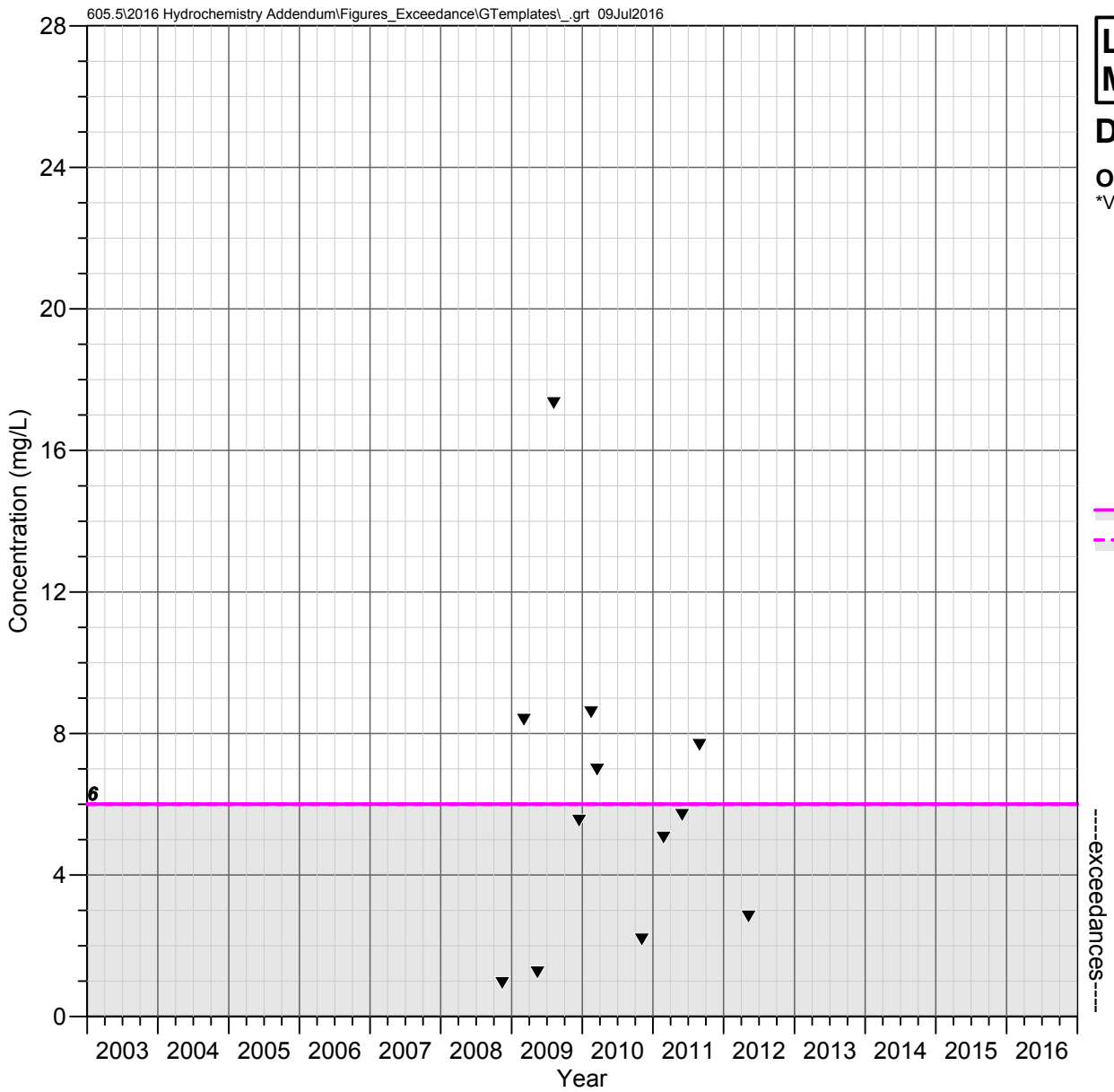


FIGURE F-322. DISSOLVED OXYGEN CONCENTRATIONS OBSERVED AT MC 8.4 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



LF 0.2 C
Mineral Creek Watershed

DISSOLVED OXYGEN

Observed Concentrations
*Value shown at the reported detection limit

▼ Detected Value
▽ Below Detection Limit*

Water Quality Standards

AZ Aquatic and Wildlife - Warm Water Chronic (min of 6 mg/L)
AZ Aquatic and Wildlife - Warm Water Acute (min of 6 mg/L)

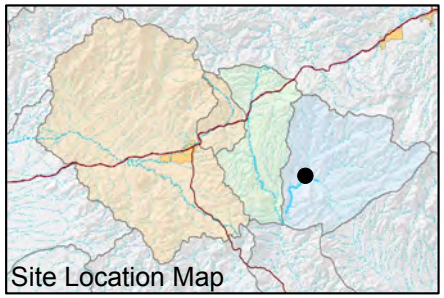
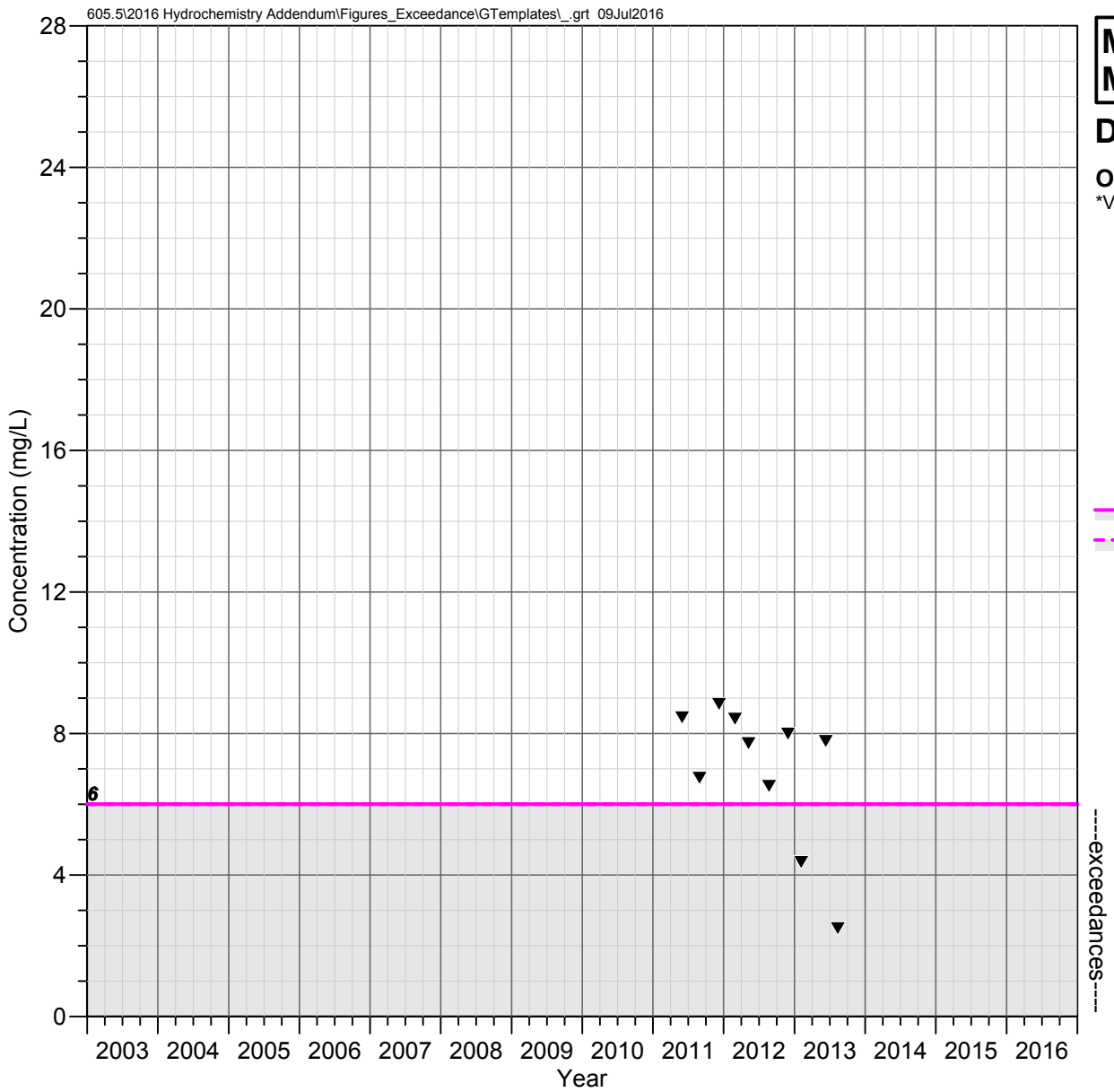


FIGURE F-323. DISSOLVED OXYGEN CONCENTRATIONS OBSERVED AT LF 0.2 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 5.2 C
Mineral Creek Watershed

DISSOLVED OXYGEN

Observed Concentrations

*Value shown at the reported detection limit

▼ Detected Value

▽ Below Detection Limit*

Water Quality Standards

AZ Aquatic and Wildlife - Warm Water Chronic (min of 6 mg/L)

AZ Aquatic and Wildlife - Warm Water Acute (min of 6 mg/L)

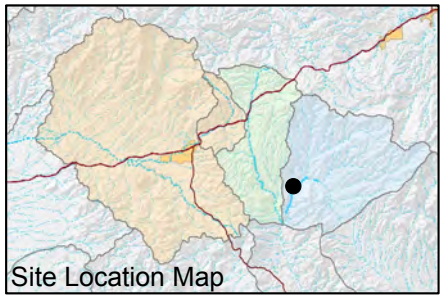
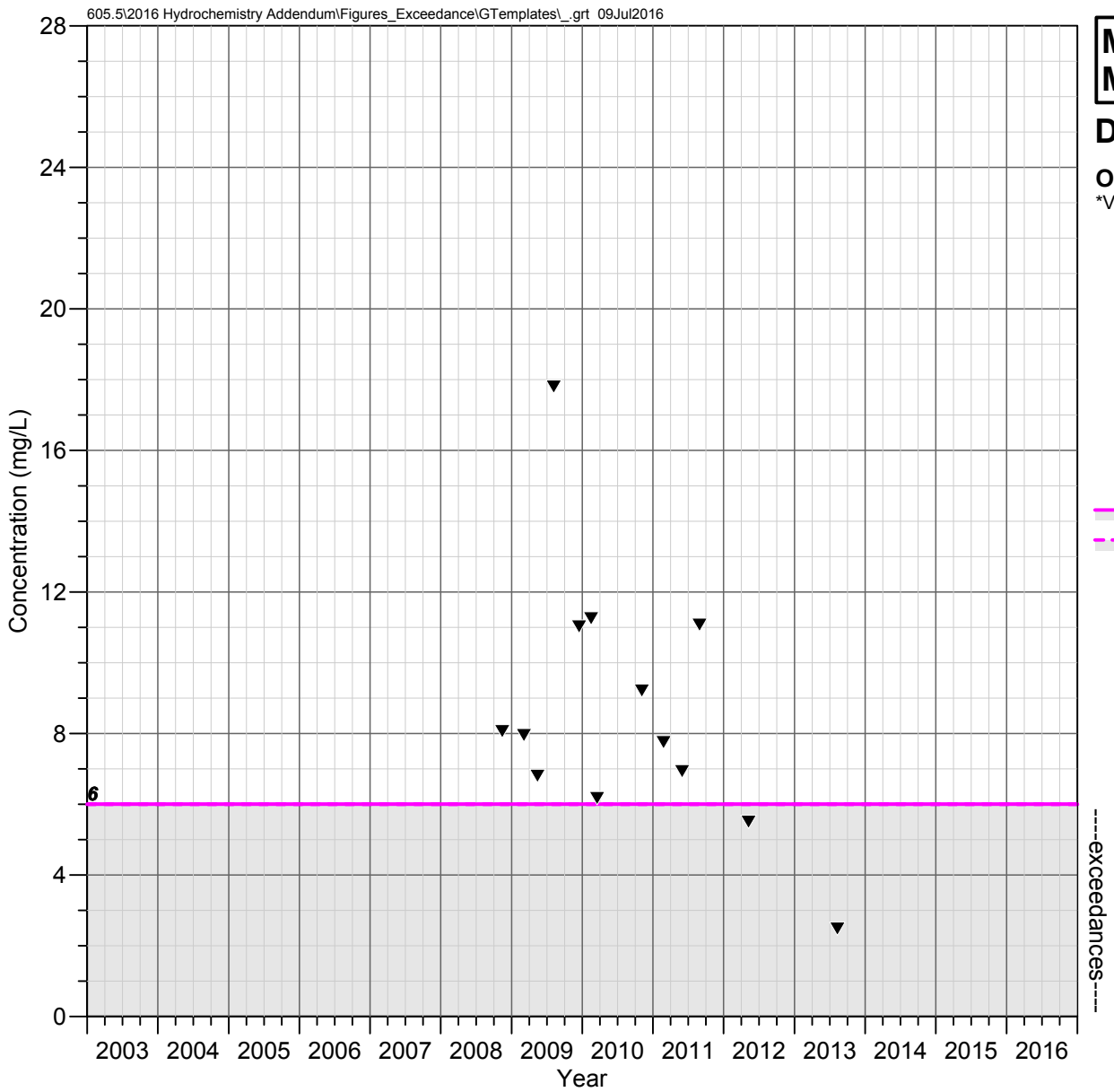


FIGURE F-324. DISSOLVED OXYGEN CONCENTRATIONS OBSERVED AT MC 5.2 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 3.4 W (Wet Leg Spring)
Mineral Creek Watershed

DISSOLVED OXYGEN

Observed Concentrations

*Value shown at the reported detection limit

▼ Detected Value

▽ Below Detection Limit*

Water Quality Standards

AZ Aquatic and Wildlife - Warm Water Chronic (min of 6 mg/L)

AZ Aquatic and Wildlife - Warm Water Acute (min of 6 mg/L)

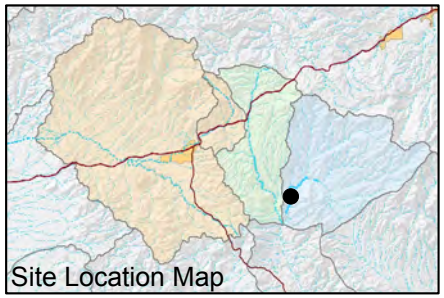
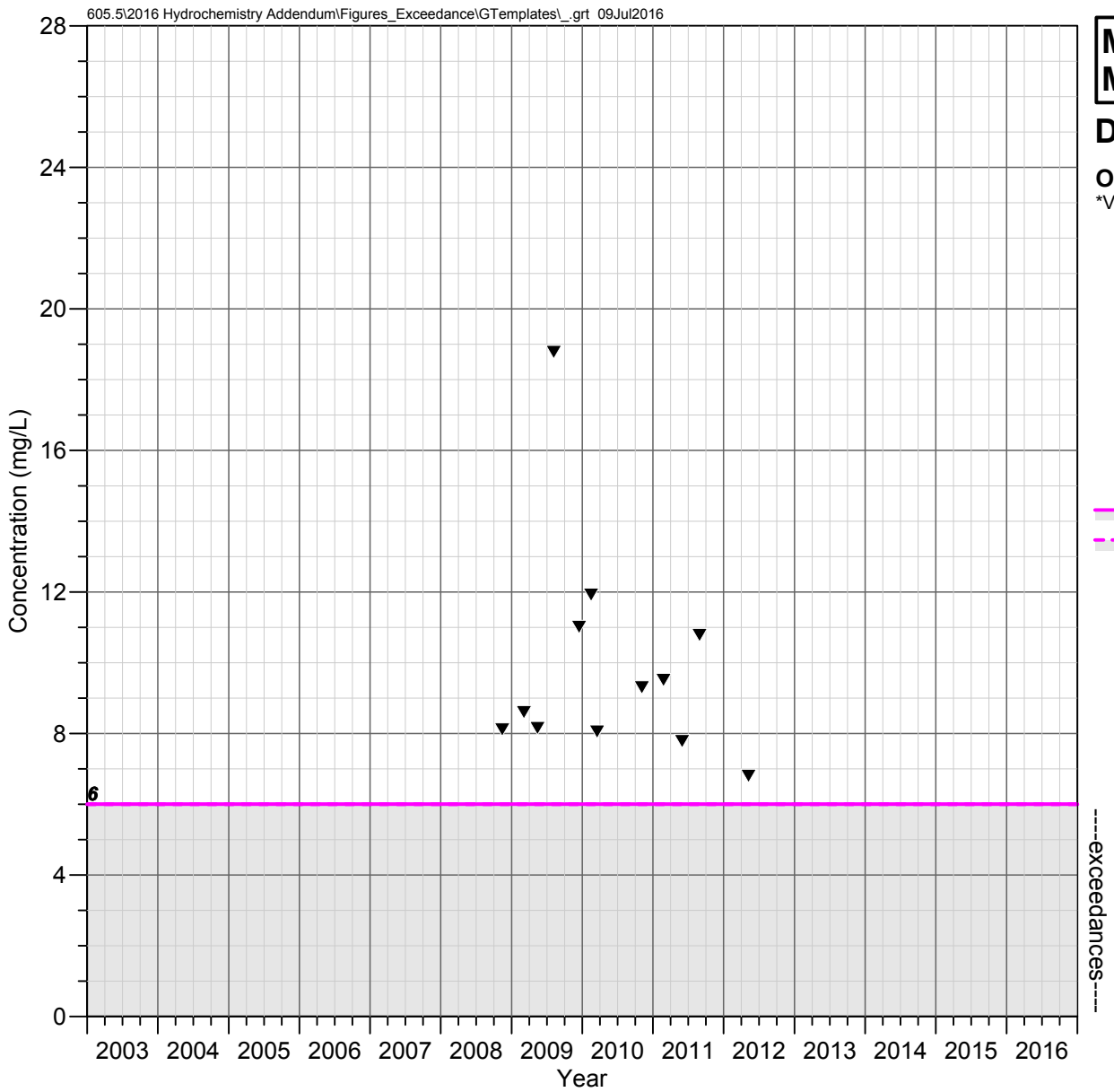


FIGURE F-325. DISSOLVED OXYGEN CONCENTRATIONS OBSERVED AT MC 3.4 W (WET LEG SPRING), MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 3.3 C (Lower Mineral)
Mineral Creek Watershed

DISSOLVED OXYGEN

Observed Concentrations

*Value shown at the reported detection limit

▼ Detected Value

▽ Below Detection Limit*

Water Quality Standards

AZ Aquatic and Wildlife - Warm Water Chronic (min of 6 mg/L)

AZ Aquatic and Wildlife - Warm Water Acute (min of 6 mg/L)

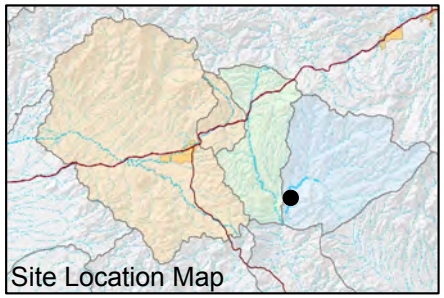
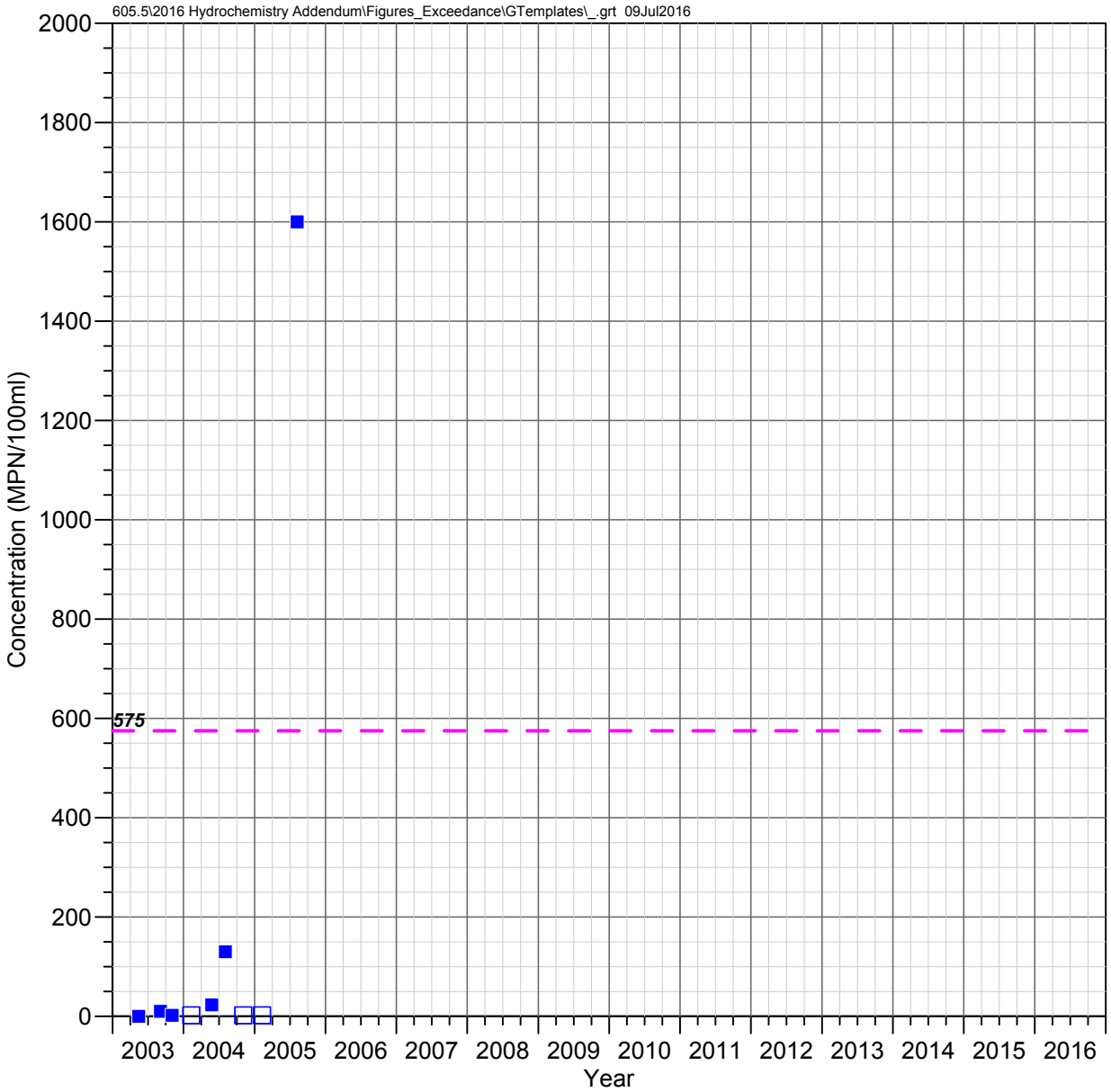


FIGURE F-326. DISSOLVED OXYGEN CONCENTRATIONS OBSERVED AT MC 3.3 C (LOWER MINERAL), MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Pump Station Spring (QC 30.7 C)
Queen Creek Watershed

E. COLI

Observed Concentrations

*Value shown at the reported detection limit

- ■ Total, Detected Value
- □ Total, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — AZ Partial Body Contact (UNS, 575 MPN/100ml*)

*MPN/100ml = Most Probable Number per 100 milliliters

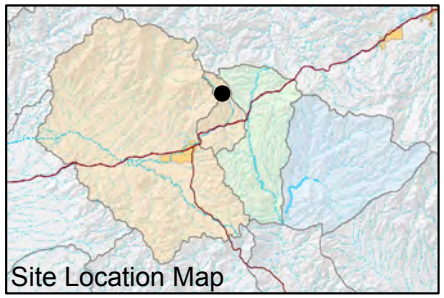
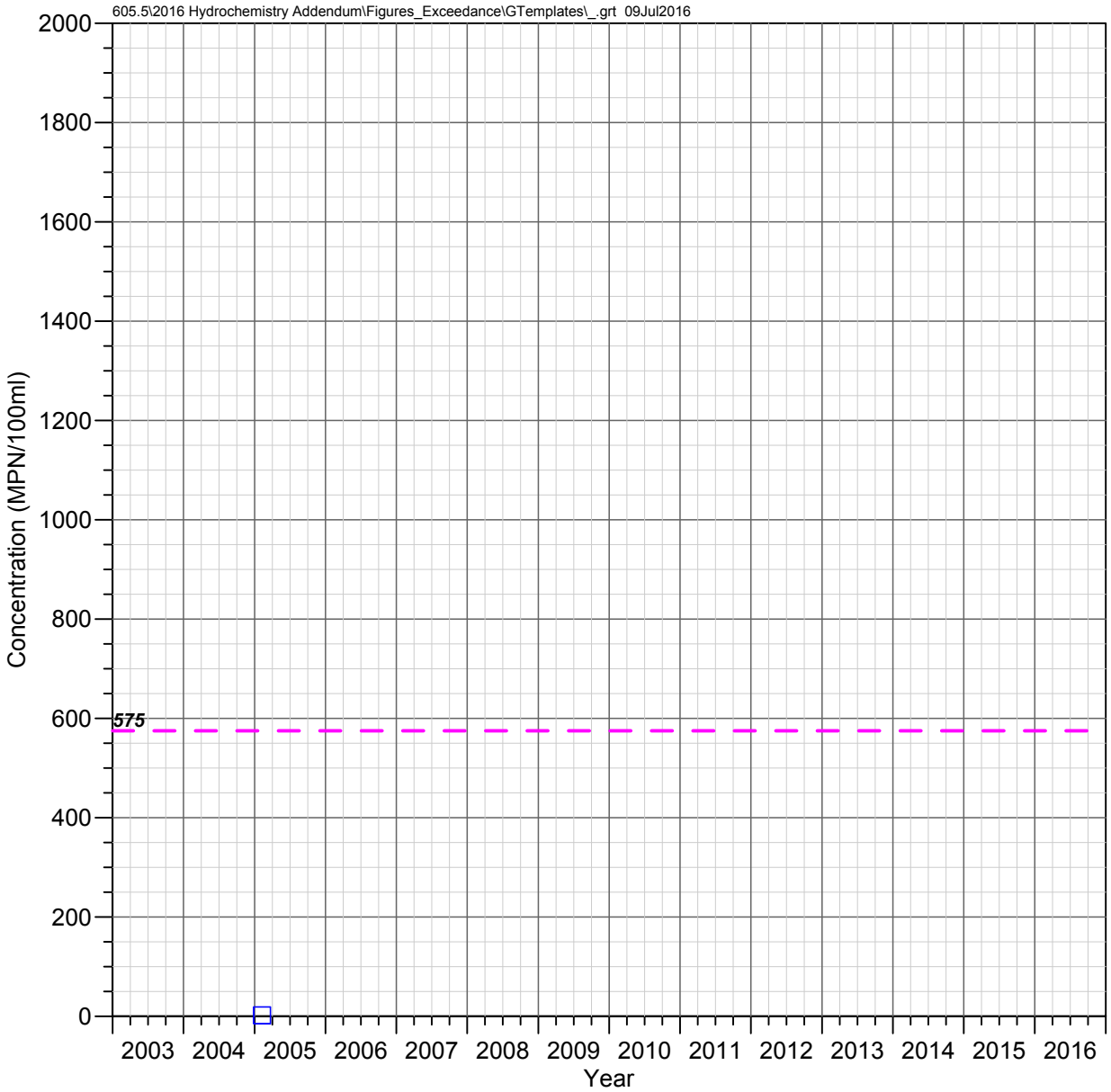


FIGURE F-327. E. COLI CONCENTRATIONS OBSERVED AT PUMP STATION SPRING (QC 30.7 C), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 27.3 C
Queen Creek Watershed

E. COLI

Observed Concentrations
*Value shown at the reported detection limit

- Total, Detected Value
- Total, Below Detection Limit*

Water Quality Standards
UNS = Unspecified filter analysis
AZ Partial Body Contact (UNS, 575 MPN/100ml*)

*MPN/100ml = Most Probable Number per 100 milliliters

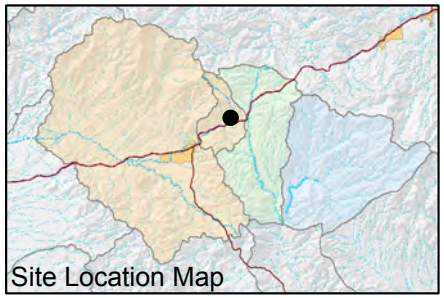
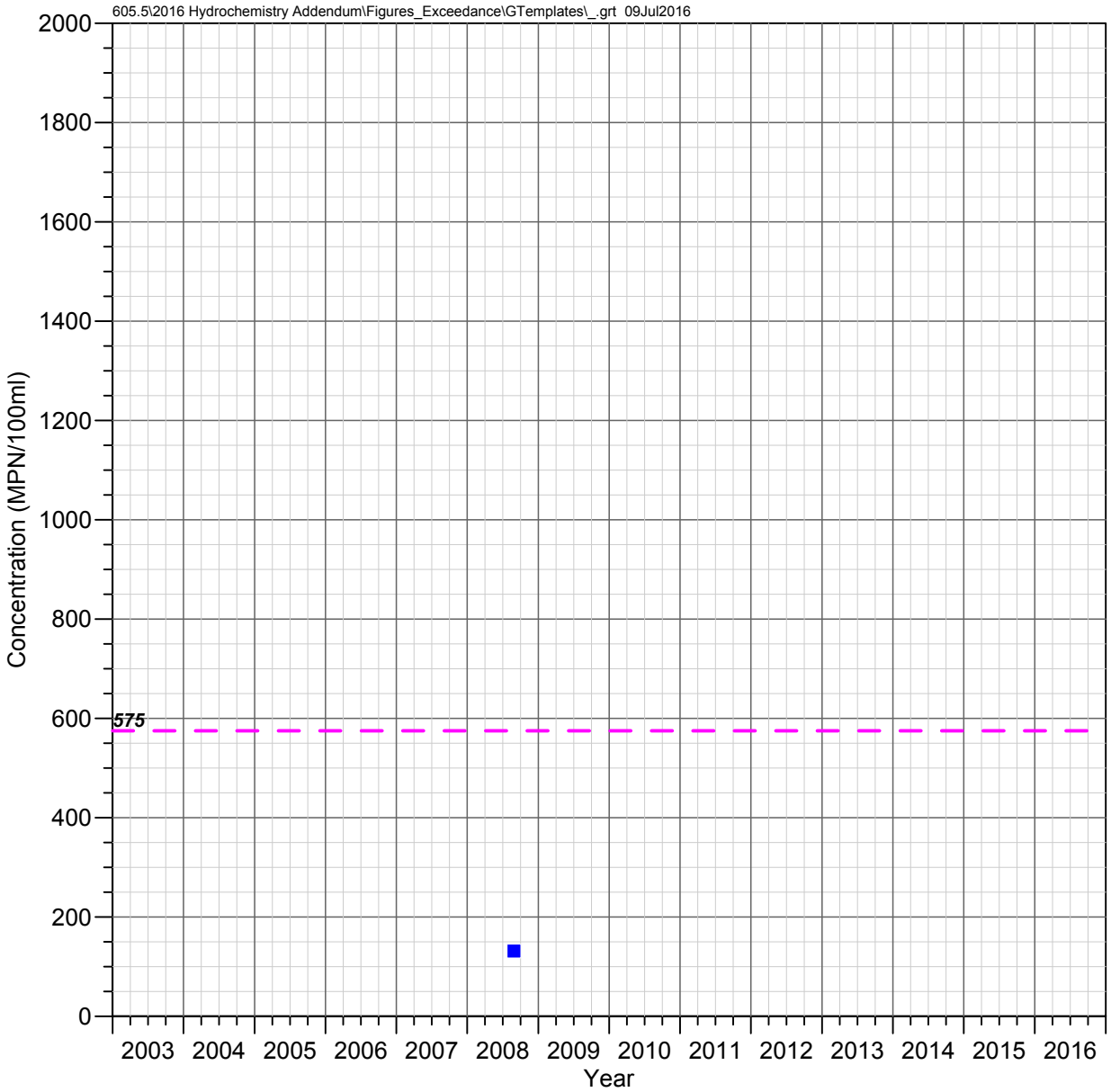


FIGURE F-328. E. COLI CONCENTRATIONS OBSERVED AT QC 27.3 C, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Number 9 Wash
Queen Creek Watershed

E. COLI

Observed Concentrations

*Value shown at the reported detection limit

- ■ Total, Detected Value
- □ Total, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — AZ Partial Body Contact (UNS, 575 MPN/100ml*)

*MPN/100ml = Most Probable Number per 100 milliliters

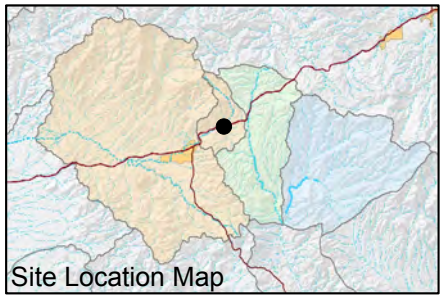
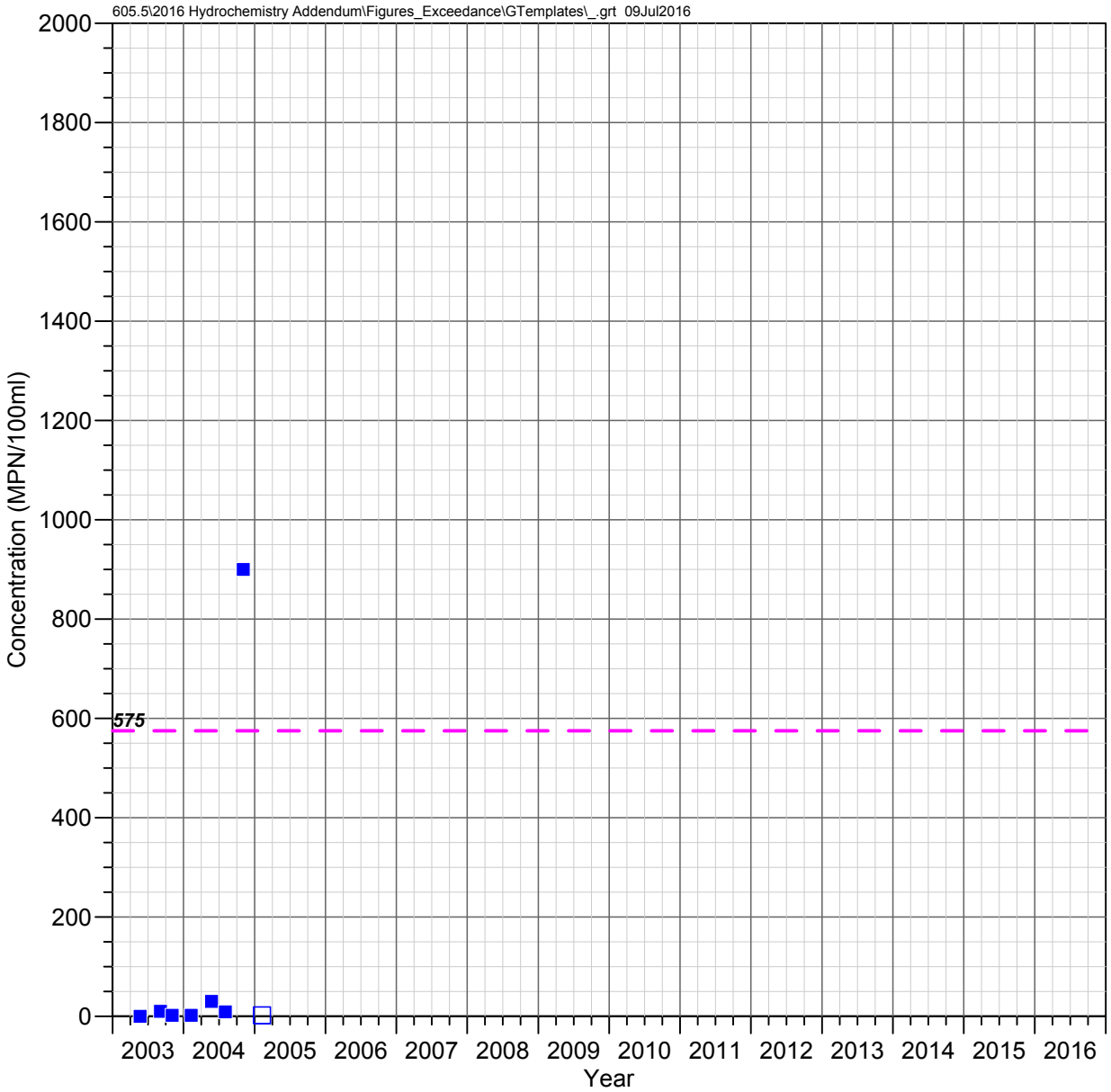


FIGURE F-329. E. COLI CONCENTRATIONS OBSERVED AT NUMBER 9 WASH, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Boulder Hole (QC 23.6 C)
Queen Creek Watershed

E. COLI

Observed Concentrations

*Value shown at the reported detection limit

- Total, Detected Value
- Total, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Partial Body Contact (UNS, 575 MPN/100ml*)

*MPN/100ml = Most Probable Number per 100 milliliters

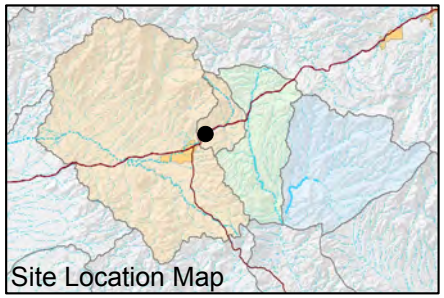
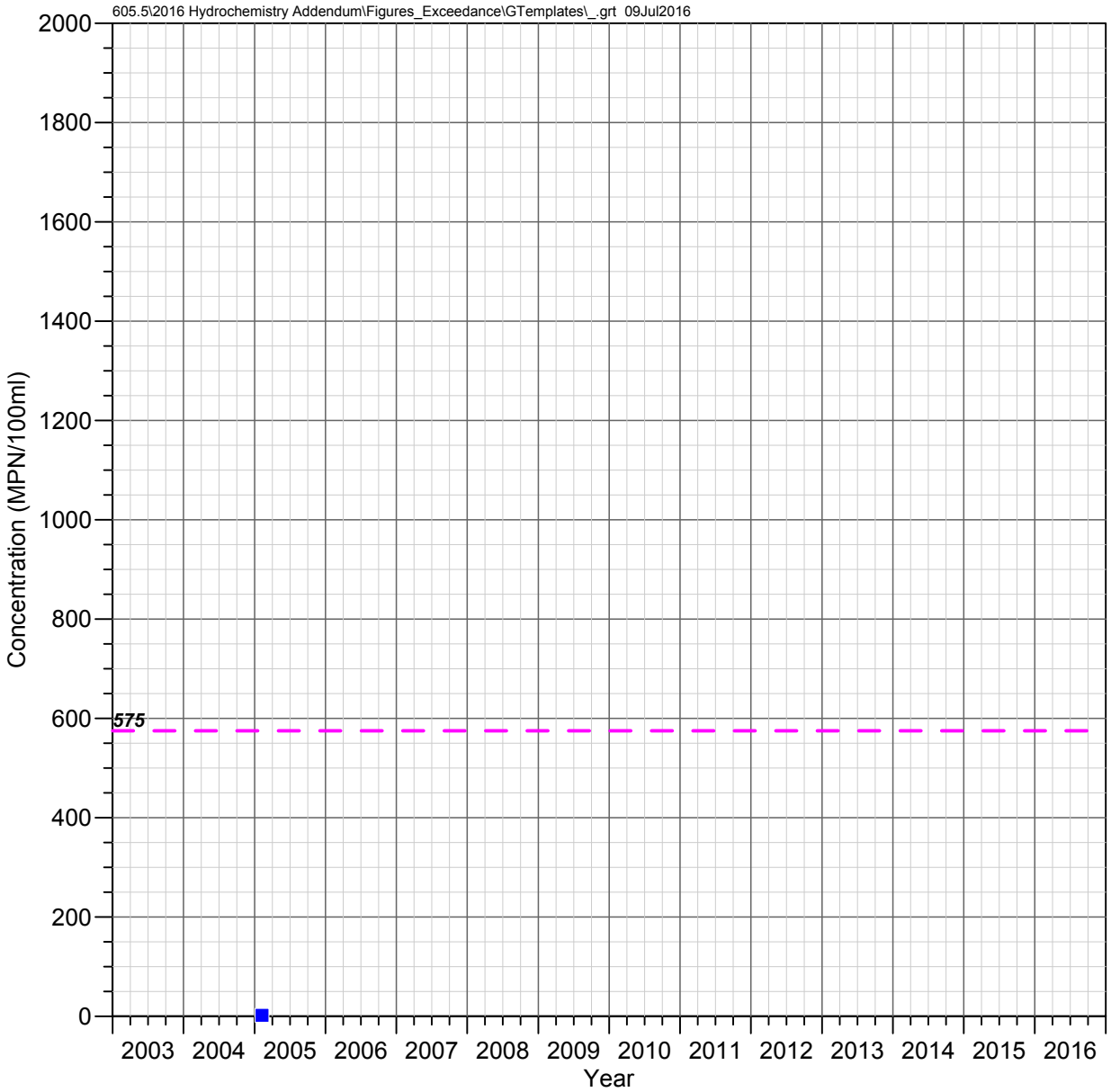


FIGURE F-330. E. COLI CONCENTRATIONS OBSERVED AT BOULDER HOLE (QC 23.6 C), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 22.6 E (Karst Spring)
Queen Creek Watershed

E. COLI

Observed Concentrations

*Value shown at the reported detection limit

- ■ Total, Detected Value
- □ Total, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — AZ Partial Body Contact (UNS, 575 MPN/100ml*)

*MPN/100ml = Most Probable Number per 100 milliliters

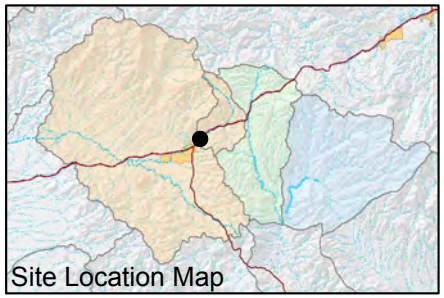
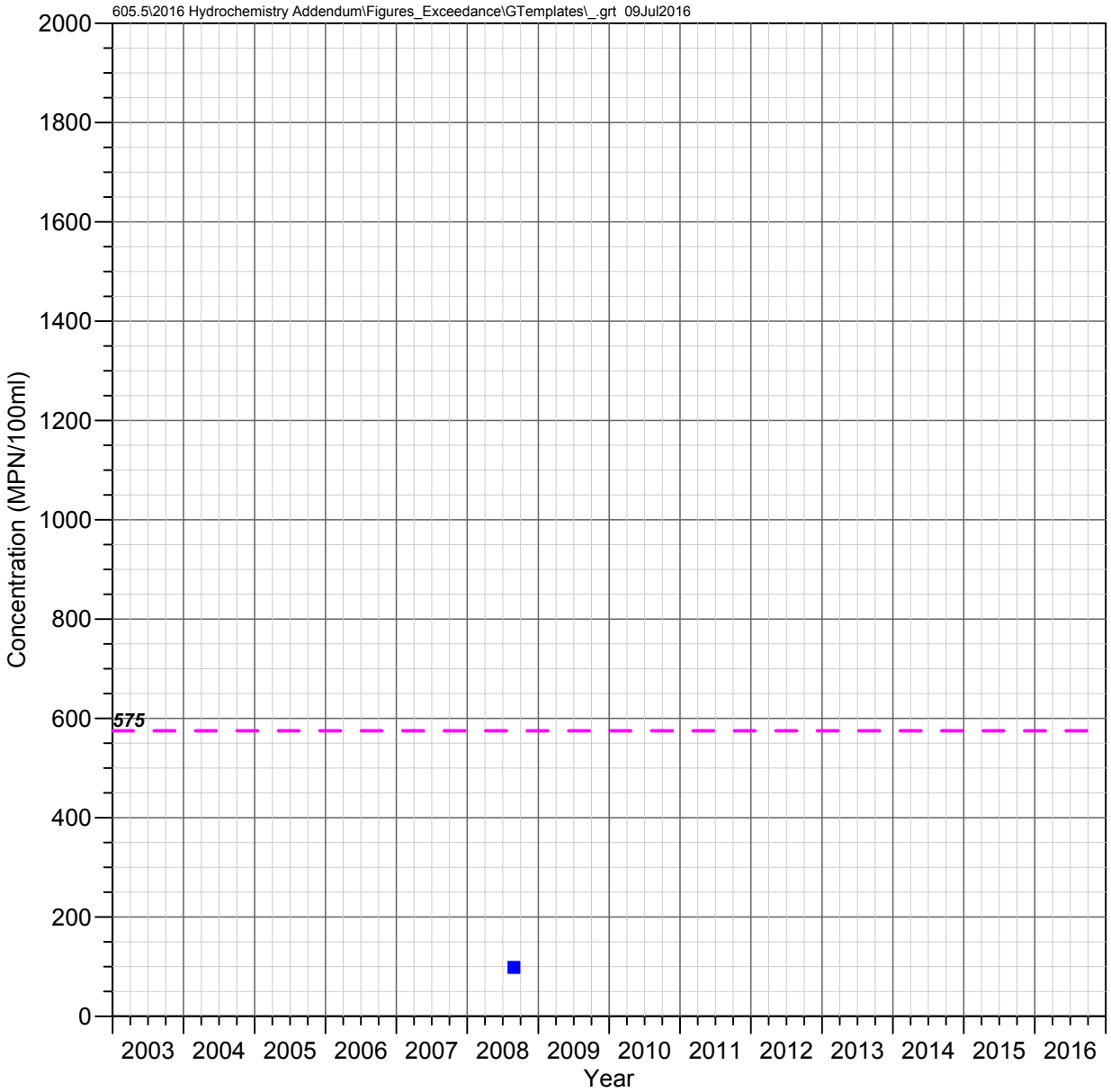


FIGURE F-331. E. COLI CONCENTRATIONS OBSERVED AT QC 22.6 E (KARST SPRING), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 19.7 C
Queen Creek Watershed

E. COLI

Observed Concentrations
*Value shown at the reported detection limit

- Total, Detected Value
- Total, Below Detection Limit*

Water Quality Standards
UNS = Unspecified filter analysis
AZ Partial Body Contact (UNS, 575 MPN/100ml*)

*MPN/100ml = Most Probable Number per 100 milliliters

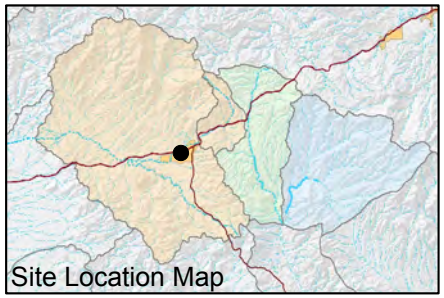
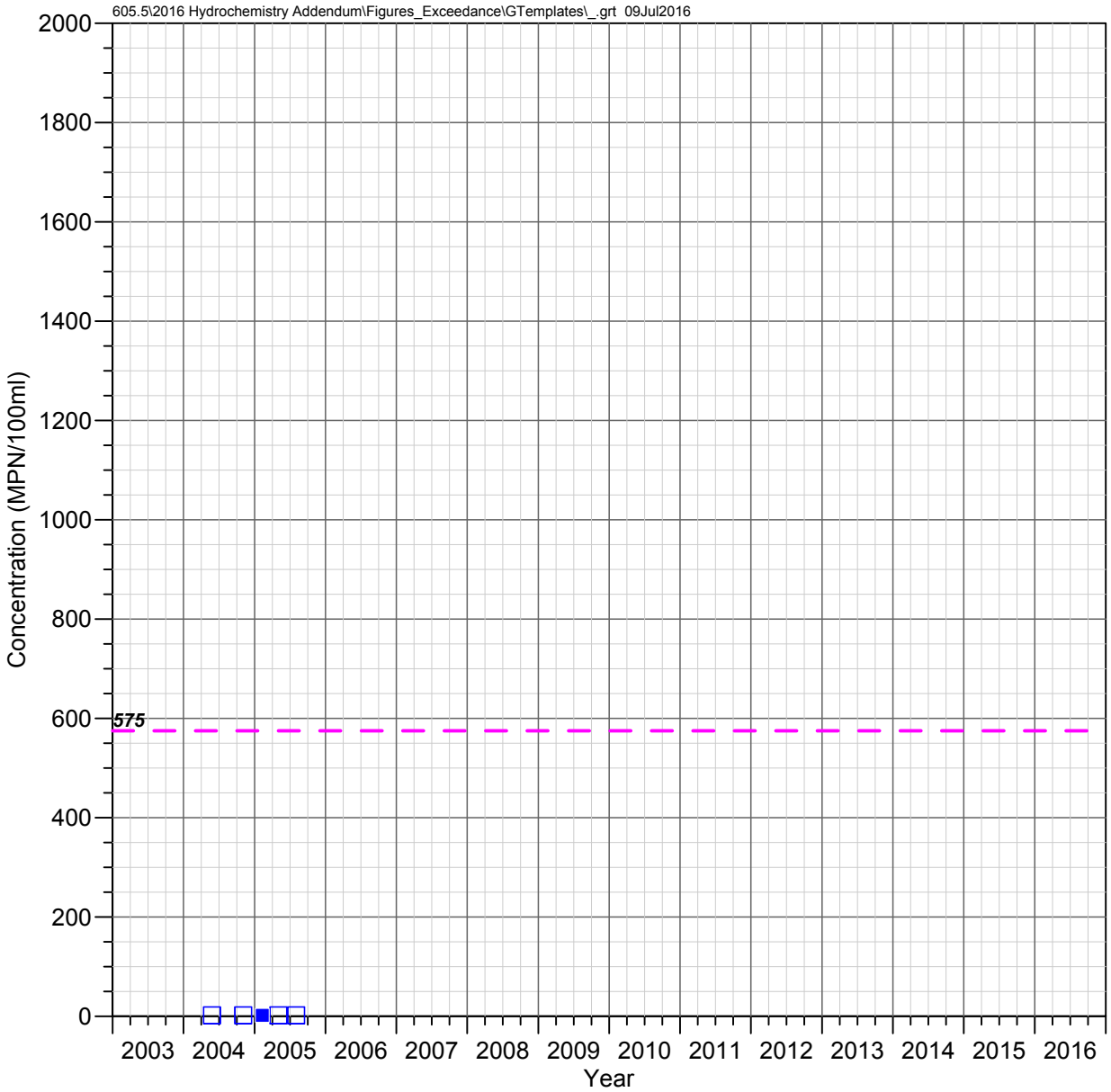


FIGURE F-332. E. COLI CONCENTRATIONS OBSERVED AT QC 19.7 C, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Bored Spring
Queen Creek Watershed

E. COLI

Observed Concentrations

*Value shown at the reported detection limit

- ■ Total, Detected Value
- □ Total, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — AZ Partial Body Contact (UNS, 575 MPN/100ml*)

*MPN/100ml = Most Probable Number per 100 milliliters

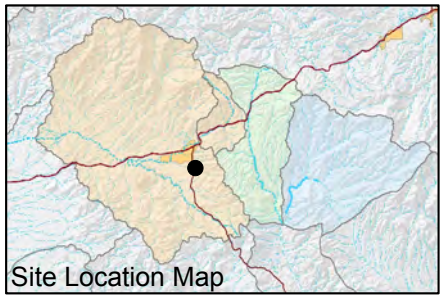
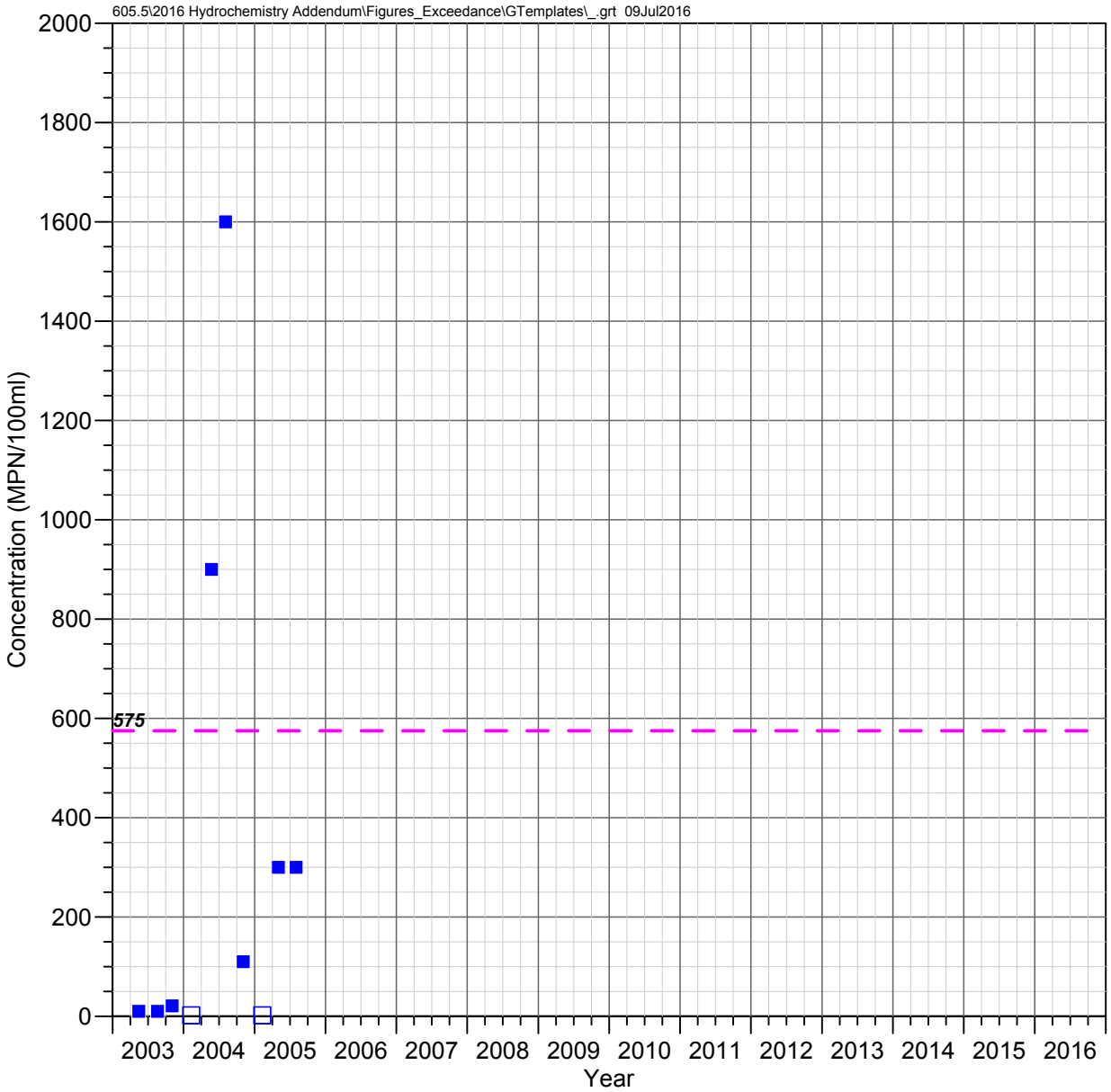


FIGURE F-333. E. COLI CONCENTRATIONS OBSERVED AT BORED SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Hidden Spring
Queen Creek Watershed

E. COLI

Observed Concentrations

*Value shown at the reported detection limit

- Total, Detected Value
- Total, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Partial Body Contact (UNS, 575 MPN/100ml*)

*MPN/100ml = Most Probable Number per 100 milliliters

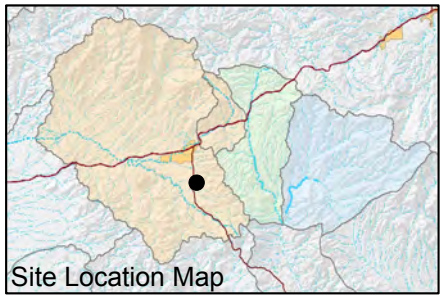
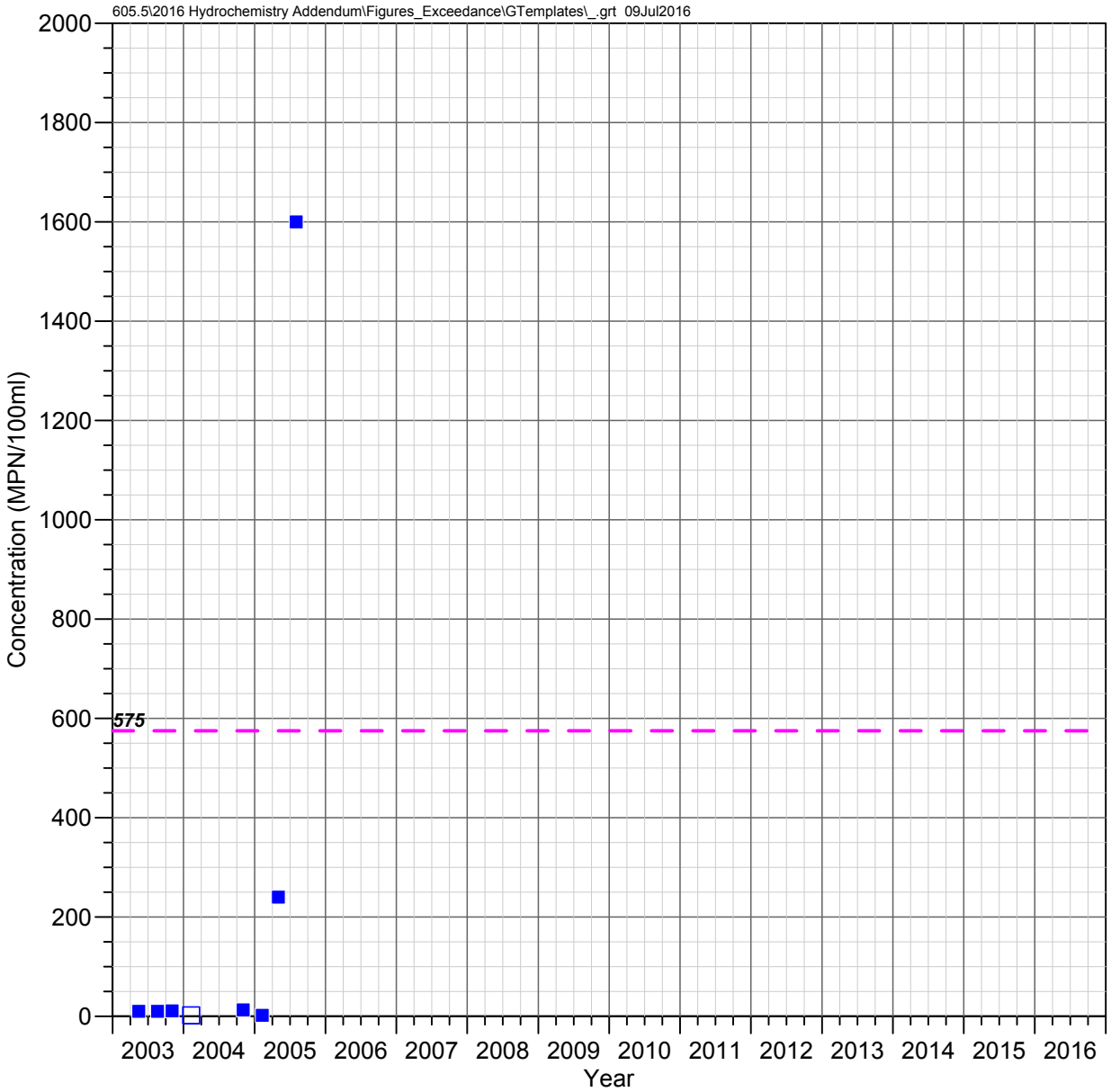


FIGURE F-334. E. COLI CONCENTRATIONS OBSERVED AT HIDDEN SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Kane Spring
Queen Creek Watershed

E. COLI

Observed Concentrations

*Value shown at the reported detection limit

- Total, Detected Value
- Total, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Partial Body Contact (UNS, 575 MPN/100ml*)

*MPN/100ml = Most Probable Number per 100 milliliters

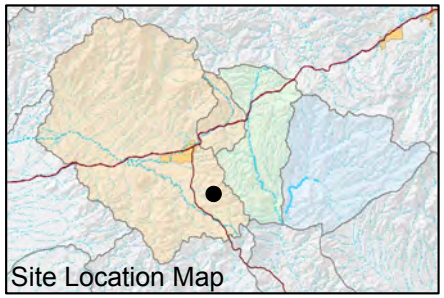
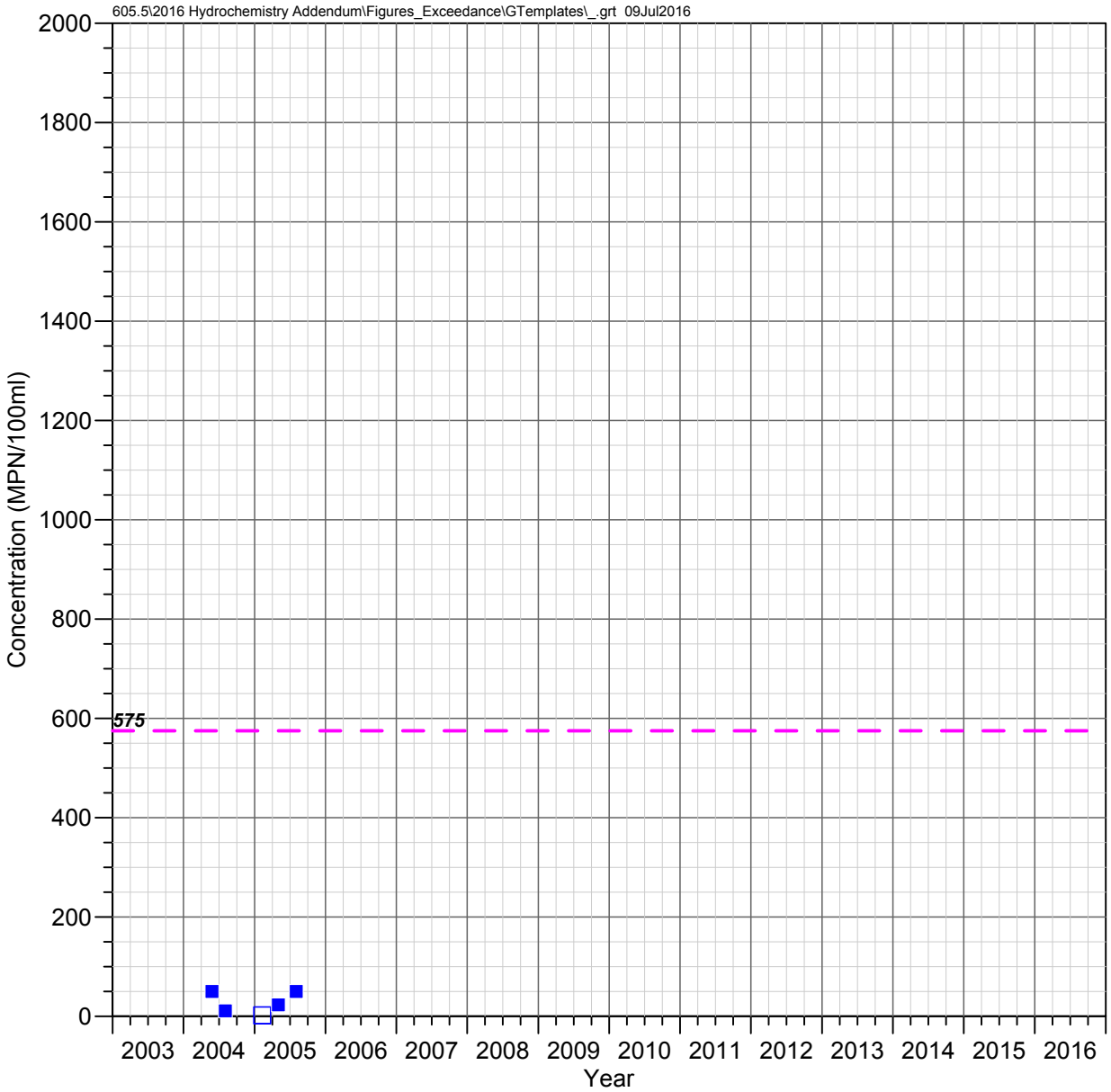


FIGURE F-335. E. COLI CONCENTRATIONS OBSERVED AT KANE SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Blue Spring
Queen Creek Watershed

E. COLI

Observed Concentrations

*Value shown at the reported detection limit

- ■ Total, Detected Value
- □ Total, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — AZ Partial Body Contact (UNS, 575 MPN/100ml*)

*MPN/100ml = Most Probable Number per 100 milliliters

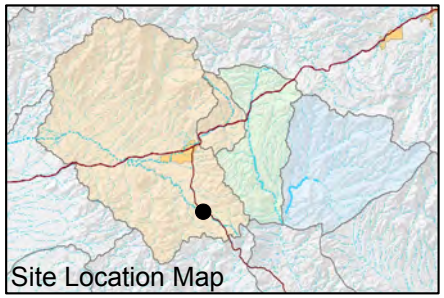
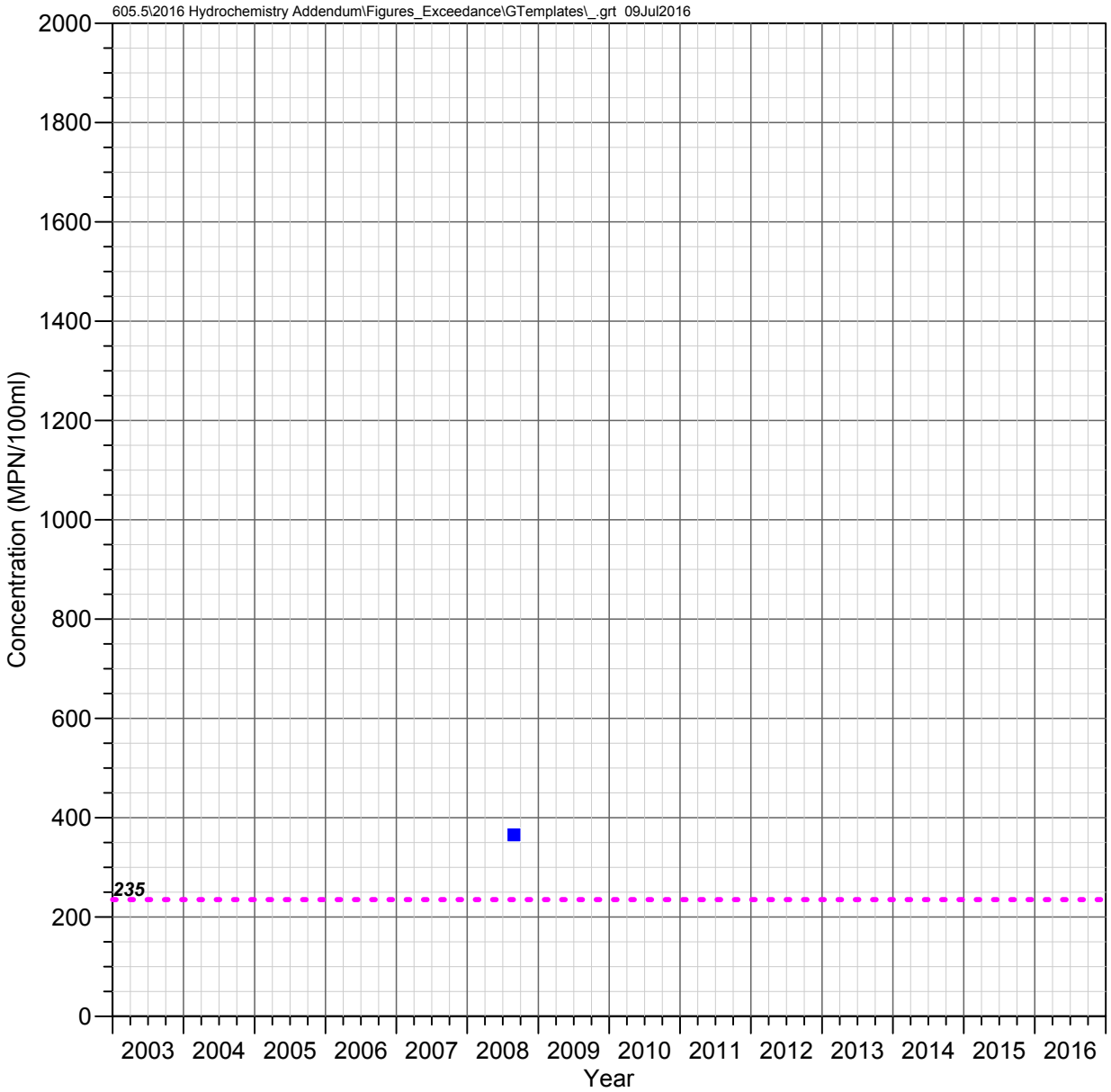


FIGURE F-336. E. COLI CONCENTRATIONS OBSERVED AT BLUE SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



IC 1.0 C
Devils Canyon Watershed

E. COLI

Observed Concentrations

*Value shown at the reported detection limit

- Total, Detected Value
- Total, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 235 MPN/100ml*)

*MPN/100ml = Most Probable Number per 100 milliliters

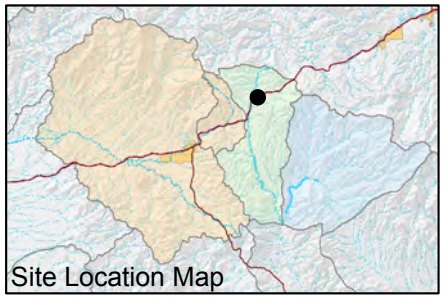
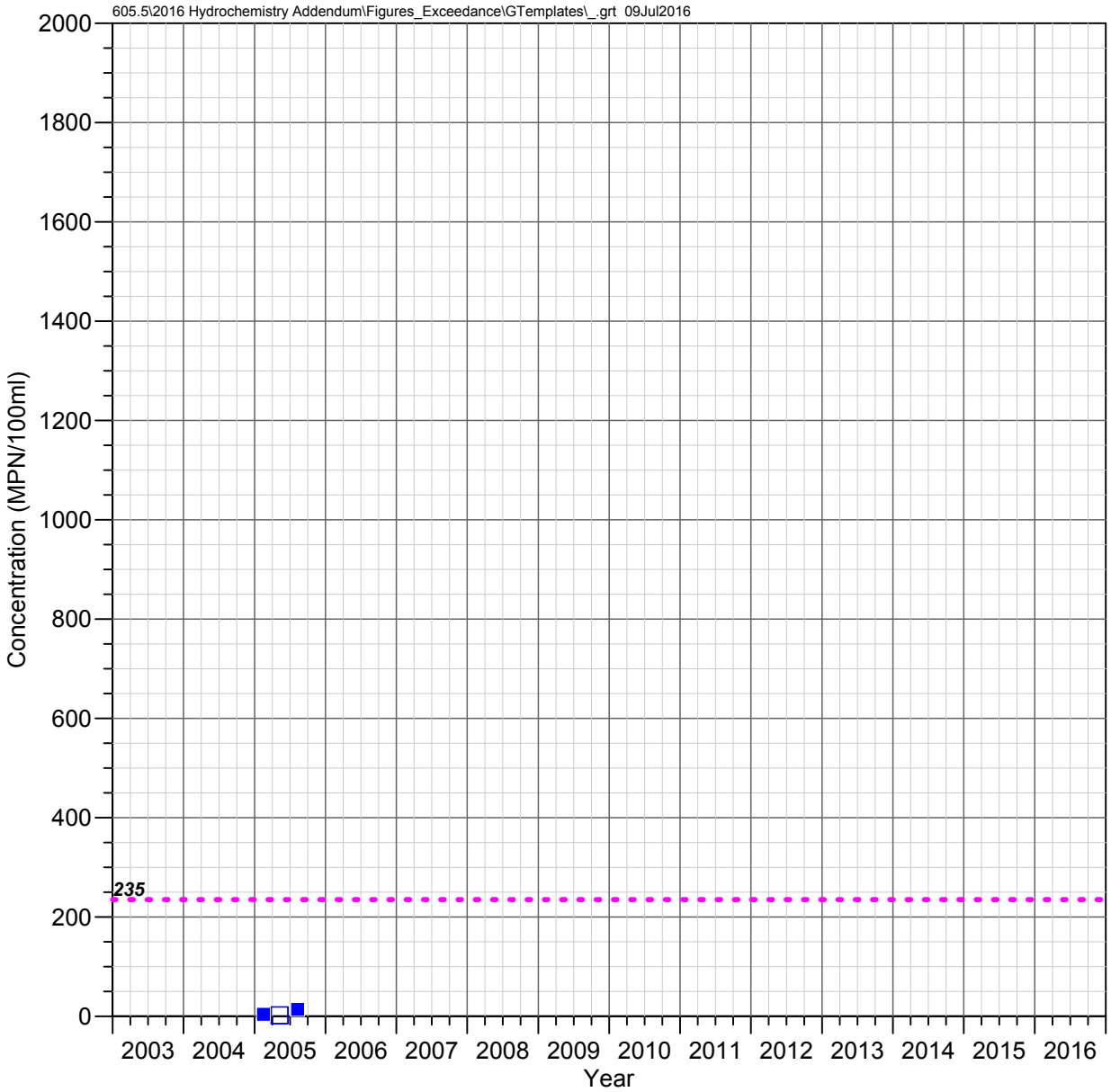


FIGURE F-337. E. COLI CONCENTRATIONS OBSERVED AT IC 1.0 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 15.2 C
Devils Canyon Watershed

E. COLI

Observed Concentrations
*Value shown at the reported detection limit

- Total, Detected Value
- Total, Below Detection Limit*

Water Quality Standards
UNS = Unspecified filter analysis
AZ Full Body Contact (UNS, 235 MPN/100ml*)

*MPN/100ml = Most Probable Number per 100 milliliters

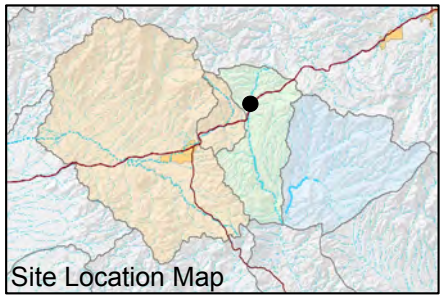
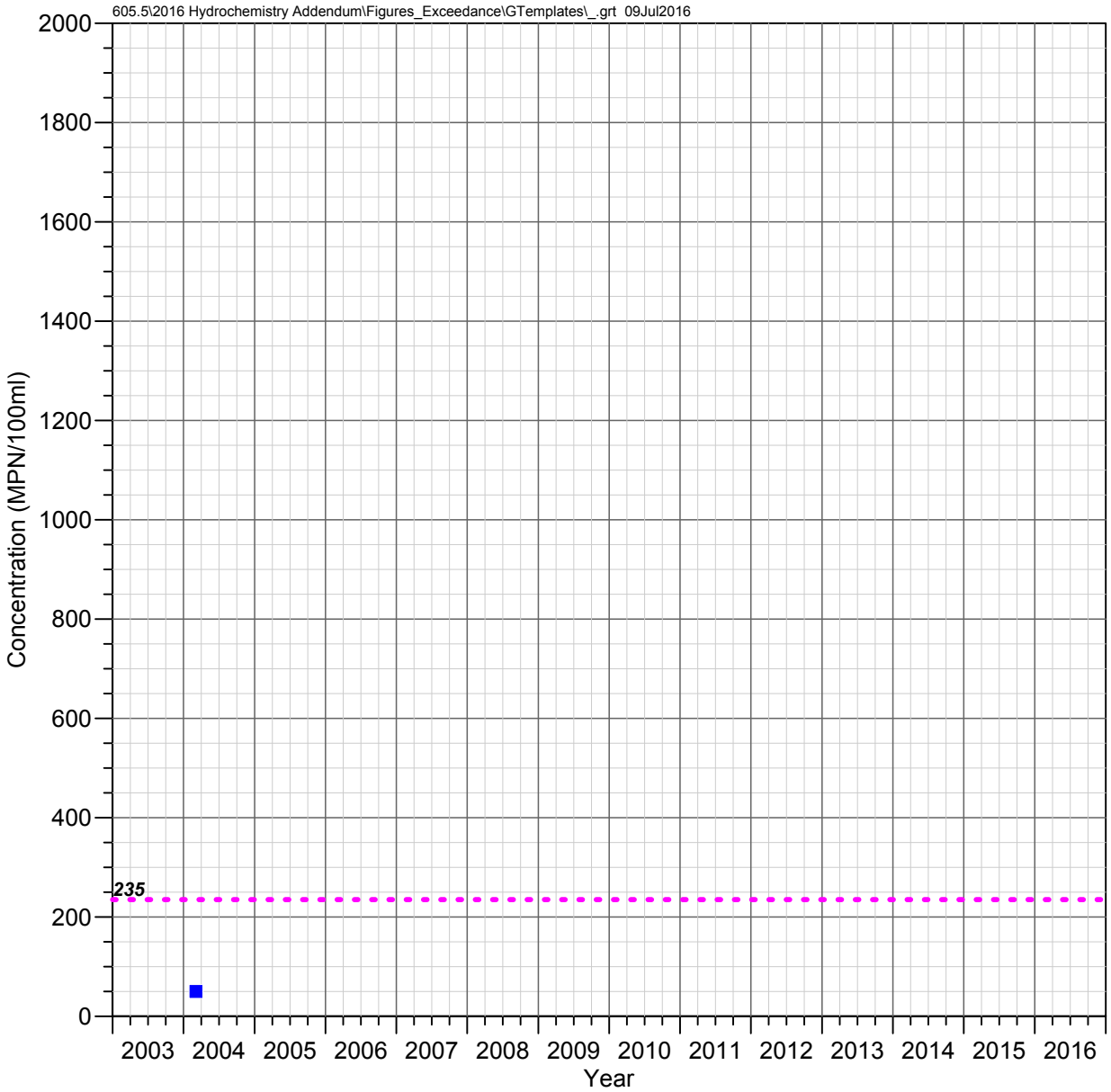


FIGURE F-338. E. COLI CONCENTRATIONS OBSERVED AT DC 15.2 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 14.7 C
Devils Canyon Watershed

E. COLI

Observed Concentrations
*Value shown at the reported detection limit

- Total, Detected Value
- Total, Below Detection Limit*

Water Quality Standards
UNS = Unspecified filter analysis
- - - - AZ Full Body Contact (UNS, 235 MPN/100ml*)

*MPN/100ml = Most Probable Number per 100 milliliters

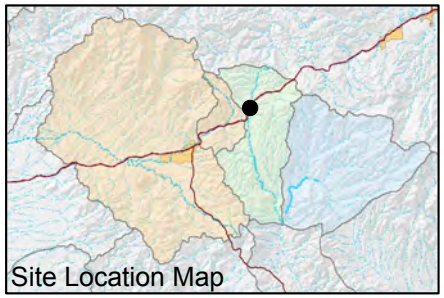
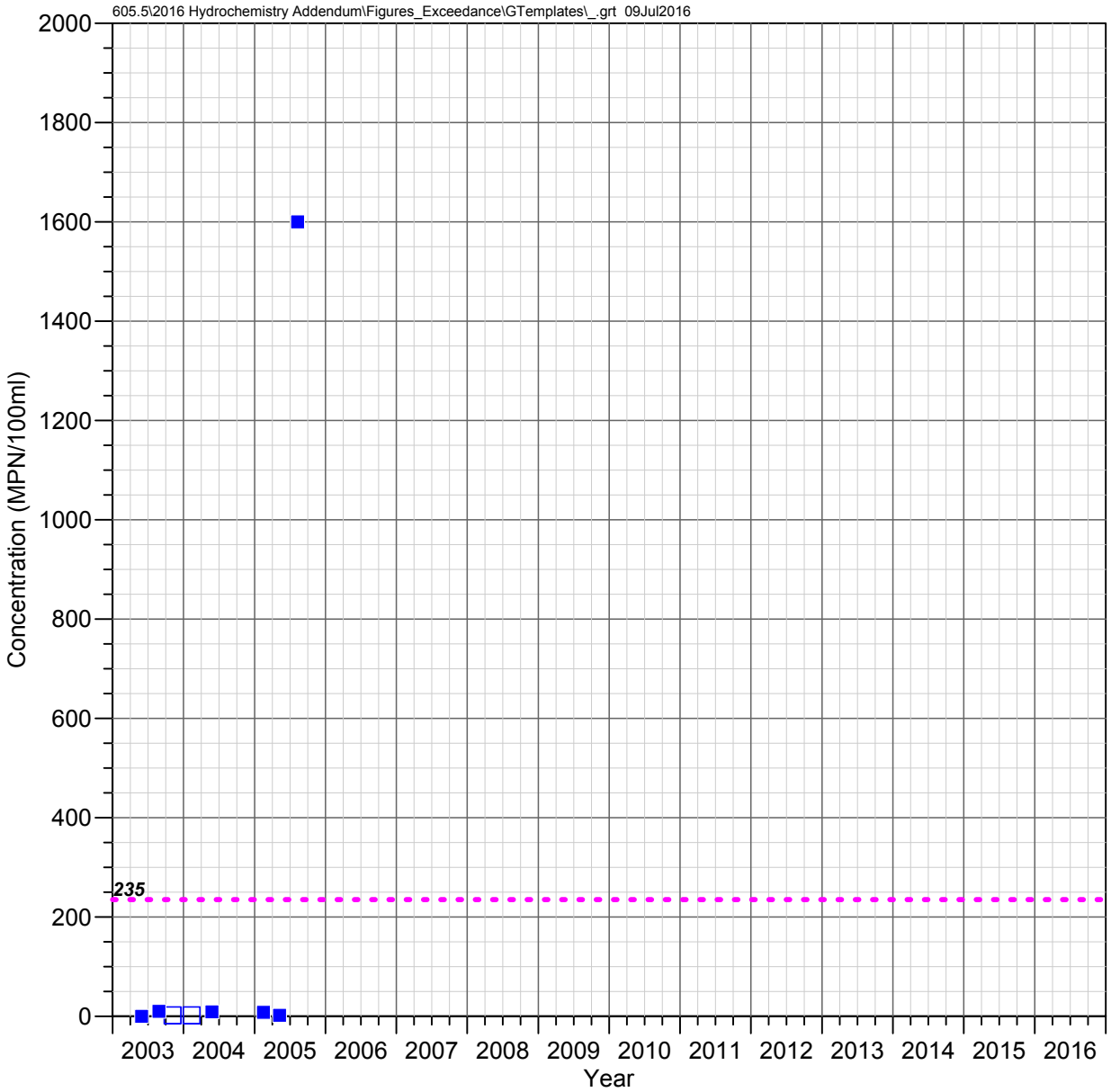


FIGURE F-339. E. COLI CONCENTRATIONS OBSERVED AT DC 14.7 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 13.5 C
Devils Canyon Watershed

E. COLI

Observed Concentrations
*Value shown at the reported detection limit

- Total, Detected Value
- Total, Below Detection Limit*

Water Quality Standards
UNS = Unspecified filter analysis
- - - - AZ Full Body Contact (UNS, 235 MPN/100ml*)

*MPN/100ml = Most Probable Number per 100 milliliters

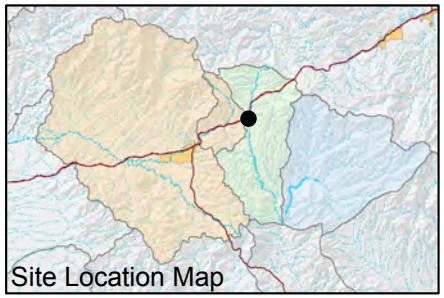
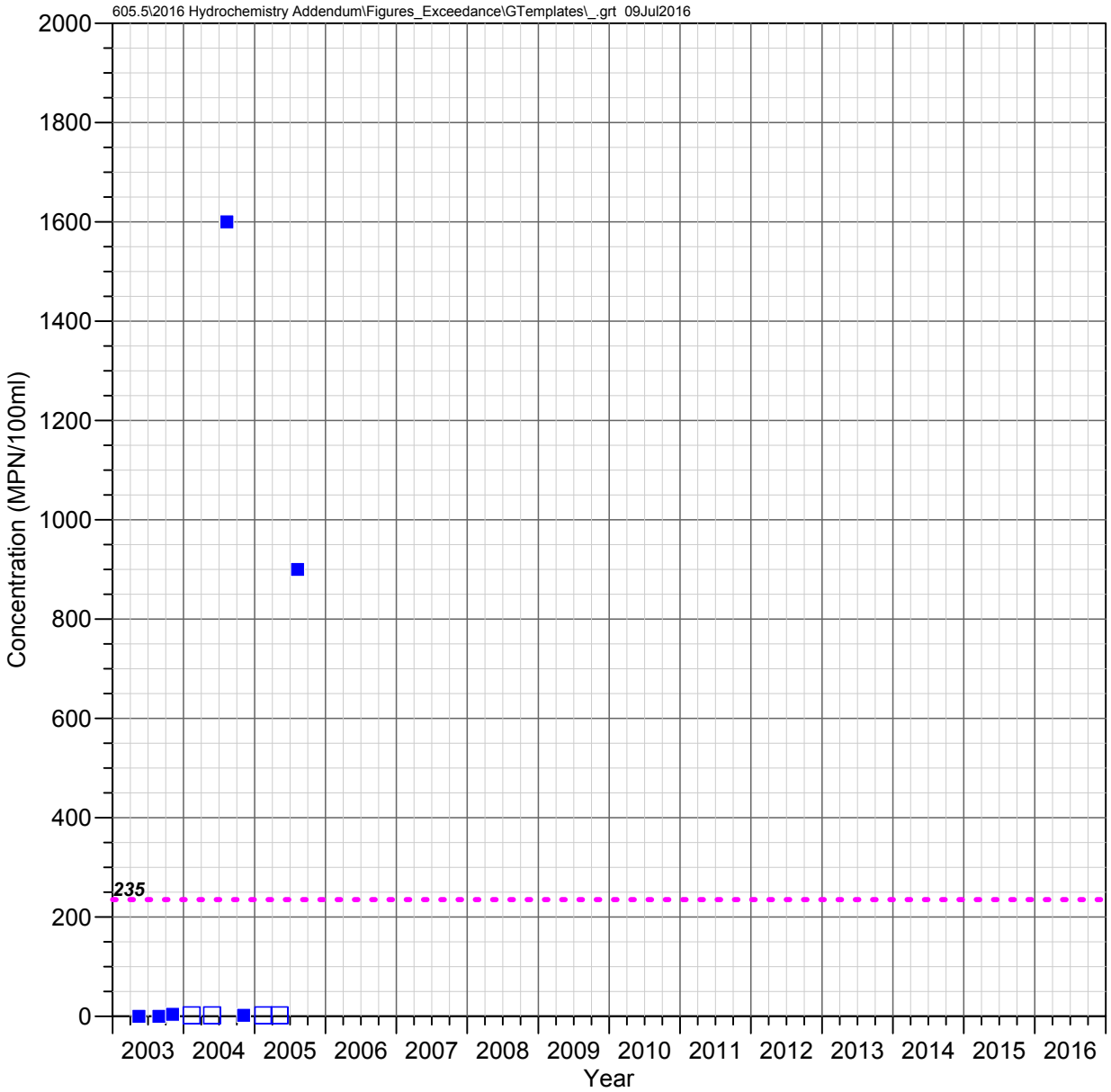


FIGURE F-340. E. COLI CONCENTRATIONS OBSERVED AT DC 13.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 10.9 C
Devils Canyon Watershed

E. COLI

Observed Concentrations
*Value shown at the reported detection limit

- Total, Detected Value
- Total, Below Detection Limit*

Water Quality Standards
UNS = Unspecified filter analysis
- - - - AZ Full Body Contact (UNS, 235 MPN/100ml*)

*MPN/100ml = Most Probable Number per 100 milliliters

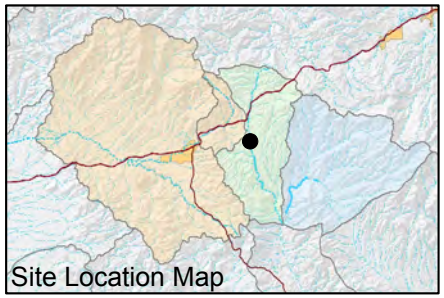
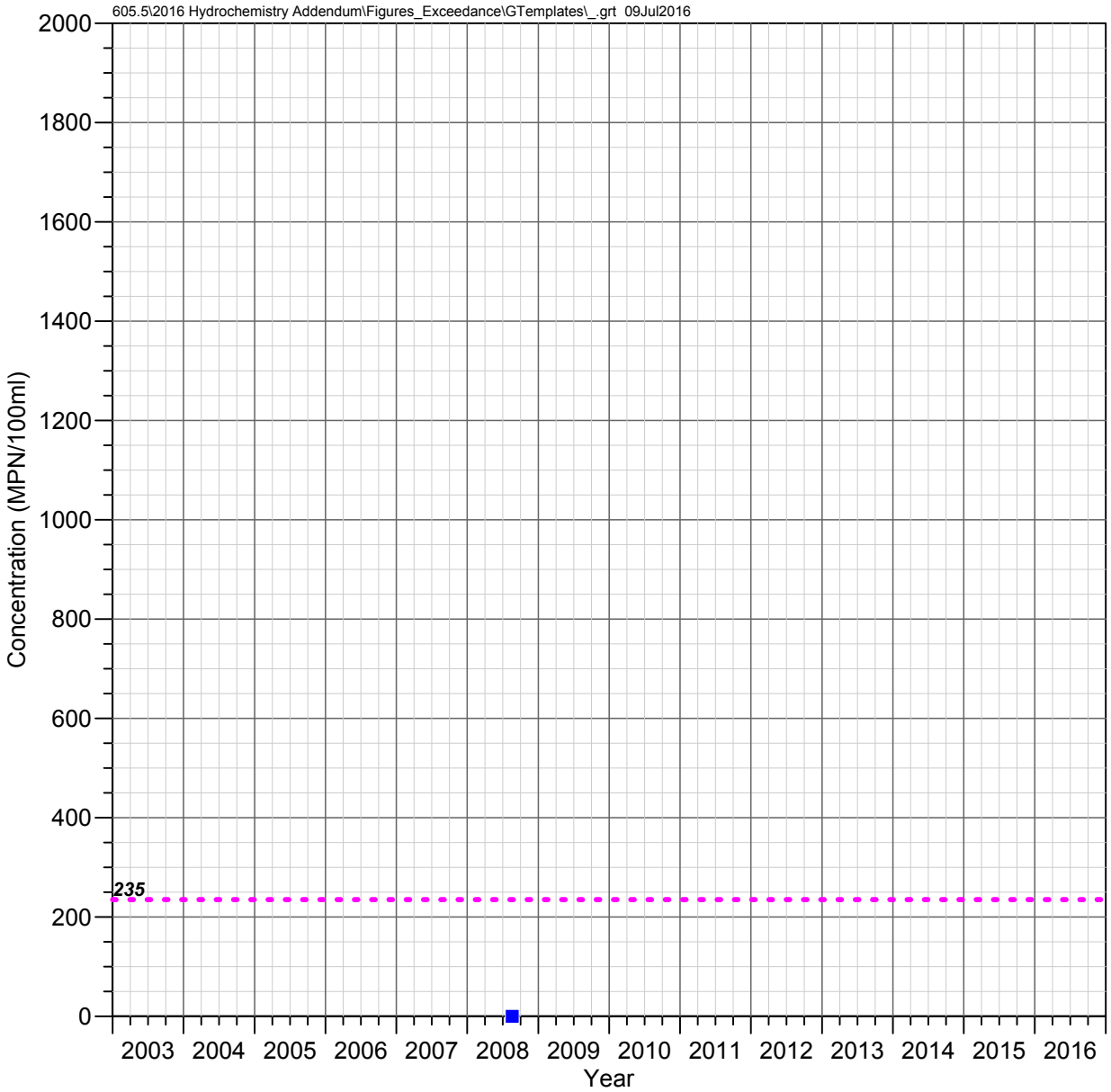


FIGURE F-341. E. COLI CONCENTRATIONS OBSERVED AT DC 10.9 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



RR 1.5 C
Devils Canyon Watershed

E. COLI

Observed Concentrations

*Value shown at the reported detection limit

- Total, Detected Value
- Total, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 235 MPN/100ml*)

*MPN/100ml = Most Probable Number per 100 milliliters

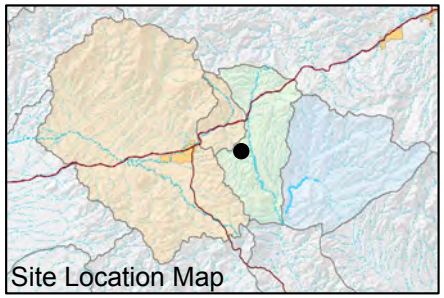
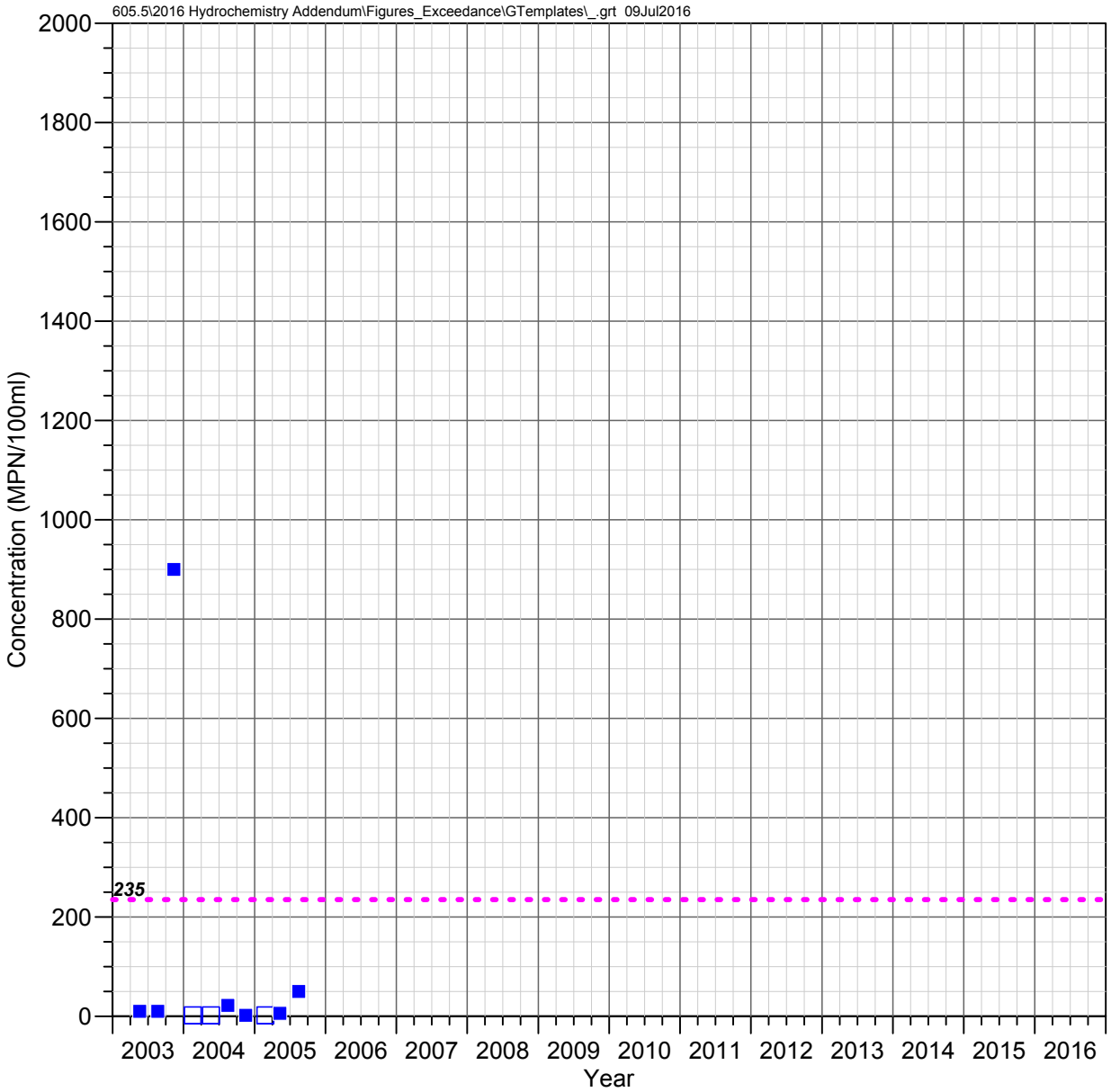


FIGURE F-342. E. COLI CONCENTRATIONS OBSERVED AT RR 1.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.8 C
Devils Canyon Watershed

E. COLI

Observed Concentrations
*Value shown at the reported detection limit

- Total, Detected Value
- Total, Below Detection Limit*

Water Quality Standards
UNS = Unspecified filter analysis
- - - - AZ Full Body Contact (UNS, 235 MPN/100ml*)

*MPN/100ml = Most Probable Number per 100 milliliters

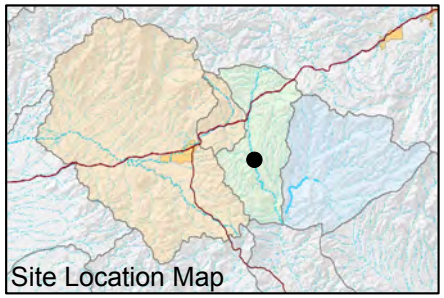
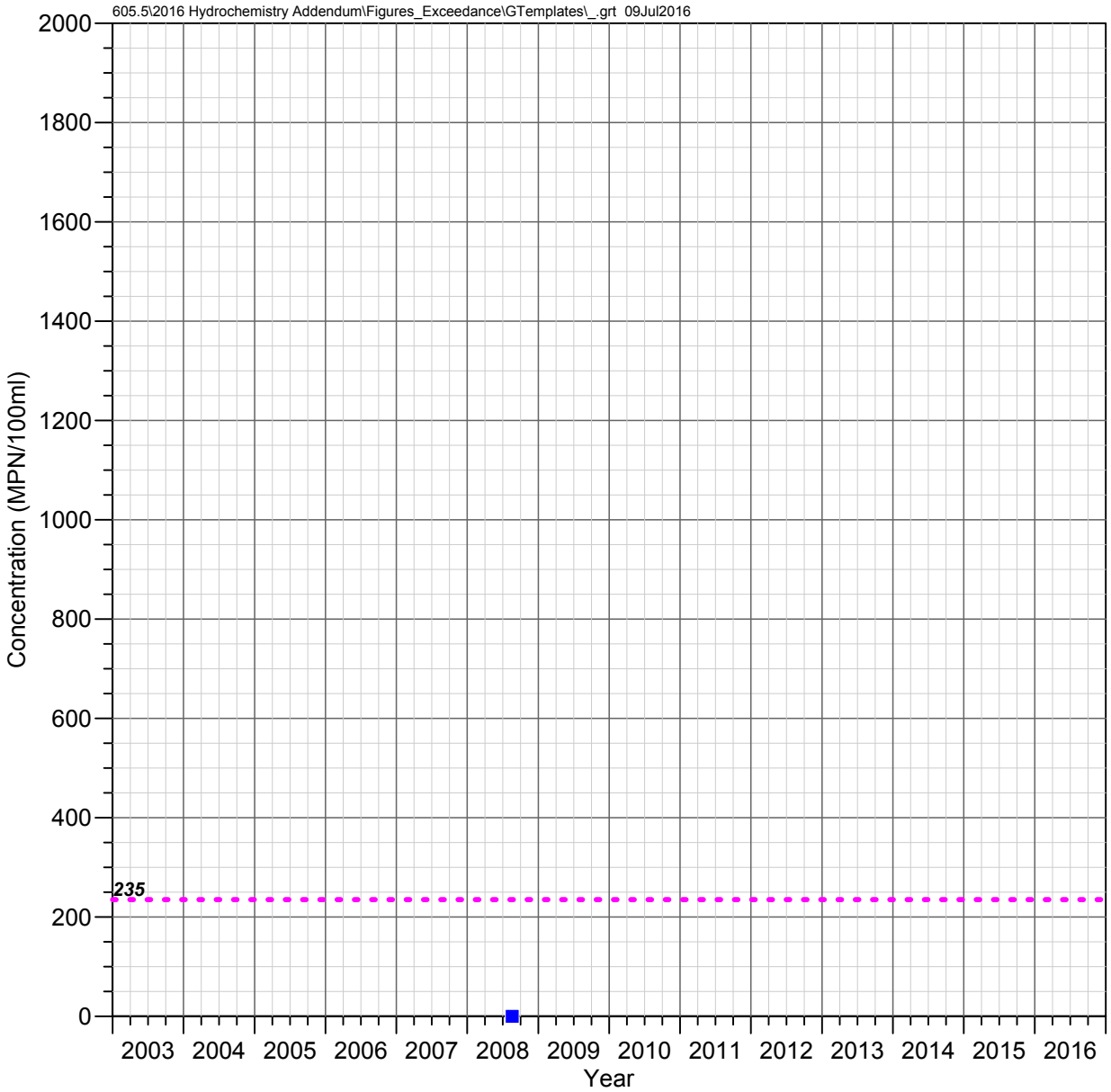


FIGURE F-343. E. COLI CONCENTRATIONS OBSERVED AT DC 8.8 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



H 0.1 C
Devils Canyon Watershed

E. COLI

Observed Concentrations
*Value shown at the reported detection limit

- Total, Detected Value
- Total, Below Detection Limit*

Water Quality Standards
UNS = Unspecified filter analysis
- - - - AZ Full Body Contact (UNS, 235 MPN/100ml*)

*MPN/100ml = Most Probable Number per 100 milliliters

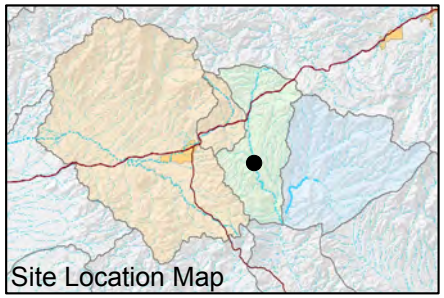
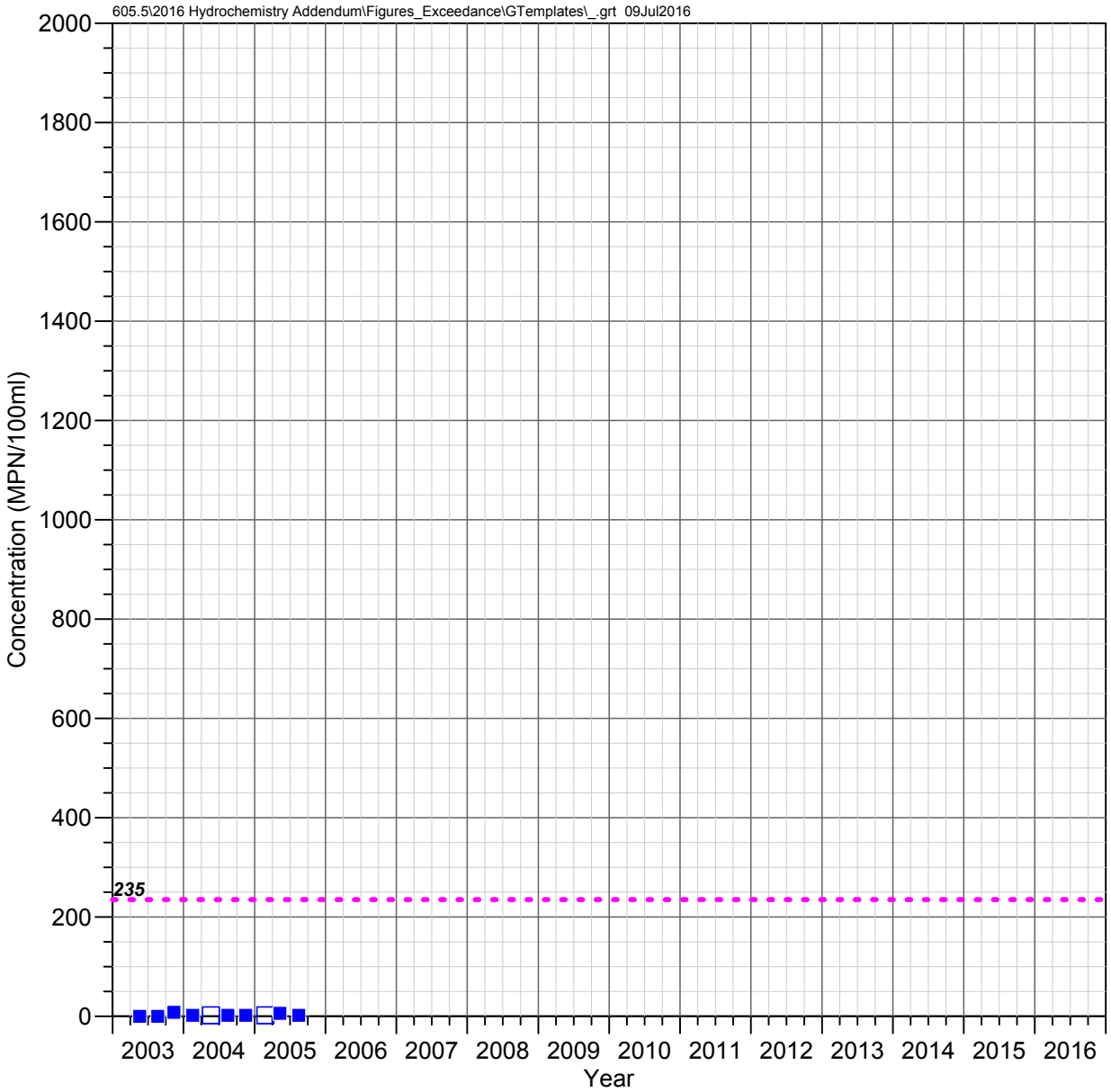


FIGURE F-344. E. COLI CONCENTRATIONS OBSERVED AT H 0.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.2 W
Devils Canyon Watershed

E. COLI

Observed Concentrations
*Value shown at the reported detection limit

- Total, Detected Value
- Total, Below Detection Limit*

Water Quality Standards
UNS = Unspecified filter analysis
- - - - AZ Full Body Contact (UNS, 235 MPN/100ml*)

*MPN/100ml = Most Probable Number per 100 milliliters

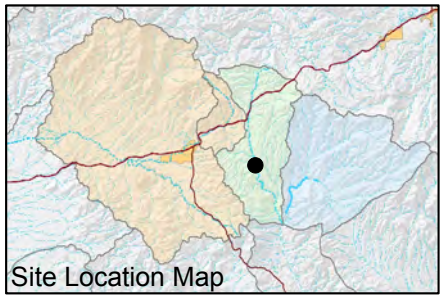
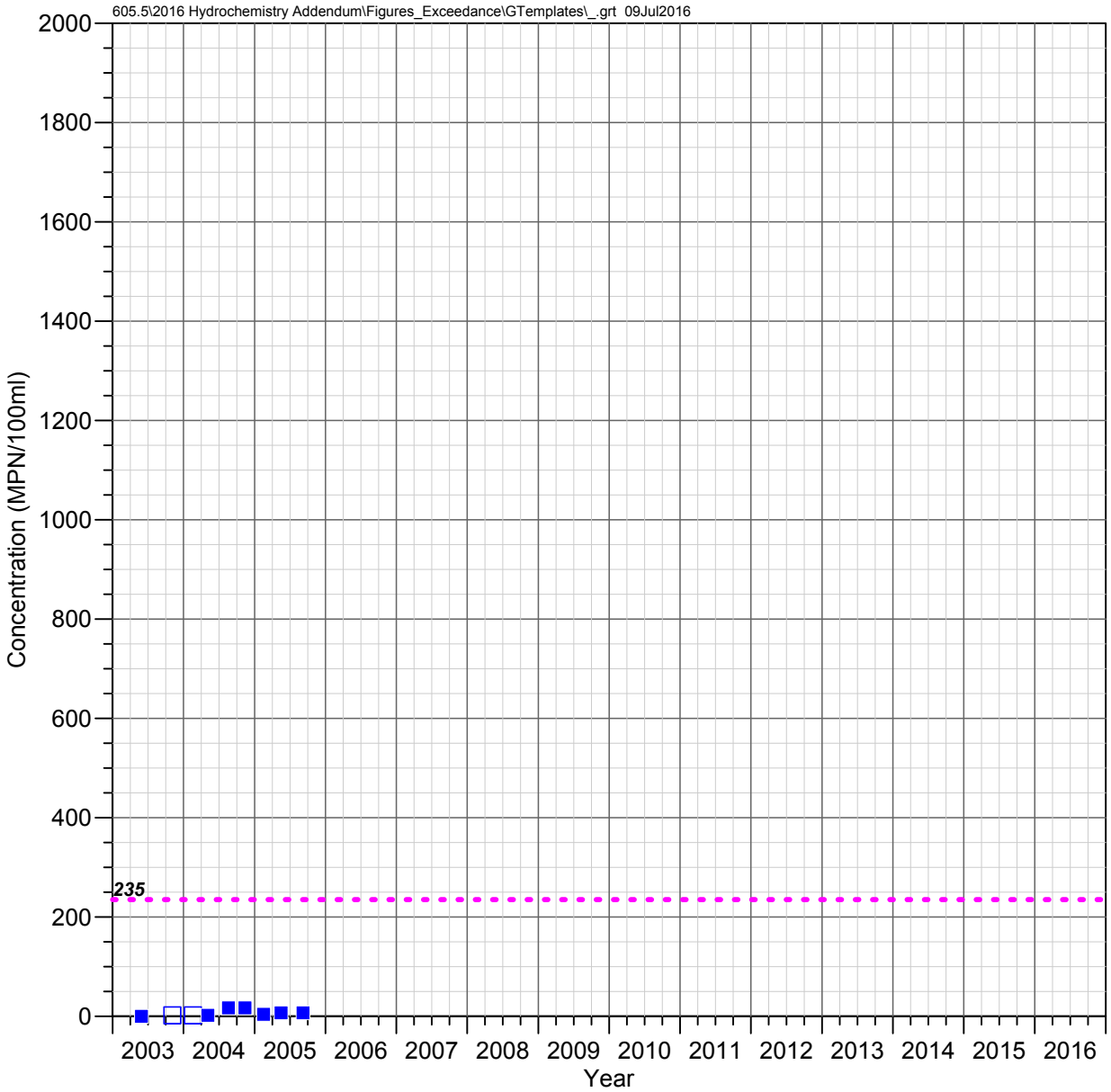


FIGURE F-345. E. COLI CONCENTRATIONS OBSERVED AT DC 8.2 W, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 7.1 C
Devils Canyon Watershed

E. COLI

Observed Concentrations
*Value shown at the reported detection limit

- Total, Detected Value
- Total, Below Detection Limit*

Water Quality Standards
UNS = Unspecified filter analysis
- - - - AZ Full Body Contact (UNS, 235 MPN/100ml*)

*MPN/100ml = Most Probable Number per 100 milliliters

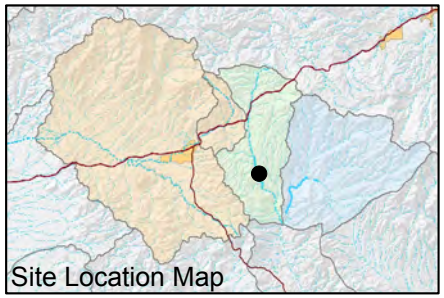
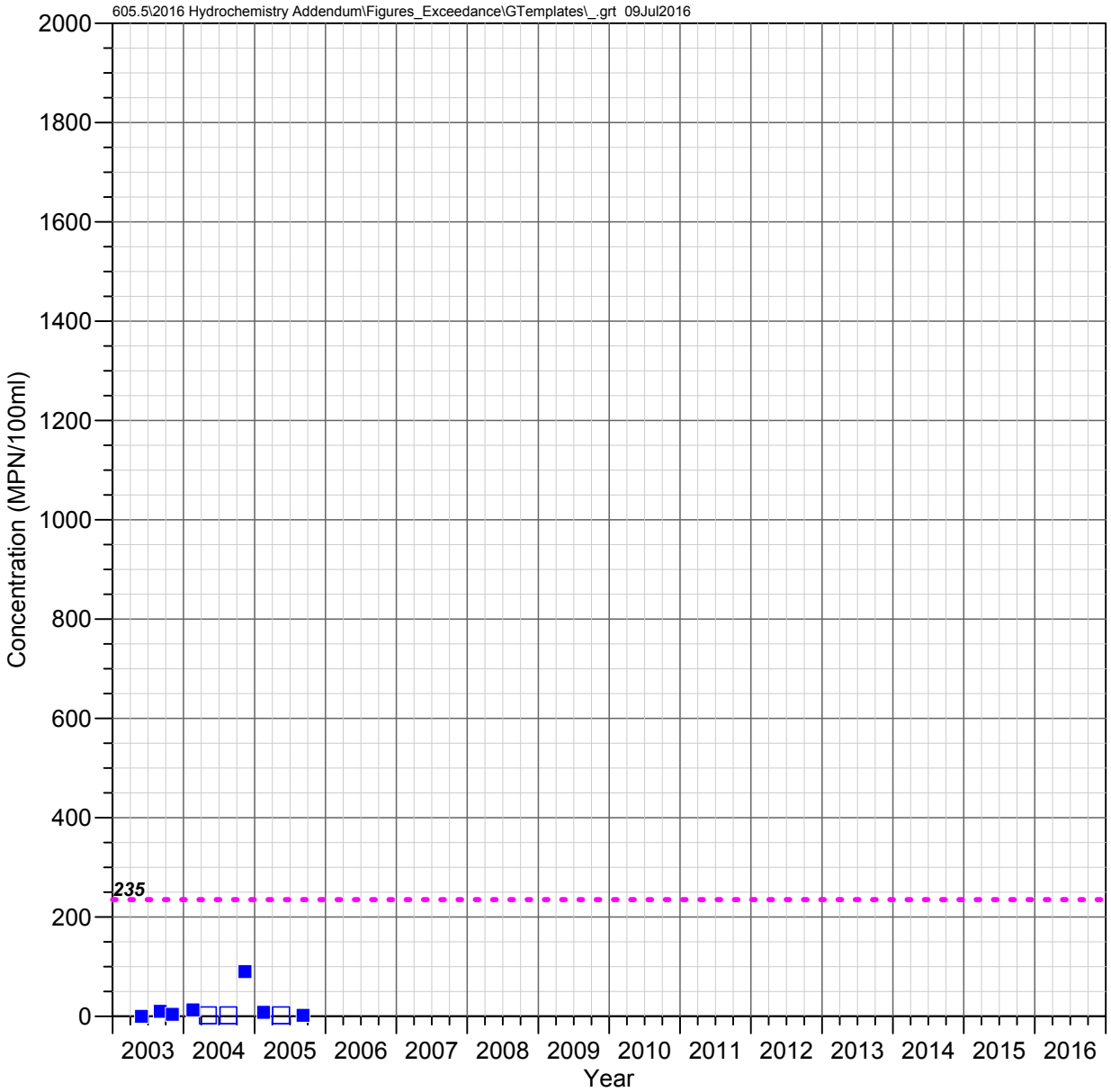


FIGURE F-346. E. COLI CONCENTRATIONS OBSERVED AT DC 7.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.6 W (DCT 6.6 W)
Devils Canyon Watershed

E. COLI

Observed Concentrations

*Value shown at the reported detection limit

- ■ Total, Detected Value
- □ Total, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 235 MPN/100ml*)

*MPN/100ml = Most Probable Number per 100 milliliters

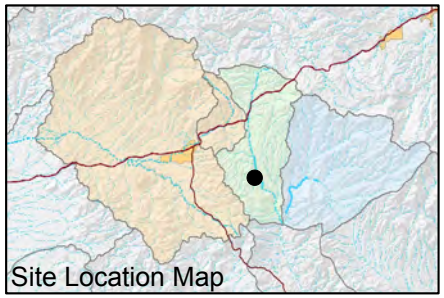
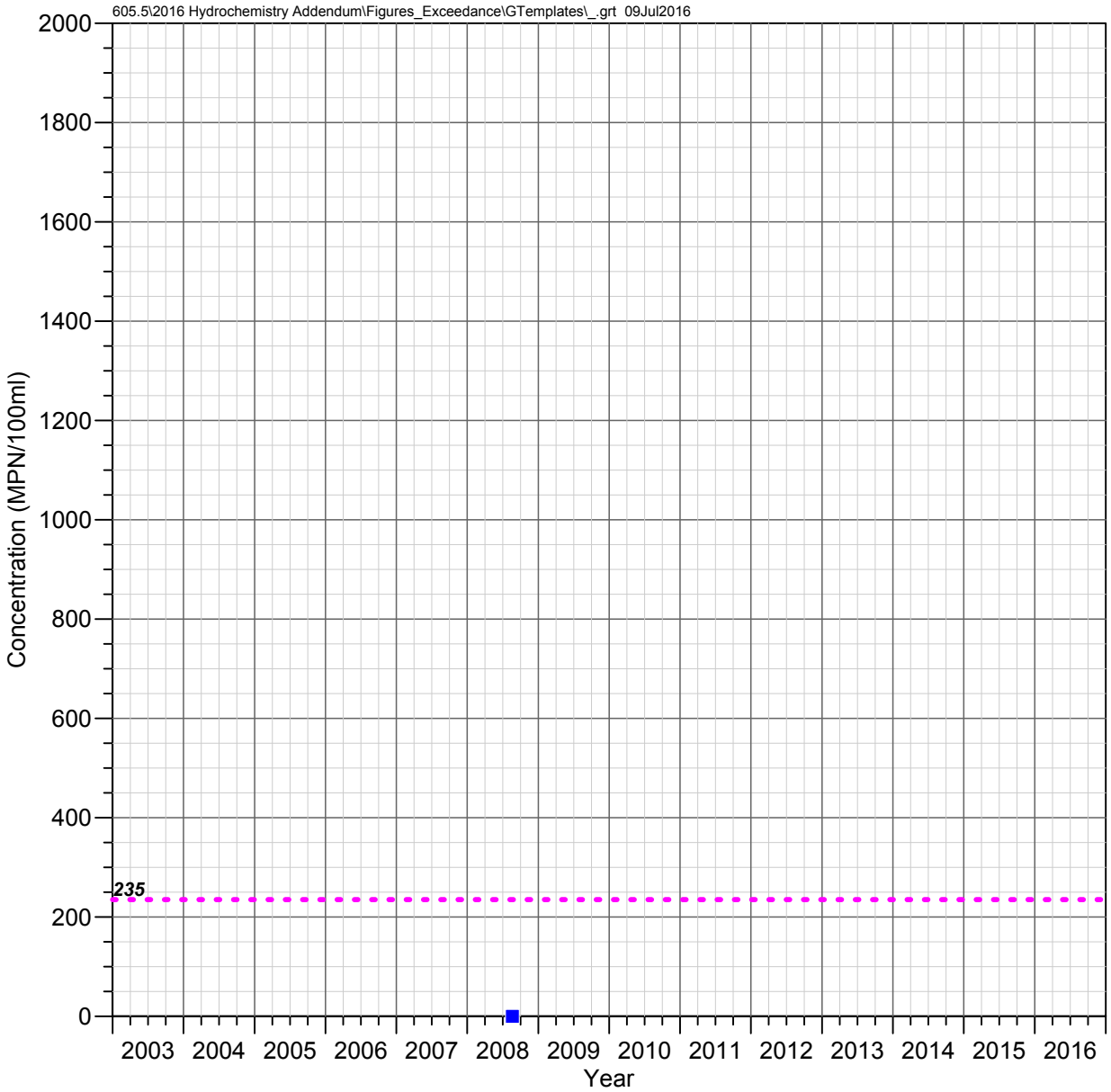


FIGURE F-347. E. COLI CONCENTRATIONS OBSERVED AT DC 6.6 W (DCT 6.6 W), DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.14 C
Devils Canyon Watershed

E. COLI

Observed Concentrations
*Value shown at the reported detection limit

- Total, Detected Value
- Total, Below Detection Limit*

Water Quality Standards
UNS = Unspecified filter analysis
AZ Full Body Contact (UNS, 235 MPN/100ml*)

*MPN/100ml = Most Probable Number per 100 milliliters

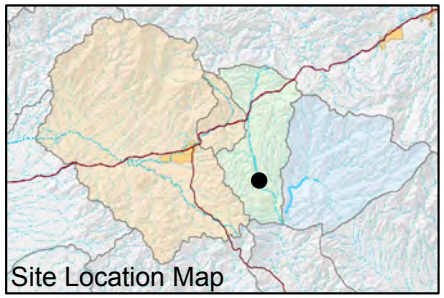
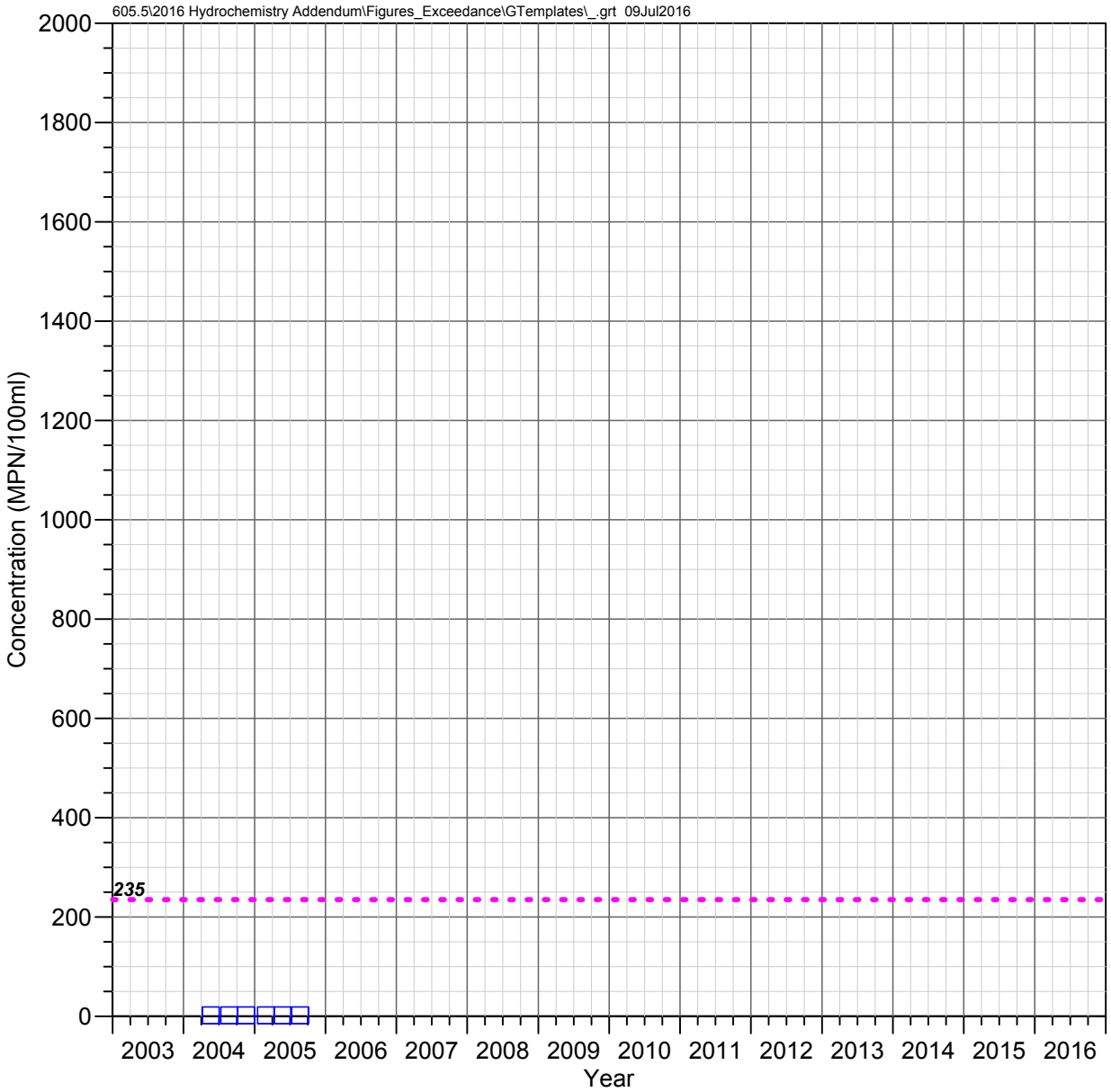


FIGURE F-348. E. COLI CONCENTRATIONS OBSERVED AT DC 6.14 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.1 E
Devils Canyon Watershed

E. COLI

Observed Concentrations
*Value shown at the reported detection limit

- Total, Detected Value
- Total, Below Detection Limit*

Water Quality Standards
UNS = Unspecified filter analysis
- - - - AZ Full Body Contact (UNS, 235 MPN/100ml*)

*MPN/100ml = Most Probable Number per 100 milliliters

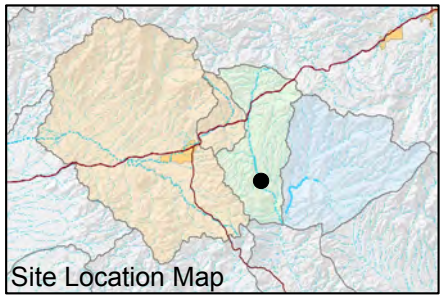
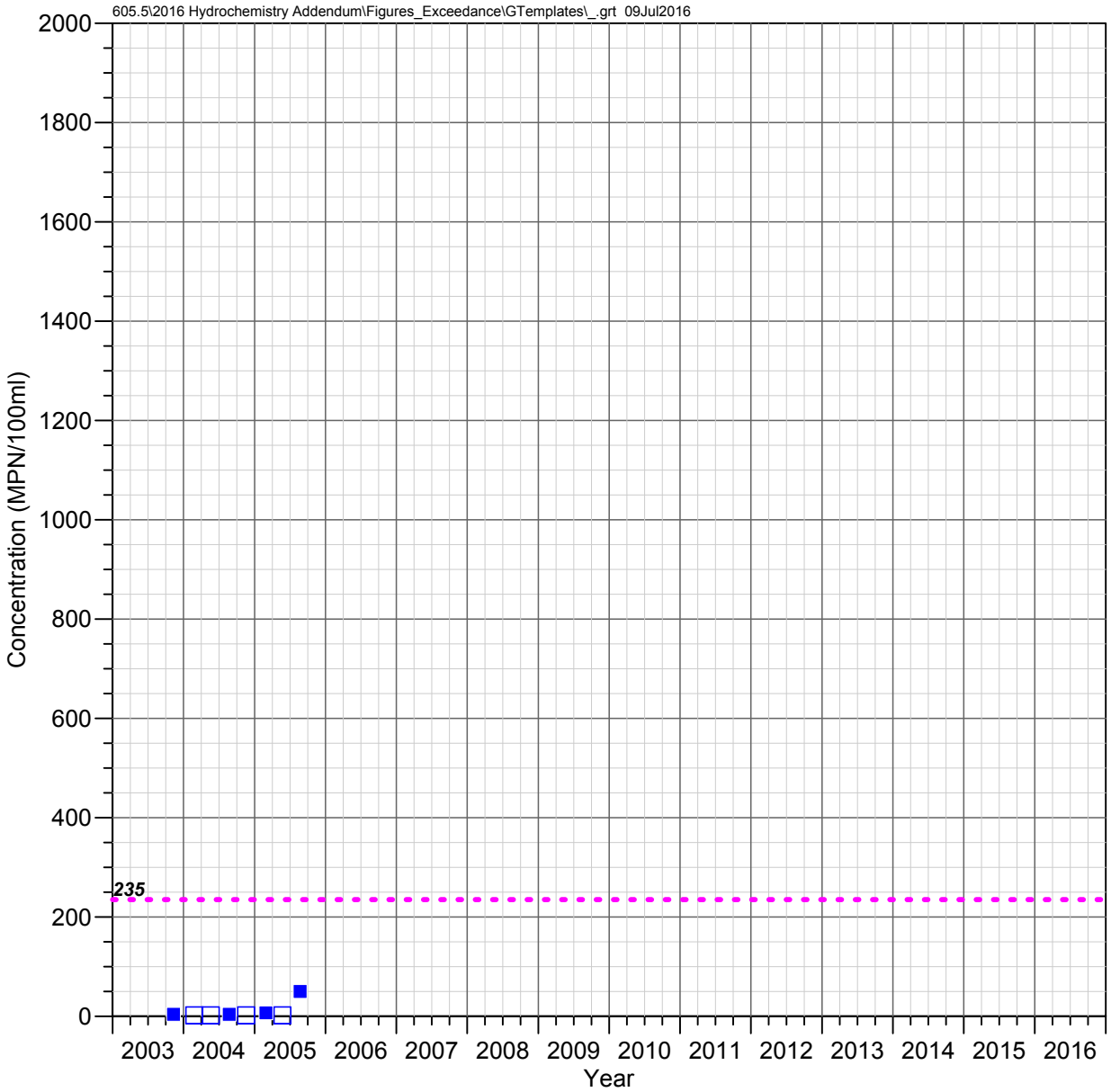


FIGURE F-349. E. COLI CONCENTRATIONS OBSERVED AT DC 6.1 E, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 5.5 C
Devils Canyon Watershed

E. COLI

Observed Concentrations
*Value shown at the reported detection limit

- Total, Detected Value
- Total, Below Detection Limit*

Water Quality Standards
UNS = Unspecified filter analysis
- - - - AZ Full Body Contact (UNS, 235 MPN/100ml*)

*MPN/100ml = Most Probable Number per 100 milliliters

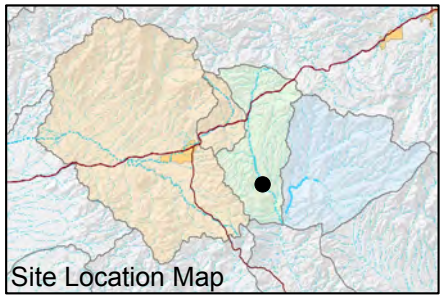
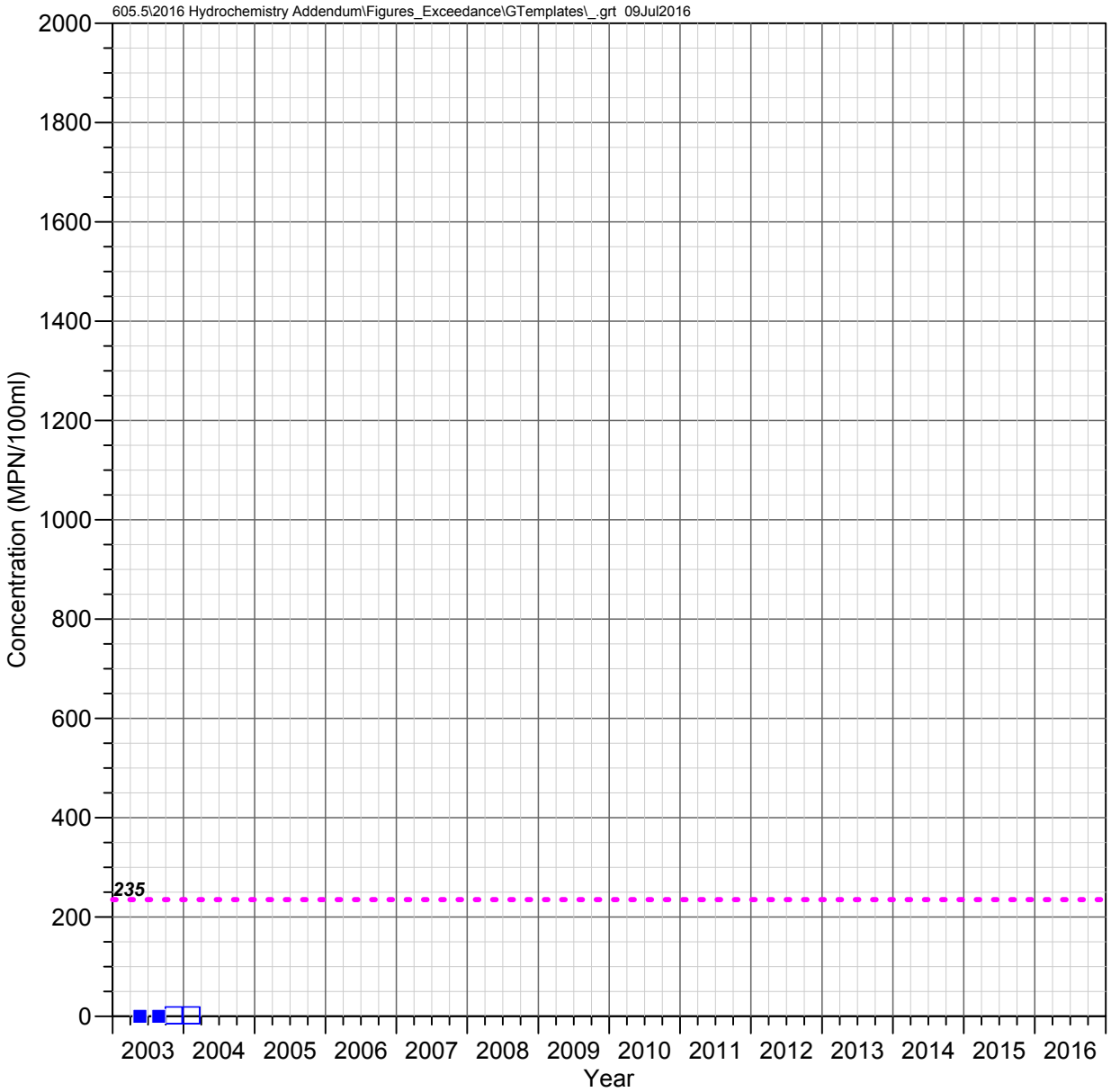


FIGURE F-350. E. COLI CONCENTRATIONS OBSERVED AT DC 5.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 4.1 E
Devils Canyon Watershed

E. COLI

Observed Concentrations
*Value shown at the reported detection limit

- Total, Detected Value
- Total, Below Detection Limit*

Water Quality Standards
UNS = Unspecified filter analysis
- - - - AZ Full Body Contact (UNS, 235 MPN/100ml*)

*MPN/100ml = Most Probable Number per 100 milliliters

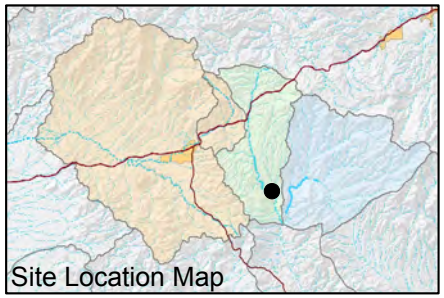
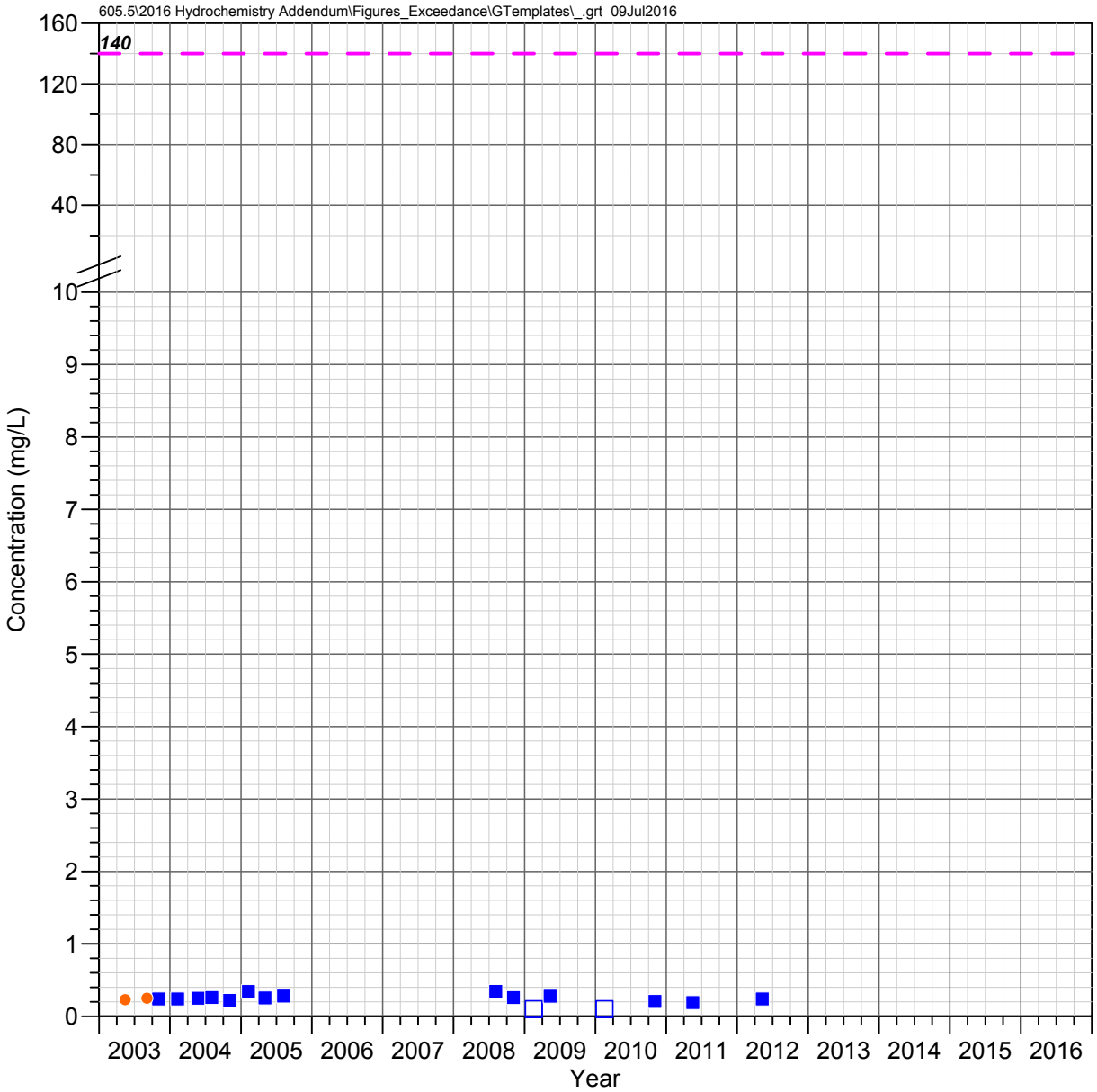


FIGURE F-351. E. COLI CONCENTRATIONS OBSERVED AT DC 4.1 E, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Pump Station Spring (QC 30.7 C)
Queen Creek Watershed

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — AZ Partial Body Contact (UNS, 140 mg/L)

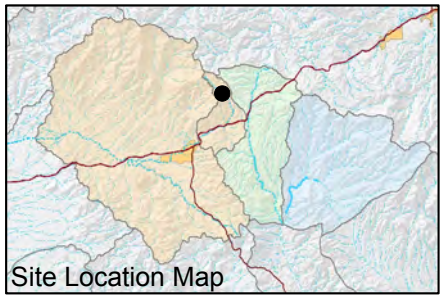
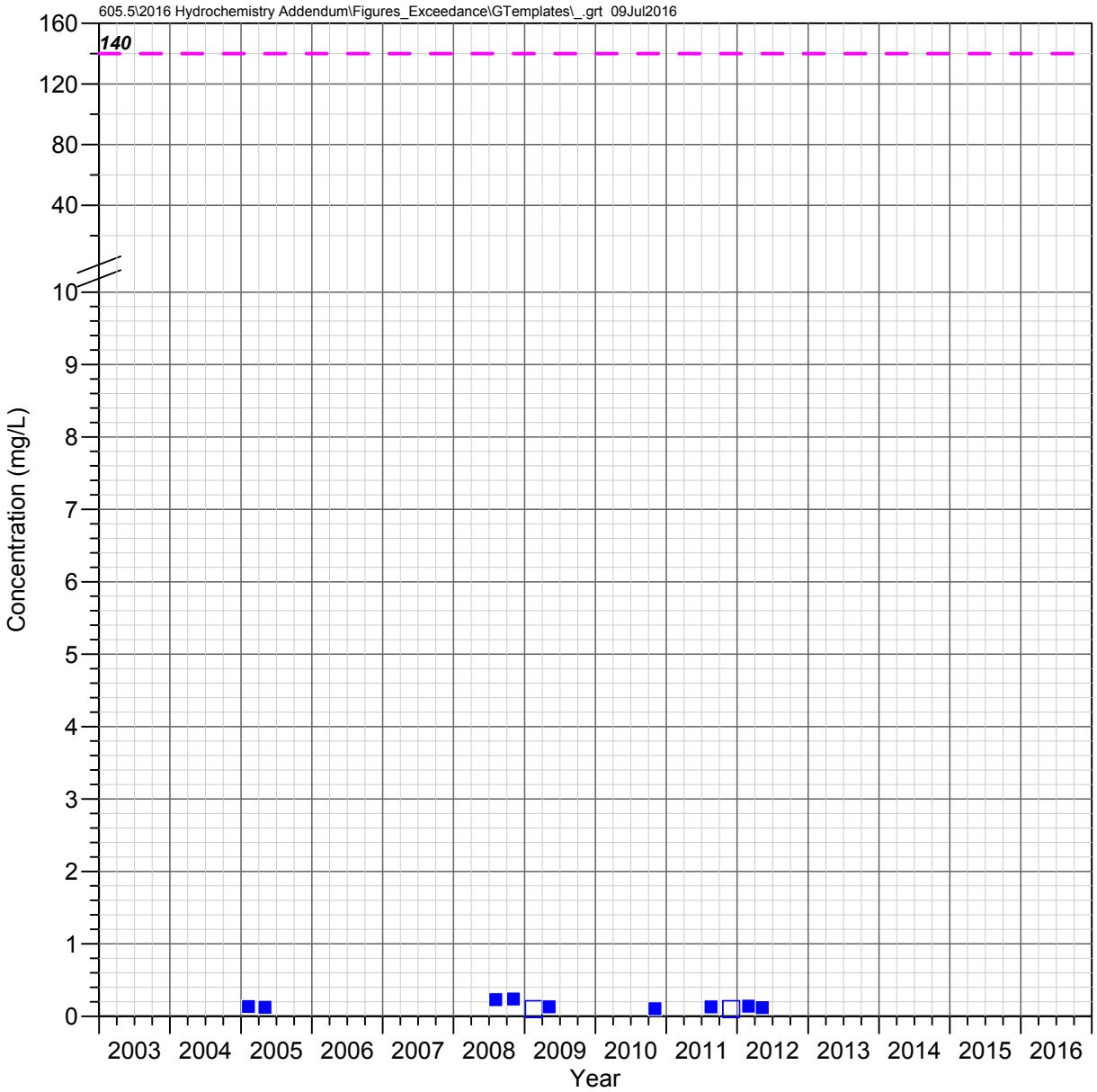


FIGURE F-352. FLUORIDE CONCENTRATIONS OBSERVED AT PUMP STATION SPRING (QC 30.7 C), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 27.3 C
Queen Creek Watershed

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Partial Body Contact (UNS, 140 mg/L)

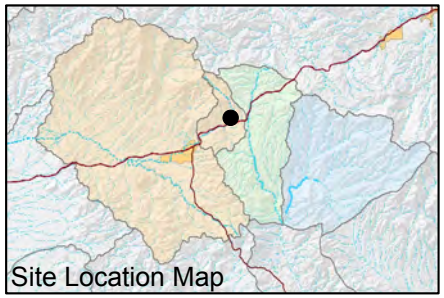
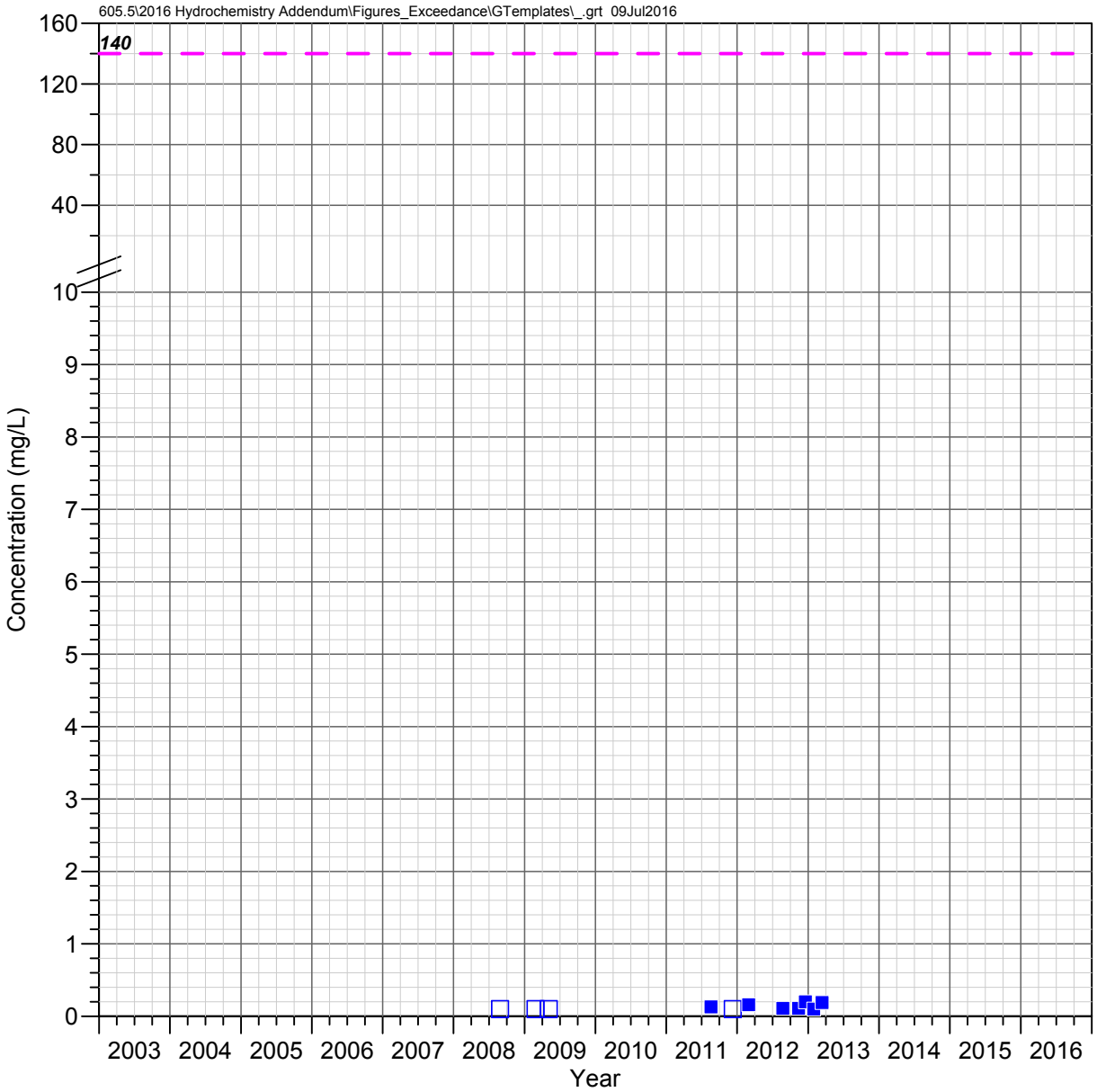


FIGURE F-353. FLUORIDE CONCENTRATIONS OBSERVED AT QC 27.3 C, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Oak Flat Wash
Queen Creek Watershed

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — AZ Partial Body Contact (UNS, 140 mg/L)

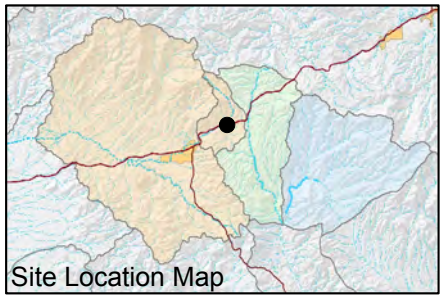
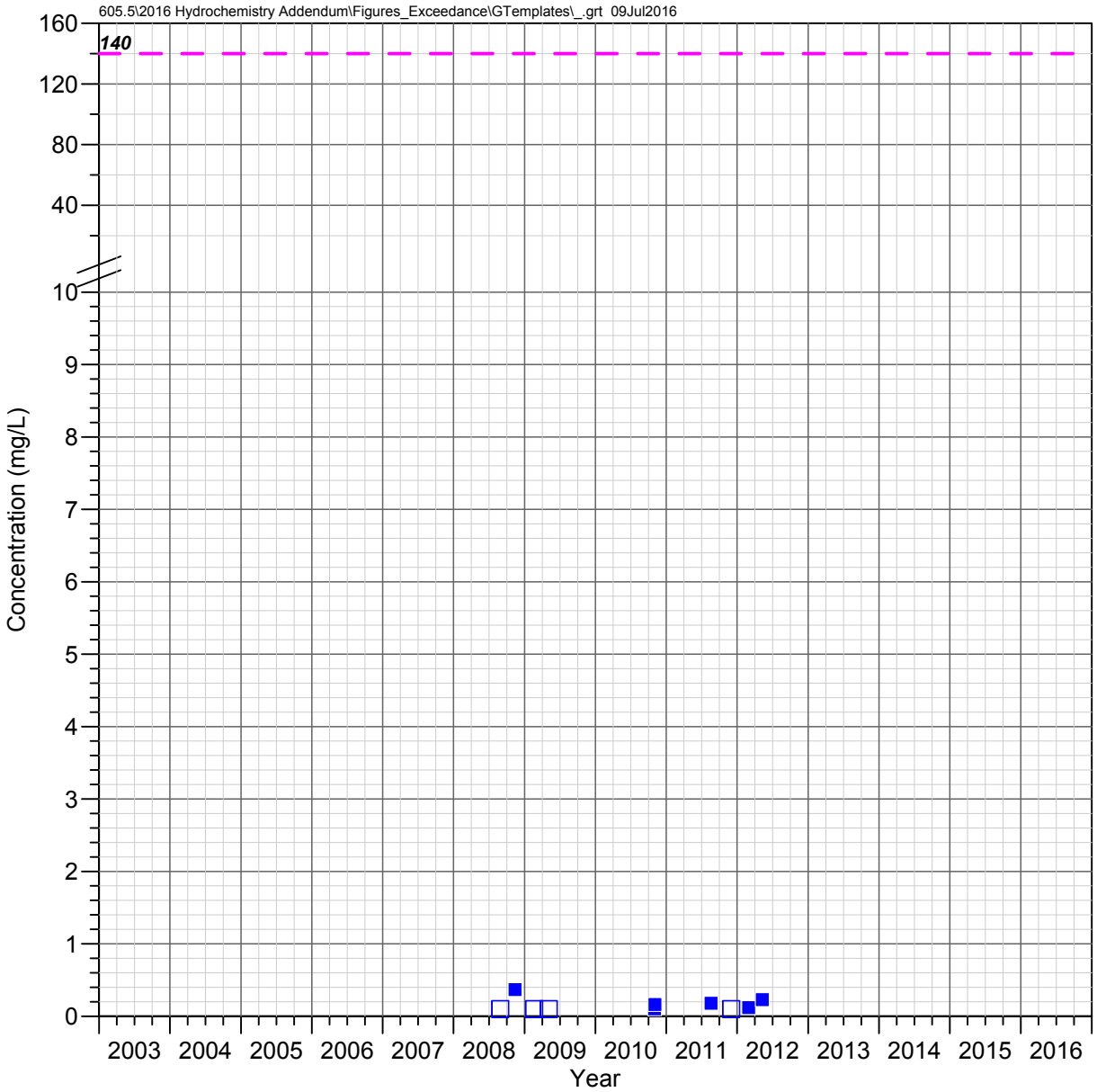


FIGURE F-354. FLUORIDE CONCENTRATIONS OBSERVED AT OAK FLAT WASH, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Number 9 Wash
Queen Creek Watershed

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — AZ Partial Body Contact (UNS, 140 mg/L)

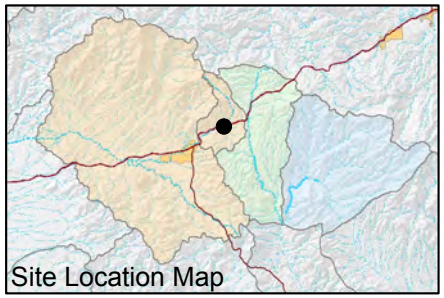
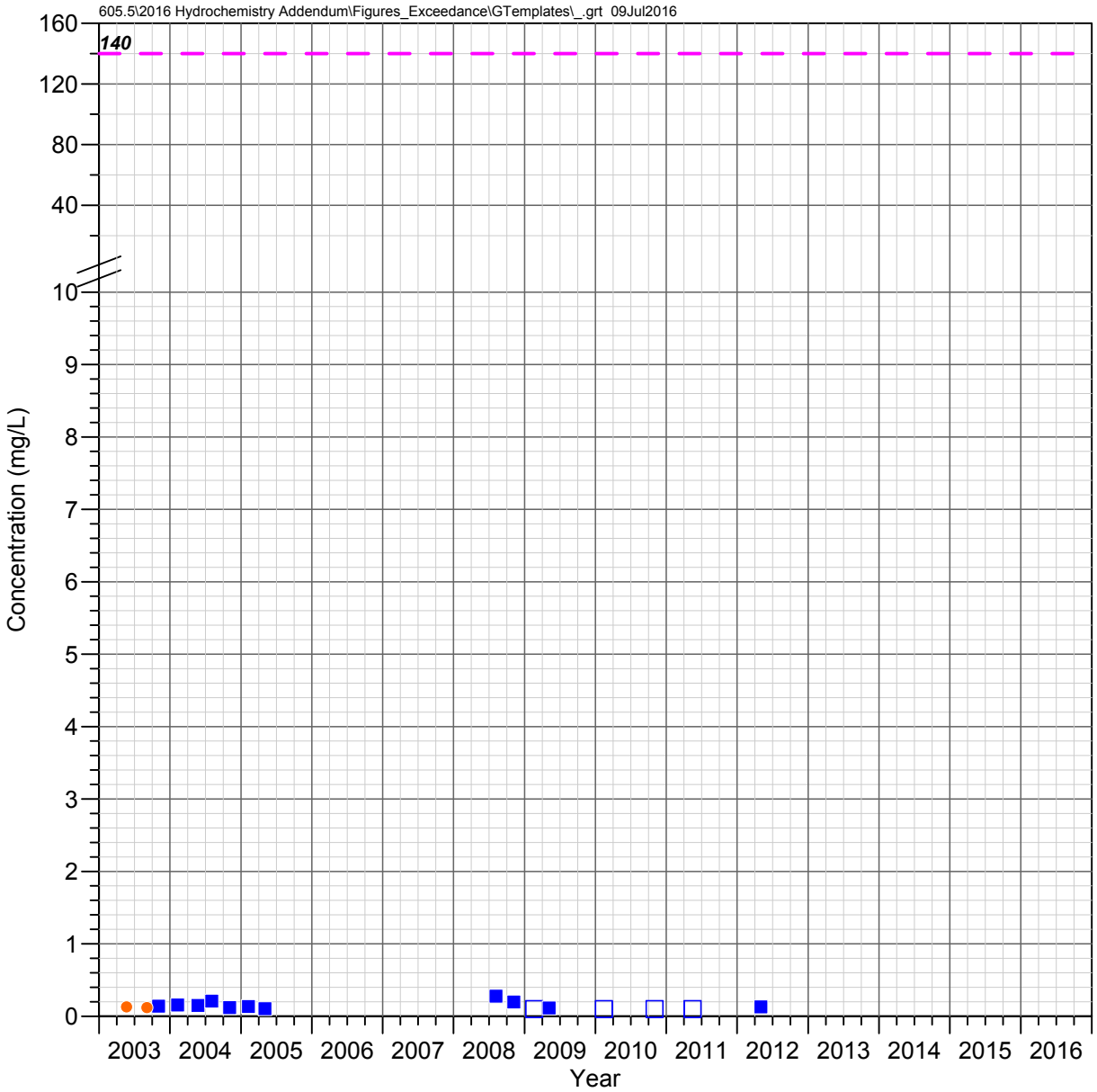


FIGURE F-355. FLUORIDE CONCENTRATIONS OBSERVED AT NUMBER 9 WASH, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Boulder Hole (QC 23.6 C)
Queen Creek Watershed

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — AZ Partial Body Contact (UNS, 140 mg/L)

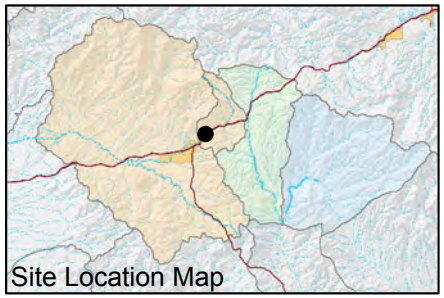
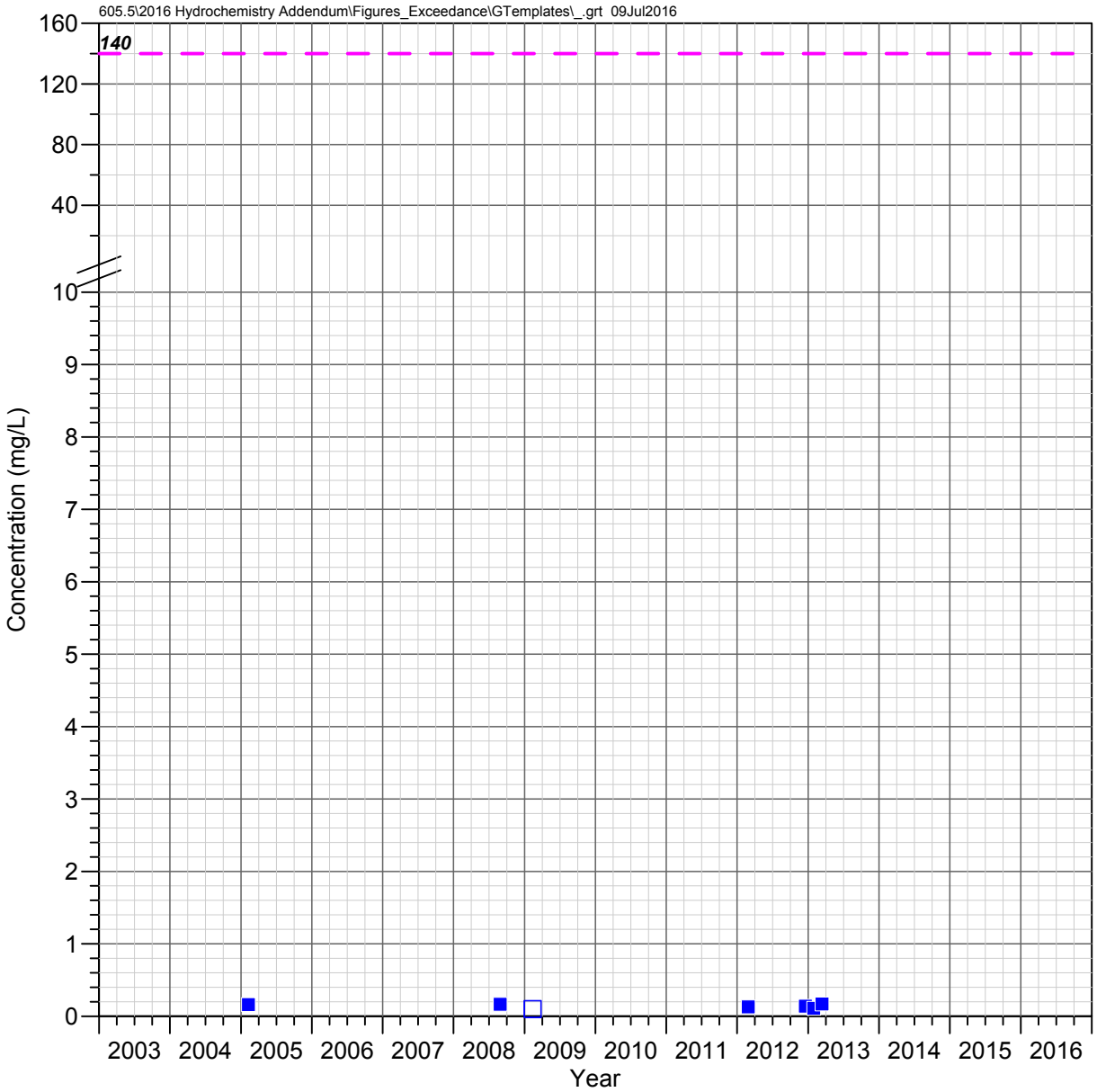


FIGURE F-356. FLUORIDE CONCENTRATIONS OBSERVED AT BOULDER HOLE (QC 23.6 C), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 22.6 E (Karst Spring)
Queen Creek Watershed

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — AZ Partial Body Contact (UNS, 140 mg/L)

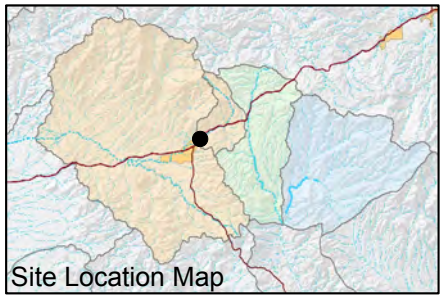
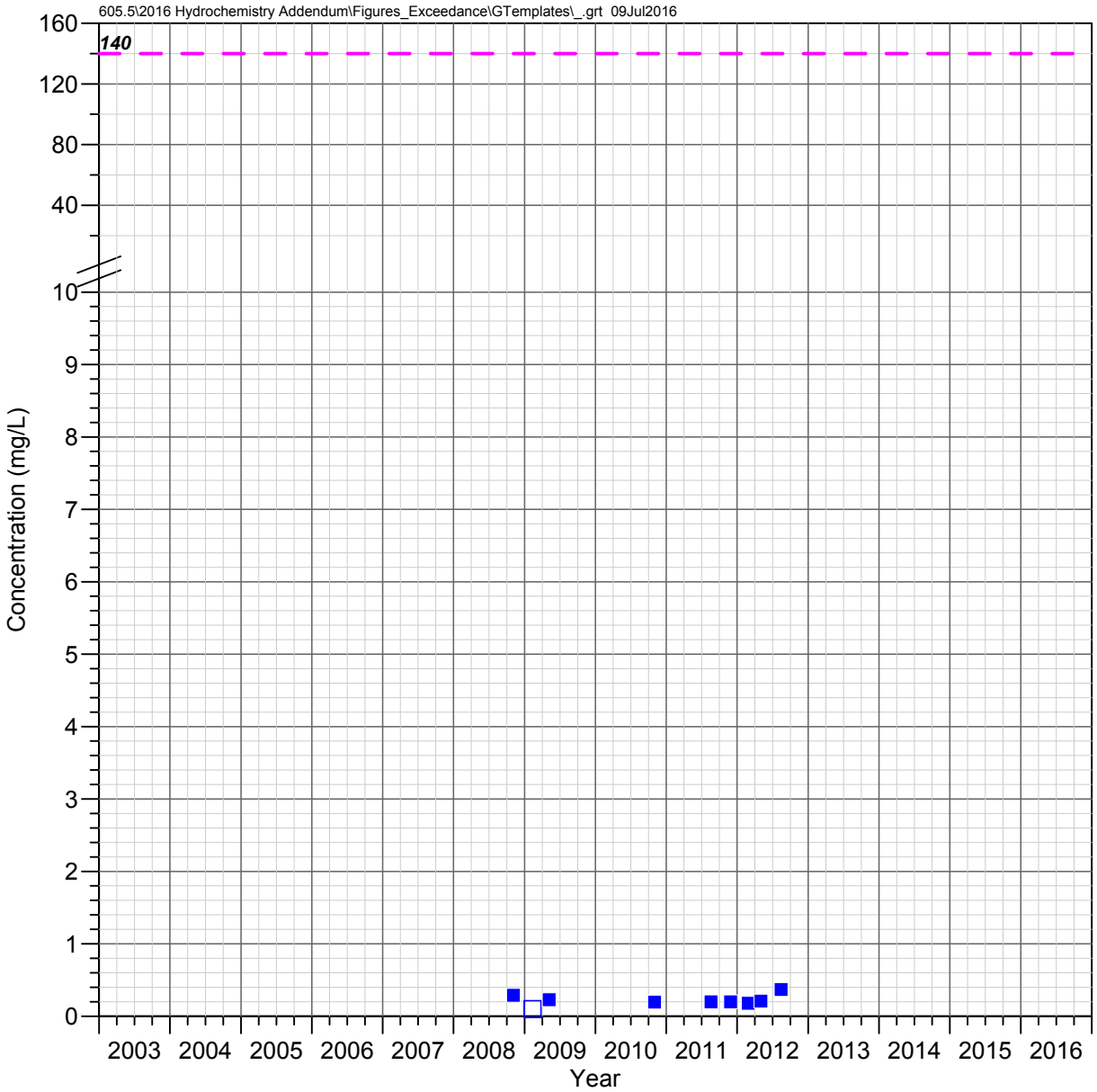


FIGURE F-357. FLUORIDE CONCENTRATIONS OBSERVED AT QC 22.6 E (KARST SPRING), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 21.7 C (Magma Avenue)
Queen Creek Watershed

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — AZ Partial Body Contact (UNS, 140 mg/L)

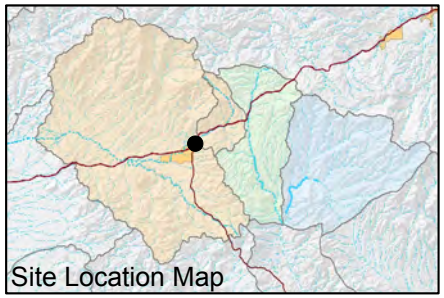
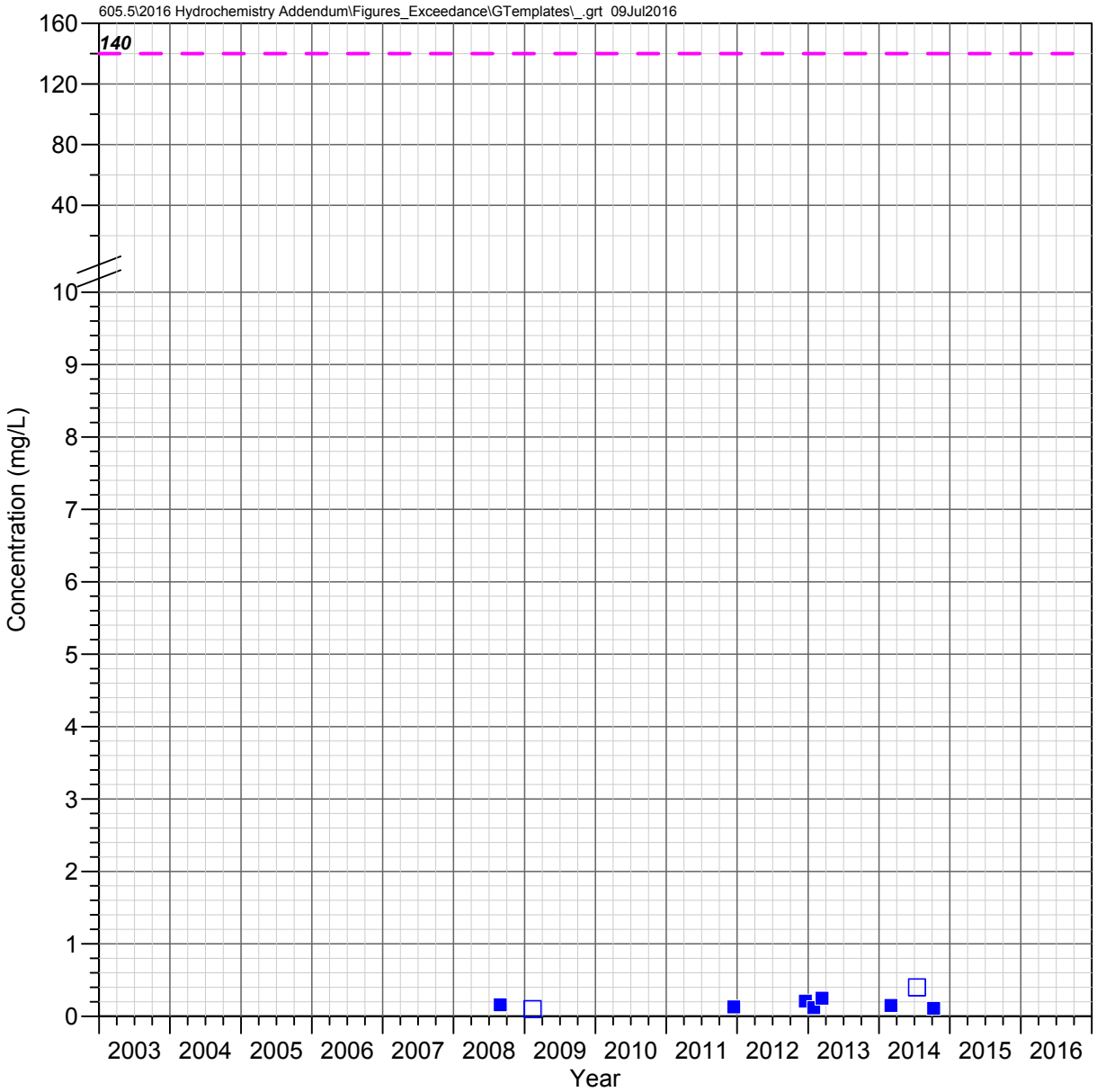


FIGURE F-358. FLUORIDE CONCENTRATIONS OBSERVED AT QC 21.7 C (MAGMA AVENUE), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 19.7 C
Queen Creek Watershed

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Partial Body Contact (UNS, 140 mg/L)

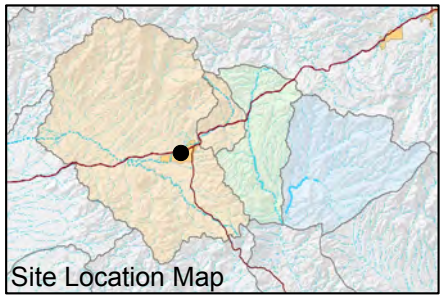
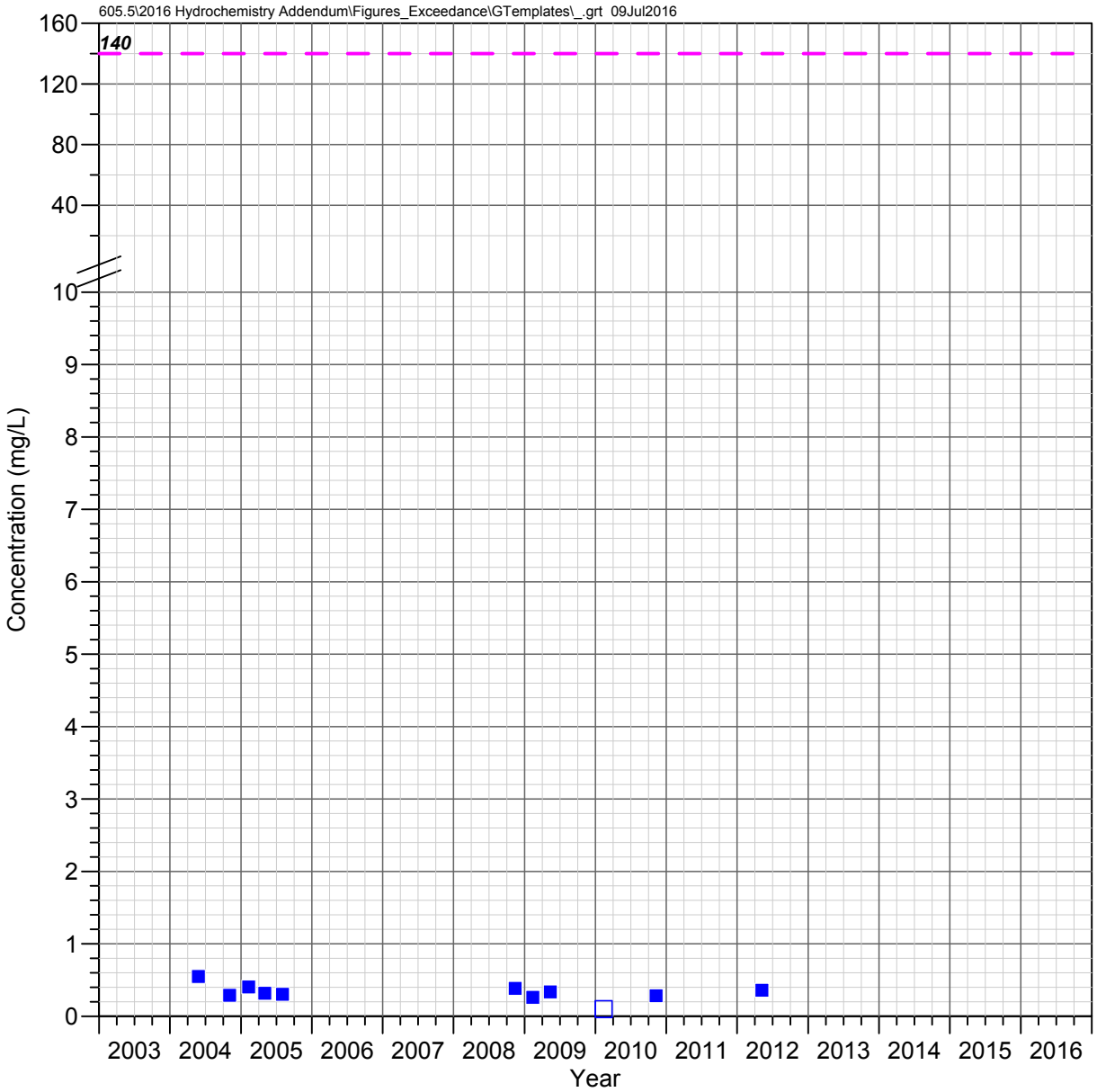


FIGURE F-359. FLUORIDE CONCENTRATIONS OBSERVED AT QC 19.7 C, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Bored Spring
Queen Creek Watershed

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — AZ Partial Body Contact (UNS, 140 mg/L)

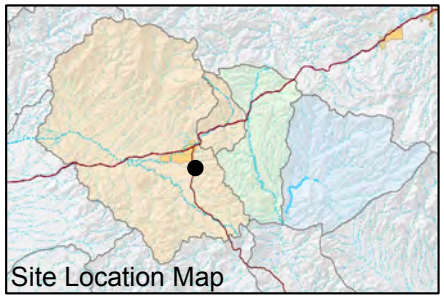
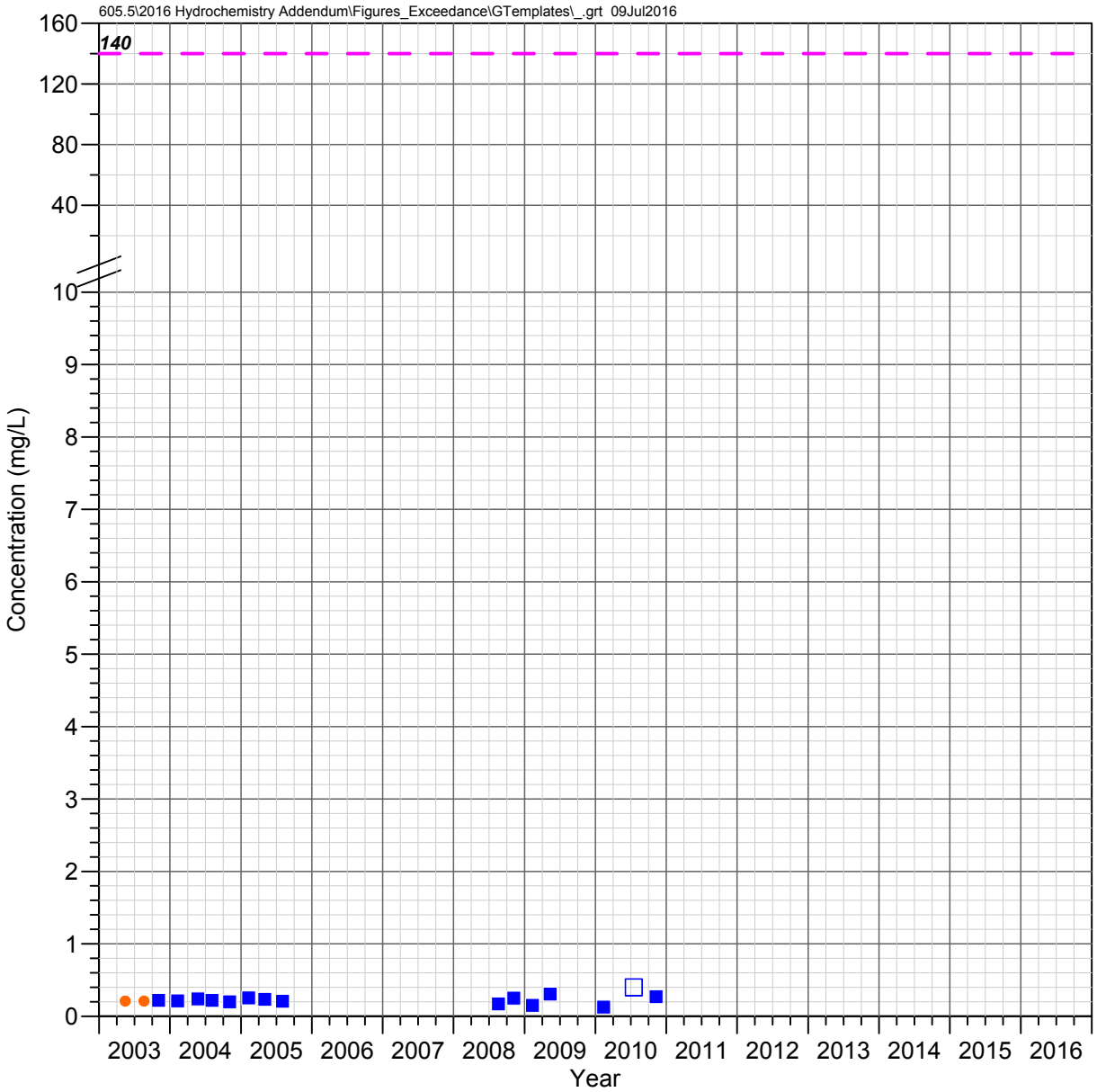


FIGURE F-360. FLUORIDE CONCENTRATIONS OBSERVED AT BORED SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Hidden Spring
Queen Creek Watershed

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — AZ Partial Body Contact (UNS, 140 mg/L)

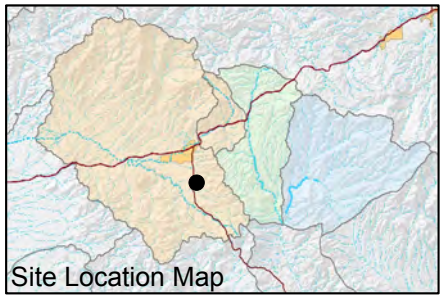
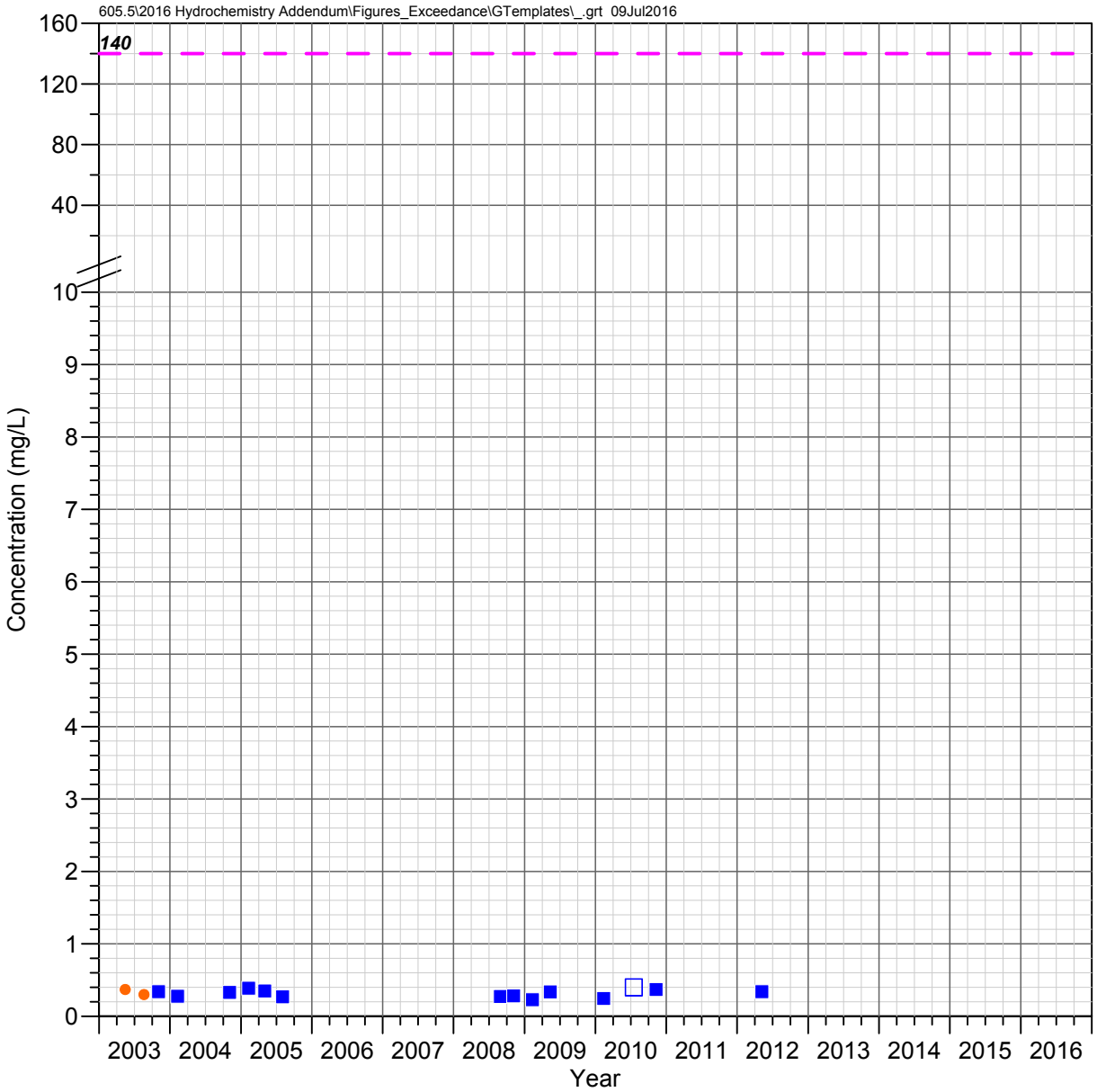


FIGURE F-361. FLUORIDE CONCENTRATIONS OBSERVED AT HIDDEN SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Kane Spring
Queen Creek Watershed

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — AZ Partial Body Contact (UNS, 140 mg/L)

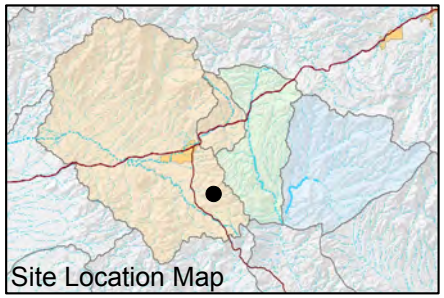
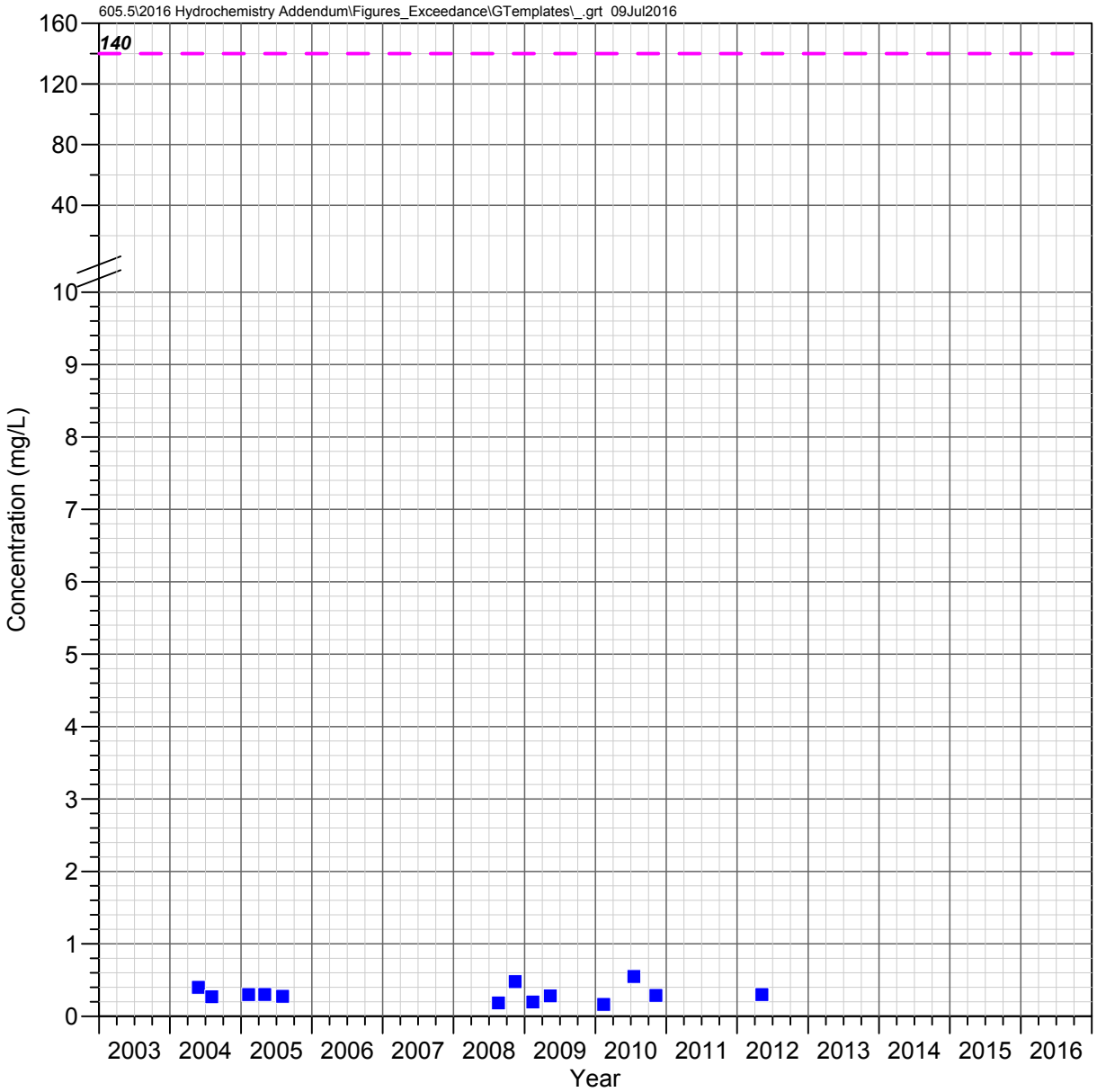


FIGURE F-362. FLUORIDE CONCENTRATIONS OBSERVED AT KANE SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Blue Spring
Queen Creek Watershed

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — AZ Partial Body Contact (UNS, 140 mg/L)

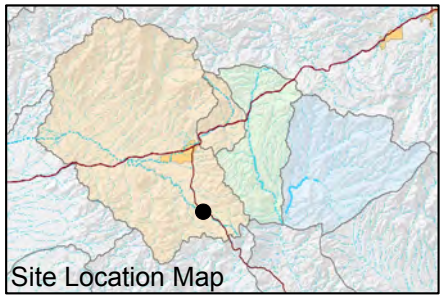
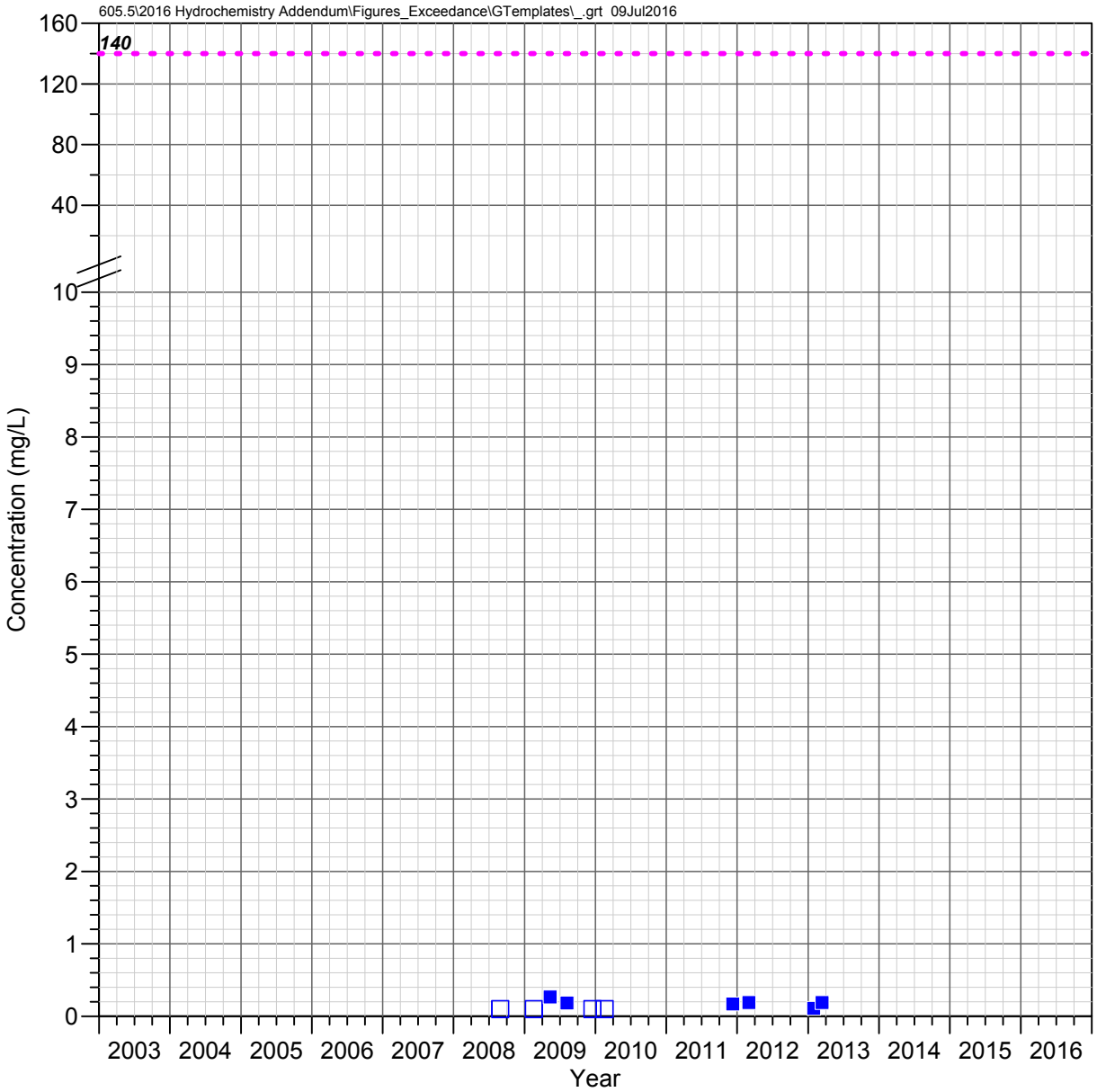


FIGURE F-363. FLUORIDE CONCENTRATIONS OBSERVED AT BLUE SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



IC 1.0 C
Devils Canyon Watershed

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 140 mg/L)

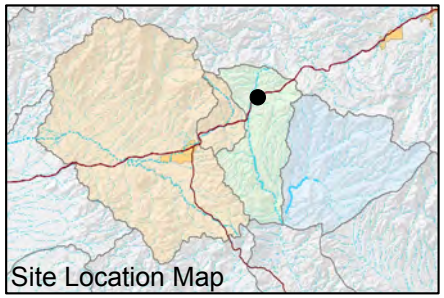
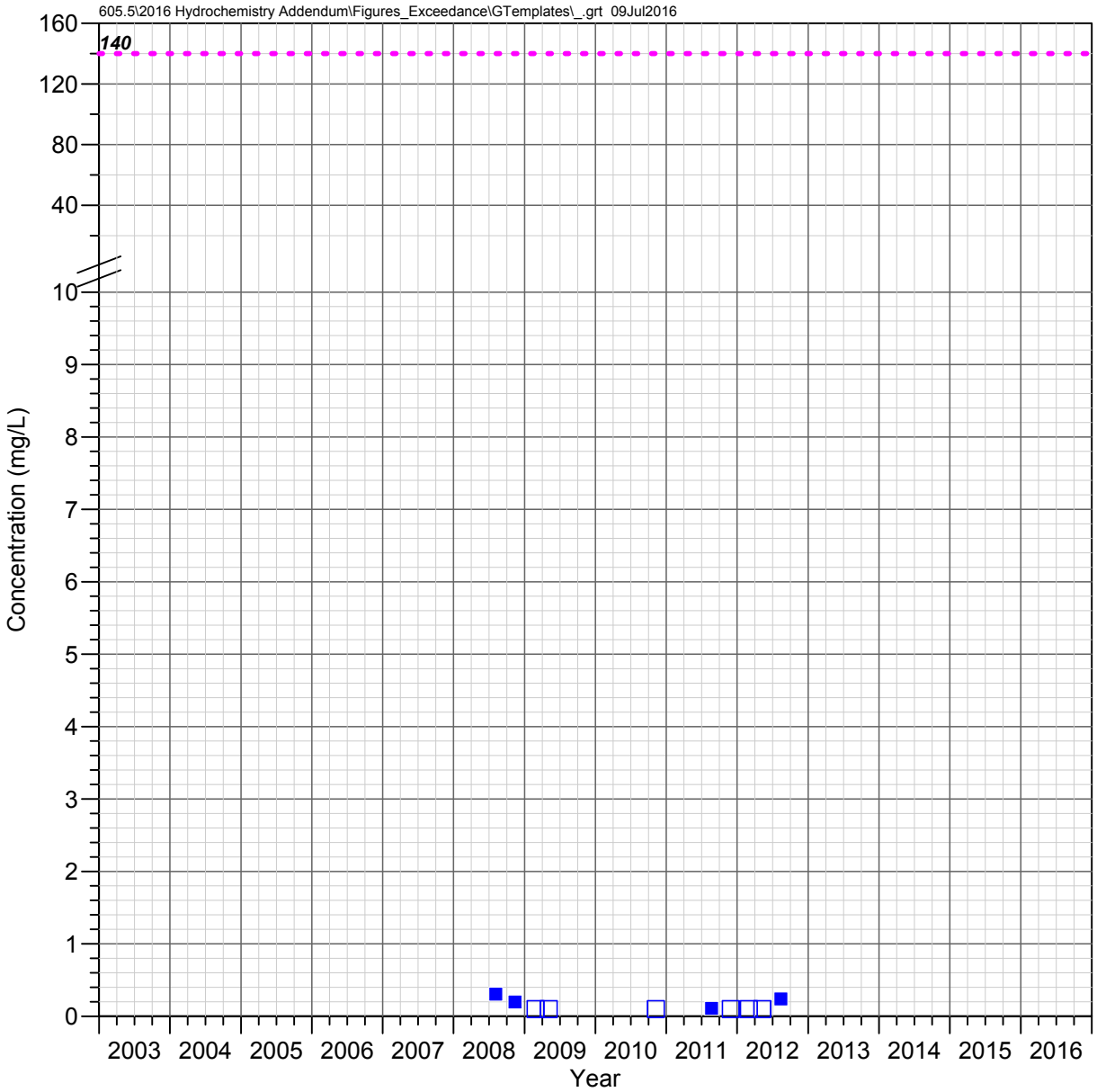


FIGURE F-364. FLUORIDE CONCENTRATIONS OBSERVED AT IC 1.0 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 15.5 C
Devils Canyon Watershed

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 140 mg/L)

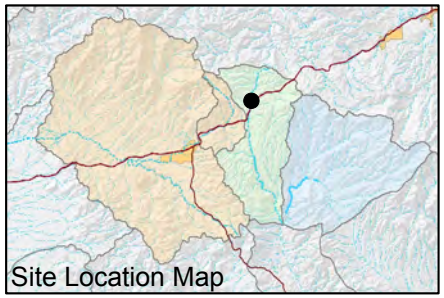
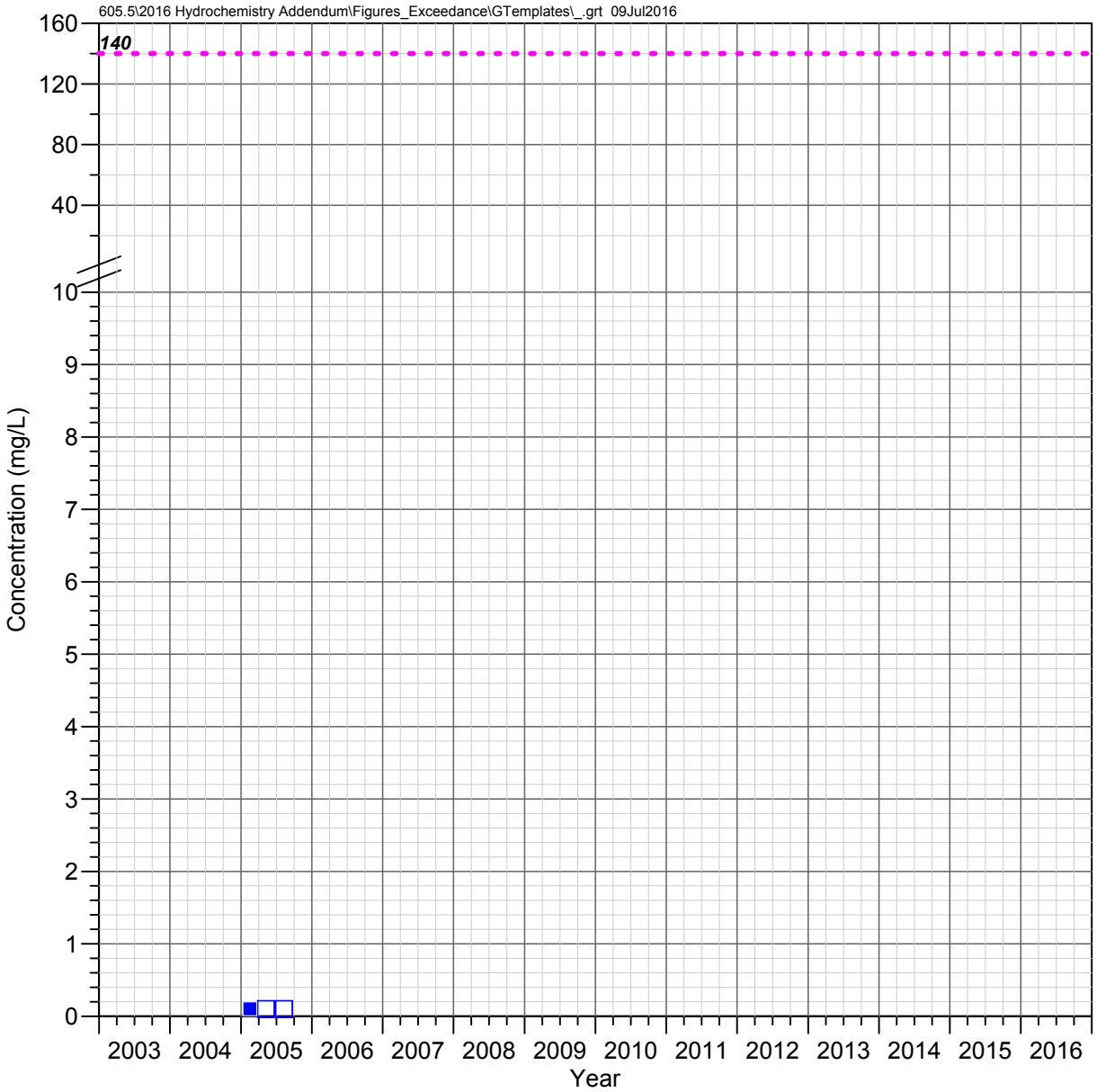


FIGURE F-365. FLUORIDE CONCENTRATIONS OBSERVED AT DC 15.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 15.2 C
Devils Canyon Watershed

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 140 mg/L)

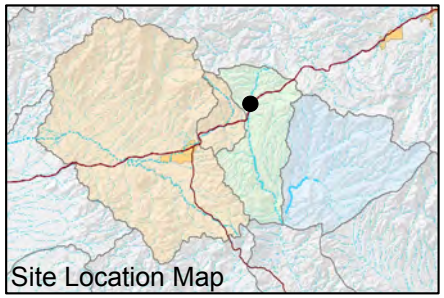
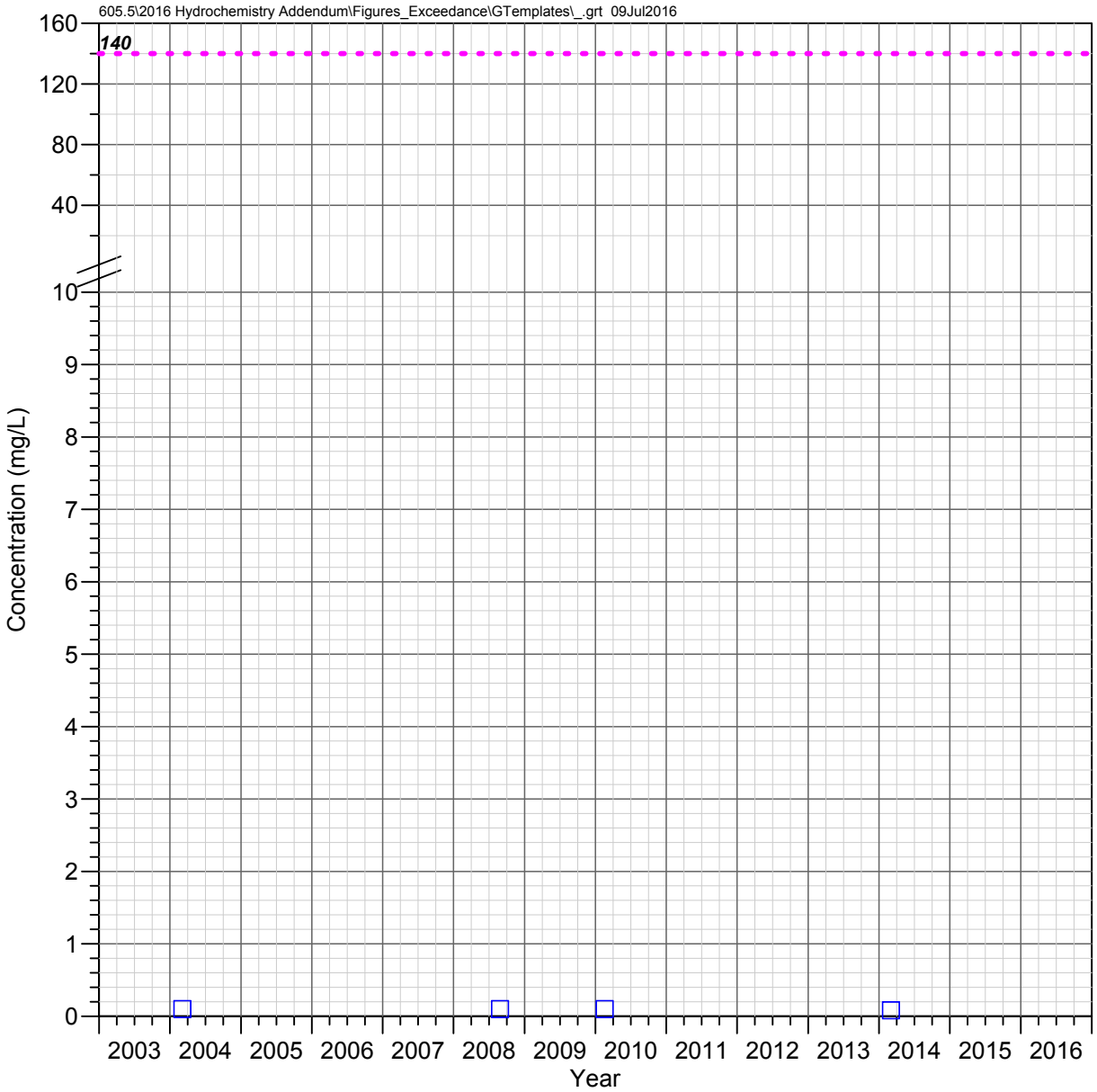


FIGURE F-366. FLUORIDE CONCENTRATIONS OBSERVED AT DC 15.2 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 14.7 C
Devils Canyon Watershed

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 140 mg/L)

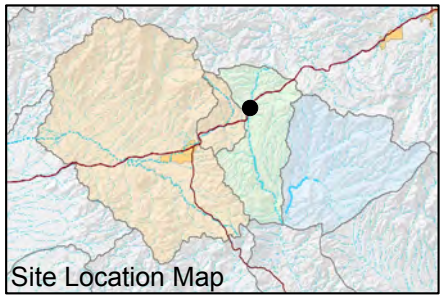
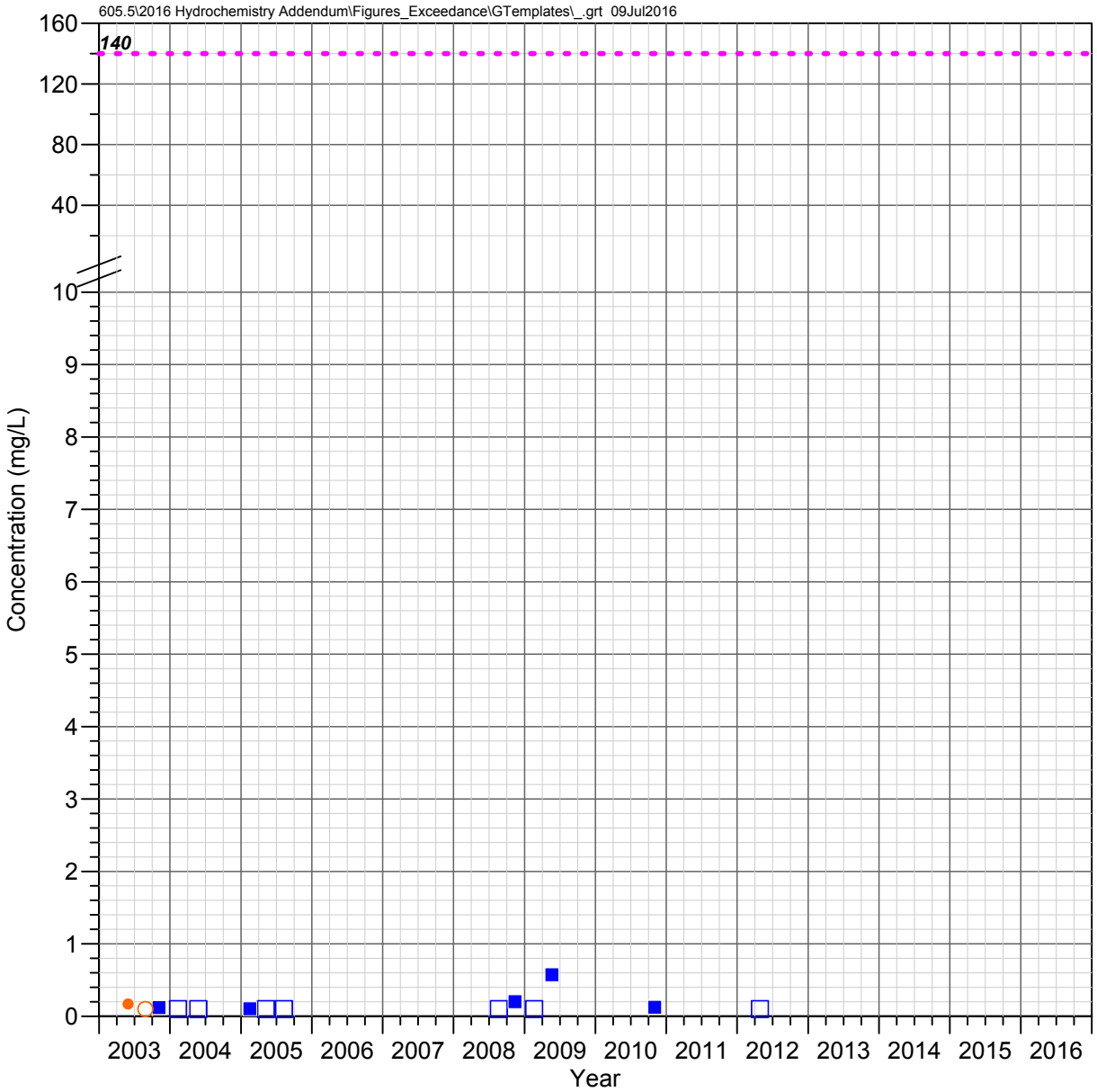


FIGURE F-367. FLUORIDE CONCENTRATIONS OBSERVED AT DC 14.7 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 13.5 C
Devils Canyon Watershed

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 140 mg/L)

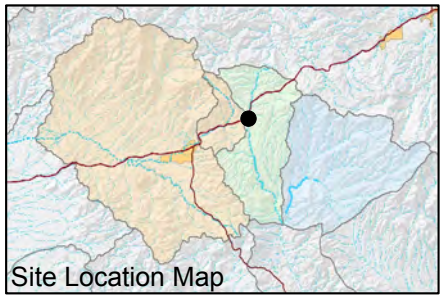
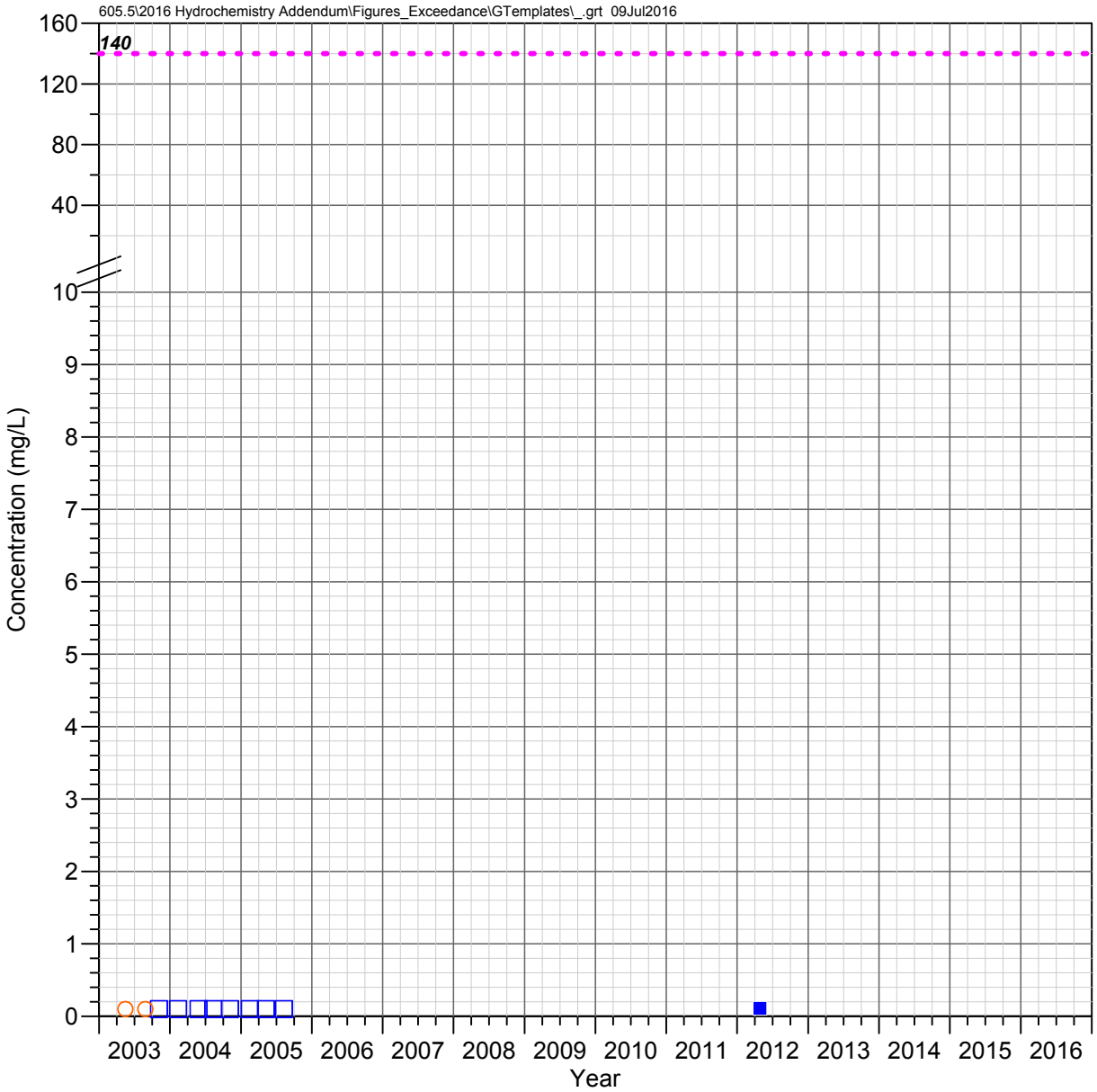


FIGURE F-368. FLUORIDE CONCENTRATIONS OBSERVED AT DC 13.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 10.9 C
Devils Canyon Watershed

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 140 mg/L)

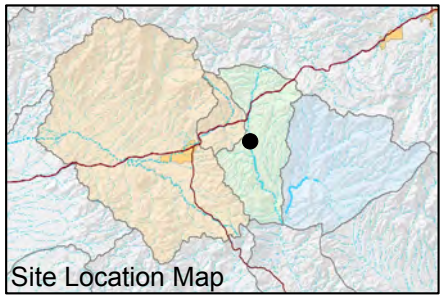
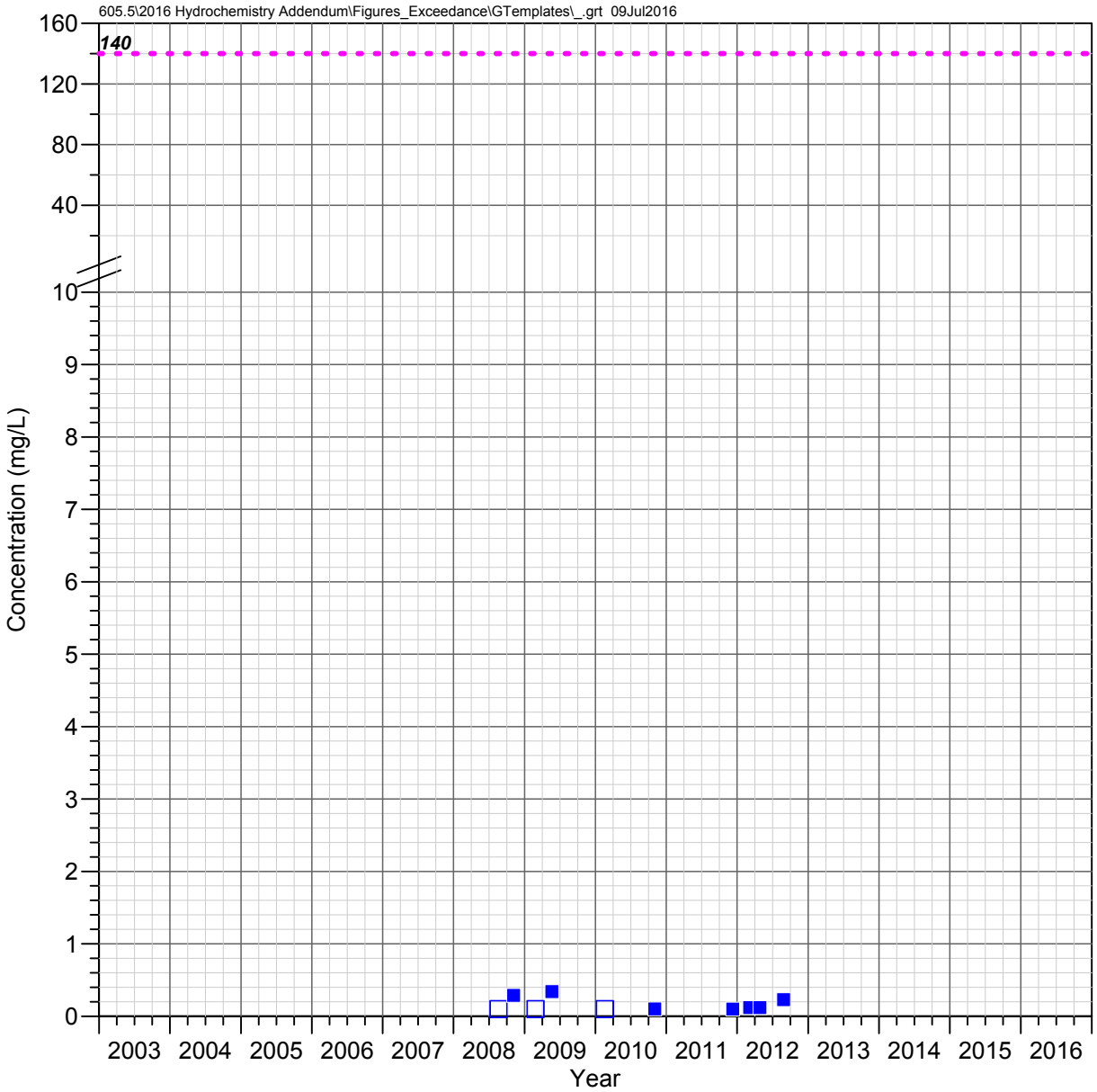


FIGURE F-369. FLUORIDE CONCENTRATIONS OBSERVED AT DC 10.9 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



RR 1.5 C
Devils Canyon Watershed

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 140 mg/L)

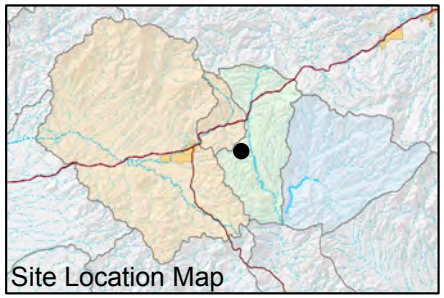
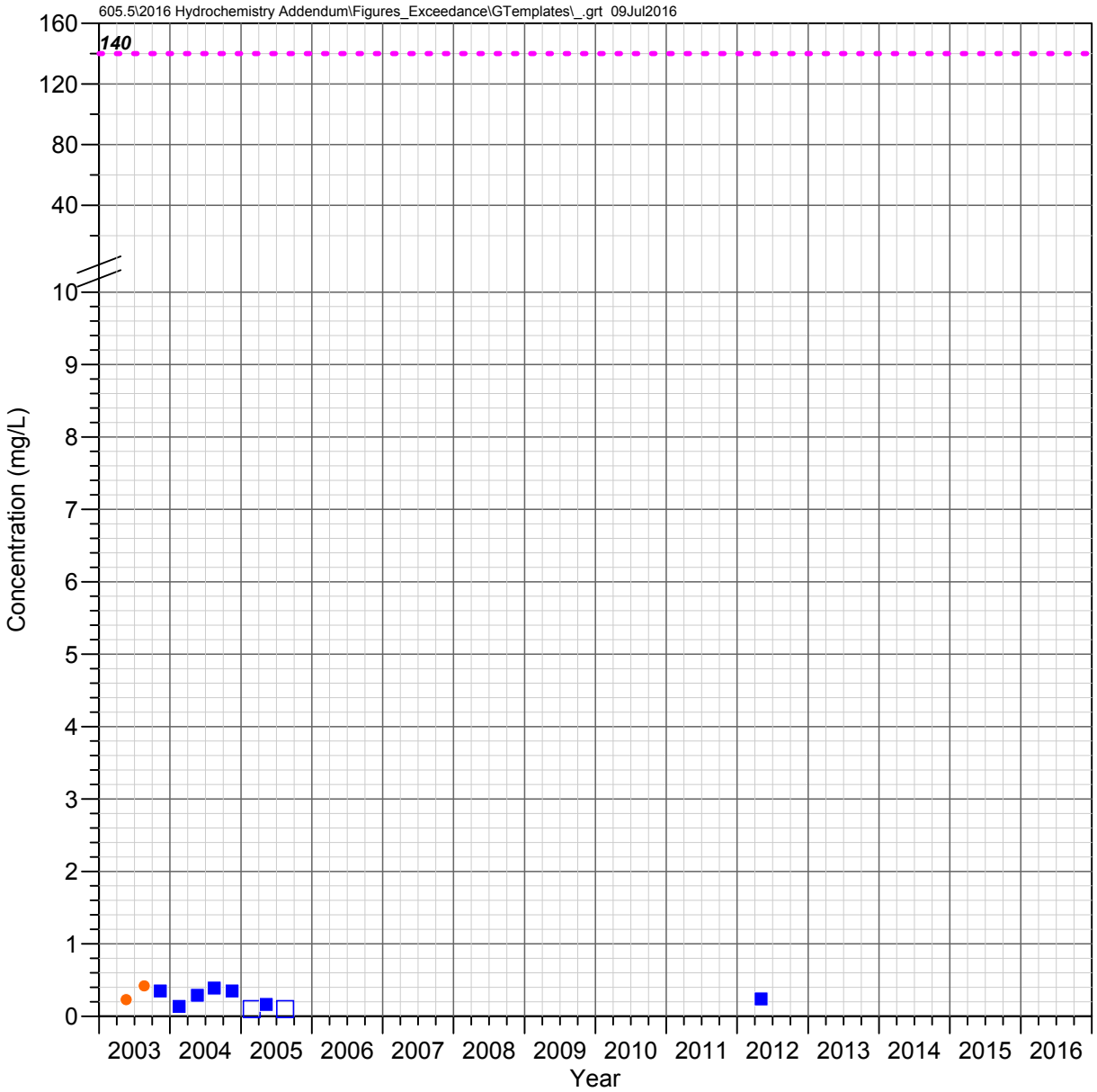


FIGURE F-370. FLUORIDE CONCENTRATIONS OBSERVED AT RR 1.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.8 C
Devils Canyon Watershed

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 140 mg/L)

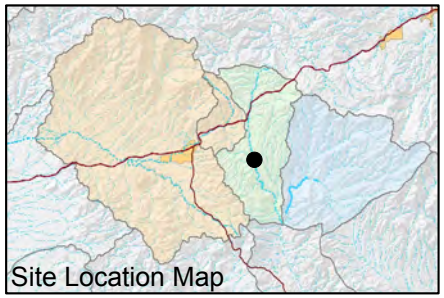
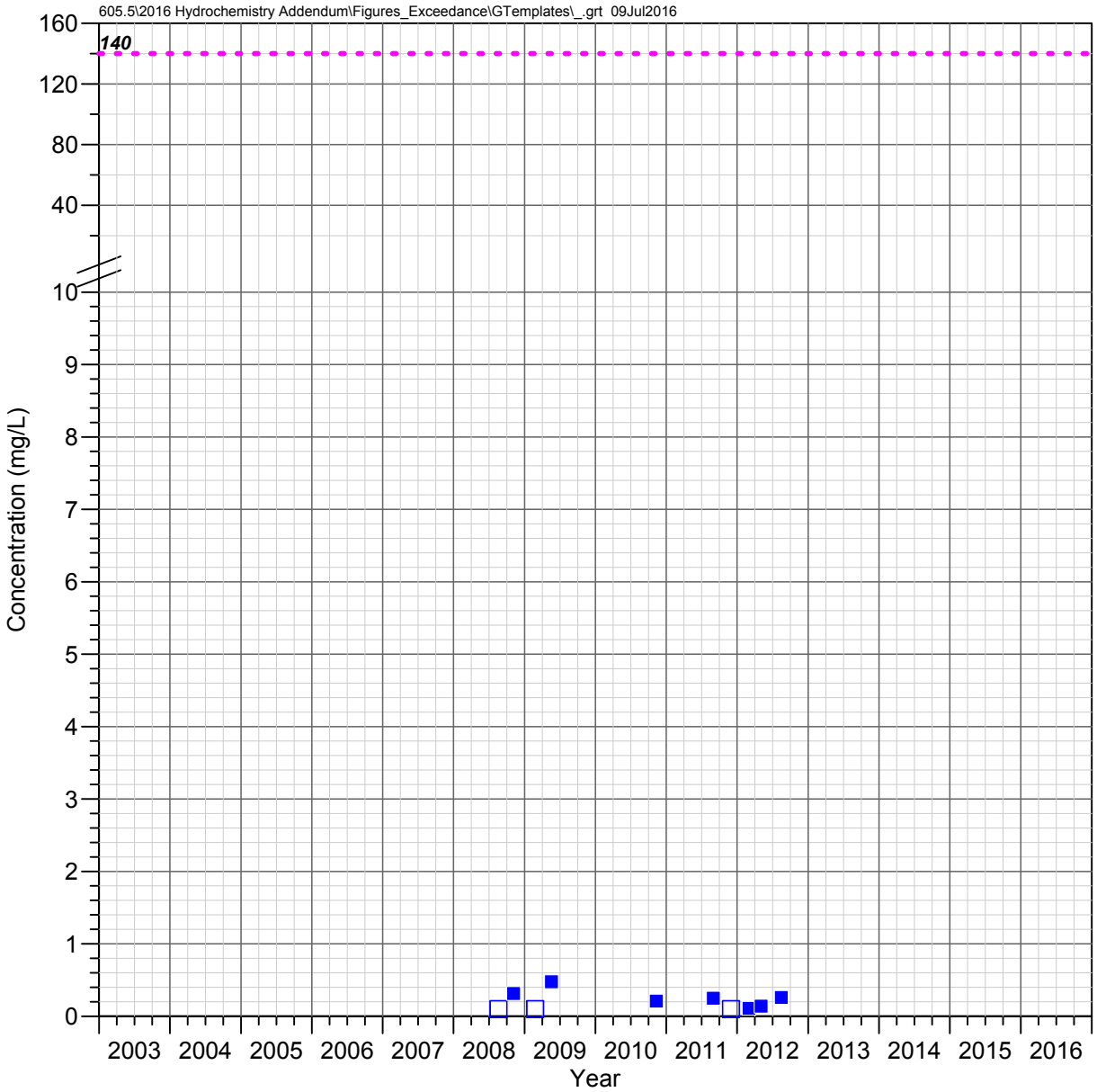


FIGURE F-371. FLUORIDE CONCENTRATIONS OBSERVED AT DC 8.8 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



H 0.1 C
Devils Canyon Watershed

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 140 mg/L)

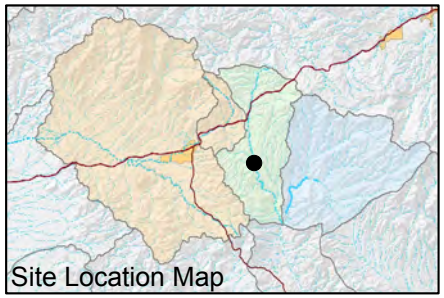
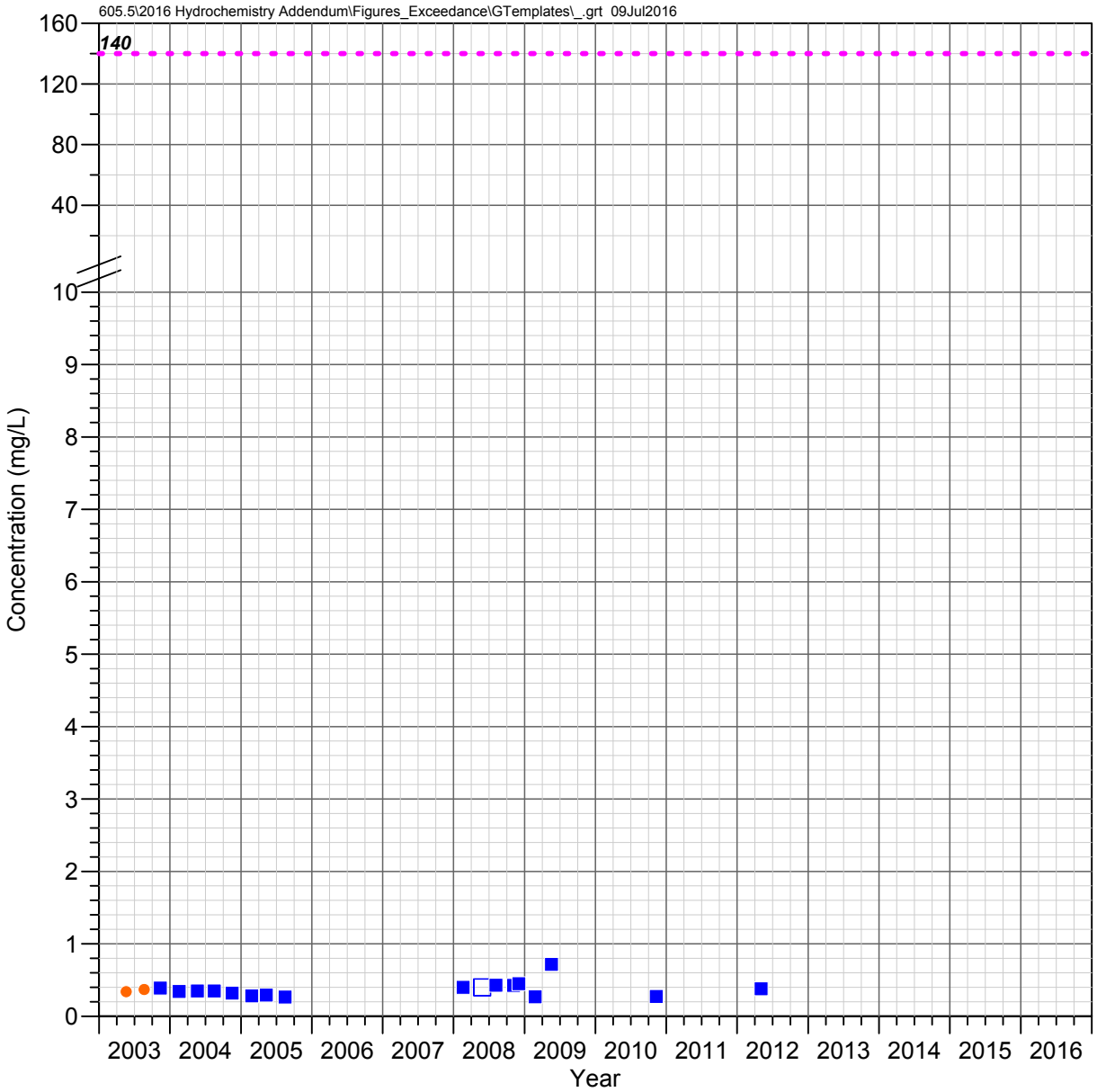


FIGURE F-372. FLUORIDE CONCENTRATIONS OBSERVED AT H 0.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.2 W
Devils Canyon Watershed

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 140 mg/L)

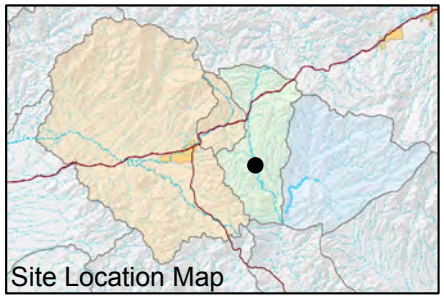
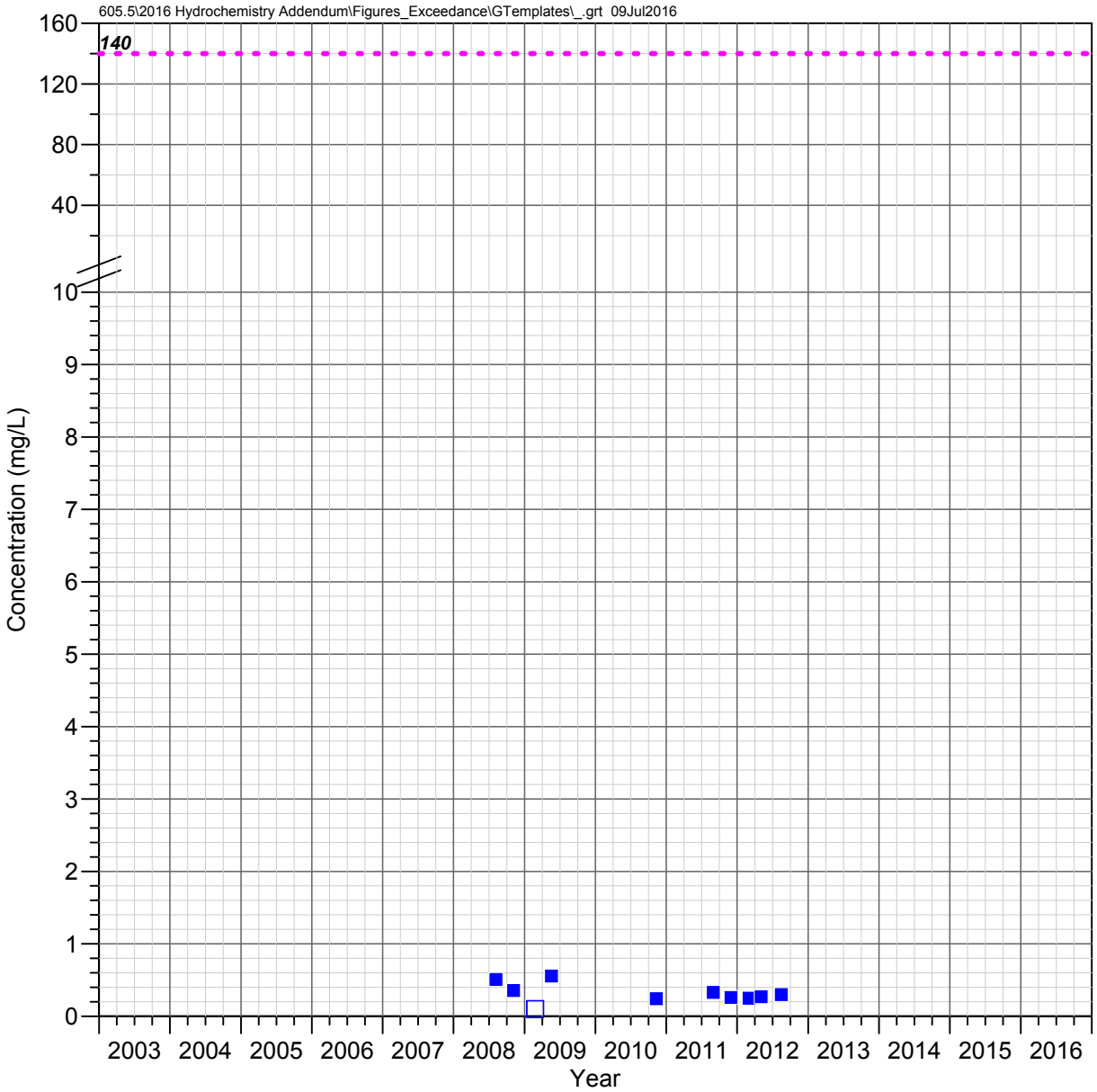


FIGURE F-373. FLUORIDE CONCENTRATIONS OBSERVED AT DC 8.2 W, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.1 C
Devils Canyon Watershed

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 140 mg/L)

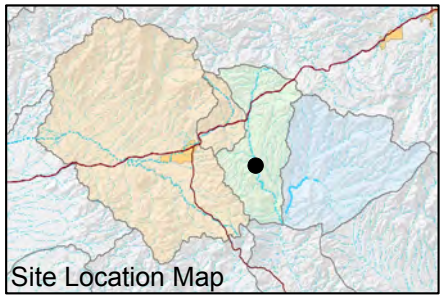
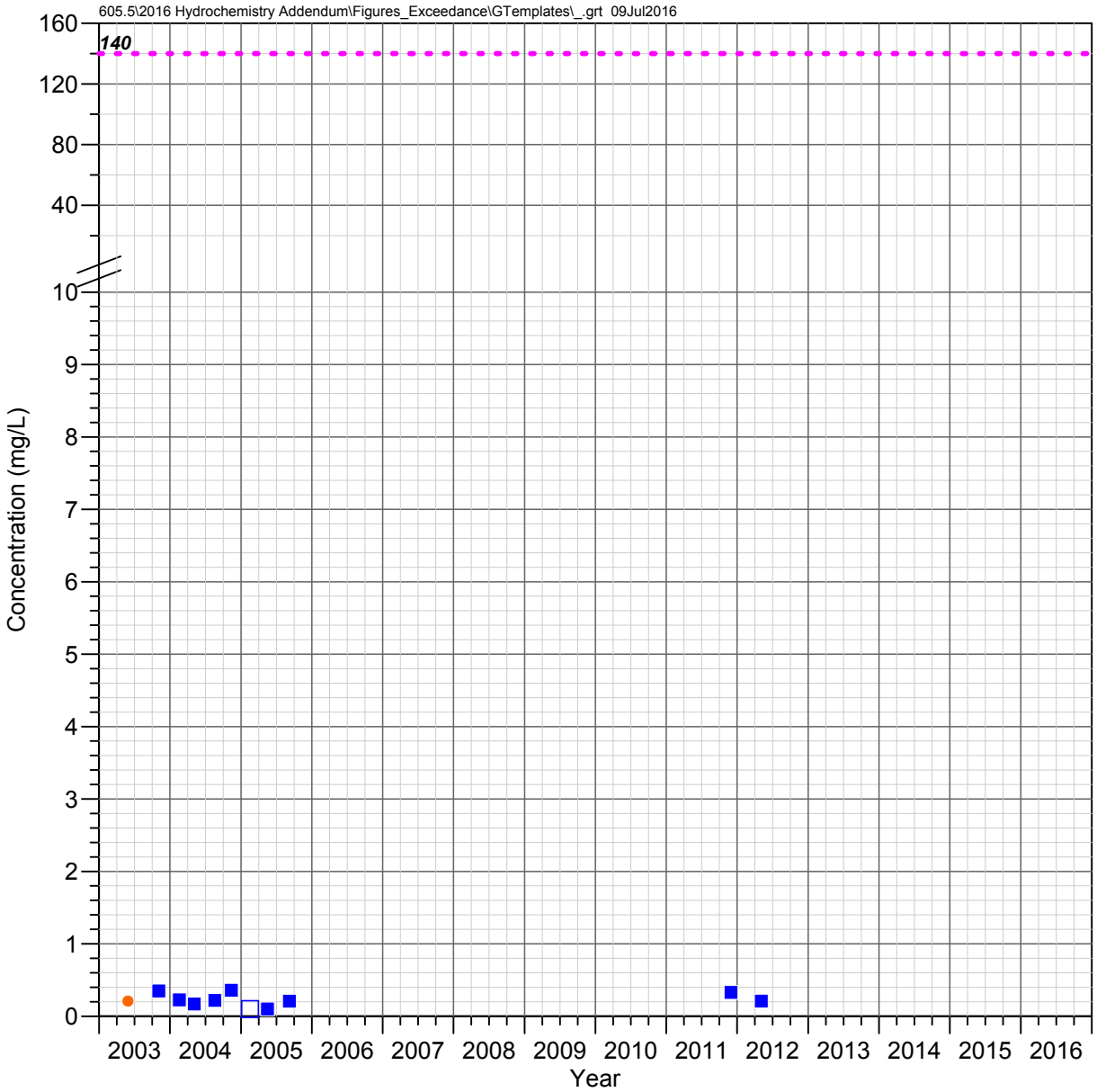


FIGURE F-374. FLUORIDE CONCENTRATIONS OBSERVED AT DC 8.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 7.1 C
Devils Canyon Watershed

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 140 mg/L)

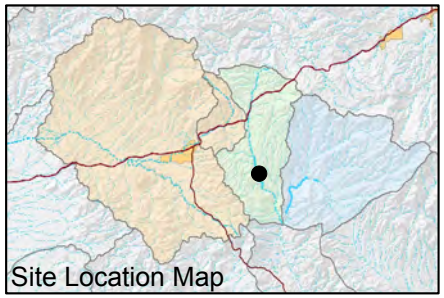
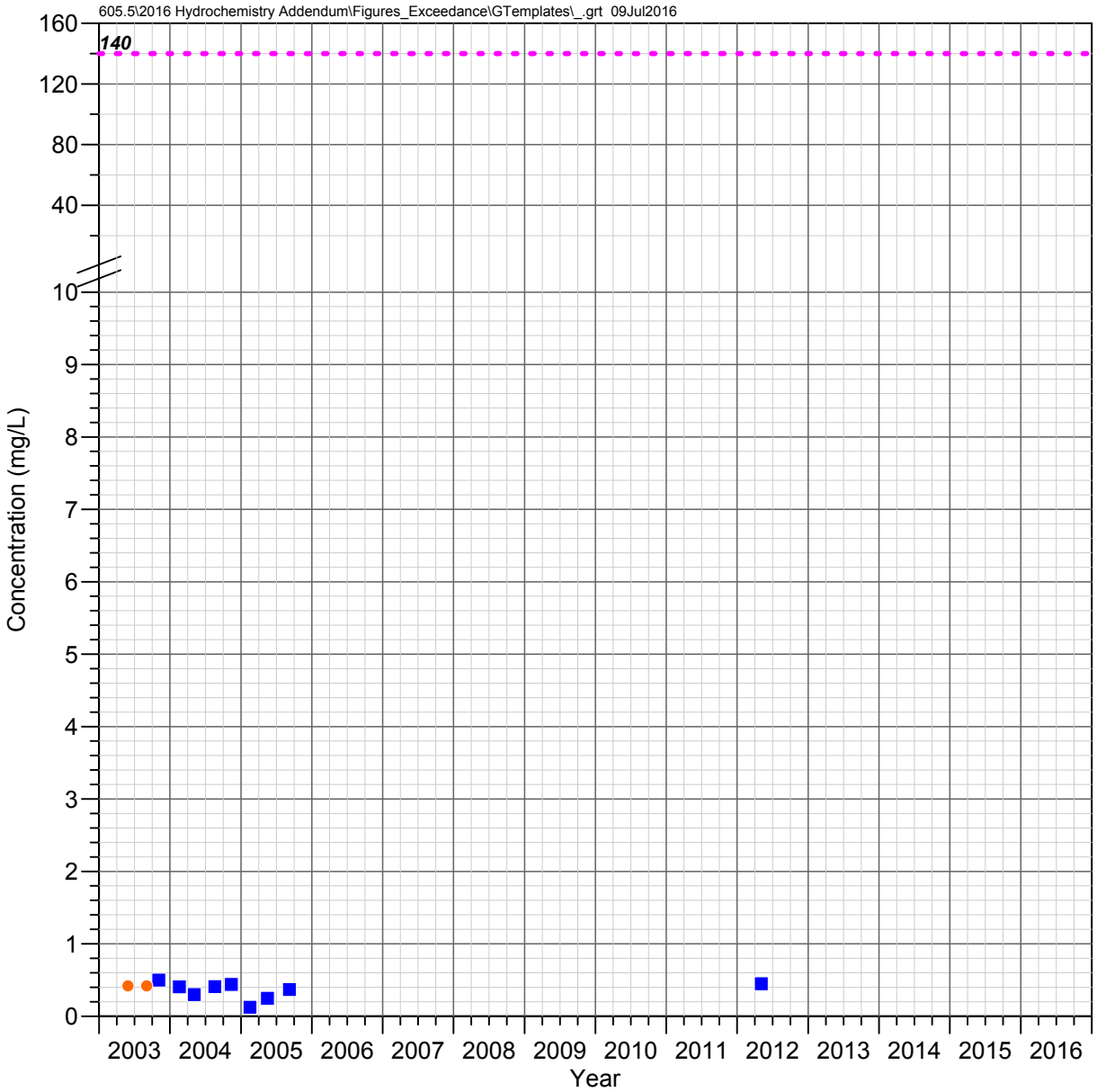


FIGURE F-375. FLUORIDE CONCENTRATIONS OBSERVED AT DC 7.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.6 W (DCT 6.6 W)
Devils Canyon Watershed

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 140 mg/L)

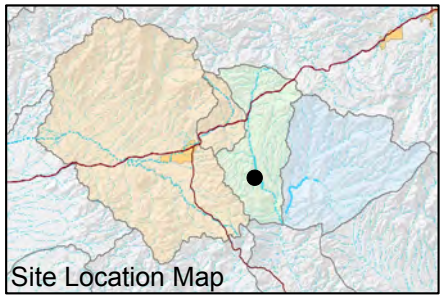
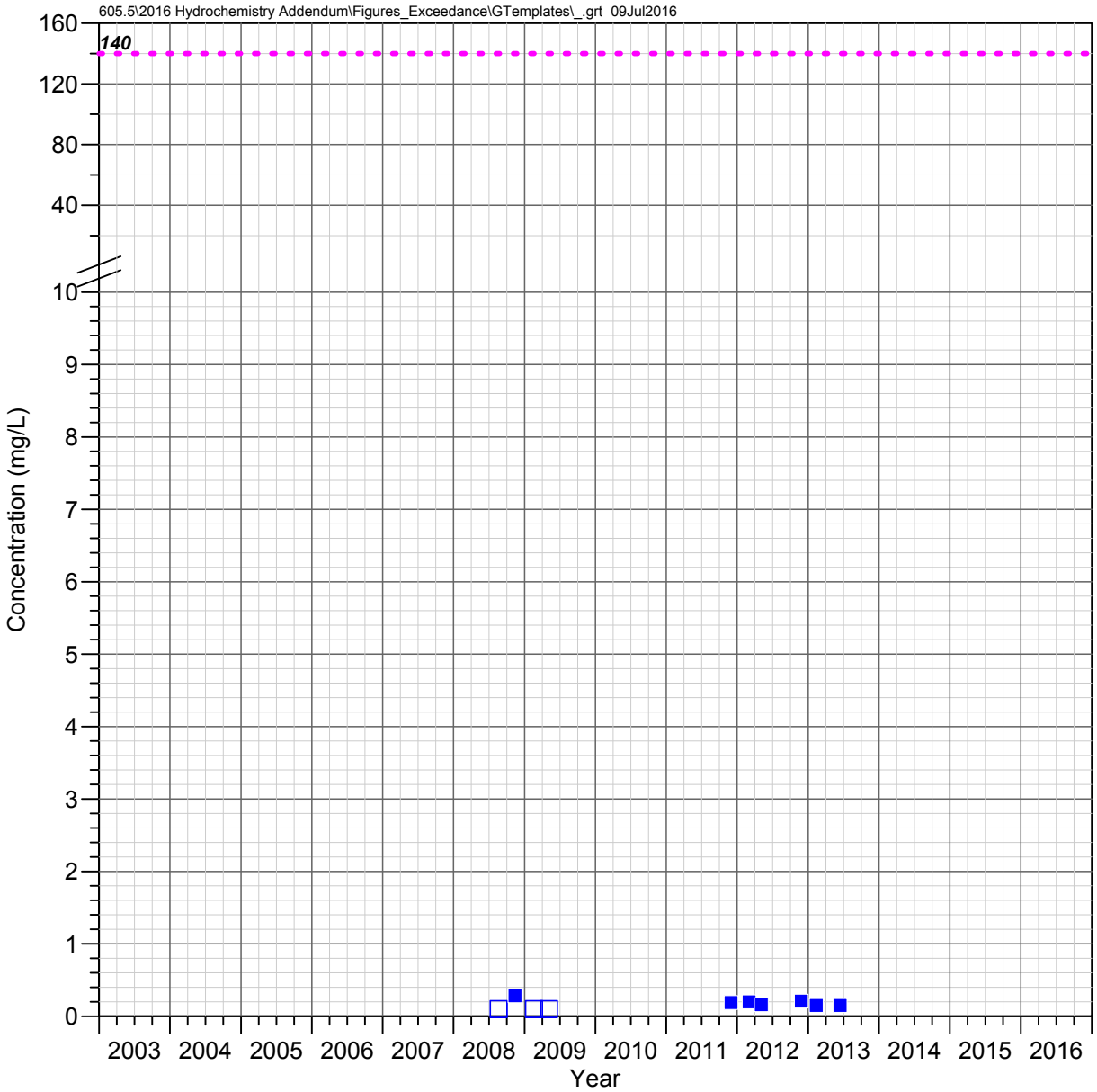


FIGURE F-376. FLUORIDE CONCENTRATIONS OBSERVED AT DC 6.6 W (DCT 6.6 W), DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.14 C
Devils Canyon Watershed

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 140 mg/L)

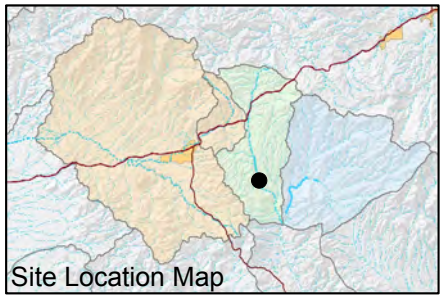
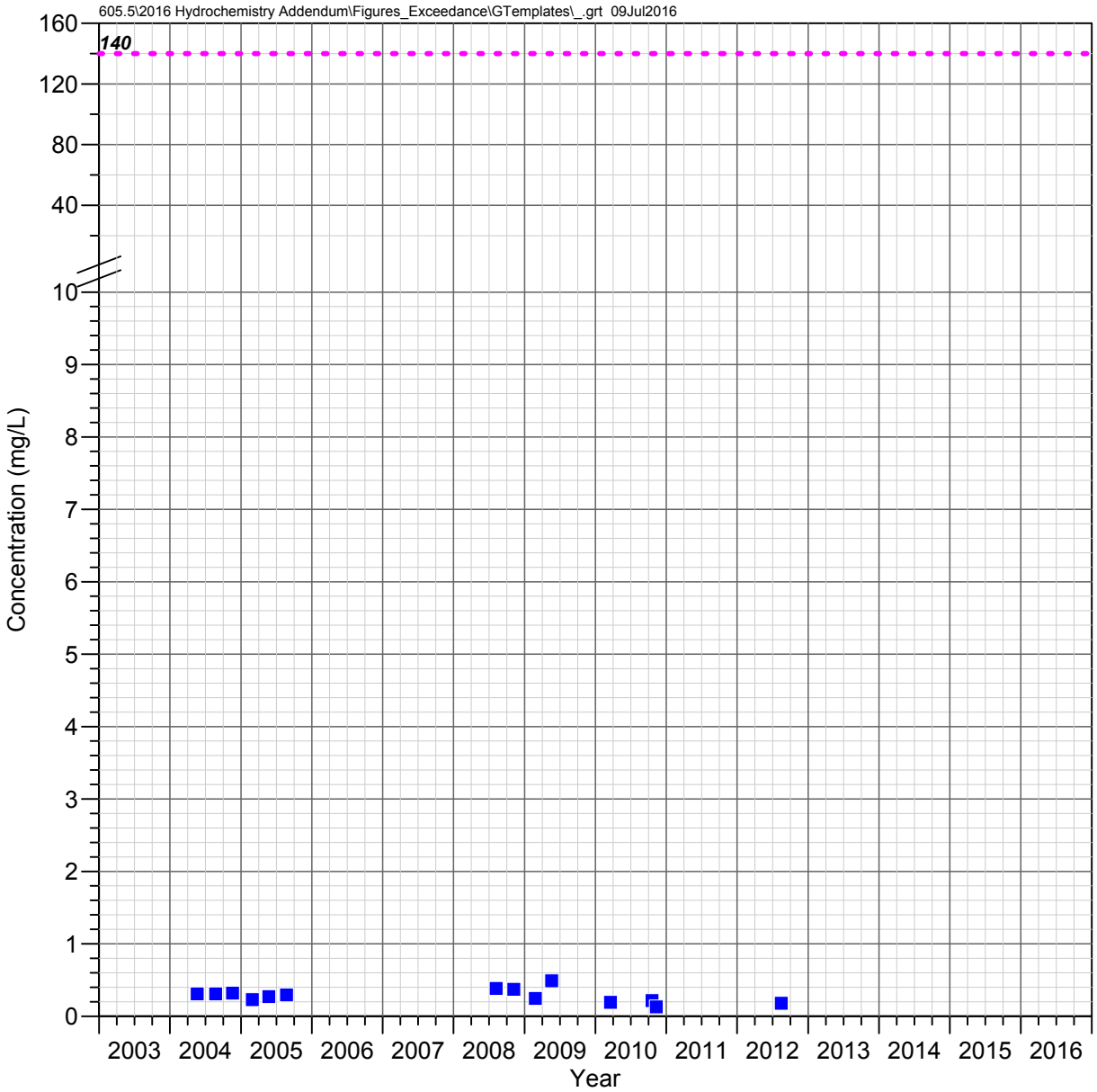


FIGURE F-377. FLUORIDE CONCENTRATIONS OBSERVED AT DC 6.14 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.1 E
Devils Canyon Watershed

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 140 mg/L)

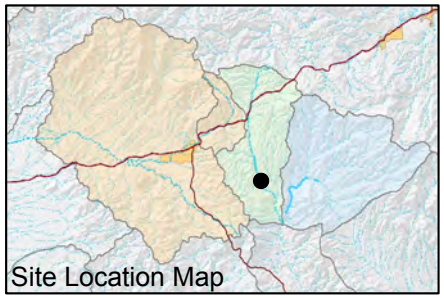
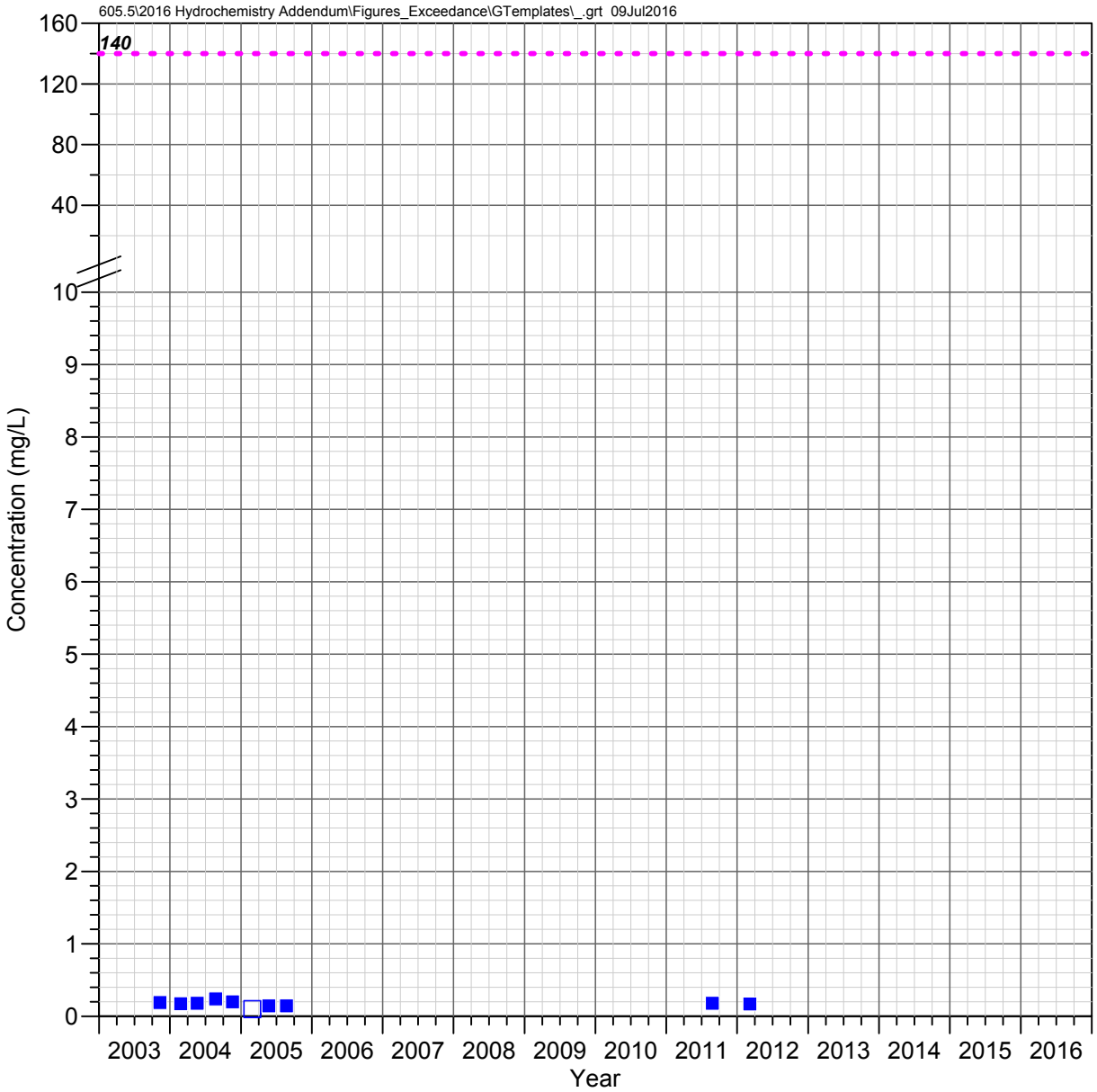


FIGURE F-378. FLUORIDE CONCENTRATIONS OBSERVED AT DC 6.1 E, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 5.5 C
Devils Canyon Watershed

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 140 mg/L)

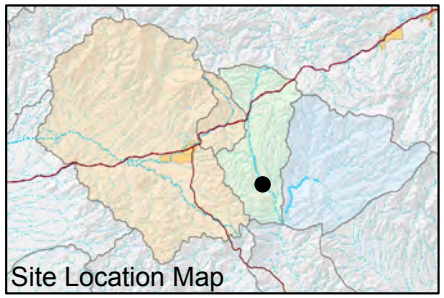
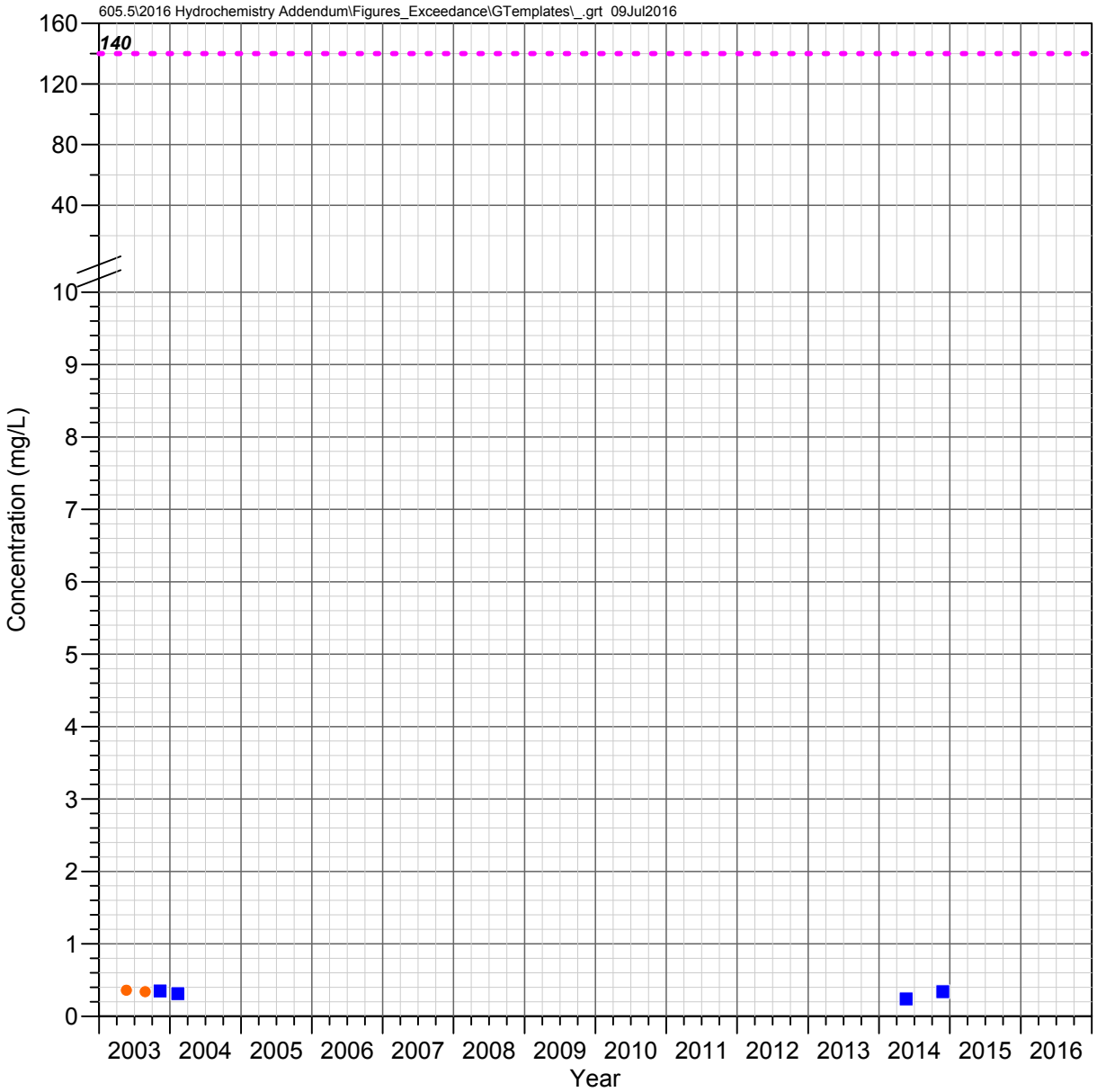


FIGURE F-379. FLUORIDE CONCENTRATIONS OBSERVED AT DC 5.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 4.1 E
Devils Canyon Watershed

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 140 mg/L)

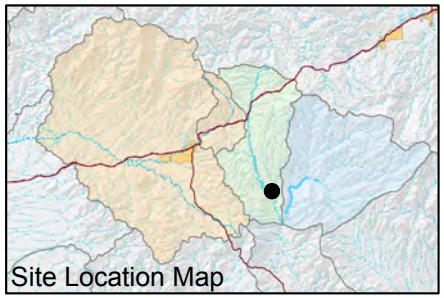
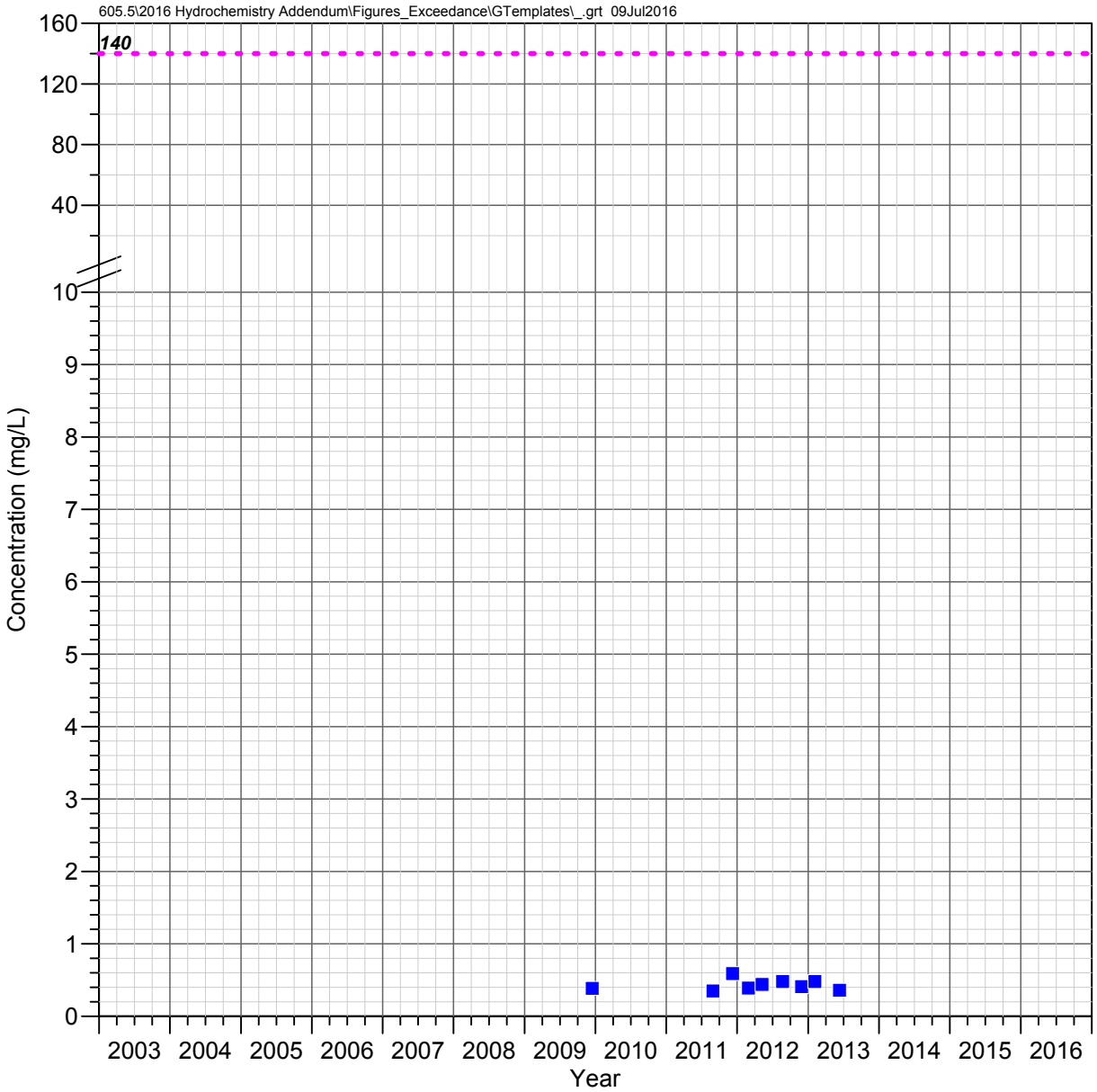


FIGURE F-380. FLUORIDE CONCENTRATIONS OBSERVED AT DC 4.1 E, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Government Springs
Mineral Creek Watershed

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 140 mg/L)

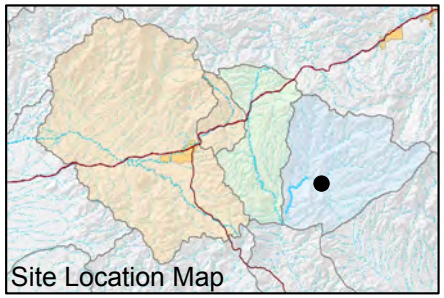
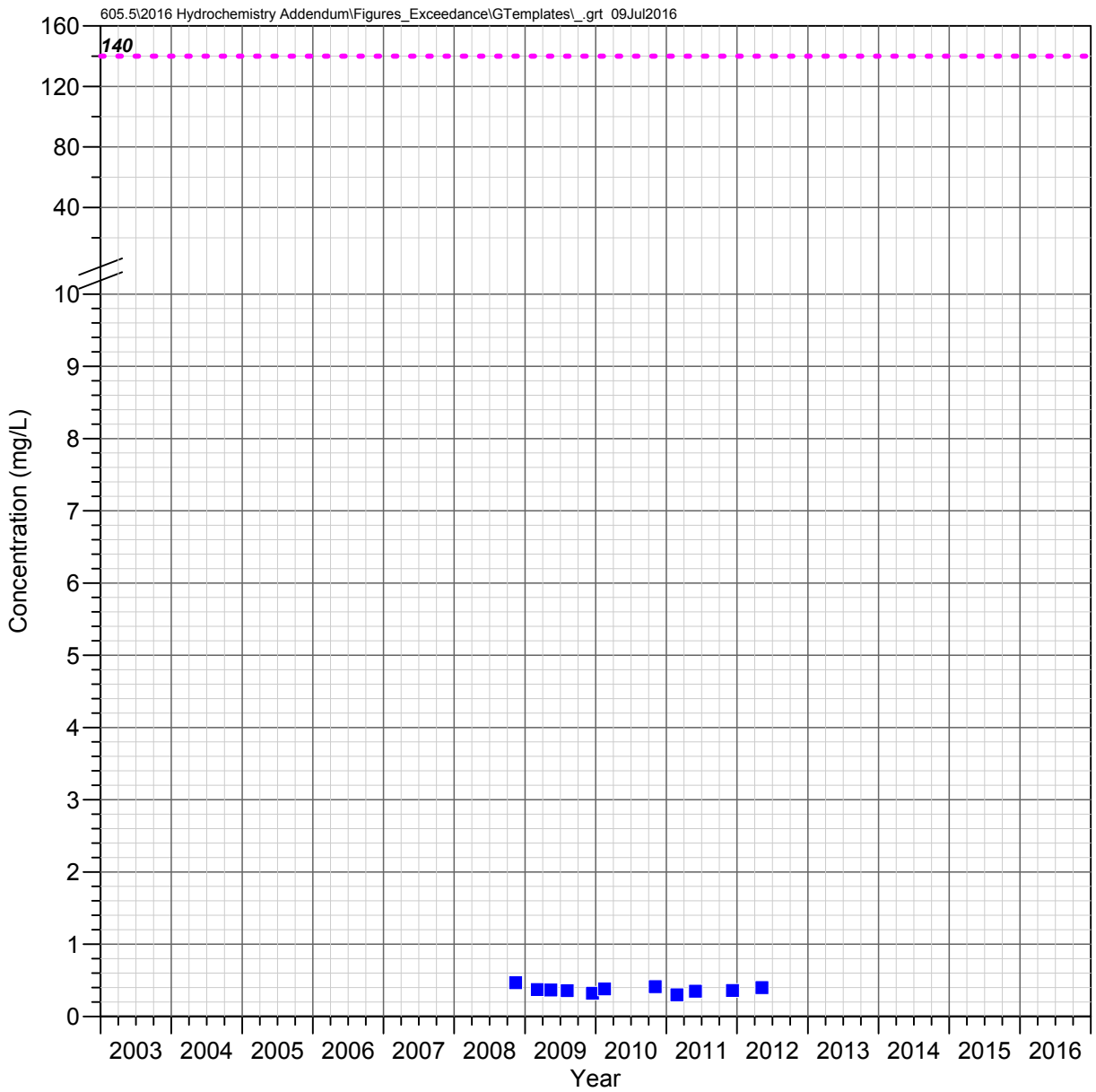


FIGURE F-381. FLUORIDE CONCENTRATIONS OBSERVED AT GOVERNMENT SPRINGS, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 8.4 C
Mineral Creek Watershed

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 140 mg/L)

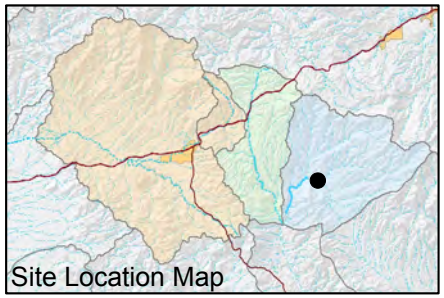
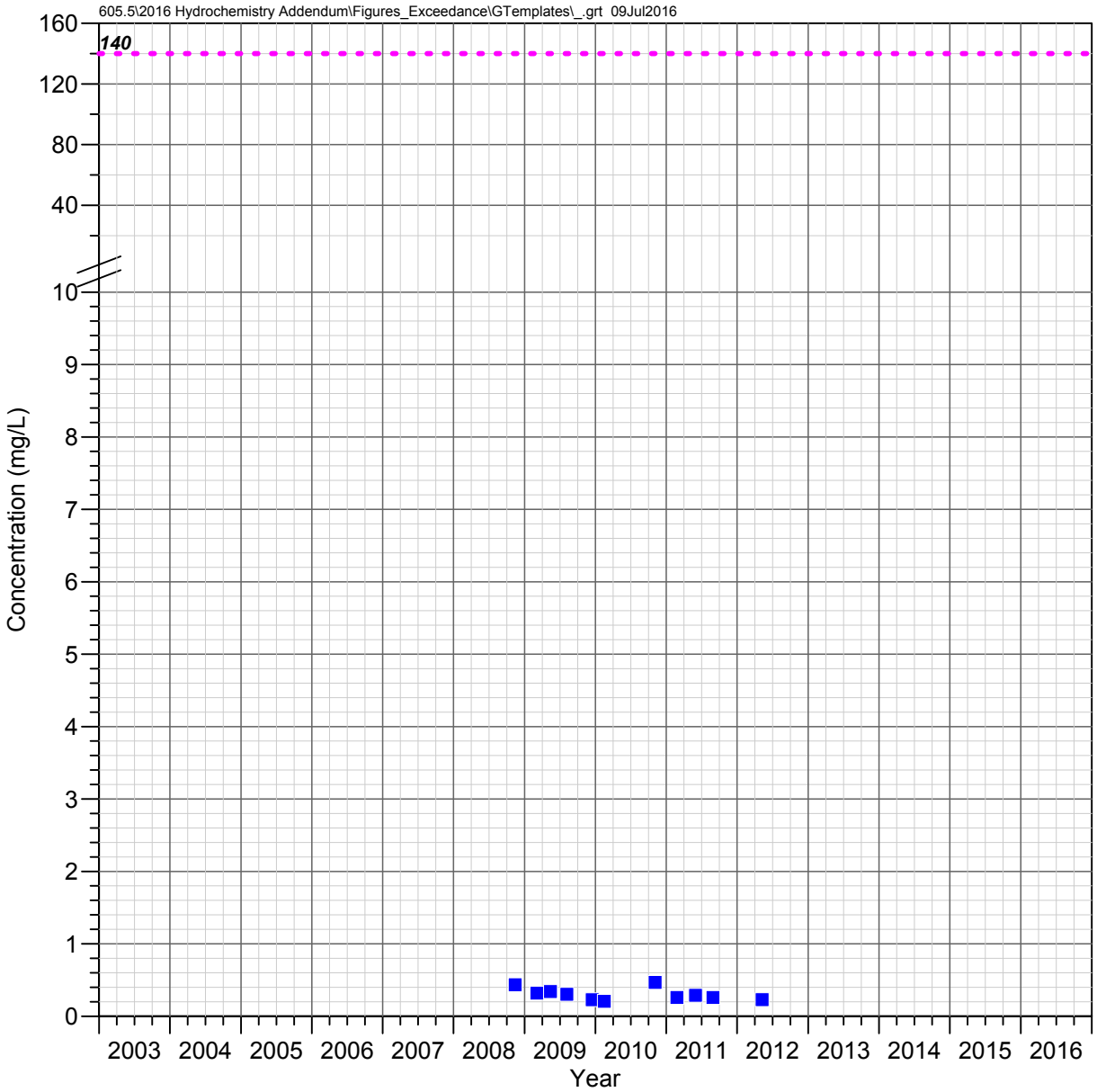


FIGURE F-382. FLUORIDE CONCENTRATIONS OBSERVED AT MC 8.4 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



LF 0.2 C
Mineral Creek Watershed

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 140 mg/L)

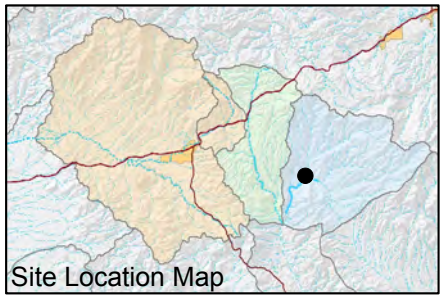
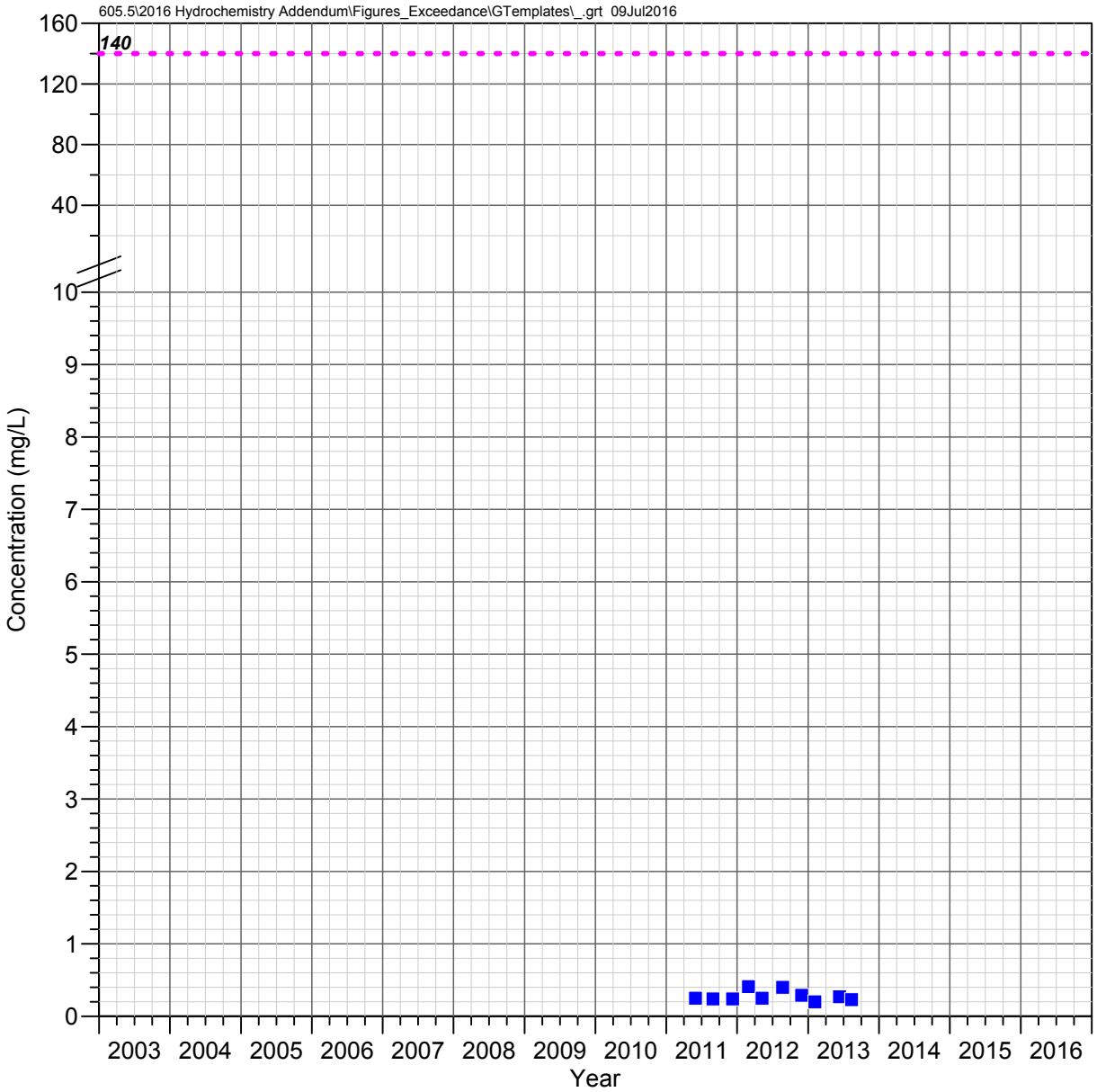


FIGURE F-383. FLUORIDE CONCENTRATIONS OBSERVED AT LF 0.2 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 5.2 C
Mineral Creek Watershed

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 140 mg/L)

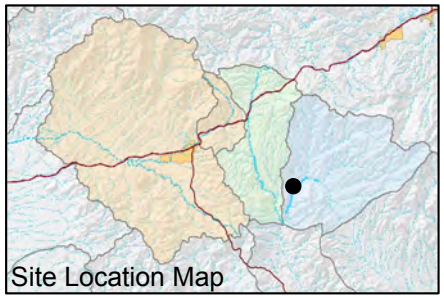
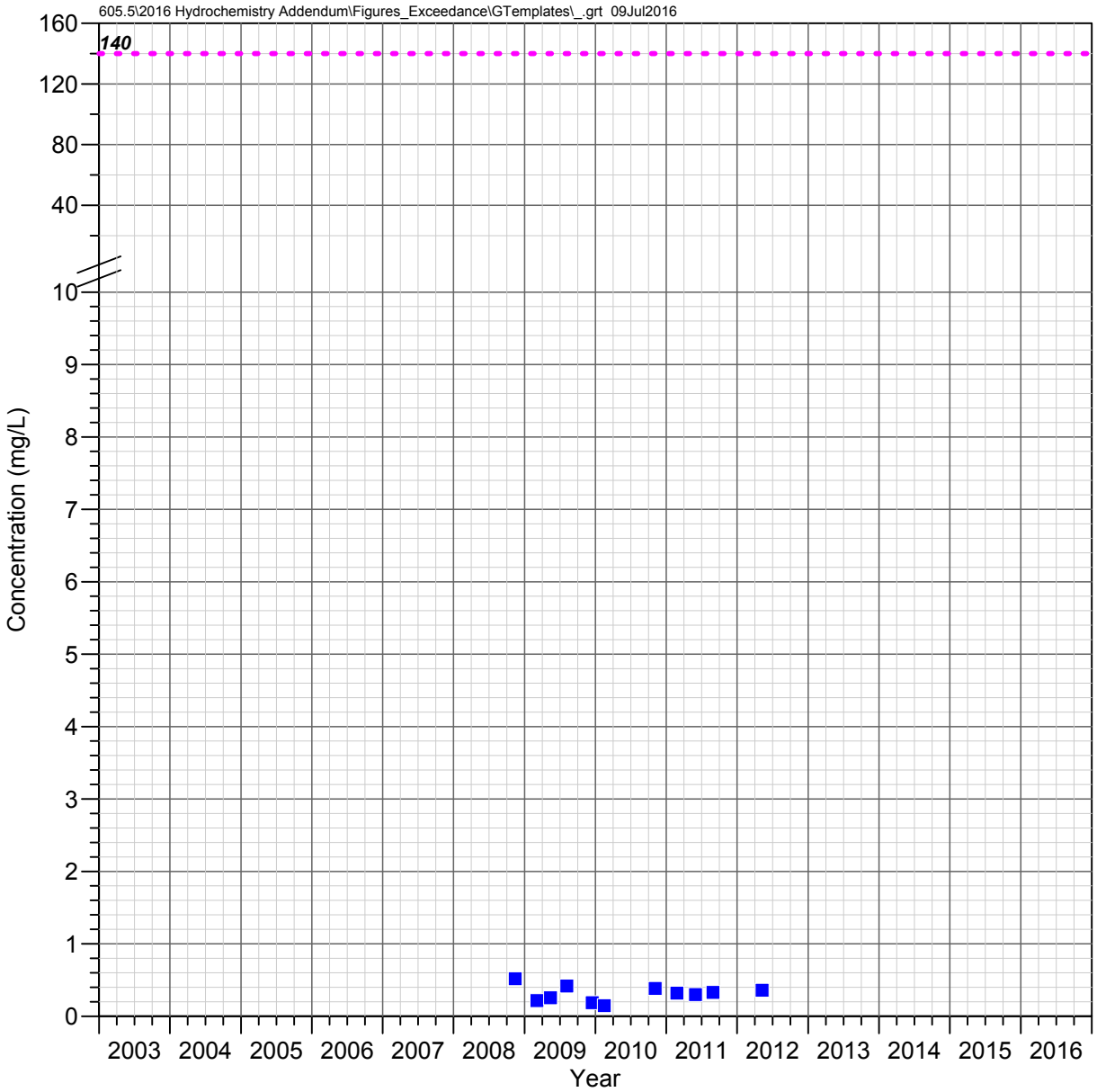


FIGURE F-384. FLUORIDE CONCENTRATIONS OBSERVED AT MC 5.2 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 3.4 W (Wet Leg Spring)
Mineral Creek Watershed

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 140 mg/L)

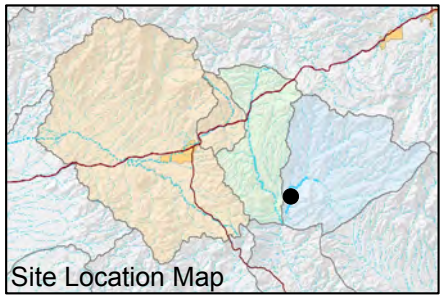
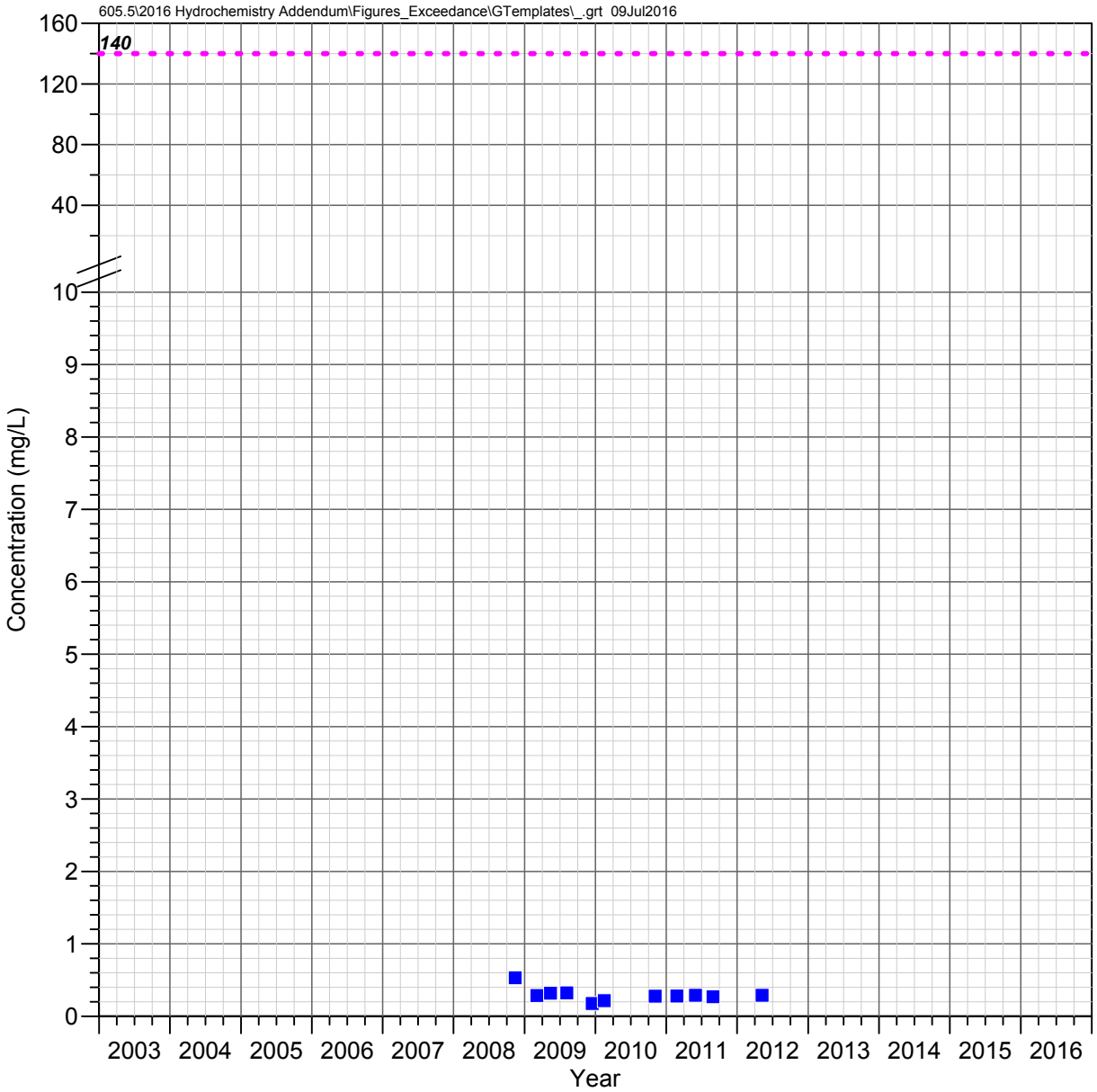


FIGURE F-385. FLUORIDE CONCENTRATIONS OBSERVED AT MC 3.4 W (WET LEG SPRING), MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 3.3 C (Lower Mineral)
Mineral Creek Watershed

FLUORIDE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 140 mg/L)

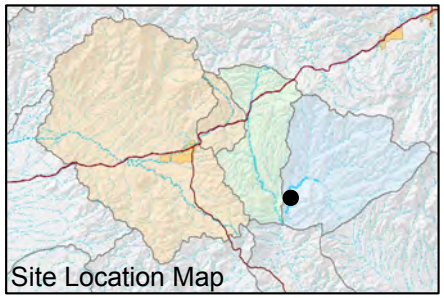
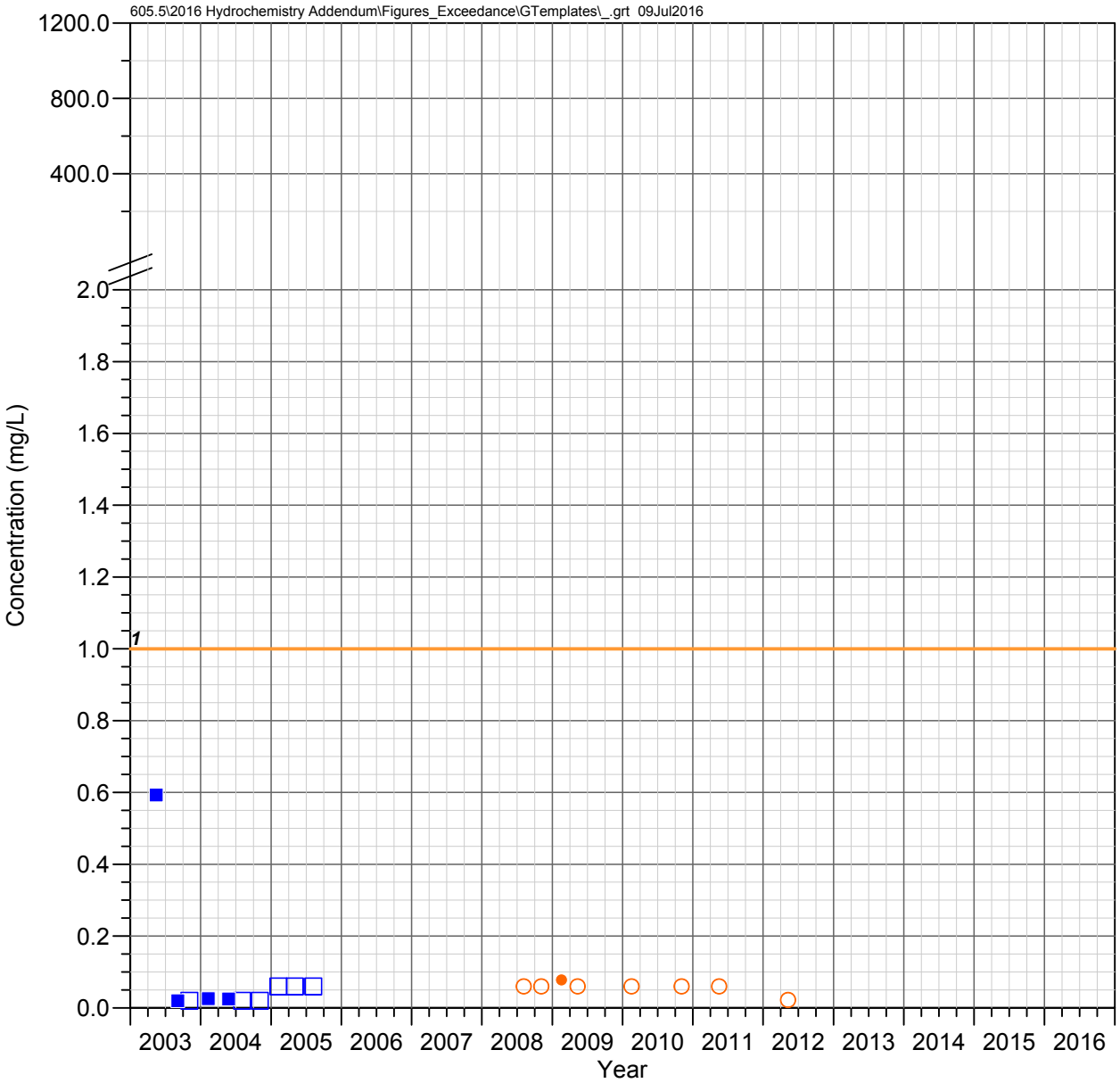


FIGURE F-386. FLUORIDE CONCENTRATIONS OBSERVED AT MC 3.3 C (LOWER MINERAL), MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Pump Station Spring (QC 30.7 C)
Queen Creek Watershed

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

DIS = Dissolved

AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1 mg/L)

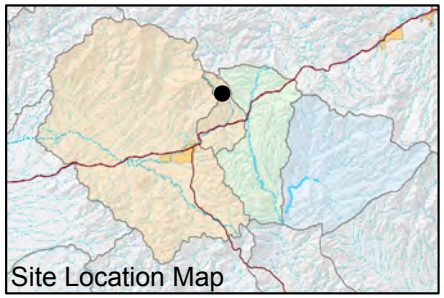
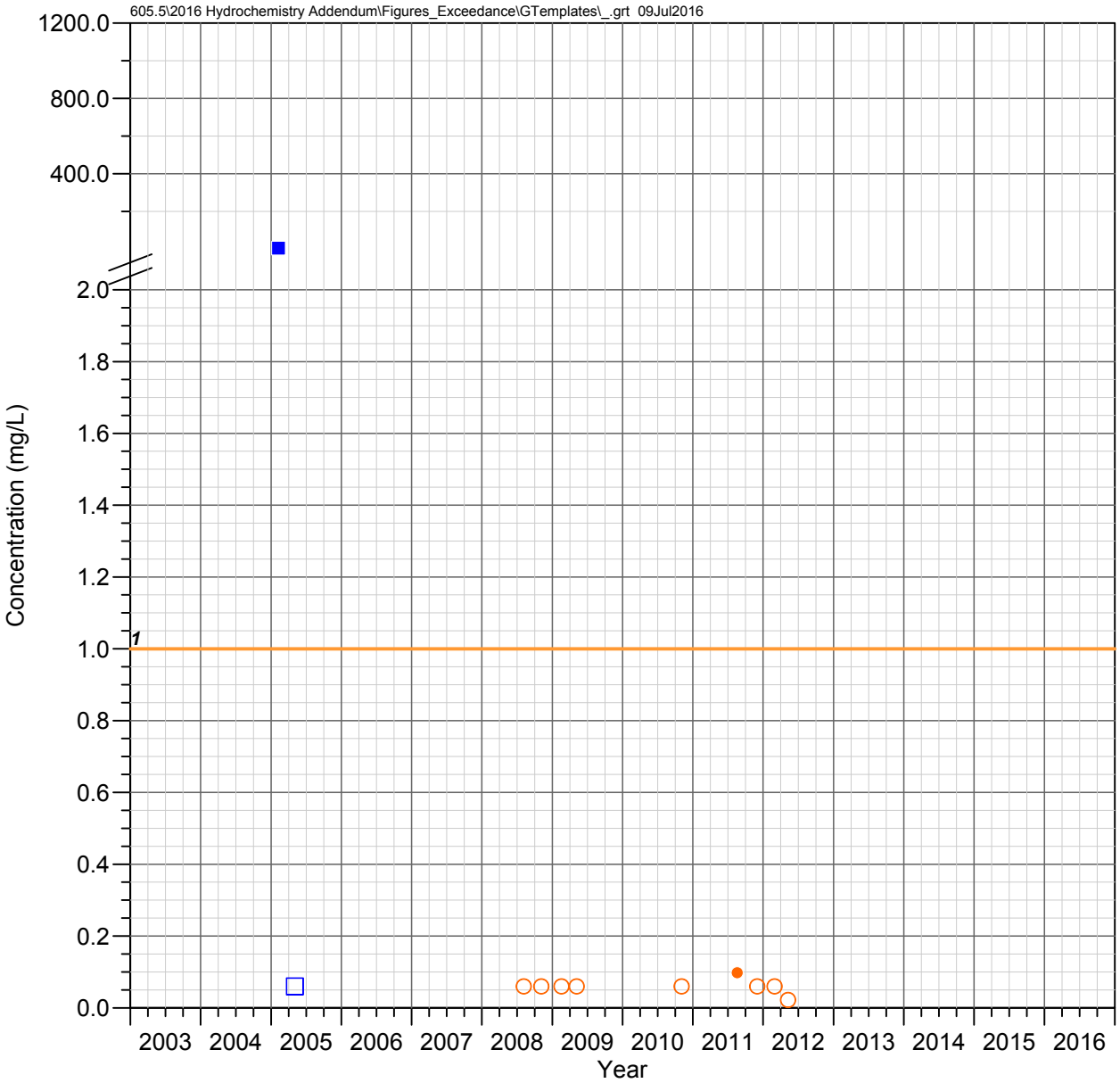


FIGURE F-387. IRON CONCENTRATIONS OBSERVED AT PUMP STATION SPRING (QC 30.7 C), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 27.3 C
Queen Creek Watershed

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

DIS = Dissolved

AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1 mg/L)

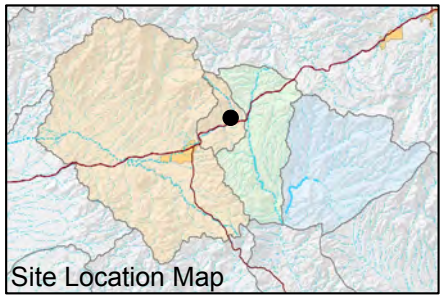
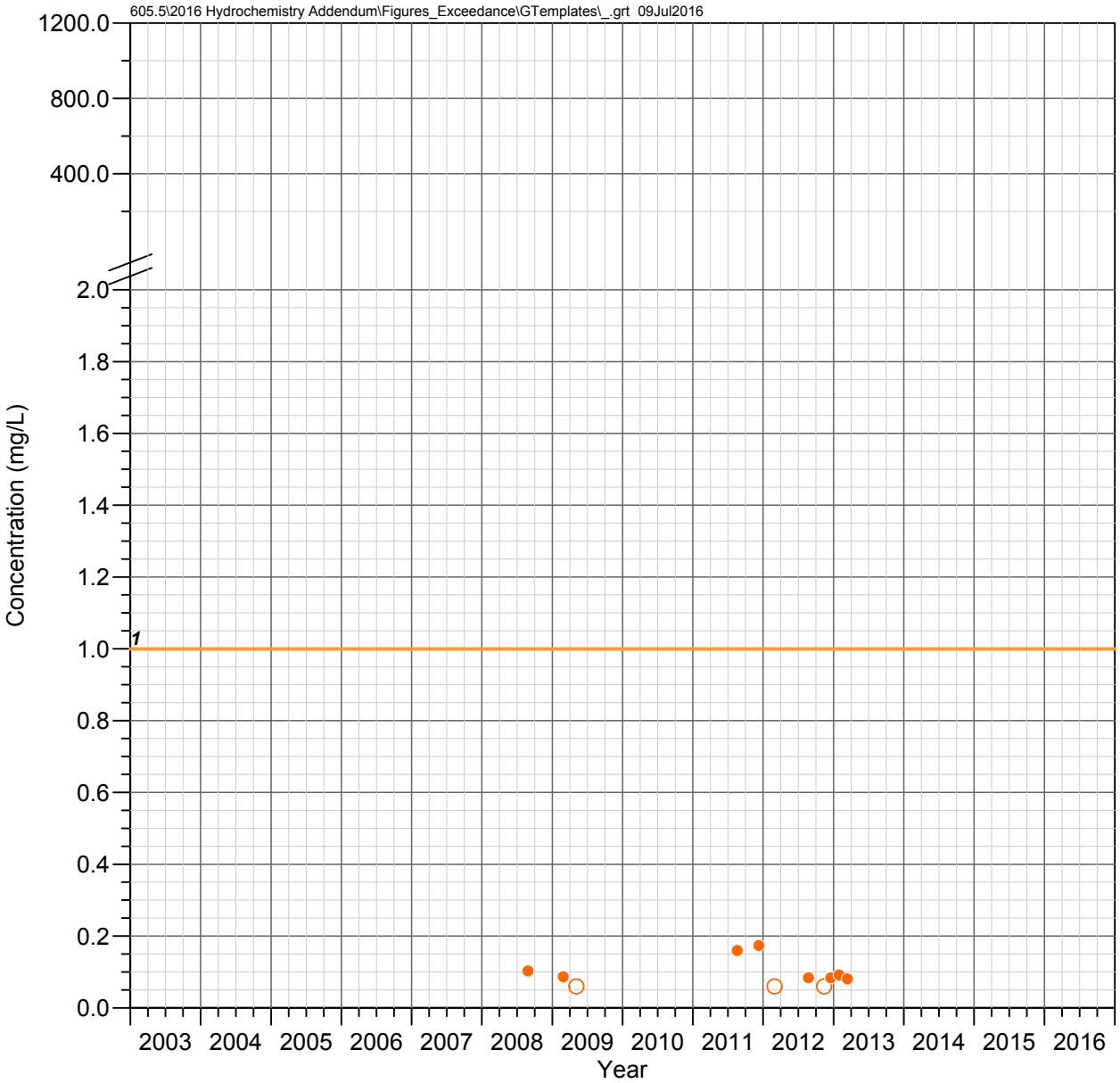


FIGURE F-388. IRON CONCENTRATIONS OBSERVED AT QC 27.3 C, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Oak Flat Wash
Queen Creek Watershed

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

DIS = Dissolved

AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1 mg/L)

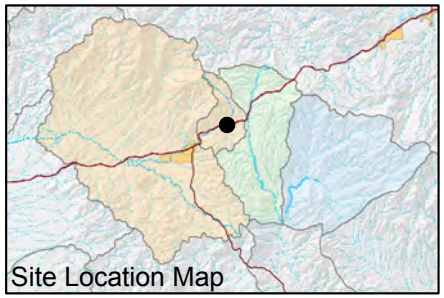
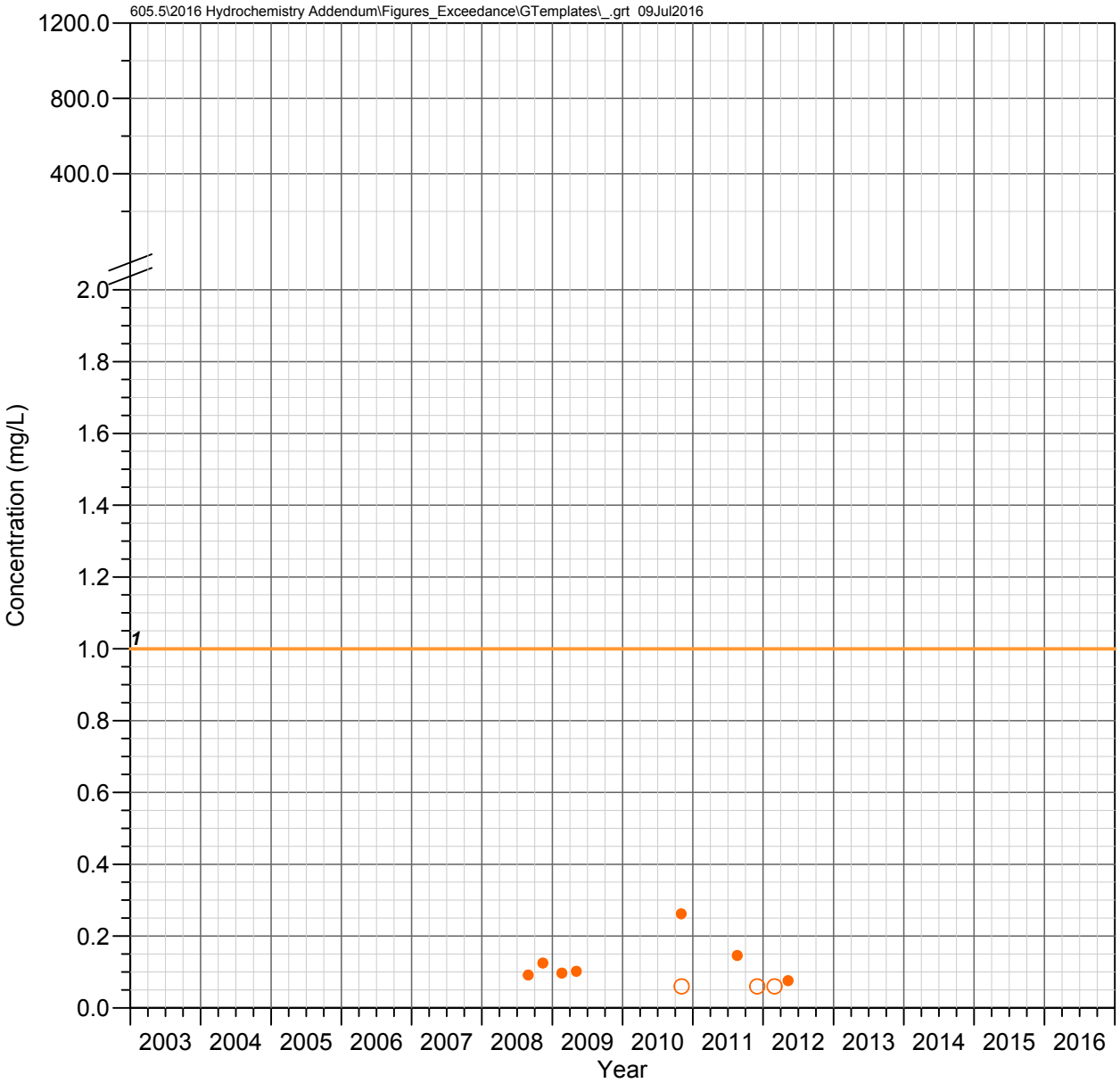


FIGURE F-389. IRON CONCENTRATIONS OBSERVED AT OAK FLAT WASH, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Number 9 Wash
Queen Creek Watershed

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

DIS = Dissolved

AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1 mg/L)

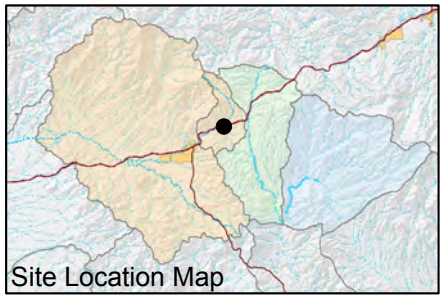
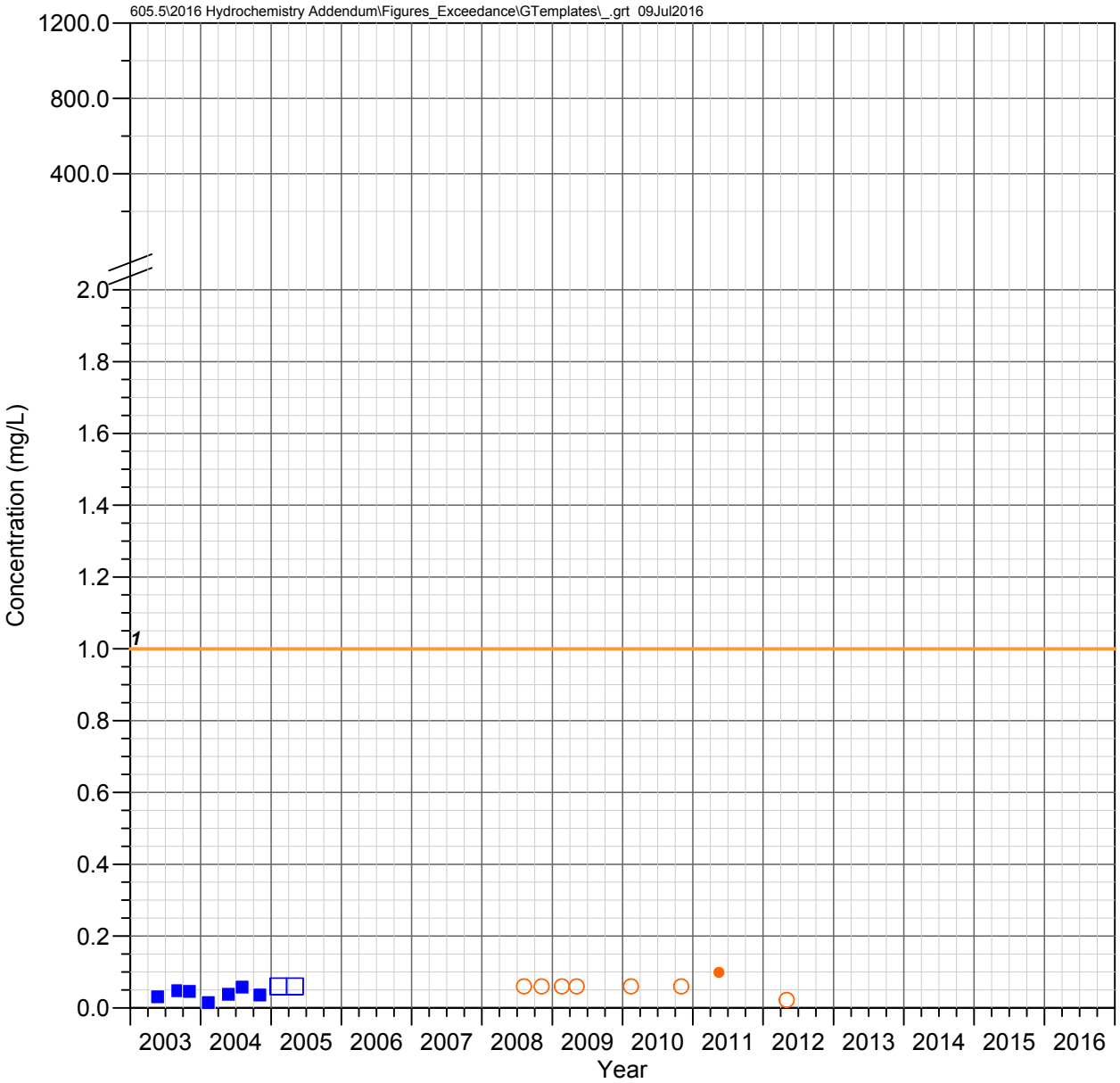


FIGURE F-390. IRON CONCENTRATIONS OBSERVED AT NUMBER 9 WASH, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Boulder Hole (QC 23.6 C)
Queen Creek Watershed

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

DIS = Dissolved

AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1 mg/L)

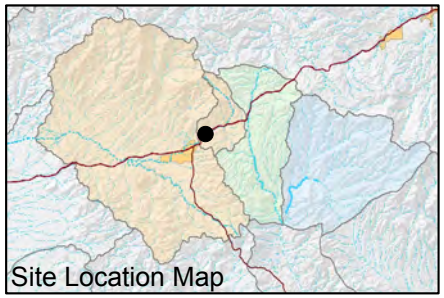
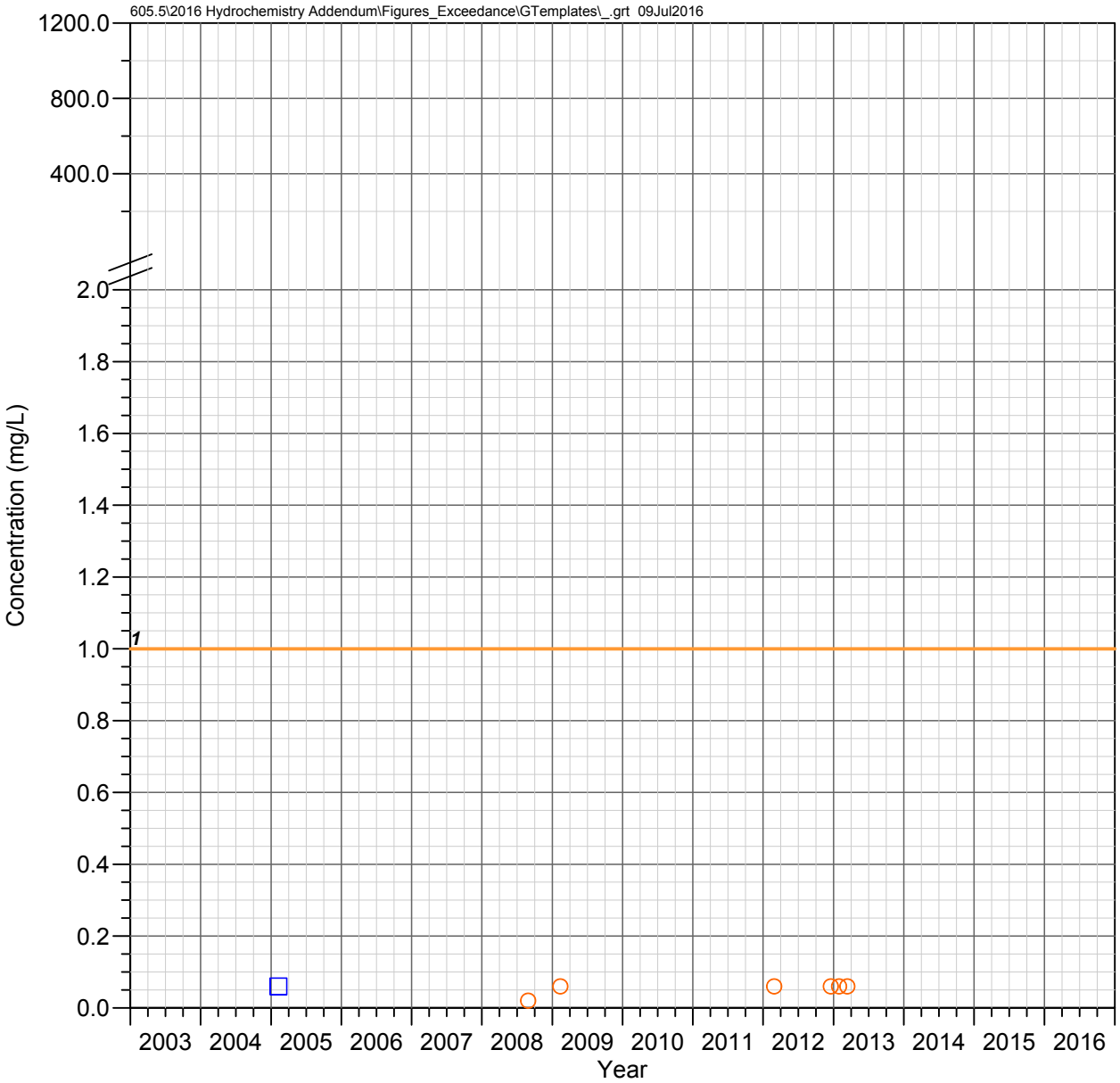


FIGURE F-391. IRON CONCENTRATIONS OBSERVED AT BOULDER HOLE (QC 23.6 C), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 22.6 E (Karst Spring)
Queen Creek Watershed

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

DIS = Dissolved

AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1 mg/L)

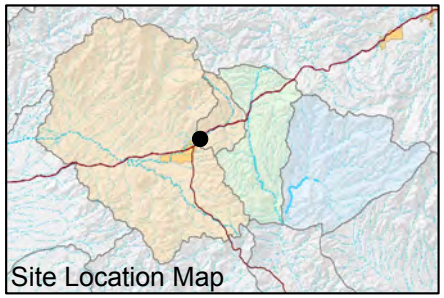
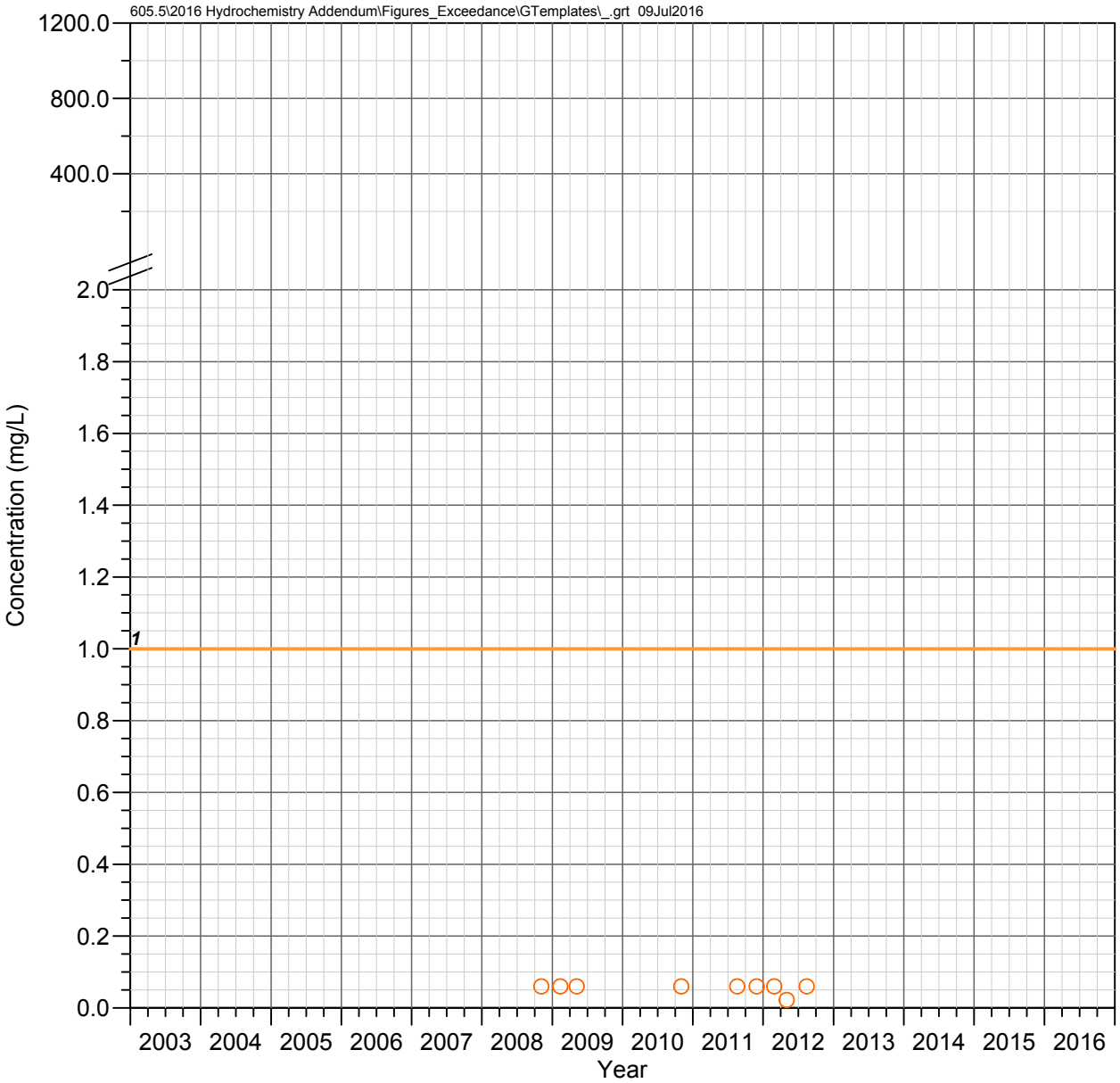


FIGURE F-392. IRON CONCENTRATIONS OBSERVED AT QC 22.6 E (KARST SPRING), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 21.7 C (Magma Avenue)
Queen Creek Watershed

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards **(filter analysis dependent)**

DIS = Dissolved

AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1 mg/L)

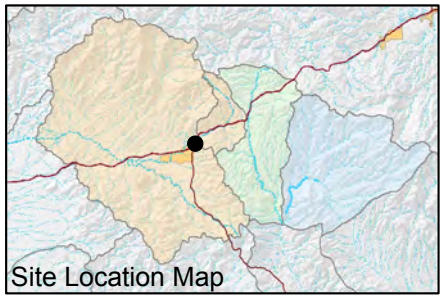
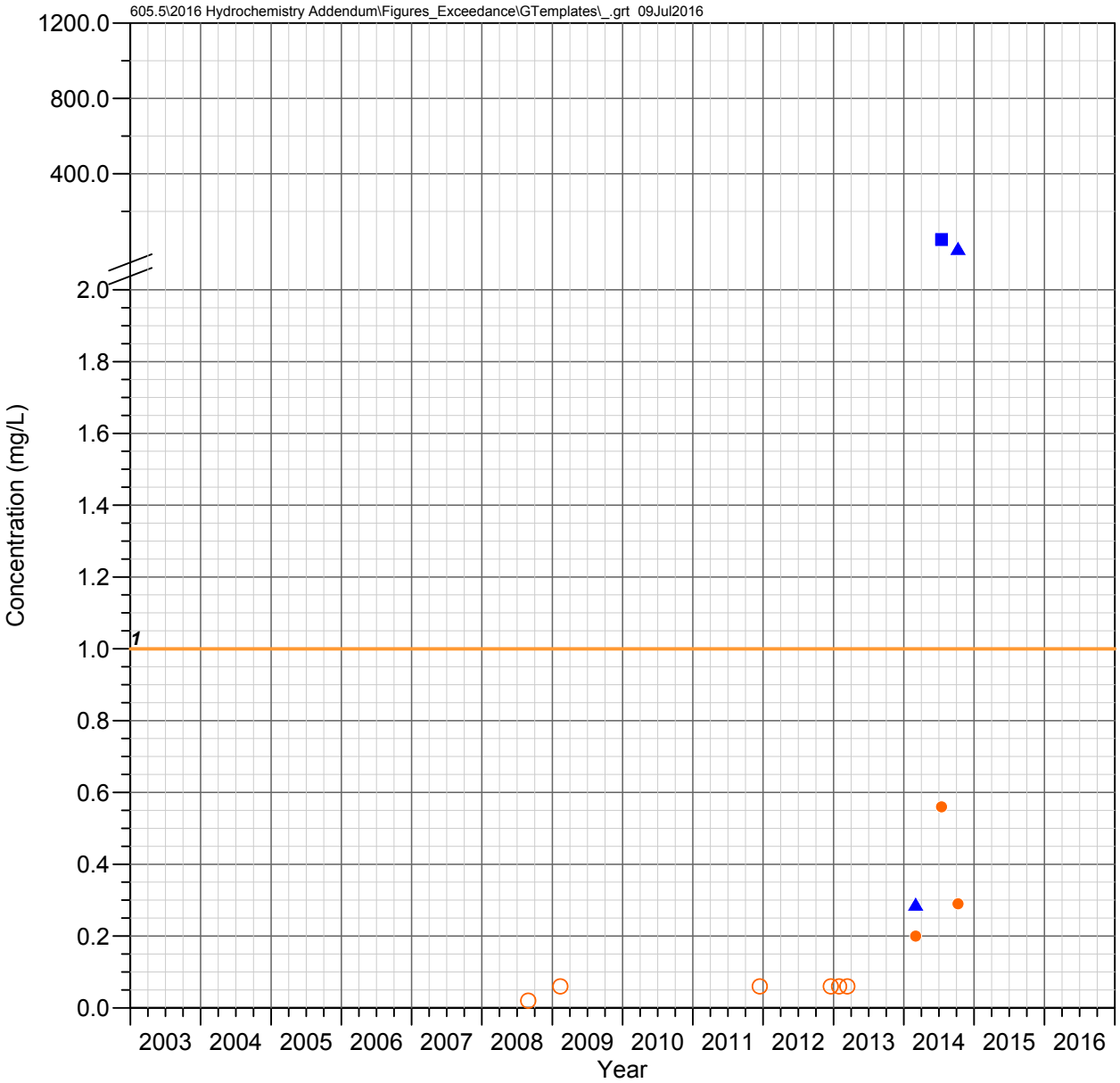


FIGURE F-393. IRON CONCENTRATIONS OBSERVED AT QC 21.7 C (MAGMA AVENUE), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 19.7 C
Queen Creek Watershed

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

DIS = Dissolved

AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1 mg/L)

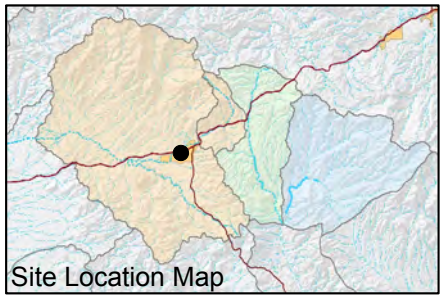
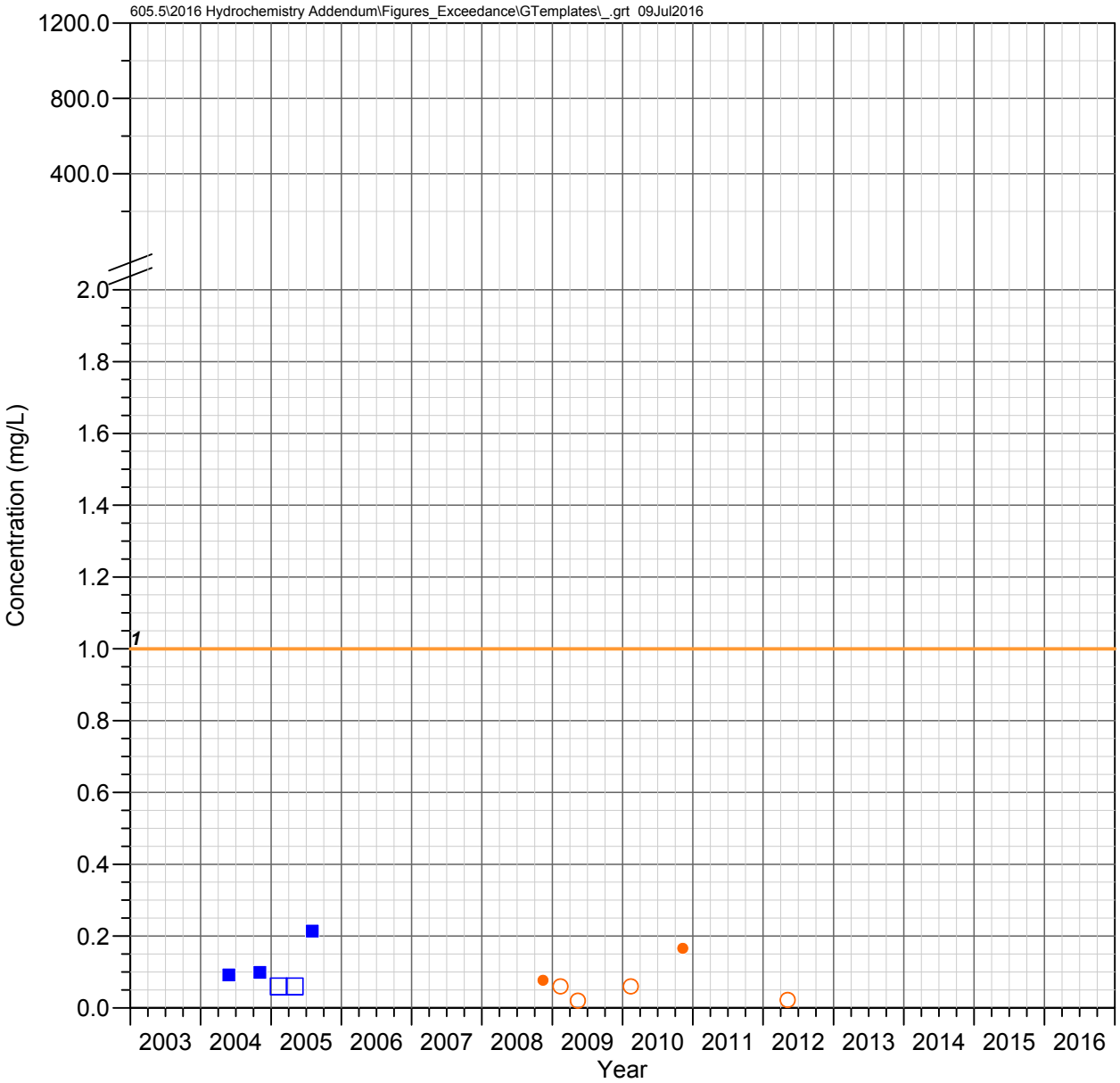


FIGURE F-394. IRON CONCENTRATIONS OBSERVED AT QC 19.7 C, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Bored Spring
Queen Creek Watershed

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

DIS = Dissolved

AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1 mg/L)

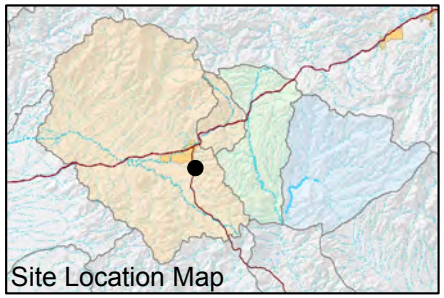
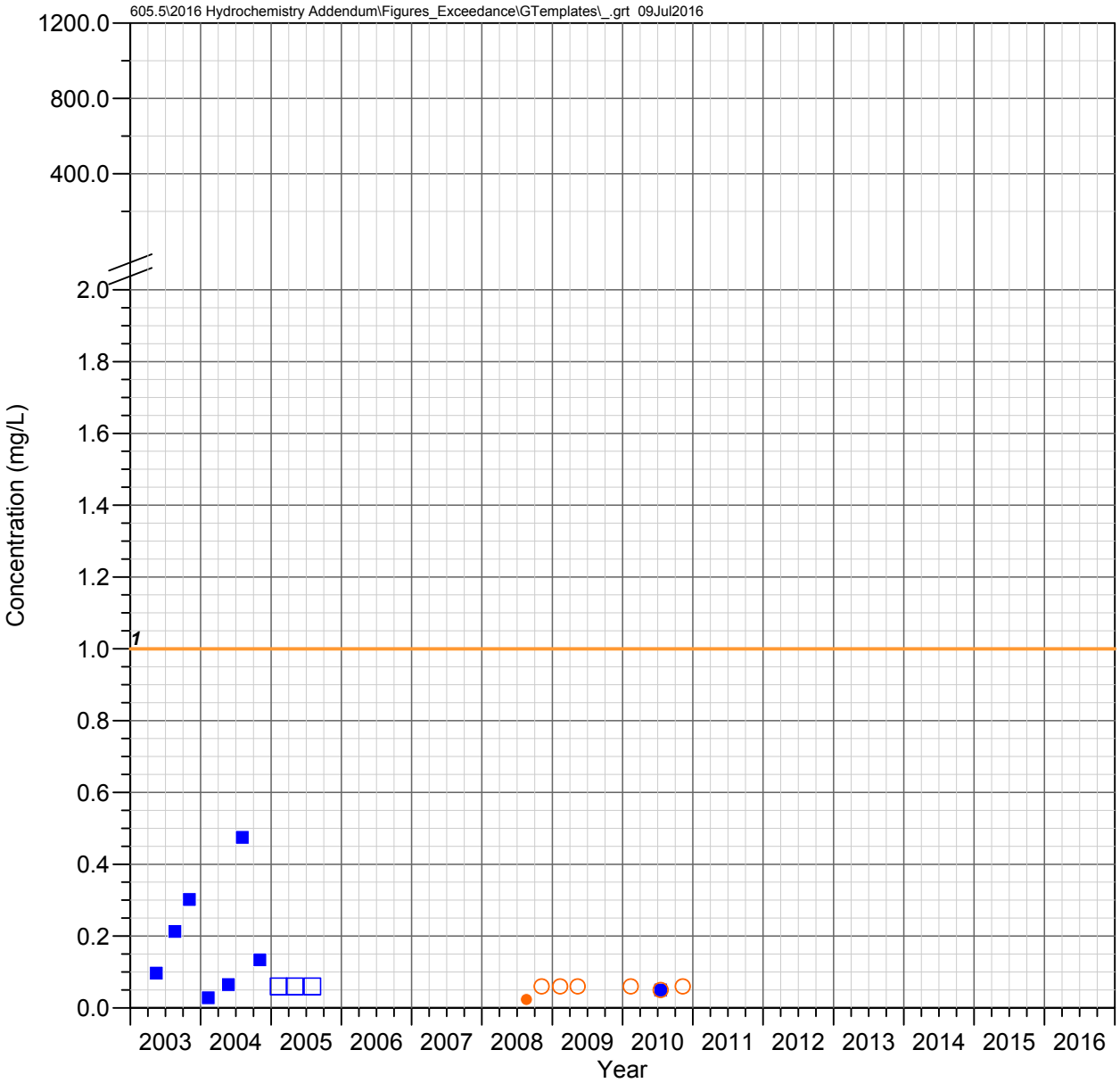


FIGURE F-395. IRON CONCENTRATIONS OBSERVED AT BORED SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Hidden Spring
Queen Creek Watershed

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

DIS = Dissolved

AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1 mg/L)

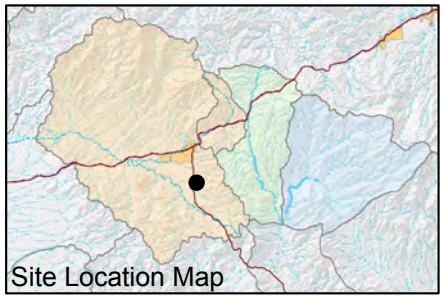
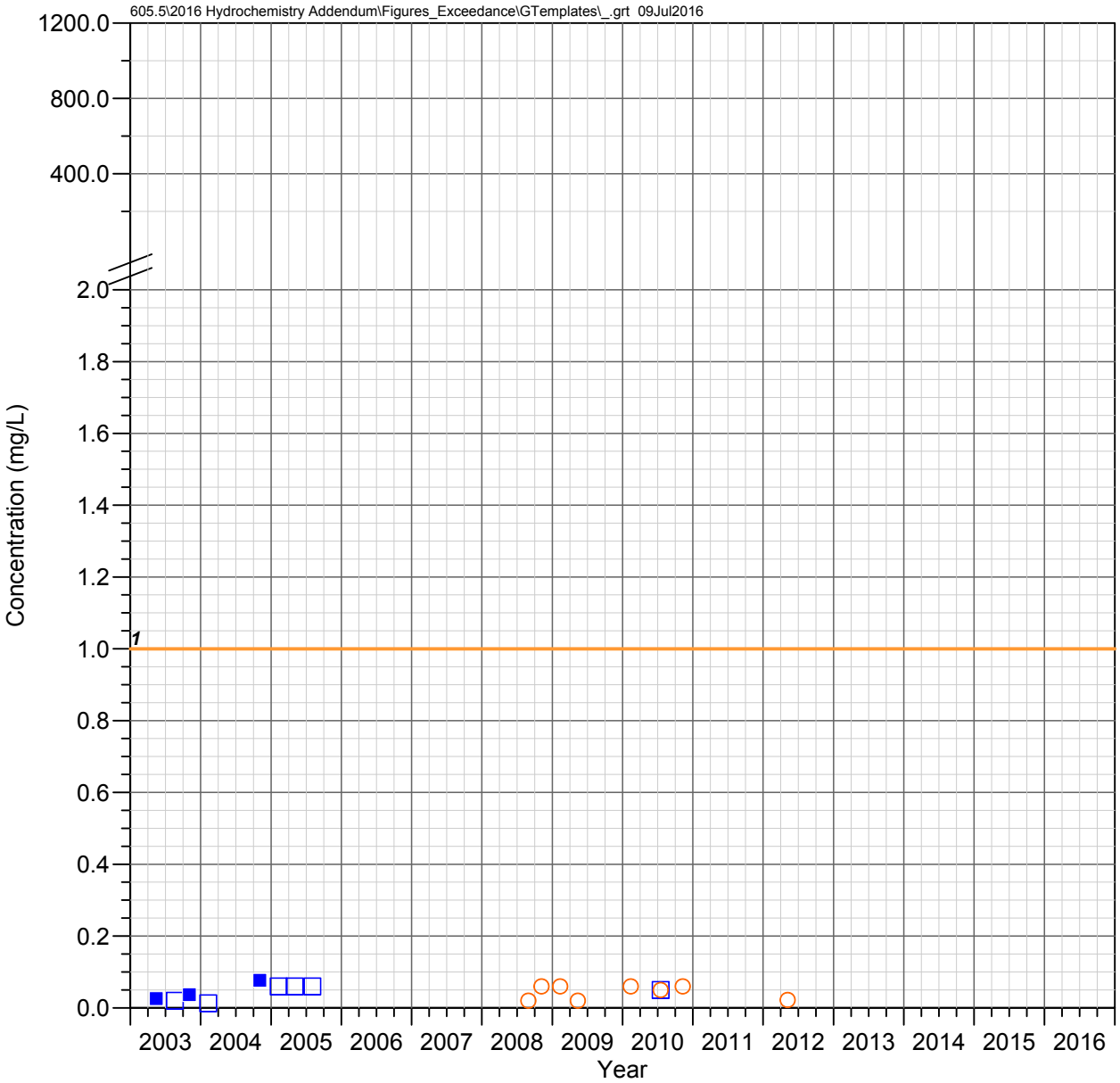


FIGURE F-396. IRON CONCENTRATIONS OBSERVED AT HIDDEN SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Kane Spring
Queen Creek Watershed

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

DIS = Dissolved

AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1 mg/L)

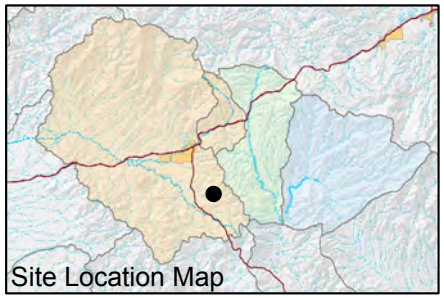
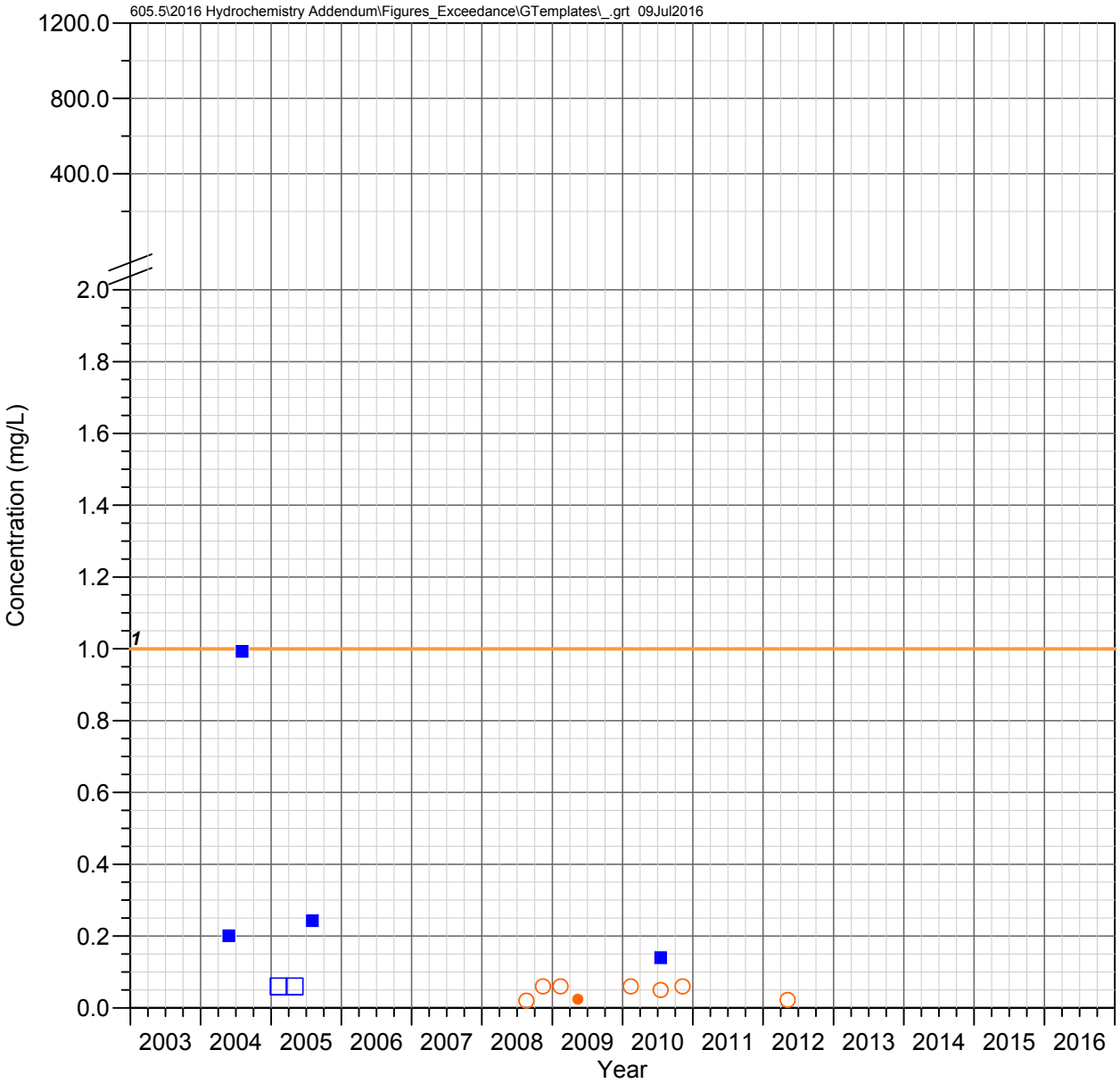


FIGURE F-397. IRON CONCENTRATIONS OBSERVED AT KANE SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Blue Spring
Queen Creek Watershed

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

DIS = Dissolved

AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1 mg/L)

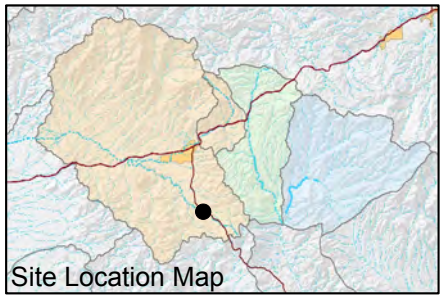
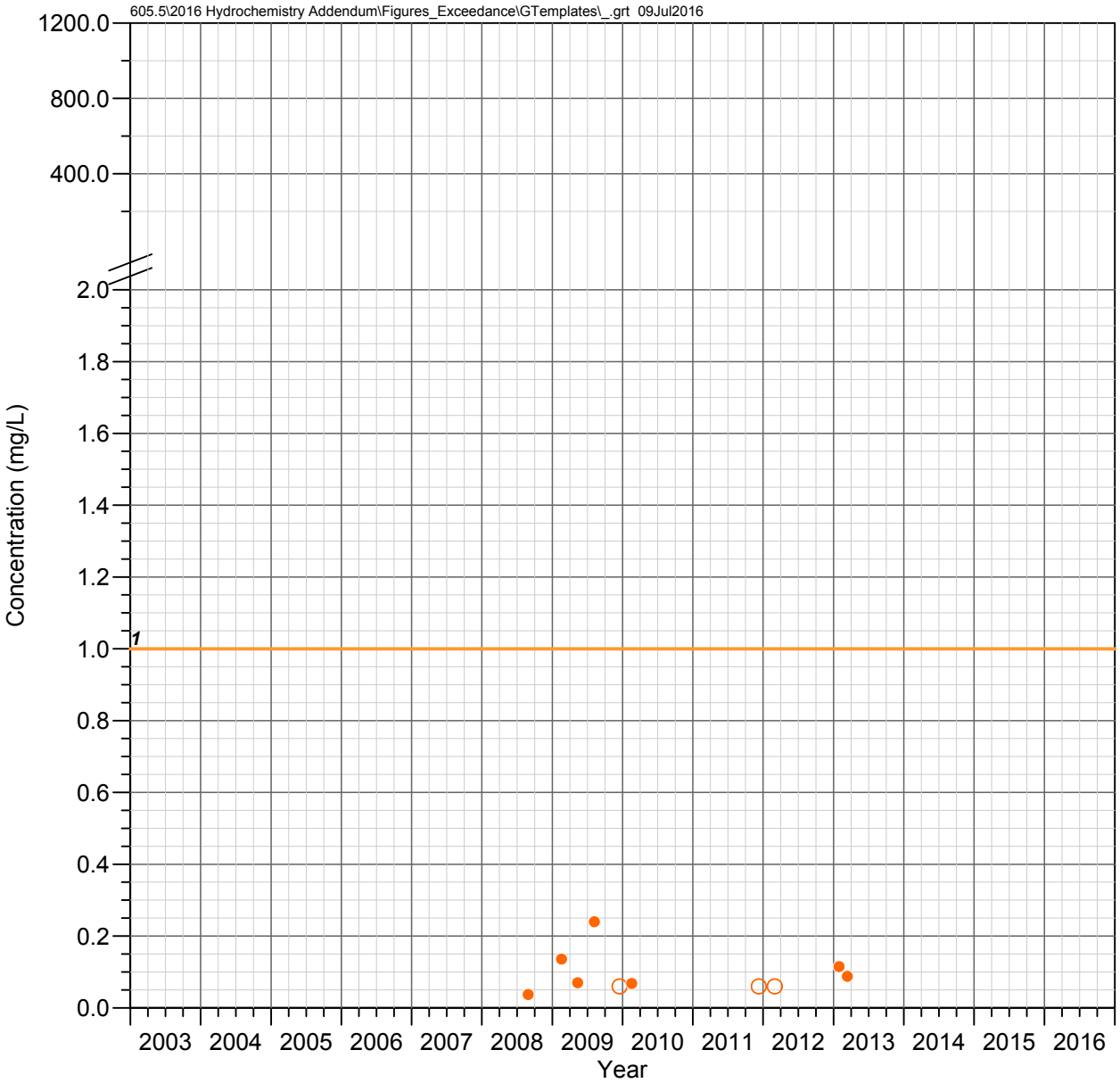


FIGURE F-398. IRON CONCENTRATIONS OBSERVED AT BLUE SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



IC 1.0 C
Devils Canyon Watershed

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

DIS = Dissolved

AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1 mg/L)

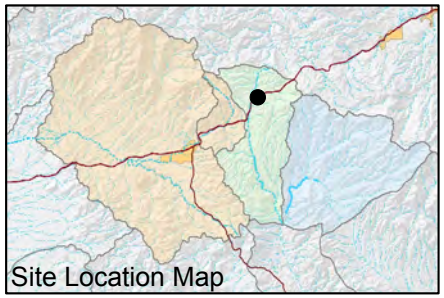
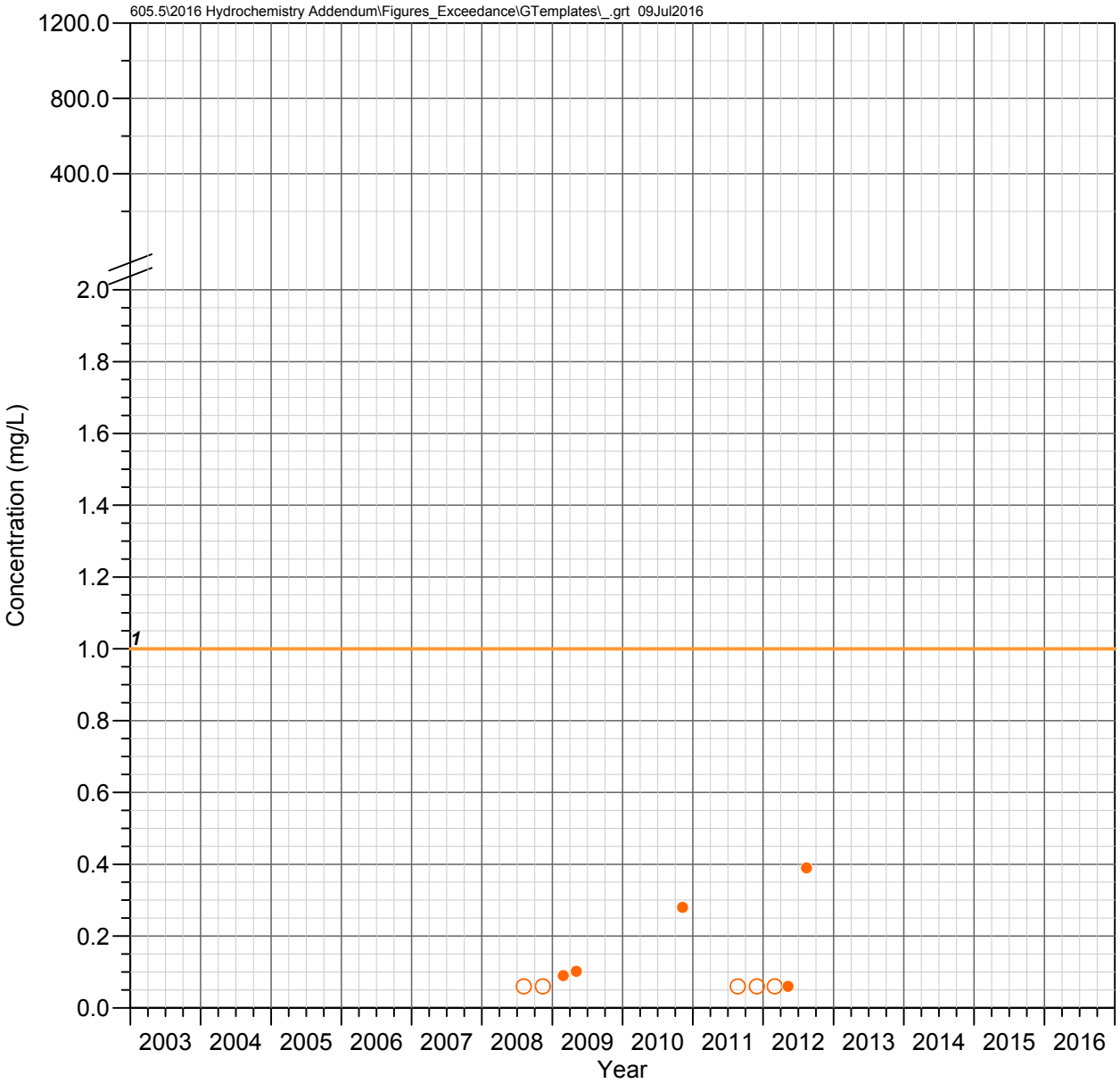


FIGURE F-399. IRON CONCENTRATIONS OBSERVED AT IC 1.0 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 15.5 C
Devils Canyon Watershed

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

DIS = Dissolved

AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1 mg/L)

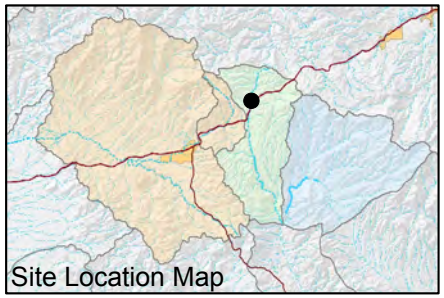
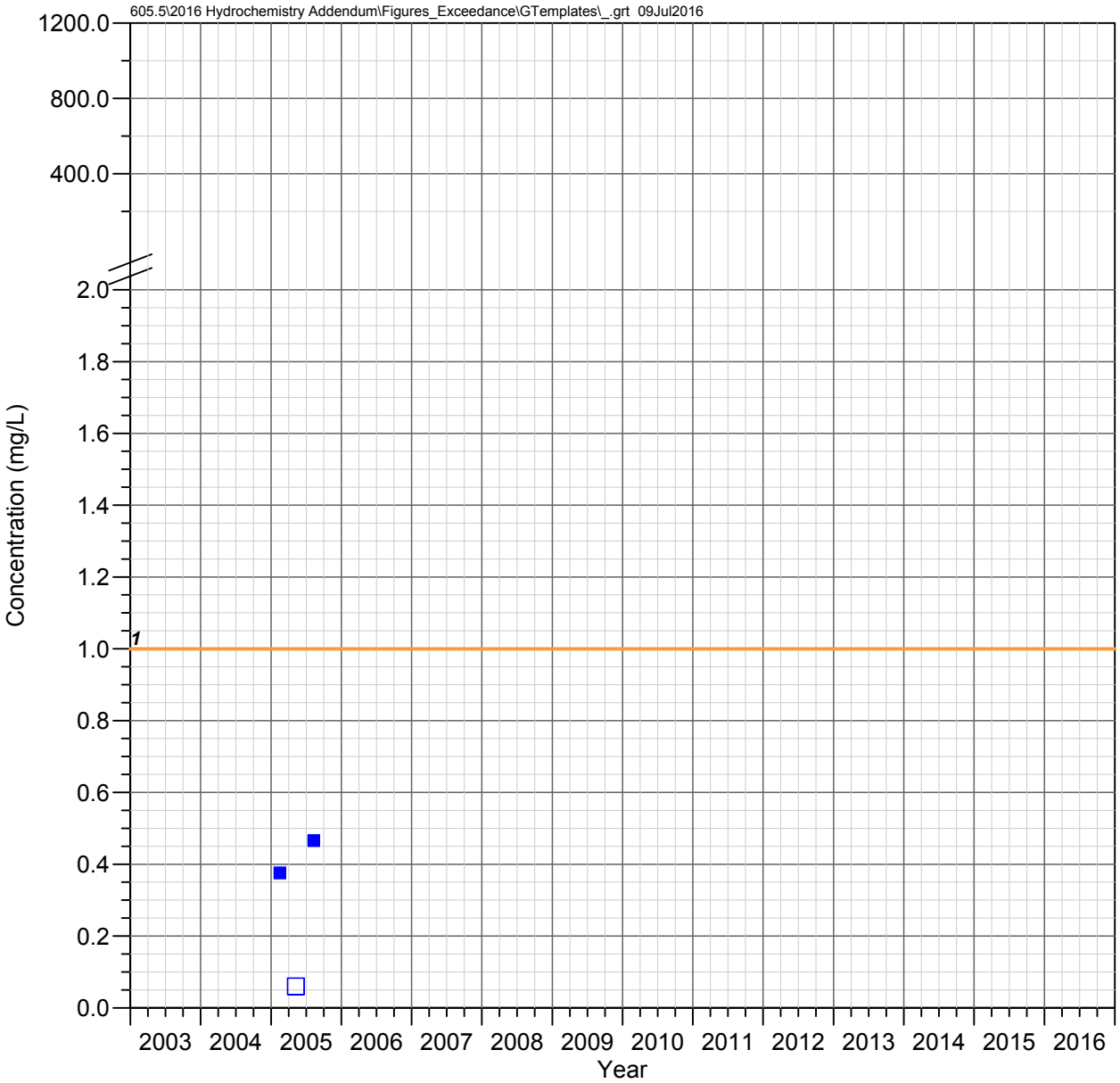


FIGURE F-400. IRON CONCENTRATIONS OBSERVED AT DC 15.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 15.2 C
Devils Canyon Watershed

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

DIS = Dissolved

AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1 mg/L)

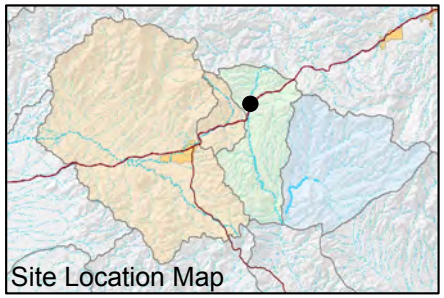
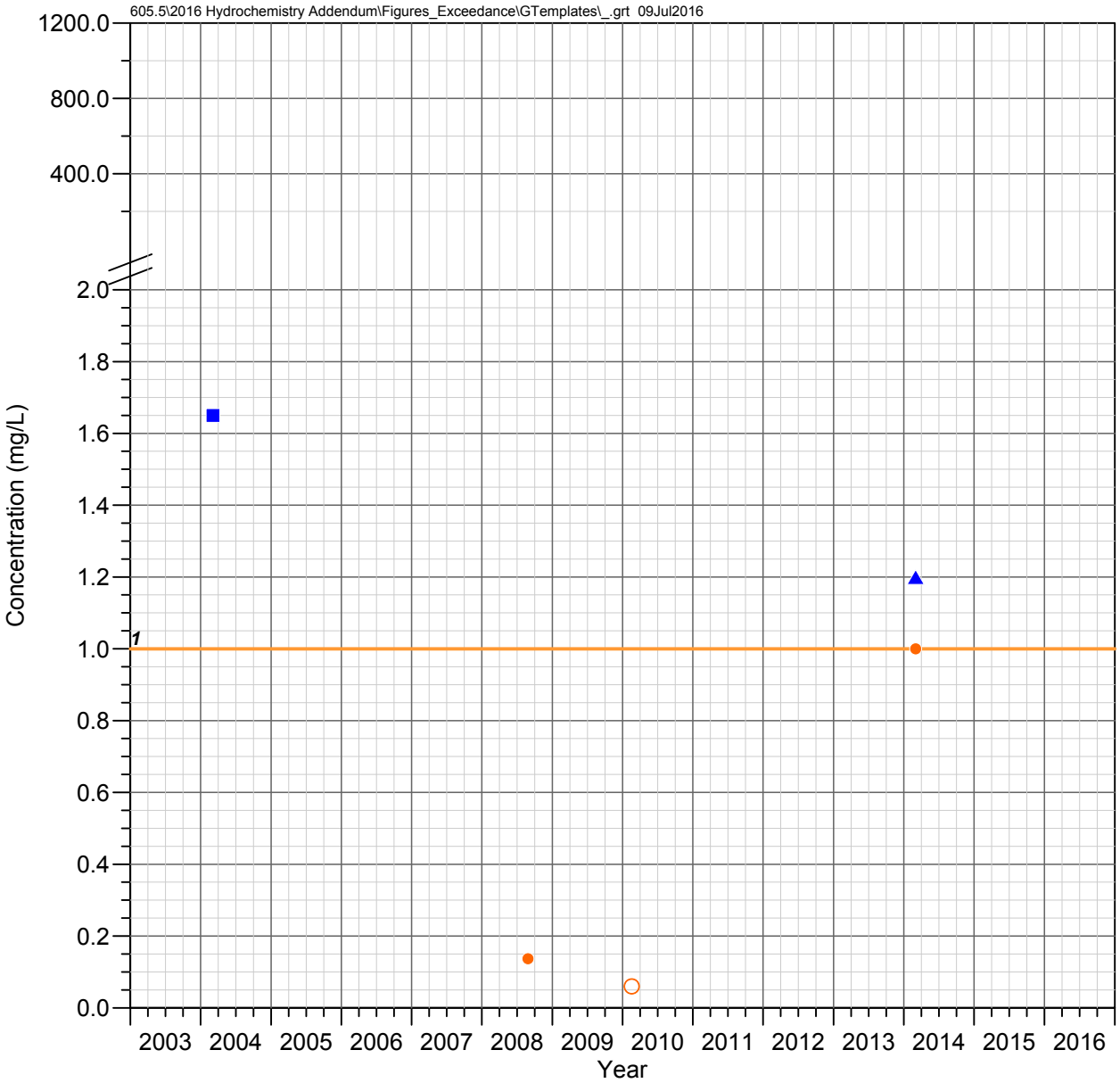


FIGURE F-401. IRON CONCENTRATIONS OBSERVED AT DC 15.2 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 14.7 C
Devils Canyon Watershed

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

DIS = Dissolved

AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1 mg/L)

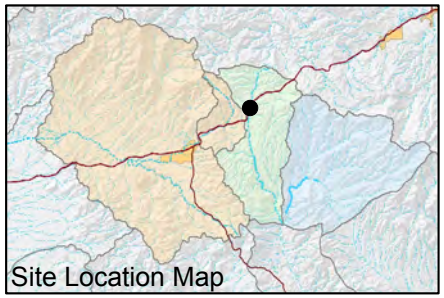
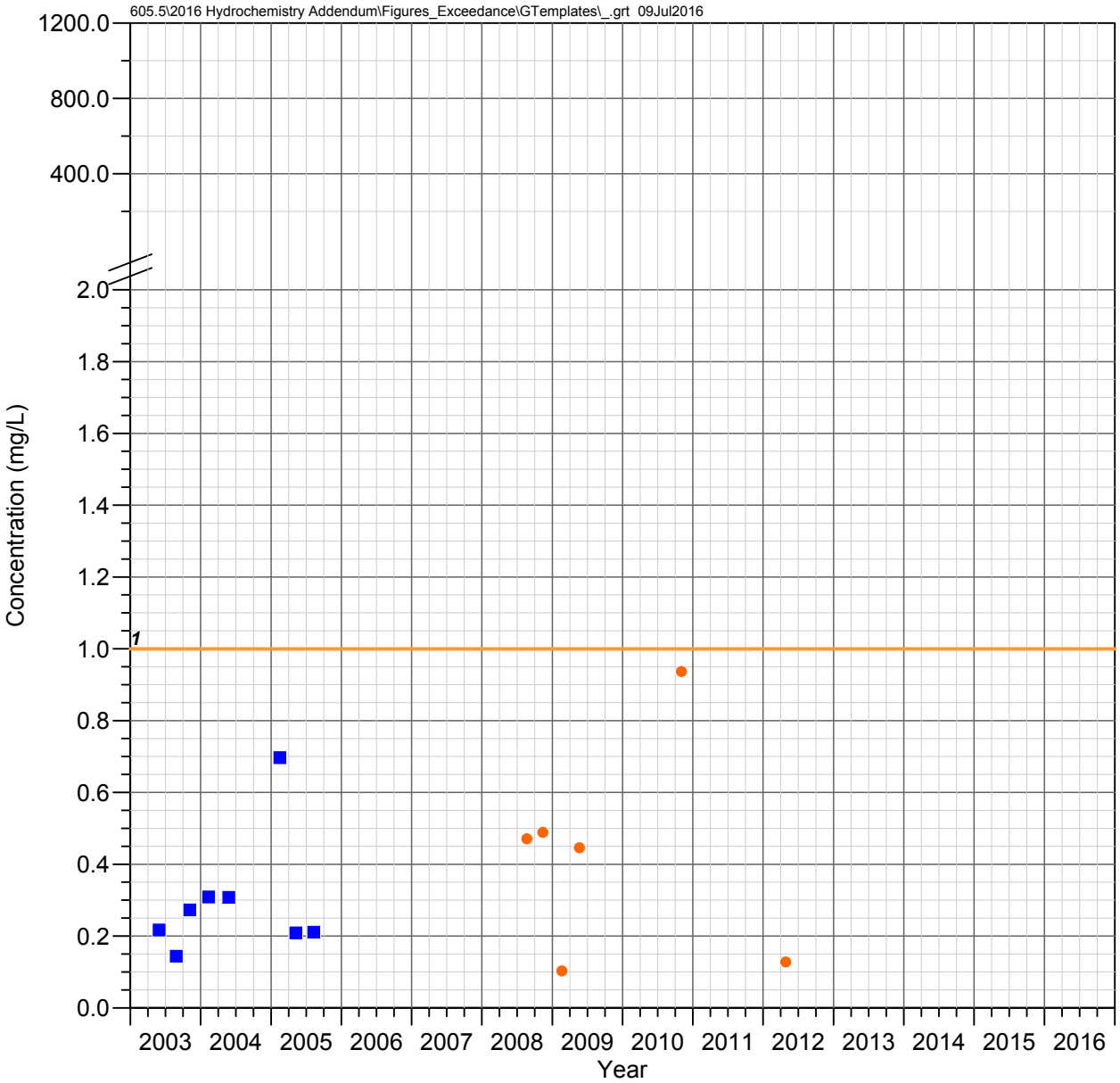


FIGURE F-402. IRON CONCENTRATIONS OBSERVED AT DC 14.7 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 13.5 C
Devils Canyon Watershed

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

DIS = Dissolved

AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1 mg/L)

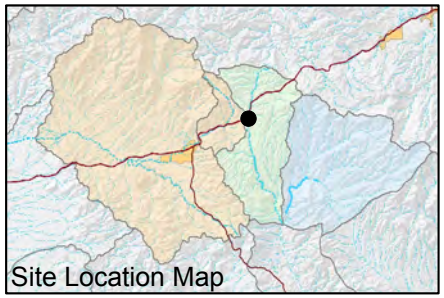
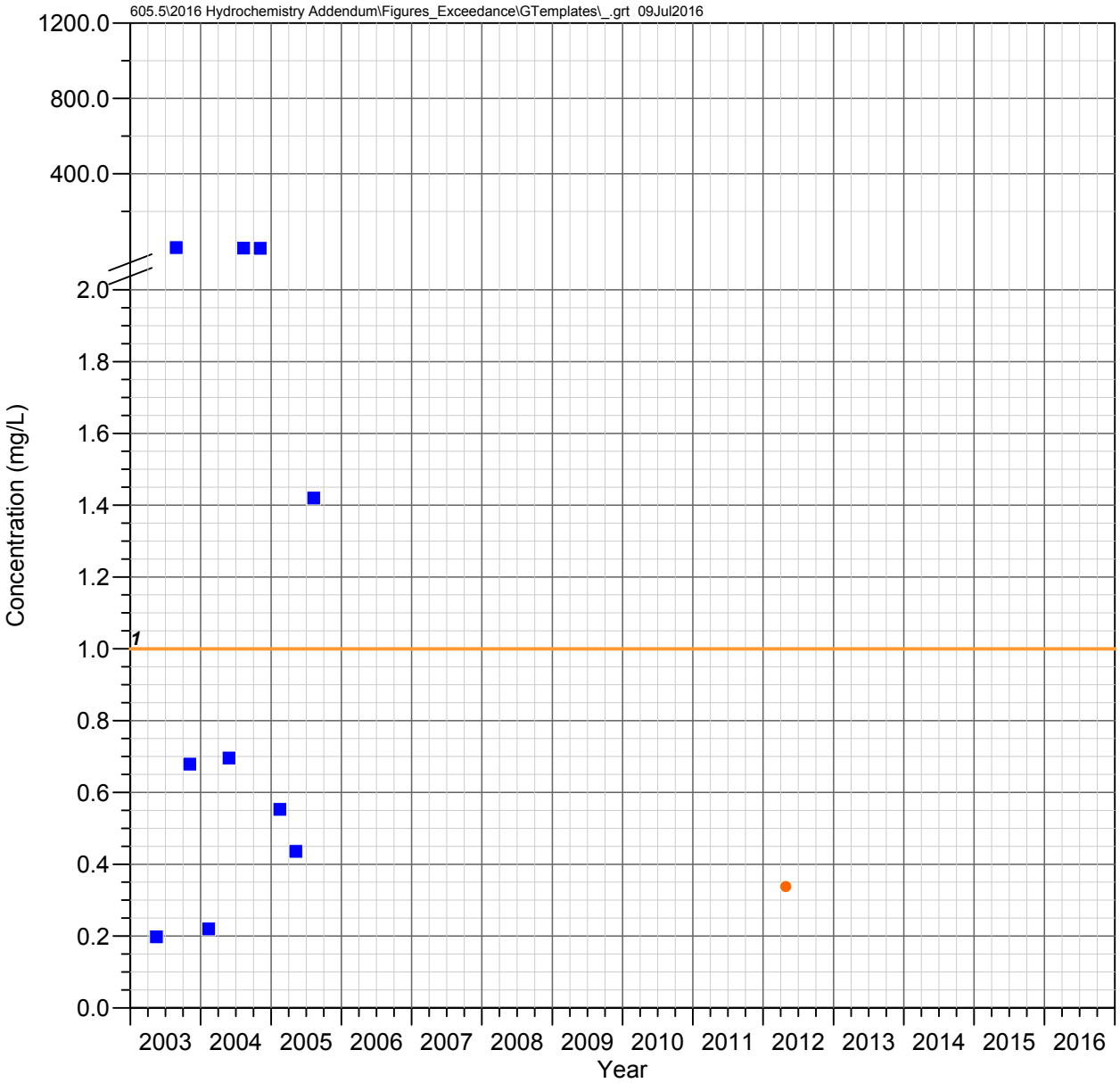


FIGURE F-403. IRON CONCENTRATIONS OBSERVED AT DC 13.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 10.9 C
Devils Canyon Watershed

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

DIS = Dissolved

AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1 mg/L)

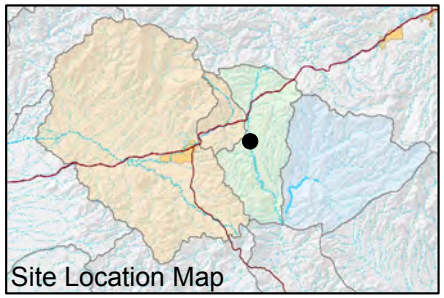
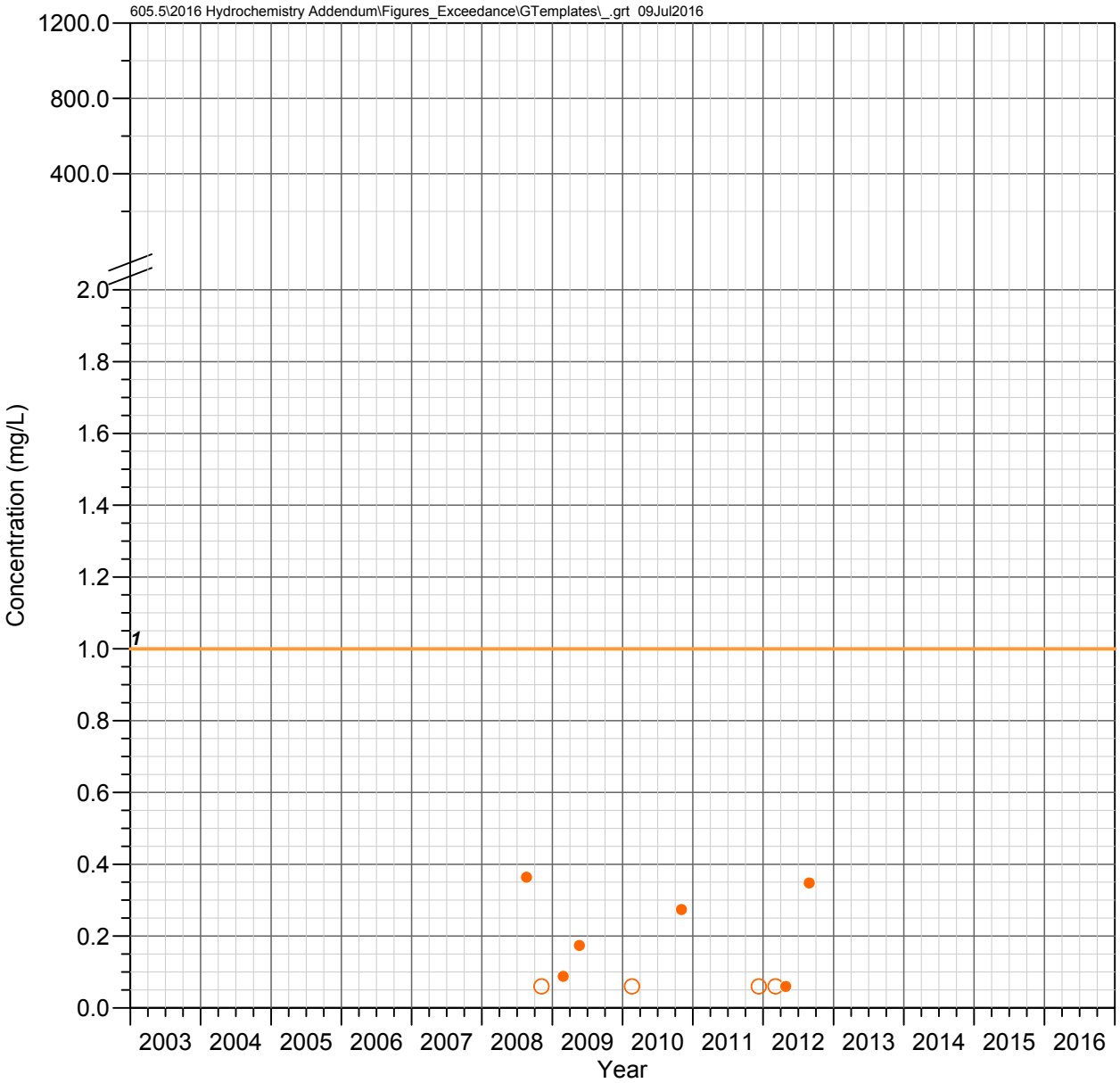


FIGURE F-404. IRON CONCENTRATIONS OBSERVED AT DC 10.9 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



RR 1.5 C
Devils Canyon Watershed

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

DIS = Dissolved

AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1 mg/L)

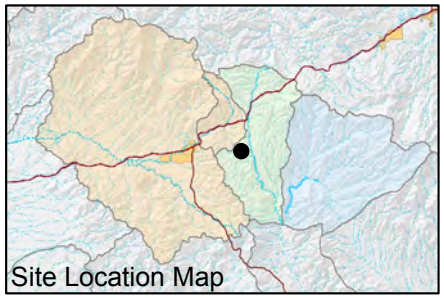
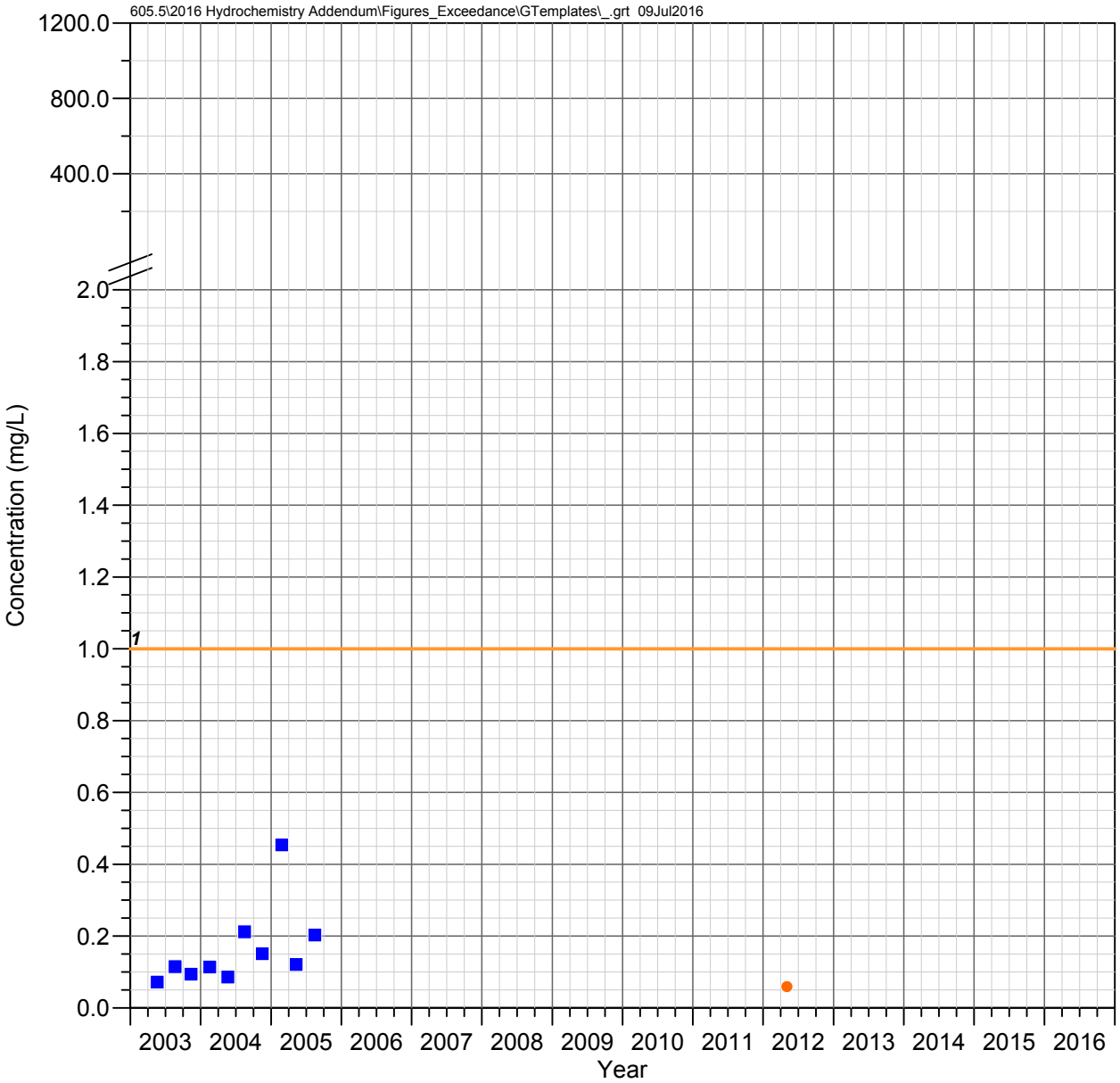


FIGURE F-405. IRON CONCENTRATIONS OBSERVED AT RR 1.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.8 C
Devils Canyon Watershed

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

DIS = Dissolved

AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1 mg/L)

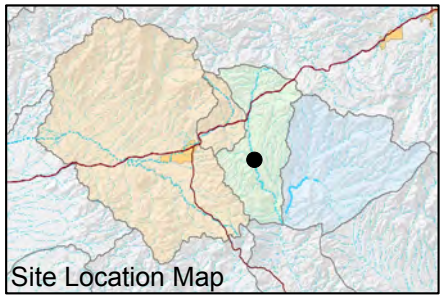
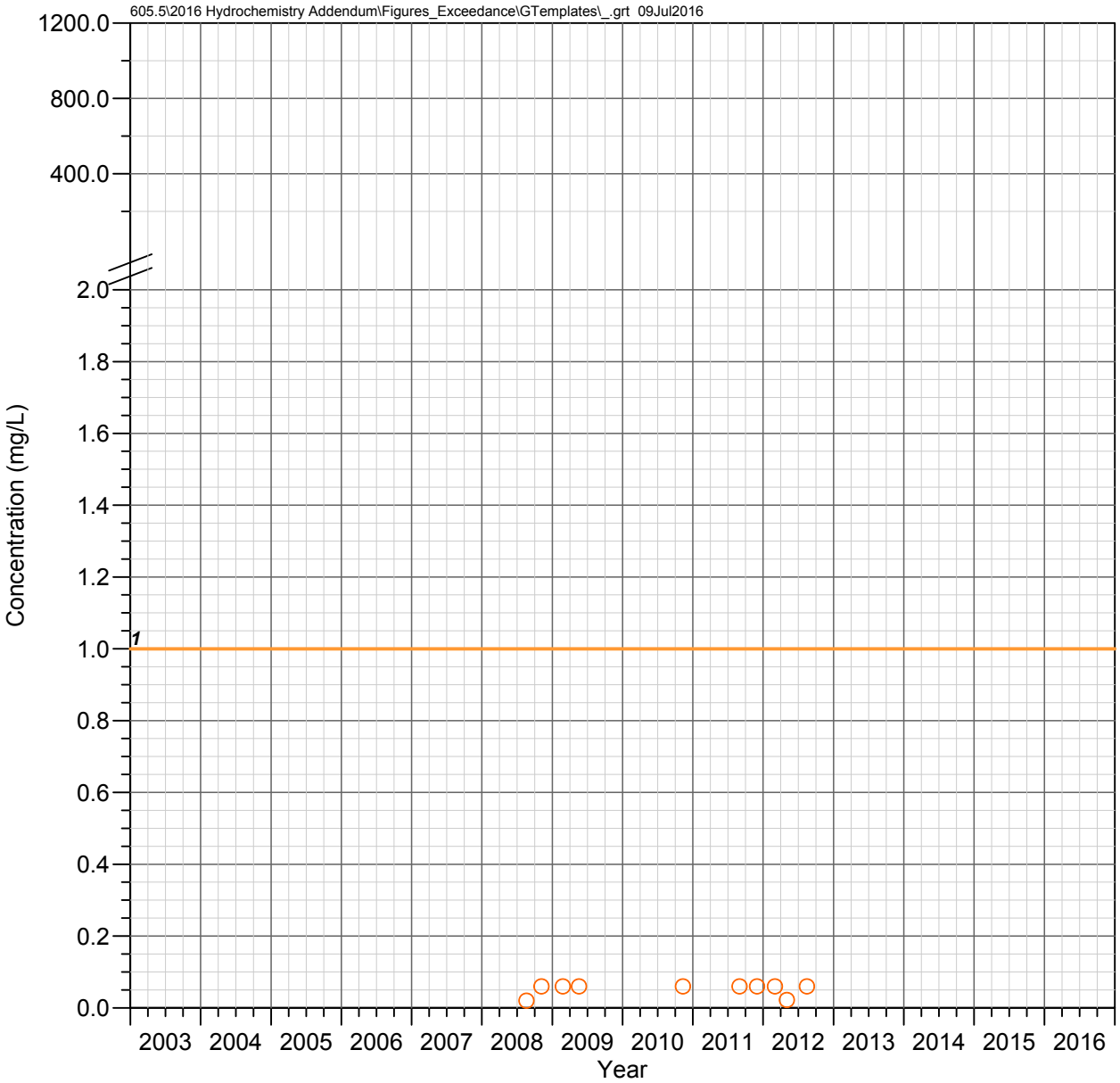


FIGURE F-406. IRON CONCENTRATIONS OBSERVED AT DC 8.8 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



H 0.1 C
Devils Canyon Watershed

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

DIS = Dissolved

AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1 mg/L)

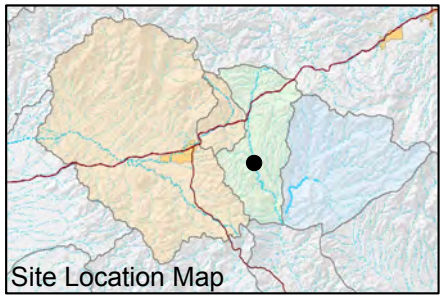
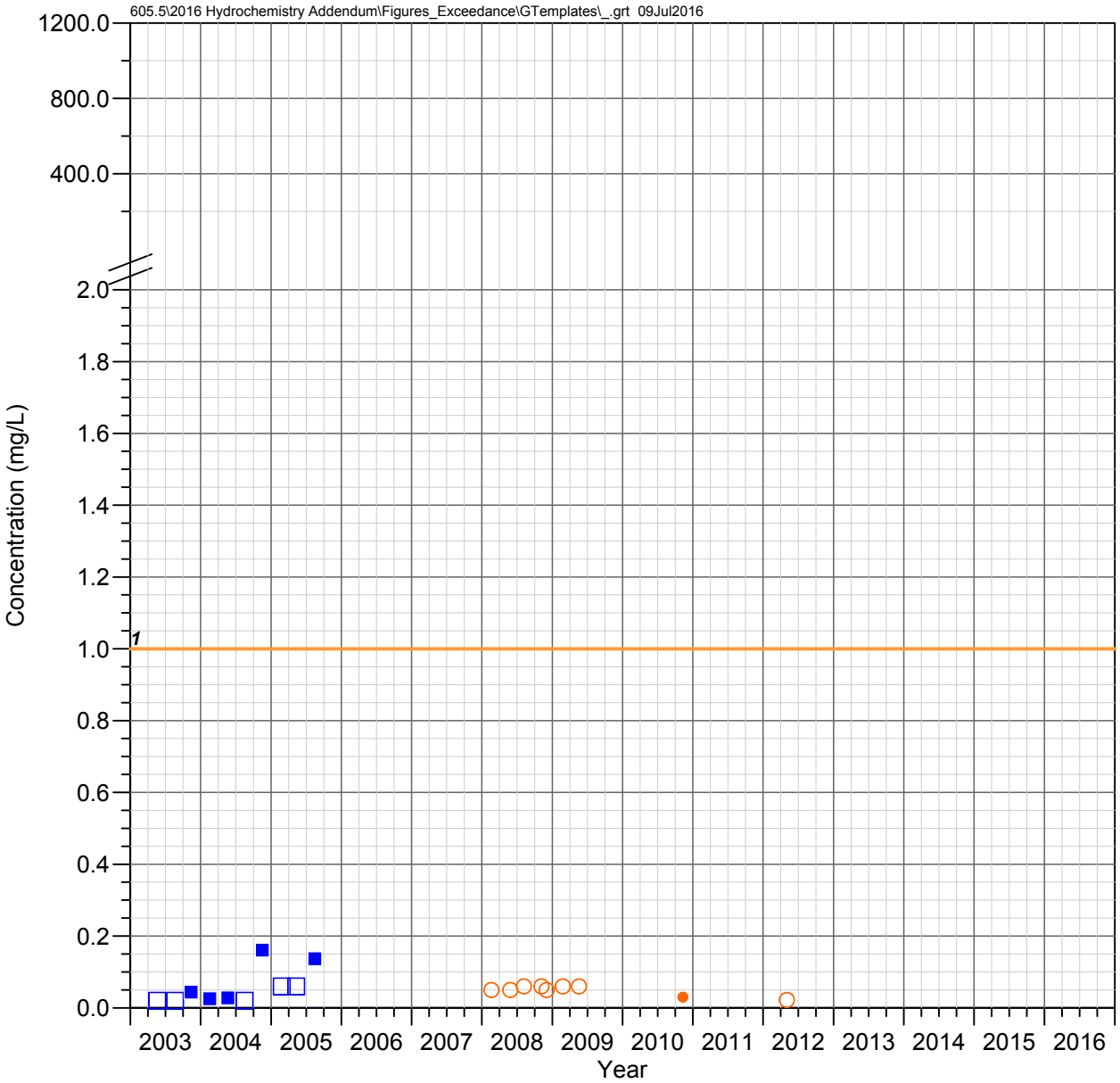


FIGURE F-407. IRON CONCENTRATIONS OBSERVED AT H 0.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.2 W
Devils Canyon Watershed

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

DIS = Dissolved

AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1 mg/L)

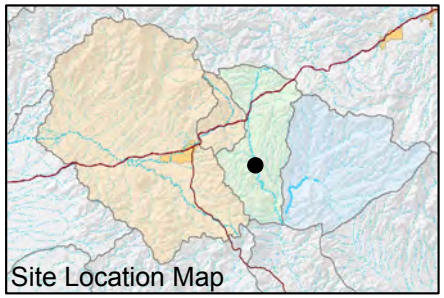
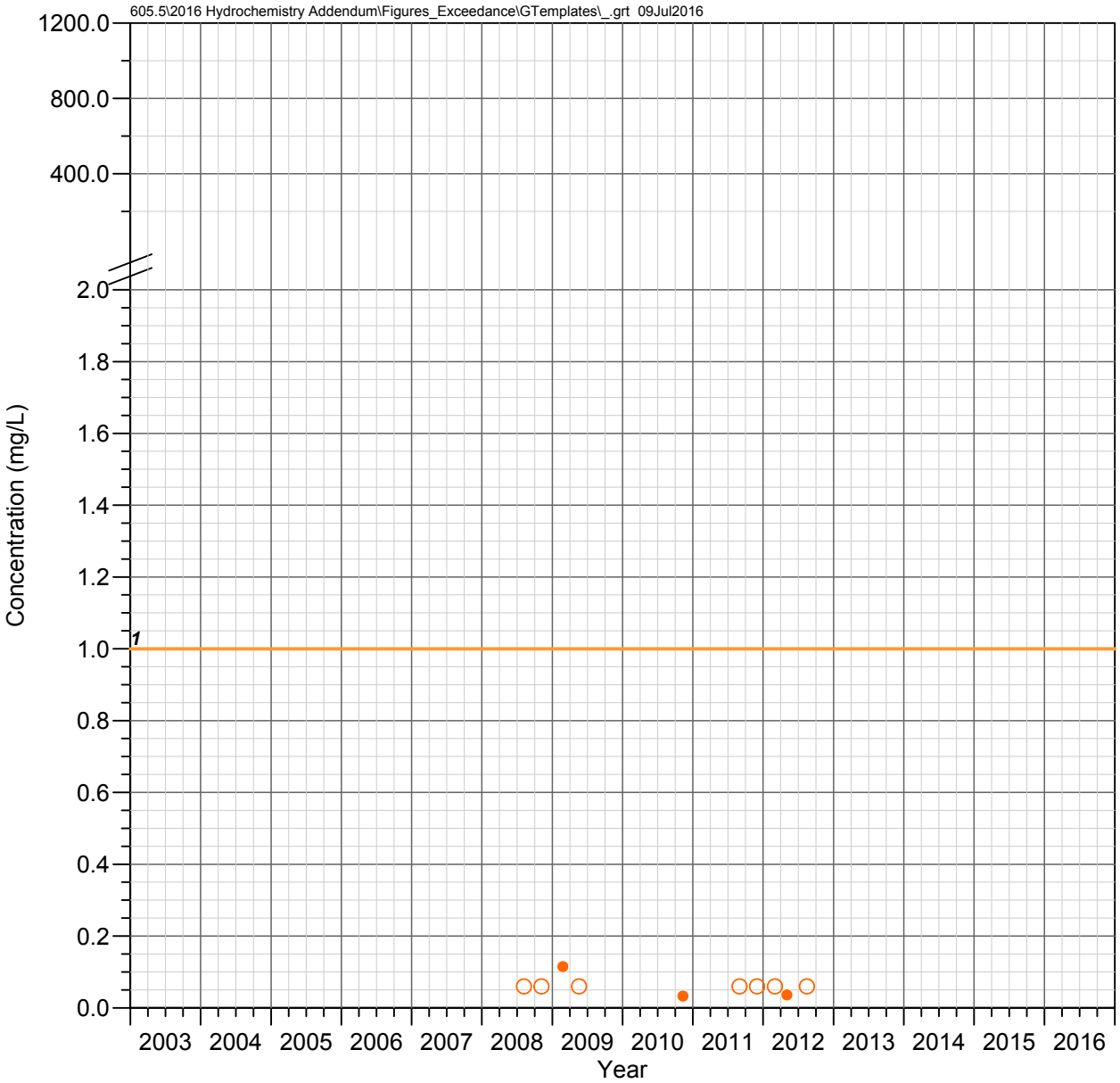


FIGURE F-408. IRON CONCENTRATIONS OBSERVED AT DC 8.2 W, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.1 C
Devils Canyon Watershed

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

DIS = Dissolved

AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1 mg/L)

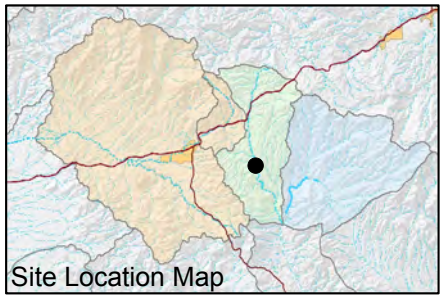
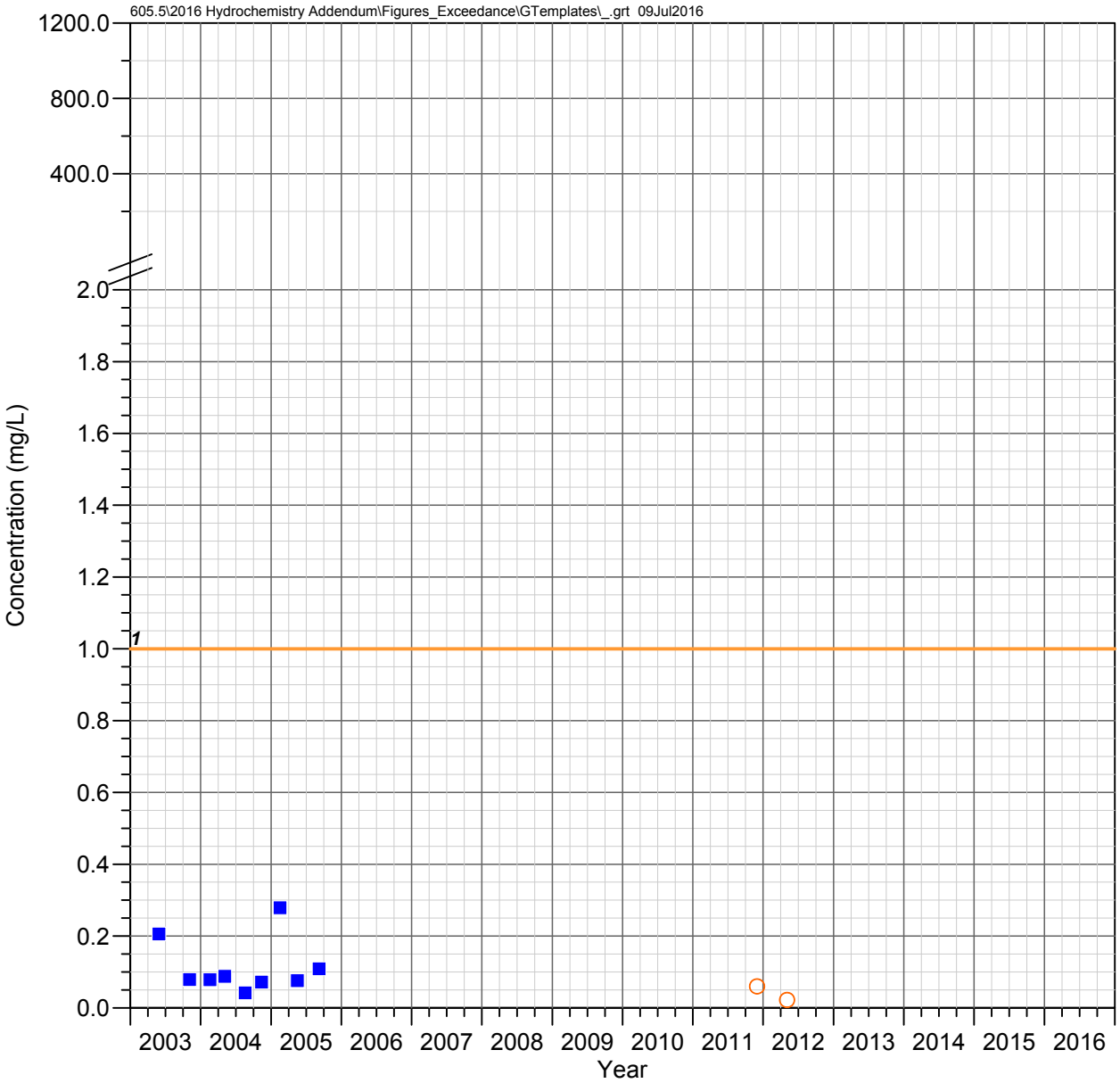


FIGURE F-409. IRON CONCENTRATIONS OBSERVED AT DC 8.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 7.1 C
Devils Canyon Watershed

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

DIS = Dissolved

AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1 mg/L)

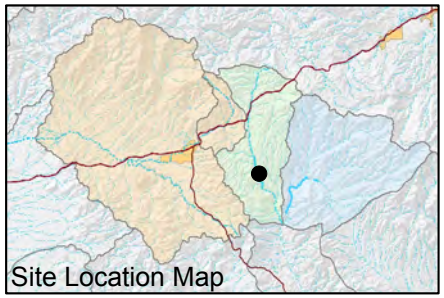
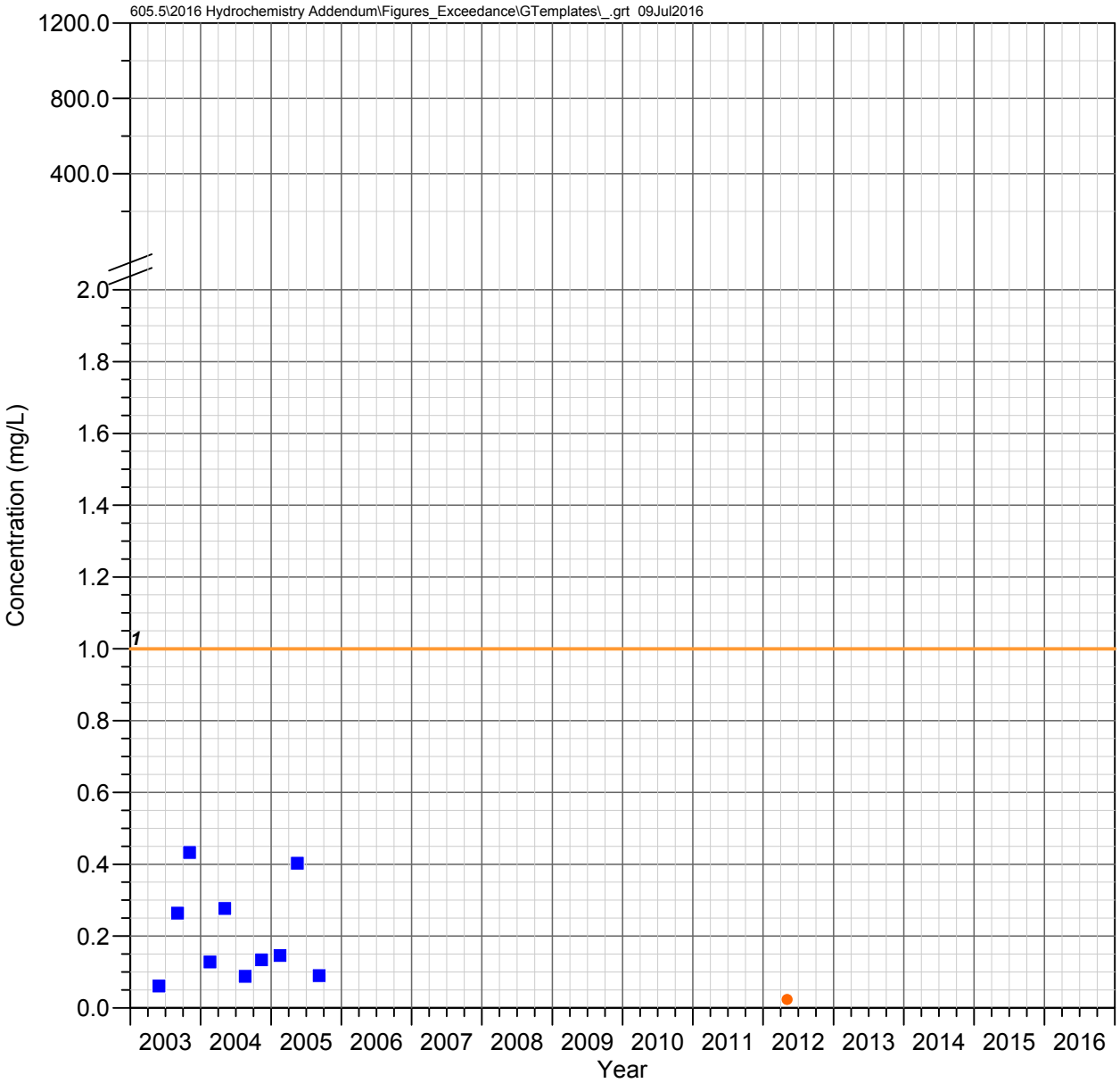


FIGURE F-410. IRON CONCENTRATIONS OBSERVED AT DC 7.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.6 W (DCT 6.6 W)
Devils Canyon Watershed

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

DIS = Dissolved

AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1 mg/L)

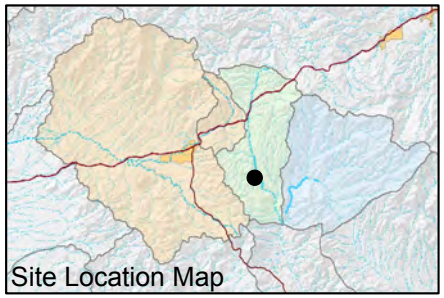
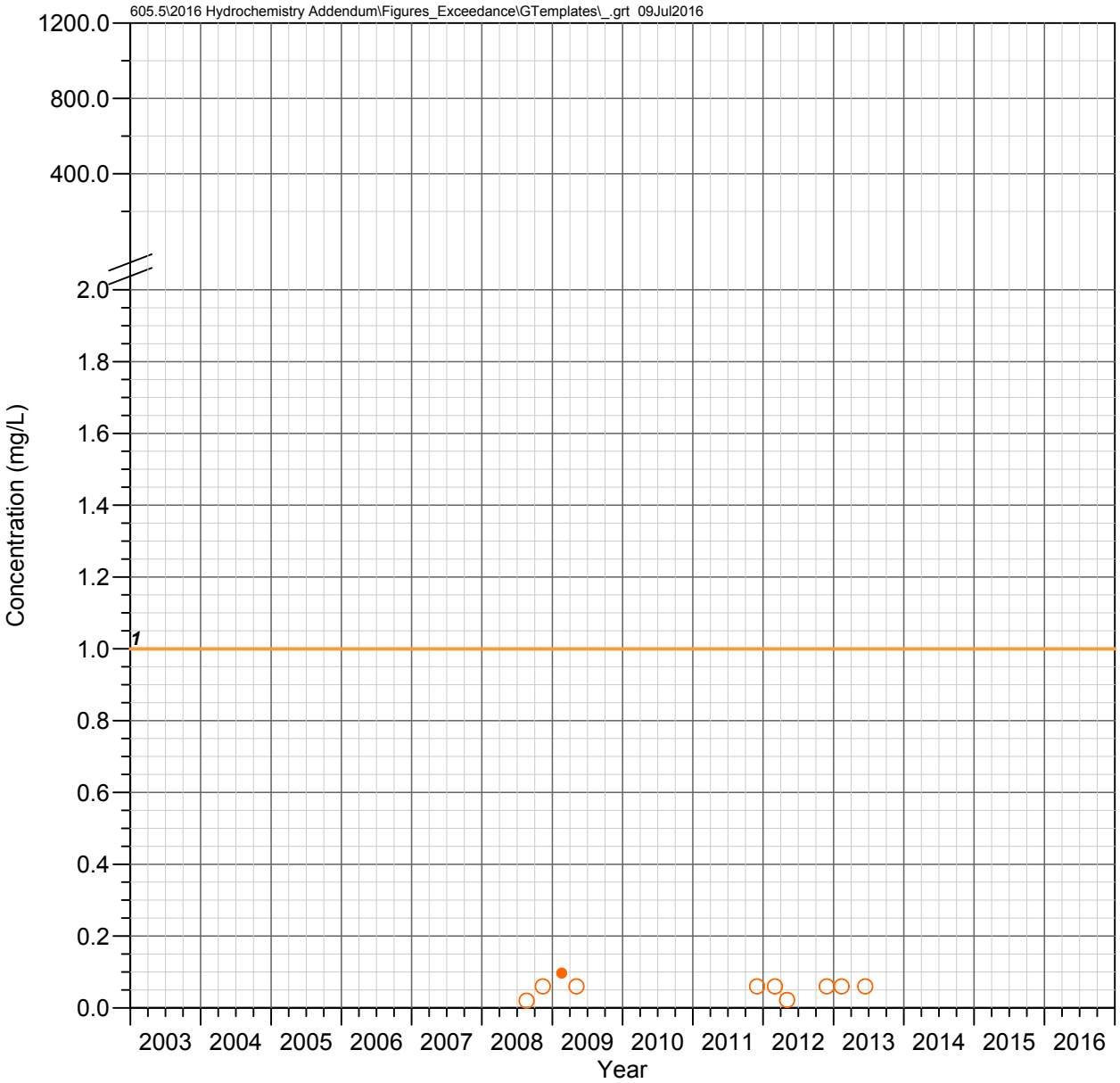


FIGURE F-411. IRON CONCENTRATIONS OBSERVED AT DC 6.6 W (DCT 6.6 W), DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.14 C
Devils Canyon Watershed

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

DIS = Dissolved

AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1 mg/L)

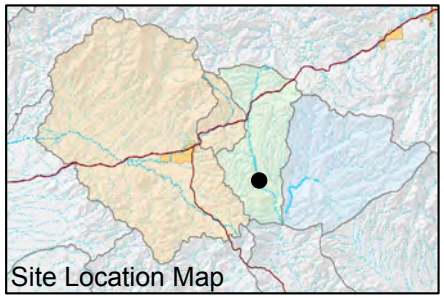
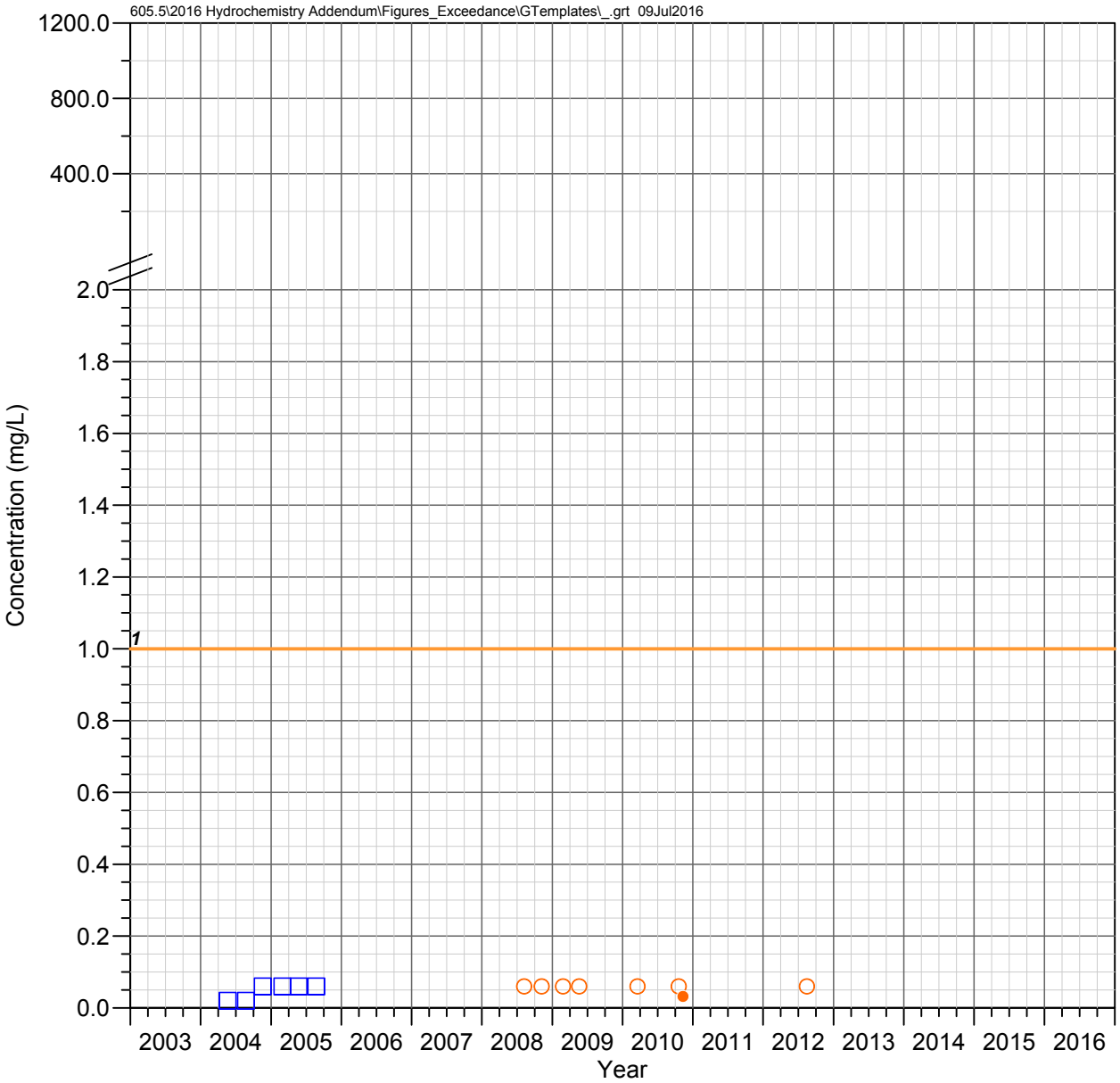


FIGURE F-412. IRON CONCENTRATIONS OBSERVED AT DC 6.14 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.1 E
Devils Canyon Watershed

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

DIS = Dissolved

AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1 mg/L)

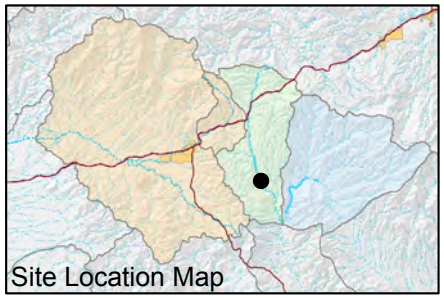
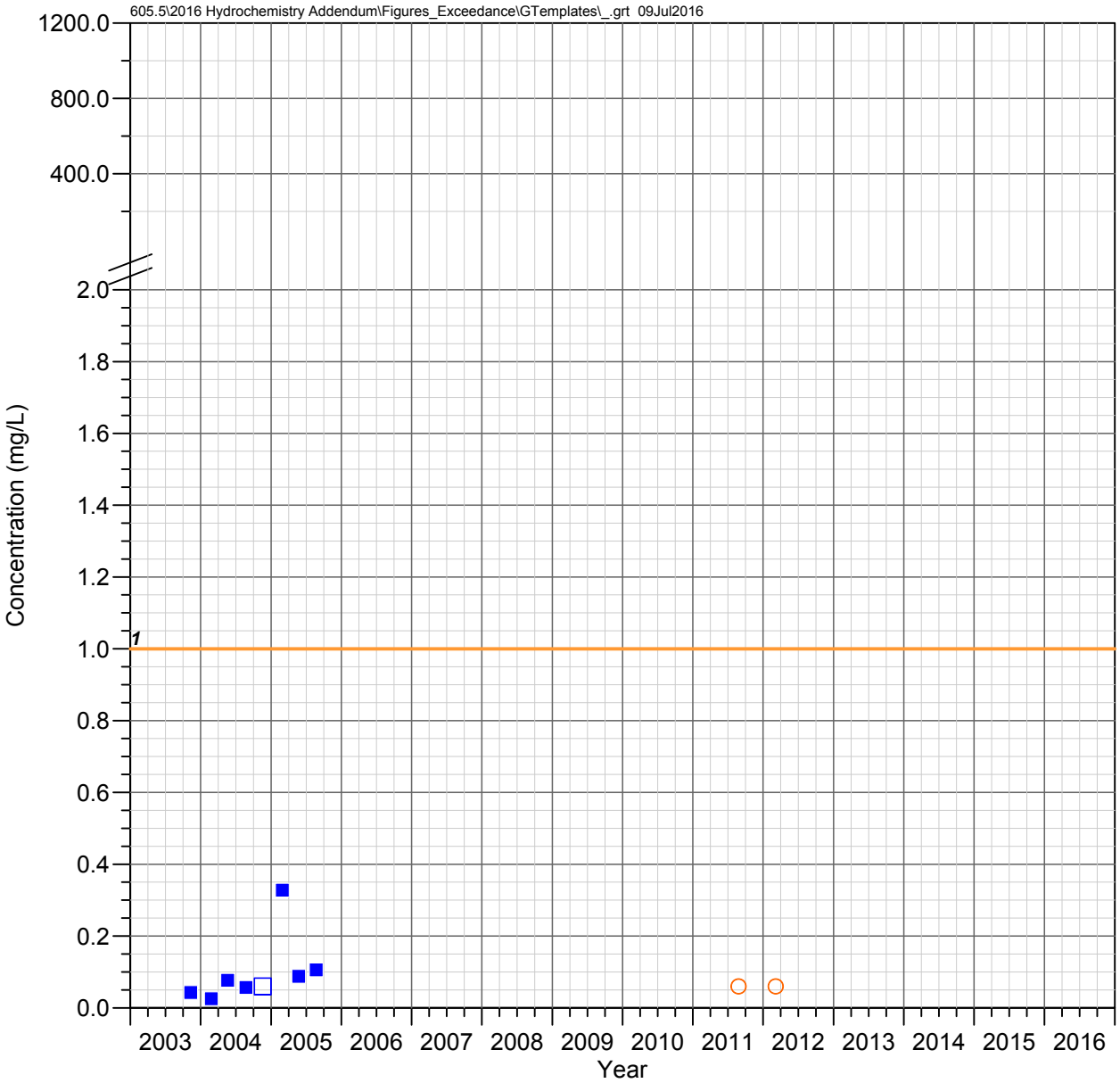


FIGURE F-413. IRON CONCENTRATIONS OBSERVED AT DC 6.1 E, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 5.5 C
Devils Canyon Watershed

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

DIS = Dissolved

AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1 mg/L)

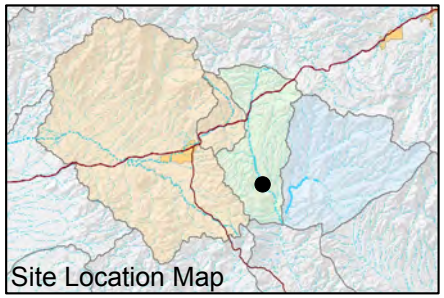
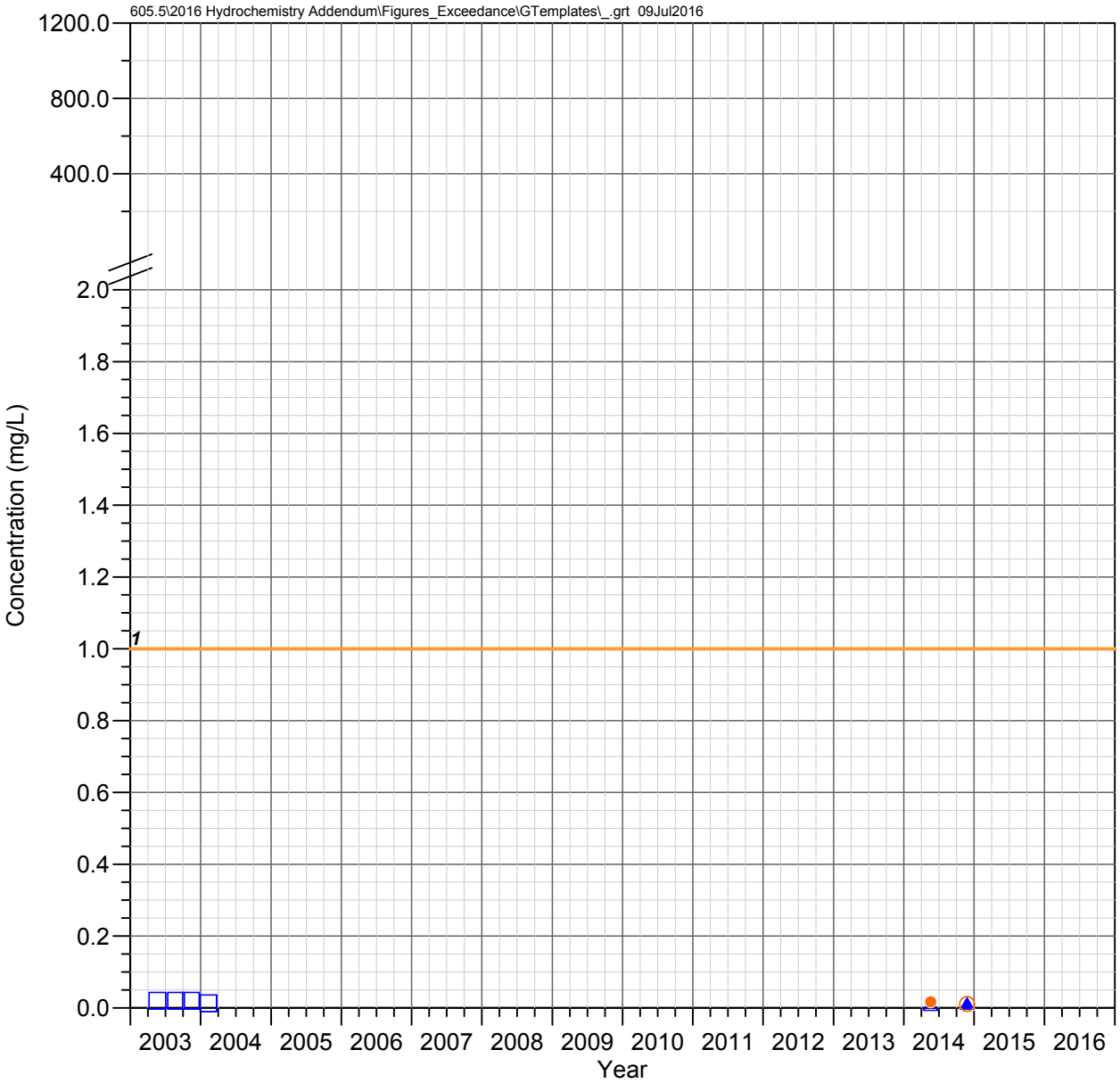


FIGURE F-414. IRON CONCENTRATIONS OBSERVED AT DC 5.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 4.1 E
Devils Canyon Watershed

IRON

Observed Concentrations
*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards **(filter analysis dependent)**
DIS = Dissolved

AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1 mg/L)

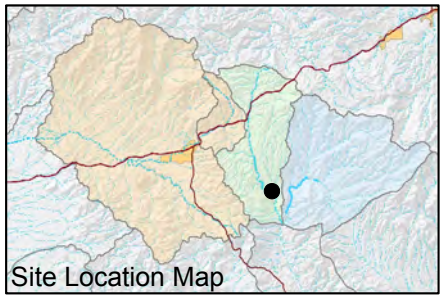
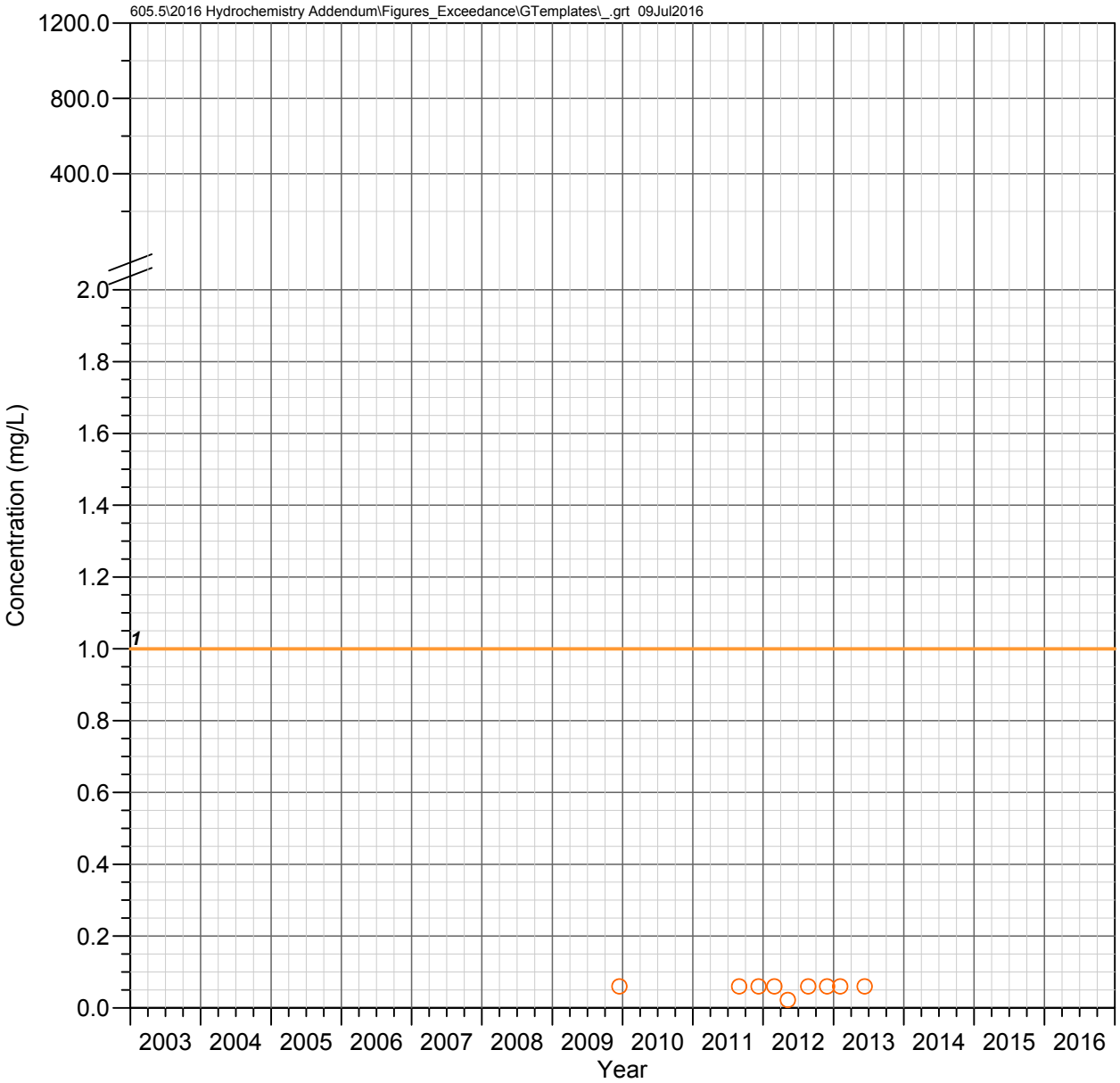


FIGURE F-415. IRON CONCENTRATIONS OBSERVED AT DC 4.1 E, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Government Springs
Mineral Creek Watershed

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards **(filter analysis dependent)**

DIS = Dissolved

AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1 mg/L)

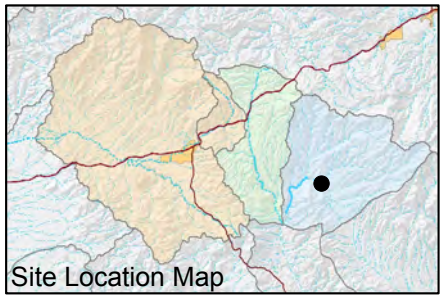
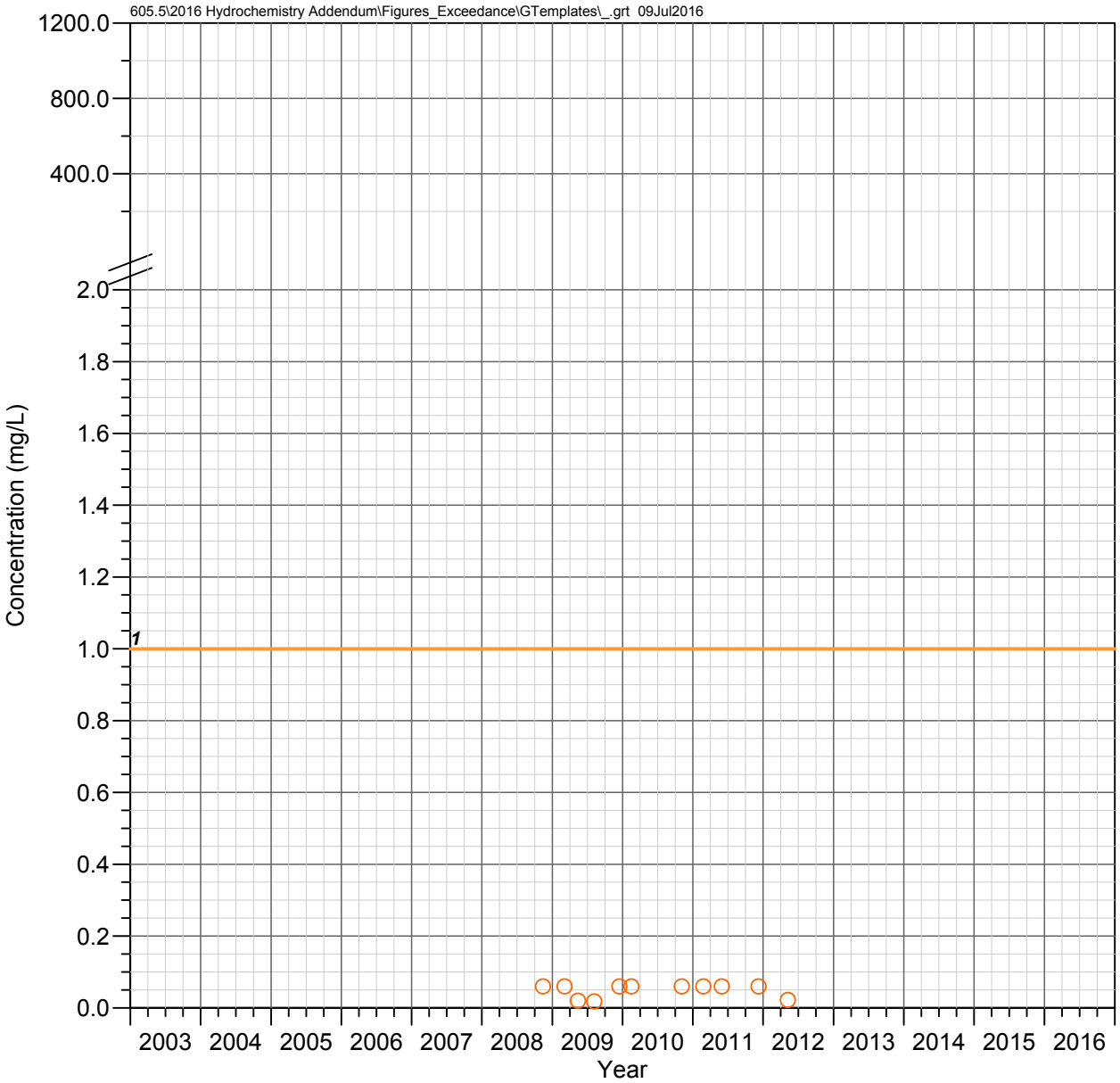


FIGURE F-416. IRON CONCENTRATIONS OBSERVED AT GOVERNMENT SPRINGS, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 8.4 C
Mineral Creek Watershed

IRON

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

DIS = Dissolved

AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1 mg/L)

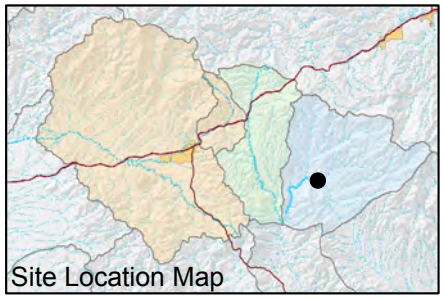
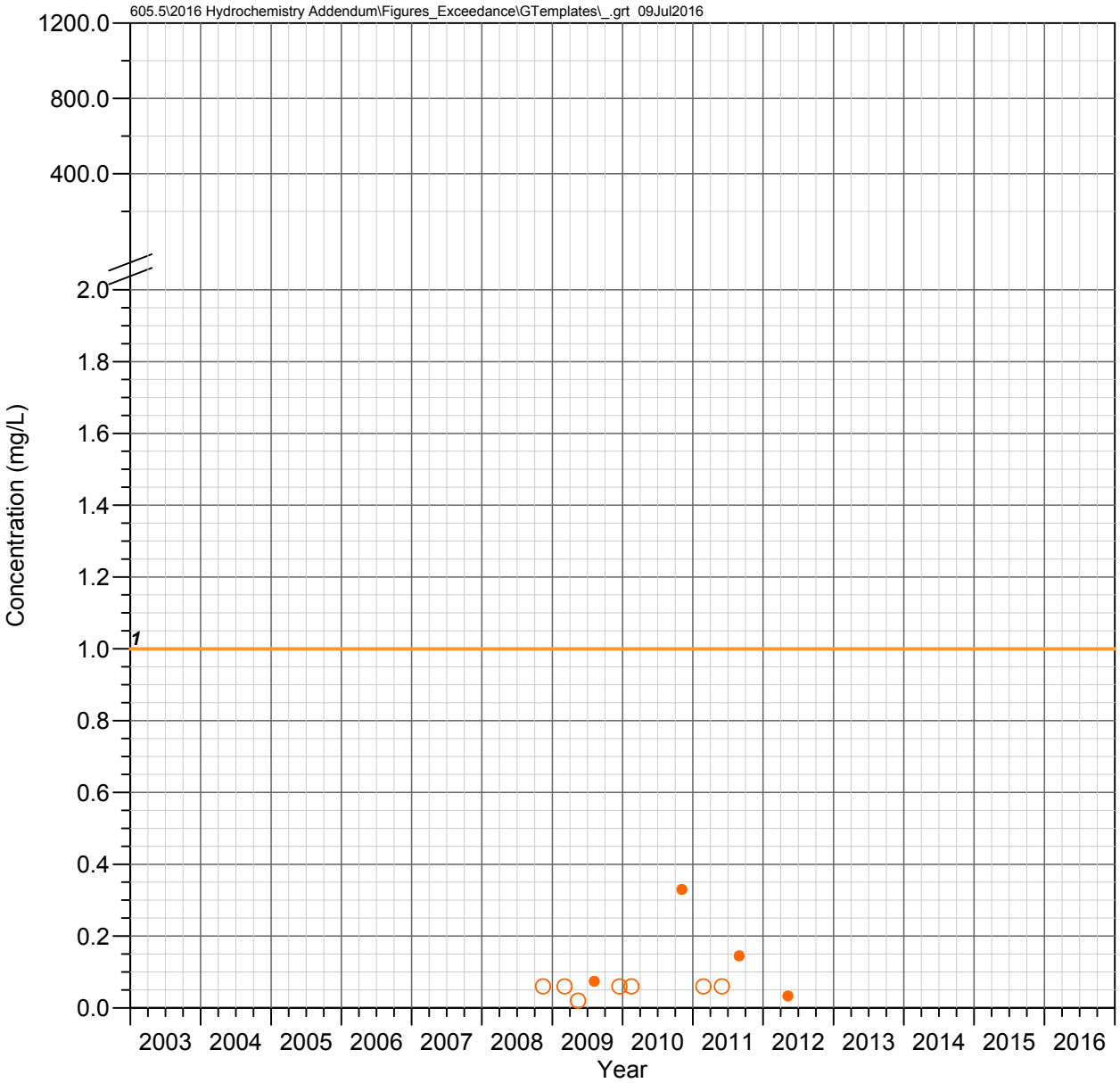


FIGURE F-417. IRON CONCENTRATIONS OBSERVED AT MC 8.4 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



LF 0.2 C
Mineral Creek Watershed

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

DIS = Dissolved

AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1 mg/L)

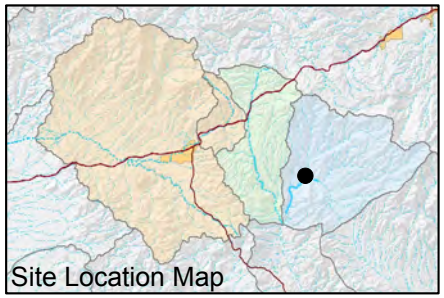
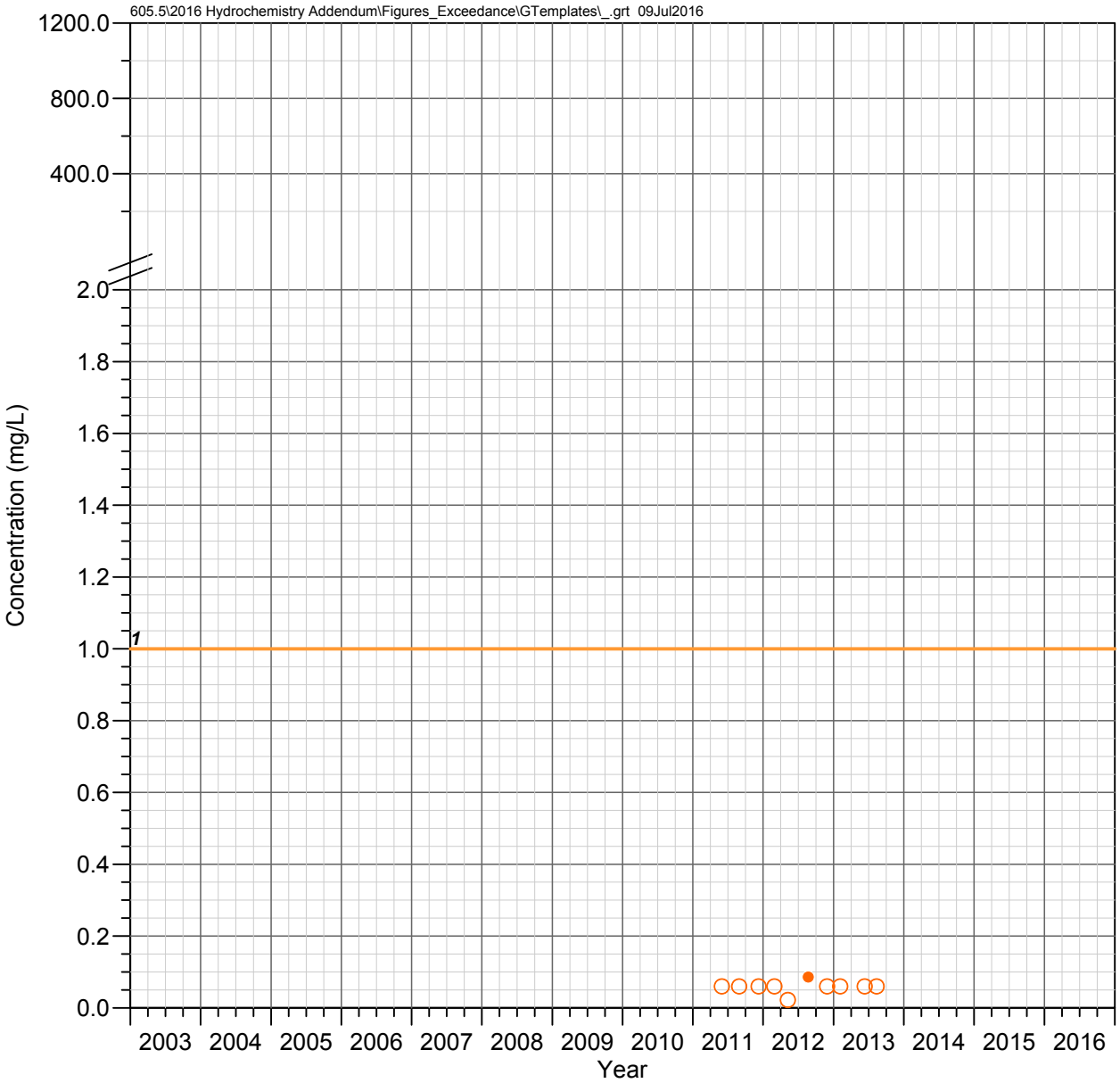


FIGURE F-418. IRON CONCENTRATIONS OBSERVED AT LF 0.2 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 5.2 C
Mineral Creek Watershed

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

DIS = Dissolved

AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1 mg/L)

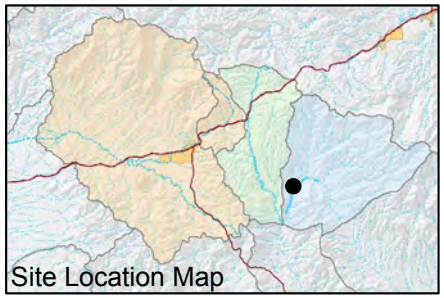
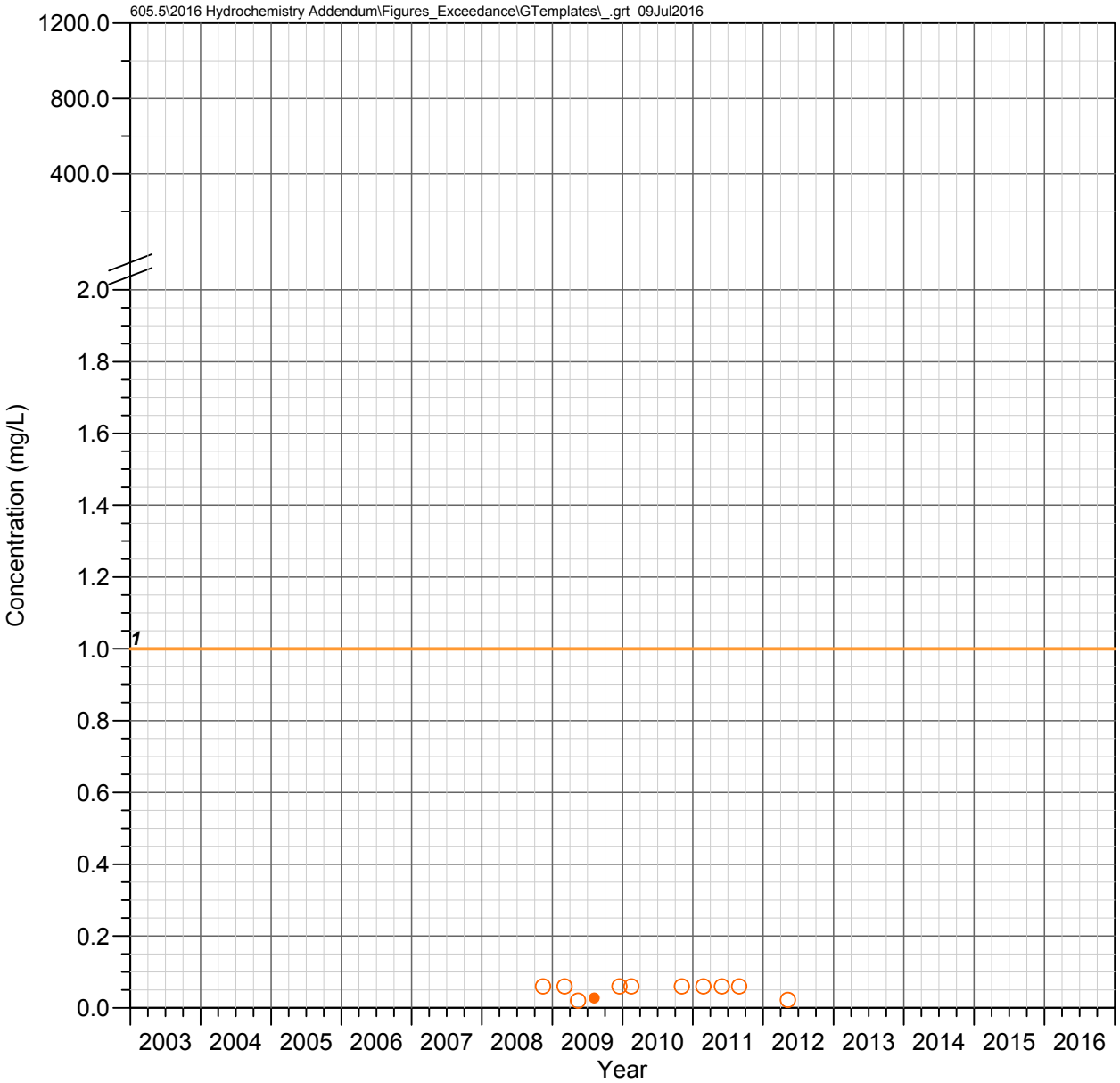


FIGURE F-419. IRON CONCENTRATIONS OBSERVED AT MC 5.2 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 3.4 W (Wet Leg Spring)
Mineral Creek Watershed

IRON

Observed Concentrations
*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards **(filter analysis dependent)**
DIS = Dissolved

AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1 mg/L)

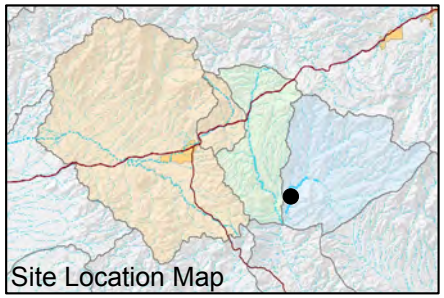
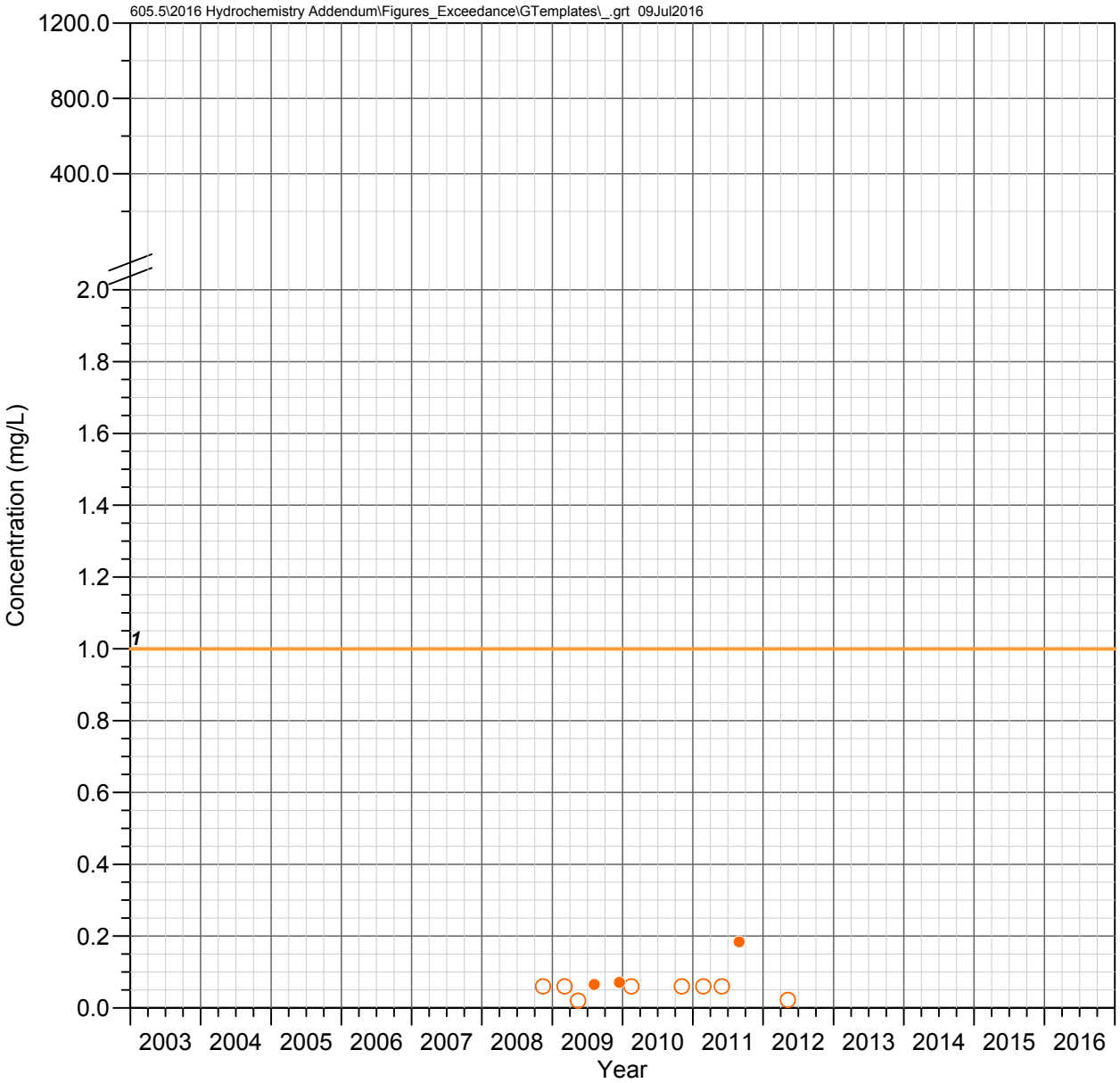


FIGURE F-420. IRON CONCENTRATIONS OBSERVED AT MC 3.4 W (WET LEG SPRING), MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 3.3 C (Lower Mineral)
Mineral Creek Watershed

IRON

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards **(filter analysis dependent)**

DIS = Dissolved

AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1 mg/L)

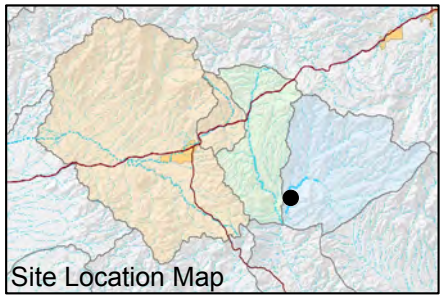
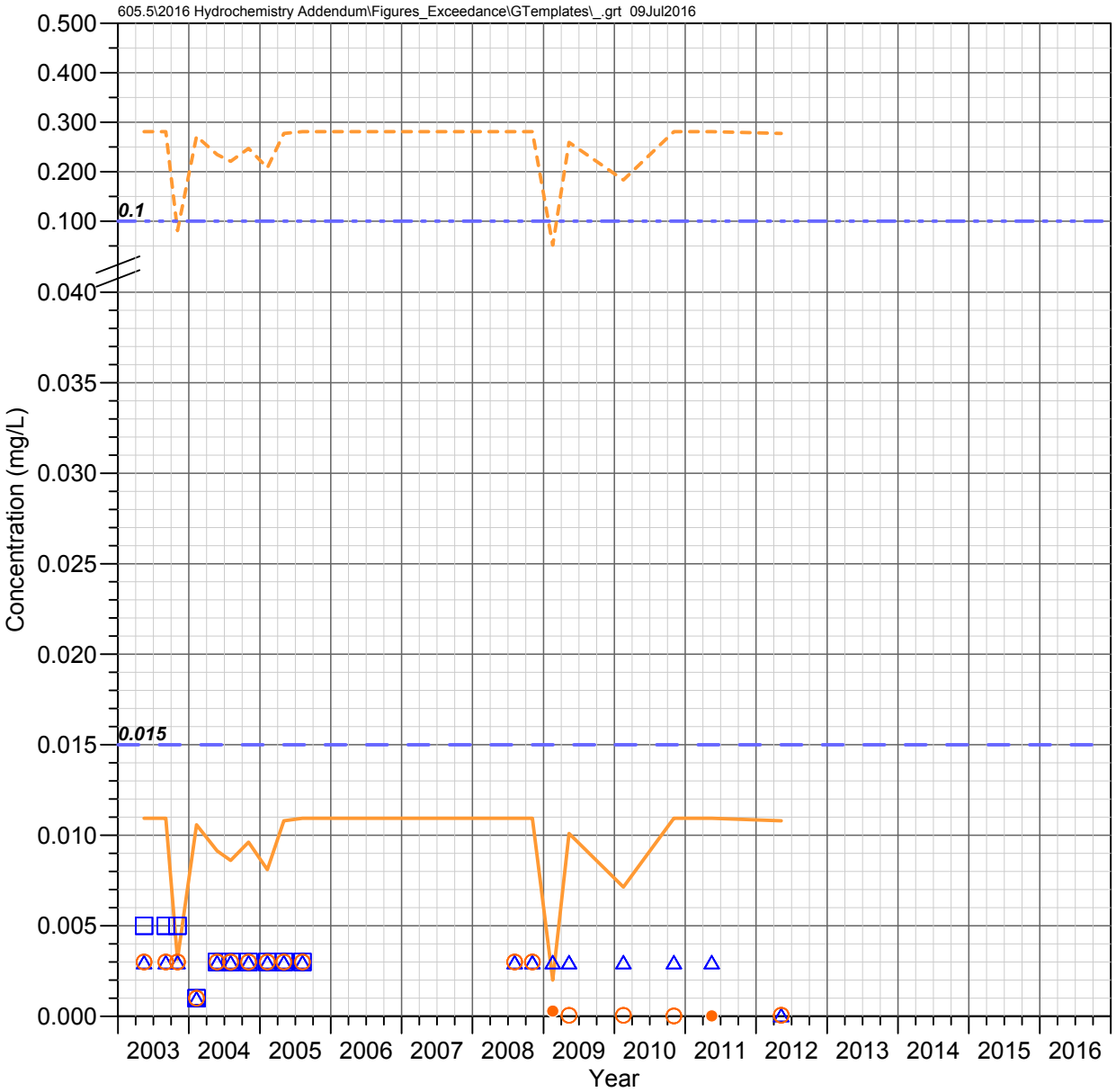


FIGURE F-421. IRON CONCENTRATIONS OBSERVED AT MC 3.3 C (LOWER MINERAL), MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Pump Station Spring (QC 30.7 C)
Queen Creek Watershed

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 0.015 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.1 mg/L)

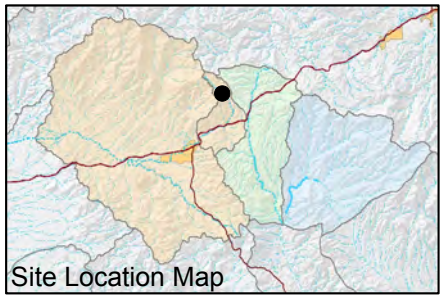


FIGURE F-422. LEAD CONCENTRATIONS OBSERVED AT PUMP STATION SPRING (QC 30.7 C), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES

QC 27.3 C
Queen Creek Watershed

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 0.015 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.1 mg/L)

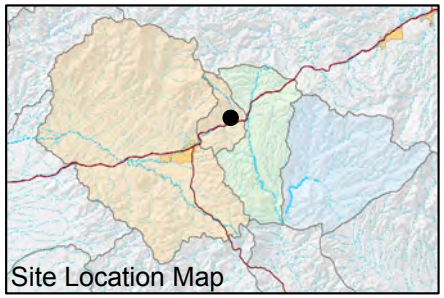
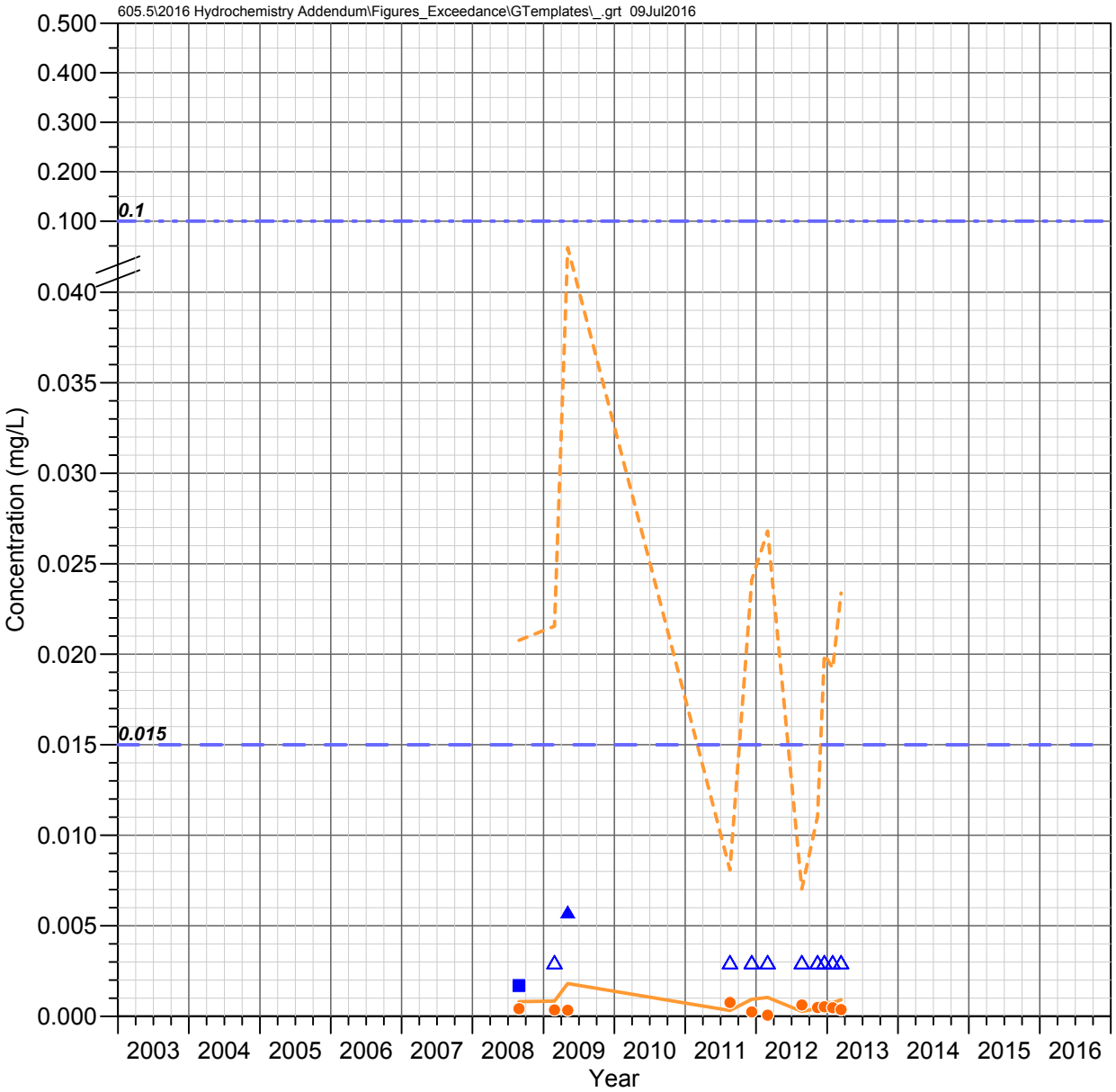


FIGURE F-423. LEAD CONCENTRATIONS OBSERVED AT QC 27.3 C, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Oak Flat Wash
Queen Creek Watershed

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 0.015 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.1 mg/L)

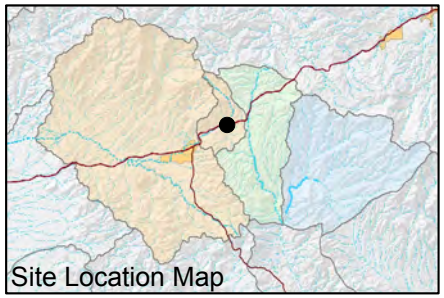
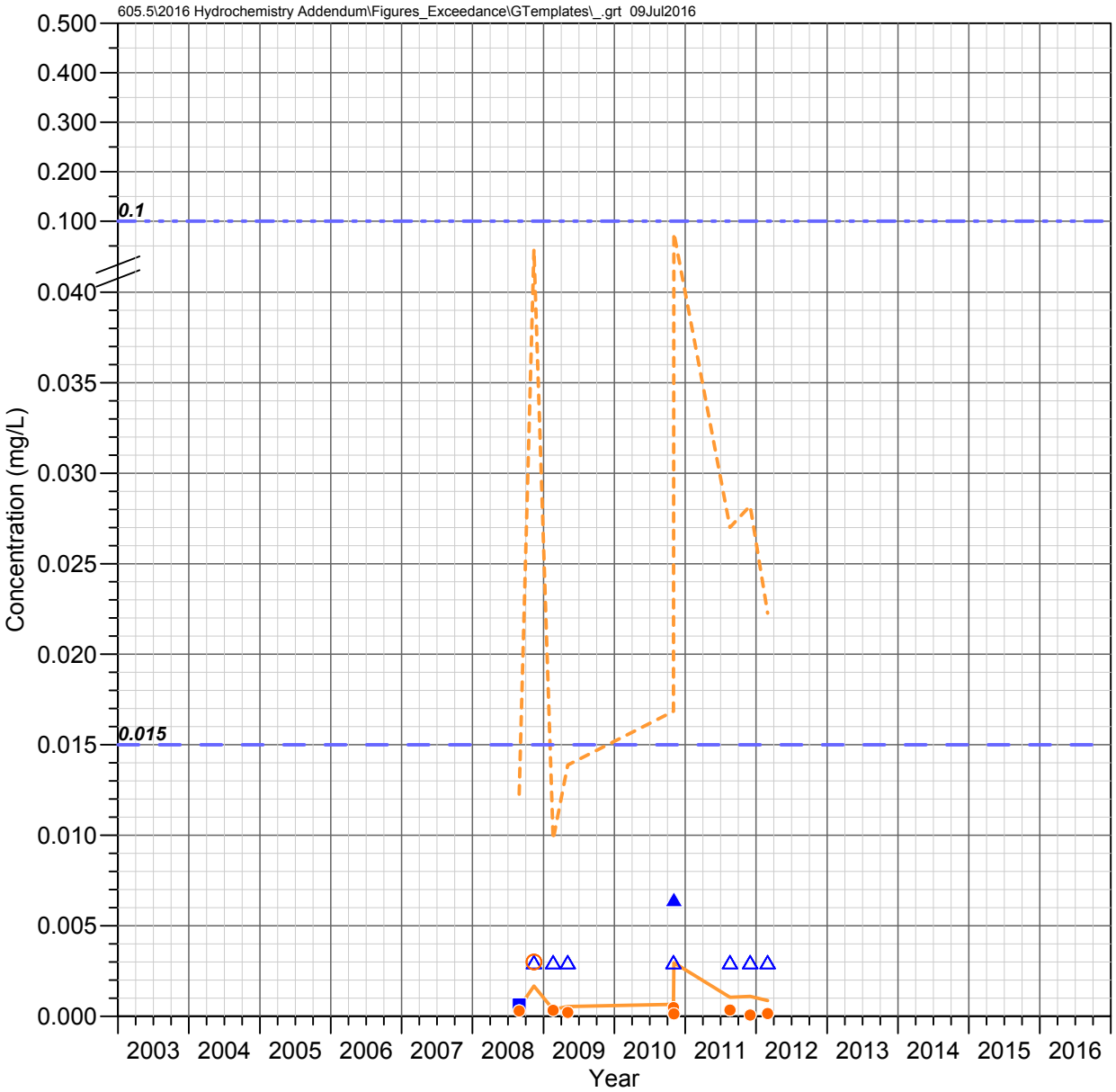


FIGURE F-424. LEAD CONCENTRATIONS OBSERVED AT OAK FLAT WASH, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Number 9 Wash
Queen Creek Watershed

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 0.015 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.1 mg/L)

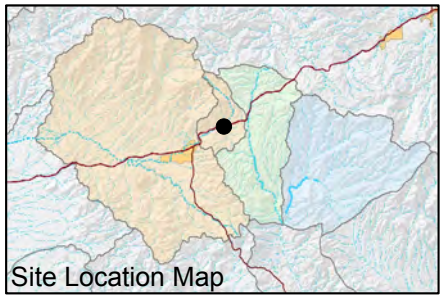
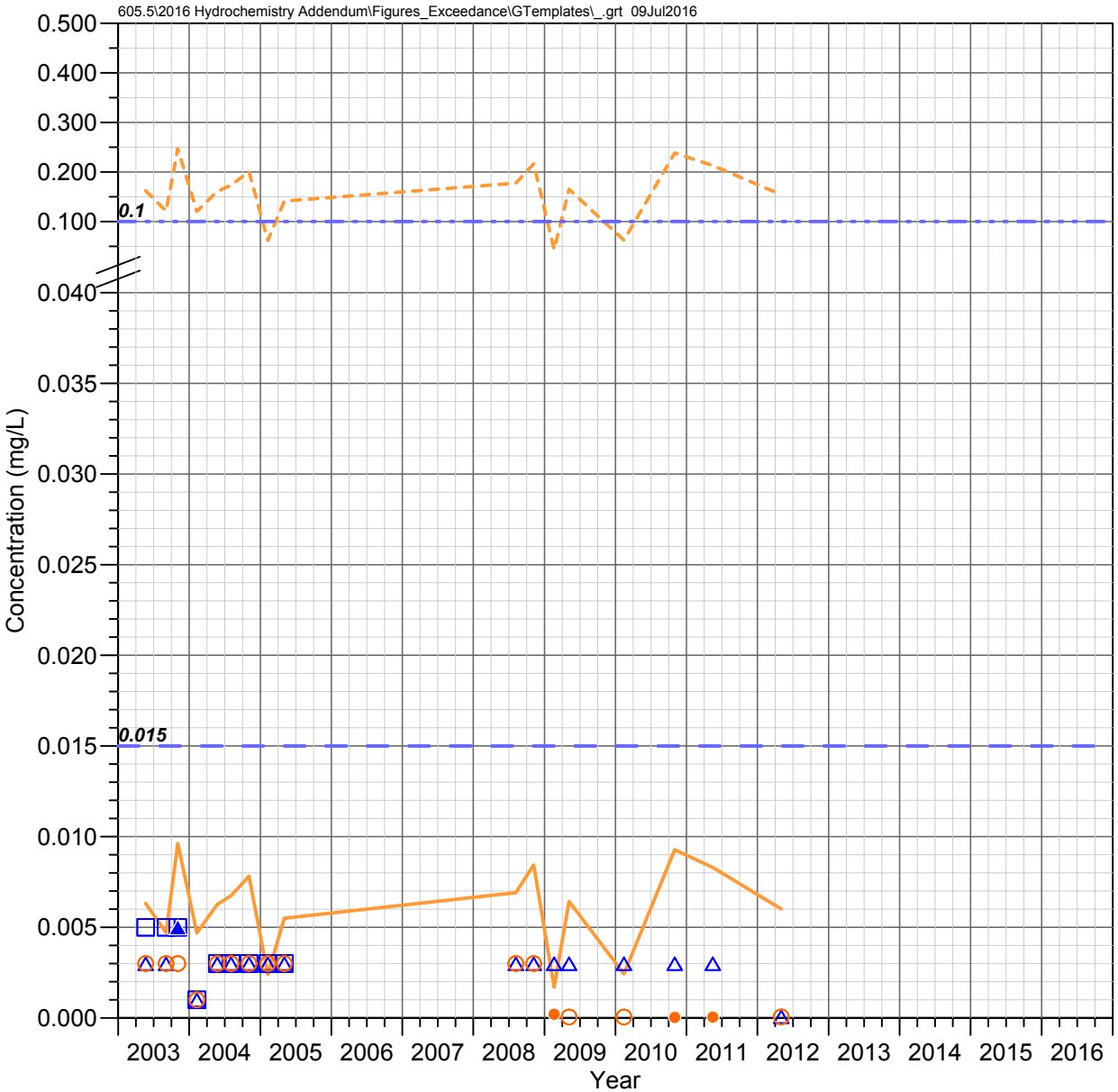


FIGURE F-425. LEAD CONCENTRATIONS OBSERVED AT NUMBER 9 WASH, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Boulder Hole (QC 23.6 C)
Queen Creek Watershed

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 0.015 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.1 mg/L)

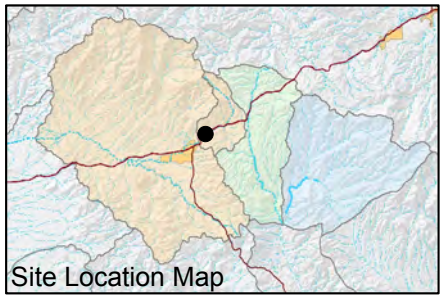
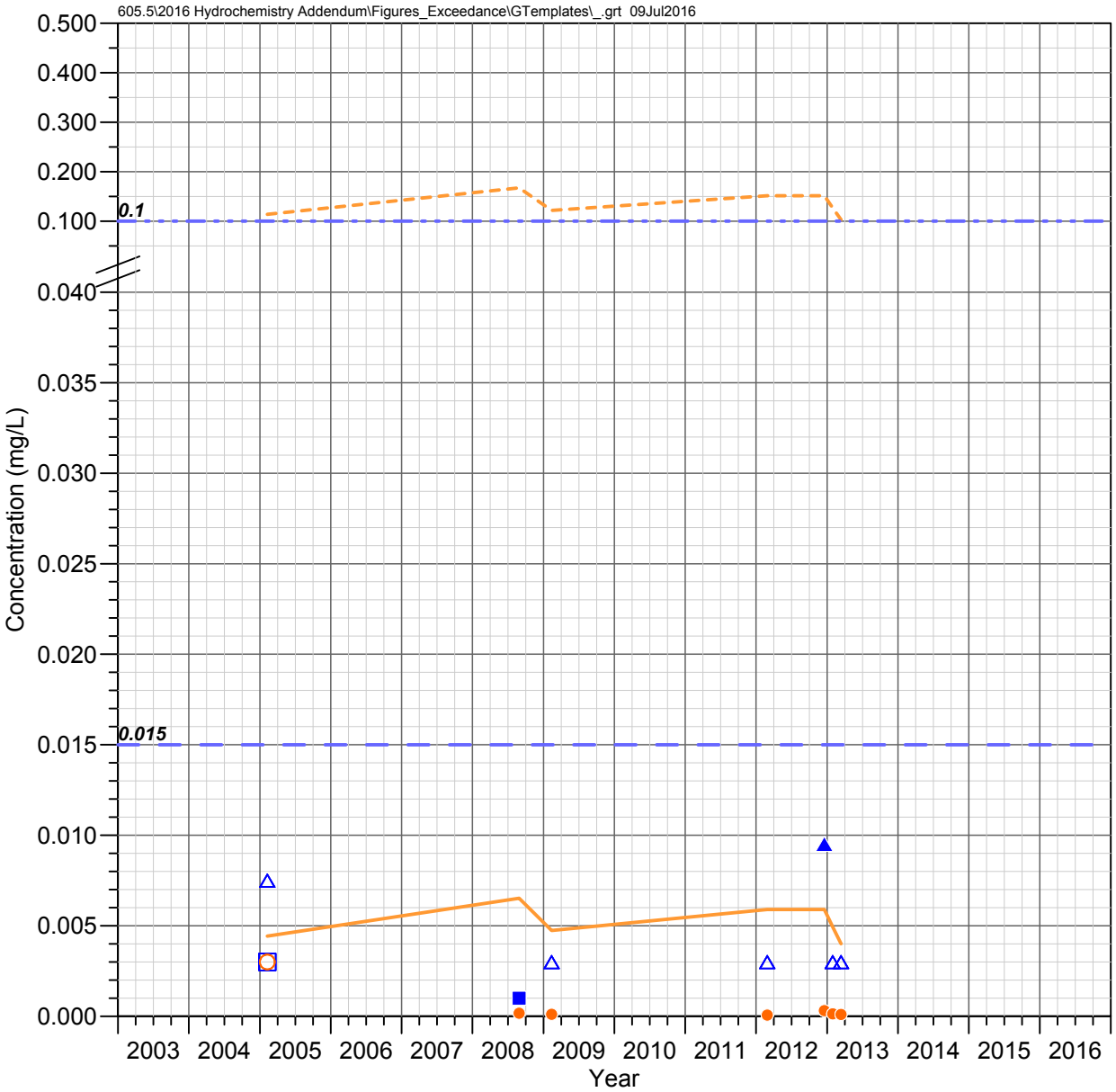


FIGURE F-426. LEAD CONCENTRATIONS OBSERVED AT BOULDER HOLE (QC 23.6 C), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 22.6 E (Karst Spring)
Queen Creek Watershed

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 0.015 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.1 mg/L)

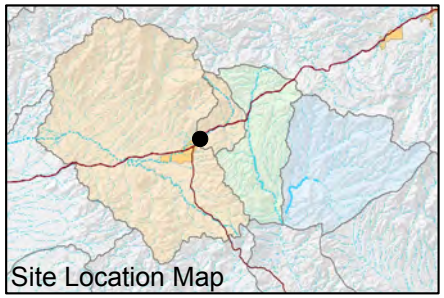
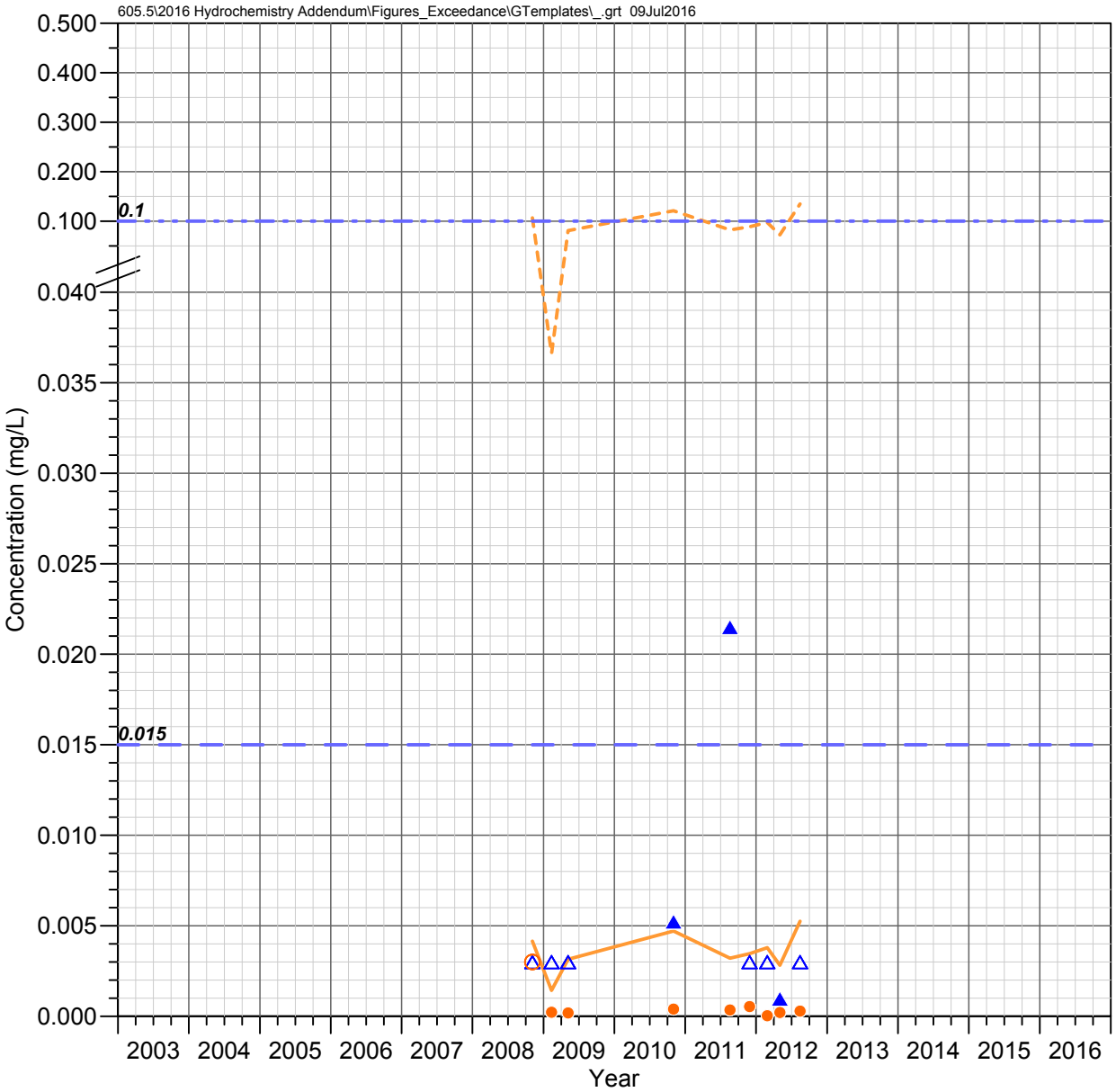


FIGURE F-427. LEAD CONCENTRATIONS OBSERVED AT QC 22.6 E (KARST SPRING), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 21.7 C (Magma Avenue)
Queen Creek Watershed

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 0.015 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.1 mg/L)

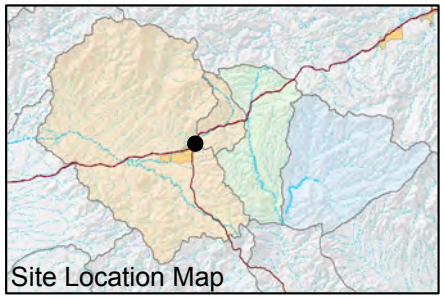
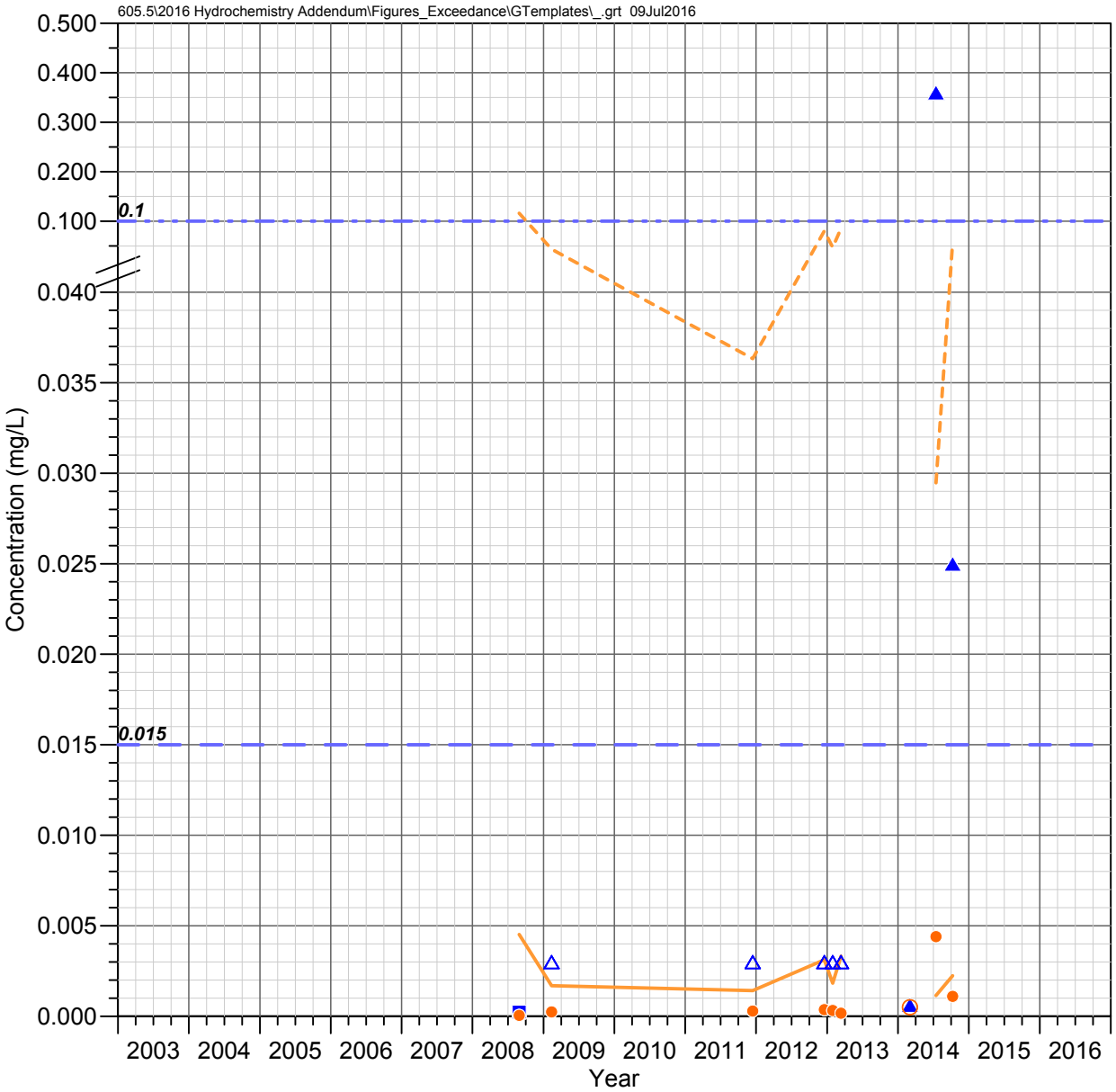


FIGURE F-428. LEAD CONCENTRATIONS OBSERVED AT QC 21.7 C (MAGMA AVENUE), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 19.7 C
Queen Creek Watershed

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 0.015 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.1 mg/L)

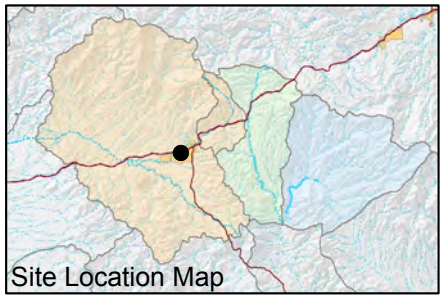
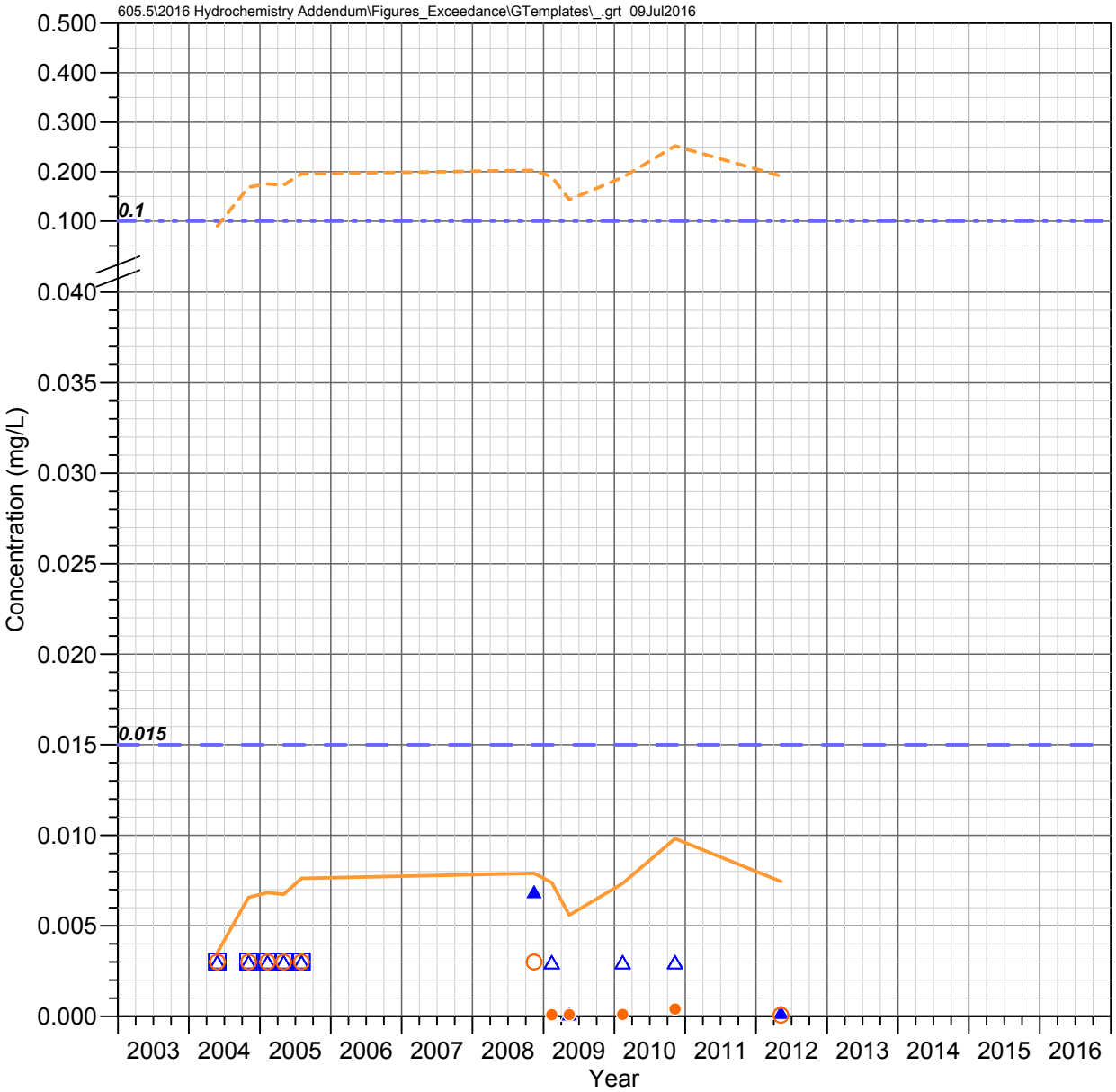


FIGURE F-429. LEAD CONCENTRATIONS OBSERVED AT QC 19.7 C, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Bored Spring
Queen Creek Watershed

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 0.015 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.1 mg/L)

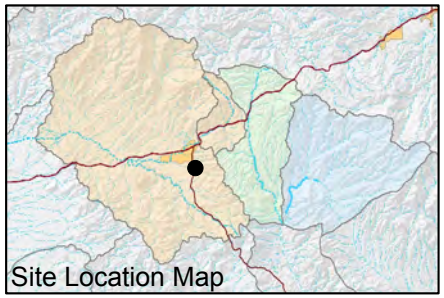
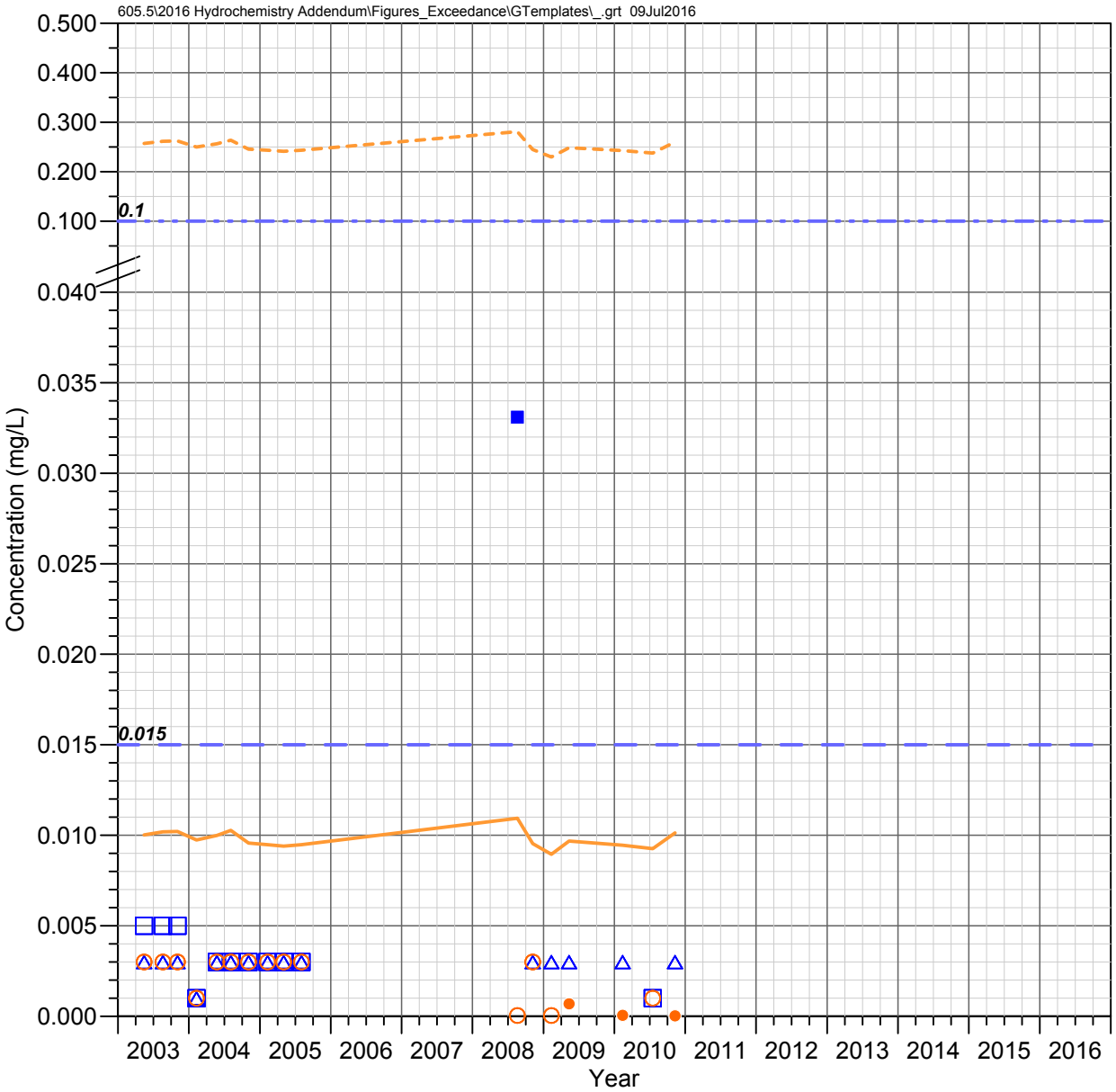


FIGURE F-430. LEAD CONCENTRATIONS OBSERVED AT BORED SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Hidden Spring
Queen Creek Watershed

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 0.015 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.1 mg/L)

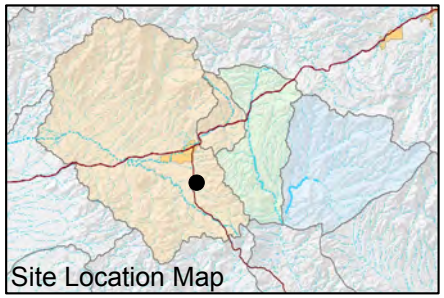
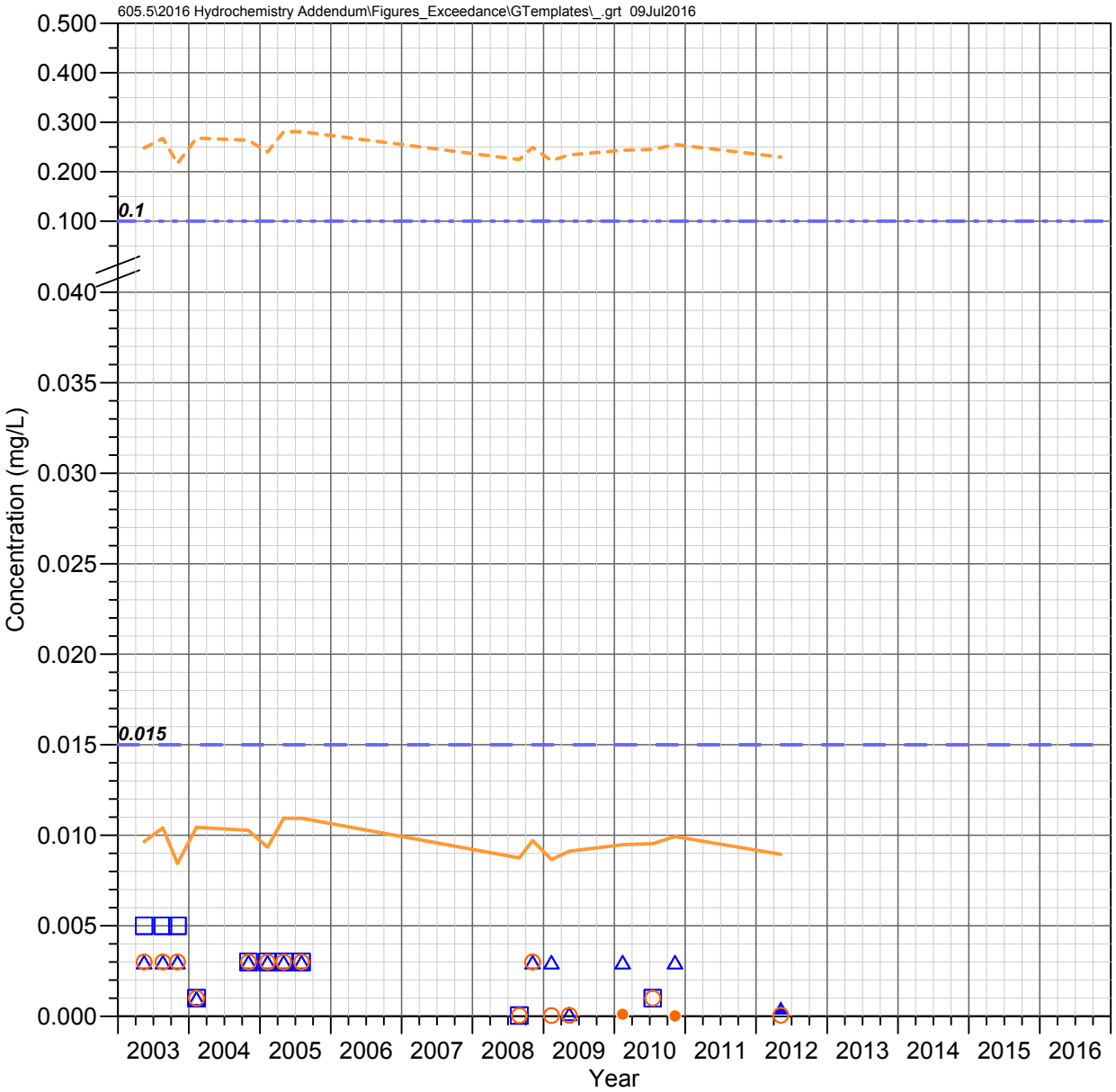


FIGURE F-431. LEAD CONCENTRATIONS OBSERVED AT HIDDEN SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Kane Spring
Queen Creek Watershed

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 0.015 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.1 mg/L)

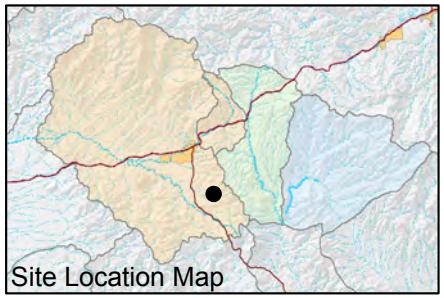
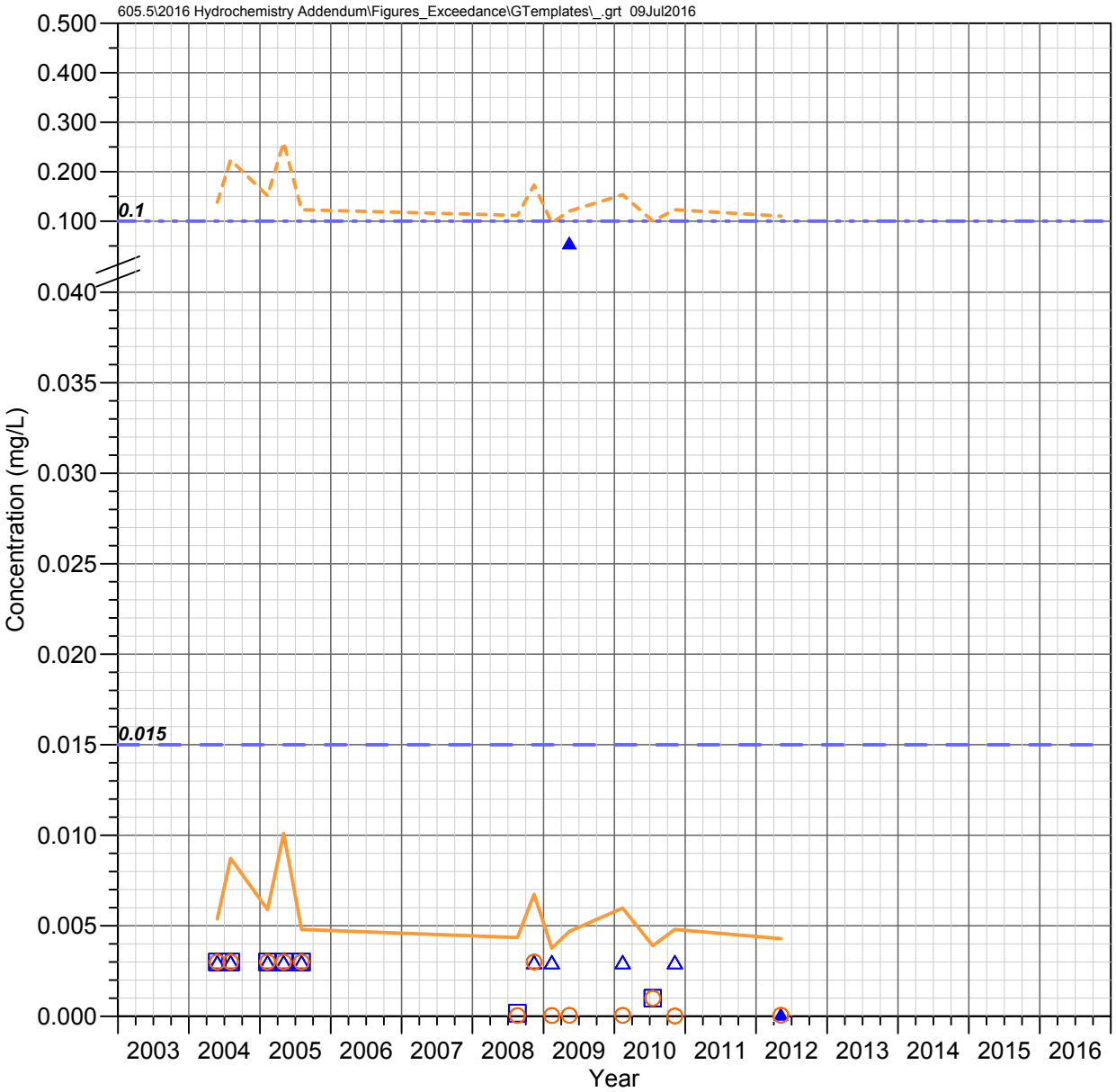


FIGURE F-432. LEAD CONCENTRATIONS OBSERVED AT KANE SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Blue Spring
Queen Creek Watershed

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 0.015 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.1 mg/L)

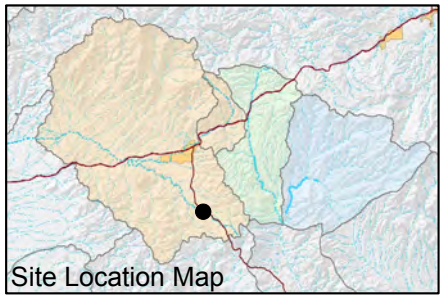
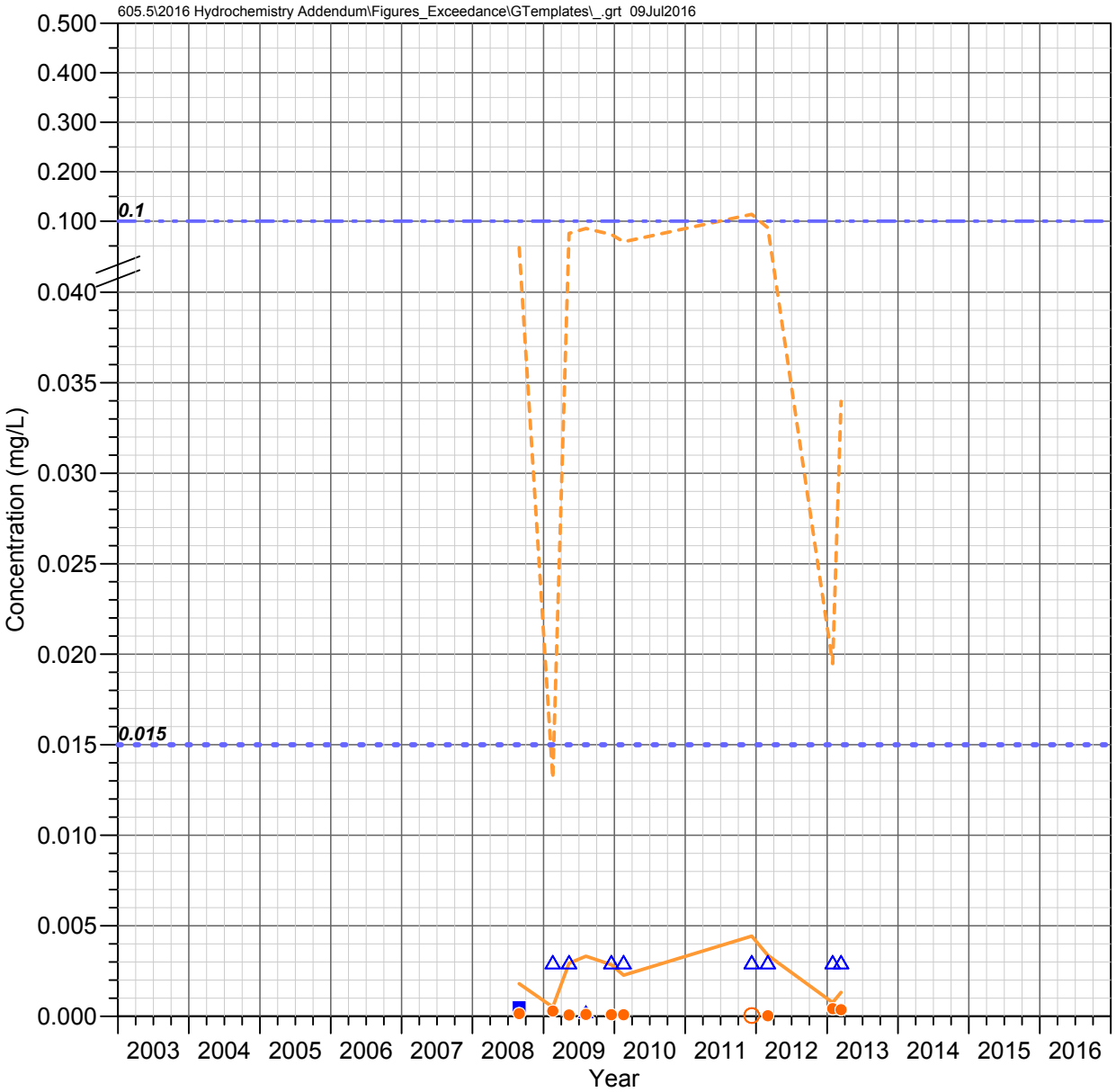


FIGURE F-433. LEAD CONCENTRATIONS OBSERVED AT BLUE SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



IC 1.0 C
Devils Canyon Watershed

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 0.015 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.1 mg/L)

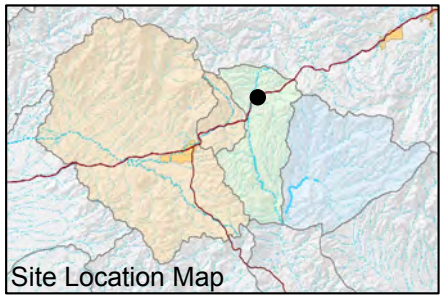
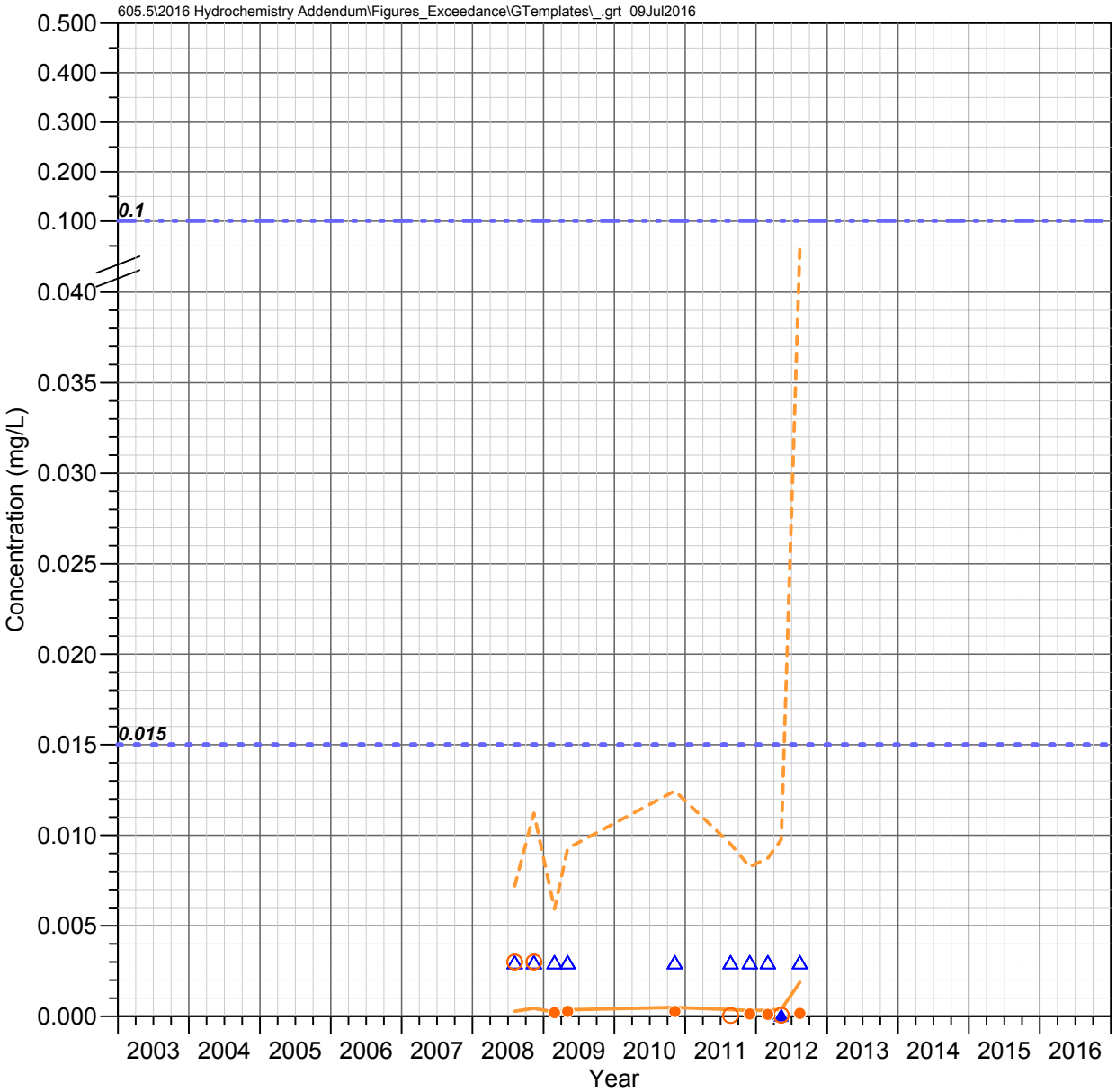


FIGURE F-434. LEAD CONCENTRATIONS OBSERVED AT IC 1.0 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 15.5 C
Devils Canyon Watershed

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 0.015 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.1 mg/L)

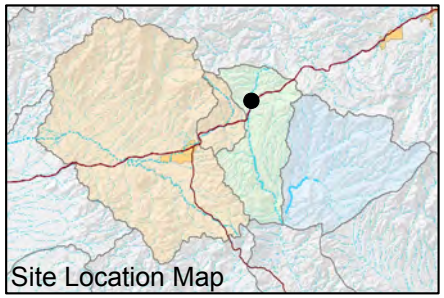
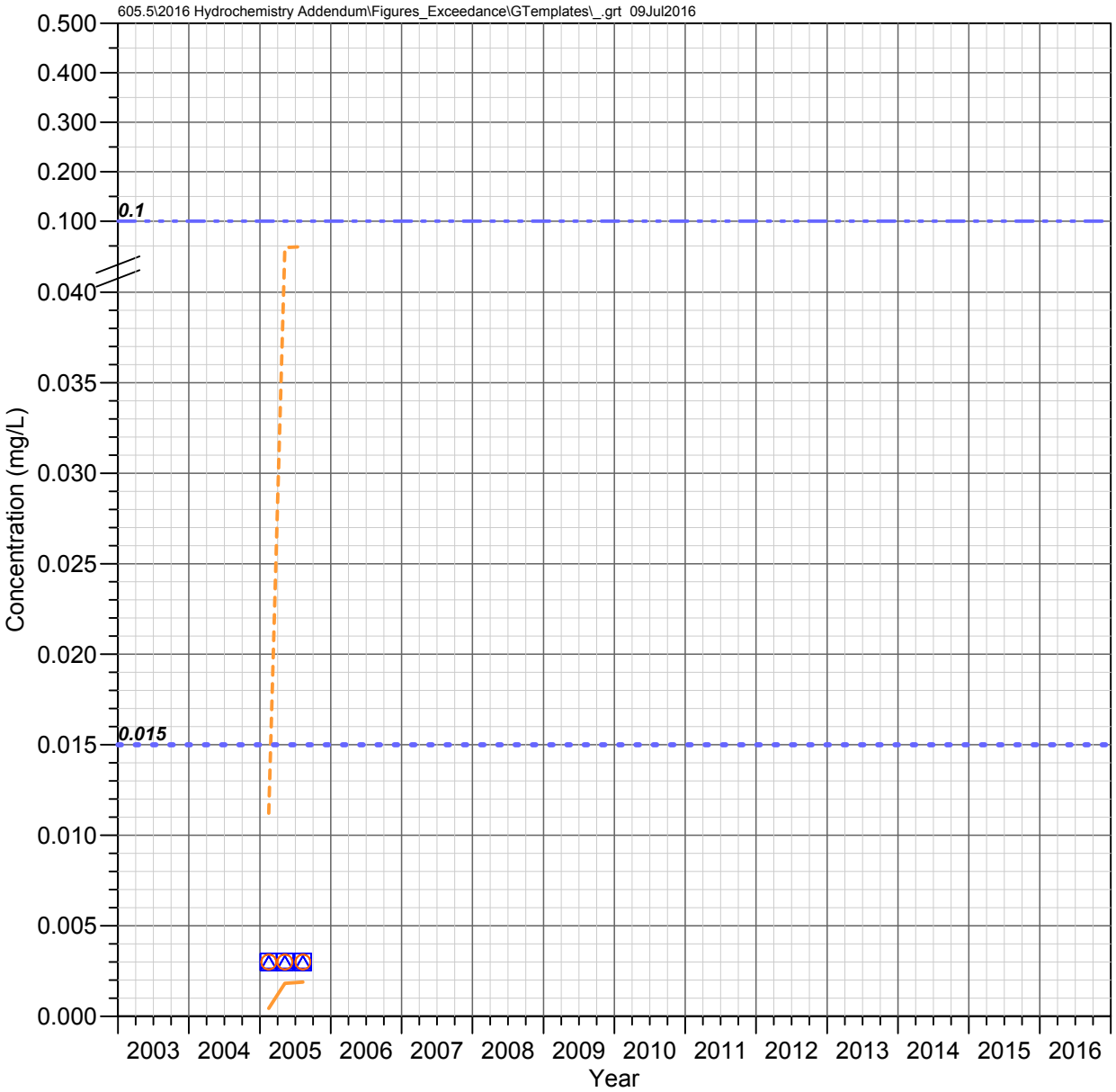


FIGURE F-435. LEAD CONCENTRATIONS OBSERVED AT DC 15.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 15.2 C
Devils Canyon Watershed

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 0.015 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.1 mg/L)

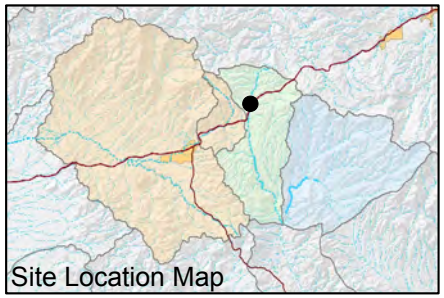
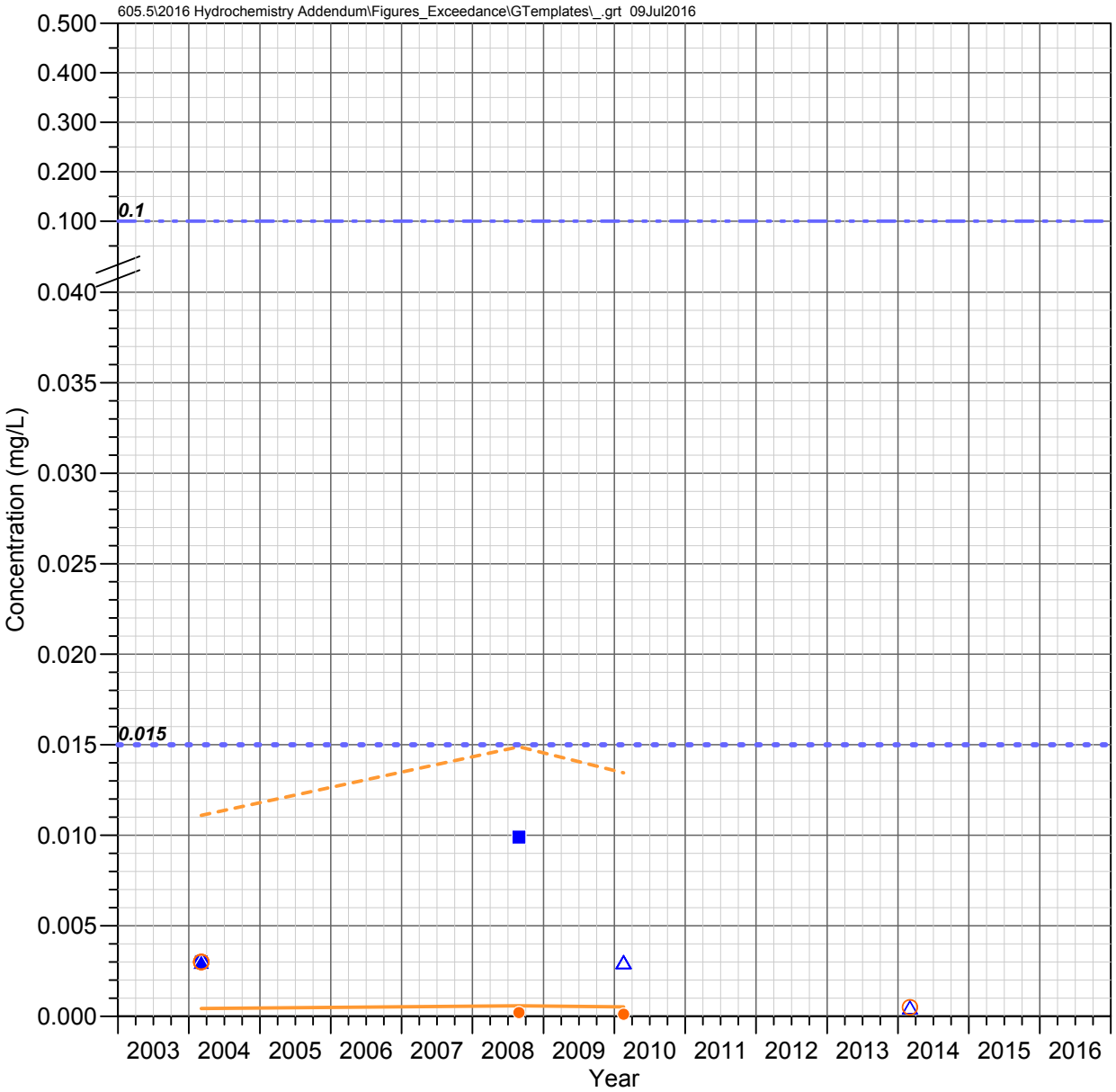


FIGURE F-436. LEAD CONCENTRATIONS OBSERVED AT DC 15.2 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 14.7 C
Devils Canyon Watershed

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 0.015 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.1 mg/L)

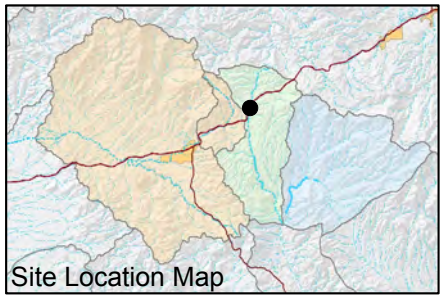
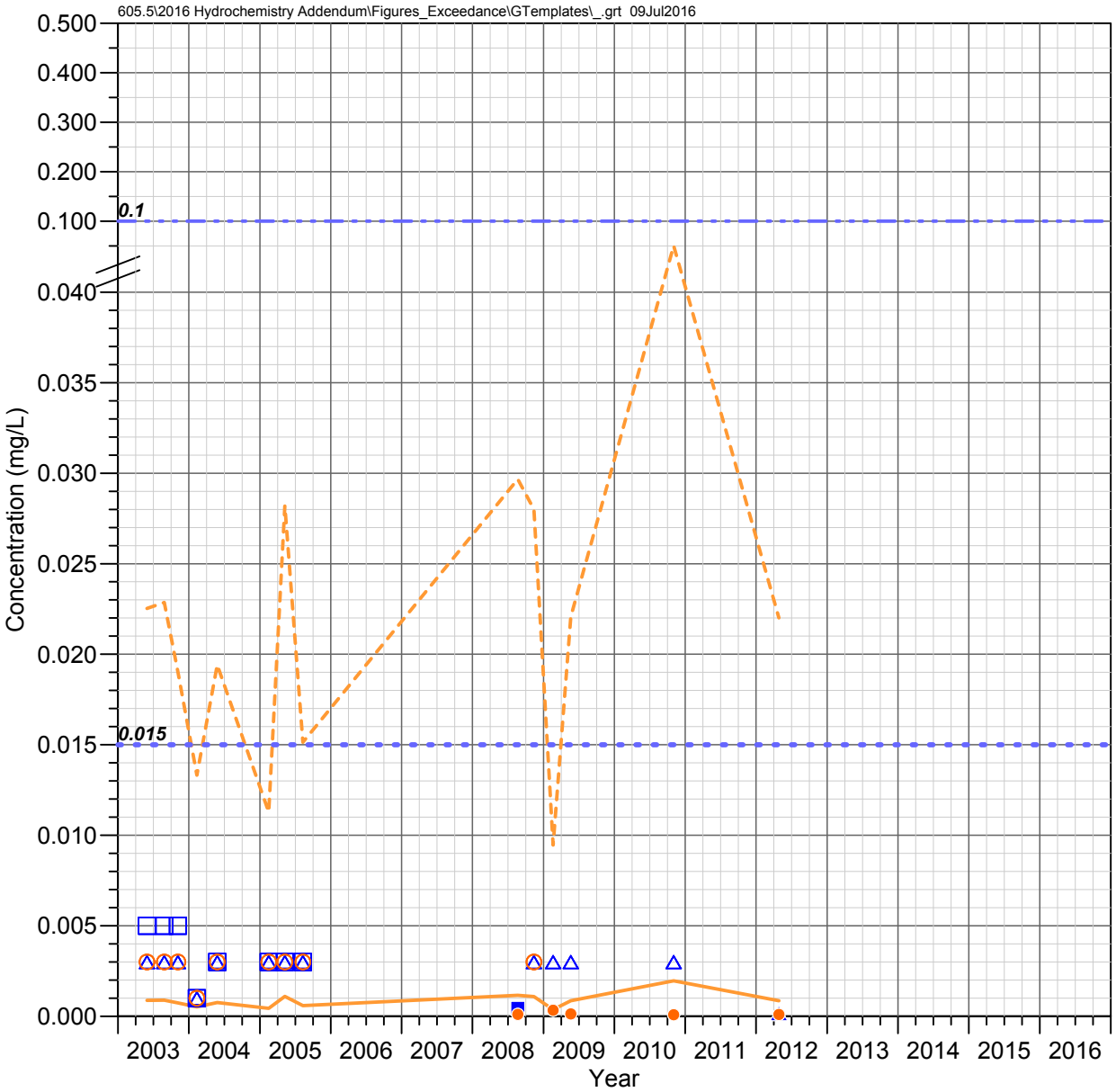


FIGURE F-437. LEAD CONCENTRATIONS OBSERVED AT DC 14.7 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 13.5 C
Devils Canyon Watershed

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 0.015 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.1 mg/L)

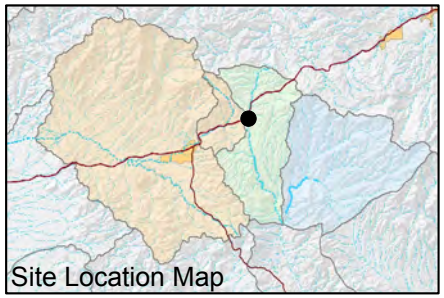
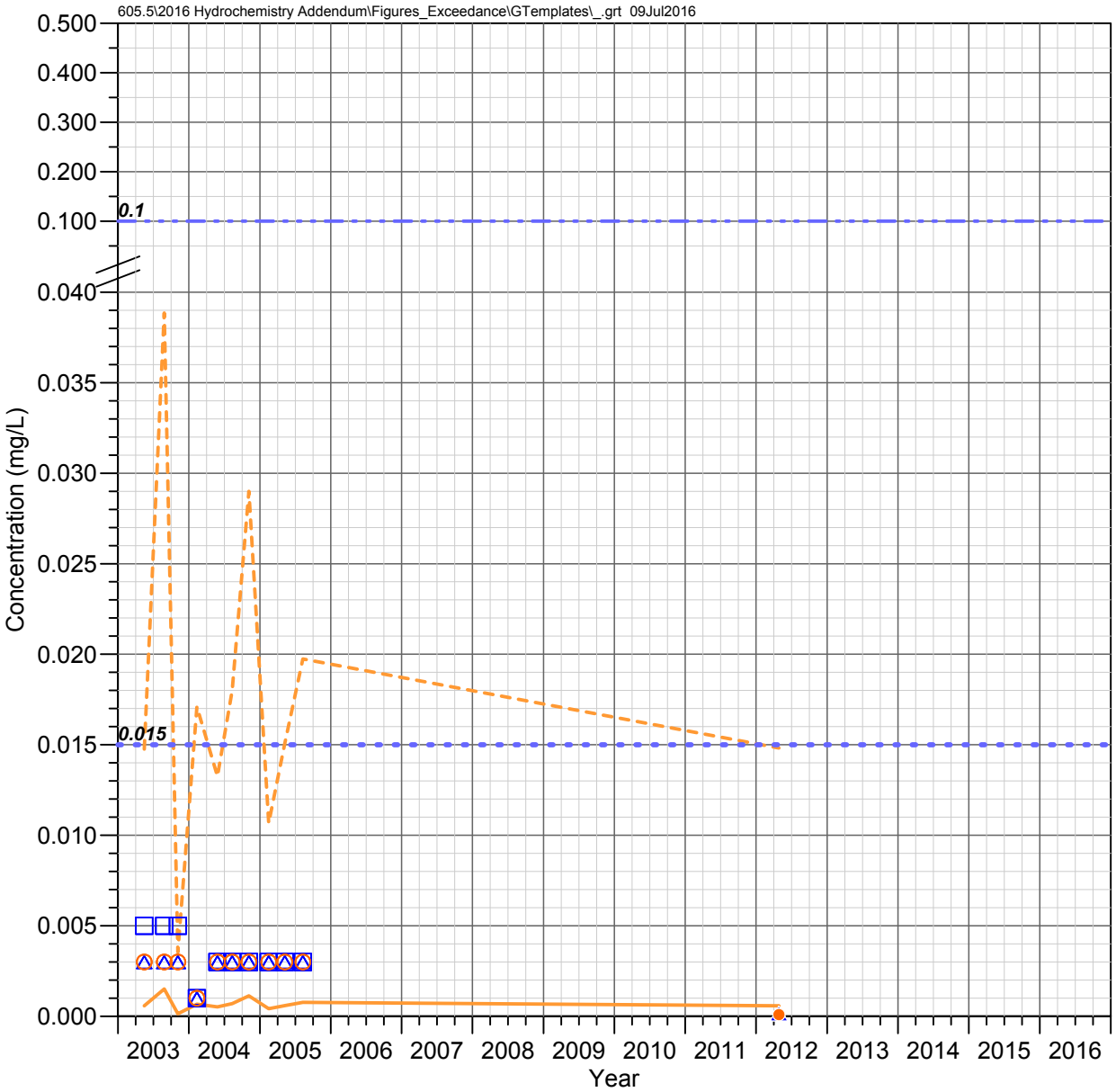


FIGURE F-438. LEAD CONCENTRATIONS OBSERVED AT DC 13.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 10.9 C
Devils Canyon Watershed

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 0.015 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.1 mg/L)

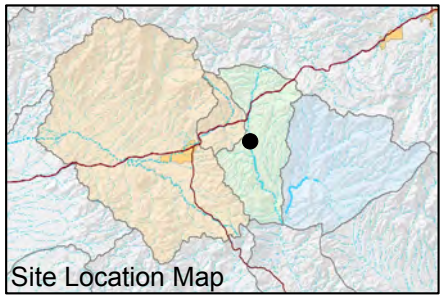
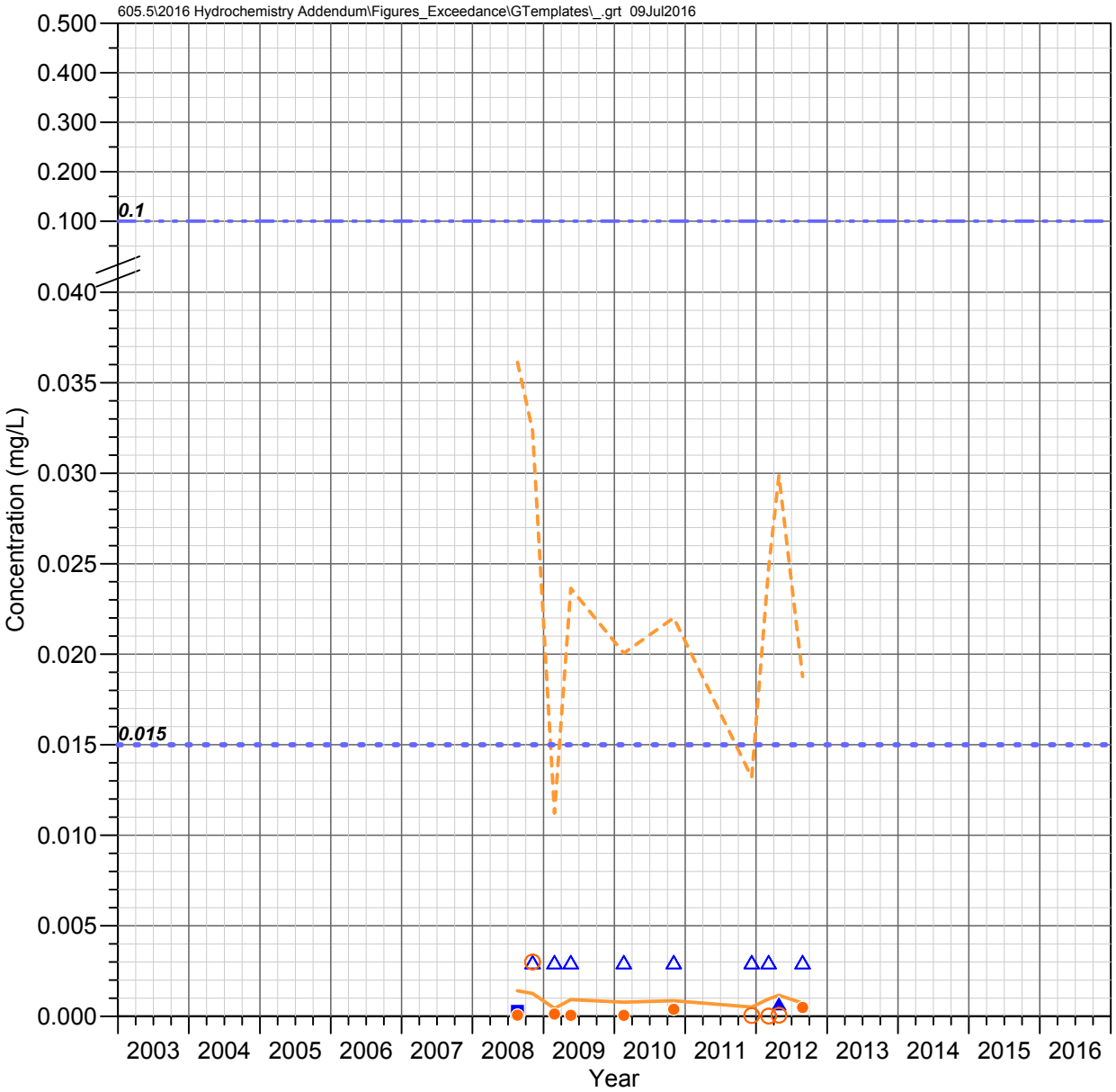


FIGURE F-439. LEAD CONCENTRATIONS OBSERVED AT DC 10.9 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



RR 1.5 C
Devils Canyon Watershed

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 0.015 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.1 mg/L)

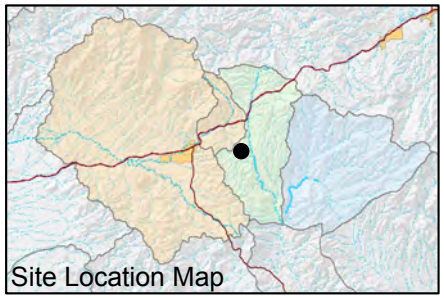
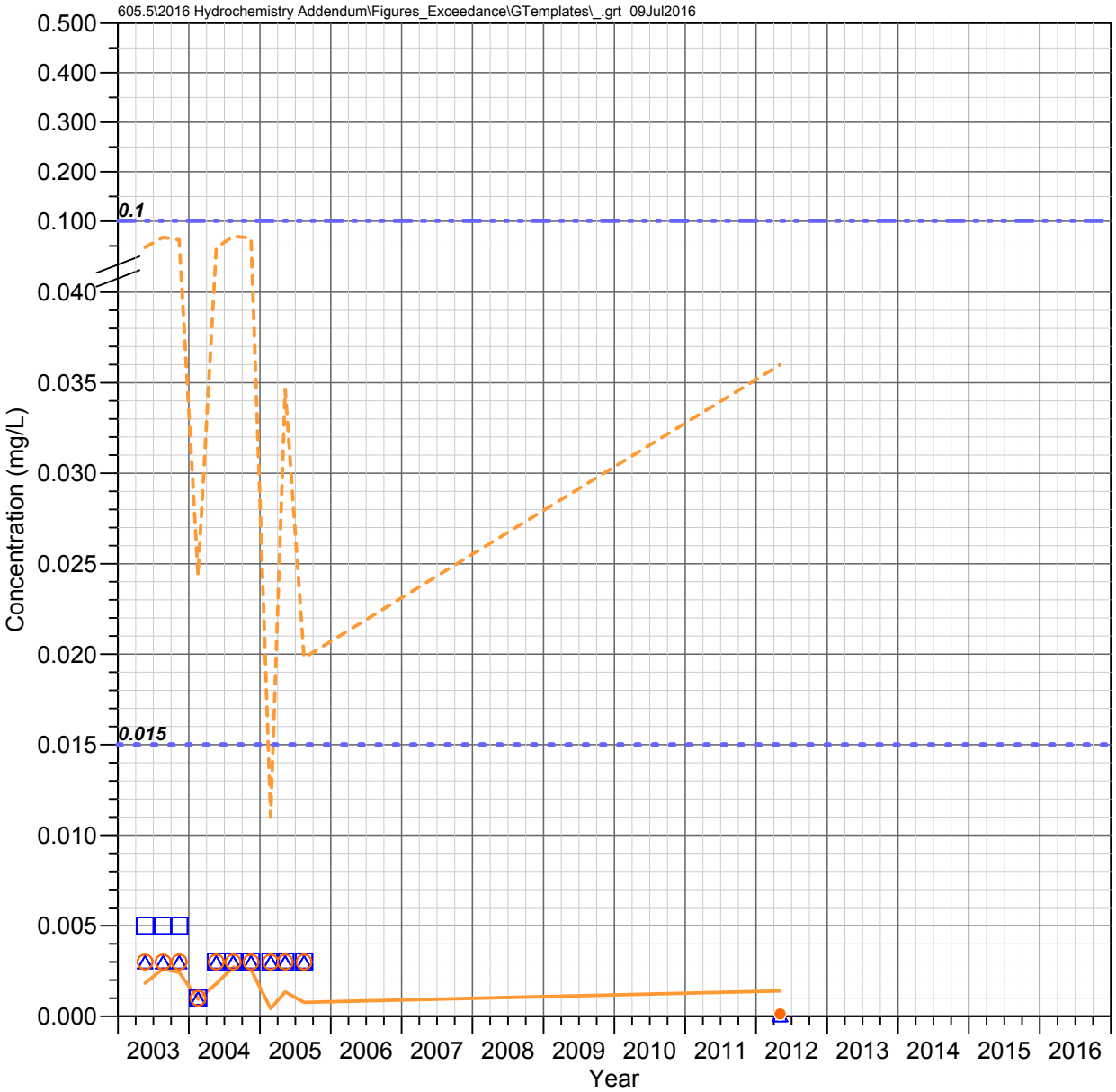


FIGURE F-440. LEAD CONCENTRATIONS OBSERVED AT RR 1.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.8 C
Devils Canyon Watershed

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 0.015 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.1 mg/L)

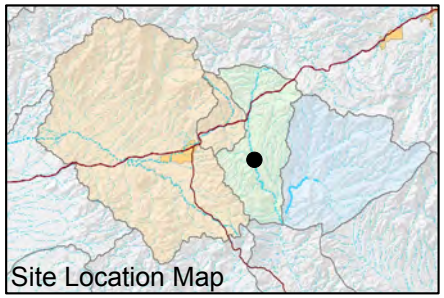
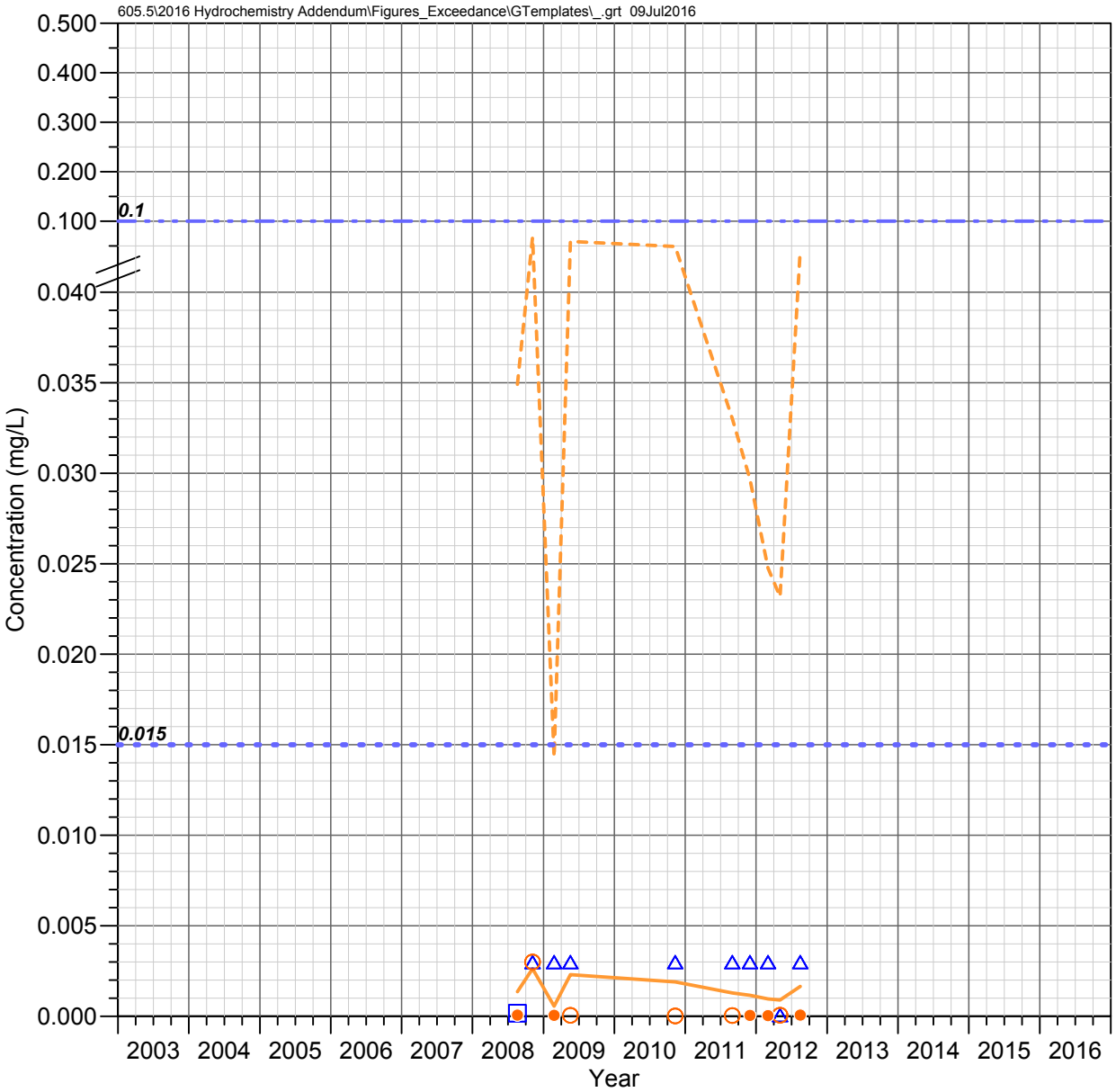


FIGURE F-441. LEAD CONCENTRATIONS OBSERVED AT DC 8.8 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



H 0.1 C
Devils Canyon Watershed

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 0.015 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.1 mg/L)

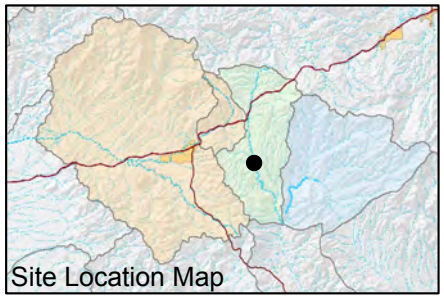
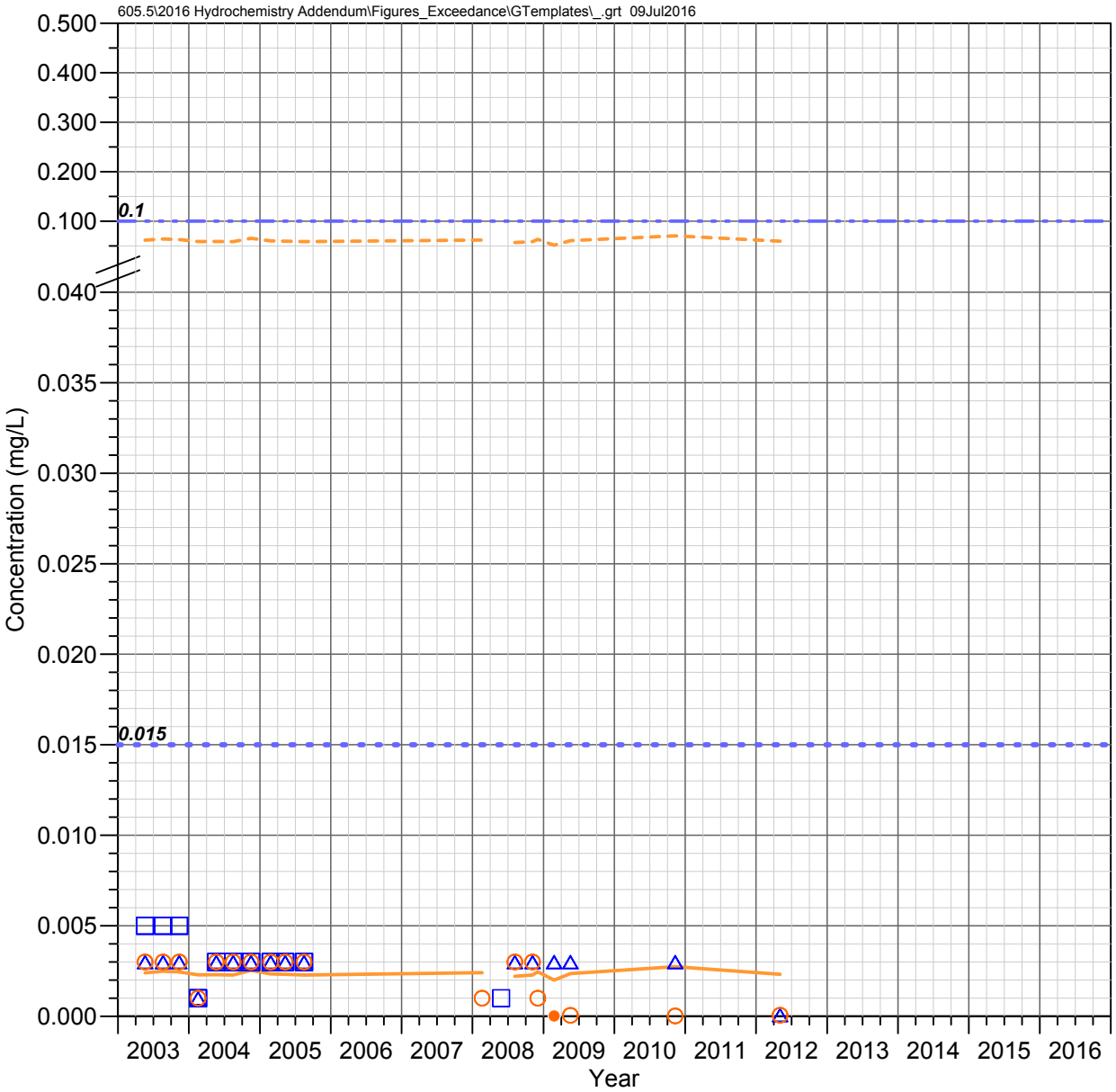


FIGURE F-442. LEAD CONCENTRATIONS OBSERVED AT H 0.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.2 W
Devils Canyon Watershed

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 0.015 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.1 mg/L)

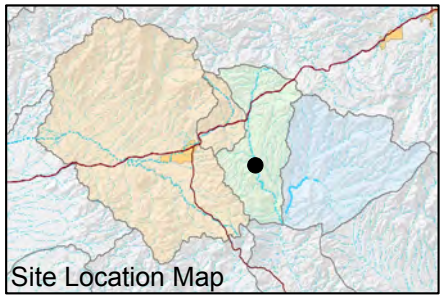
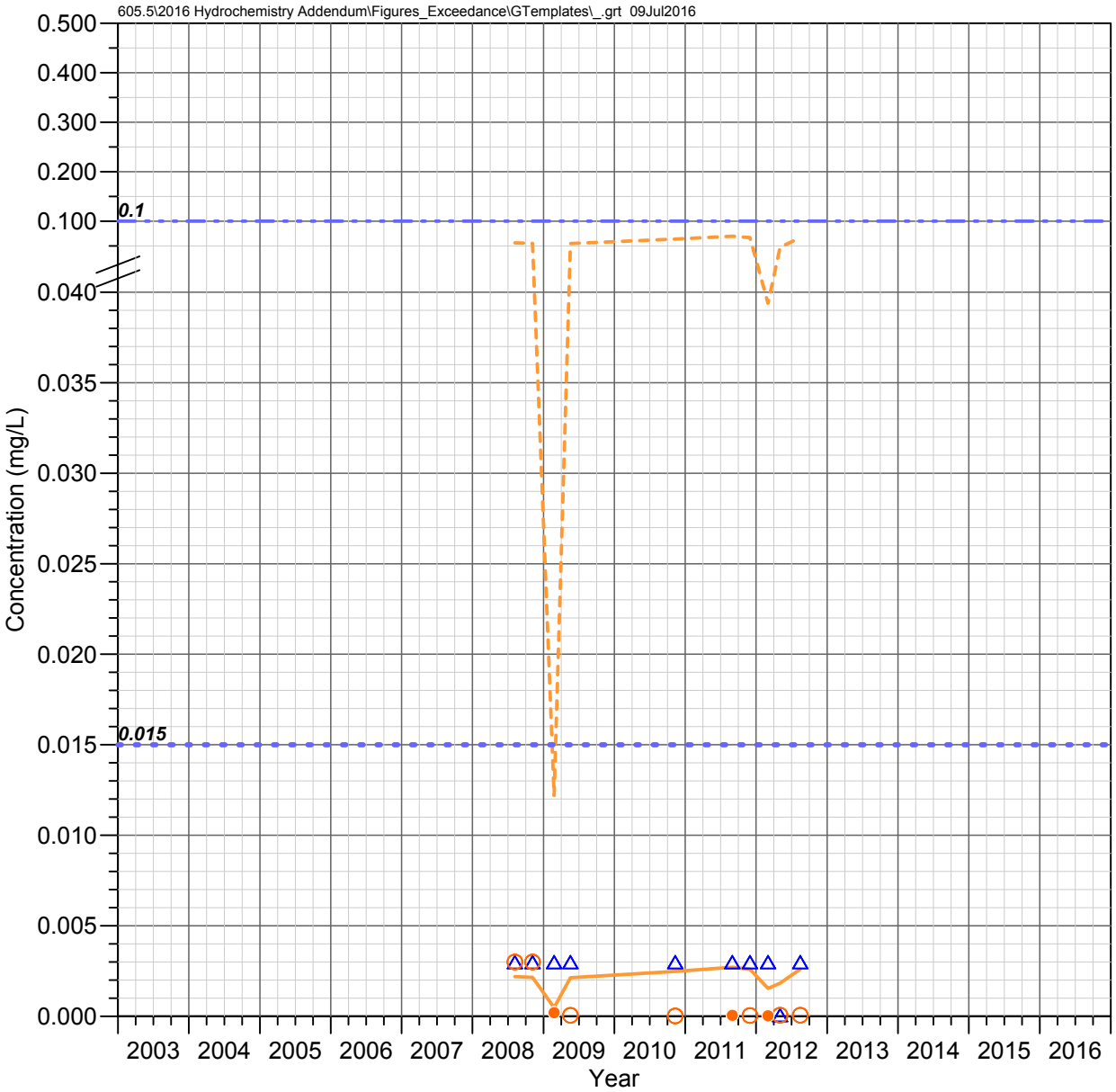


FIGURE F-443. LEAD CONCENTRATIONS OBSERVED AT DC 8.2 W, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.1 C
Devils Canyon Watershed

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 0.015 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.1 mg/L)

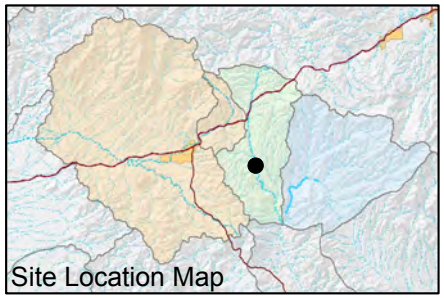
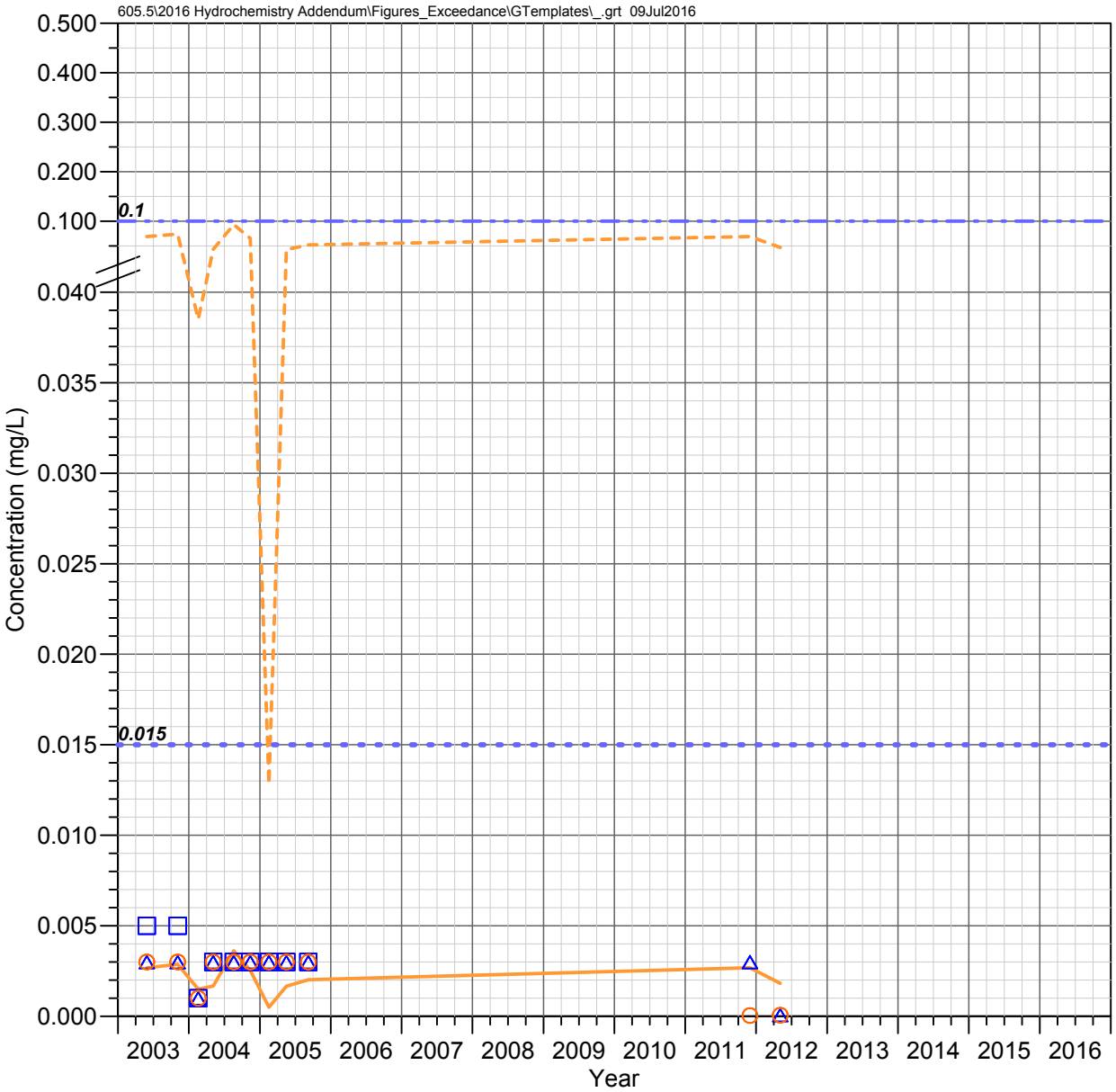


FIGURE F-444. LEAD CONCENTRATIONS OBSERVED AT DC 8.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 7.1 C
Devils Canyon Watershed

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 0.015 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.1 mg/L)

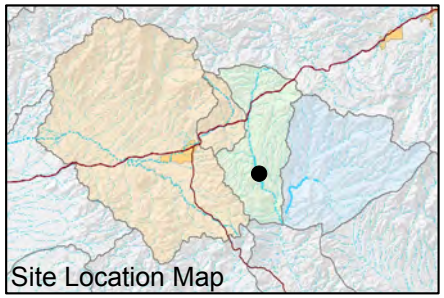
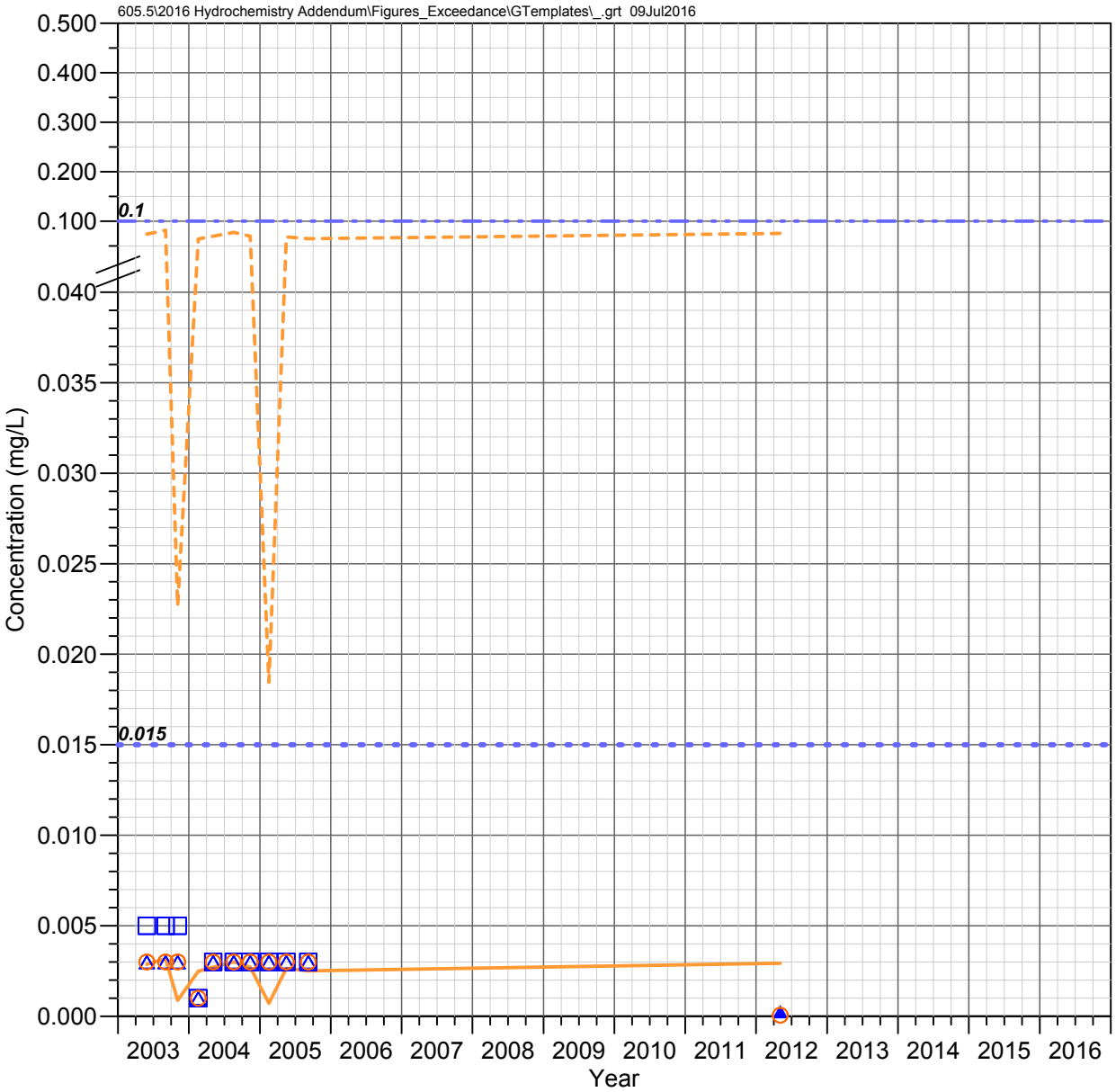


FIGURE F-445. LEAD CONCENTRATIONS OBSERVED AT DC 7.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.6 W (DCT 6.6 W)
Devils Canyon Watershed

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 0.015 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.1 mg/L)

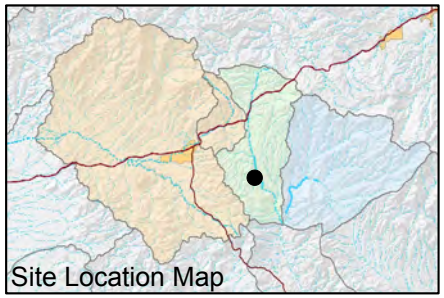
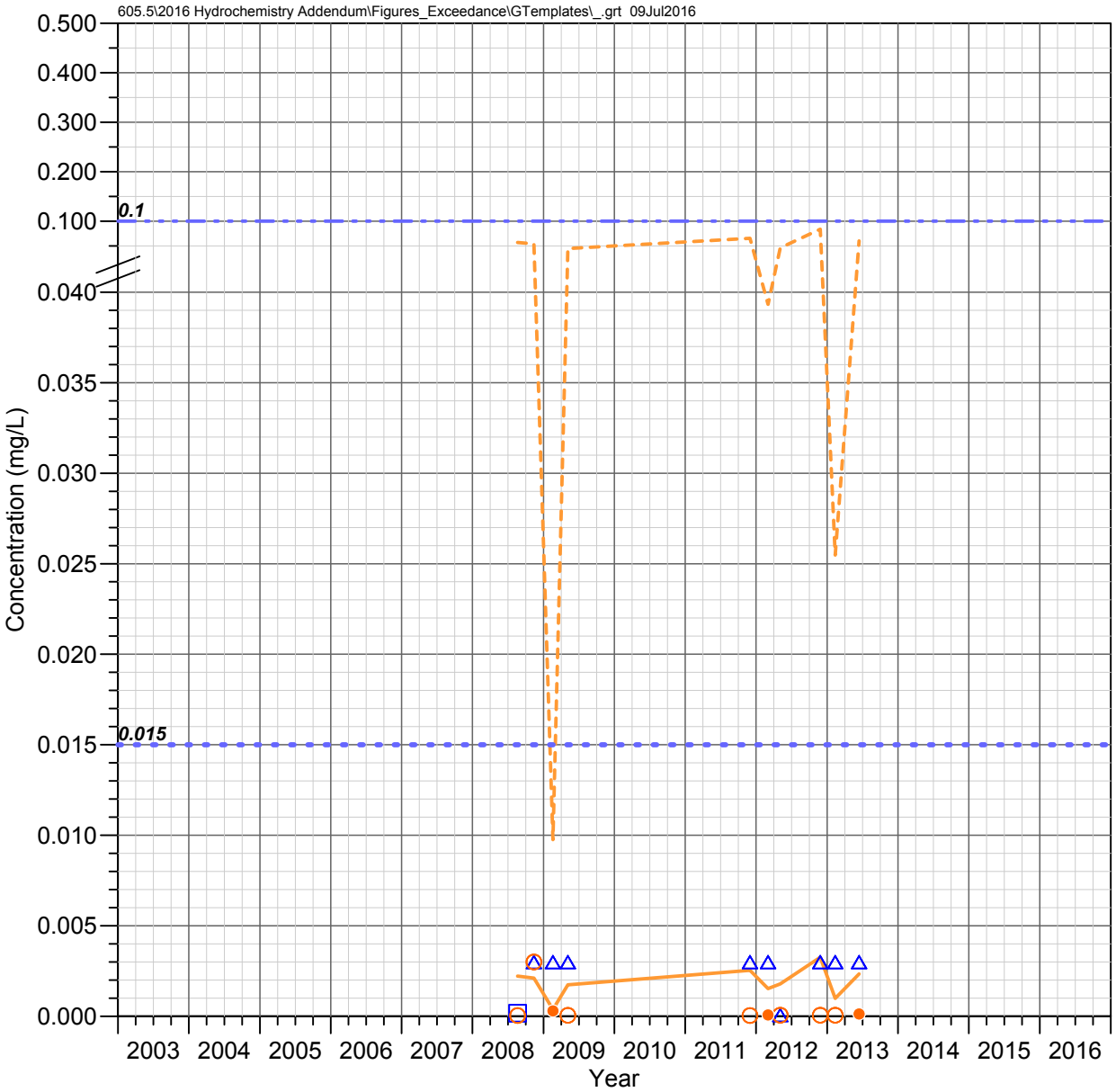


FIGURE F-446. LEAD CONCENTRATIONS OBSERVED AT DC 6.6 W (DCT 6.6 W), DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.14 C
Devils Canyon Watershed

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 0.015 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.1 mg/L)

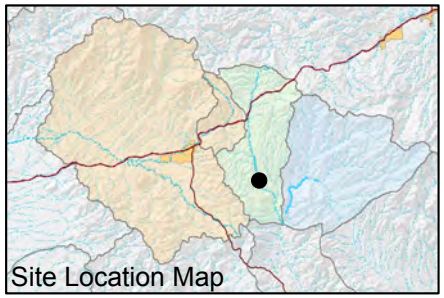
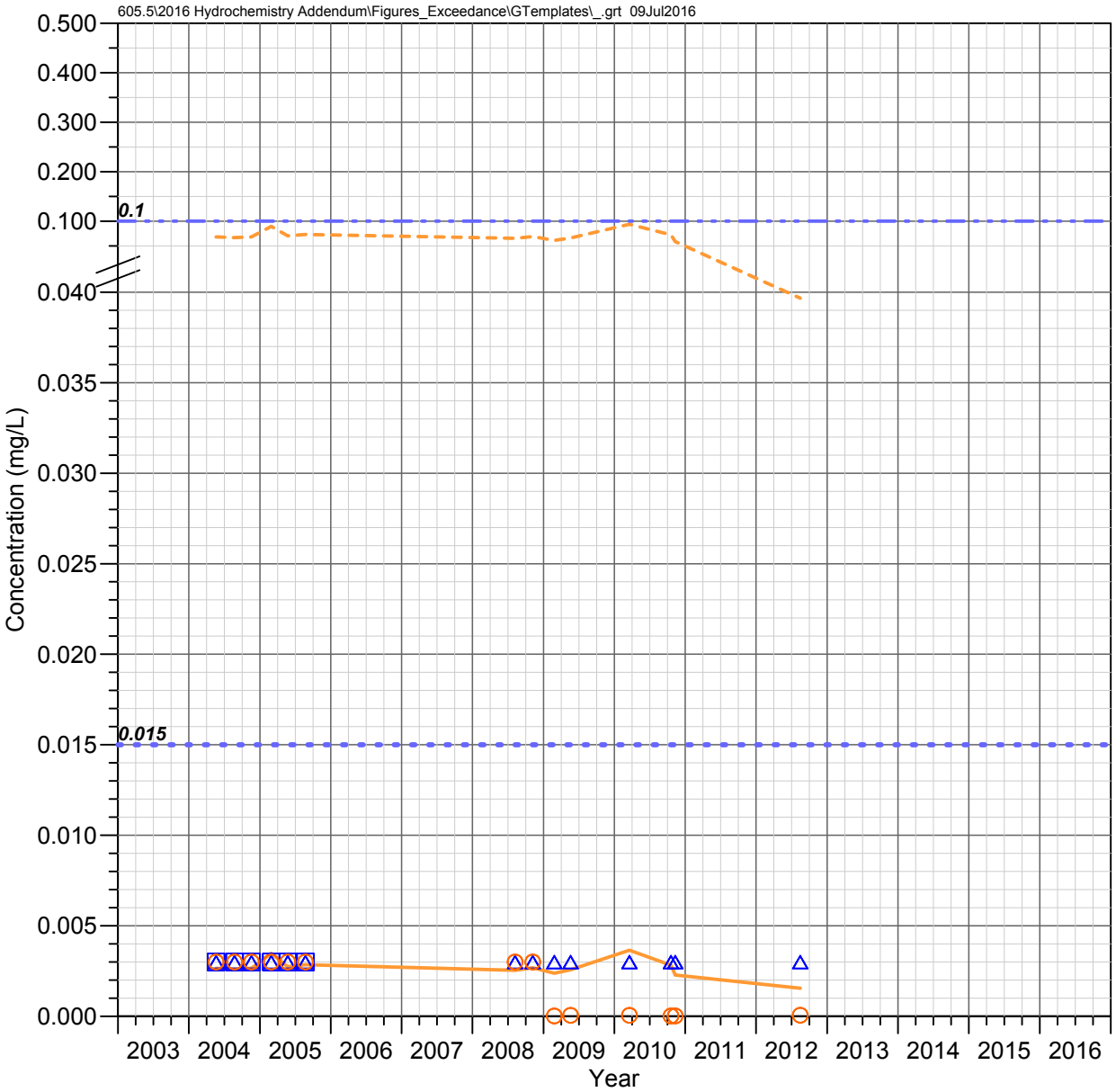


FIGURE F-447. LEAD CONCENTRATIONS OBSERVED AT DC 6.14 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.1 E
Devils Canyon Watershed

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 0.015 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.1 mg/L)

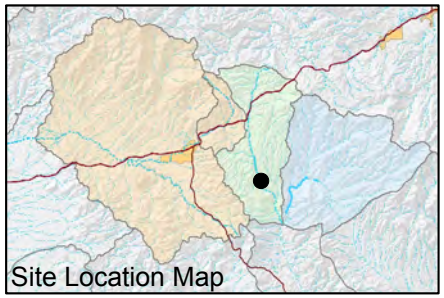
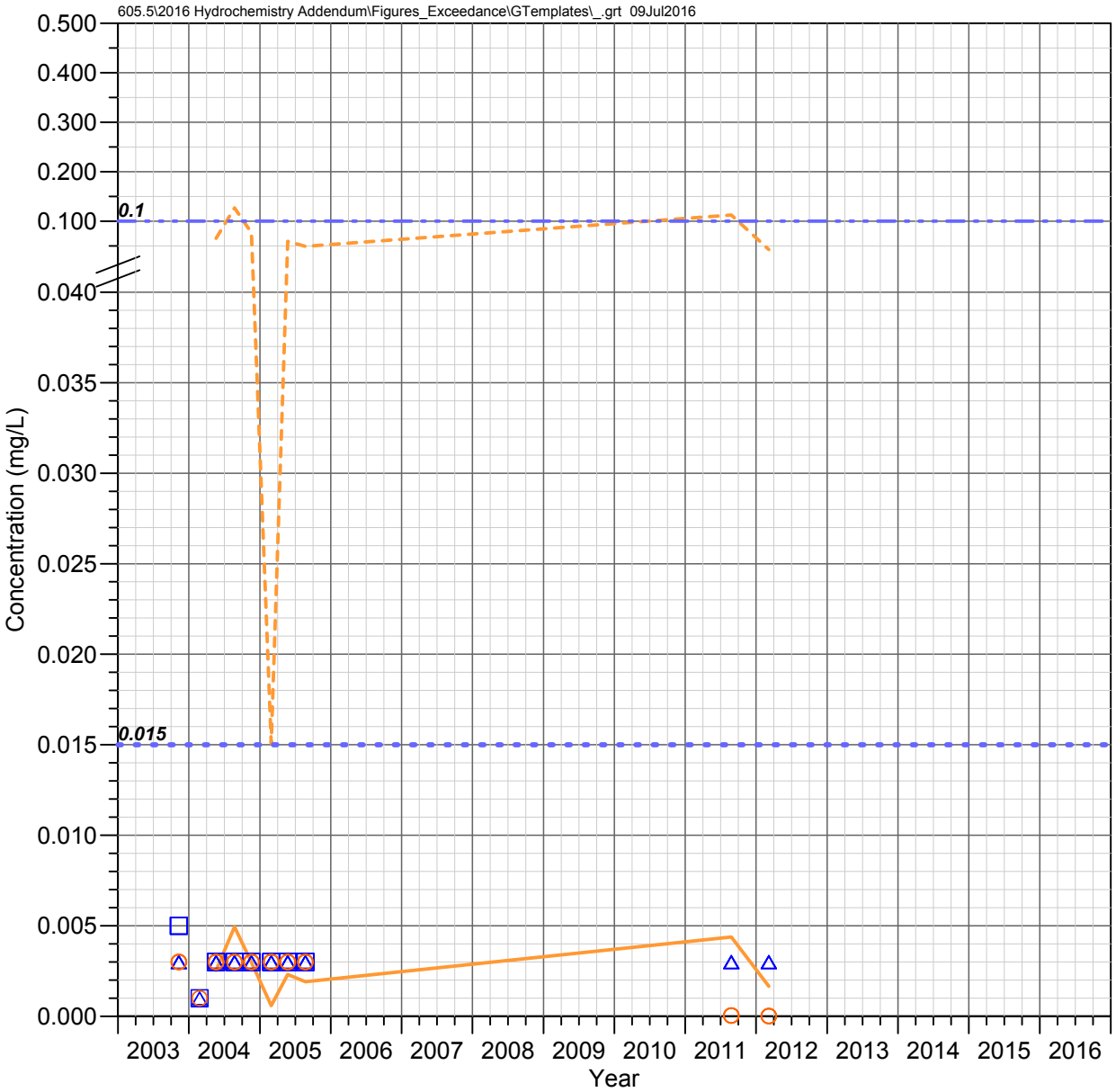


FIGURE F-448. LEAD CONCENTRATIONS OBSERVED AT DC 6.1 E, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 5.5 C
Devils Canyon Watershed

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 0.015 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.1 mg/L)

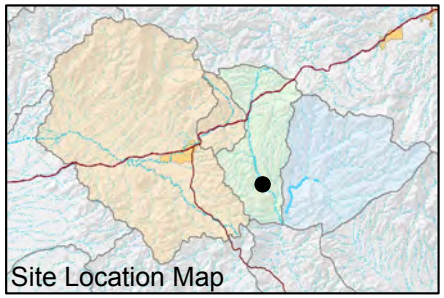
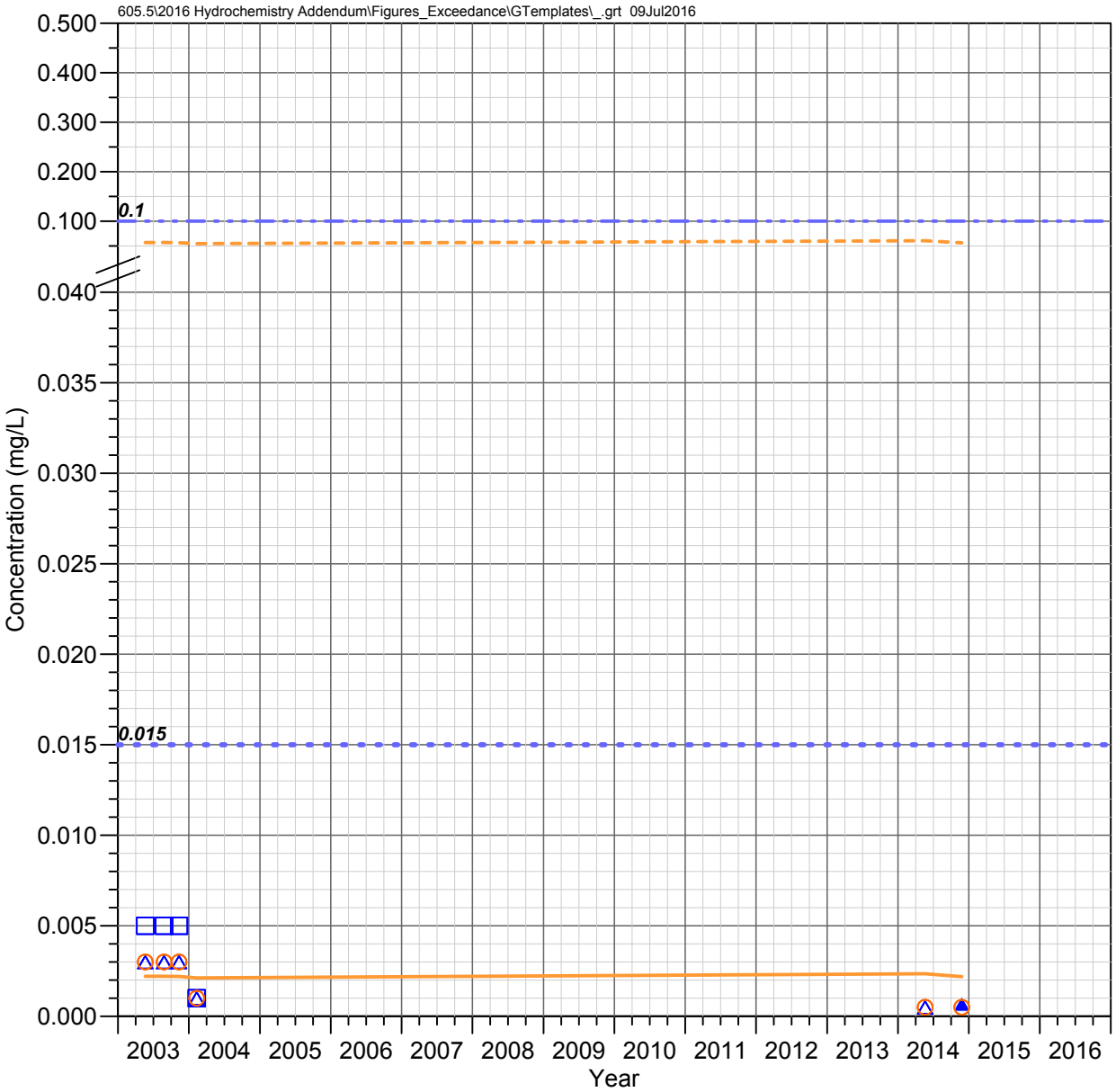


FIGURE F-449. LEAD CONCENTRATIONS OBSERVED AT DC 5.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 4.1 E
Devils Canyon Watershed

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 0.015 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.1 mg/L)

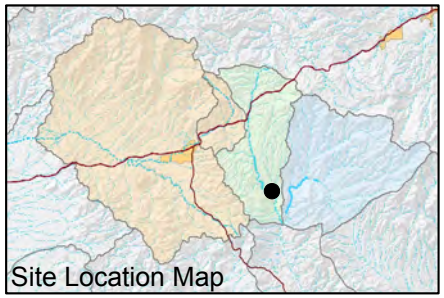
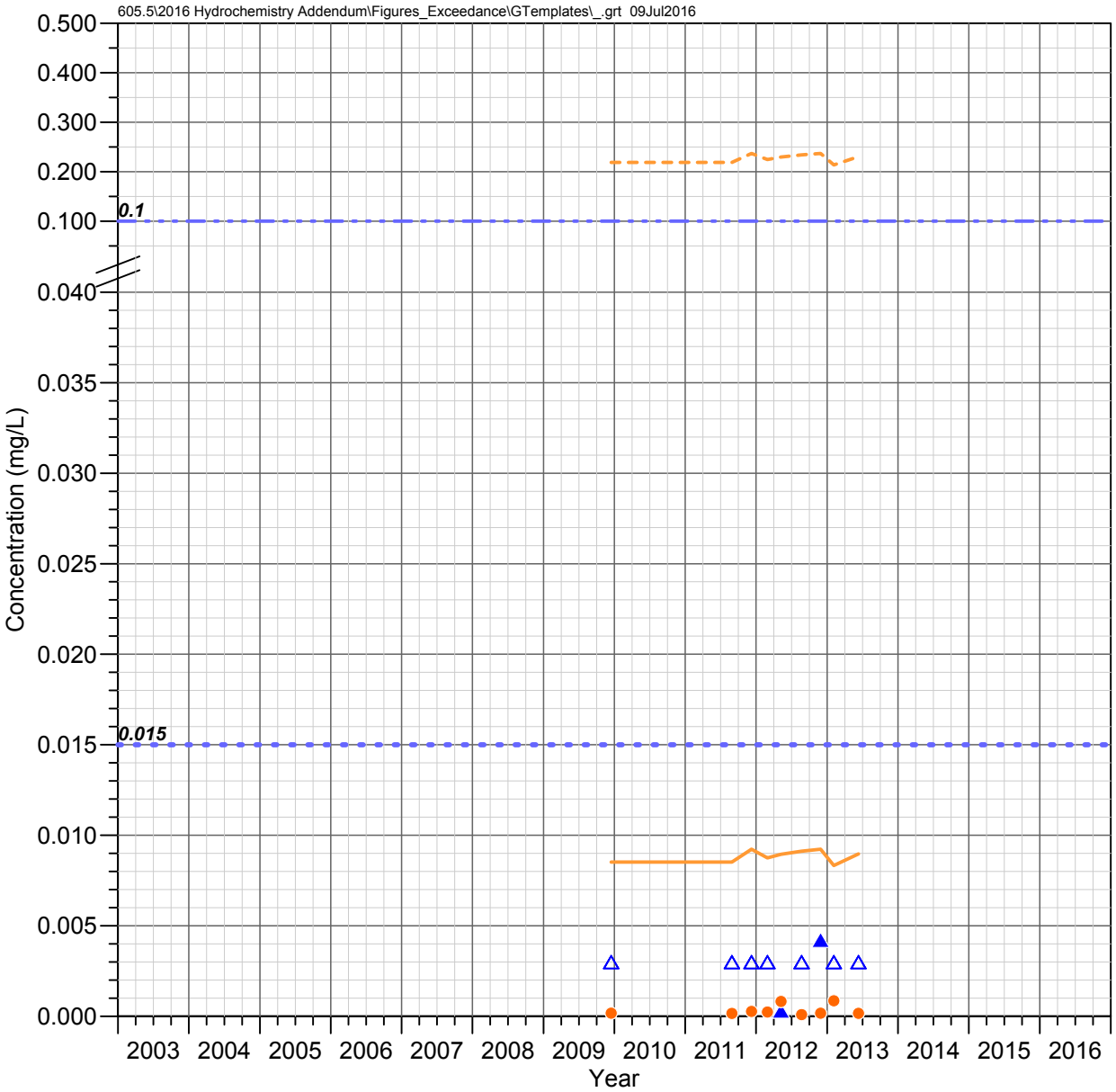


FIGURE F-450. LEAD CONCENTRATIONS OBSERVED AT DC 4.1 E, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Government Springs
Mineral Creek Watershed

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 0.015 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.1 mg/L)

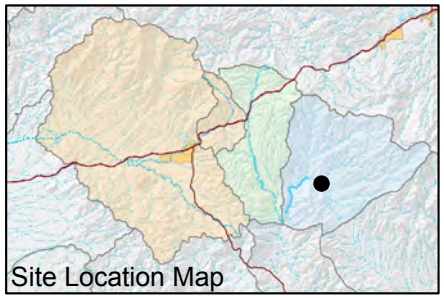
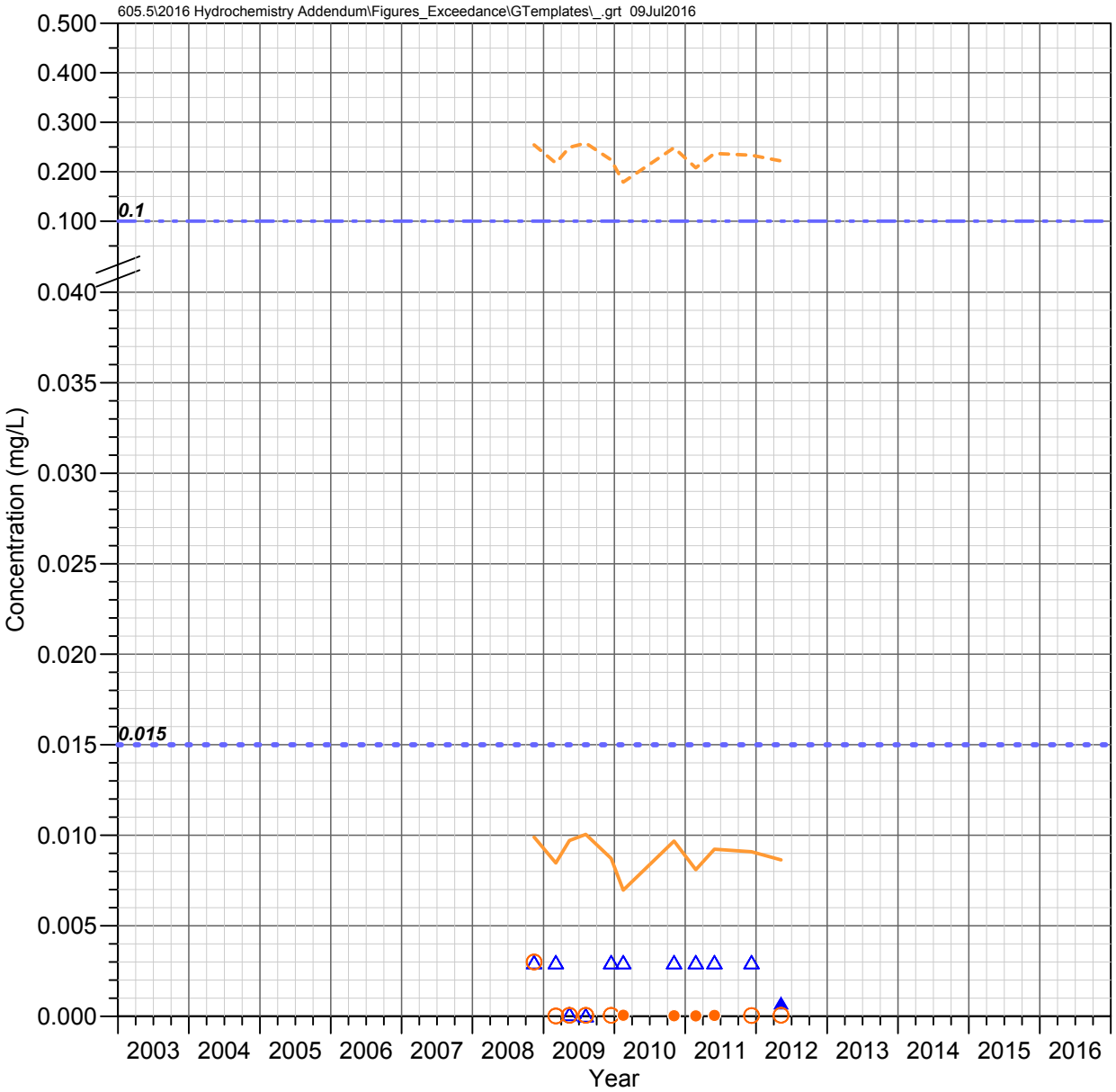


FIGURE F-451. LEAD CONCENTRATIONS OBSERVED AT GOVERNMENT SPRINGS, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 8.4 C
Mineral Creek Watershed

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 0.015 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.1 mg/L)

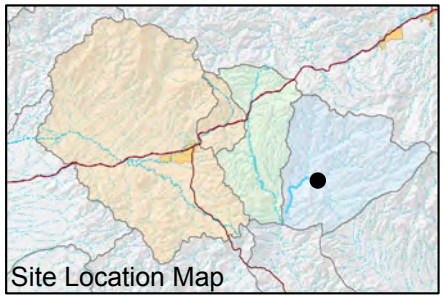
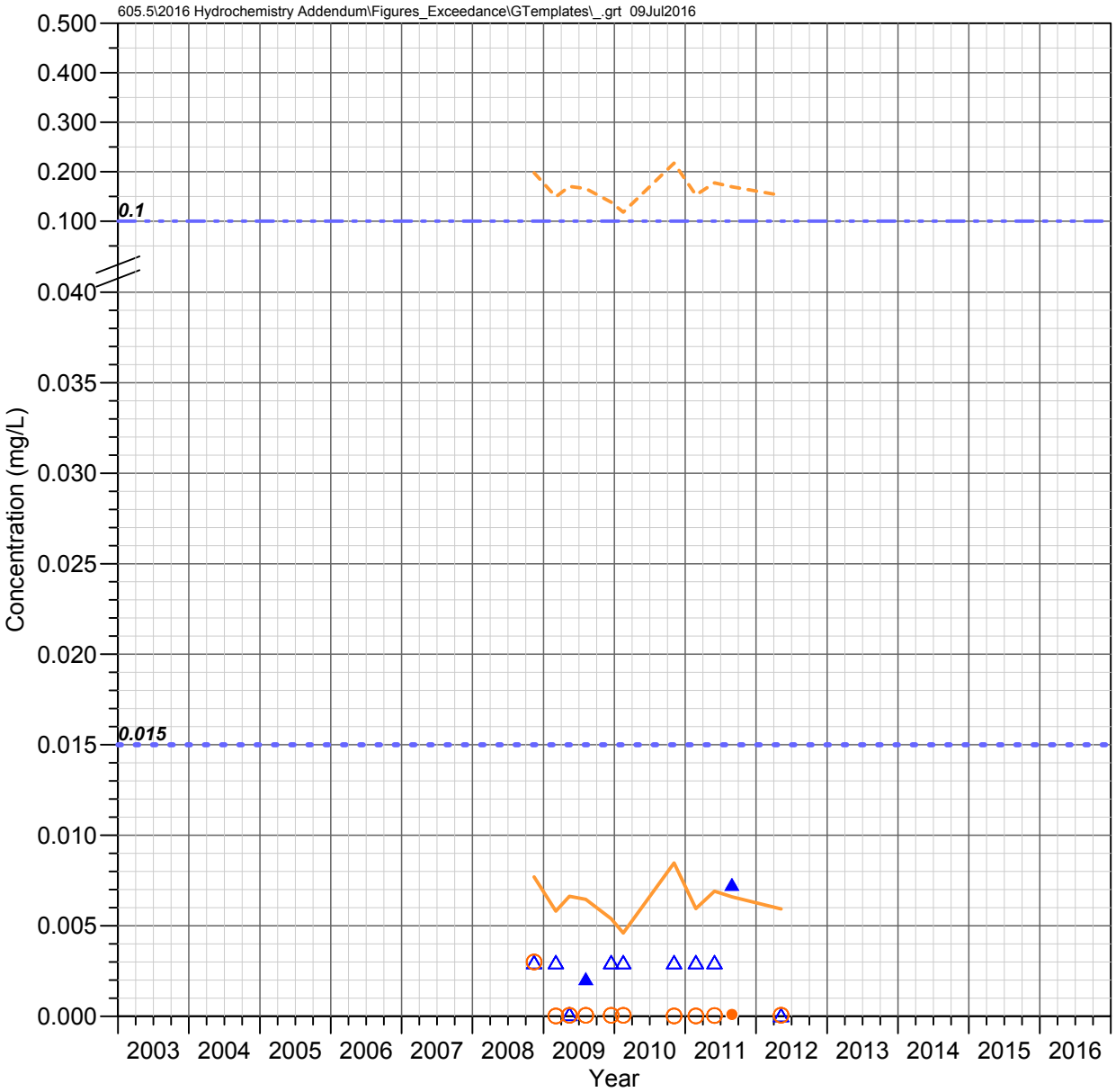


FIGURE F-452. LEAD CONCENTRATIONS OBSERVED AT MC 8.4 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



LF 0.2 C
Mineral Creek Watershed

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 0.015 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.1 mg/L)

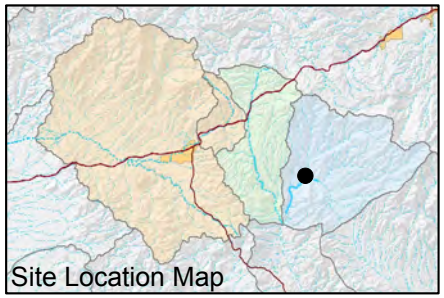
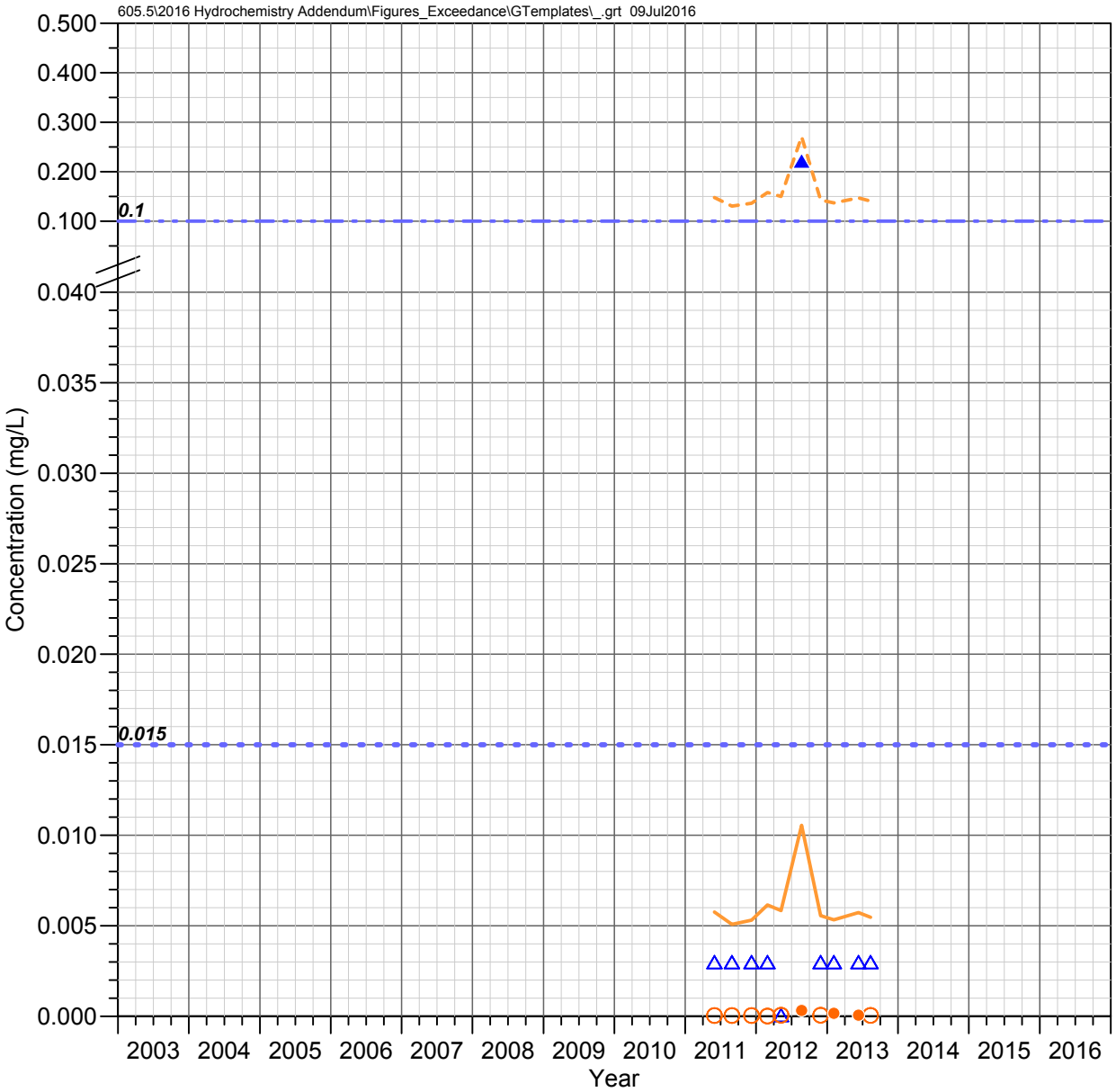


FIGURE F-453. LEAD CONCENTRATIONS OBSERVED AT LF 0.2 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 5.2 C
Mineral Creek Watershed

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 0.015 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.1 mg/L)

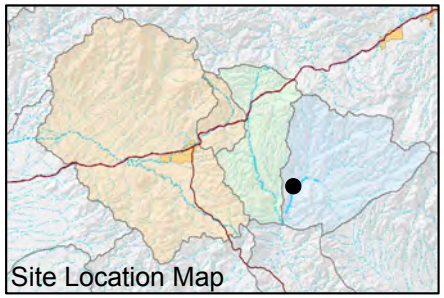
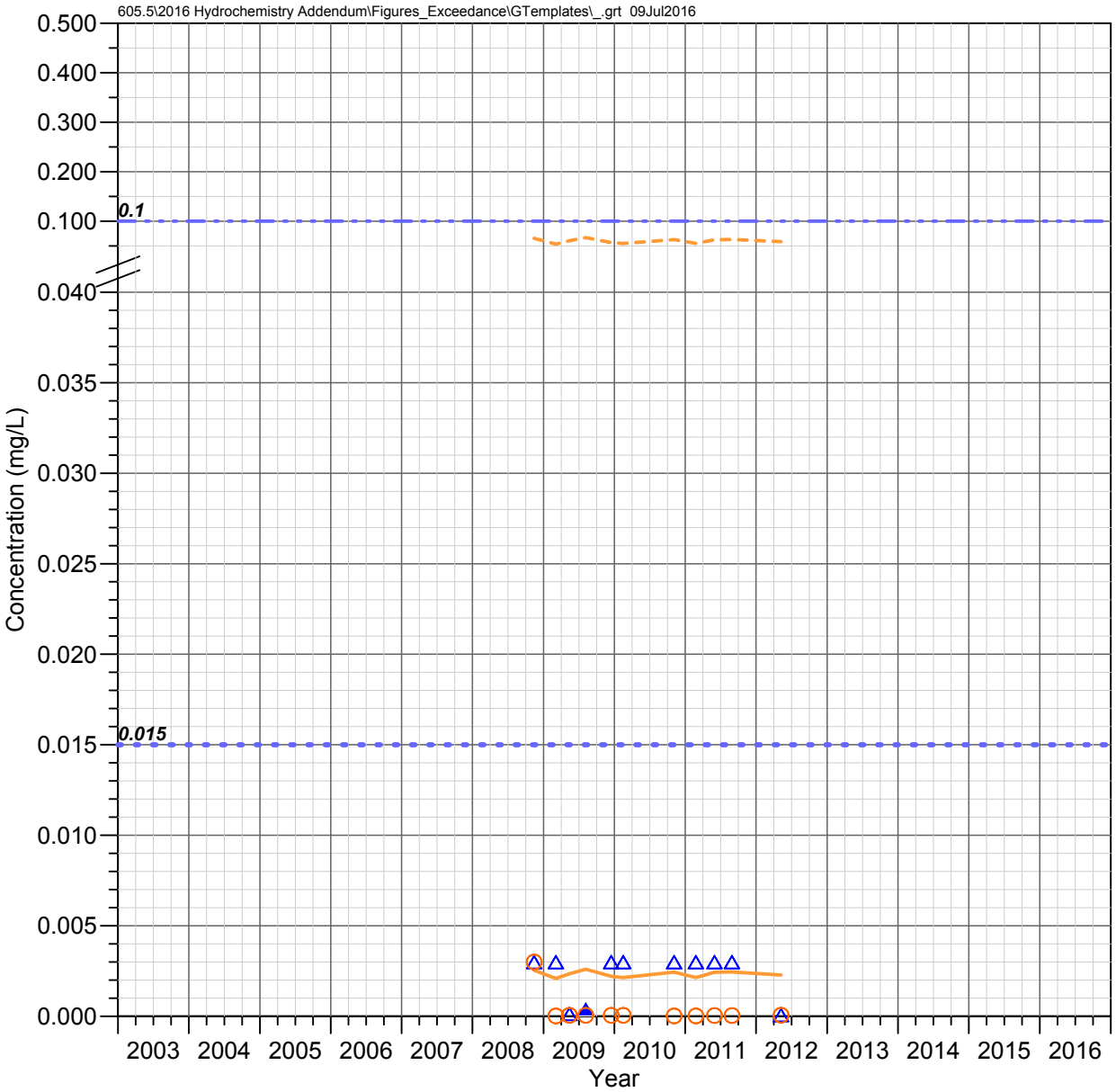


FIGURE F-454. LEAD CONCENTRATIONS OBSERVED AT MC 5.2 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 3.4 W (Wet Leg Spring)
Mineral Creek Watershed

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 0.015 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.1 mg/L)

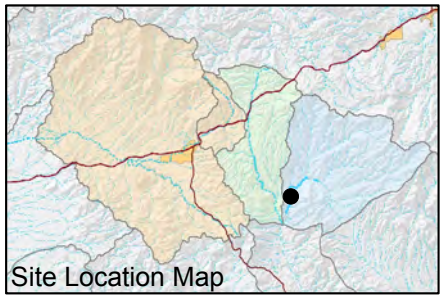
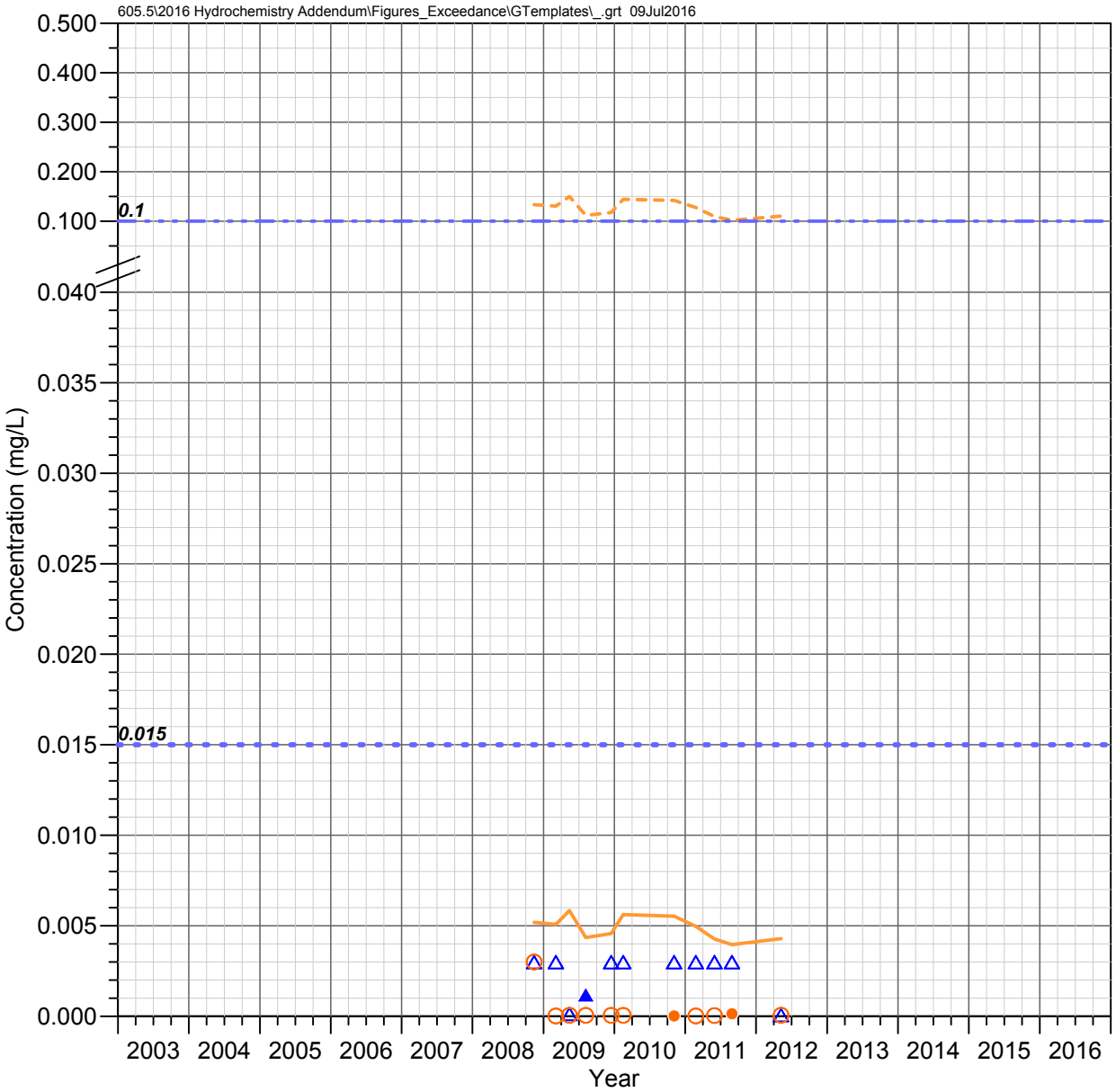


FIGURE F-455. LEAD CONCENTRATIONS OBSERVED AT MC 3.4 W (WET LEG SPRING), MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 3.3 C (Lower Mineral)
Mineral Creek Watershed

LEAD

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 0.015 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.1 mg/L)

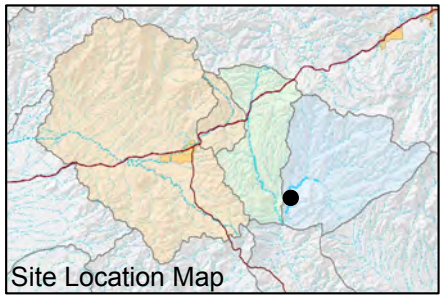
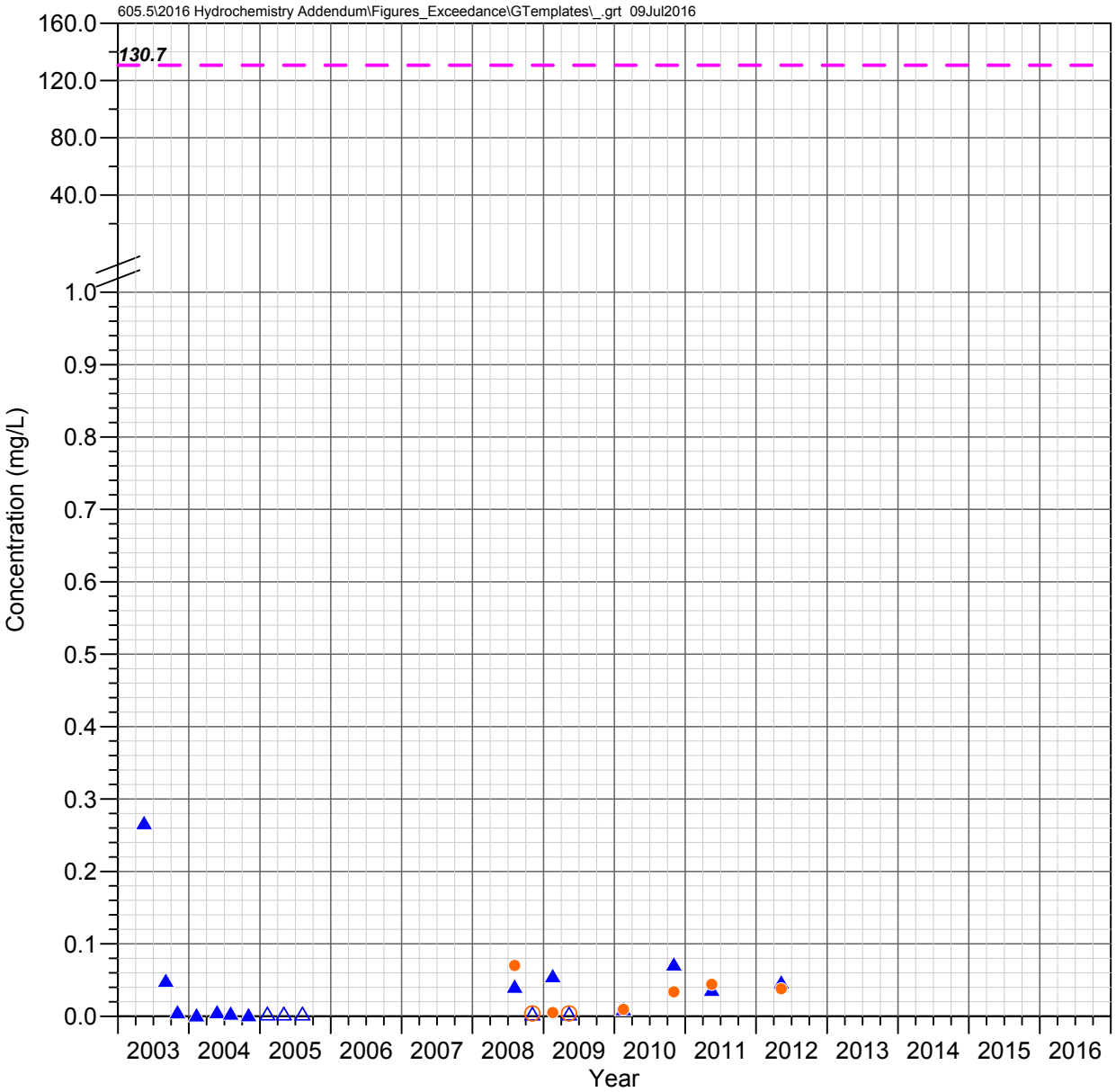


FIGURE F-456. LEAD CONCENTRATIONS OBSERVED AT MC 3.3 C (LOWER MINERAL), MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Pump Station Spring (QC 30.7 C)
Queen Creek Watershed

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — AZ Partial Body Contact (UNS, 130.667 mg/L)

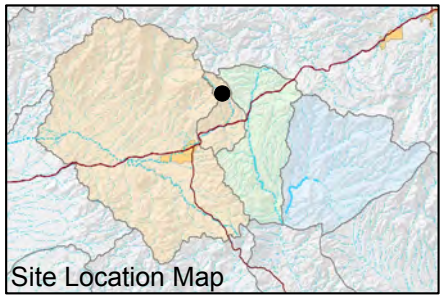
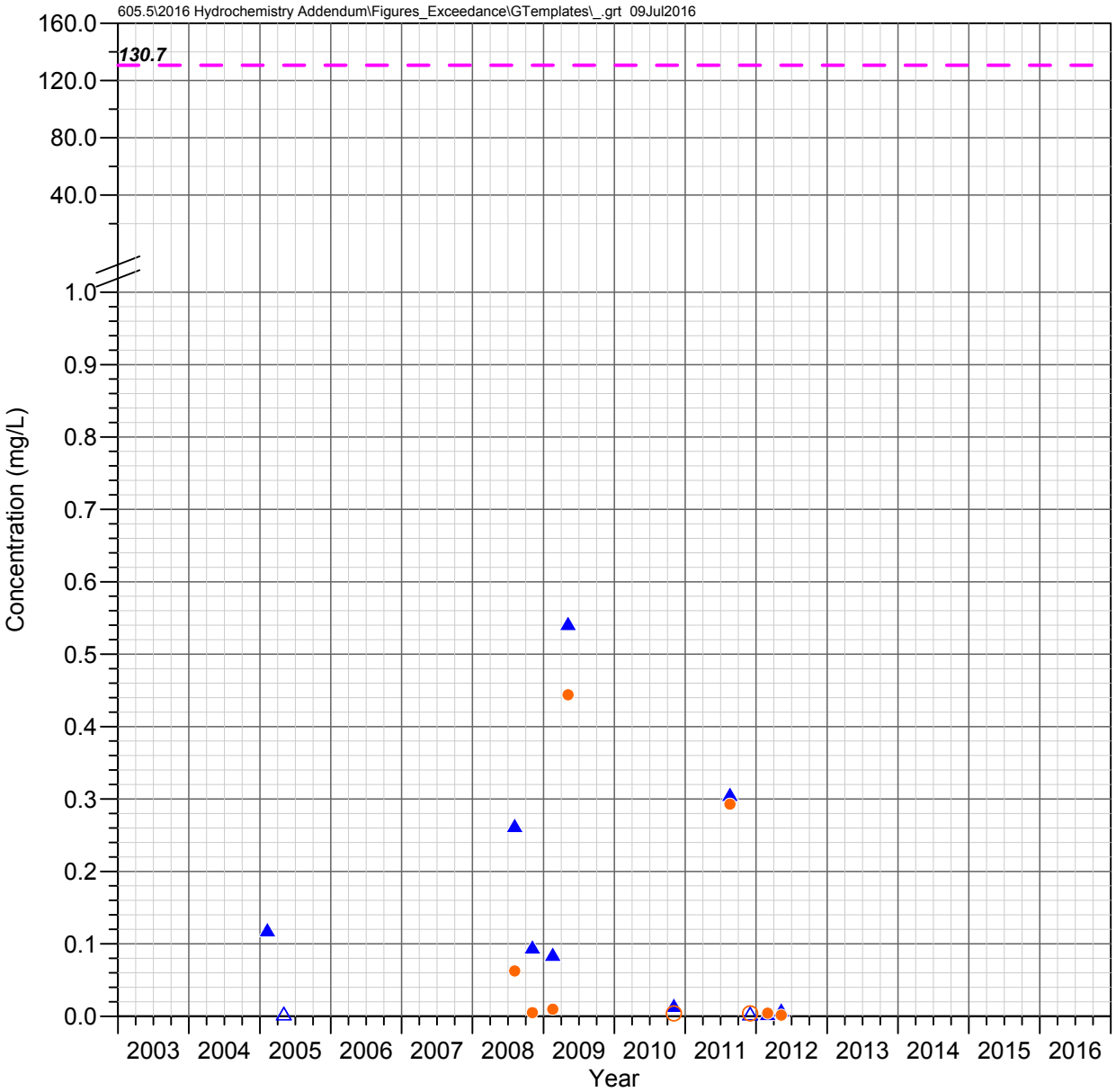


FIGURE F-457. MANGANESE CONCENTRATIONS OBSERVED AT PUMP STATION SPRING (QC 30.7 C), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 27.3 C
Queen Creek Watershed

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — AZ Partial Body Contact (UNS, 130.667 mg/L)

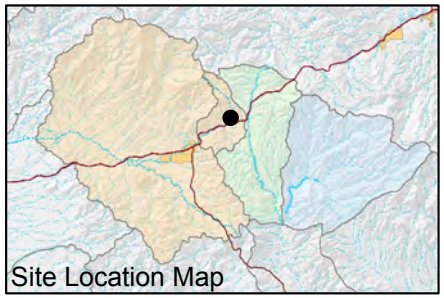
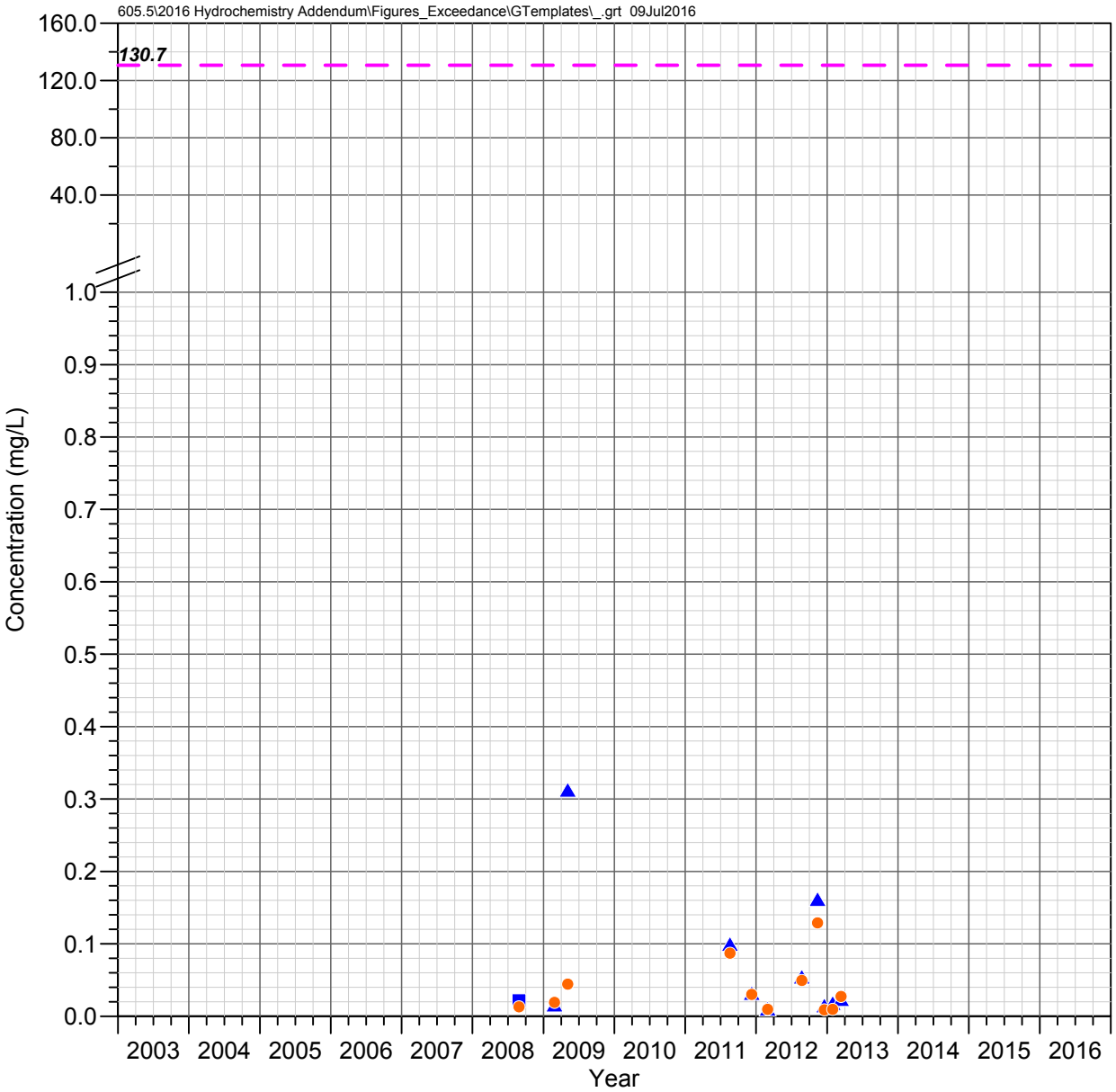


FIGURE F-458. MANGANESE CONCENTRATIONS OBSERVED AT QC 27.3 C, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Oak Flat Wash
Queen Creek Watershed

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — AZ Partial Body Contact (UNS, 130.667 mg/L)

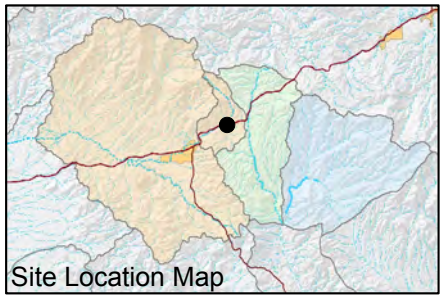
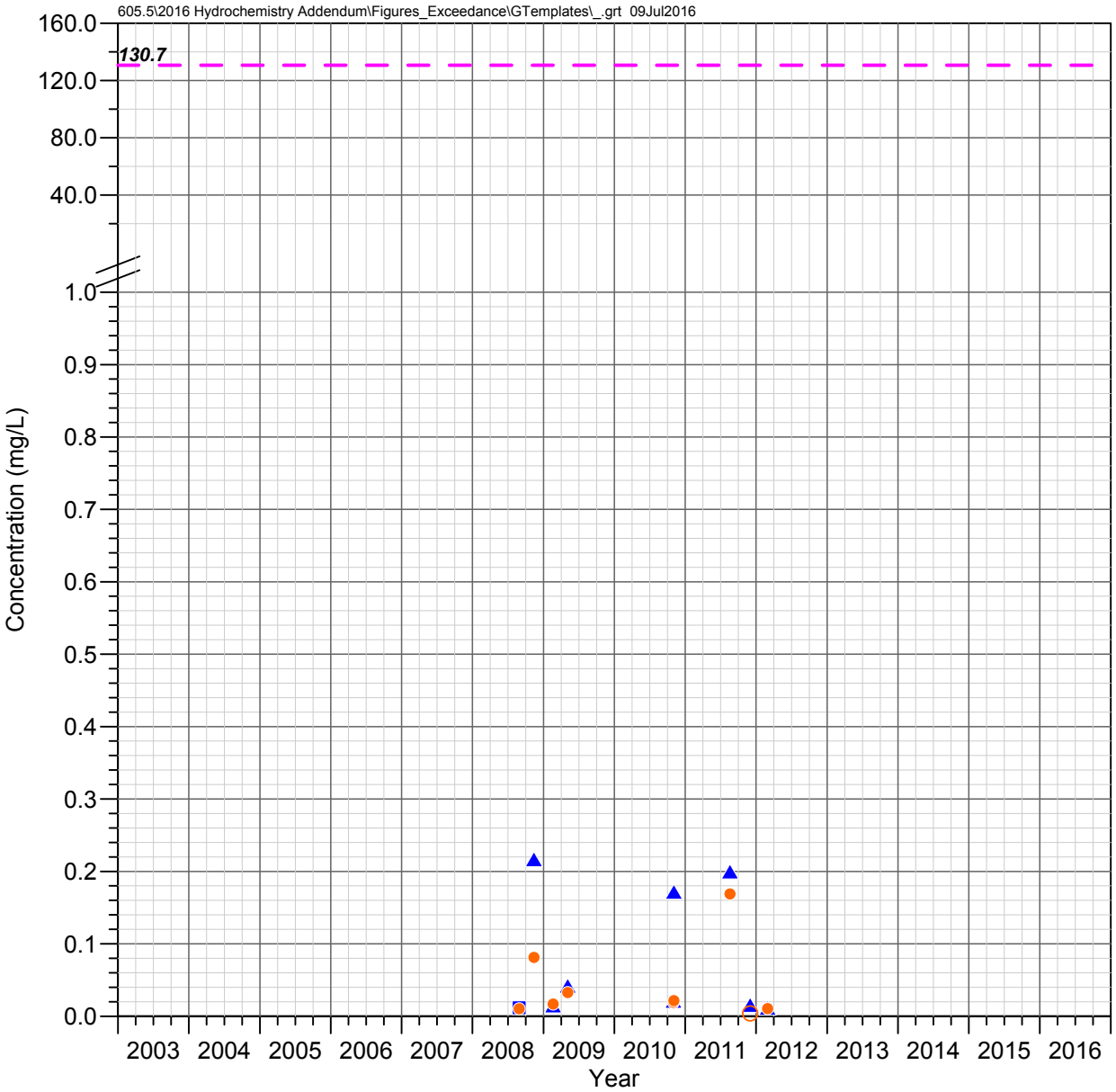


FIGURE F-459. MANGANESE CONCENTRATIONS OBSERVED AT OAK FLAT WASH, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Number 9 Wash
Queen Creek Watershed

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — AZ Partial Body Contact (UNS, 130.667 mg/L)

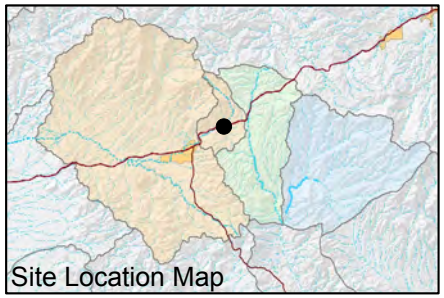
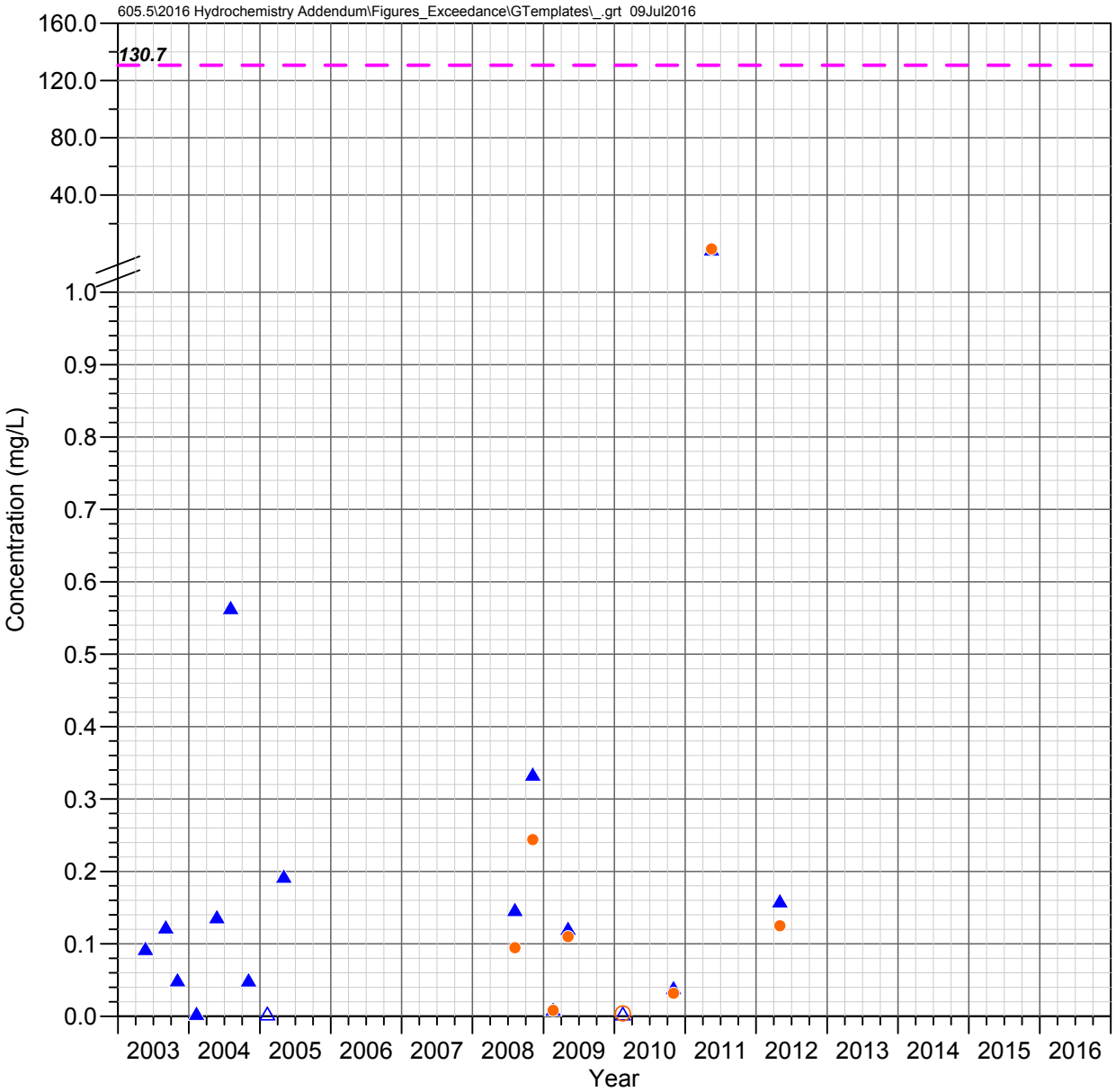


FIGURE F-460. MANGANESE CONCENTRATIONS OBSERVED AT NUMBER 9 WASH, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Boulder Hole (QC 23.6 C)
Queen Creek Watershed

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — AZ Partial Body Contact (UNS, 130.667 mg/L)

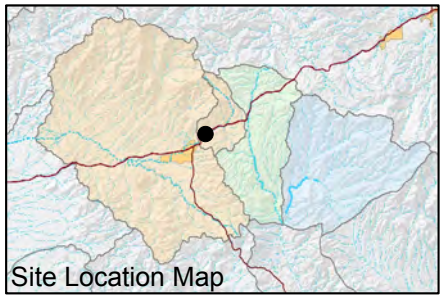
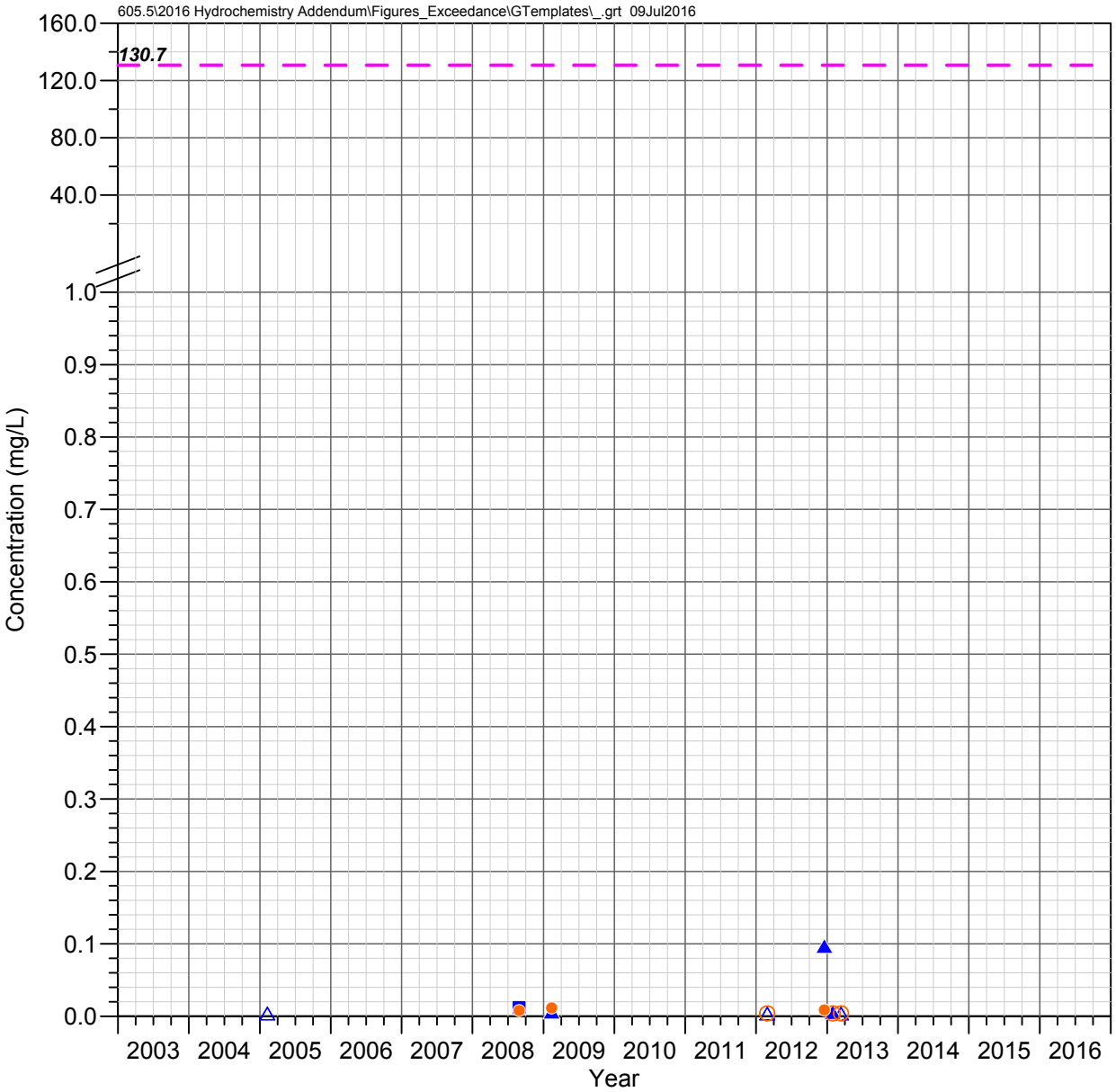


FIGURE F-461. MANGANESE CONCENTRATIONS OBSERVED AT BOULDER HOLE (QC 23.6 C), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 22.6 E (Karst Spring)
Queen Creek Watershed

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — AZ Partial Body Contact (UNS, 130.667 mg/L)

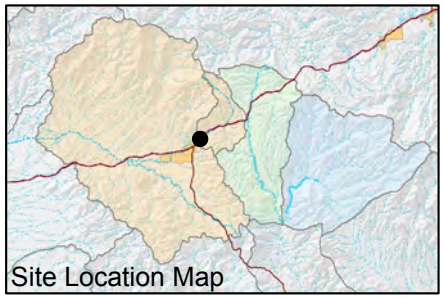
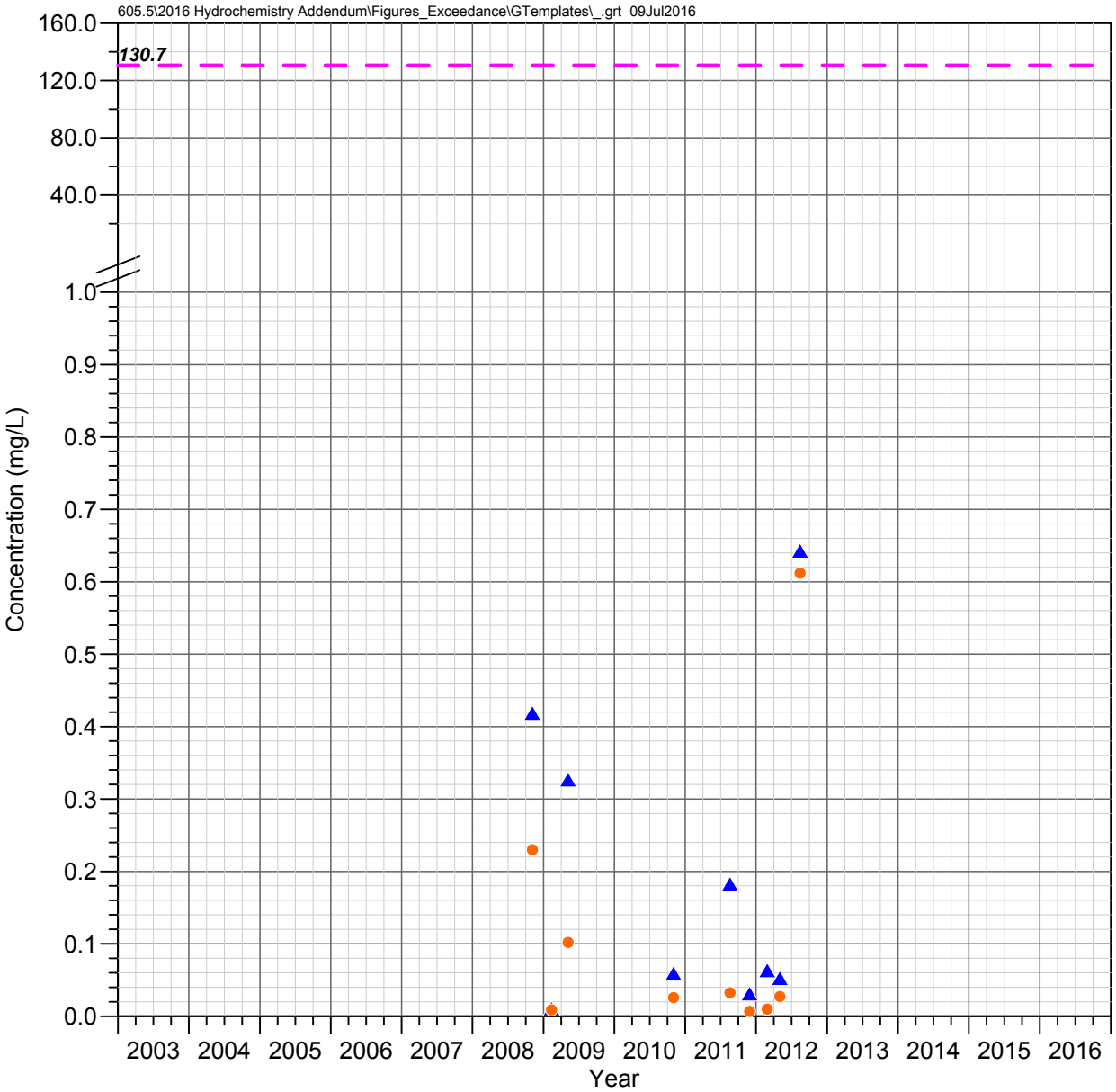


FIGURE F-462. MANGANESE CONCENTRATIONS OBSERVED AT QC 22.6 E (KARST SPRING), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 21.7 C (Magma Avenue)
Queen Creek Watershed

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — AZ Partial Body Contact (UNS, 130.667 mg/L)

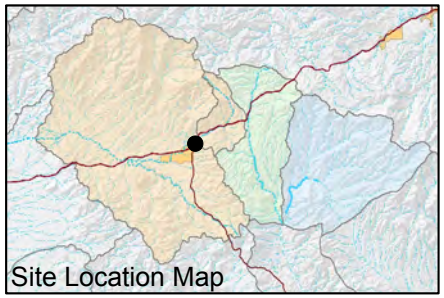
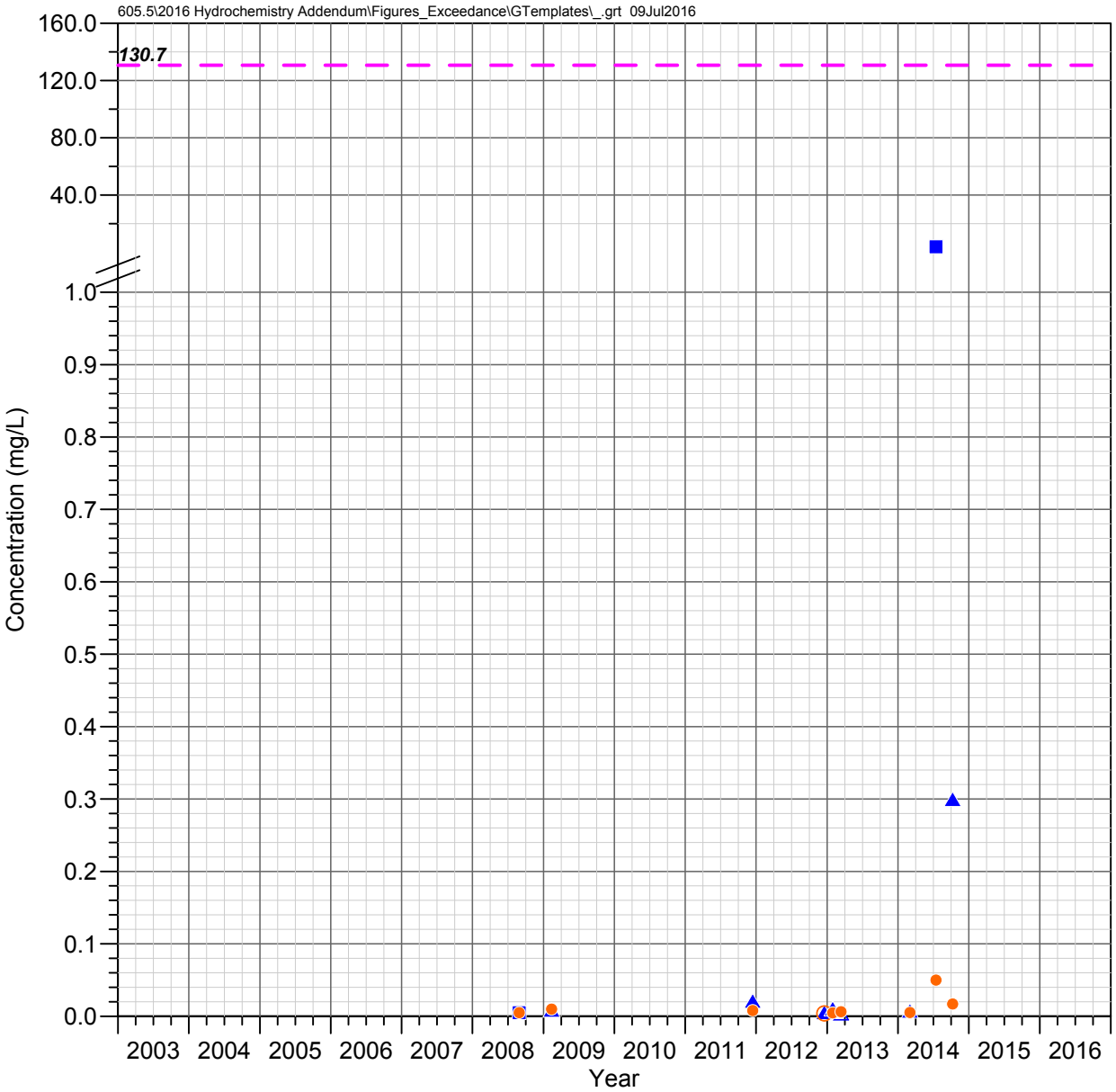


FIGURE F-463. MANGANESE CONCENTRATIONS OBSERVED AT QC 21.7 C (MAGMA AVENUE), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 19.7 C
Queen Creek Watershed

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Partial Body Contact (UNS, 130.667 mg/L)

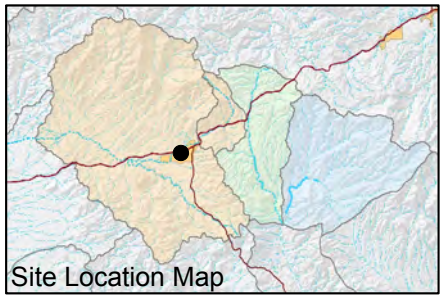
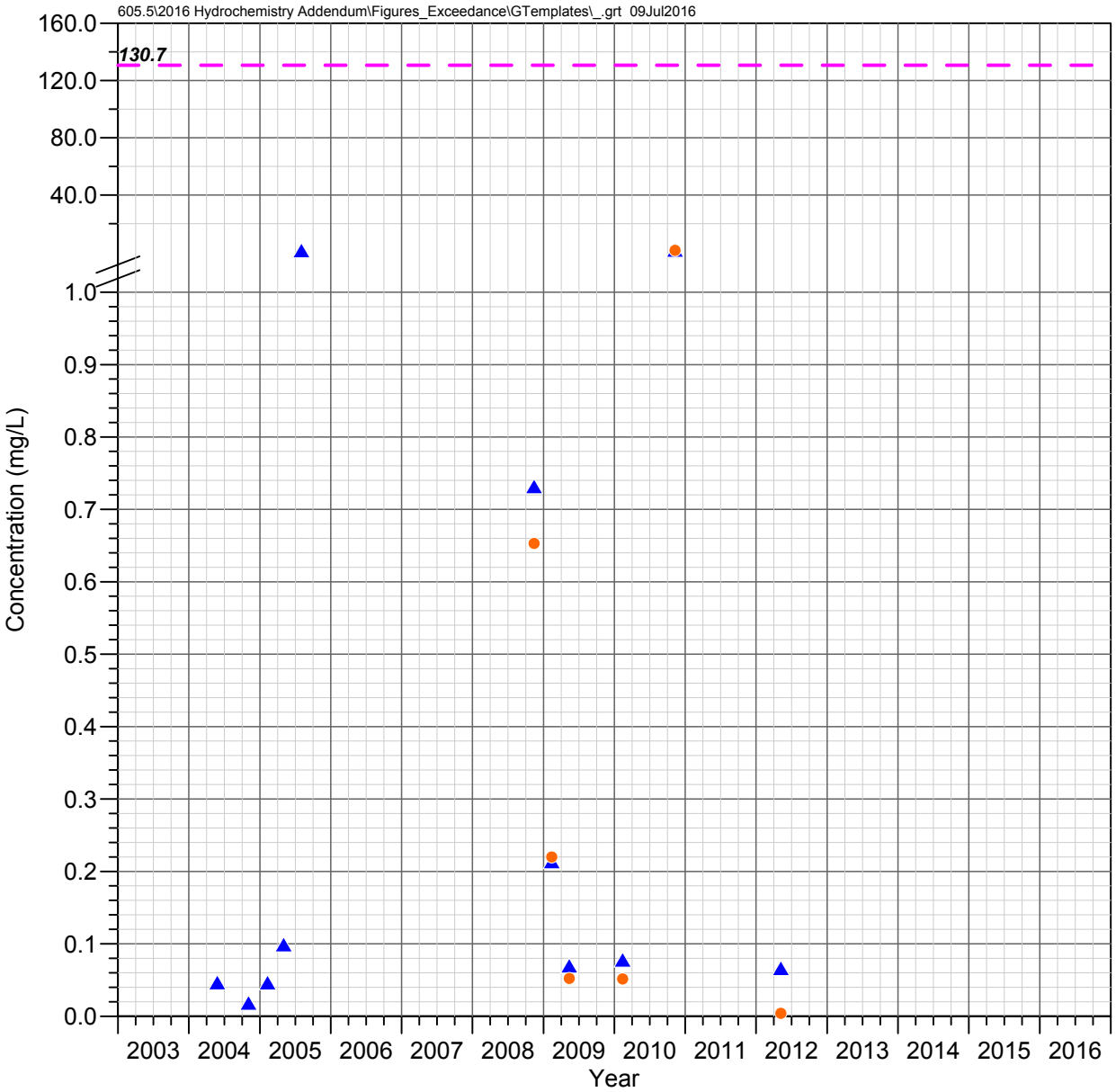


FIGURE F-464. MANGANESE CONCENTRATIONS OBSERVED AT QC 19.7 C, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Bored Spring
Queen Creek Watershed

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — AZ Partial Body Contact (UNS, 130.667 mg/L)

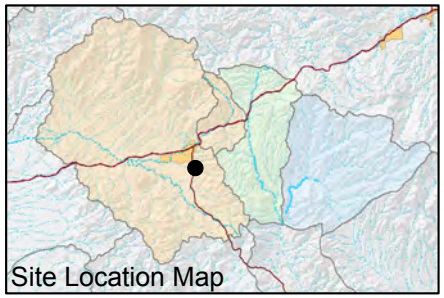
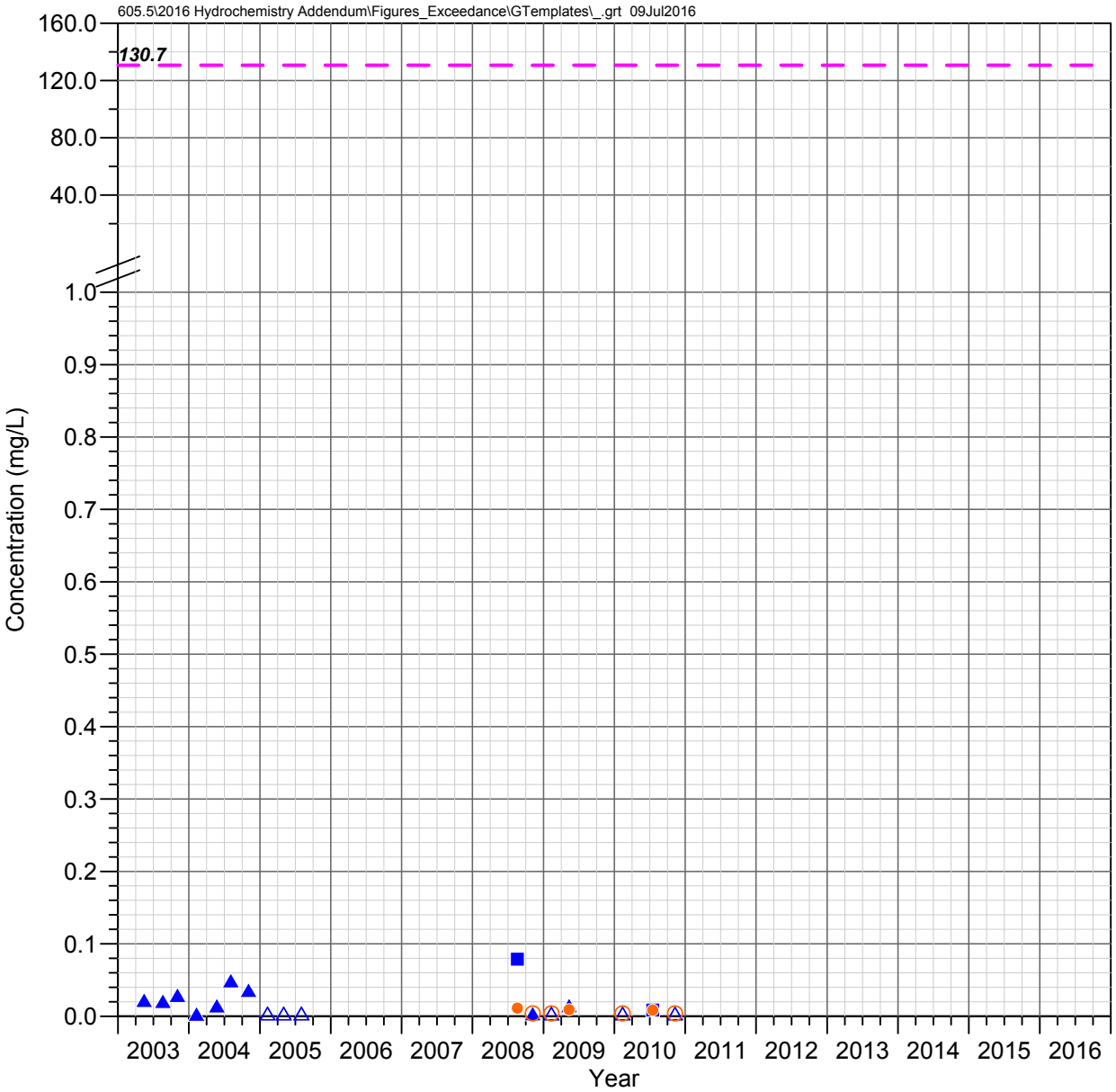


FIGURE F-465. MANGANESE CONCENTRATIONS OBSERVED AT BORED SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Hidden Spring
Queen Creek Watershed

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — AZ Partial Body Contact (UNS, 130.667 mg/L)

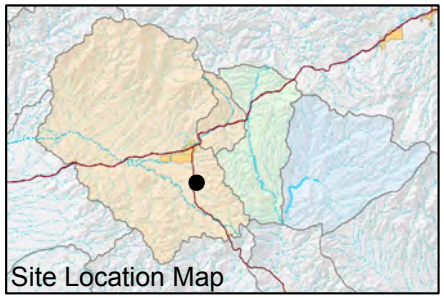
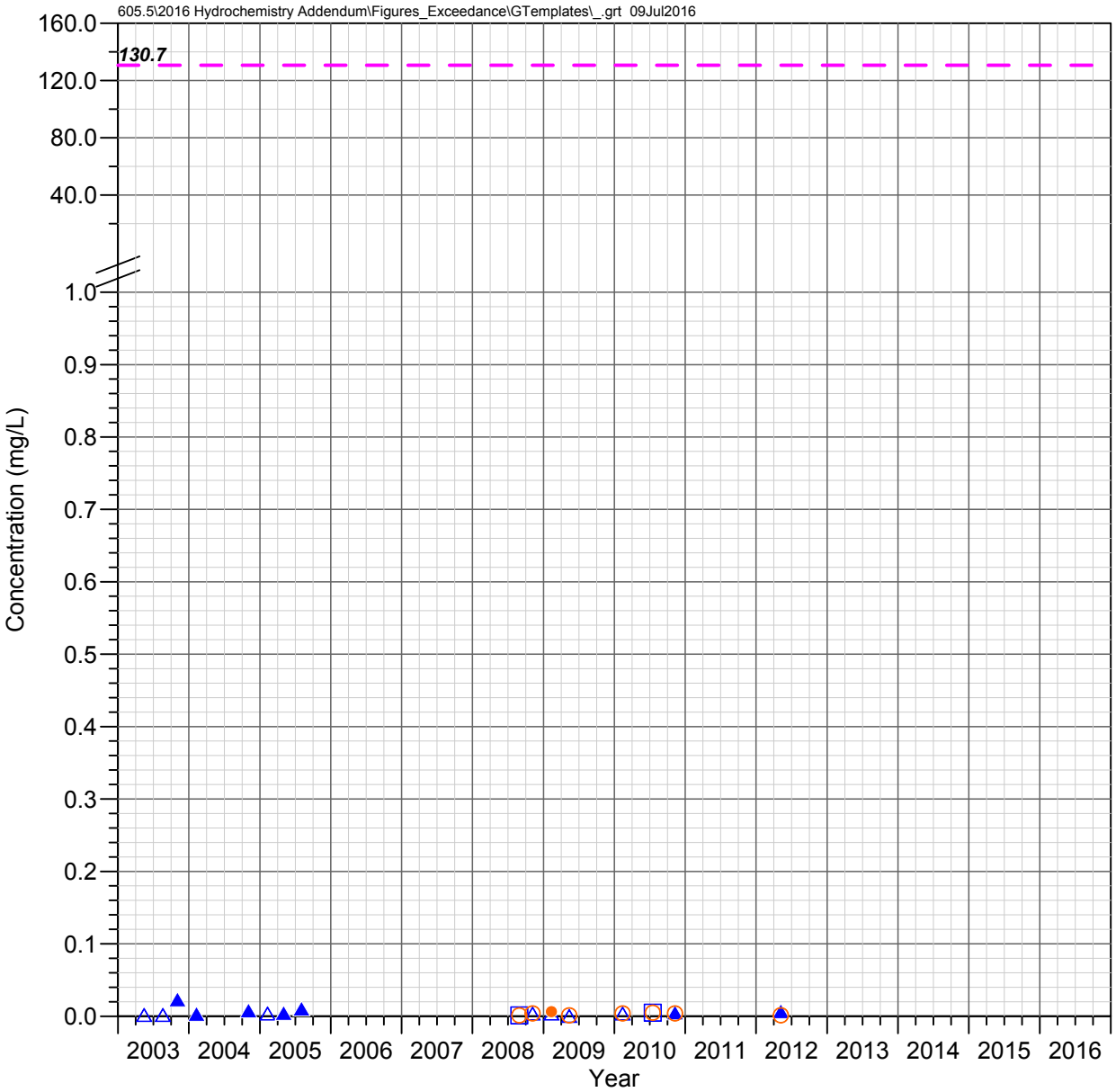


FIGURE F-466. MANGANESE CONCENTRATIONS OBSERVED AT HIDDEN SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Kane Spring
Queen Creek Watershed

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — AZ Partial Body Contact (UNS, 130.667 mg/L)

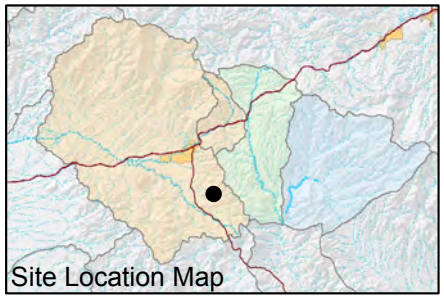
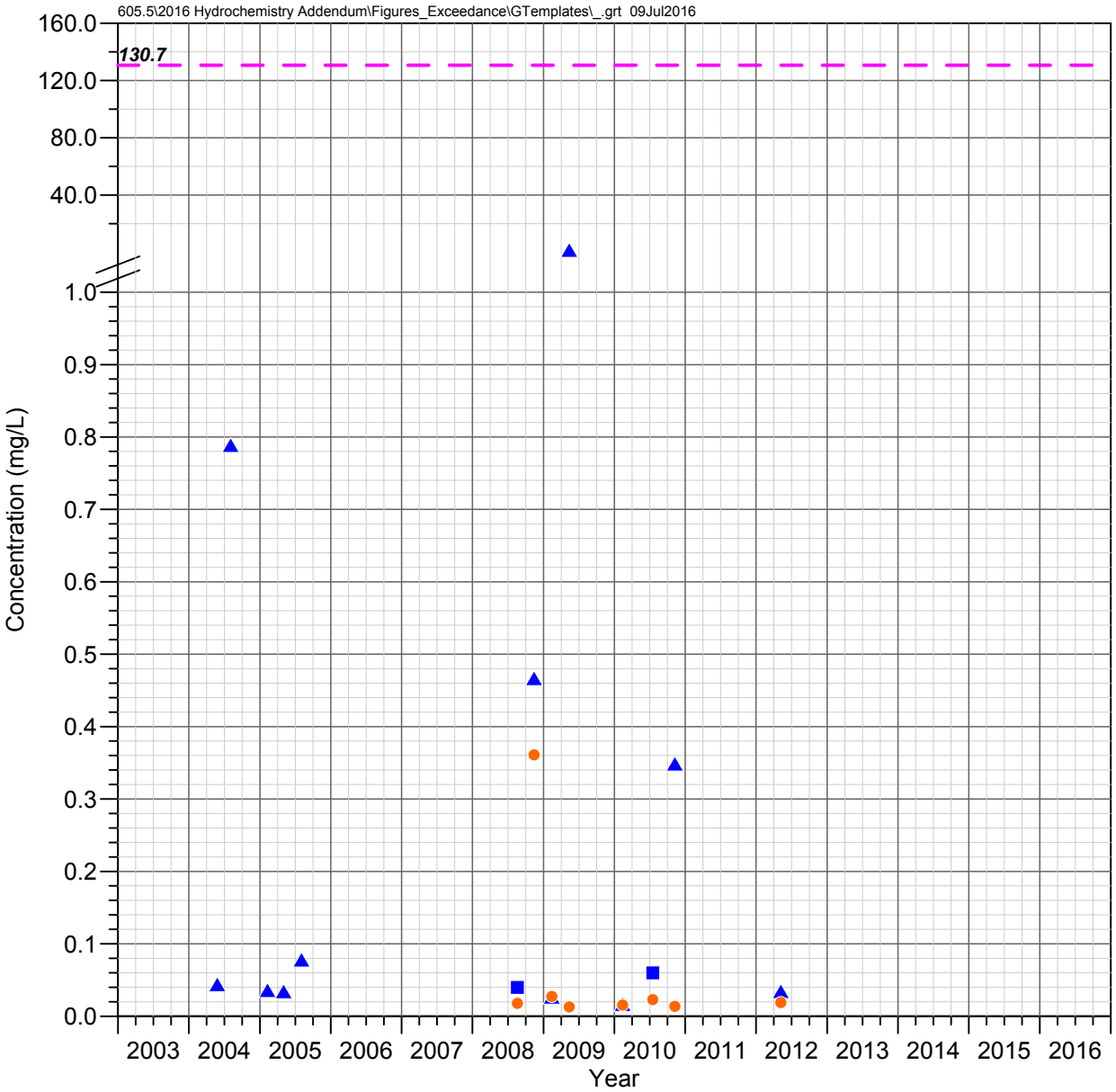


FIGURE F-467. MANGANESE CONCENTRATIONS OBSERVED AT KANE SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Blue Spring
Queen Creek Watershed

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Partial Body Contact (UNS, 130.667 mg/L)

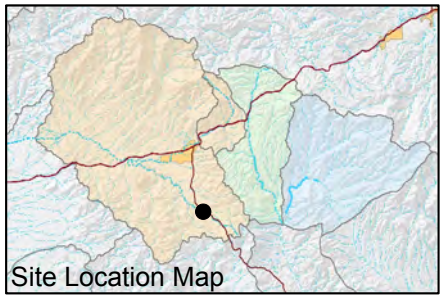
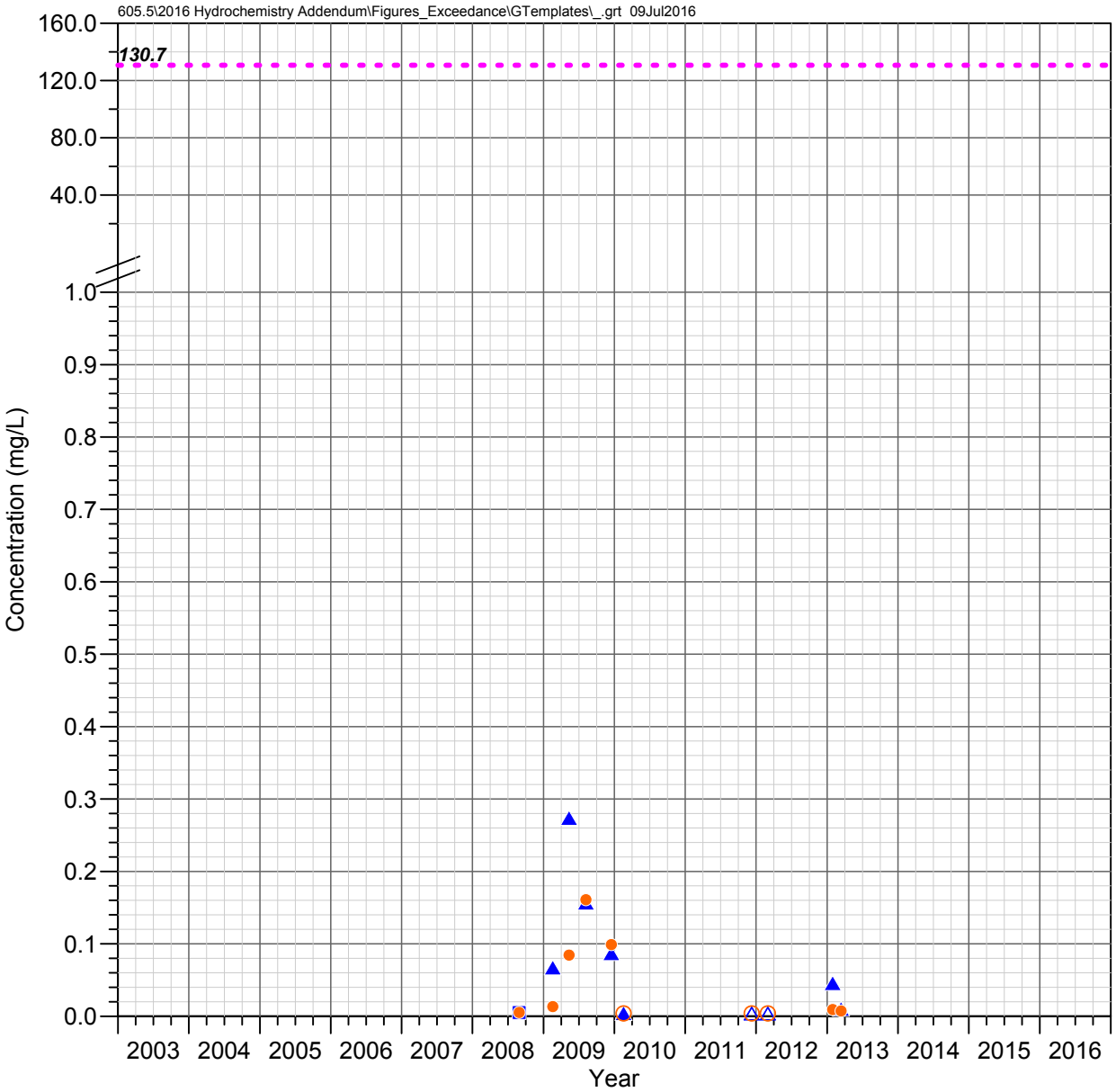


FIGURE F-468. MANGANESE CONCENTRATIONS OBSERVED AT BLUE SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



IC 1.0 C
Devils Canyon Watershed

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 130.667 mg/L)

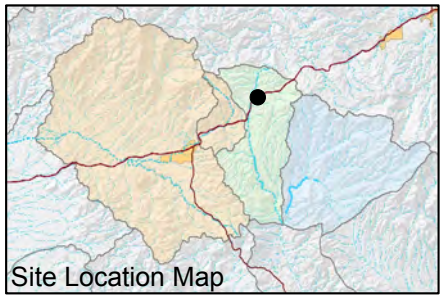
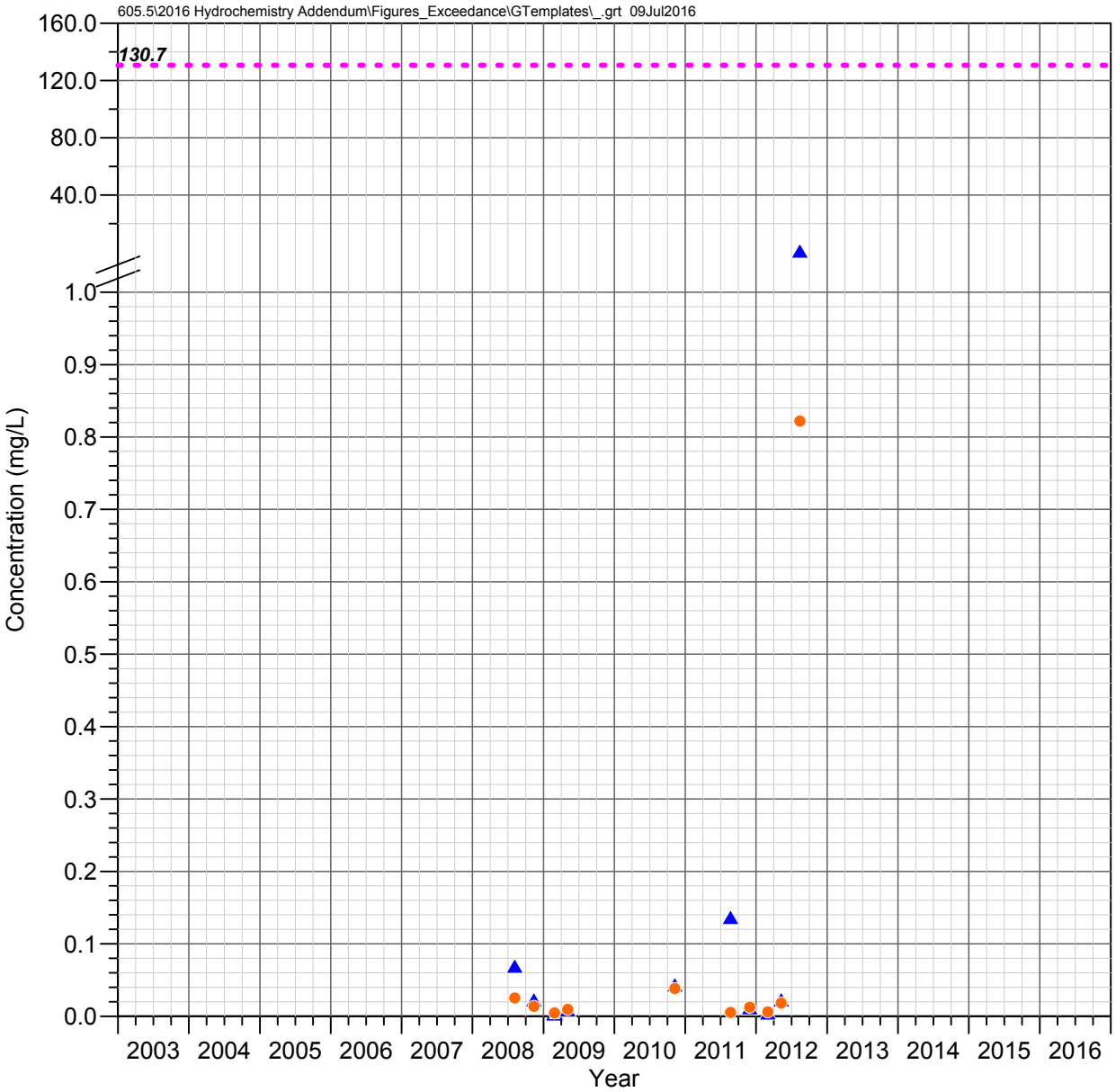


FIGURE F-469. MANGANESE CONCENTRATIONS OBSERVED AT IC 1.0 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 15.5 C
Devils Canyon Watershed

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 130.667 mg/L)

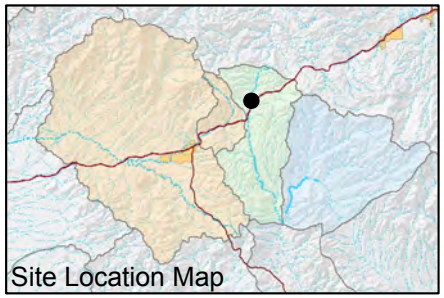
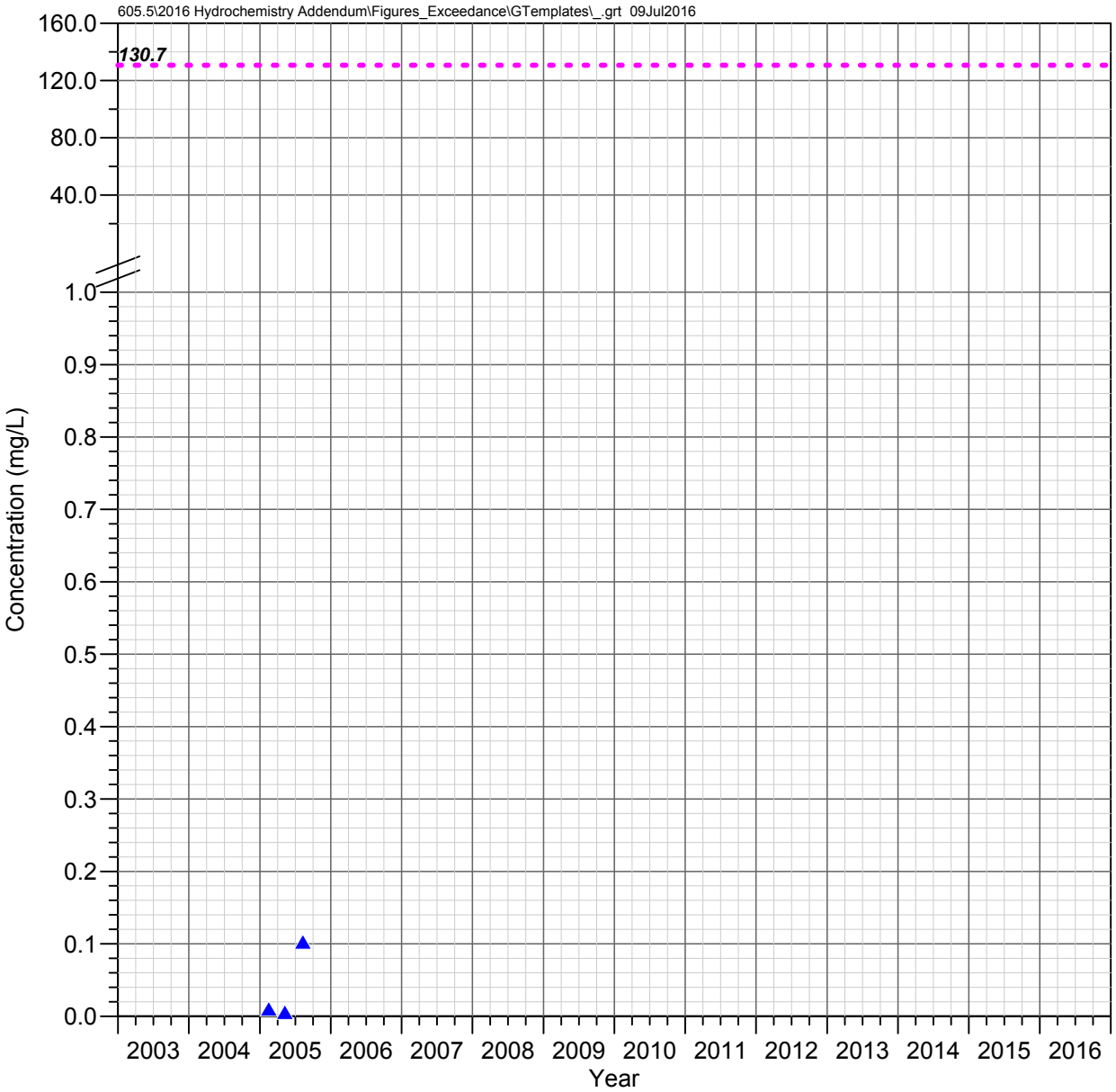


FIGURE F-470. MANGANESE CONCENTRATIONS OBSERVED AT DC 15.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 15.2 C
Devils Canyon Watershed

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 130.667 mg/L)

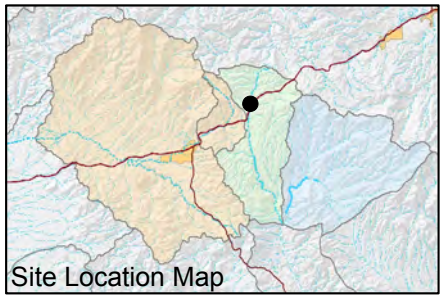
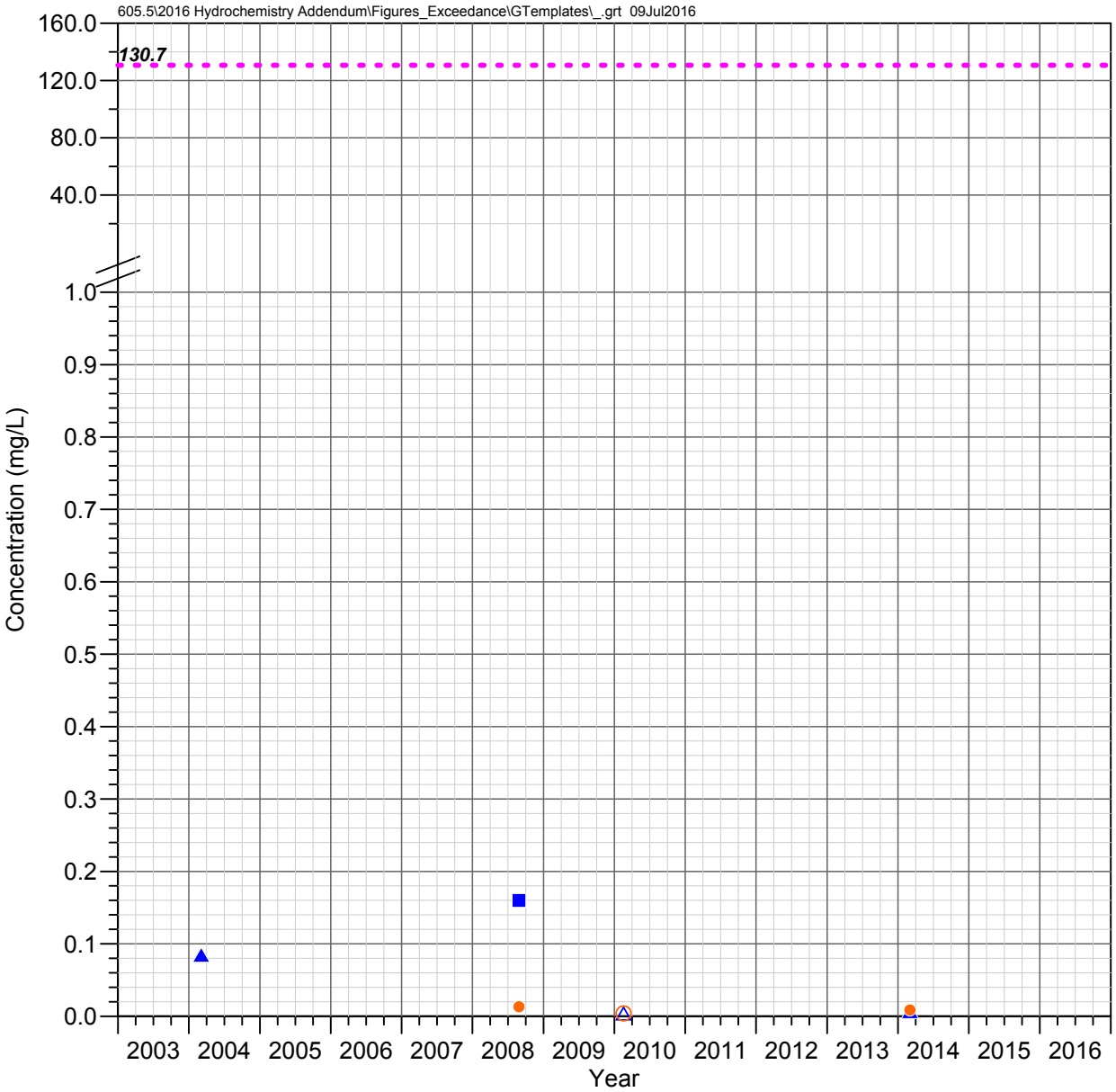


FIGURE F-471. MANGANESE CONCENTRATIONS OBSERVED AT DC 15.2 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 14.7 C
Devils Canyon Watershed

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 130.667 mg/L)

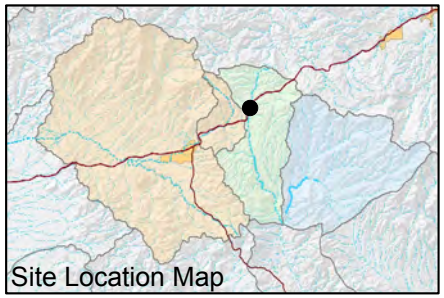
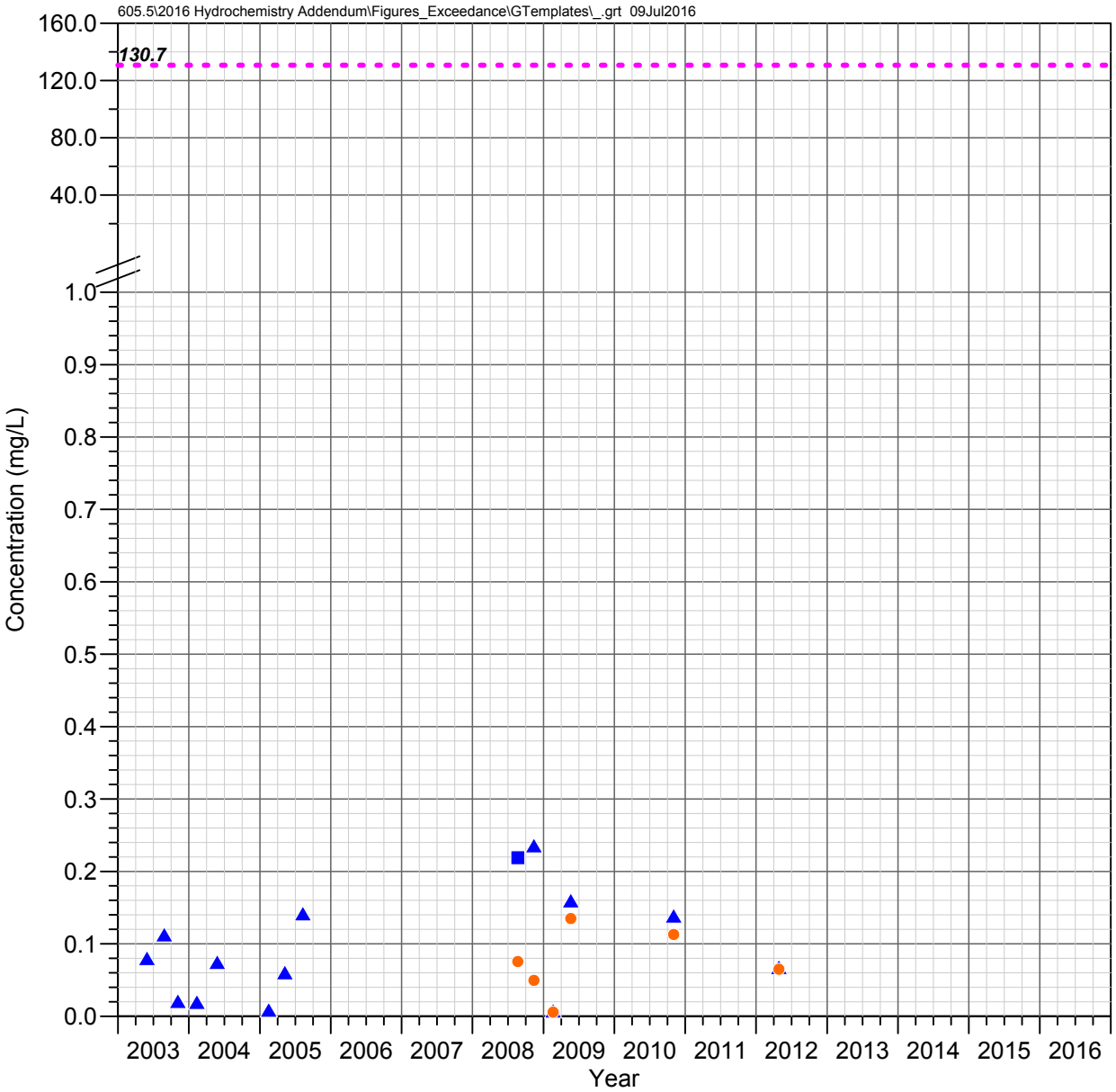


FIGURE F-472. MANGANESE CONCENTRATIONS OBSERVED AT DC 14.7 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 13.5 C
Devils Canyon Watershed

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 130.667 mg/L)

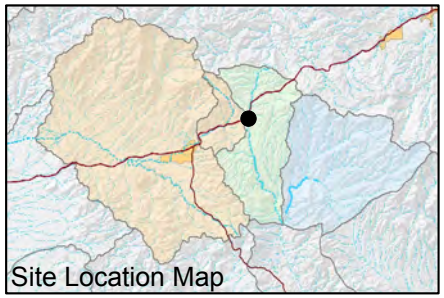
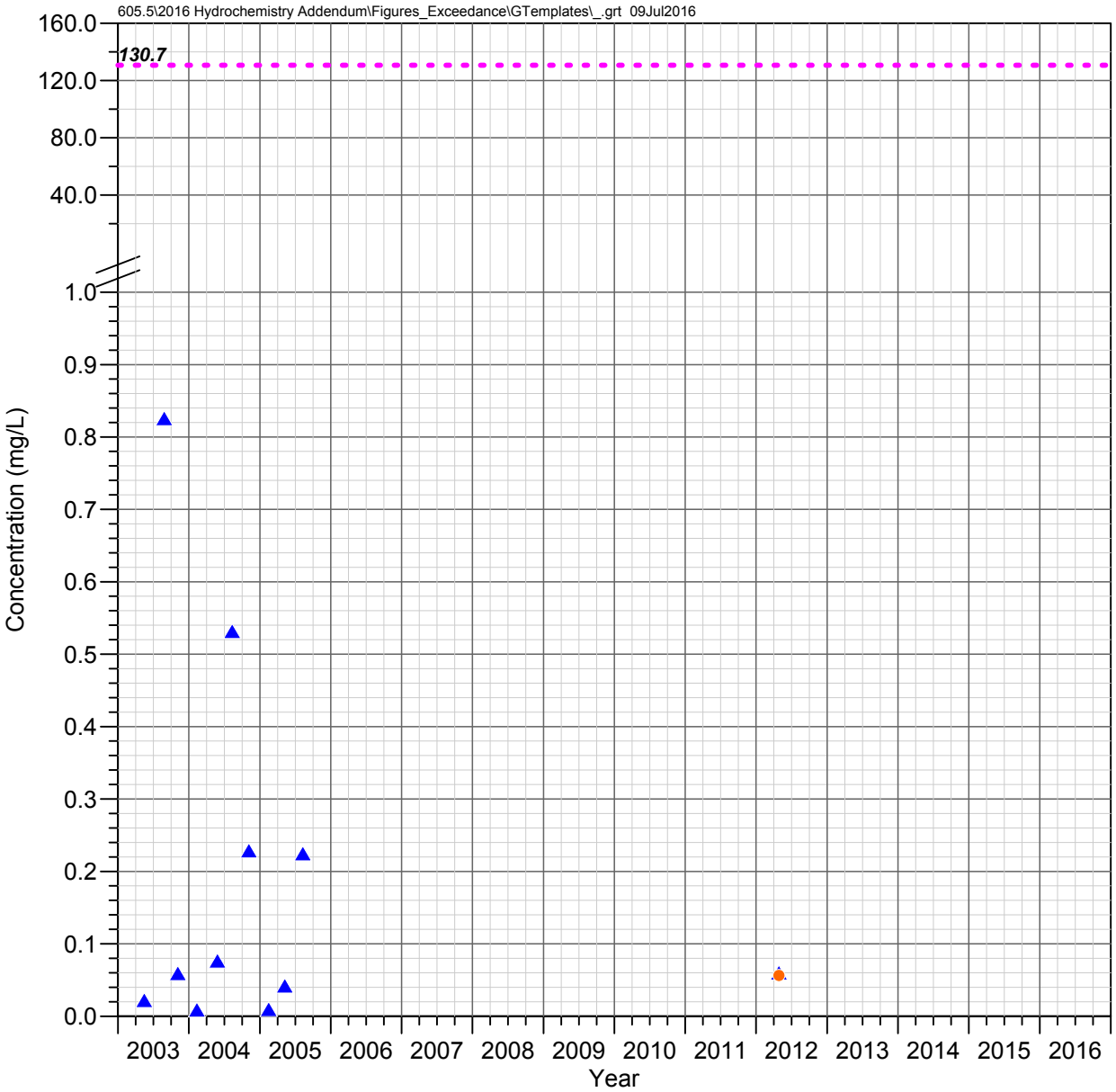


FIGURE F-473. MANGANESE CONCENTRATIONS OBSERVED AT DC 13.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 10.9 C
Devils Canyon Watershed

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 130.667 mg/L)

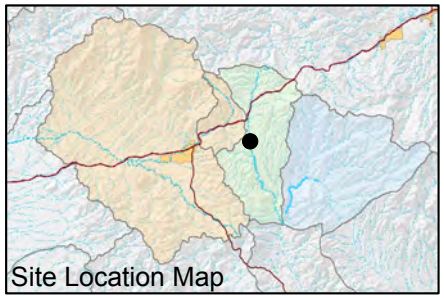
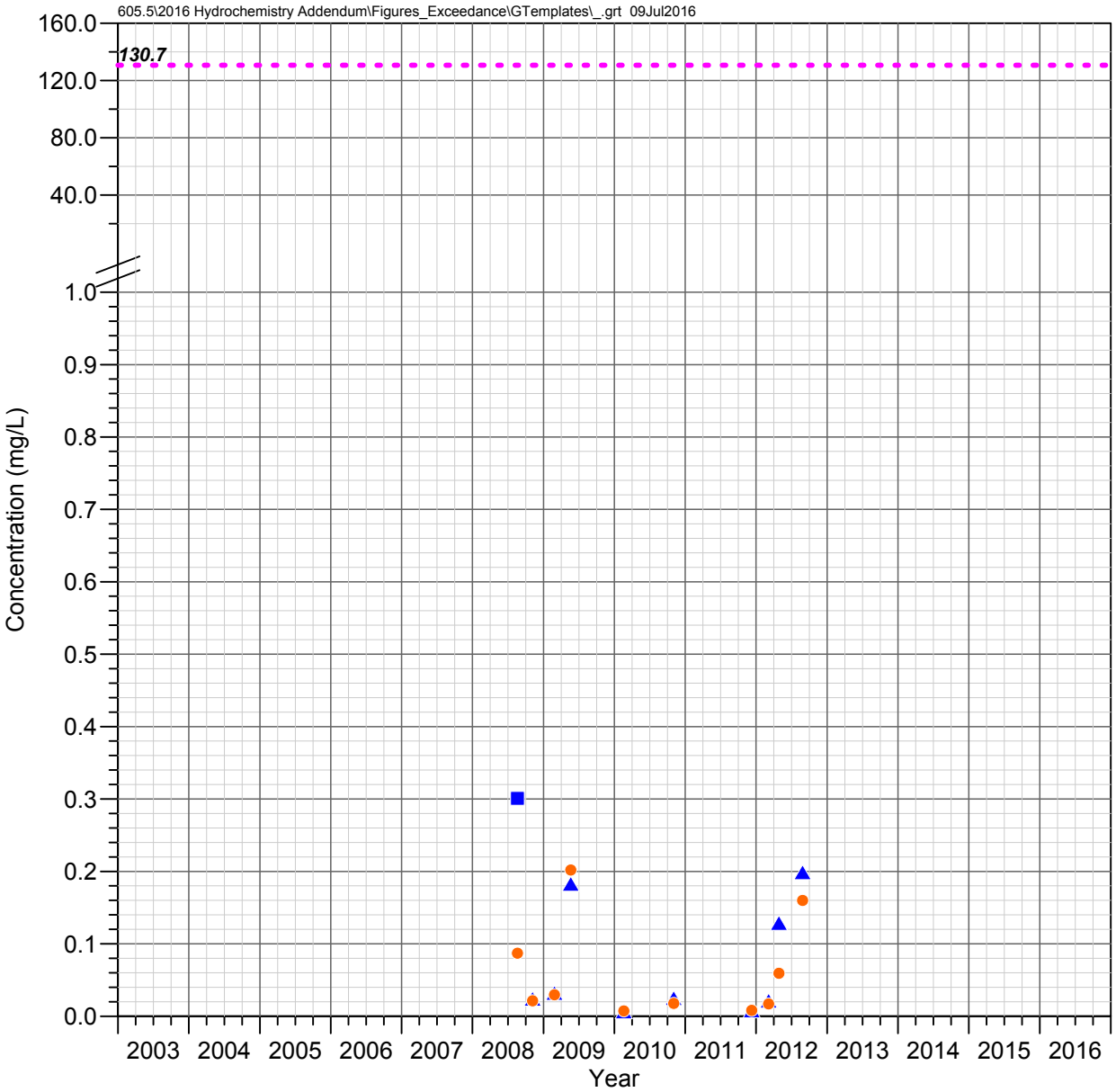


FIGURE F-474. MANGANESE CONCENTRATIONS OBSERVED AT DC 10.9 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



RR 1.5 C
Devils Canyon Watershed

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 130.667 mg/L)

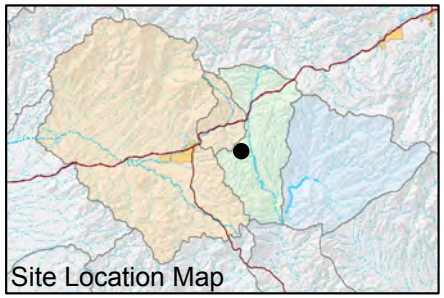
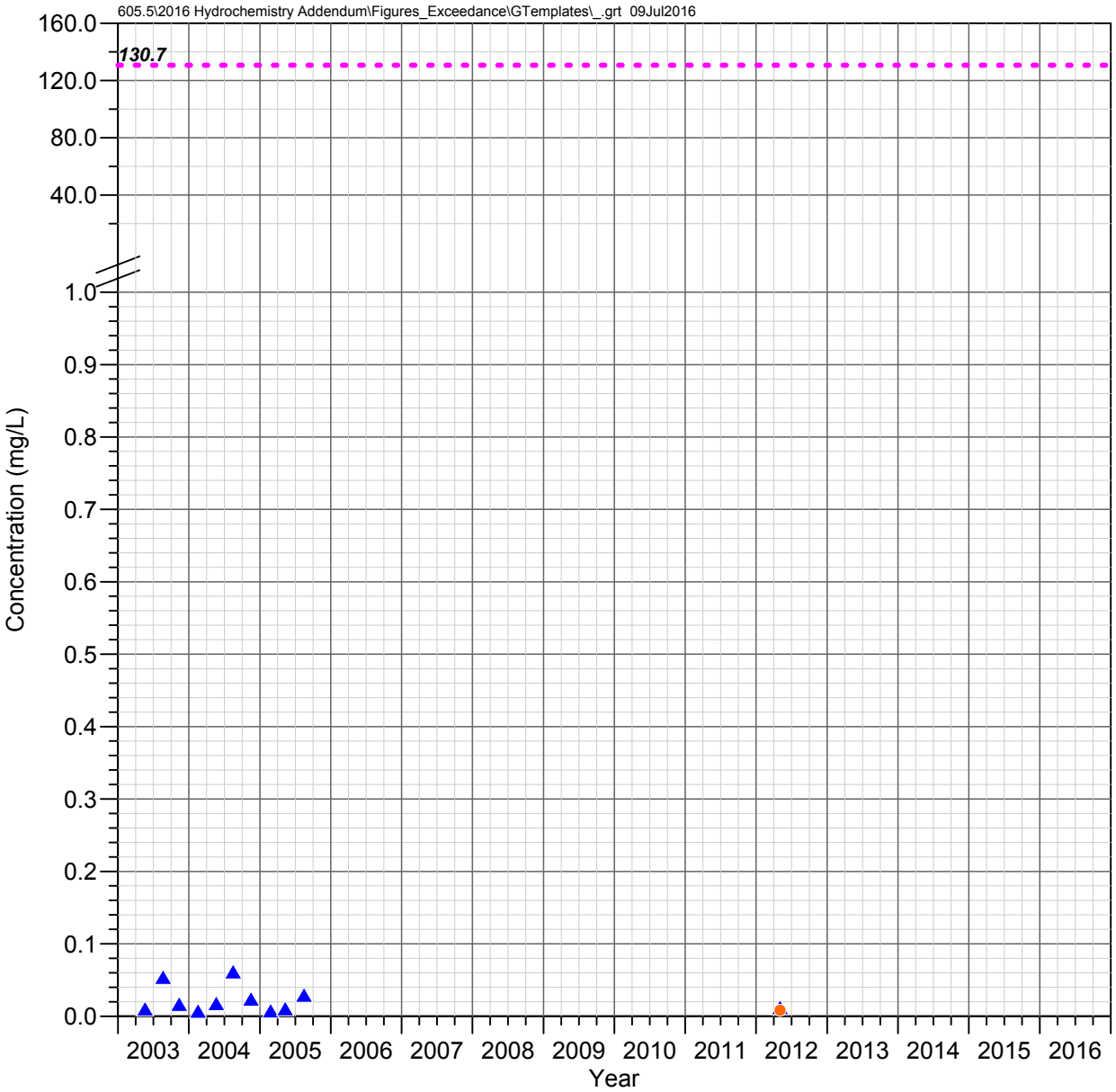


FIGURE F-475. MANGANESE CONCENTRATIONS OBSERVED AT RR 1.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.8 C
Devils Canyon Watershed

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 130.667 mg/L)

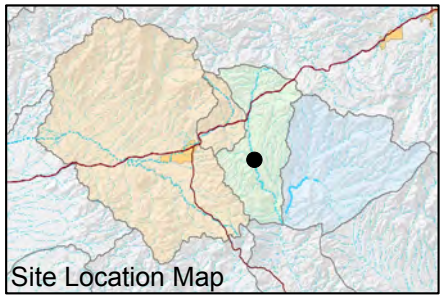
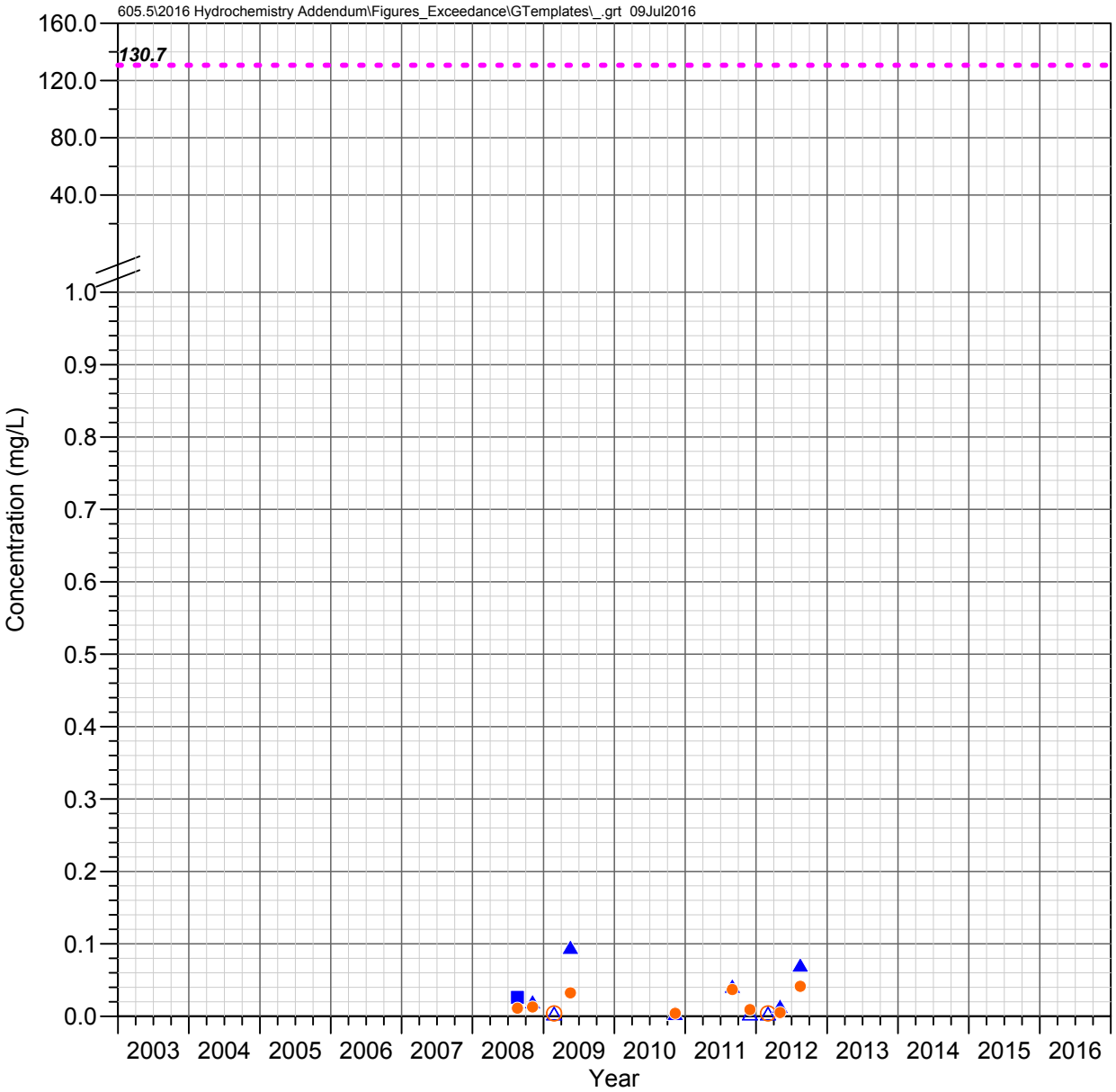


FIGURE F-476. MANGANESE CONCENTRATIONS OBSERVED AT DC 8.8 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



H 0.1 C
Devils Canyon Watershed

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 130.667 mg/L)

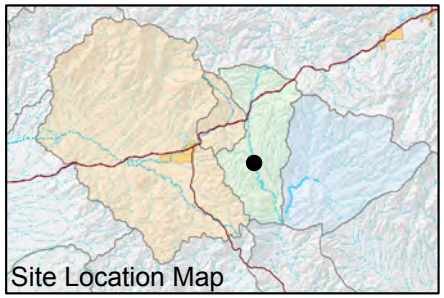
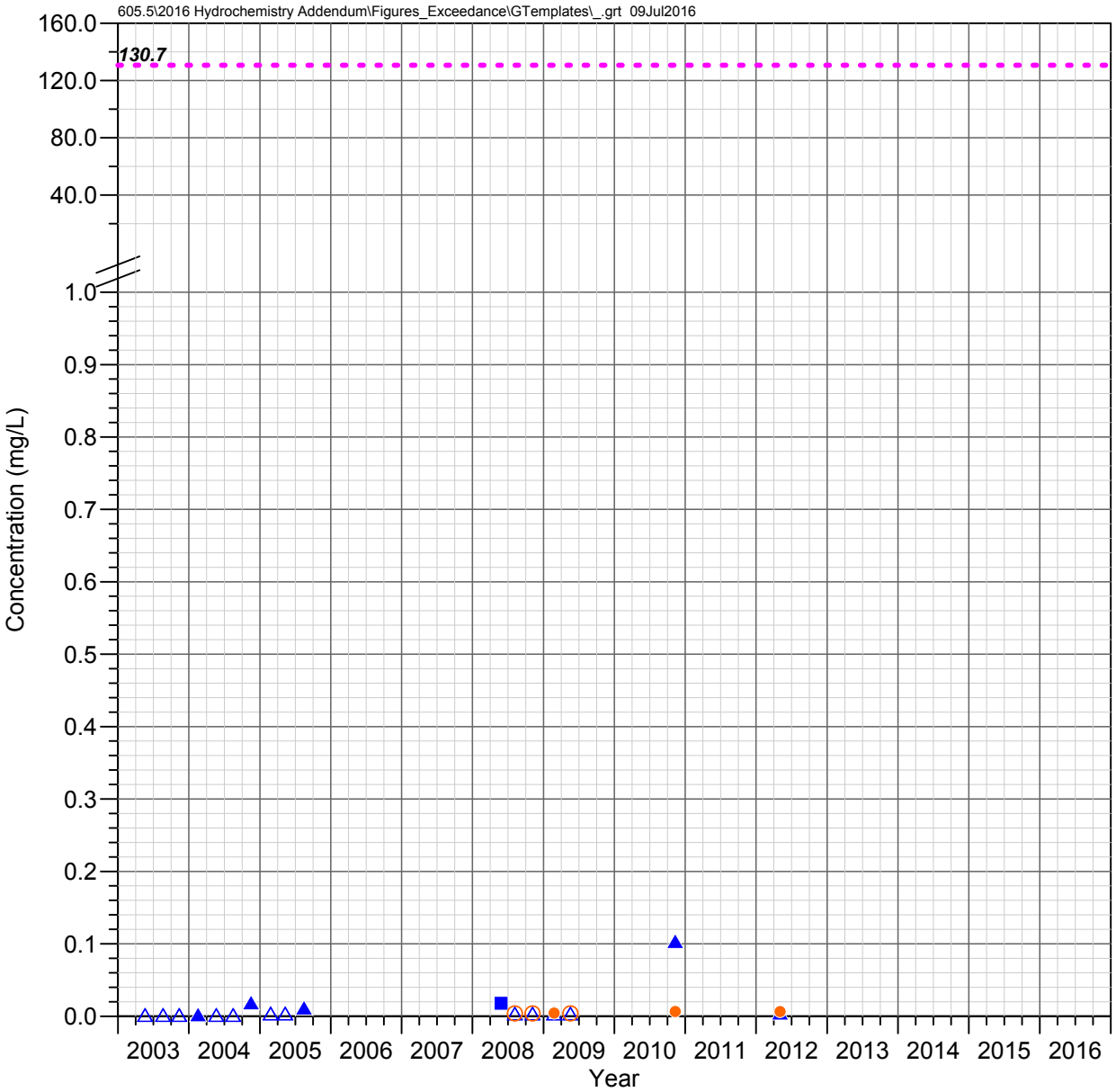


FIGURE F-477. MANGANESE CONCENTRATIONS OBSERVED AT H 0.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.2 W
Devils Canyon Watershed

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 130.667 mg/L)

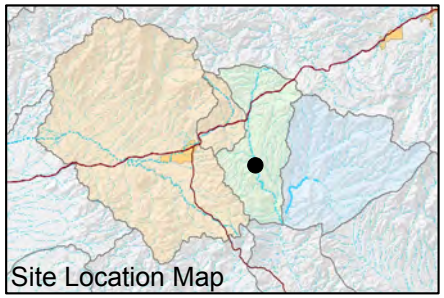
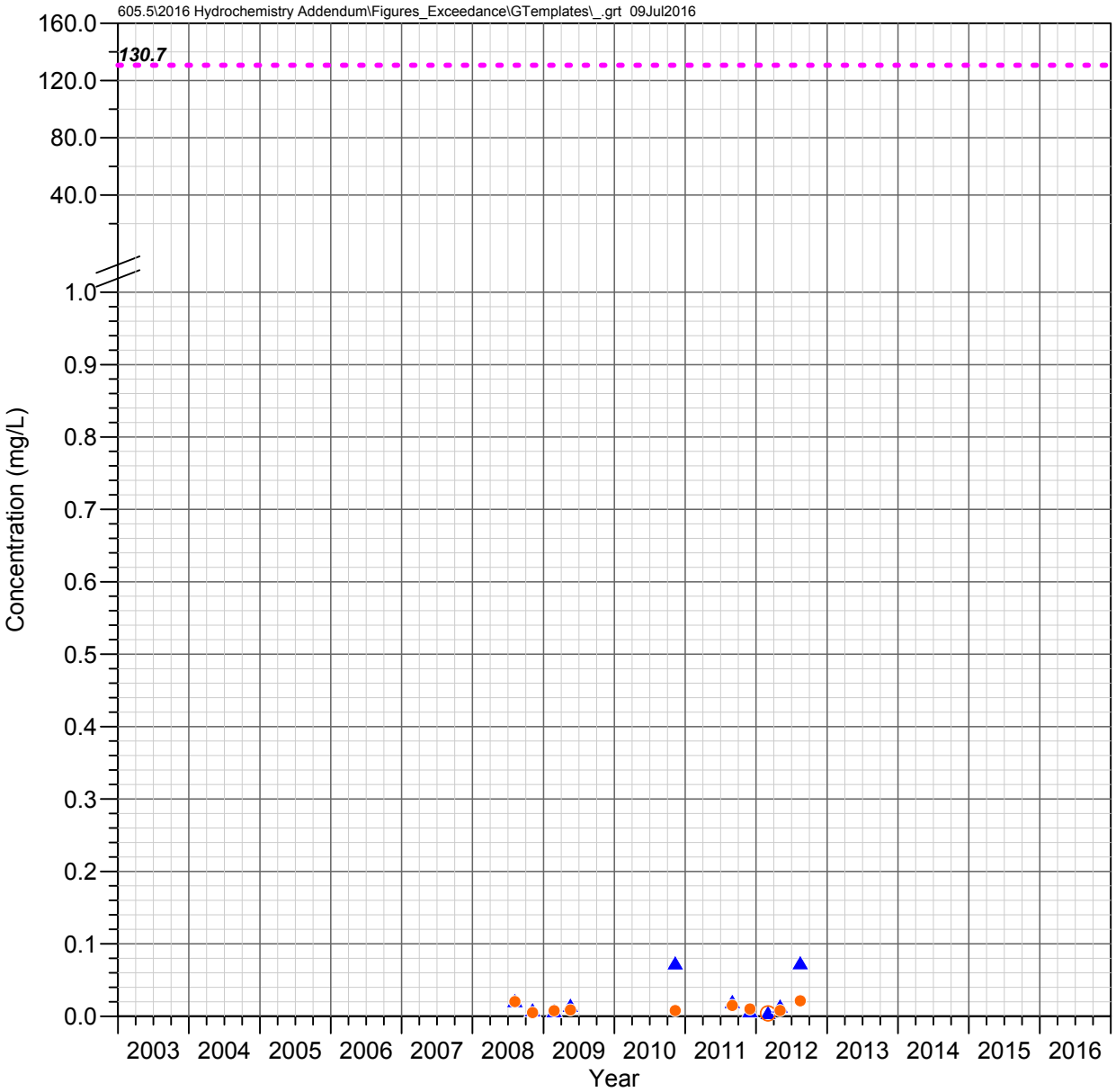


FIGURE F-478. MANGANESE CONCENTRATIONS OBSERVED AT DC 8.2 W, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.1 C
Devils Canyon Watershed

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 130.667 mg/L)

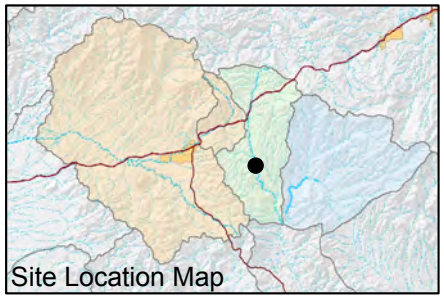
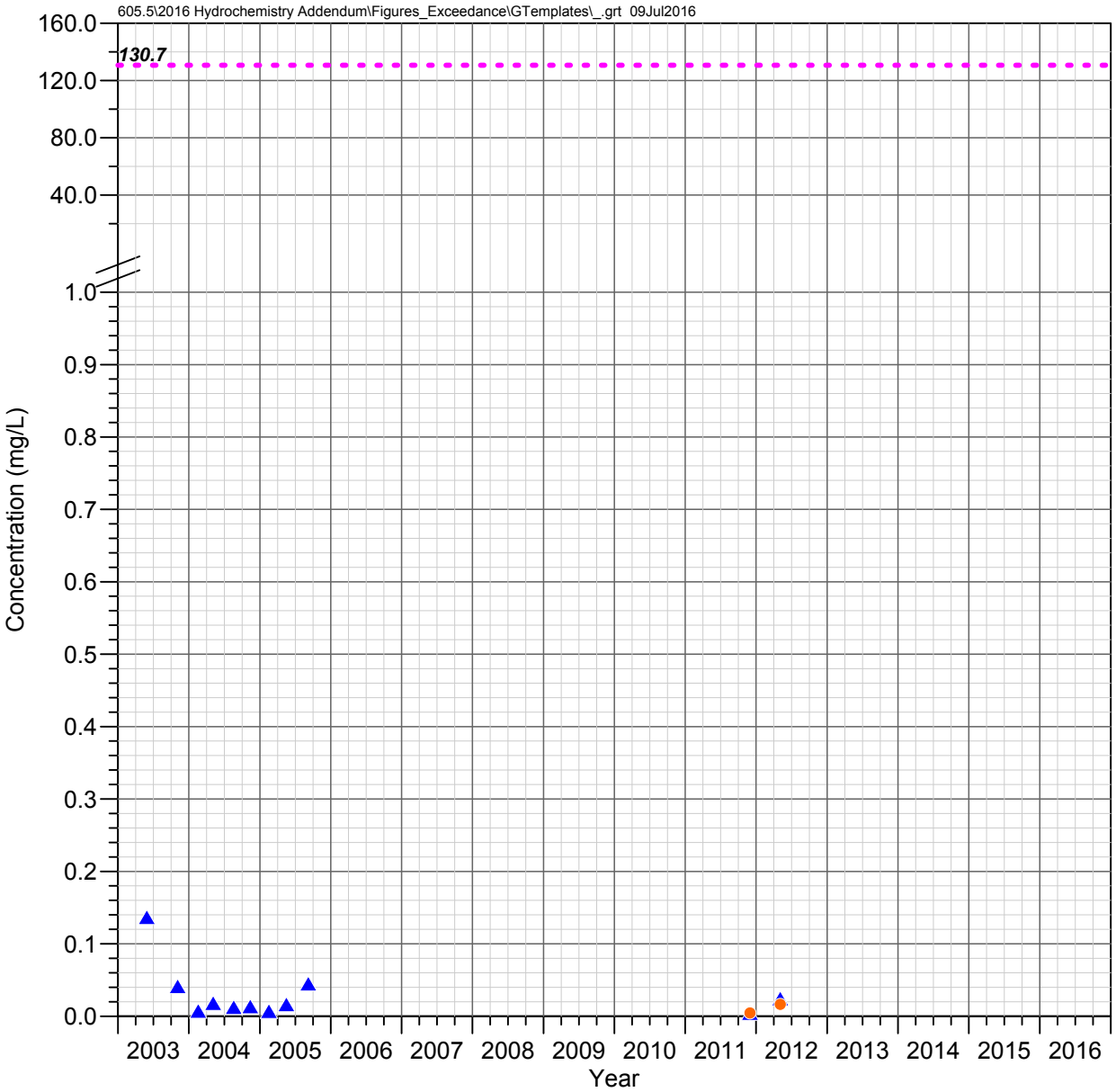


FIGURE F-479. MANGANESE CONCENTRATIONS OBSERVED AT DC 8.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 7.1 C
Devils Canyon Watershed

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 130.667 mg/L)

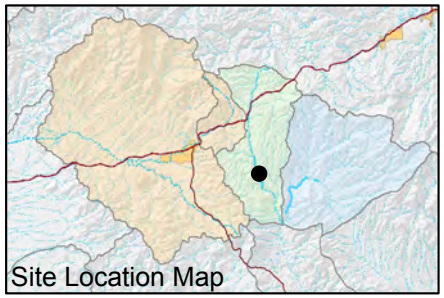
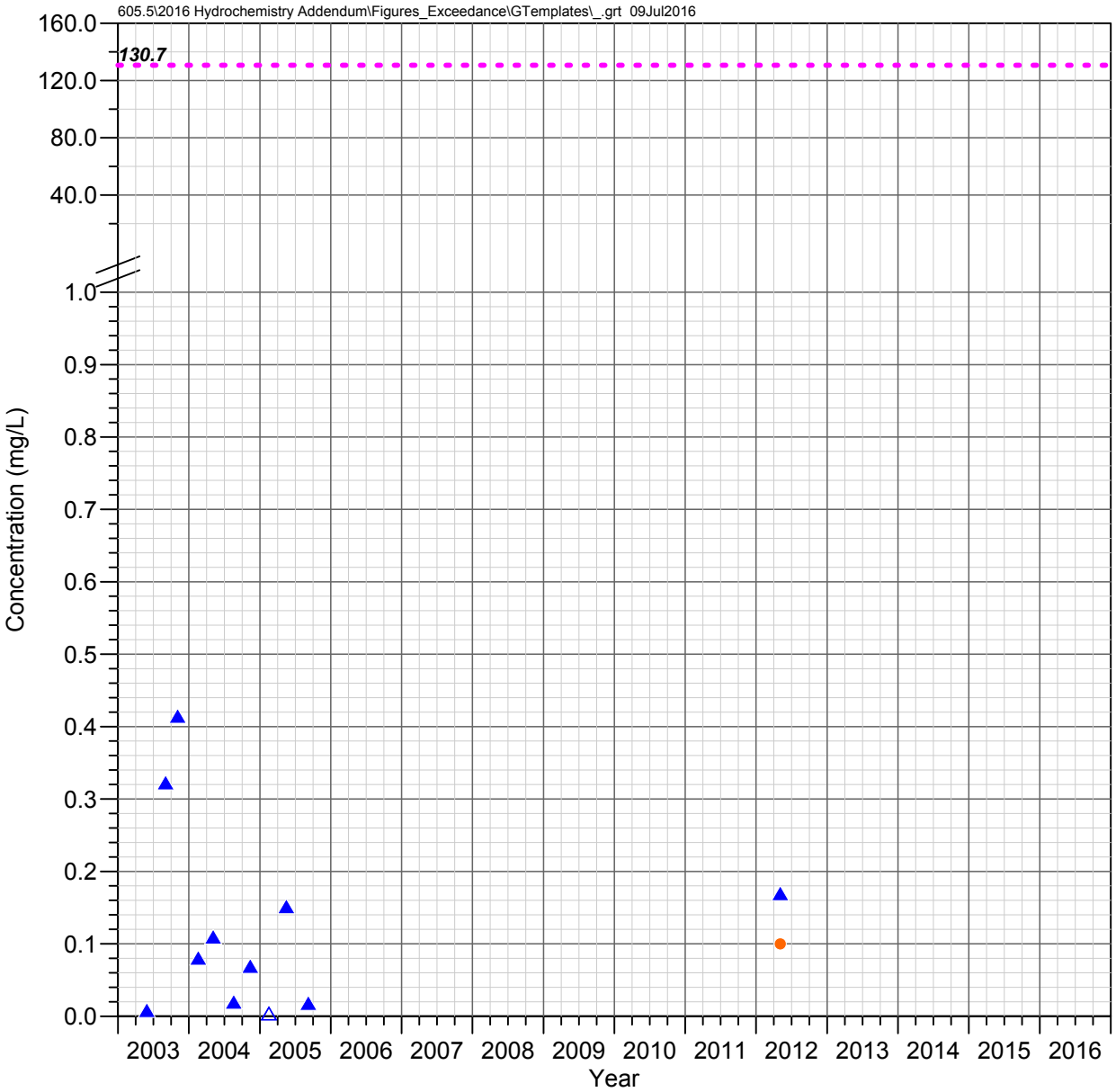


FIGURE F-480. MANGANESE CONCENTRATIONS OBSERVED AT DC 7.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.6 W (DCT 6.6 W)
Devils Canyon Watershed

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 130.667 mg/L)

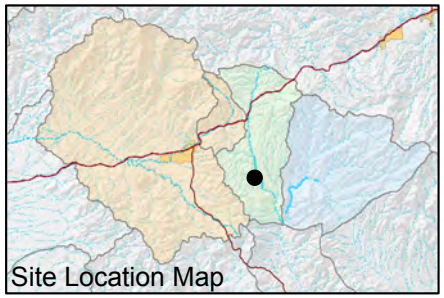
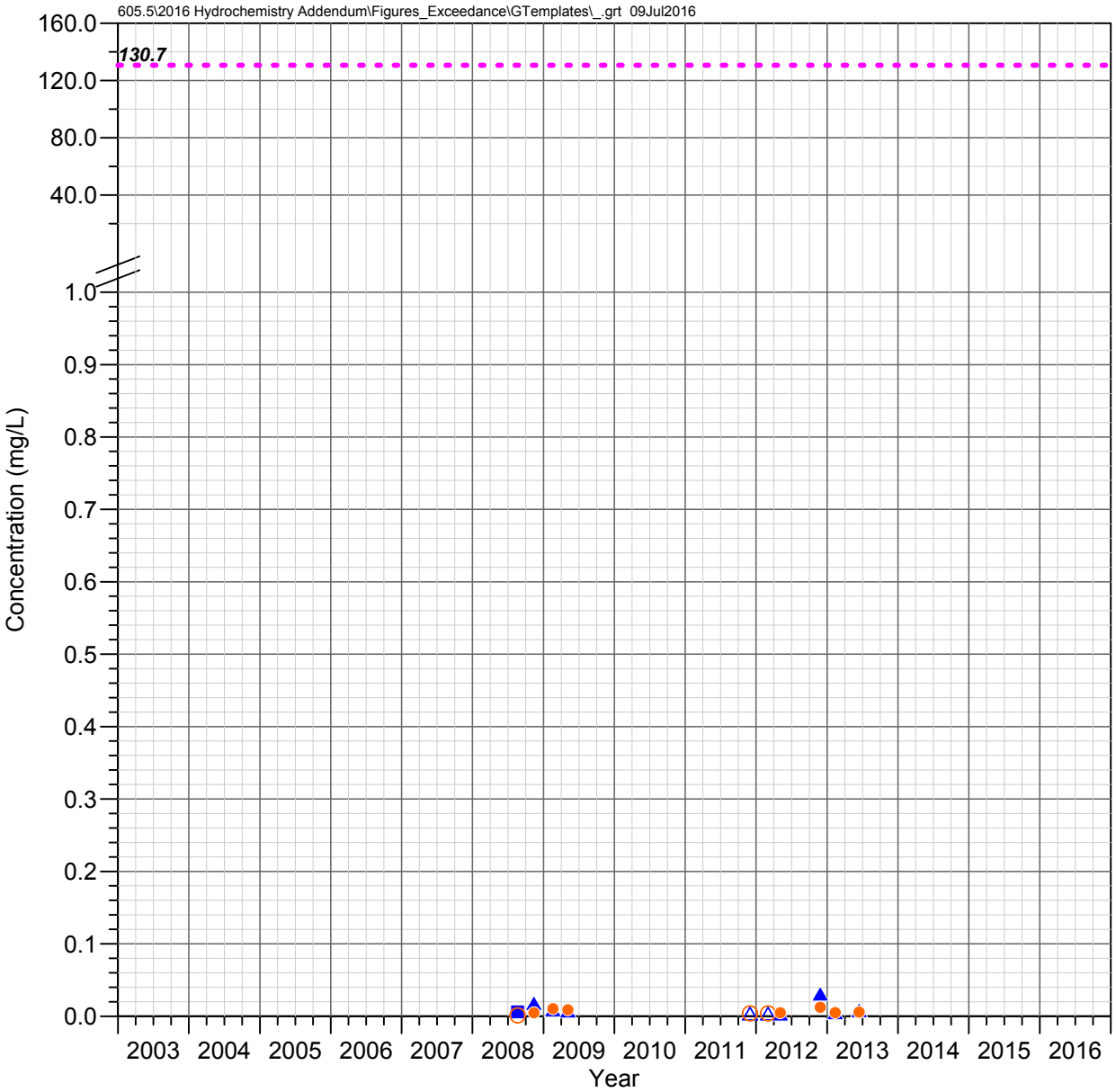


FIGURE F-481. MANGANESE CONCENTRATIONS OBSERVED AT DC 6.6 W (DCT 6.6 W), DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.14 C
Devils Canyon Watershed

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 130.667 mg/L)

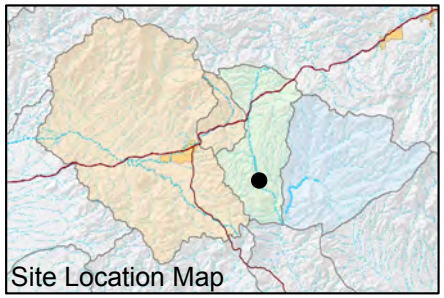
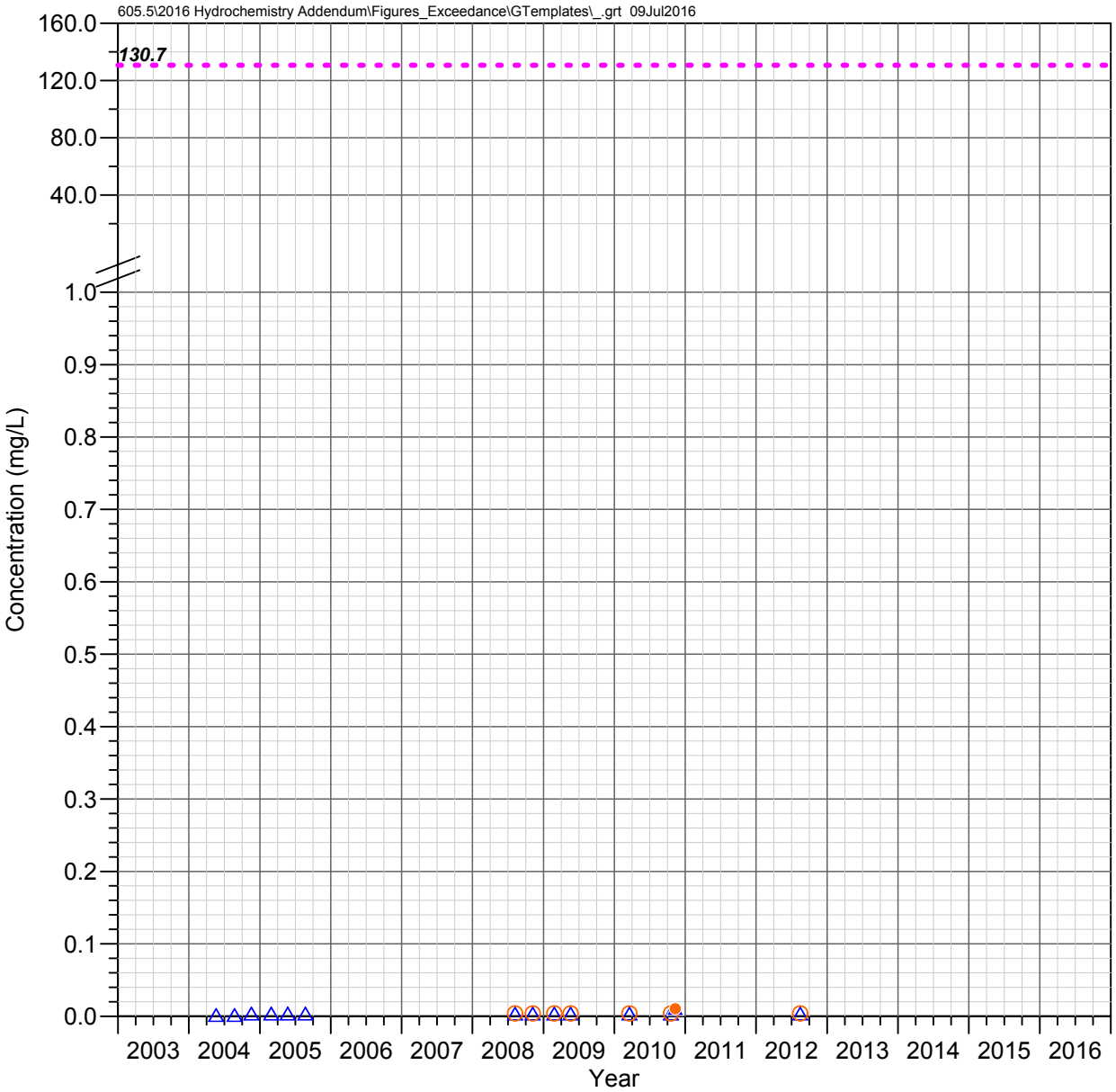


FIGURE F-482. MANGANESE CONCENTRATIONS OBSERVED AT DC 6.14 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.1 E
Devils Canyon Watershed

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 130.667 mg/L)

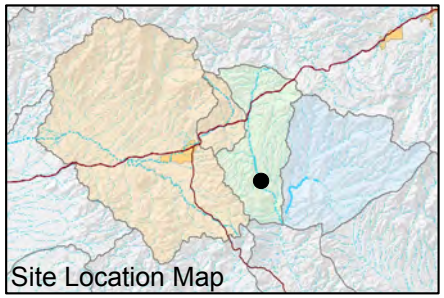
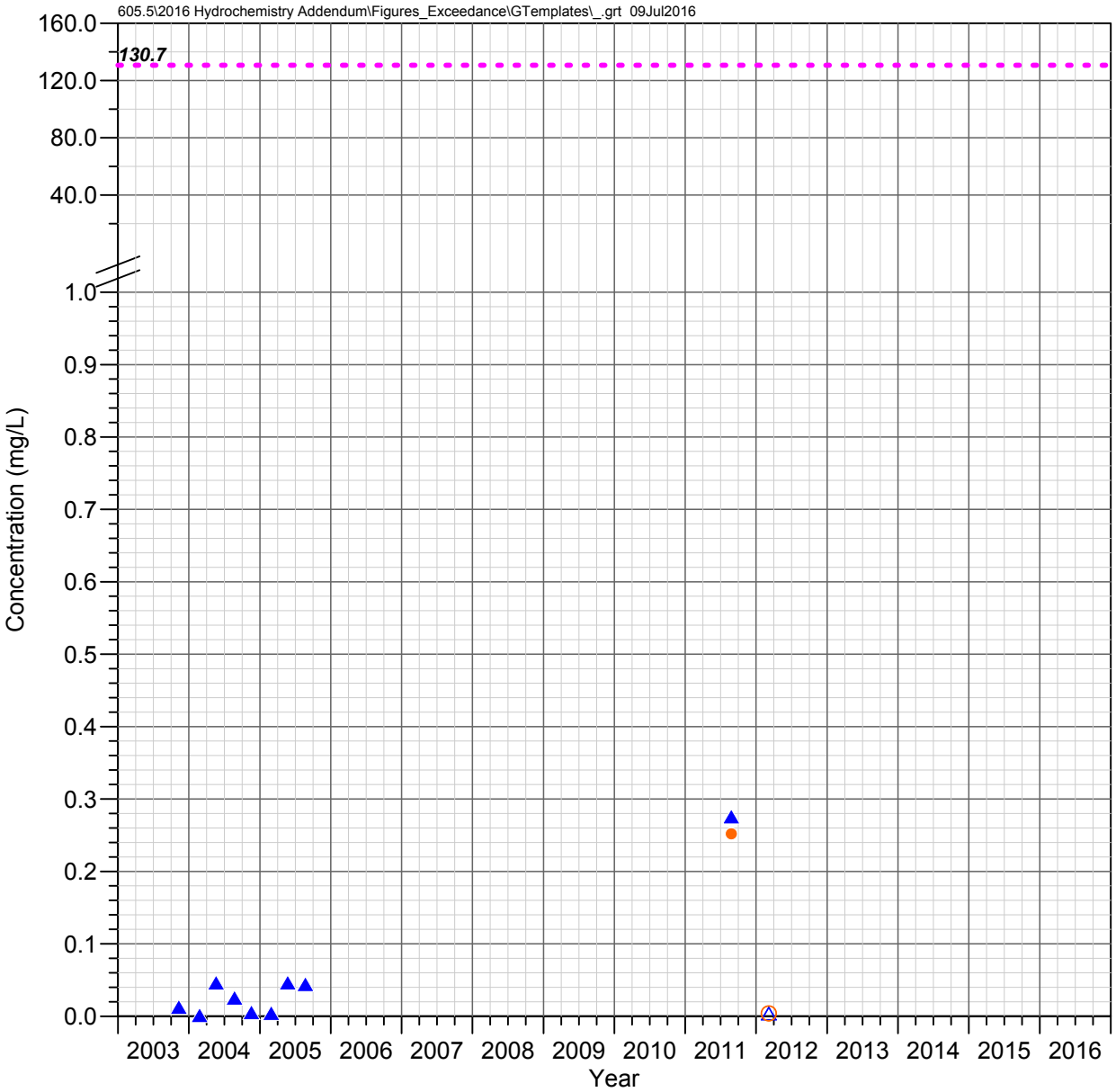


FIGURE F-483. MANGANESE CONCENTRATIONS OBSERVED AT DC 6.1 E, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 5.5 C
Devils Canyon Watershed

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 130.667 mg/L)

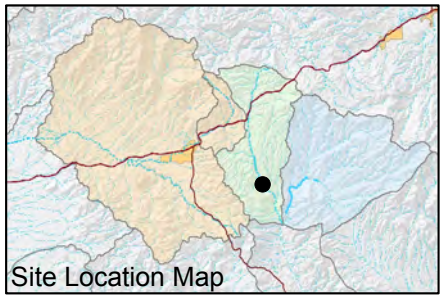
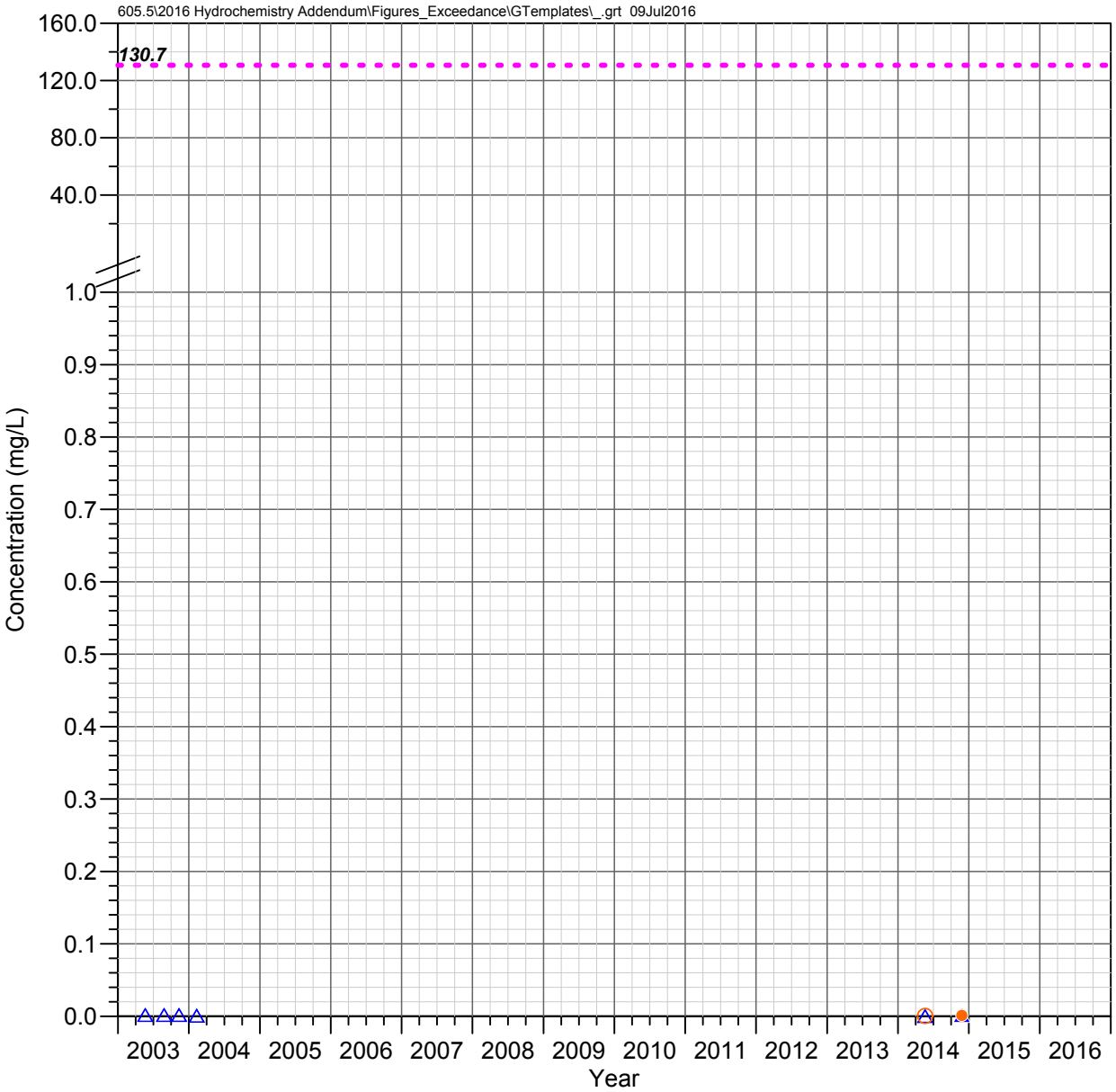


FIGURE F-484. MANGANESE CONCENTRATIONS OBSERVED AT DC 5.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 4.1 E
Devils Canyon Watershed

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 130.667 mg/L)

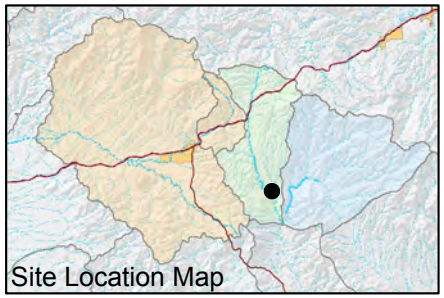
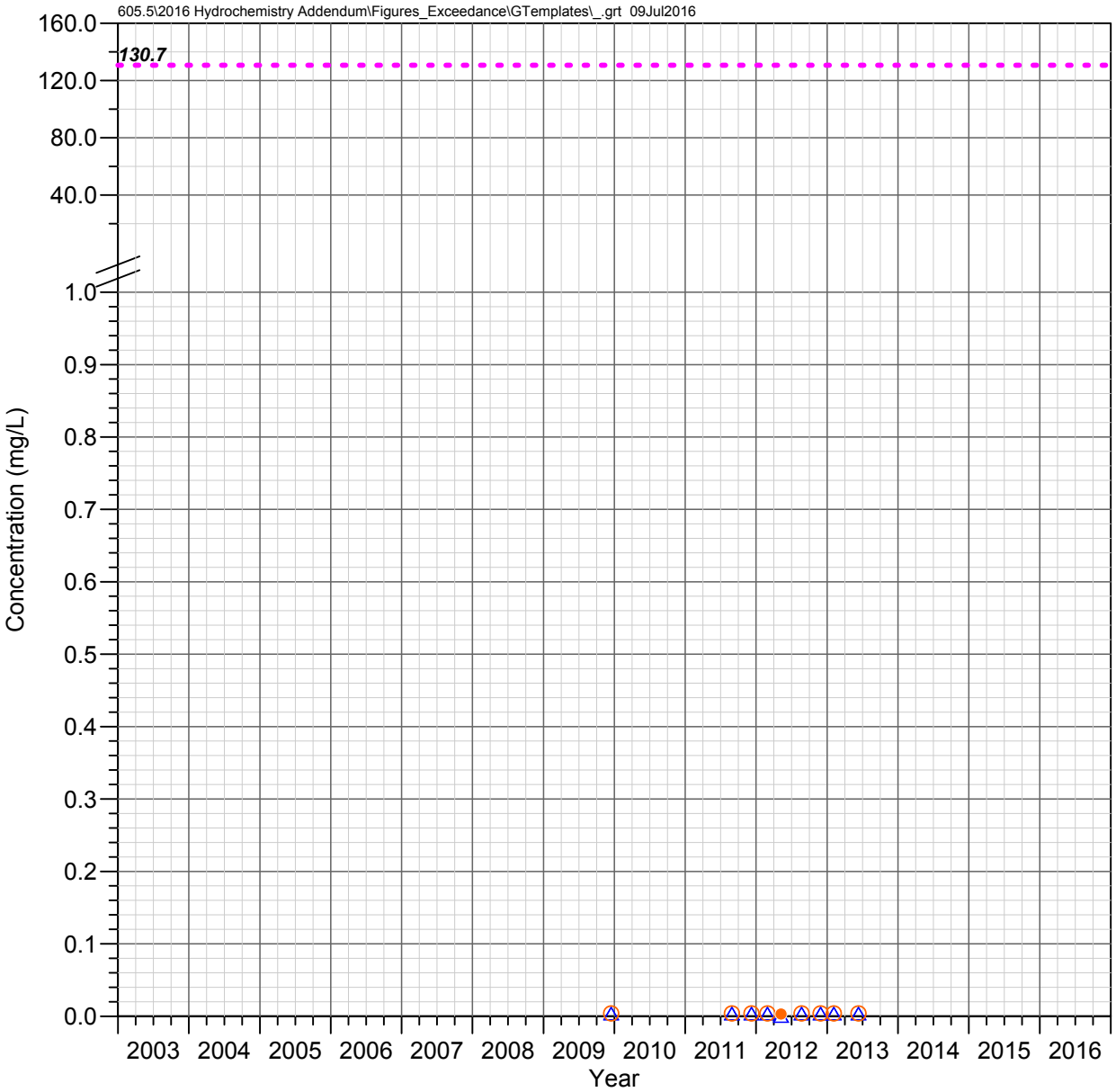


FIGURE F-485. MANGANESE CONCENTRATIONS OBSERVED AT DC 4.1 E, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Government Springs
Mineral Creek Watershed

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 130.667 mg/L)

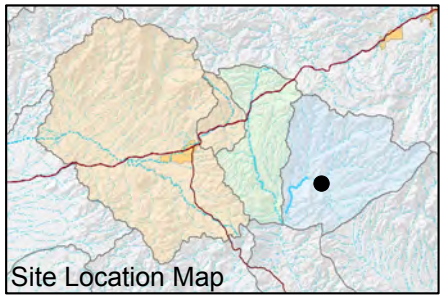
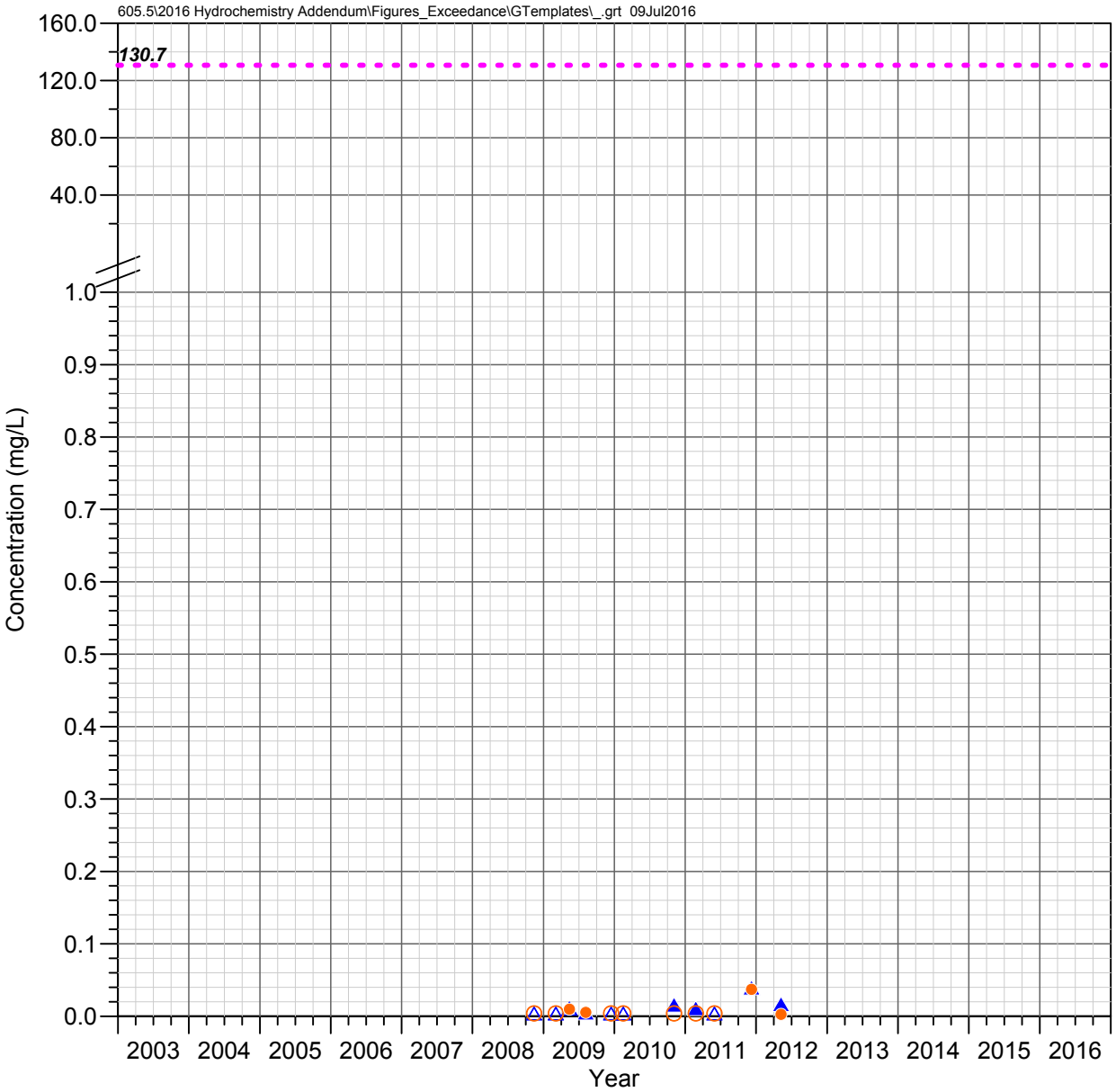


FIGURE F-486. MANGANESE CONCENTRATIONS OBSERVED AT GOVERNMENT SPRINGS, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 8.4 C
Mineral Creek Watershed

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 130.667 mg/L)

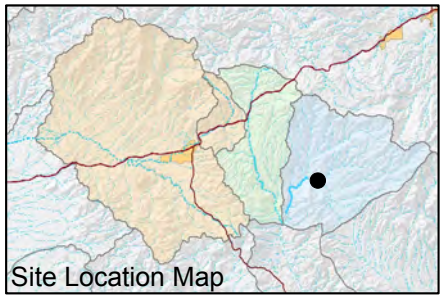
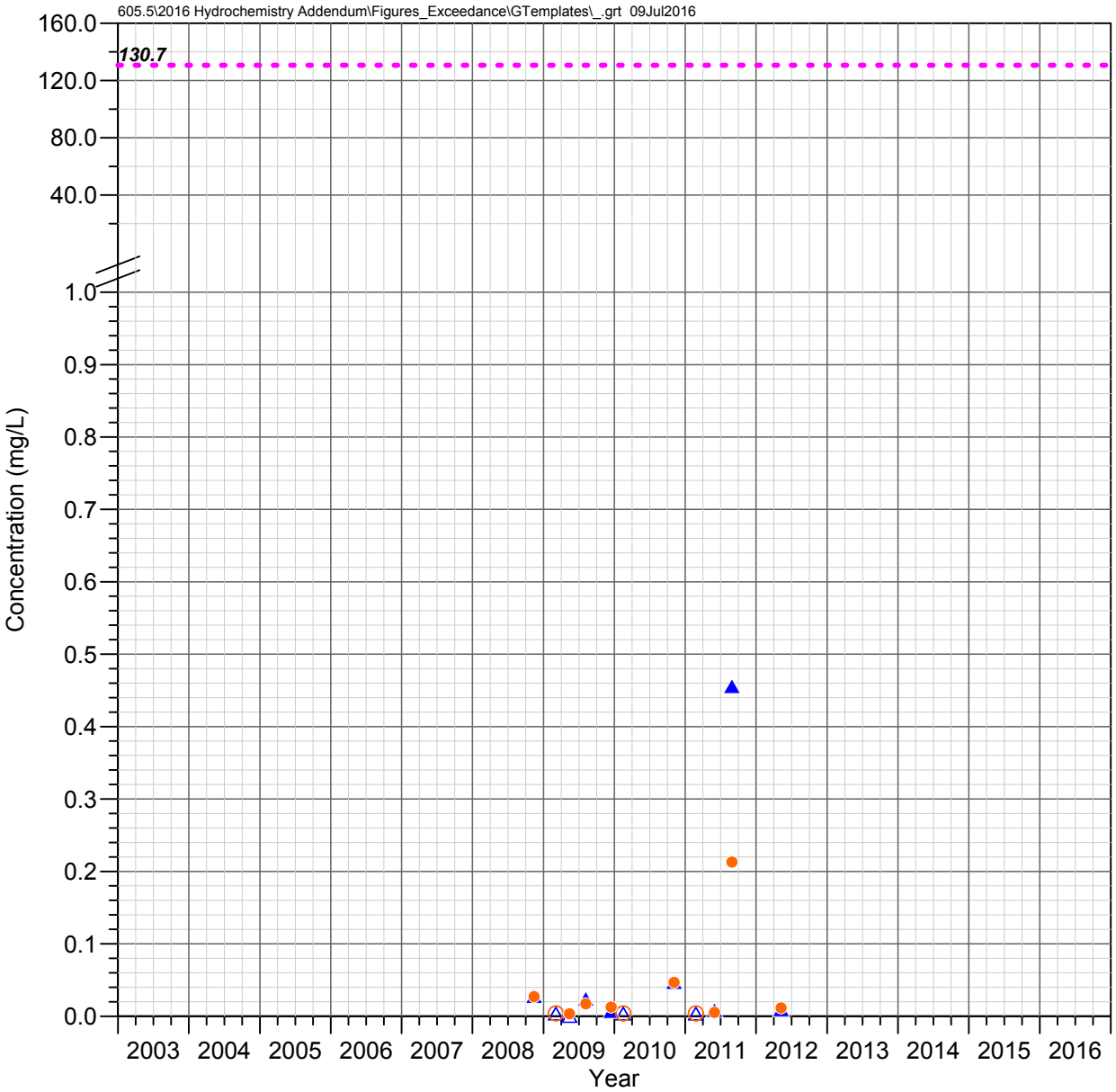


FIGURE F-487. MANGANESE CONCENTRATIONS OBSERVED AT MC 8.4 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



LF 0.2 C
Mineral Creek Watershed

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 130.667 mg/L)

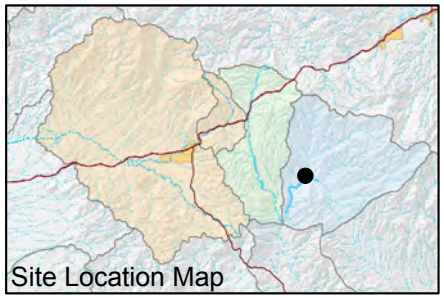
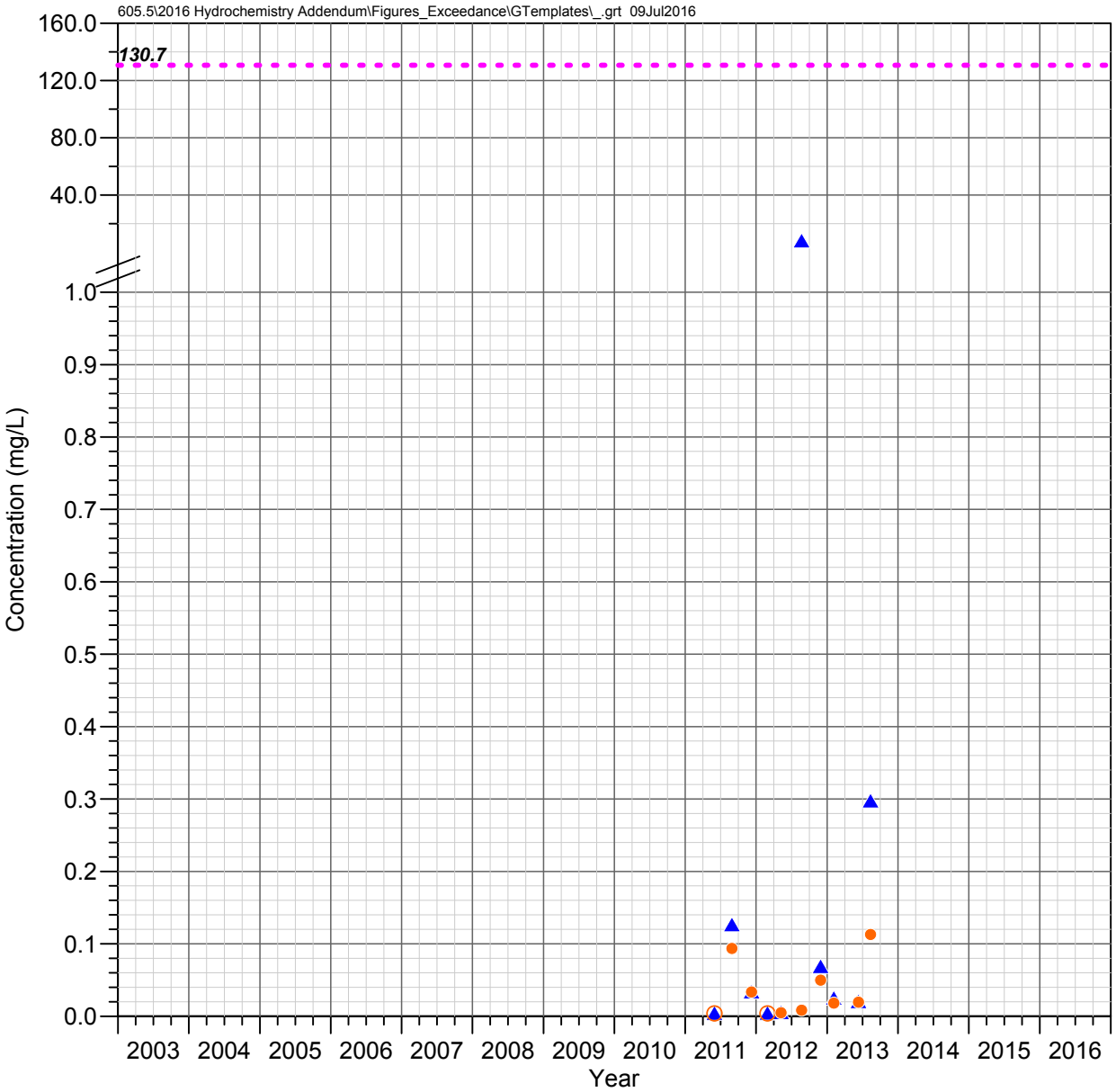


FIGURE F-488. MANGANESE CONCENTRATIONS OBSERVED AT LF 0.2 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 5.2 C
Mineral Creek Watershed

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 130.667 mg/L)

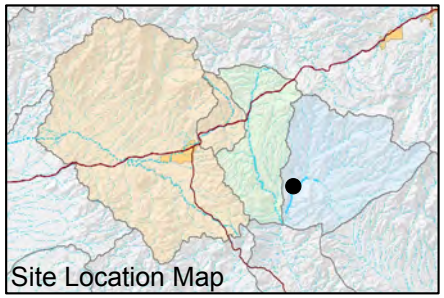
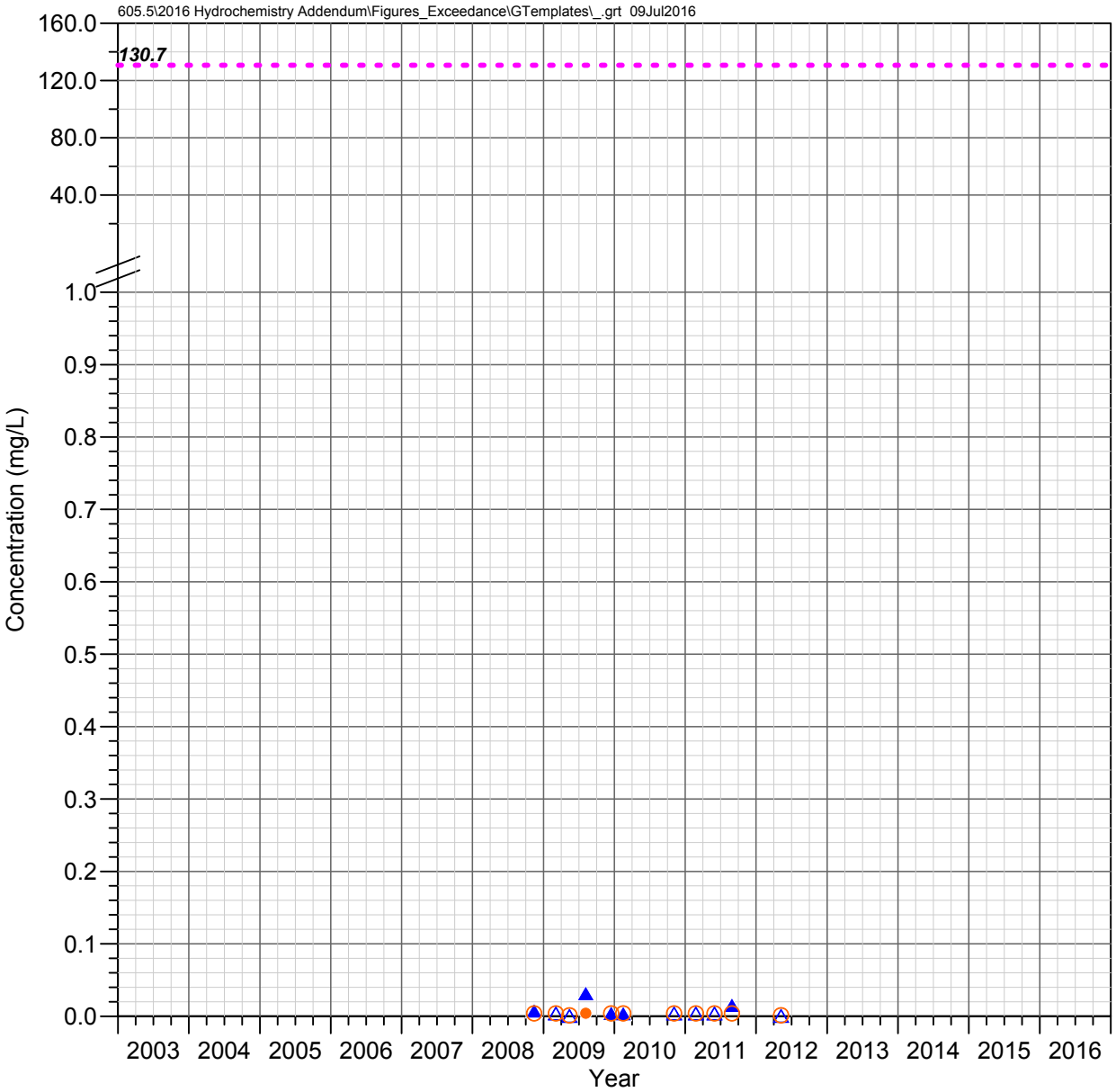


FIGURE F-489. MANGANESE CONCENTRATIONS OBSERVED AT MC 5.2 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 3.4 W (Wet Leg Spring)
Mineral Creek Watershed

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 130.667 mg/L)

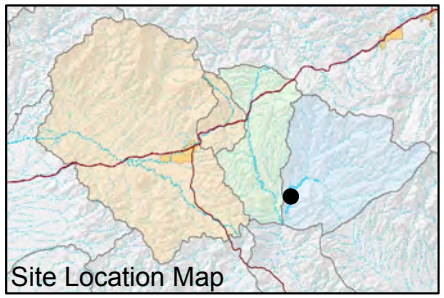
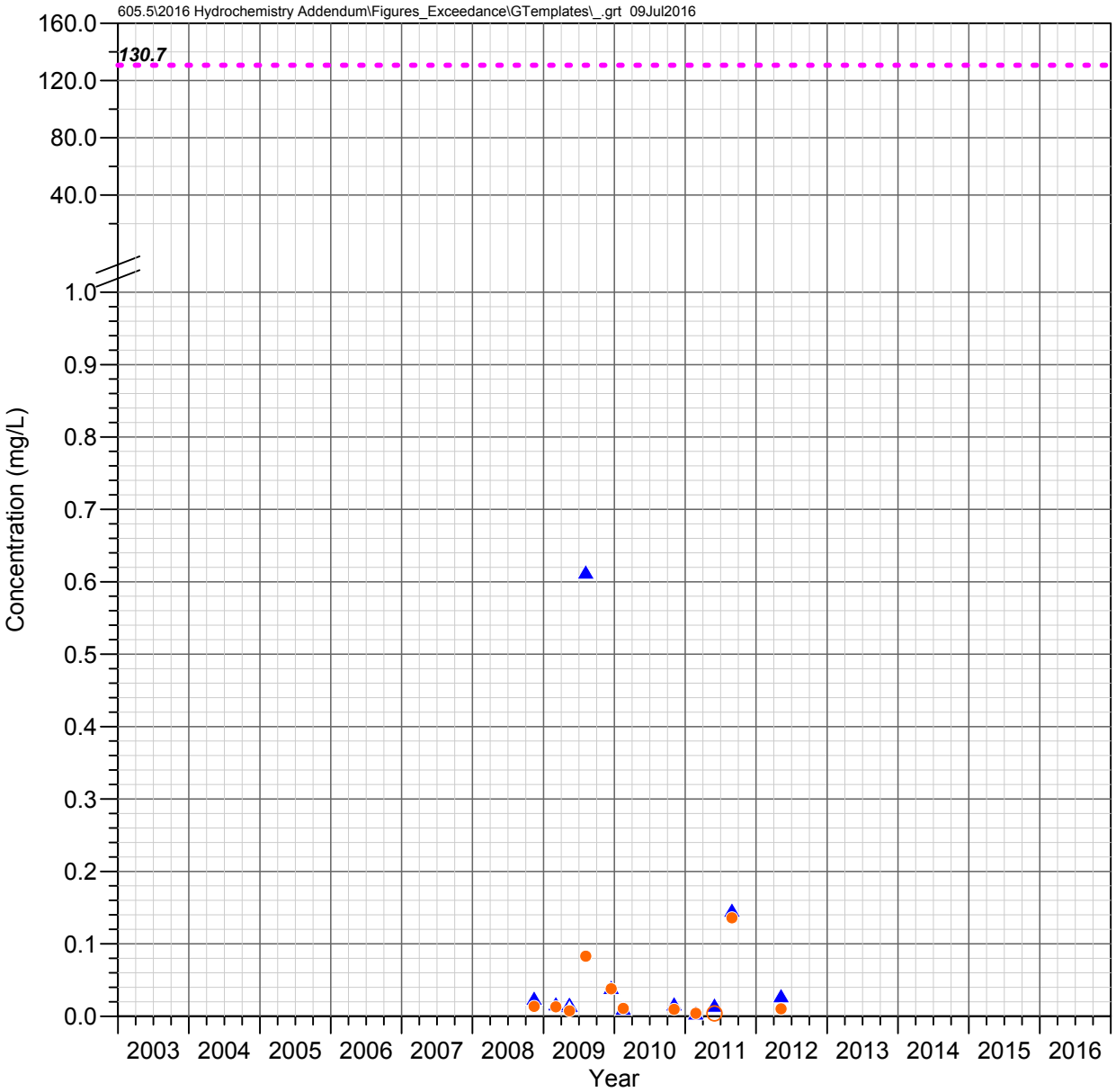


FIGURE F-490. MANGANESE CONCENTRATIONS OBSERVED AT MC 3.4 W (WET LEG SPRING), MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 3.3 C (Lower Mineral)
Mineral Creek Watershed

MANGANESE

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 130.667 mg/L)

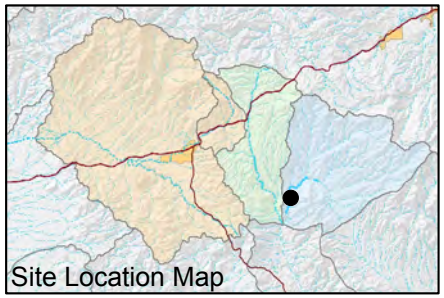
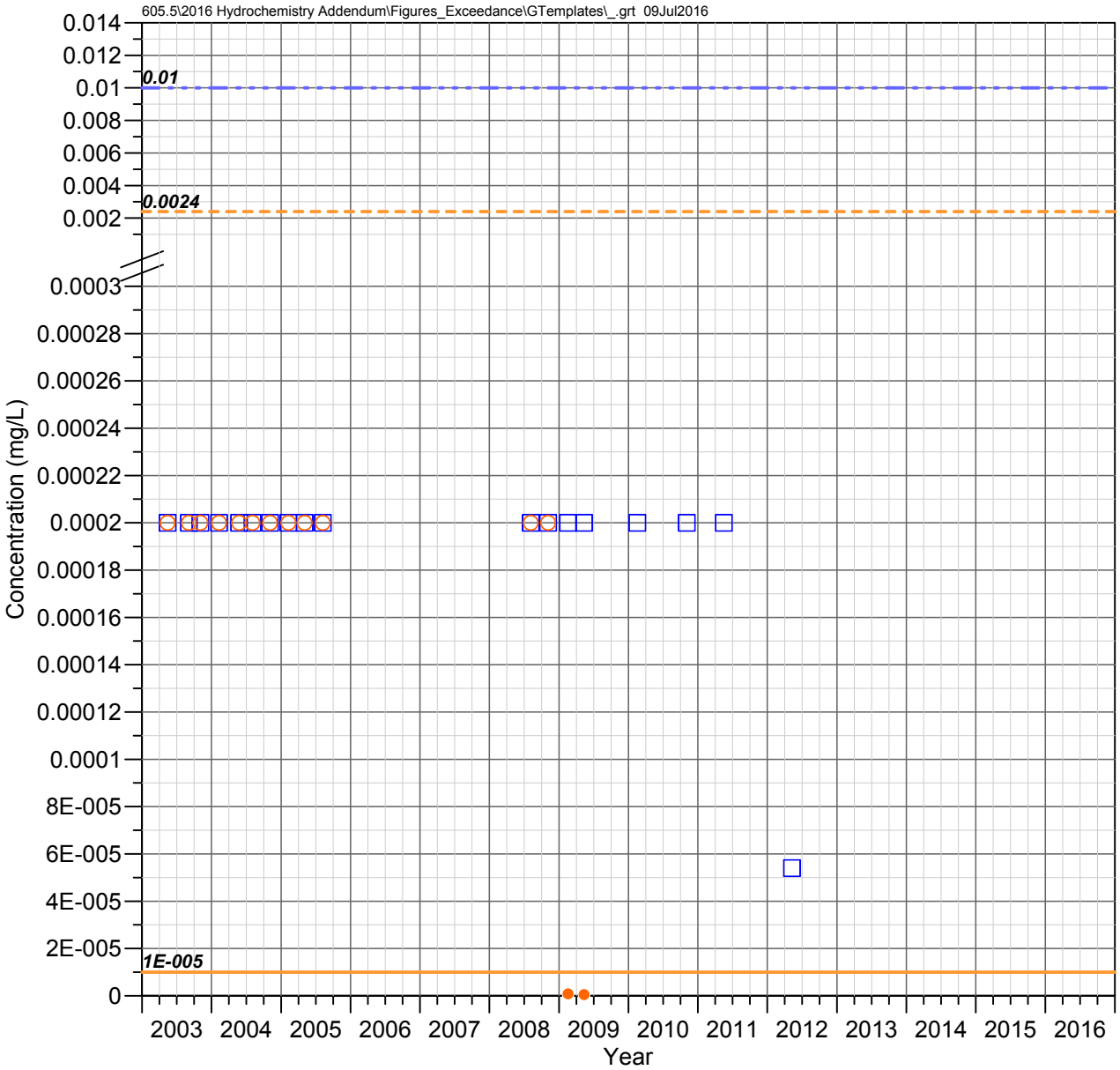


FIGURE F-491. MANGANESE CONCENTRATIONS OBSERVED AT MC 3.3 C (LOWER MINERAL), MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Pump Station Spring (QC 30.7 C)
Queen Creek Watershed

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Partial Body Contact (TRC, 0.28 mg/L) **above axis limit*
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1E-5 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.0024 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.01 mg/L)

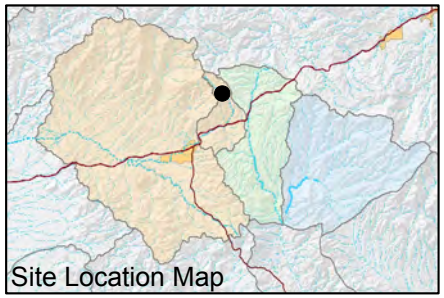
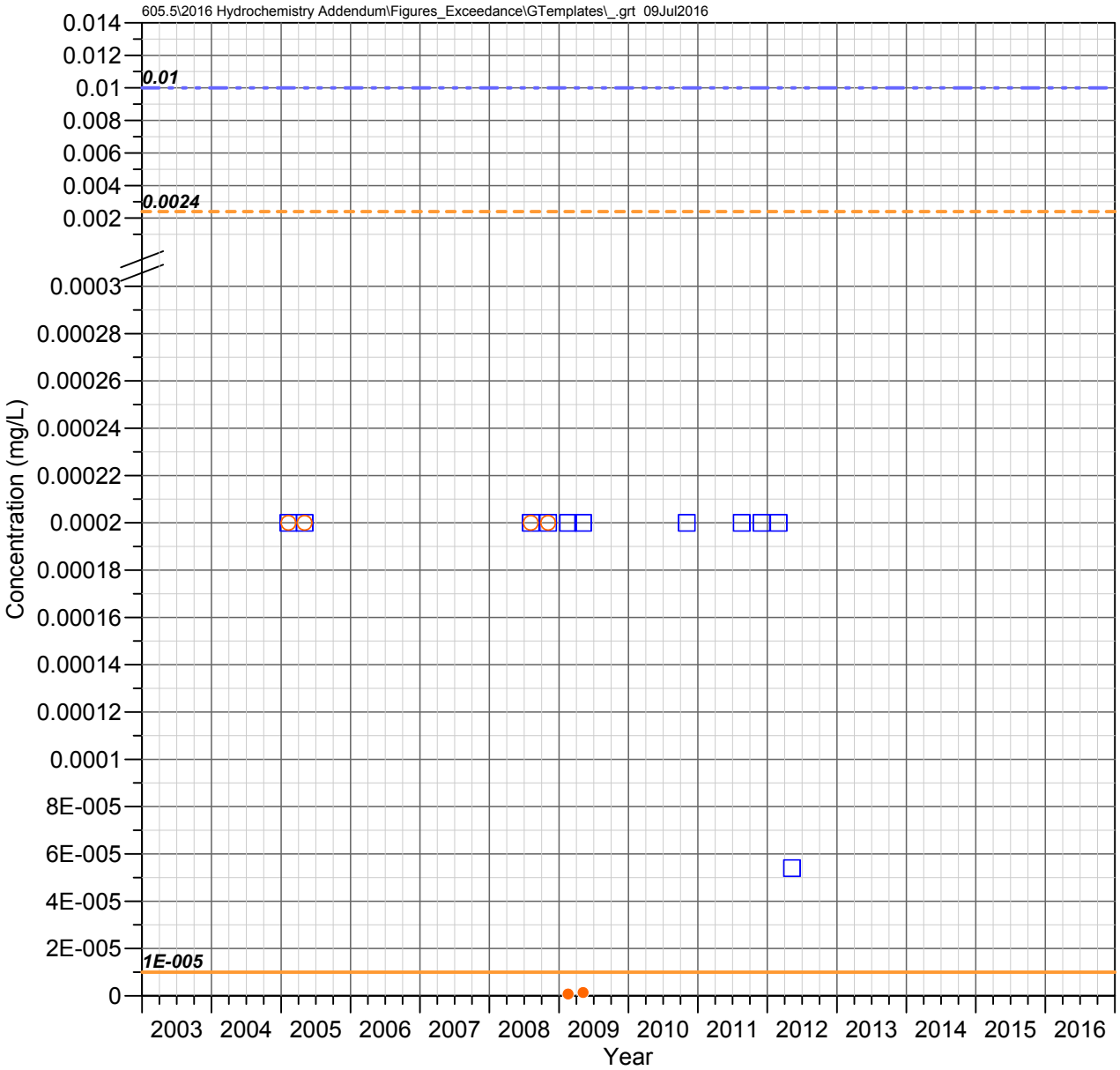


FIGURE F-492. MERCURY CONCENTRATIONS OBSERVED AT PUMP STATION SPRING (QC 30.7 C), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 27.3 C
Queen Creek Watershed

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Partial Body Contact (TRC, 0.28 mg/L) **above axis limit*
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1E-5 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.0024 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.01 mg/L)

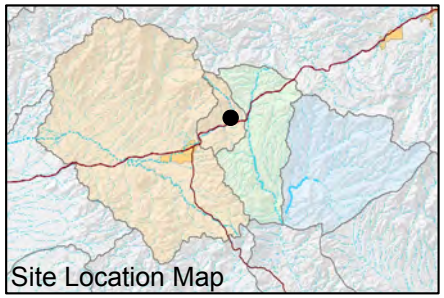
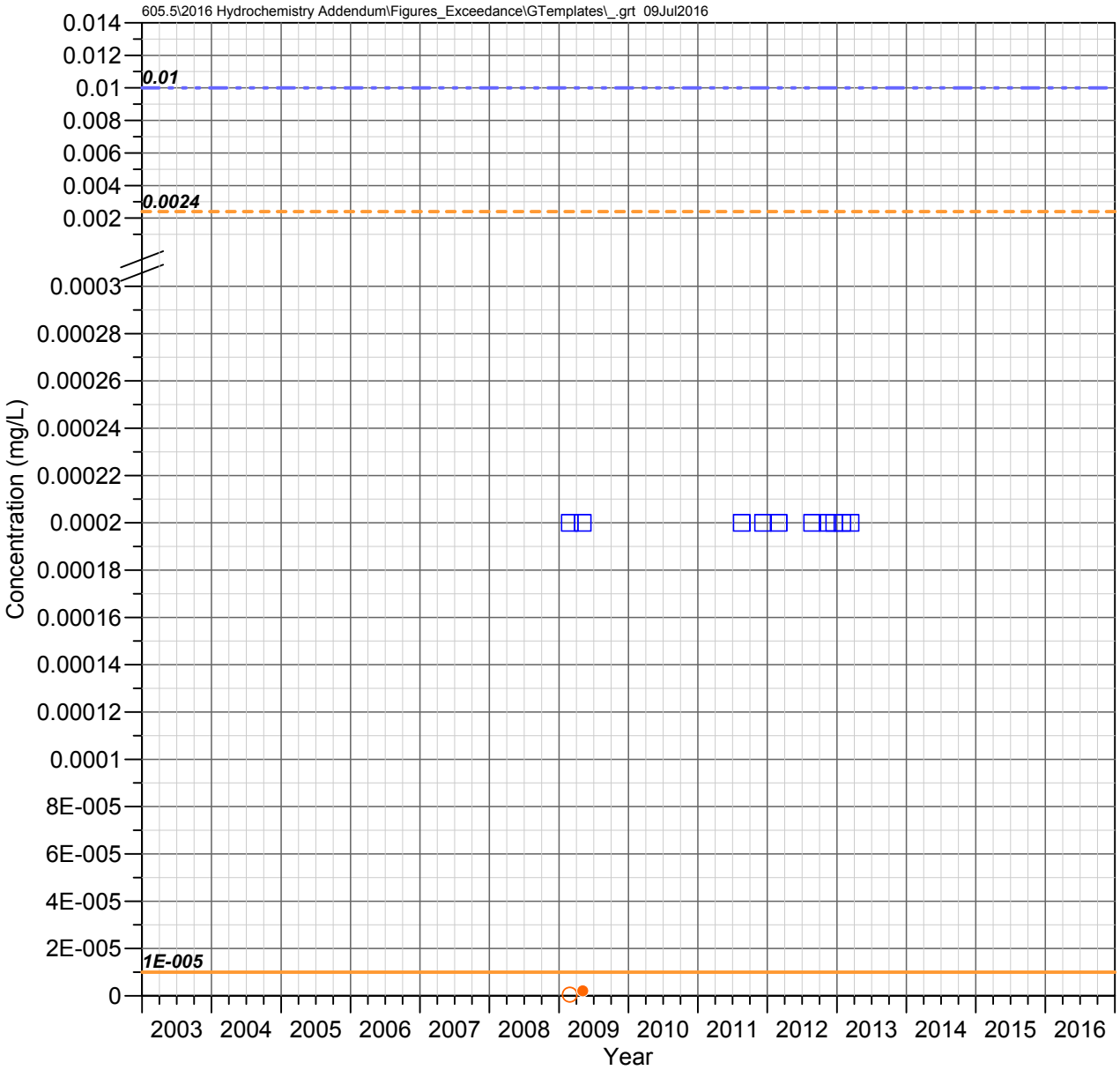


FIGURE F-493. MERCURY CONCENTRATIONS OBSERVED AT QC 27.3 C, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Oak Flat Wash
Queen Creek Watershed

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Partial Body Contact (TRC, 0.28 mg/L) **above axis limit*
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1E-5 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.0024 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.01 mg/L)

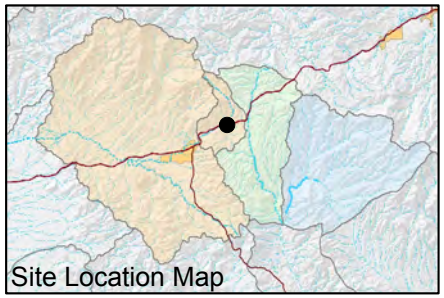
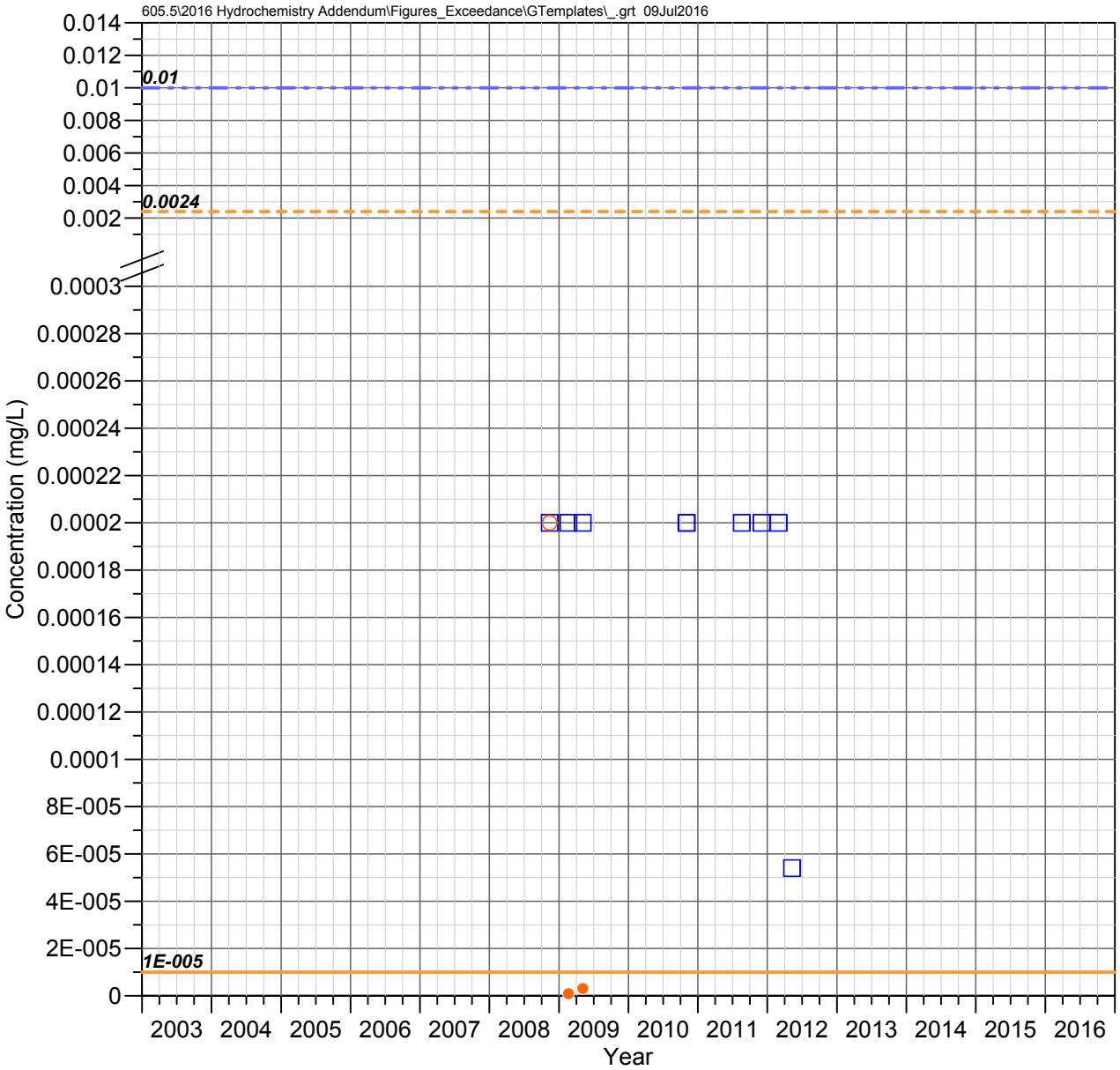


FIGURE F-494. MERCURY CONCENTRATIONS OBSERVED AT OAK FLAT WASH, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Number 9 Wash
Queen Creek Watershed

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Partial Body Contact (TRC, 0.28 mg/L) **above axis limit*
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1E-5 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.0024 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.01 mg/L)

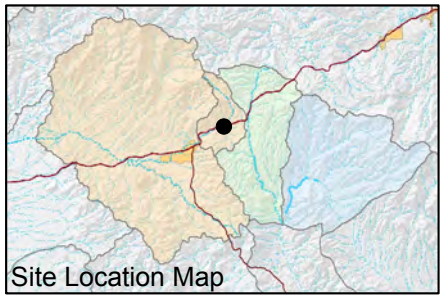
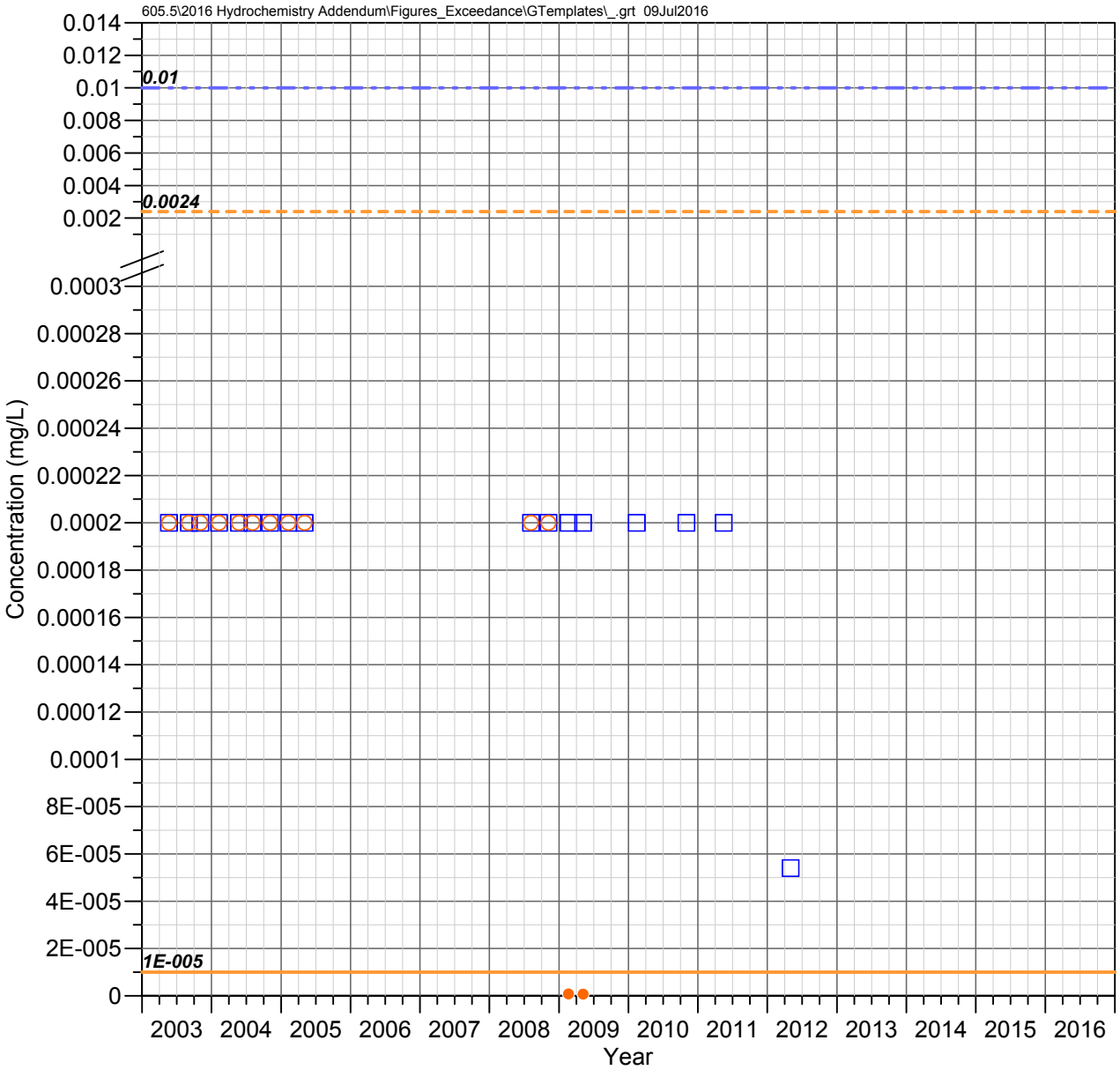


FIGURE F-495. MERCURY CONCENTRATIONS OBSERVED AT NUMBER 9 WASH, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Boulder Hole (QC 23.6 C)
Queen Creek Watershed

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Partial Body Contact (TRC, 0.28 mg/L) **above axis limit*
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1E-5 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.0024 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.01 mg/L)

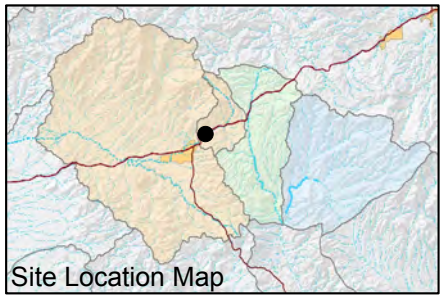
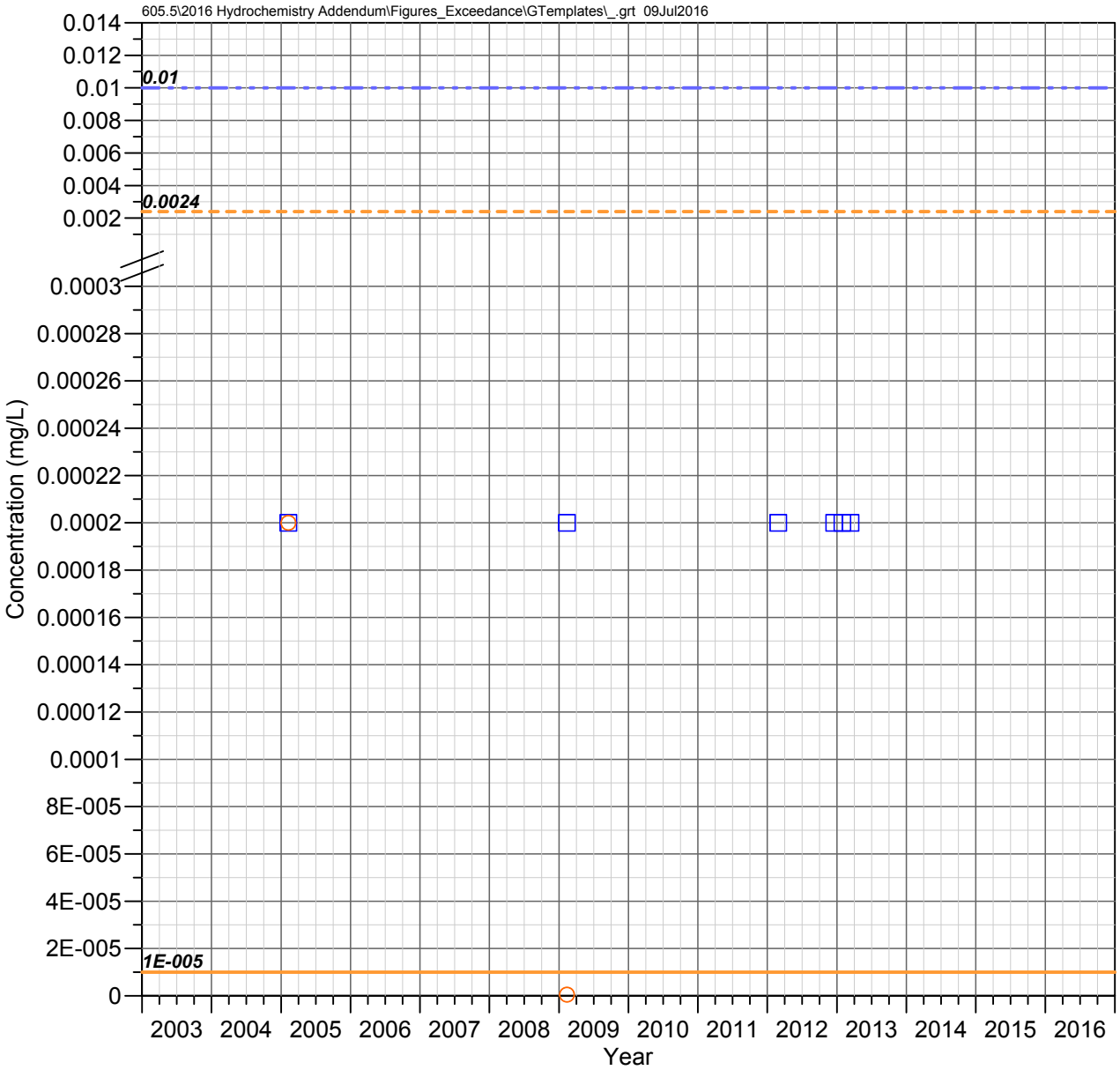


FIGURE F-496. MERCURY CONCENTRATIONS OBSERVED AT BOULDER HOLE (QC 23.6 C), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 22.6 E (Karst Spring) Queen Creek Watershed

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Partial Body Contact (TRC, 0.28 mg/L) **above axis limit*
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1E-5 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.0024 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.01 mg/L)

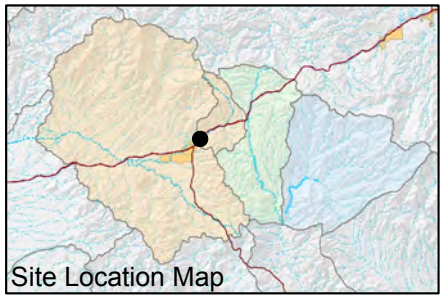
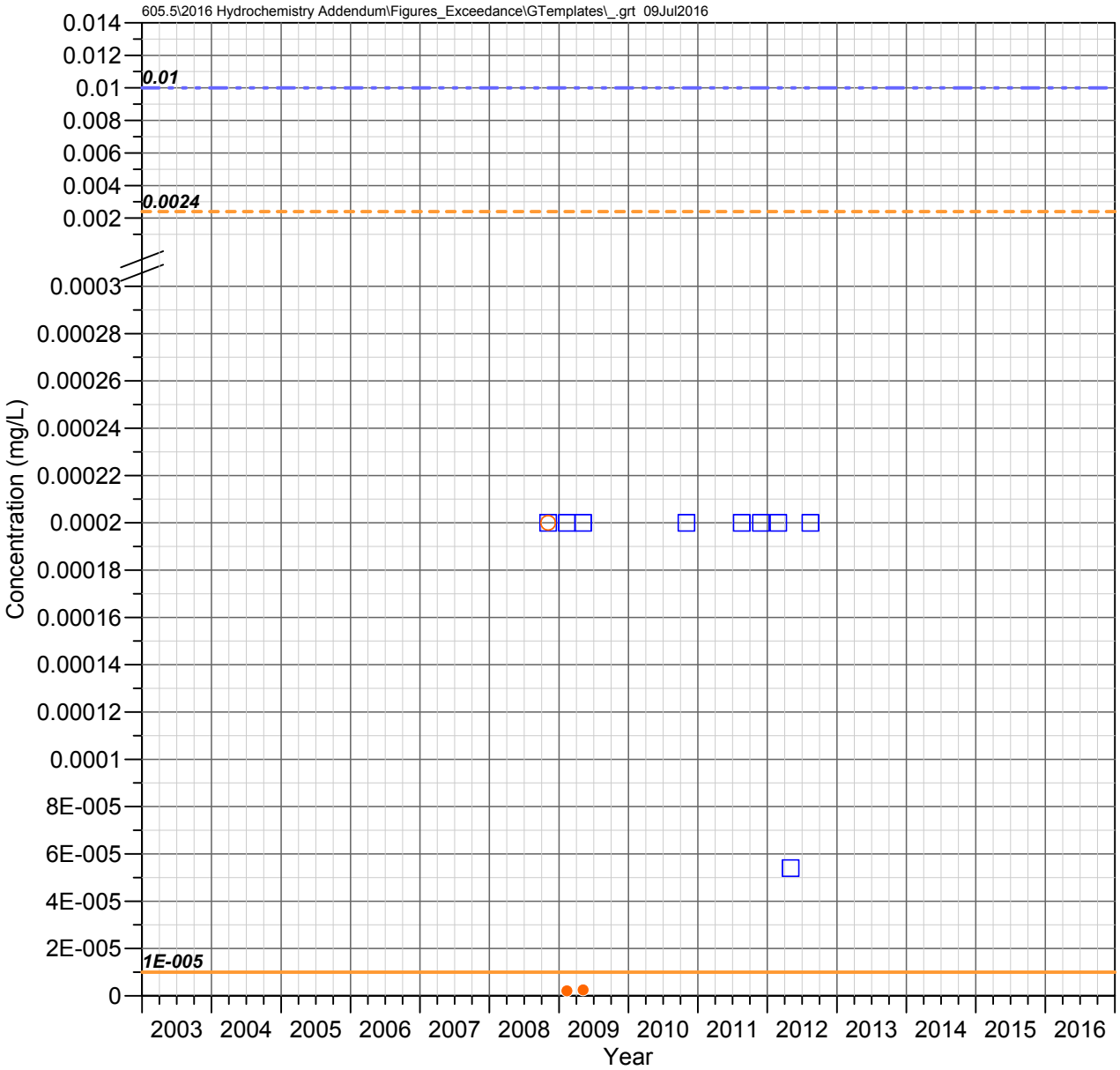


FIGURE F-497. MERCURY CONCENTRATIONS OBSERVED AT QC 22.6 E (KARST SPRING), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 21.7 C (Magma Avenue) Queen Creek Watershed

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Partial Body Contact (TRC, 0.28 mg/L) **above axis limit*
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1E-5 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.0024 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.01 mg/L)

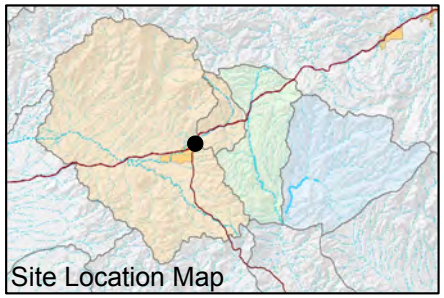
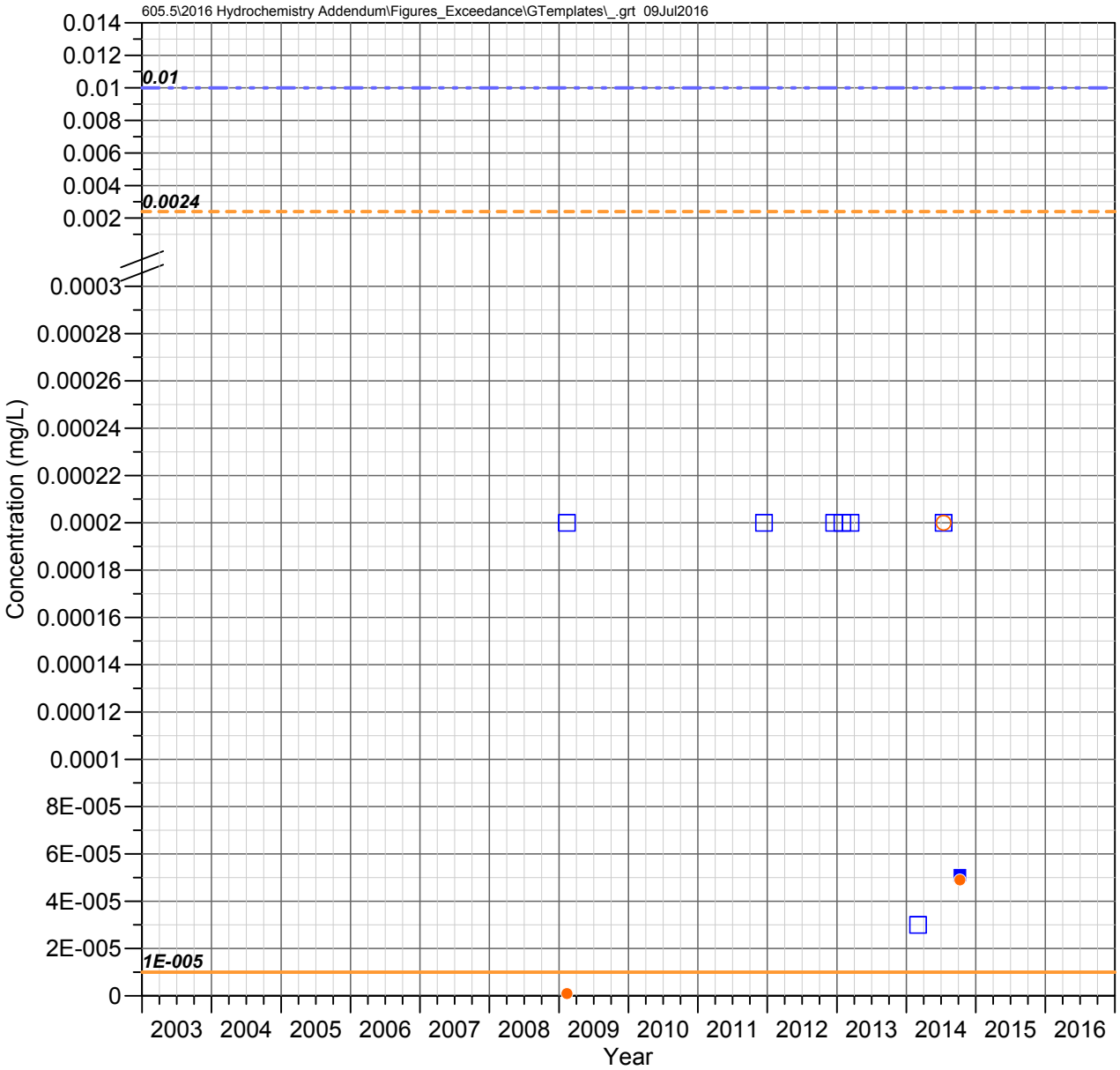


FIGURE F-498. MERCURY CONCENTRATIONS OBSERVED AT QC 21.7 C (MAGMA AVENUE), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 19.7 C
Queen Creek Watershed

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Partial Body Contact (TRC, 0.28 mg/L) **above axis limit*
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1E-5 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.0024 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.01 mg/L)

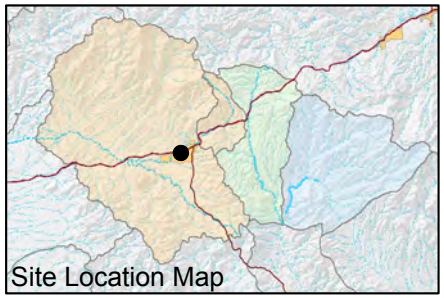
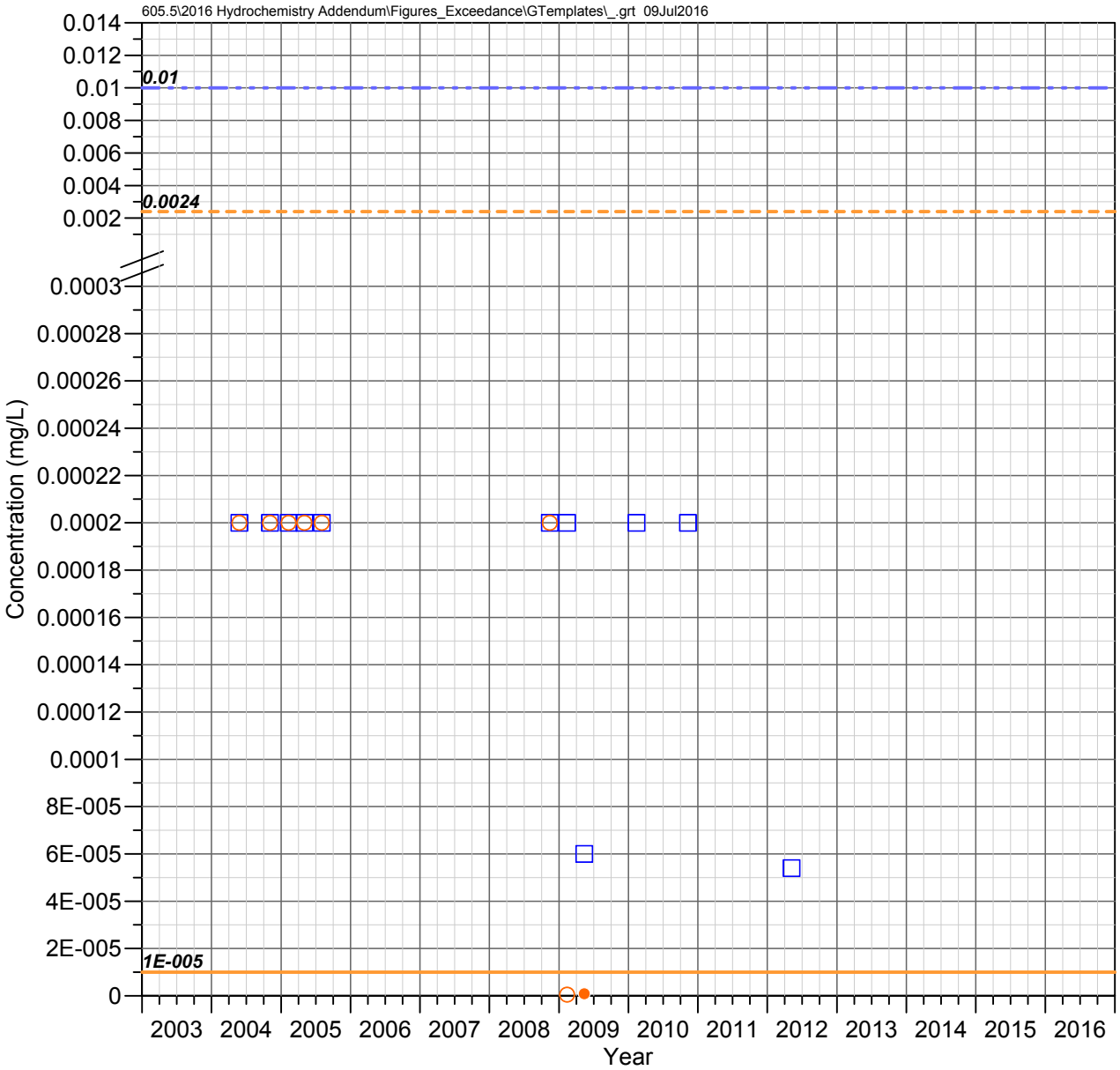


FIGURE F-499. MERCURY CONCENTRATIONS OBSERVED AT QC 19.7 C, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Bored Spring
Queen Creek Watershed

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Partial Body Contact (TRC, 0.28 mg/L) **above axis limit*
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1E-5 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.0024 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.01 mg/L)

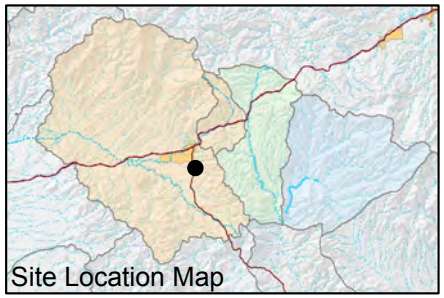
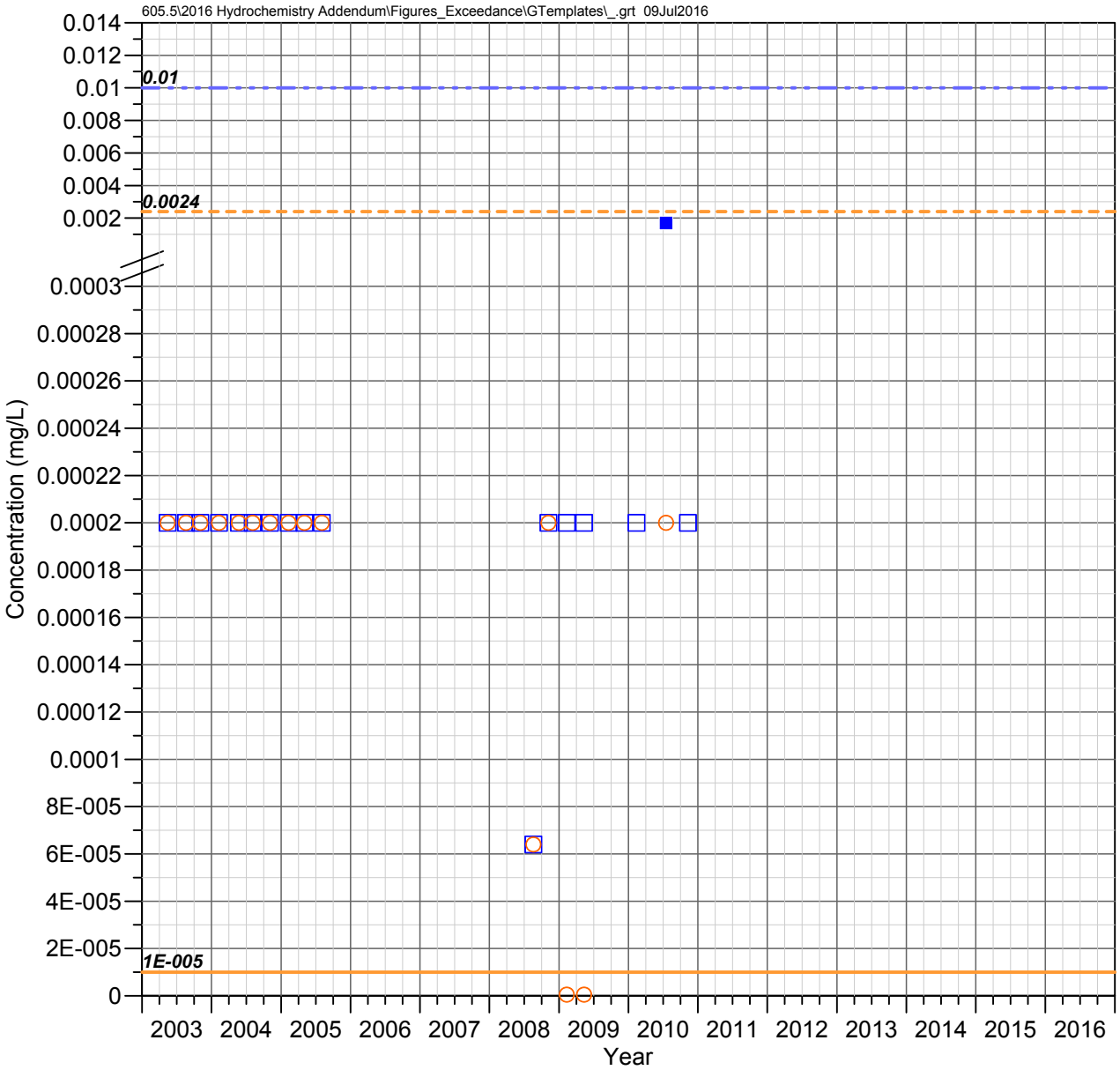


FIGURE F-500. MERCURY CONCENTRATIONS OBSERVED AT BORED SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Hidden Spring
Queen Creek Watershed

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Partial Body Contact (TRC, 0.28 mg/L) **above axis limit*
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1E-5 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.0024 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.01 mg/L)

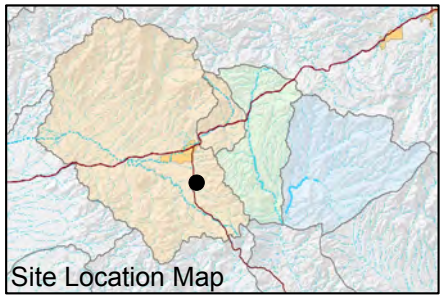
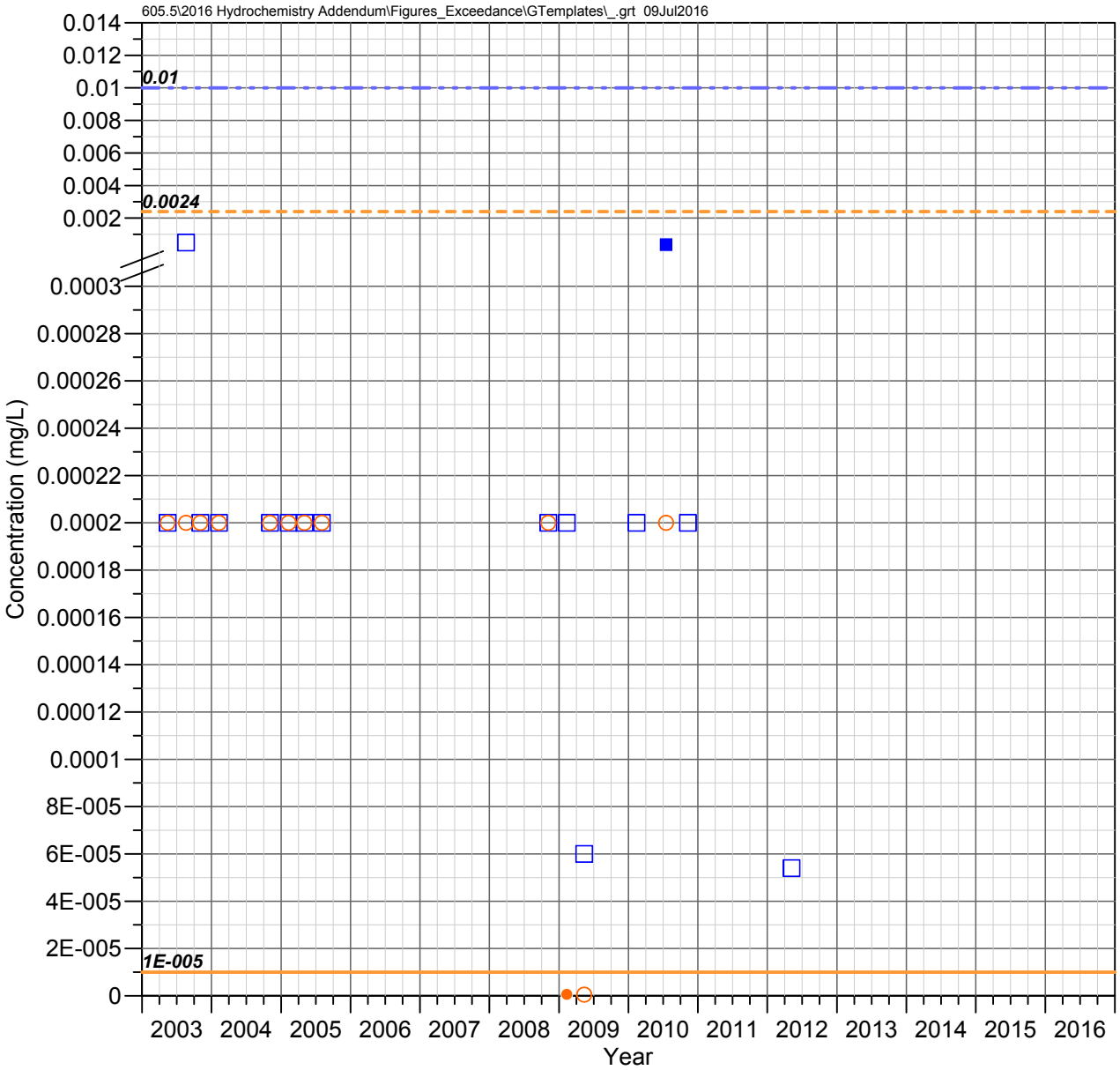


FIGURE F-501. MERCURY CONCENTRATIONS OBSERVED AT HIDDEN SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Kane Spring
Queen Creek Watershed

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Partial Body Contact (TRC, 0.28 mg/L) **above axis limit*
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1E-5 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.0024 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.01 mg/L)

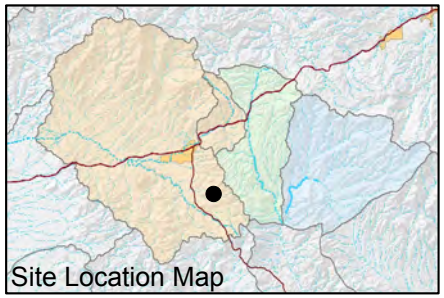
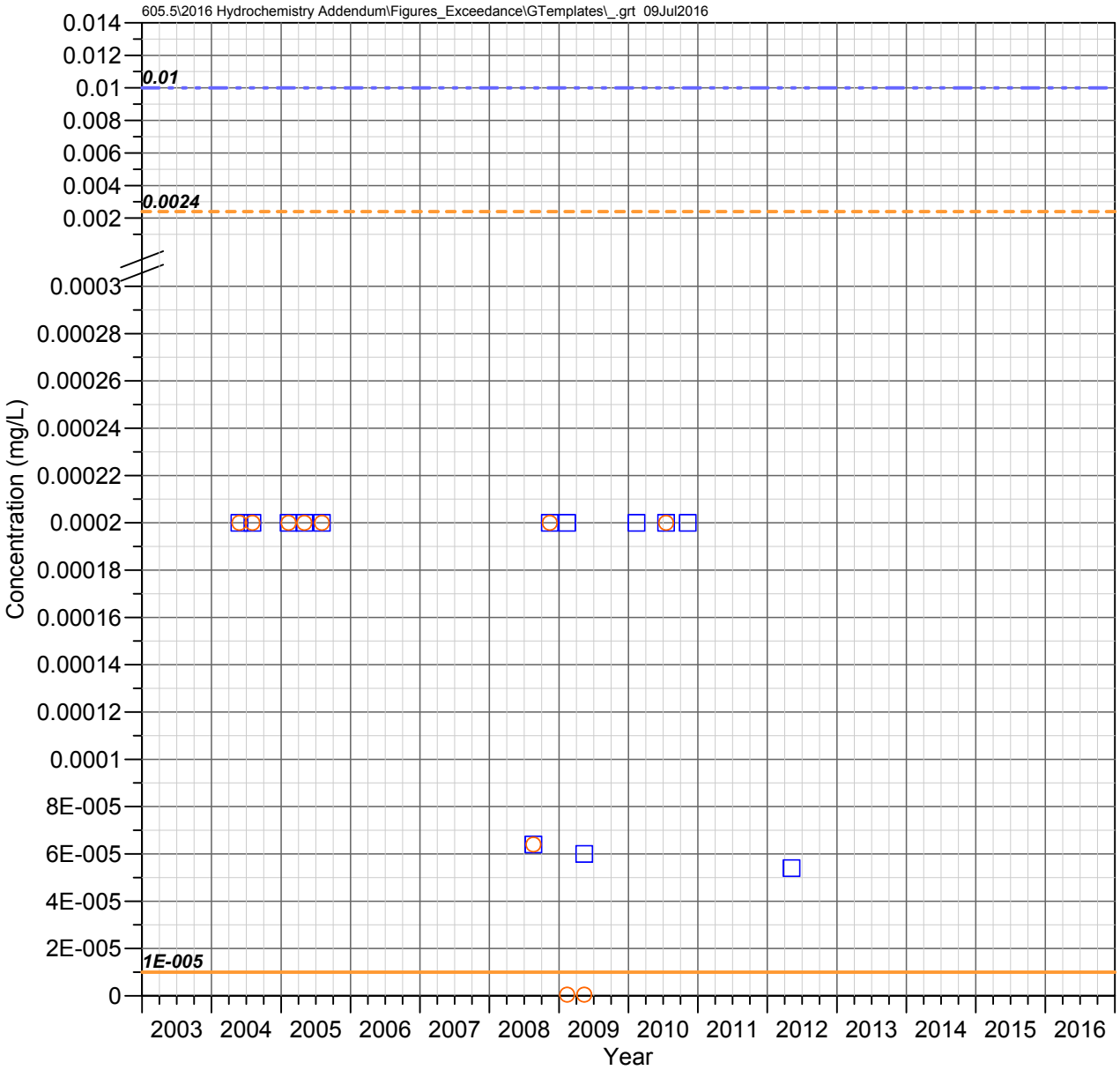


FIGURE F-502. MERCURY CONCENTRATIONS OBSERVED AT KANE SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Blue Spring
Queen Creek Watershed

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Partial Body Contact (TRC, 0.28 mg/L) **above axis limit*
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1E-5 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.0024 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.01 mg/L)

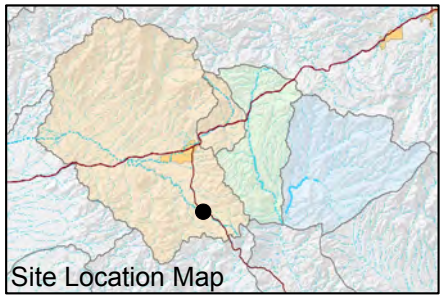
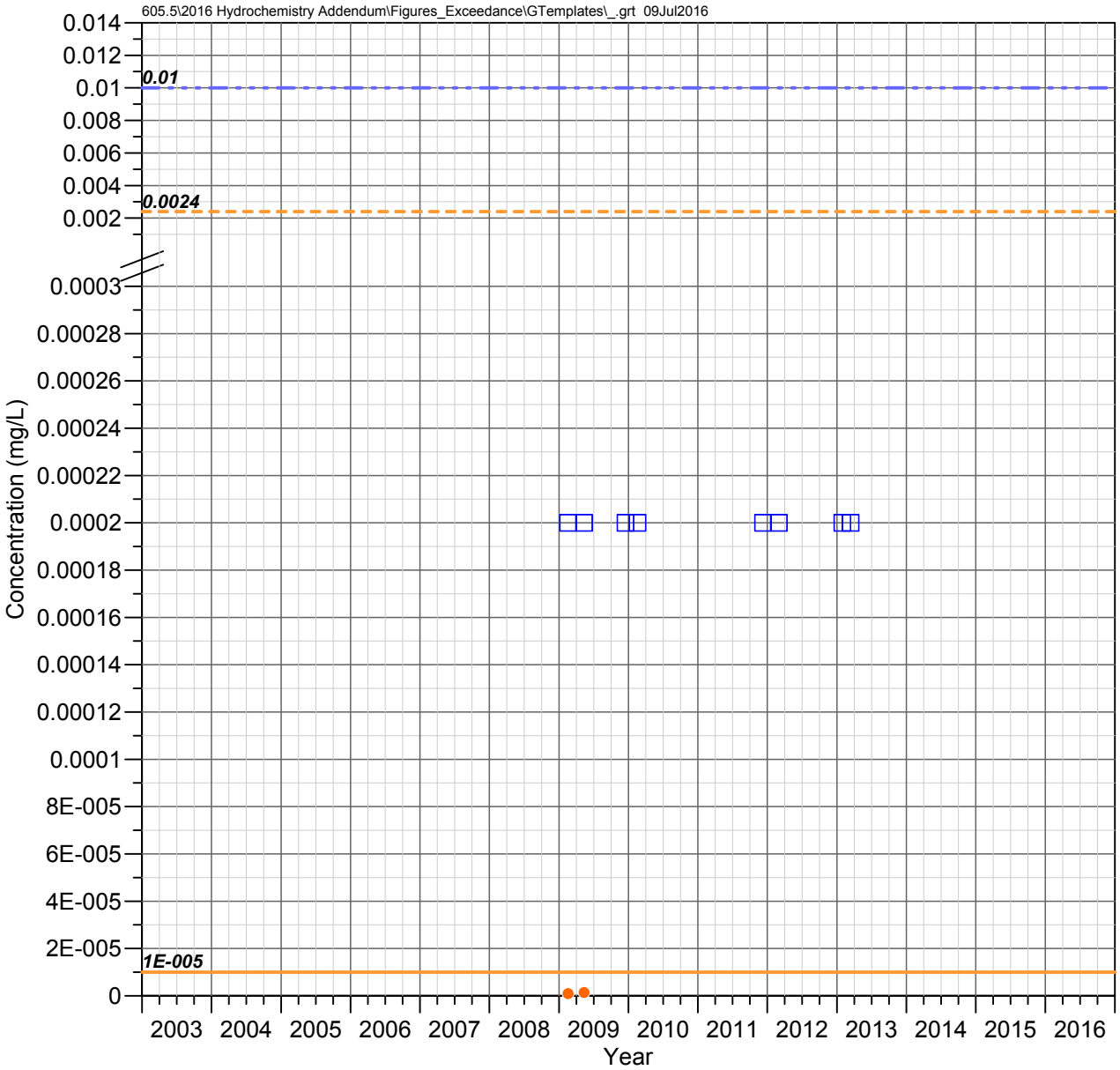


FIGURE F-503. MERCURY CONCENTRATIONS OBSERVED AT BLUE SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



IC 1.0 C
Devils Canyon Watershed

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.28 mg/L) **above axis limit*
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1E-5 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.0024 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.01 mg/L)

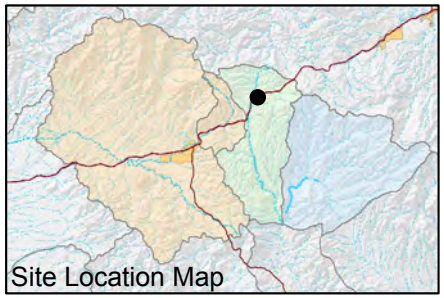
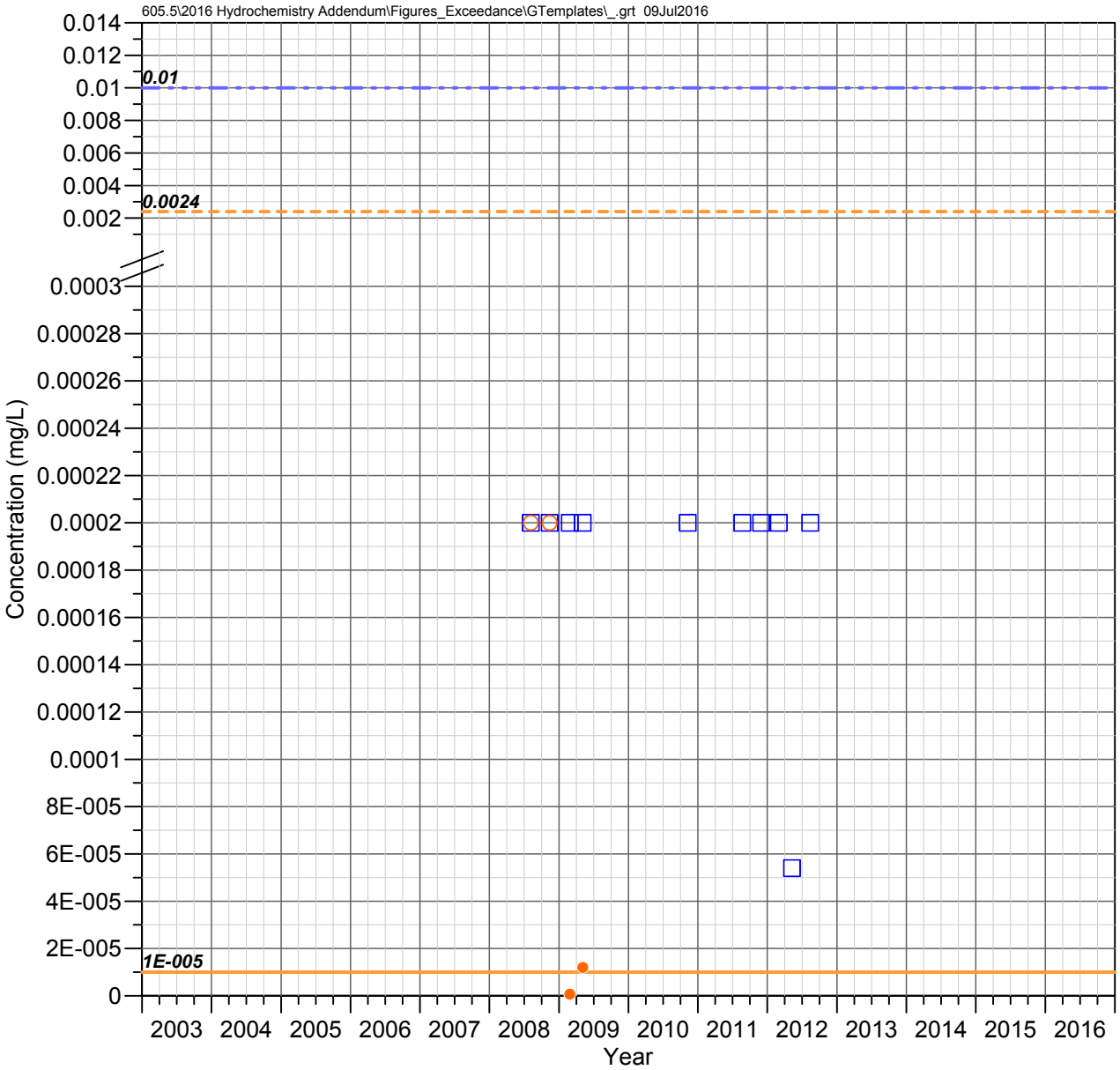


FIGURE F-504. MERCURY CONCENTRATIONS OBSERVED AT IC 1.0 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 15.5 C
Devils Canyon Watershed

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.28 mg/L) **above axis limit*
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1E-5 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.0024 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.01 mg/L)

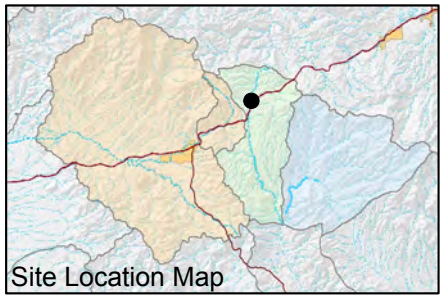
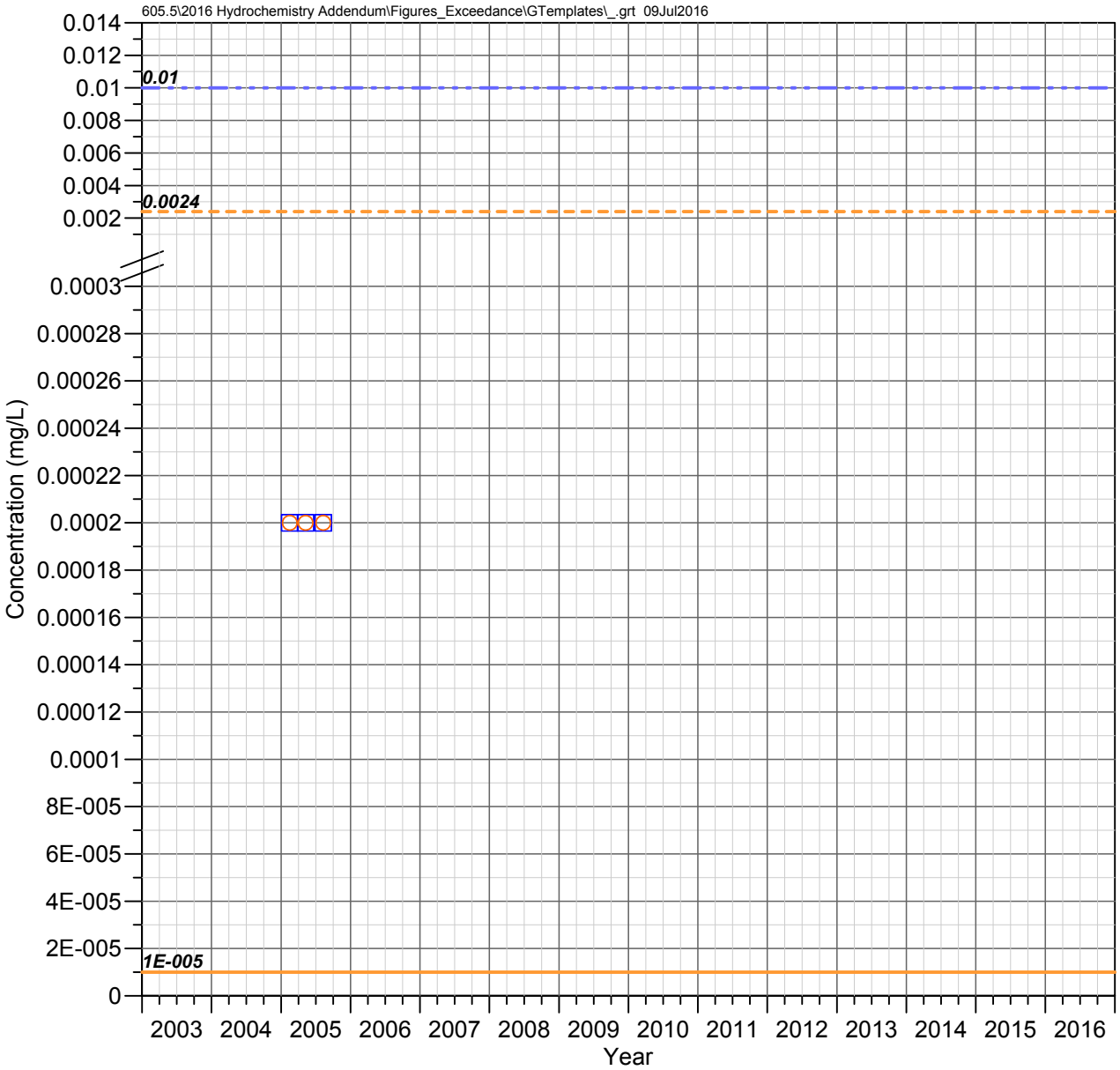


FIGURE F-505. MERCURY CONCENTRATIONS OBSERVED AT DC 15.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 15.2 C
Devils Canyon Watershed

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.28 mg/L) **above axis limit*
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1E-5 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.0024 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.01 mg/L)

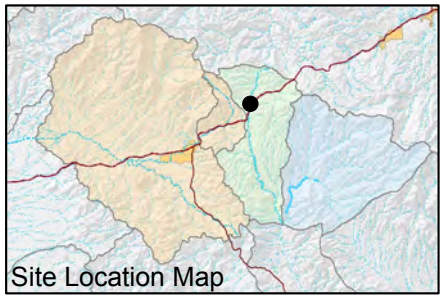
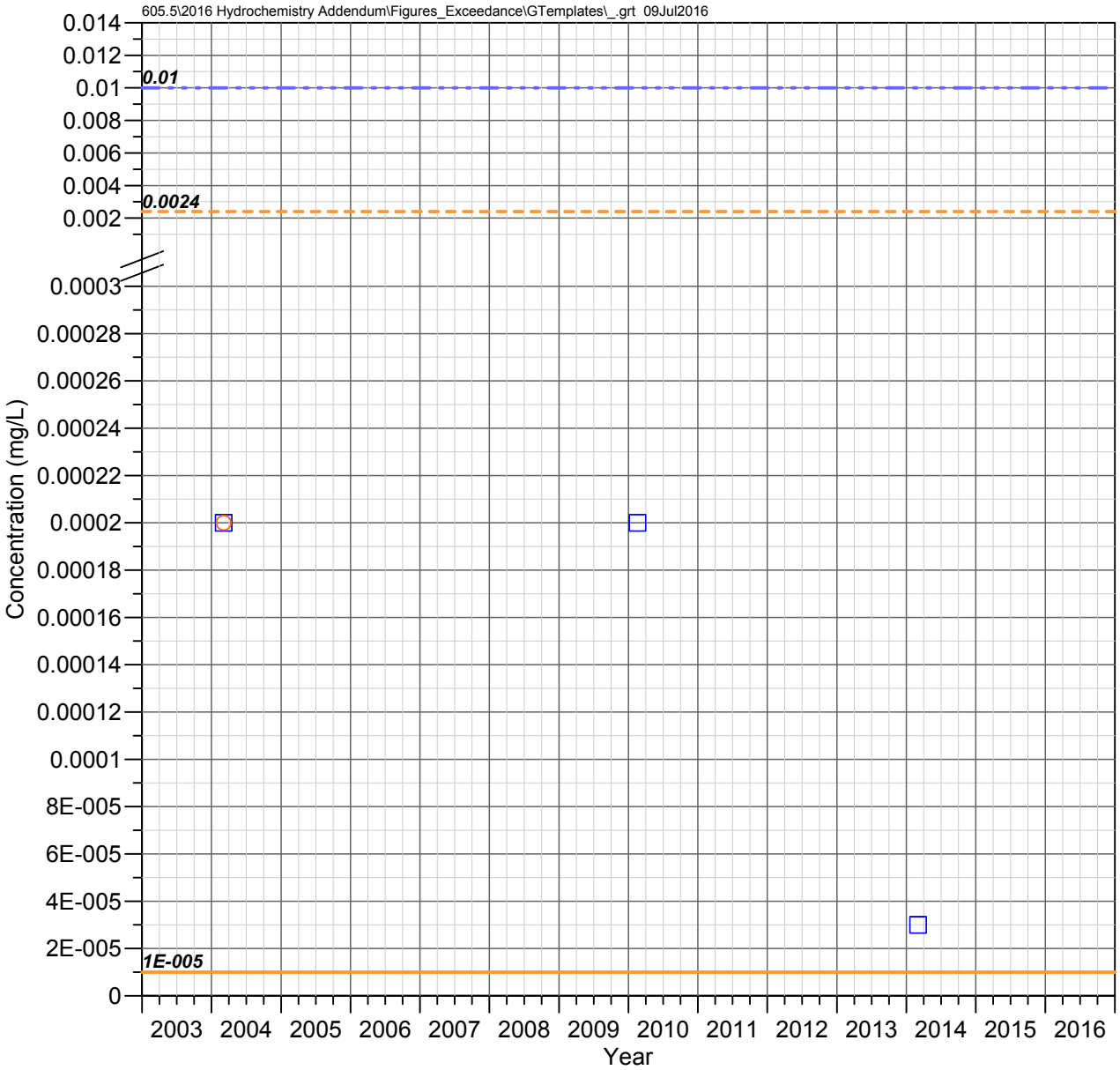


FIGURE F-506. MERCURY CONCENTRATIONS OBSERVED AT DC 15.2 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 14.7 C
Devils Canyon Watershed

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.28 mg/L) **above axis limit*
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1E-5 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.0024 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.01 mg/L)

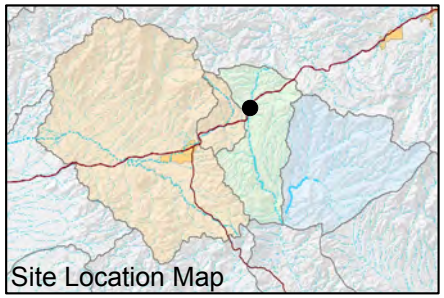
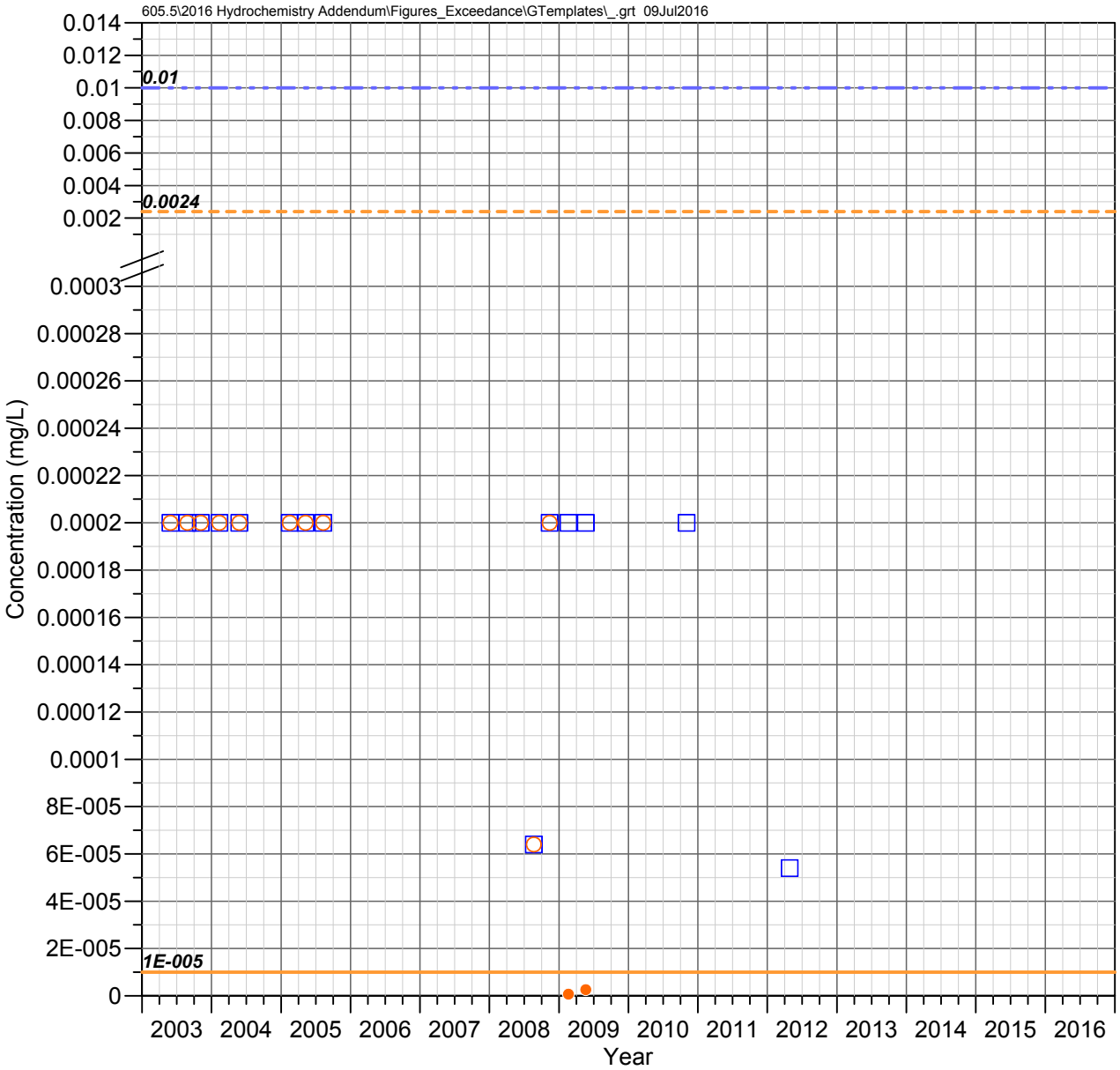


FIGURE F-507. MERCURY CONCENTRATIONS OBSERVED AT DC 14.7 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 13.5 C
Devils Canyon Watershed

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.28 mg/L) **above axis limit*
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1E-5 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.0024 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.01 mg/L)

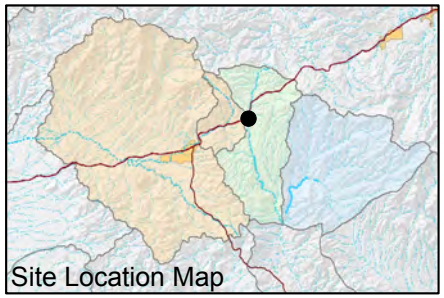
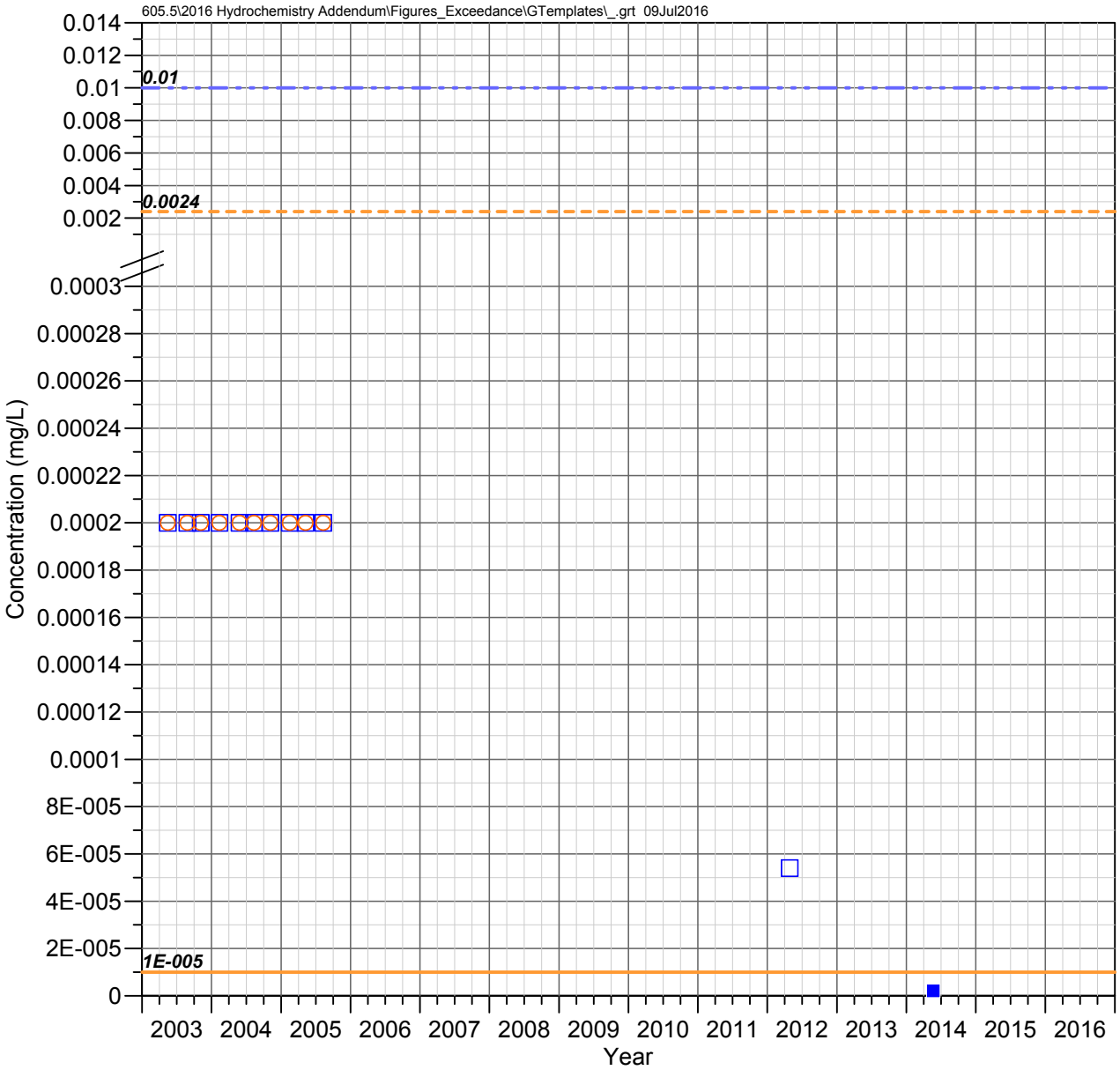


FIGURE F-508. MERCURY CONCENTRATIONS OBSERVED AT DC 13.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 10.9 C
Devils Canyon Watershed

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.28 mg/L) **above axis limit*
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1E-5 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.0024 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.01 mg/L)

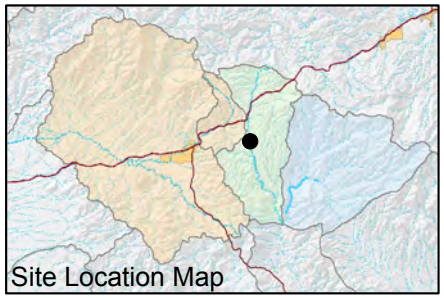
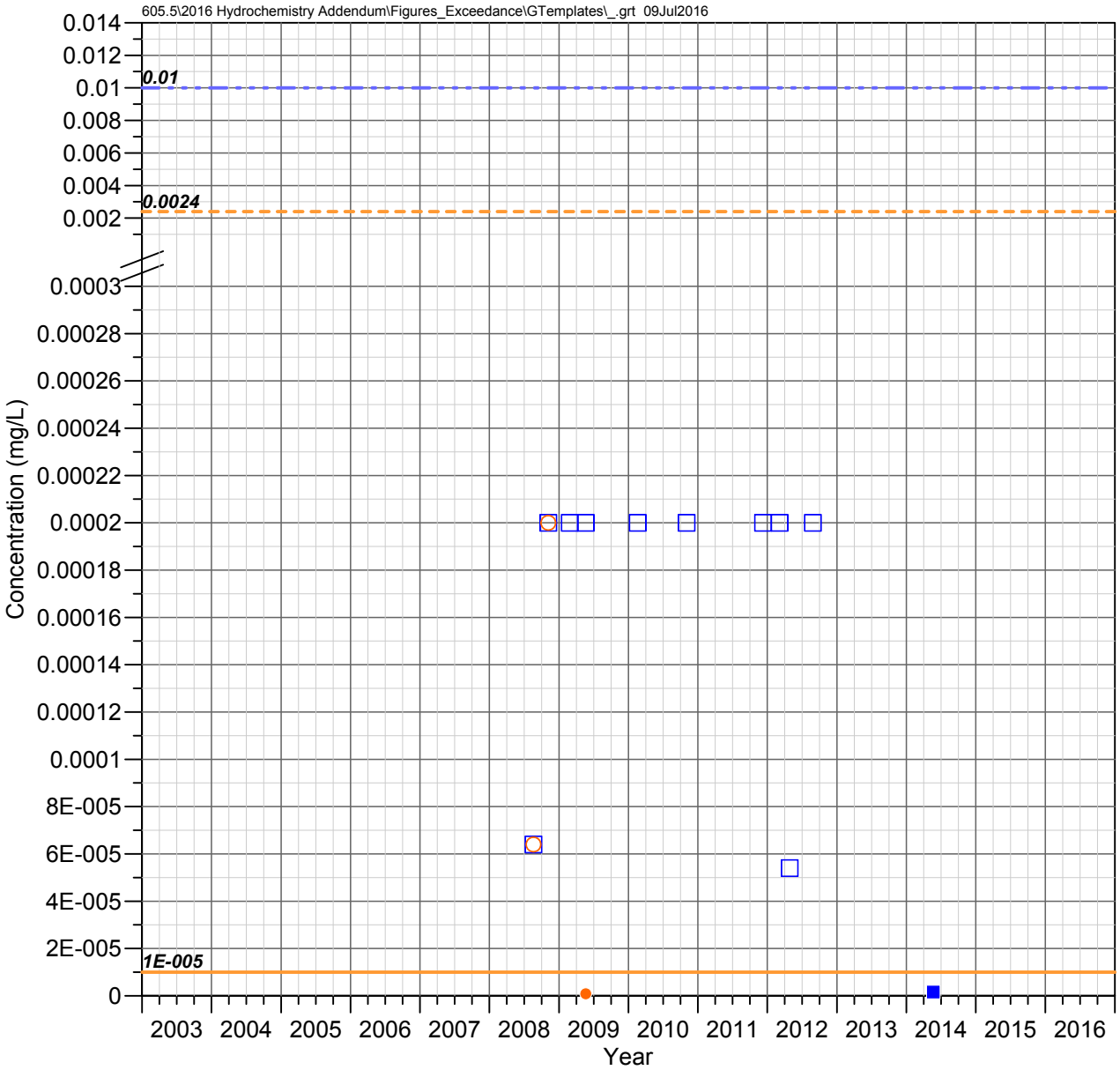


FIGURE F-509. MERCURY CONCENTRATIONS OBSERVED AT DC 10.9 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



RR 1.5 C
Devils Canyon Watershed

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.28 mg/L) **above axis limit*
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1E-5 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.0024 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.01 mg/L)

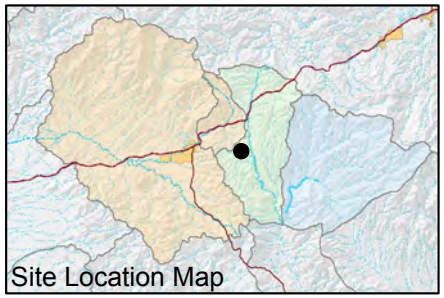
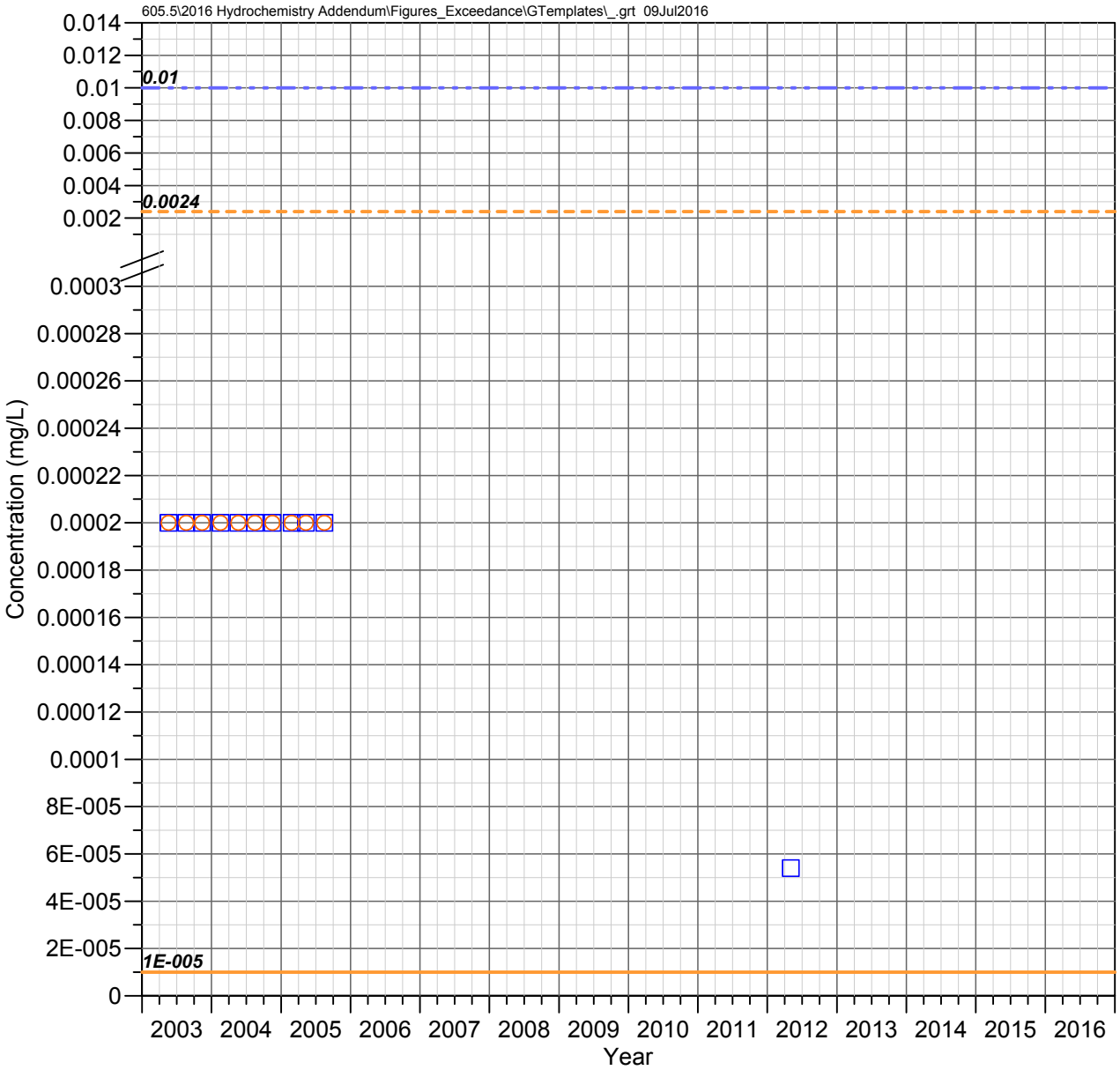


FIGURE F-510. MERCURY CONCENTRATIONS OBSERVED AT RR 1.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.8 C
Devils Canyon Watershed

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.28 mg/L) **above axis limit*
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1E-5 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.0024 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.01 mg/L)

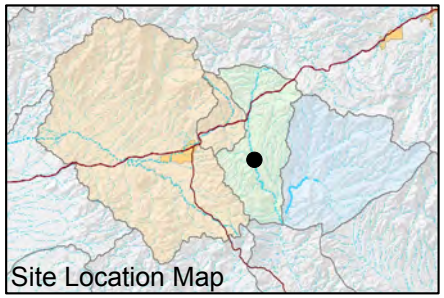
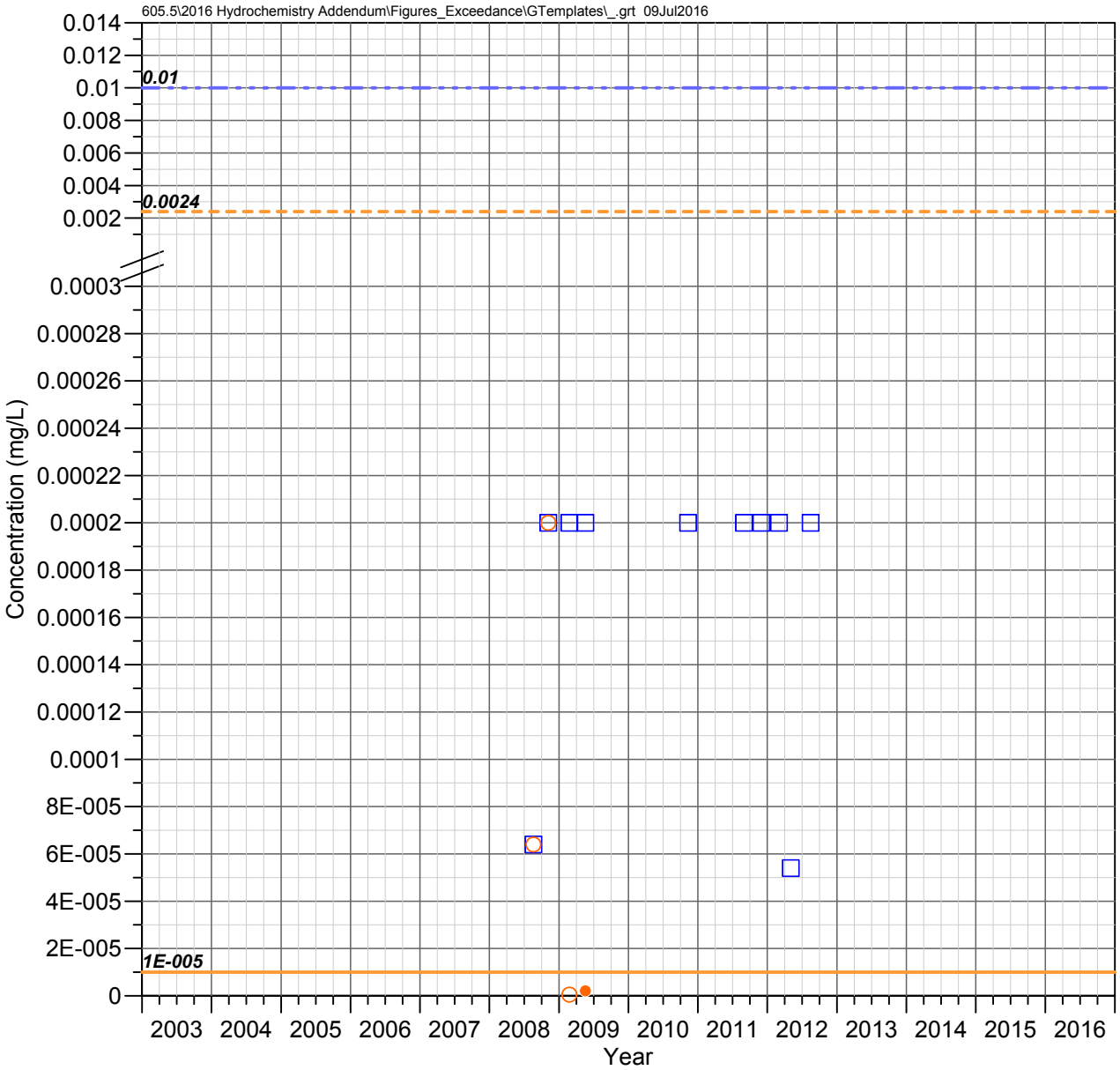


FIGURE F-511. MERCURY CONCENTRATIONS OBSERVED AT DC 8.8 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



H 0.1 C
Devils Canyon Watershed

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.28 mg/L) **above axis limit*
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1E-5 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.0024 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.01 mg/L)

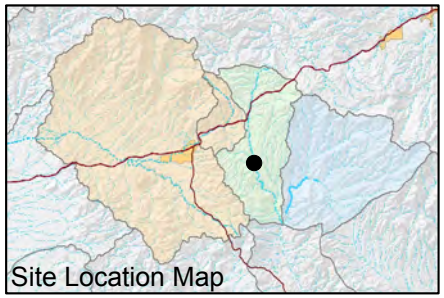
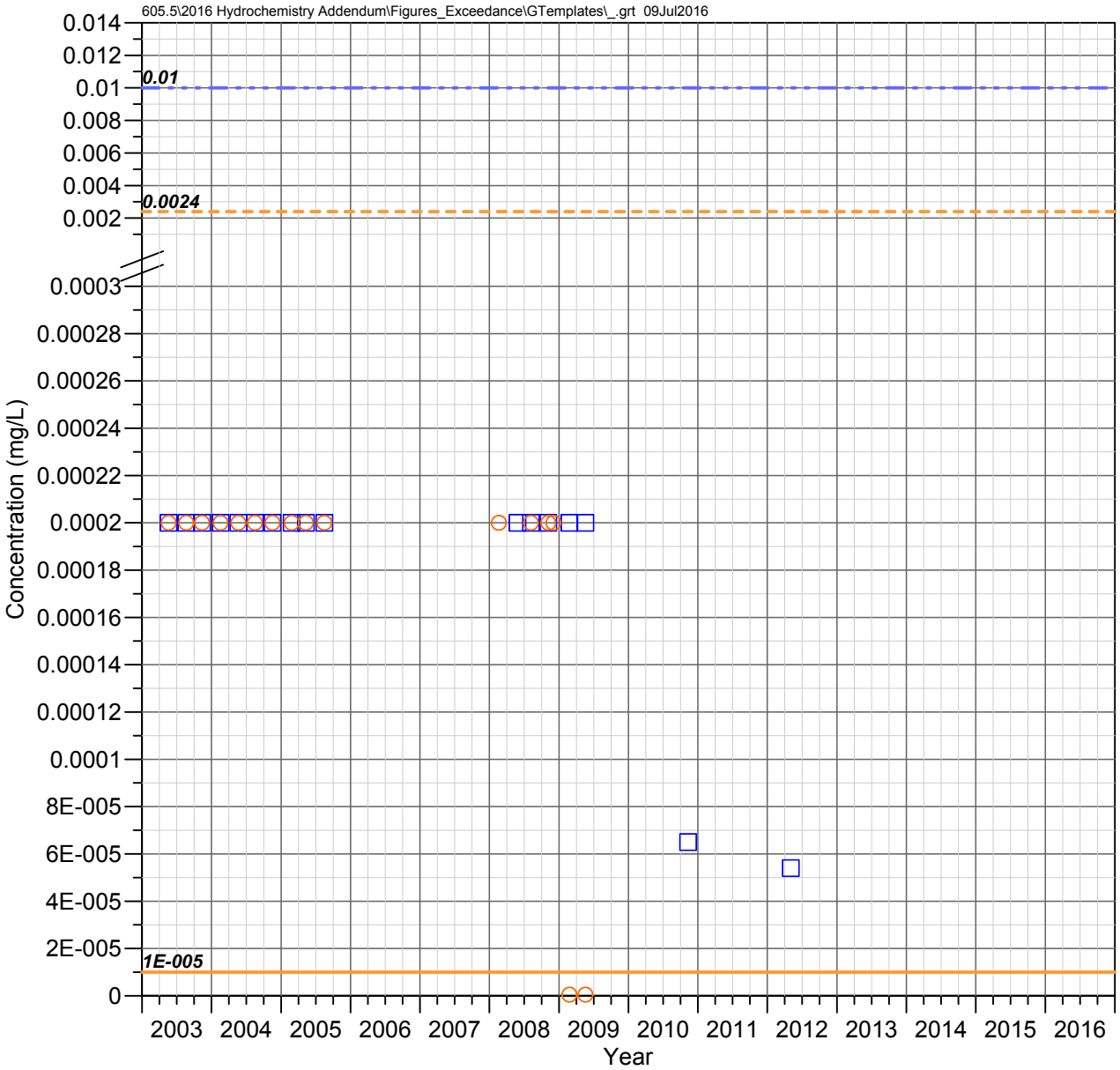


FIGURE F-512. MERCURY CONCENTRATIONS OBSERVED AT H 0.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.2 W
Devils Canyon Watershed

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.28 mg/L) **above axis limit*
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1E-5 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.0024 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.01 mg/L)

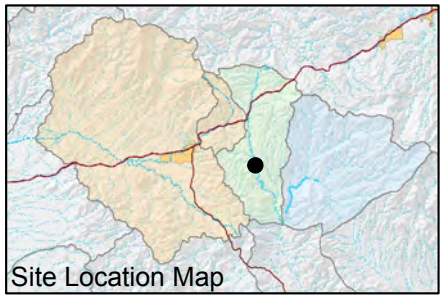
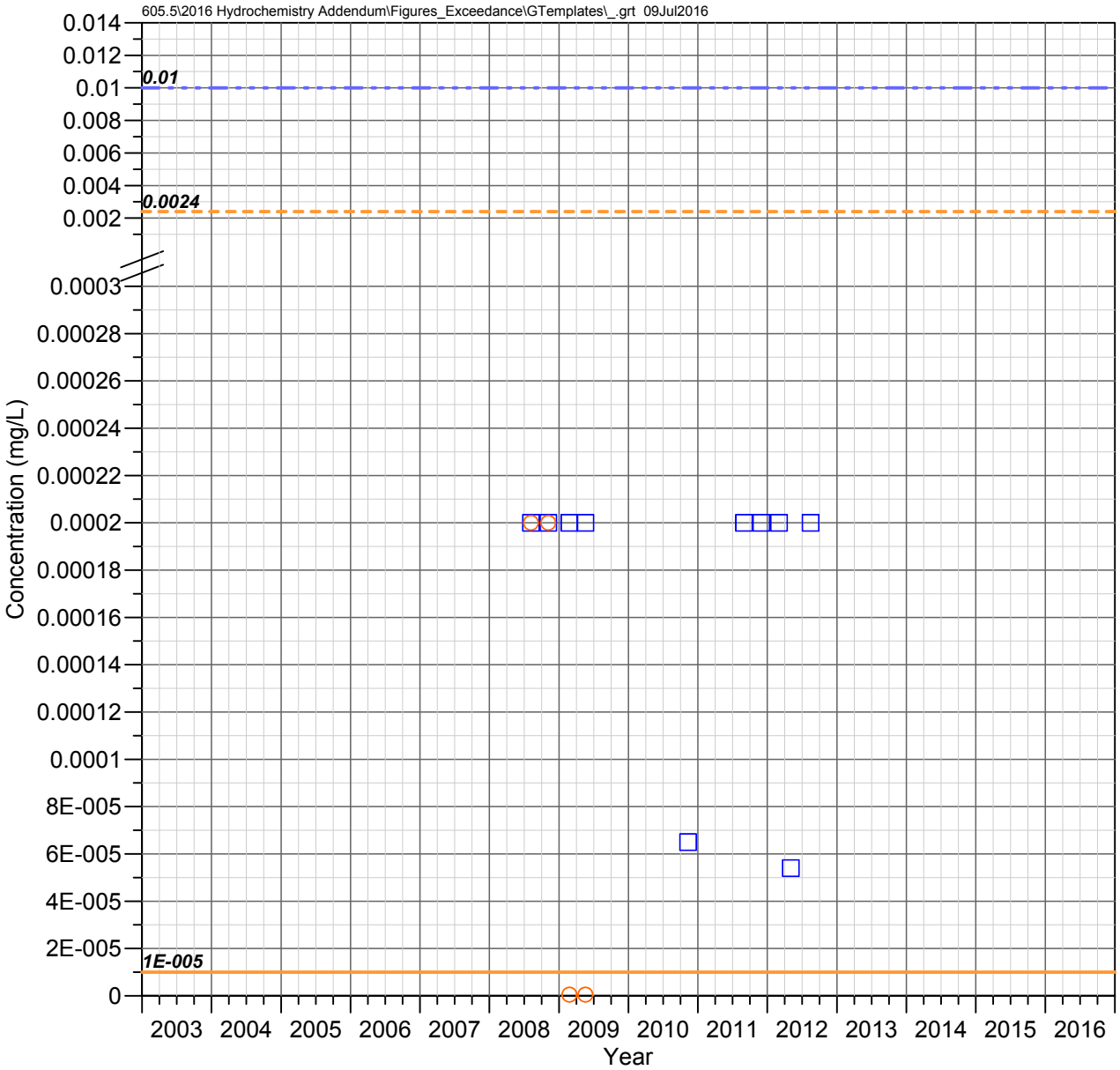


FIGURE F-513. MERCURY CONCENTRATIONS OBSERVED AT DC 8.2 W, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.1 C
Devils Canyon Watershed

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.28 mg/L) **above axis limit*
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1E-5 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.0024 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.01 mg/L)

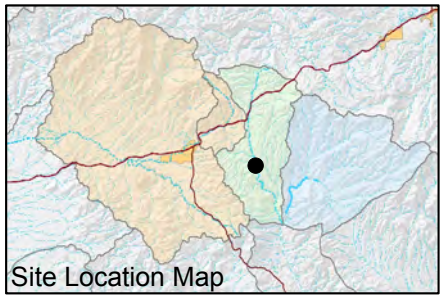
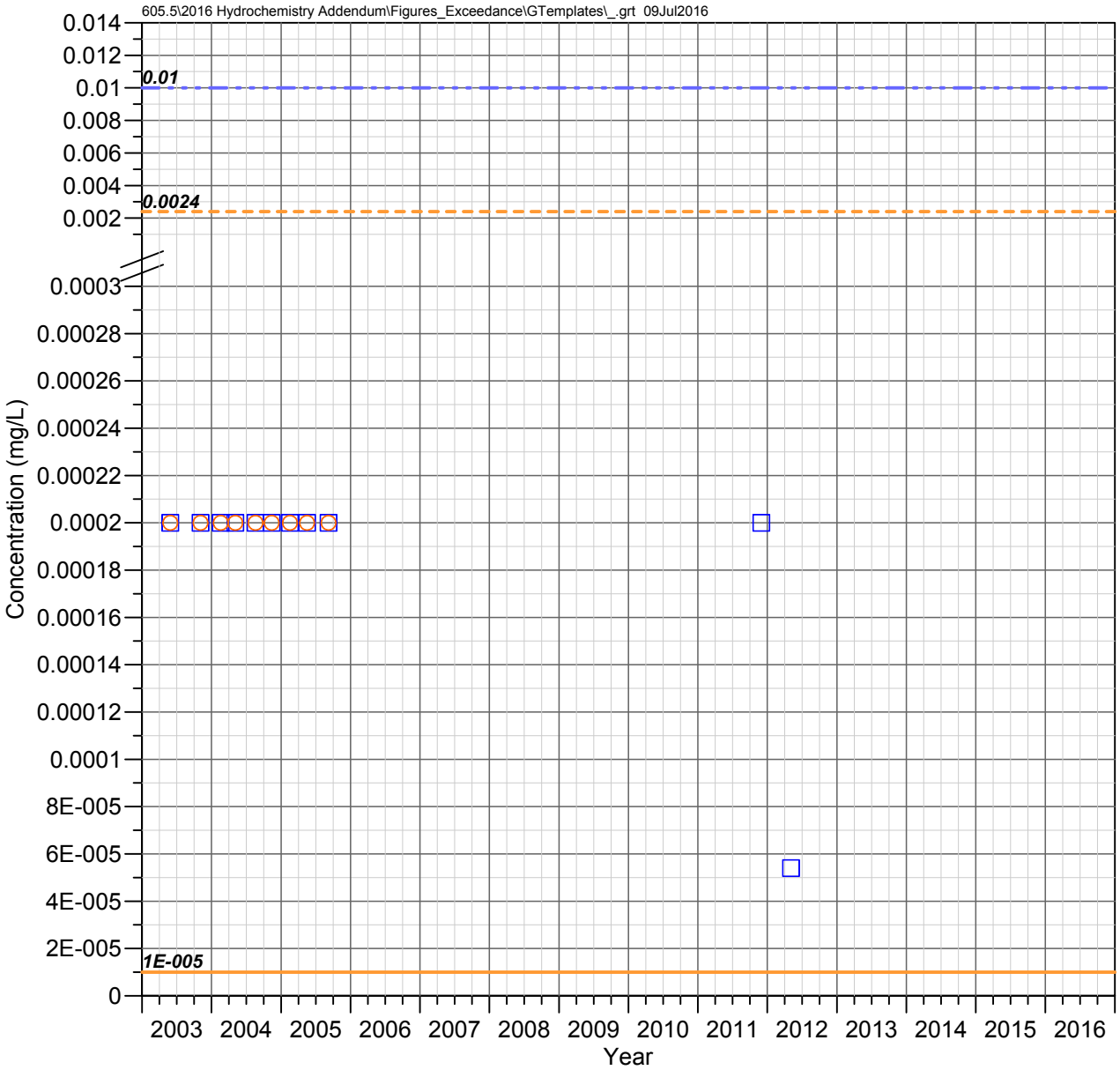


FIGURE F-514. MERCURY CONCENTRATIONS OBSERVED AT DC 8.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 7.1 C
Devils Canyon Watershed

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.28 mg/L) **above axis limit*
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1E-5 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.0024 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.01 mg/L)

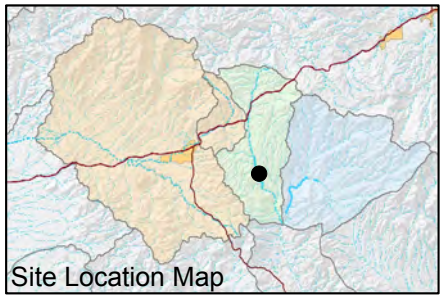
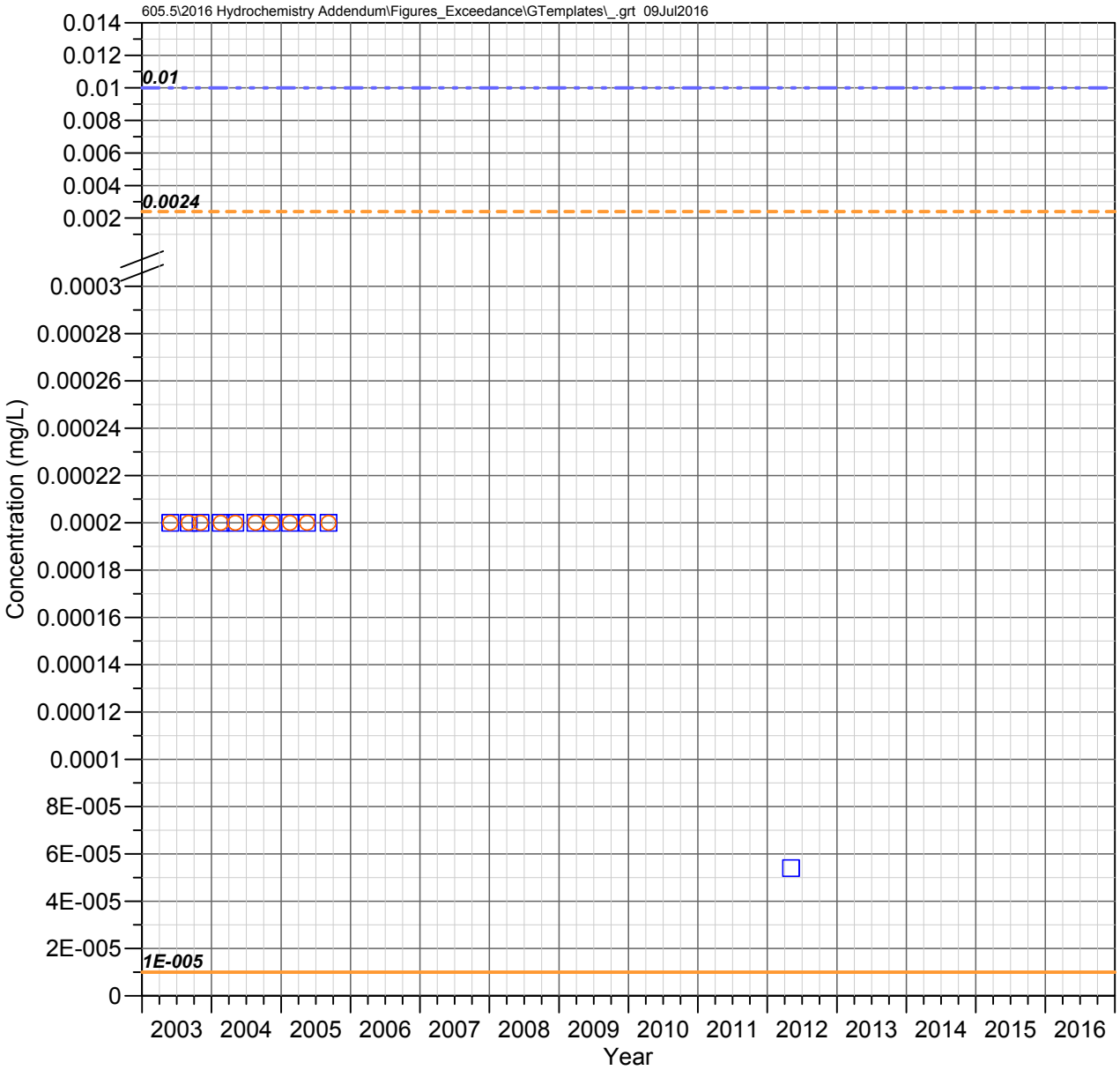


FIGURE F-515. MERCURY CONCENTRATIONS OBSERVED AT DC 7.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.6 W (DCT 6.6 W)
Devils Canyon Watershed

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.28 mg/L) **above axis limit*
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1E-5 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.0024 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.01 mg/L)

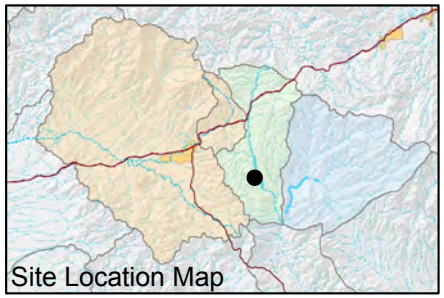
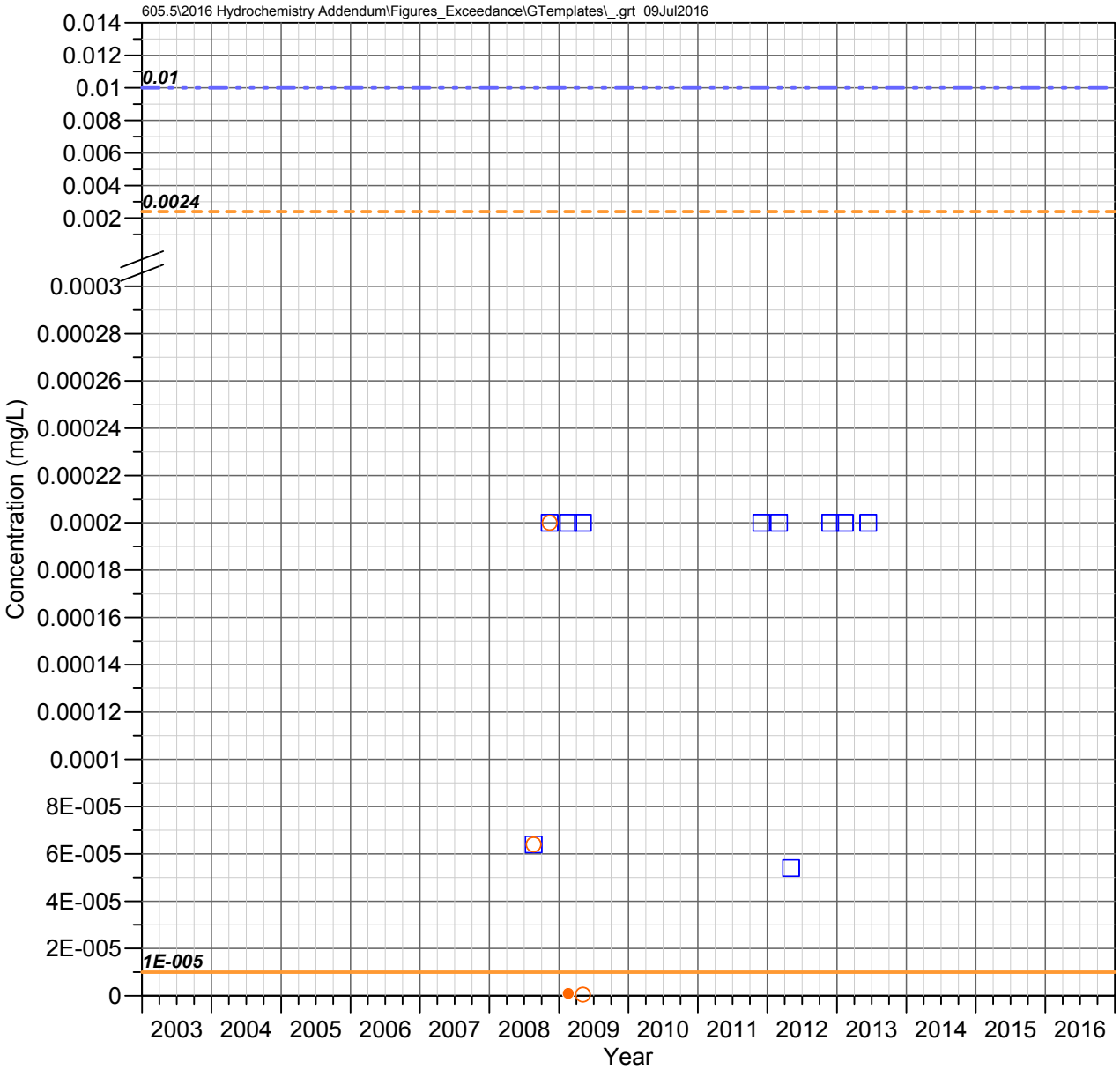


FIGURE F-516. MERCURY CONCENTRATIONS OBSERVED AT DC 6.6 W (DCT 6.6 W), DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.14 C
Devils Canyon Watershed

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.28 mg/L) **above axis limit*
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1E-5 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.0024 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.01 mg/L)

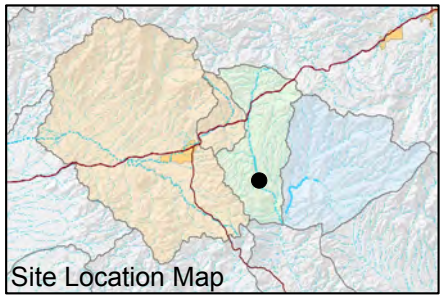
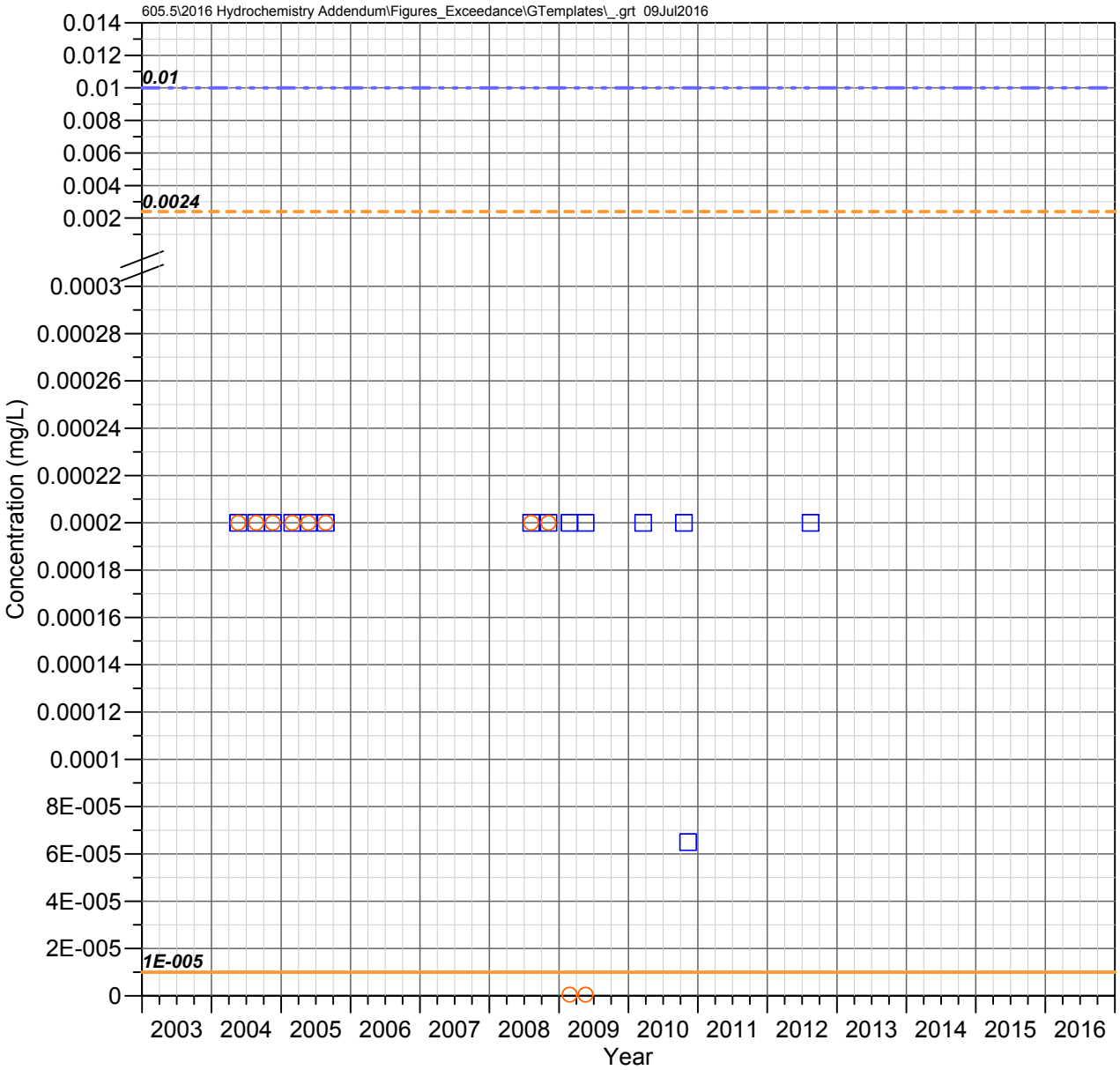


FIGURE F-517. MERCURY CONCENTRATIONS OBSERVED AT DC 6.14 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.1 E
Devils Canyon Watershed

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.28 mg/L) **above axis limit*
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1E-5 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.0024 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.01 mg/L)

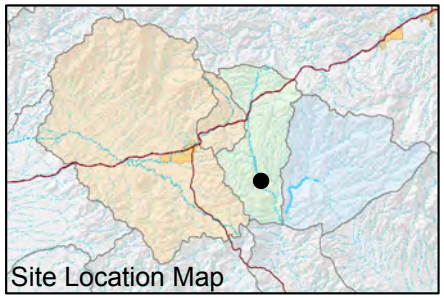
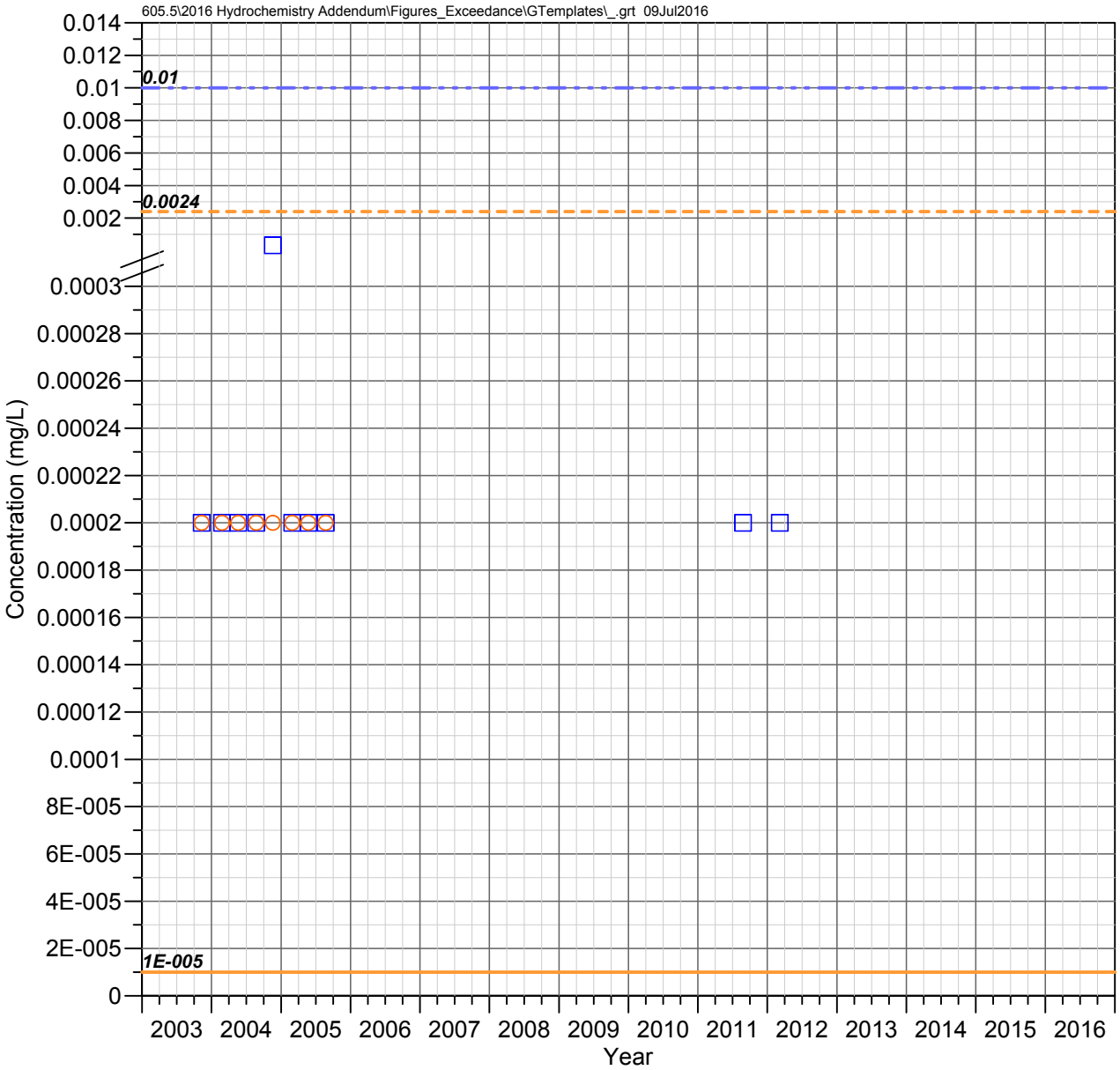


FIGURE F-518. MERCURY CONCENTRATIONS OBSERVED AT DC 6.1 E, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 5.5 C
Devils Canyon Watershed

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.28 mg/L) **above axis limit*
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1E-5 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.0024 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.01 mg/L)

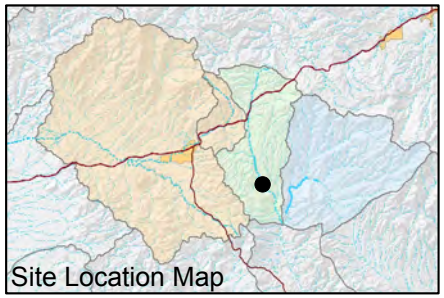
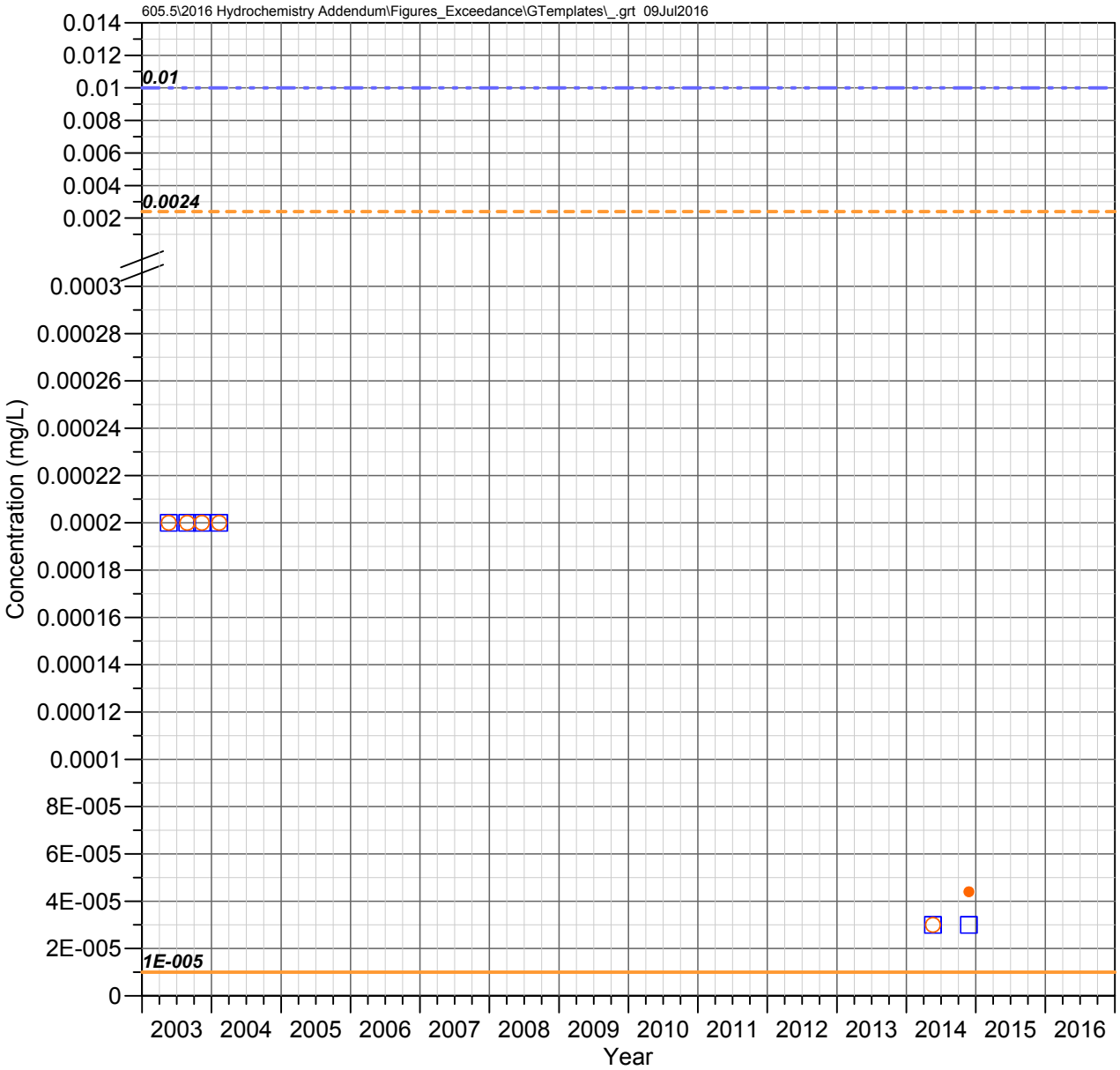


FIGURE F-519. MERCURY CONCENTRATIONS OBSERVED AT DC 5.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 4.1 E
Devils Canyon Watershed

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.28 mg/L) **above axis limit*
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1E-5 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.0024 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.01 mg/L)

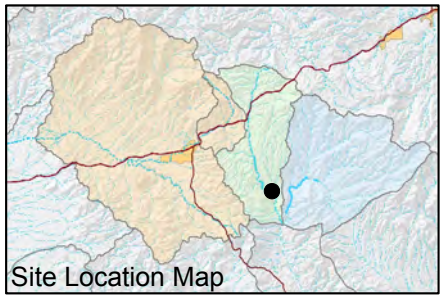
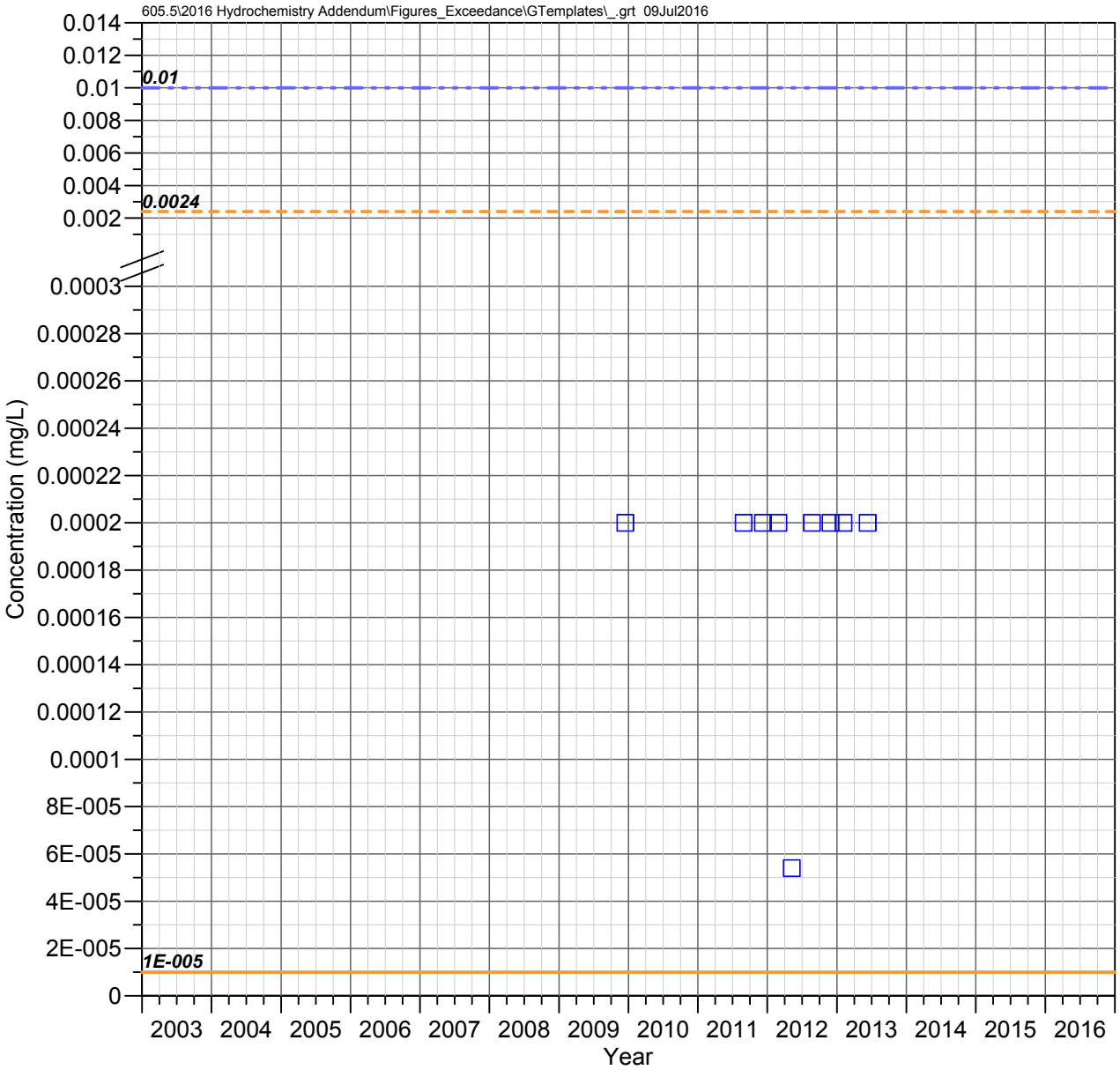


FIGURE F-520. MERCURY CONCENTRATIONS OBSERVED AT DC 4.1 E, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Government Springs
Mineral Creek Watershed

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.28 mg/L) **above axis limit*
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1E-5 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.0024 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.01 mg/L)

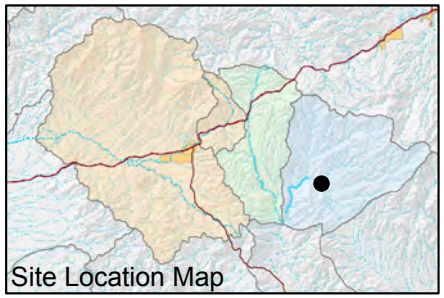
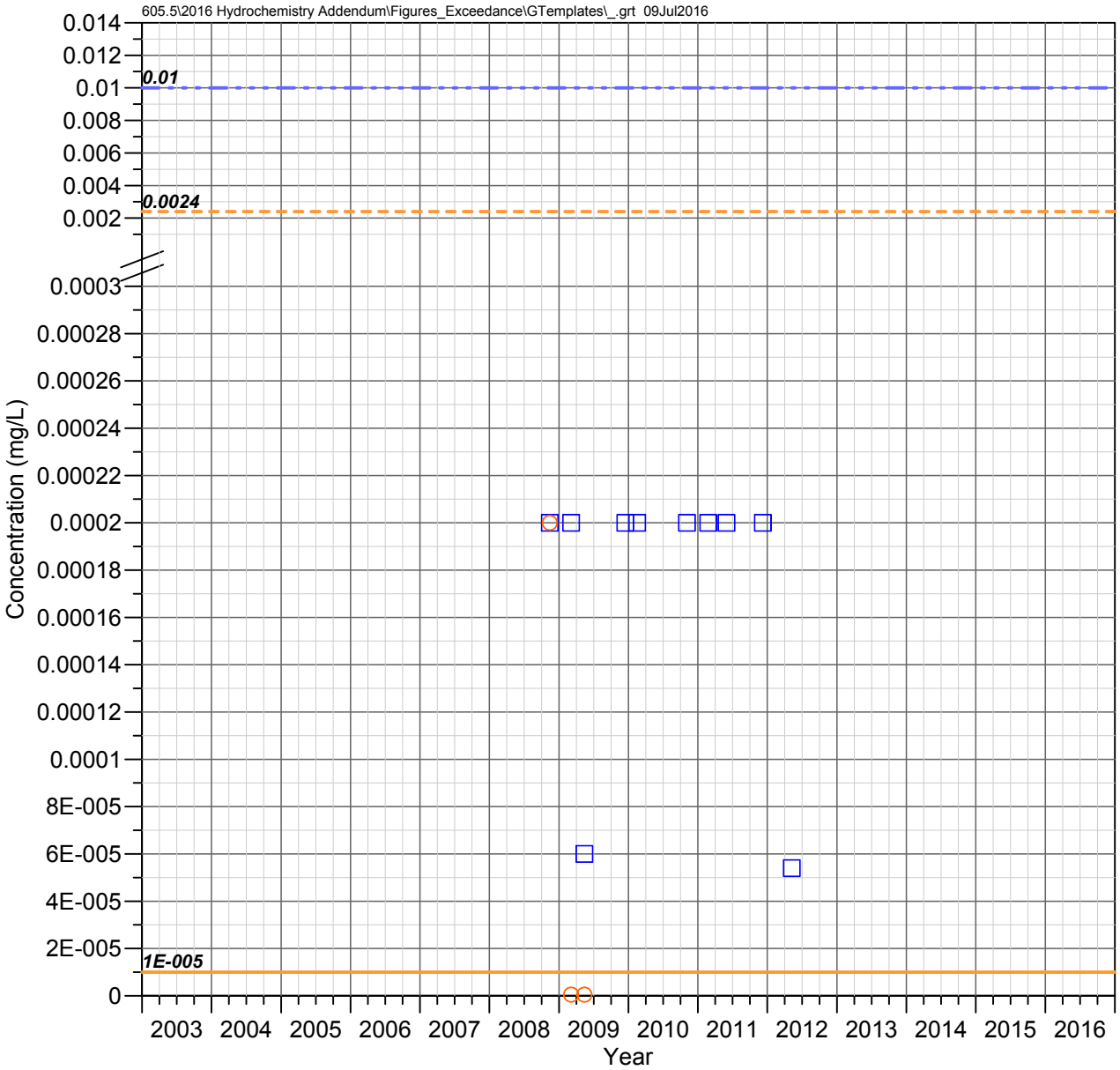


FIGURE F-521. MERCURY CONCENTRATIONS OBSERVED AT GOVERNMENT SPRINGS, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 8.4 C
Mineral Creek Watershed

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.28 mg/L) **above axis limit*
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1E-5 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.0024 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.01 mg/L)

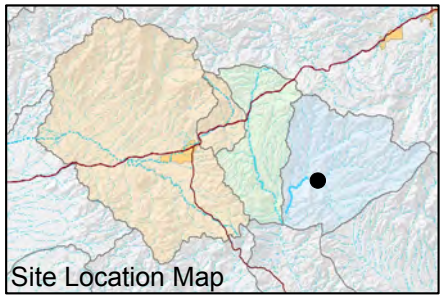
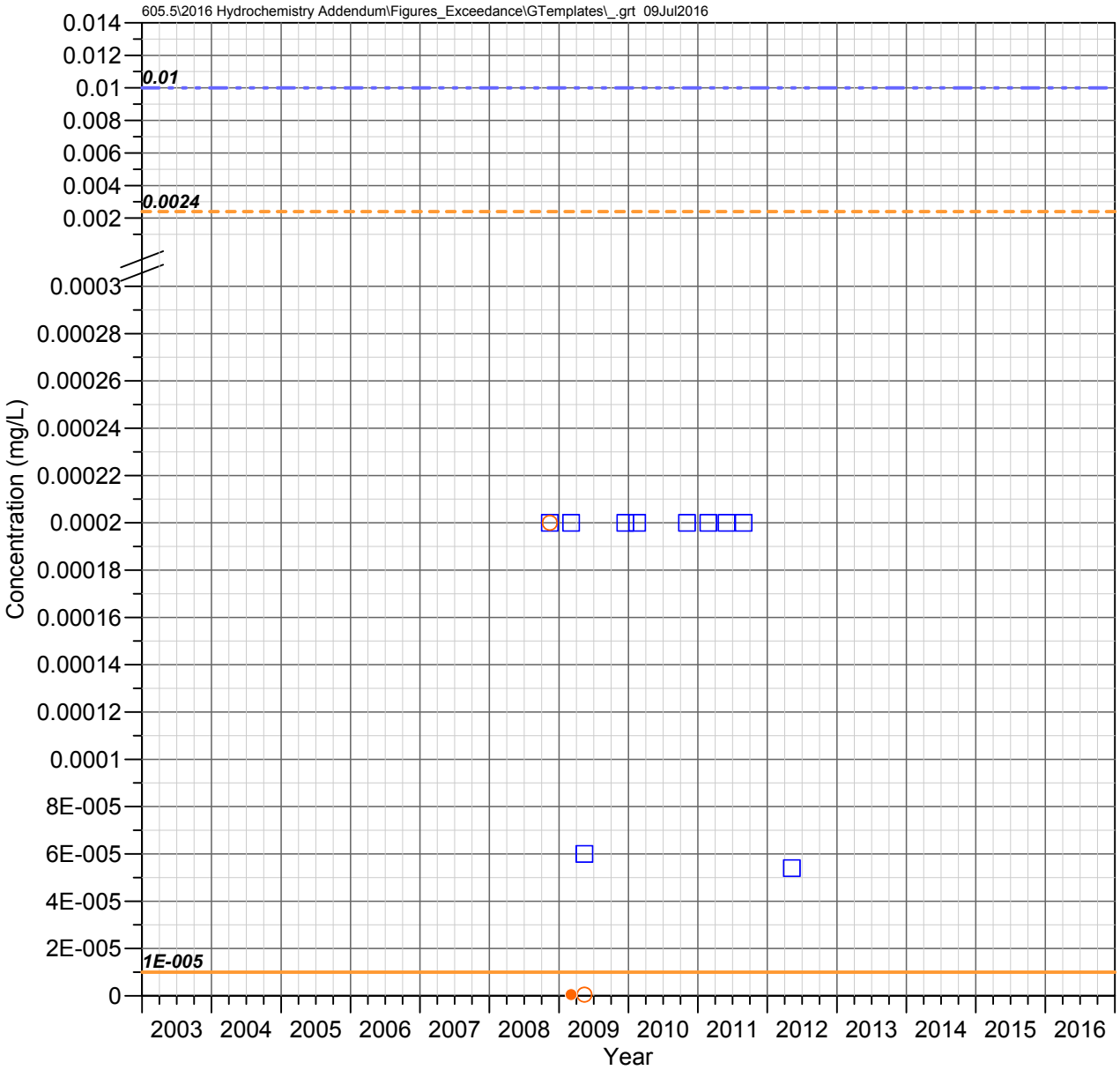


FIGURE F-522. MERCURY CONCENTRATIONS OBSERVED AT MC 8.4 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



LF 0.2 C
Mineral Creek Watershed

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.28 mg/L) **above axis limit*
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1E-5 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.0024 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.01 mg/L)

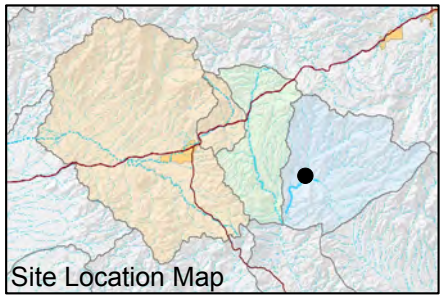
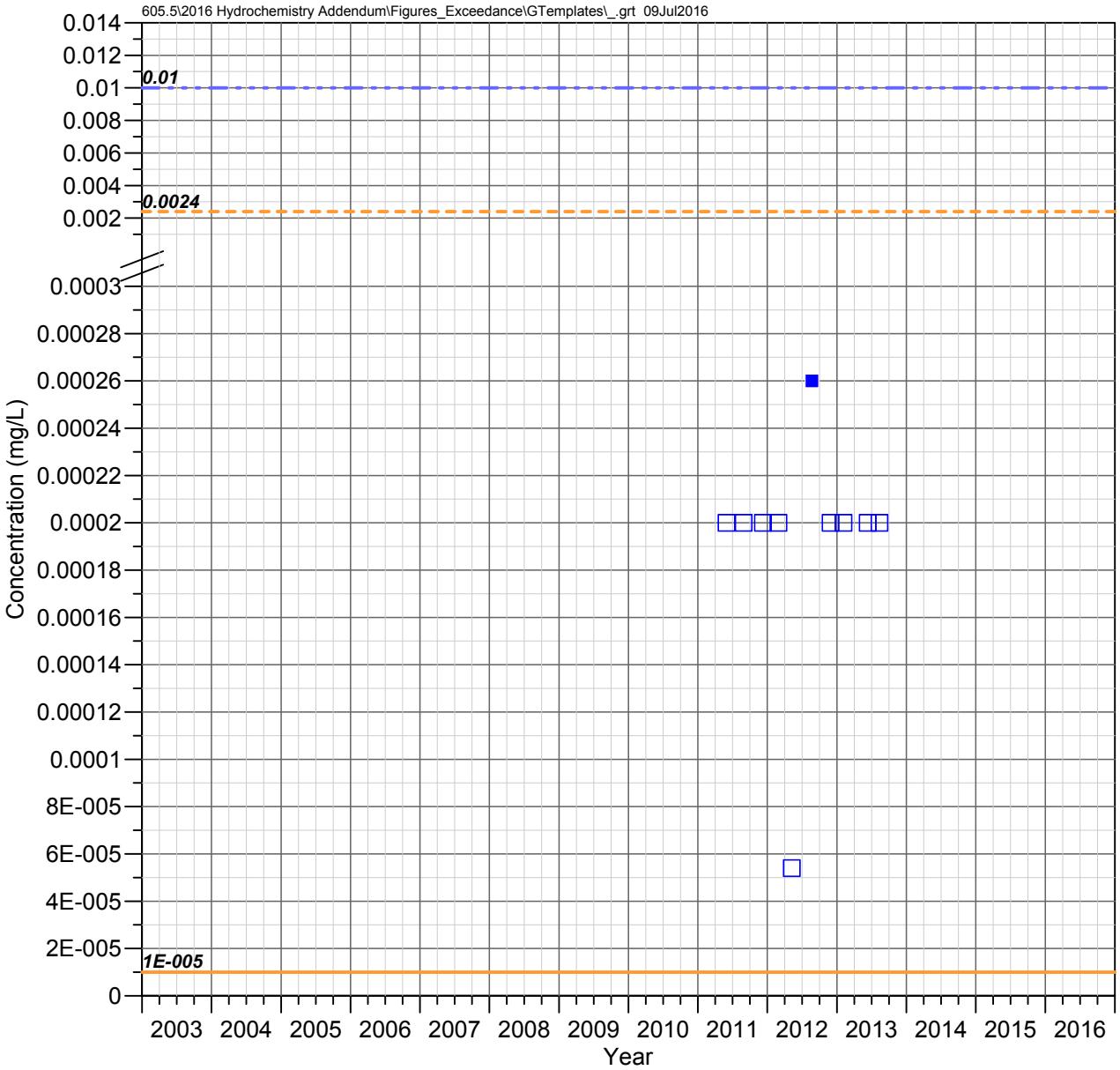


FIGURE F-523. MERCURY CONCENTRATIONS OBSERVED AT LF 0.2 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 5.2 C
Mineral Creek Watershed

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.28 mg/L) **above axis limit*
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1E-5 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.0024 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.01 mg/L)

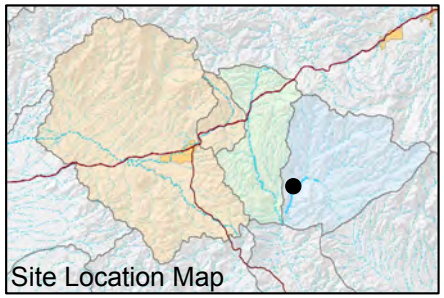
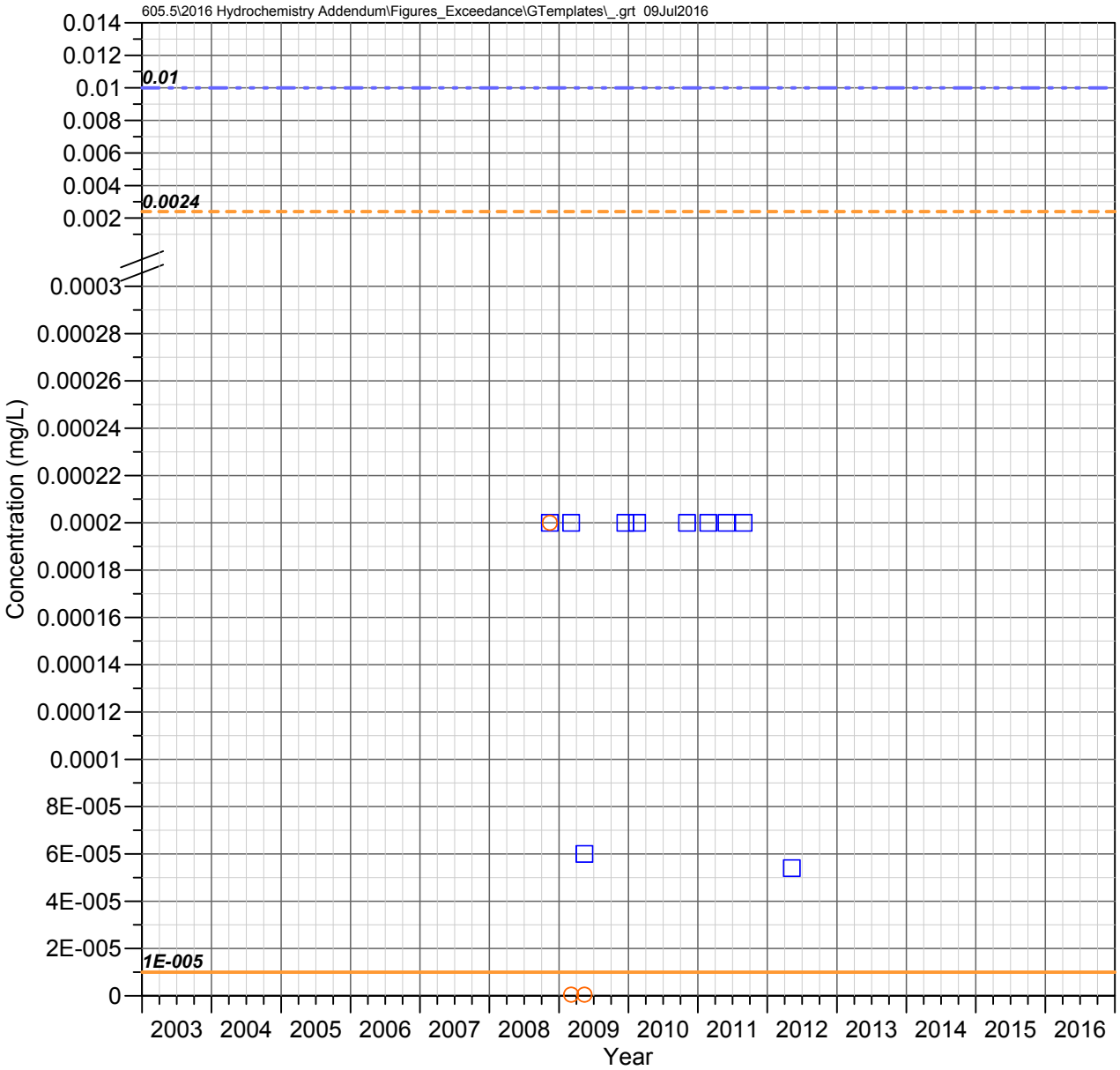


FIGURE F-524. MERCURY CONCENTRATIONS OBSERVED AT MC 5.2 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 3.4 W (Wet Leg Spring)
Mineral Creek Watershed

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.28 mg/L) **above axis limit*
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1E-5 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.0024 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.01 mg/L)

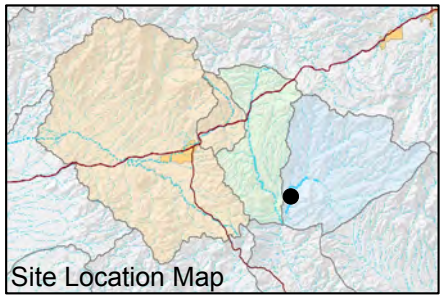
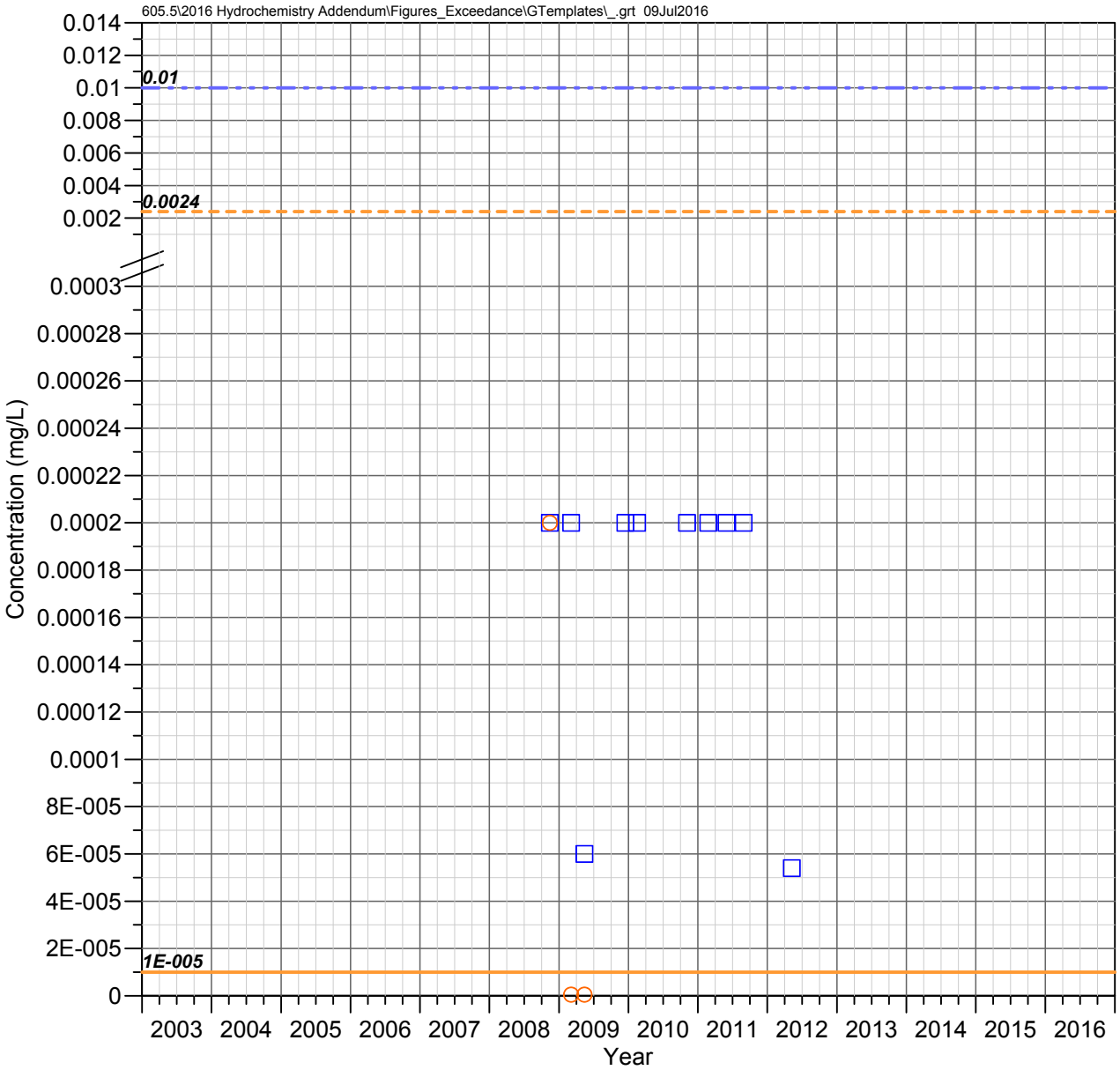


FIGURE F-525. MERCURY CONCENTRATIONS OBSERVED AT MC 3.4 W (WET LEG SPRING), MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 3.3 C (Lower Mineral)
Mineral Creek Watershed

MERCURY

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.28 mg/L) **above axis limit*
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 1E-5 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.0024 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.01 mg/L)

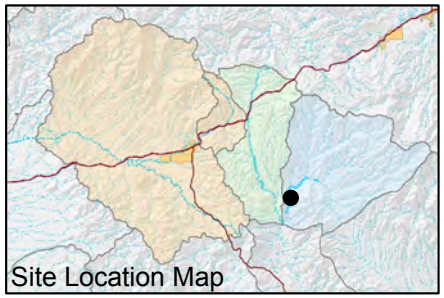
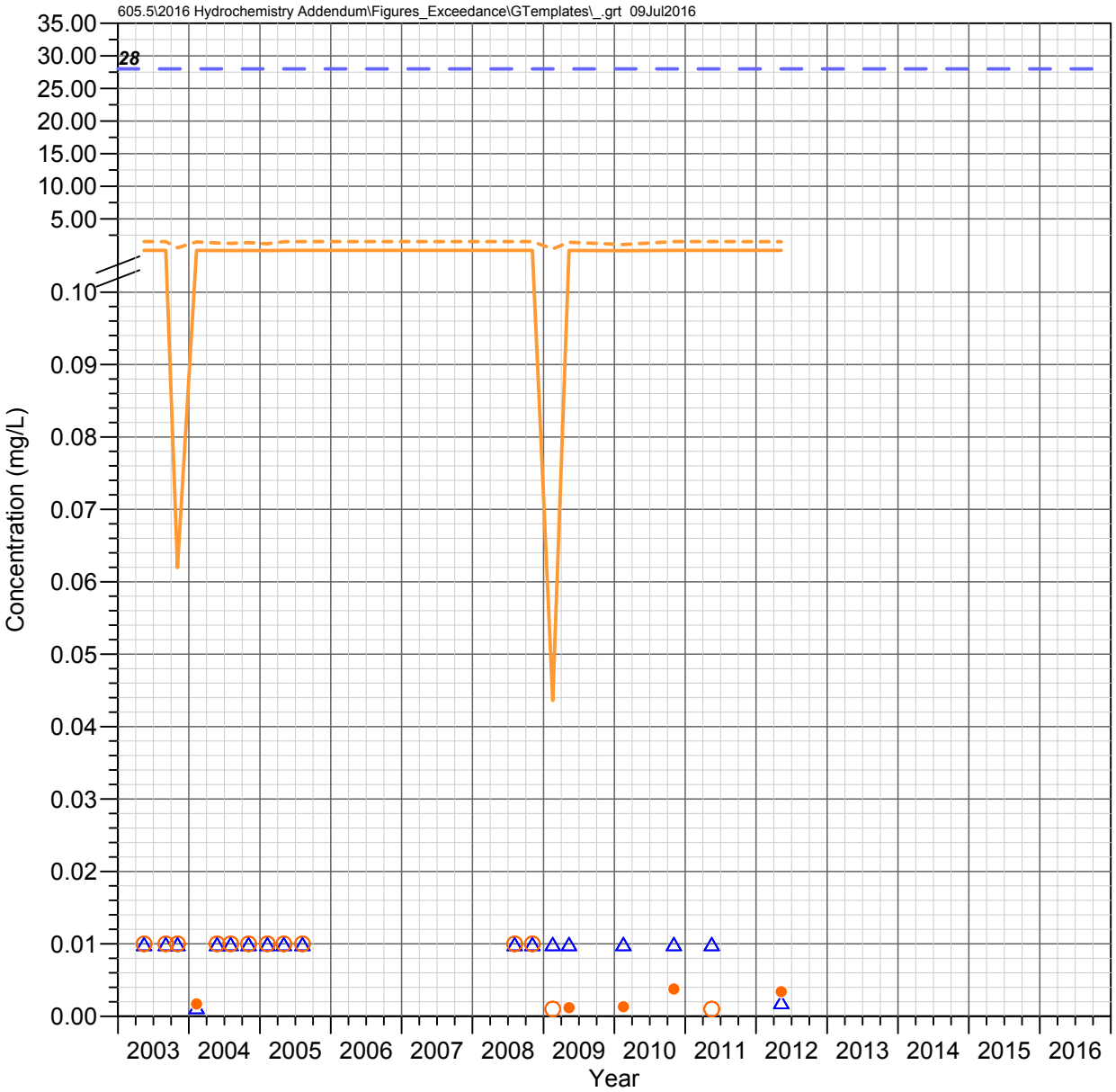


FIGURE F-526. MERCURY CONCENTRATIONS OBSERVED AT MC 3.3 C (LOWER MINERAL), MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Pump Station Spring (QC 30.7 C)
Queen Creek Watershed

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 28 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)

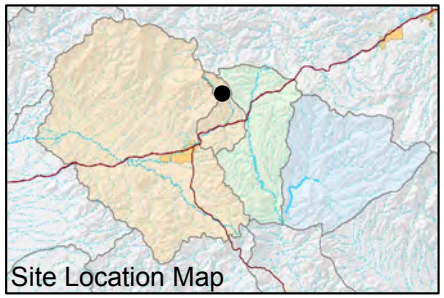
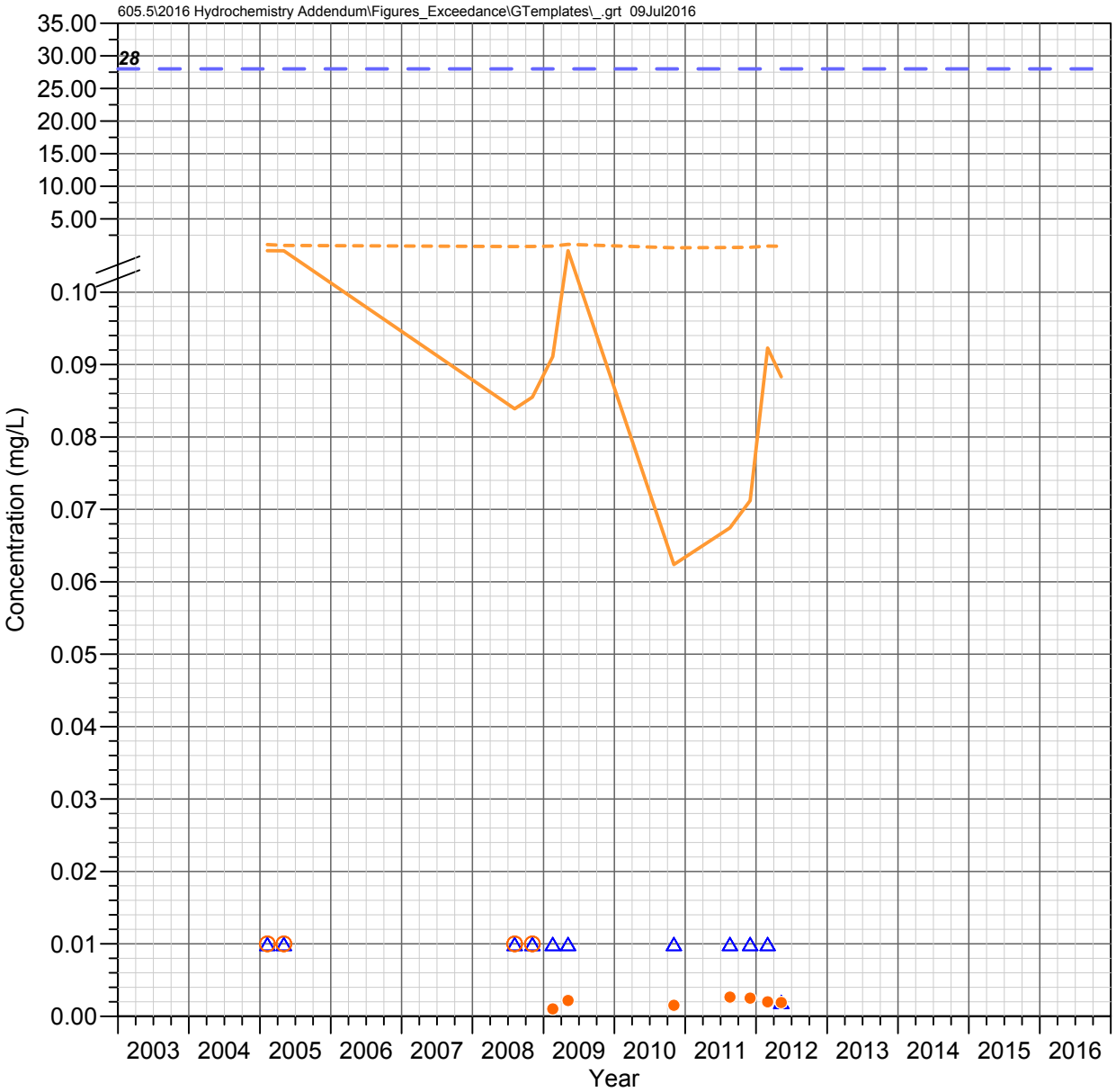


FIGURE F-527. NICKEL CONCENTRATIONS OBSERVED AT PUMP STATION SPRING (QC 30.7 C), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 27.3 C
Queen Creek Watershed

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 28 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)

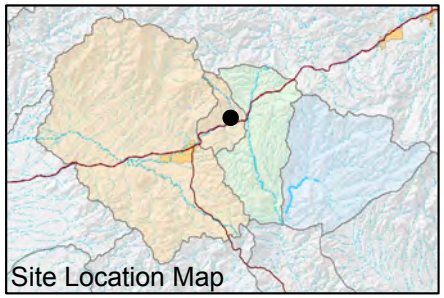
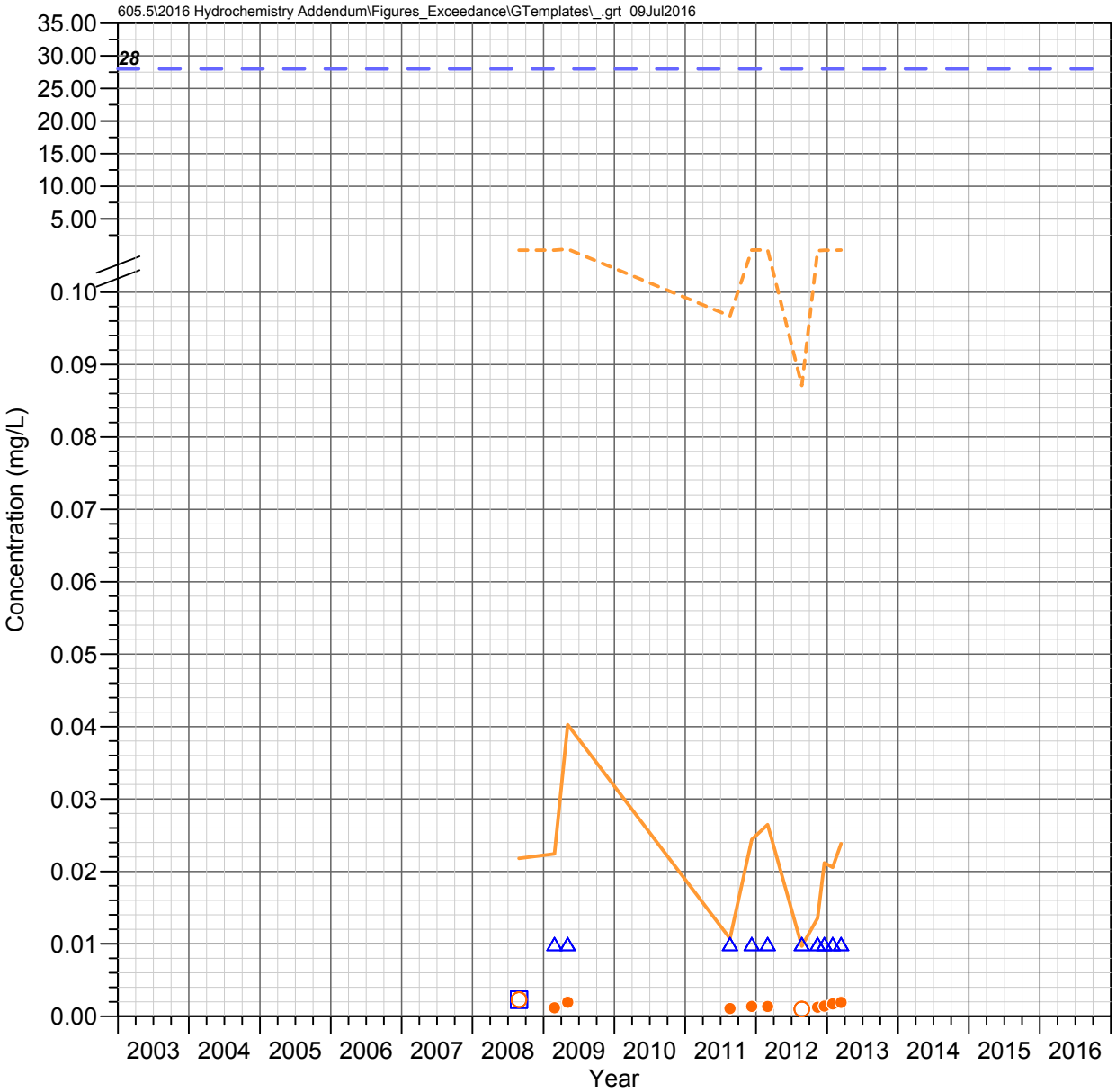


FIGURE F-528. NICKEL CONCENTRATIONS OBSERVED AT QC 27.3 C, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Oak Flat Wash
Queen Creek Watershed

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 28 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)

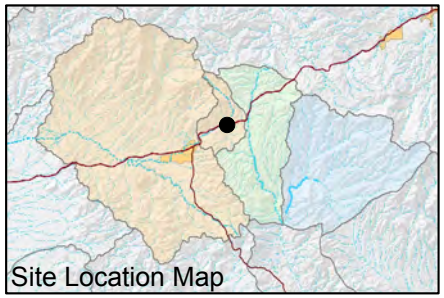
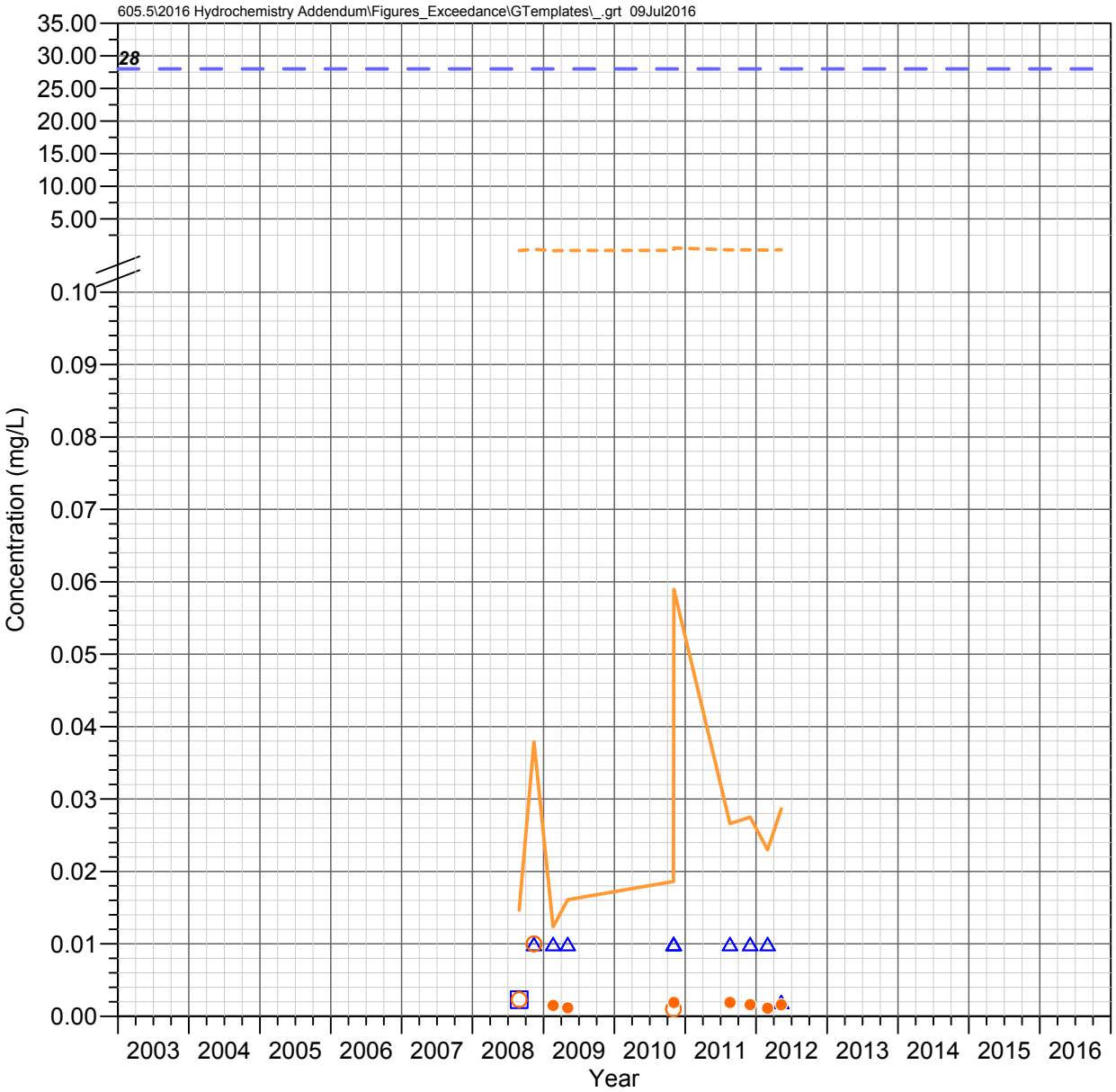


FIGURE F-529. NICKEL CONCENTRATIONS OBSERVED AT OAK FLAT WASH, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Number 9 Wash
Queen Creek Watershed

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 28 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)

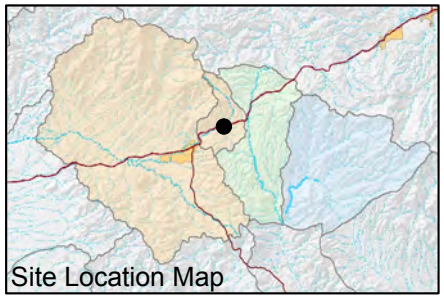
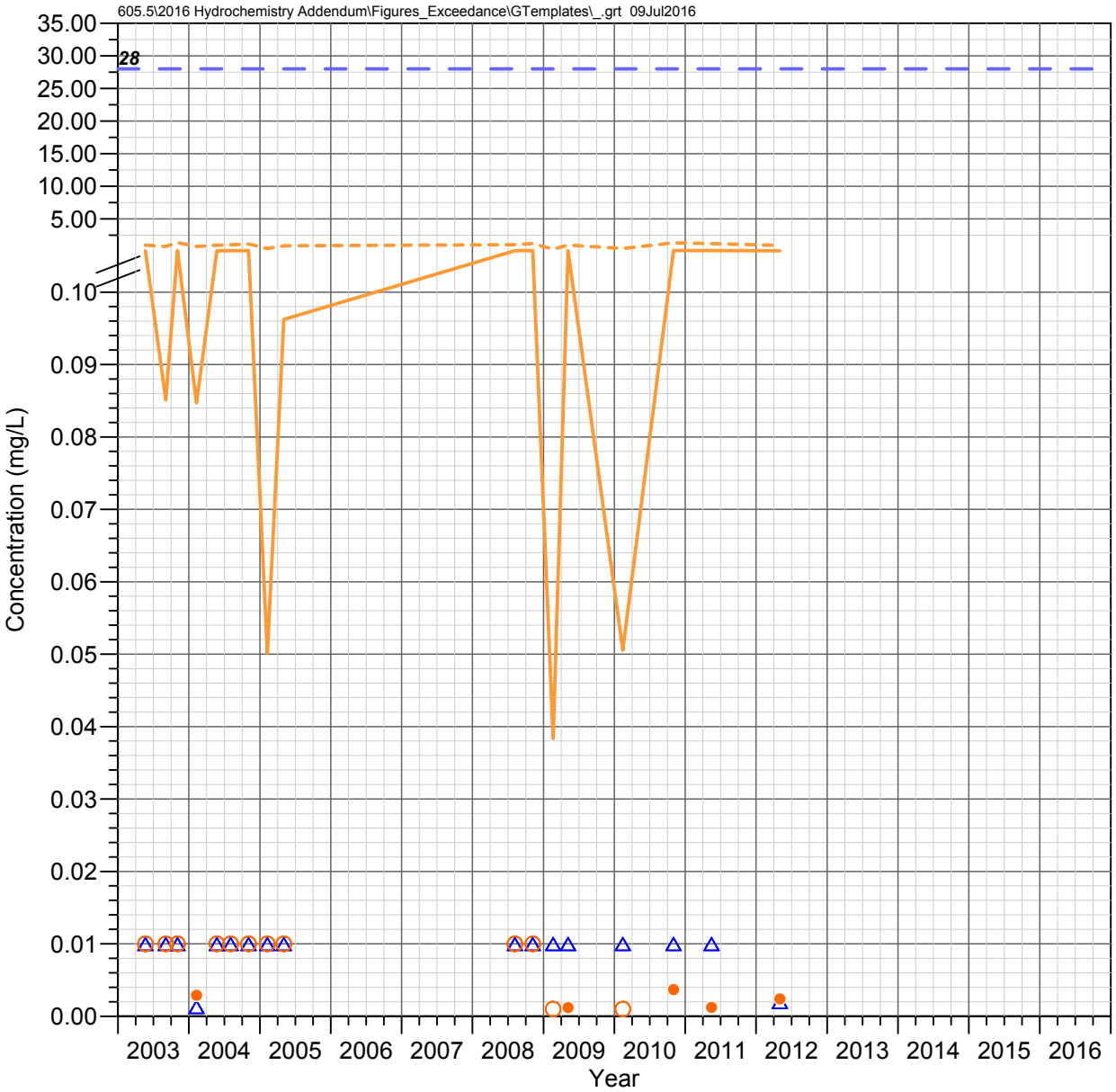


FIGURE F-530. NICKEL CONCENTRATIONS OBSERVED AT NUMBER 9 WASH, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Boulder Hole (QC 23.6 C)
Queen Creek Watershed

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 28 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)

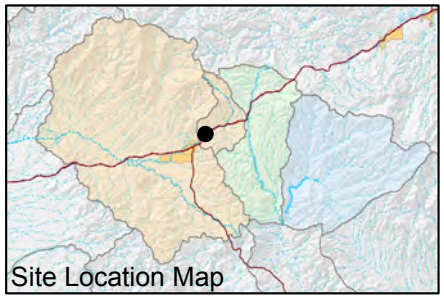
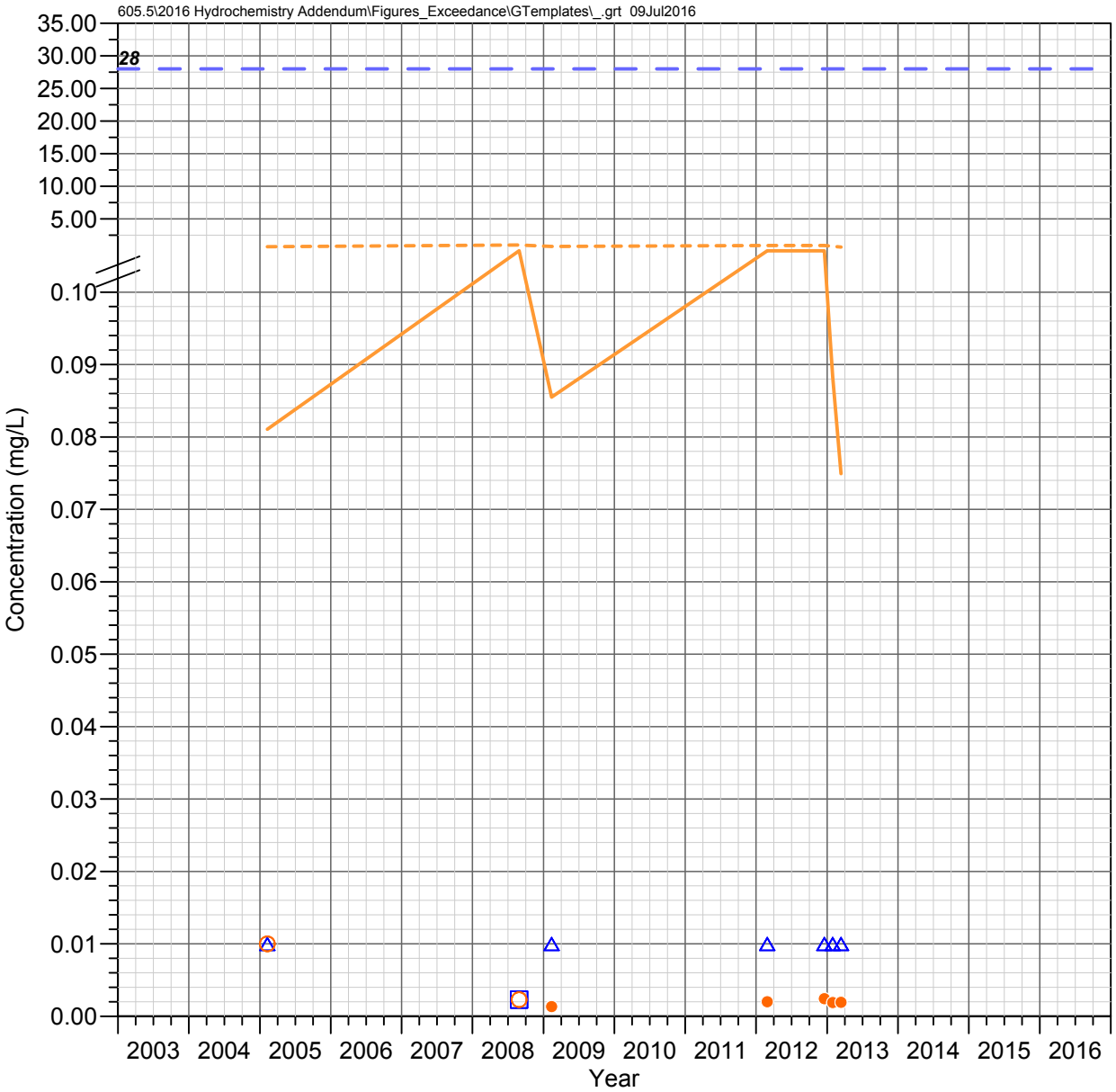


FIGURE F-531. NICKEL CONCENTRATIONS OBSERVED AT BOULDER HOLE (QC 23.6 C), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 22.6 E (Karst Spring)
Queen Creek Watershed

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 28 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)

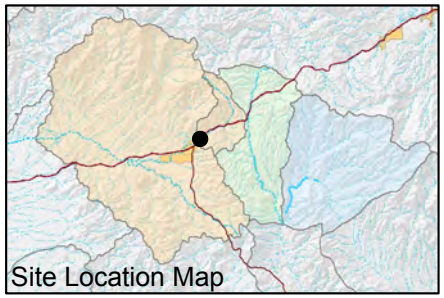
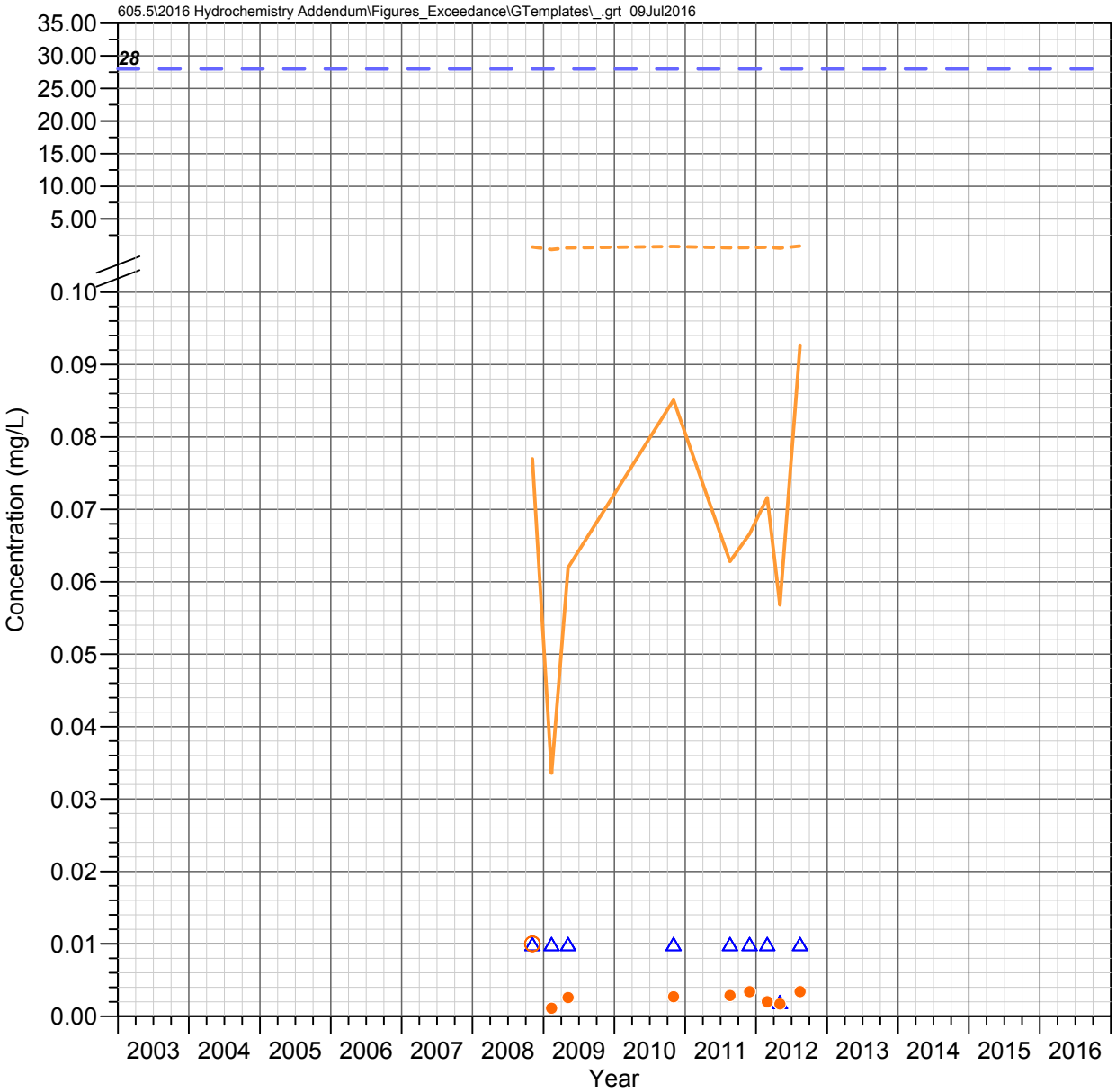


FIGURE F-532. NICKEL CONCENTRATIONS OBSERVED AT QC 22.6 E (KARST SPRING), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 21.7 C (Magma Avenue)
Queen Creek Watershed

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 28 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)

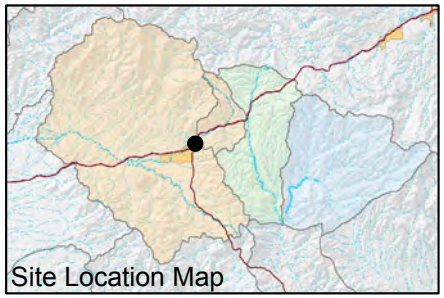
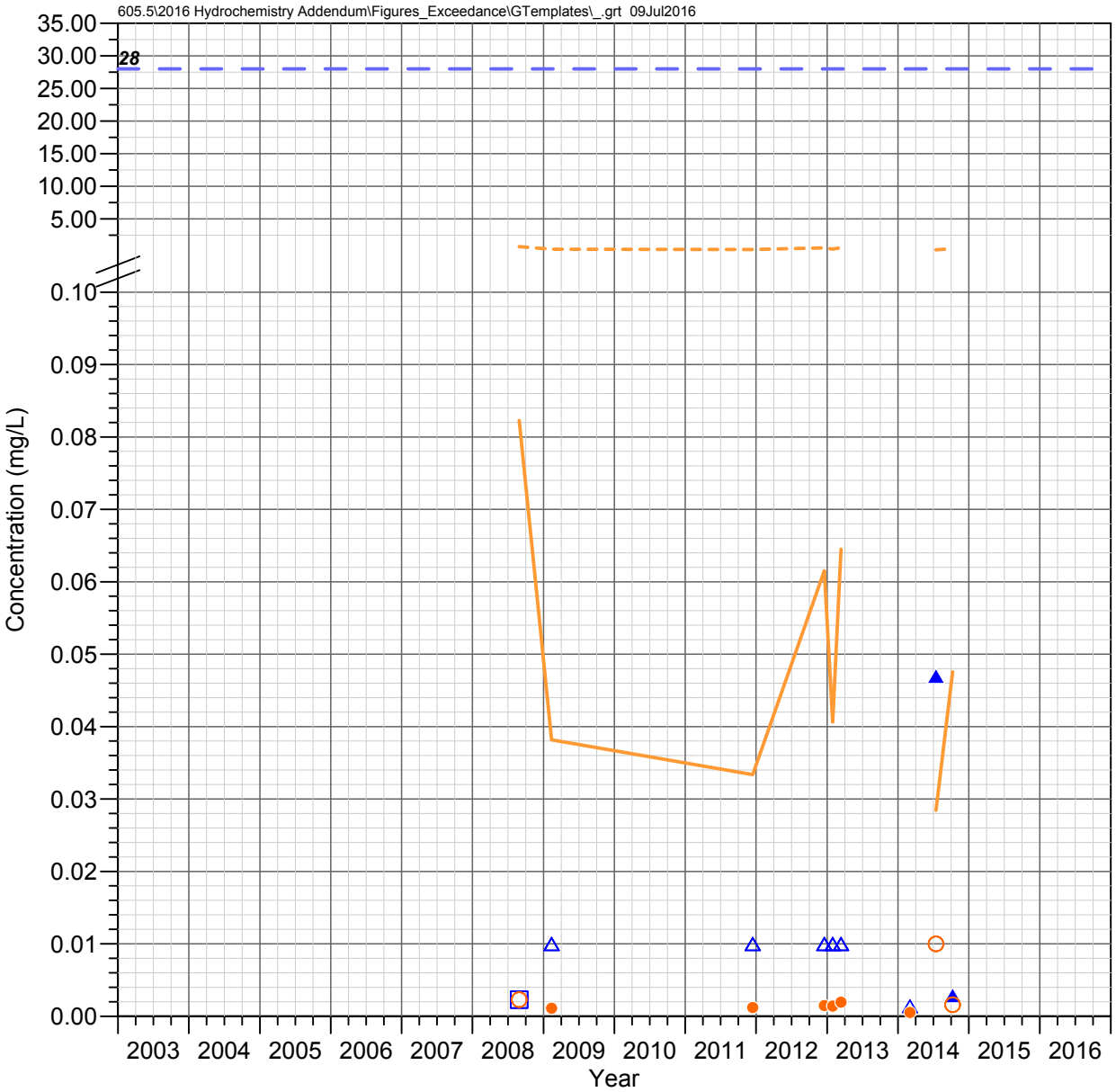


FIGURE F-533. NICKEL CONCENTRATIONS OBSERVED AT QC 21.7 C (MAGMA AVENUE), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 19.7 C
Queen Creek Watershed

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 28 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)

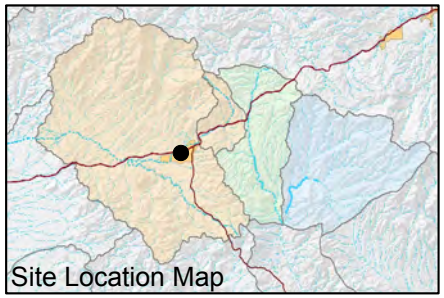
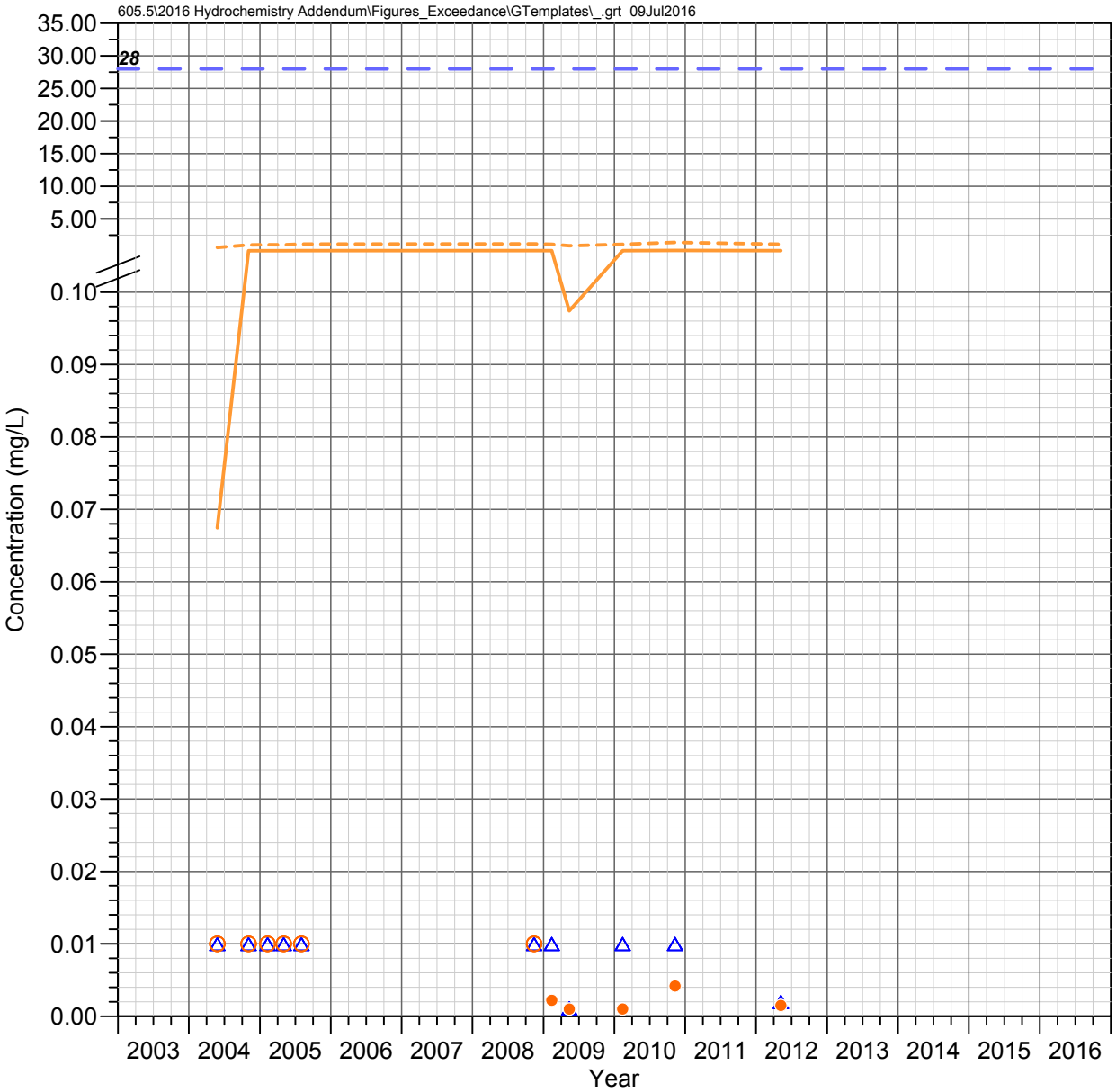


FIGURE F-534. NICKEL CONCENTRATIONS OBSERVED AT QC 19.7 C, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Bored Spring
Queen Creek Watershed

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 28 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)

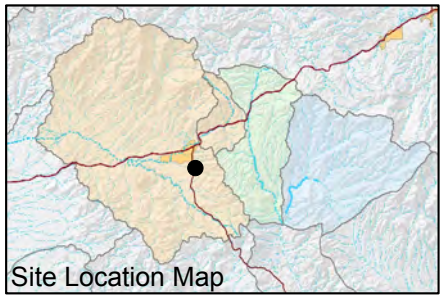
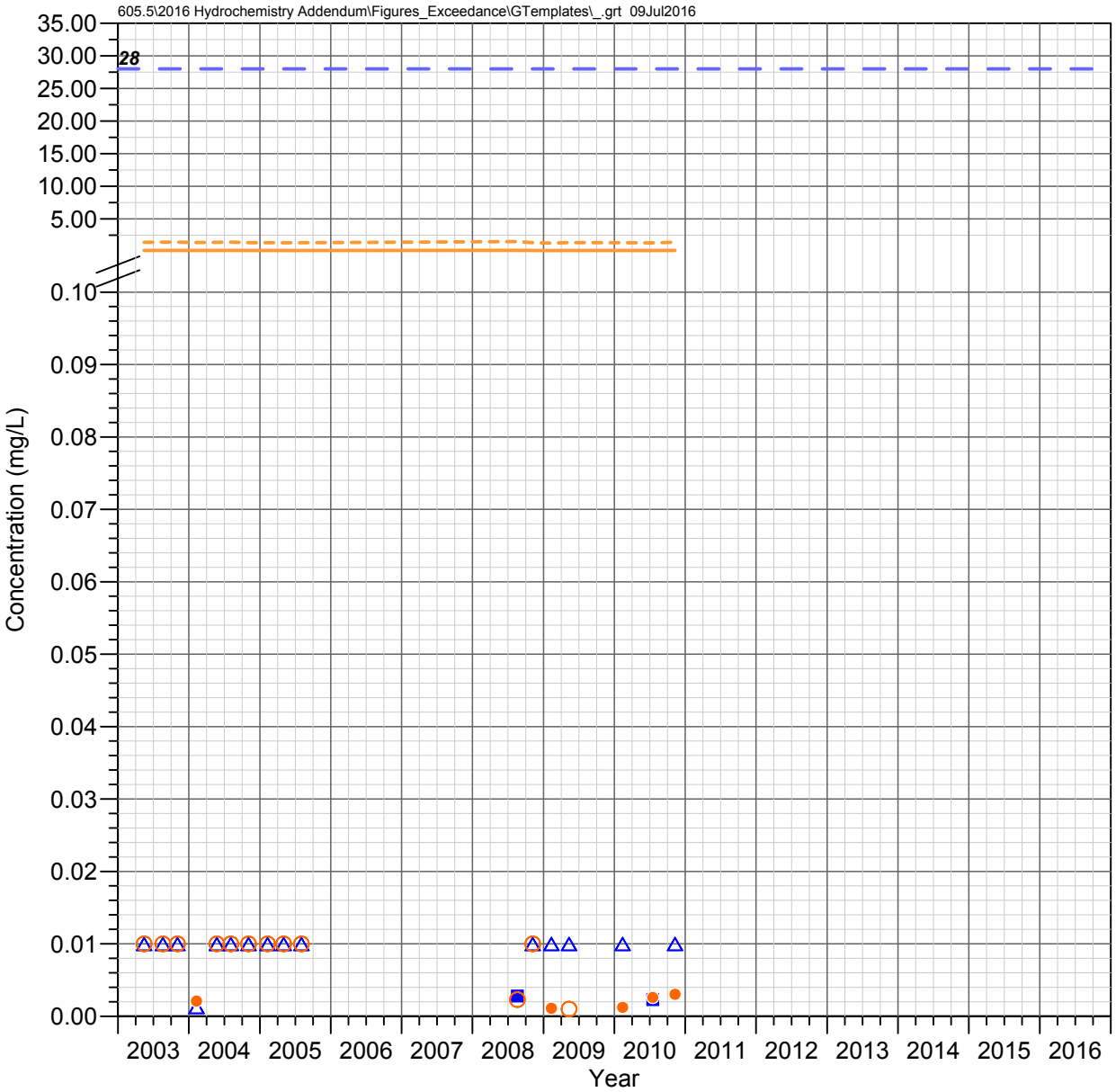


FIGURE F-535. NICKEL CONCENTRATIONS OBSERVED AT BORED SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Hidden Spring
Queen Creek Watershed

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 28 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)

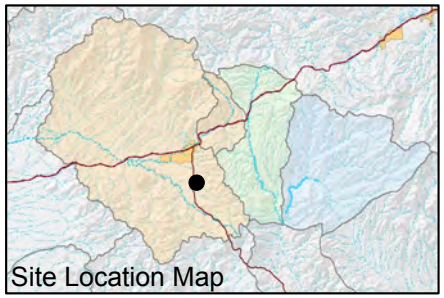
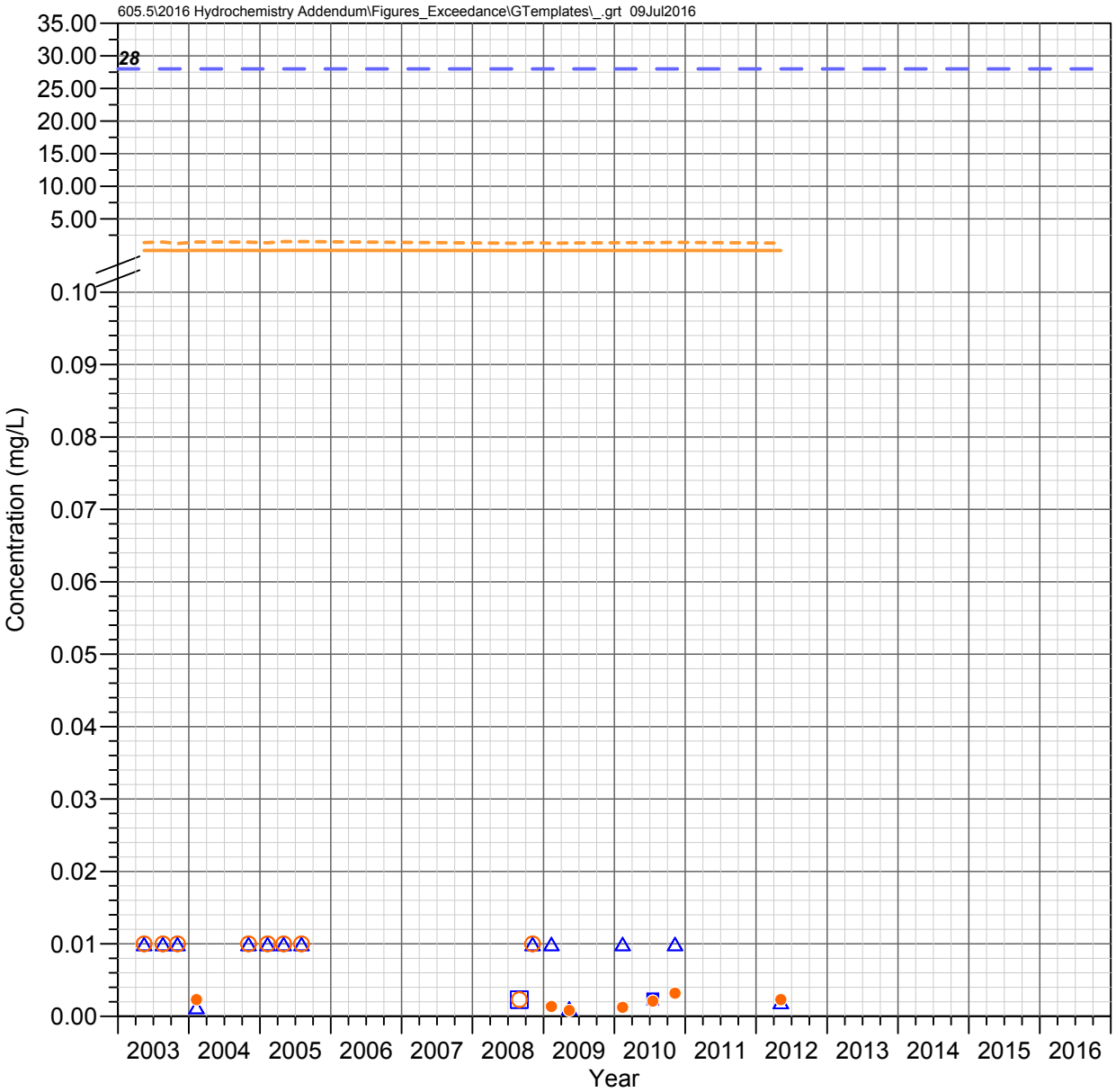


FIGURE F-536. NICKEL CONCENTRATIONS OBSERVED AT HIDDEN SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Kane Spring
Queen Creek Watershed

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 28 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)

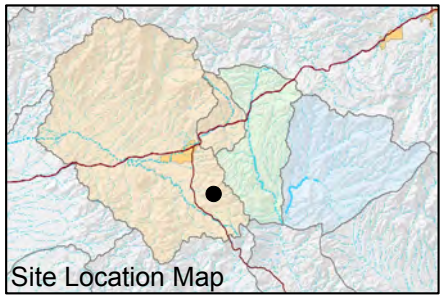
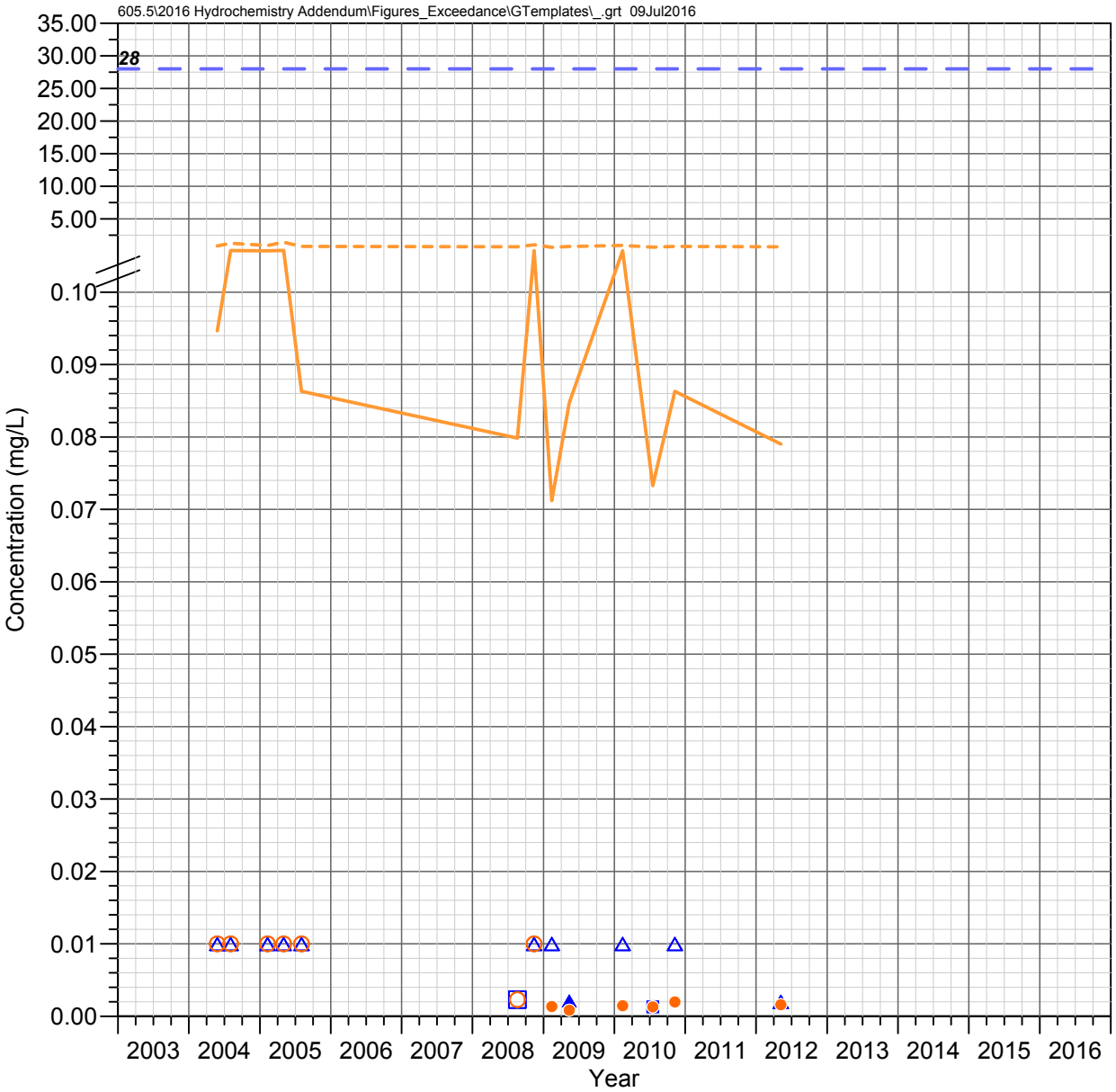


FIGURE F-537. NICKEL CONCENTRATIONS OBSERVED AT KANE SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Blue Spring
Queen Creek Watershed

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 28 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)

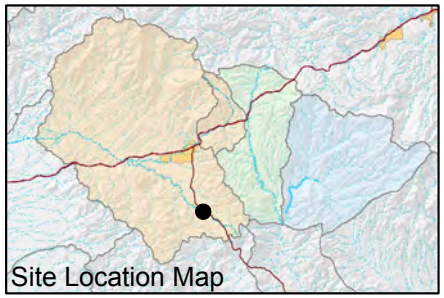
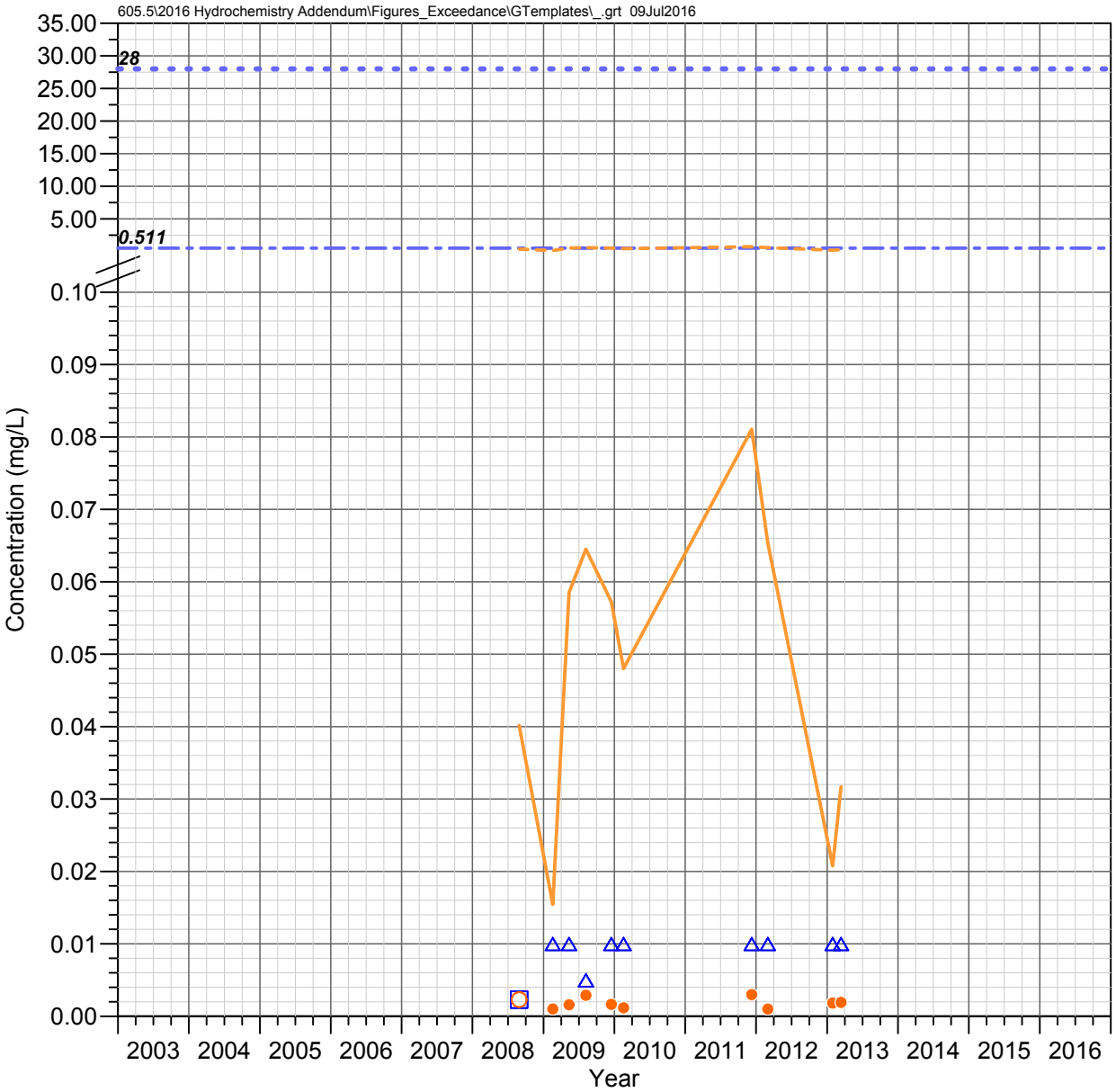


FIGURE F-538. NICKEL CONCENTRATIONS OBSERVED AT BLUE SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



IC 1.0 C
Devils Canyon Watershed

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 28 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 0.511 mg/L)

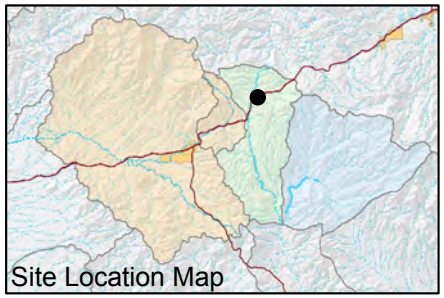
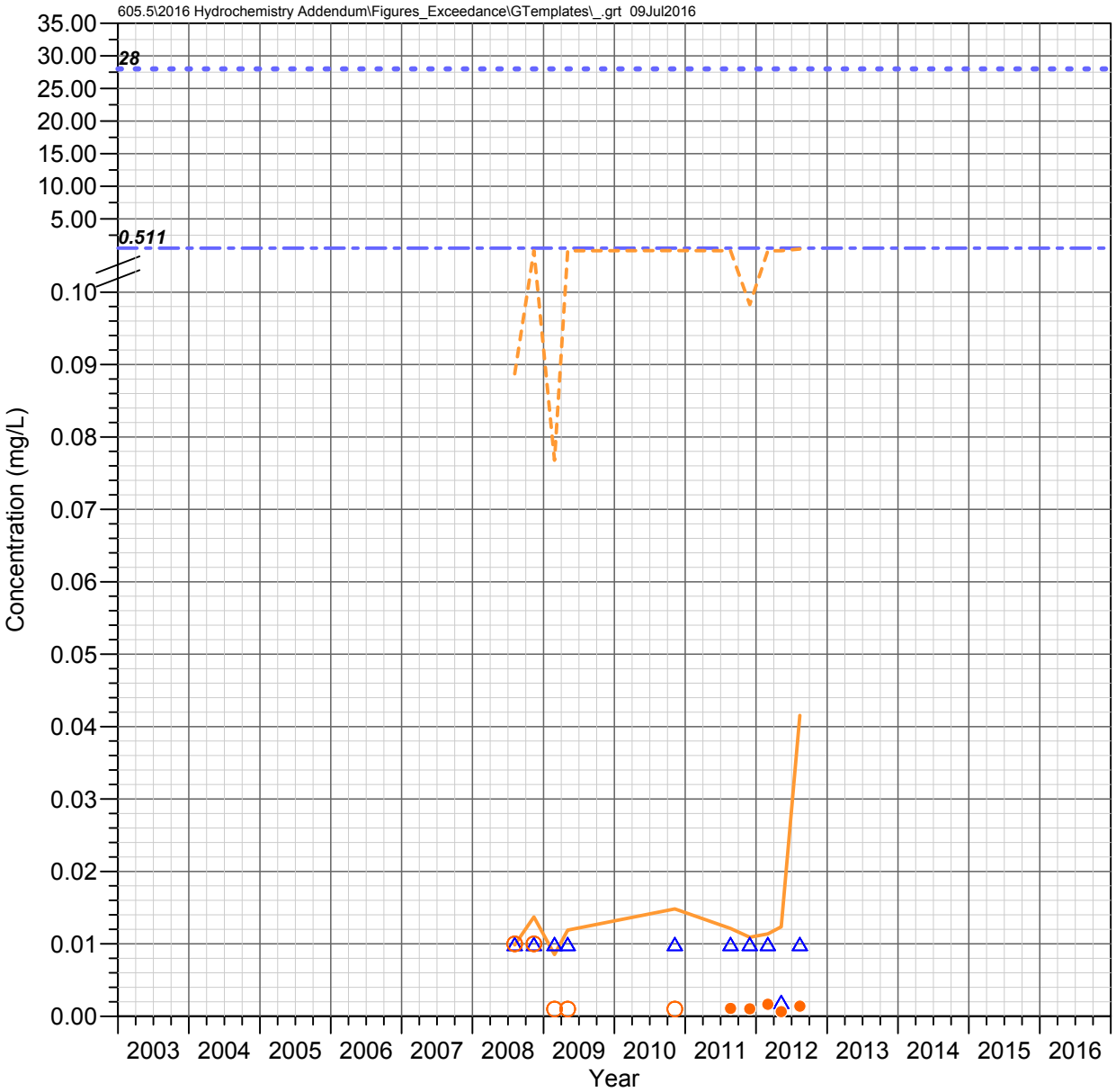


FIGURE F-539. NICKEL CONCENTRATIONS OBSERVED AT IC 1.0 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 15.5 C
Devils Canyon Watershed

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 28 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 0.511 mg/L)

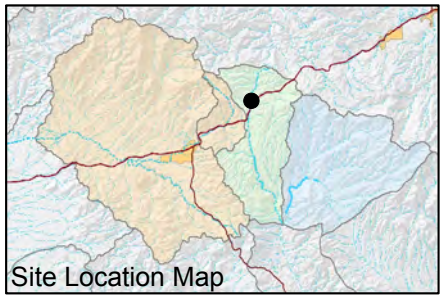
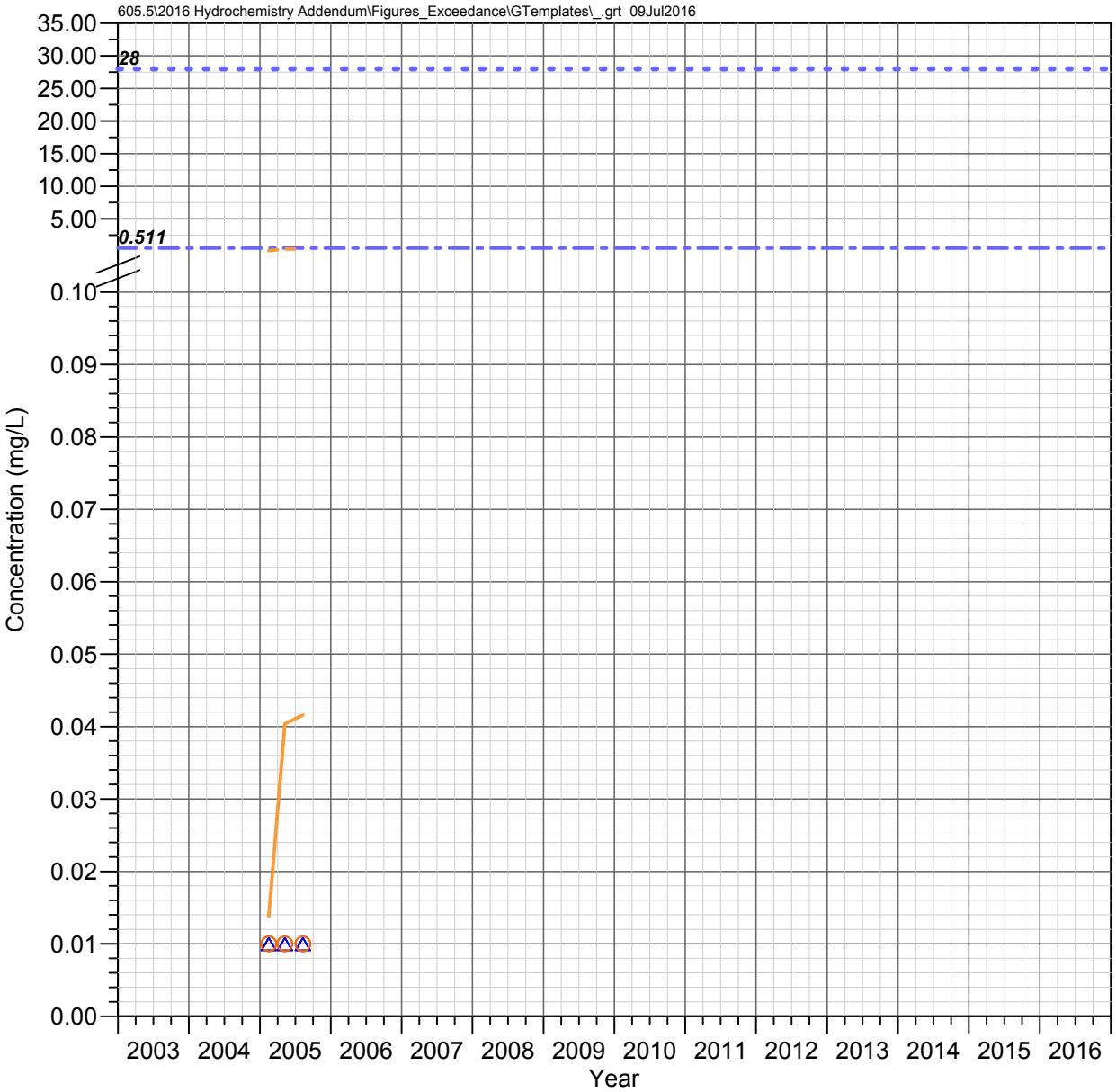


FIGURE F-540. NICKEL CONCENTRATIONS OBSERVED AT DC 15.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 15.2 C
Devils Canyon Watershed

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 28 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 0.511 mg/L)

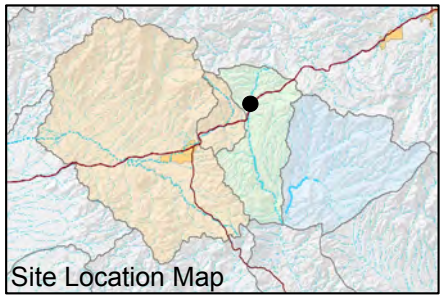
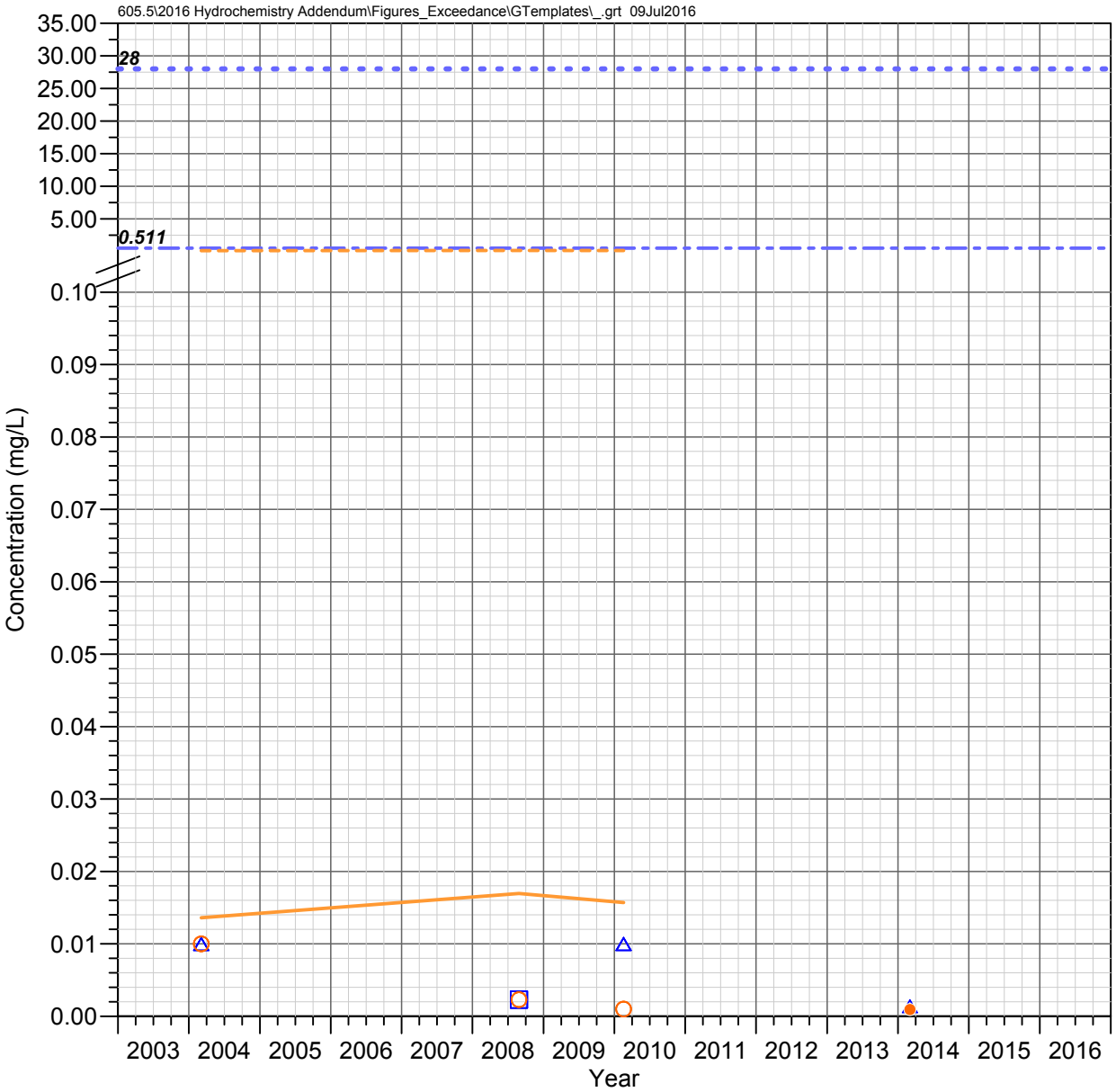


FIGURE F-541. NICKEL CONCENTRATIONS OBSERVED AT DC 15.2 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 14.7 C
Devils Canyon Watershed

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 28 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 0.511 mg/L)

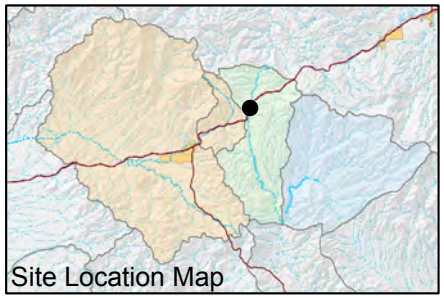
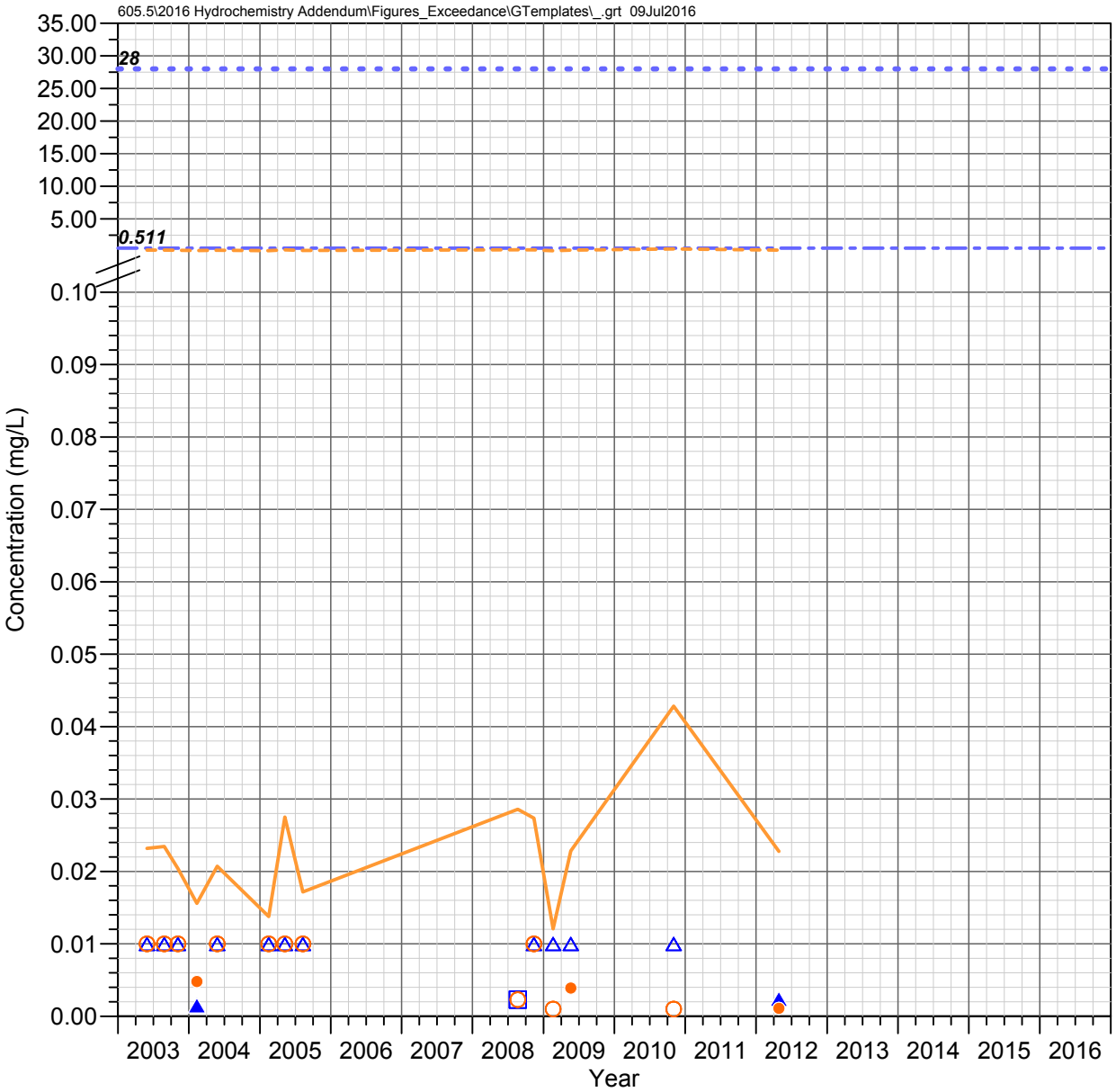


FIGURE F-542. NICKEL CONCENTRATIONS OBSERVED AT DC 14.7 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 13.5 C
Devils Canyon Watershed

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 28 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 0.511 mg/L)

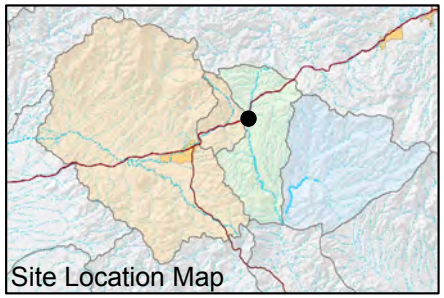
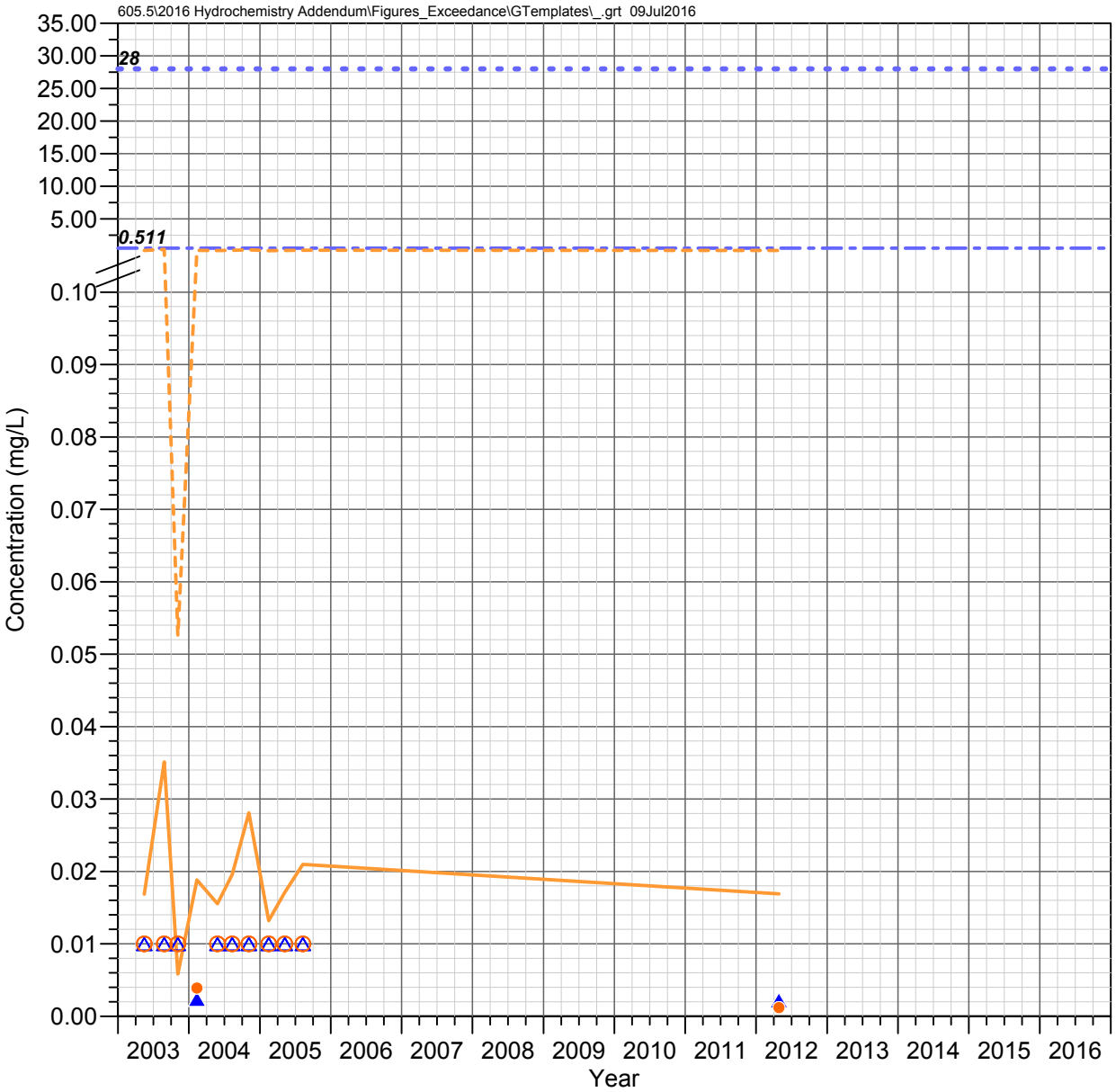


FIGURE F-543. NICKEL CONCENTRATIONS OBSERVED AT DC 13.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 10.9 C
Devils Canyon Watershed

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 28 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 0.511 mg/L)

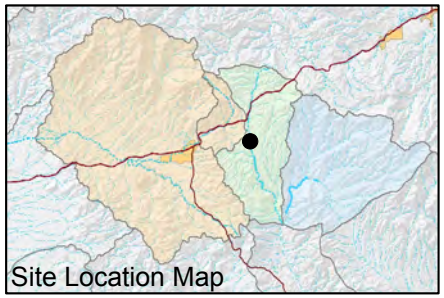
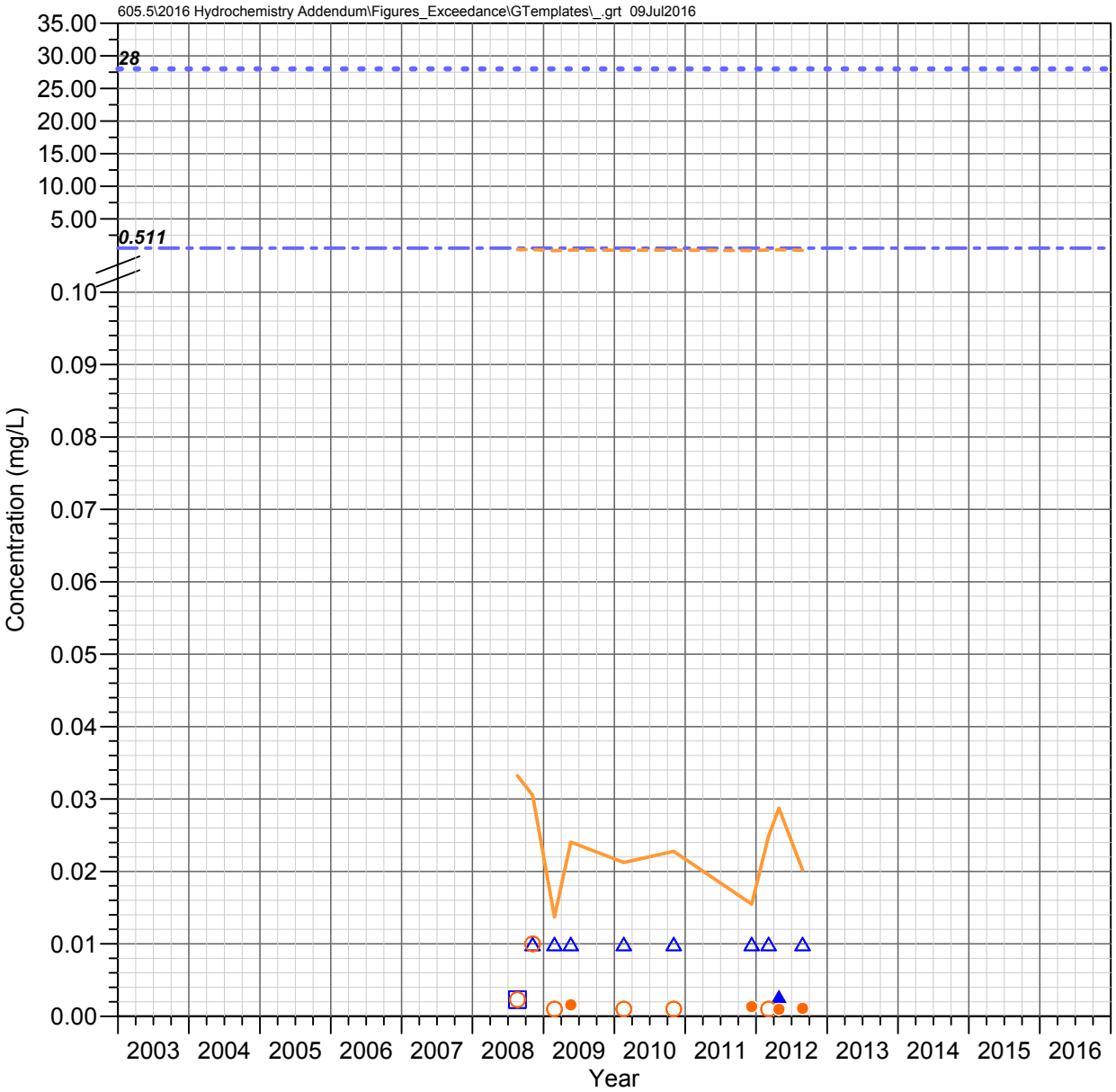


FIGURE F-544. NICKEL CONCENTRATIONS OBSERVED AT DC 10.9 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



RR 1.5 C
Devils Canyon Watershed

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 28 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 0.511 mg/L)

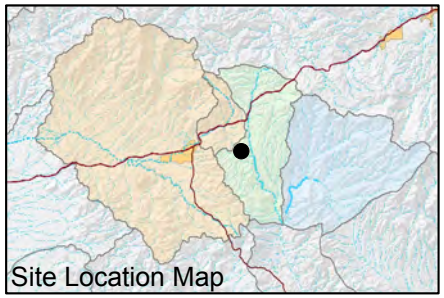
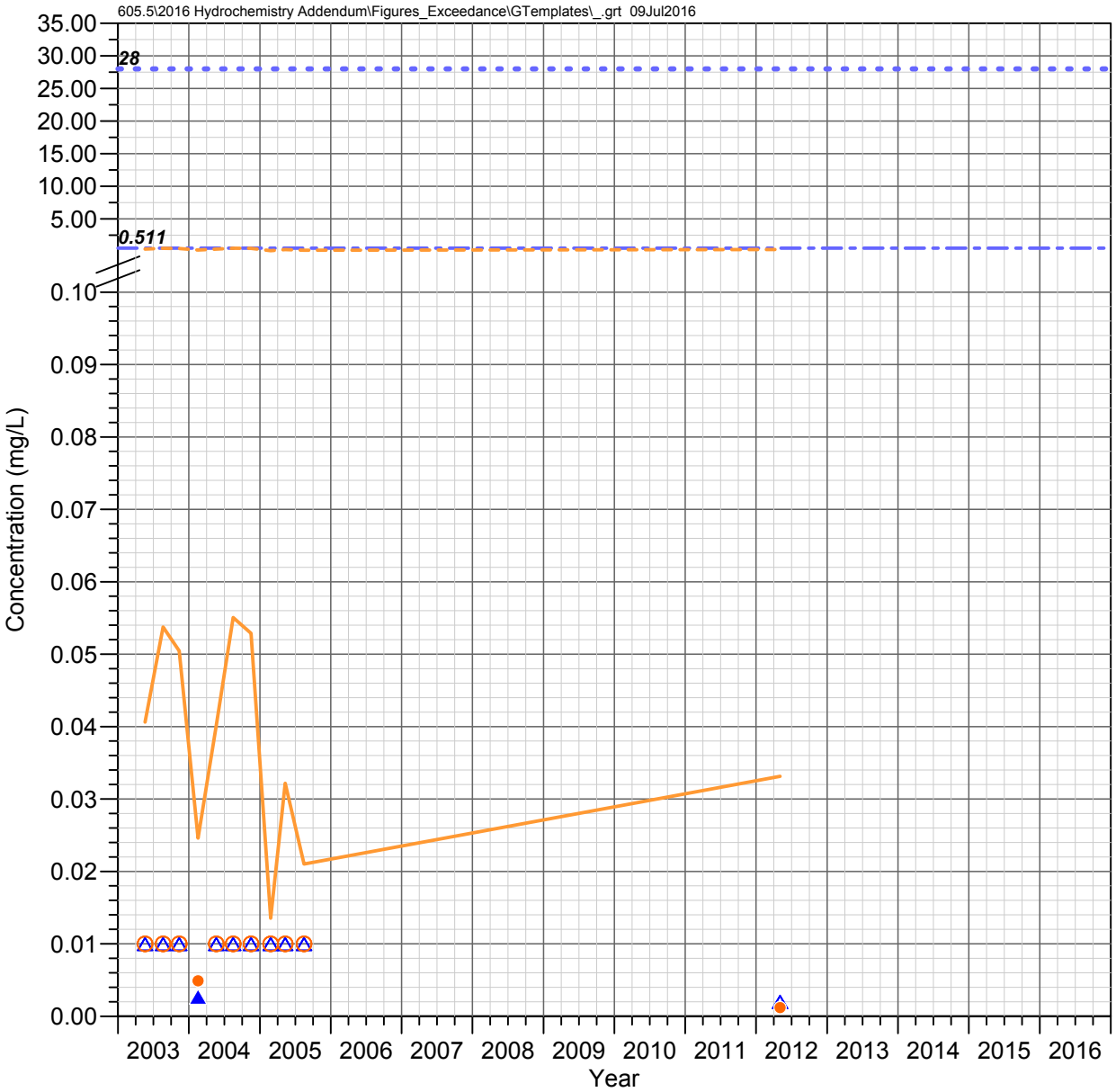


FIGURE F-545. NICKEL CONCENTRATIONS OBSERVED AT RR 1.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.8 C
Devils Canyon Watershed

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 28 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 0.511 mg/L)

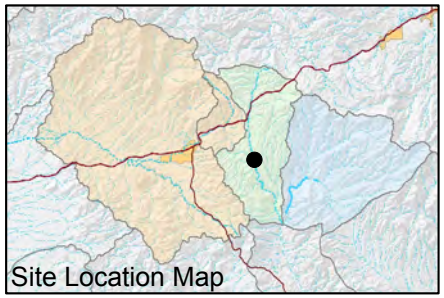
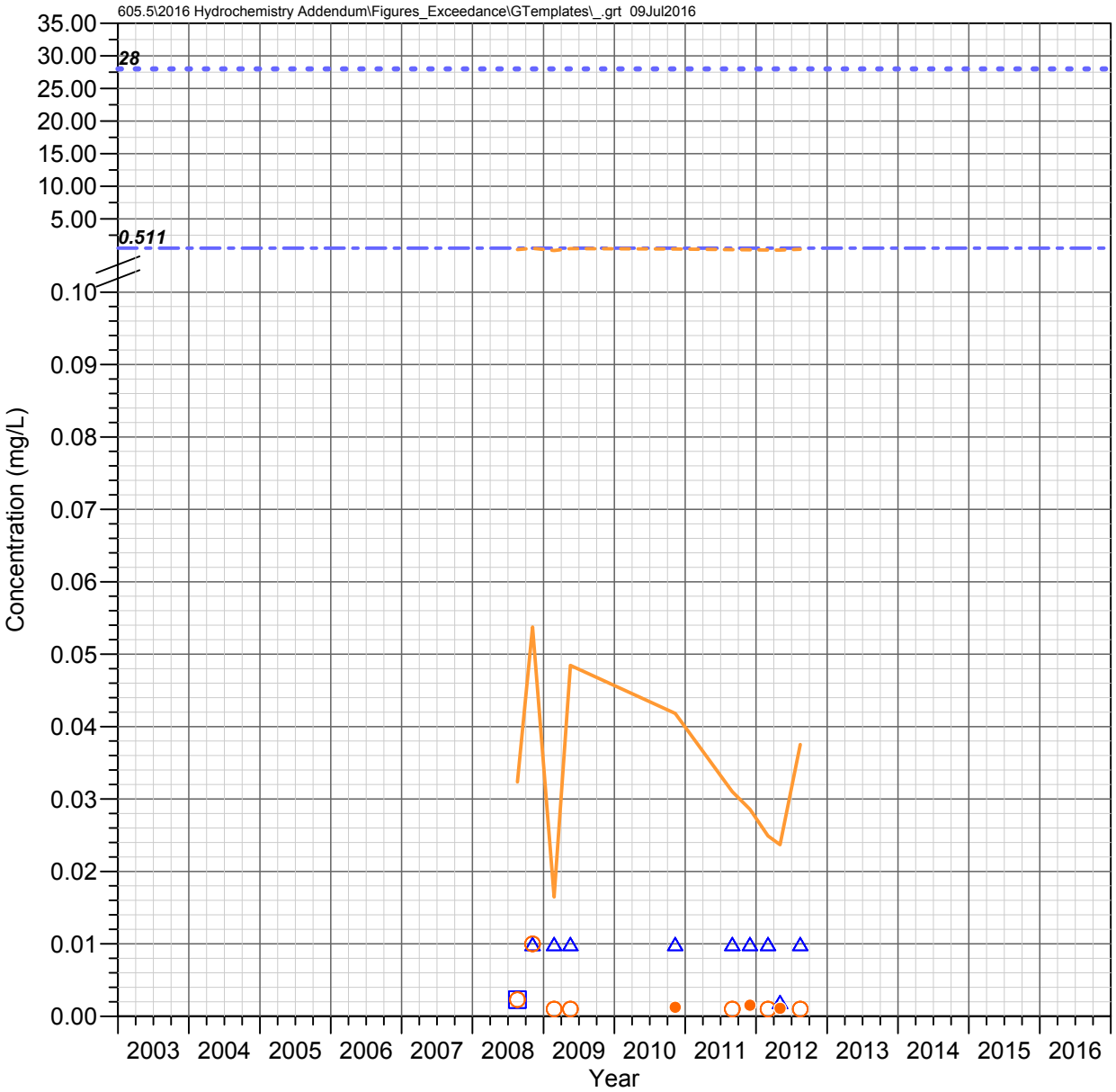


FIGURE F-546. NICKEL CONCENTRATIONS OBSERVED AT DC 8.8 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



H 0.1 C
Devils Canyon Watershed

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 28 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 0.511 mg/L)

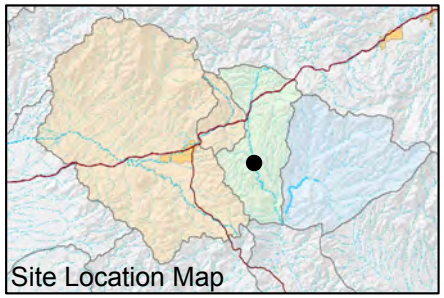
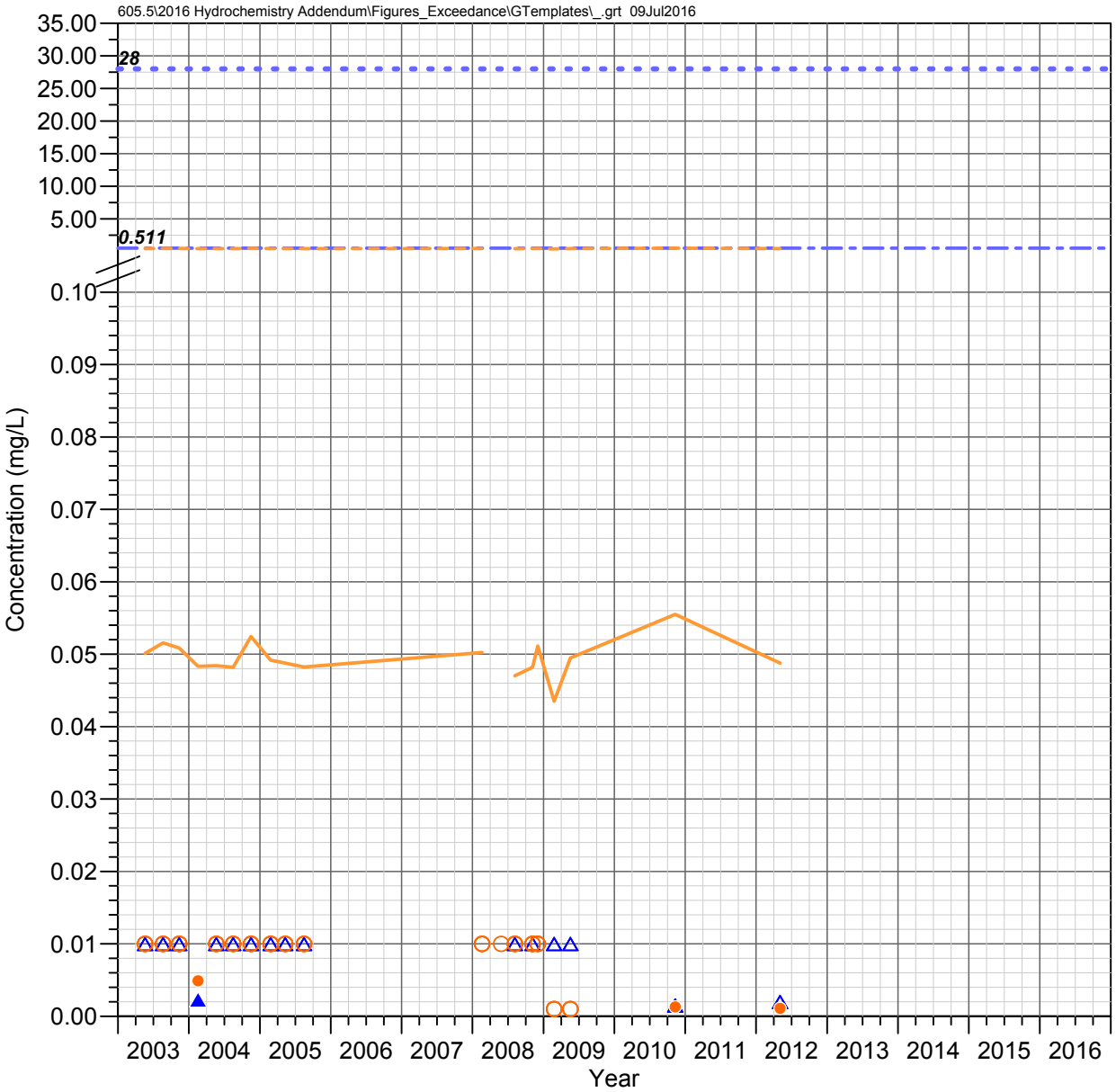


FIGURE F-547. NICKEL CONCENTRATIONS OBSERVED AT H 0.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.2 W
Devils Canyon Watershed

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 28 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 0.511 mg/L)

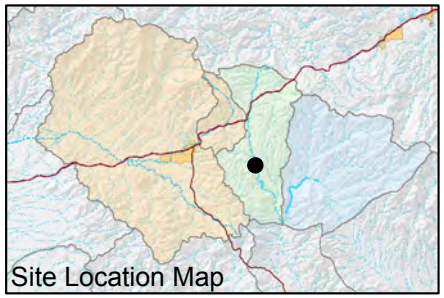
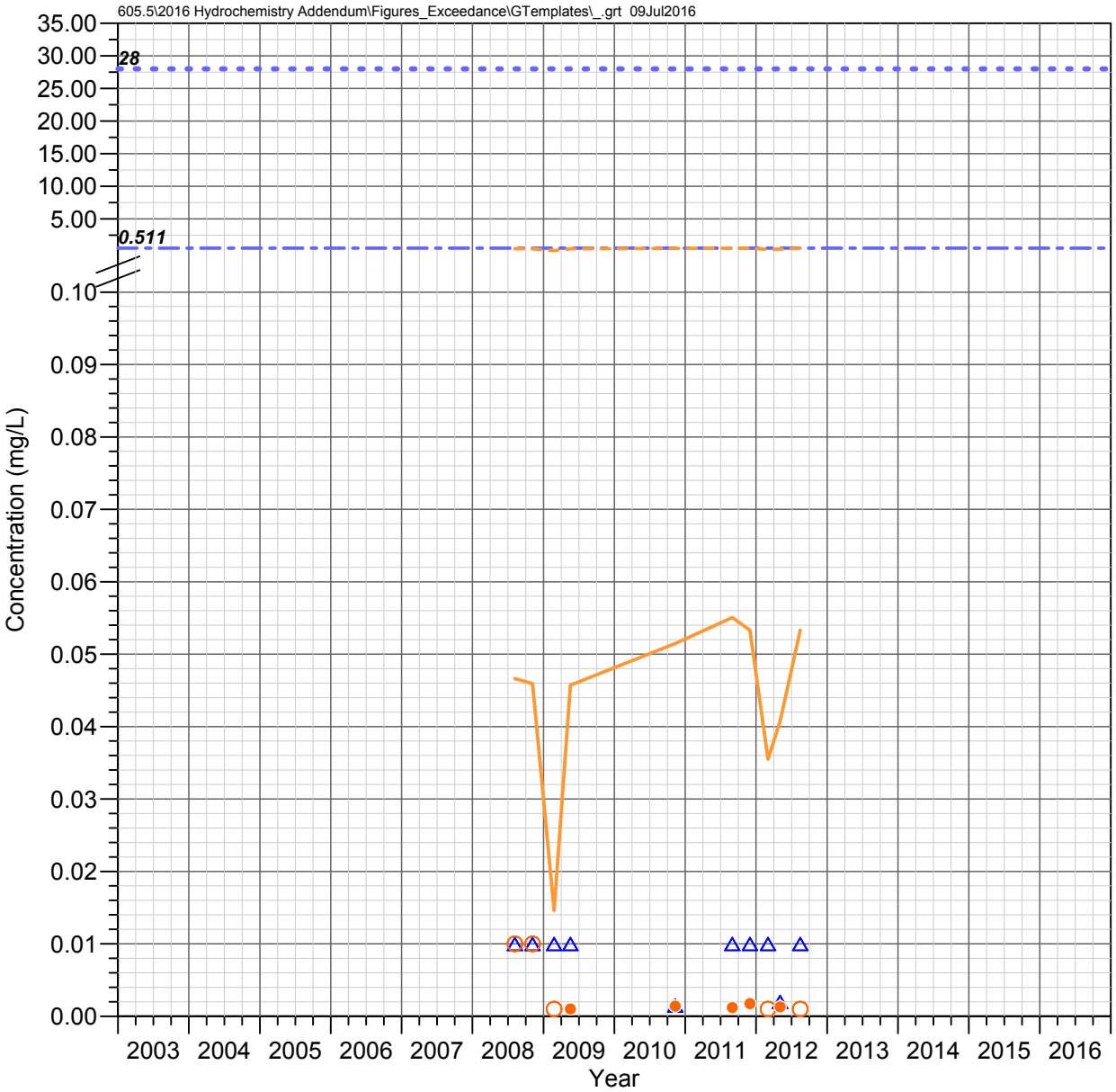


FIGURE F-548. NICKEL CONCENTRATIONS OBSERVED AT DC 8.2 W, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.1 C
Devils Canyon Watershed

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 28 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 0.511 mg/L)

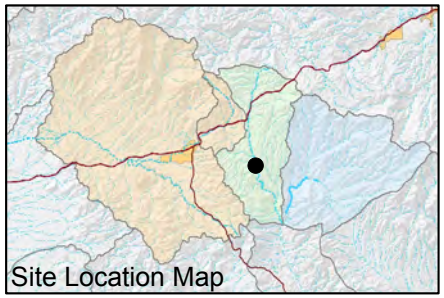
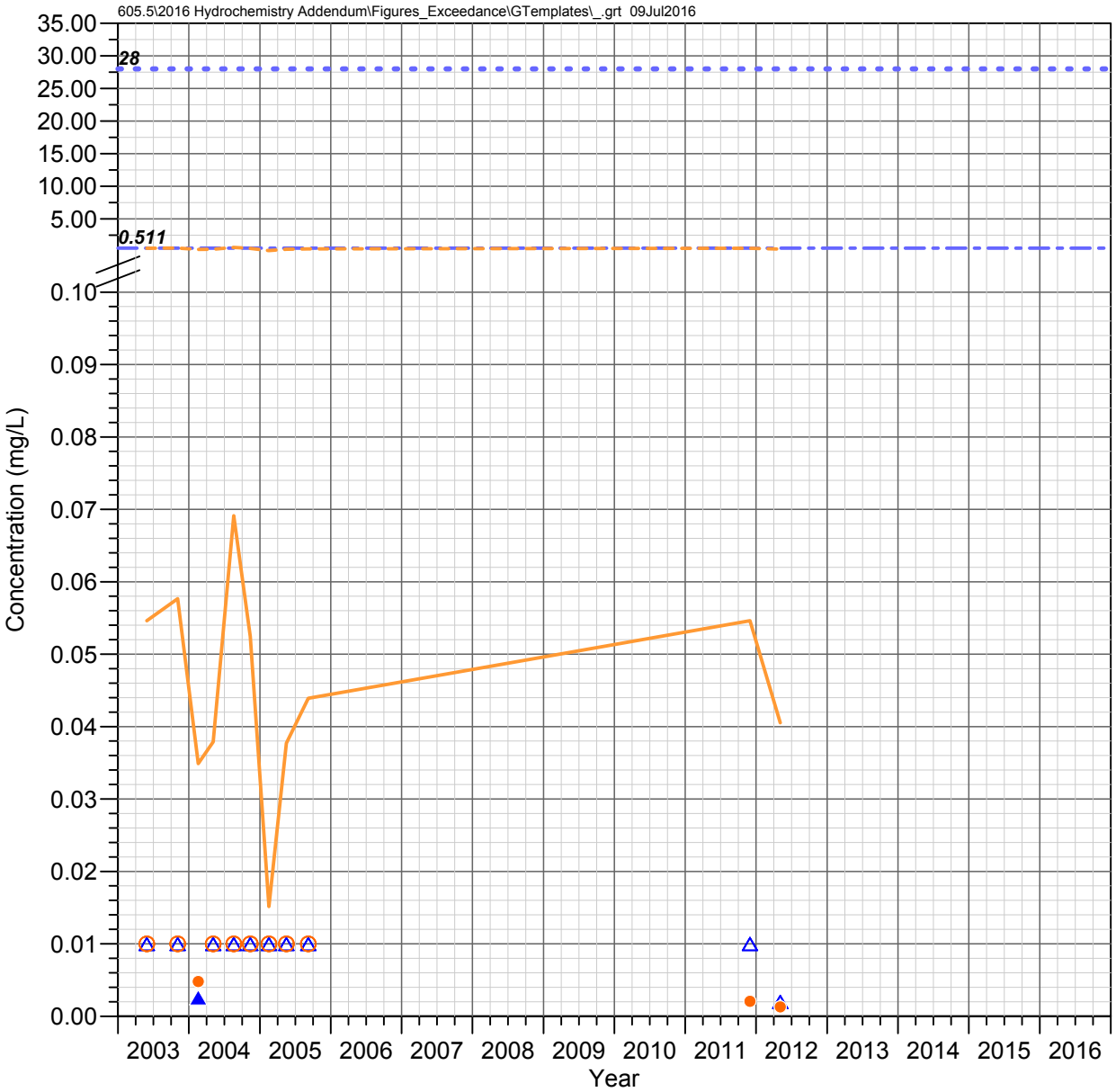


FIGURE F-549. NICKEL CONCENTRATIONS OBSERVED AT DC 8.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 7.1 C
Devils Canyon Watershed

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 28 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 0.511 mg/L)

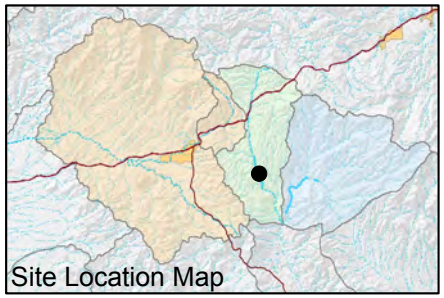
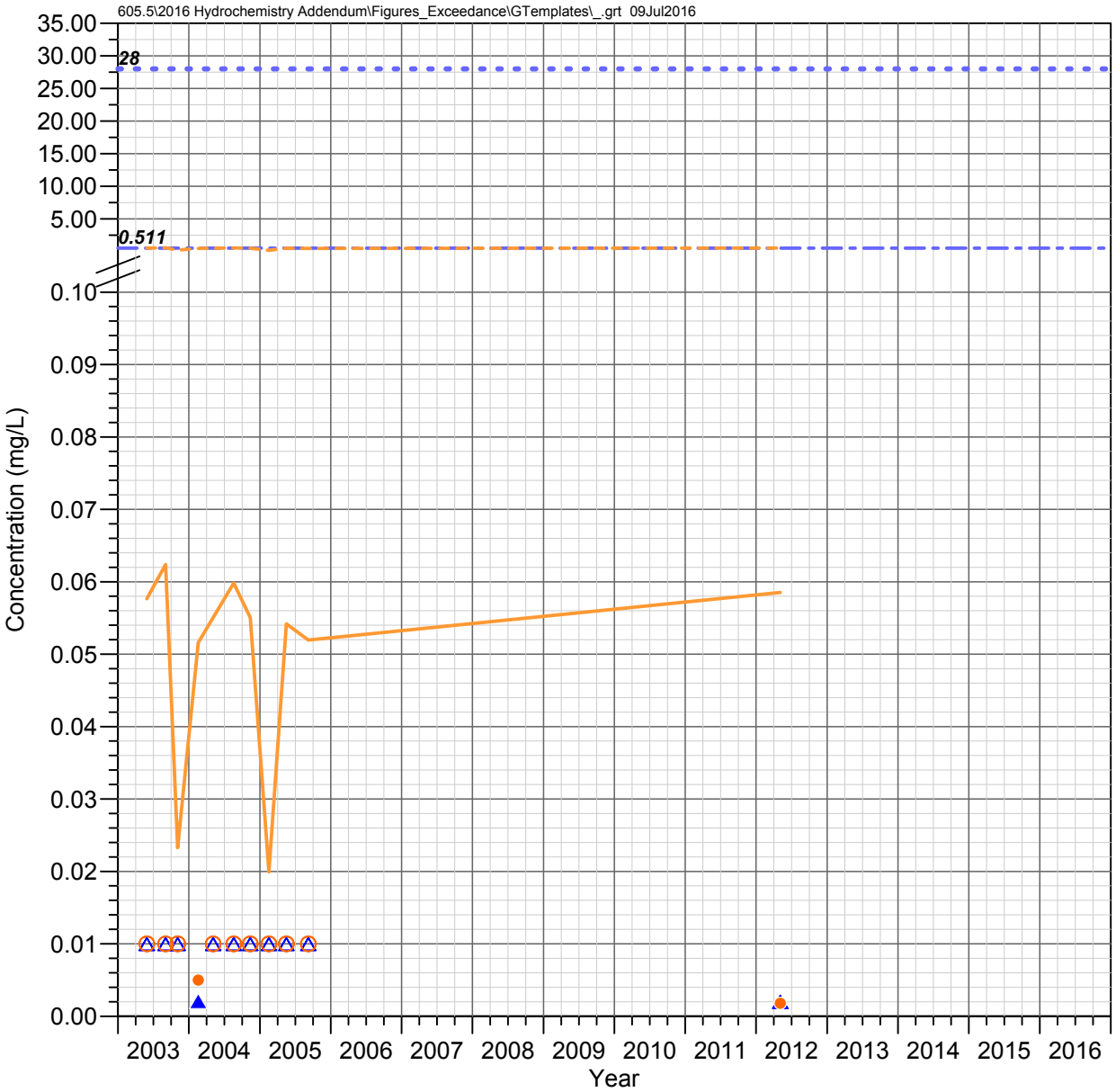


FIGURE F-550. NICKEL CONCENTRATIONS OBSERVED AT DC 7.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.6 W (DCT 6.6 W) Devils Canyon Watershed

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 28 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 0.511 mg/L)

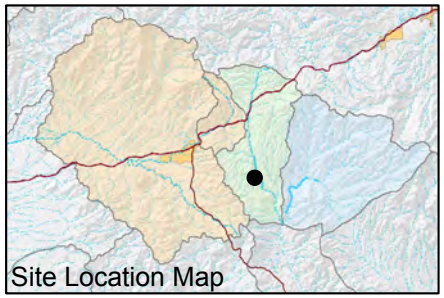
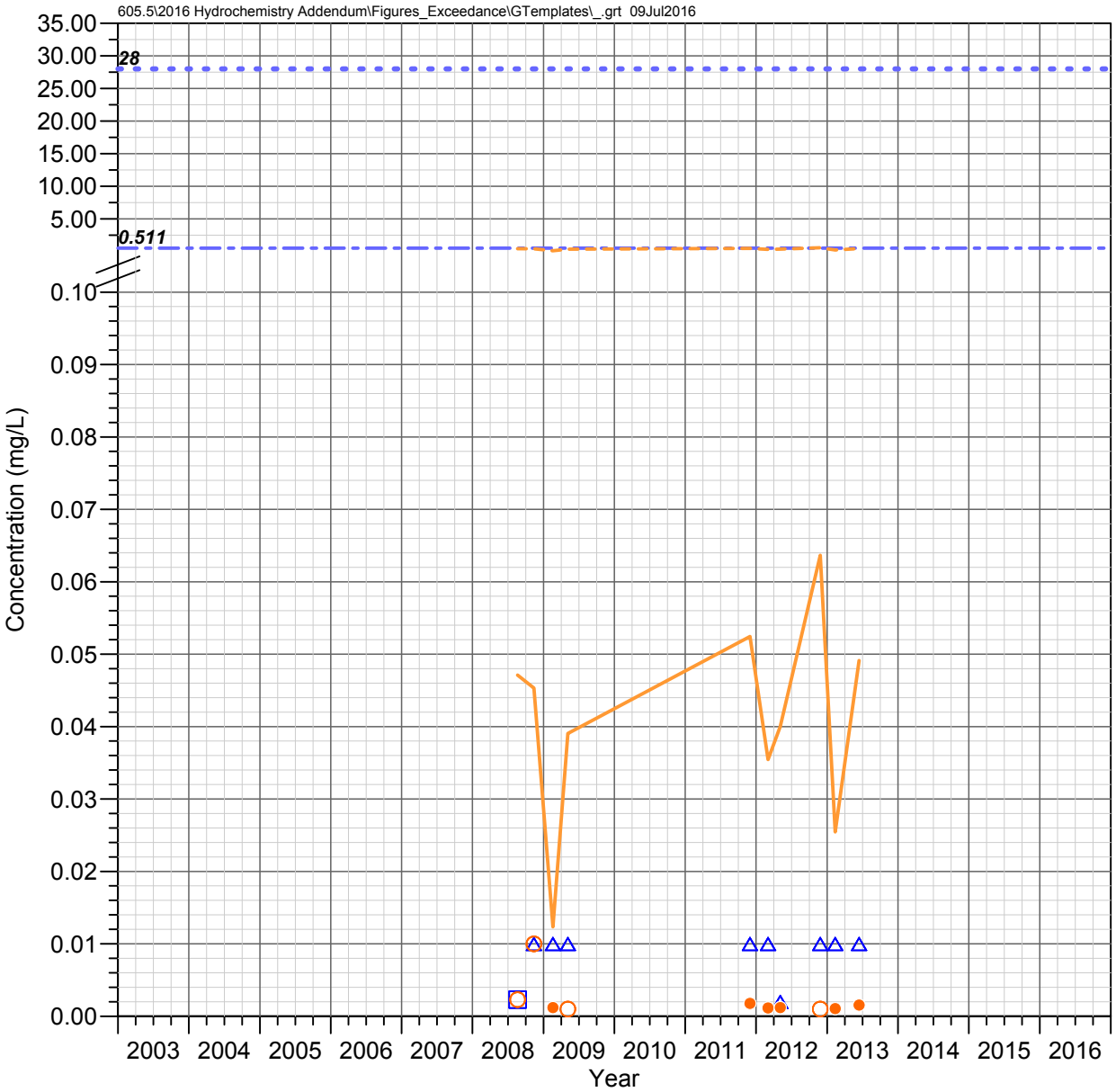


FIGURE F-551. NICKEL CONCENTRATIONS OBSERVED AT DC 6.6 W (DCT 6.6 W), DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.14 C
Devils Canyon Watershed

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 28 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 0.511 mg/L)

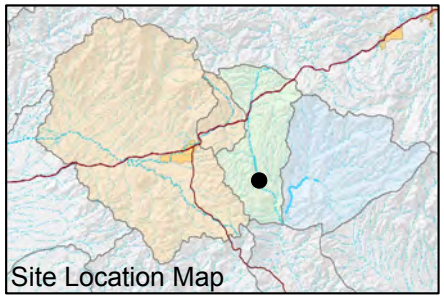


FIGURE F-552. NICKEL CONCENTRATIONS OBSERVED AT DC 6.14 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES

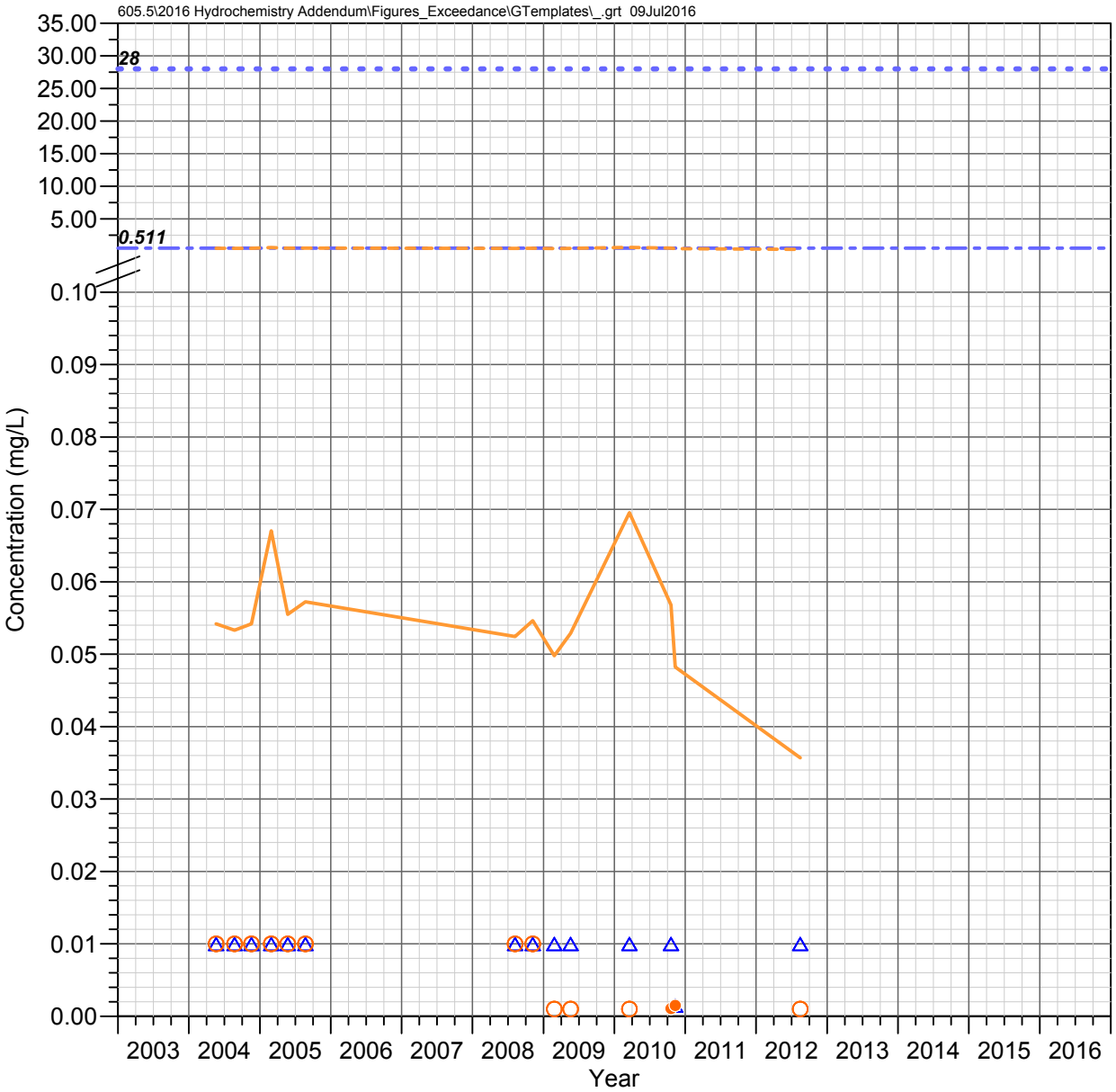


FIGURE F-553. NICKEL CONCENTRATIONS OBSERVED AT DC 6.1 E, DEVILS CANYON WATERSHED

DC 6.1 E
Devils Canyon Watershed

NICKEL

Observed Concentrations

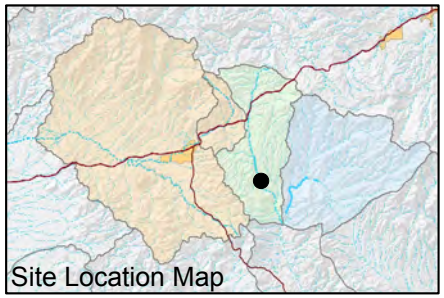
*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

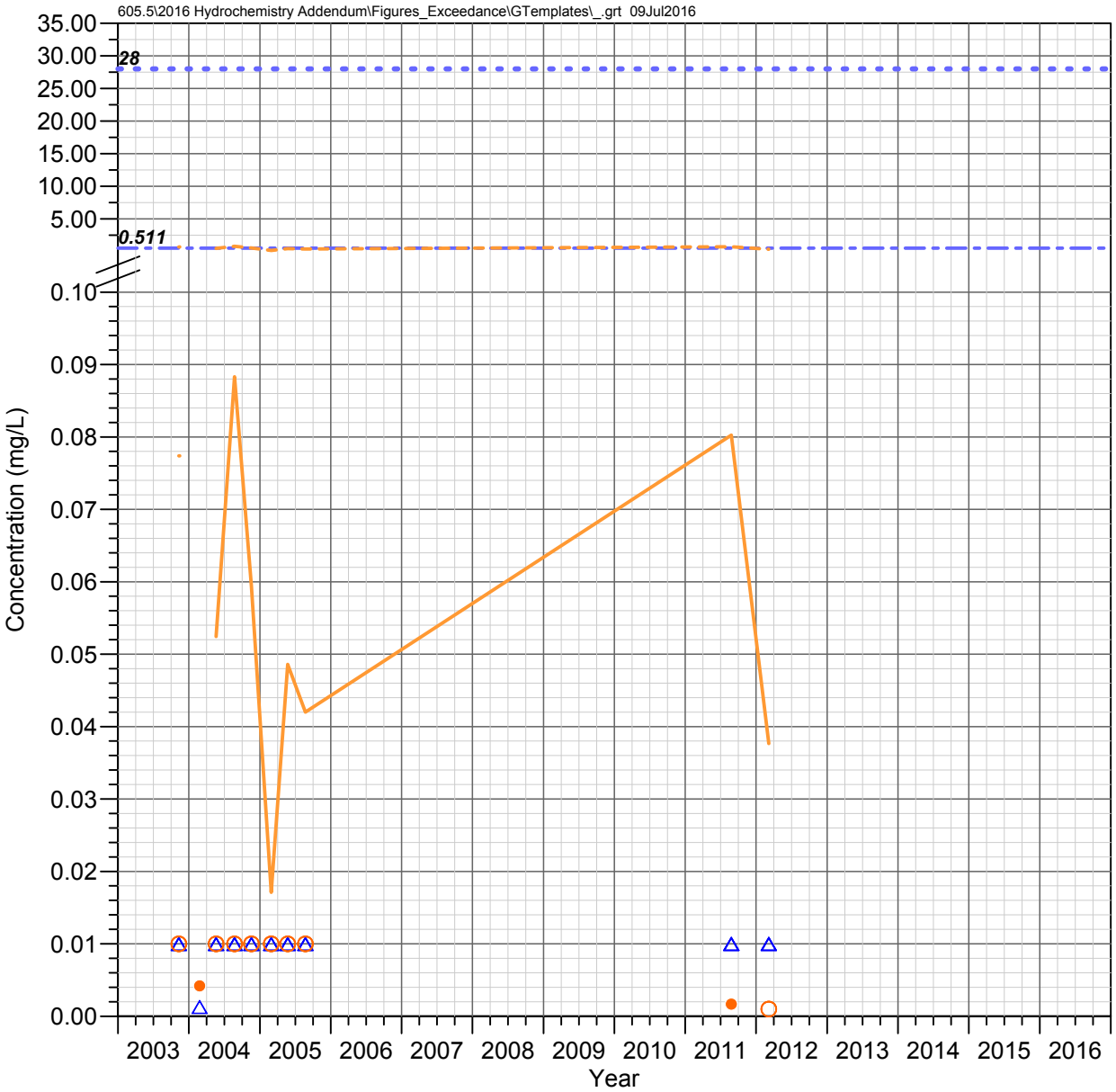
TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 28 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 0.511 mg/L)



Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 5.5 C
Devils Canyon Watershed

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 28 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 0.511 mg/L)

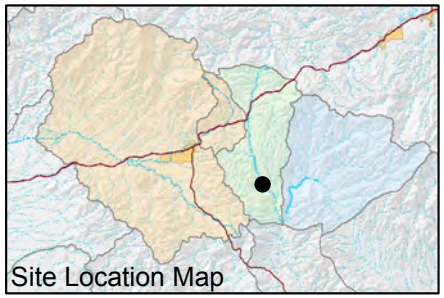
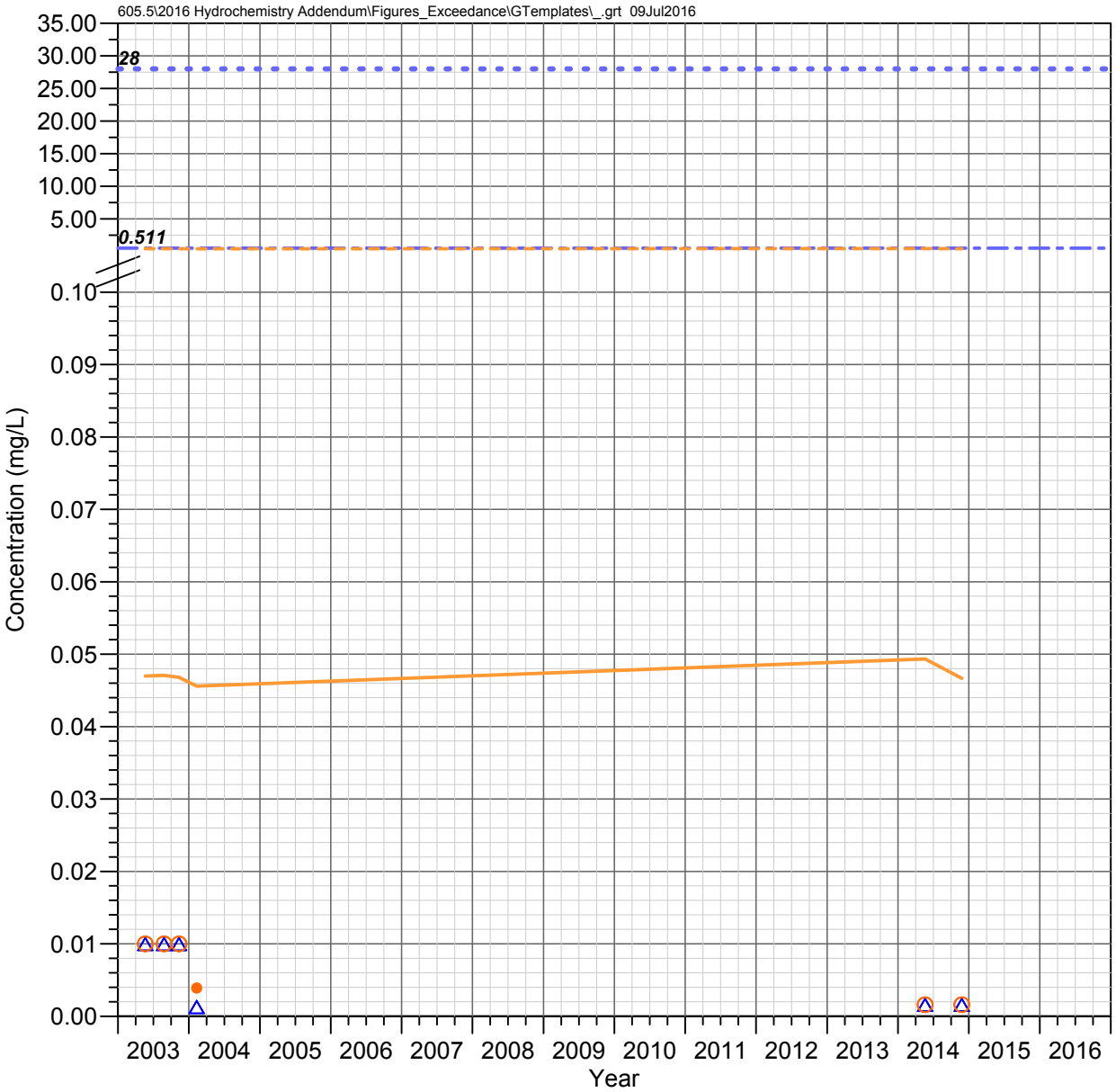


FIGURE F-554. NICKEL CONCENTRATIONS OBSERVED AT DC 5.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 4.1 E
Devils Canyon Watershed

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 28 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 0.511 mg/L)

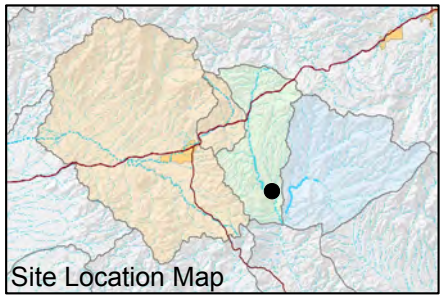
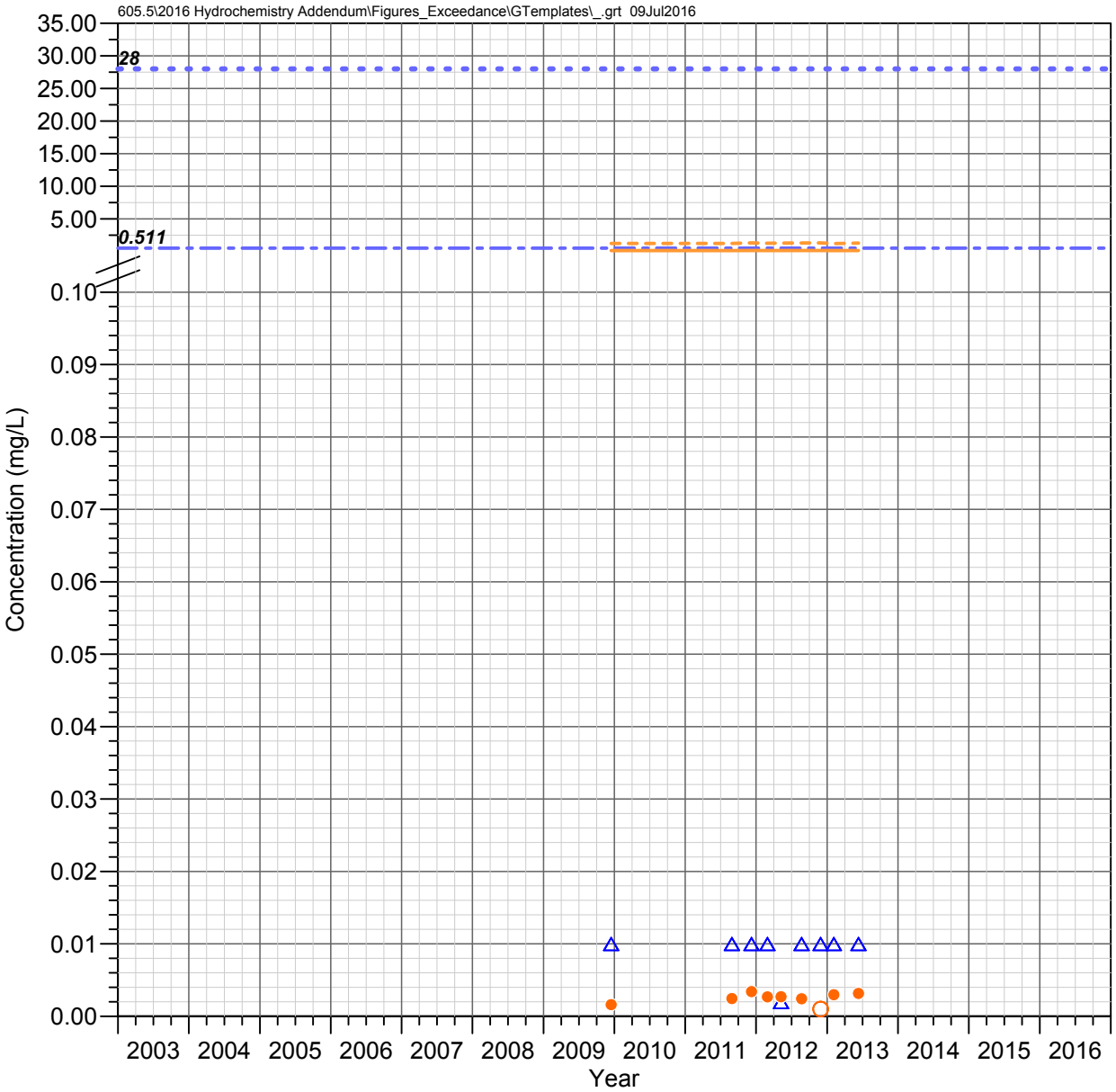


FIGURE F-555. NICKEL CONCENTRATIONS OBSERVED AT DC 4.1 E, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Government Springs Mineral Creek Watershed

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 28 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 0.511 mg/L)

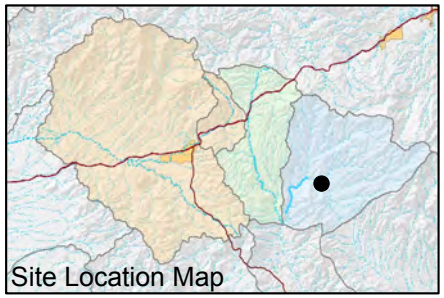
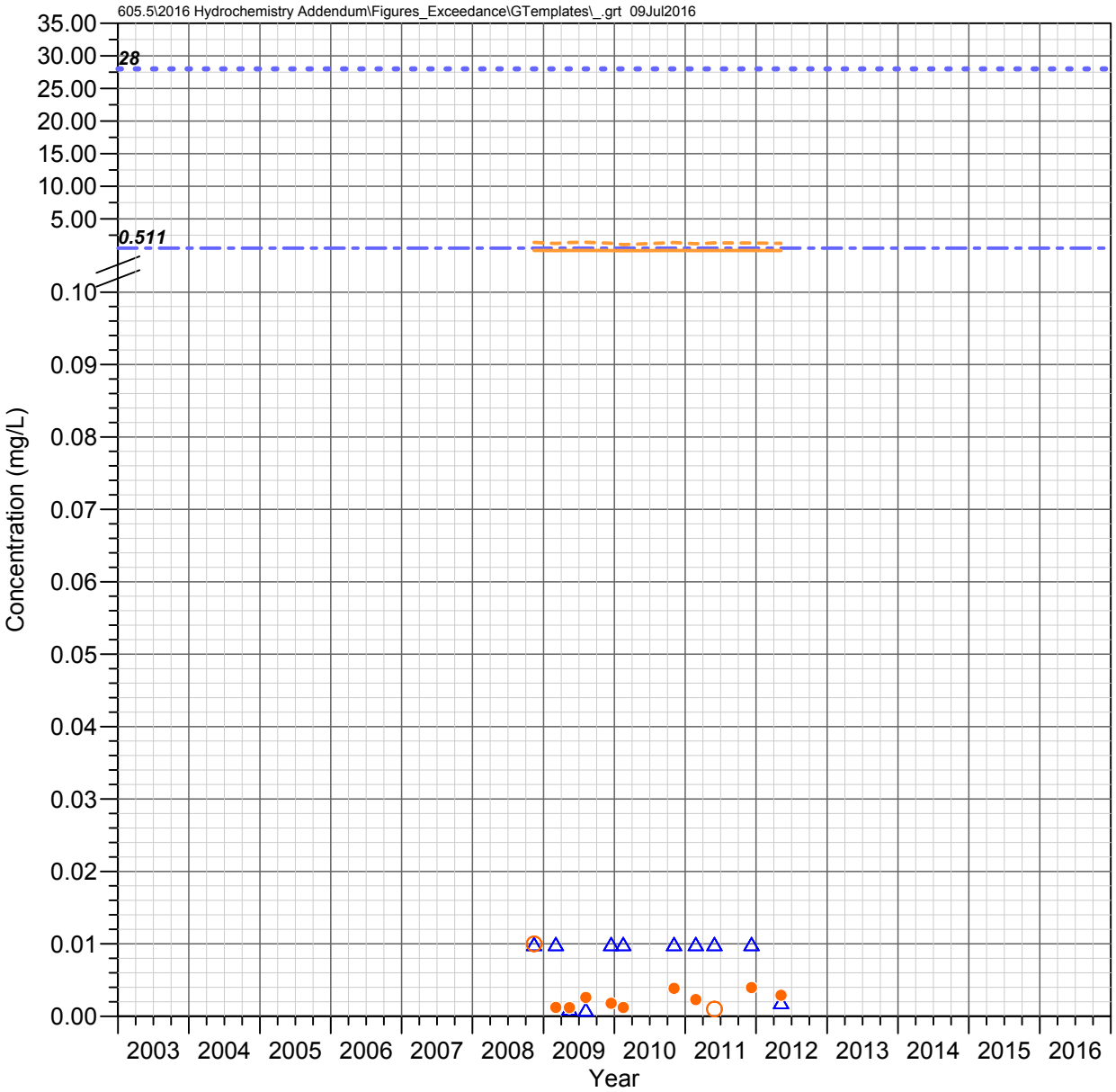


FIGURE F-556. NICKEL CONCENTRATIONS OBSERVED AT GOVERNMENT SPRINGS, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 8.4 C
Mineral Creek Watershed

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 28 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 0.511 mg/L)

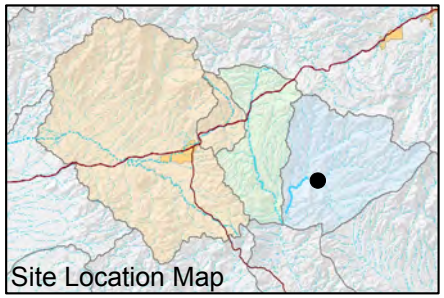
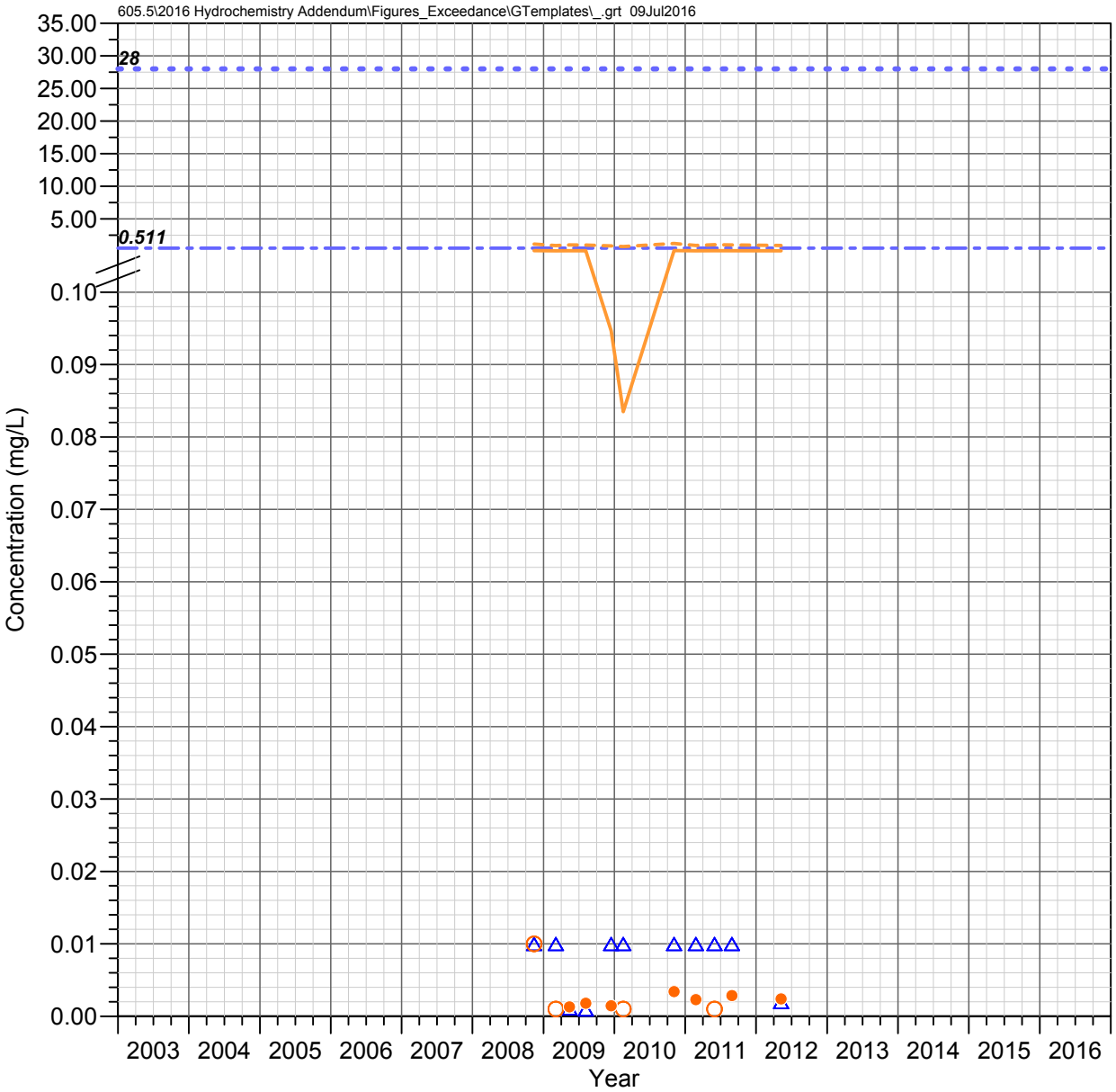


FIGURE F-557. NICKEL CONCENTRATIONS OBSERVED AT MC 8.4 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



LF 0.2 C
Mineral Creek Watershed

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 28 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 0.511 mg/L)

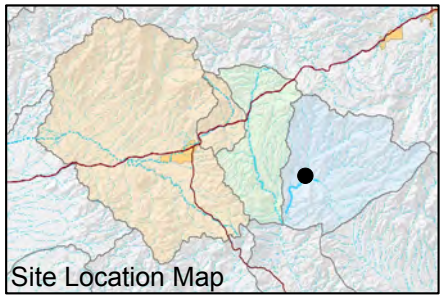
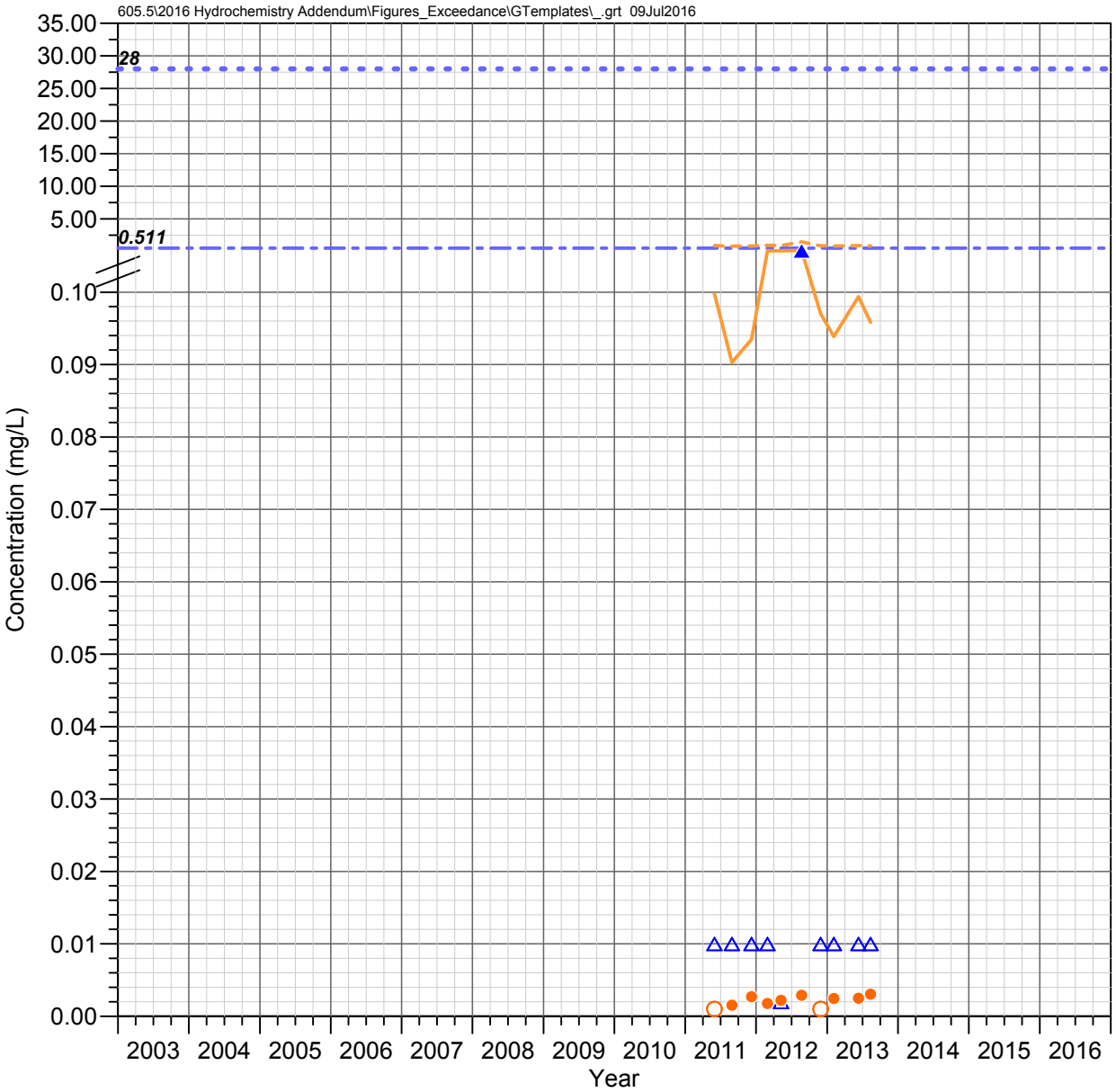


FIGURE F-558. NICKEL CONCENTRATIONS OBSERVED AT LF 0.2 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 5.2 C
Mineral Creek Watershed

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 28 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 0.511 mg/L)

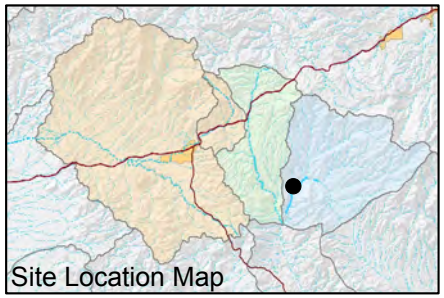
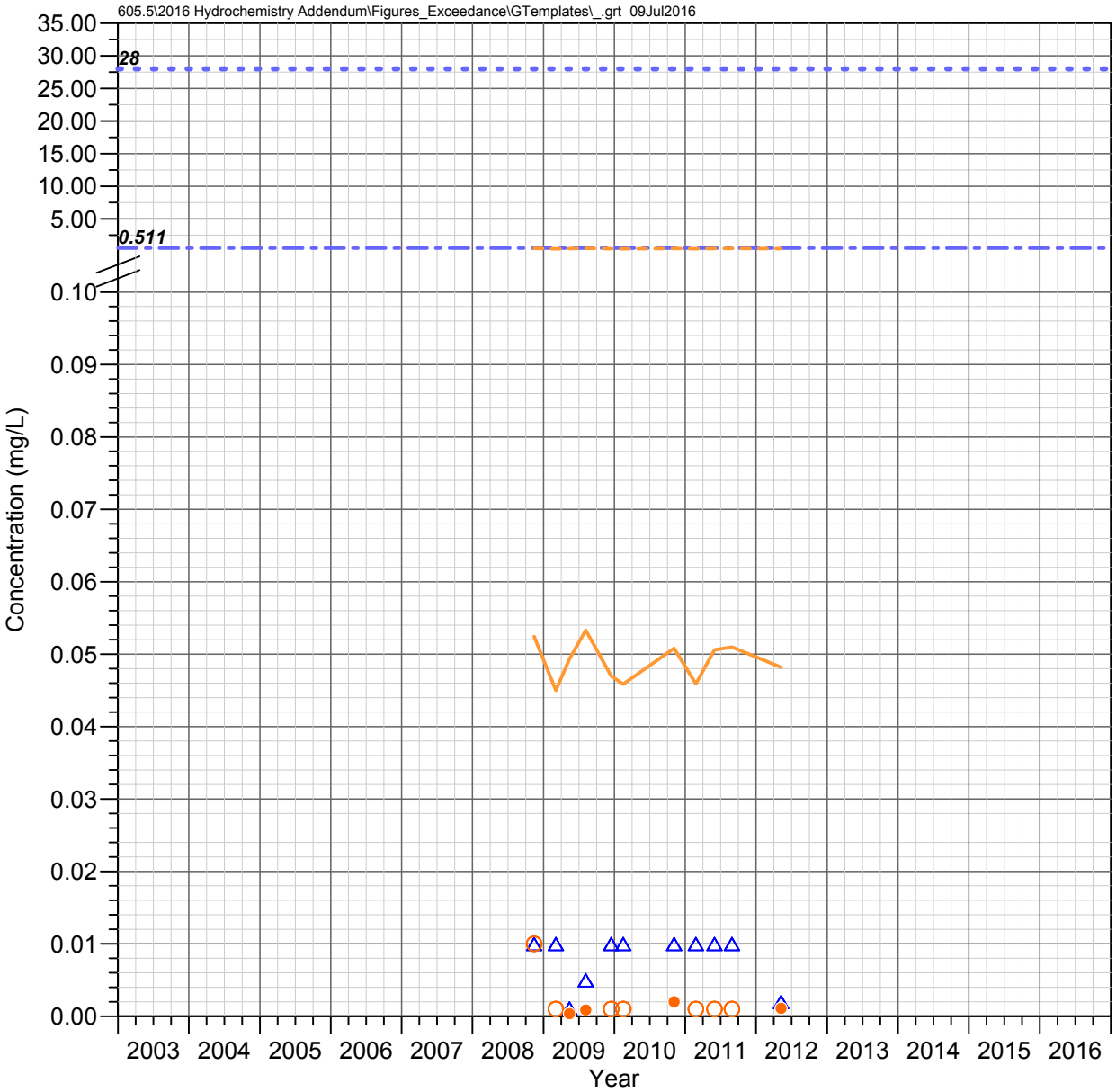


FIGURE F-559. NICKEL CONCENTRATIONS OBSERVED AT MC 5.2 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 3.4 W (Wet Leg Spring)
Mineral Creek Watershed

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 28 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 0.511 mg/L)

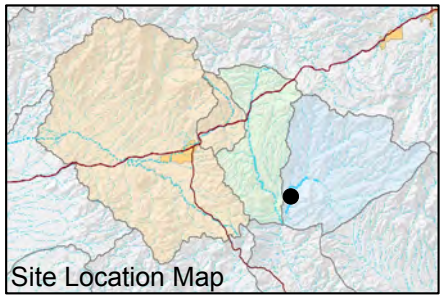
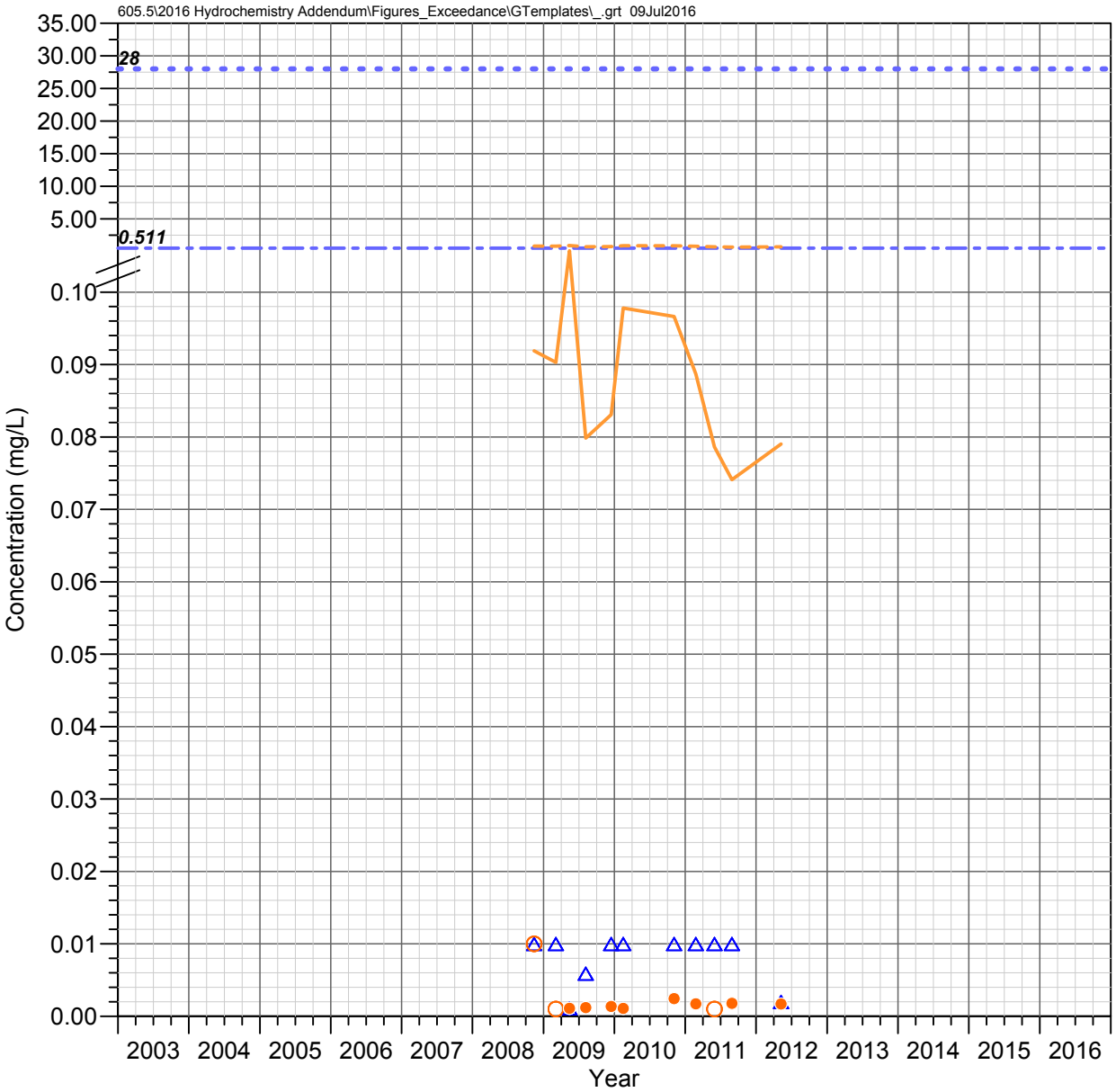


FIGURE F-560. NICKEL CONCENTRATIONS OBSERVED AT MC 3.4 W (WET LEG SPRING), MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 3.3 C (Lower Mineral)
Mineral Creek Watershed

NICKEL

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved;
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 28 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 0.511 mg/L)

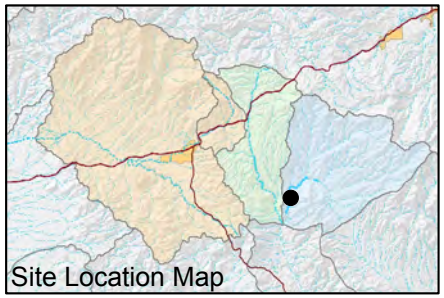
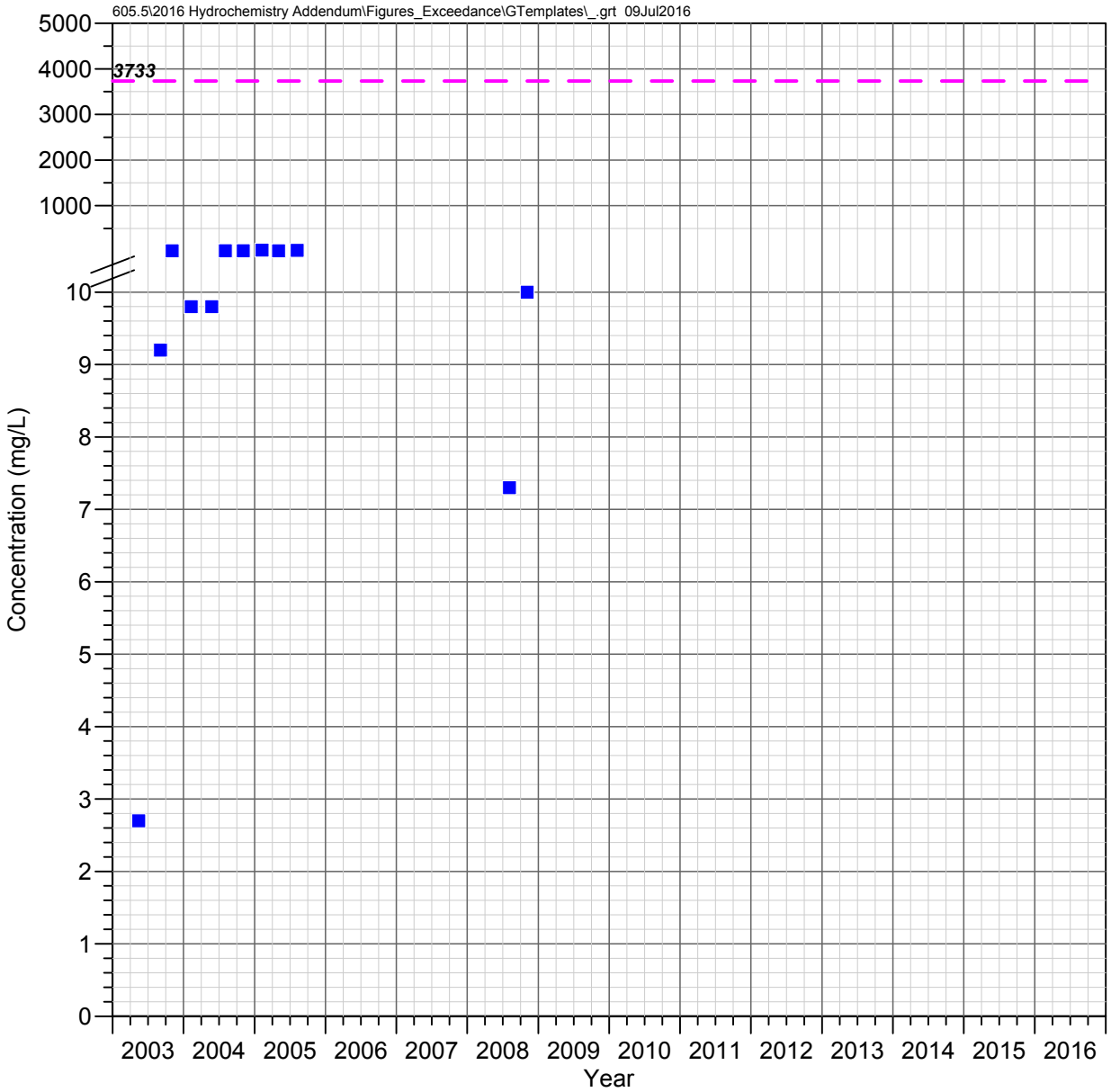


FIGURE F-561. NICKEL CONCENTRATIONS OBSERVED AT MC 3.3 C (LOWER MINERAL), MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Pump Station Spring (QC 30.7 C)
Queen Creek Watershed

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — AZ Partial Body Contact (UNS, 3733.333 mg/L)

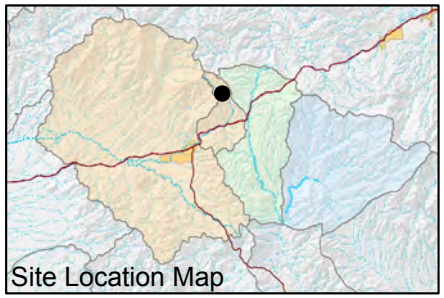
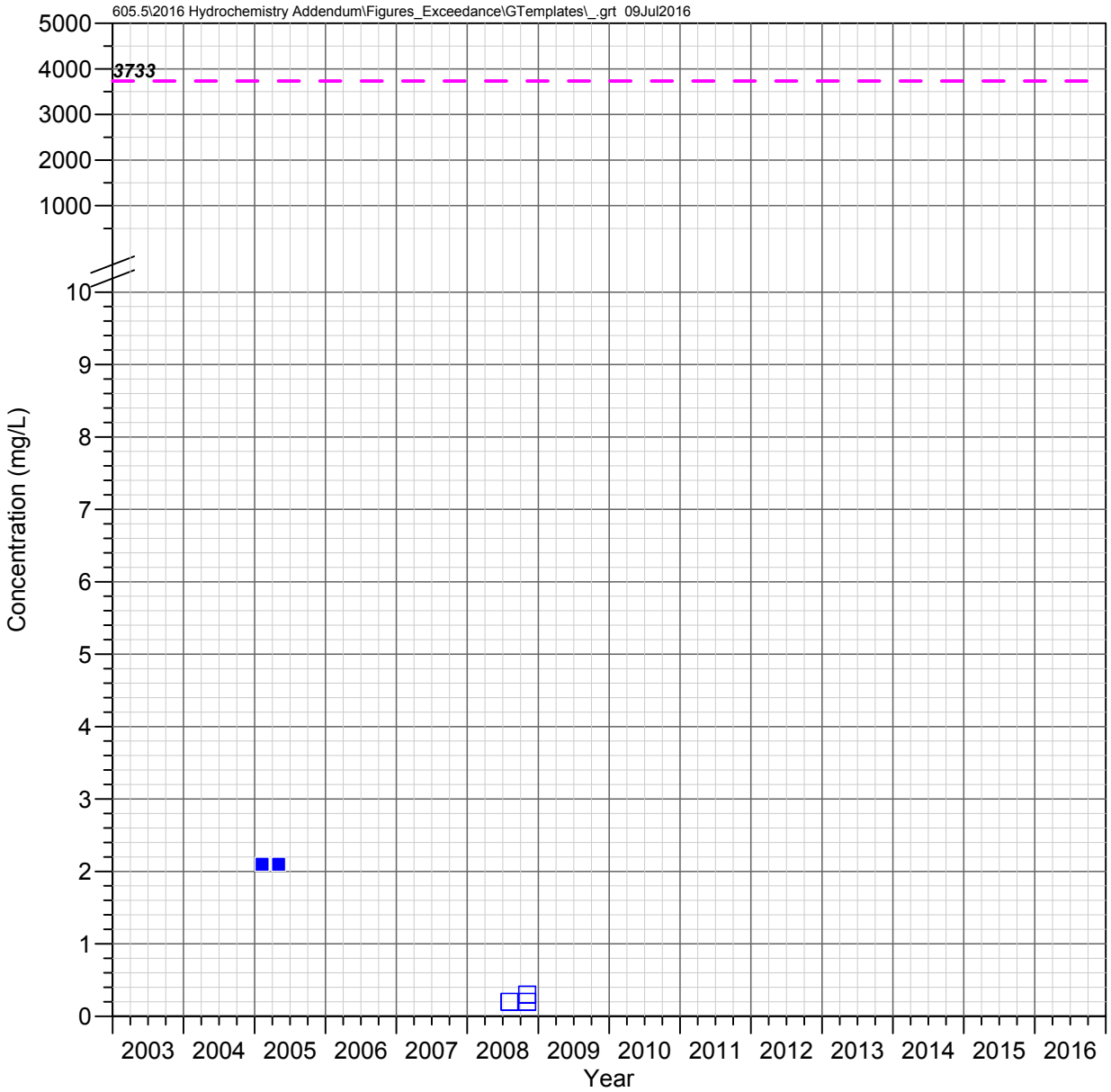


FIGURE F-562. NITRATE AS N CONCENTRATIONS OBSERVED AT PUMP STATION SPRING (QC 30.7 C), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 27.3 C
Queen Creek Watershed

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — AZ Partial Body Contact (UNS, 3733.333 mg/L)

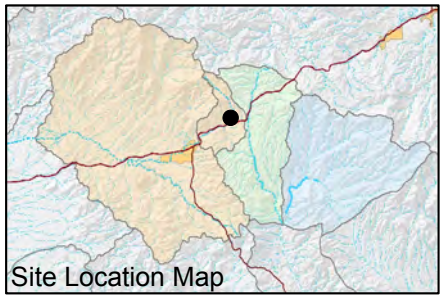
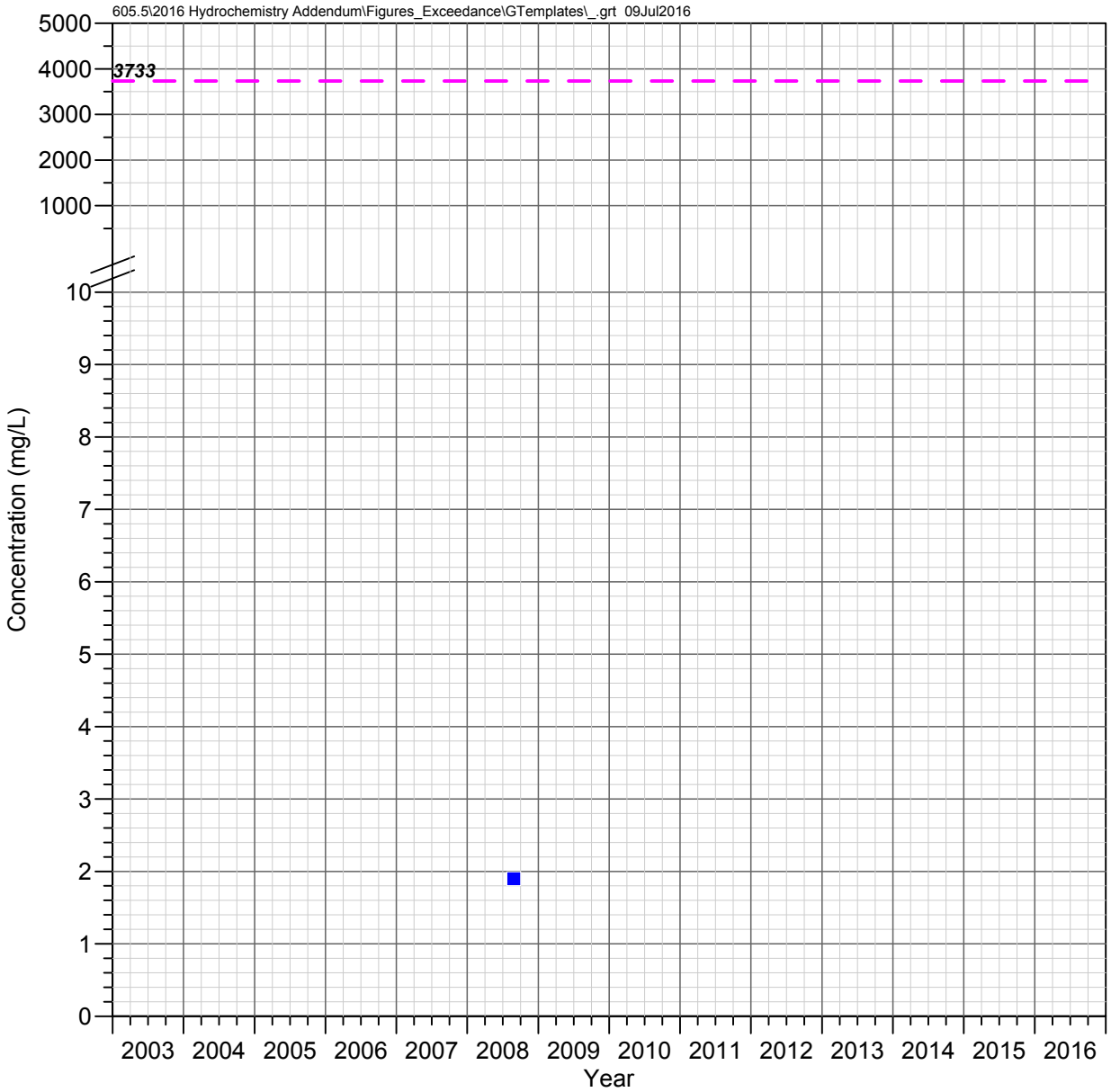


FIGURE F-563. NITRATE AS N CONCENTRATIONS OBSERVED AT QC 27.3 C, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Oak Flat Wash
Queen Creek Watershed

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — AZ Partial Body Contact (UNS, 3733.333 mg/L)

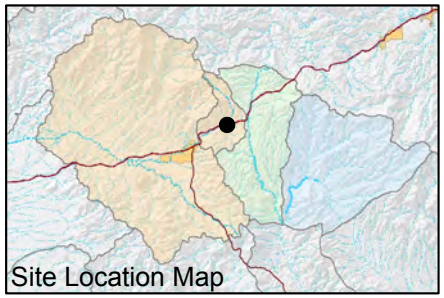
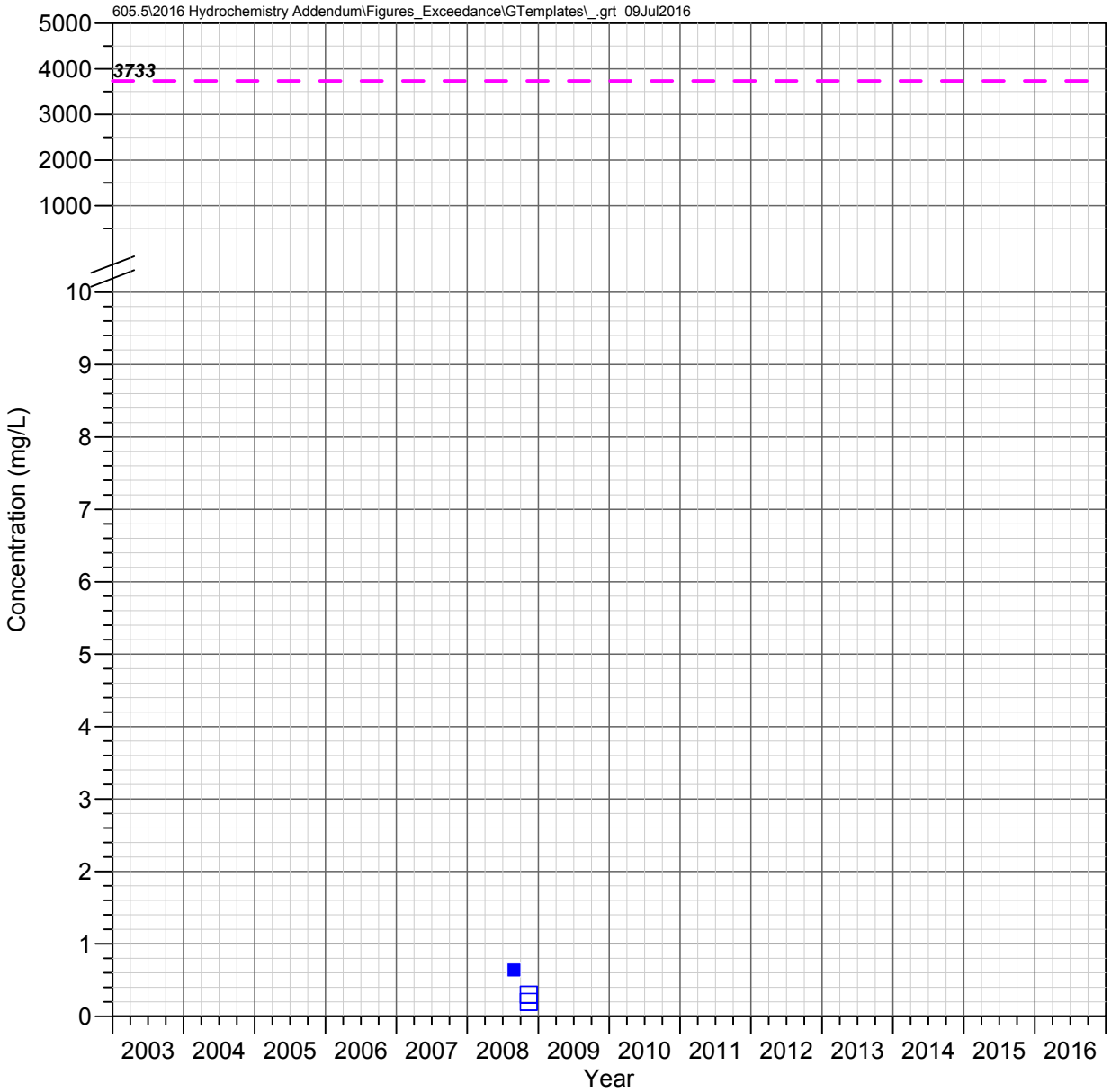


FIGURE F-564. NITRATE AS N CONCENTRATIONS OBSERVED AT OAK FLAT WASH, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Number 9 Wash
Queen Creek Watershed

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — AZ Partial Body Contact (UNS, 3733.333 mg/L)

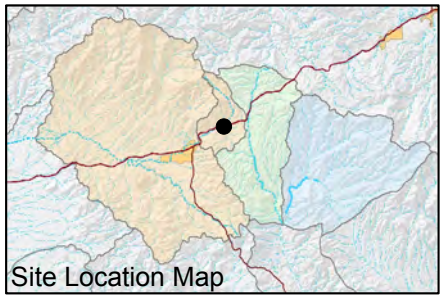
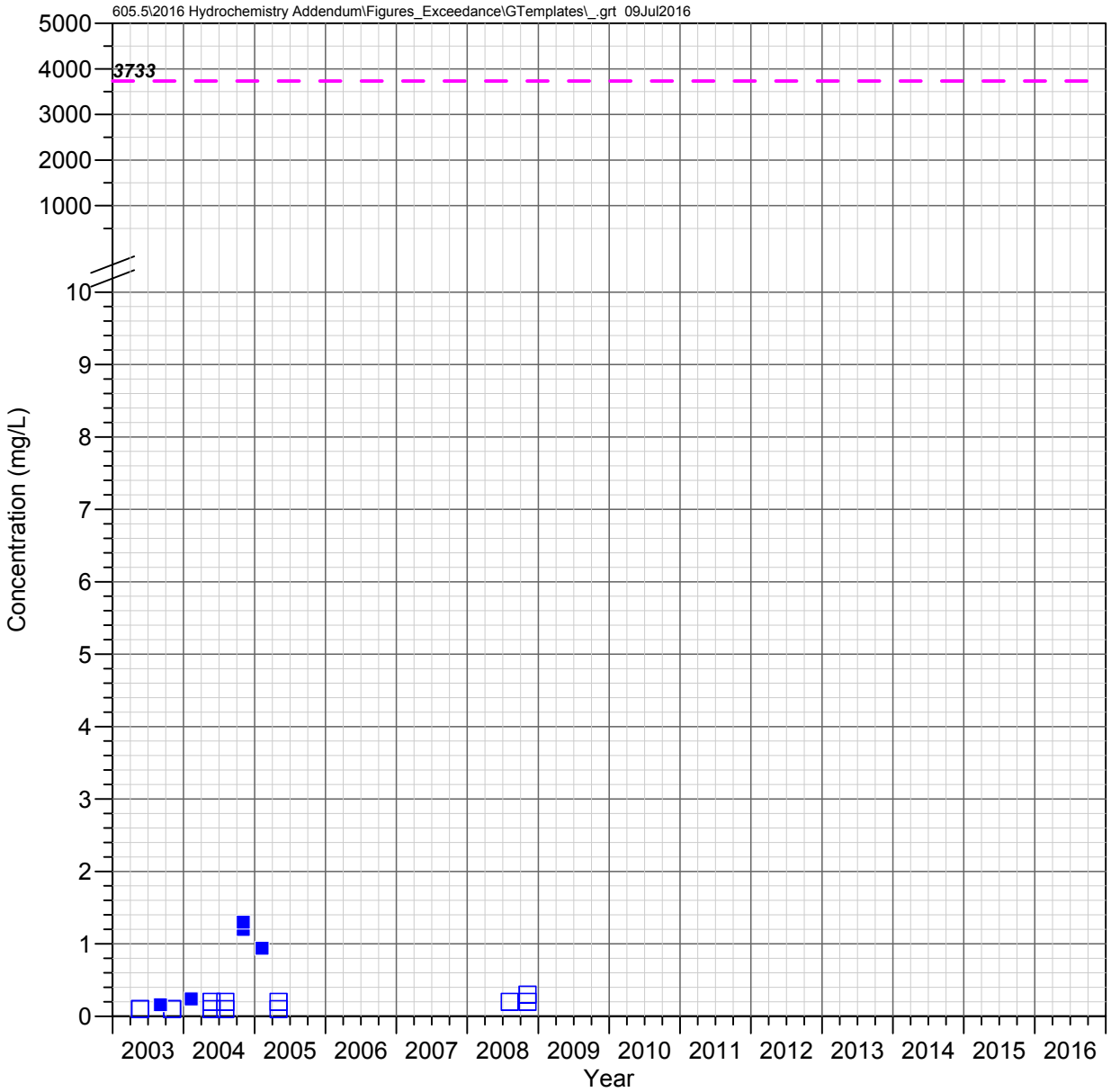


FIGURE F-565. NITRATE AS N CONCENTRATIONS OBSERVED AT NUMBER 9 WASH, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Boulder Hole (QC 23.6 C)
Queen Creek Watershed

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — AZ Partial Body Contact (UNS, 3733.333 mg/L)

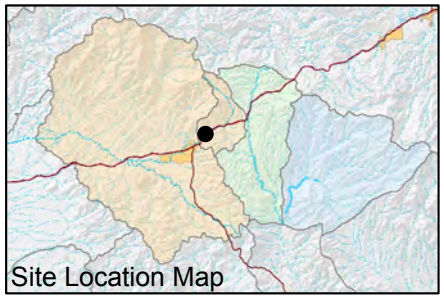
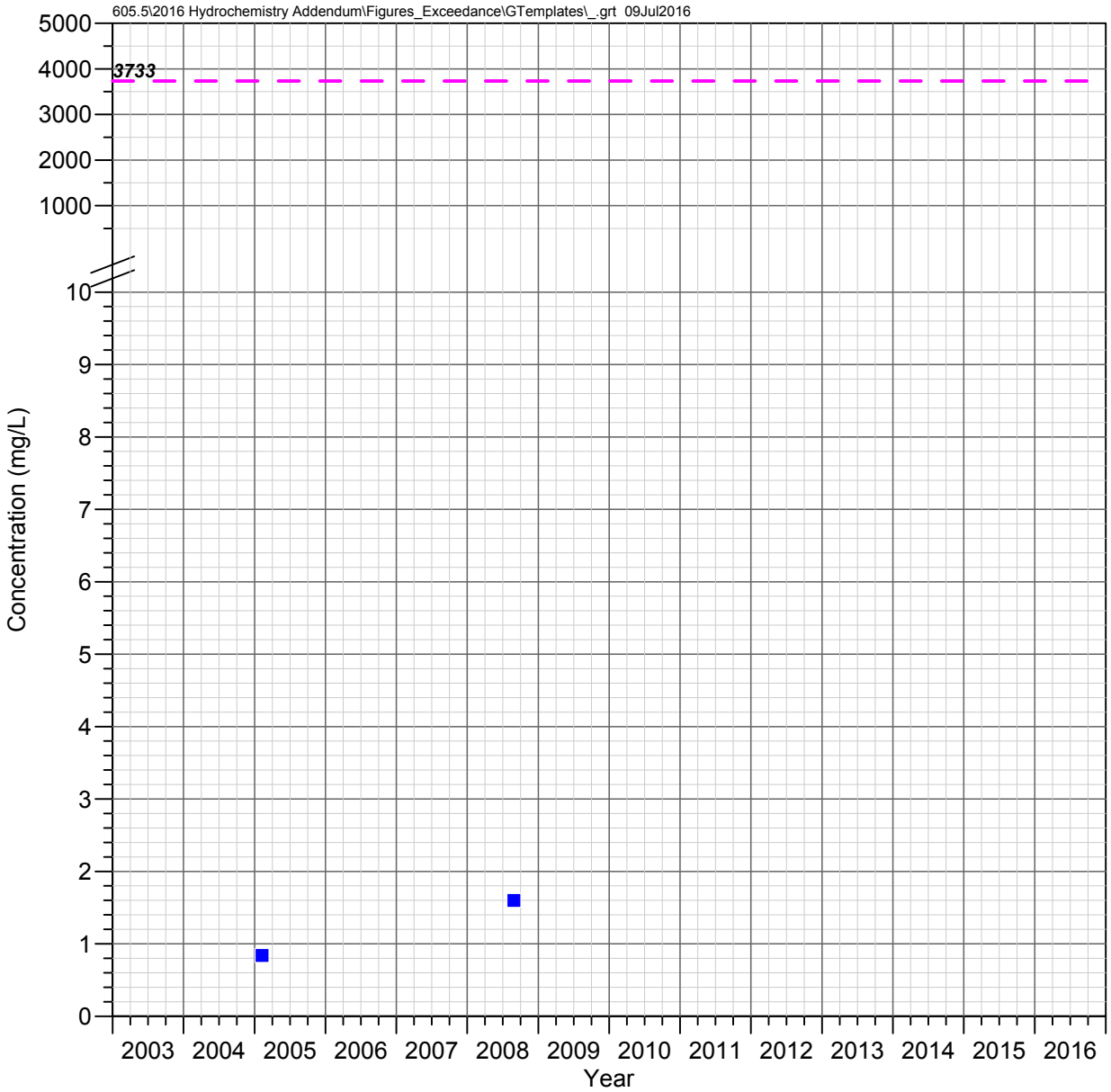


FIGURE F-566. NITRATE AS N CONCENTRATIONS OBSERVED AT BOULDER HOLE (QC 23.6 C), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 22.6 E (Karst Spring)
Queen Creek Watershed

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — AZ Partial Body Contact (UNS, 3733.333 mg/L)

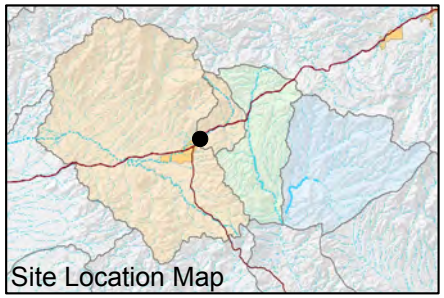
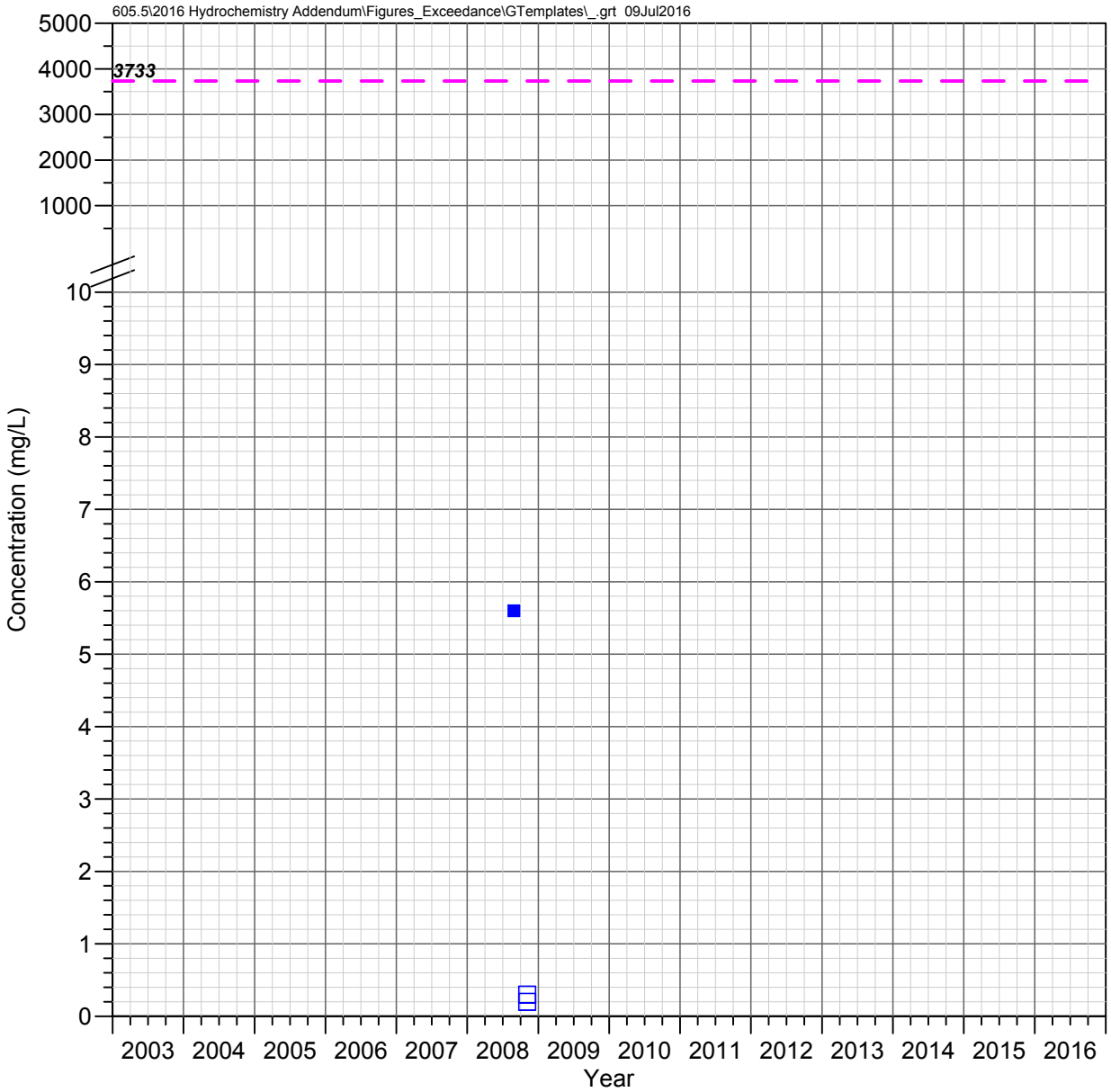


FIGURE F-567. NITRATE AS N CONCENTRATIONS OBSERVED AT QC 22.6 E (KARST SPRING), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 21.7 C (Magma Avenue)
Queen Creek Watershed

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — AZ Partial Body Contact (UNS, 3733.333 mg/L)

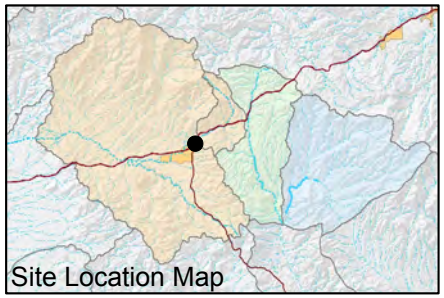
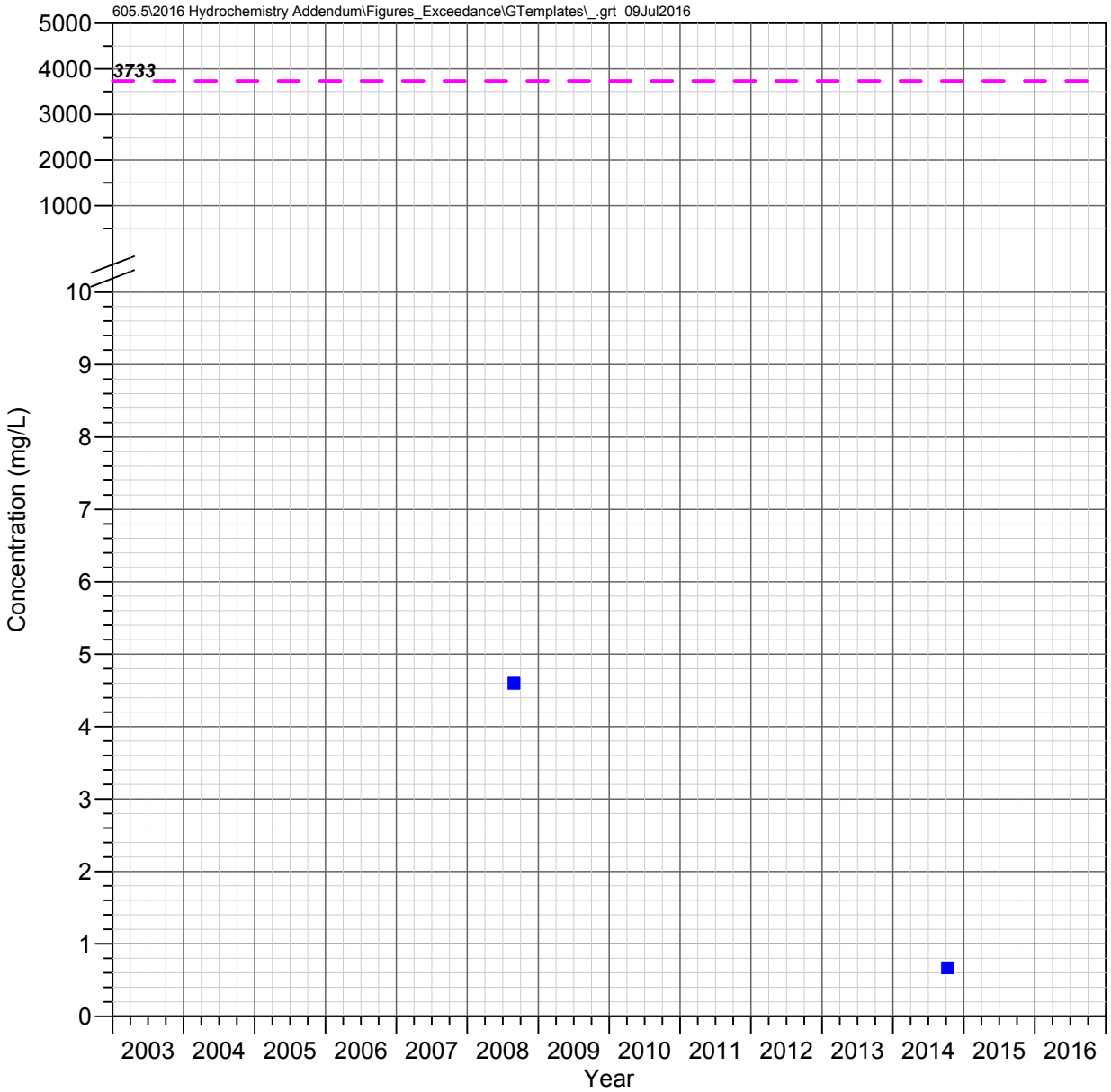


FIGURE F-568. NITRATE AS N CONCENTRATIONS OBSERVED AT QC 21.7 C (MAGMA AVENUE), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 19.7 C
Queen Creek Watershed

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — AZ Partial Body Contact (UNS, 3733.333 mg/L)

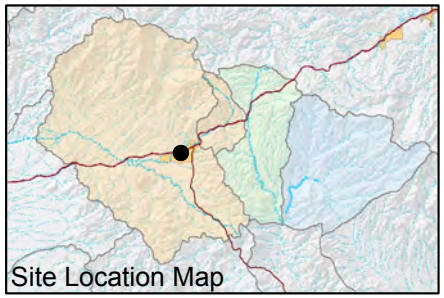
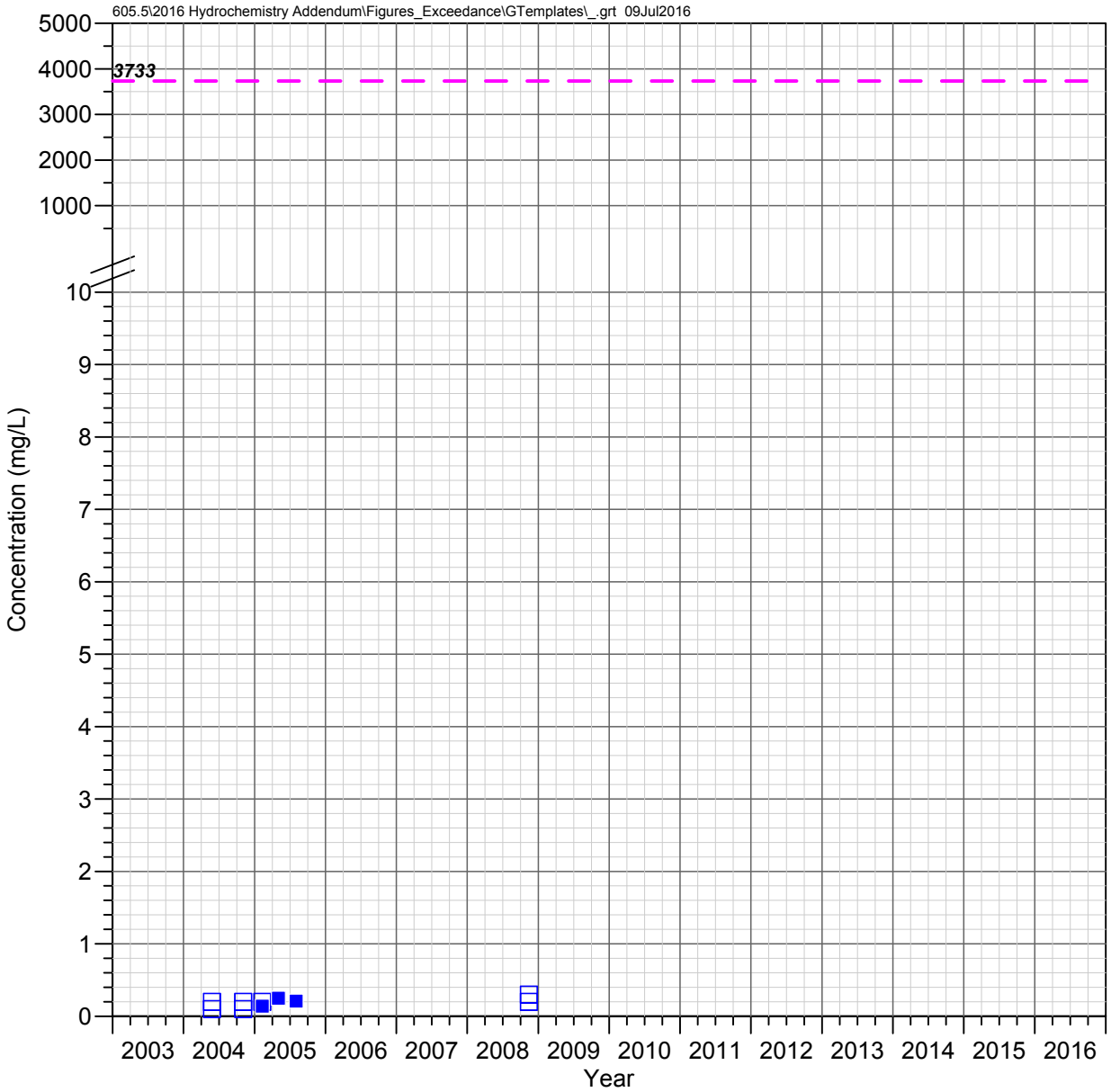


FIGURE F-569. NITRATE AS N CONCENTRATIONS OBSERVED AT QC 19.7 C, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Bored Spring
Queen Creek Watershed

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — AZ Partial Body Contact (UNS, 3733.333 mg/L)

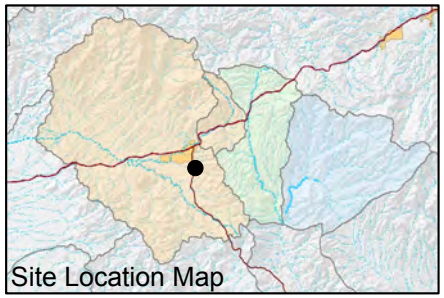
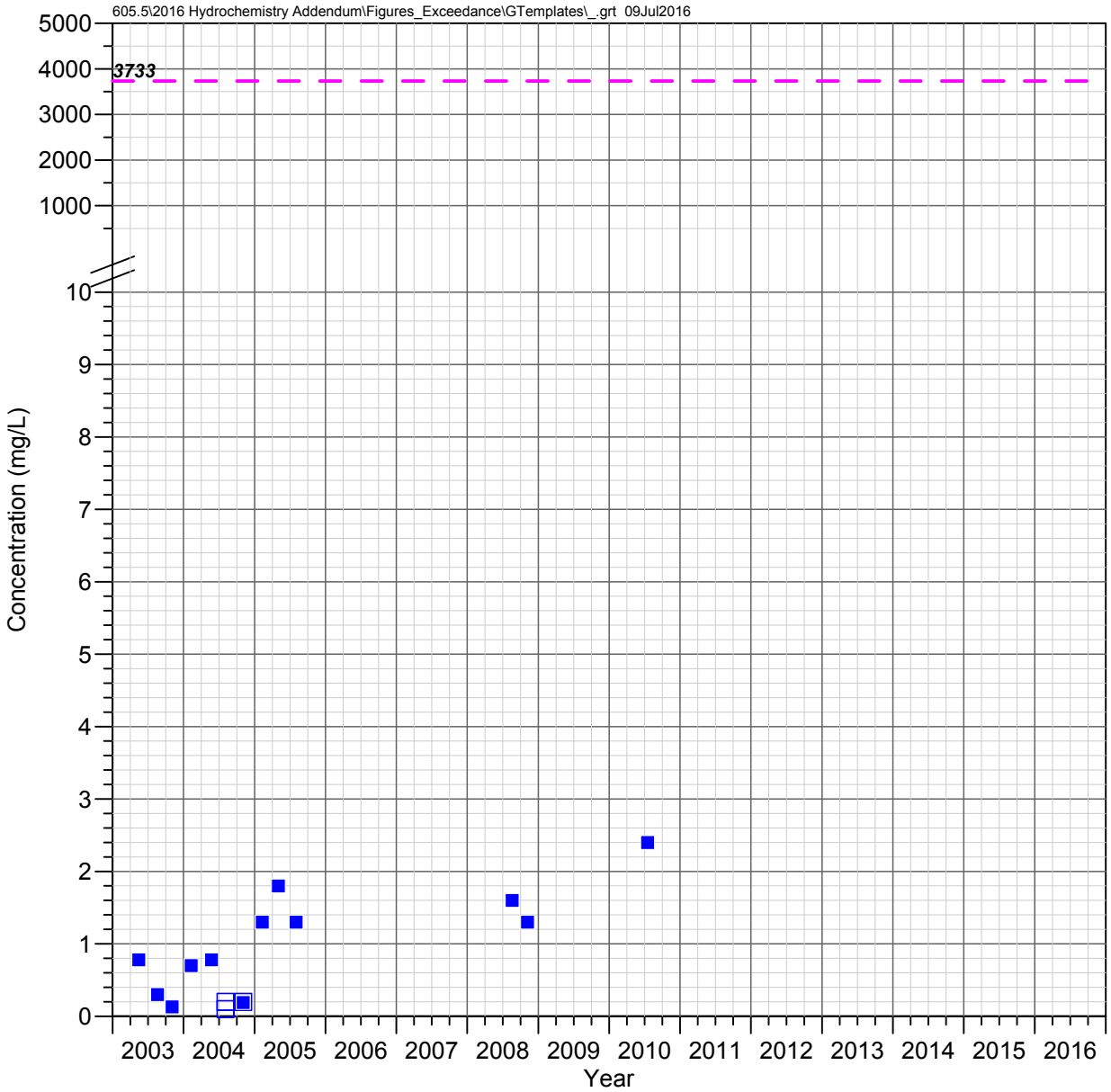


FIGURE F-570. NITRATE AS N CONCENTRATIONS OBSERVED AT BORED SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Hidden Spring
Queen Creek Watershed

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — AZ Partial Body Contact (UNS, 3733.333 mg/L)

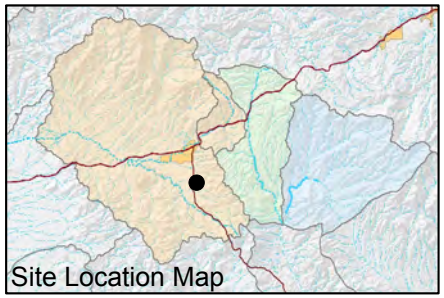
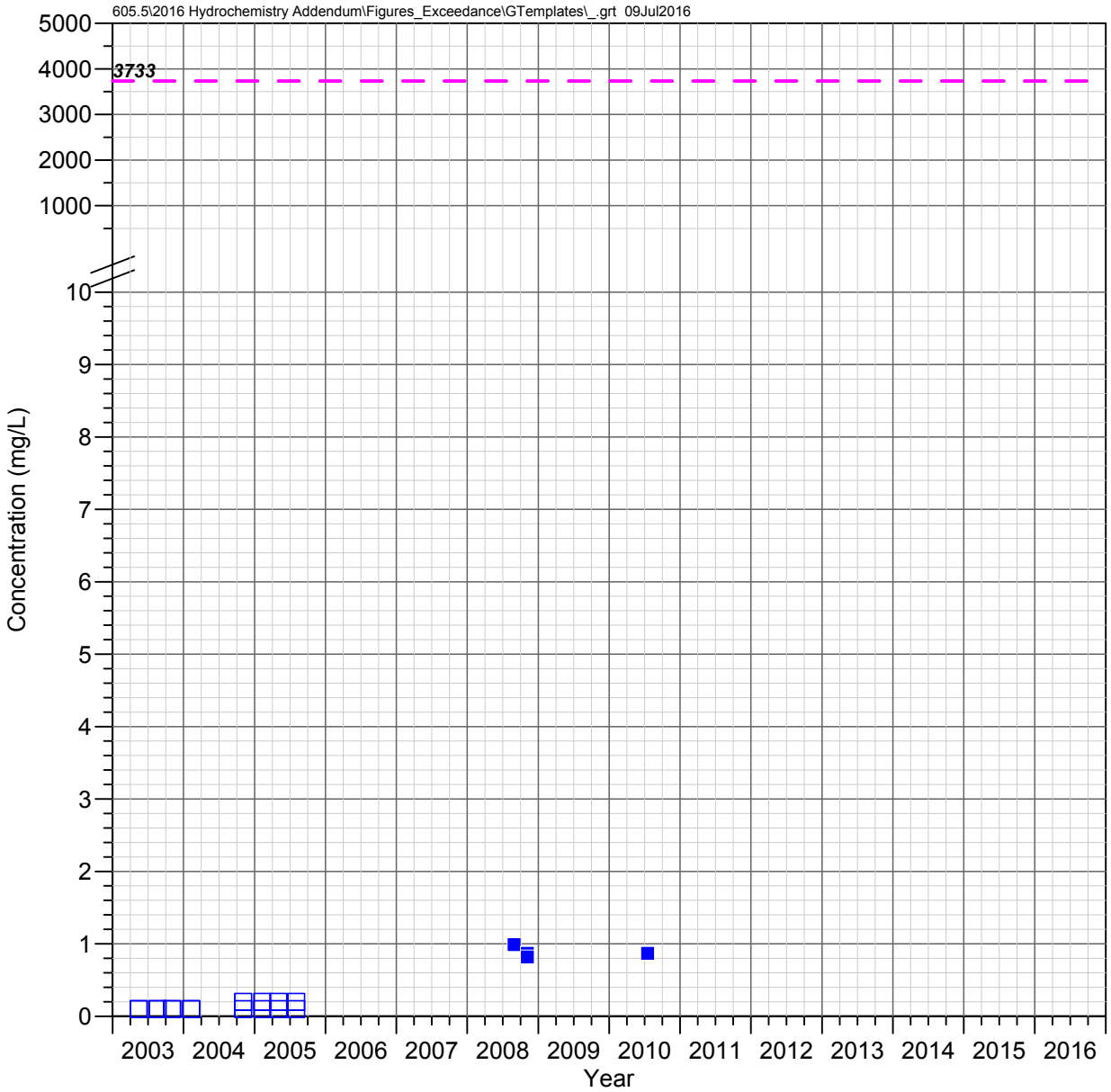


FIGURE F-571. NITRATE AS N CONCENTRATIONS OBSERVED AT HIDDEN SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Kane Spring
Queen Creek Watershed

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Partial Body Contact (UNS, 3733.333 mg/L)

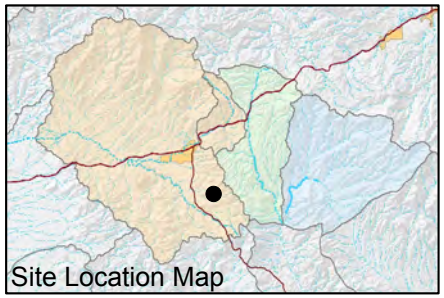
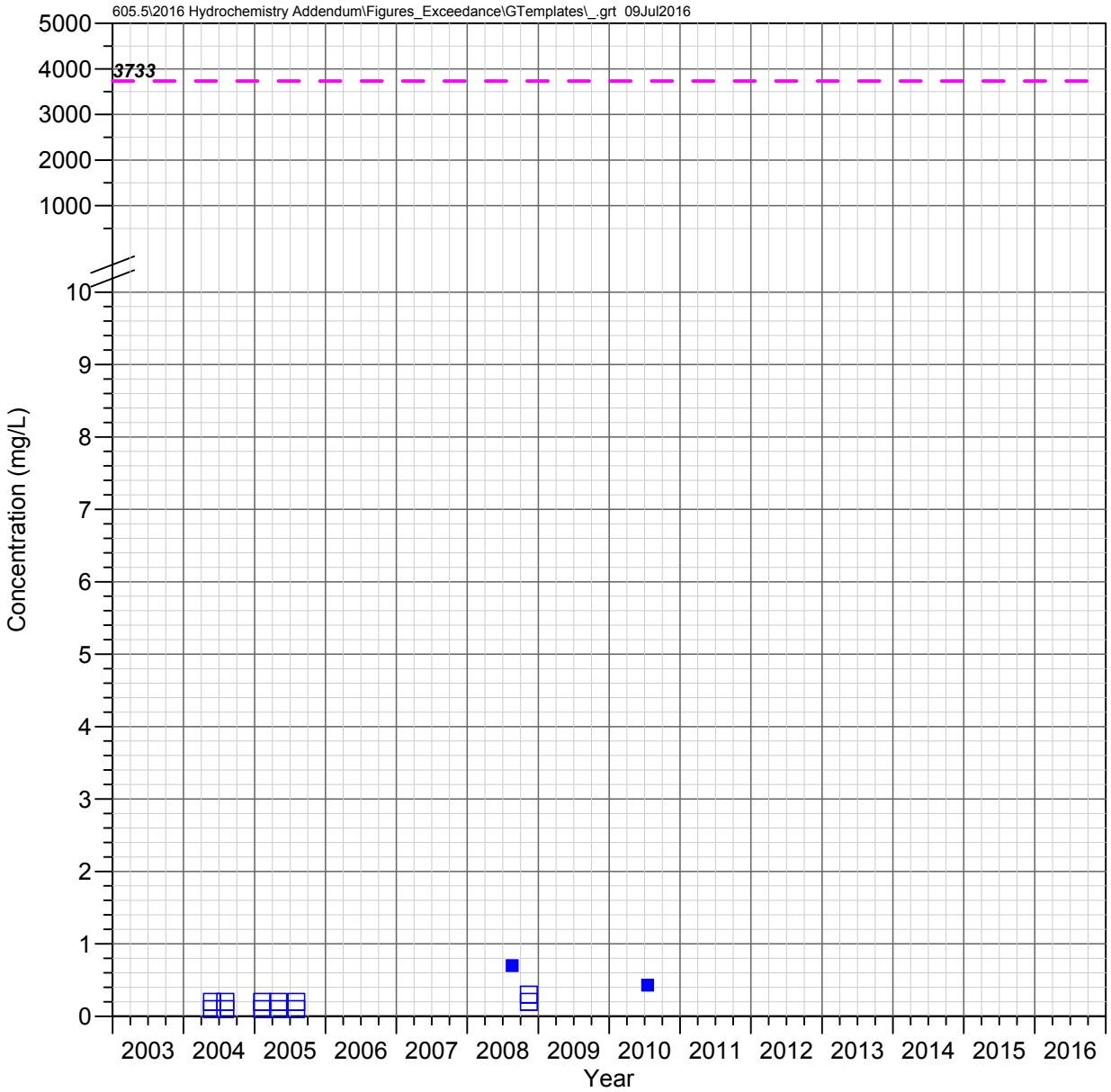


FIGURE F-572. NITRATE AS N CONCENTRATIONS OBSERVED AT KANE SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Blue Spring
Queen Creek Watershed

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — AZ Partial Body Contact (UNS, 3733.333 mg/L)

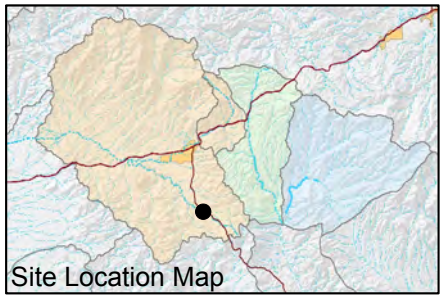
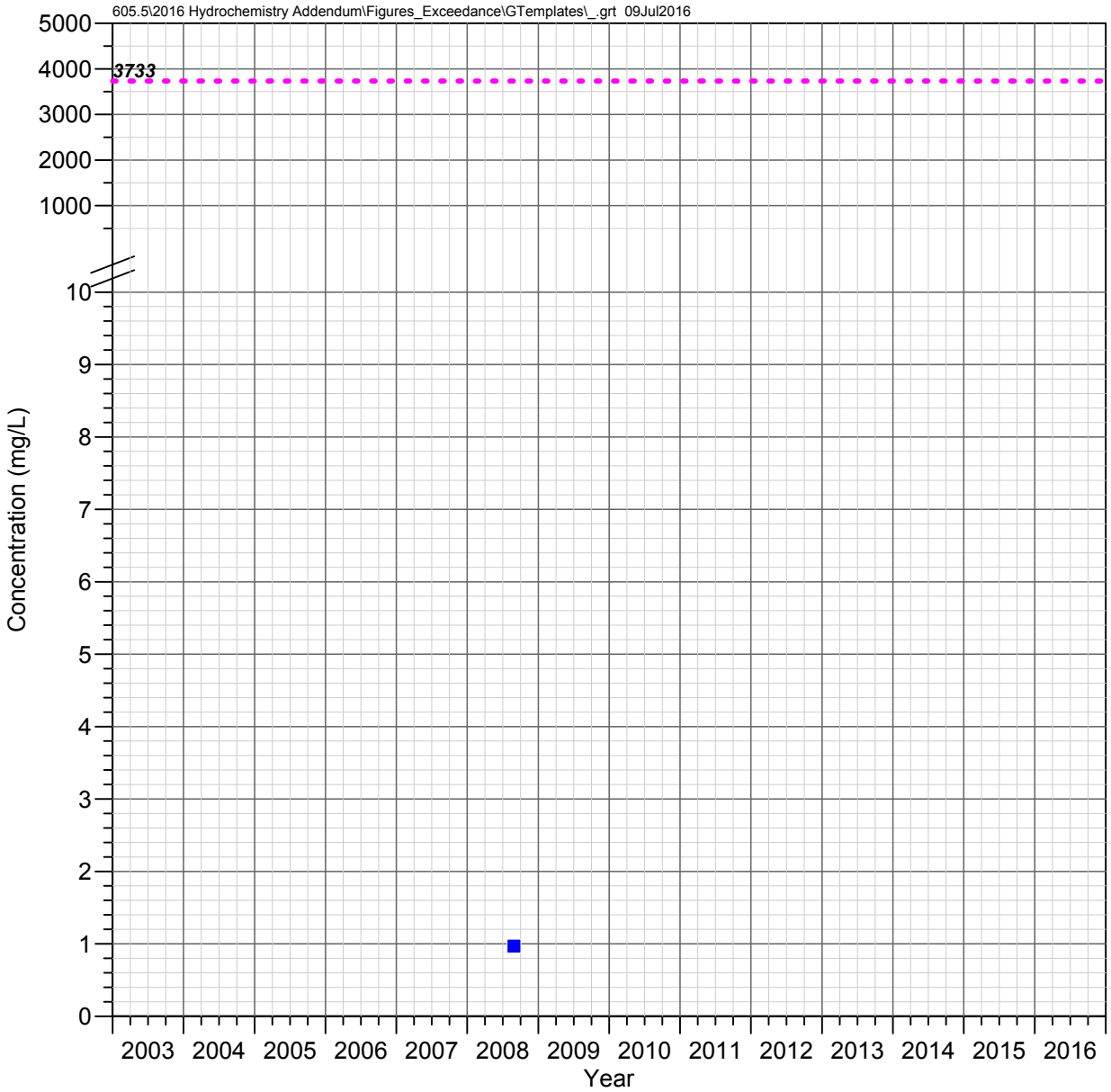


FIGURE F-573. NITRATE AS N CONCENTRATIONS OBSERVED AT BLUE SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



IC 1.0 C
Devils Canyon Watershed

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 3733.333 mg/L)

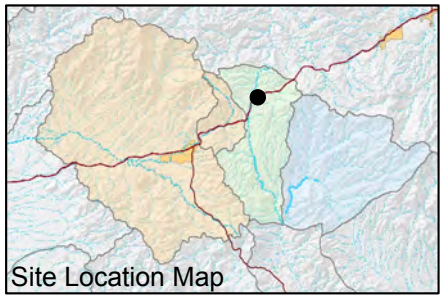
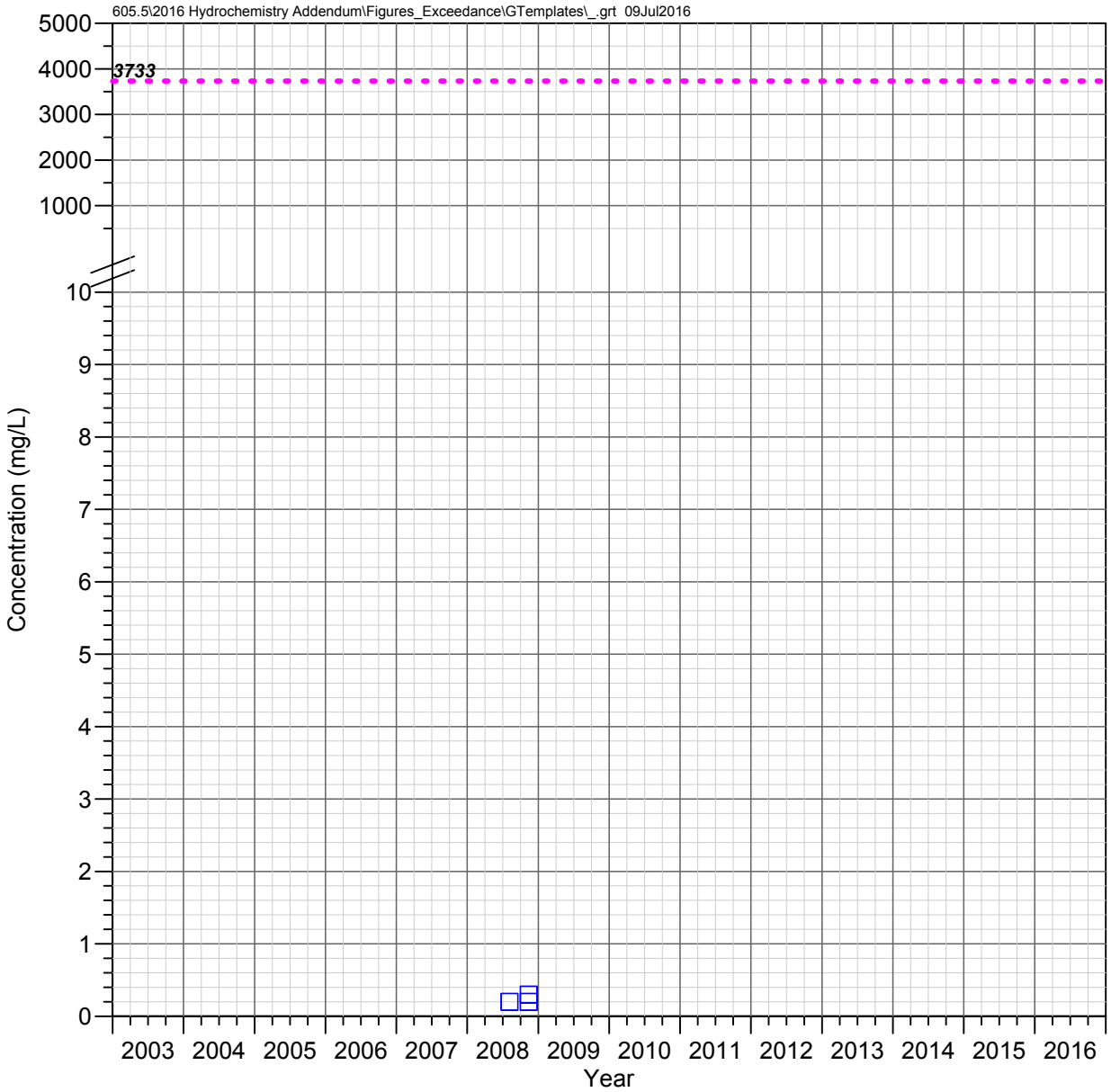


FIGURE F-574. NITRATE AS N CONCENTRATIONS OBSERVED AT IC 1.0 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 15.5 C
Devils Canyon Watershed

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 3733.333 mg/L)

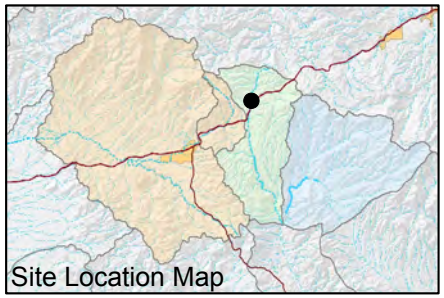
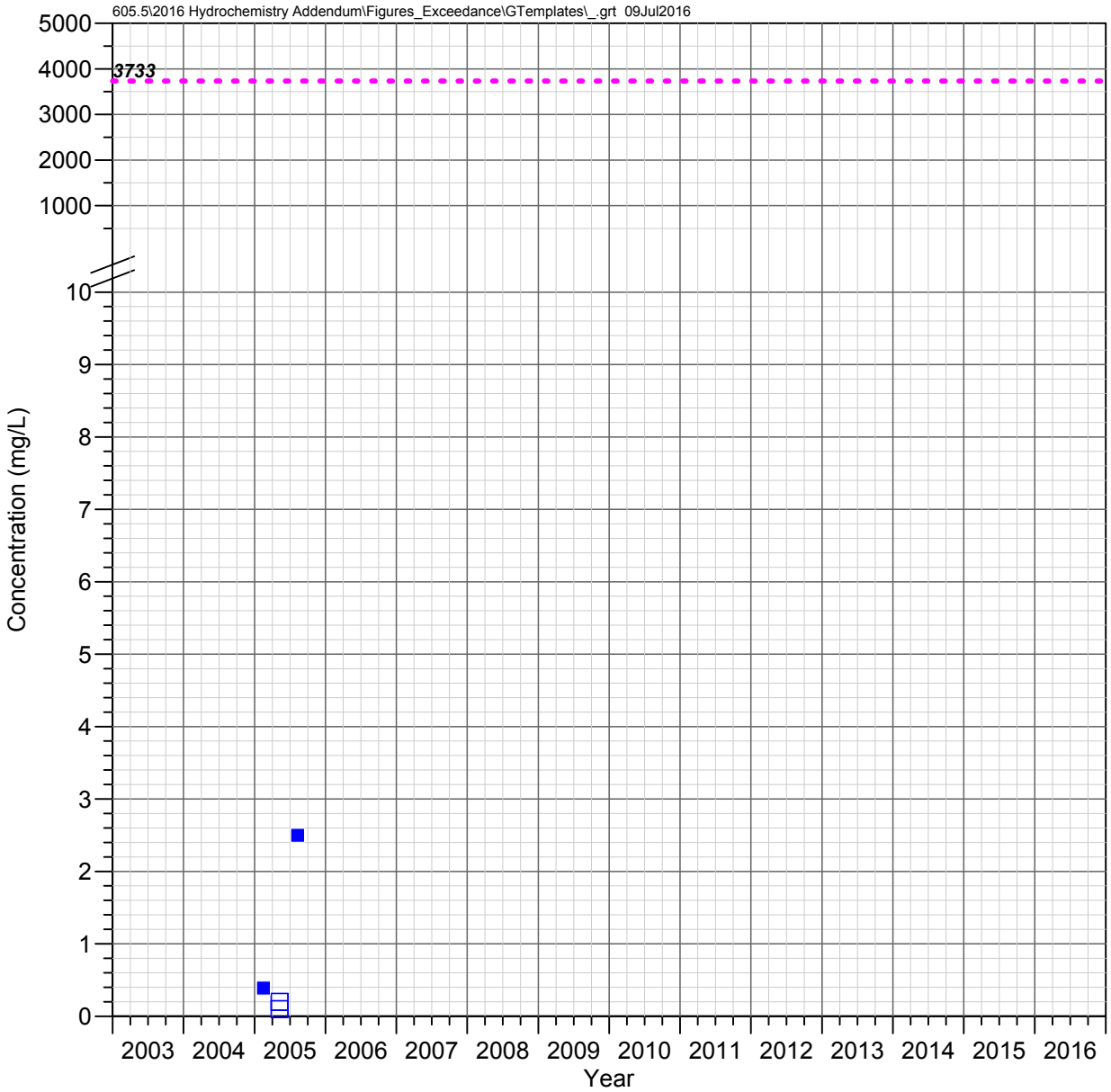


FIGURE F-575. NITRATE AS N CONCENTRATIONS OBSERVED AT DC 15.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 15.2 C
Devils Canyon Watershed

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Full Body Contact (UNS, 3733.333 mg/L)

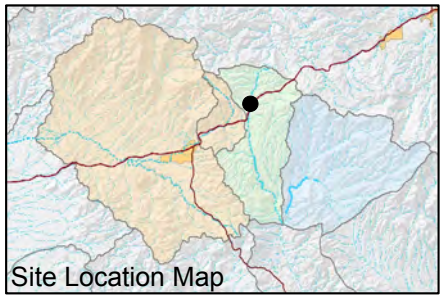
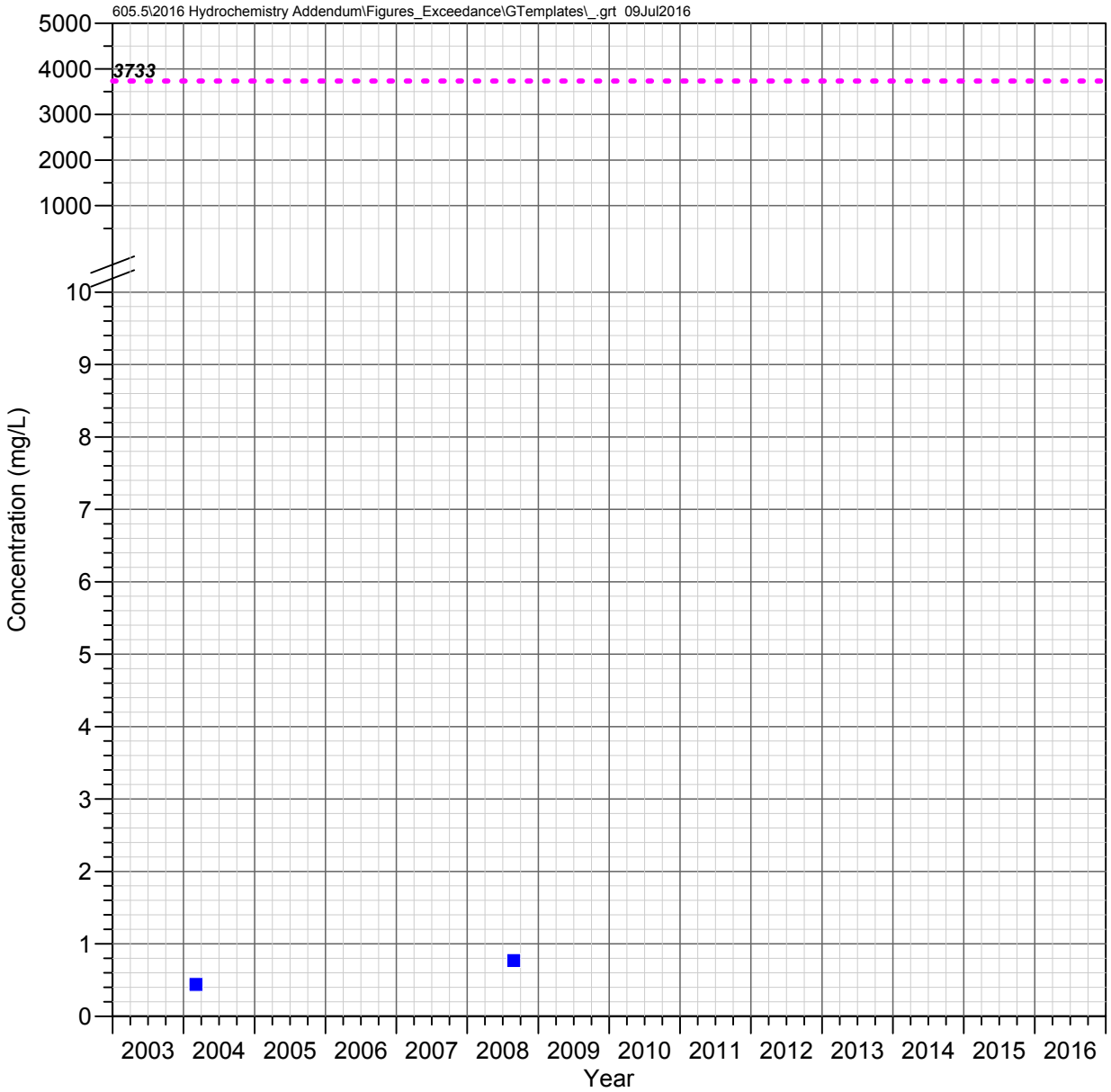


FIGURE F-576. NITRATE AS N CONCENTRATIONS OBSERVED AT DC 15.2 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 14.7 C
Devils Canyon Watershed

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Full Body Contact (UNS, 3733.333 mg/L)

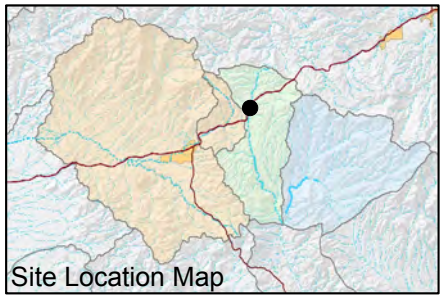
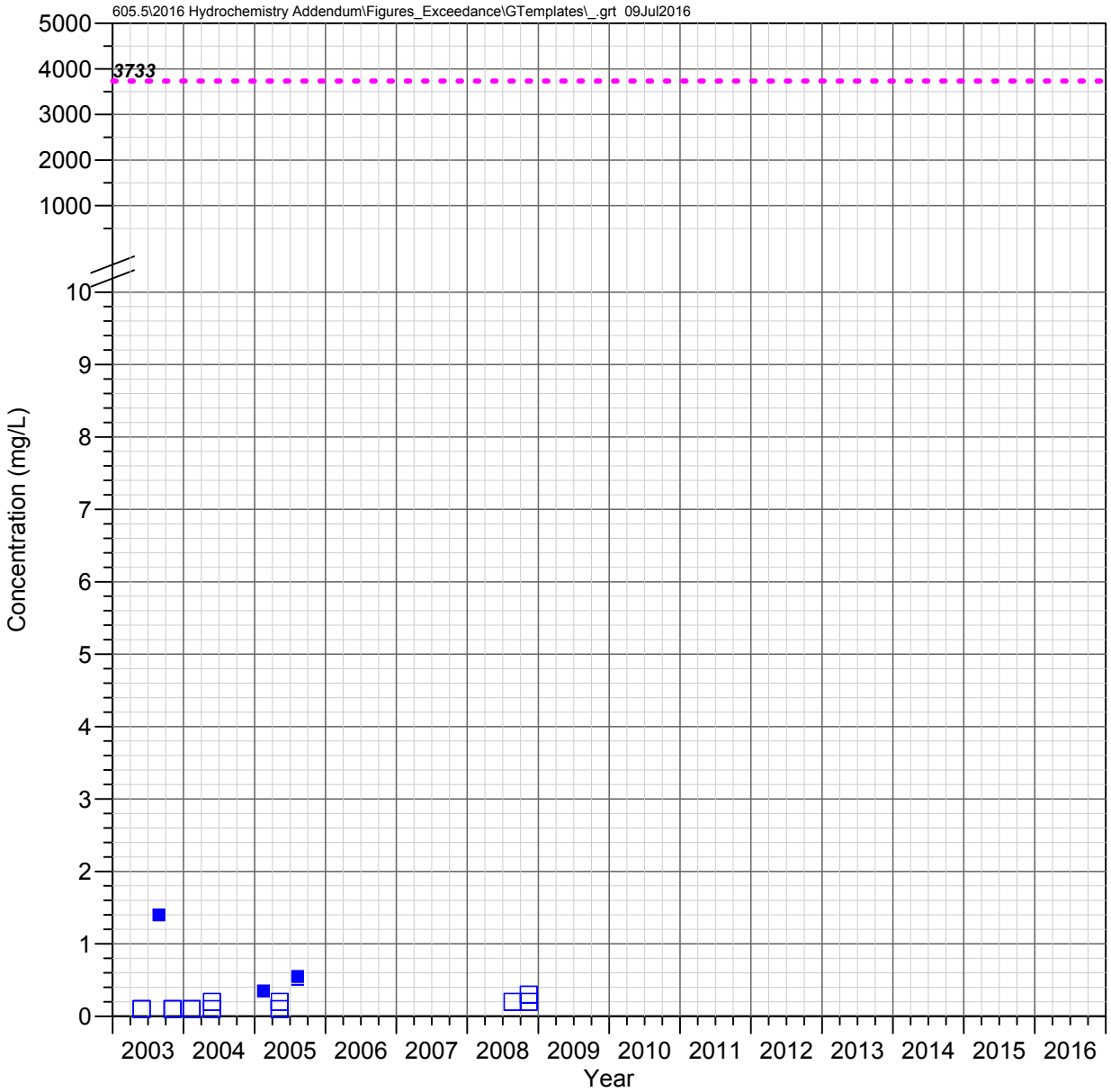


FIGURE F-577. NITRATE AS N CONCENTRATIONS OBSERVED AT DC 14.7 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 13.5 C
Devils Canyon Watershed

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 3733.333 mg/L)

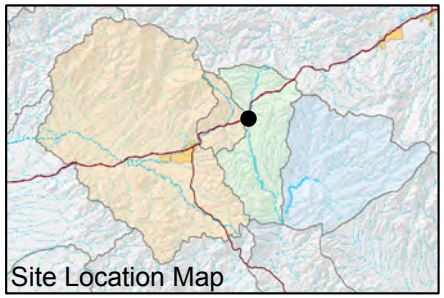
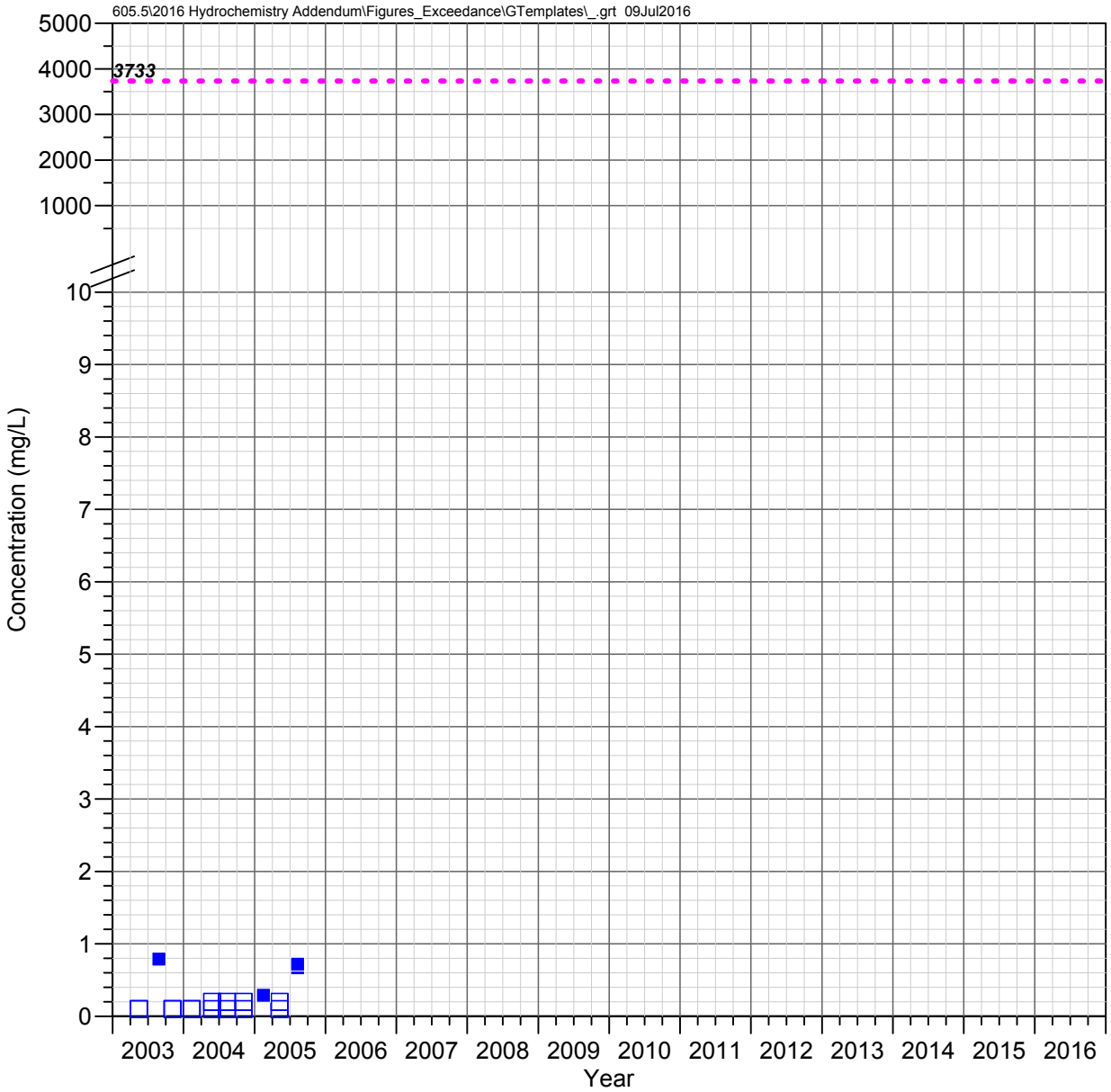


FIGURE F-578. NITRATE AS N CONCENTRATIONS OBSERVED AT DC 13.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 10.9 C
Devils Canyon Watershed

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Full Body Contact (UNS, 3733.333 mg/L)

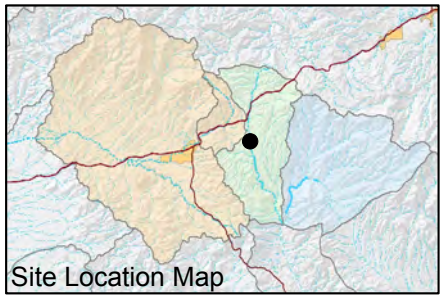
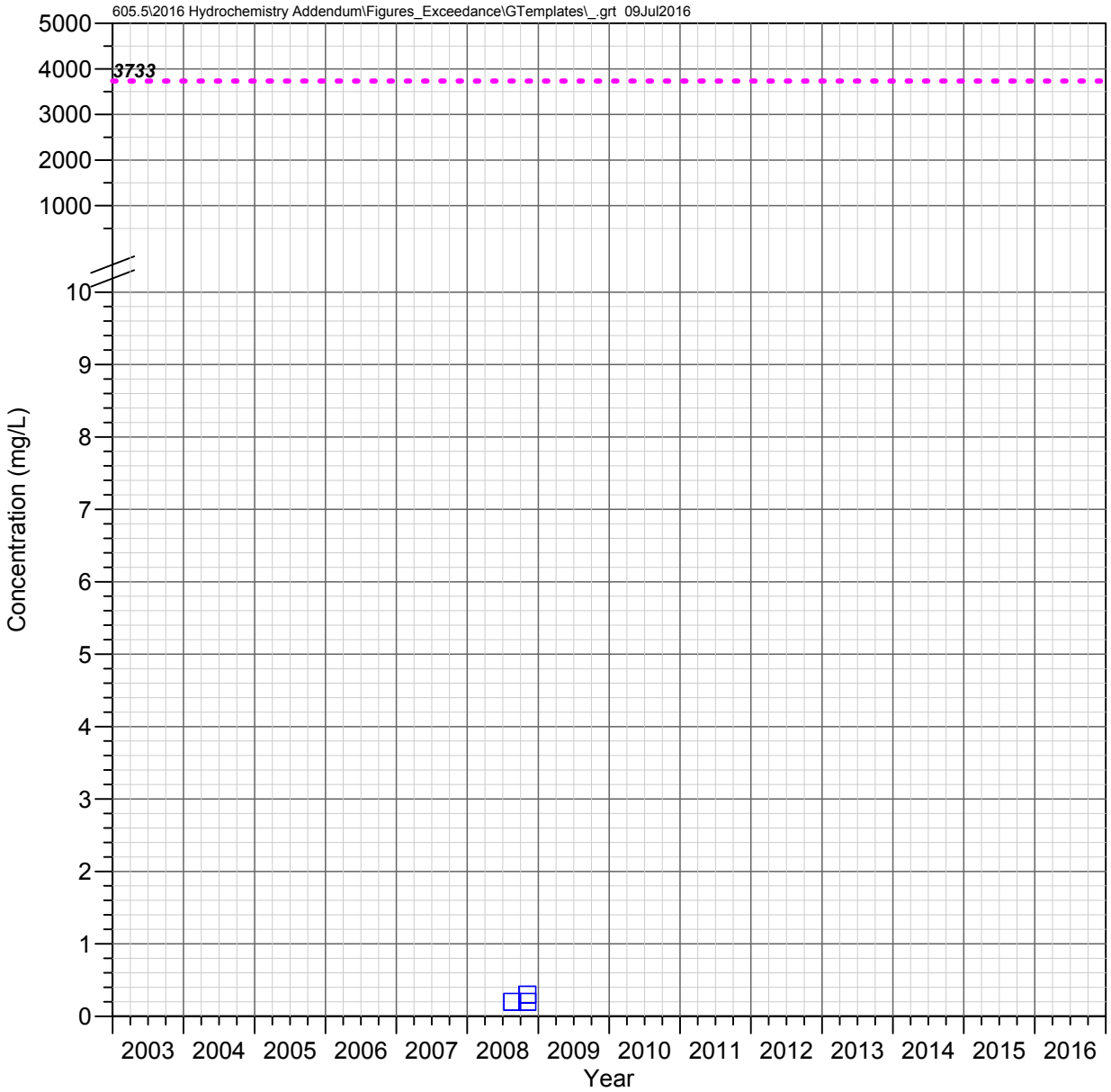


FIGURE F-579. NITRATE AS N CONCENTRATIONS OBSERVED AT DC 10.9 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



RR 1.5 C
Devils Canyon Watershed

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 3733.333 mg/L)

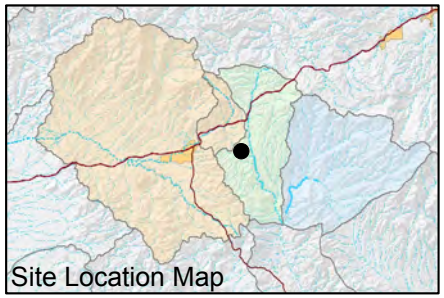
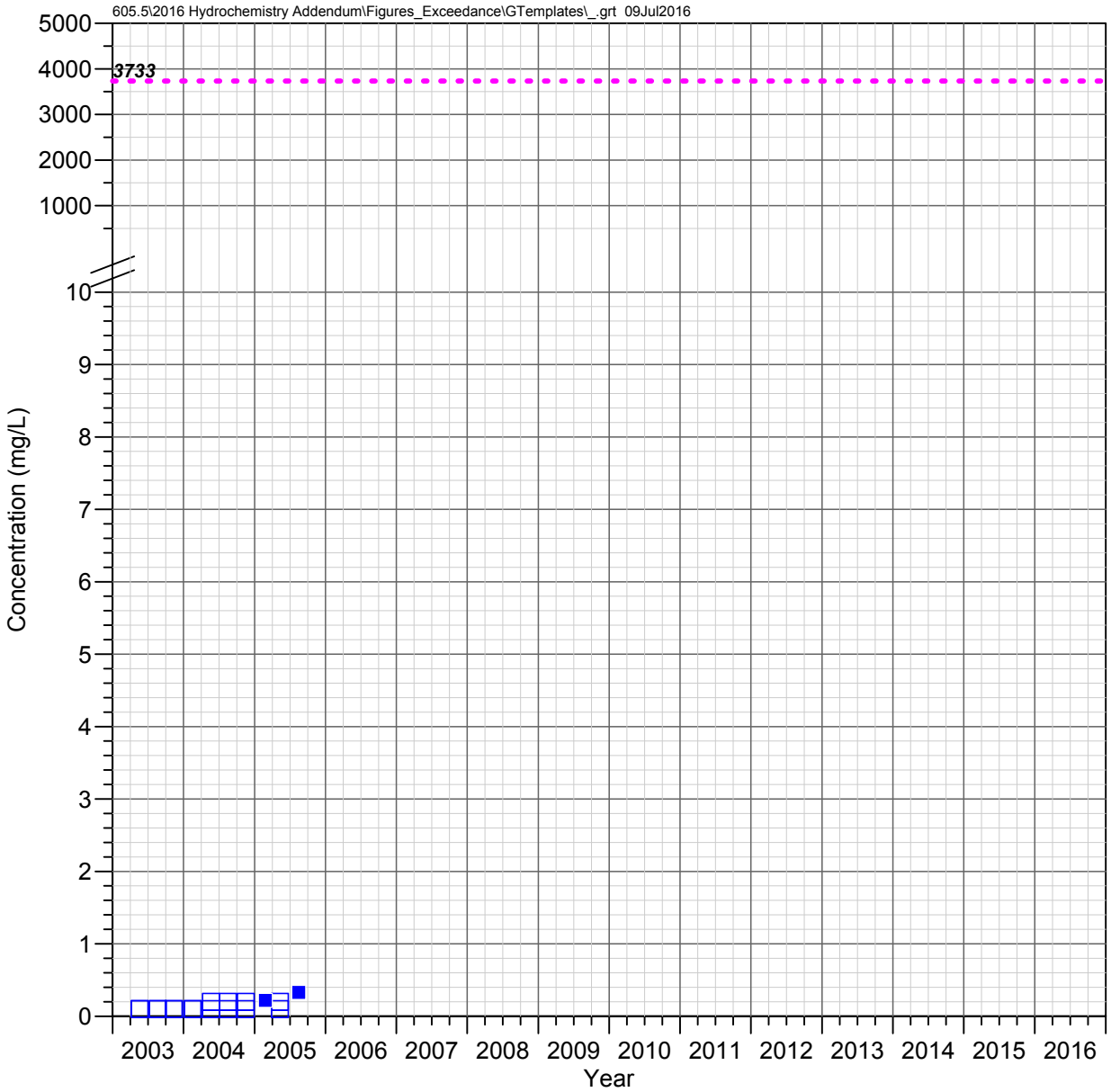


FIGURE F-580. NITRATE AS N CONCENTRATIONS OBSERVED AT RR 1.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.8 C
Devils Canyon Watershed

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Full Body Contact (UNS, 3733.333 mg/L)

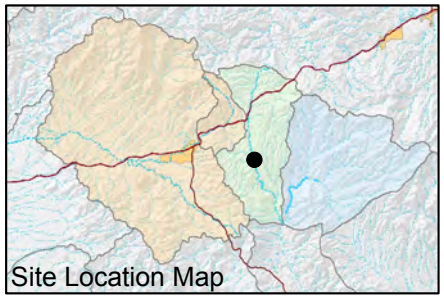
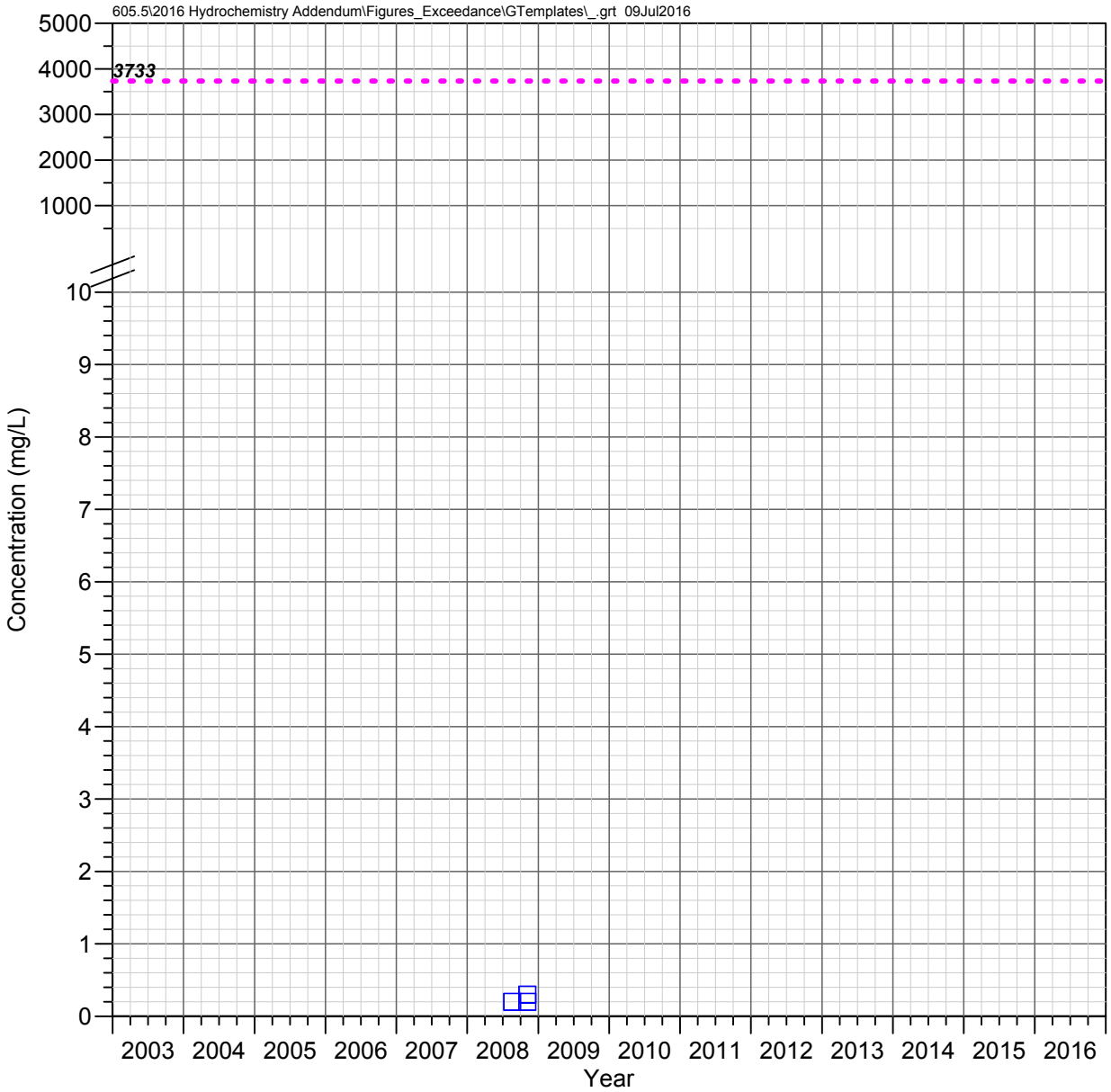


FIGURE F-581. NITRATE AS N CONCENTRATIONS OBSERVED AT DC 8.8 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



H 0.1 C
Devils Canyon Watershed

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 3733.333 mg/L)

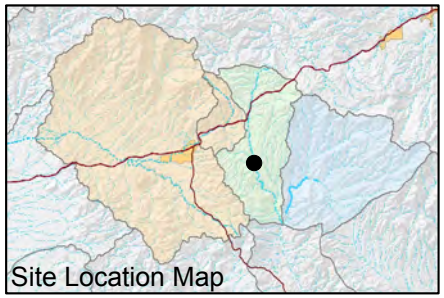
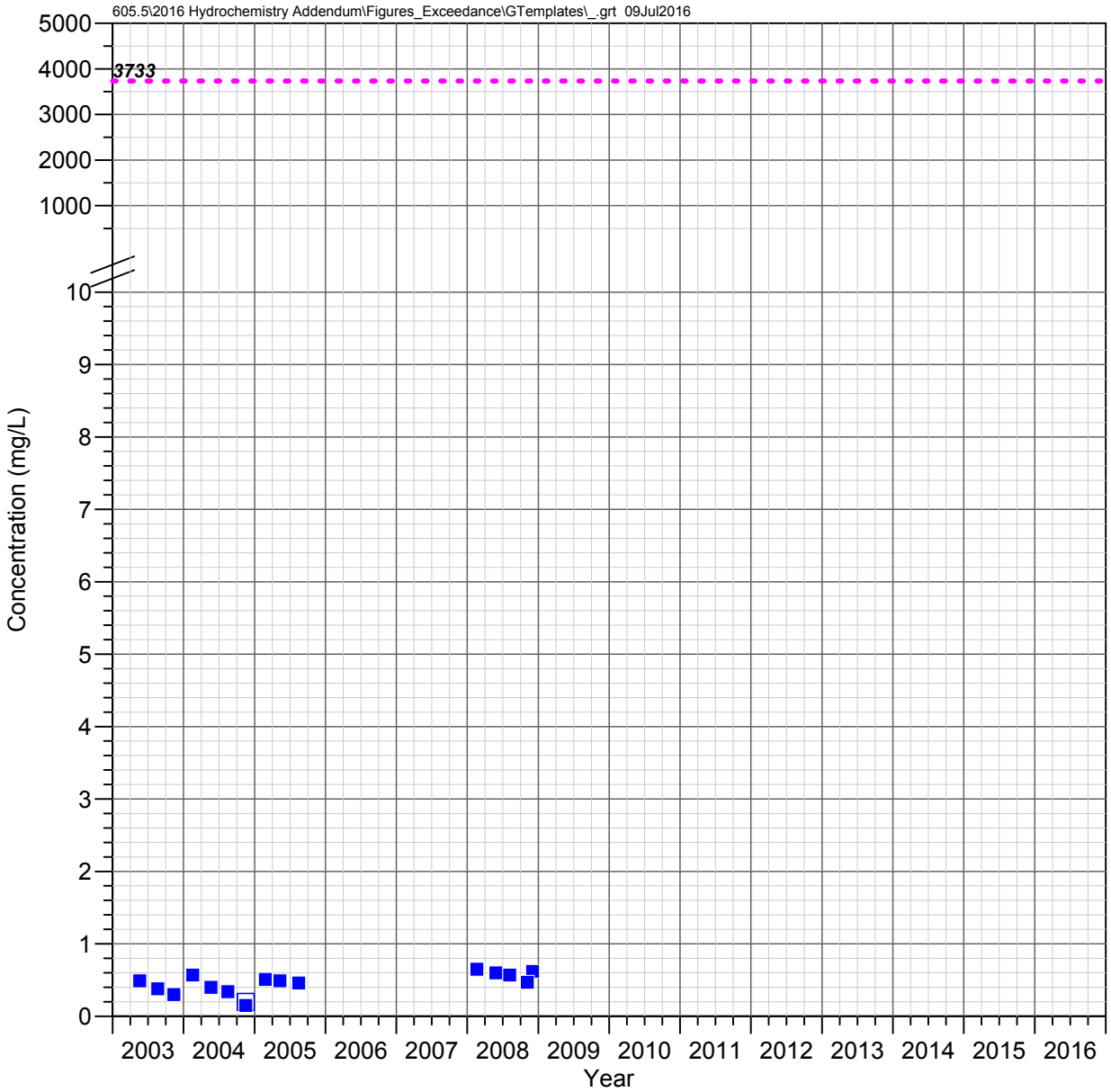


FIGURE F-582. NITRATE AS N CONCENTRATIONS OBSERVED AT H 0.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.2 W
Devils Canyon Watershed

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Full Body Contact (UNS, 3733.333 mg/L)

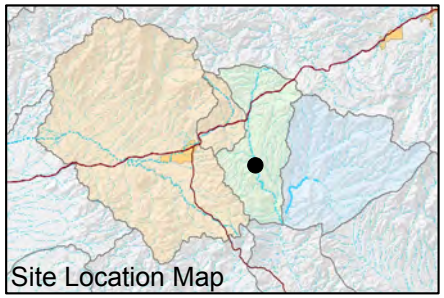
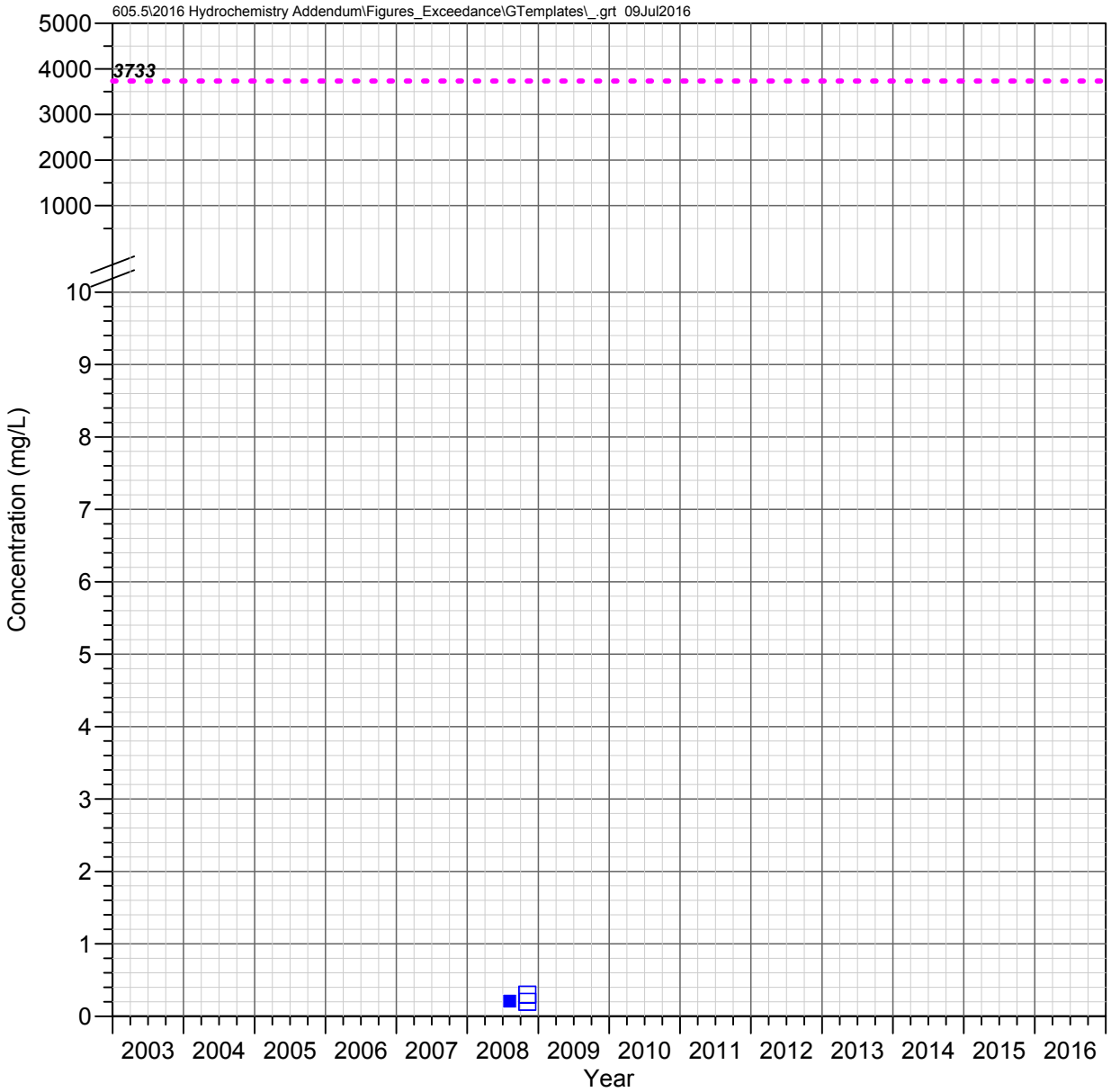


FIGURE F-583. NITRATE AS N CONCENTRATIONS OBSERVED AT DC 8.2 W, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.1 C
Devils Canyon Watershed

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 3733.333 mg/L)

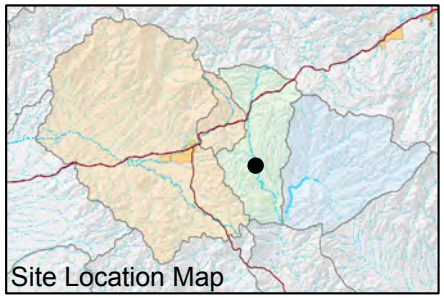
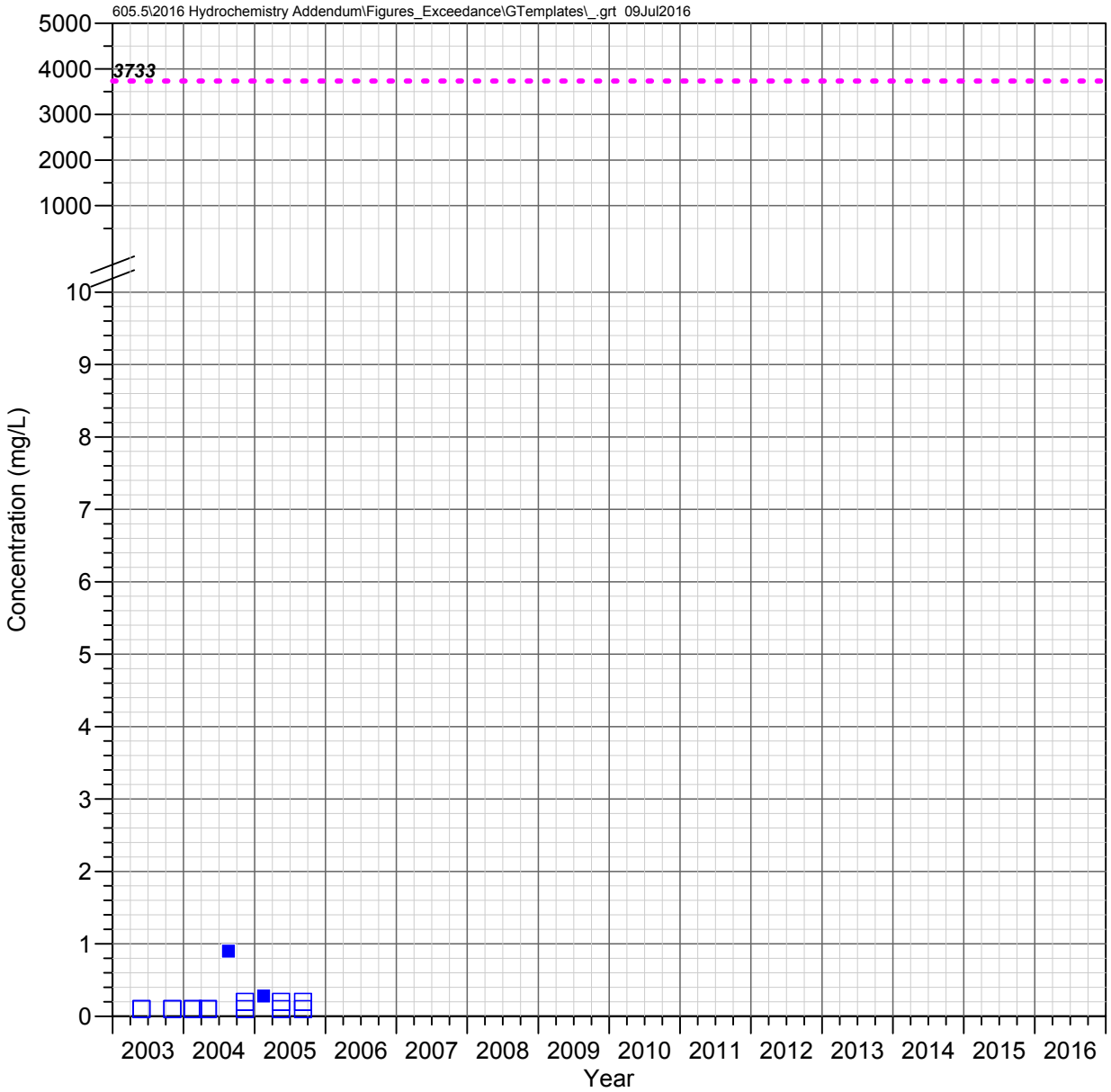


FIGURE F-584. NITRATE AS N CONCENTRATIONS OBSERVED AT DC 8.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 7.1 C
Devils Canyon Watershed

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Full Body Contact (UNS, 3733.333 mg/L)

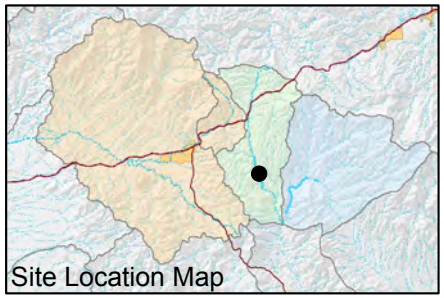
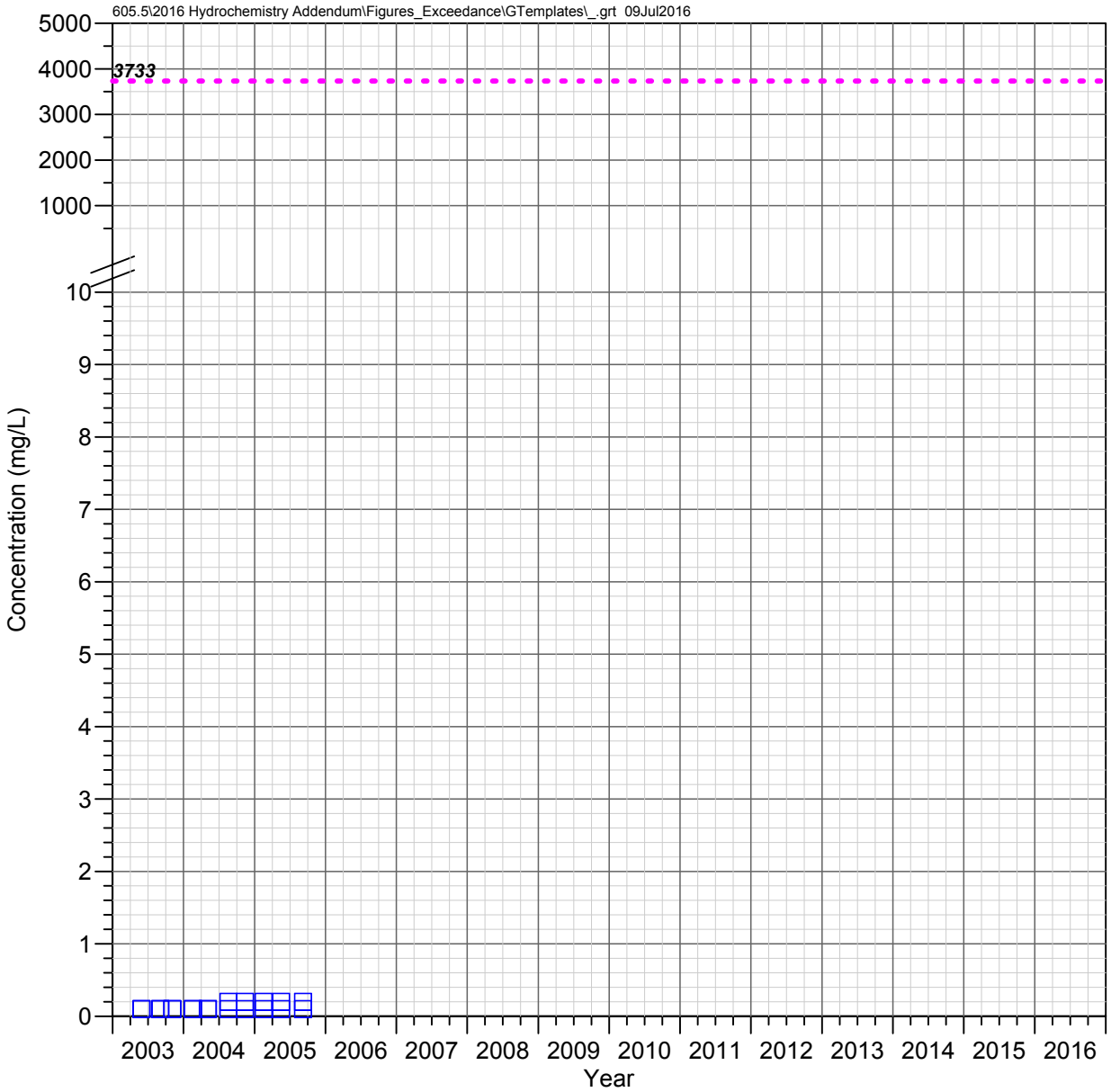


FIGURE F-585. NITRATE AS N CONCENTRATIONS OBSERVED AT DC 7.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.6 W (DCT 6.6 W)
Devils Canyon Watershed

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 3733.333 mg/L)

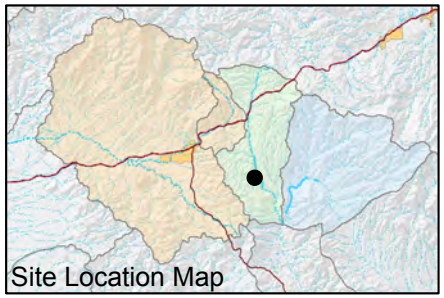
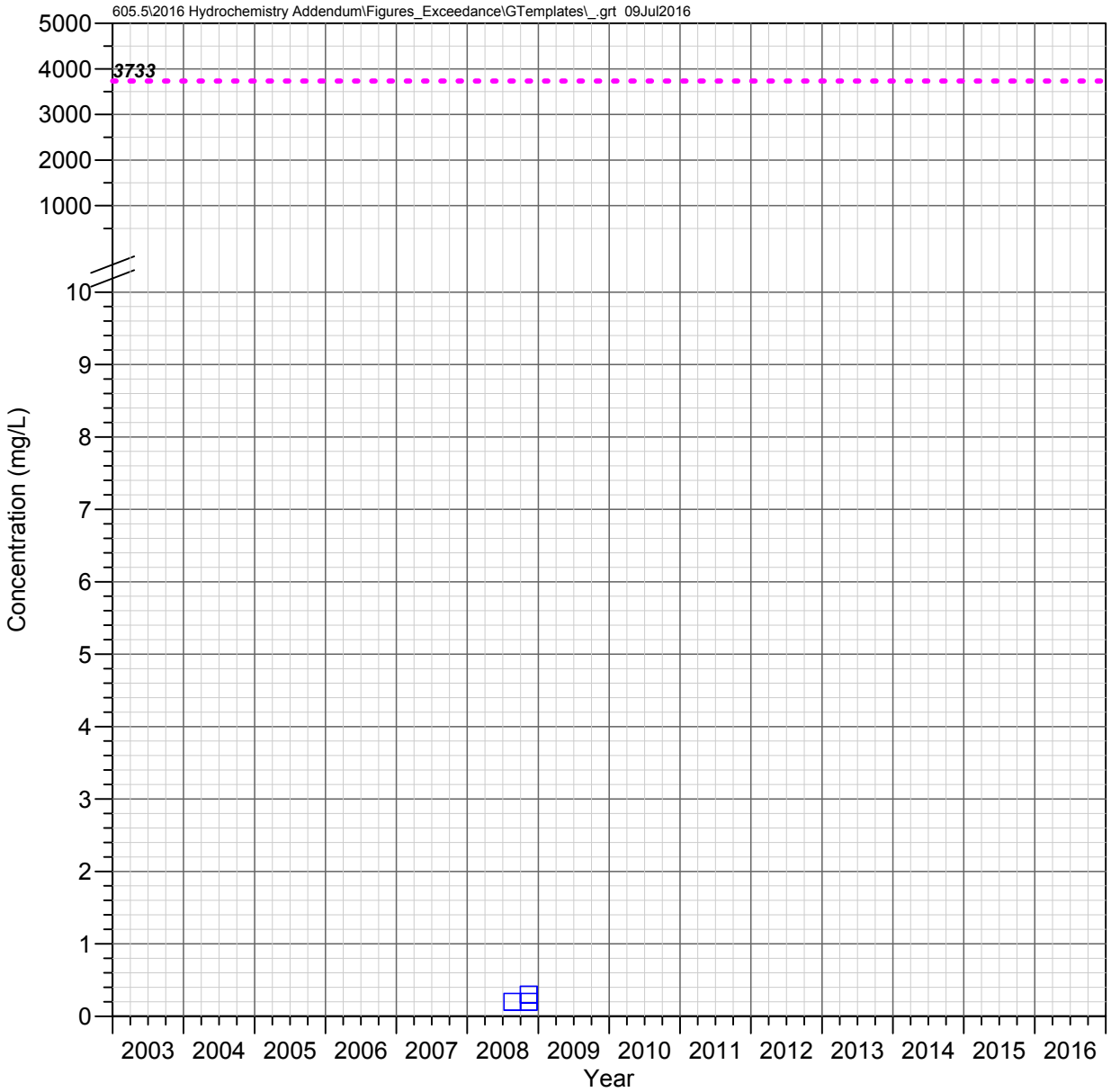


FIGURE F-586. NITRATE AS N CONCENTRATIONS OBSERVED AT DC 6.6 W (DCT 6.6 W), DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.14 C
Devils Canyon Watershed

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 3733.333 mg/L)

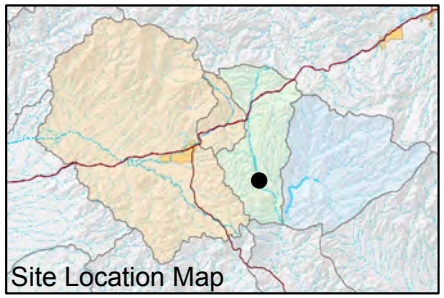
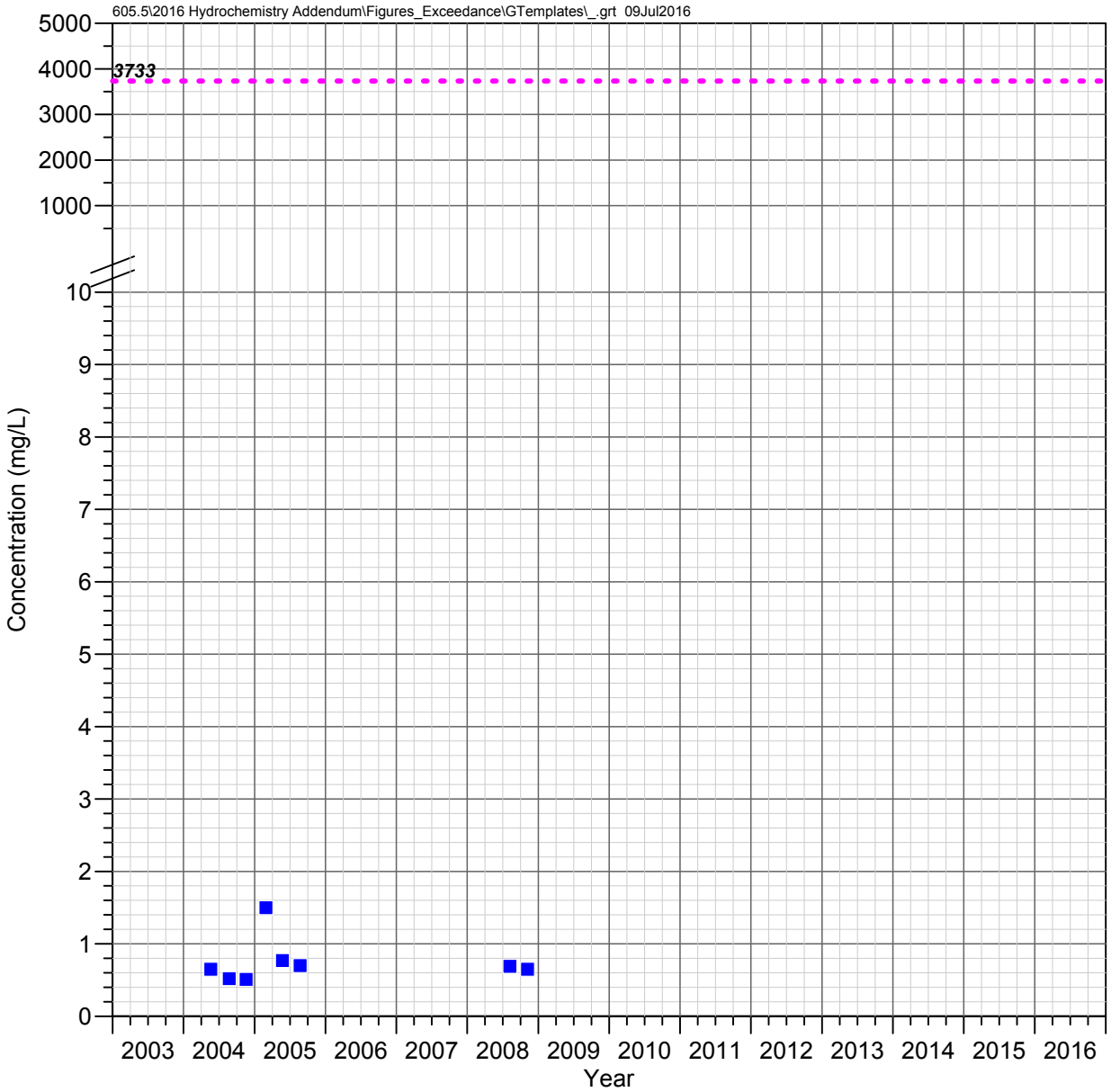


FIGURE F-587. NITRATE AS N CONCENTRATIONS OBSERVED AT DC 6.14 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.1 E
Devils Canyon Watershed

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Full Body Contact (UNS, 3733.333 mg/L)

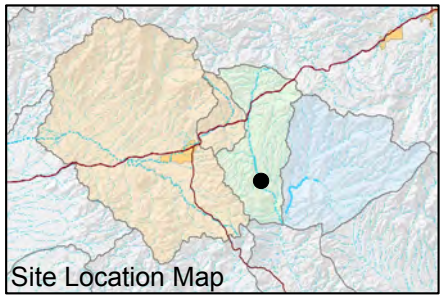
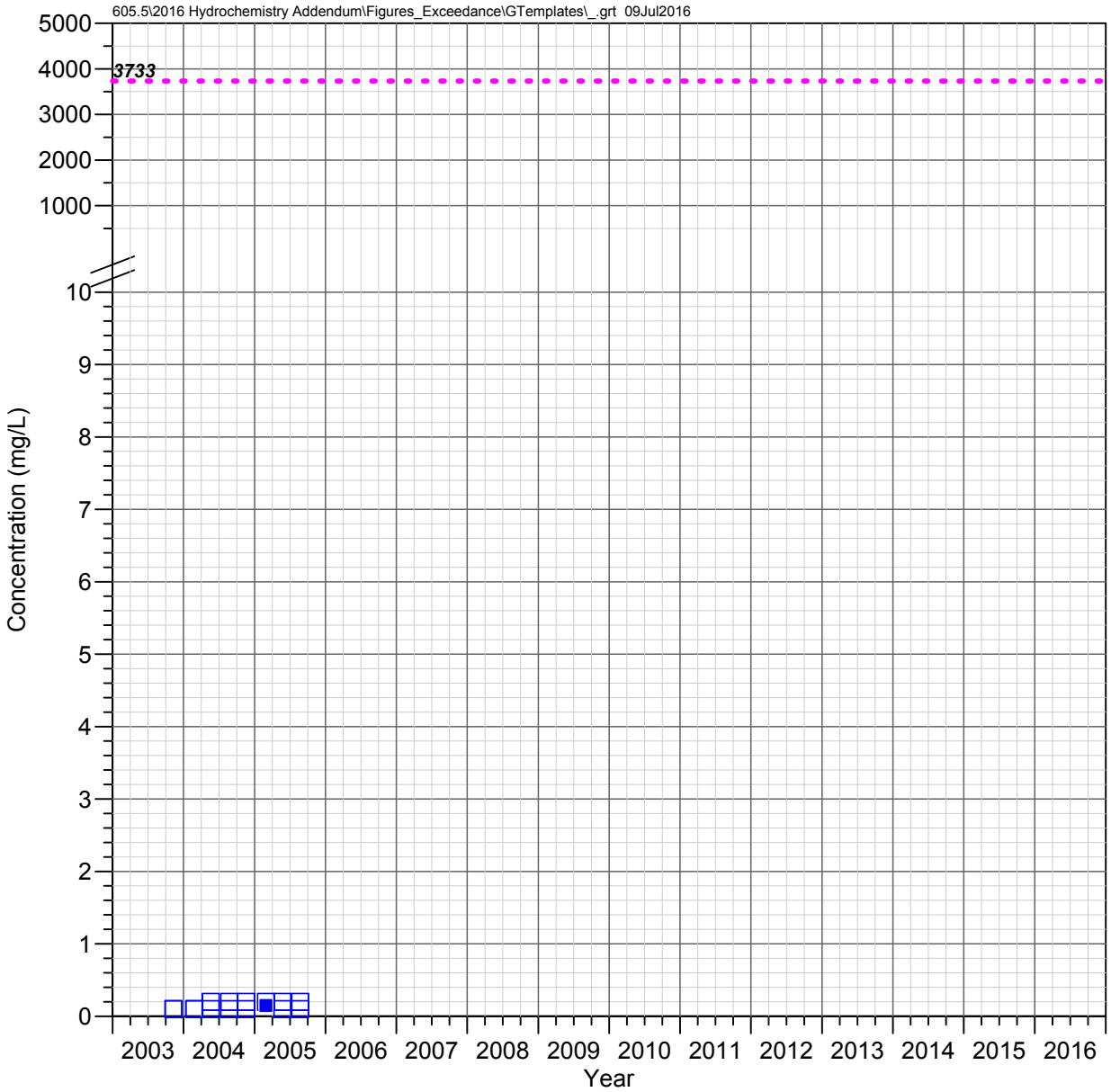


FIGURE F-588. NITRATE AS N CONCENTRATIONS OBSERVED AT DC 6.1 E, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 5.5 C
Devils Canyon Watershed

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 3733.333 mg/L)

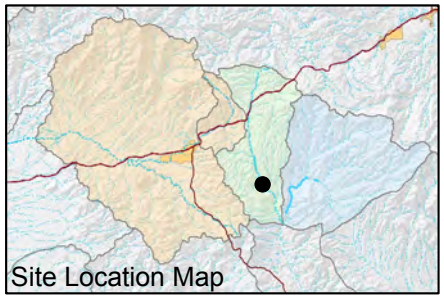
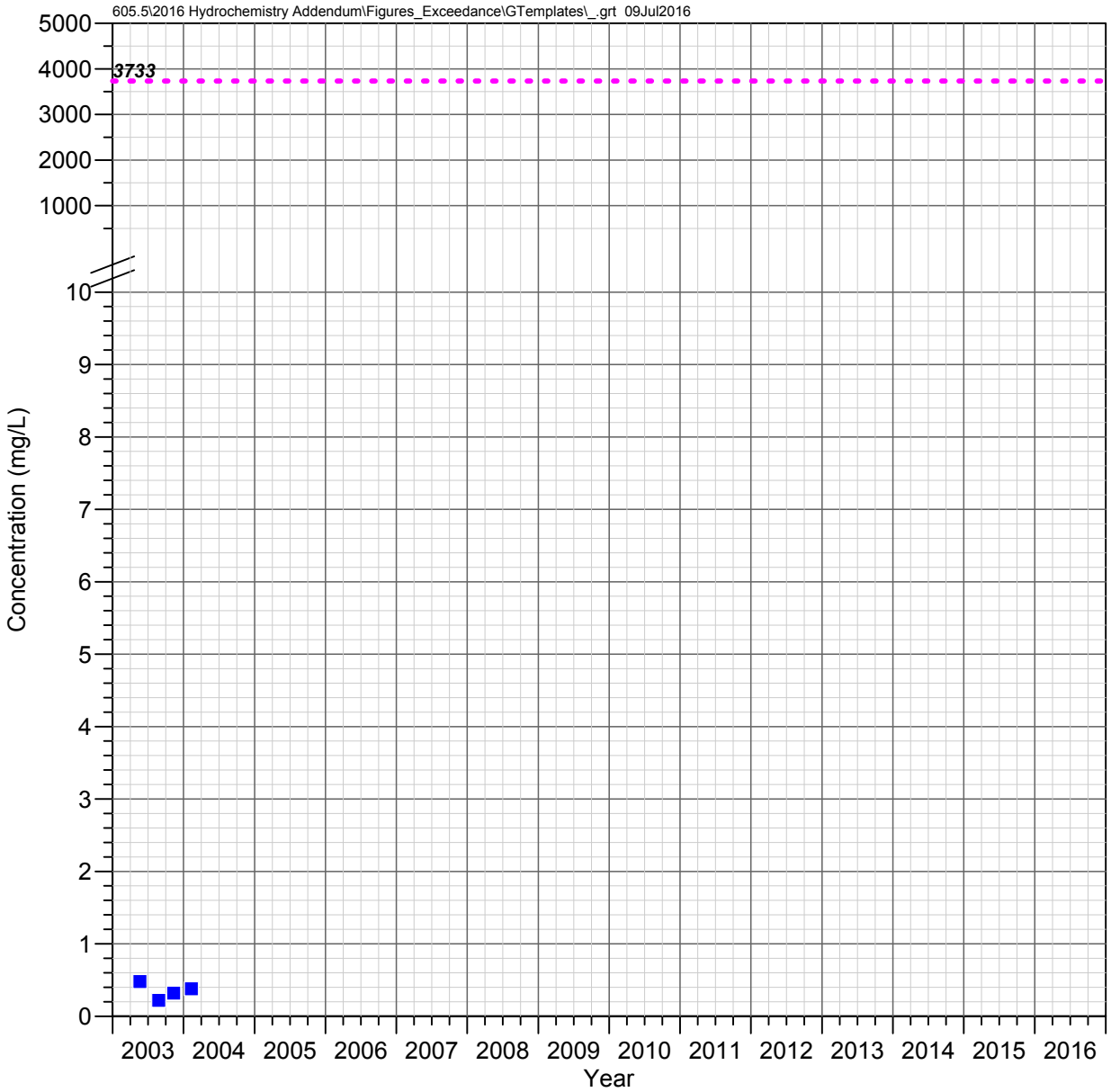


FIGURE F-589. NITRATE AS N CONCENTRATIONS OBSERVED AT DC 5.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 4.1 E
Devils Canyon Watershed

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Full Body Contact (UNS, 3733.333 mg/L)

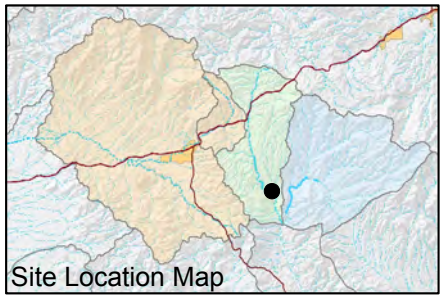
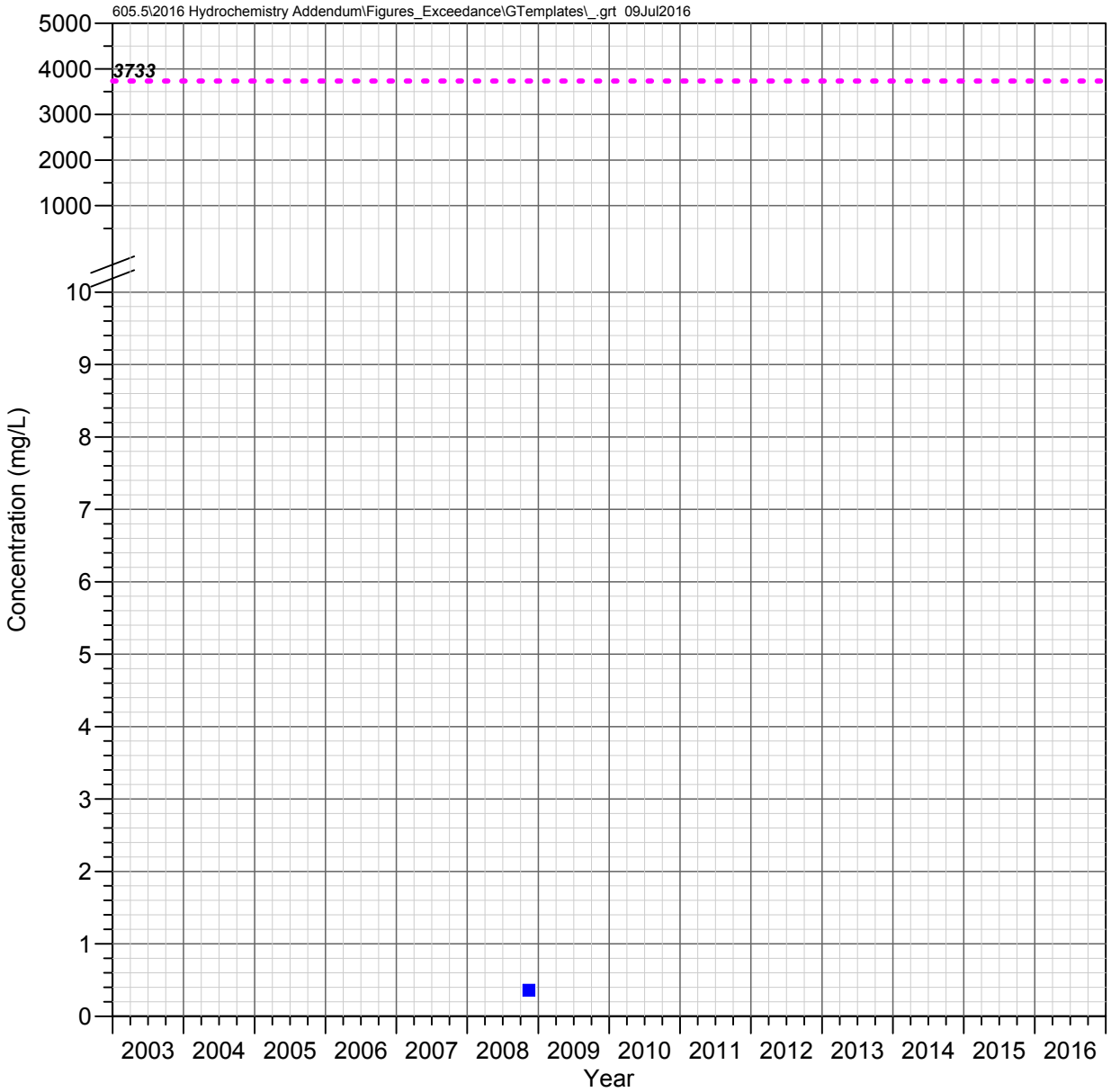


FIGURE F-590. NITRATE AS N CONCENTRATIONS OBSERVED AT DC 4.1 E, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 8.4 C
Mineral Creek Watershed

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 3733.333 mg/L)

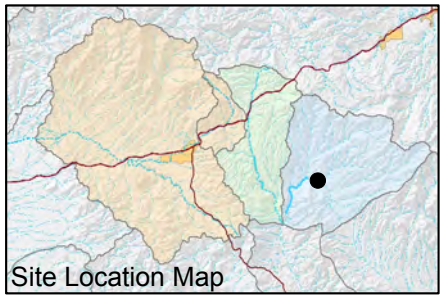
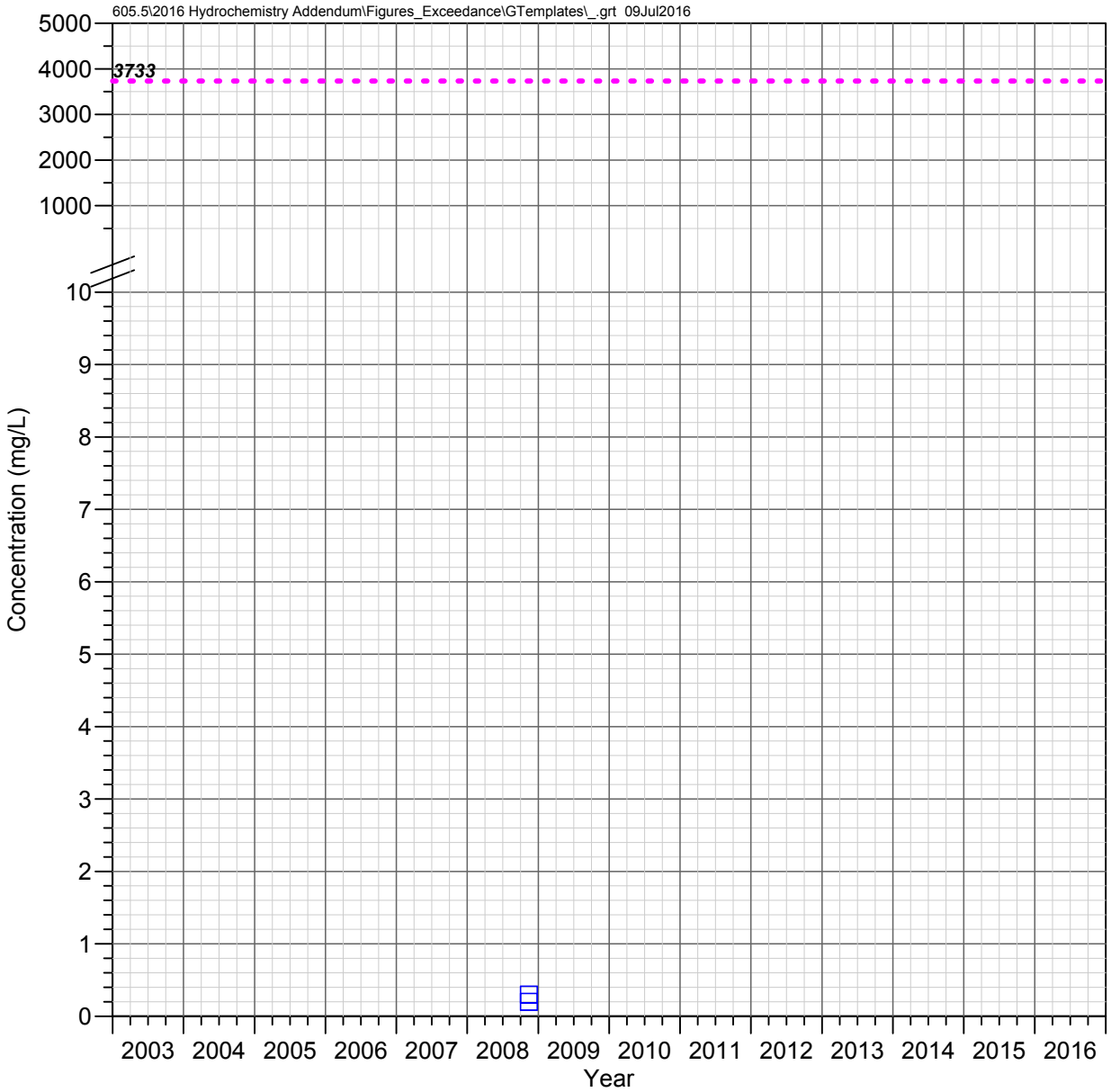


FIGURE F-591. NITRATE AS N CONCENTRATIONS OBSERVED AT MC 8.4 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



LF 0.2 C
Mineral Creek Watershed

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 3733.333 mg/L)

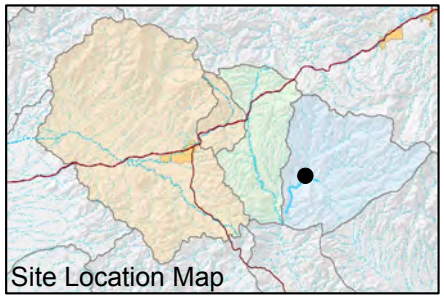
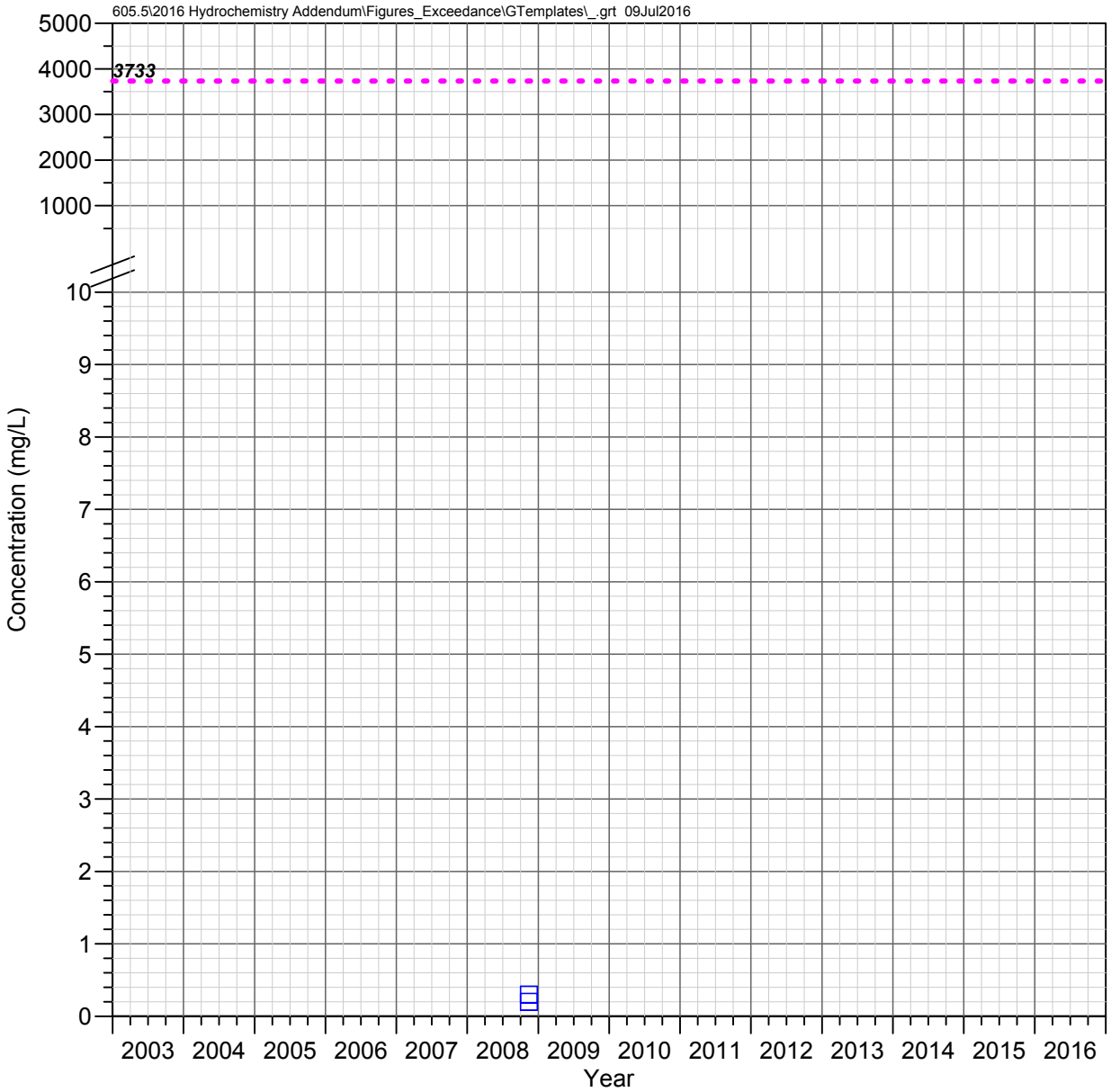


FIGURE F-592. NITRATE AS N CONCENTRATIONS OBSERVED AT LF 0.2 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 3.4 W (Wet Leg Spring)
Mineral Creek Watershed

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 3733.333 mg/L)

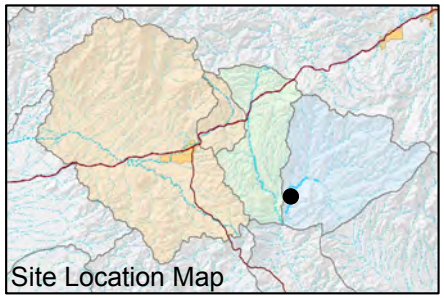
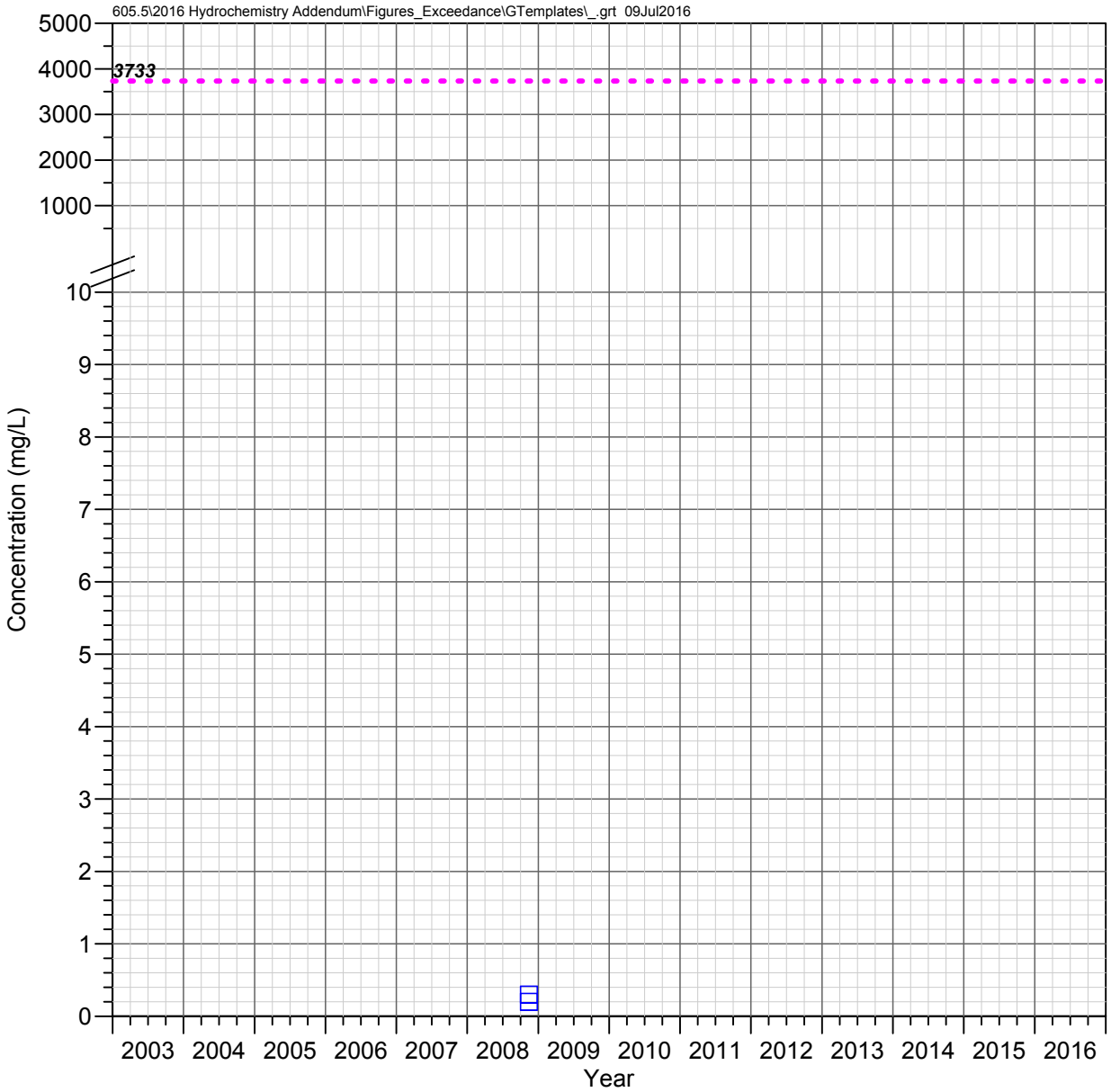


FIGURE F-593. NITRATE AS N CONCENTRATIONS OBSERVED AT MC 3.4 W (WET LEG SPRING), MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 3.3 C (Lower Mineral)
Mineral Creek Watershed

NITRATE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 3733.333 mg/L)

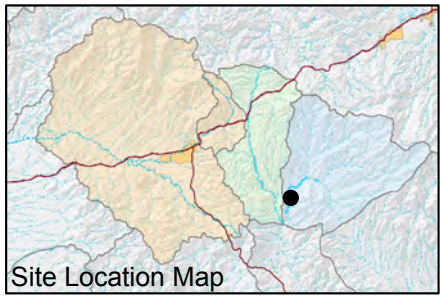
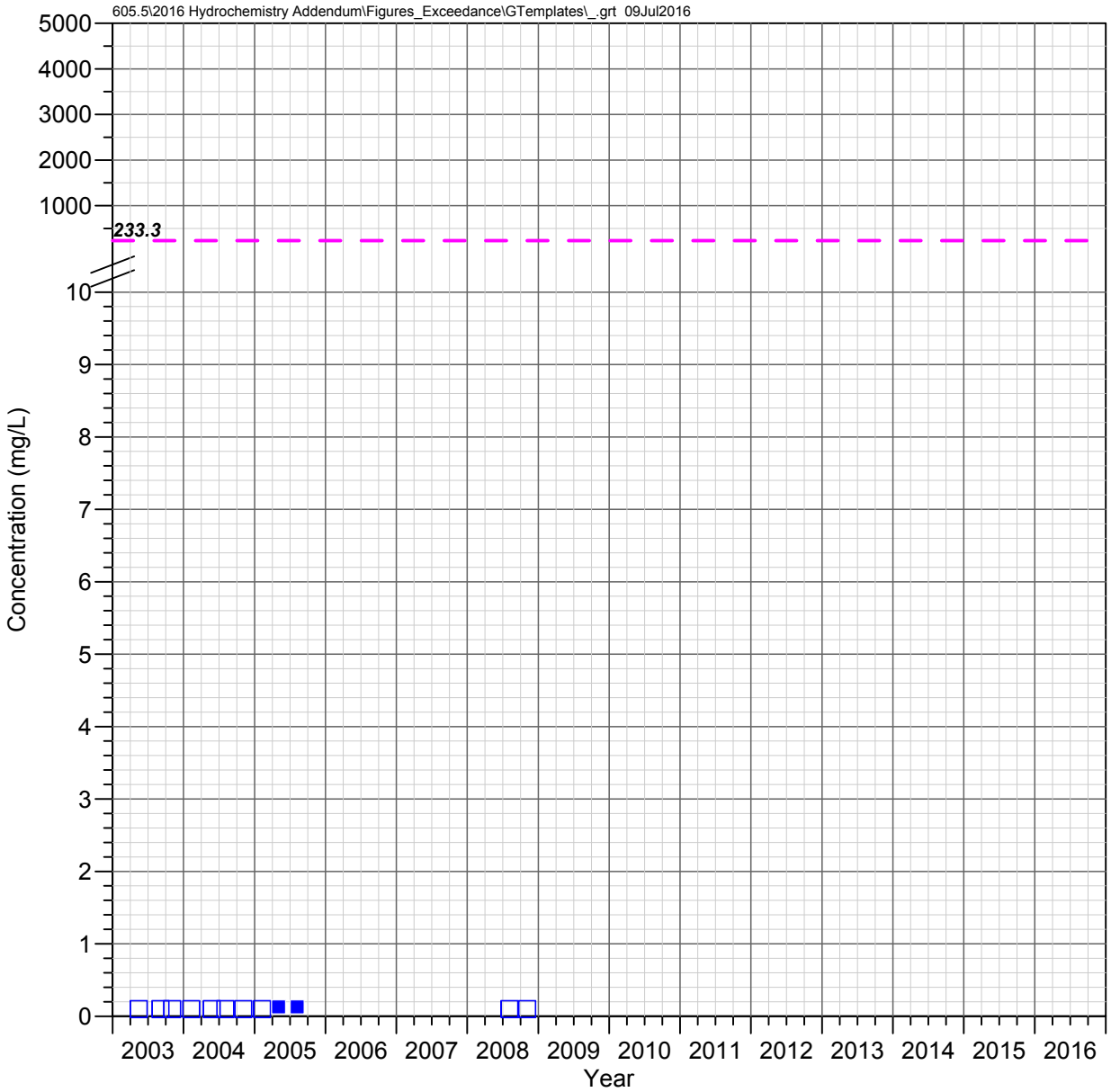


FIGURE F-594. NITRATE AS N CONCENTRATIONS OBSERVED AT MC 3.3 C (LOWER MINERAL), MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Pump Station Spring (QC 30.7 C)
Queen Creek Watershed

NITRITE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — AZ Partial Body Contact (UNS, 233.333 mg/L)

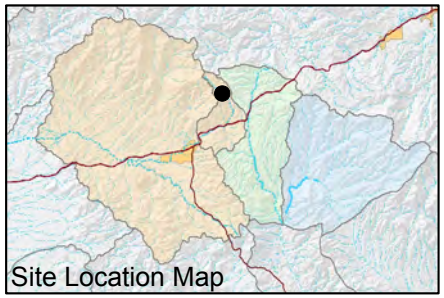
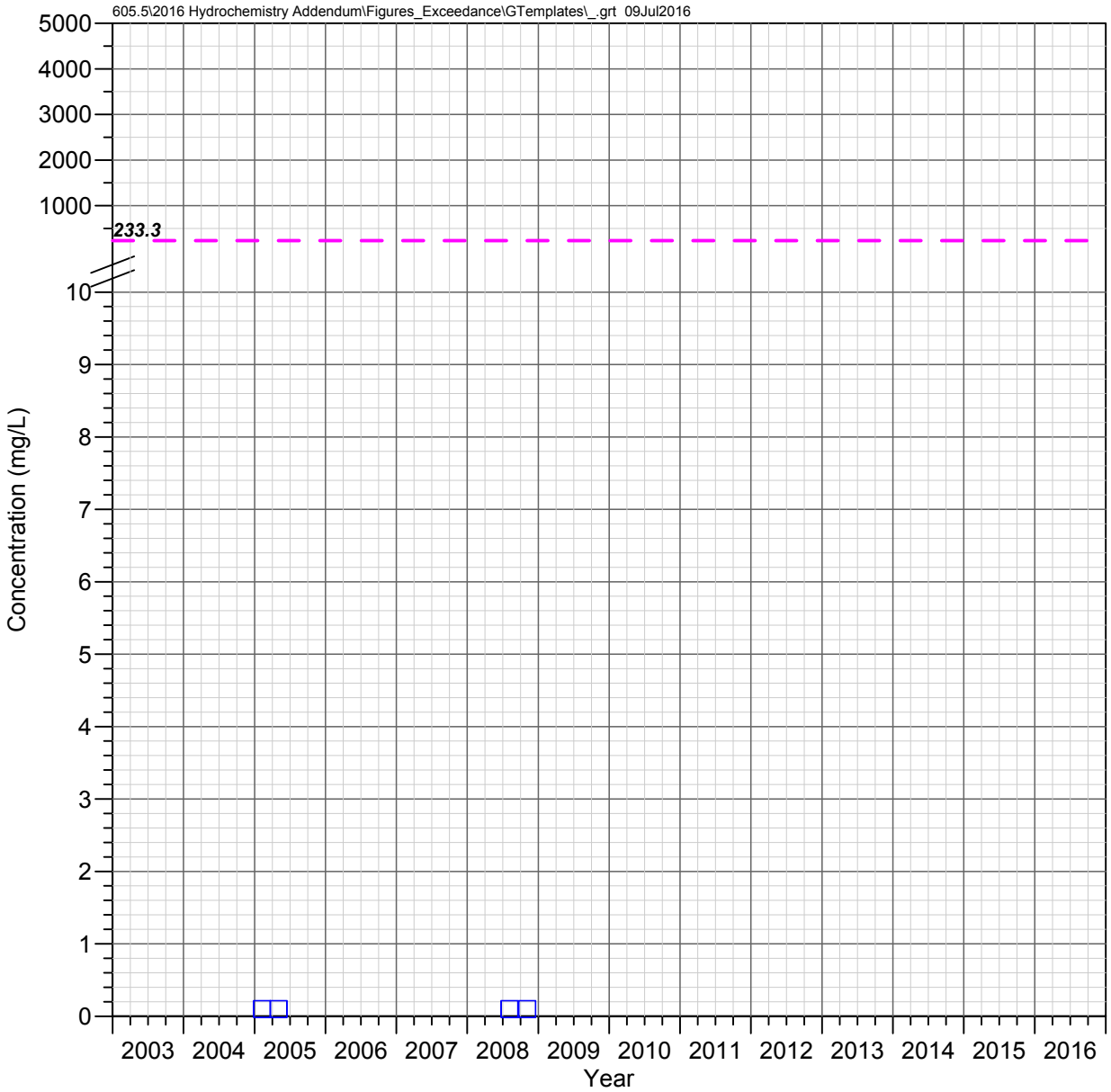


FIGURE F-595. NITRITE AS N CONCENTRATIONS OBSERVED AT PUMP STATION SPRING (QC 30.7 C), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 27.3 C
Queen Creek Watershed

NITRITE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — AZ Partial Body Contact (UNS, 233.333 mg/L)

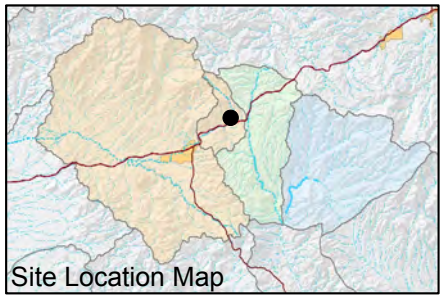
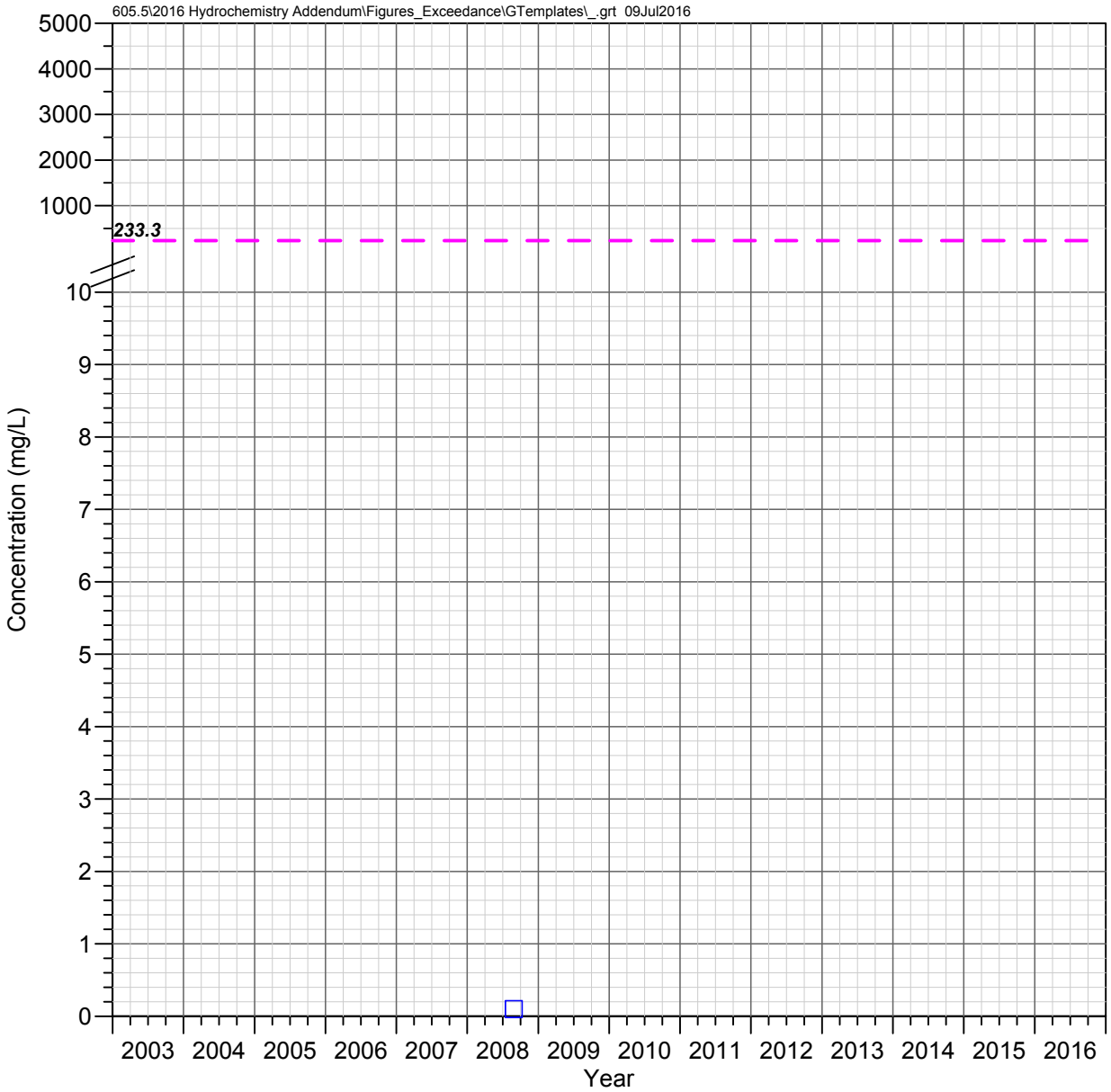


FIGURE F-596. NITRITE AS N CONCENTRATIONS OBSERVED AT QC 27.3 C, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Oak Flat Wash
Queen Creek Watershed

NITRITE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — AZ Partial Body Contact (UNS, 233.333 mg/L)

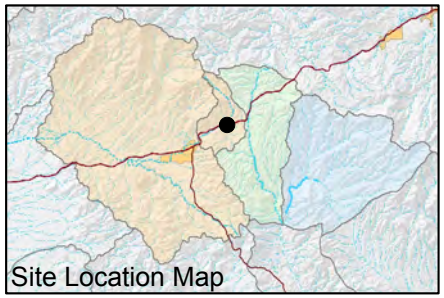
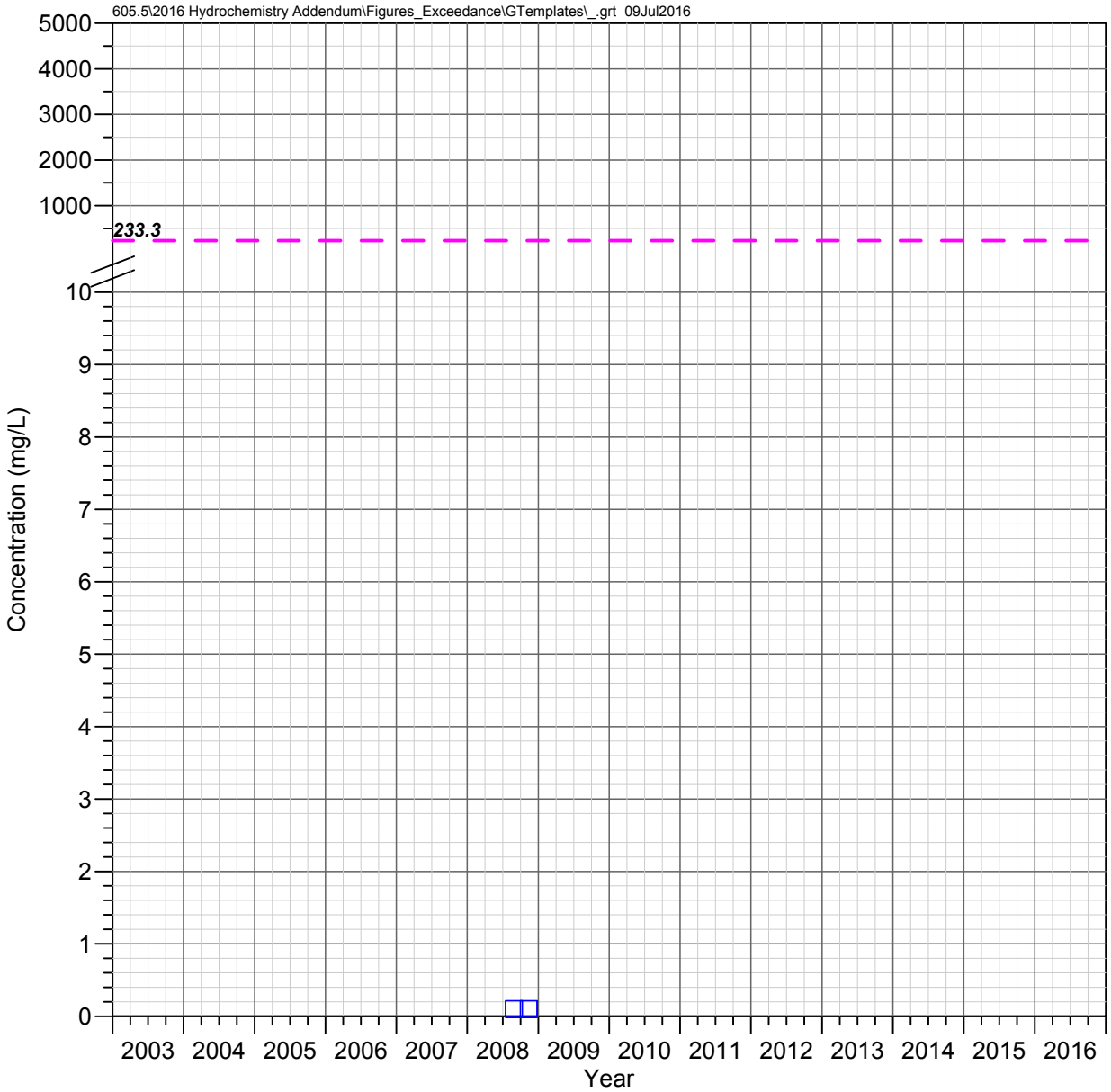


FIGURE F-597. NITRITE AS N CONCENTRATIONS OBSERVED AT OAK FLAT WASH, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Number 9 Wash
Queen Creek Watershed

NITRITE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — AZ Partial Body Contact (UNS, 233.333 mg/L)

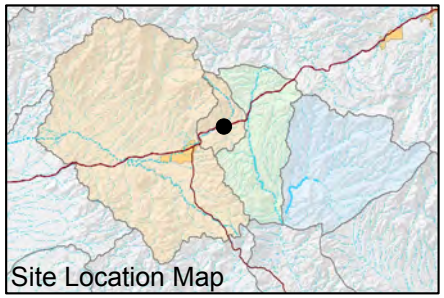
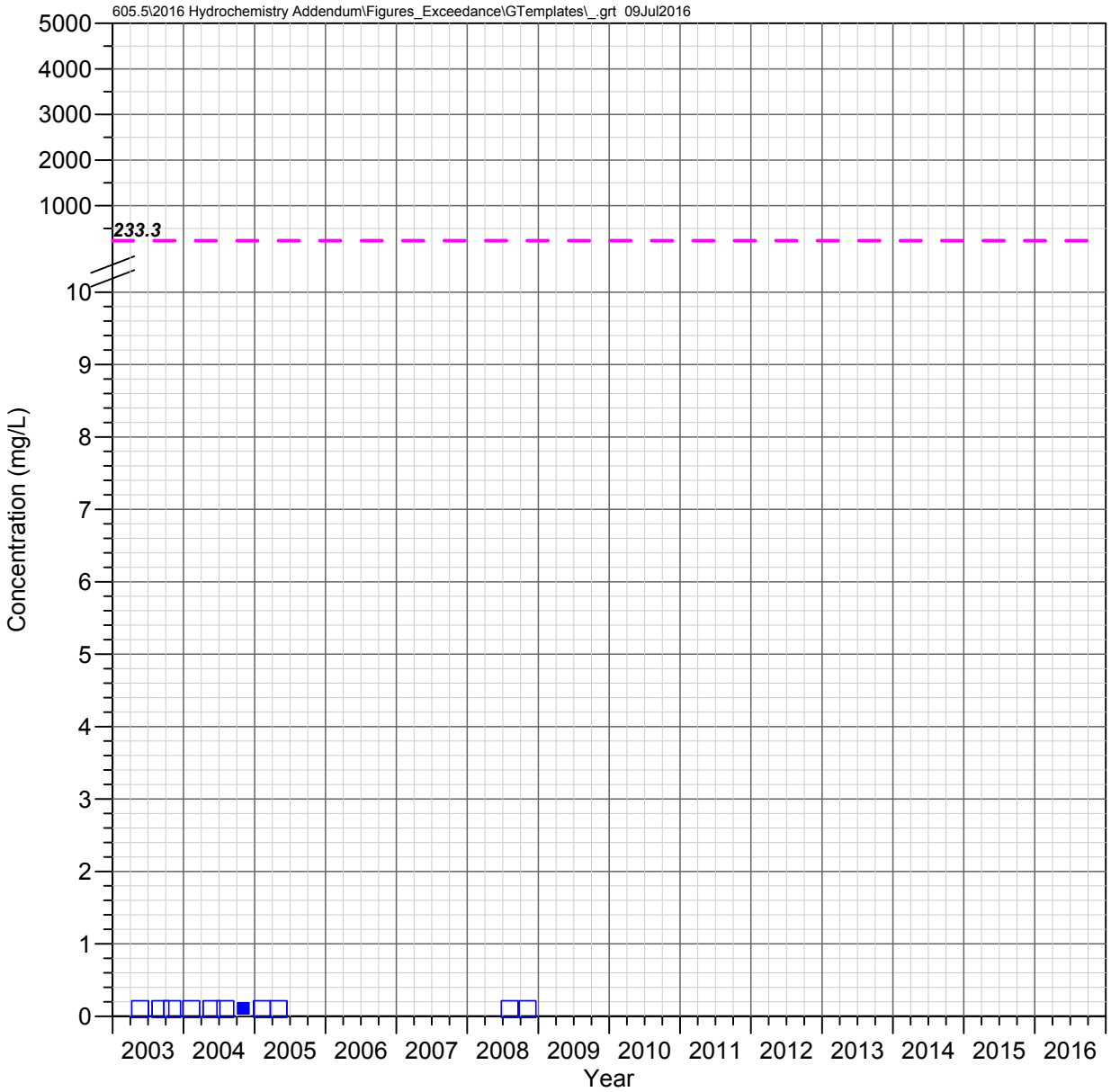


FIGURE F-598. NITRITE AS N CONCENTRATIONS OBSERVED AT NUMBER 9 WASH, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Boulder Hole (QC 23.6 C)
Queen Creek Watershed

NITRITE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — AZ Partial Body Contact (UNS, 233.333 mg/L)

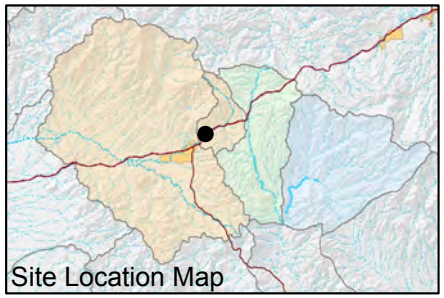
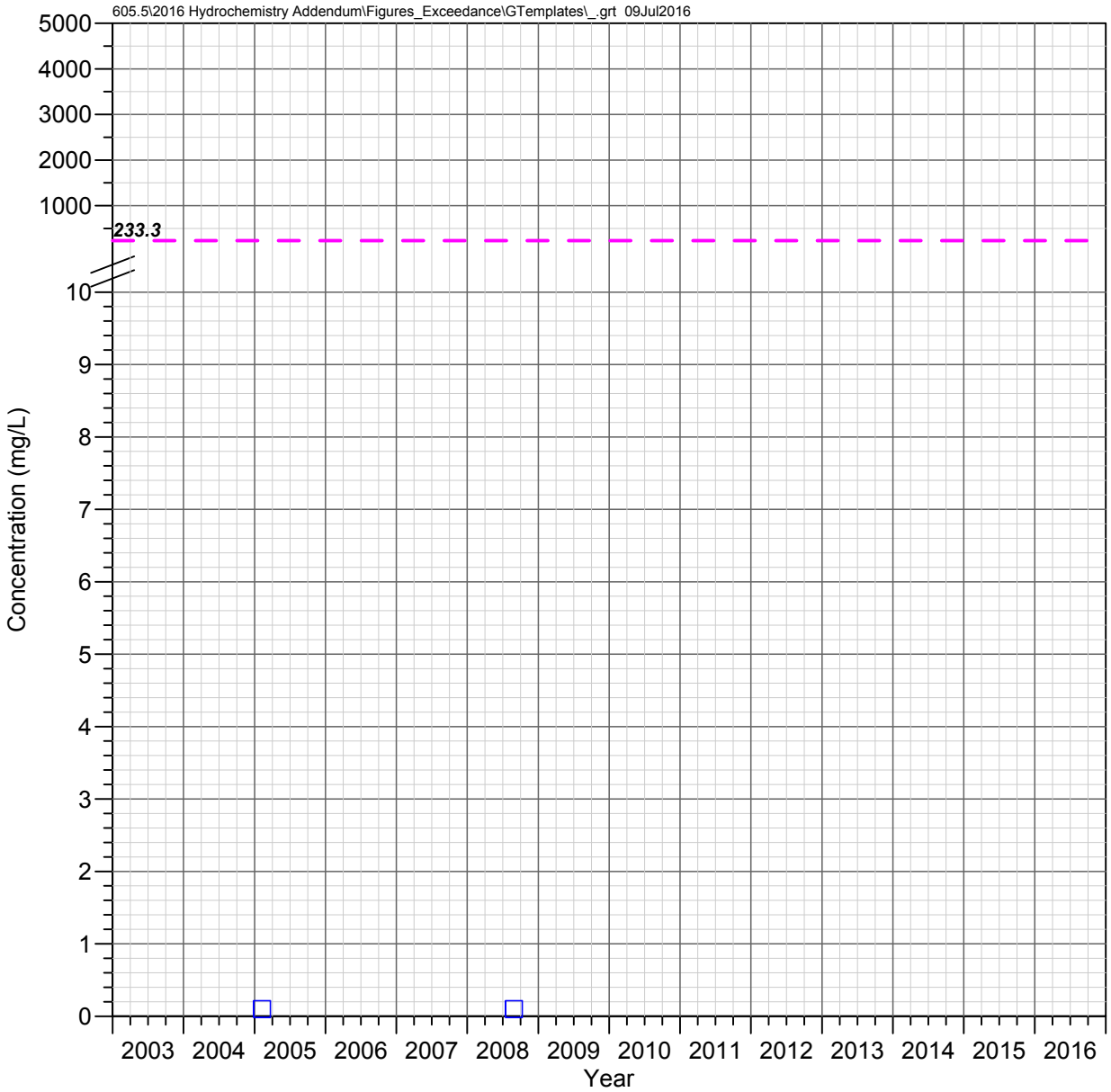


FIGURE F-599. NITRITE AS N CONCENTRATIONS OBSERVED AT BOULDER HOLE (QC 23.6 C), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 22.6 E (Karst Spring)
Queen Creek Watershed

NITRITE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — AZ Partial Body Contact (UNS, 233.333 mg/L)

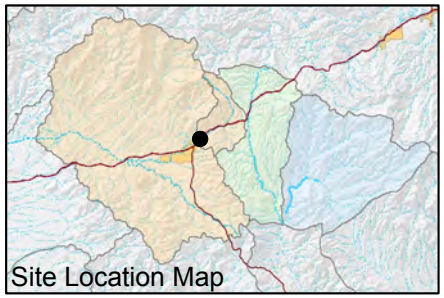
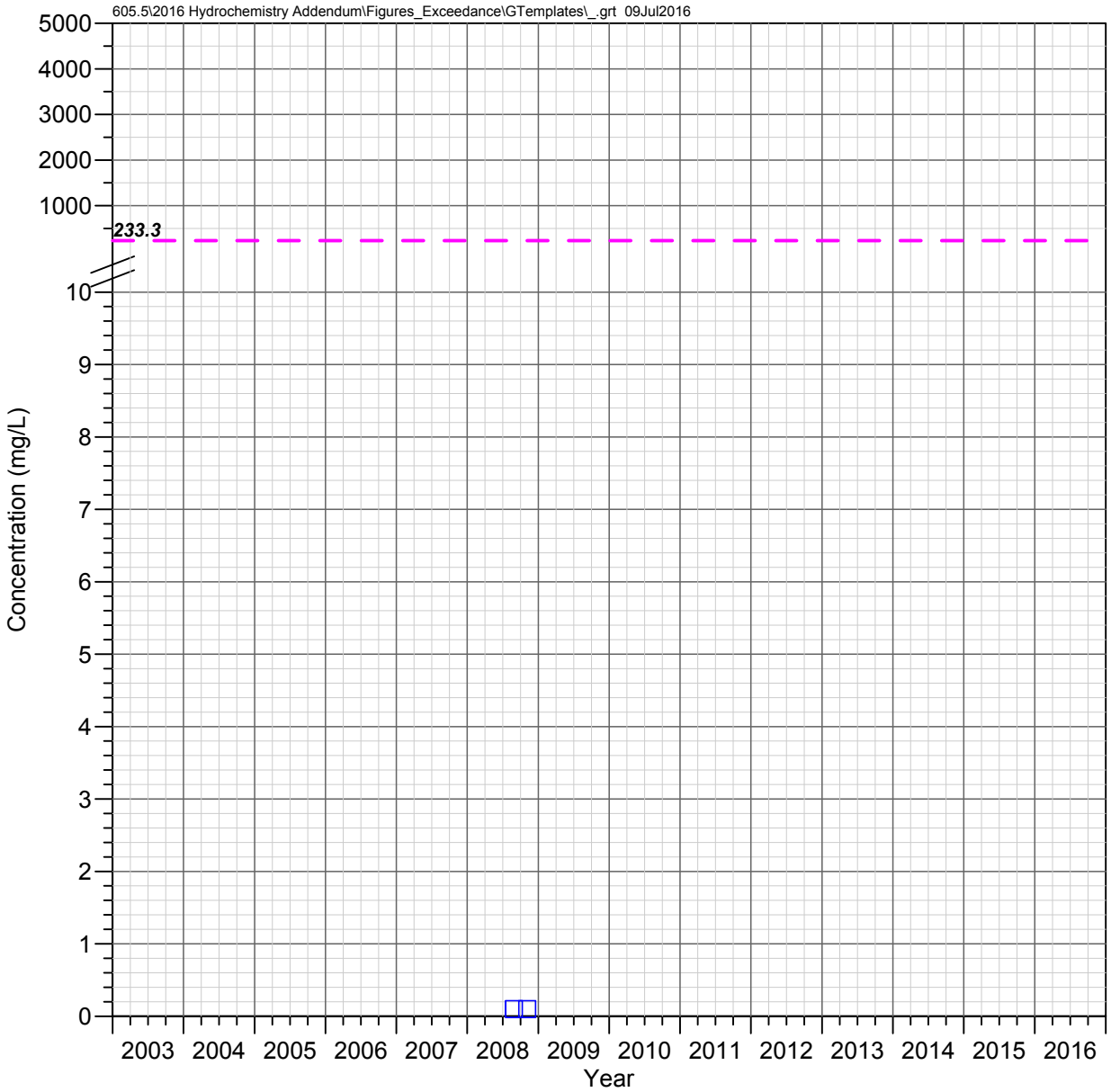


FIGURE F-600. NITRITE AS N CONCENTRATIONS OBSERVED AT QC 22.6 E (KARST SPRING), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 21.7 C (Magma Avenue)
Queen Creek Watershed

NITRITE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — AZ Partial Body Contact (UNS, 233.333 mg/L)

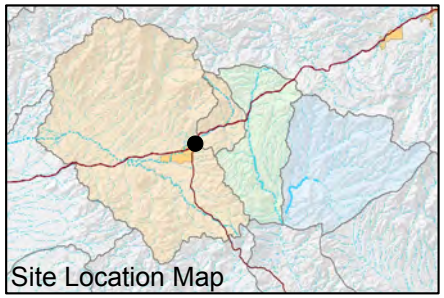
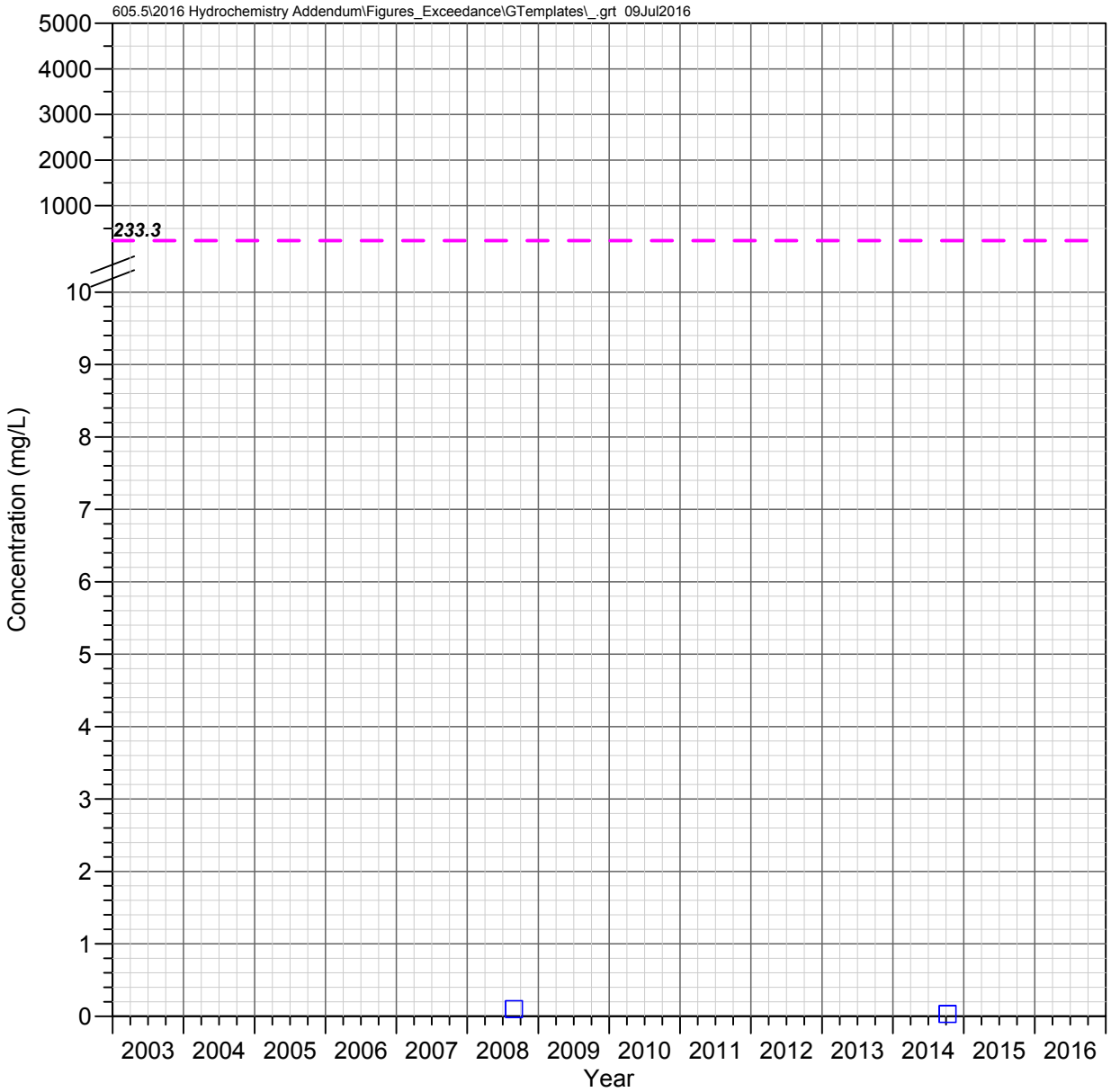


FIGURE F-601. NITRITE AS N CONCENTRATIONS OBSERVED AT QC 21.7 C (MAGMA AVENUE), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 19.7 C
Queen Creek Watershed

NITRITE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — AZ Partial Body Contact (UNS, 233.333 mg/L)

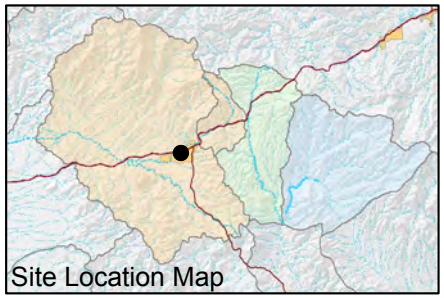
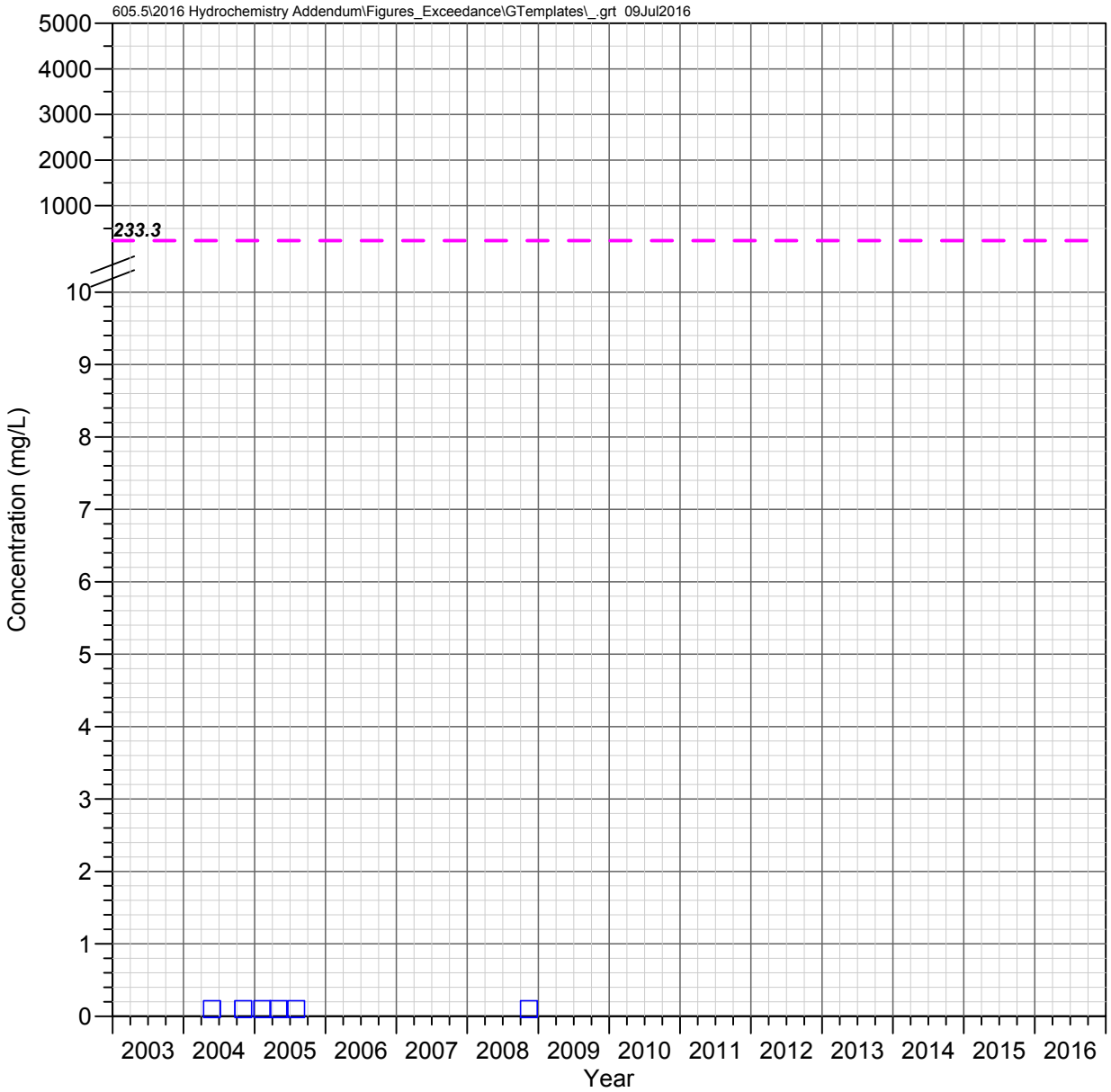


FIGURE F-602. NITRITE AS N CONCENTRATIONS OBSERVED AT QC 19.7 C, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Bored Spring
Queen Creek Watershed

NITRITE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — AZ Partial Body Contact (UNS, 233.333 mg/L)

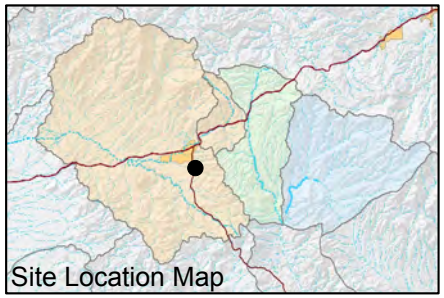
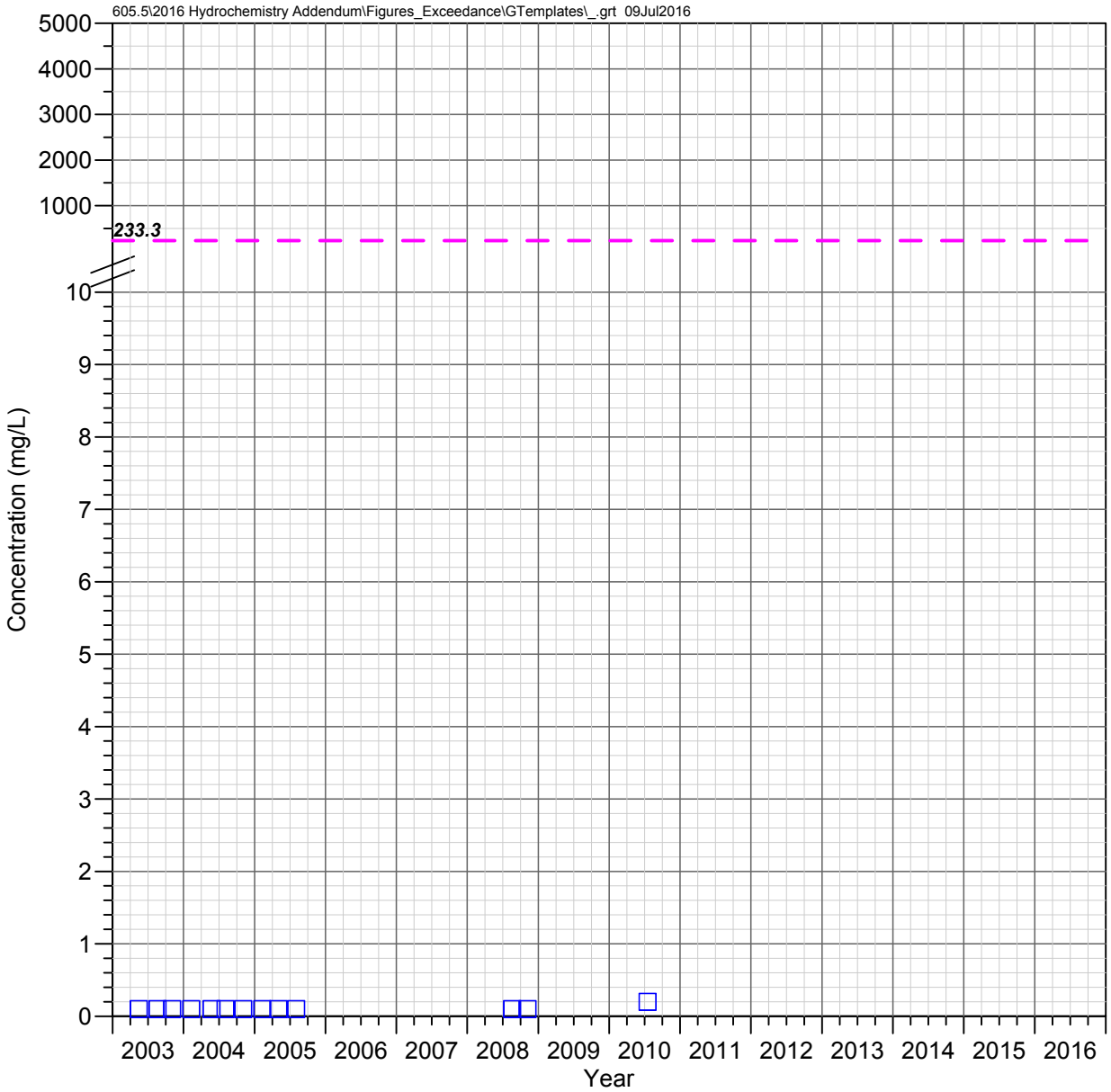


FIGURE F-603. NITRITE AS N CONCENTRATIONS OBSERVED AT BORED SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Hidden Spring
Queen Creek Watershed

NITRITE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — AZ Partial Body Contact (UNS, 233.333 mg/L)

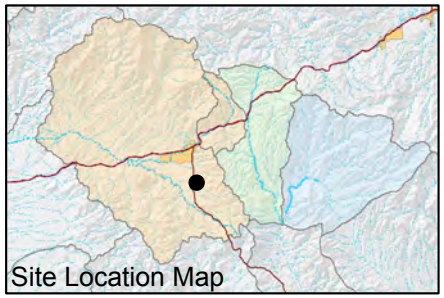
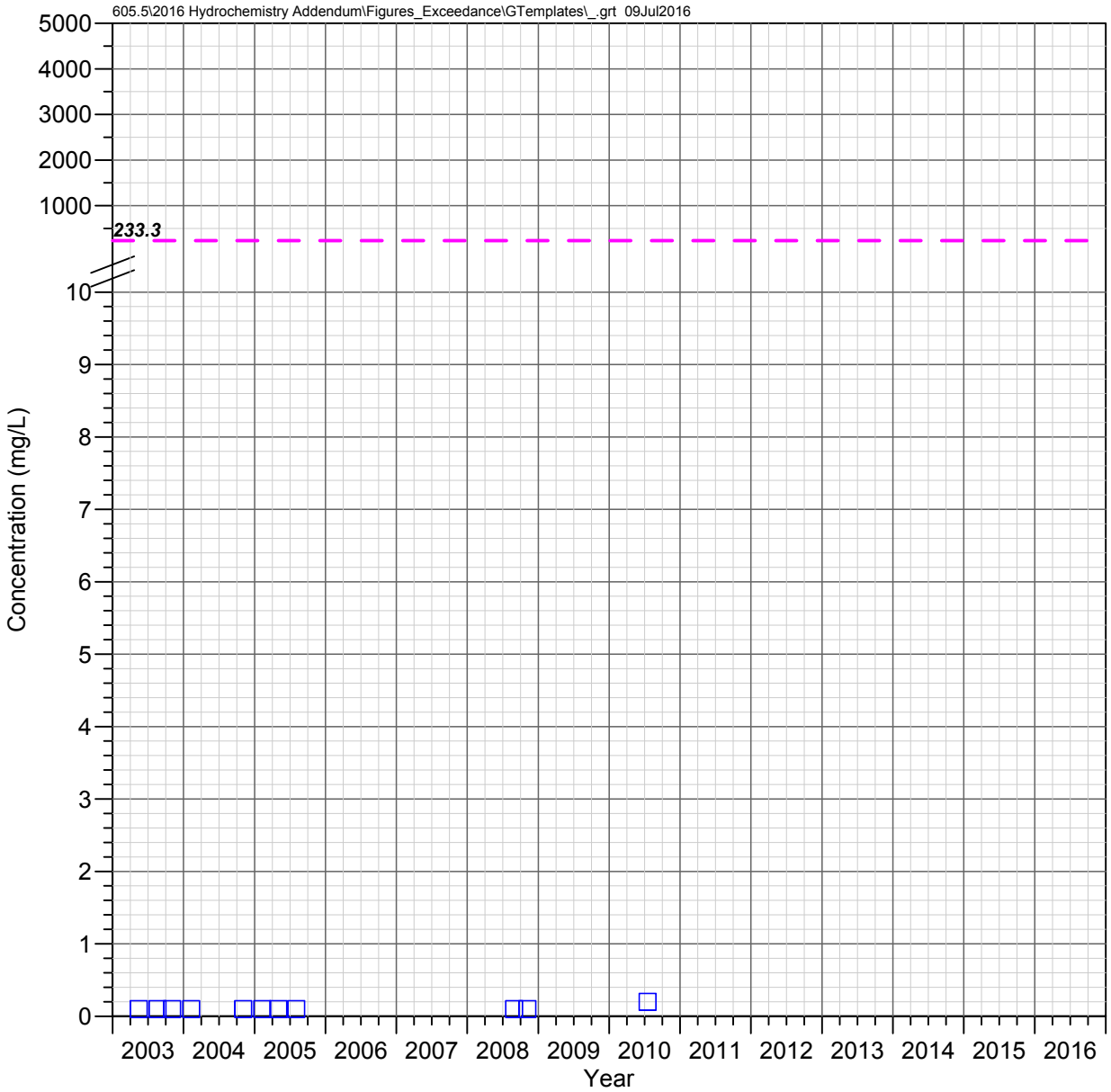


FIGURE F-604. NITRITE AS N CONCENTRATIONS OBSERVED AT HIDDEN SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Kane Spring
Queen Creek Watershed

NITRITE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — AZ Partial Body Contact (UNS, 233.333 mg/L)

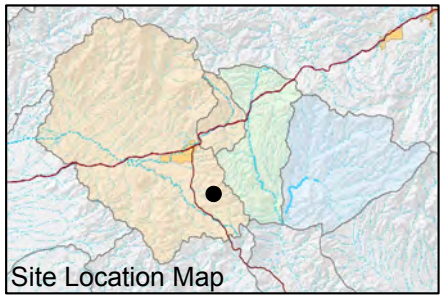
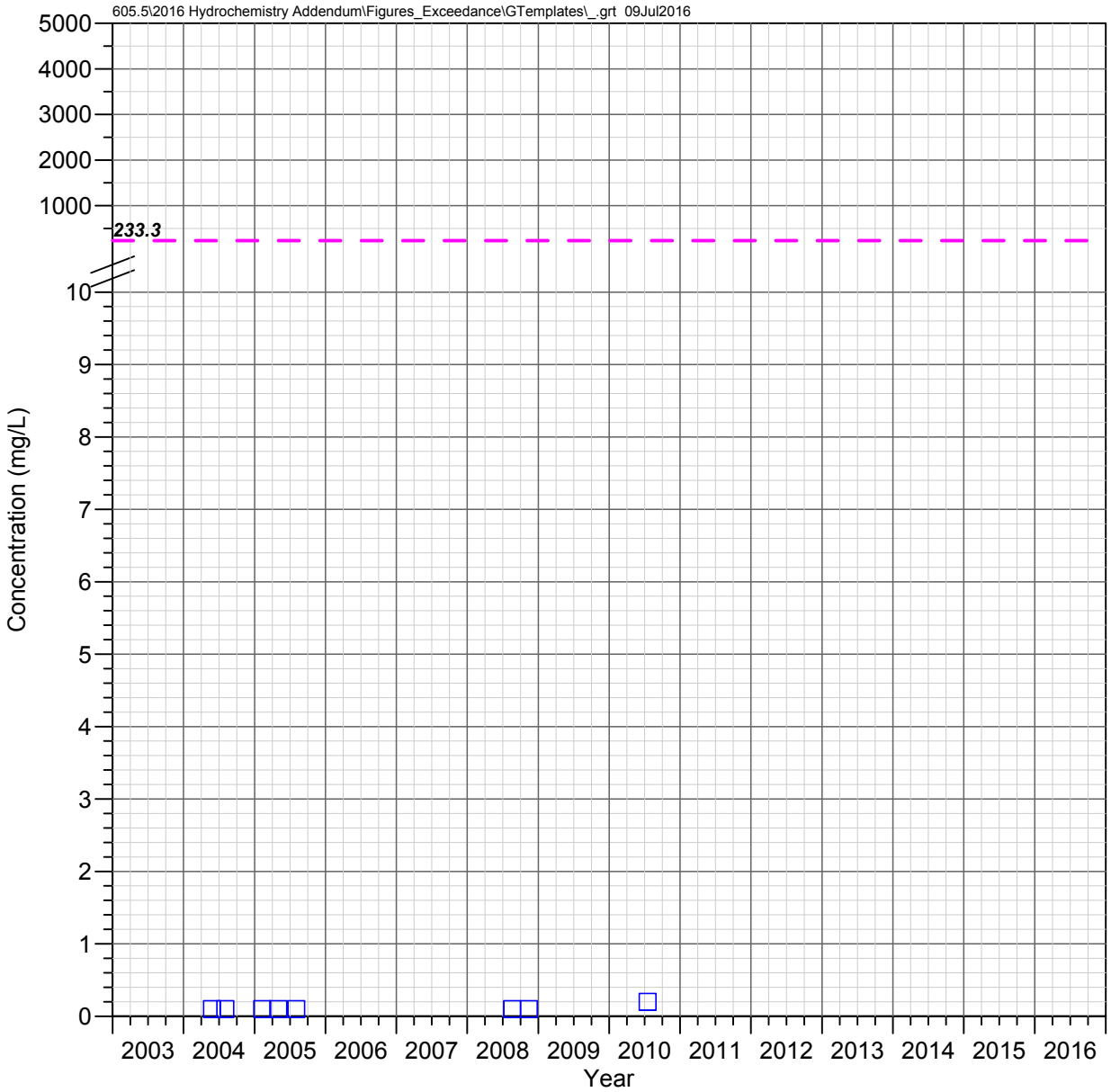


FIGURE F-605. NITRITE AS N CONCENTRATIONS OBSERVED AT KANE SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Blue Spring
Queen Creek Watershed

NITRITE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — AZ Partial Body Contact (UNS, 233.333 mg/L)

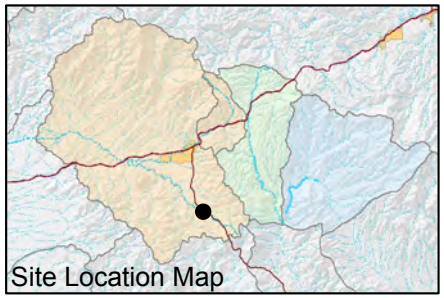
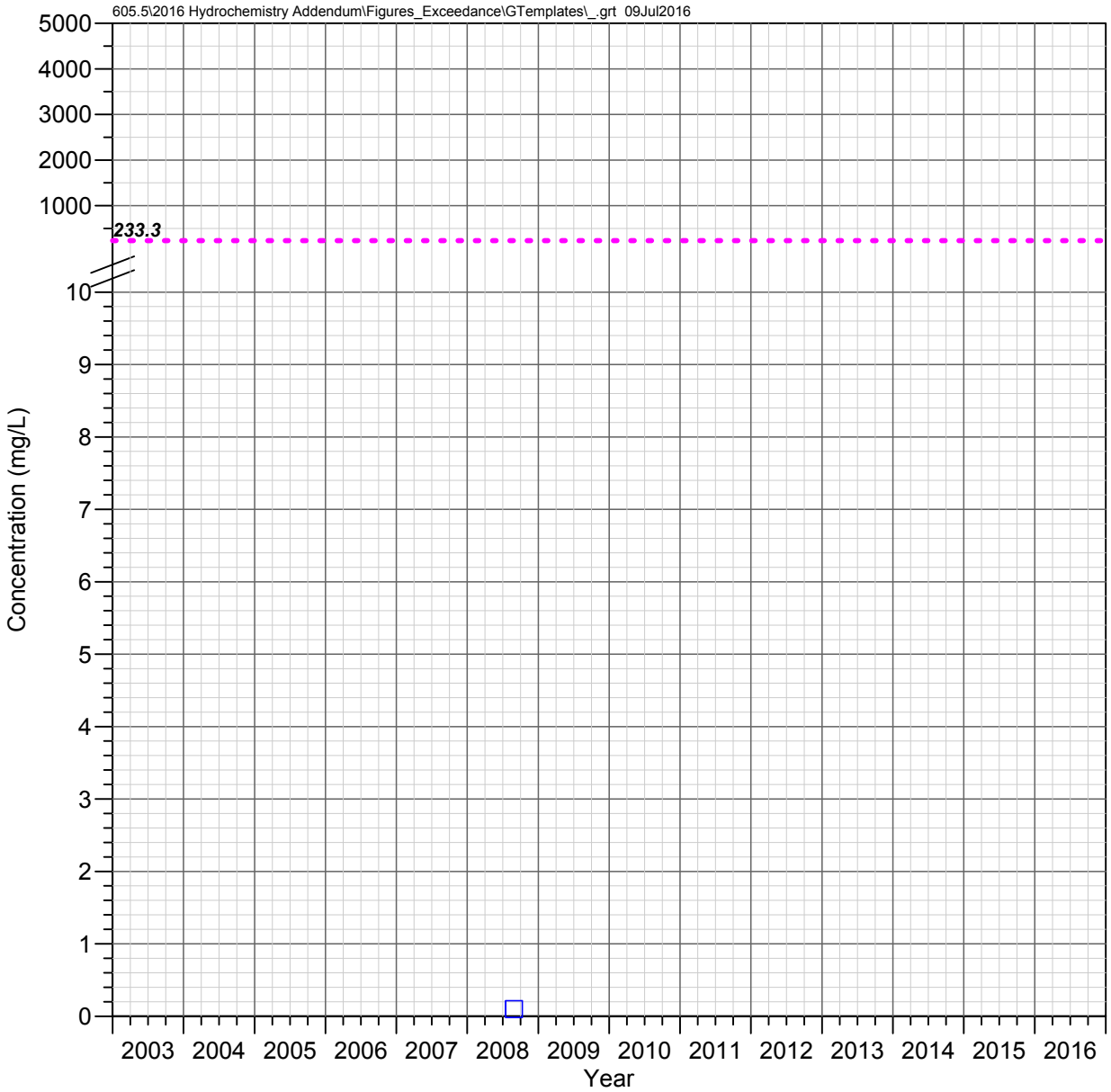


FIGURE F-606. NITRITE AS N CONCENTRATIONS OBSERVED AT BLUE SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



IC 1.0 C
Devils Canyon Watershed

NITRITE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 233.333 mg/L)

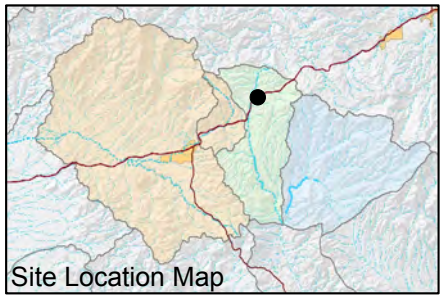
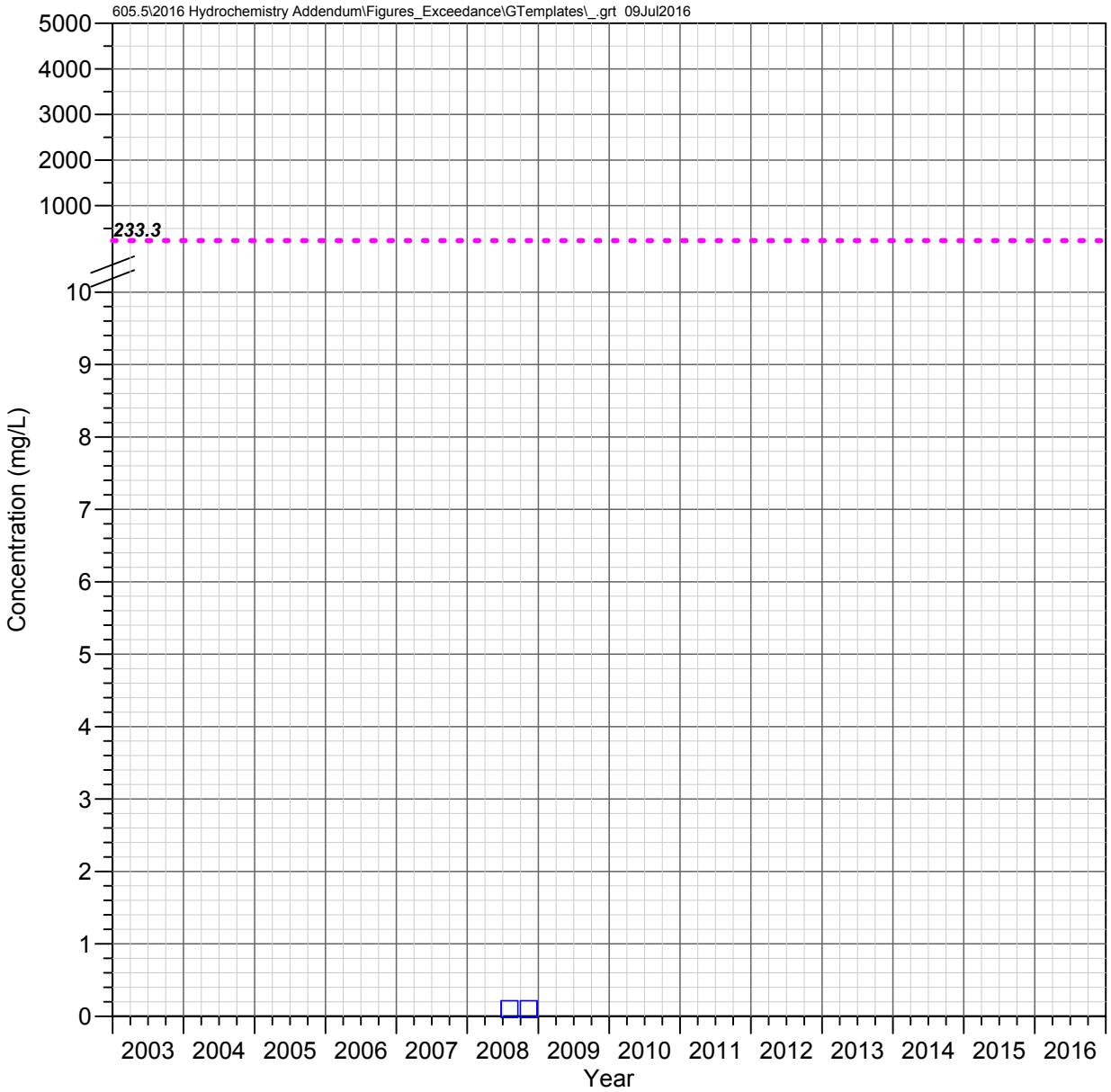


FIGURE F-607. NITRITE AS N CONCENTRATIONS OBSERVED AT IC 1.0 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 15.5 C
Devils Canyon Watershed

NITRITE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 233.333 mg/L)

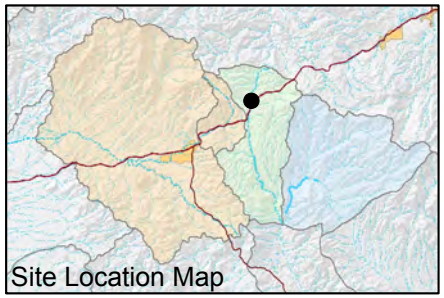
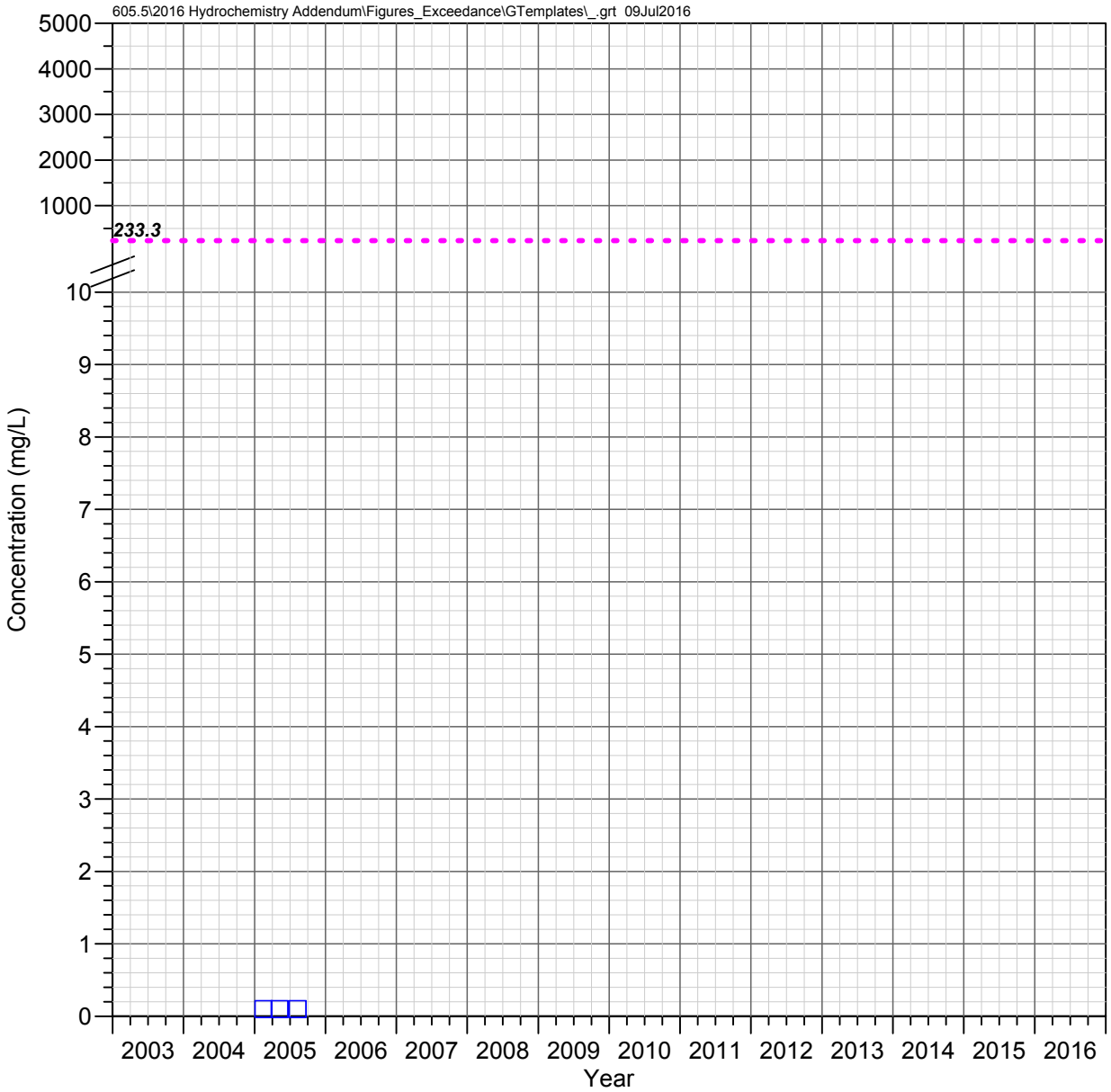


FIGURE F-608. NITRITE AS N CONCENTRATIONS OBSERVED AT DC 15.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 15.2 C
Devils Canyon Watershed

NITRITE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 233.333 mg/L)

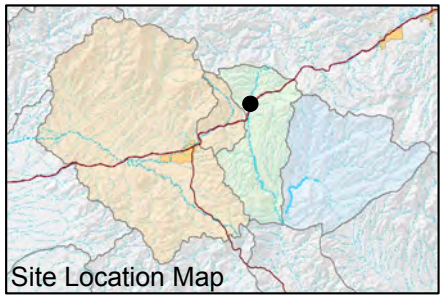
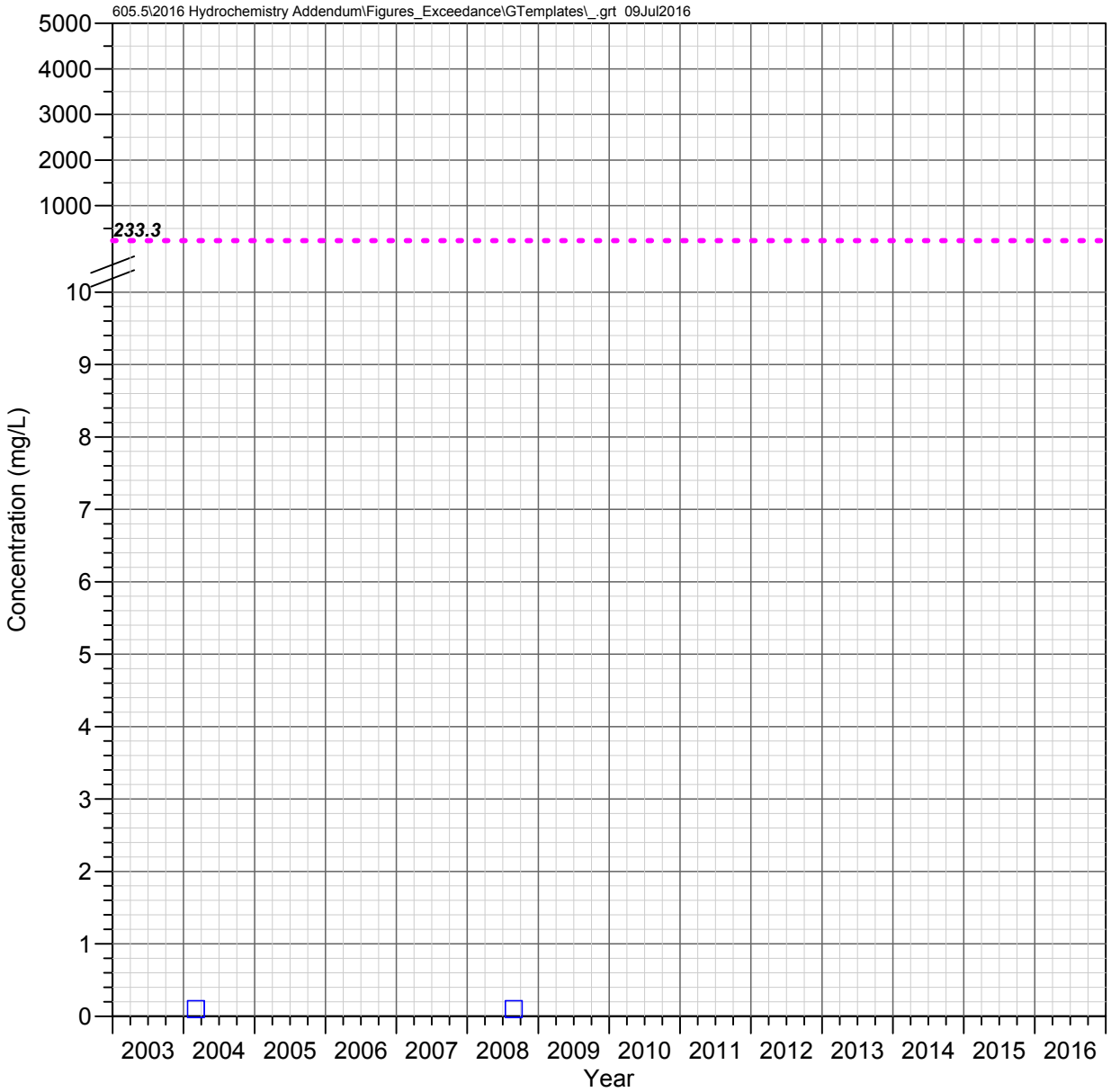


FIGURE F-609. NITRITE AS N CONCENTRATIONS OBSERVED AT DC 15.2 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 14.7 C
Devils Canyon Watershed

NITRITE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 233.333 mg/L)

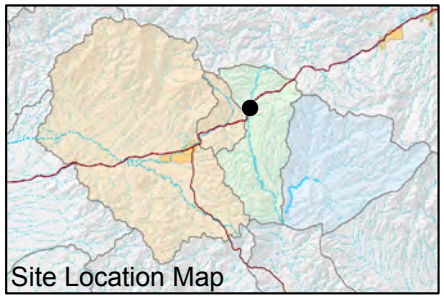
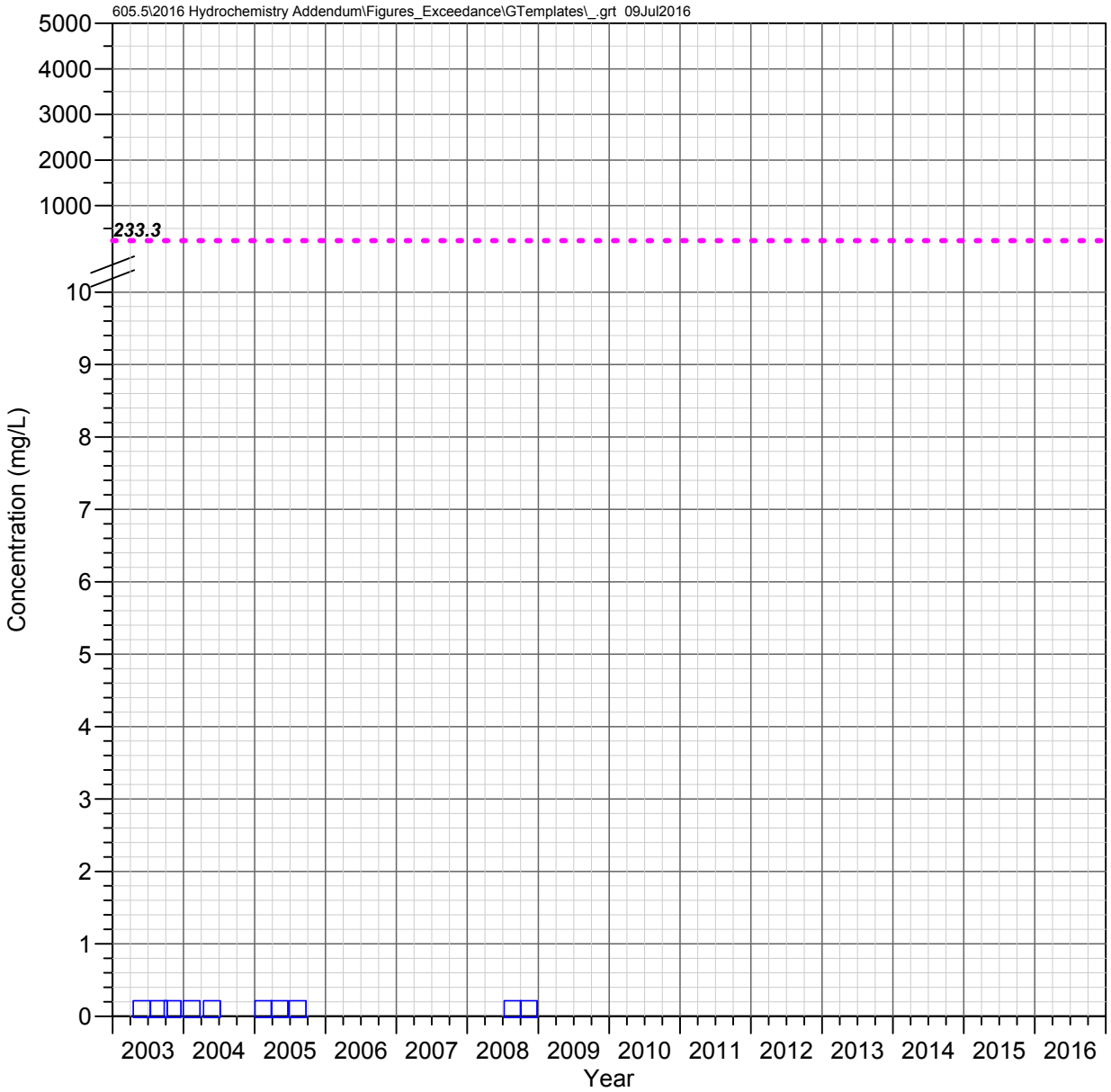


FIGURE F-610. NITRITE AS N CONCENTRATIONS OBSERVED AT DC 14.7 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 13.5 C
Devils Canyon Watershed

NITRITE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 233.333 mg/L)

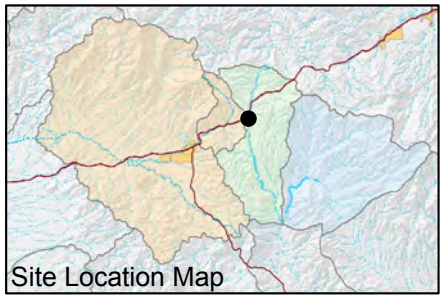
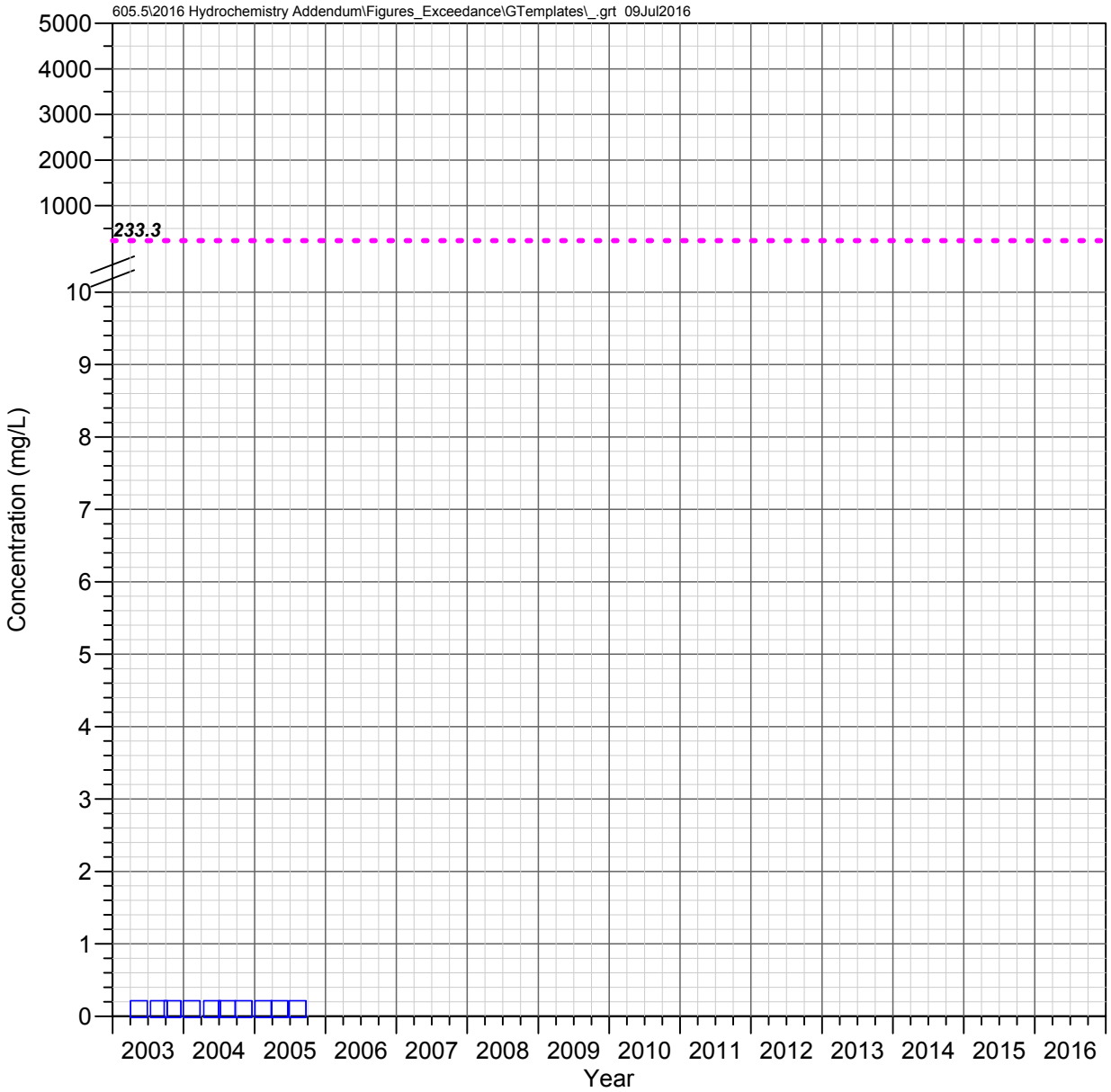


FIGURE F-611. NITRITE AS N CONCENTRATIONS OBSERVED AT DC 13.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 10.9 C
Devils Canyon Watershed

NITRITE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 233.333 mg/L)

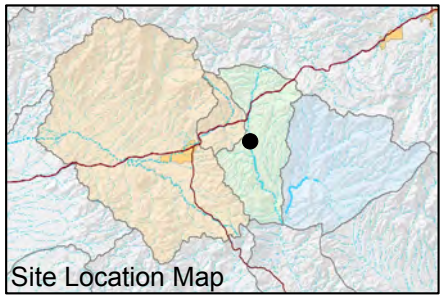
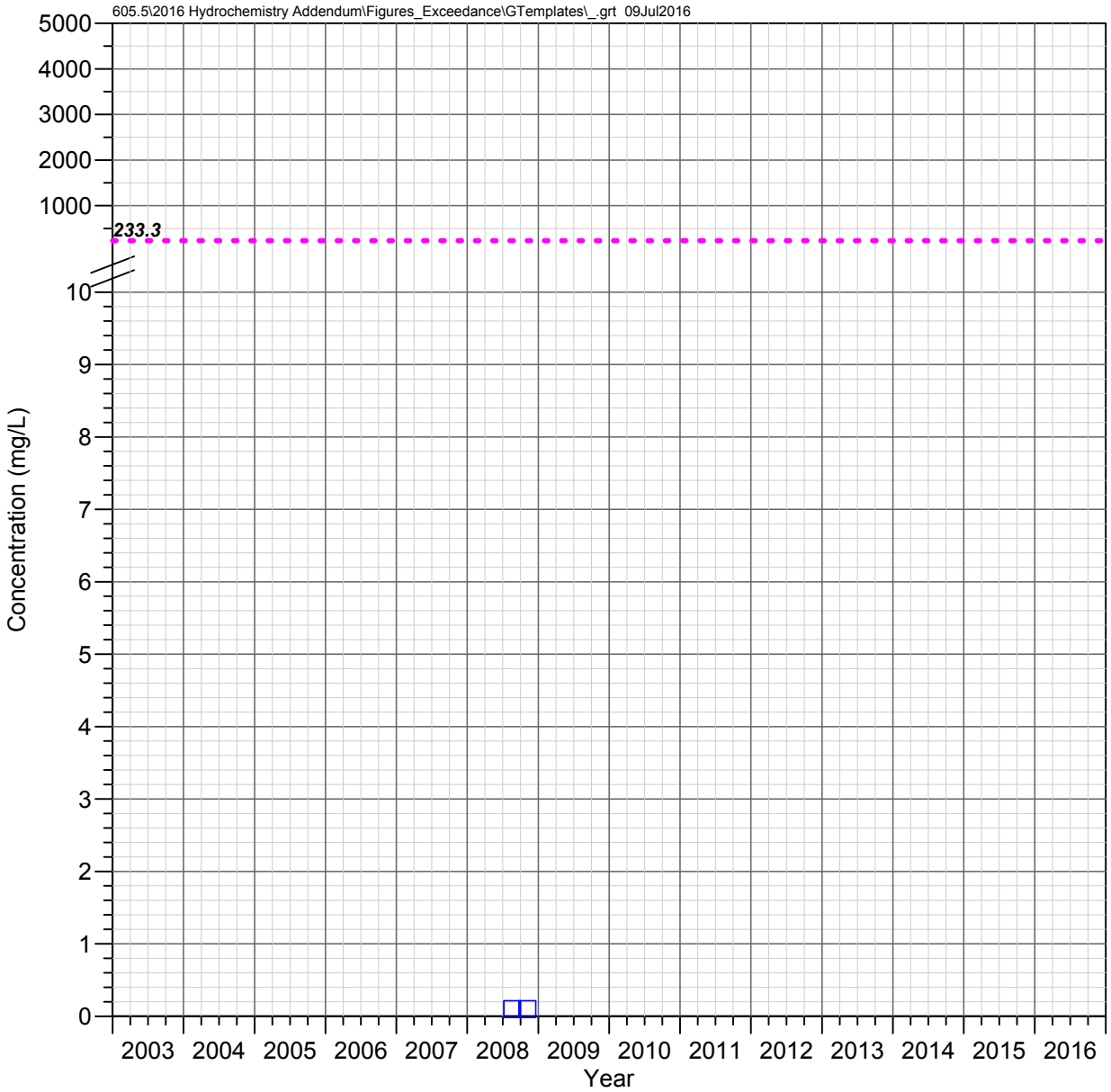


FIGURE F-612. NITRITE AS N CONCENTRATIONS OBSERVED AT DC 10.9 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



RR 1.5 C
Devils Canyon Watershed

NITRITE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 233.333 mg/L)

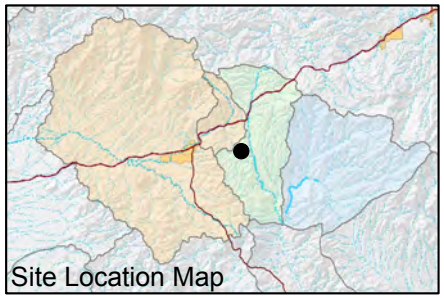
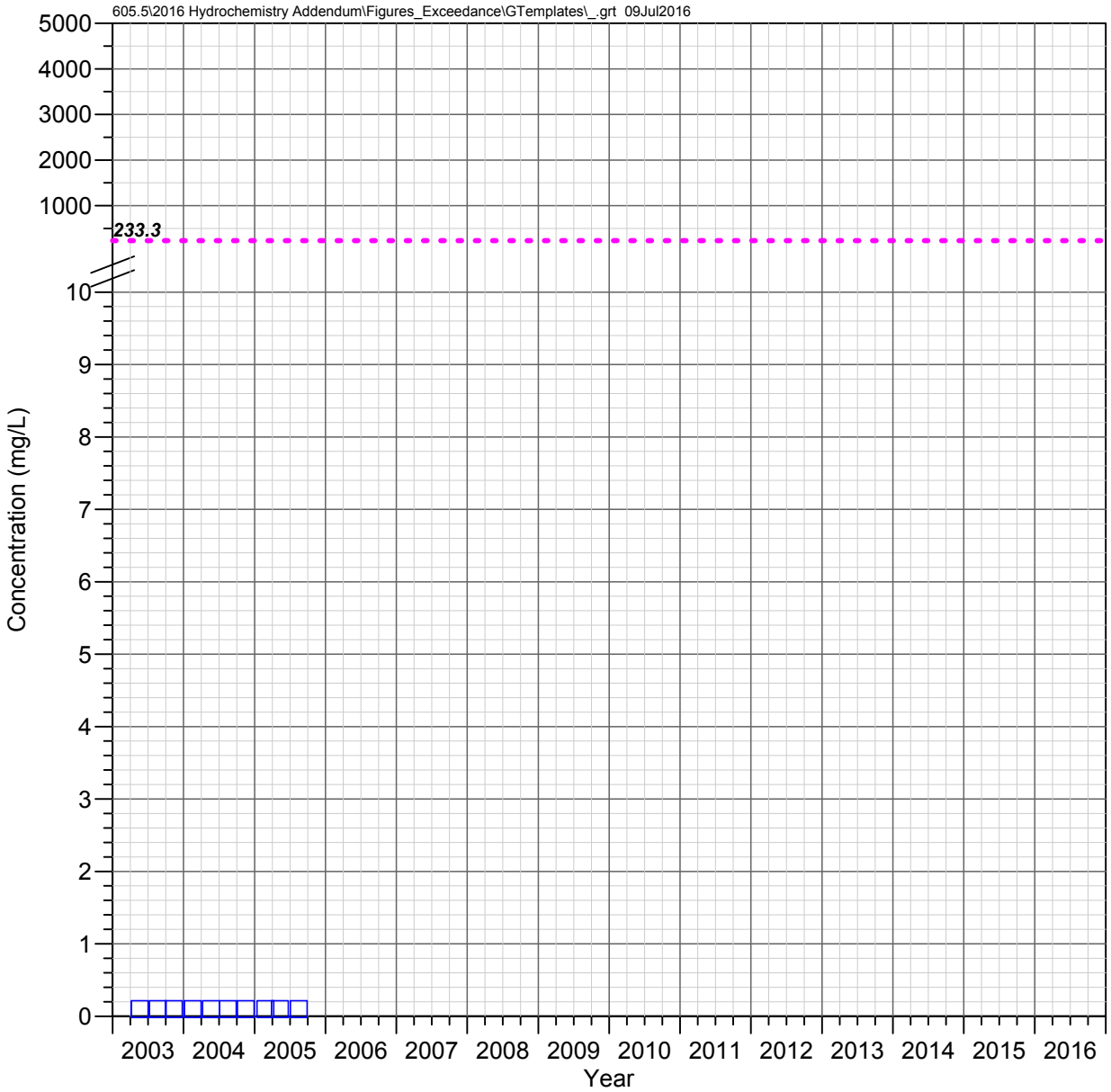


FIGURE F-613. NITRITE AS N CONCENTRATIONS OBSERVED AT RR 1.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.8 C
Devils Canyon Watershed

NITRITE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 233.333 mg/L)

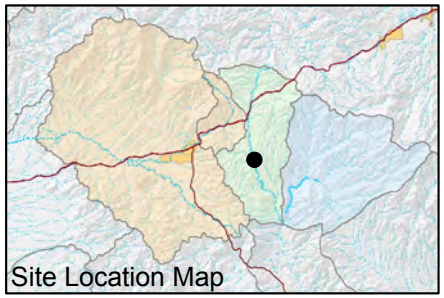
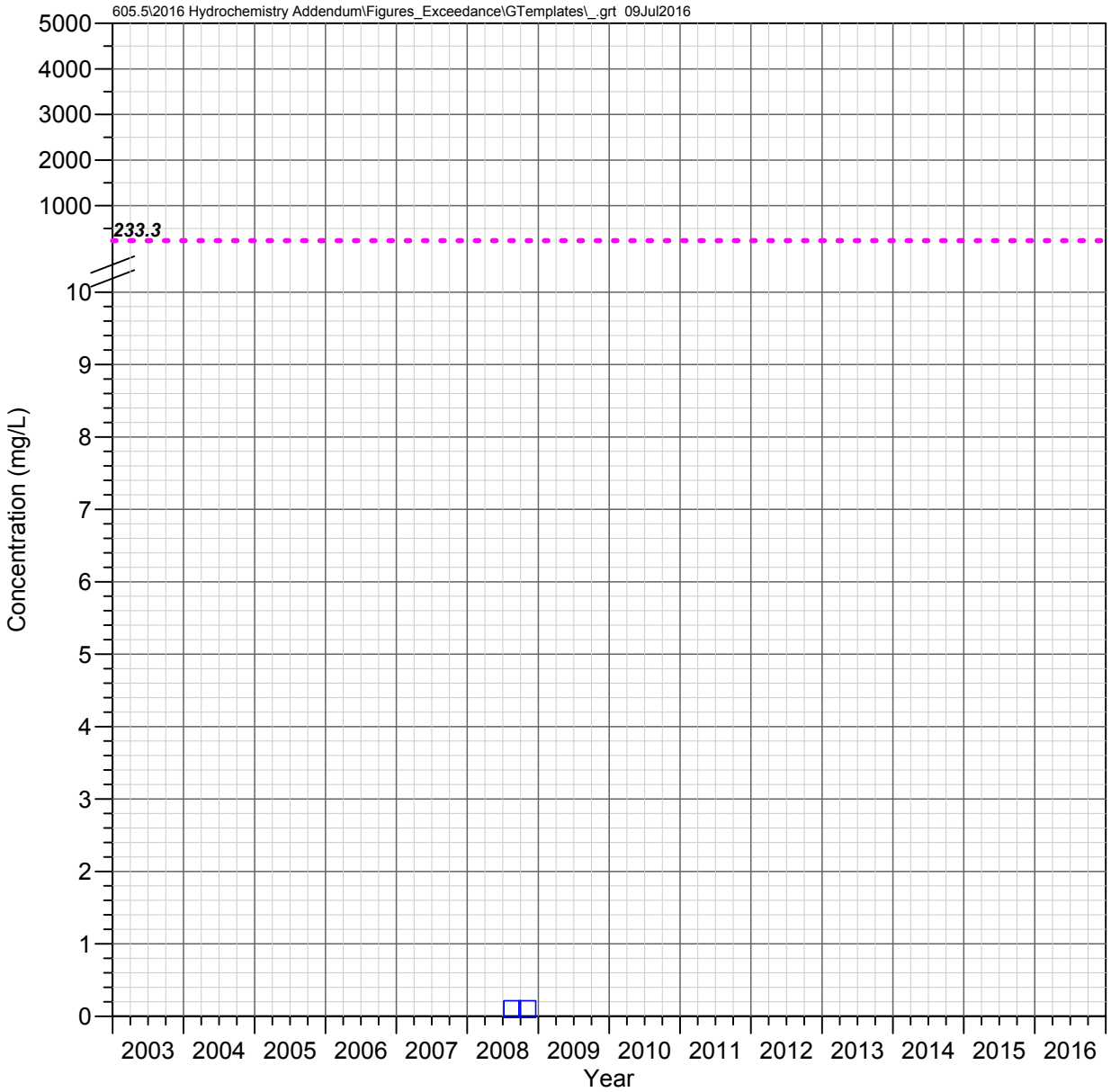


FIGURE F-614. NITRITE AS N CONCENTRATIONS OBSERVED AT DC 8.8 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



H 0.1 C
Devils Canyon Watershed

NITRITE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 233.333 mg/L)

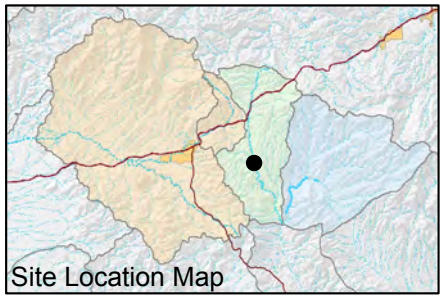
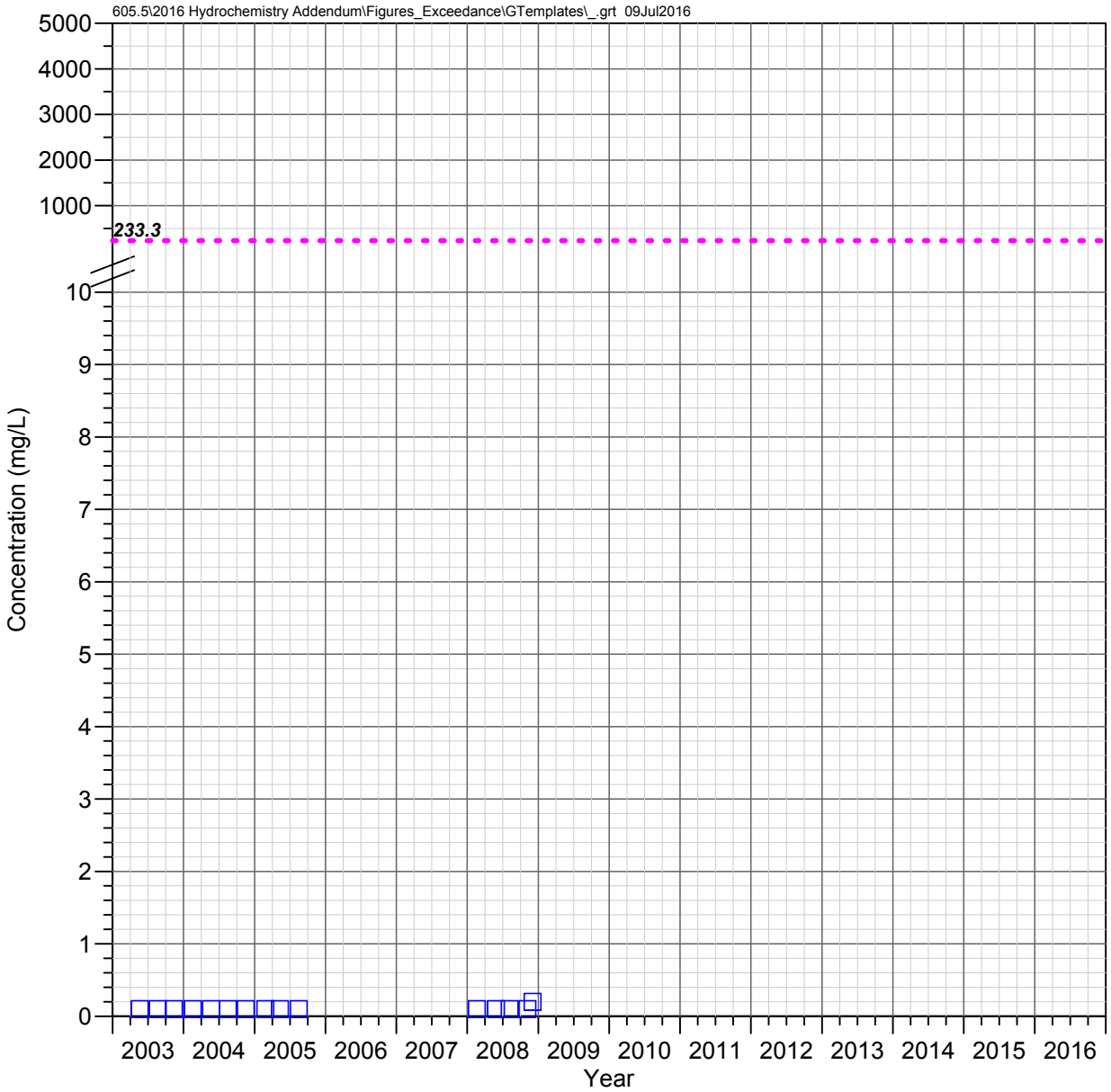


FIGURE F-615. NITRITE AS N CONCENTRATIONS OBSERVED AT H 0.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.2 W
Devils Canyon Watershed

NITRITE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 233.333 mg/L)

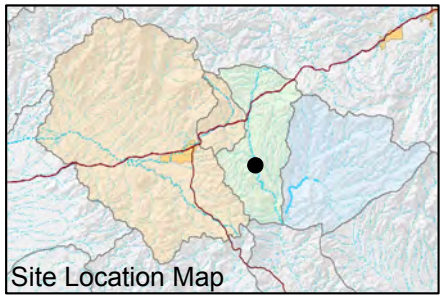
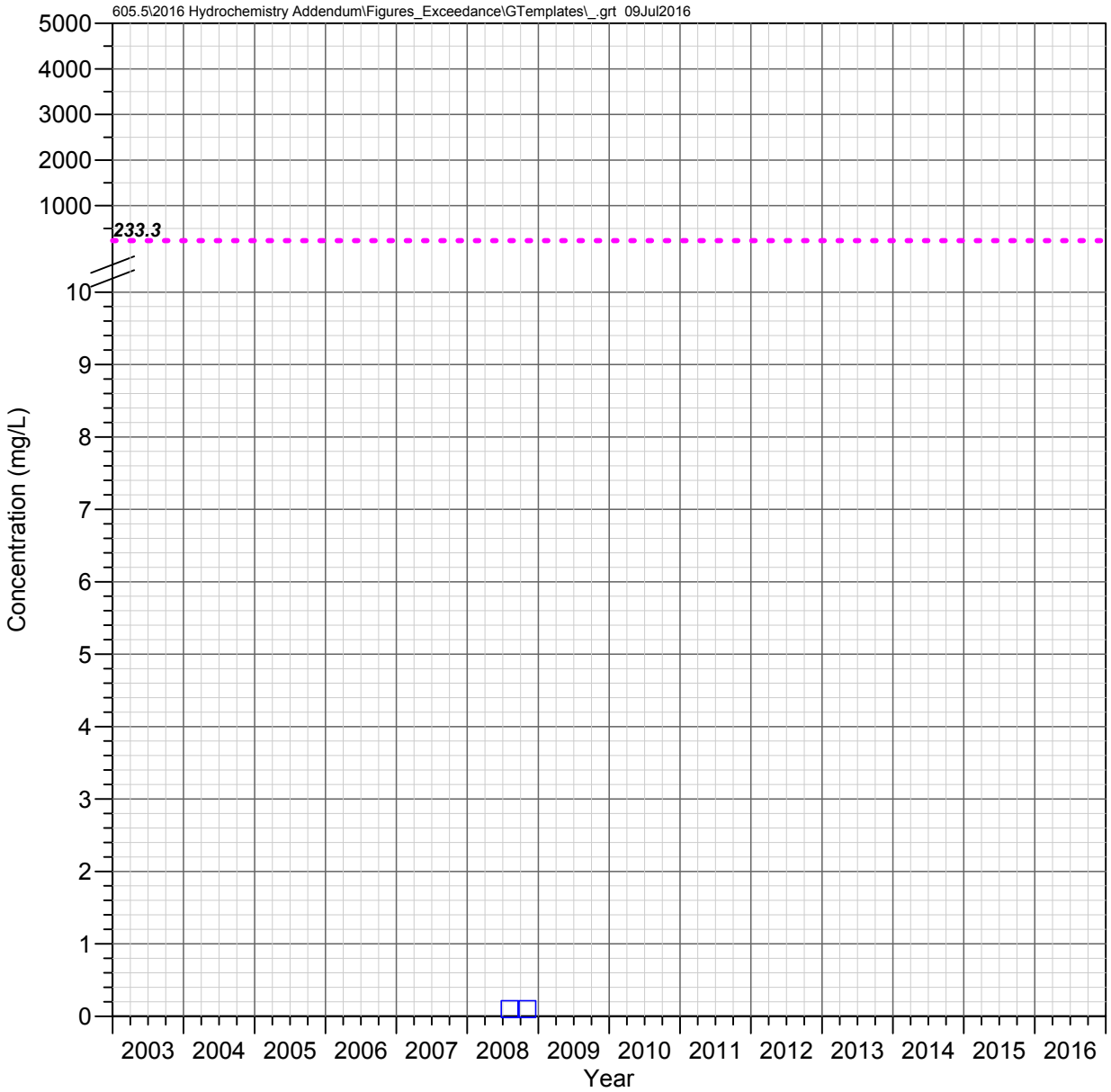


FIGURE F-616. NITRITE AS N CONCENTRATIONS OBSERVED AT DC 8.2 W, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.1 C
Devils Canyon Watershed

NITRITE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 233.333 mg/L)

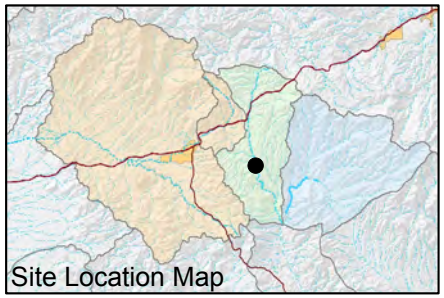
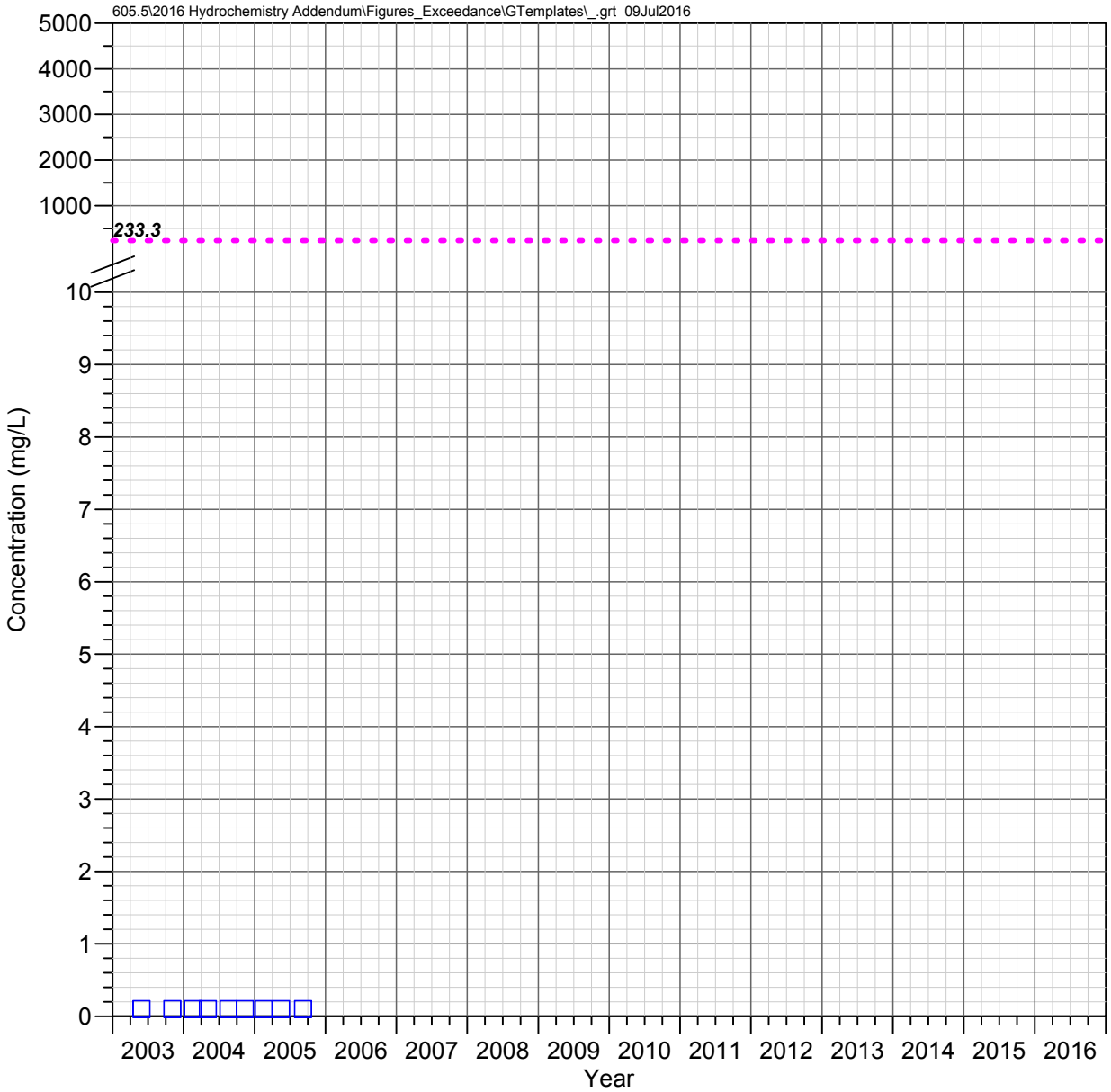


FIGURE F-617. NITRITE AS N CONCENTRATIONS OBSERVED AT DC 8.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 7.1 C
Devils Canyon Watershed

NITRITE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 233.333 mg/L)

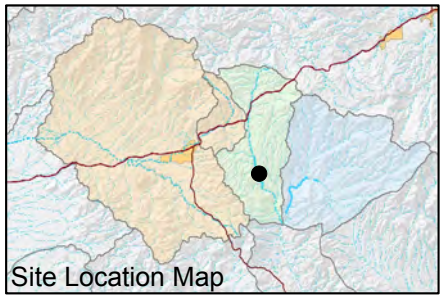
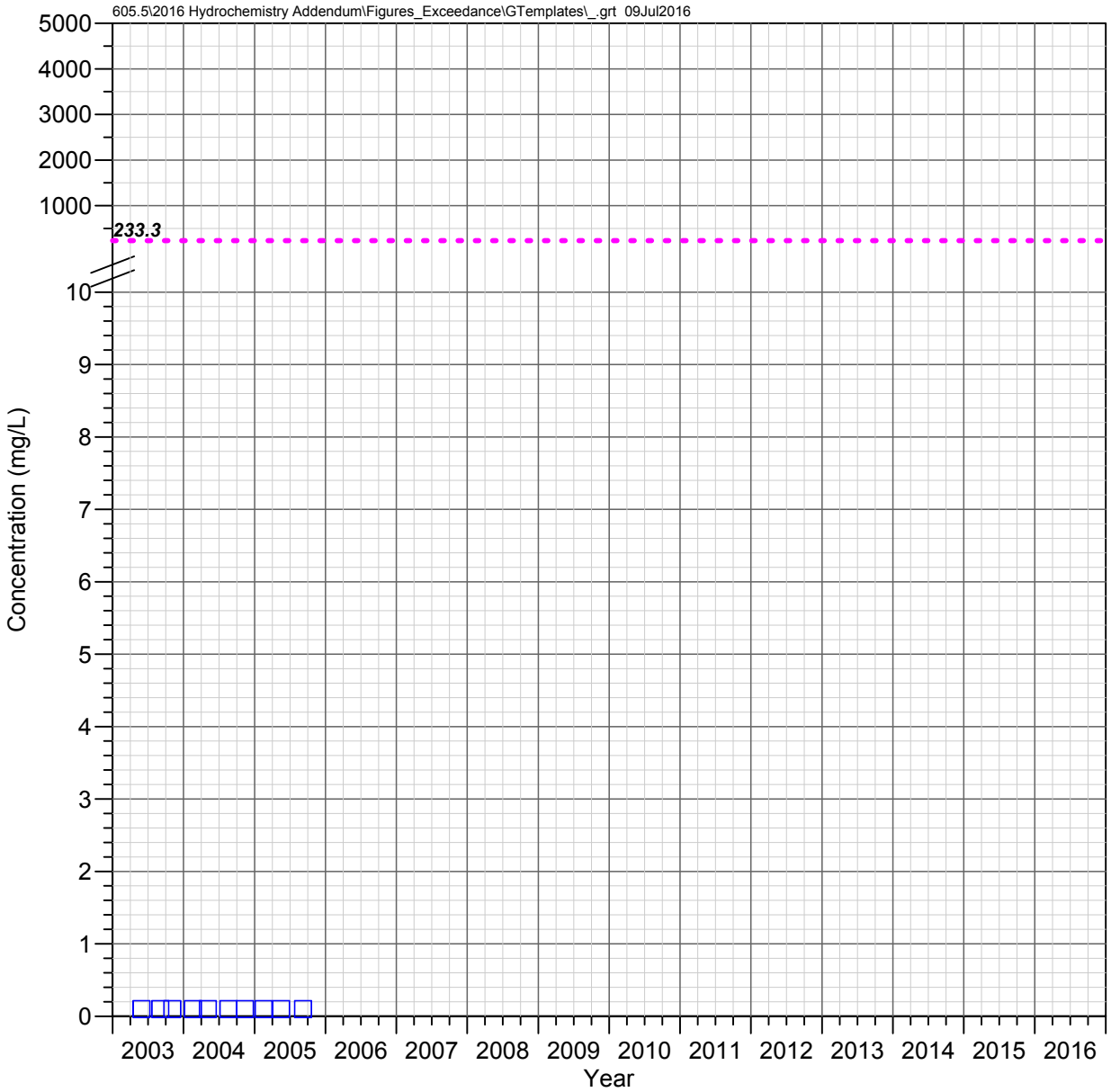


FIGURE F-618. NITRITE AS N CONCENTRATIONS OBSERVED AT DC 7.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.6 W (DCT 6.6 W)
Devils Canyon Watershed

NITRITE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 233.333 mg/L)

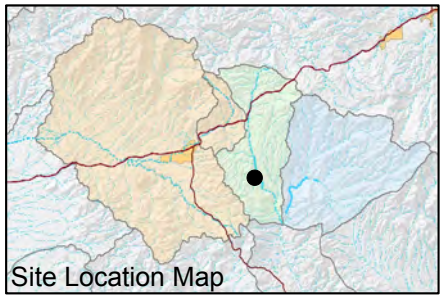
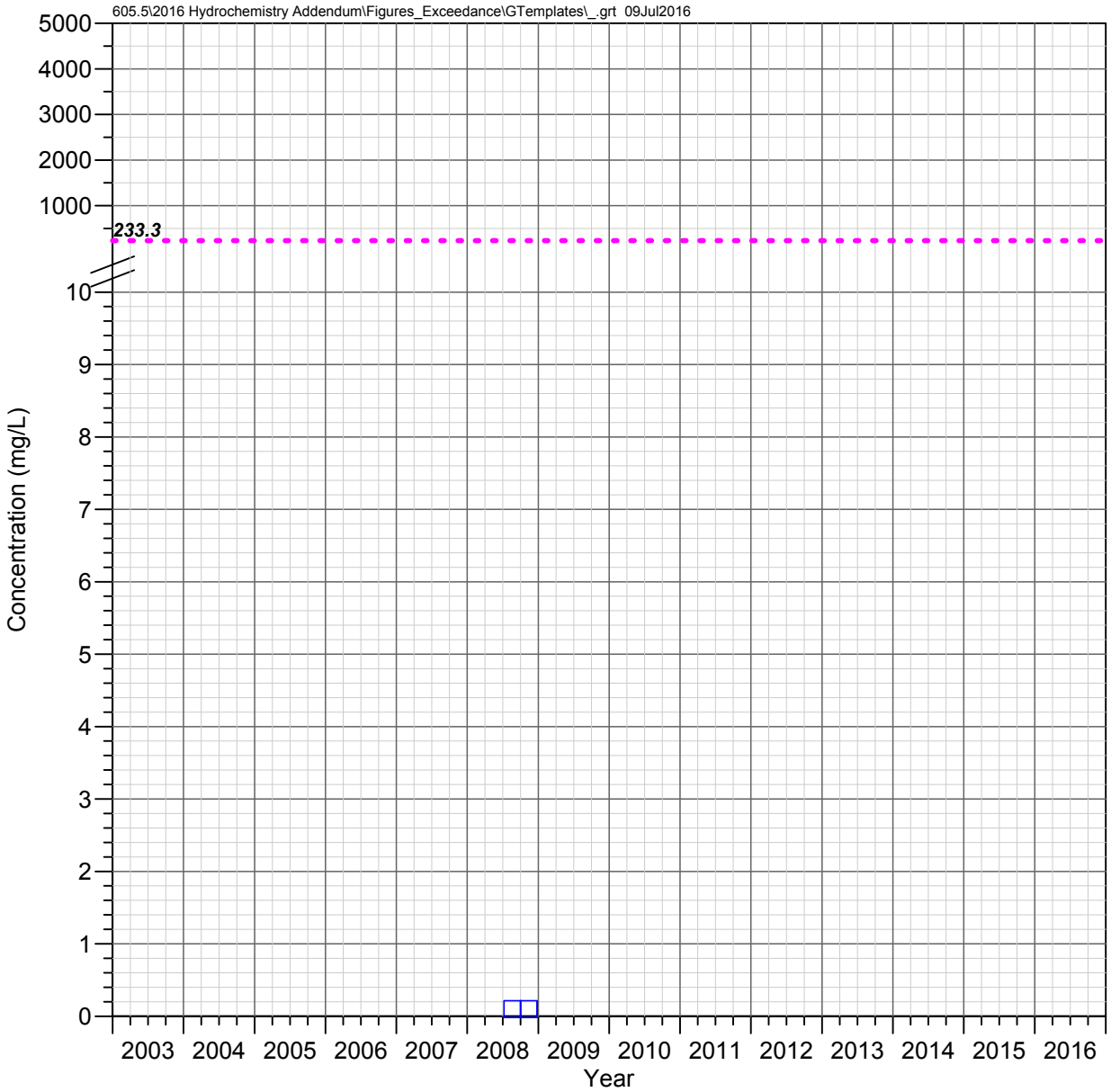


FIGURE F-619. NITRITE AS N CONCENTRATIONS OBSERVED AT DC 6.6 W (DCT 6.6 W), DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.14 C
Devils Canyon Watershed

NITRITE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 233.333 mg/L)

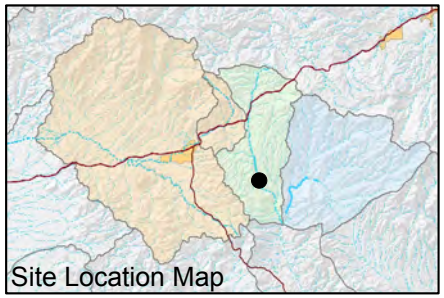
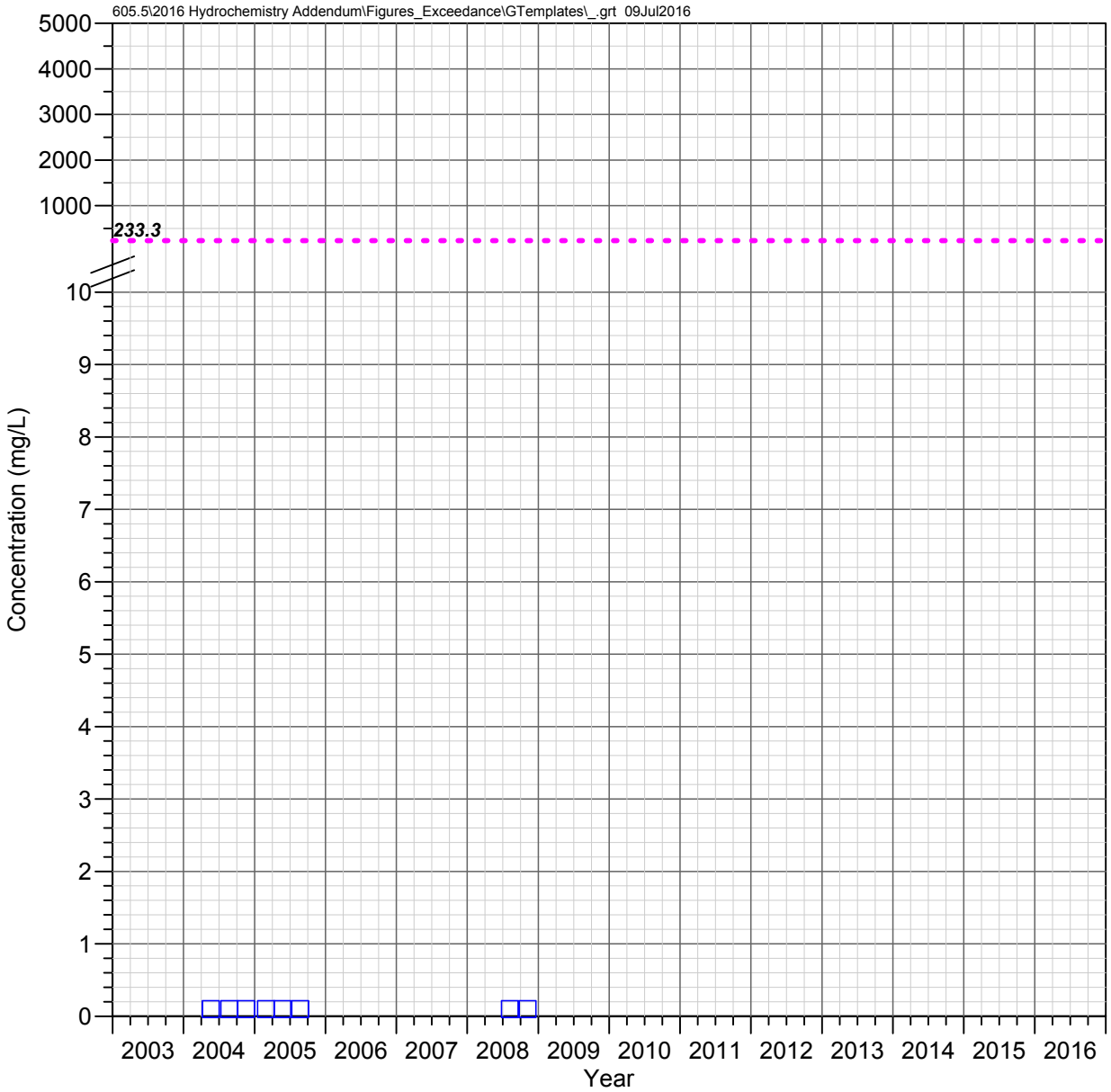


FIGURE F-620. NITRITE AS N CONCENTRATIONS OBSERVED AT DC 6.14 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.1 E
Devils Canyon Watershed

NITRITE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 233.333 mg/L)

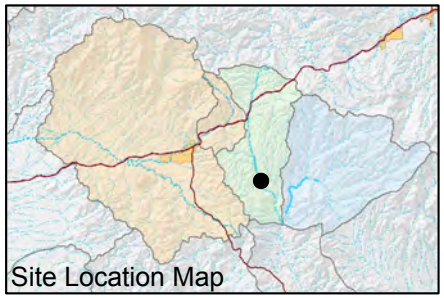
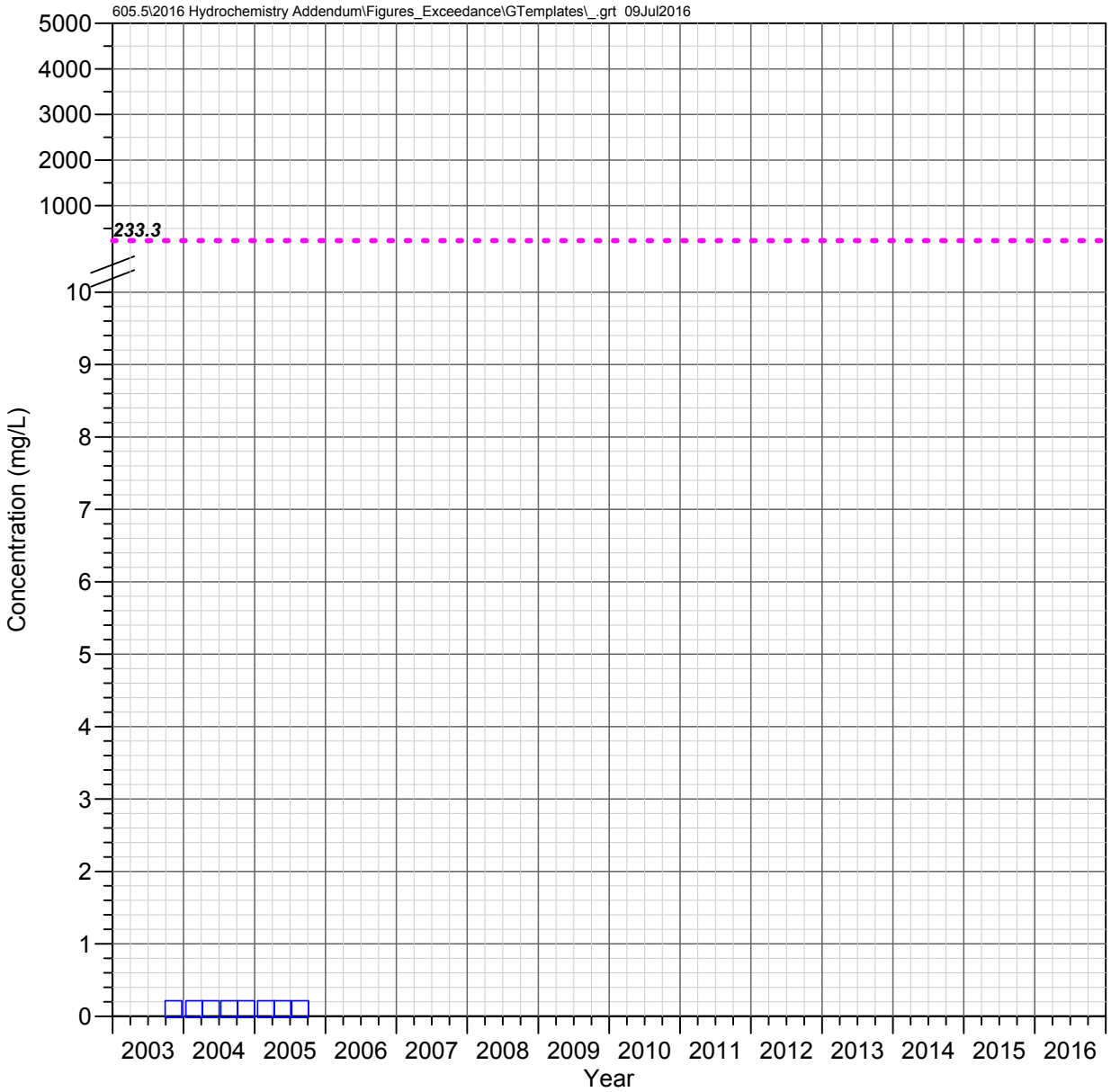


FIGURE F-621. NITRITE AS N CONCENTRATIONS OBSERVED AT DC 6.1 E, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 5.5 C
Devils Canyon Watershed

NITRITE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 233.333 mg/L)

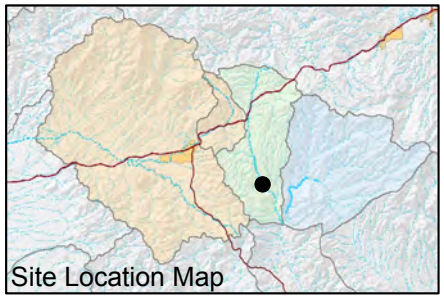
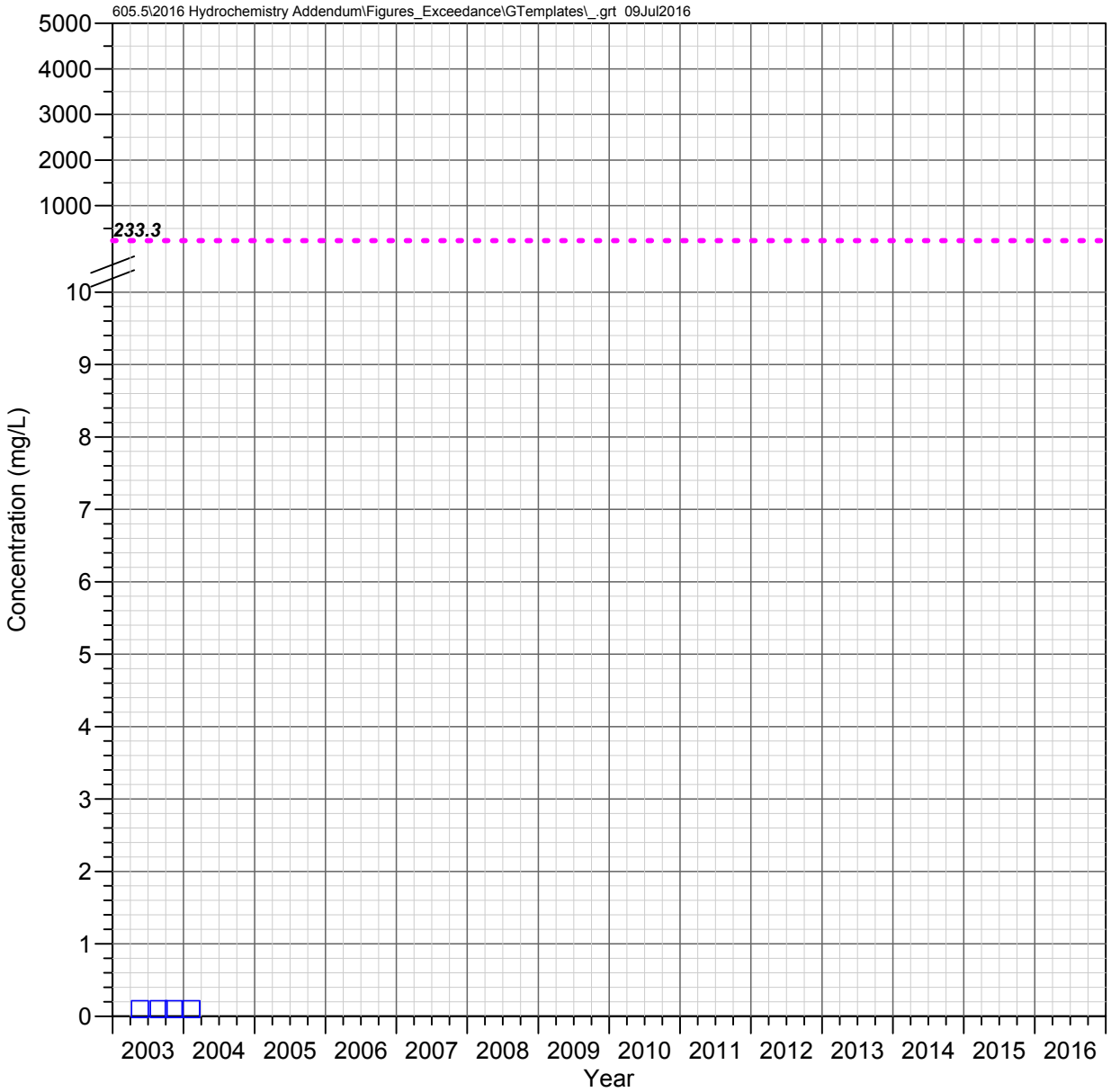


FIGURE F-622. NITRITE AS N CONCENTRATIONS OBSERVED AT DC 5.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 4.1 E
Devils Canyon Watershed

NITRITE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 233.333 mg/L)

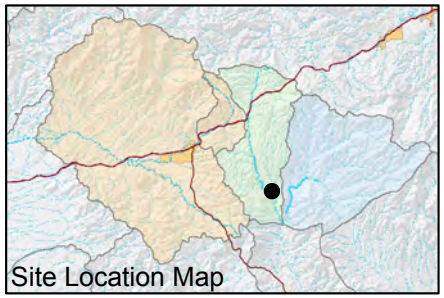
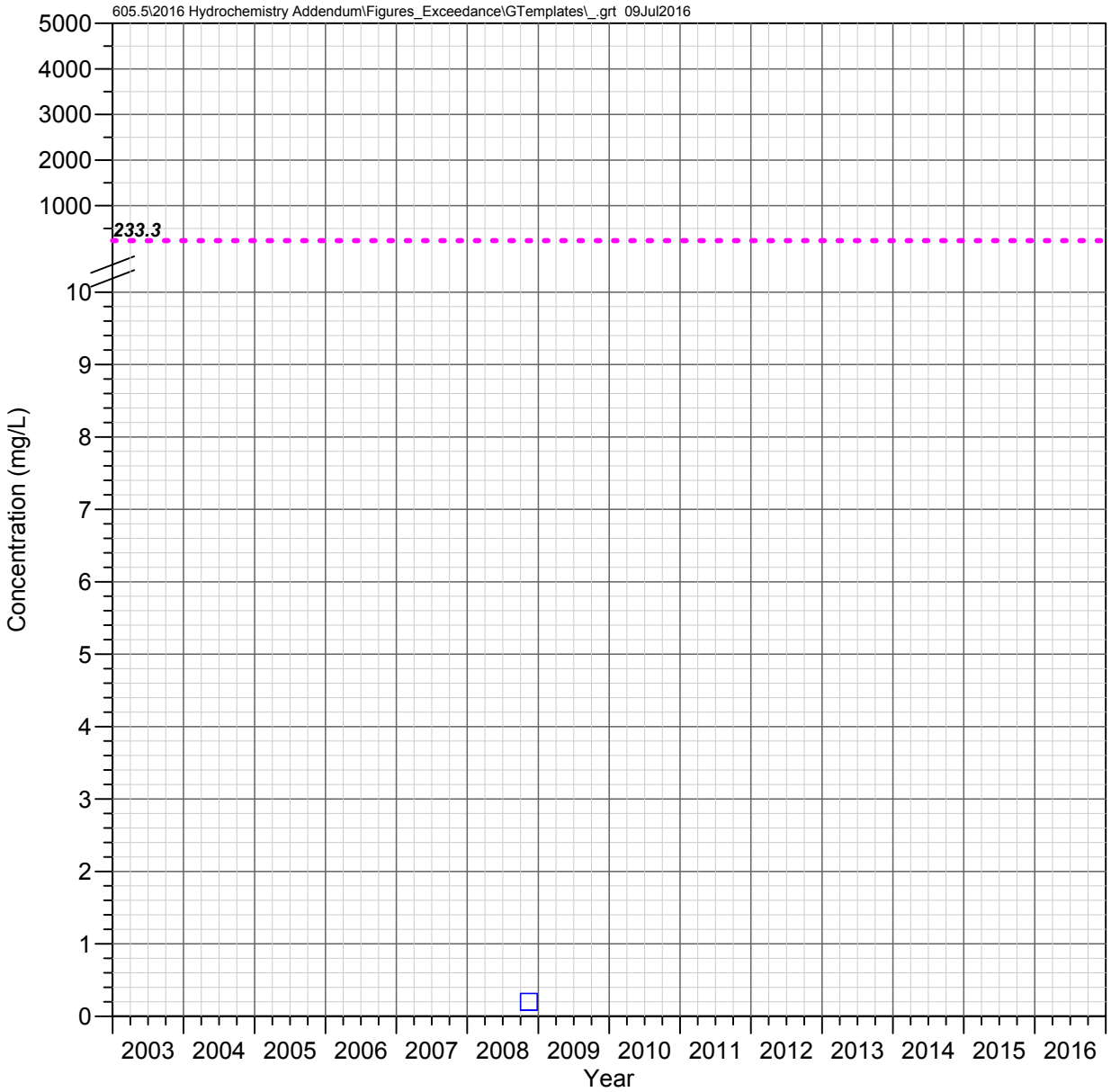


FIGURE F-623. NITRITE AS N CONCENTRATIONS OBSERVED AT DC 4.1 E, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 8.4 C
Mineral Creek Watershed

NITRITE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 233.333 mg/L)

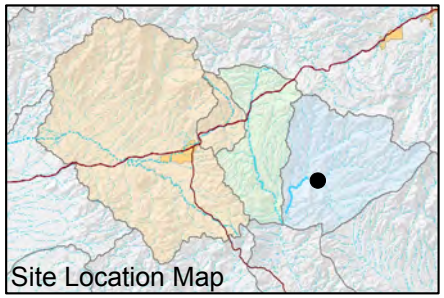
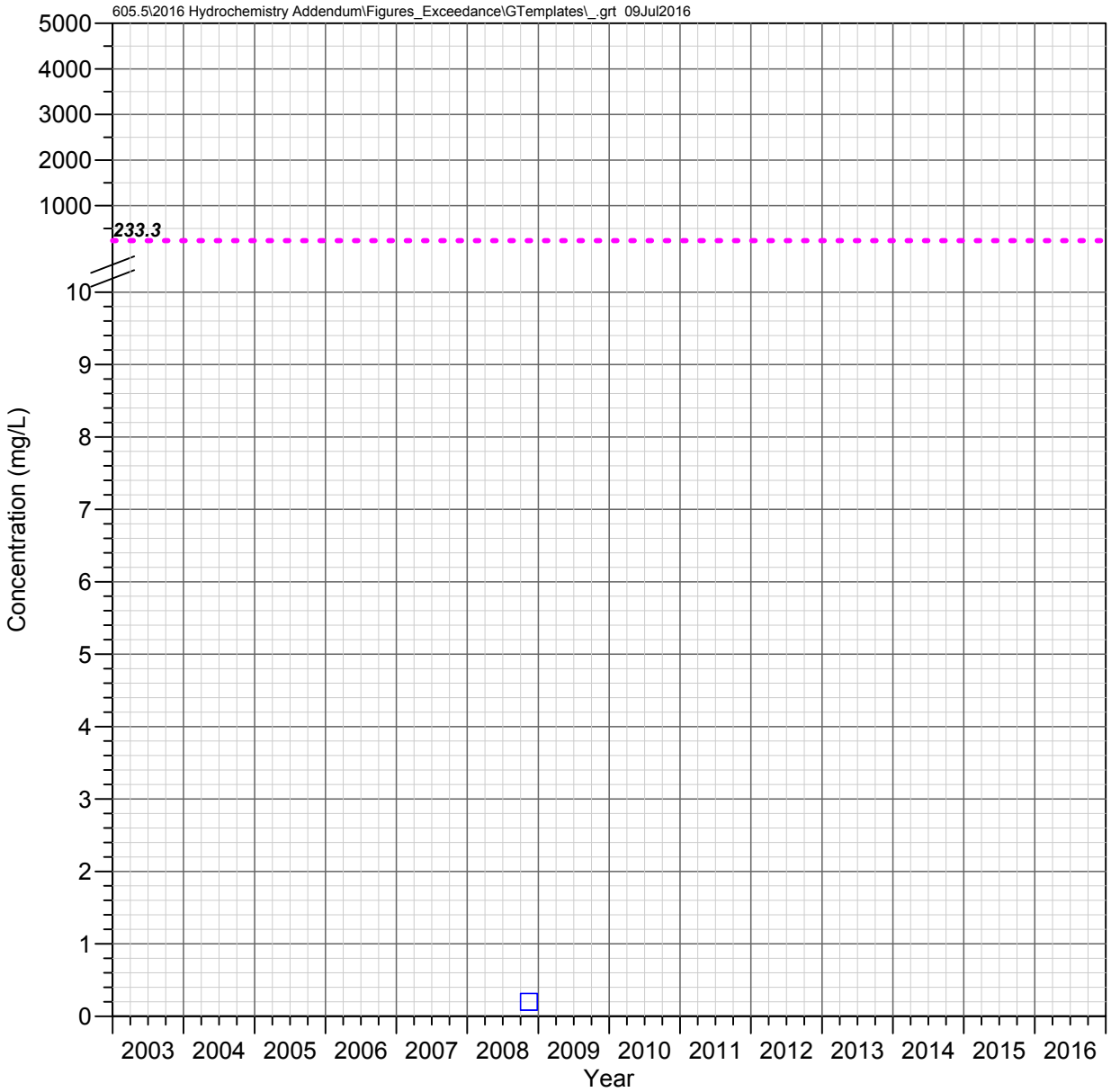


FIGURE F-624. NITRITE AS N CONCENTRATIONS OBSERVED AT MC 8.4 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



LF 0.2 C
Mineral Creek Watershed

NITRITE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 233.333 mg/L)

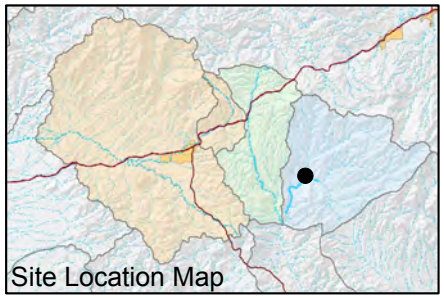
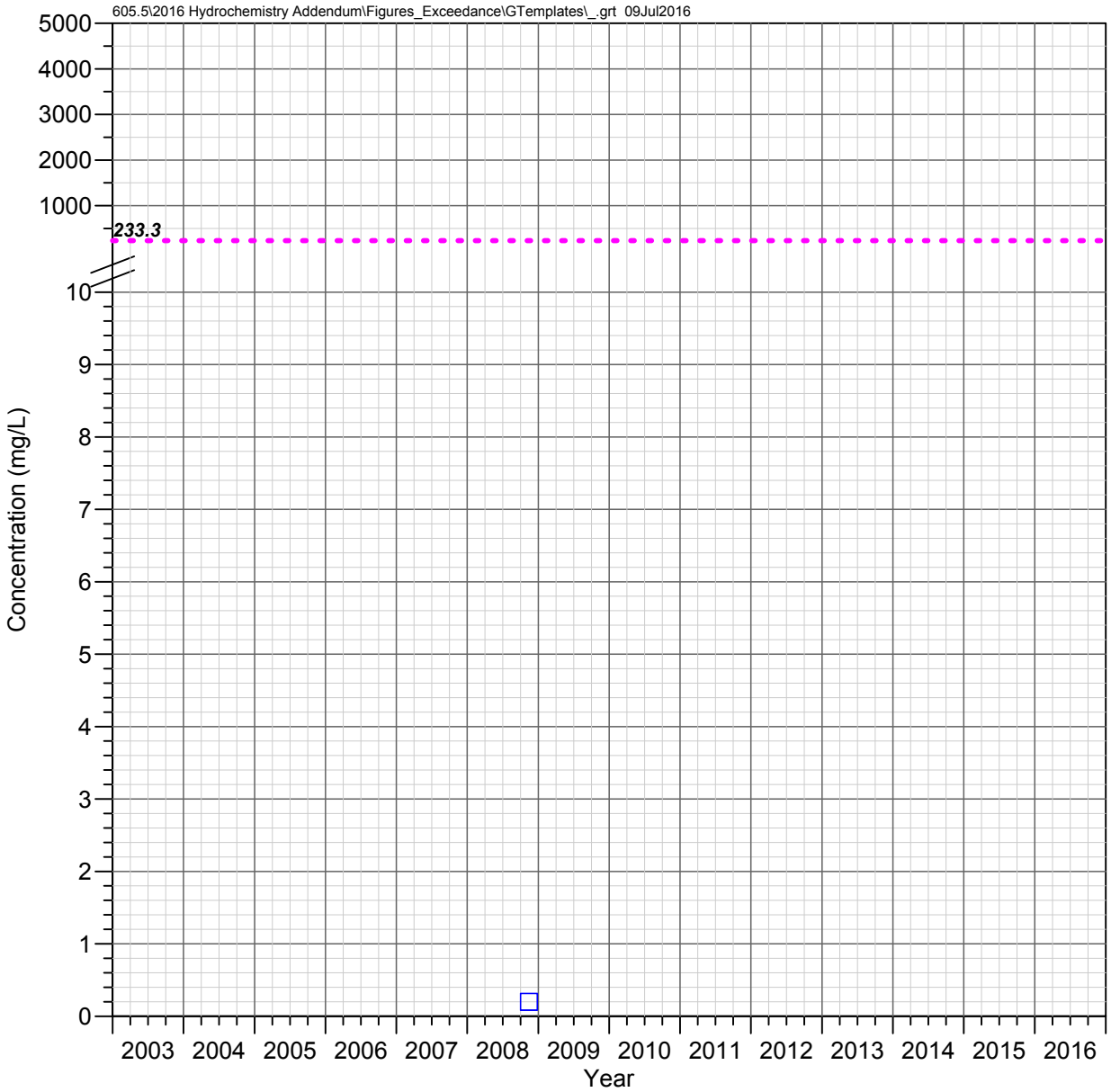


FIGURE F-625. NITRITE AS N CONCENTRATIONS OBSERVED AT LF 0.2 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 3.4 W (Wet Leg Spring)
Mineral Creek Watershed

NITRITE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 233.333 mg/L)

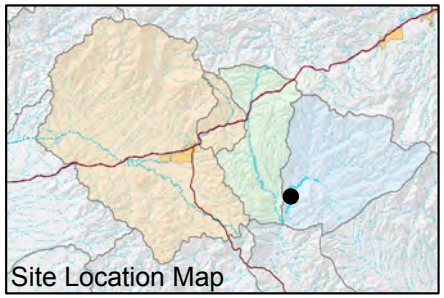
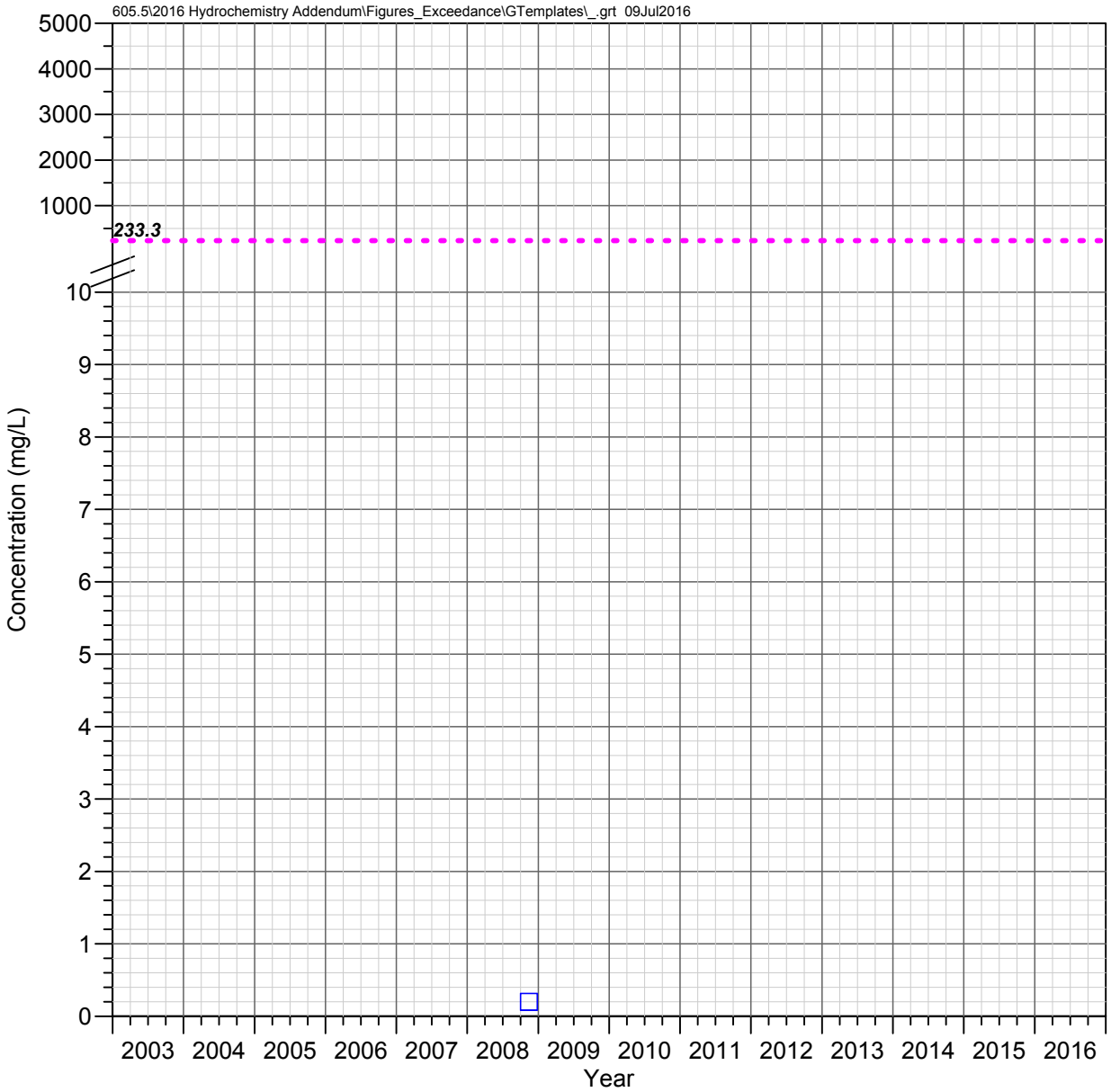


FIGURE F-626. NITRITE AS N CONCENTRATIONS OBSERVED AT MC 3.4 W (WET LEG SPRING), MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 3.3 C (Lower Mineral)
Mineral Creek Watershed

NITRITE AS N

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 233.333 mg/L)

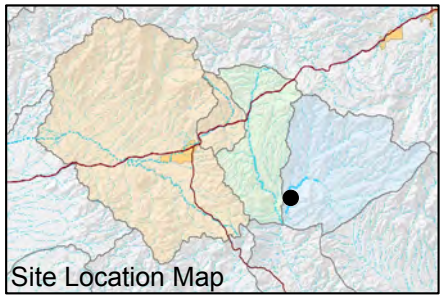
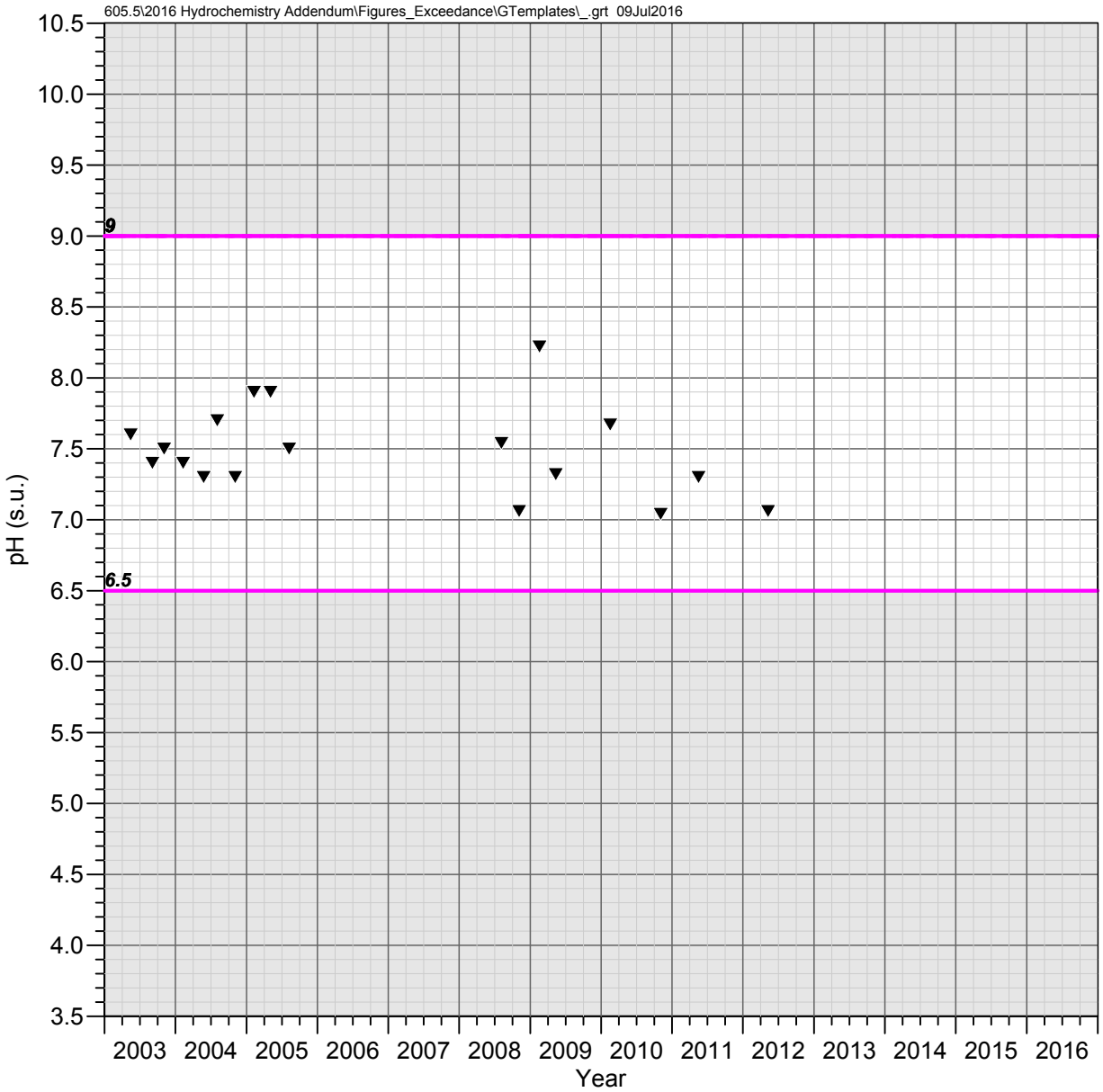


FIGURE F-627. NITRITE AS N CONCENTRATIONS OBSERVED AT MC 3.3 C (LOWER MINERAL), MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Pump Station Spring (QC 30.7 C)
Queen Creek Watershed

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- AZ Partial Body Contact (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Chronic (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Acute (>6.5 and <9)
- AZ Agricultural Livestock Watering (>6.5 and <9)

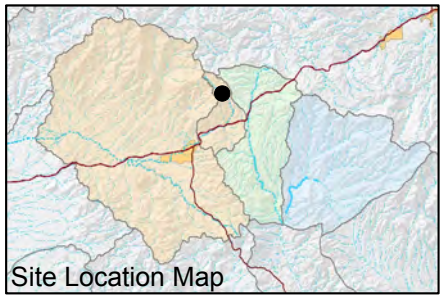
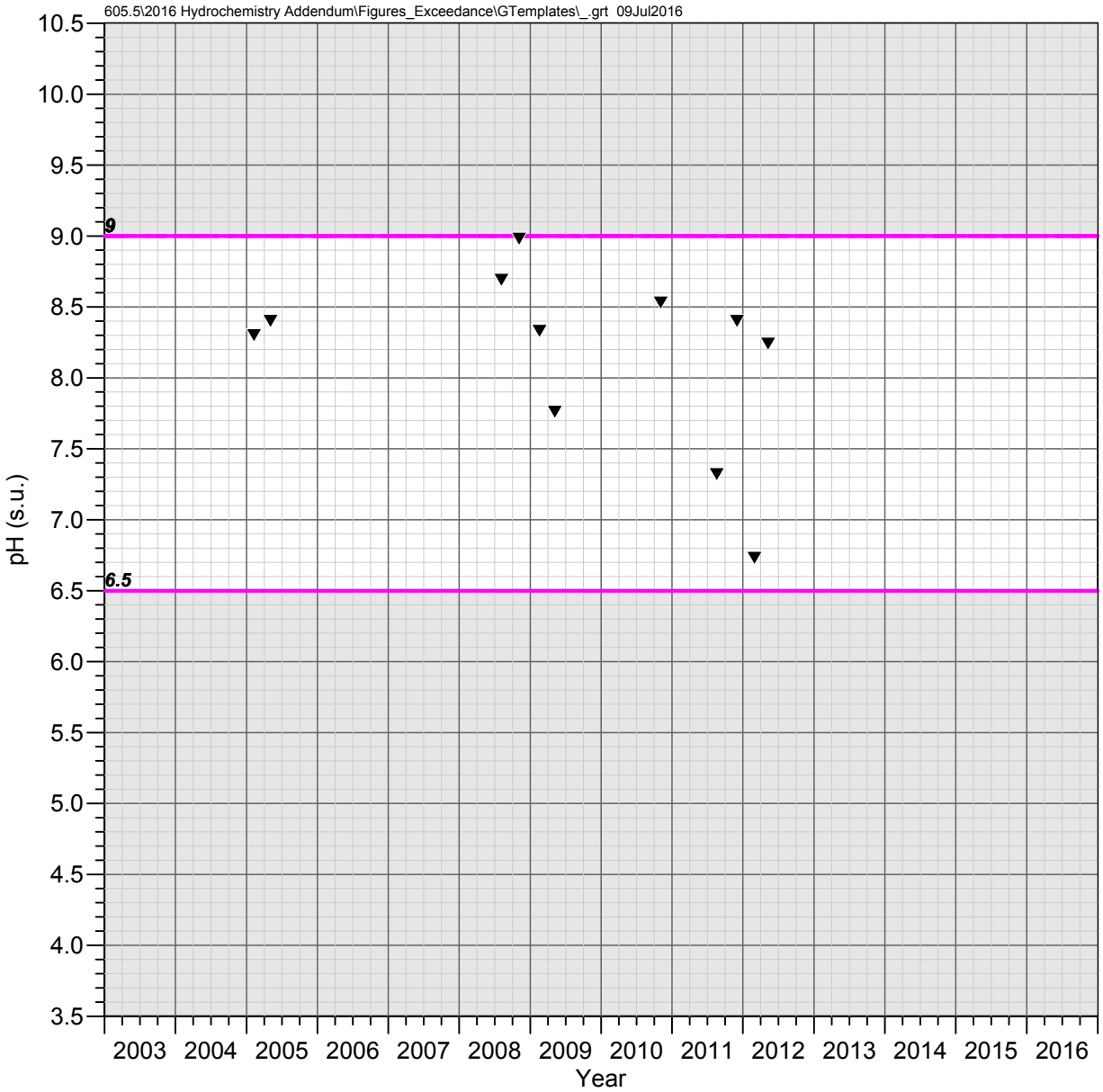


FIGURE F-628. pH OBSERVED AT PUMP STATION SPRING (QC 30.7 C), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 27.3 C
Queen Creek Watershed

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- AZ Partial Body Contact (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Chronic (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Acute (>6.5 and <9)
- AZ Agricultural Livestock Watering (>6.5 and <9)

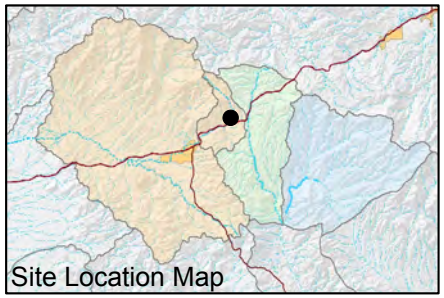
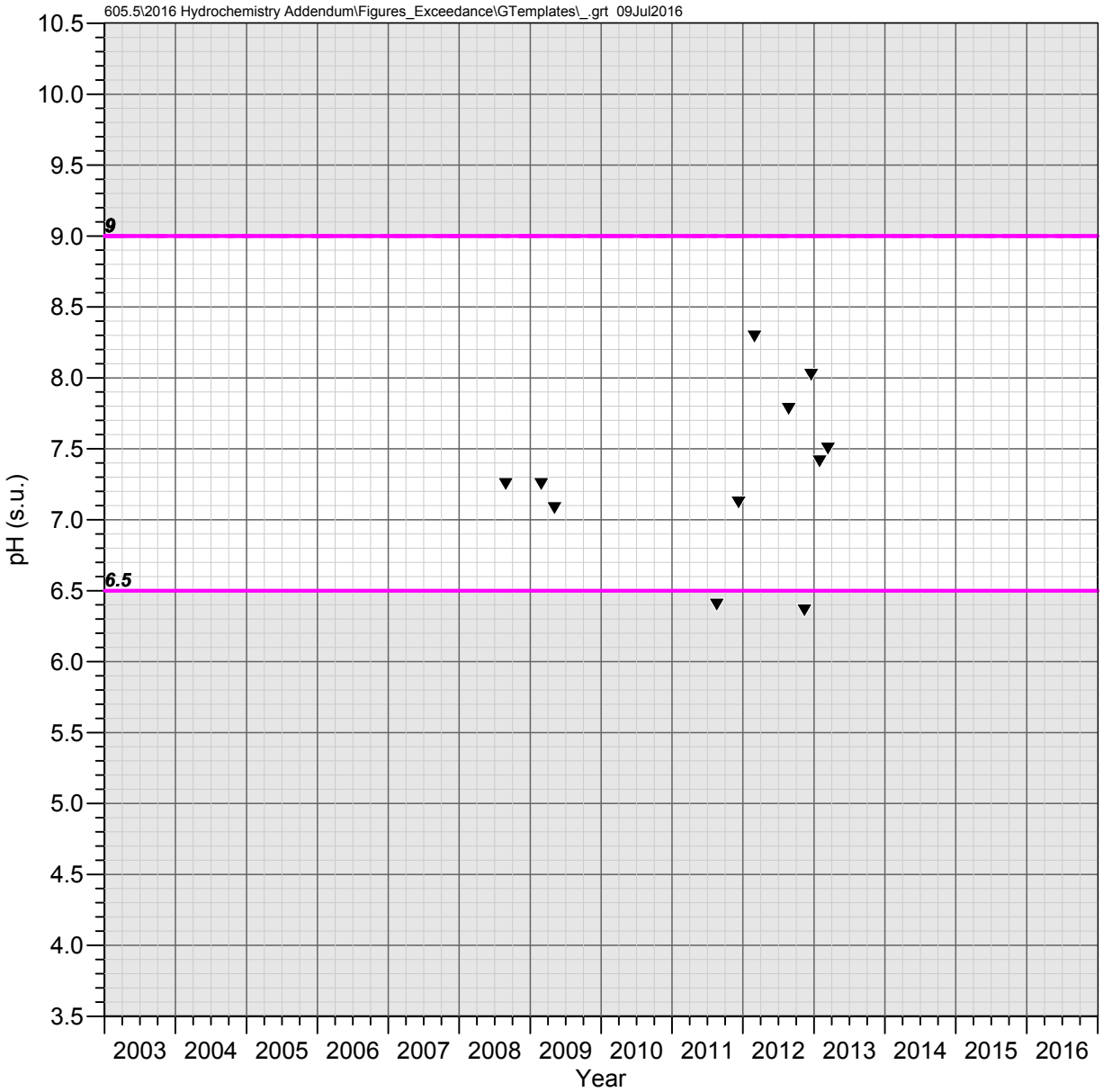


FIGURE F-629. pH OBSERVED AT QC 27.3 C, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Oak Flat Wash
Queen Creek Watershed

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- AZ Partial Body Contact (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Chronic (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Acute (>6.5 and <9)
- AZ Agricultural Livestock Watering (>6.5 and <9)

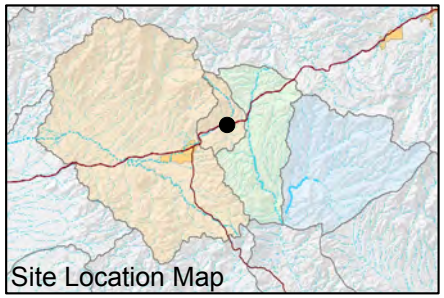
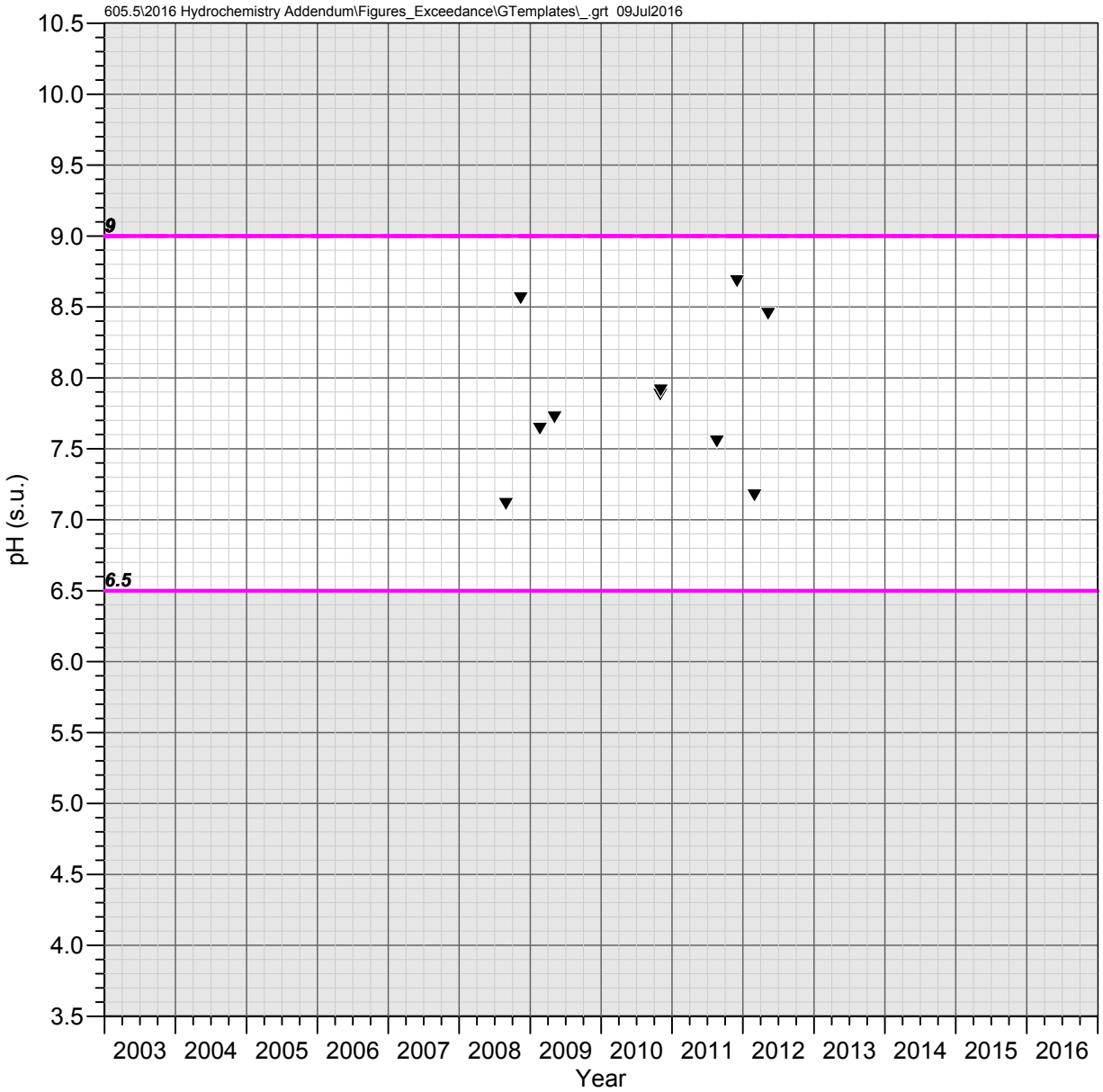


FIGURE F-630. pH OBSERVED AT OAK FLAT WASH, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Number 9 Wash
Queen Creek Watershed

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- AZ Partial Body Contact (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Chronic (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Acute (>6.5 and <9)
- AZ Agricultural Livestock Watering (>6.5 and <9)

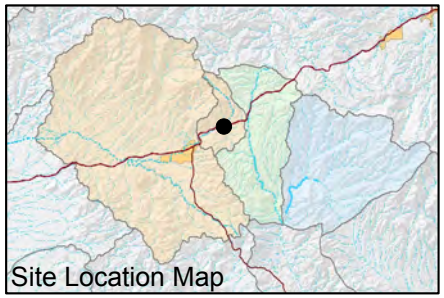
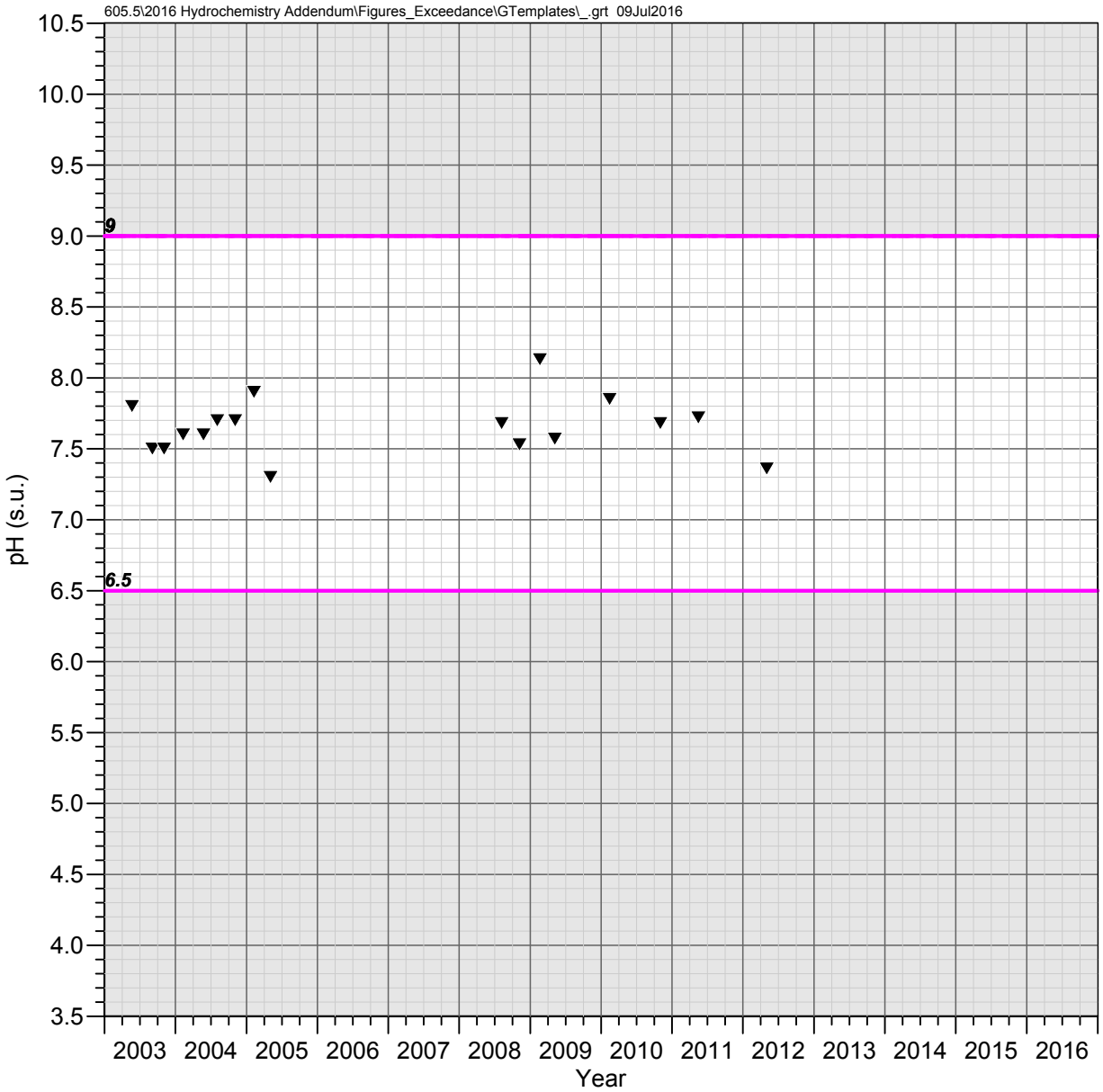


FIGURE F-631. pH OBSERVED AT NUMBER 9 WASH, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Boulder Hole (QC 23.6 C)
Queen Creek Watershed

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- AZ Partial Body Contact (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Chronic (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Acute (>6.5 and <9)
- AZ Agricultural Livestock Watering (>6.5 and <9)

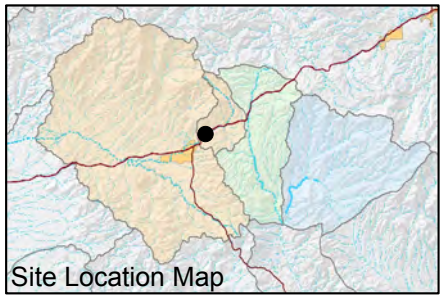
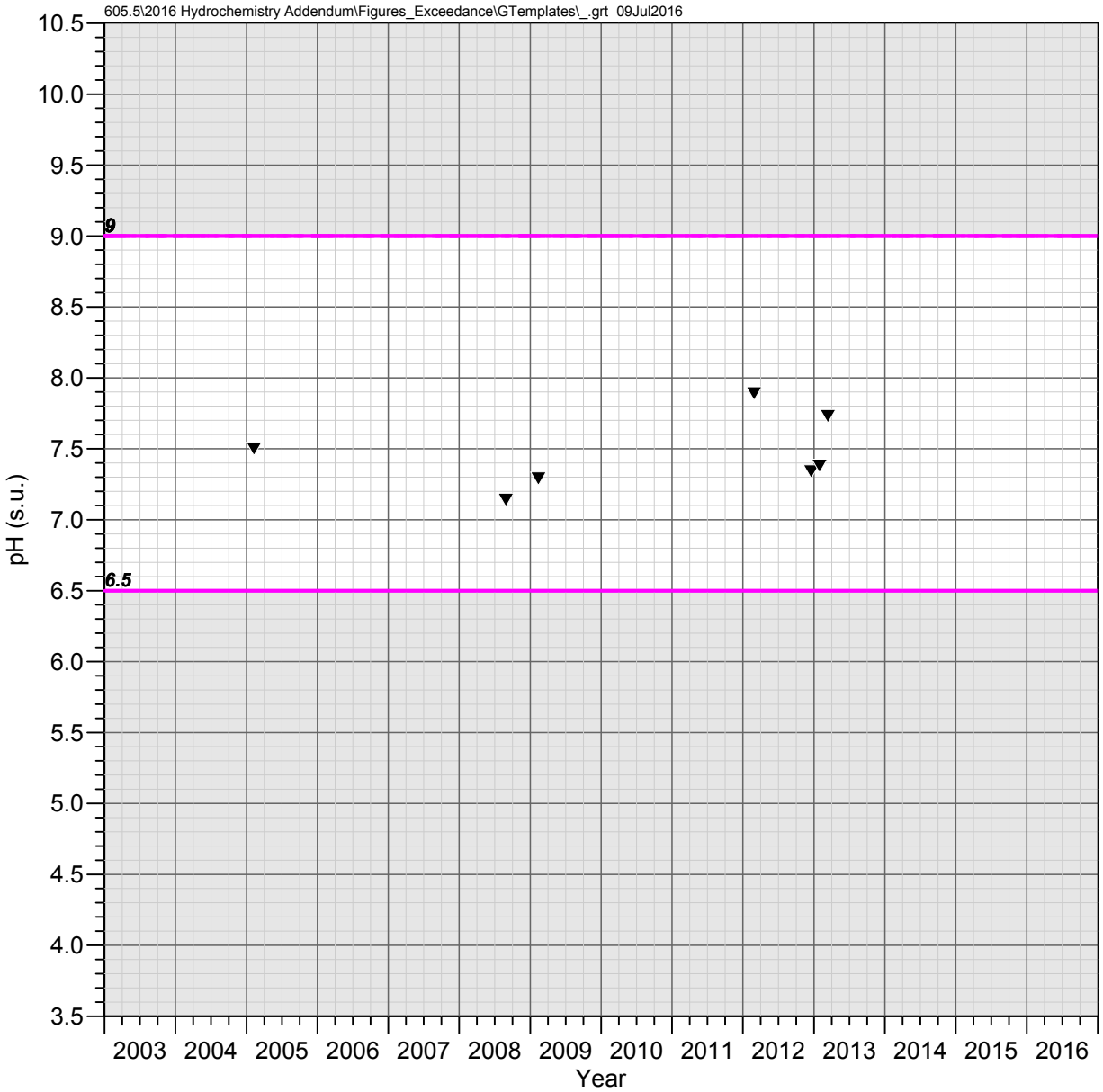


FIGURE F-632. pH OBSERVED AT BOULDER HOLE (QC 23.6 C), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 22.6 E (Karst Spring)
Queen Creek Watershed

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- AZ Partial Body Contact (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Chronic (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Acute (>6.5 and <9)
- AZ Agricultural Livestock Watering (>6.5 and <9)

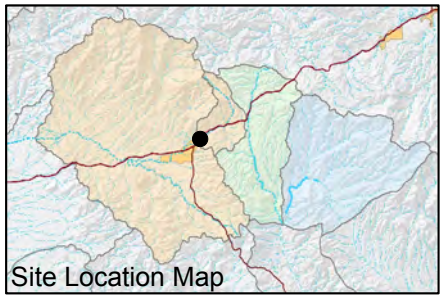
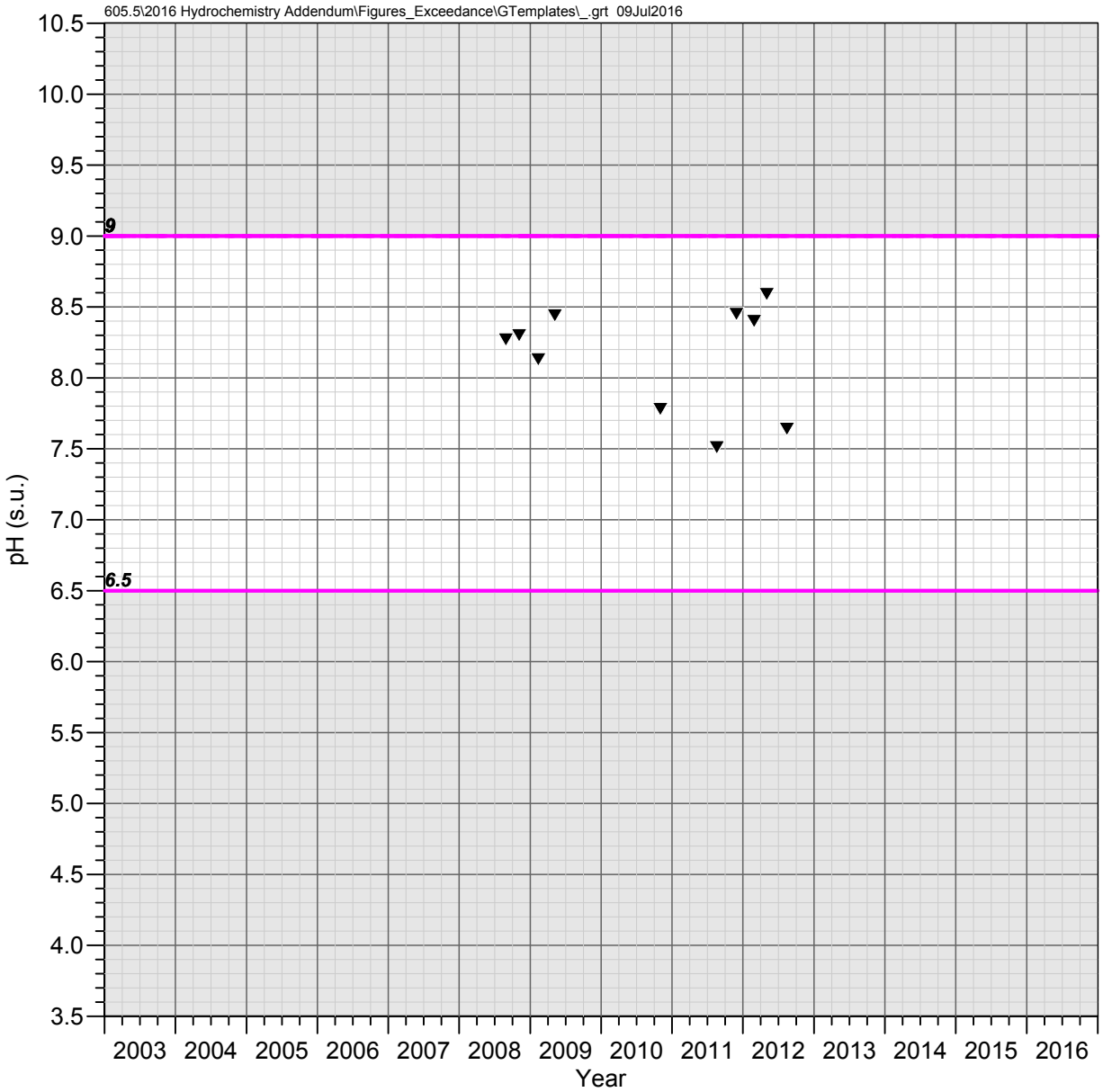


FIGURE F-633. pH OBSERVED AT QC 22.6 E (KARST SPRING), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 21.7 C (Magma Avenue)
Queen Creek Watershed

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- AZ Partial Body Contact (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Chronic (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Acute (>6.5 and <9)
- AZ Agricultural Livestock Watering (>6.5 and <9)

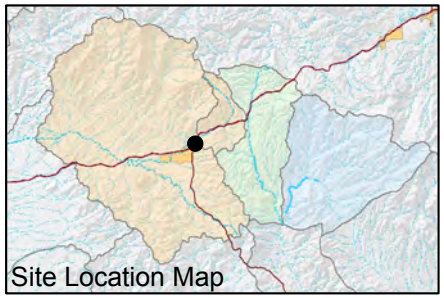
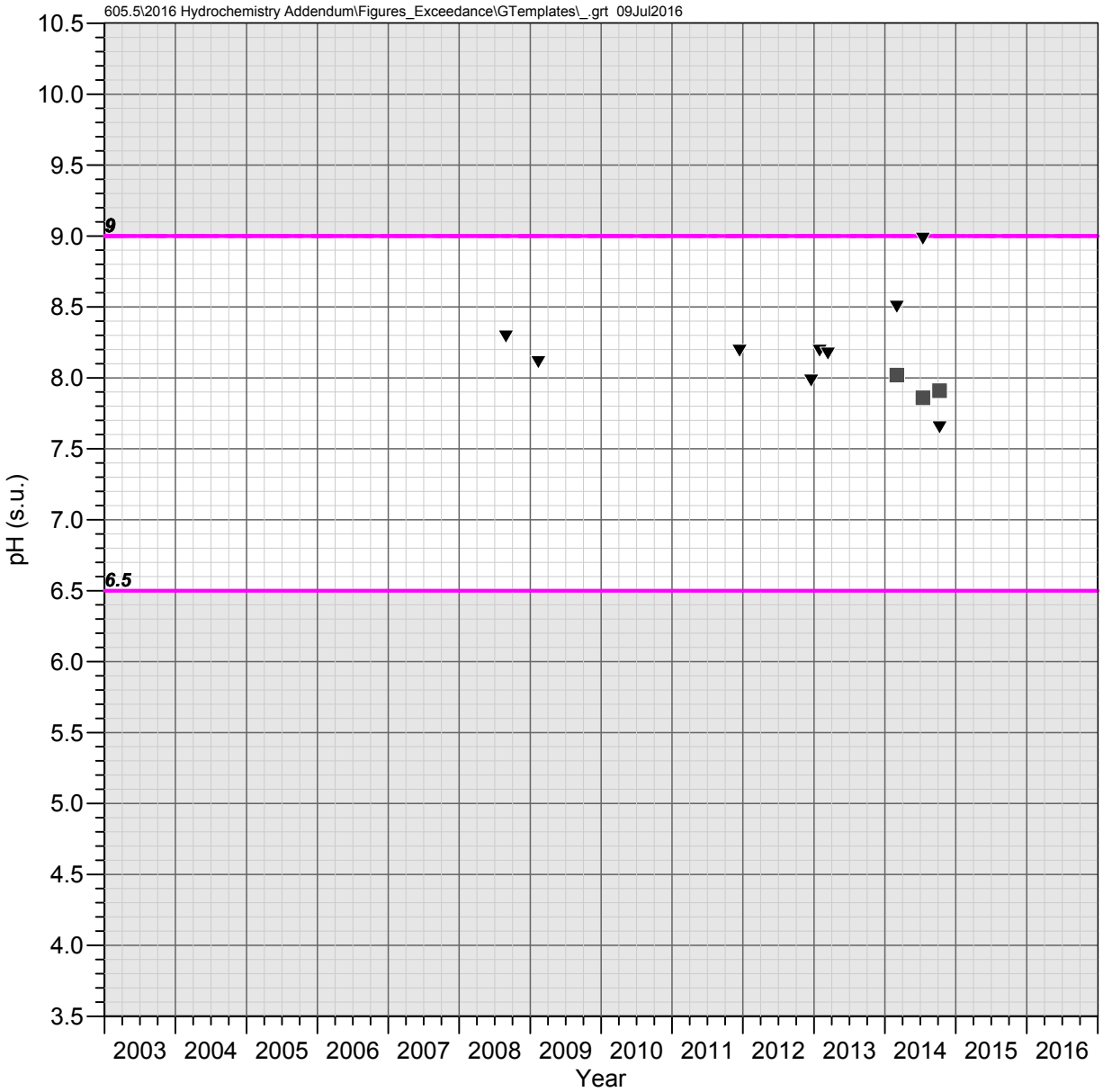


FIGURE F-634. pH OBSERVED AT QC 21.7 C (MAGMA AVENUE), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 19.7 C
Queen Creek Watershed

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- AZ Partial Body Contact (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Chronic (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Acute (>6.5 and <9)
- AZ Agricultural Livestock Watering (>6.5 and <9)

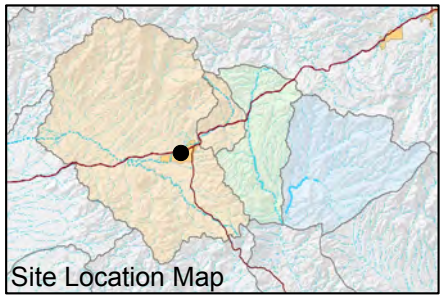
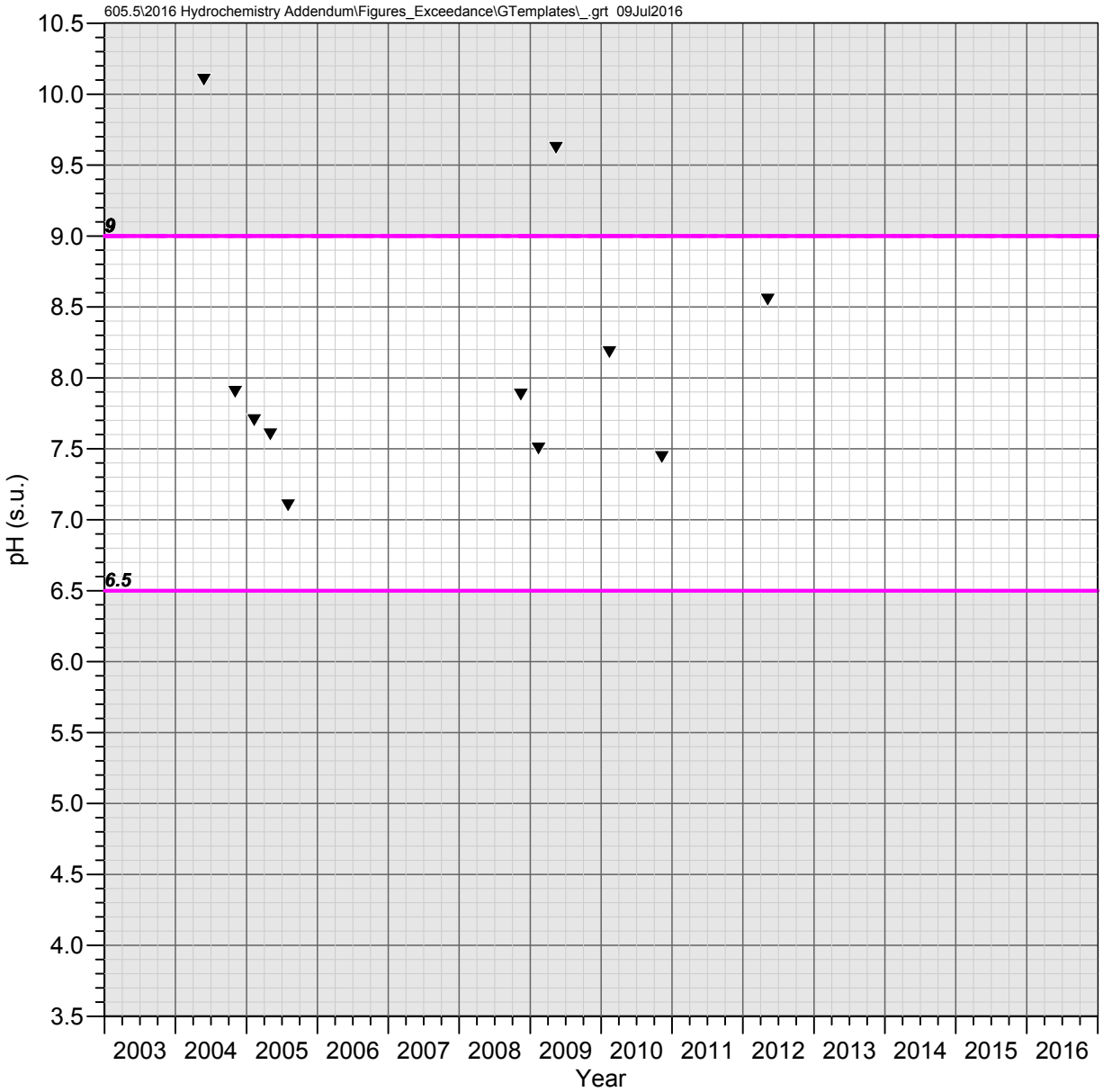


FIGURE F-635. pH OBSERVED AT QC 19.7 C, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Bored Spring
Queen Creek Watershed

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- AZ Partial Body Contact (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Chronic (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Acute (>6.5 and <9)
- AZ Agricultural Livestock Watering (>6.5 and <9)

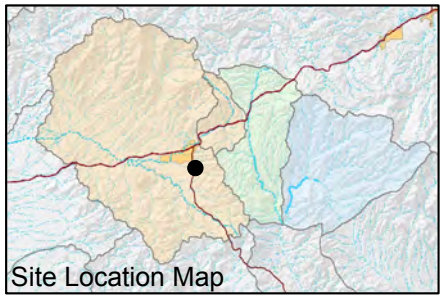
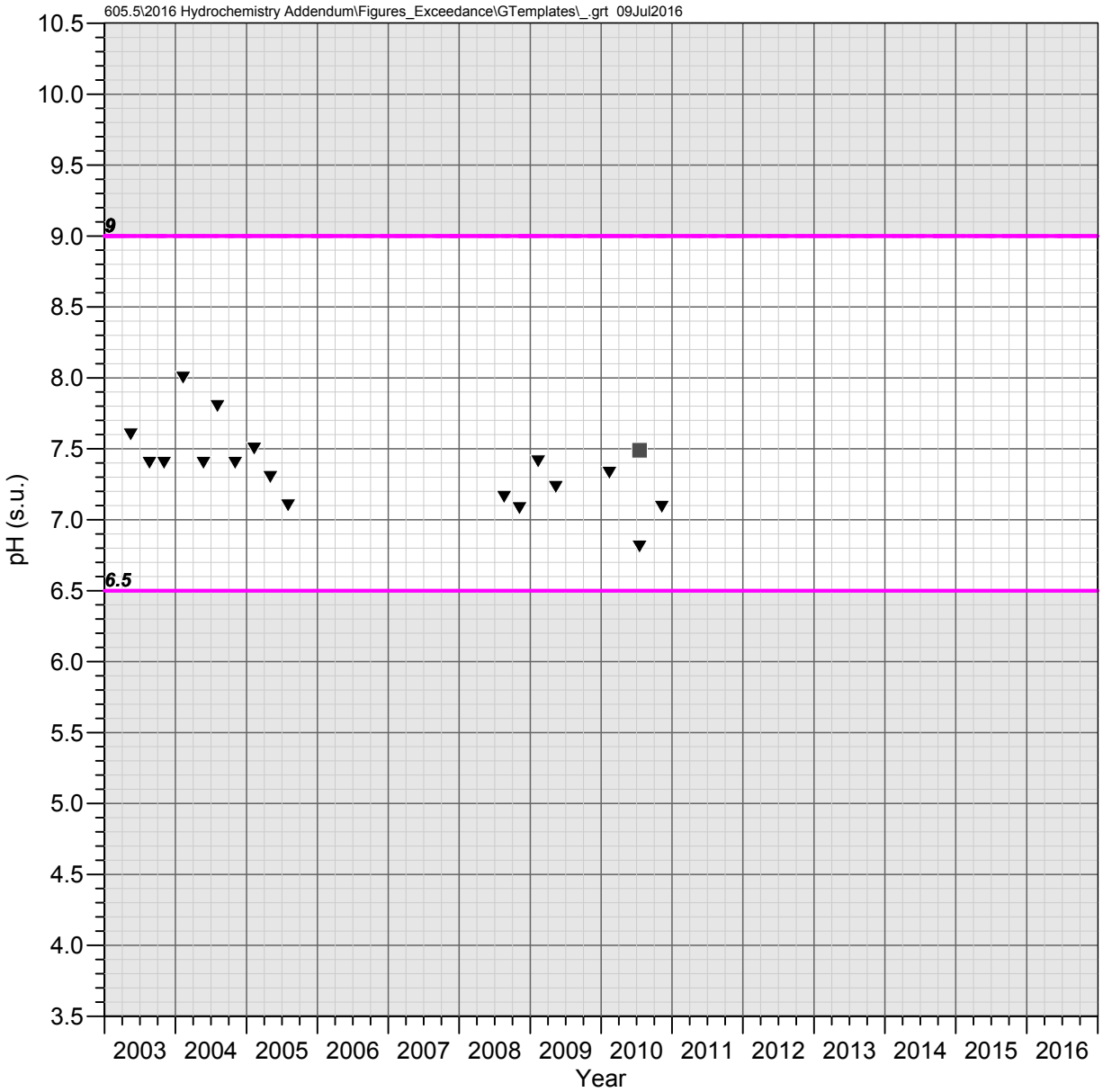


FIGURE F-636. pH OBSERVED AT BORED SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Hidden Spring
Queen Creek Watershed

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- AZ Partial Body Contact (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Chronic (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Acute (>6.5 and <9)
- AZ Agricultural Livestock Watering (>6.5 and <9)

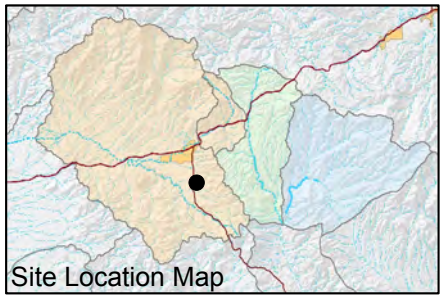
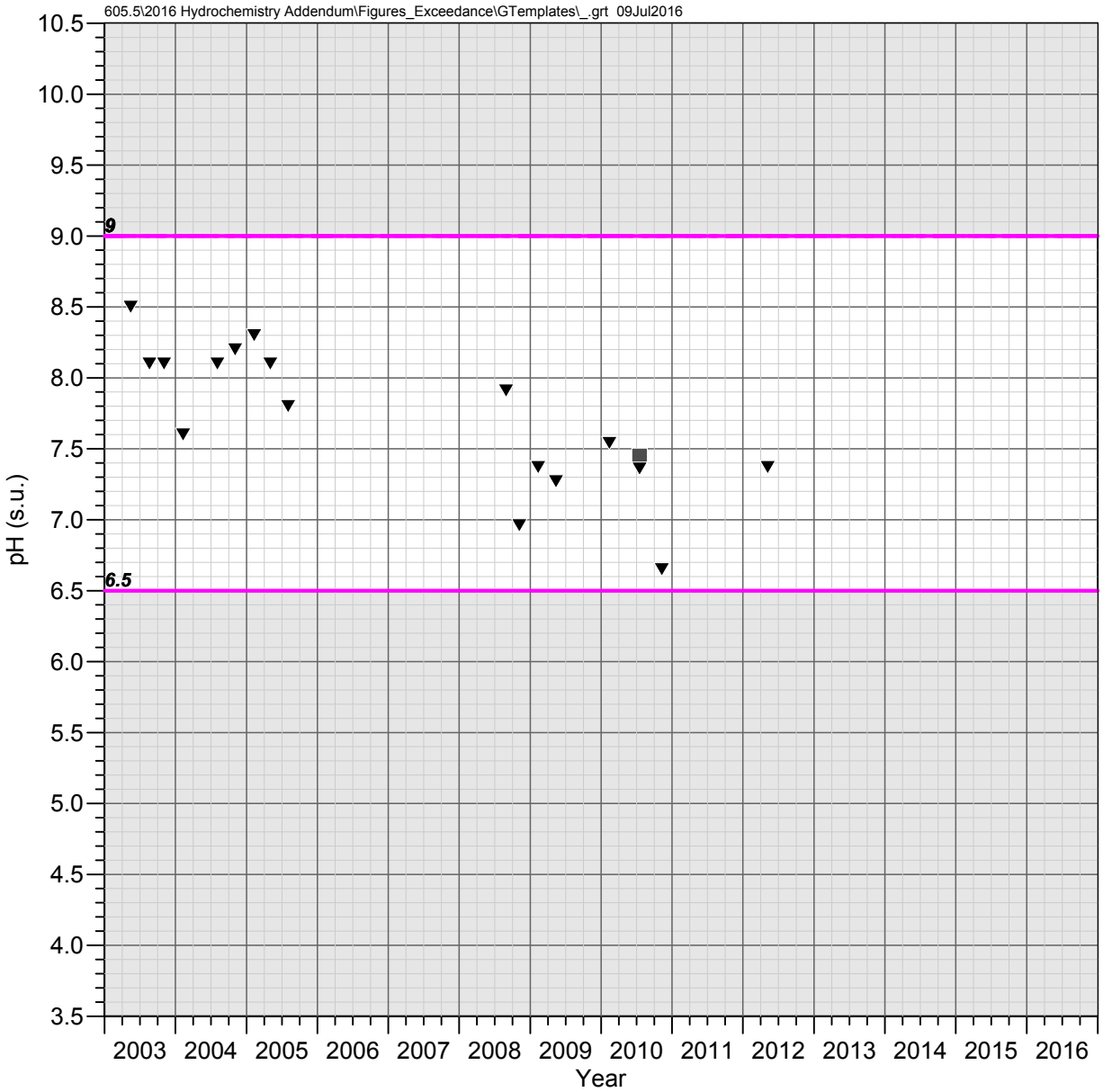


FIGURE F-637. pH OBSERVED AT HIDDEN SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Kane Spring
Queen Creek Watershed

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- AZ Partial Body Contact (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Chronic (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Acute (>6.5 and <9)
- AZ Agricultural Livestock Watering (>6.5 and <9)

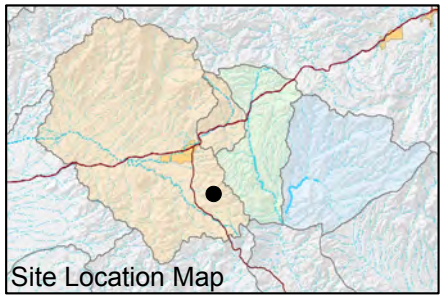
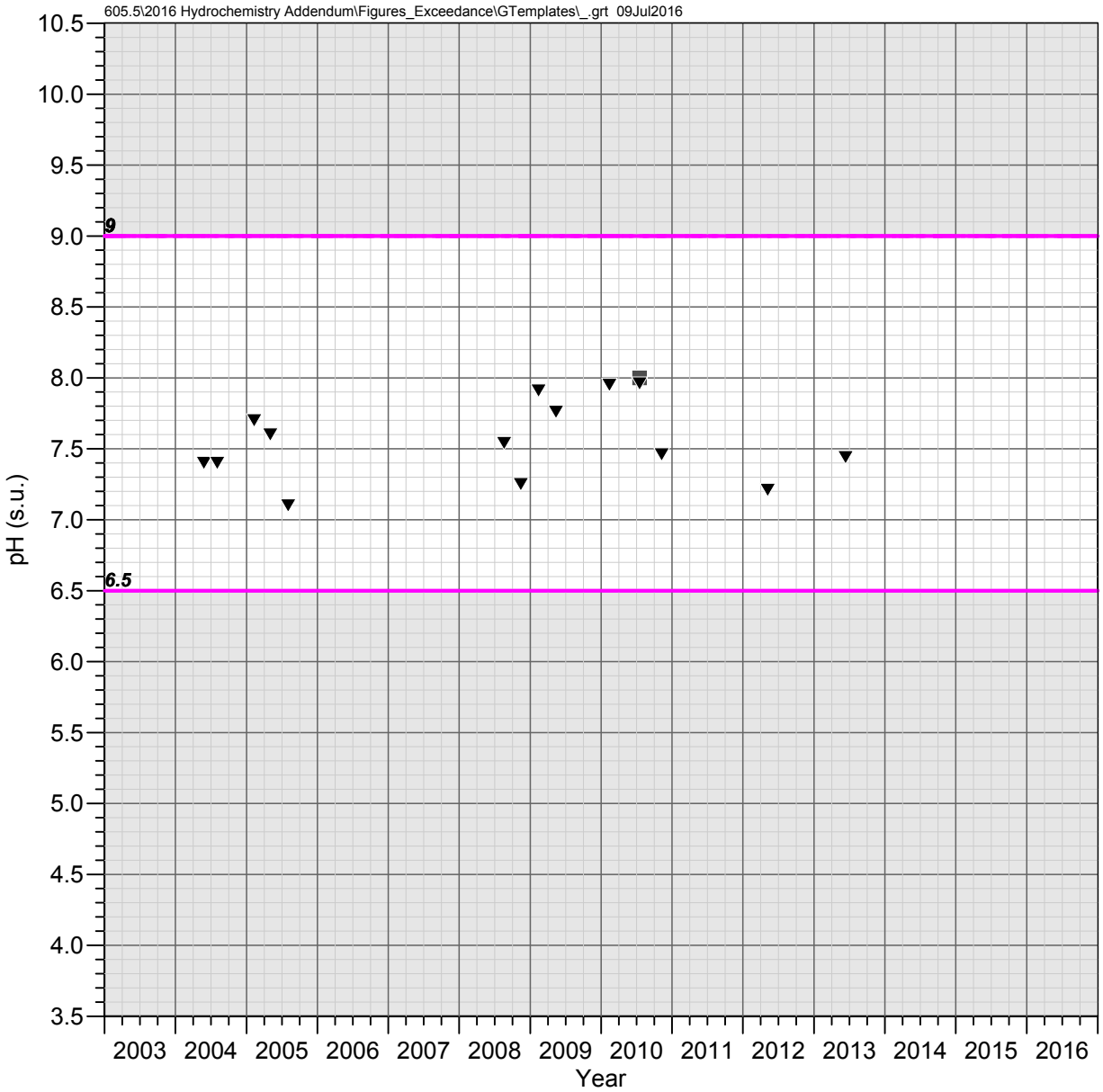


FIGURE F-638. pH OBSERVED AT KANE SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Blue Spring
Queen Creek Watershed

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- AZ Partial Body Contact (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Chronic (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Acute (>6.5 and <9)
- AZ Agricultural Livestock Watering (>6.5 and <9)

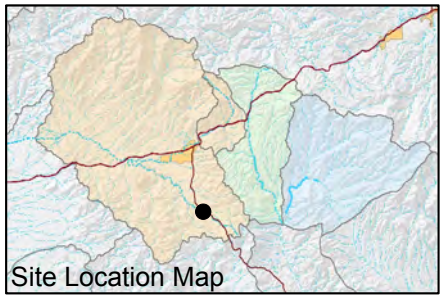
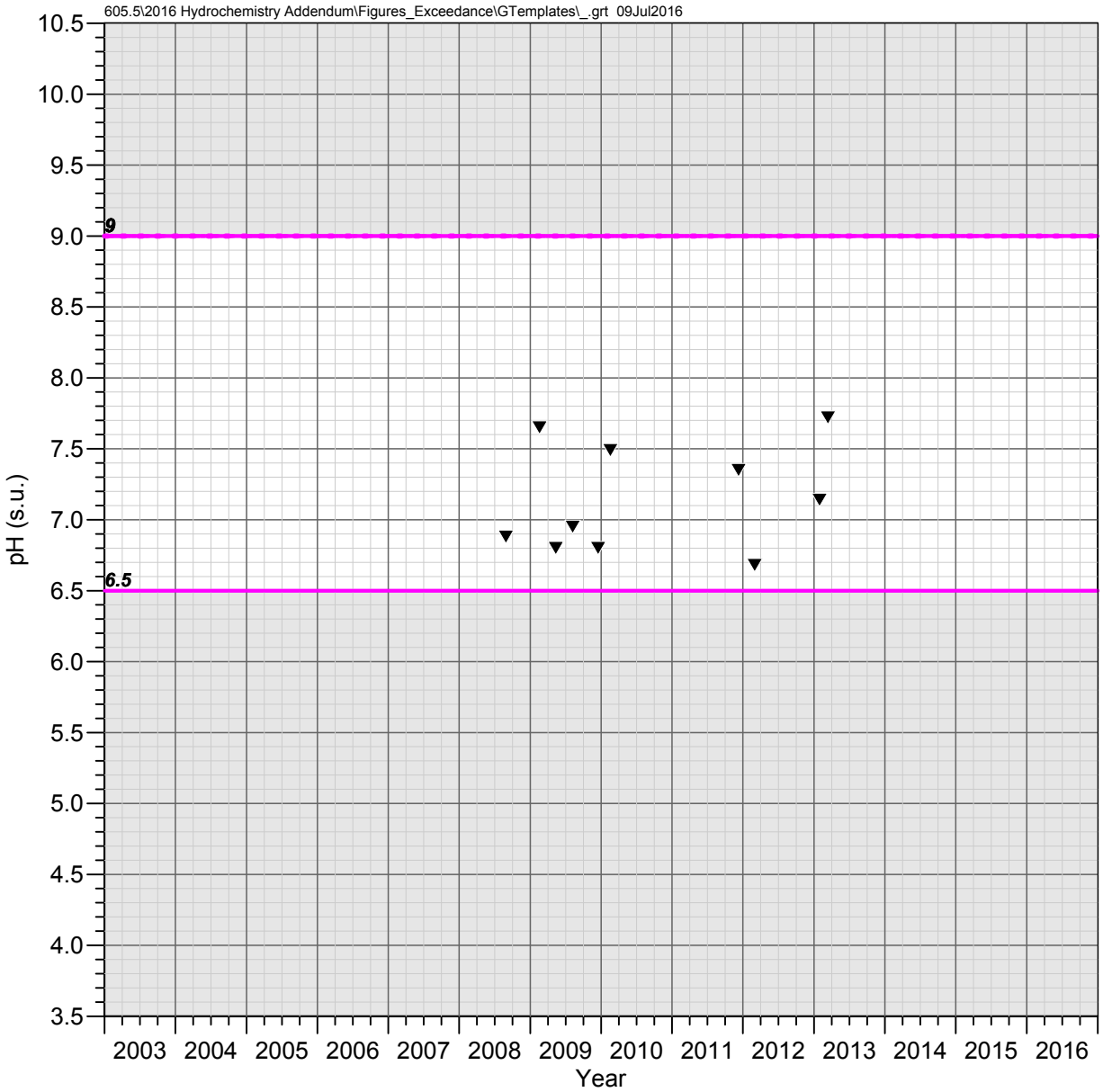


FIGURE F-639. pH OBSERVED AT BLUE SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



IC 1.0 C
Devils Canyon Watershed

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- AZ Full Body Contact (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Chronic (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Acute (>6.5 and <9)
- AZ Agricultural Livestock Watering (>6.5 and <9)

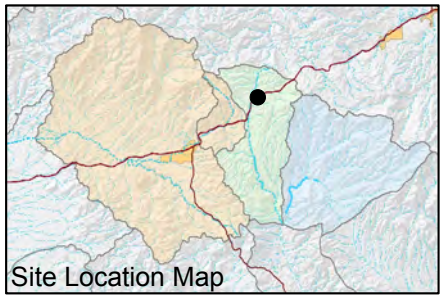
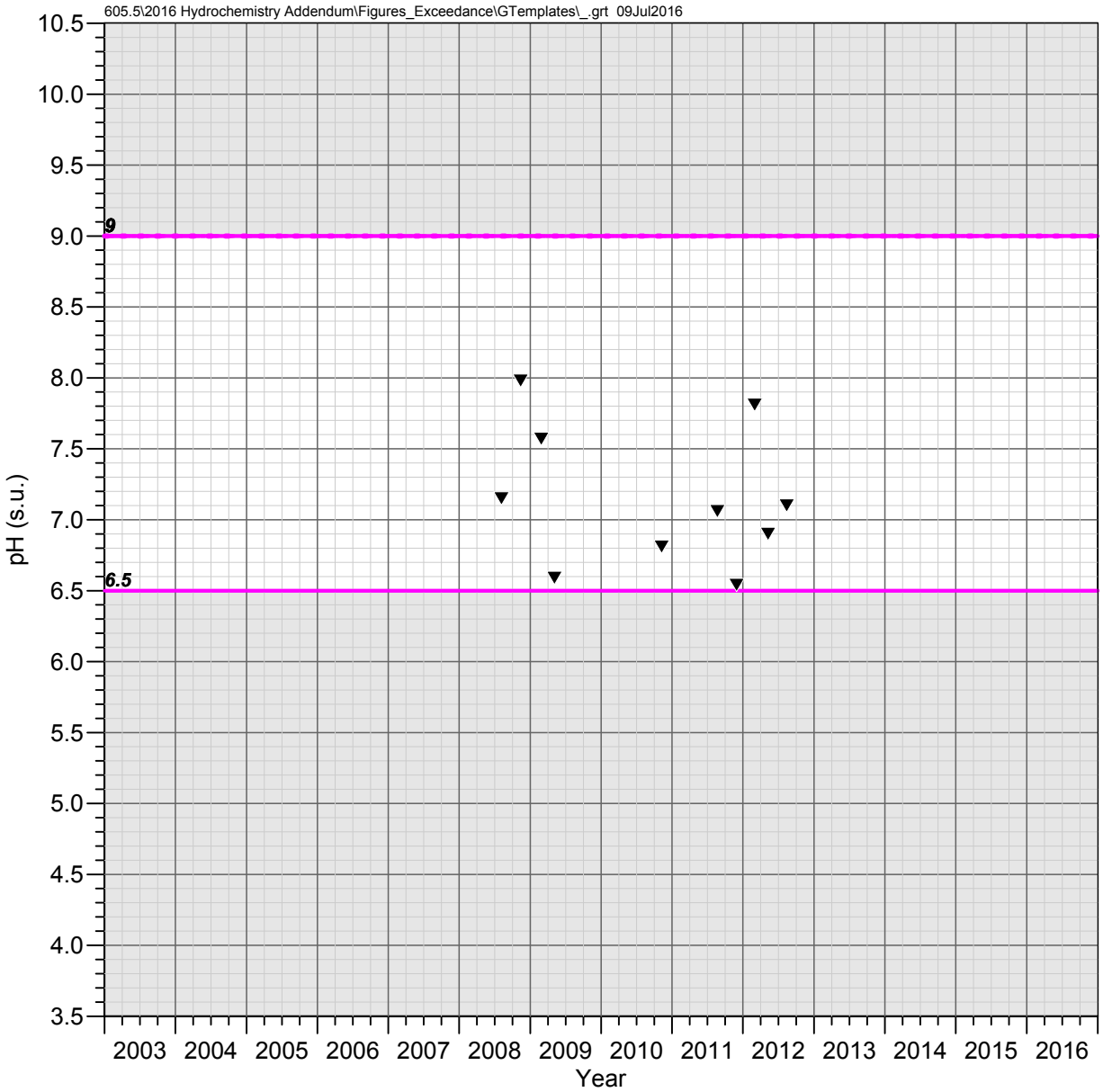


FIGURE F-640. pH OBSERVED AT IC 1.0 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 15.5 C
Devils Canyon Watershed

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- AZ Full Body Contact (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Chronic (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Acute (>6.5 and <9)
- AZ Agricultural Livestock Watering (>6.5 and <9)

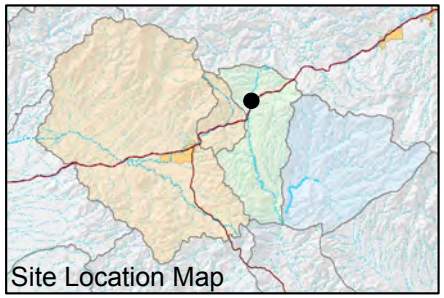
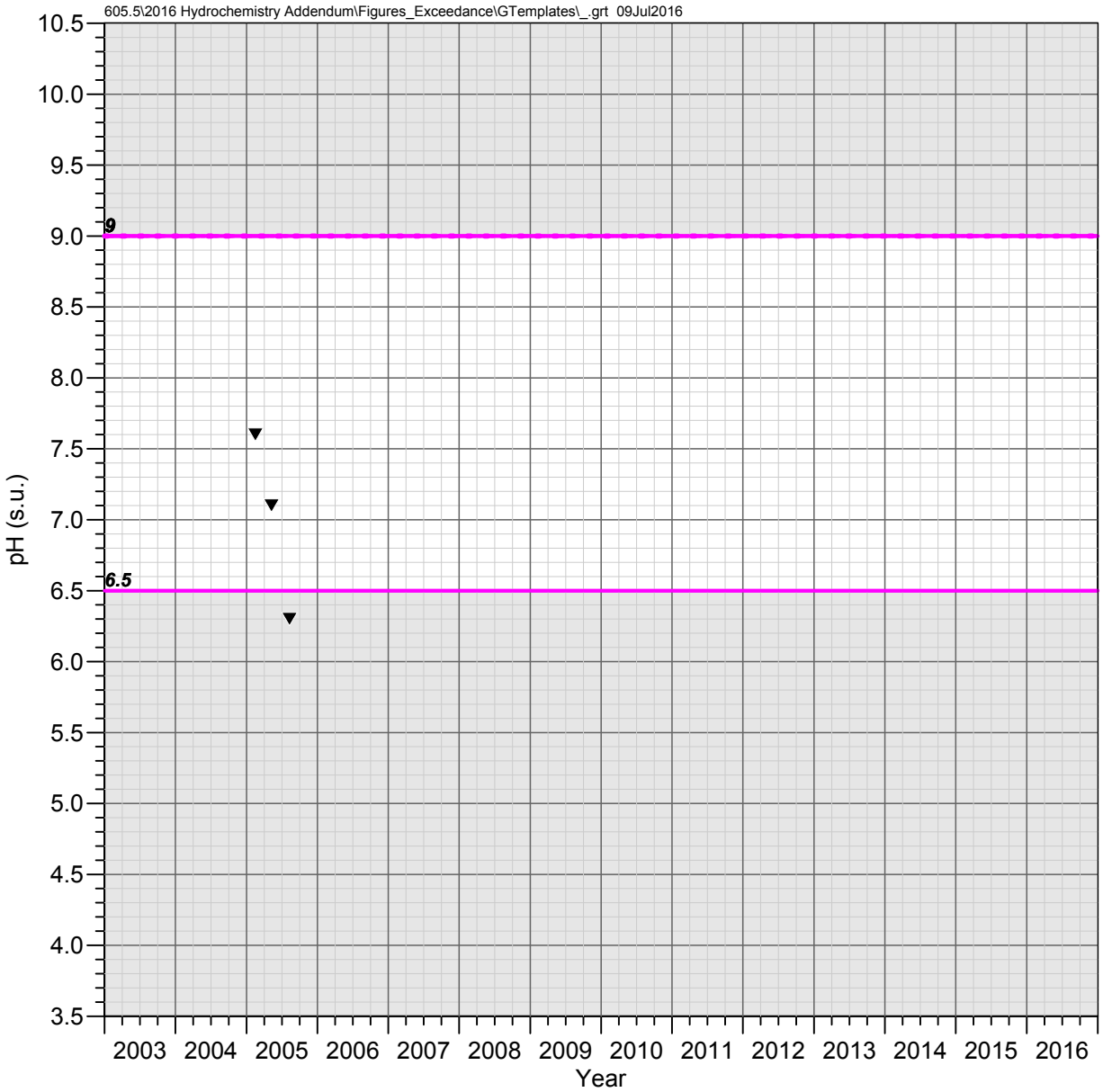


FIGURE F-641. pH OBSERVED AT DC 15.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 15.2 C
Devils Canyon Watershed

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- AZ Full Body Contact (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Chronic (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Acute (>6.5 and <9)
- AZ Agricultural Livestock Watering (>6.5 and <9)

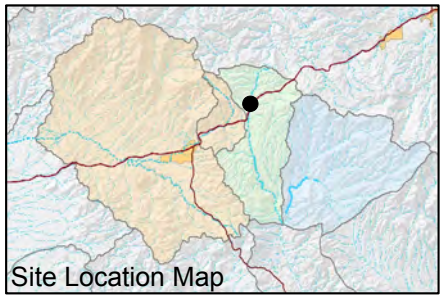
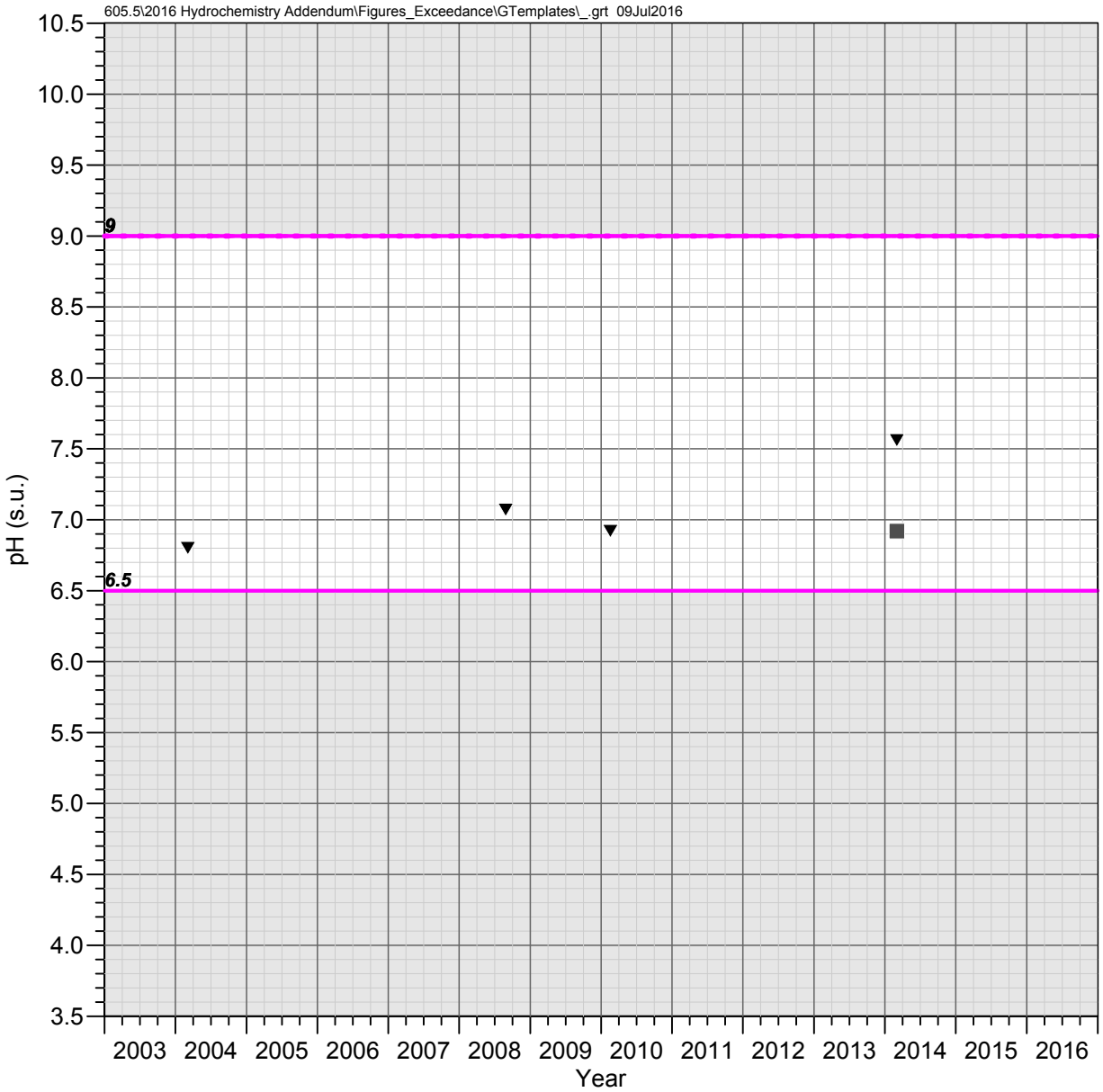


FIGURE F-642. pH OBSERVED AT DC 15.2 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 14.7 C
Devils Canyon Watershed

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- AZ Full Body Contact (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Chronic (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Acute (>6.5 and <9)
- AZ Agricultural Livestock Watering (>6.5 and <9)

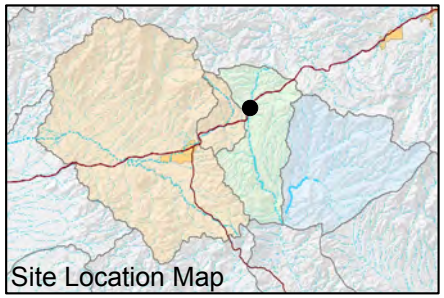
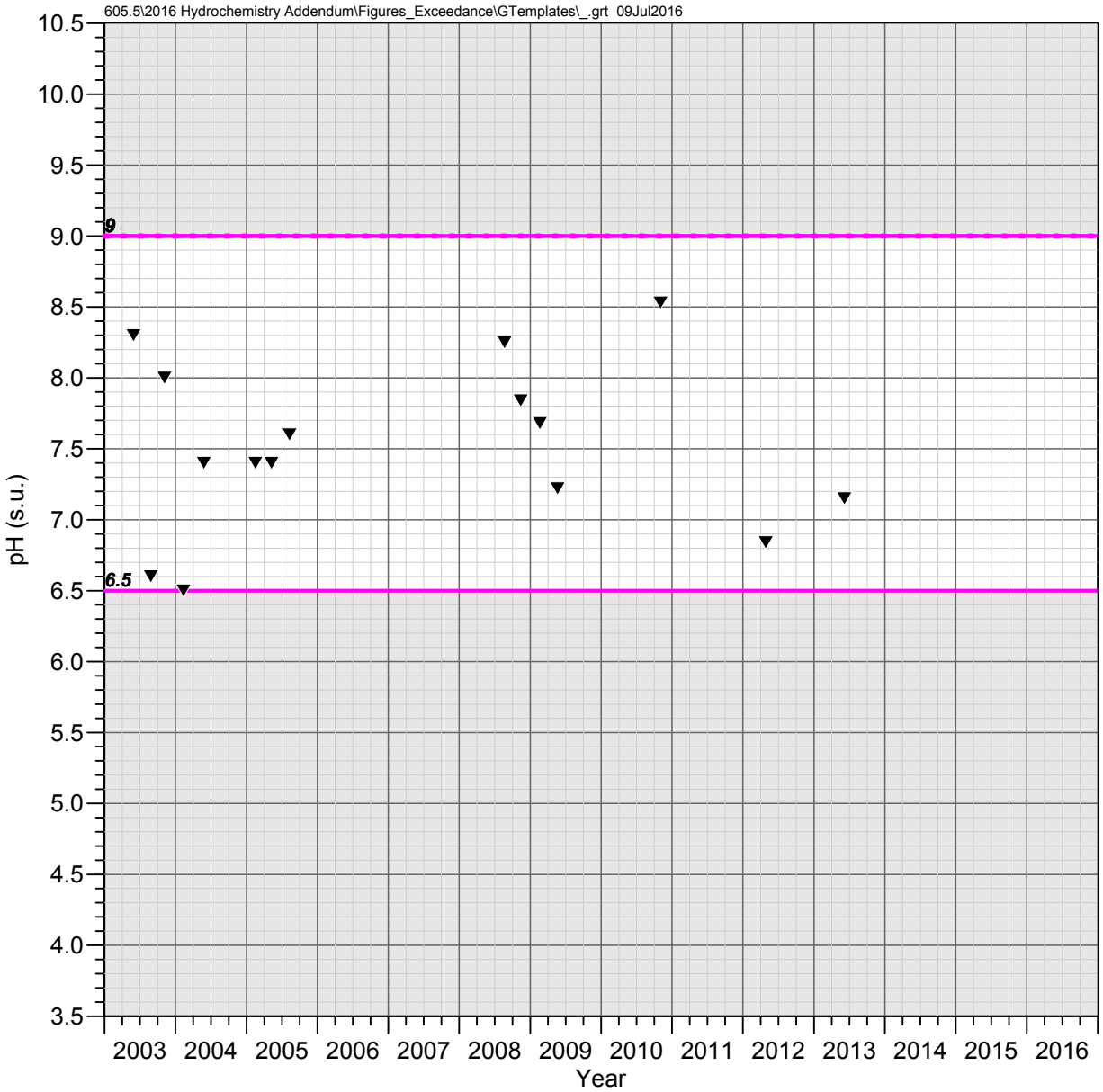


FIGURE F-643. pH OBSERVED AT DC 14.7 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 13.5 C
Devils Canyon Watershed

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- AZ Full Body Contact (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Chronic (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Acute (>6.5 and <9)
- AZ Agricultural Livestock Watering (>6.5 and <9)

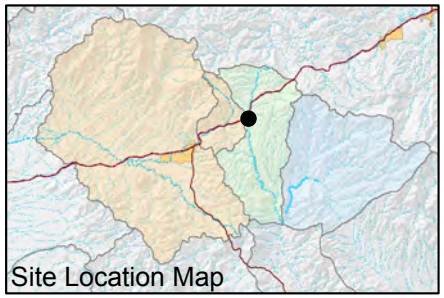
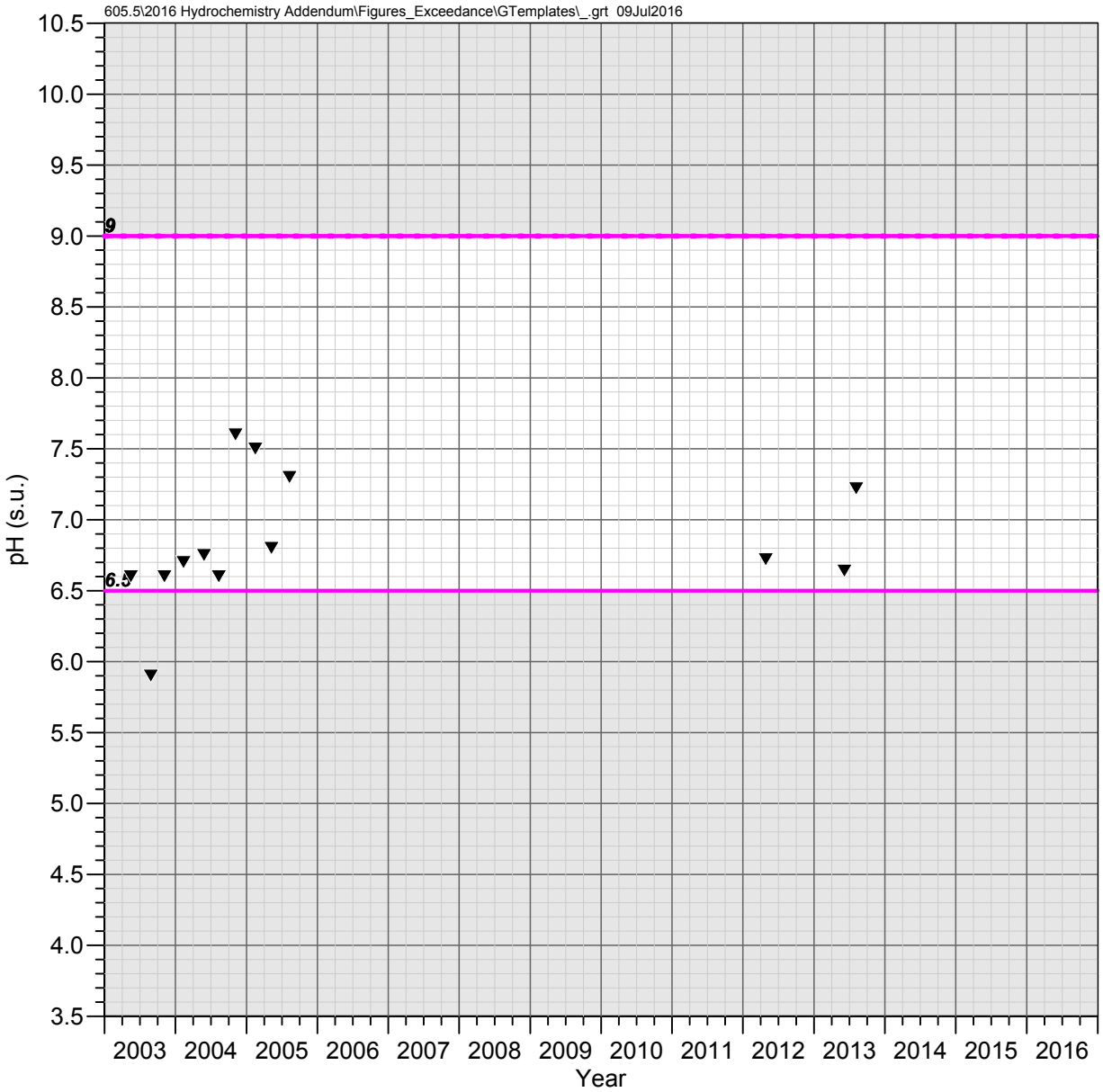


FIGURE F-644. pH OBSERVED AT DC 13.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 10.9 C
Devils Canyon Watershed

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- AZ Full Body Contact (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Chronic (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Acute (>6.5 and <9)
- AZ Agricultural Livestock Watering (>6.5 and <9)

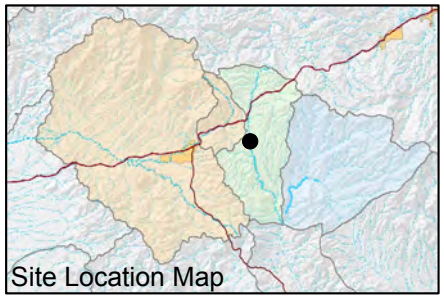
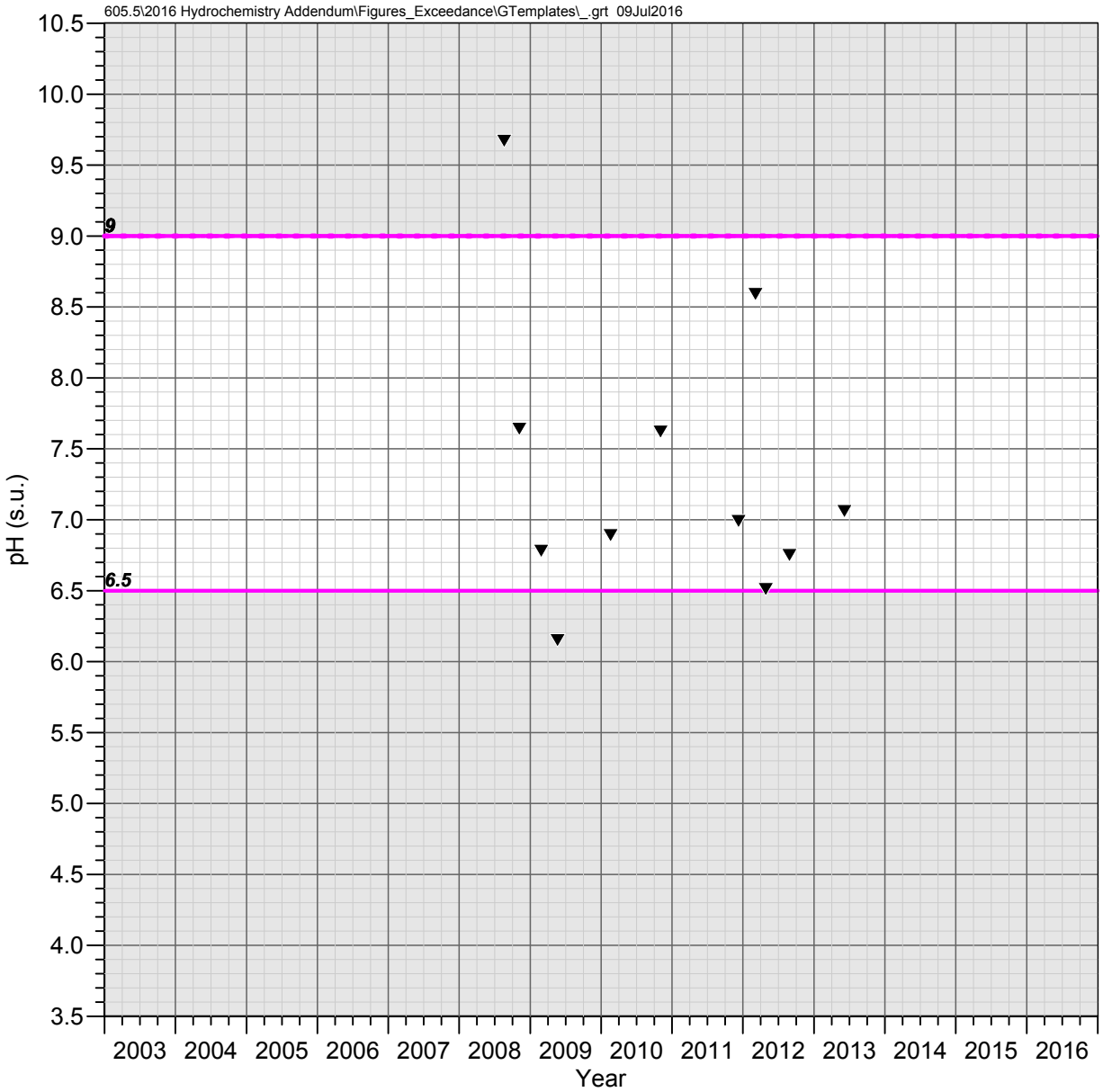


FIGURE F-645. pH OBSERVED AT DC 10.9 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



RR 1.5 C
Devils Canyon Watershed

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- AZ Full Body Contact (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Chronic (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Acute (>6.5 and <9)
- AZ Agricultural Livestock Watering (>6.5 and <9)

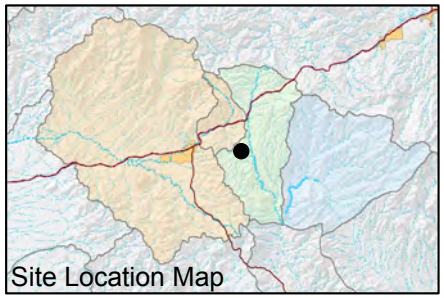
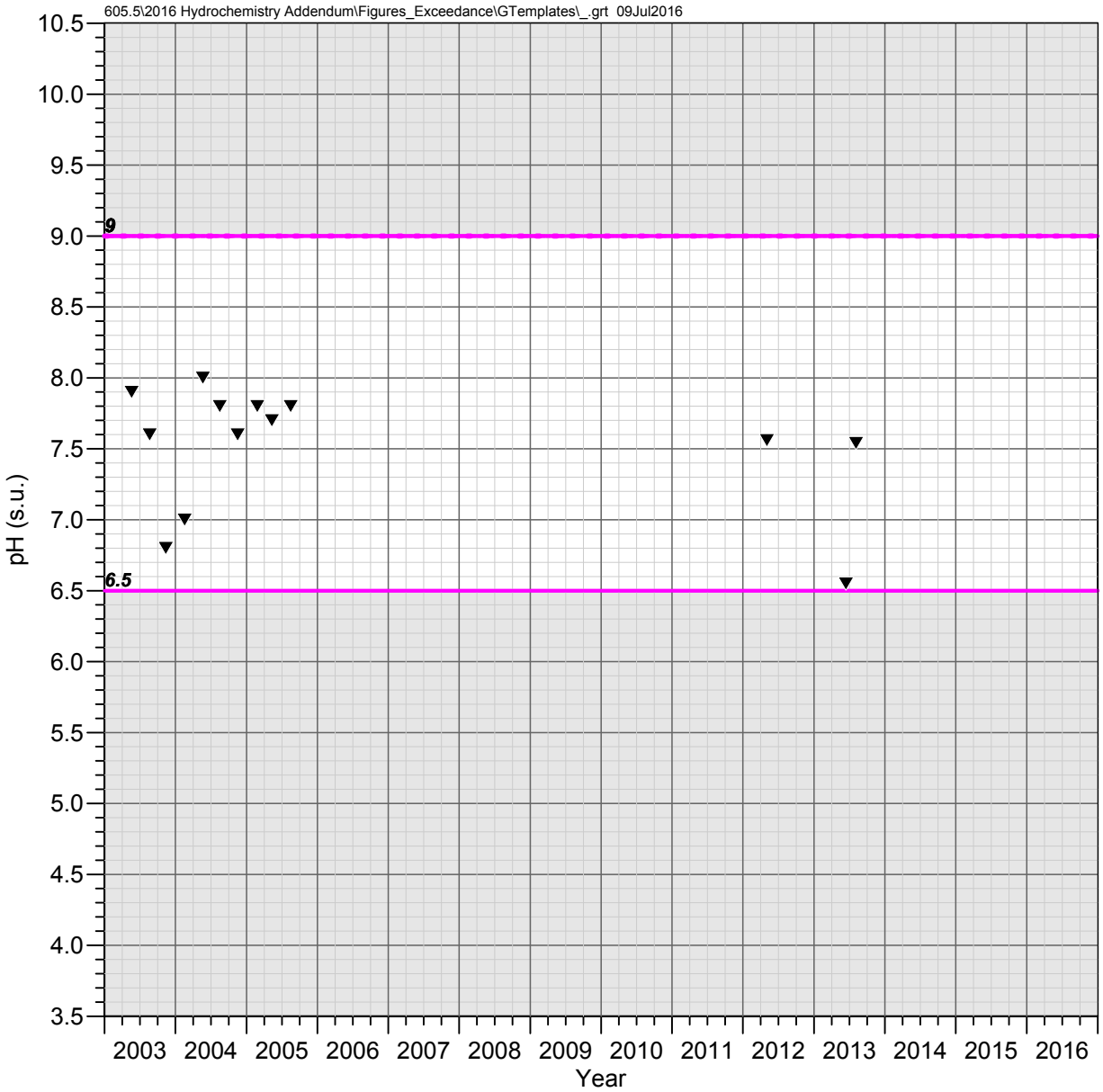


FIGURE F-646. pH OBSERVED AT RR 1.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.8 C
Devils Canyon Watershed

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- AZ Full Body Contact (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Chronic (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Acute (>6.5 and <9)
- AZ Agricultural Livestock Watering (>6.5 and <9)

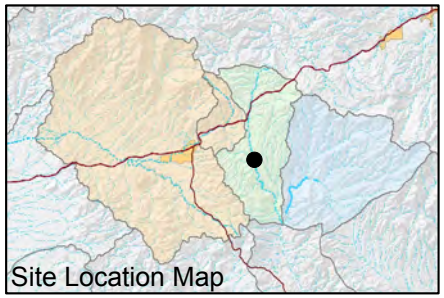
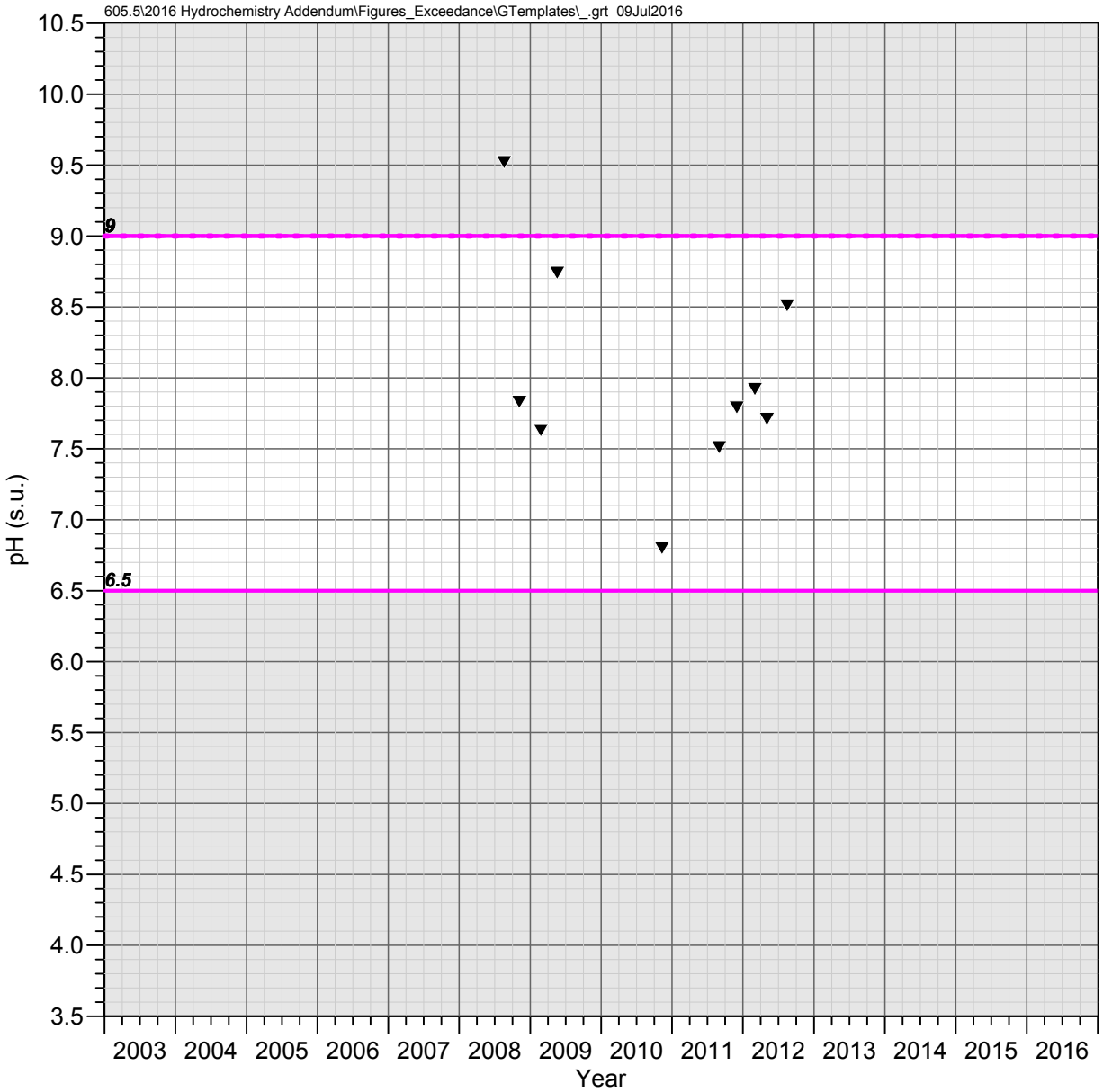


FIGURE F-647. pH OBSERVED AT DC 8.8 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



H 0.1 C
Devils Canyon Watershed

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- AZ Full Body Contact (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Chronic (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Acute (>6.5 and <9)
- AZ Agricultural Livestock Watering (>6.5 and <9)

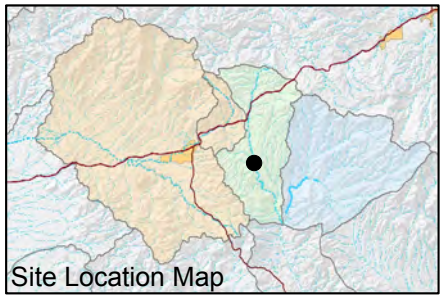
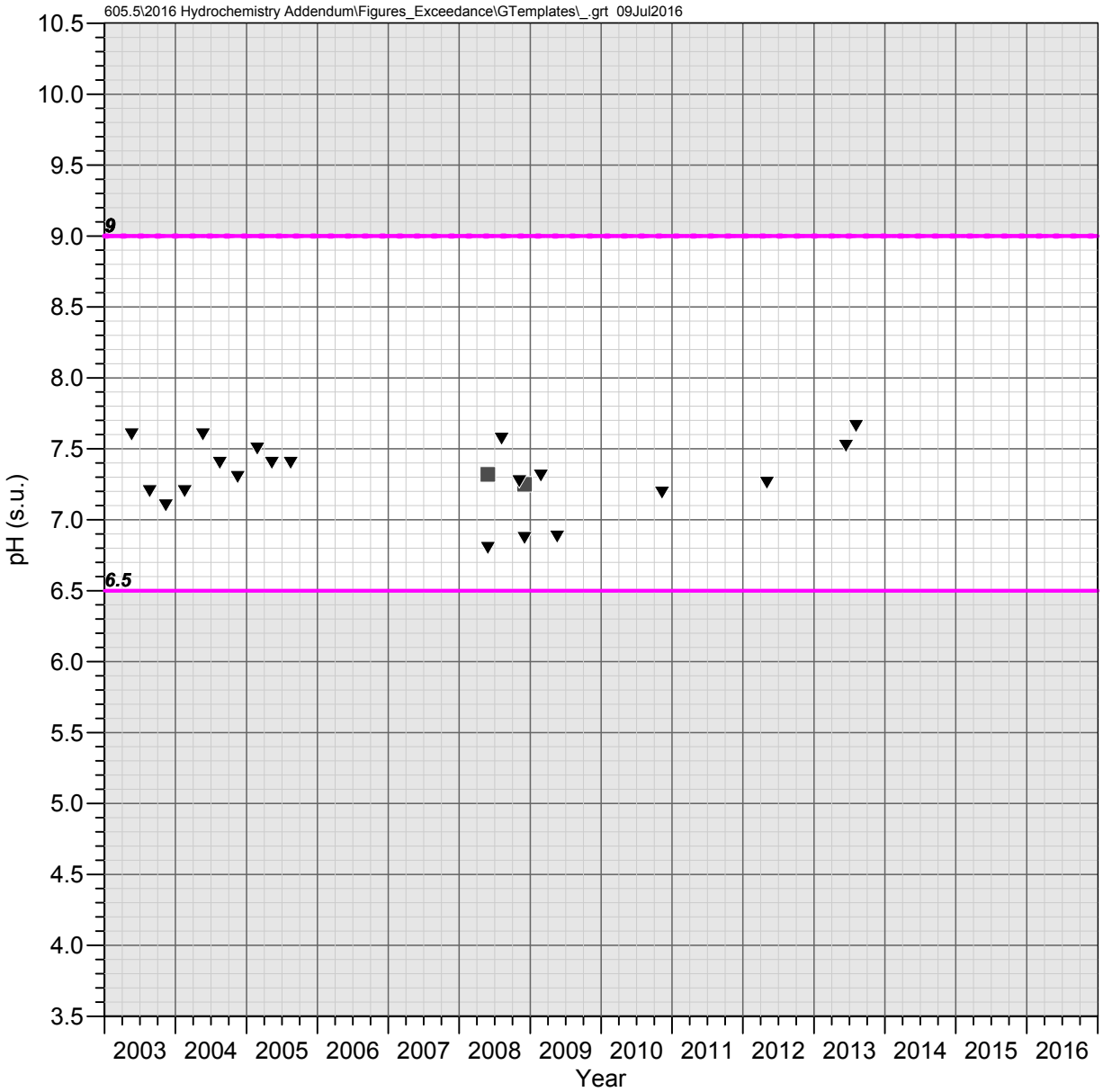


FIGURE F-648. pH OBSERVED AT H 0.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.2 W
Devils Canyon Watershed

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- AZ Full Body Contact (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Chronic (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Acute (>6.5 and <9)
- AZ Agricultural Livestock Watering (>6.5 and <9)

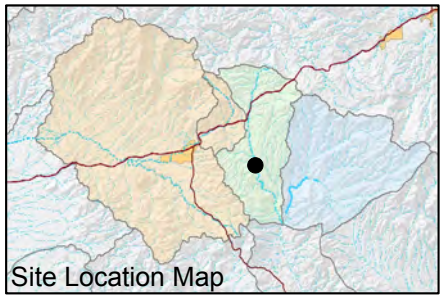
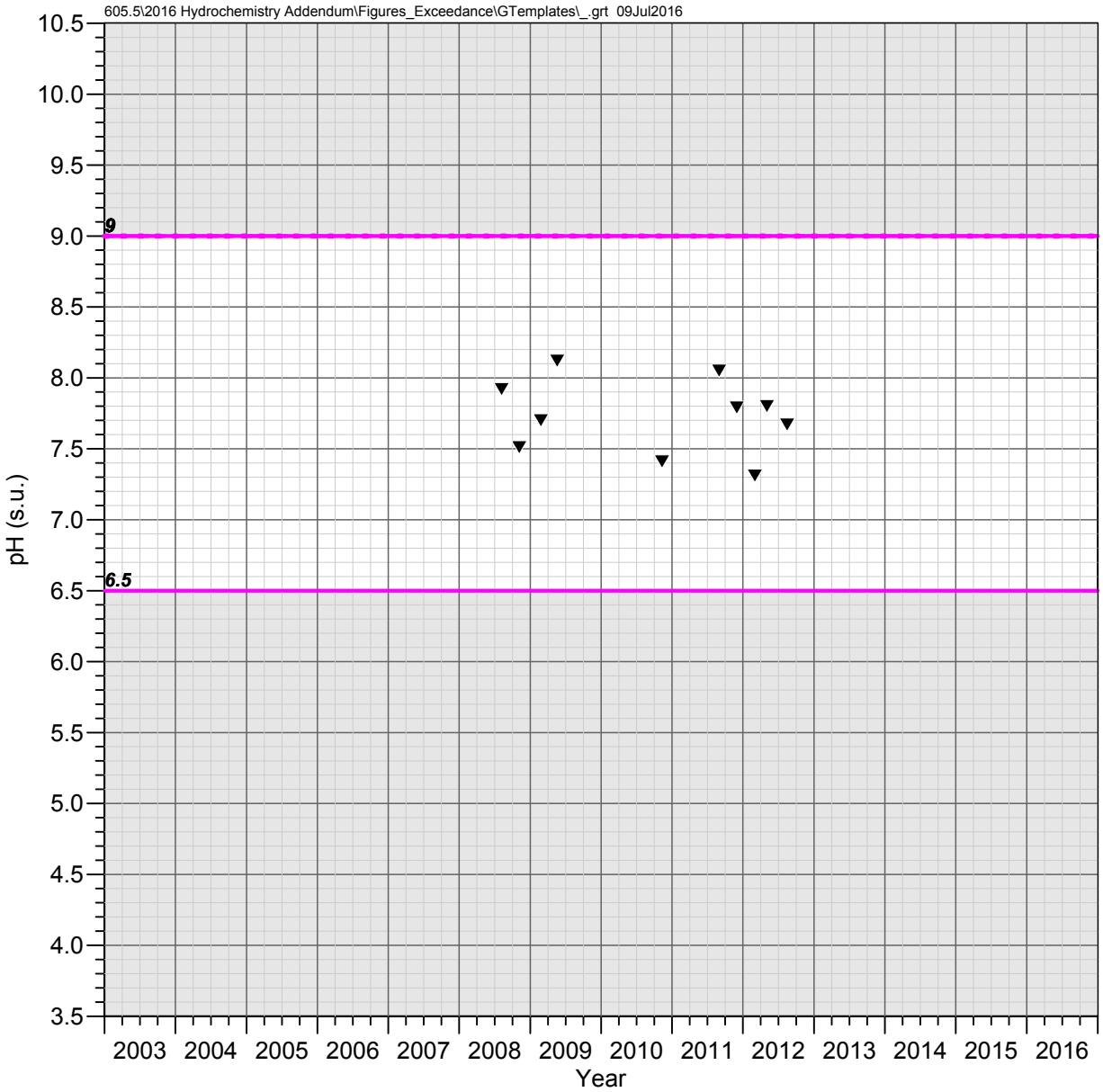


FIGURE F-649. pH OBSERVED AT DC 8.2 W, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.1 C
Devils Canyon Watershed

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- AZ Full Body Contact (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Chronic (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Acute (>6.5 and <9)
- AZ Agricultural Livestock Watering (>6.5 and <9)

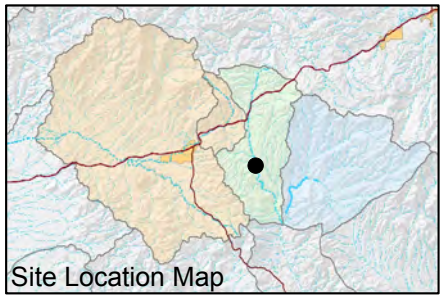
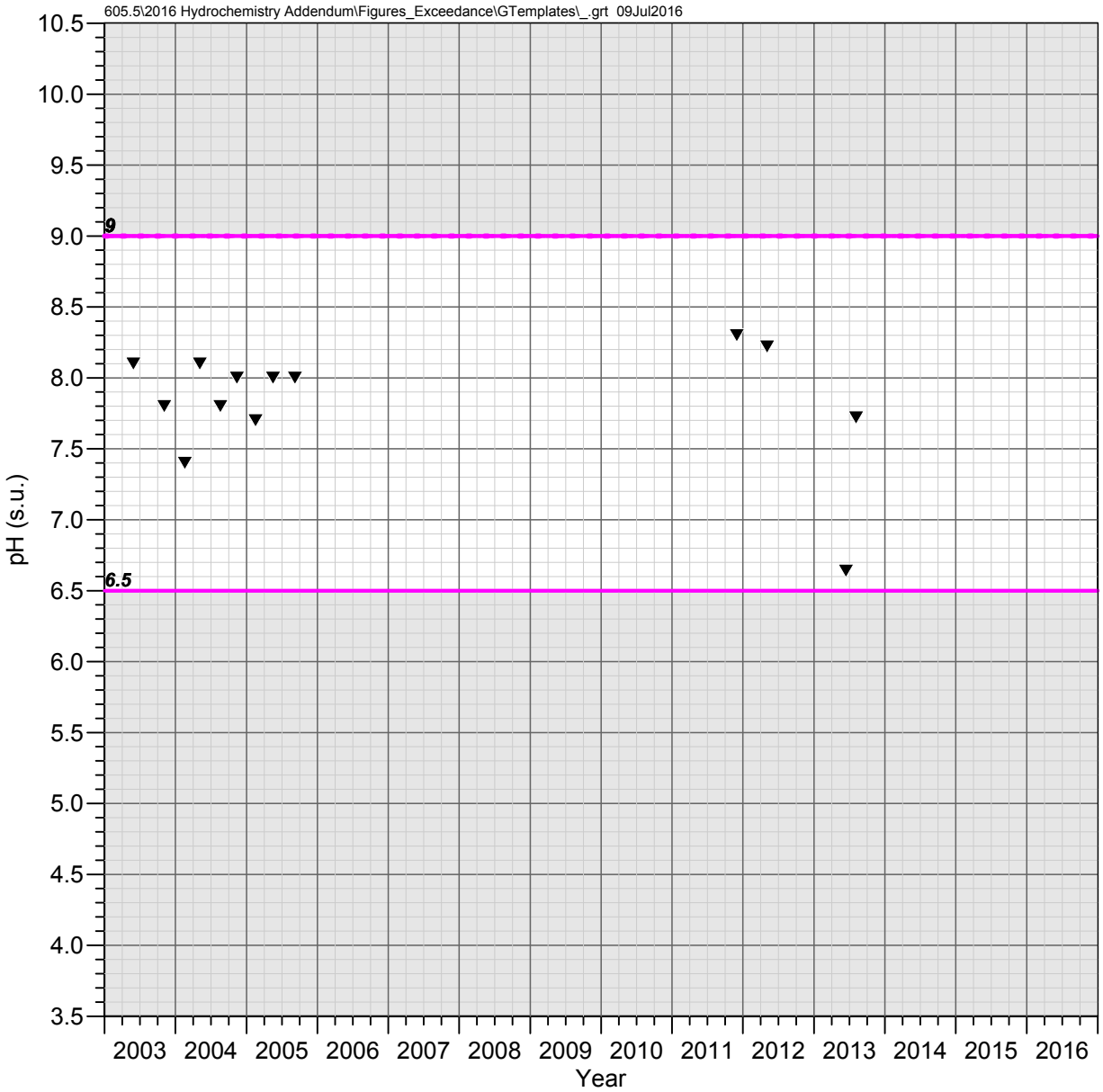


FIGURE F-650. pH OBSERVED AT DC 8.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 7.1 C
Devils Canyon Watershed

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- AZ Full Body Contact (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Chronic (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Acute (>6.5 and <9)
- AZ Agricultural Livestock Watering (>6.5 and <9)

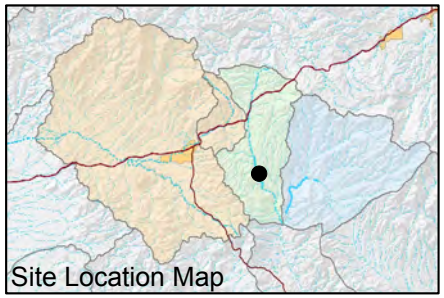
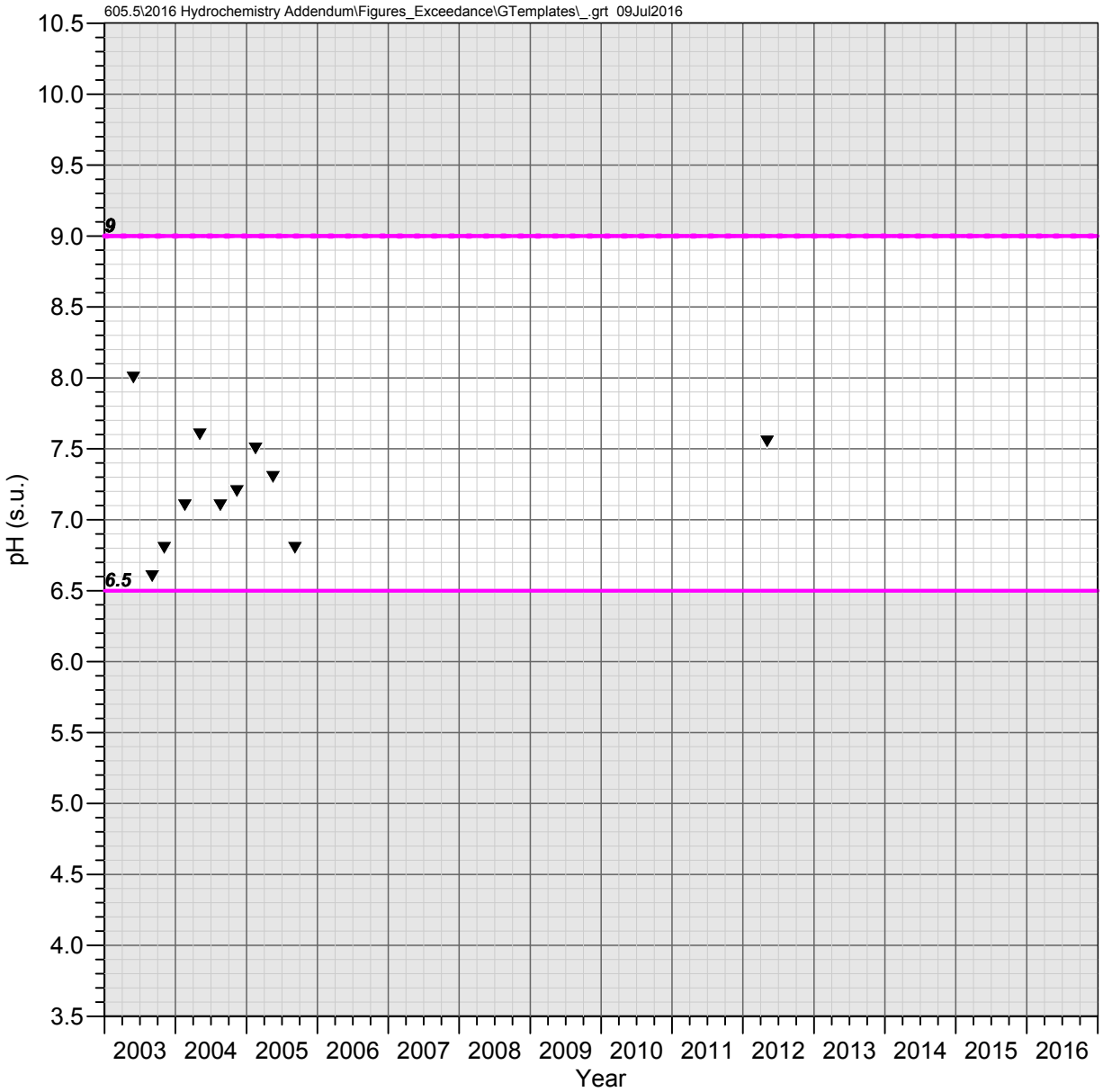


FIGURE F-651. pH OBSERVED AT DC 7.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.6 W (DCT 6.6 W)
Devils Canyon Watershed

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- AZ Full Body Contact (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Chronic (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Acute (>6.5 and <9)
- AZ Agricultural Livestock Watering (>6.5 and <9)

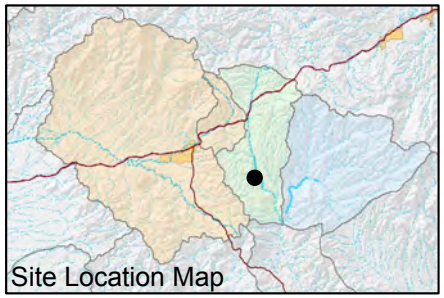
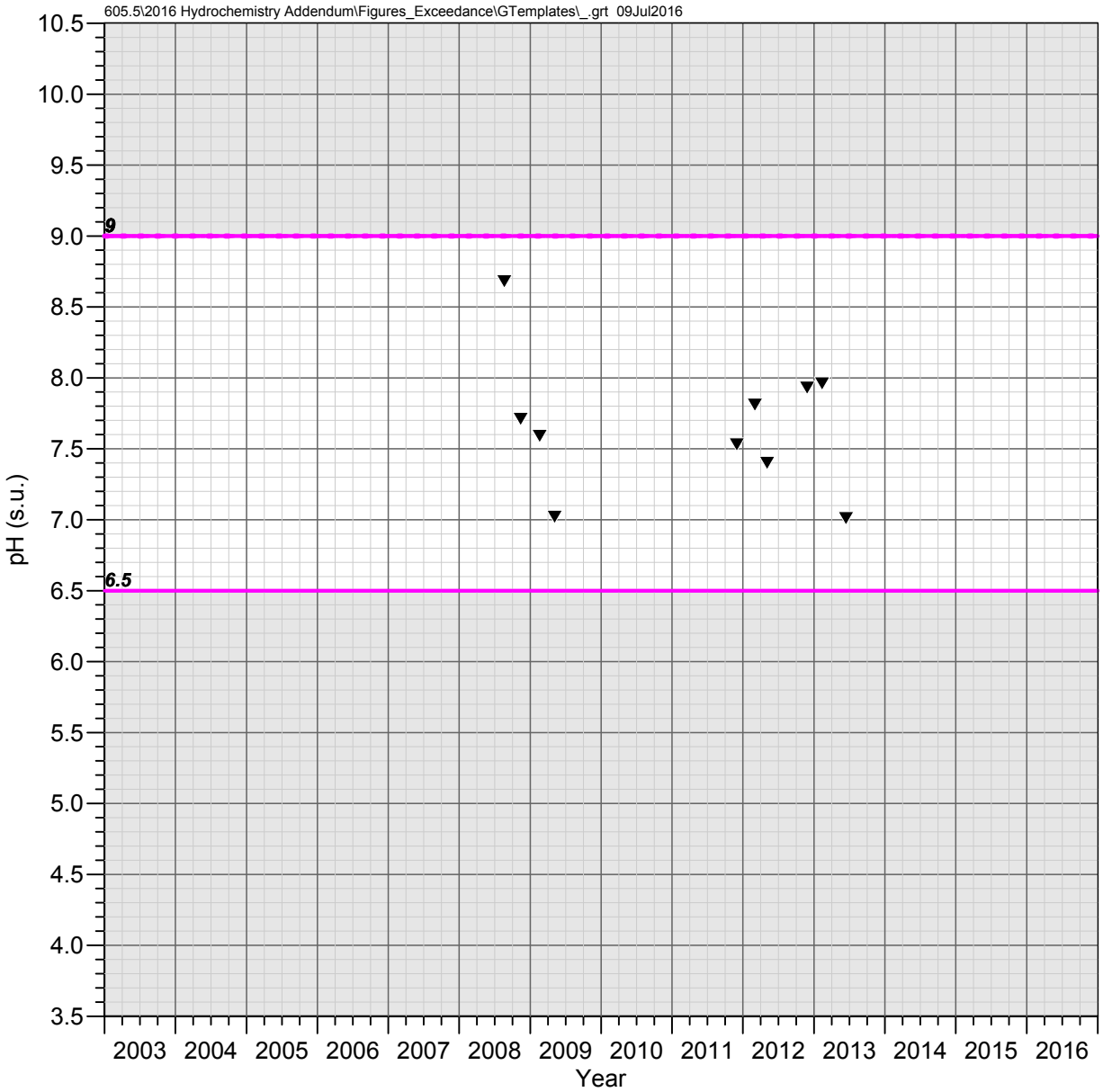


FIGURE F-652. pH OBSERVED AT DC 6.6 W (DCT 6.6 W), DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.14 C
Devils Canyon Watershed

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- AZ Full Body Contact (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Chronic (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Acute (>6.5 and <9)
- AZ Agricultural Livestock Watering (>6.5 and <9)

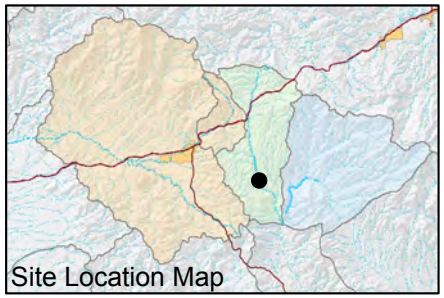
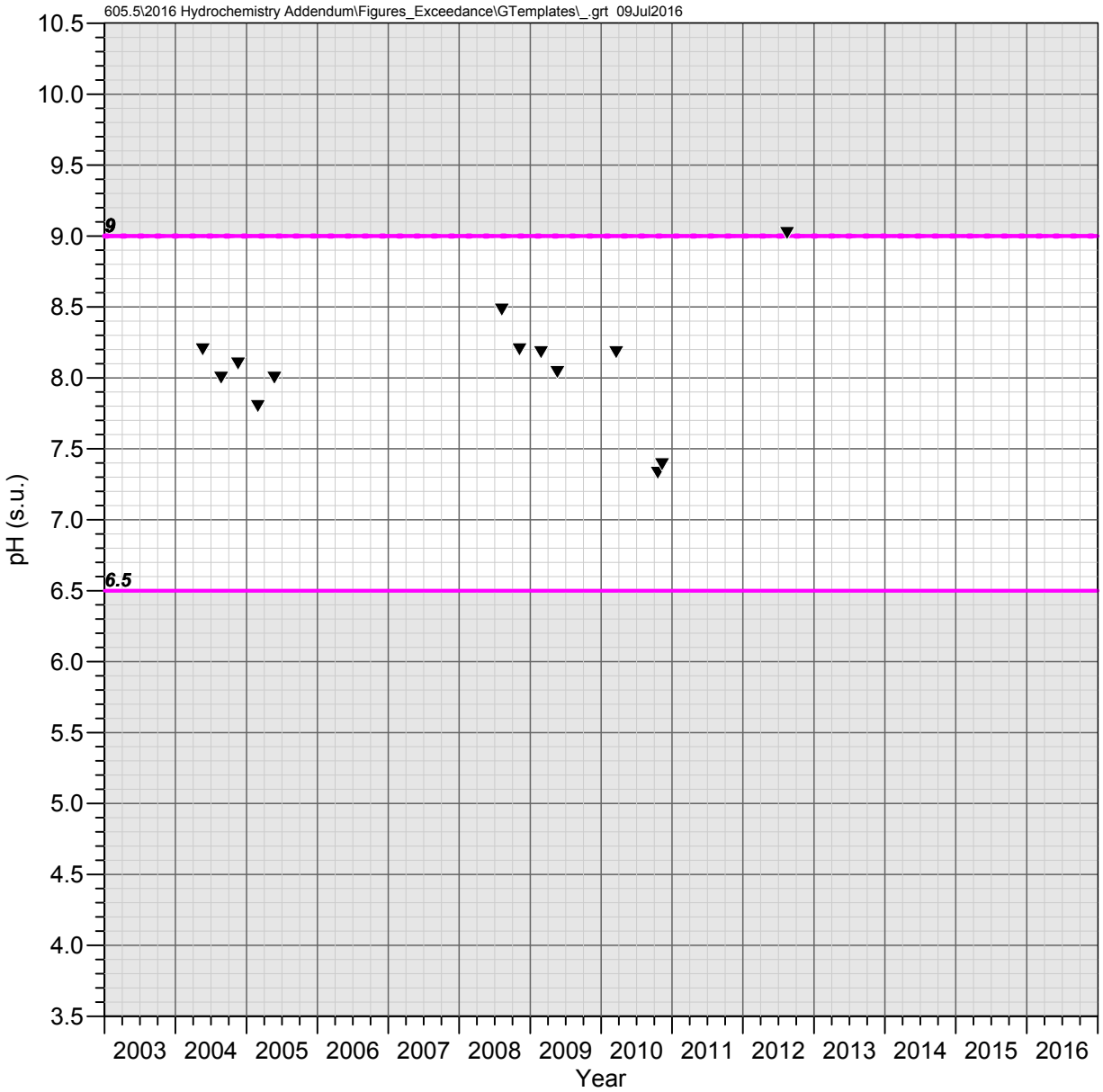


FIGURE F-653. pH OBSERVED AT DC 6.14 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.1 E
Devils Canyon Watershed

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- AZ Full Body Contact (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Chronic (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Acute (>6.5 and <9)
- AZ Agricultural Livestock Watering (>6.5 and <9)

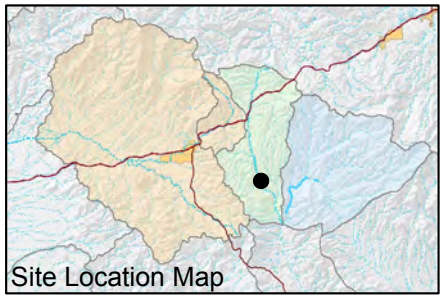
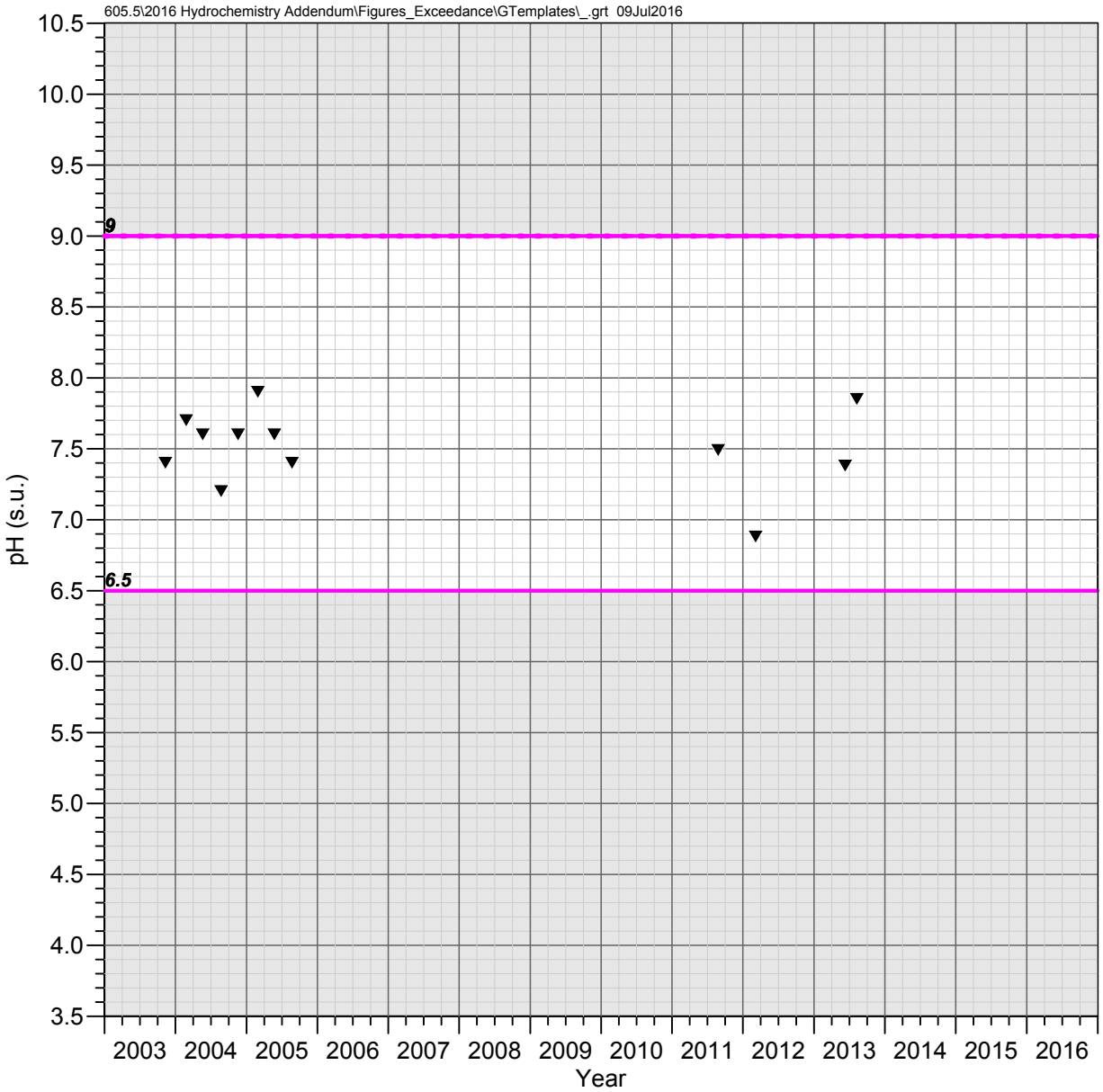


FIGURE F-654. pH OBSERVED AT DC 6.1 E, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 5.5 C
Devils Canyon Watershed

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- AZ Full Body Contact (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Chronic (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Acute (>6.5 and <9)
- AZ Agricultural Livestock Watering (>6.5 and <9)

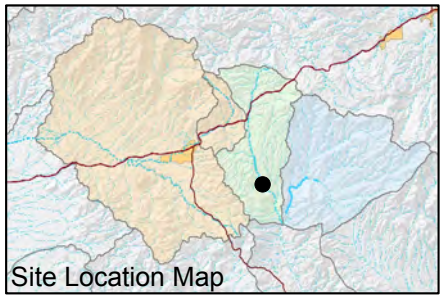
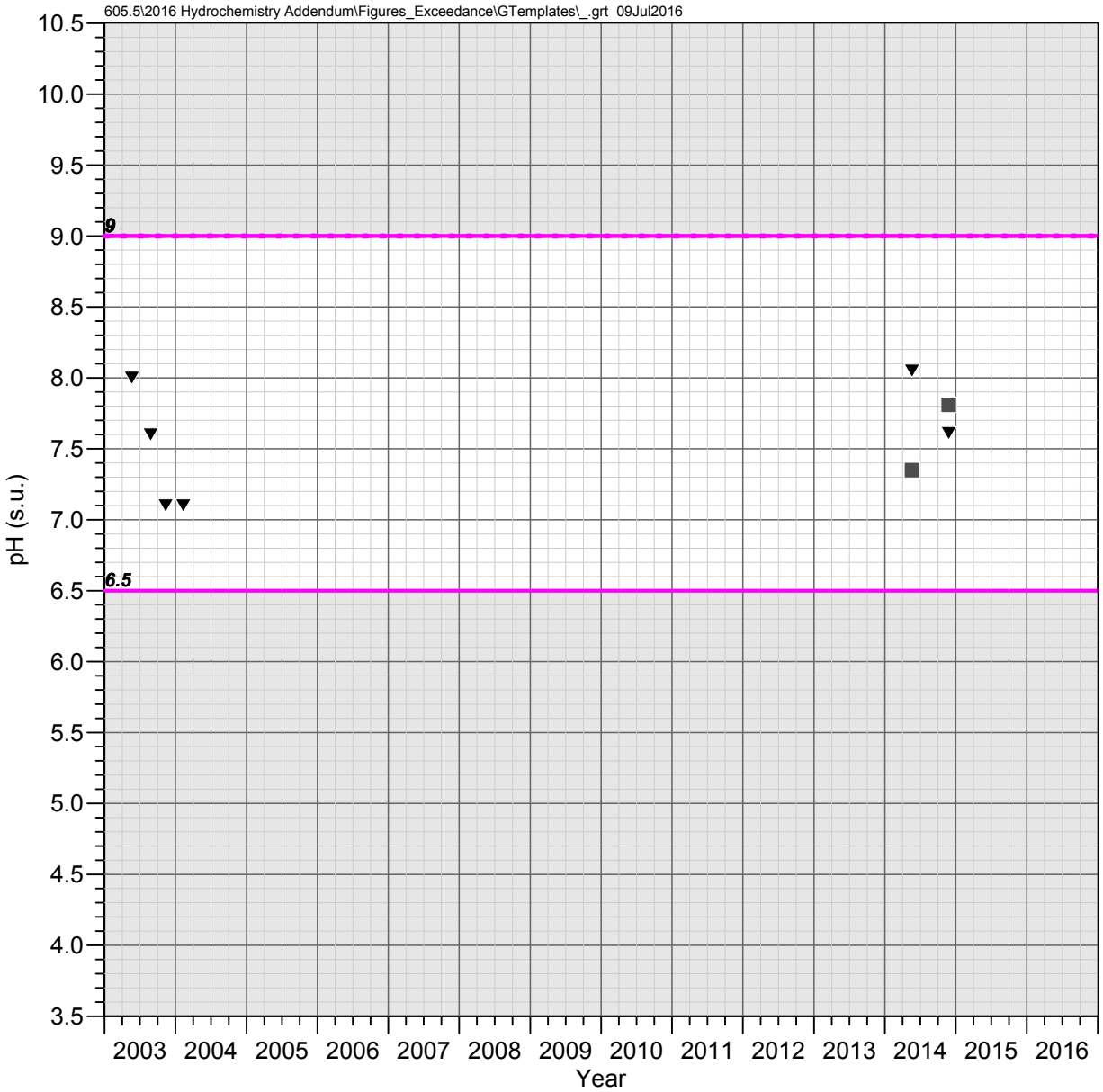


FIGURE F-655. pH OBSERVED AT DC 5.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 4.1 E
Devils Canyon Watershed

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- AZ Full Body Contact (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Chronic (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Acute (>6.5 and <9)
- AZ Agricultural Livestock Watering (>6.5 and <9)

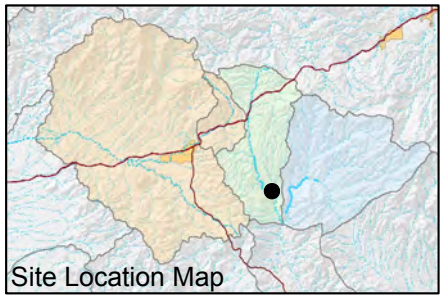
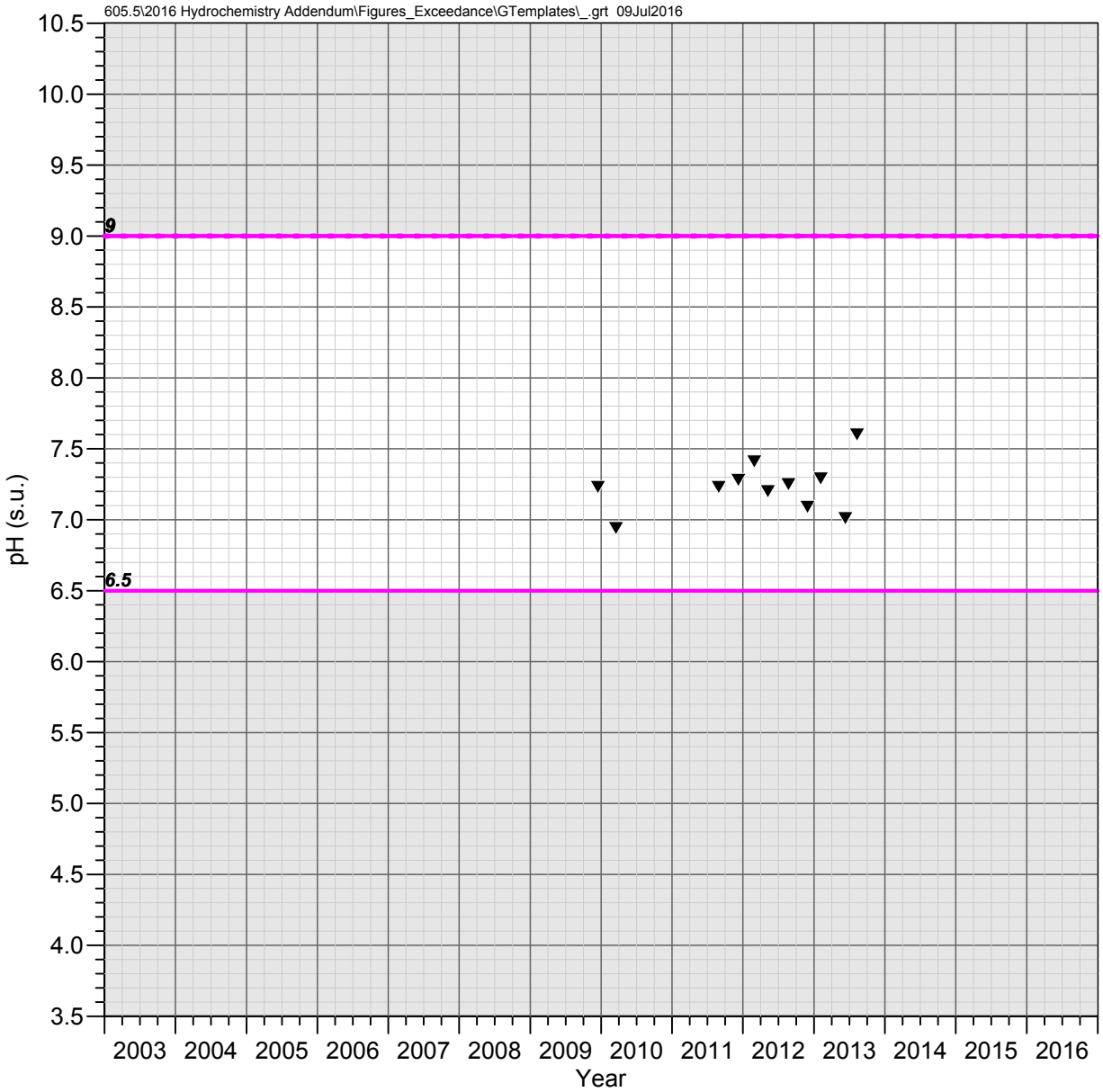


FIGURE F-656. pH OBSERVED AT DC 4.1 E, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Government Springs
Mineral Creek Watershed

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- AZ Full Body Contact (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Chronic (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Acute (>6.5 and <9)
- AZ Agricultural Livestock Watering (>6.5 and <9)

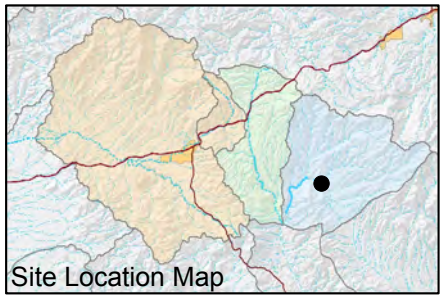
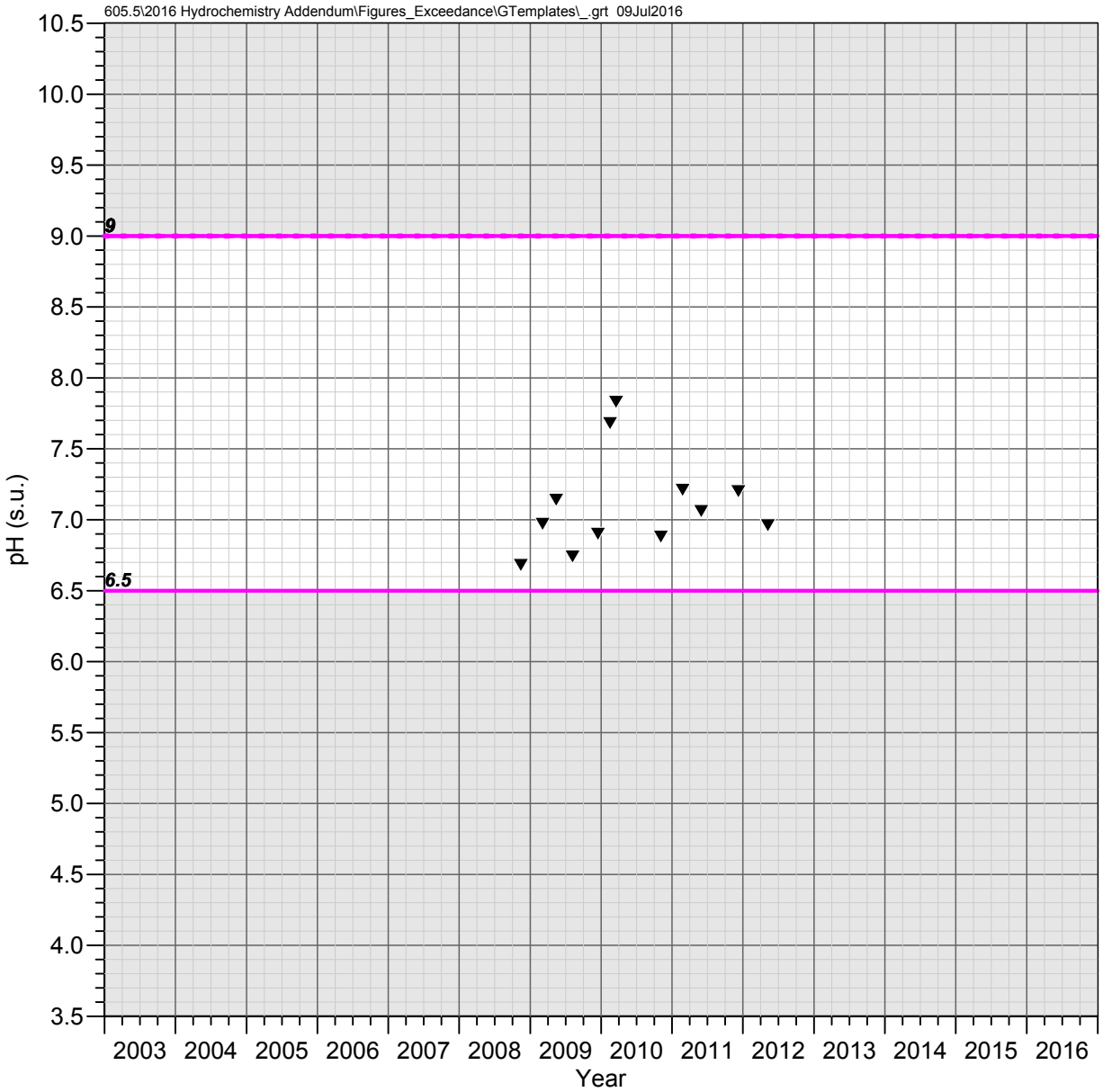


FIGURE F-657. pH OBSERVED AT GOVERNMENT SPRINGS, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 8.4 C
Mineral Creek Watershed

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- AZ Full Body Contact (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Chronic (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Acute (>6.5 and <9)
- AZ Agricultural Livestock Watering (>6.5 and <9)

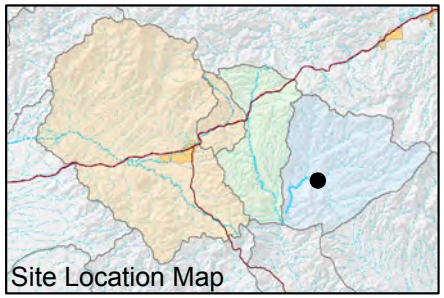
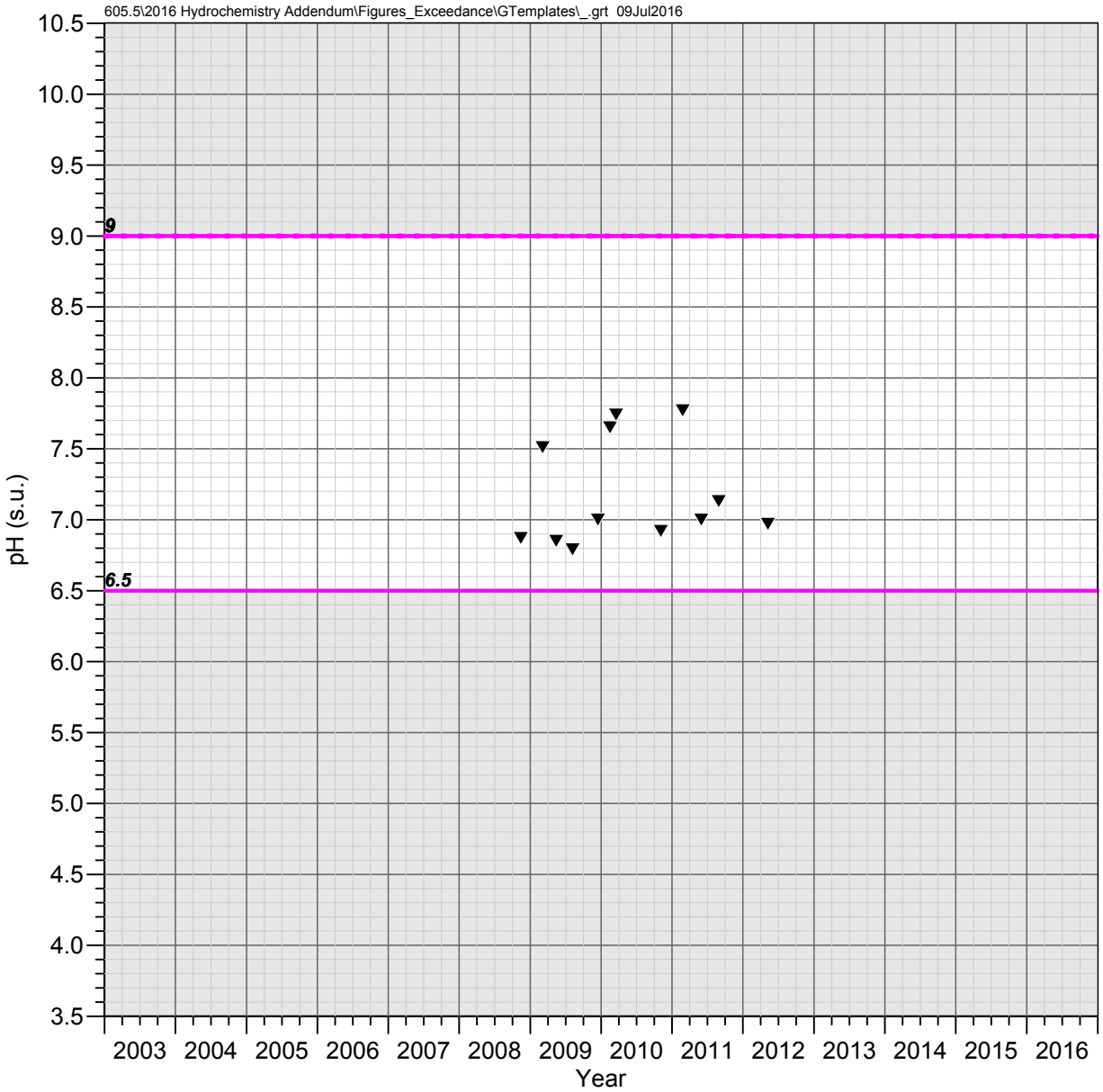


FIGURE F-658. pH OBSERVED AT MC 8.4 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



LF 0.2 C
Mineral Creek Watershed

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- AZ Full Body Contact (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Chronic (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Acute (>6.5 and <9)
- AZ Agricultural Livestock Watering (>6.5 and <9)

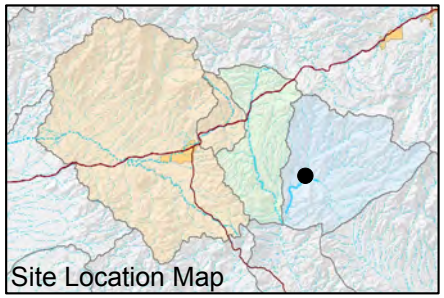
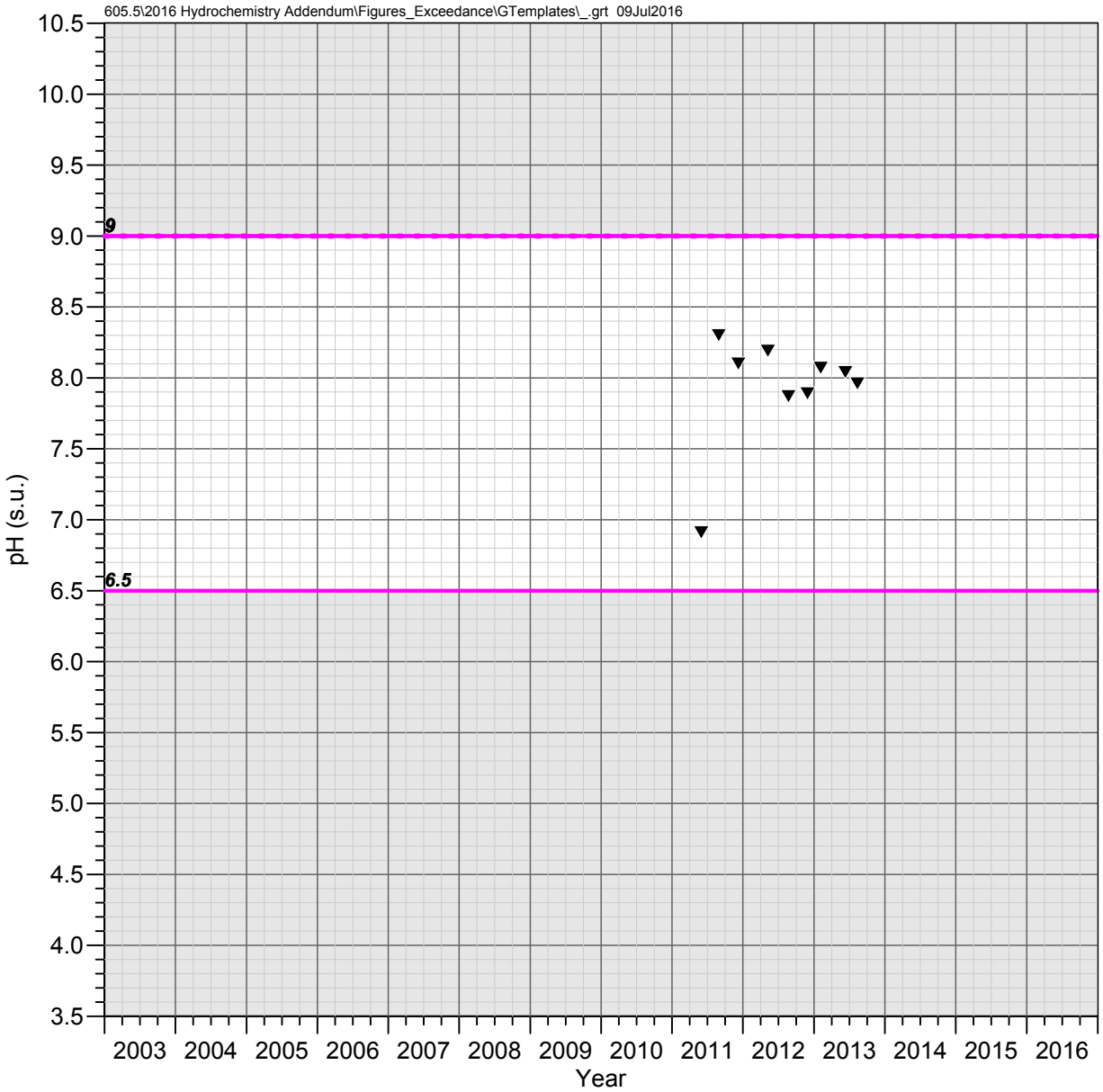


FIGURE F-659. pH OBSERVED AT LF 0.2 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 5.2 C
Mineral Creek Watershed

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- AZ Full Body Contact (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Chronic (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Acute (>6.5 and <9)
- AZ Agricultural Livestock Watering (>6.5 and <9)

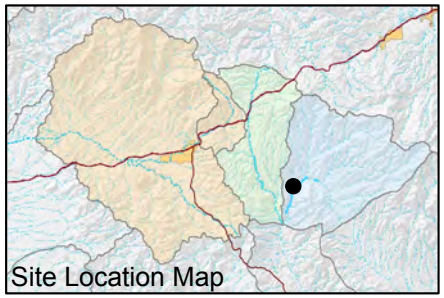
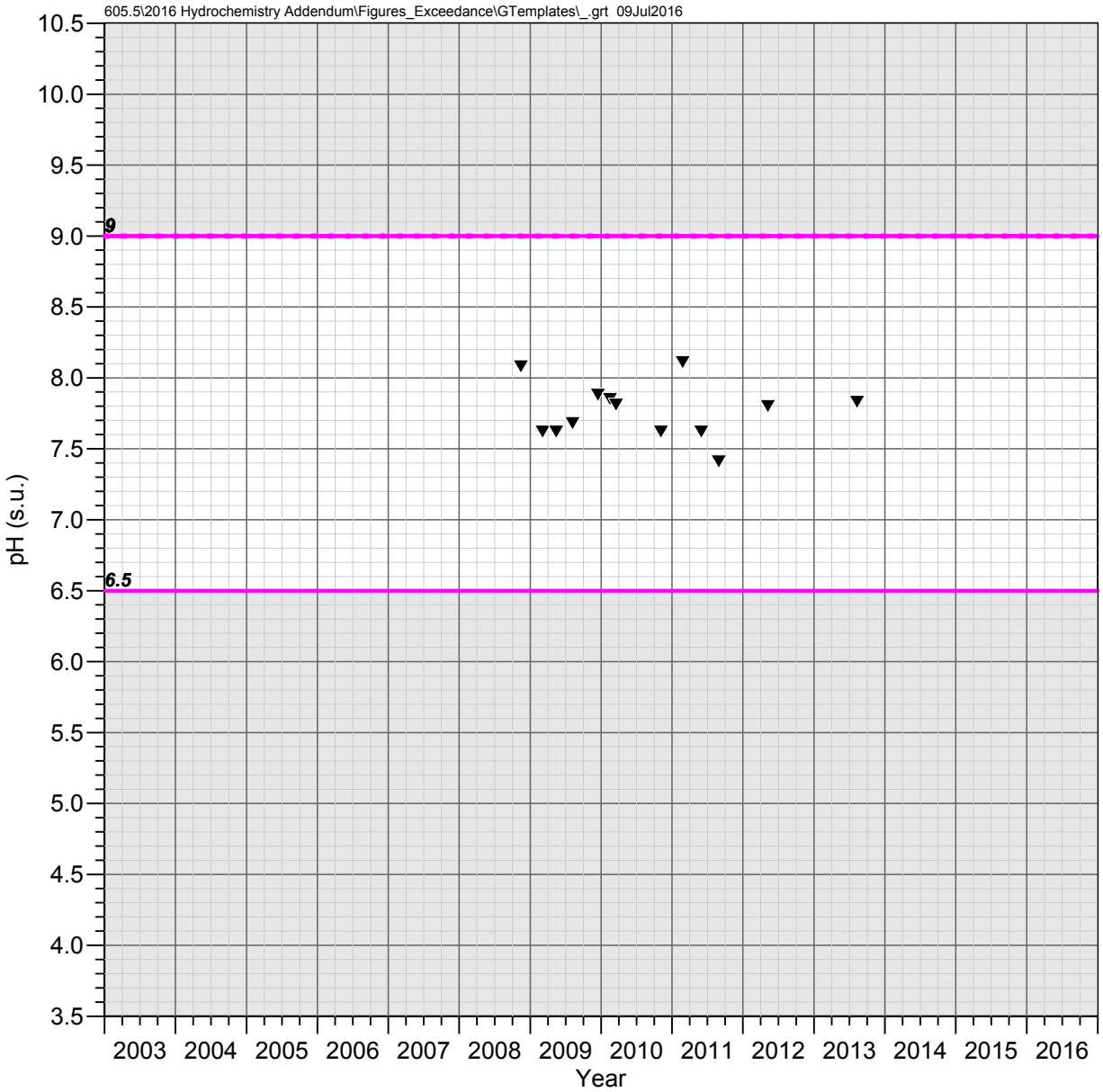


FIGURE F-660. pH OBSERVED AT MC 5.2 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 3.4 W (Wet Leg Spring)
Mineral Creek Watershed

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- AZ Full Body Contact (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Chronic (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Acute (>6.5 and <9)
- AZ Agricultural Livestock Watering (>6.5 and <9)

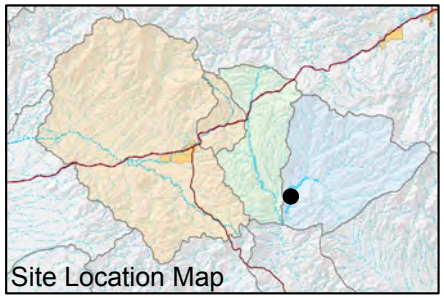
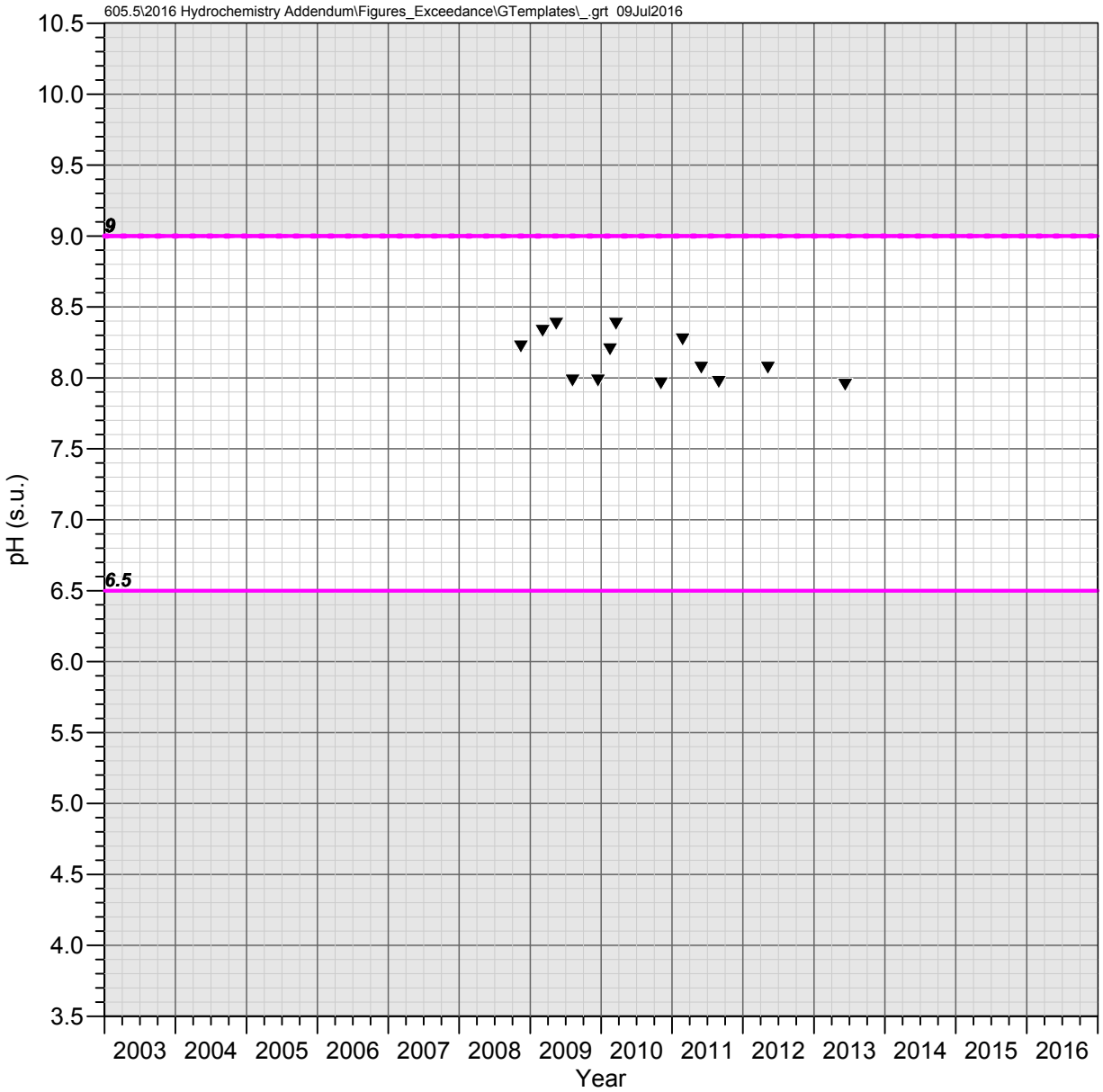


FIGURE F-661. pH OBSERVED AT MC 3.4 W (WET LEG SPRING), MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 3.3 C (Lower Mineral)
Mineral Creek Watershed

pH

Observed Concentrations

- ▼ pH (Field)
- ■ pH (Laboratory)

Water Quality Standards

- AZ Full Body Contact (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Chronic (>6.5 and <9)
- AZ Aquatic and Wildlife - Warm Water Acute (>6.5 and <9)
- AZ Agricultural Livestock Watering (>6.5 and <9)

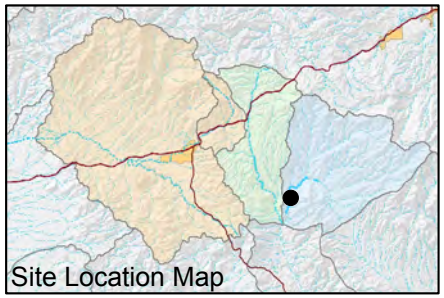
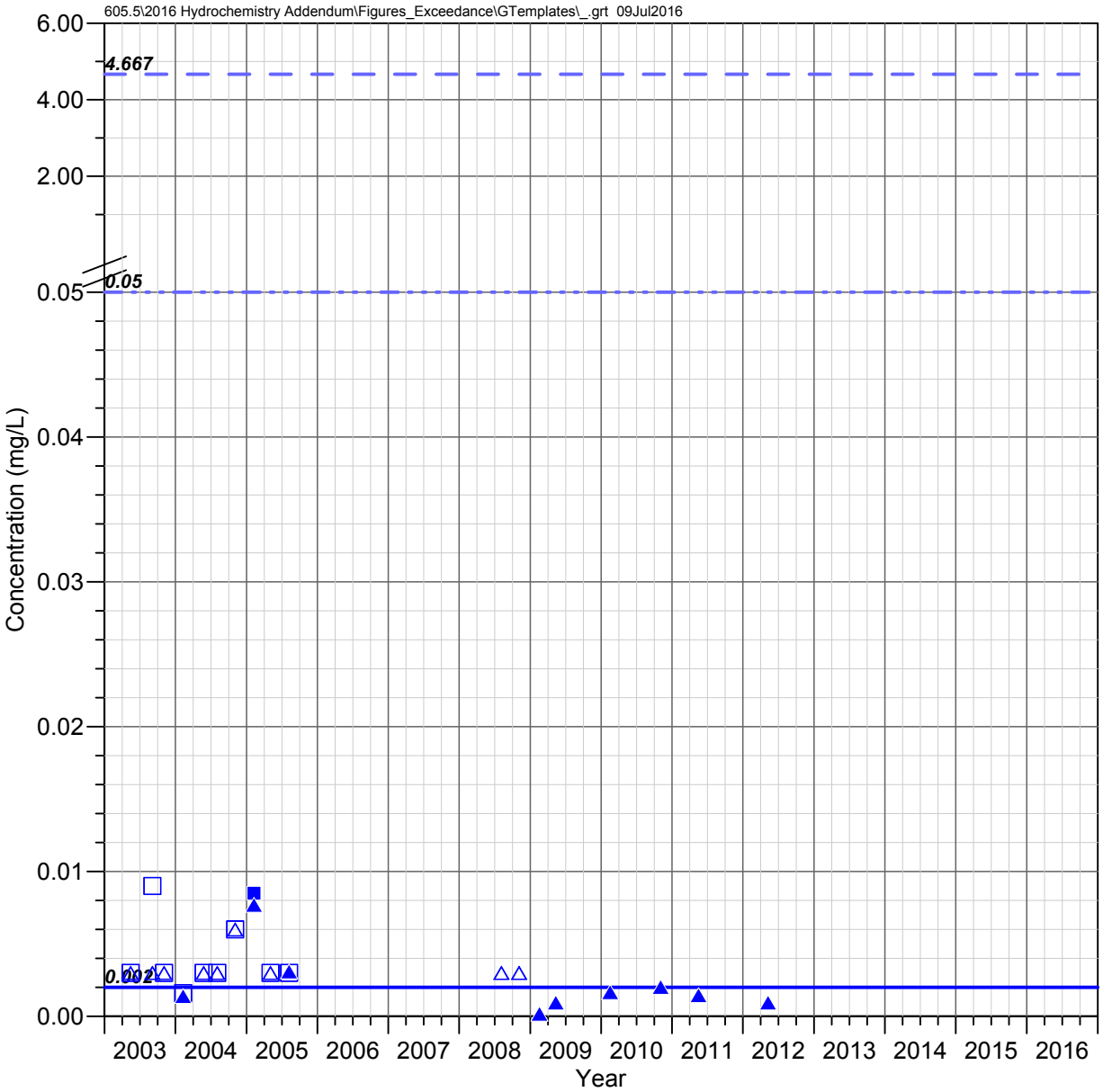


FIGURE F-662. pH OBSERVED AT MC 3.3 C (LOWER MINERAL), MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Pump Station Spring (QC 30.7 C)
Queen Creek Watershed

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Partial Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (TRC, 0.002 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.05 mg/L)

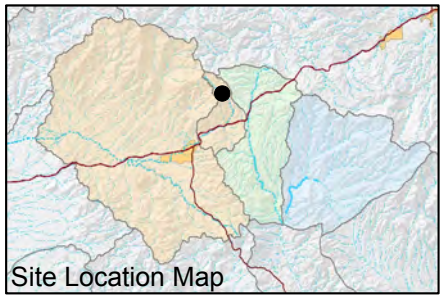
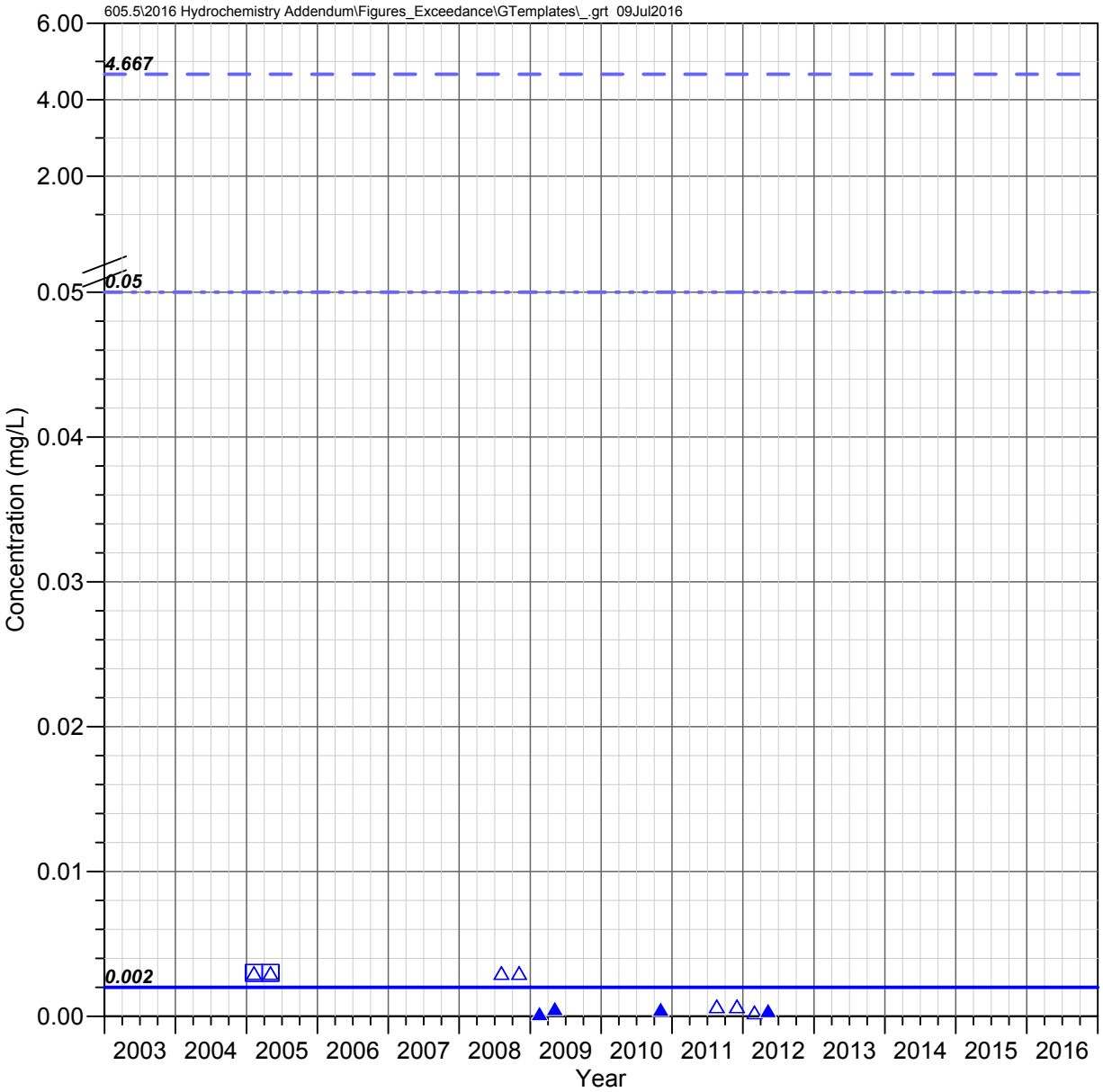


FIGURE F-663. SELENIUM CONCENTRATIONS OBSERVED AT PUMP STATION SPRING (QC 30.7 C), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 27.3 C
Queen Creek Watershed

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Partial Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (TRC, 0.002 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.05 mg/L)

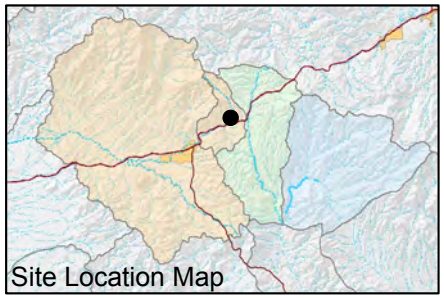
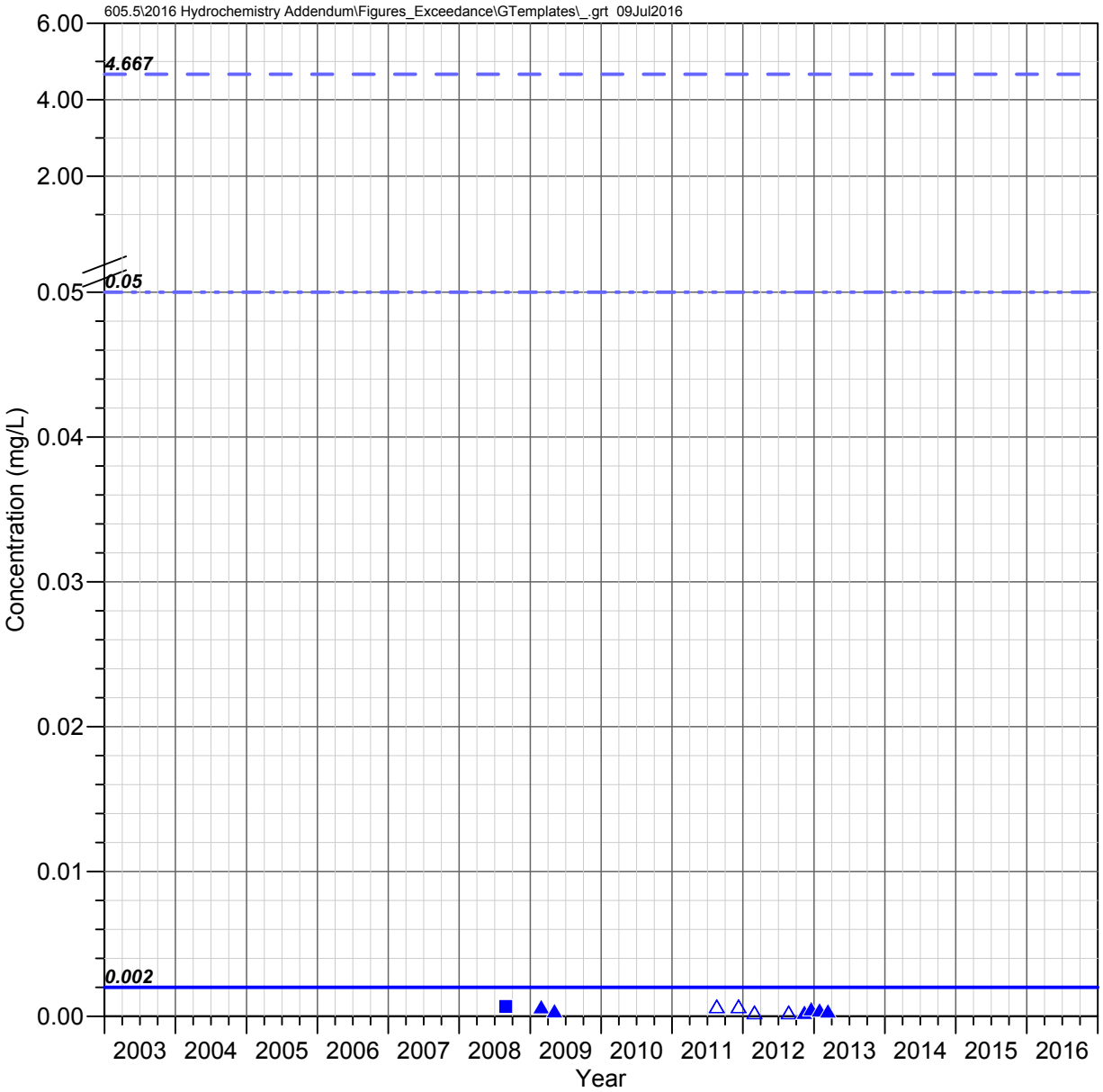


FIGURE F-664. SELENIUM CONCENTRATIONS OBSERVED AT QC 27.3 C, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Oak Flat Wash
Queen Creek Watershed

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Partial Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (TRC, 0.002 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.05 mg/L)

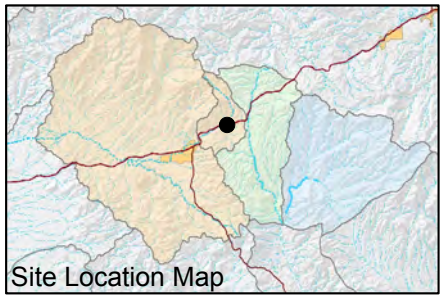
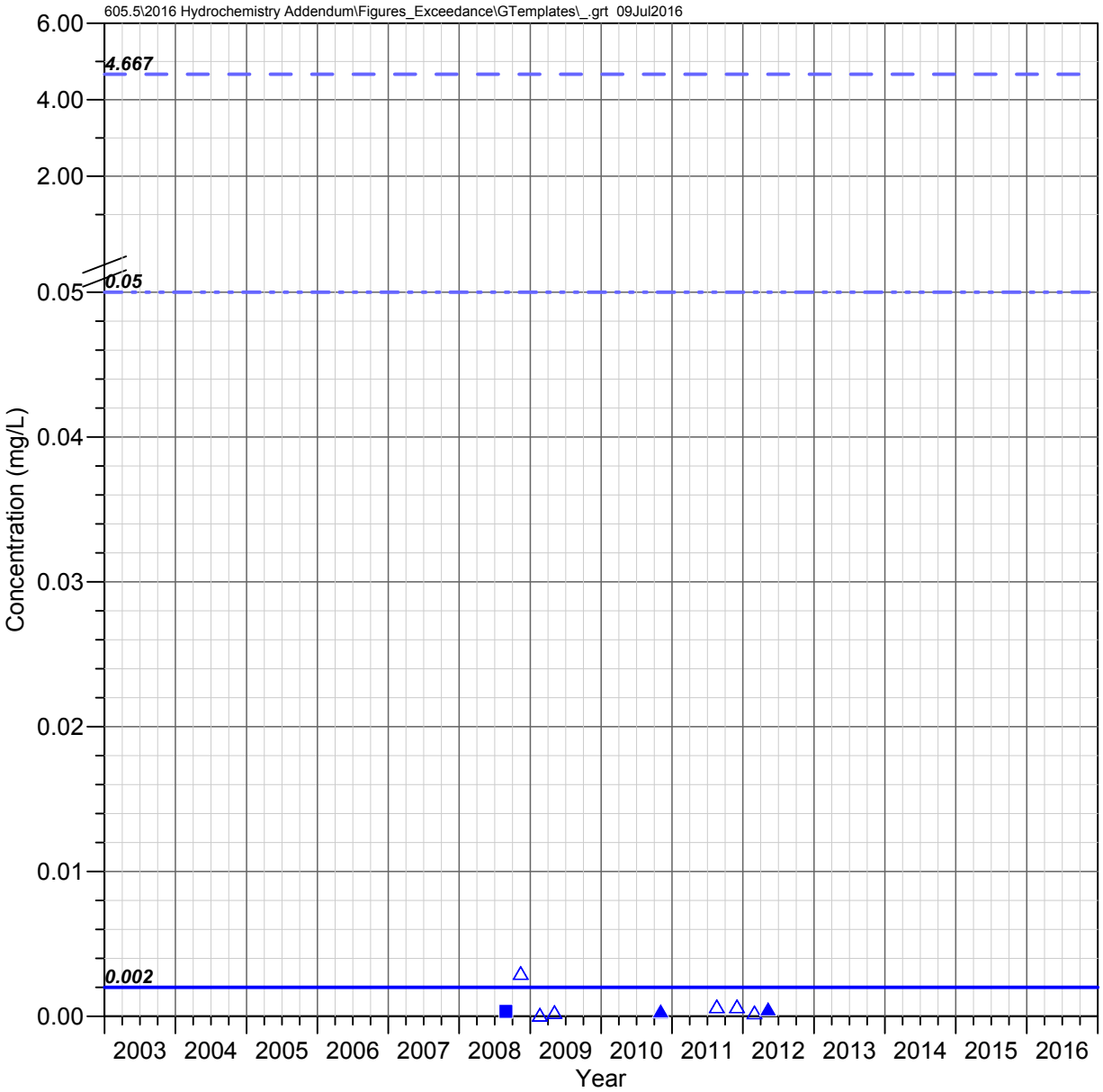


FIGURE F-665. SELENIUM CONCENTRATIONS OBSERVED AT OAK FLAT WASH, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Number 9 Wash
Queen Creek Watershed

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Partial Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (TRC, 0.002 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.05 mg/L)

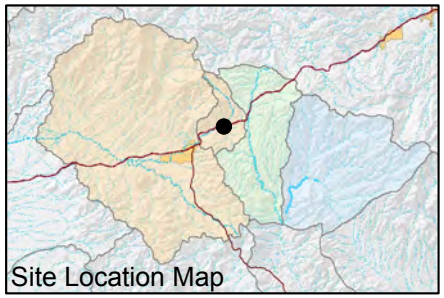
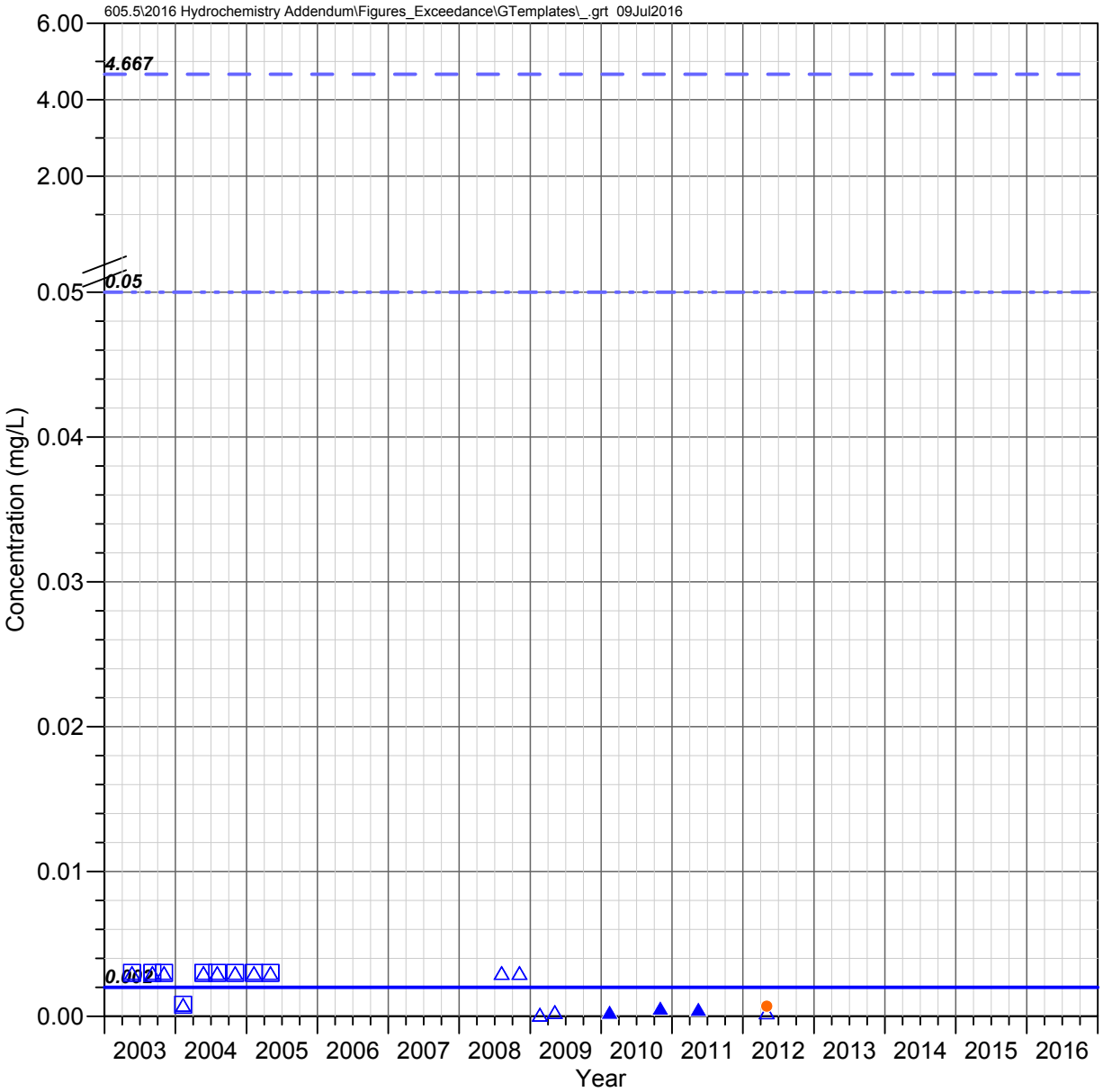


FIGURE F-666. SELENIUM CONCENTRATIONS OBSERVED AT NUMBER 9 WASH, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Boulder Hole (QC 23.6 C)
Queen Creek Watershed

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Partial Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (TRC, 0.002 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.05 mg/L)

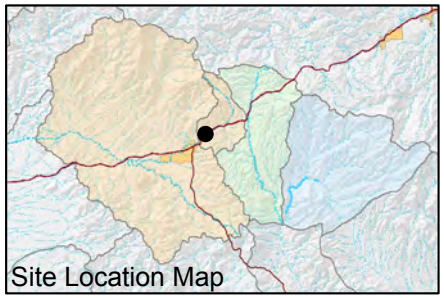
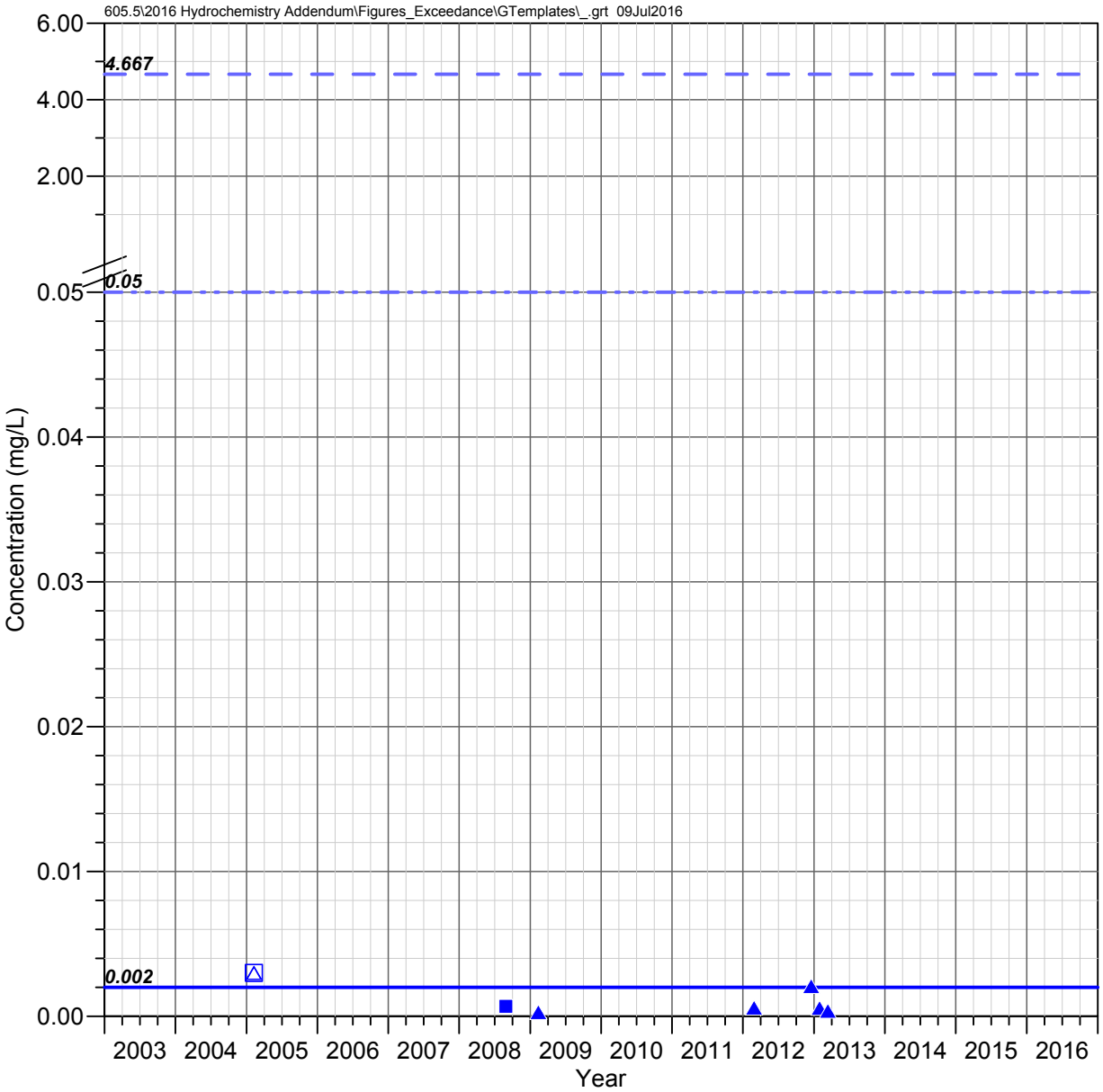


FIGURE F-667. SELENIUM CONCENTRATIONS OBSERVED AT BOULDER HOLE (QC 23.6 C), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 22.6 E (Karst Spring)
Queen Creek Watershed

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Partial Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (TRC, 0.002 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.05 mg/L)

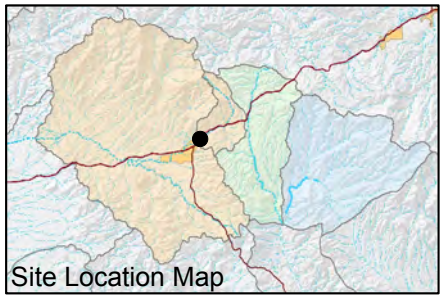
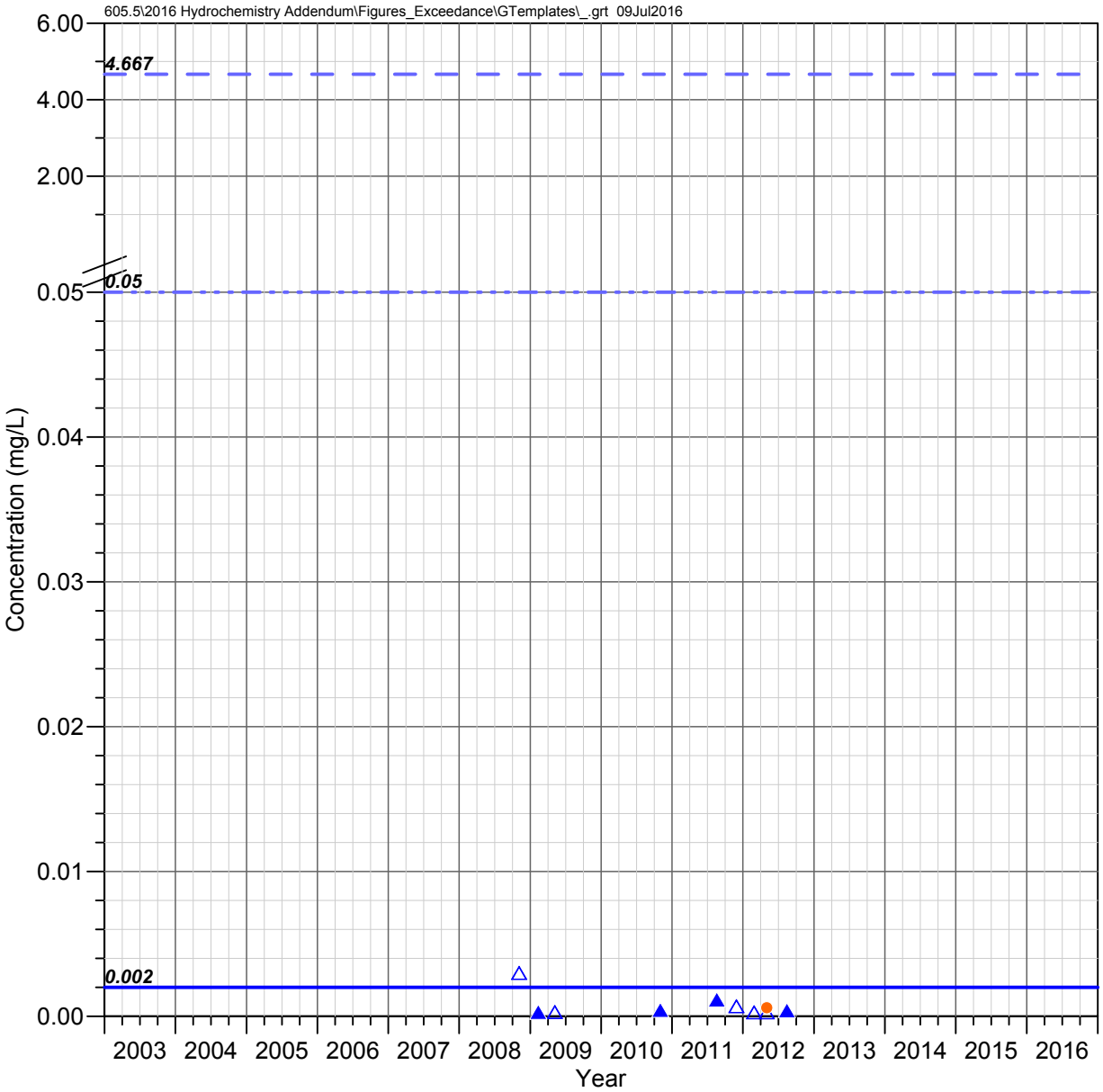


FIGURE F-668. SELENIUM CONCENTRATIONS OBSERVED AT QC 22.6 E (KARST SPRING), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 21.7 C (Magma Avenue)
Queen Creek Watershed

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Partial Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (TRC, 0.002 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.05 mg/L)

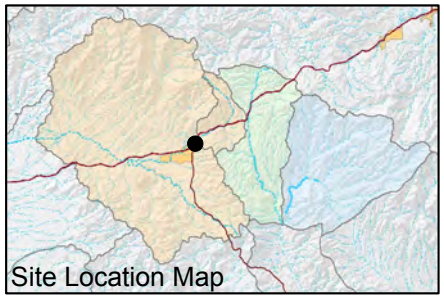
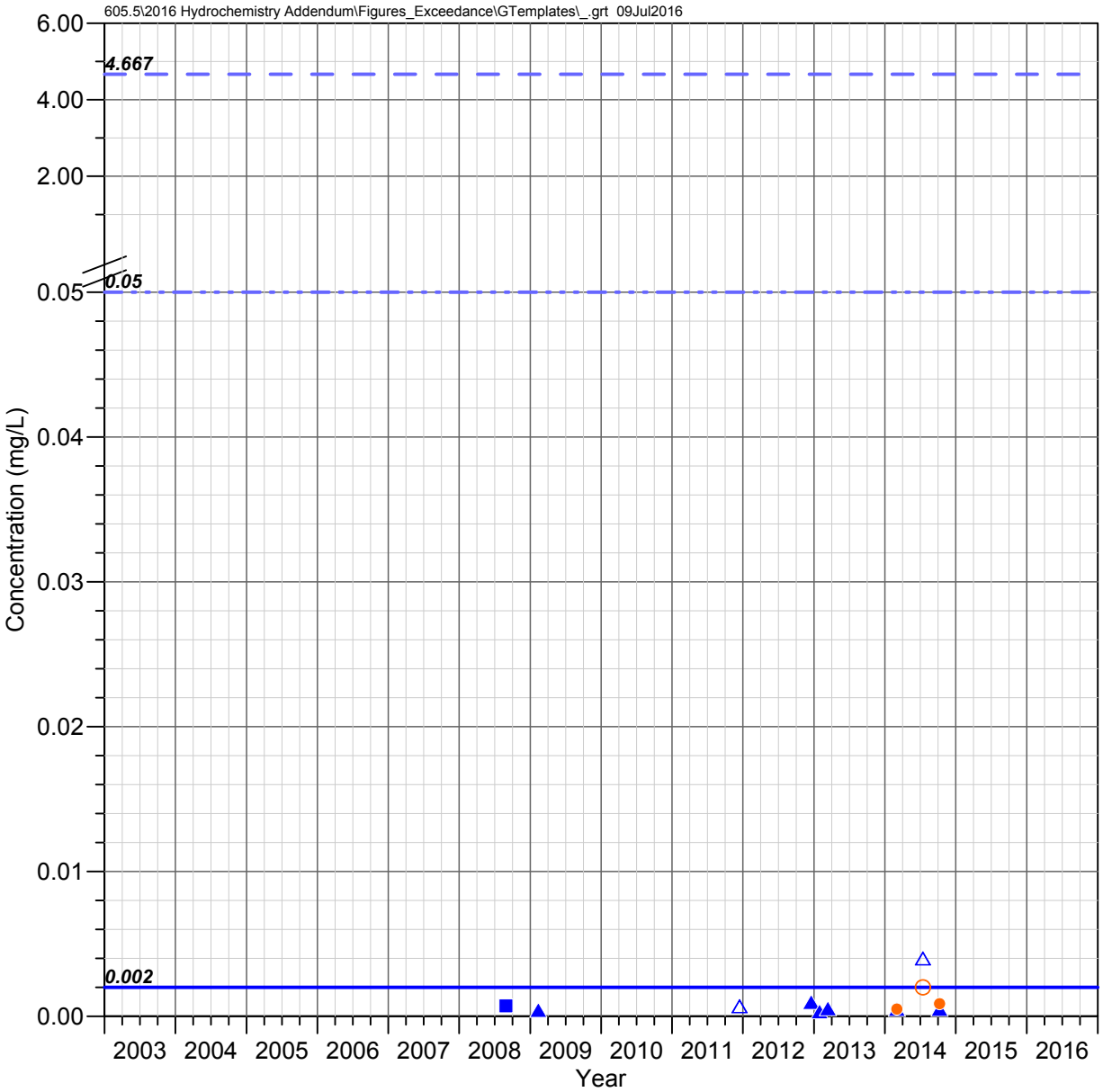


FIGURE F-669. SELENIUM CONCENTRATIONS OBSERVED AT QC 21.7 C (MAGMA AVENUE), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 19.7 C
Queen Creek Watershed

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Partial Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (TRC, 0.002 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.05 mg/L)

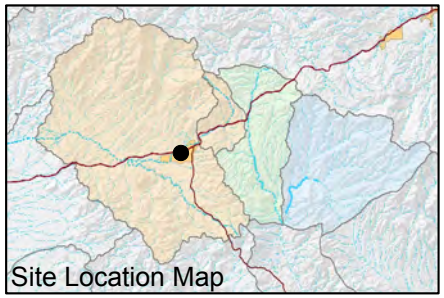
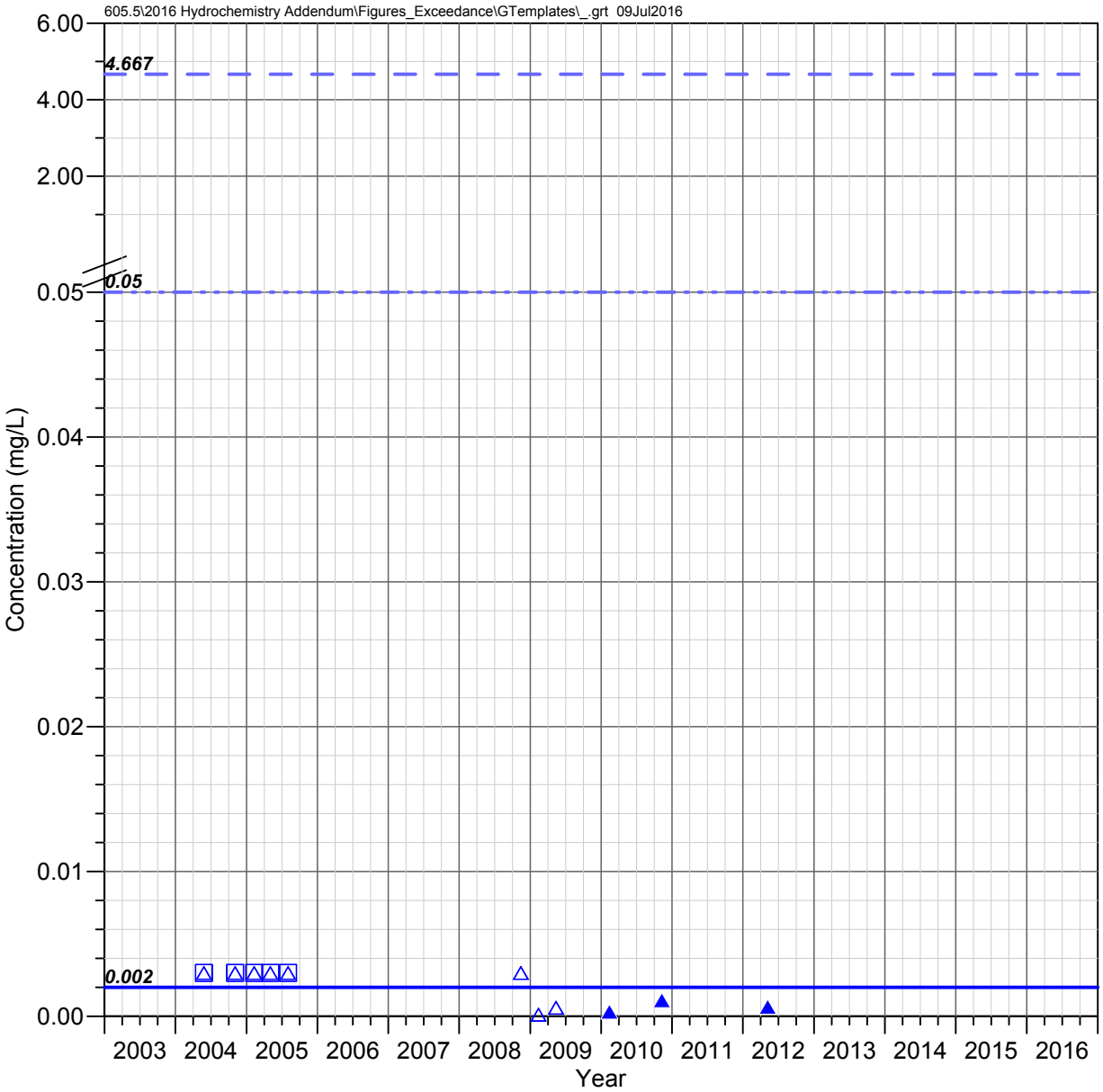


FIGURE F-670. SELENIUM CONCENTRATIONS OBSERVED AT QC 19.7 C, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Bored Spring
Queen Creek Watershed

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Partial Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (TRC, 0.002 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.05 mg/L)

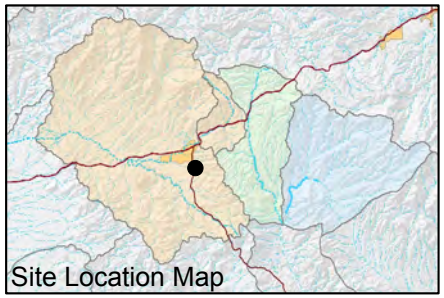
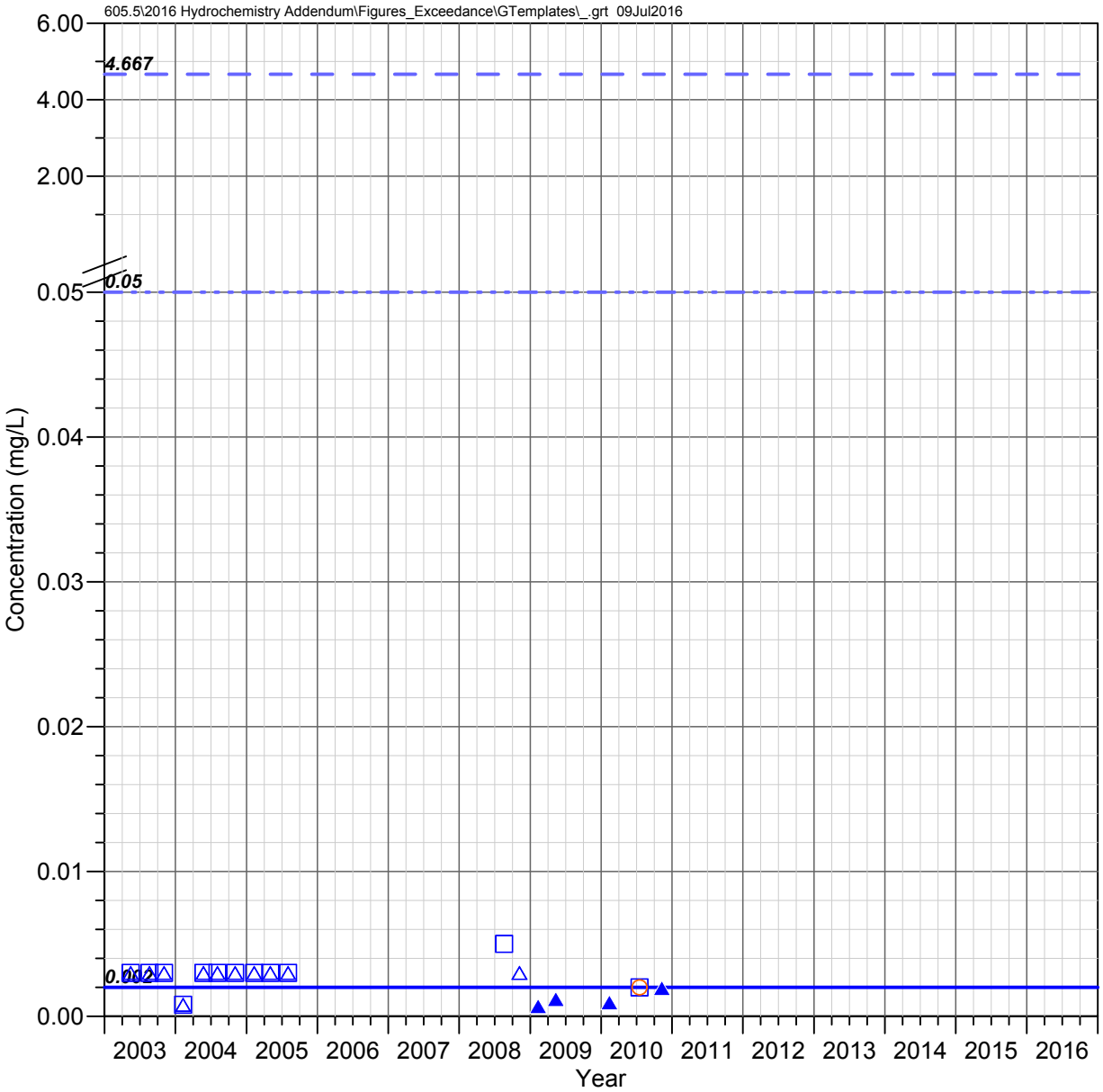


FIGURE F-671. SELENIUM CONCENTRATIONS OBSERVED AT BORED SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Hidden Spring
Queen Creek Watershed

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Partial Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (TRC, 0.002 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.05 mg/L)

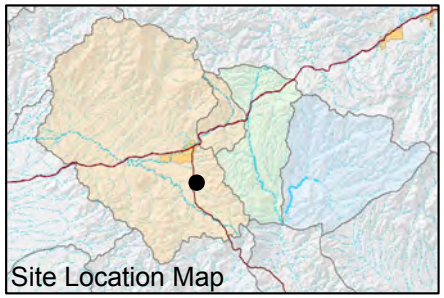
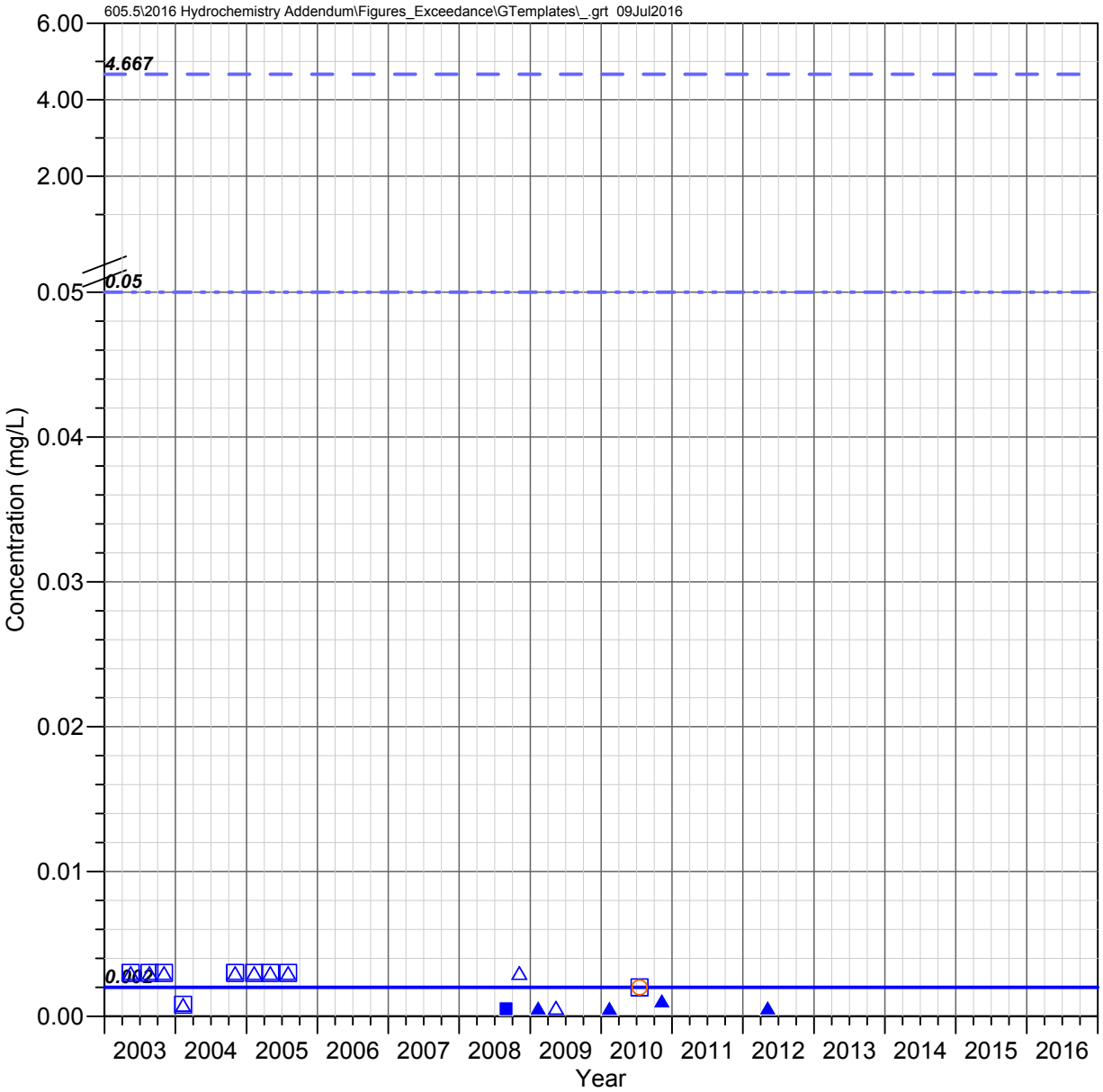


FIGURE F-672. SELENIUM CONCENTRATIONS OBSERVED AT HIDDEN SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Kane Spring
Queen Creek Watershed

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Partial Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (TRC, 0.002 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.05 mg/L)

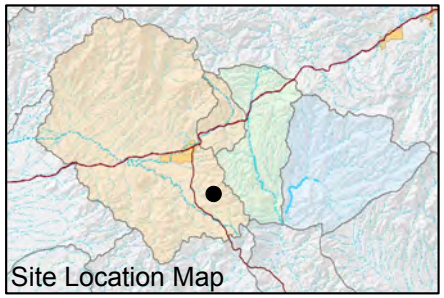
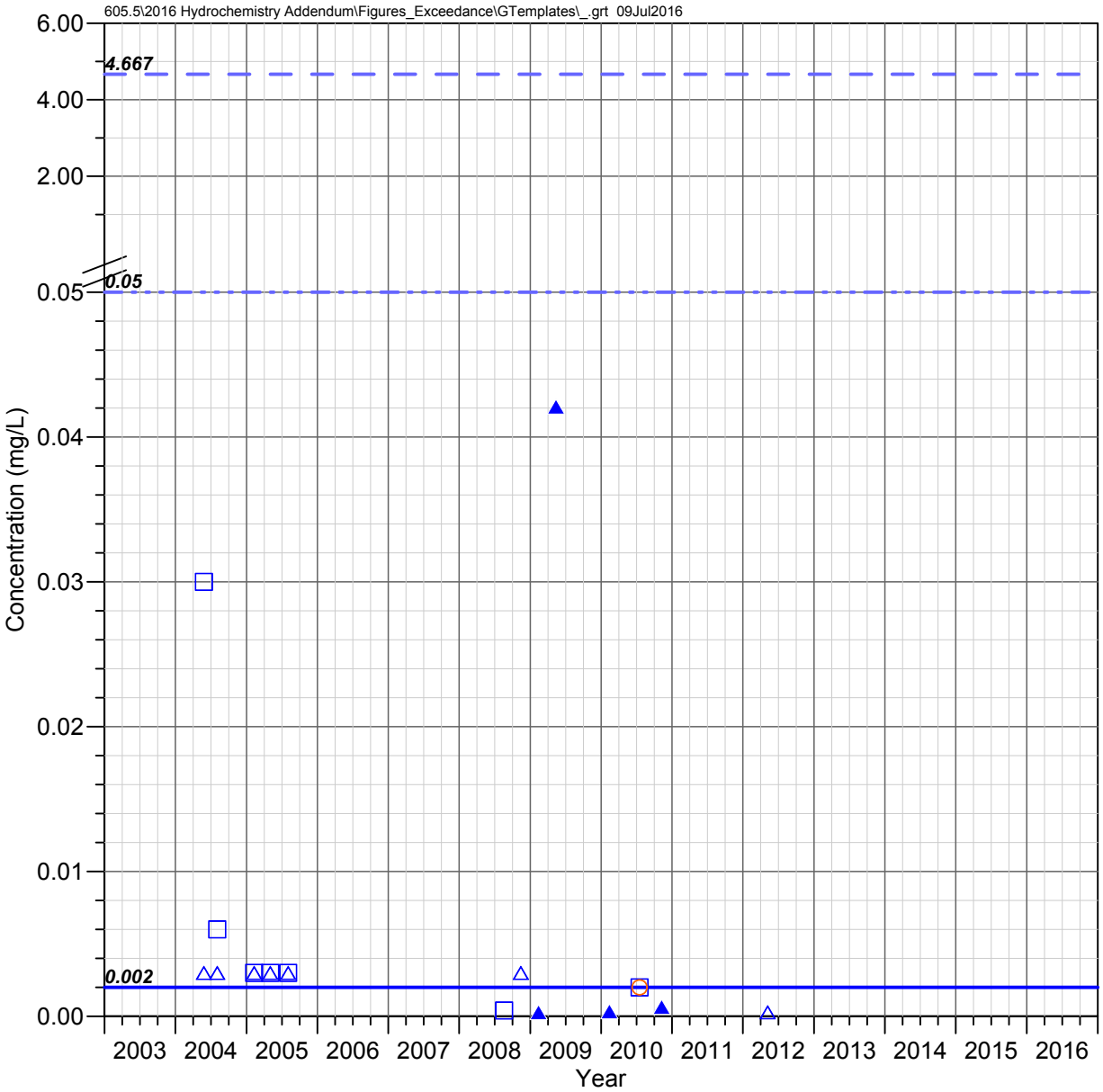


FIGURE F-673. SELENIUM CONCENTRATIONS OBSERVED AT KANE SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Blue Spring
Queen Creek Watershed

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Partial Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (TRC, 0.002 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.05 mg/L)

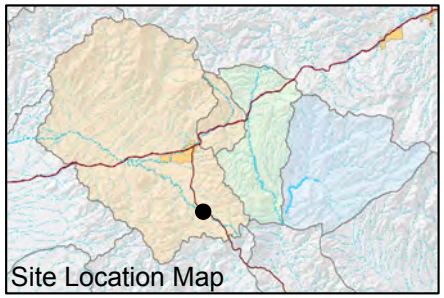
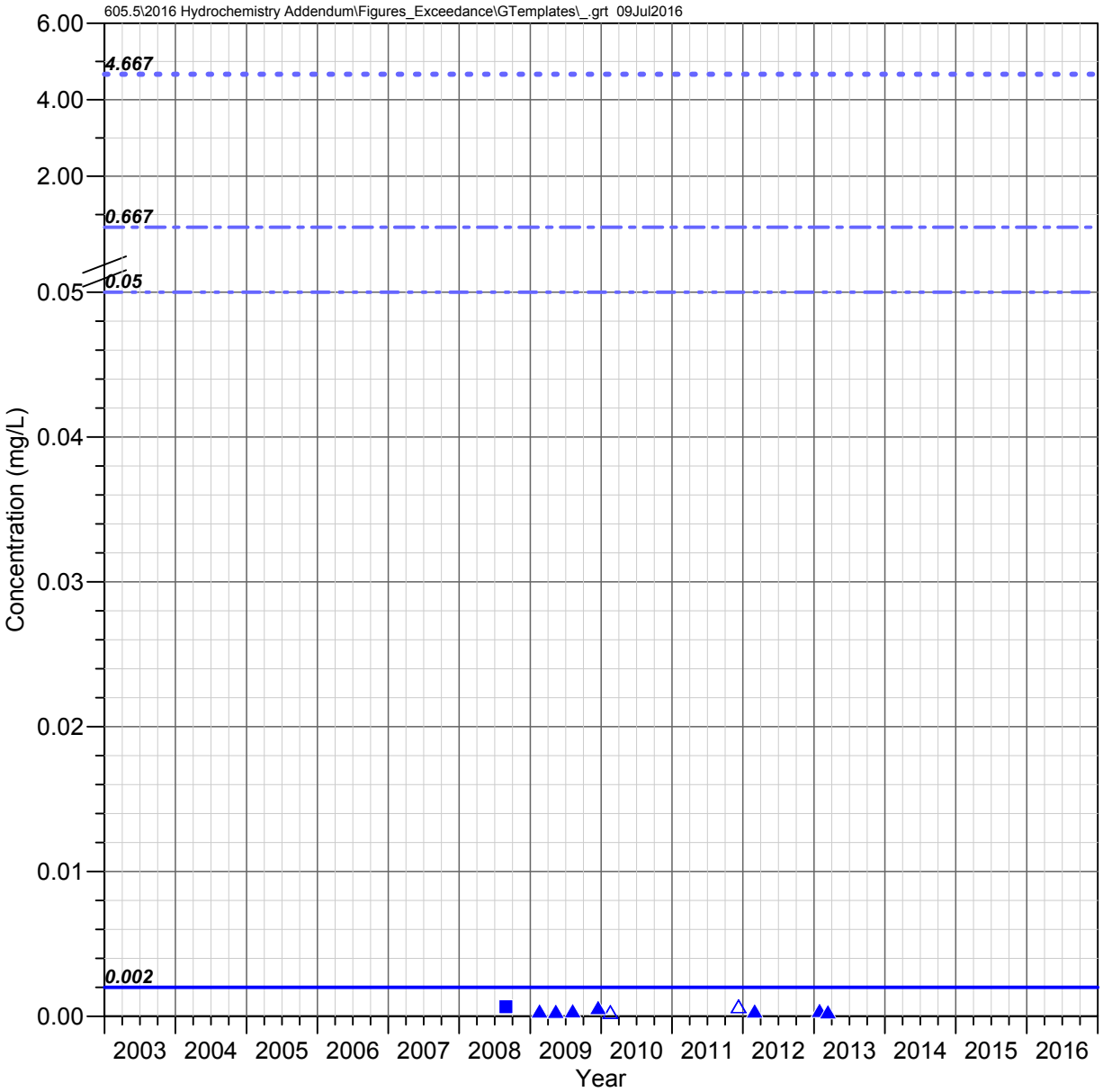


FIGURE F-674. SELENIUM CONCENTRATIONS OBSERVED AT BLUE SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



IC 1.0 C
Devils Canyon Watershed

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (TRC, 0.002 mg/L)
- AZ Fish Consumption (TRC, 0.667 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.05 mg/L)

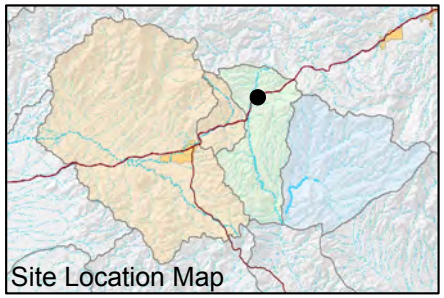
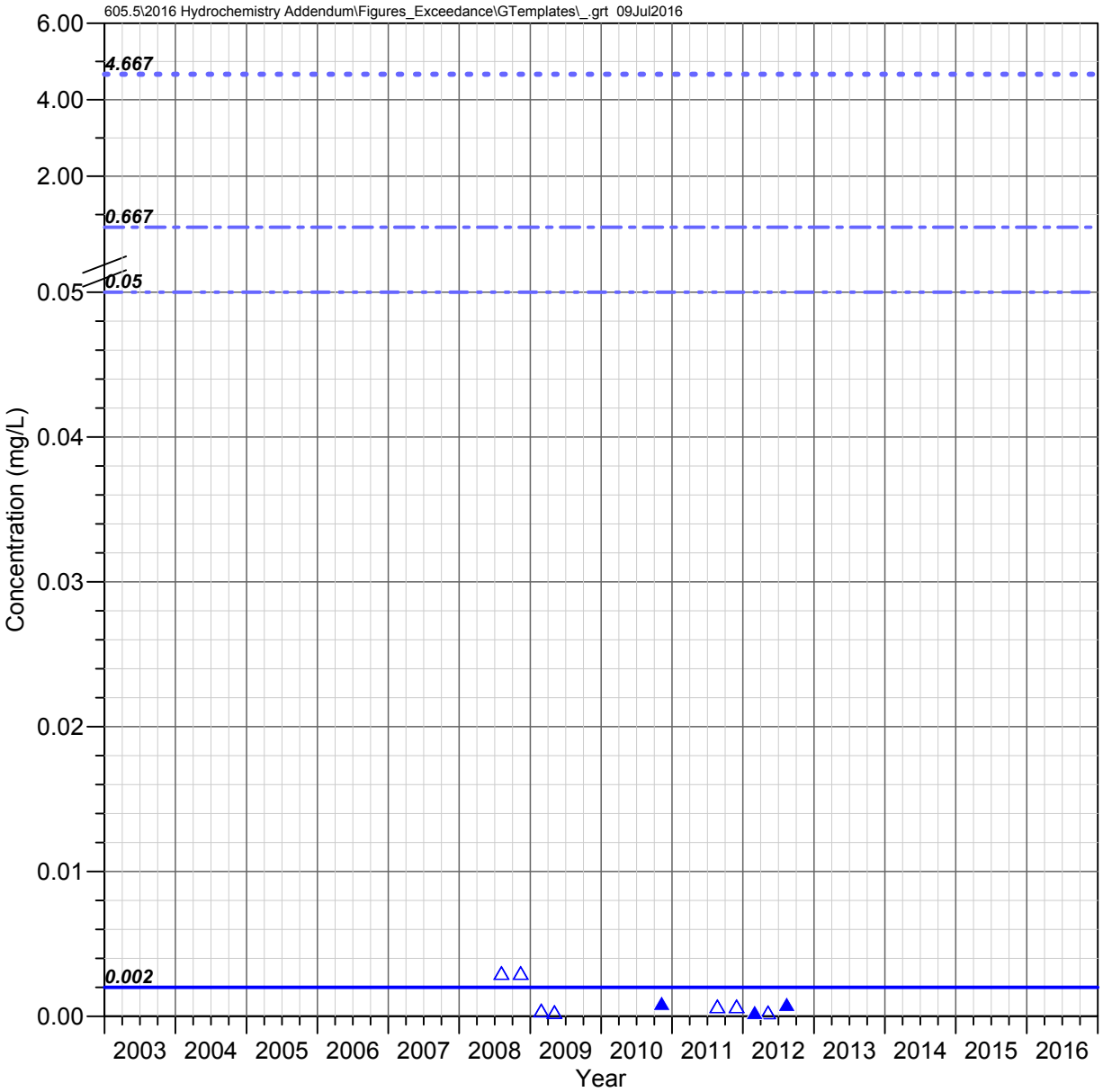


FIGURE F-675. SELENIUM CONCENTRATIONS OBSERVED AT IC 1.0 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 15.5 C
Devils Canyon Watershed

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (TRC, 0.002 mg/L)
- AZ Fish Consumption (TRC, 0.667 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.05 mg/L)

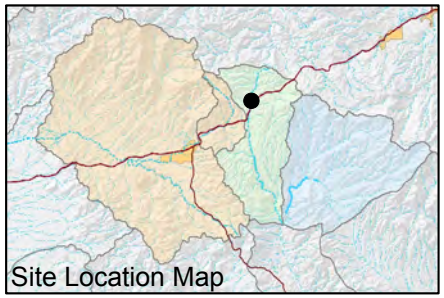
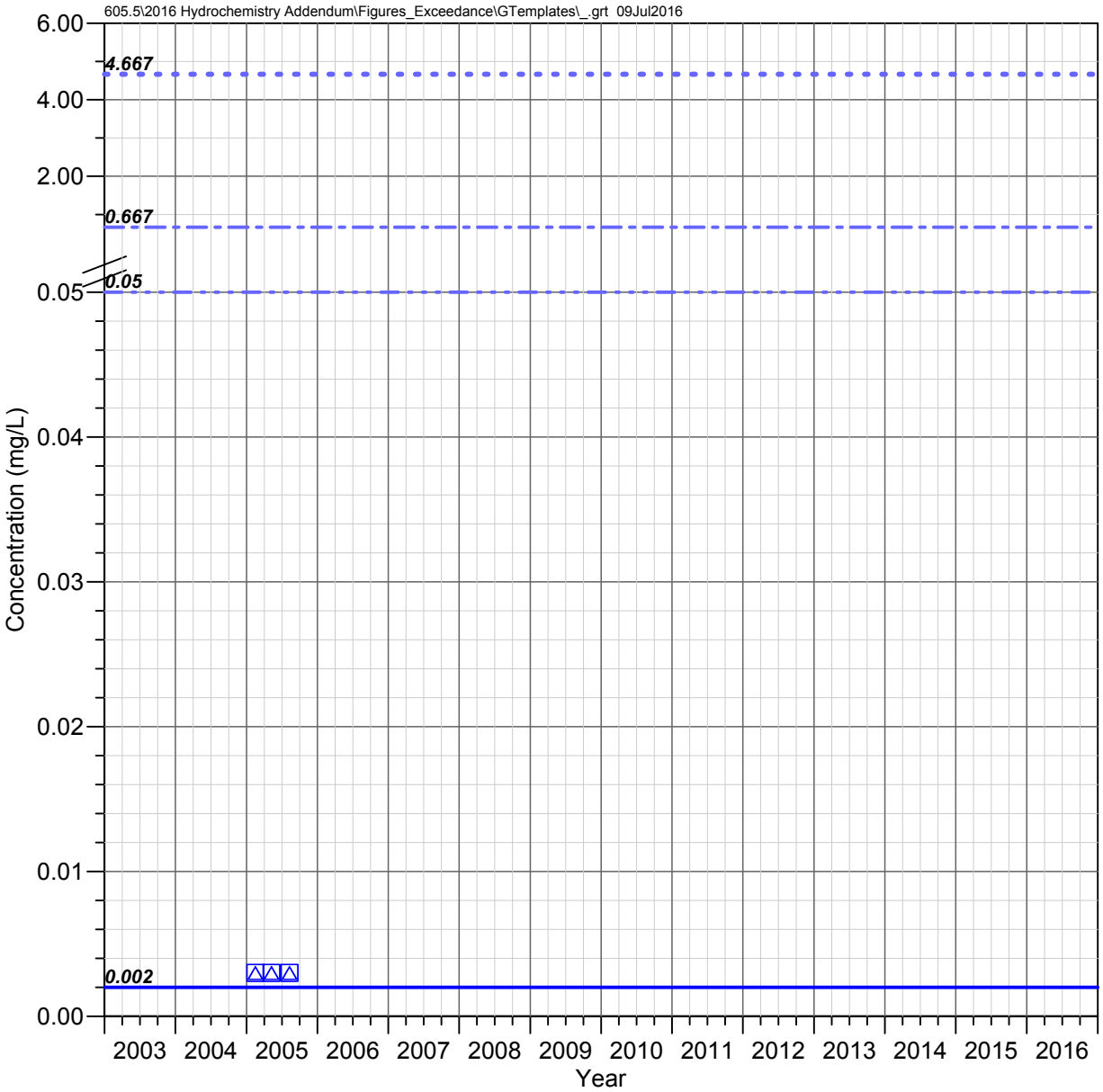


FIGURE F-676. SELENIUM CONCENTRATIONS OBSERVED AT DC 15.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 15.2 C
Devils Canyon Watershed

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (TRC, 0.002 mg/L)
- AZ Fish Consumption (TRC, 0.667 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.05 mg/L)

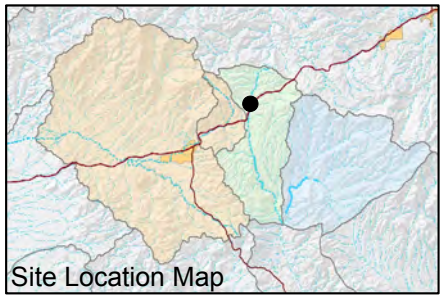
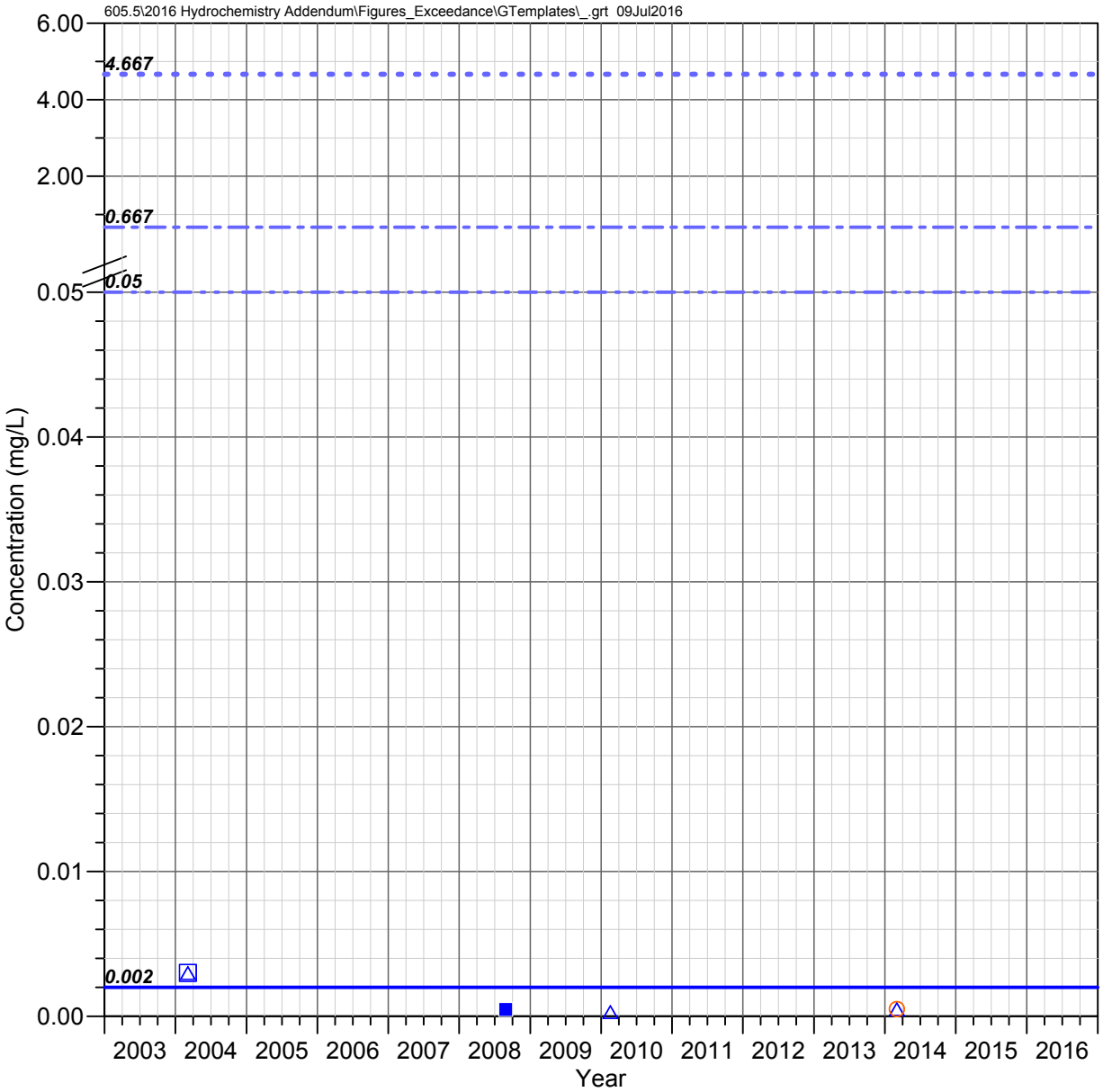


FIGURE F-677. SELENIUM CONCENTRATIONS OBSERVED AT DC 15.2 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 14.7 C
Devils Canyon Watershed

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (TRC, 0.002 mg/L)
- AZ Fish Consumption (TRC, 0.667 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.05 mg/L)

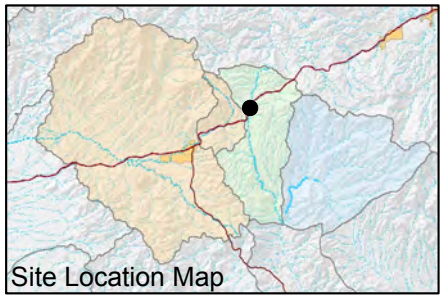
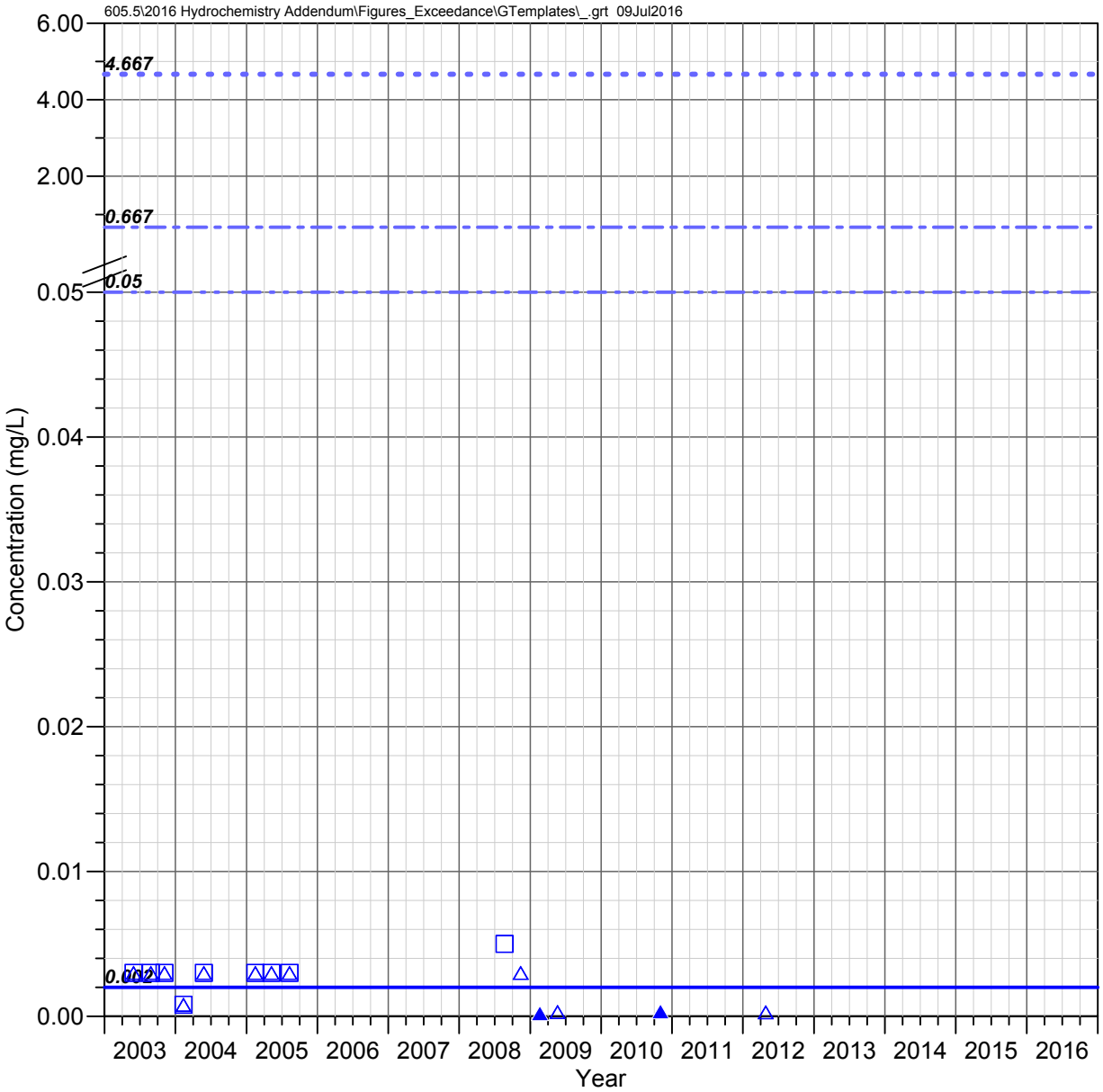


FIGURE F-678. SELENIUM CONCENTRATIONS OBSERVED AT DC 14.7 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 13.5 C
Devils Canyon Watershed

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (TRC, 0.002 mg/L)
- AZ Fish Consumption (TRC, 0.667 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.05 mg/L)

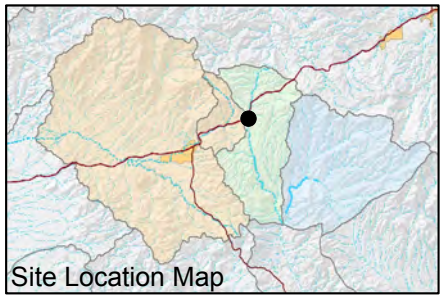
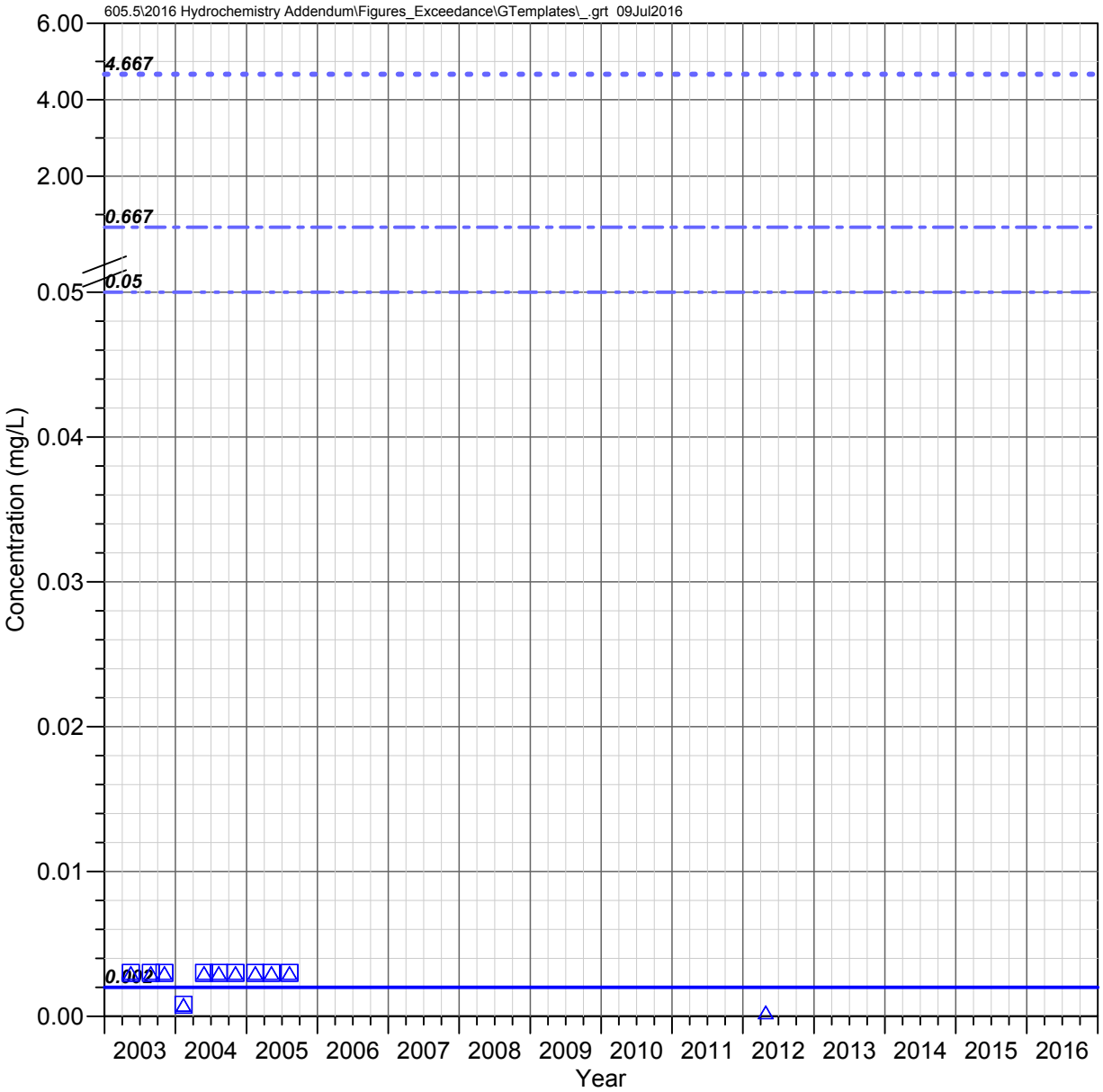


FIGURE F-679. SELENIUM CONCENTRATIONS OBSERVED AT DC 13.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 10.9 C
Devils Canyon Watershed

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (TRC, 0.002 mg/L)
- AZ Fish Consumption (TRC, 0.667 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.05 mg/L)

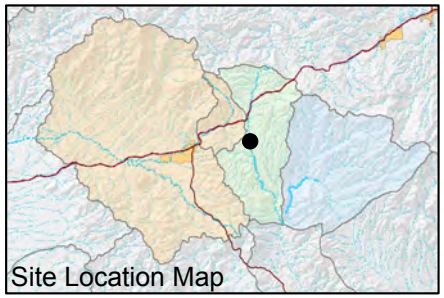
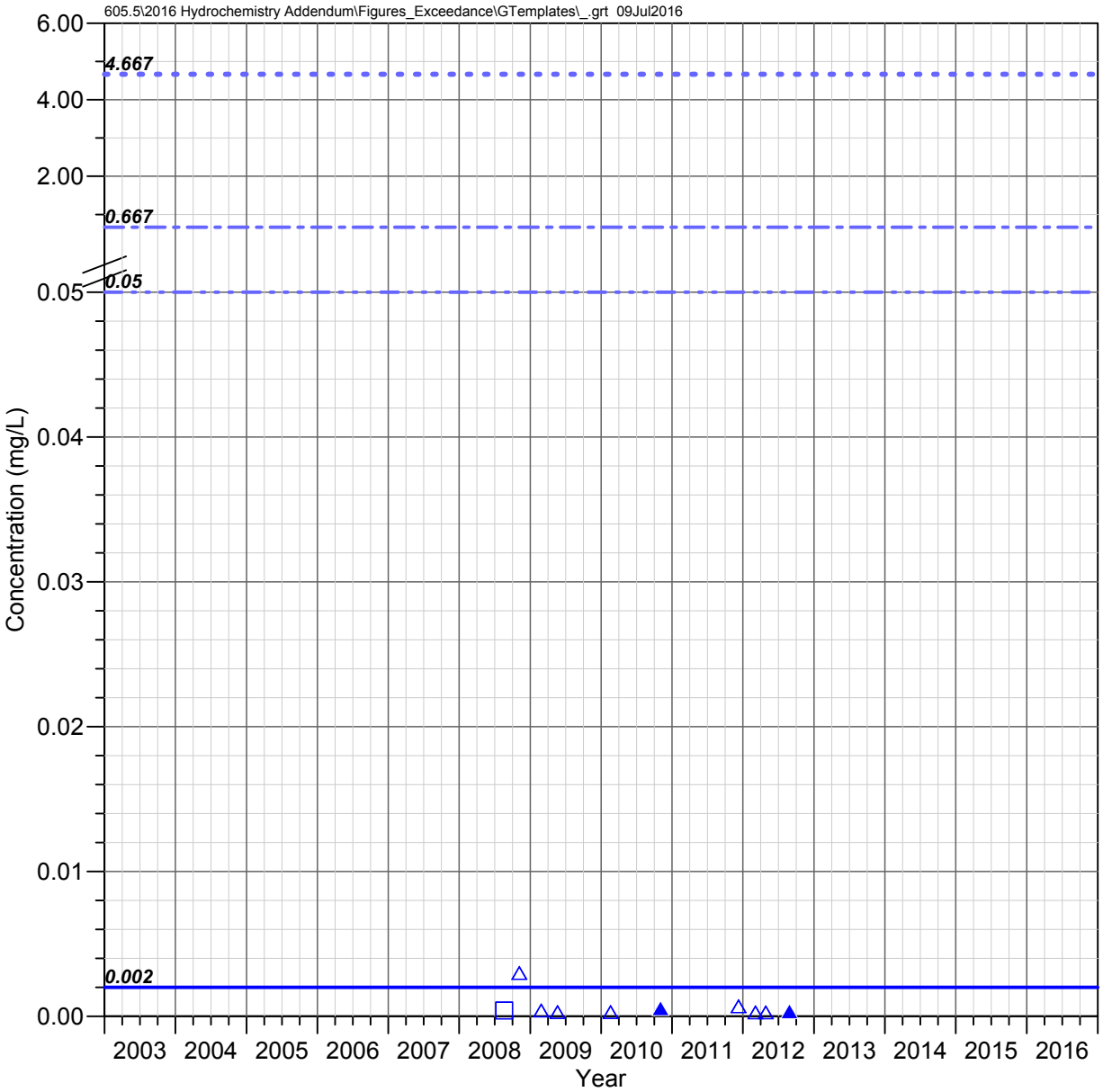


FIGURE F-680. SELENIUM CONCENTRATIONS OBSERVED AT DC 10.9 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



RR 1.5 C
Devils Canyon Watershed

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (TRC, 0.002 mg/L)
- AZ Fish Consumption (TRC, 0.667 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.05 mg/L)

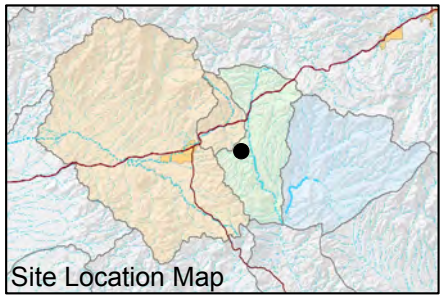
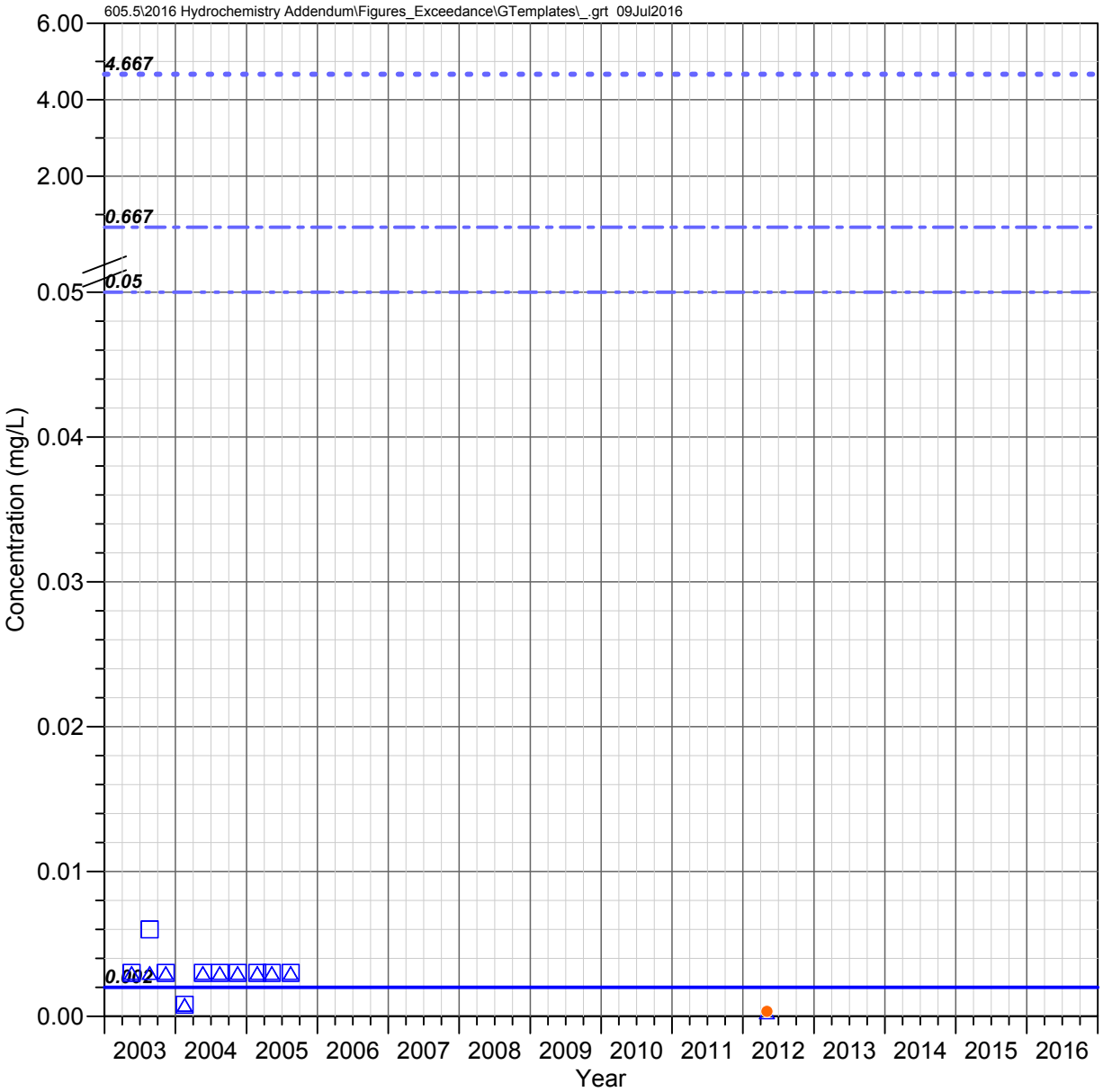


FIGURE F-681. SELENIUM CONCENTRATIONS OBSERVED AT RR 1.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.8 C
Devils Canyon Watershed

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (TRC, 0.002 mg/L)
- AZ Fish Consumption (TRC, 0.667 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.05 mg/L)

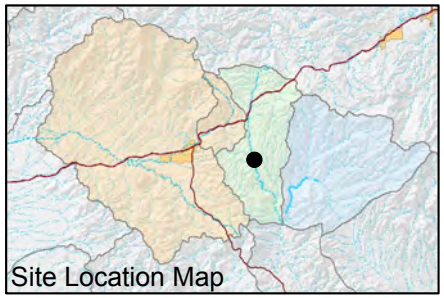
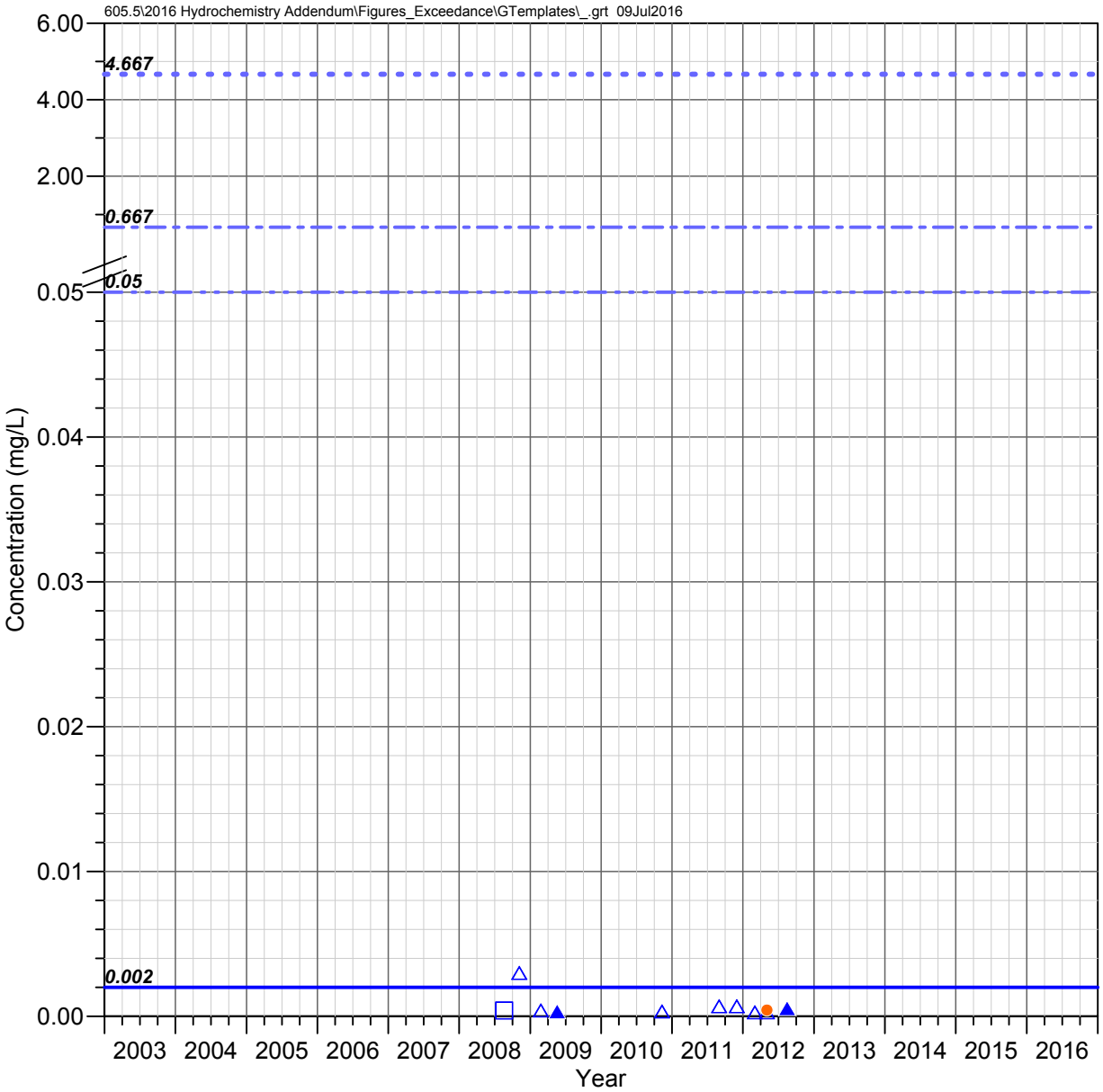


FIGURE F-682. SELENIUM CONCENTRATIONS OBSERVED AT DC 8.8 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



H 0.1 C
Devils Canyon Watershed

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (TRC, 0.002 mg/L)
- AZ Fish Consumption (TRC, 0.667 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.05 mg/L)

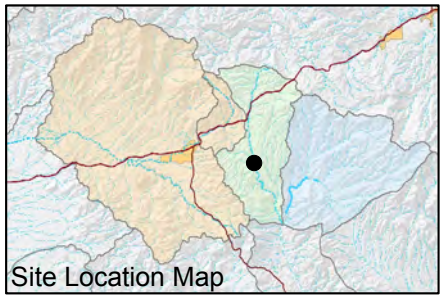
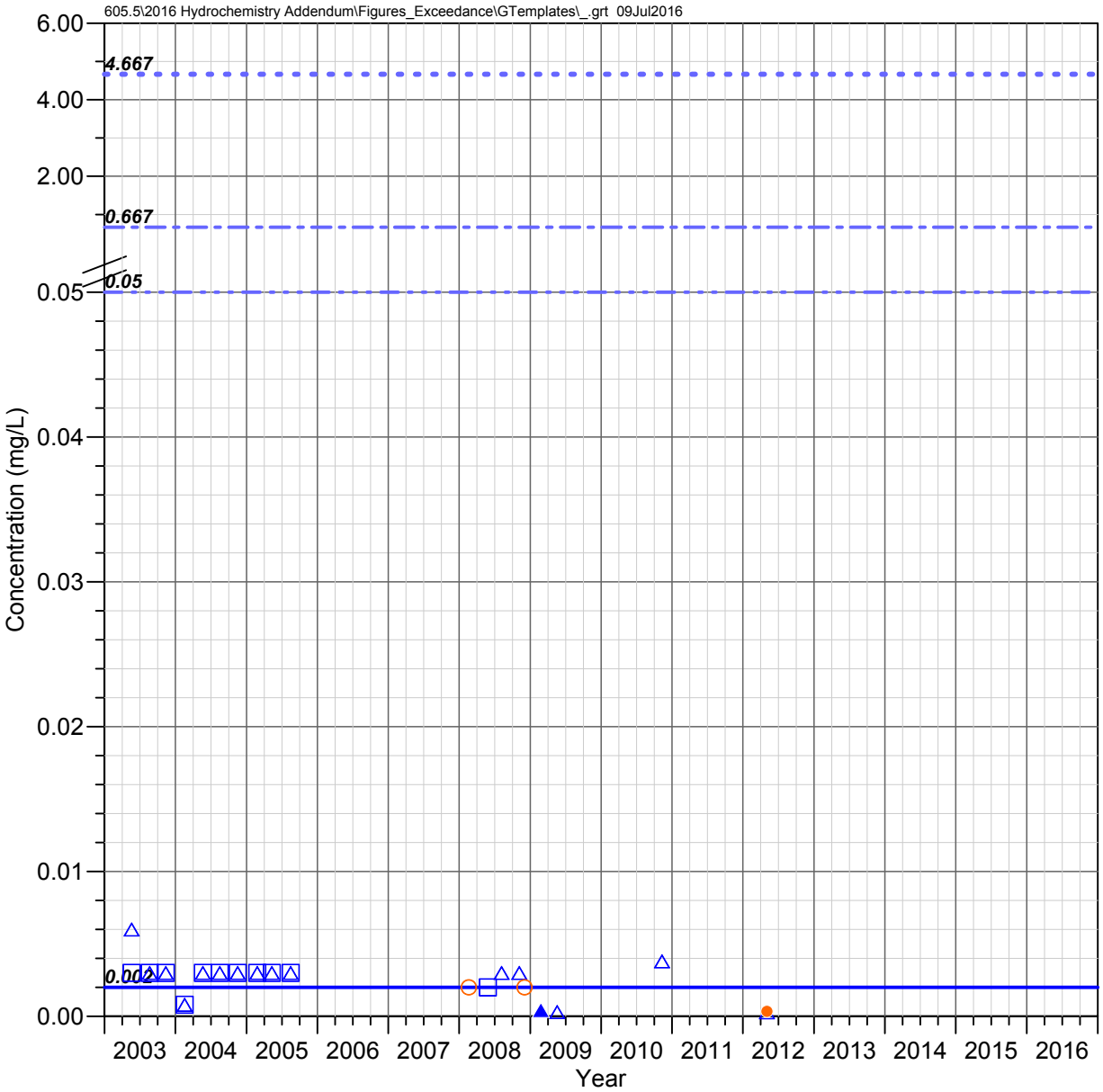


FIGURE F-683. SELENIUM CONCENTRATIONS OBSERVED AT H 0.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.2 W
Devils Canyon Watershed

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (TRC, 0.002 mg/L)
- AZ Fish Consumption (TRC, 0.667 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.05 mg/L)

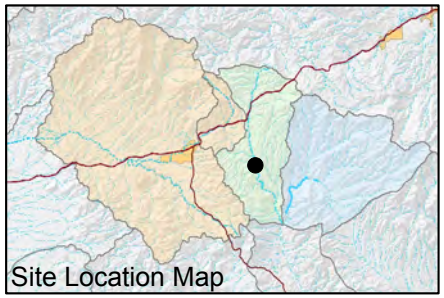
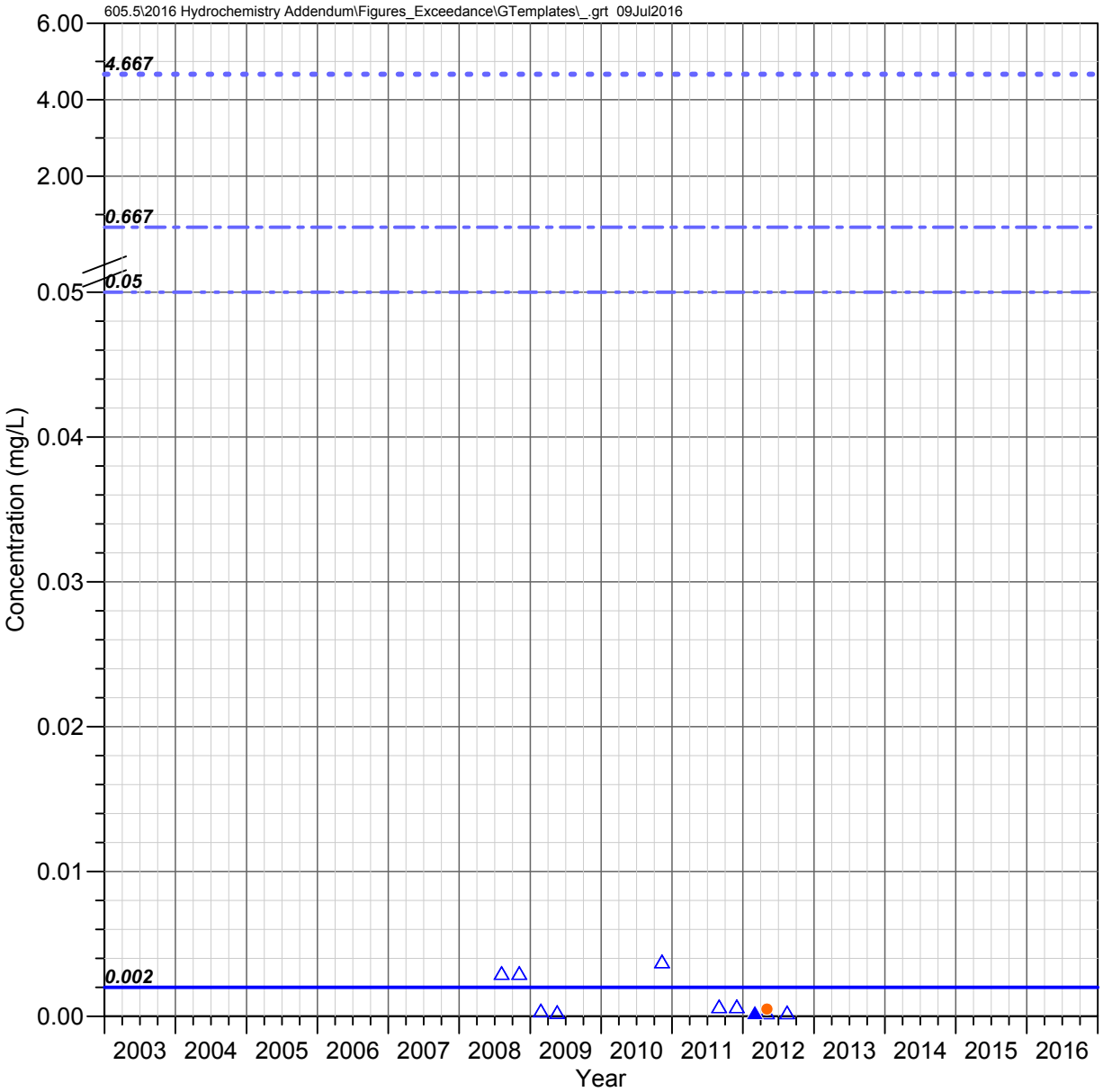


FIGURE F-684. SELENIUM CONCENTRATIONS OBSERVED AT DC 8.2 W, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.1 C
Devils Canyon Watershed

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (TRC, 0.002 mg/L)
- AZ Fish Consumption (TRC, 0.667 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.05 mg/L)

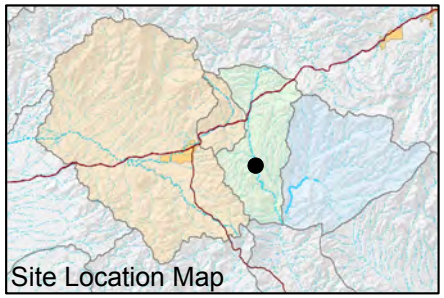
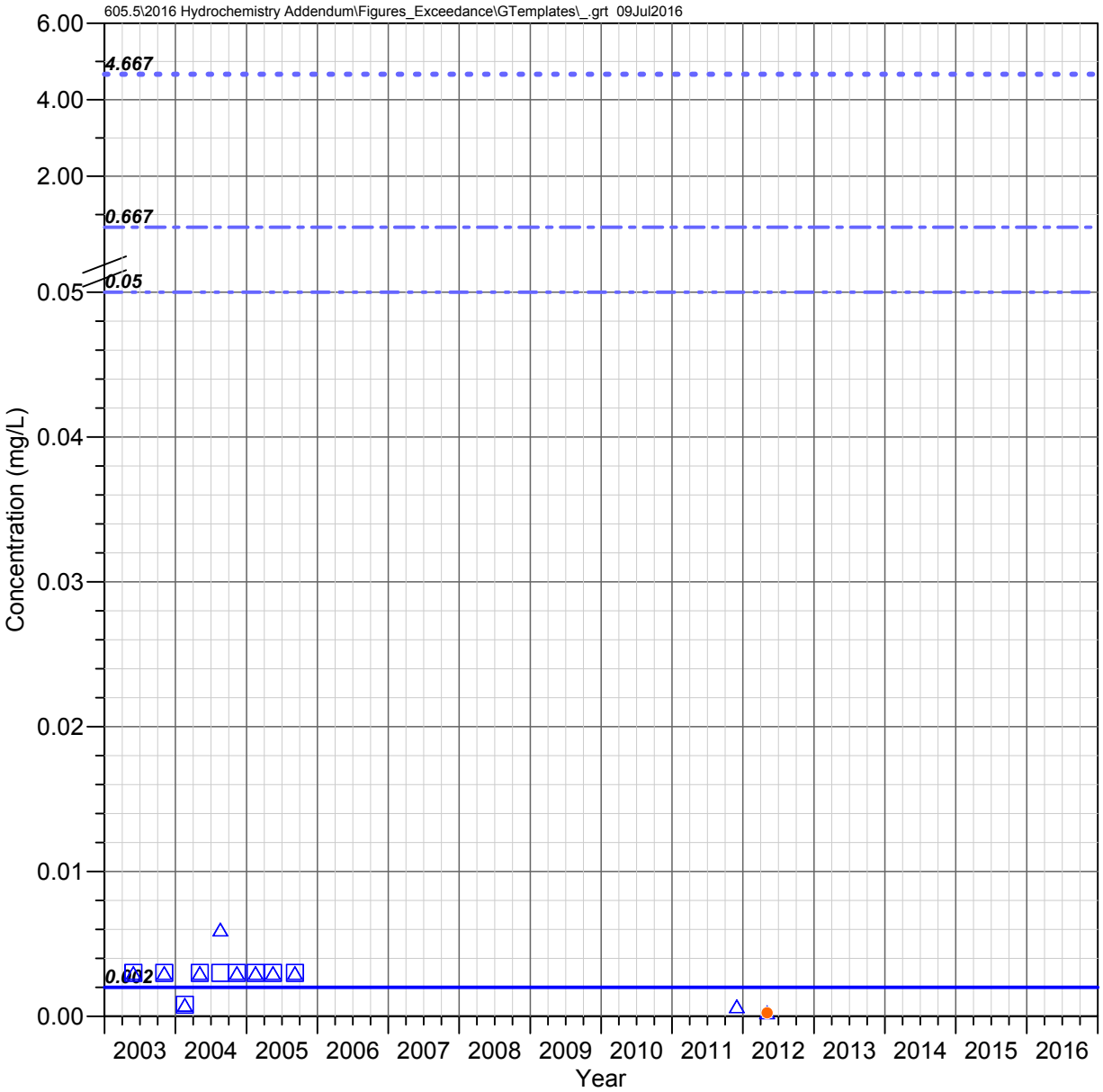


FIGURE F-685. SELENIUM CONCENTRATIONS OBSERVED AT DC 8.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 7.1 C
Devils Canyon Watershed

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (TRC, 0.002 mg/L)
- AZ Fish Consumption (TRC, 0.667 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.05 mg/L)

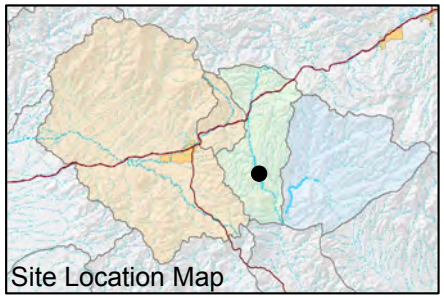
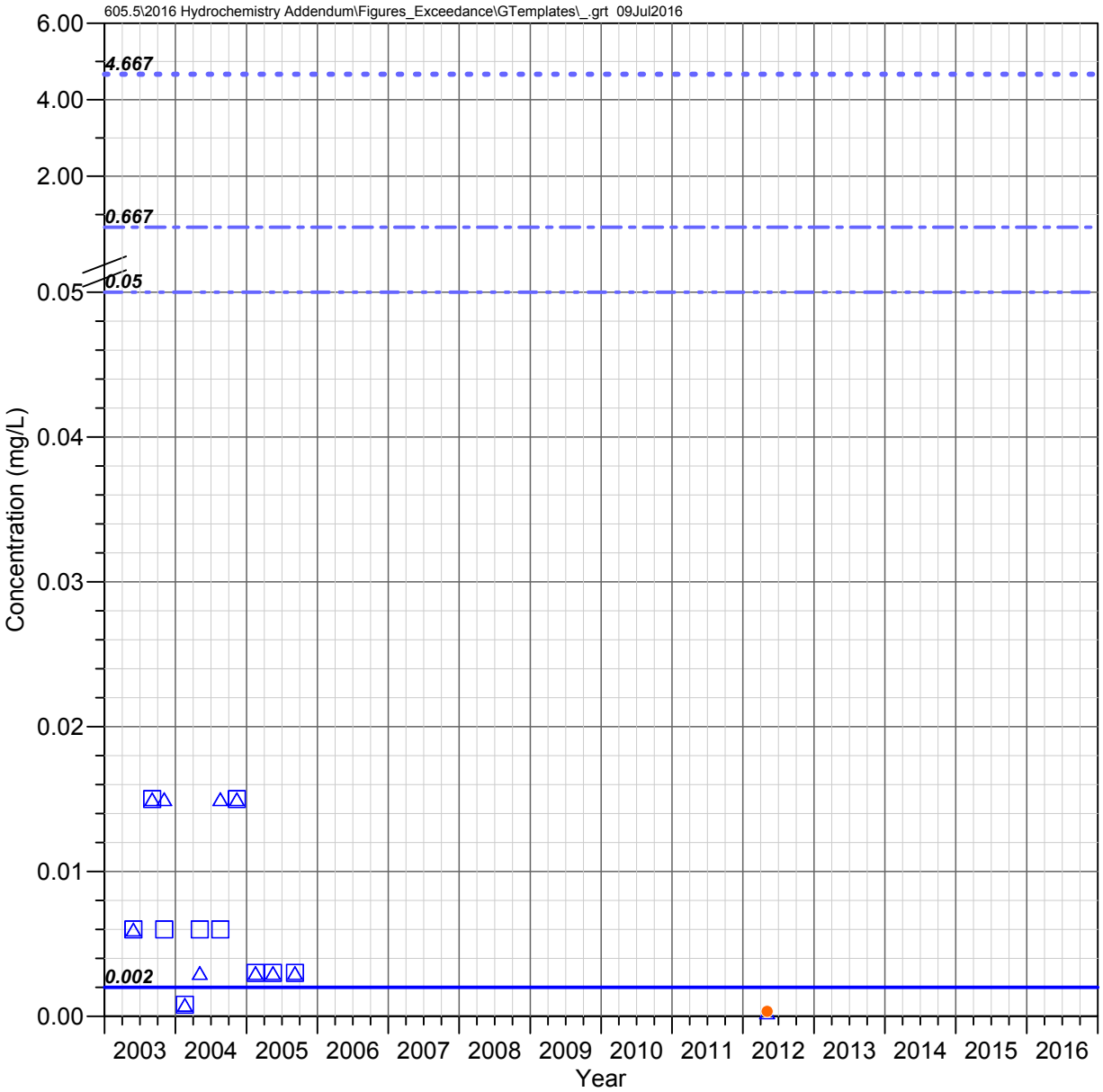


FIGURE F-686. SELENIUM CONCENTRATIONS OBSERVED AT DC 7.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.6 W (DCT 6.6 W)
Devils Canyon Watershed

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (TRC, 0.002 mg/L)
- AZ Fish Consumption (TRC, 0.667 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.05 mg/L)

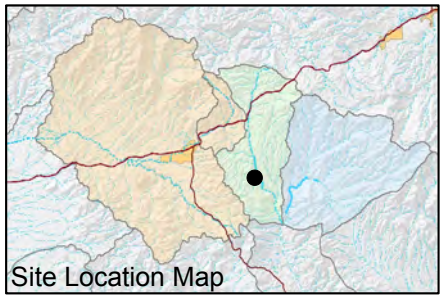
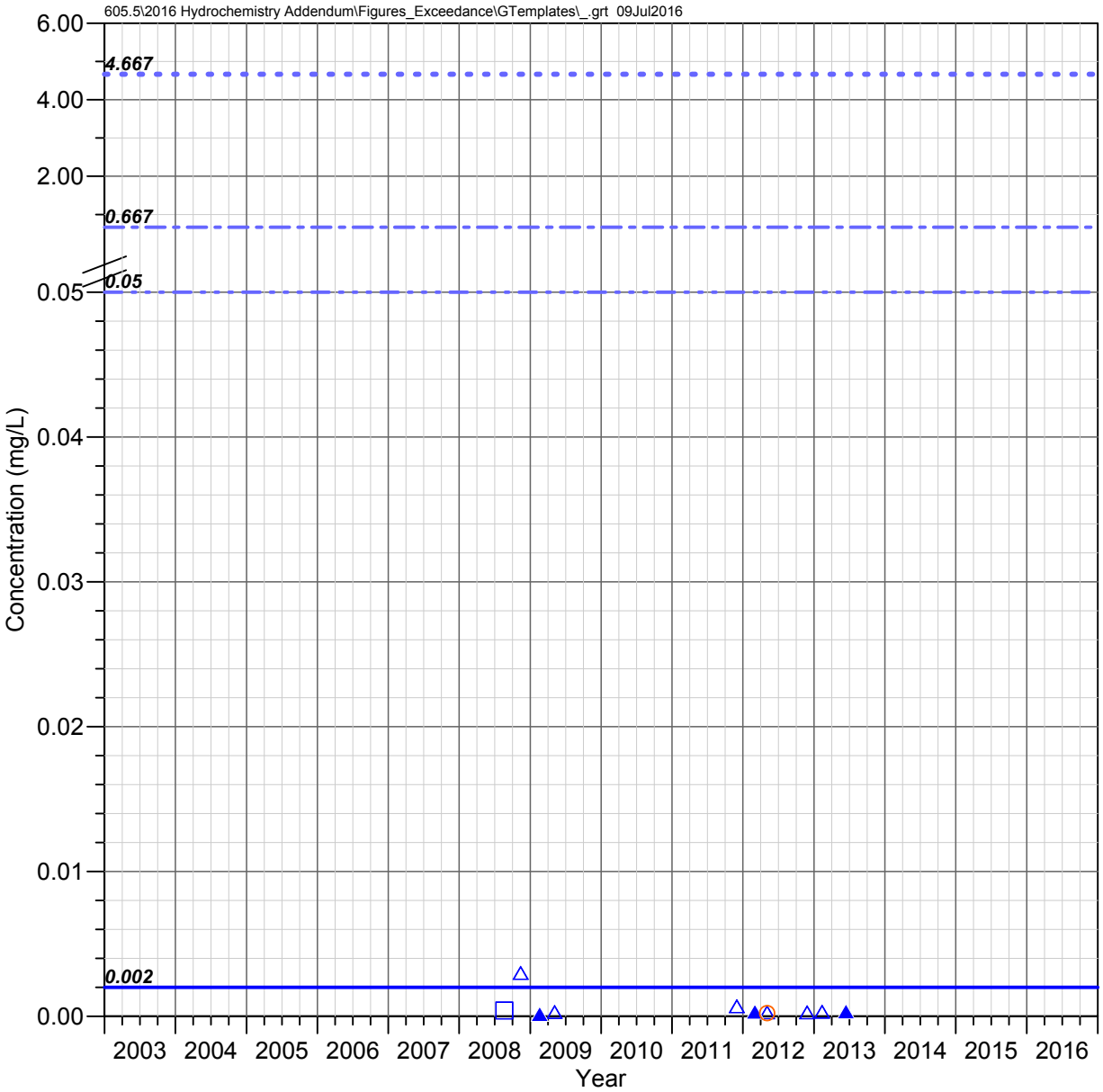


FIGURE F-687. SELENIUM CONCENTRATIONS OBSERVED AT DC 6.6 W (DCT 6.6 W), DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.14 C
Devils Canyon Watershed

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (TRC, 0.002 mg/L)
- AZ Fish Consumption (TRC, 0.667 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.05 mg/L)

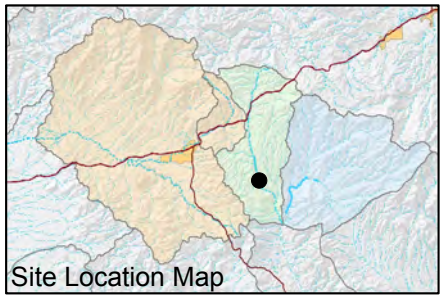
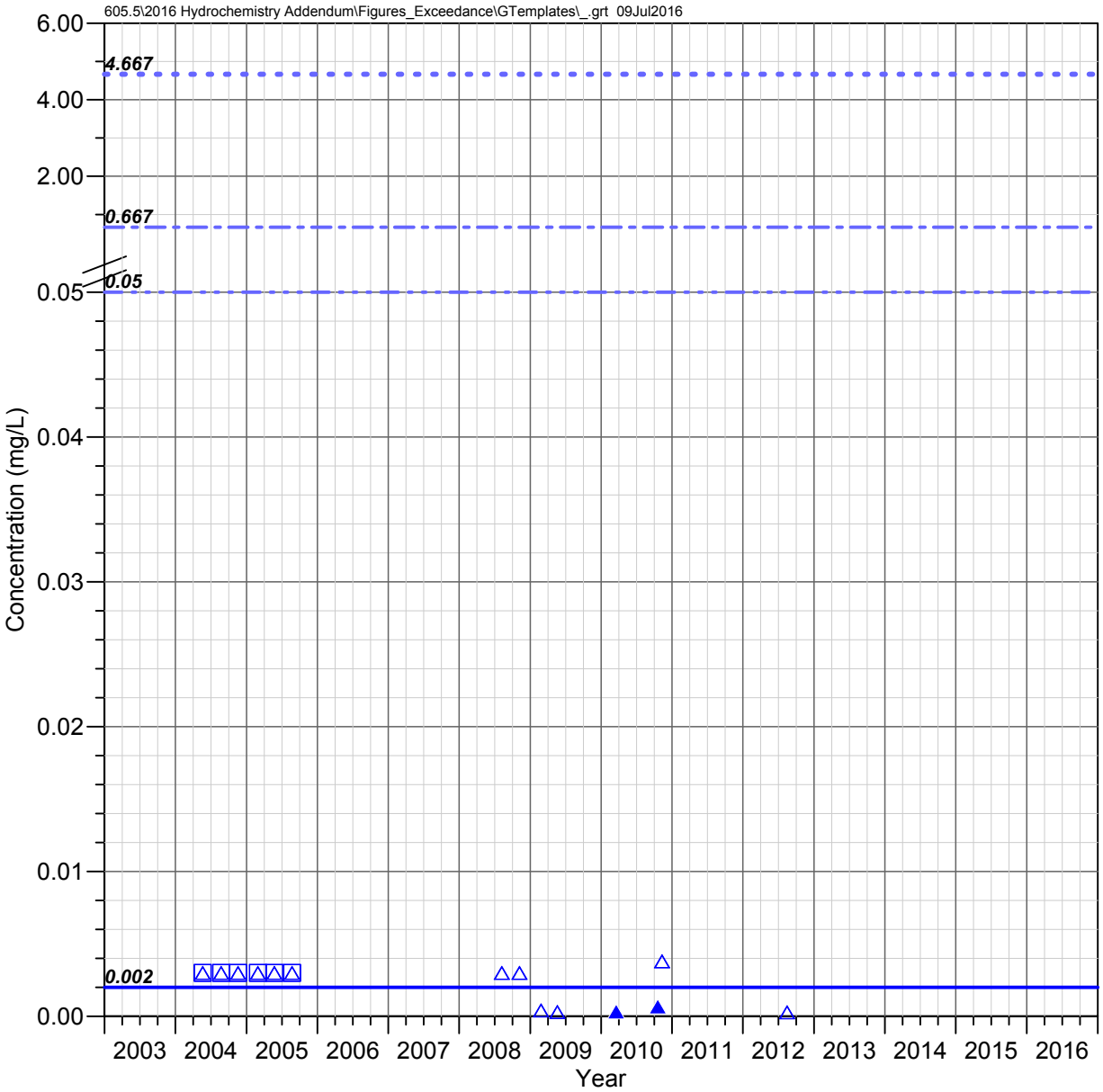


FIGURE F-688. SELENIUM CONCENTRATIONS OBSERVED AT DC 6.14 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.1 E
Devils Canyon Watershed

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (TRC, 0.002 mg/L)
- AZ Fish Consumption (TRC, 0.667 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.05 mg/L)

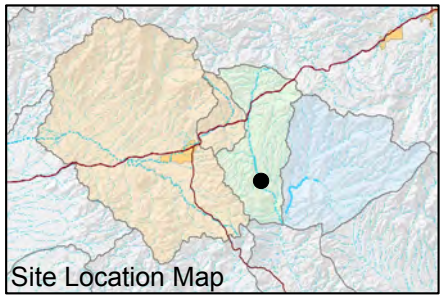
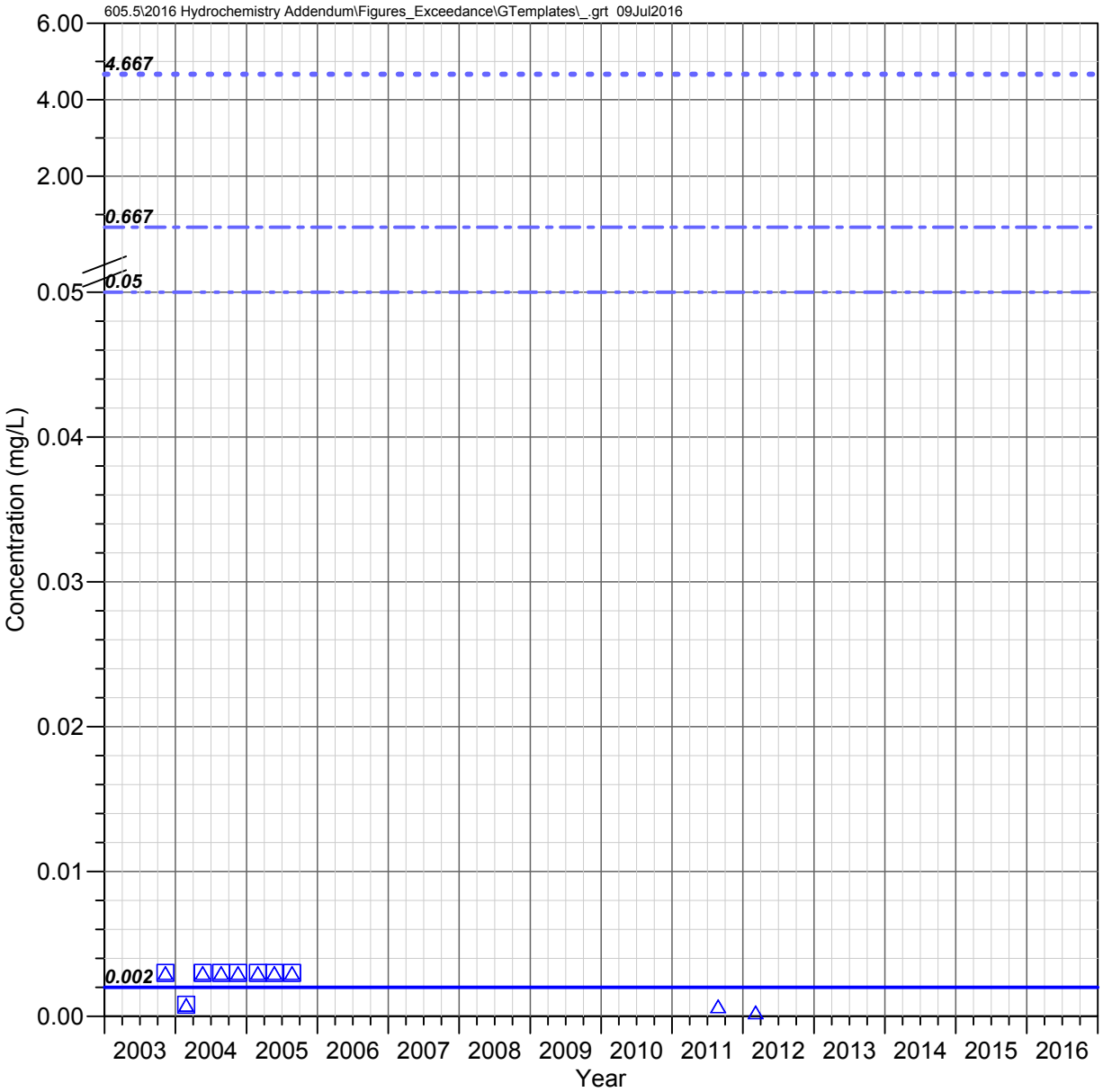


FIGURE F-689. SELENIUM CONCENTRATIONS OBSERVED AT DC 6.1 E, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 5.5 C
Devils Canyon Watershed

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (TRC, 0.002 mg/L)
- AZ Fish Consumption (TRC, 0.667 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.05 mg/L)

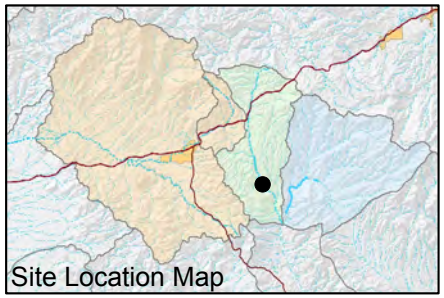
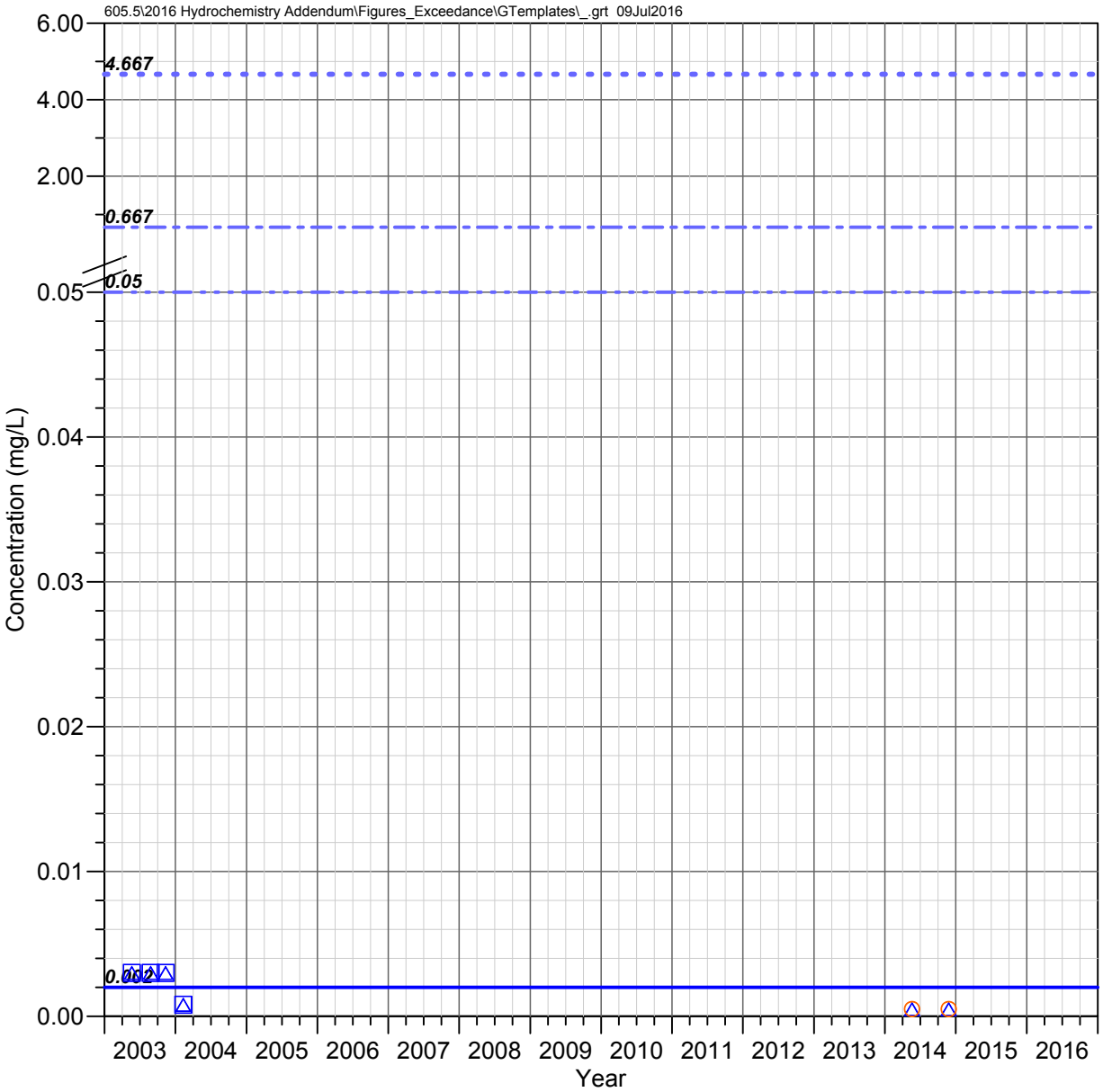


FIGURE F-690. SELENIUM CONCENTRATIONS OBSERVED AT DC 5.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 4.1 E
Devils Canyon Watershed

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (TRC, 0.002 mg/L)
- AZ Fish Consumption (TRC, 0.667 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.05 mg/L)

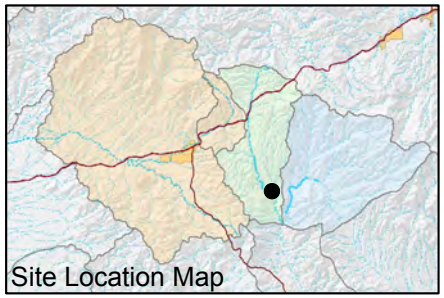
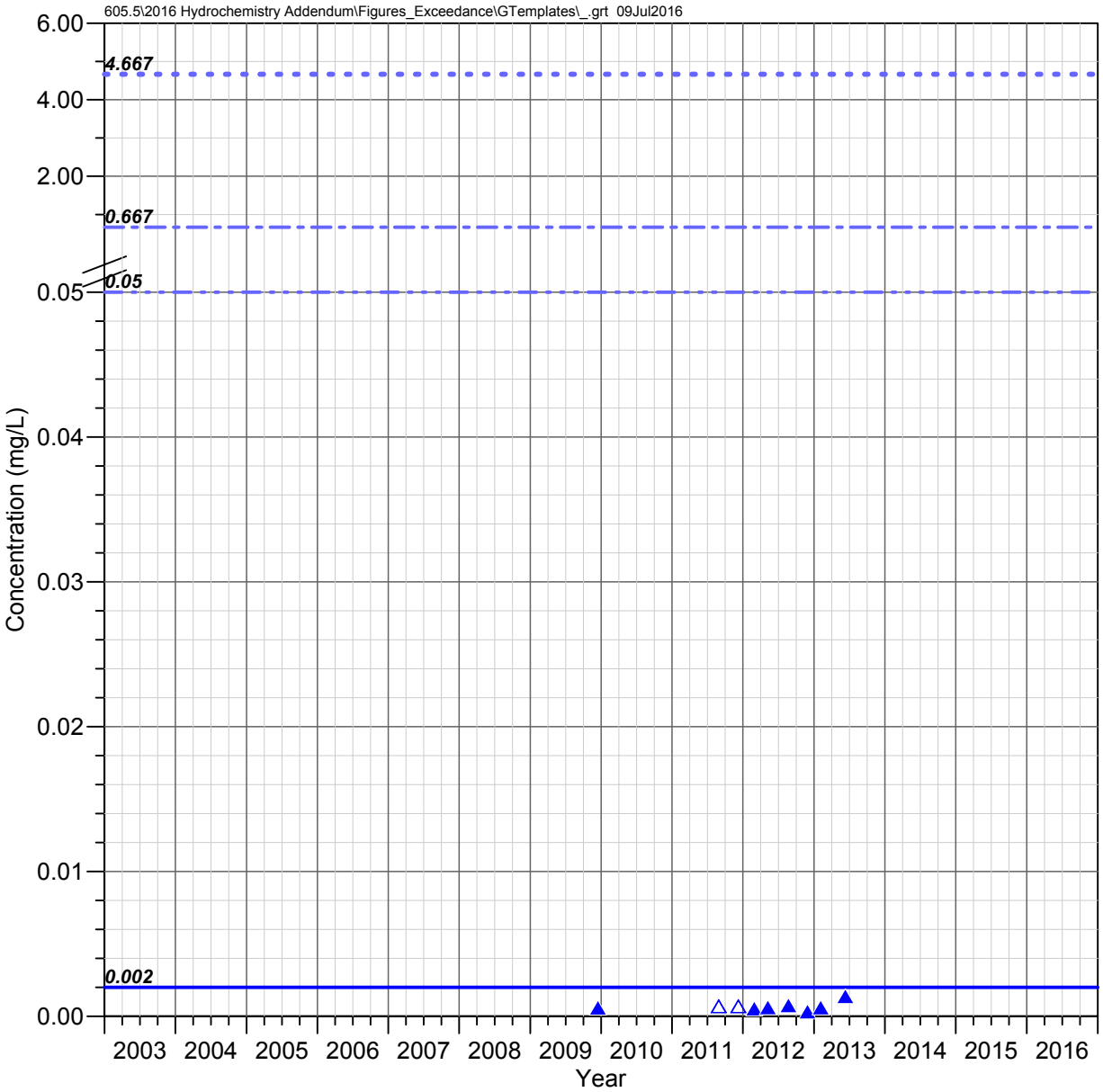


FIGURE F-691. SELENIUM CONCENTRATIONS OBSERVED AT DC 4.1 E, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Government Springs
Mineral Creek Watershed

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (TRC, 0.002 mg/L)
- AZ Fish Consumption (TRC, 0.667 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.05 mg/L)

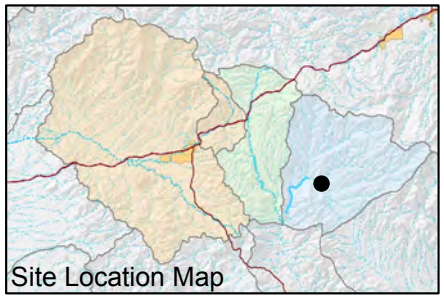
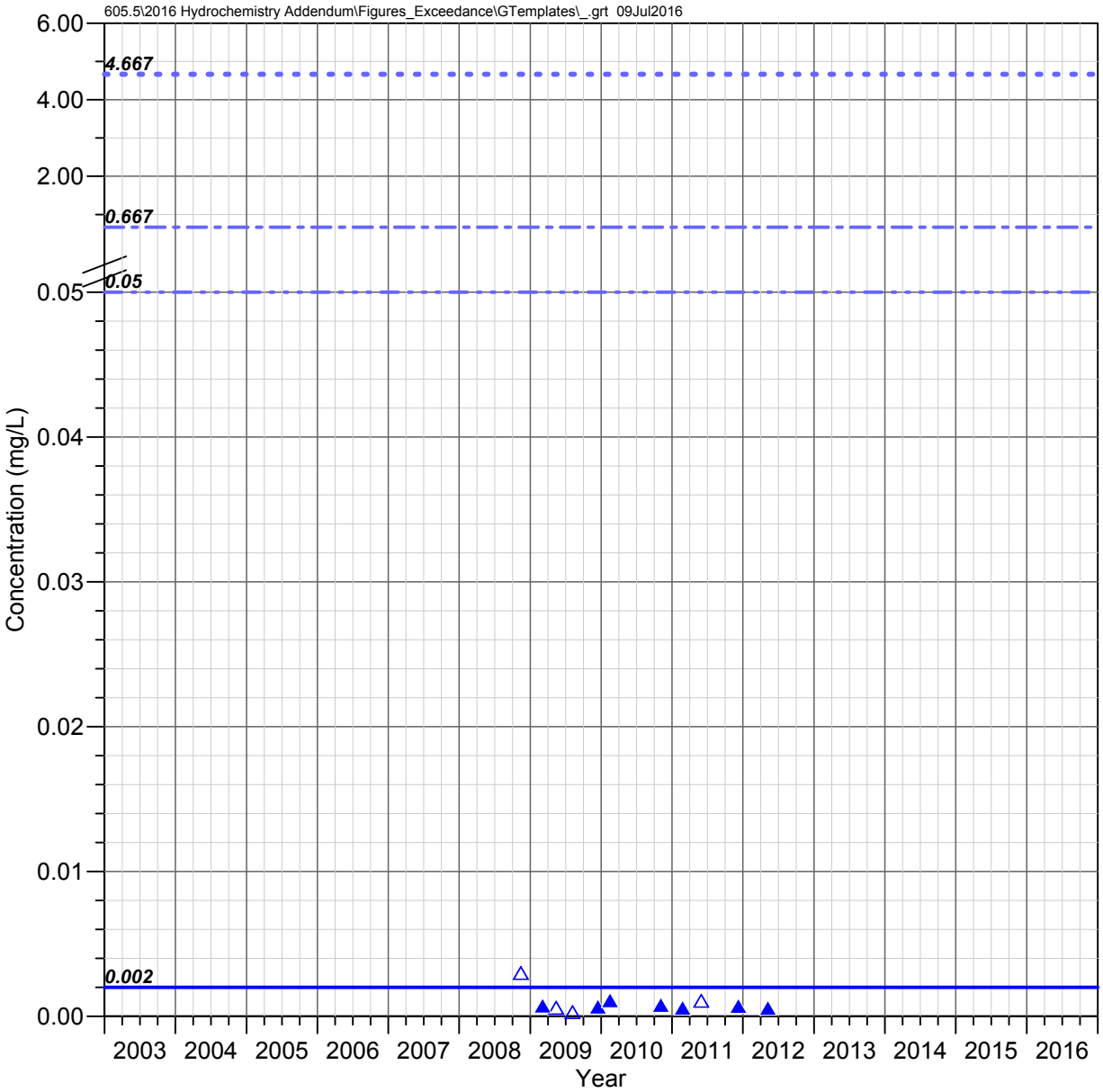


FIGURE F-692. SELENIUM CONCENTRATIONS OBSERVED AT GOVERNMENT SPRINGS, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 8.4 C
Mineral Creek Watershed

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (TRC, 0.002 mg/L)
- AZ Fish Consumption (TRC, 0.667 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.05 mg/L)

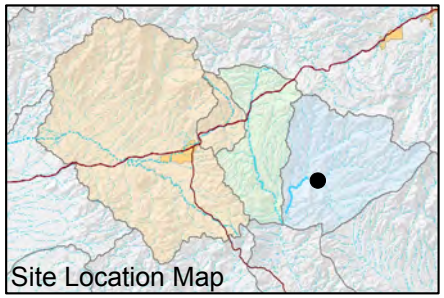
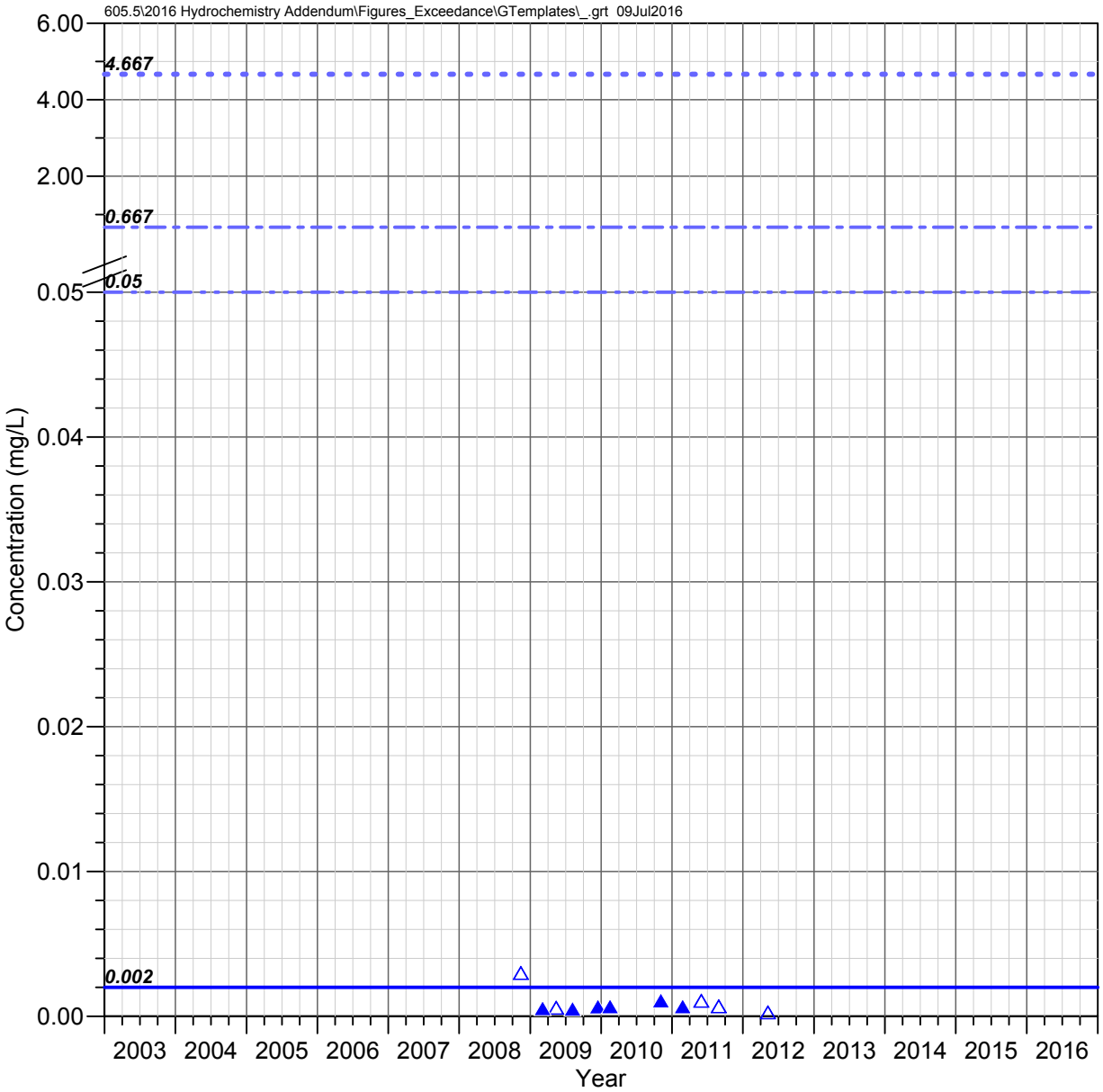


FIGURE F-693. SELENIUM CONCENTRATIONS OBSERVED AT MC 8.4 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



LF 0.2 C
Mineral Creek Watershed

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (TRC, 0.002 mg/L)
- AZ Fish Consumption (TRC, 0.667 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.05 mg/L)

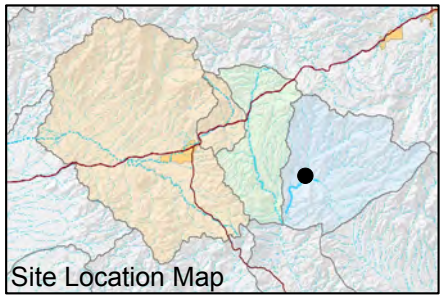
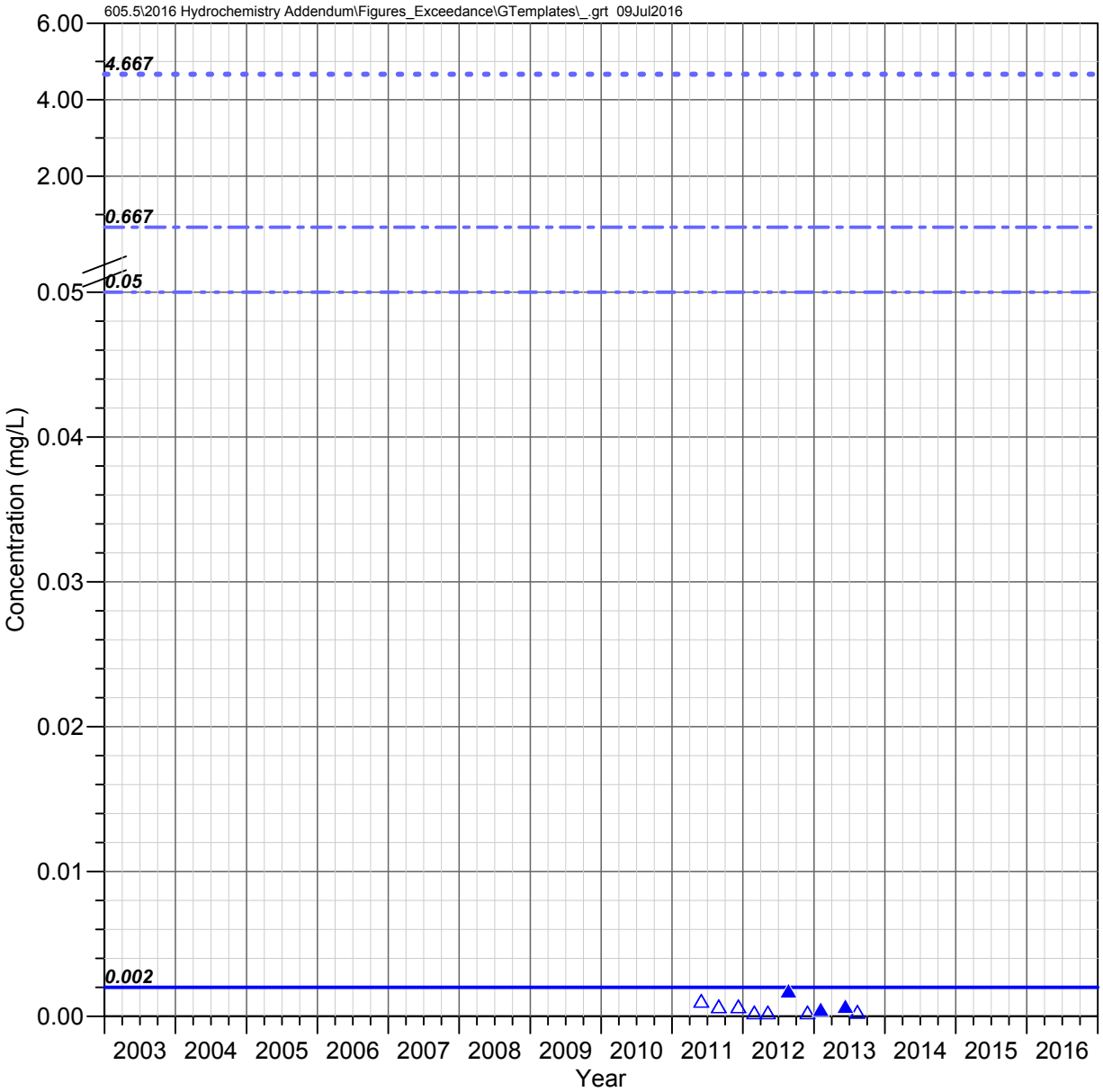


FIGURE F-694. SELENIUM CONCENTRATIONS OBSERVED AT LF 0.2 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 5.2 C
Mineral Creek Watershed

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (TRC, 0.002 mg/L)
- AZ Fish Consumption (TRC, 0.667 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.05 mg/L)

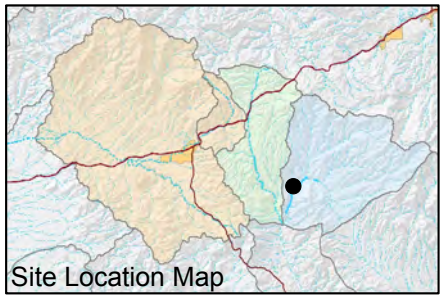
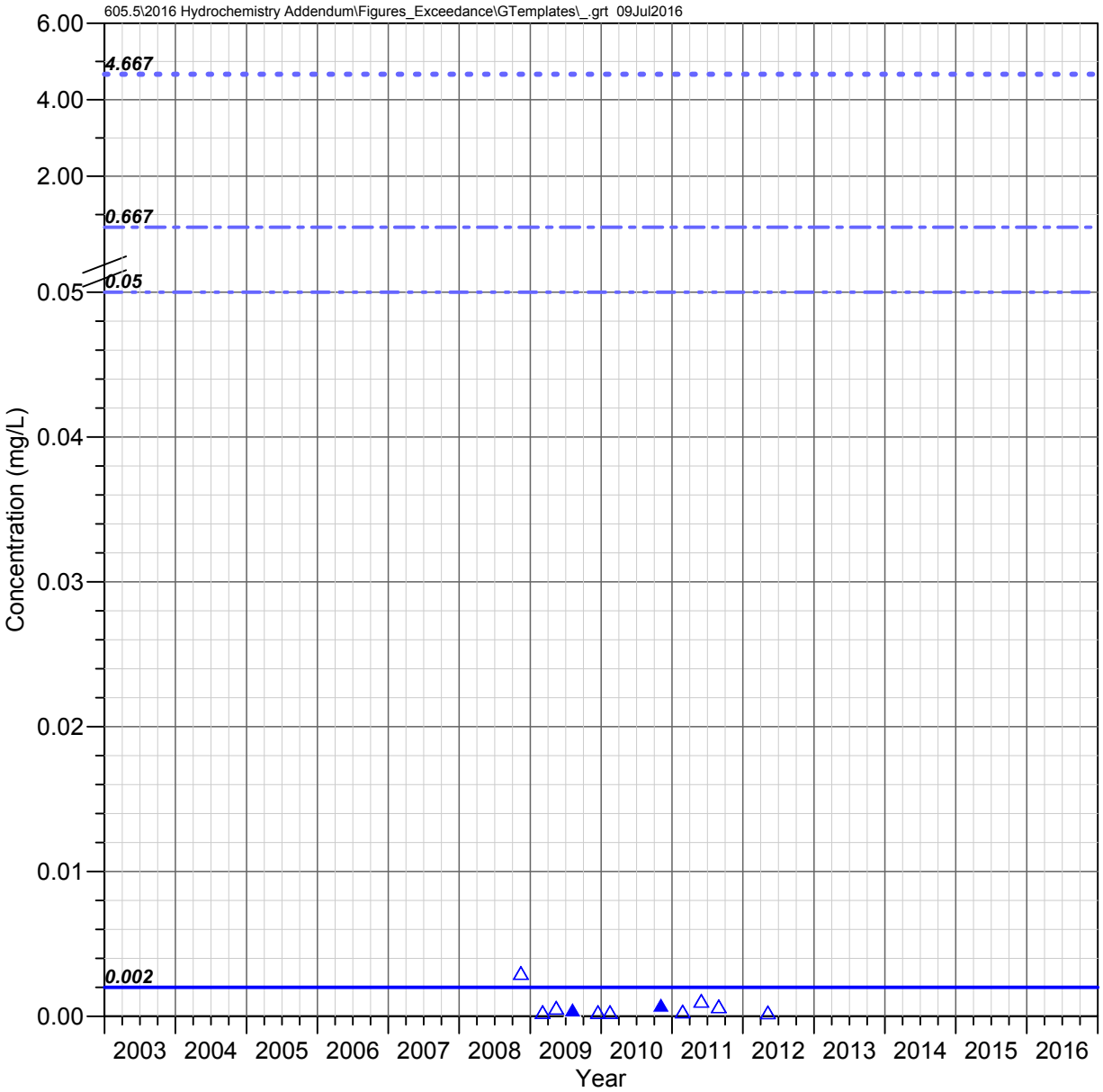


FIGURE F-695. SELENIUM CONCENTRATIONS OBSERVED AT MC 5.2 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 3.4 W (Wet Leg Spring)
Mineral Creek Watershed

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (TRC, 0.002 mg/L)
- AZ Fish Consumption (TRC, 0.667 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.05 mg/L)

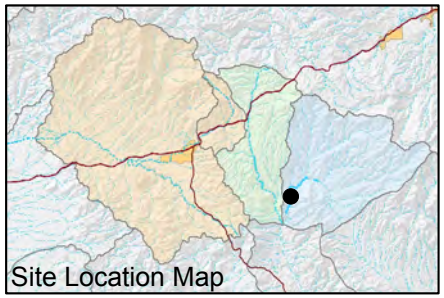
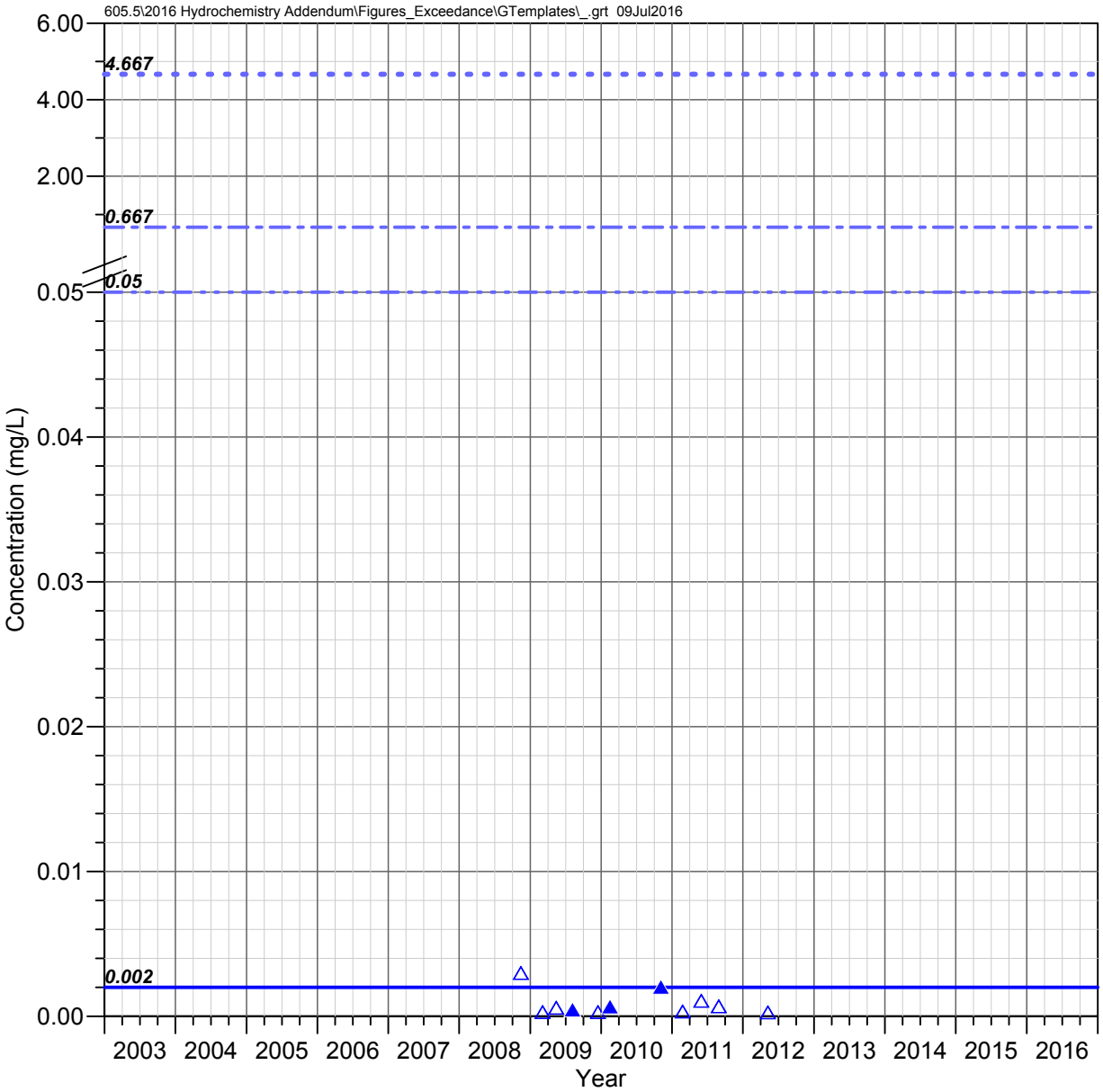


FIGURE F-696. SELENIUM CONCENTRATIONS OBSERVED AT MC 3.4 W (WET LEG SPRING), MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 3.3 C (Lower Mineral)
Mineral Creek Watershed

SELENIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable

- AZ Full Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (TRC, 0.002 mg/L)
- AZ Fish Consumption (TRC, 0.667 mg/L)
- AZ Agricultural Livestock Watering (TRC, 0.05 mg/L)

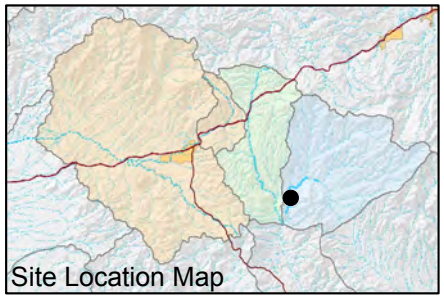
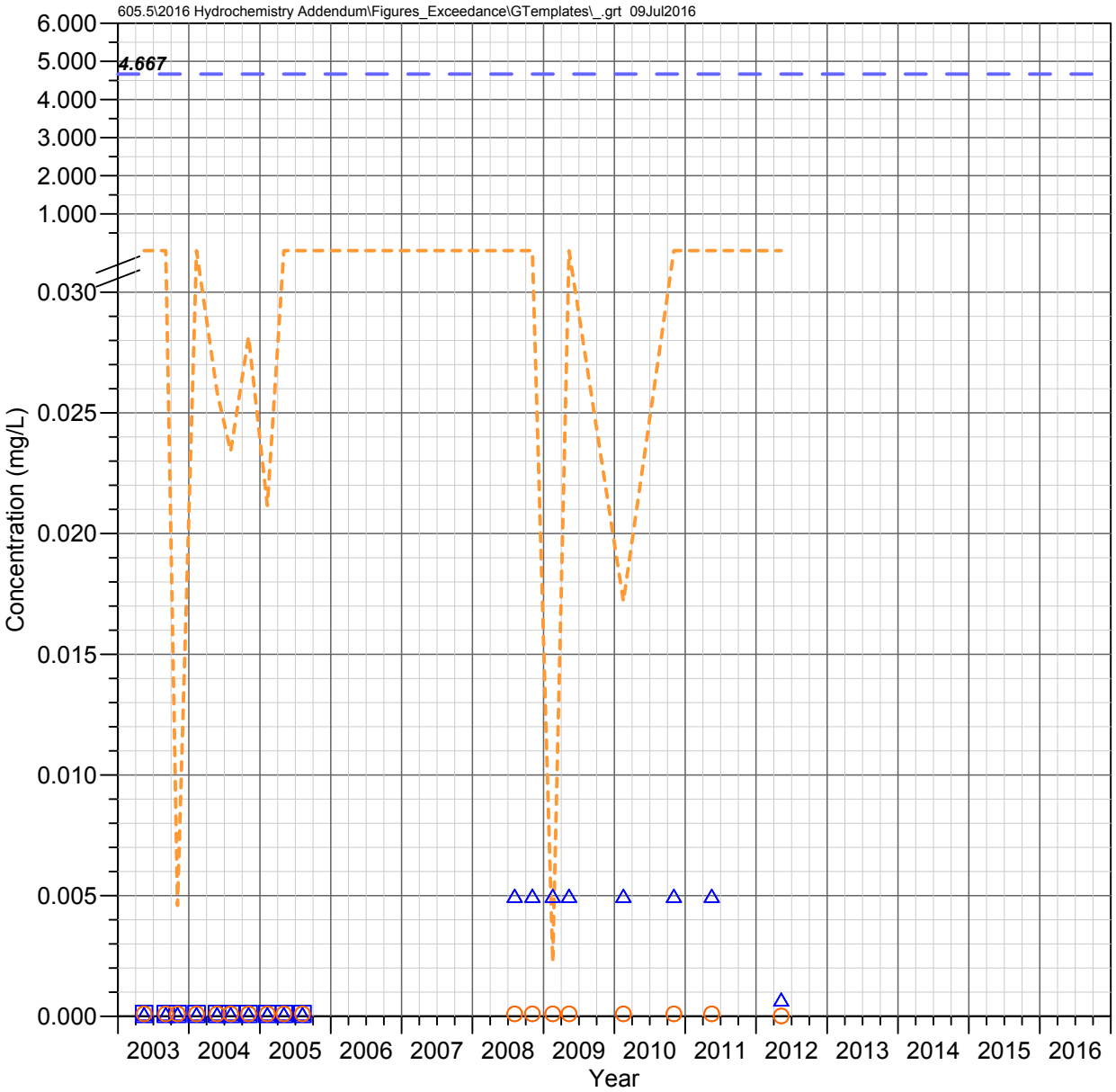


FIGURE F-697. SELENIUM CONCENTRATIONS OBSERVED AT MC 3.3 C (LOWER MINERAL), MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Pump Station Spring (QC 30.7 C)
Queen Creek Watershed

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- — — AZ Partial Body Contact (TRC, 4.667 mg/L)
- - - - AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)

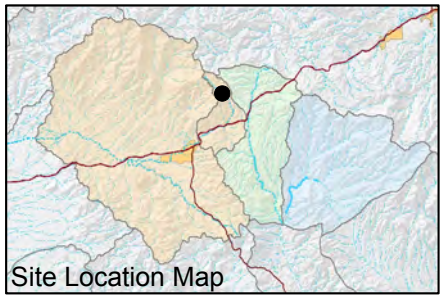
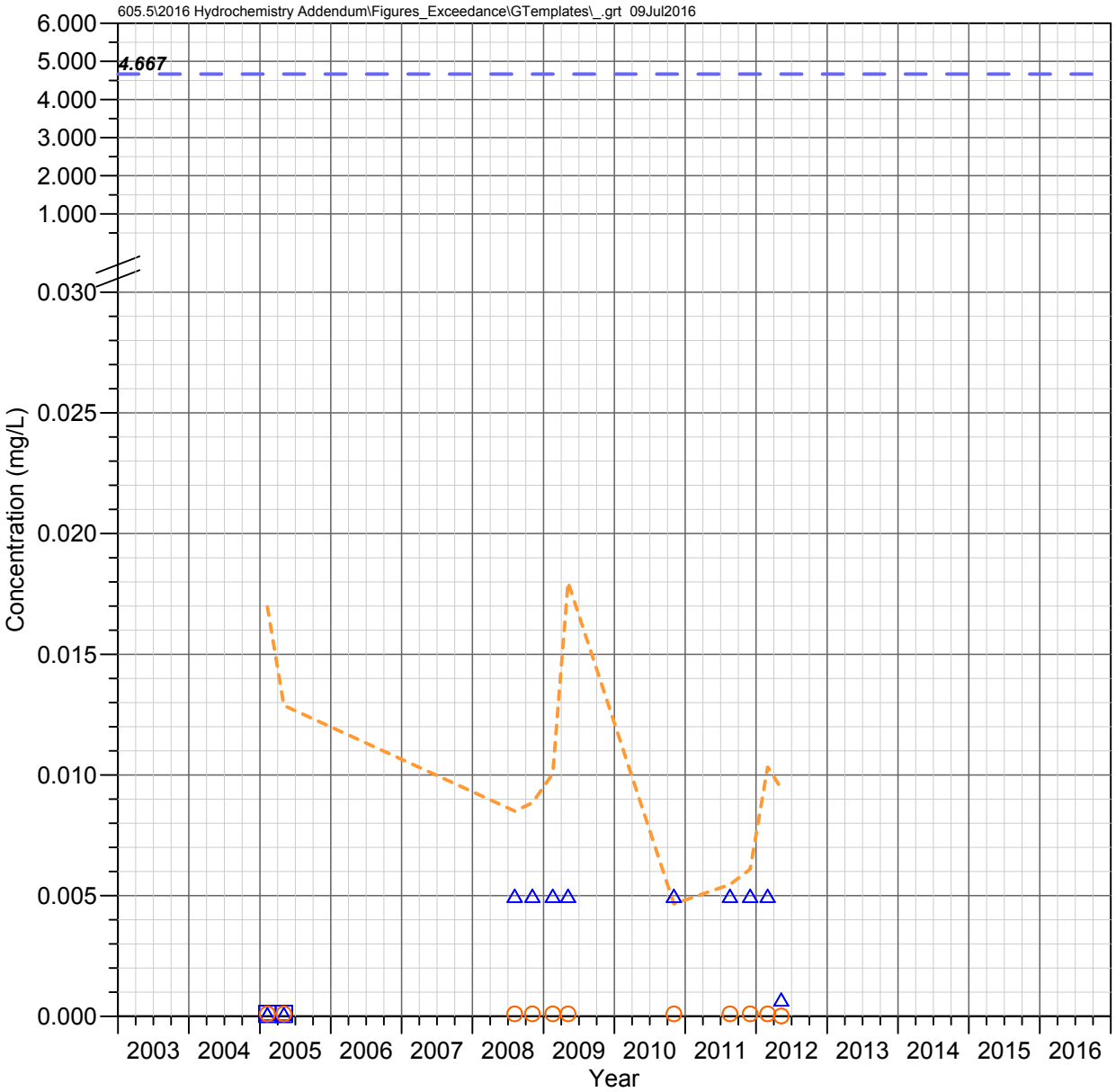


FIGURE F-698. SILVER CONCENTRATIONS OBSERVED AT PUMP STATION SPRING (QC 30.7 C), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 27.3 C
Queen Creek Watershed

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)

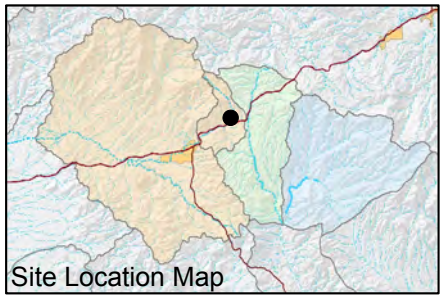
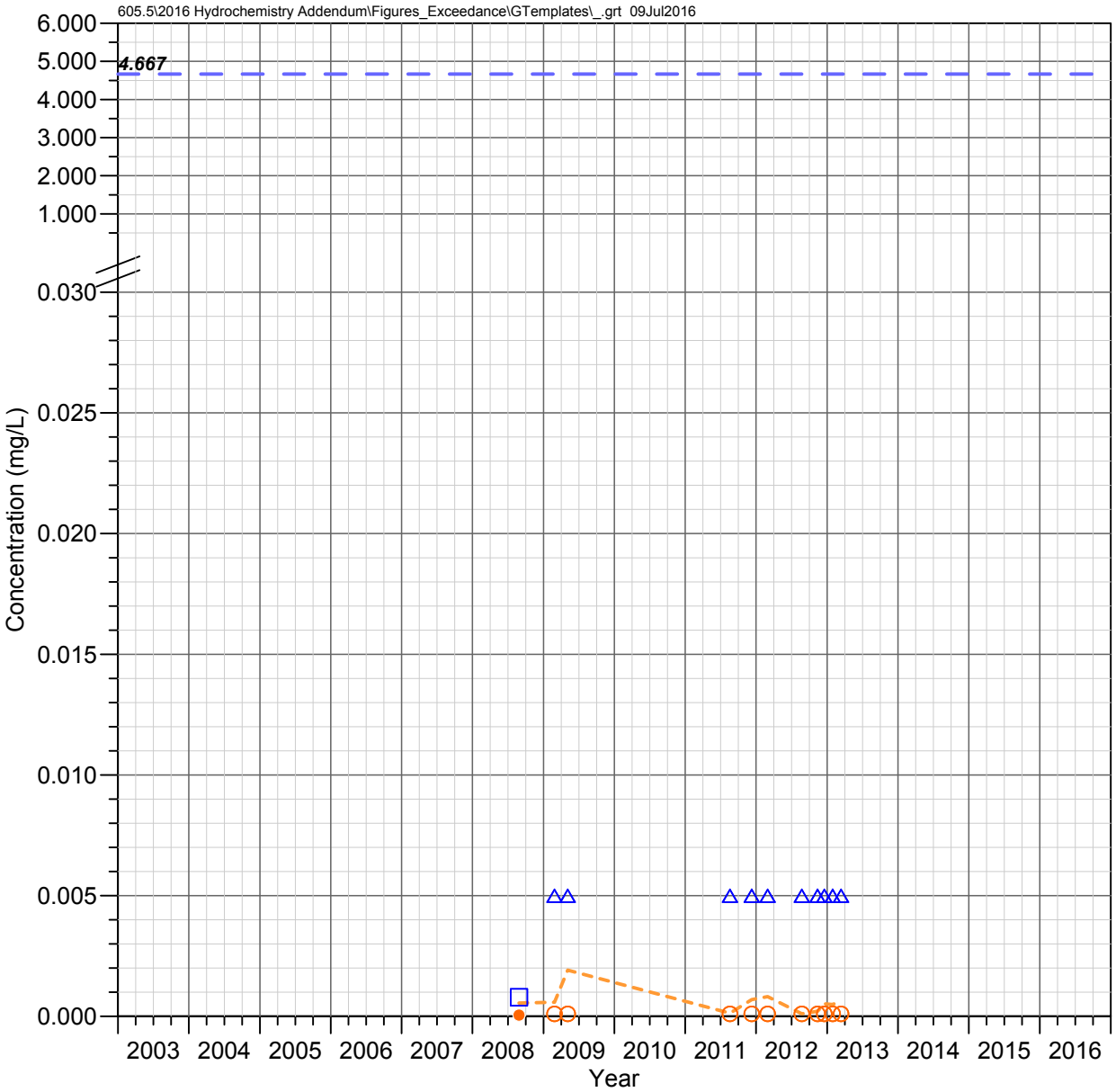


FIGURE F-699. SILVER CONCENTRATIONS OBSERVED AT QC 27.3 C, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Oak Flat Wash
Queen Creek Watershed

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- — — AZ Partial Body Contact (TRC, 4.667 mg/L)
- - - - AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)

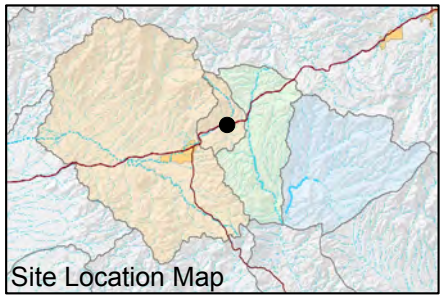
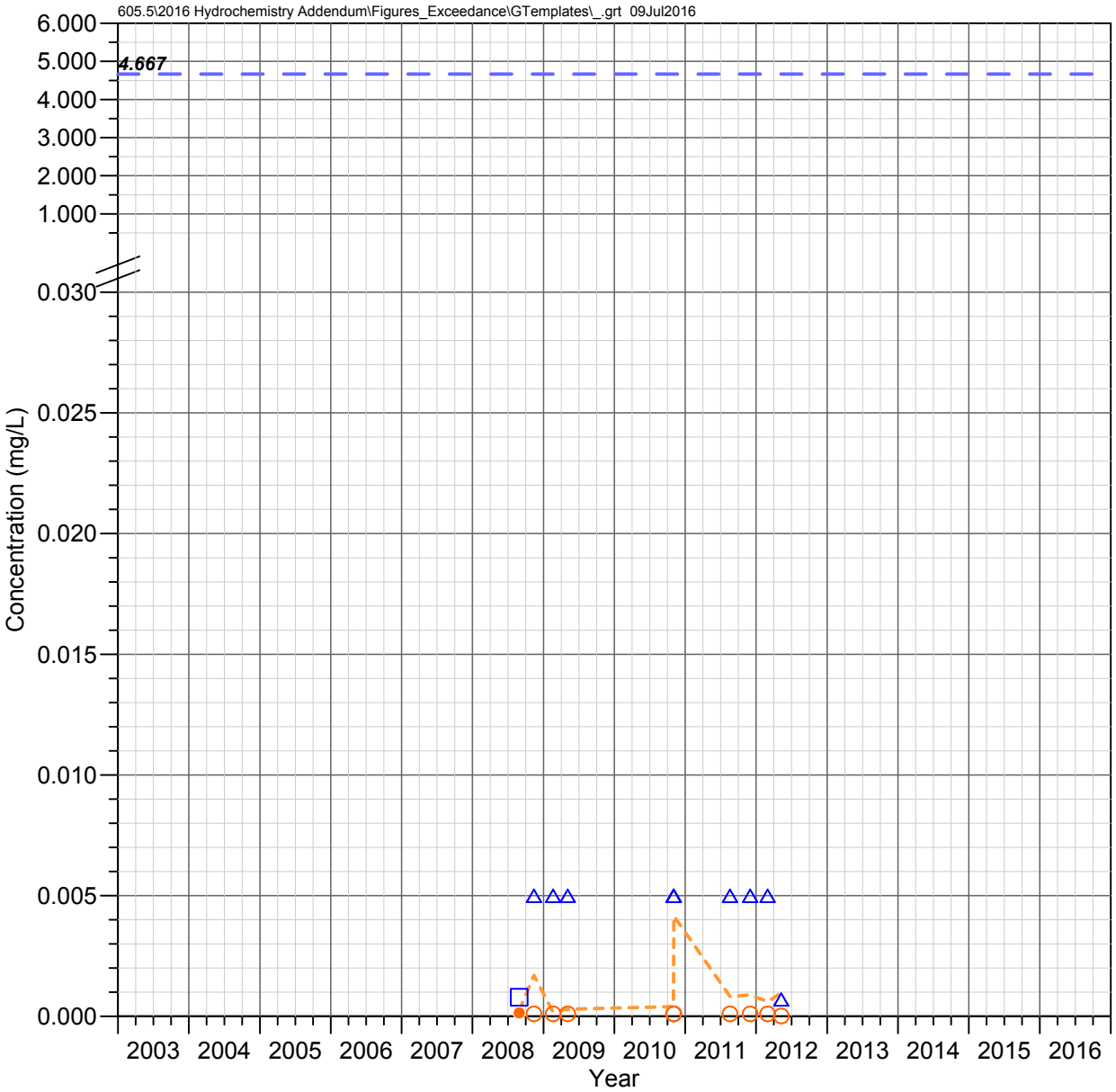


FIGURE F-700. SILVER CONCENTRATIONS OBSERVED AT OAK FLAT WASH, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Number 9 Wash
Queen Creek Watershed

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)

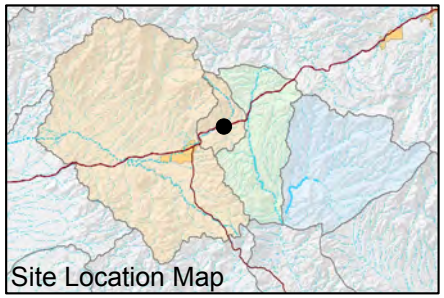
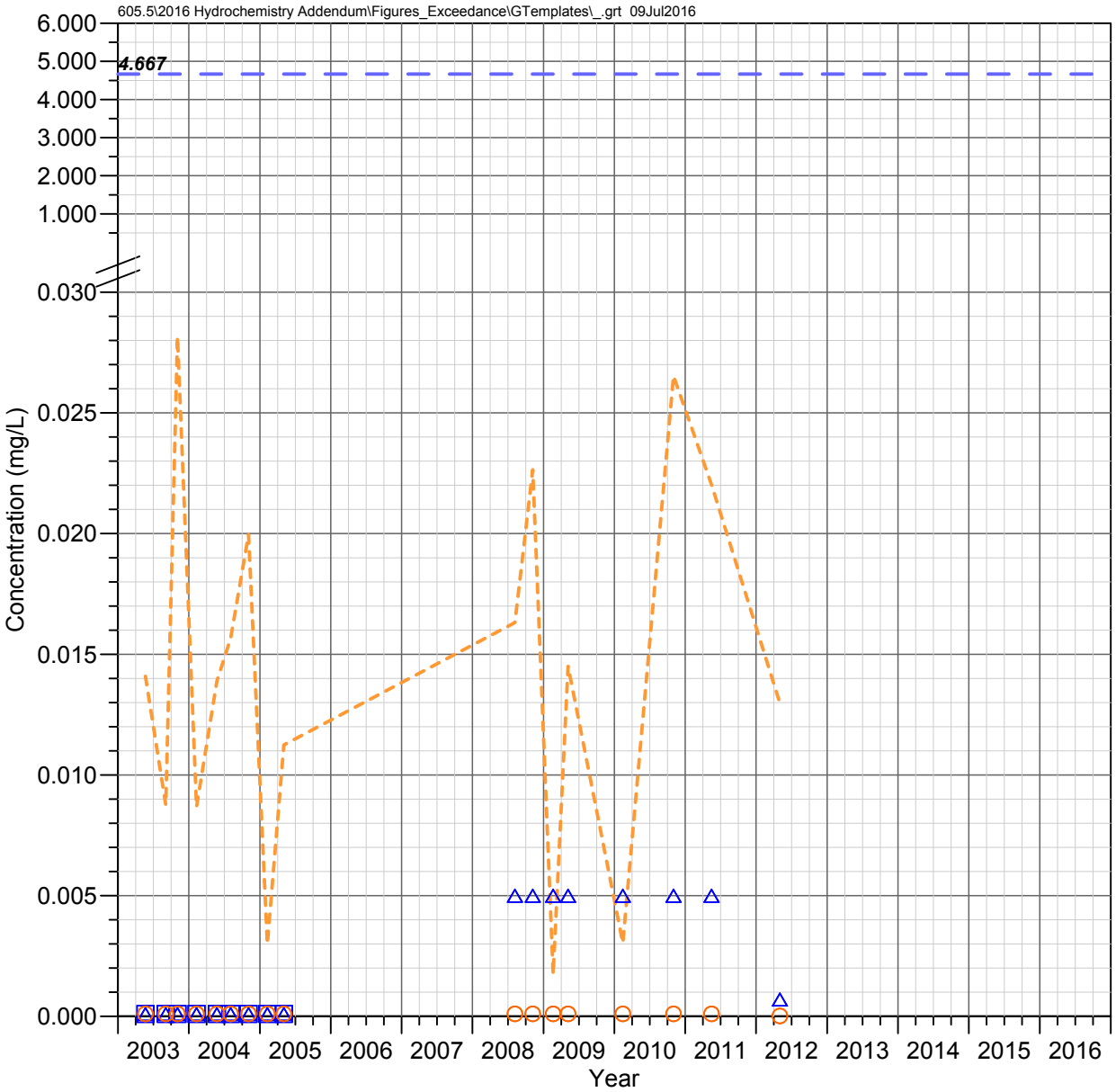


FIGURE F-701. SILVER CONCENTRATIONS OBSERVED AT NUMBER 9 WASH, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Boulder Hole (QC 23.6 C)
Queen Creek Watershed

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)

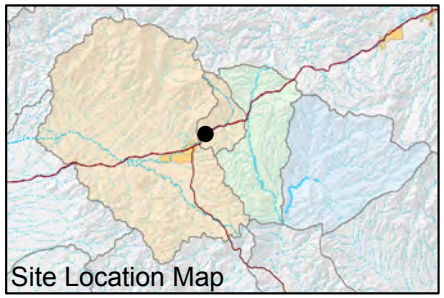
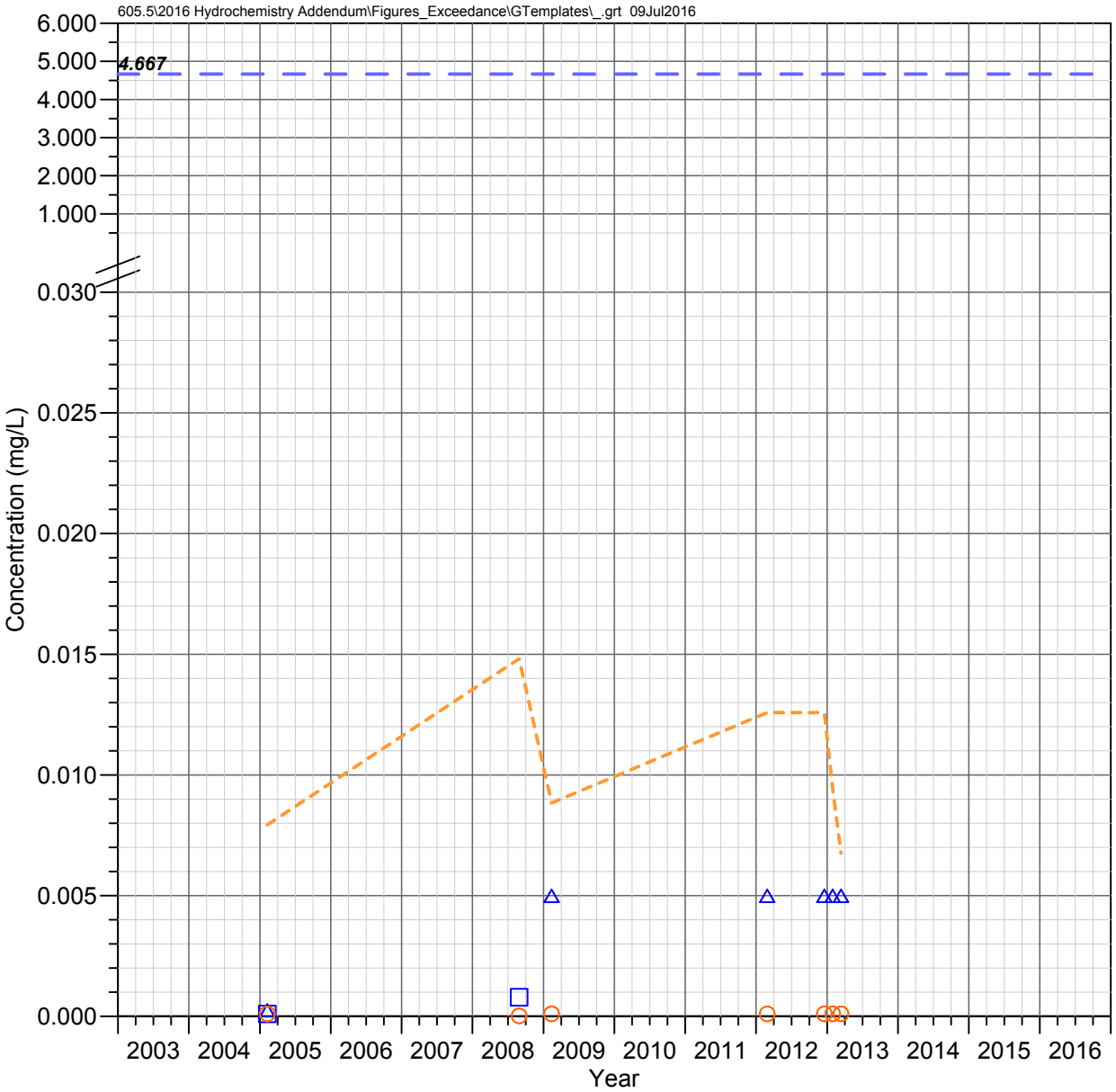


FIGURE F-702. SILVER CONCENTRATIONS OBSERVED AT BOULDER HOLE (QC 23.6 C), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 22.6 E (Karst Spring)
Queen Creek Watershed

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)

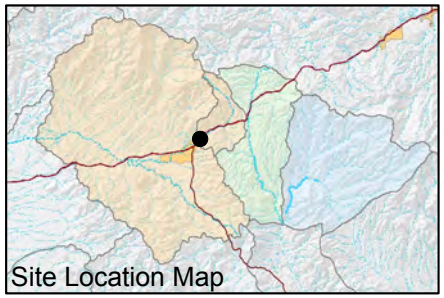
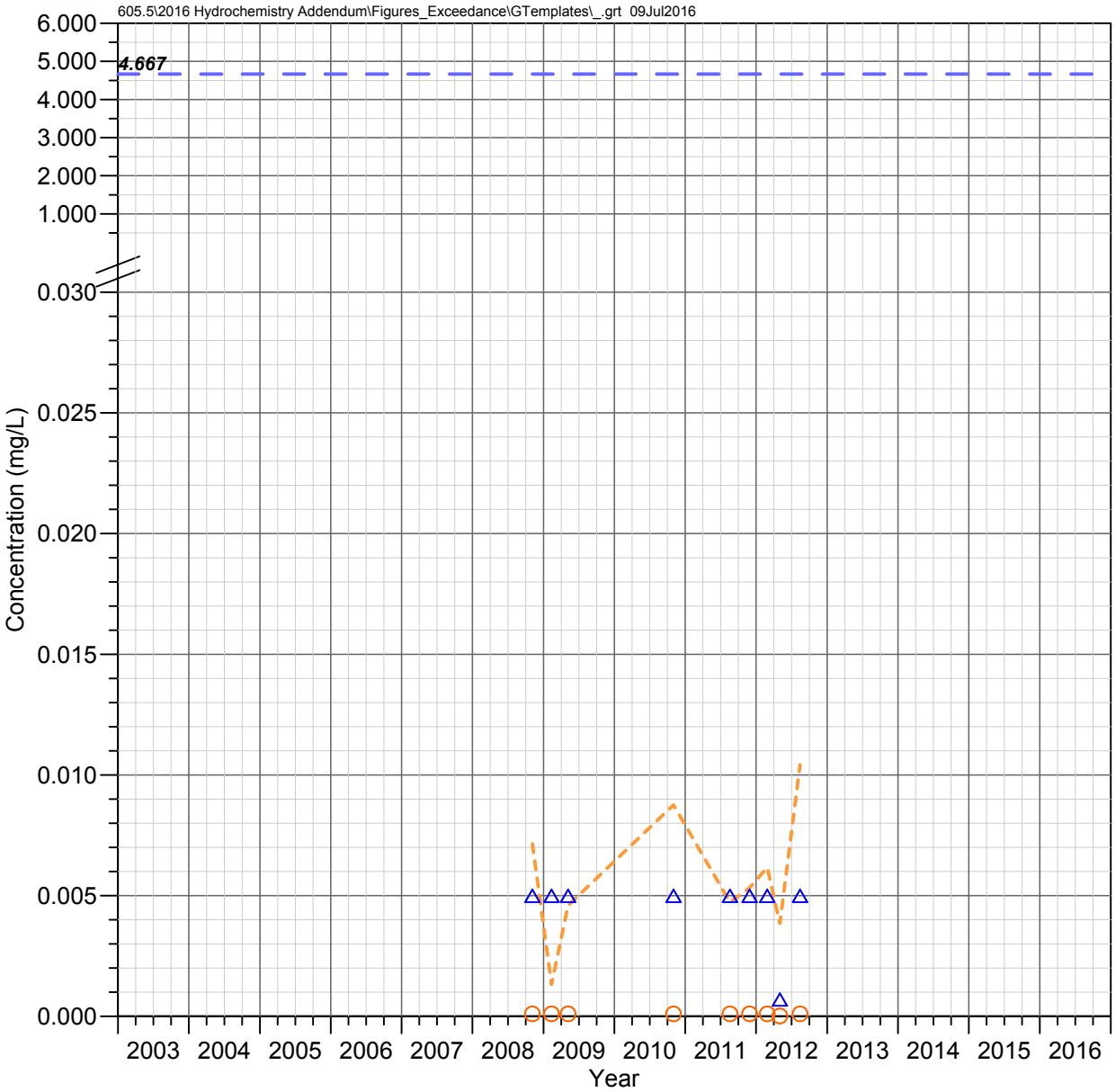


FIGURE F-703. SILVER CONCENTRATIONS OBSERVED AT QC 22.6 E (KARST SPRING), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 21.7 C (Magma Avenue)
Queen Creek Watershed

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)

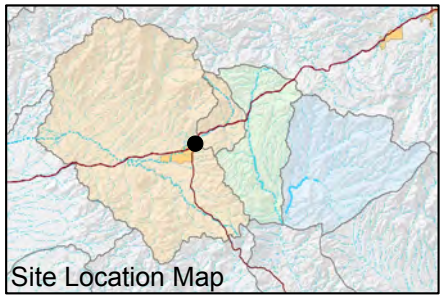
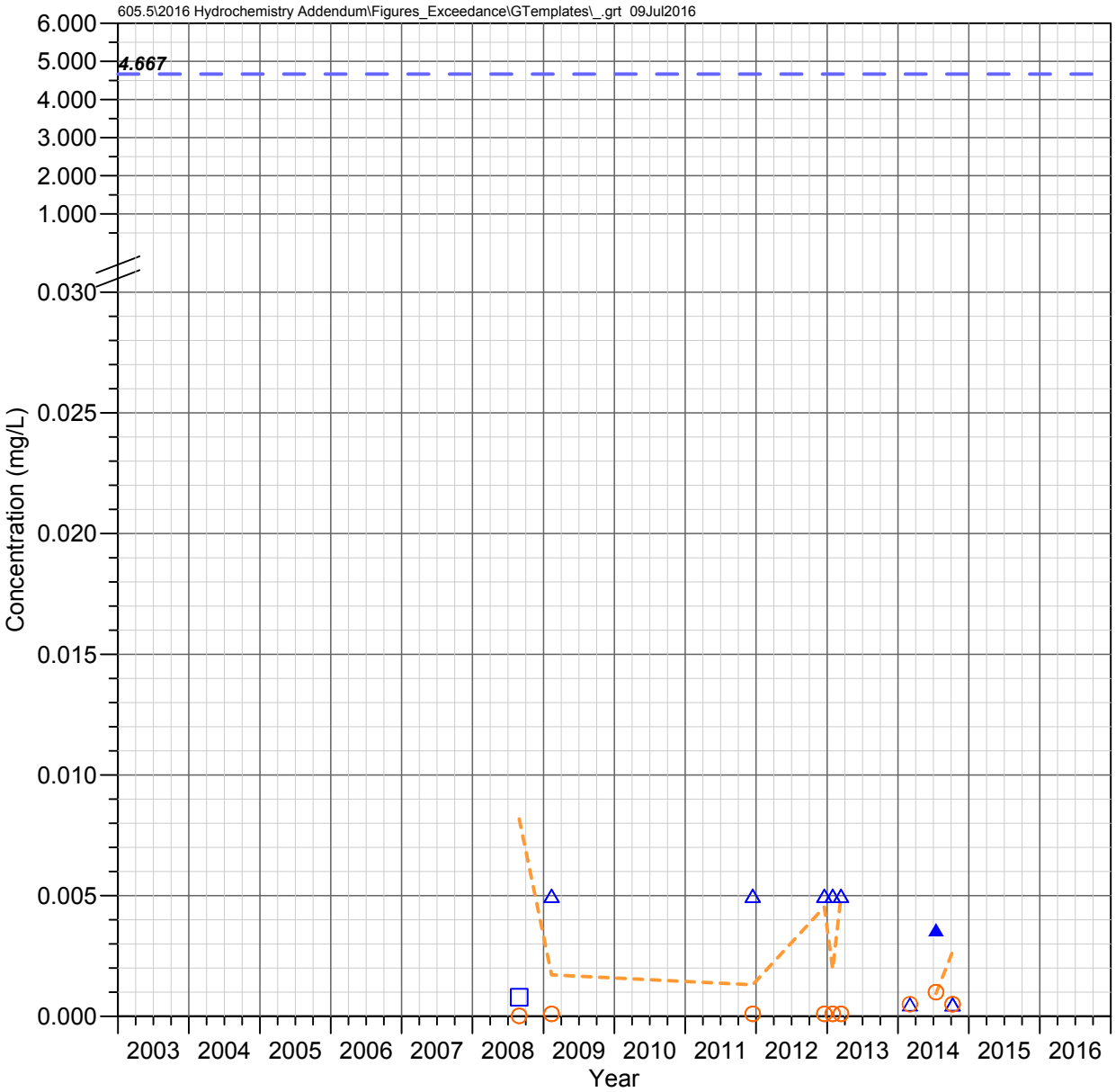


FIGURE F-704. SILVER CONCENTRATIONS OBSERVED AT QC 21.7 C (MAGMA AVENUE), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 19.7 C
Queen Creek Watershed

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)

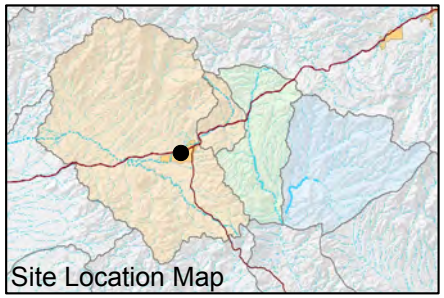
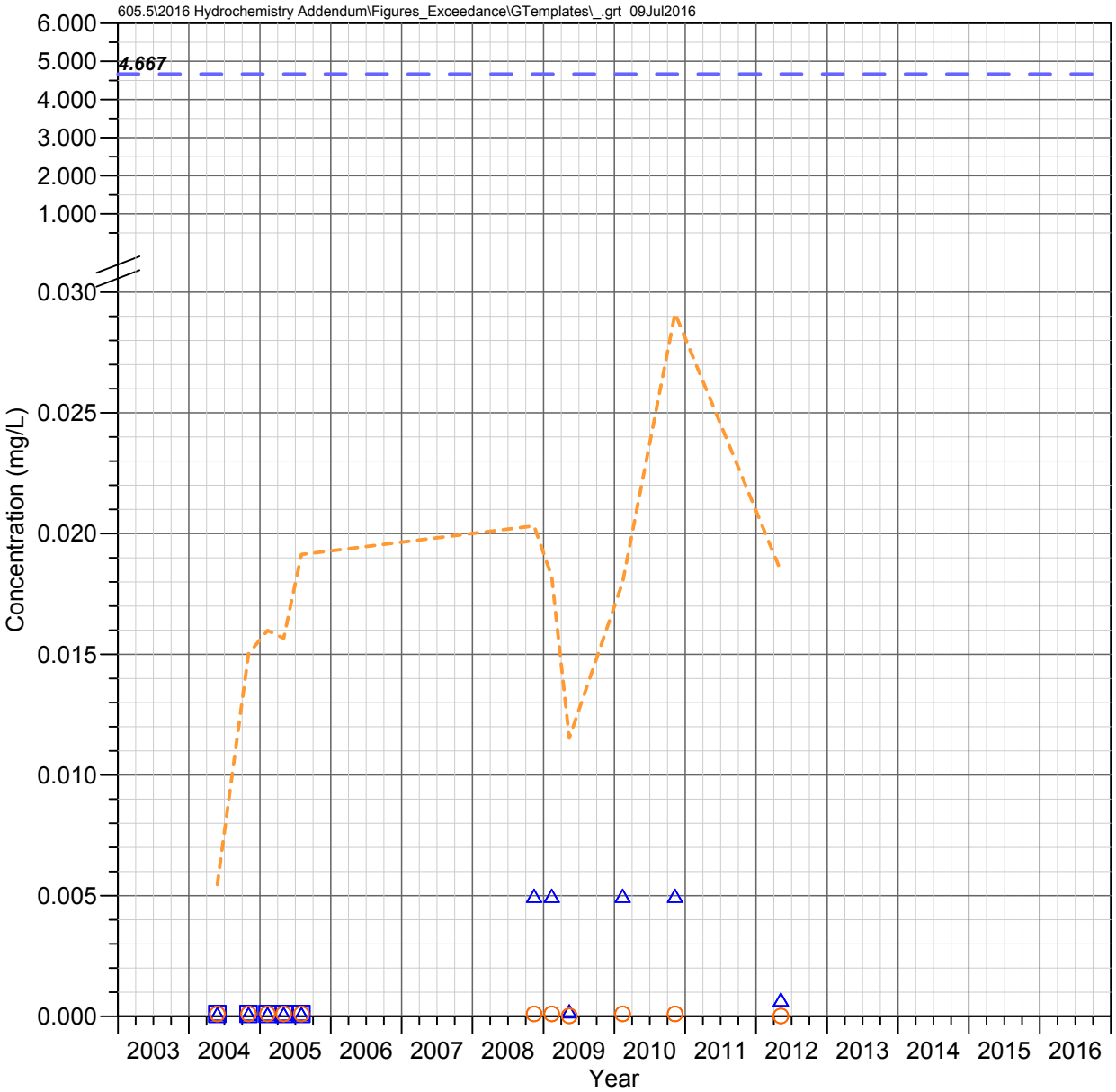


FIGURE F-705. SILVER CONCENTRATIONS OBSERVED AT QC 19.7 C, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Bored Spring
Queen Creek Watershed

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)

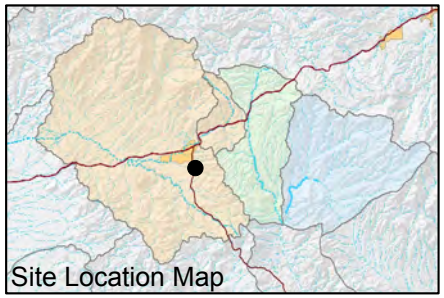
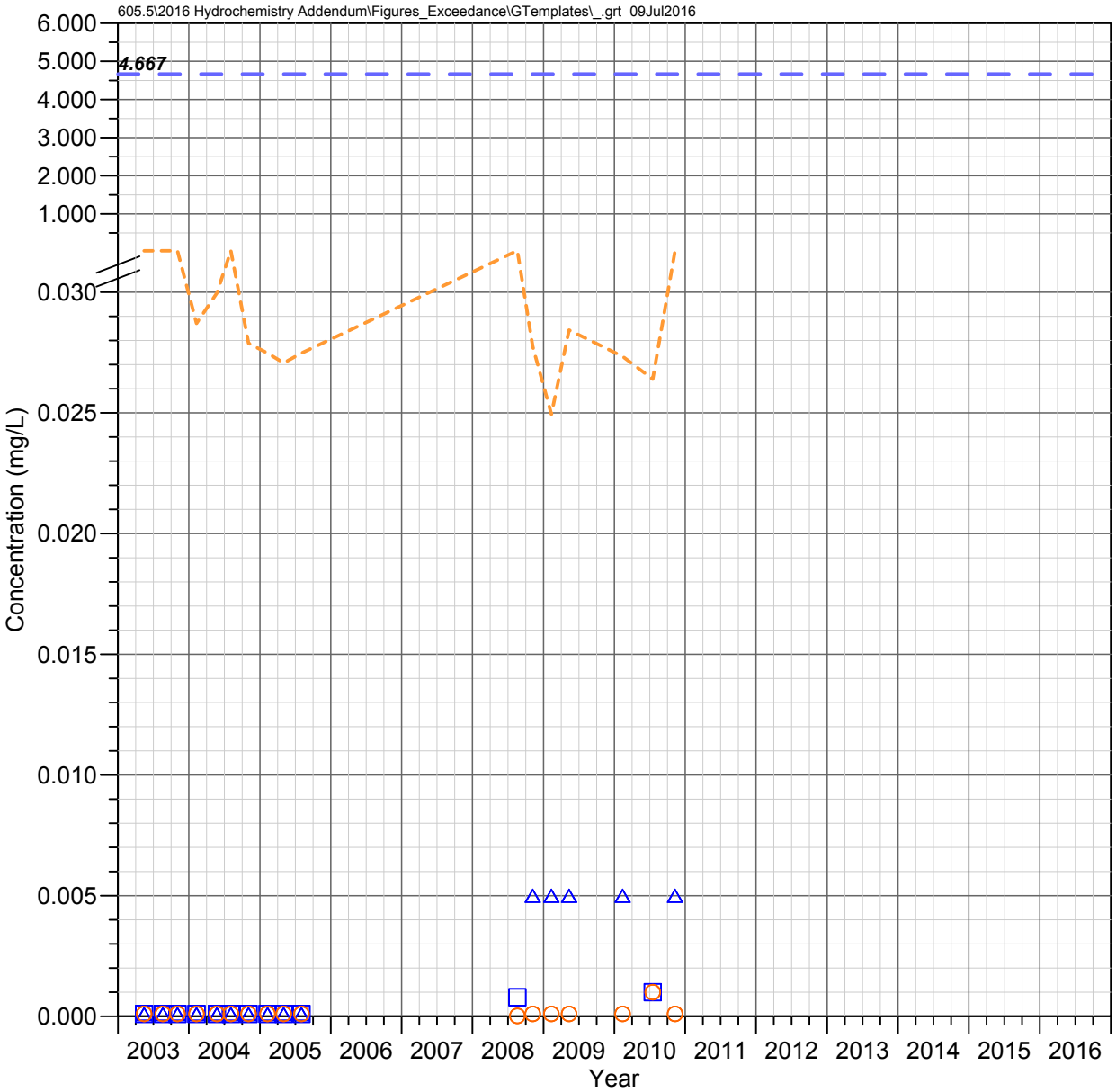


FIGURE F-706. SILVER CONCENTRATIONS OBSERVED AT BORED SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Hidden Spring
Queen Creek Watershed

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)

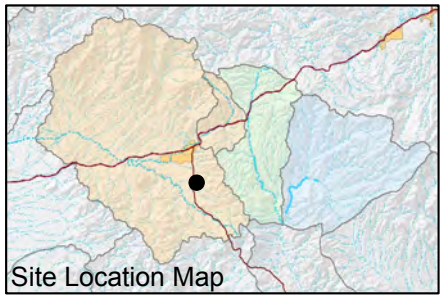
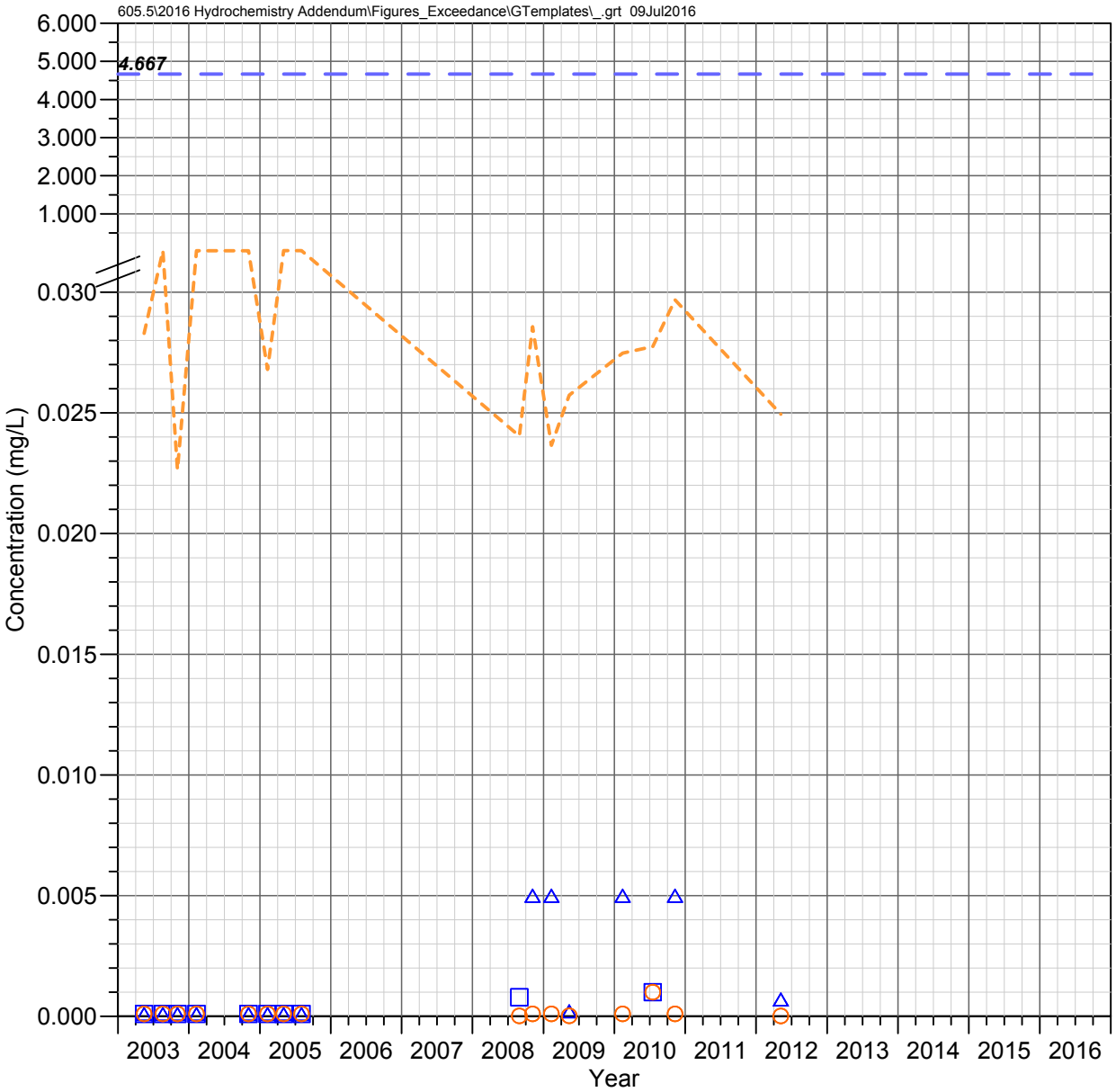


FIGURE F-707. SILVER CONCENTRATIONS OBSERVED AT HIDDEN SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Kane Spring
Queen Creek Watershed

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)

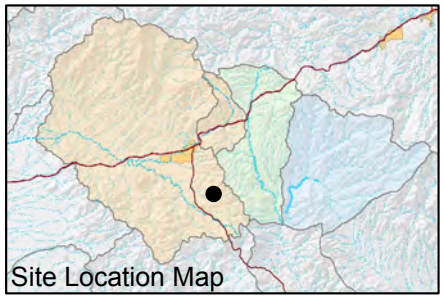
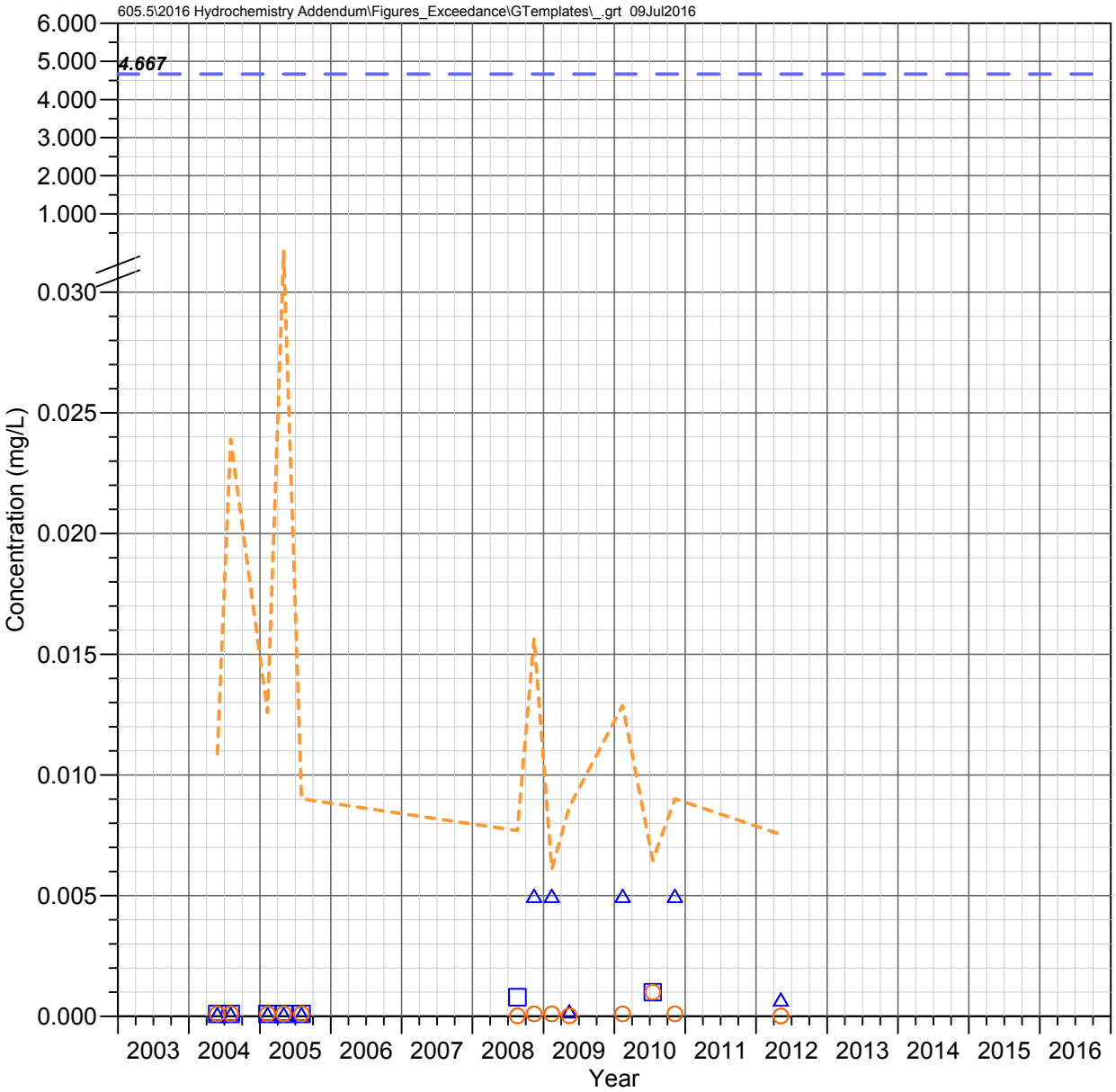


FIGURE F-708. SILVER CONCENTRATIONS OBSERVED AT KANE SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Blue Spring
Queen Creek Watershed

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)

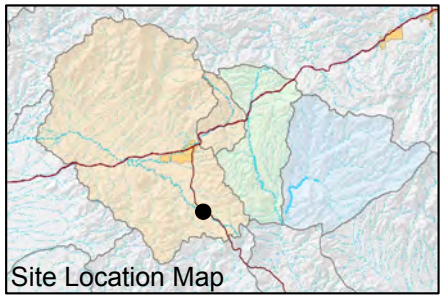
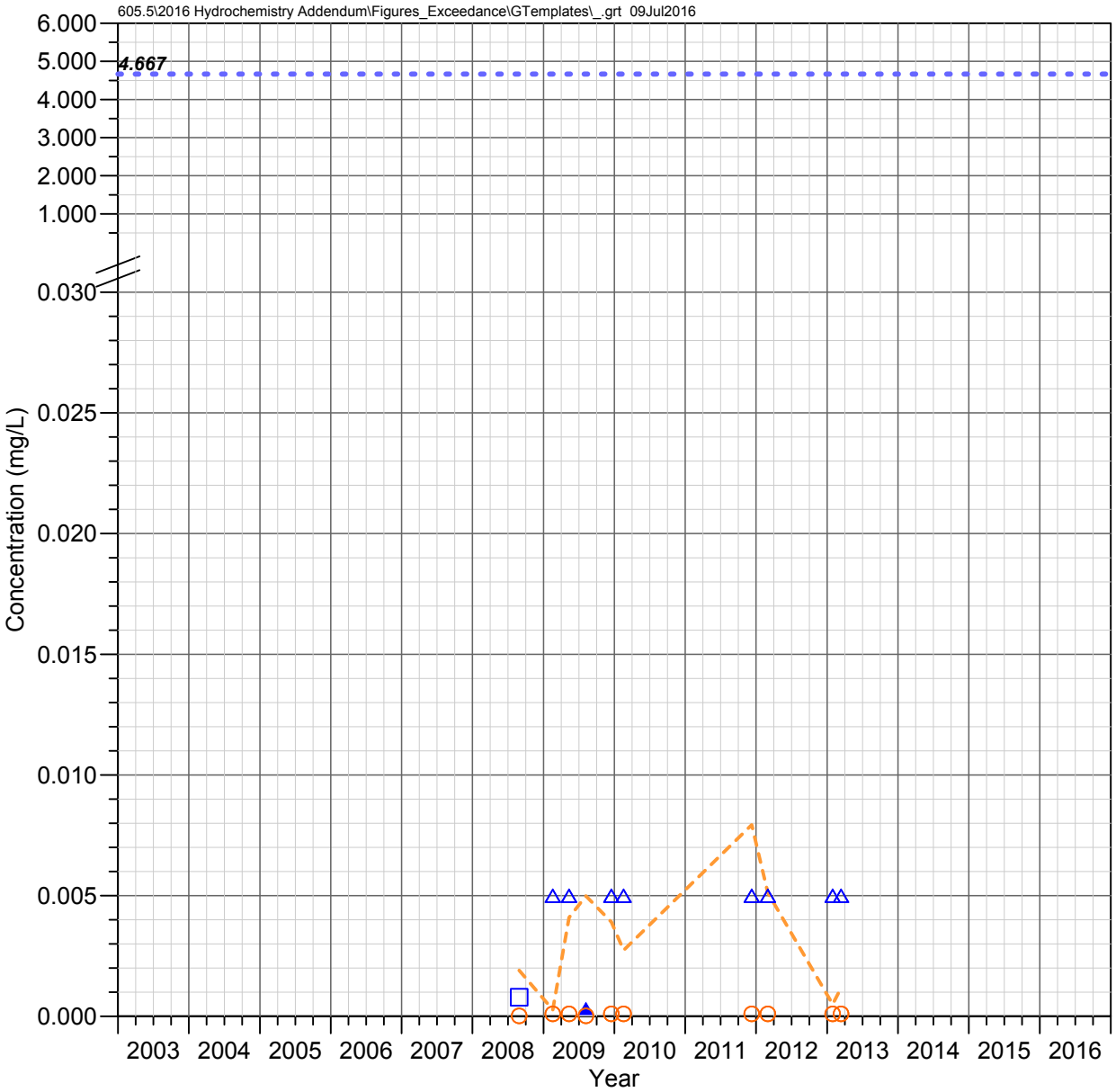


FIGURE F-709. SILVER CONCENTRATIONS OBSERVED AT BLUE SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



IC 1.0 C
Devils Canyon Watershed

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 8 mg/L)

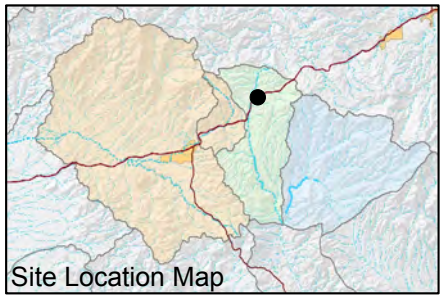
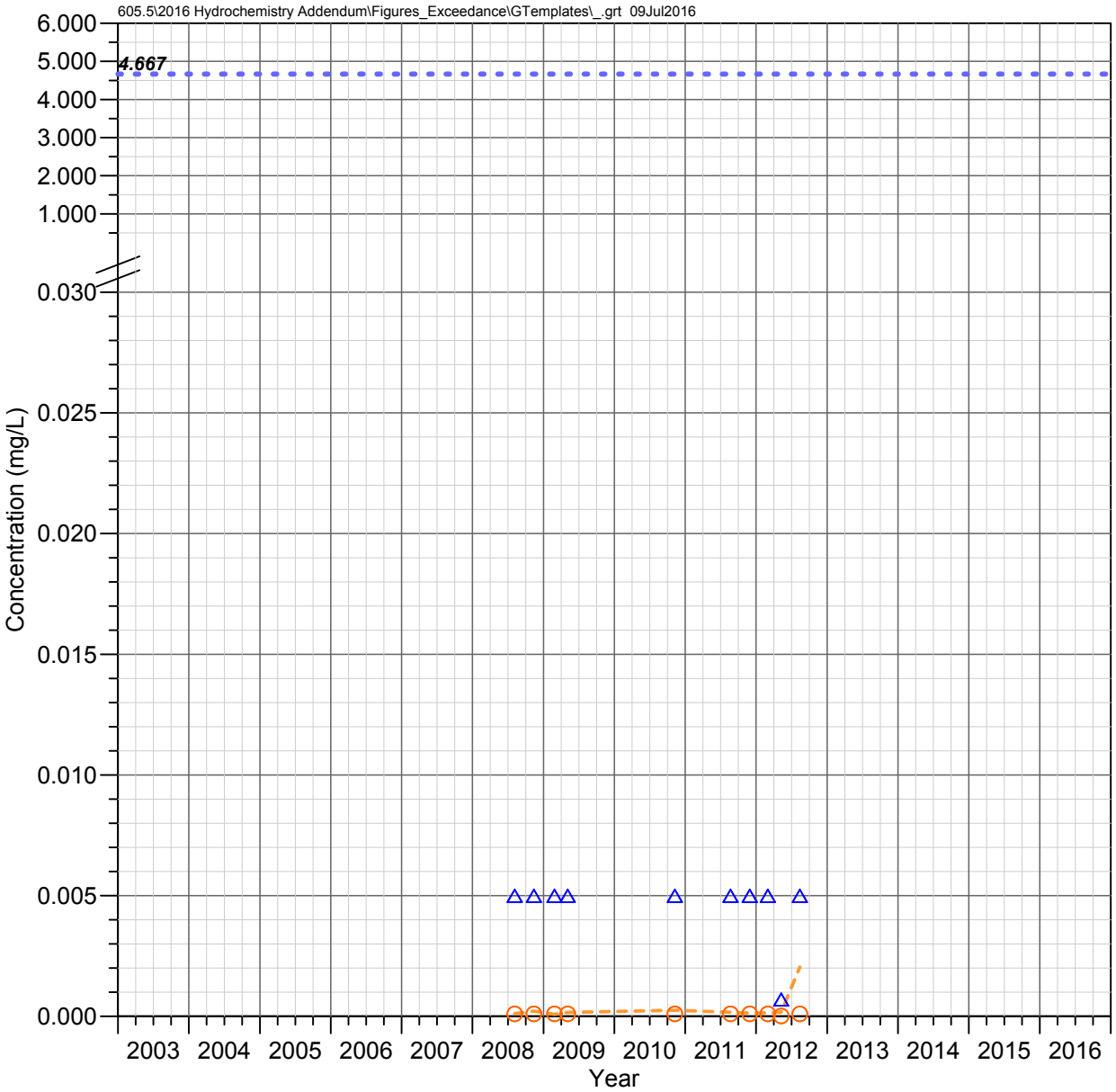


FIGURE F-710. SILVER CONCENTRATIONS OBSERVED AT IC 1.0 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 15.5 C
Devils Canyon Watershed

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 8 mg/L)

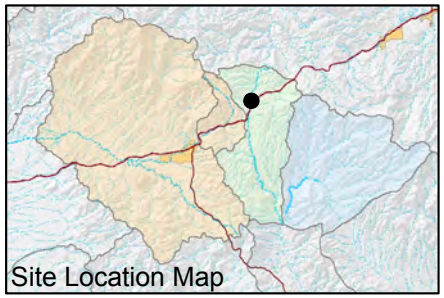
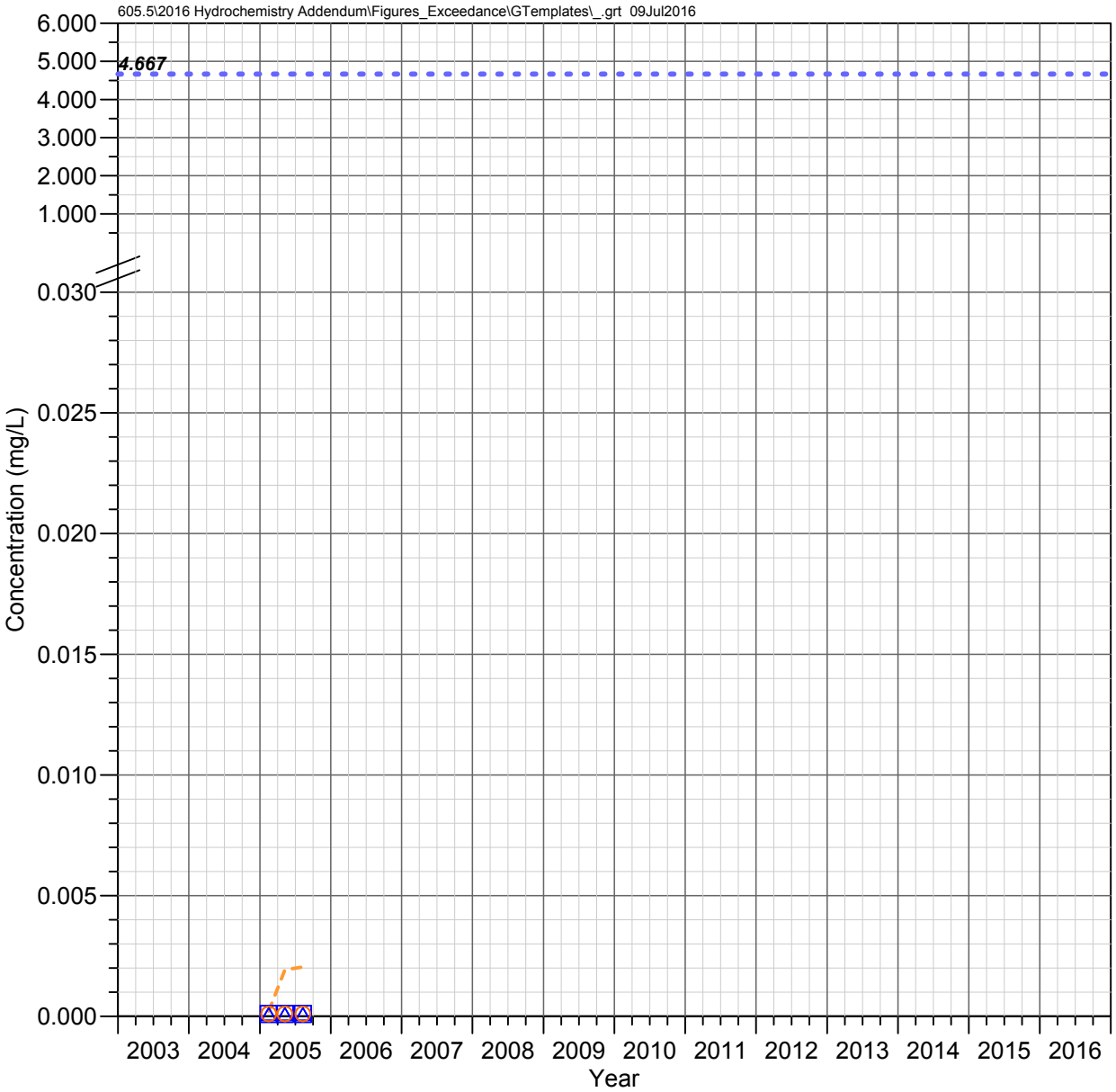


FIGURE F-711. SILVER CONCENTRATIONS OBSERVED AT DC 15.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 15.2 C
Devils Canyon Watershed

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 8 mg/L)

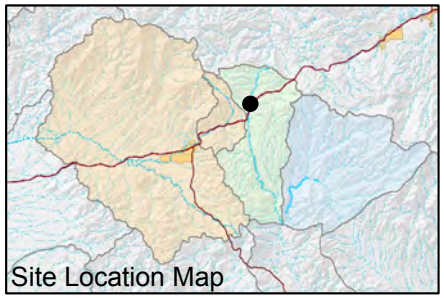
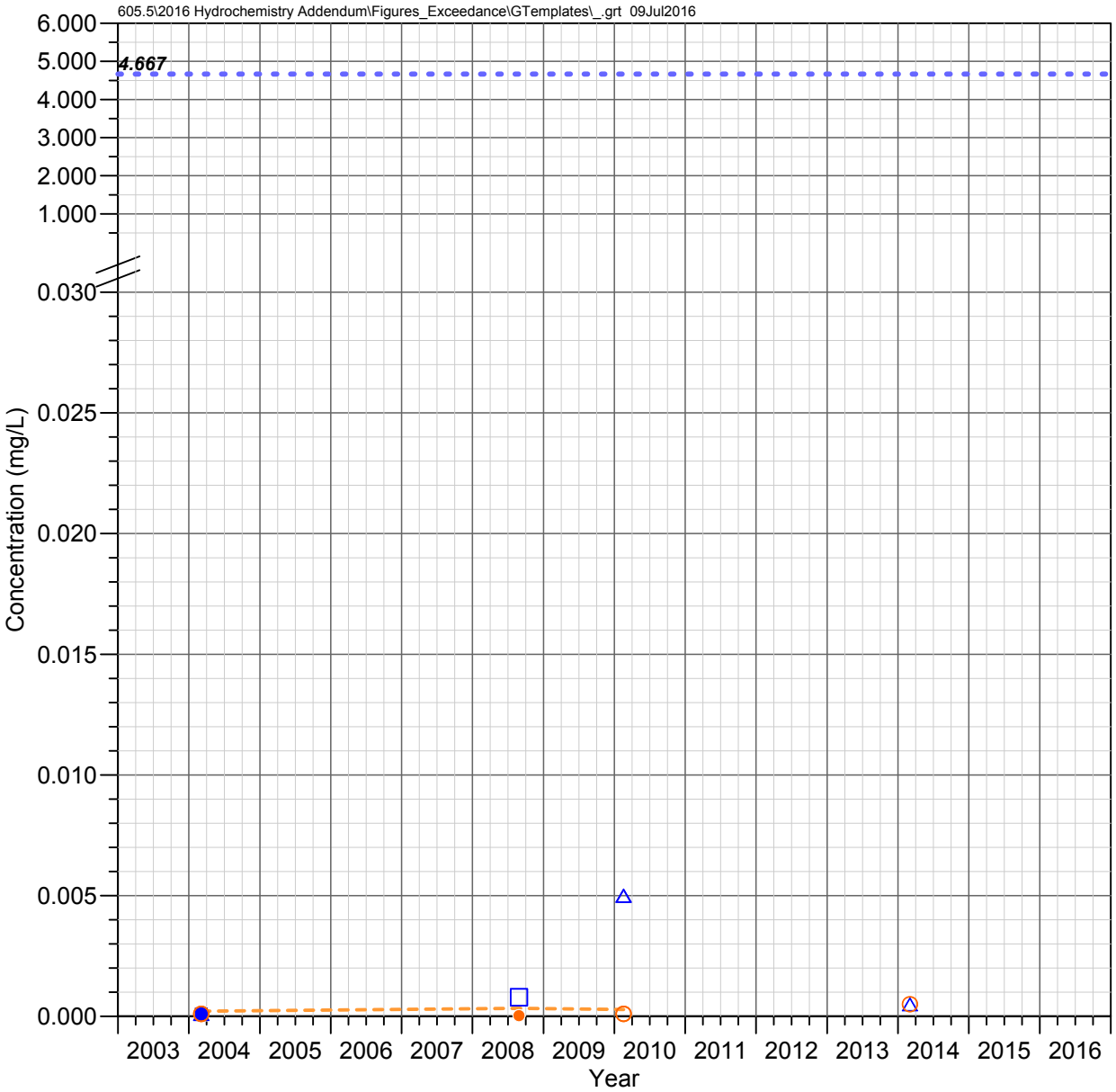


FIGURE F-712. SILVER CONCENTRATIONS OBSERVED AT DC 15.2 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 14.7 C
Devils Canyon Watershed

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 8 mg/L)

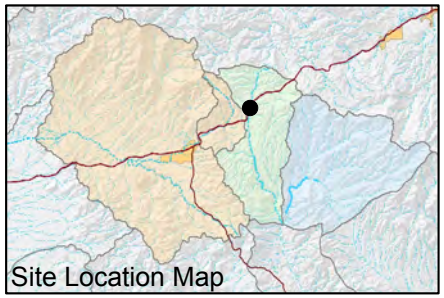
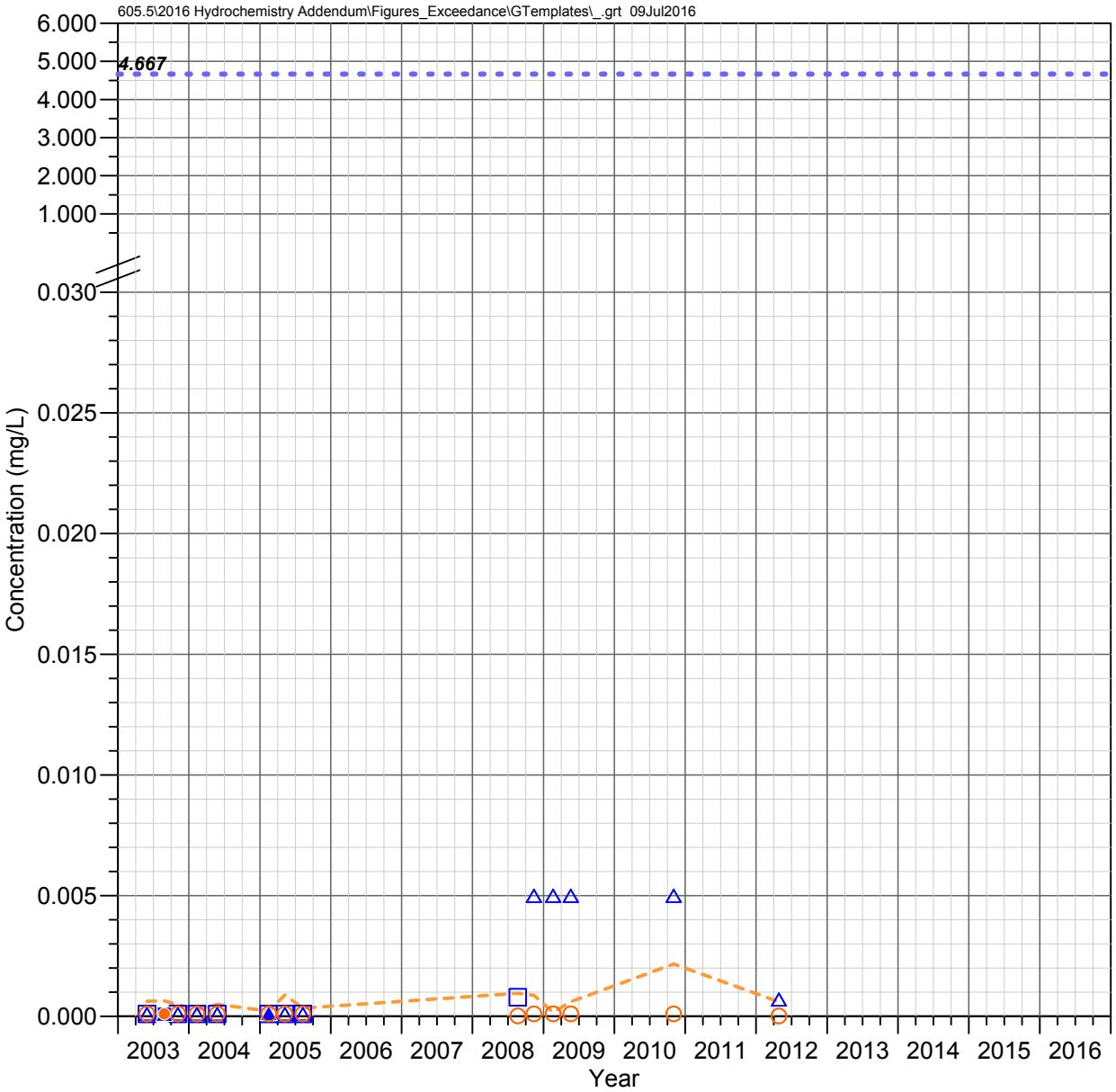


FIGURE F-713. SILVER CONCENTRATIONS OBSERVED AT DC 14.7 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 13.5 C
Devils Canyon Watershed

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 8 mg/L)

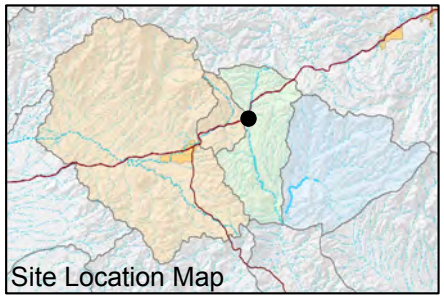
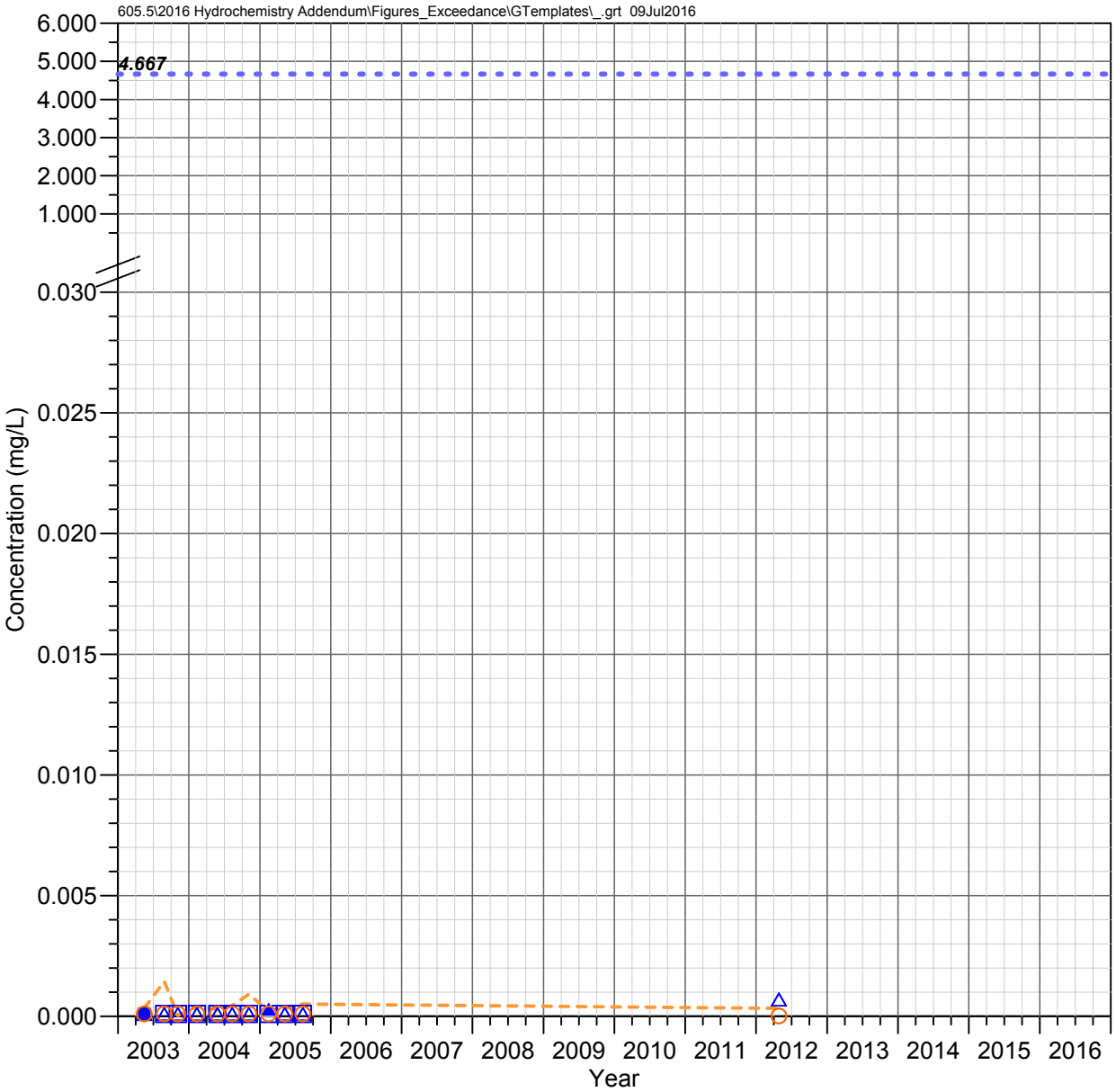


FIGURE F-714. SILVER CONCENTRATIONS OBSERVED AT DC 13.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 10.9 C
Devils Canyon Watershed

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 8 mg/L)

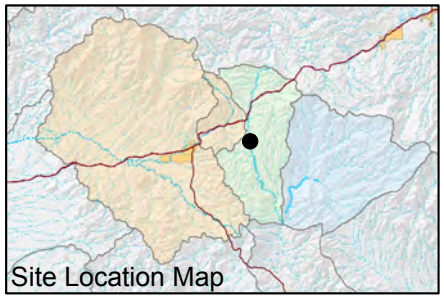
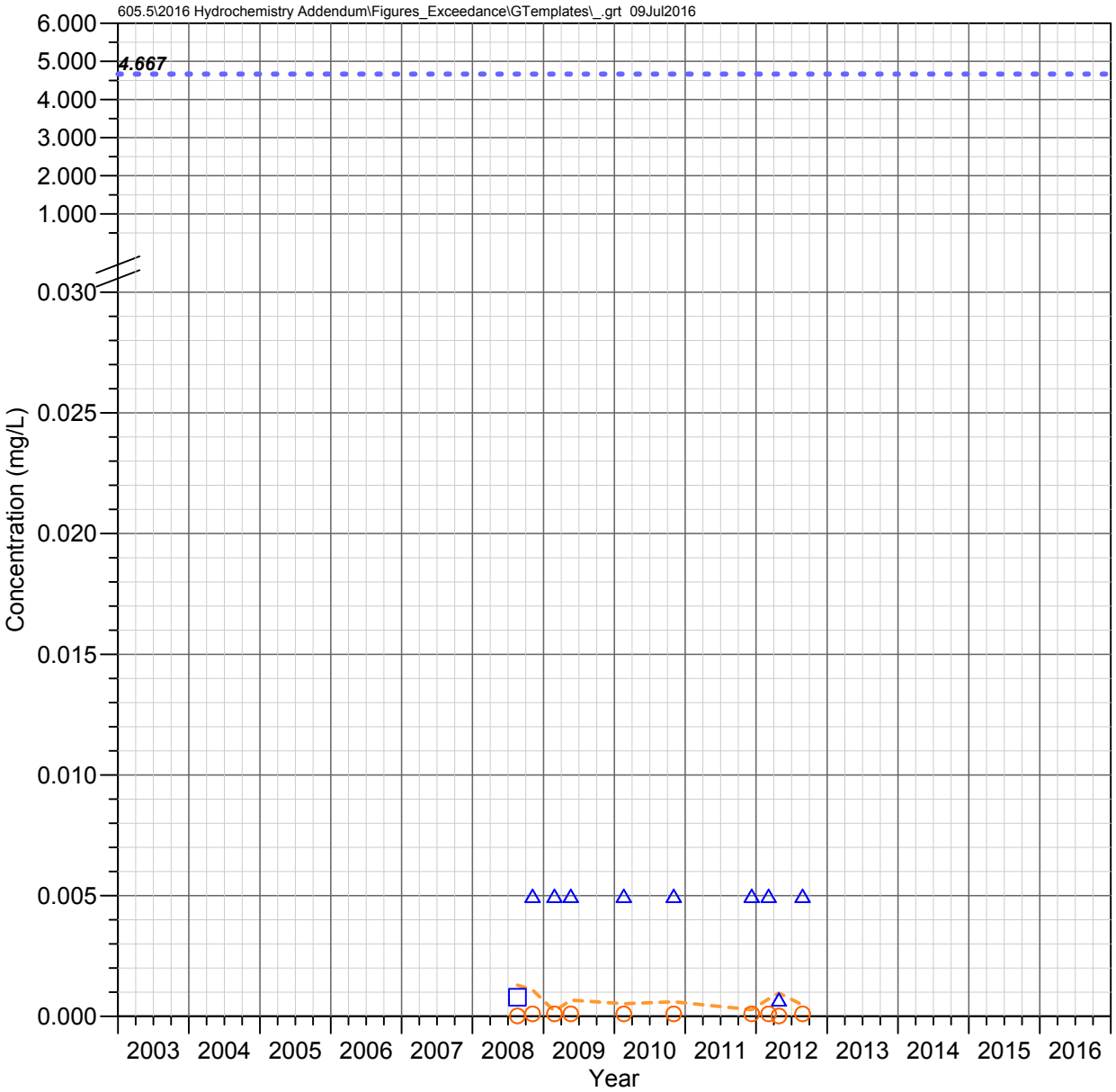


FIGURE F-715. SILVER CONCENTRATIONS OBSERVED AT DC 10.9 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



RR 1.5 C
Devils Canyon Watershed

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 8 mg/L)

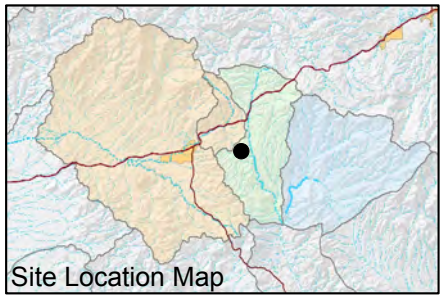
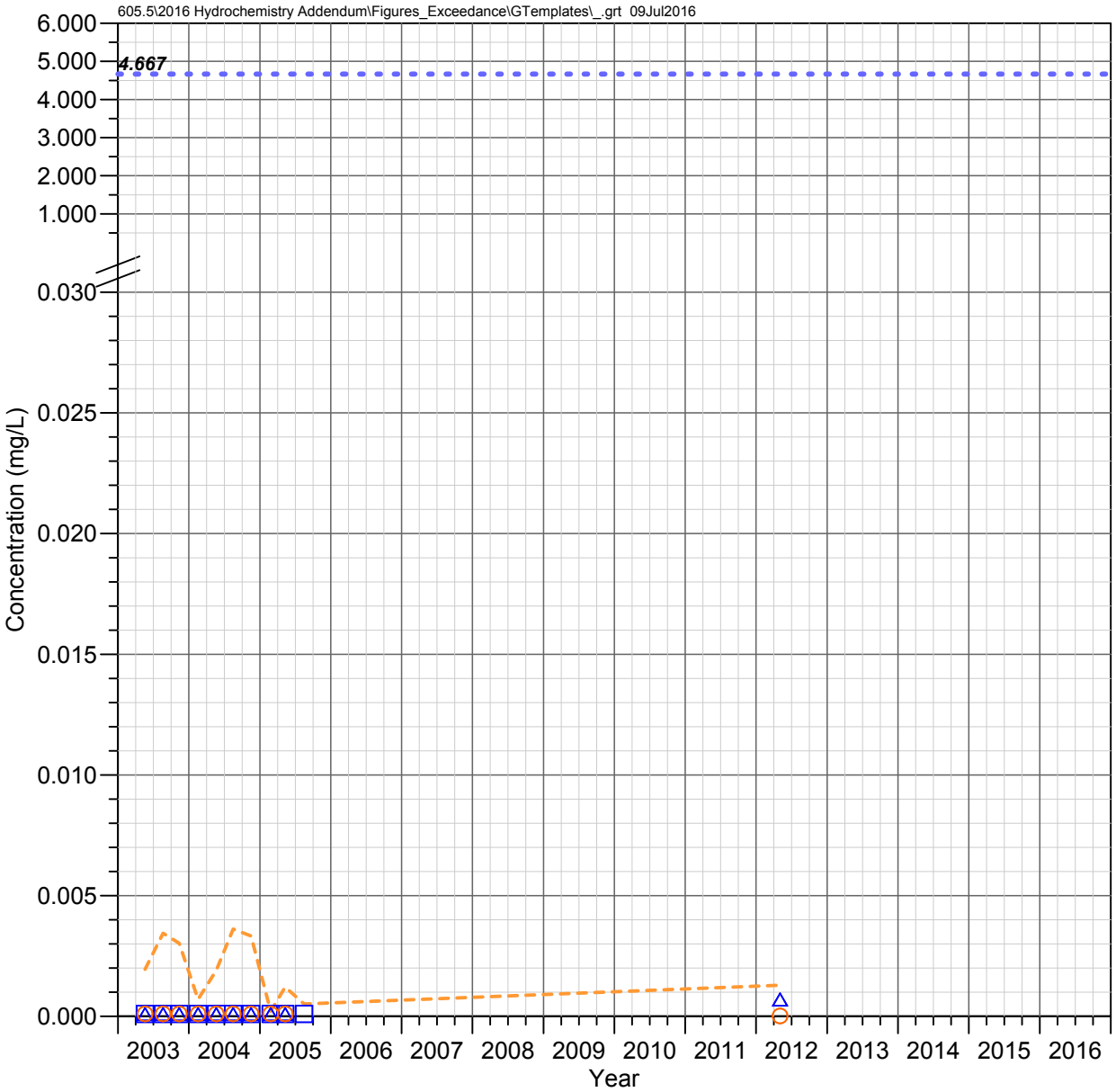


FIGURE F-716. SILVER CONCENTRATIONS OBSERVED AT RR 1.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.8 C
Devils Canyon Watershed

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 8 mg/L)

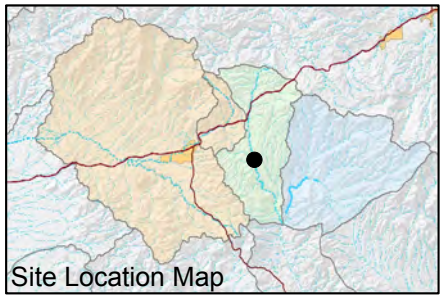
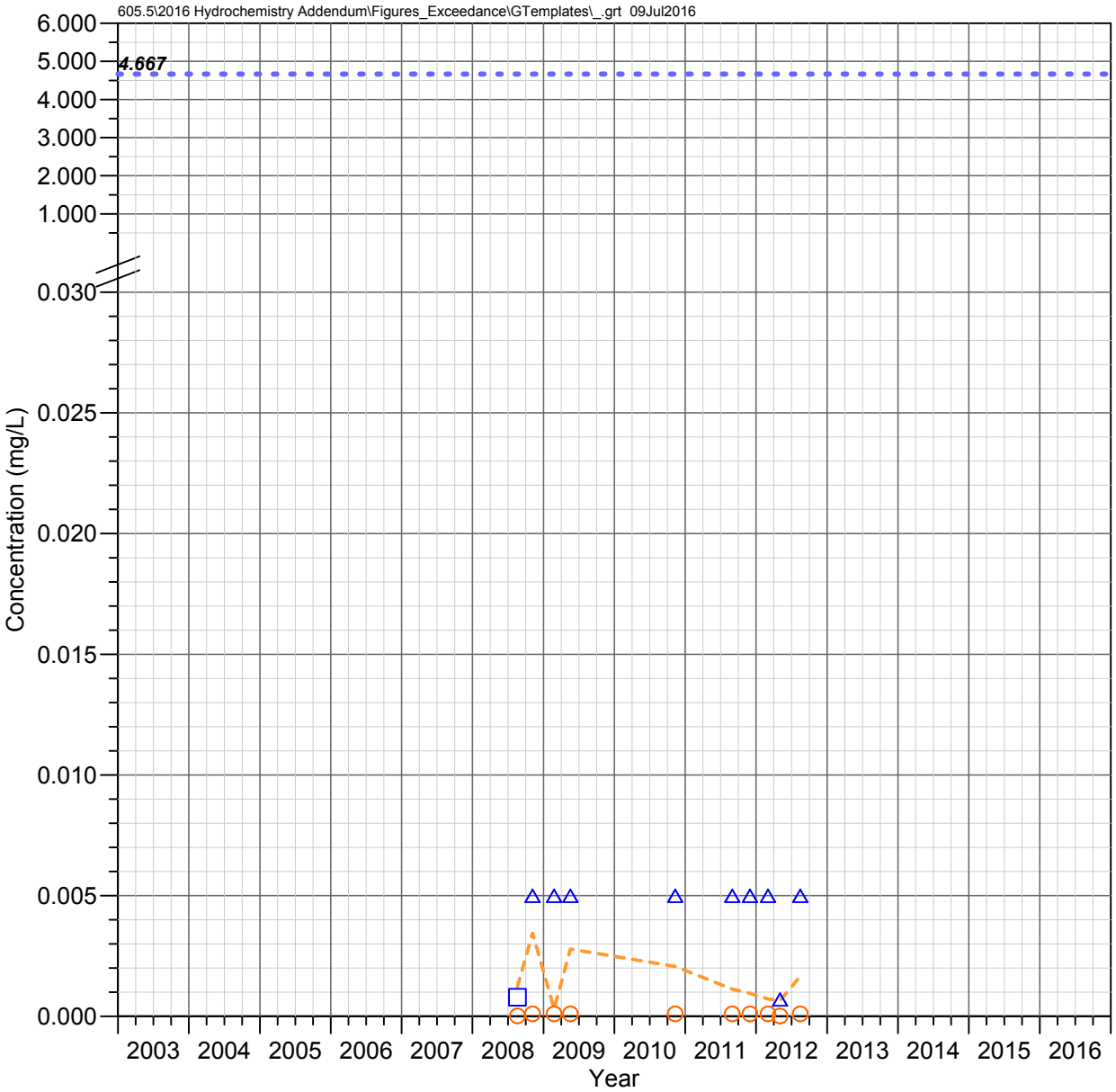


FIGURE F-717. SILVER CONCENTRATIONS OBSERVED AT DC 8.8 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



H 0.1 C
Devils Canyon Watershed

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 8 mg/L)

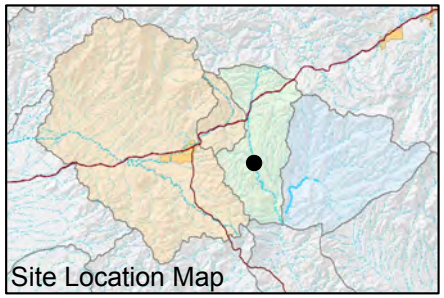
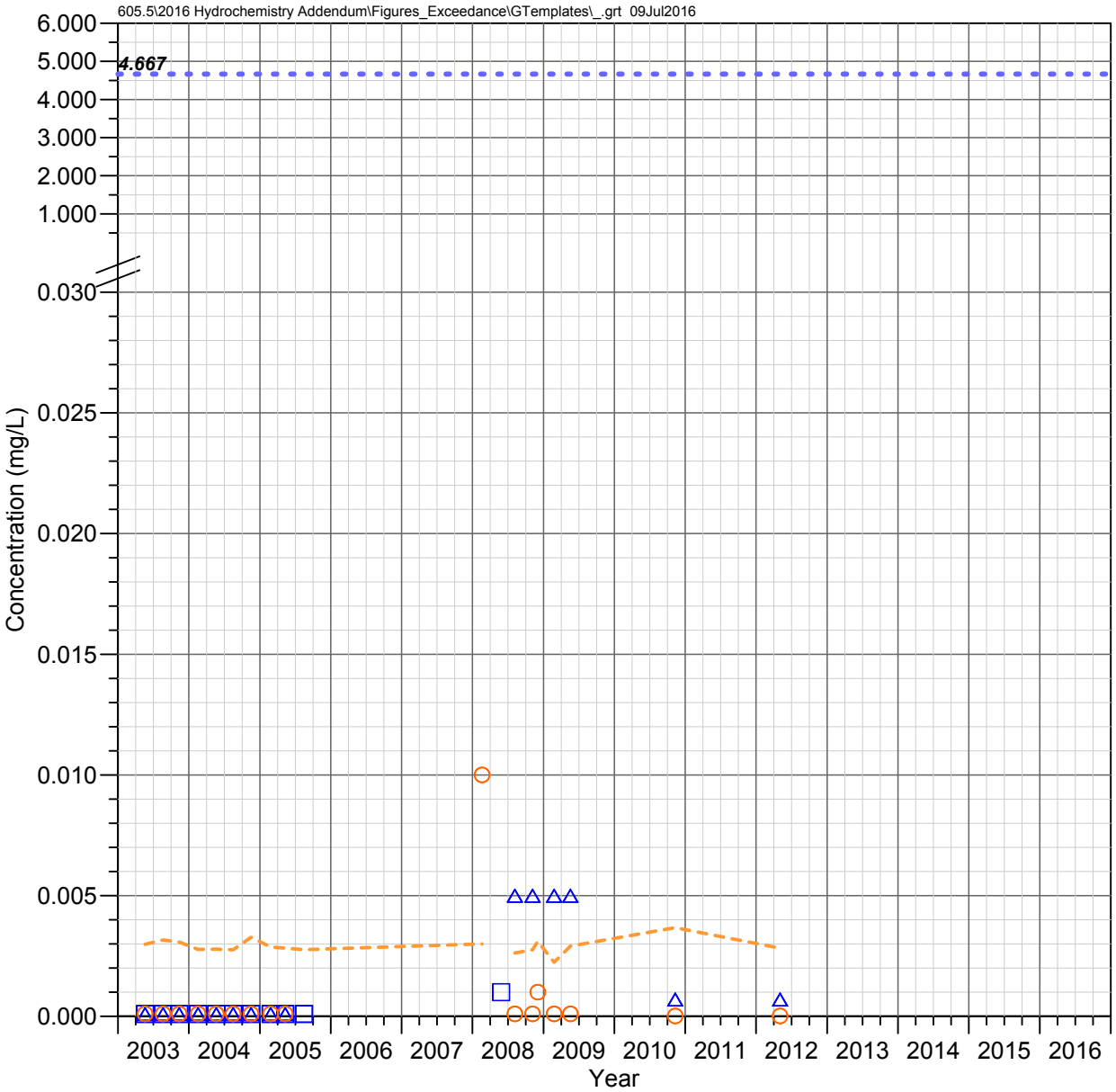


FIGURE F-718. SILVER CONCENTRATIONS OBSERVED AT H 0.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.2 W
Devils Canyon Watershed

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 8 mg/L)

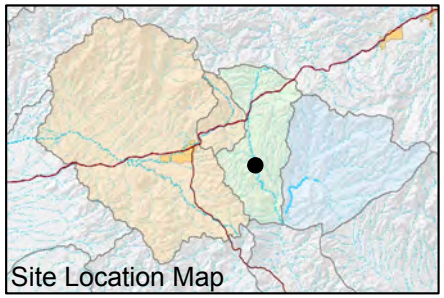
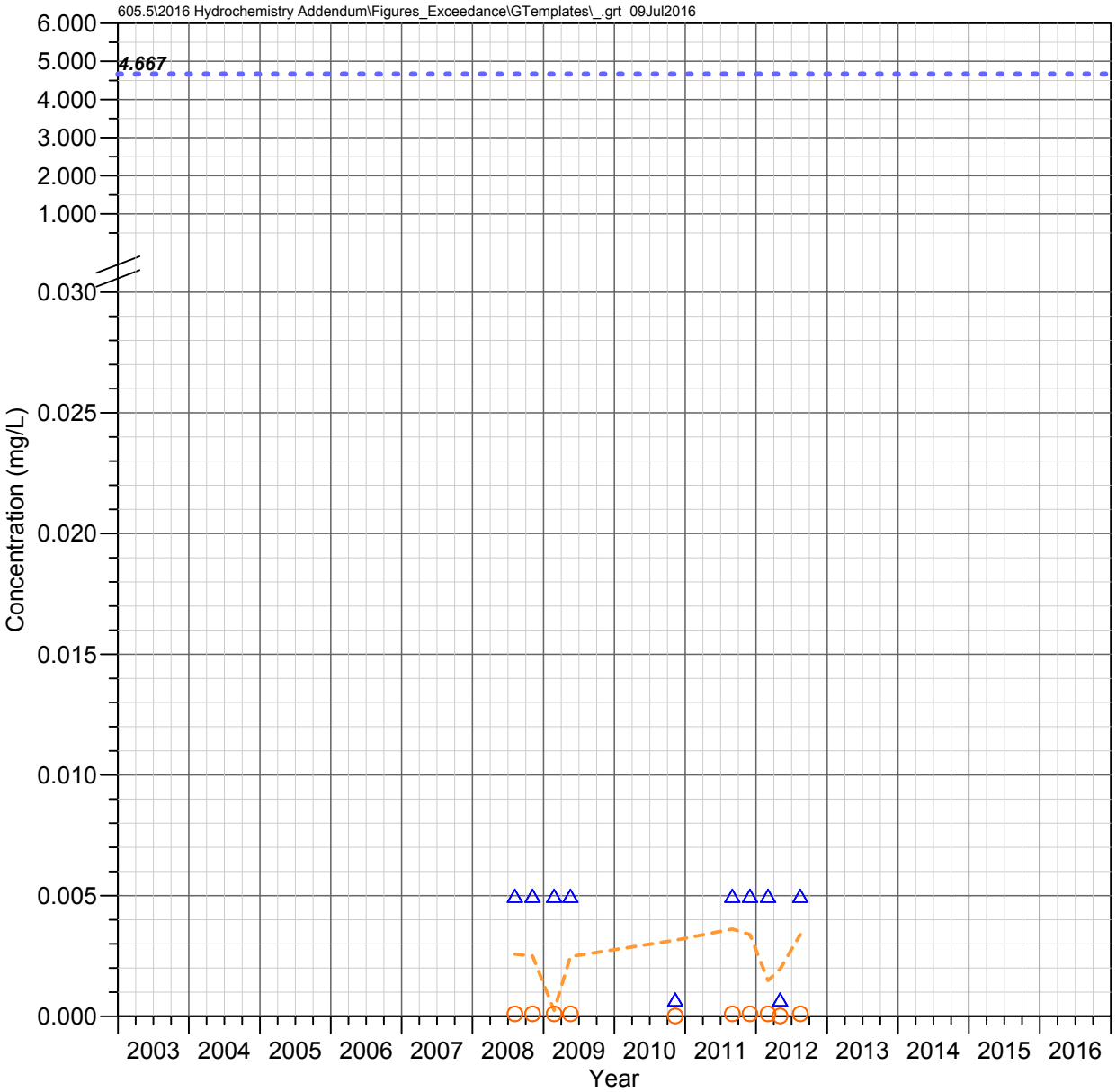


FIGURE F-719. SILVER CONCENTRATIONS OBSERVED AT DC 8.2 W, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.1 C
Devils Canyon Watershed

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 8 mg/L)

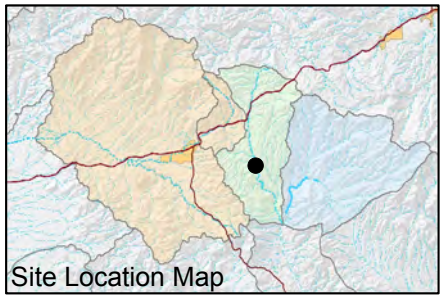
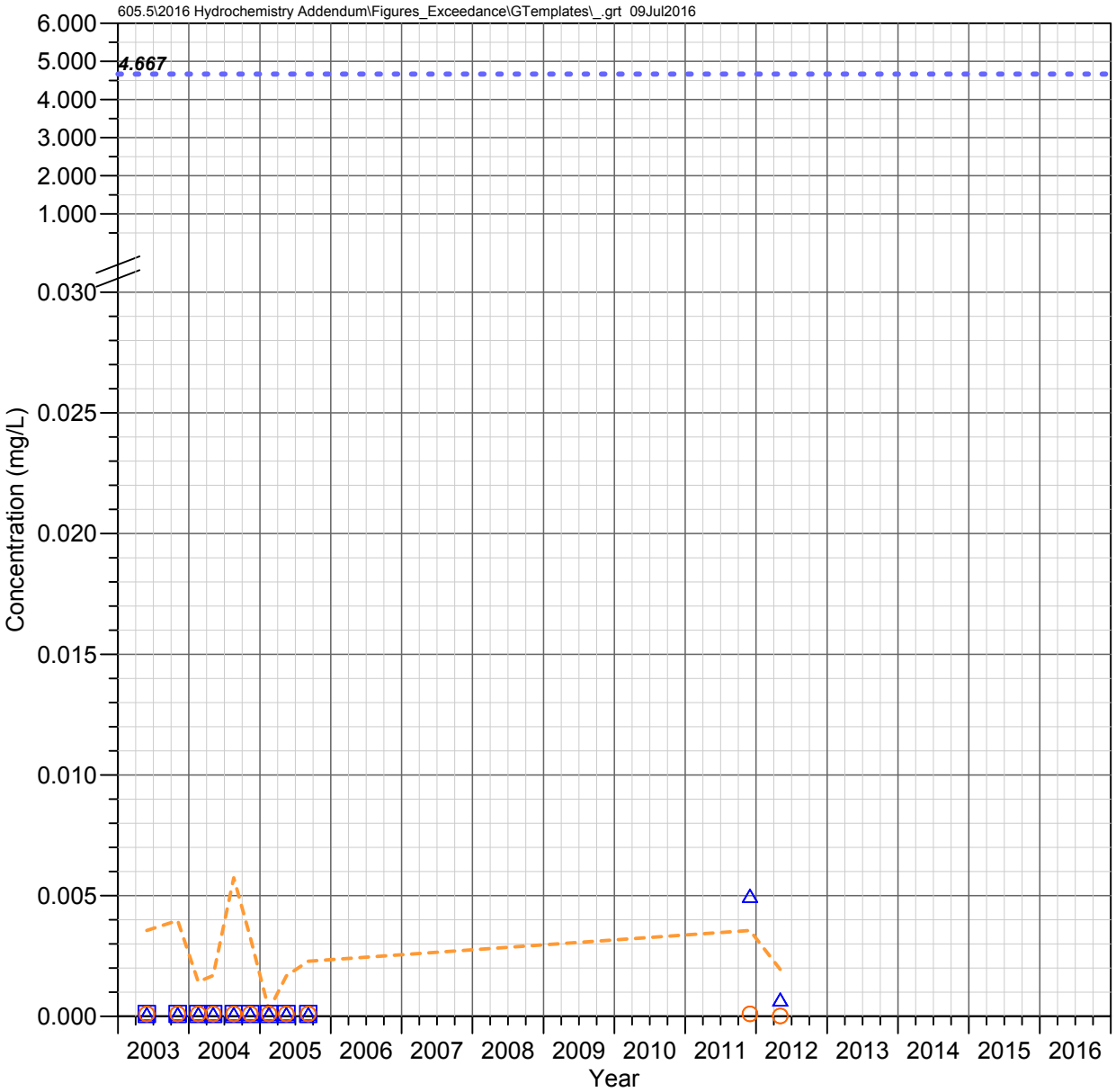


FIGURE F-720. SILVER CONCENTRATIONS OBSERVED AT DC 8.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 7.1 C
Devils Canyon Watershed

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 8 mg/L)

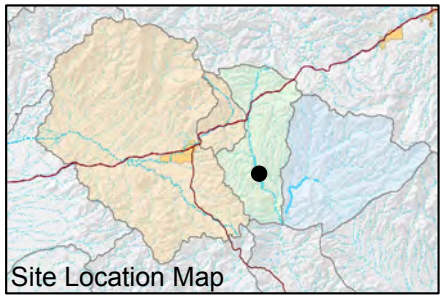
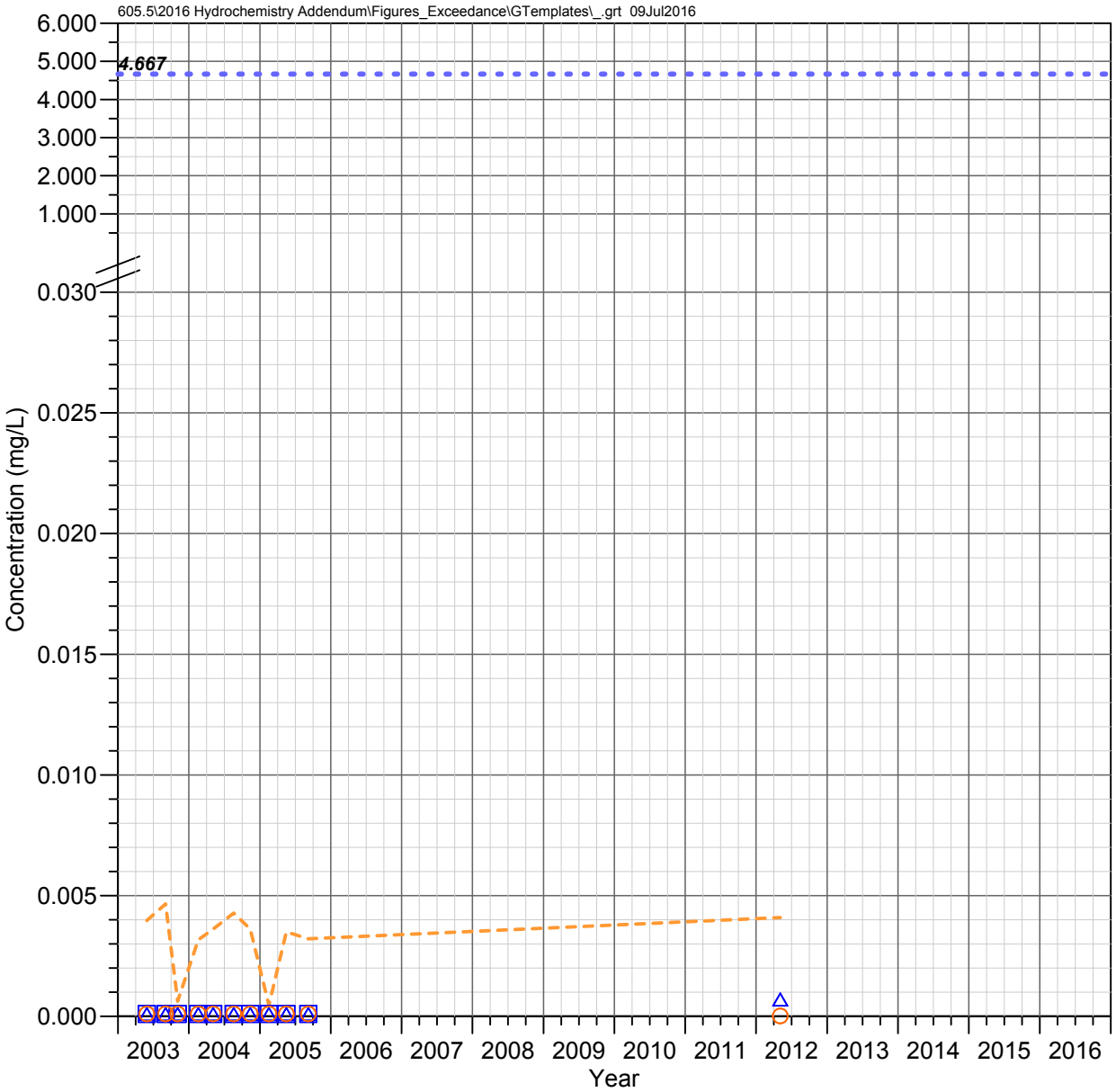


FIGURE F-721. SILVER CONCENTRATIONS OBSERVED AT DC 7.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.6 W (DCT 6.6 W)
Devils Canyon Watershed

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 8 mg/L)

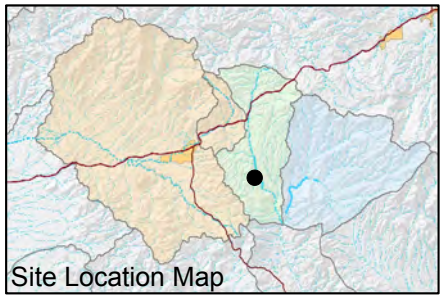
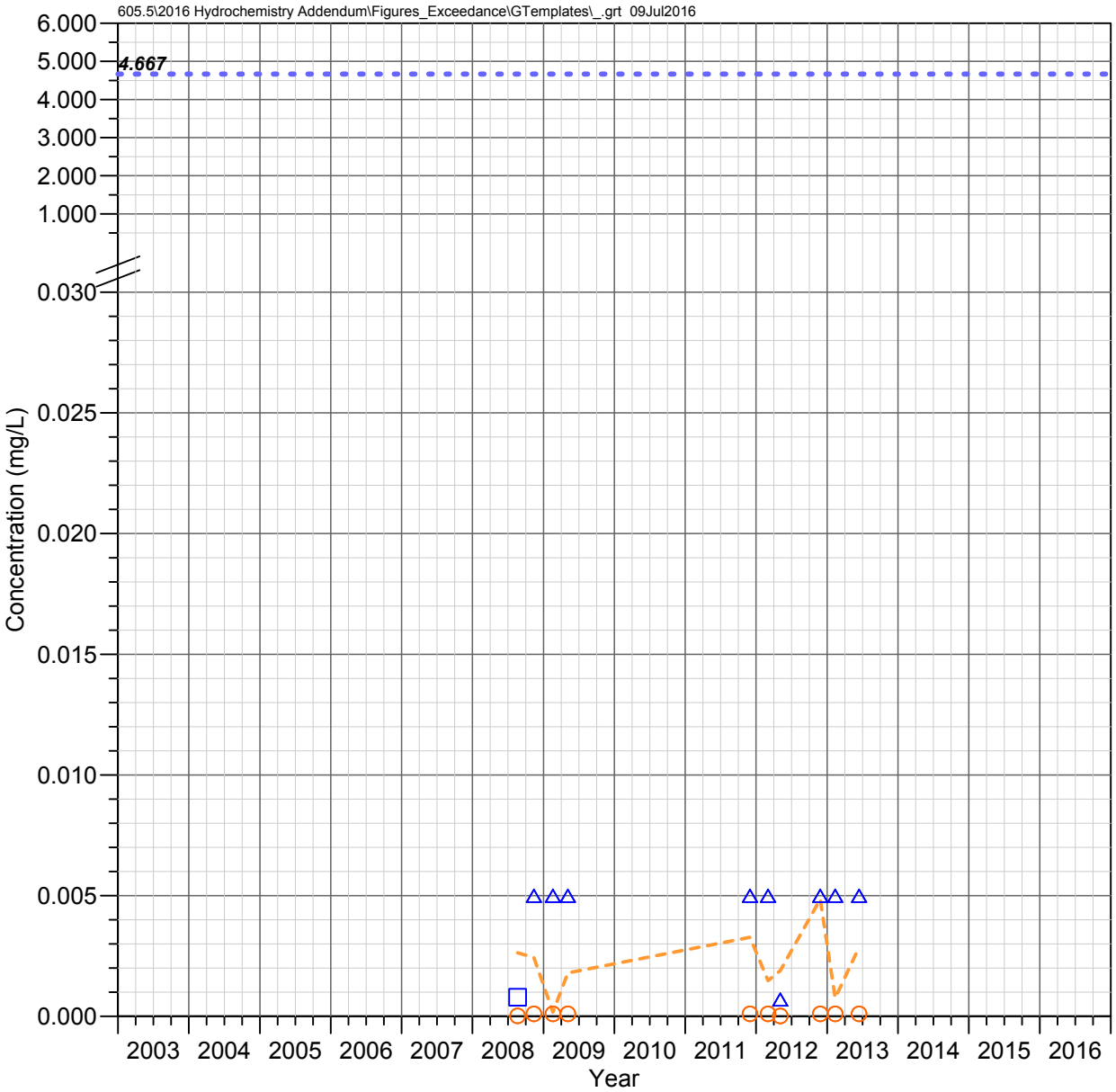


FIGURE F-722. SILVER CONCENTRATIONS OBSERVED AT DC 6.6 W (DCT 6.6 W), DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.14 C
Devils Canyon Watershed

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 8 mg/L)

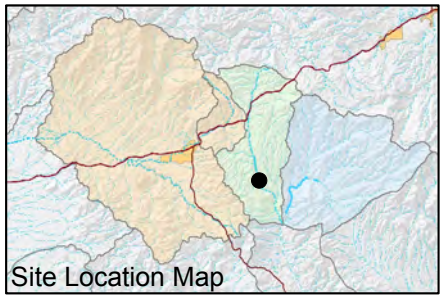
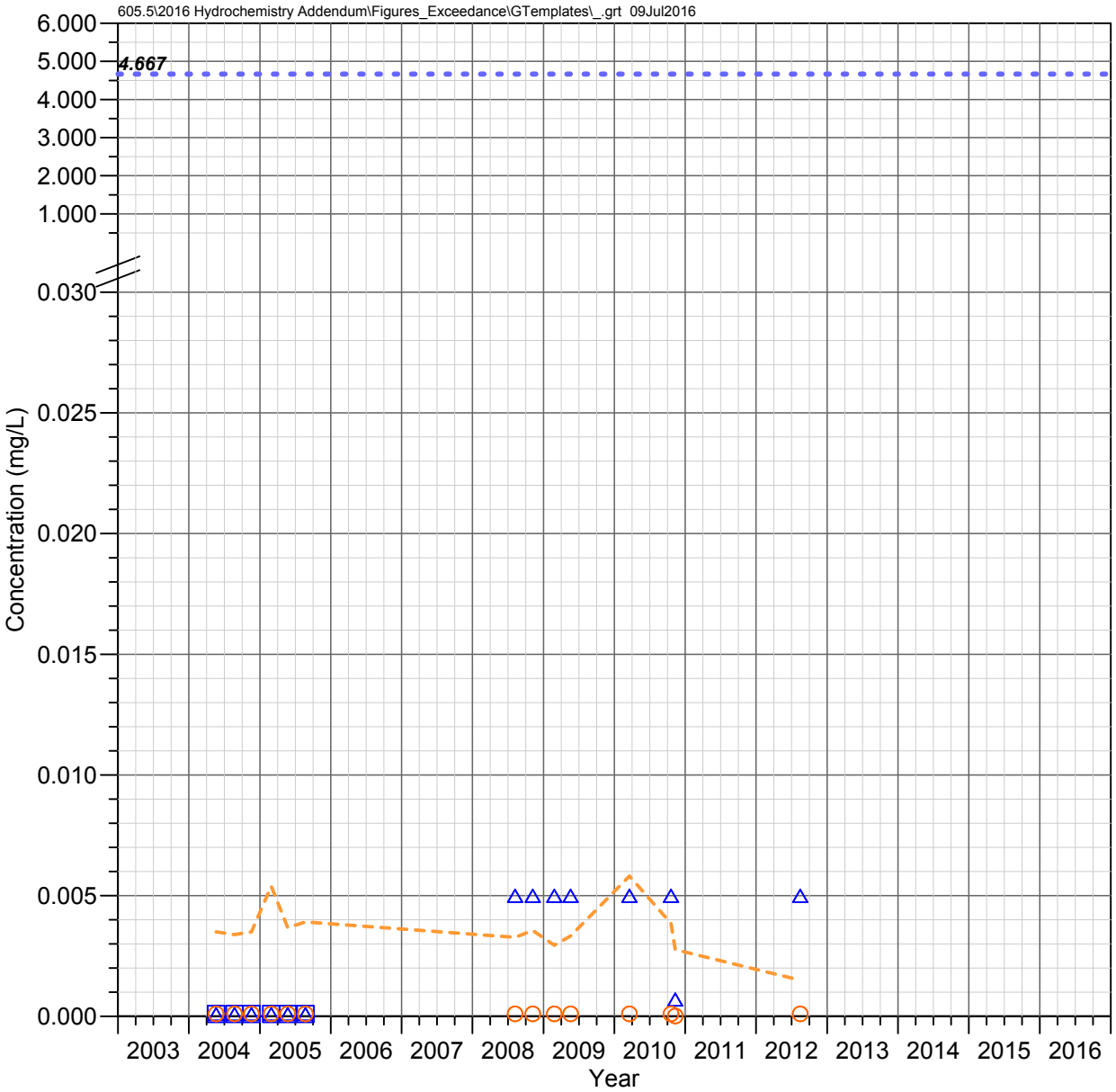


FIGURE F-723. SILVER CONCENTRATIONS OBSERVED AT DC 6.14 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.1 E
Devils Canyon Watershed

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 8 mg/L)

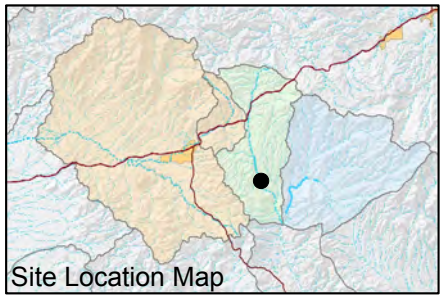
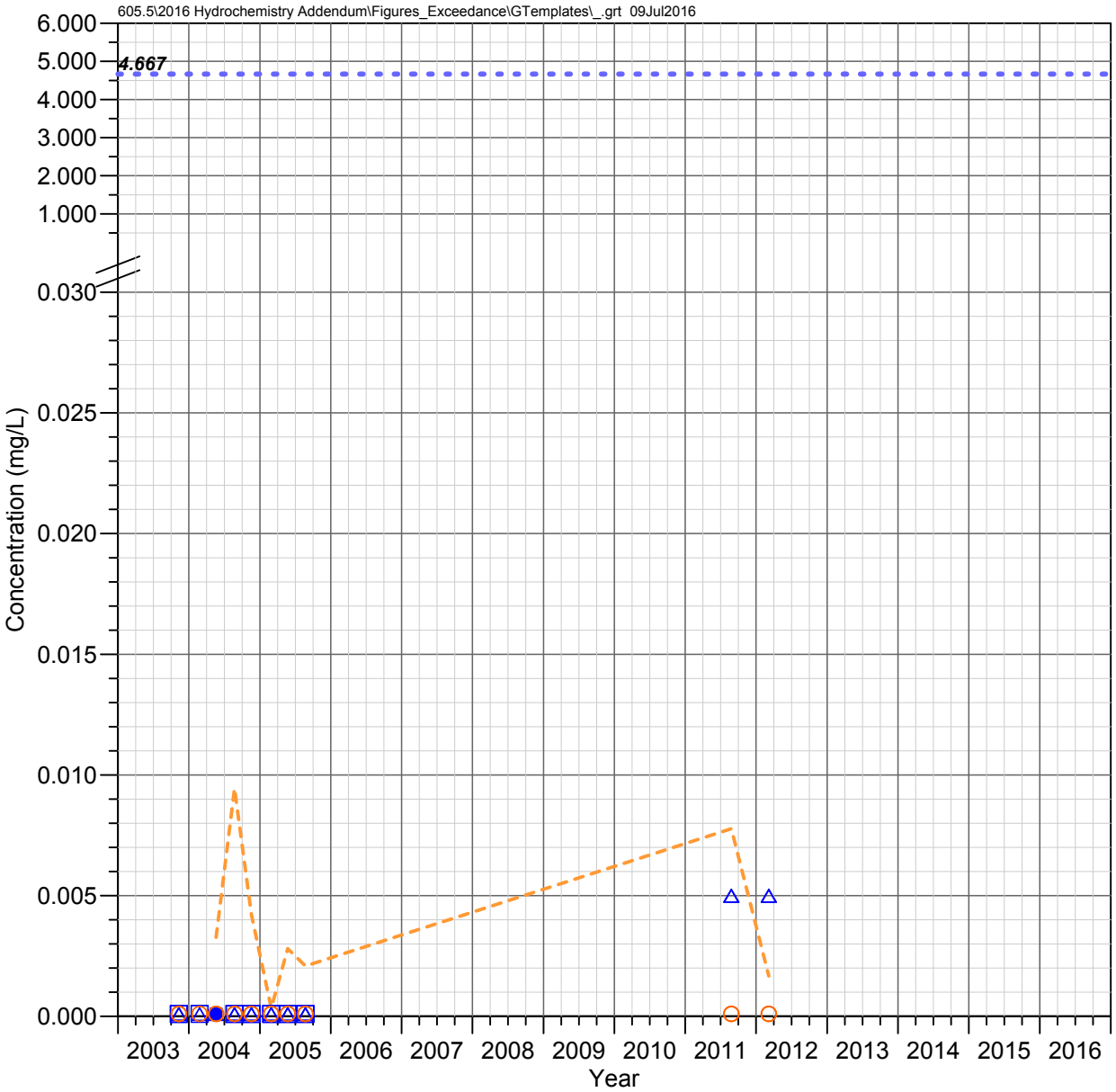


FIGURE F-724. SILVER CONCENTRATIONS OBSERVED AT DC 6.1 E, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 5.5 C
Devils Canyon Watershed

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 8 mg/L)

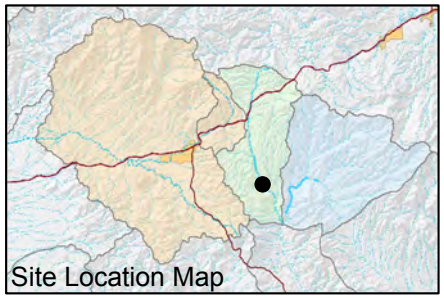
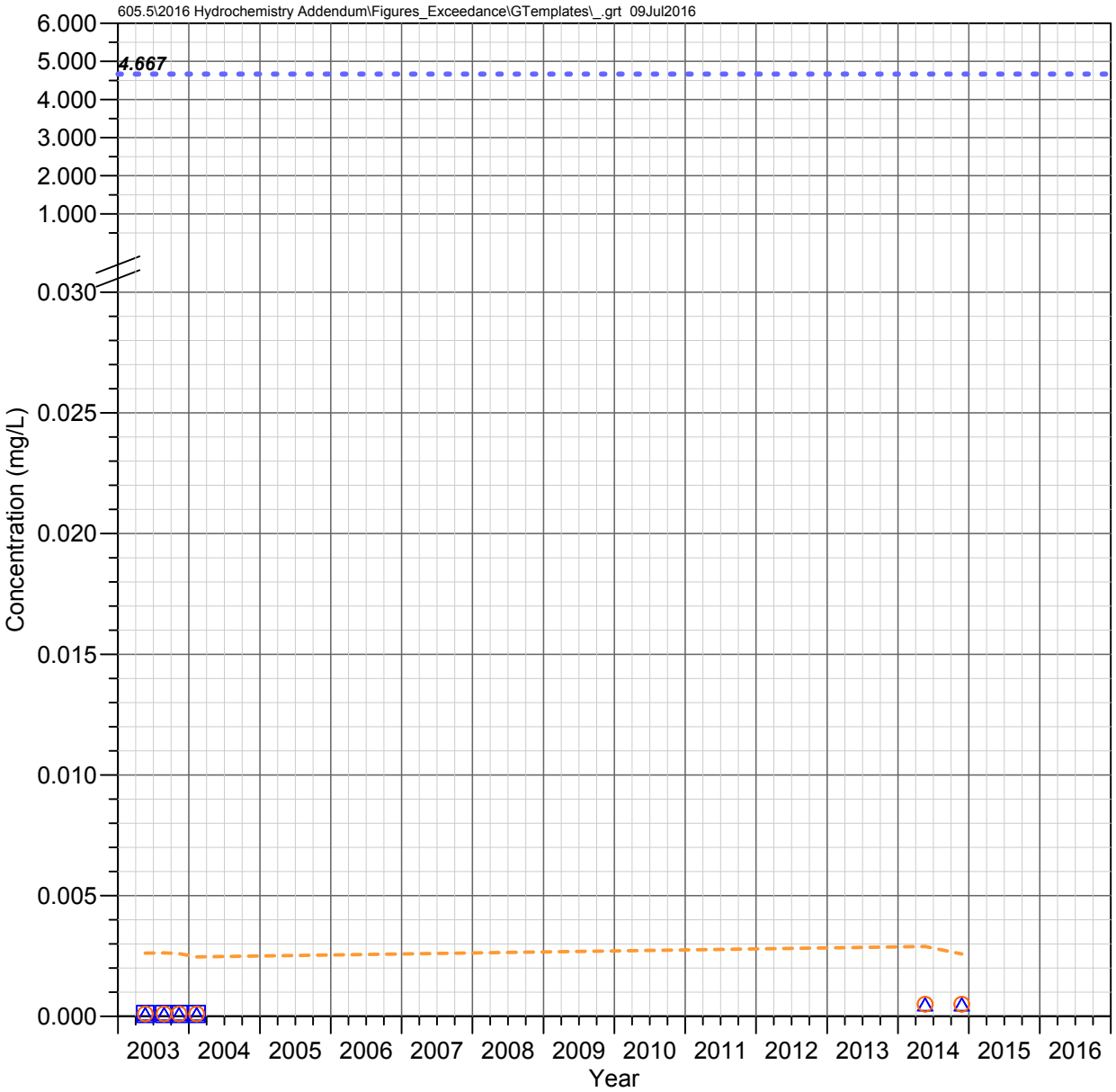


FIGURE F-725. SILVER CONCENTRATIONS OBSERVED AT DC 5.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 4.1 E
Devils Canyon Watershed

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 8 mg/L)

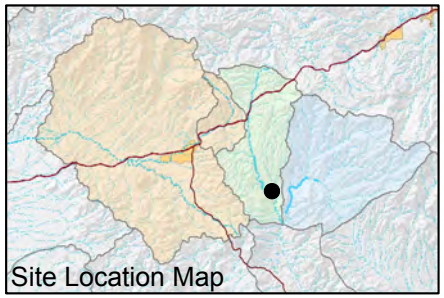
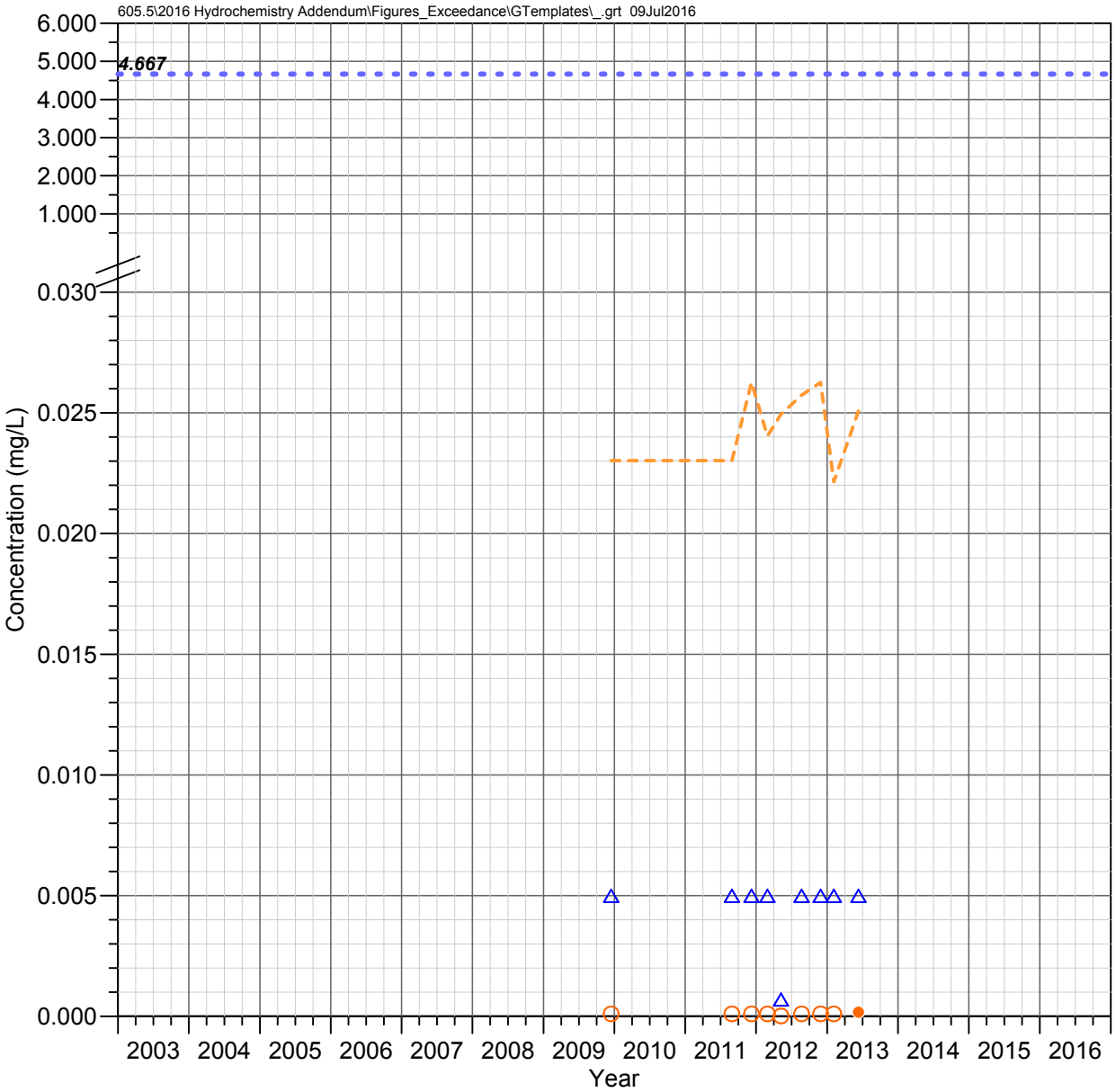


FIGURE F-726. SILVER CONCENTRATIONS OBSERVED AT DC 4.1 E, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Government Springs
Mineral Creek Watershed

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 8 mg/L)

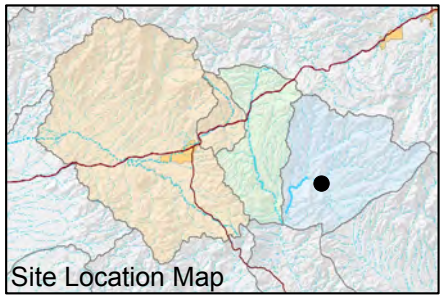
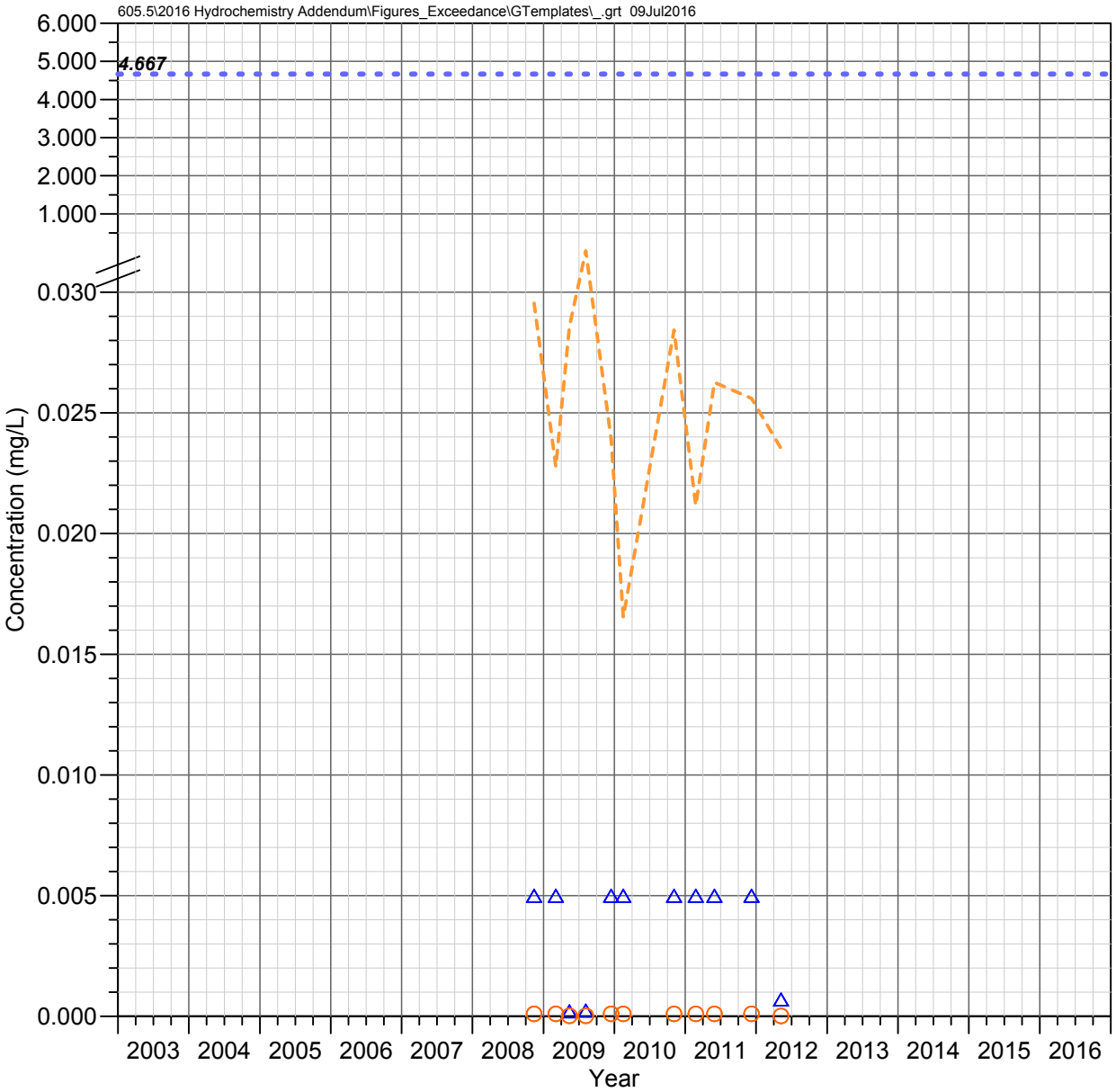


FIGURE F-727. SILVER CONCENTRATIONS OBSERVED AT GOVERNMENT SPRINGS, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 8.4 C
Mineral Creek Watershed

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 8 mg/L)

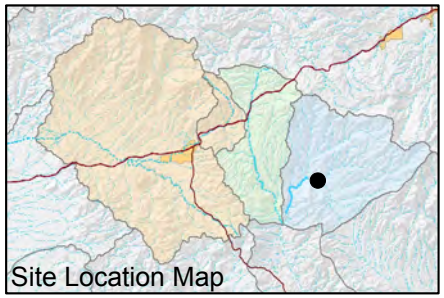
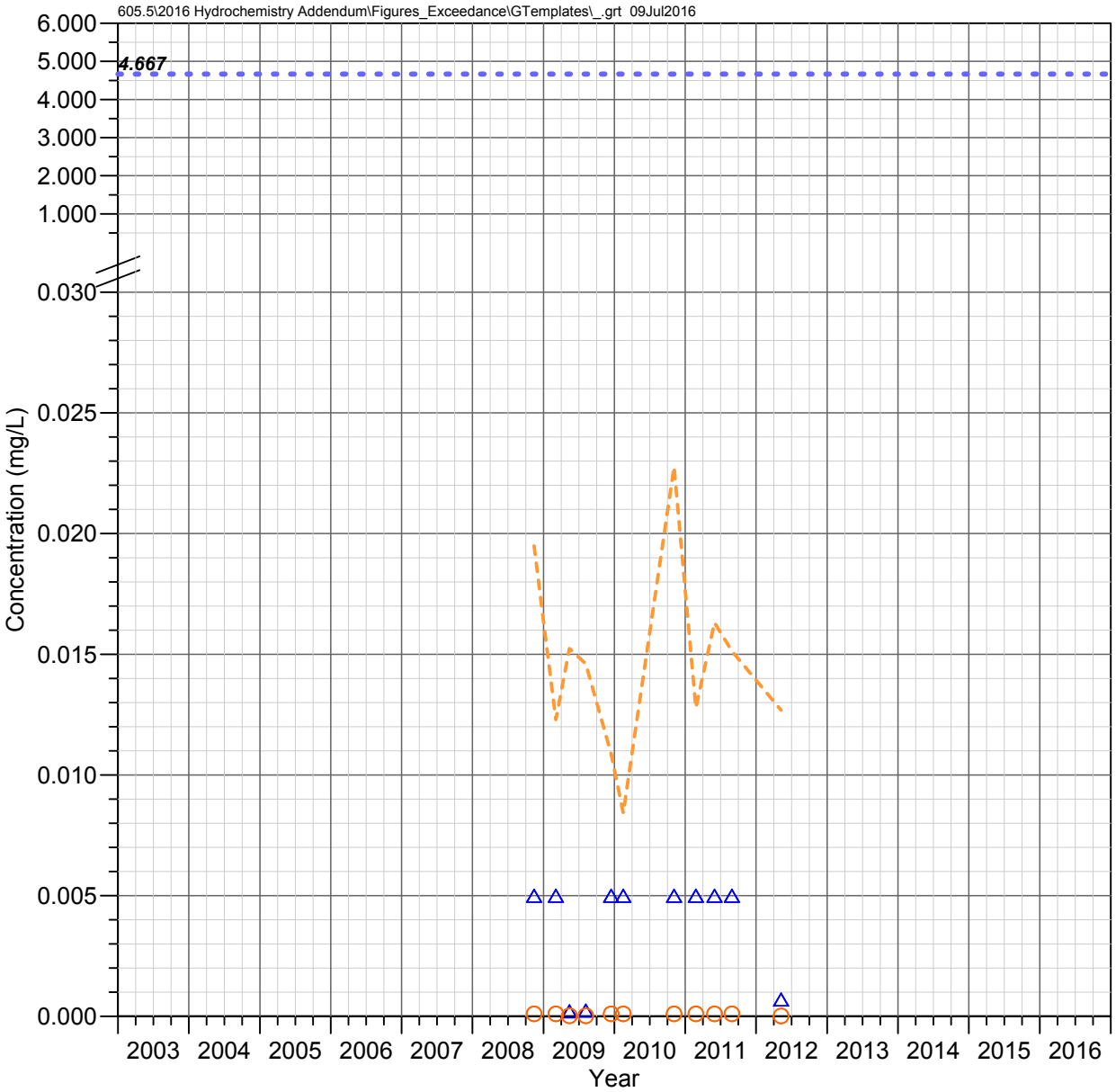


FIGURE F-728. SILVER CONCENTRATIONS OBSERVED AT MC 8.4 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



LF 0.2 C
Mineral Creek Watershed

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 8 mg/L)

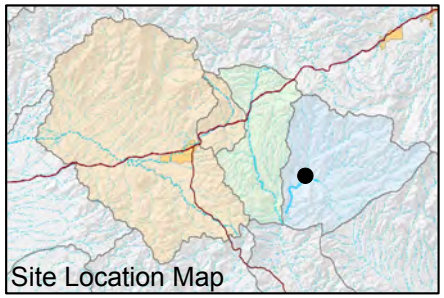
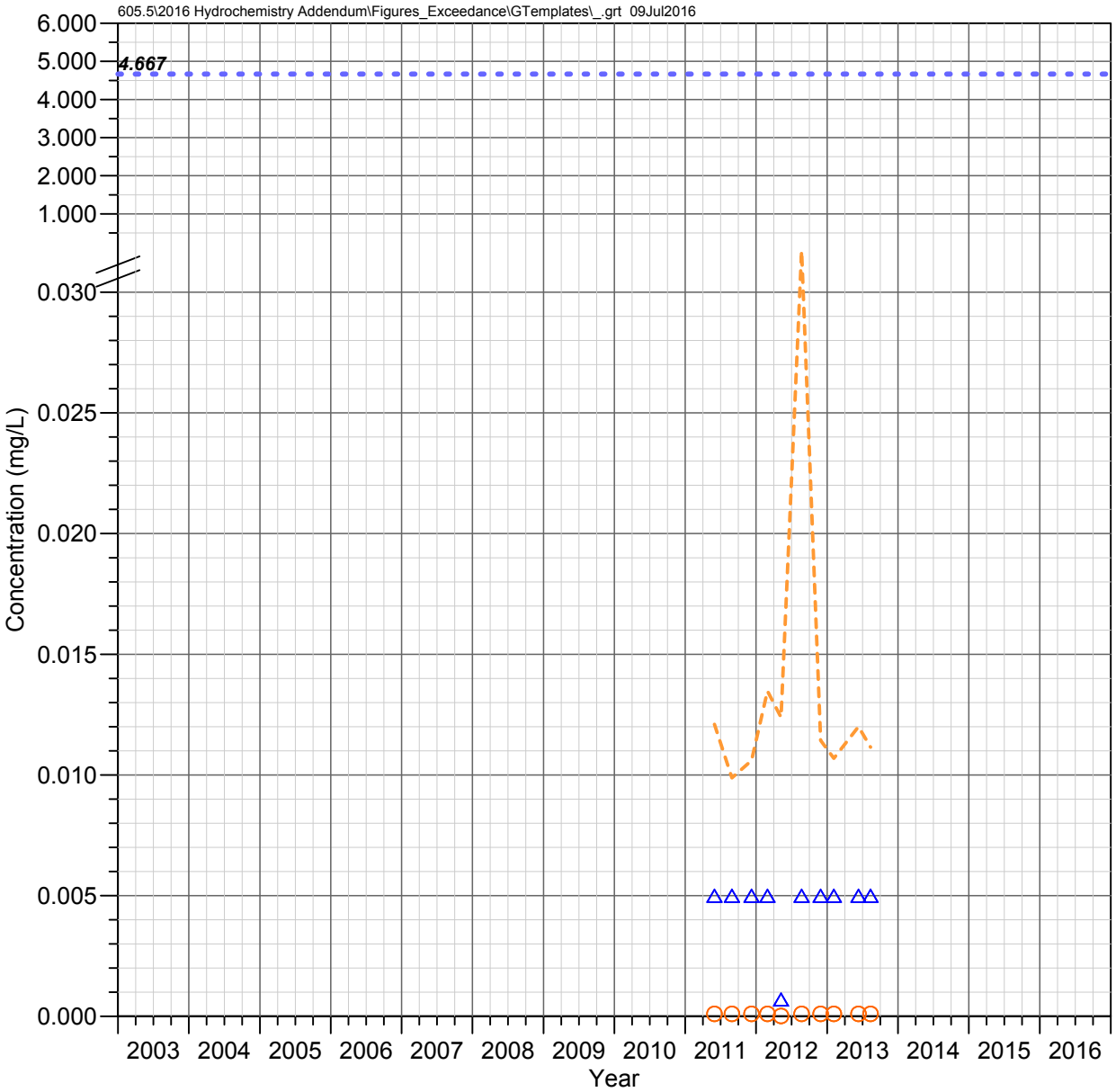


FIGURE F-729. SILVER CONCENTRATIONS OBSERVED AT LF 0.2 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 5.2 C
Mineral Creek Watershed

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 8 mg/L)

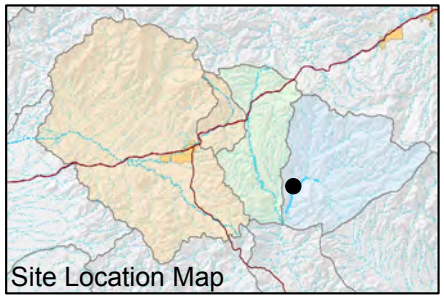
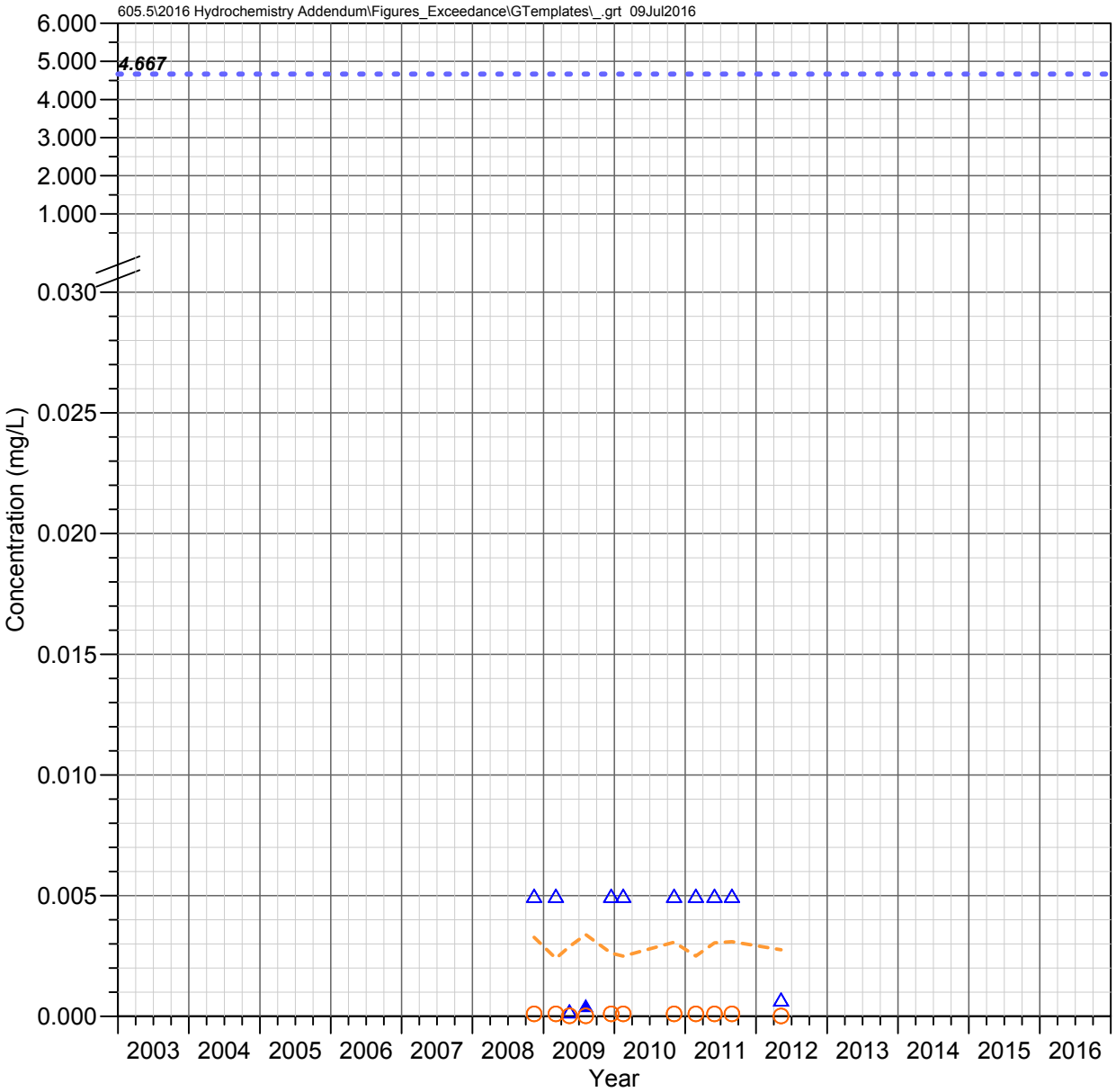


FIGURE F-730. SILVER CONCENTRATIONS OBSERVED AT MC 5.2 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 3.4 W (Wet Leg Spring)
Mineral Creek Watershed

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 8 mg/L)

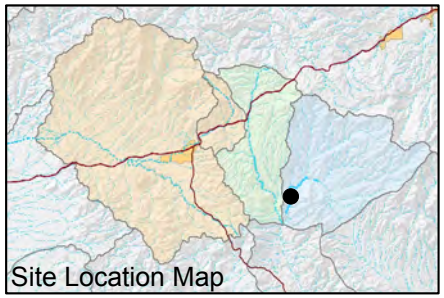
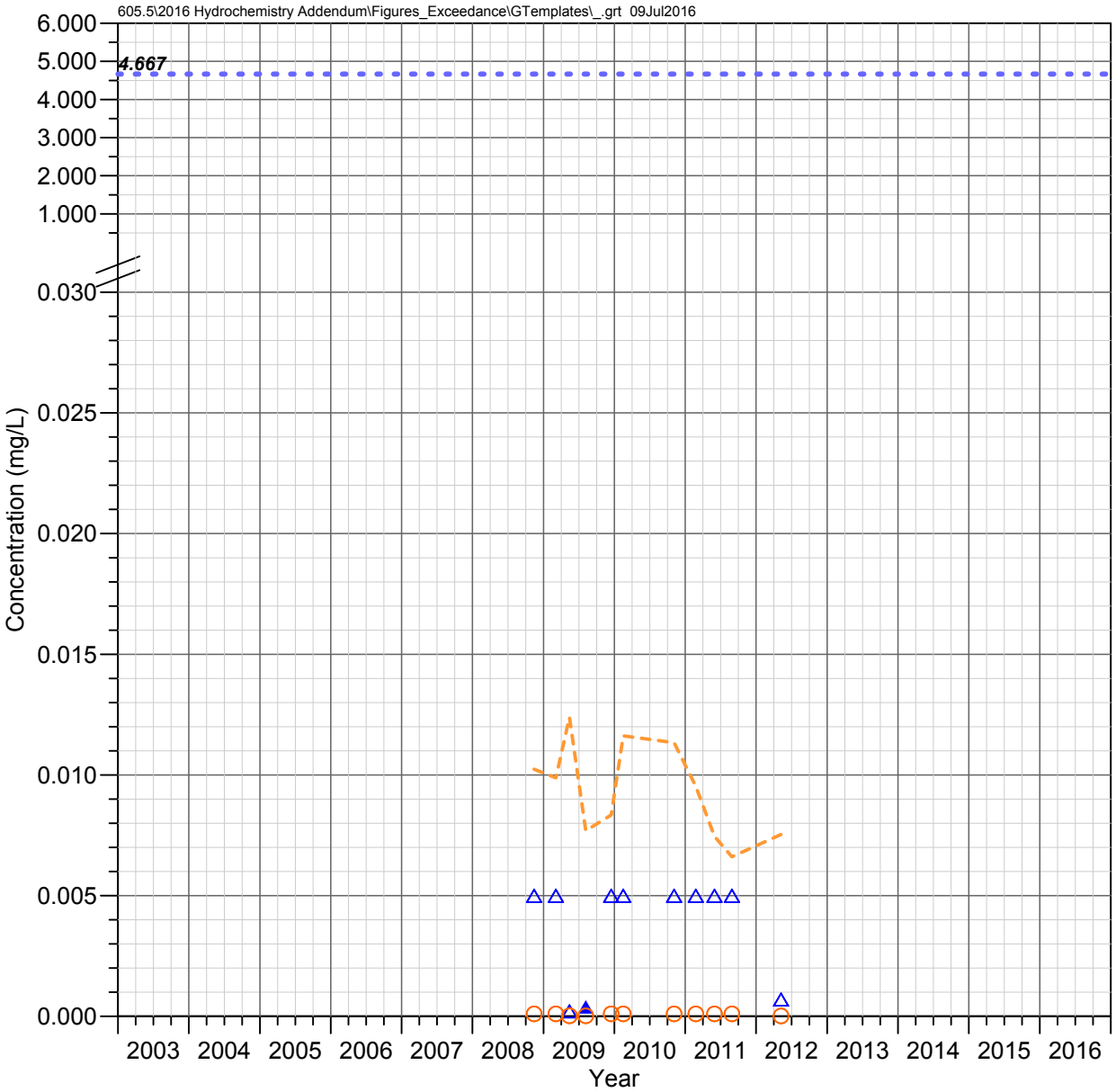


FIGURE F-731. SILVER CONCENTRATIONS OBSERVED AT MC 3.4 W (WET LEG SPRING), MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 3.3 C (Lower Mineral)
Mineral Creek Watershed

SILVER

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 4.667 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 8 mg/L)

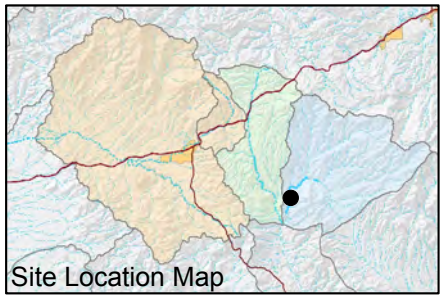
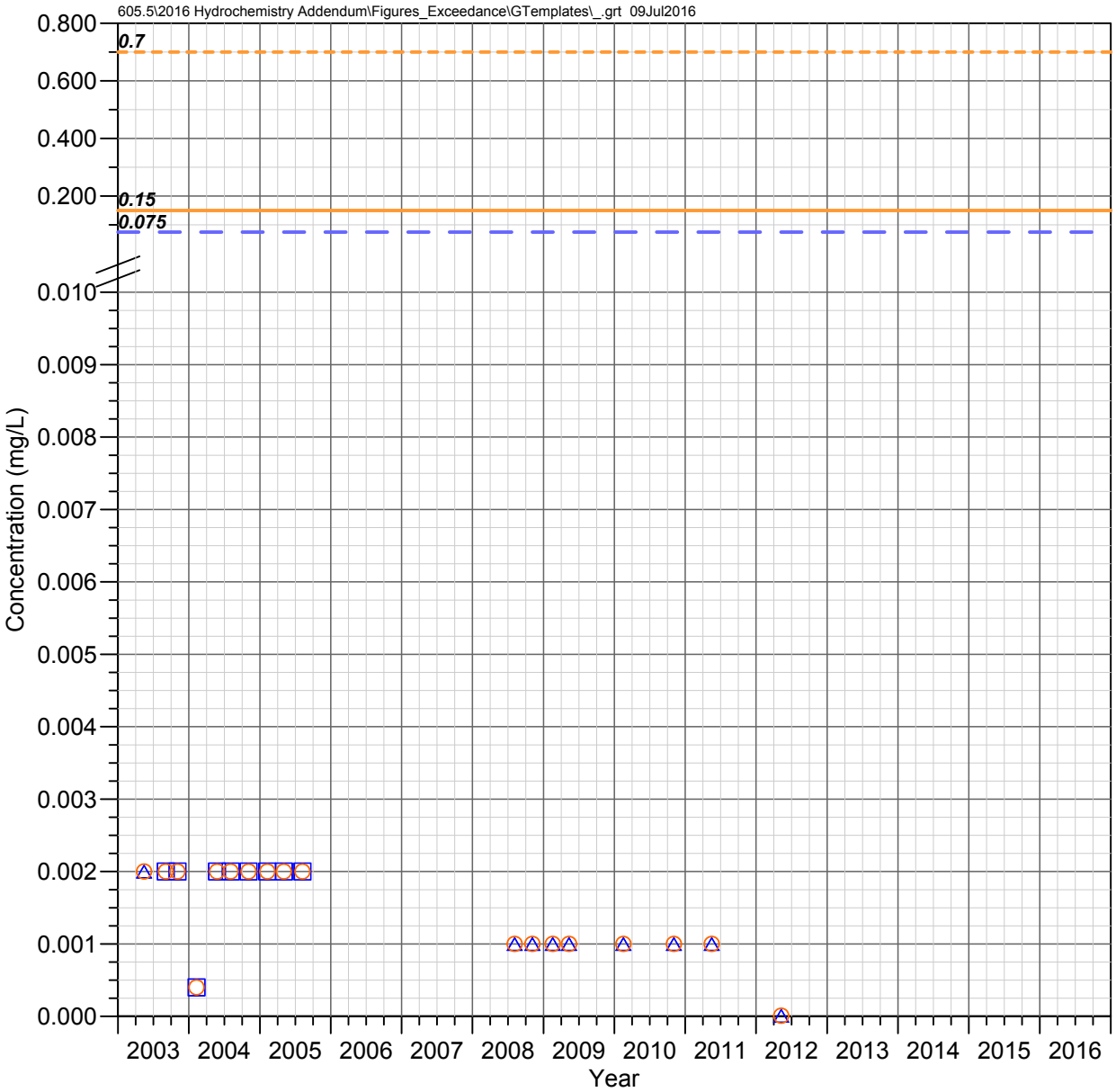


FIGURE F-732. SILVER CONCENTRATIONS OBSERVED AT MC 3.3 C (LOWER MINERAL), MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Pump Station Spring (QC 30.7 C)
Queen Creek Watershed

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Partial Body Contact (TRC, 0.075 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.7 mg/L)

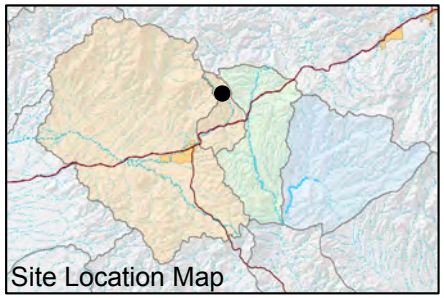
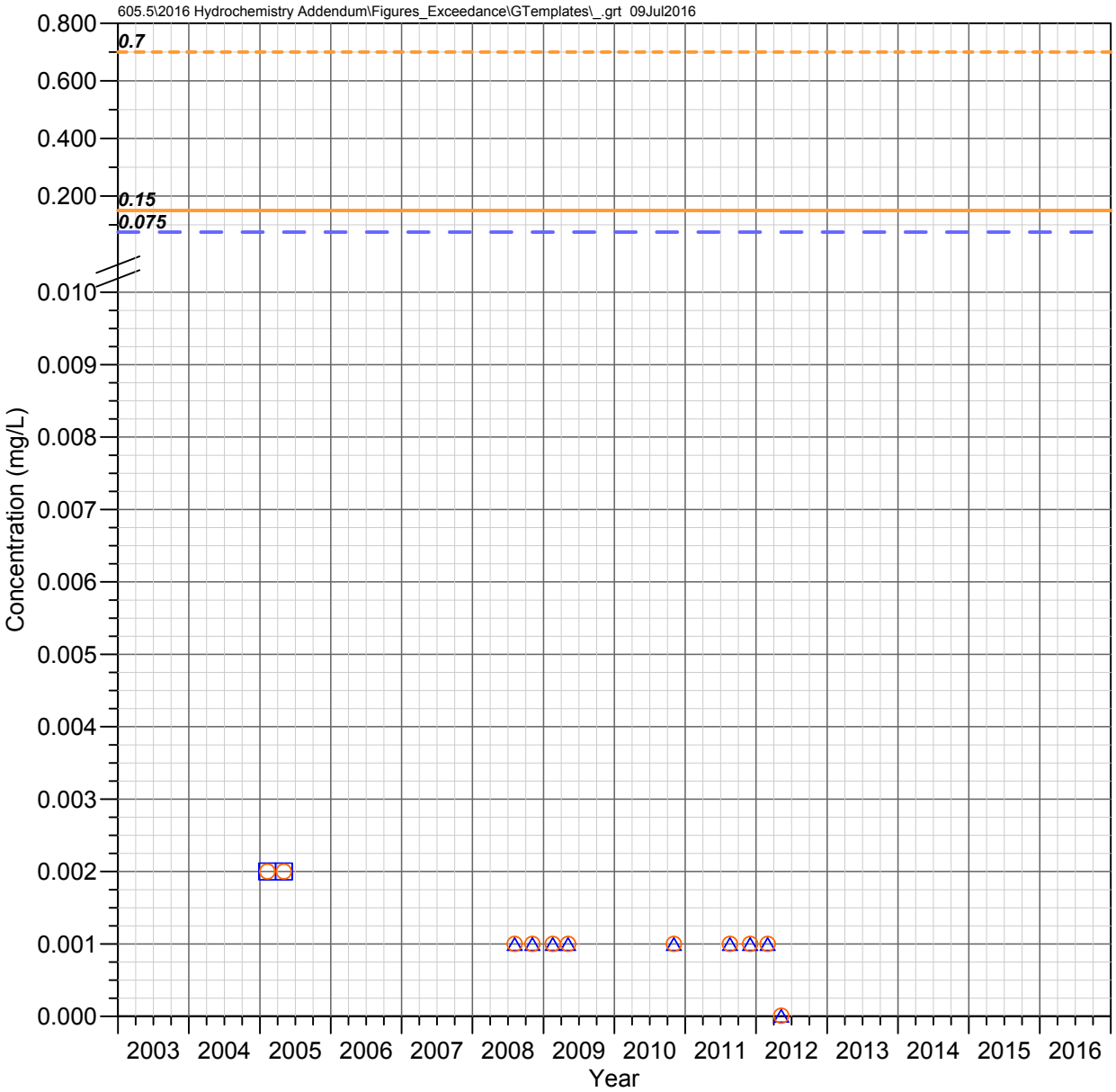


FIGURE F-733. THALLIUM CONCENTRATIONS OBSERVED AT PUMP STATION SPRING (QC 30.7 C), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 27.3 C
Queen Creek Watershed

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Partial Body Contact (TRC, 0.075 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.7 mg/L)

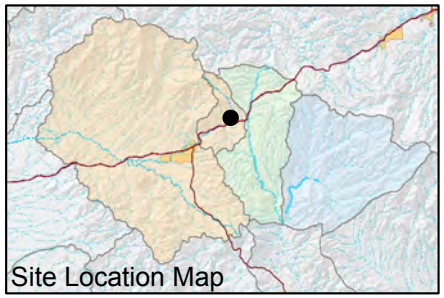
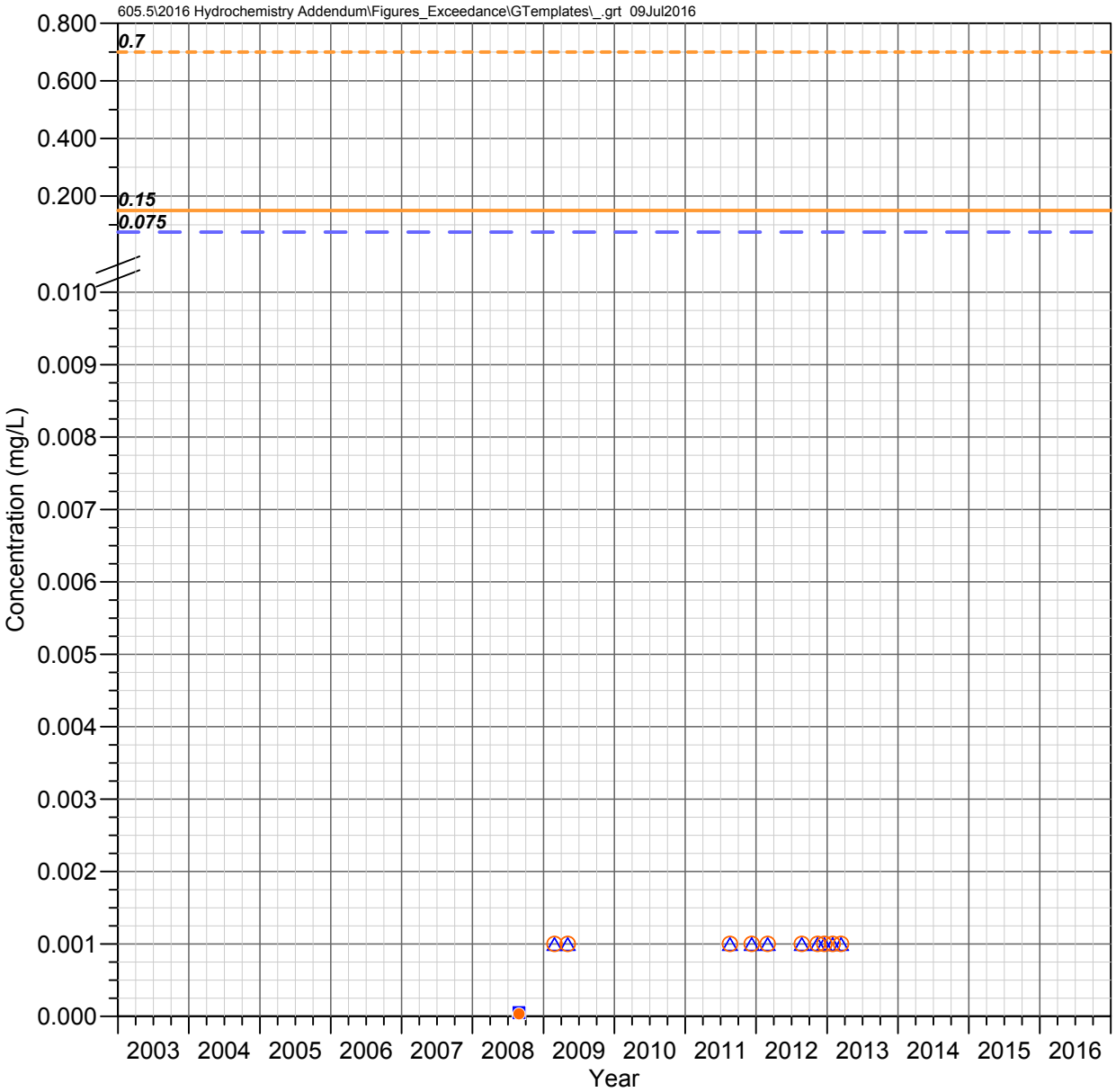


FIGURE F-734. THALLIUM CONCENTRATIONS OBSERVED AT QC 27.3 C, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Oak Flat Wash
Queen Creek Watershed

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Partial Body Contact (TRC, 0.075 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.7 mg/L)

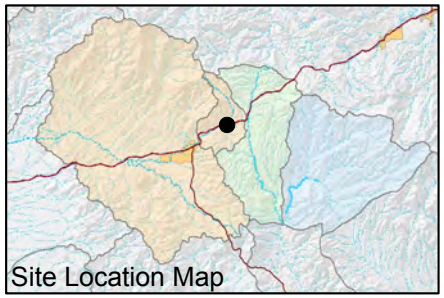
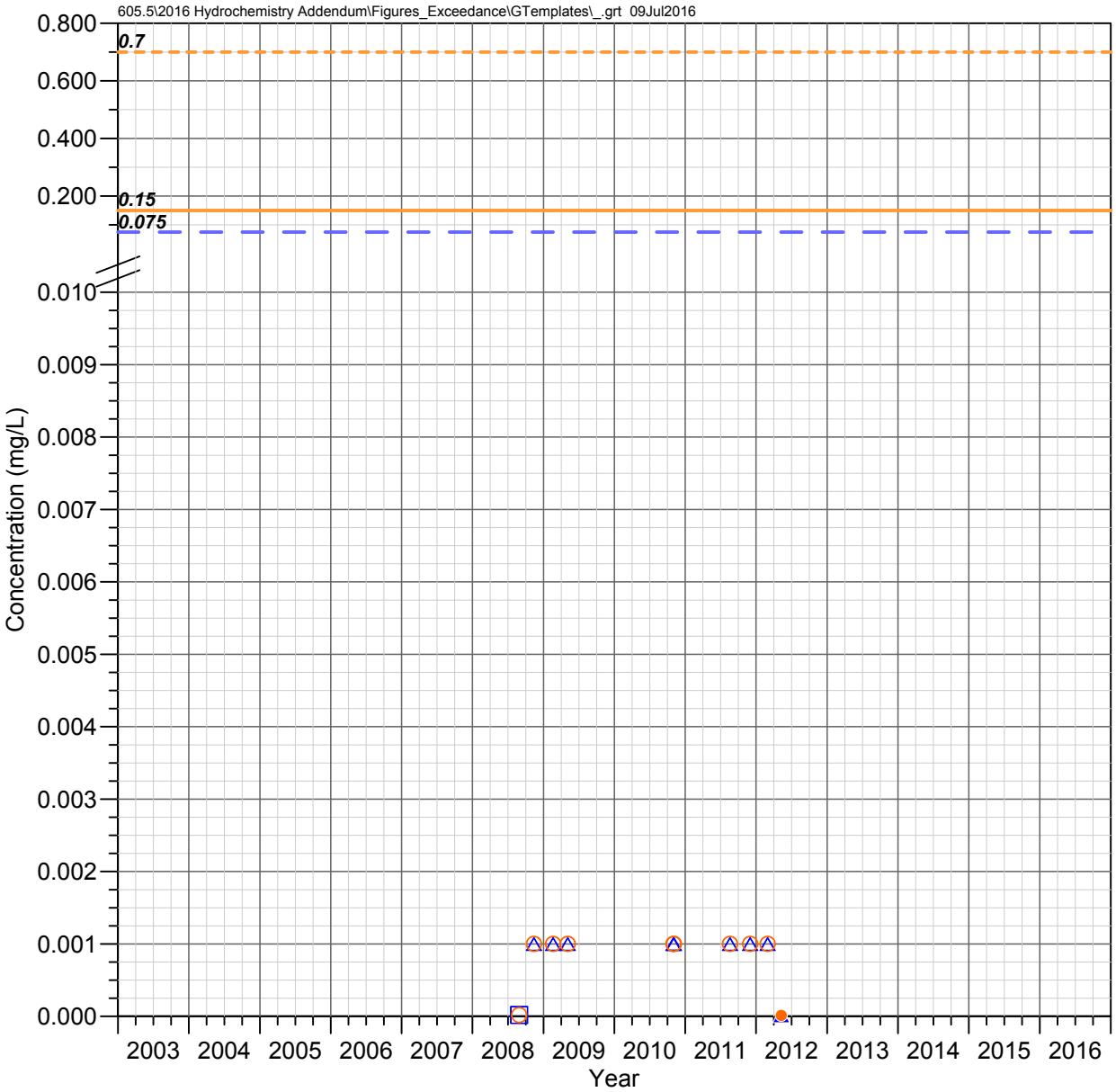


FIGURE F-735. THALLIUM CONCENTRATIONS OBSERVED AT OAK FLAT WASH, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Number 9 Wash
Queen Creek Watershed

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Partial Body Contact (TRC, 0.075 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.7 mg/L)

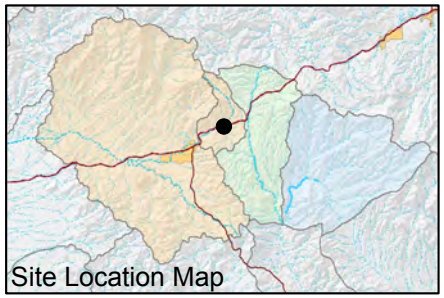
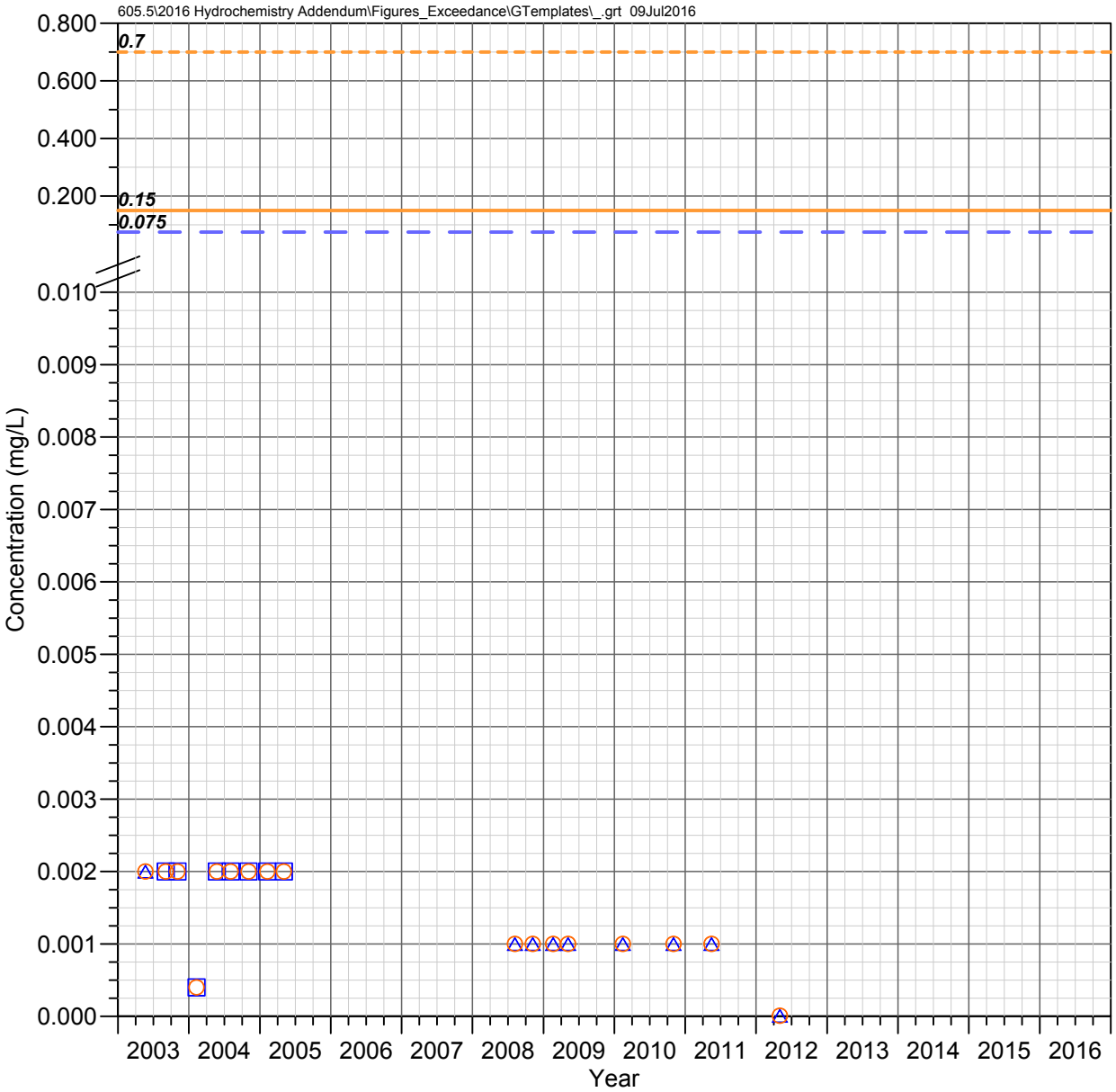


FIGURE F-736. THALLIUM CONCENTRATIONS OBSERVED AT NUMBER 9 WASH, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Boulder Hole (QC 23.6 C)
Queen Creek Watershed

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Partial Body Contact (TRC, 0.075 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.7 mg/L)

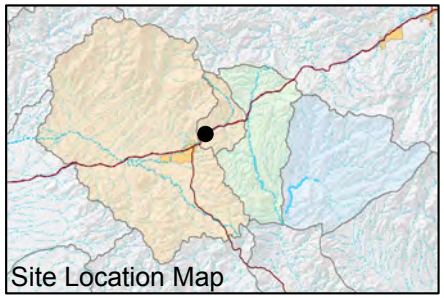
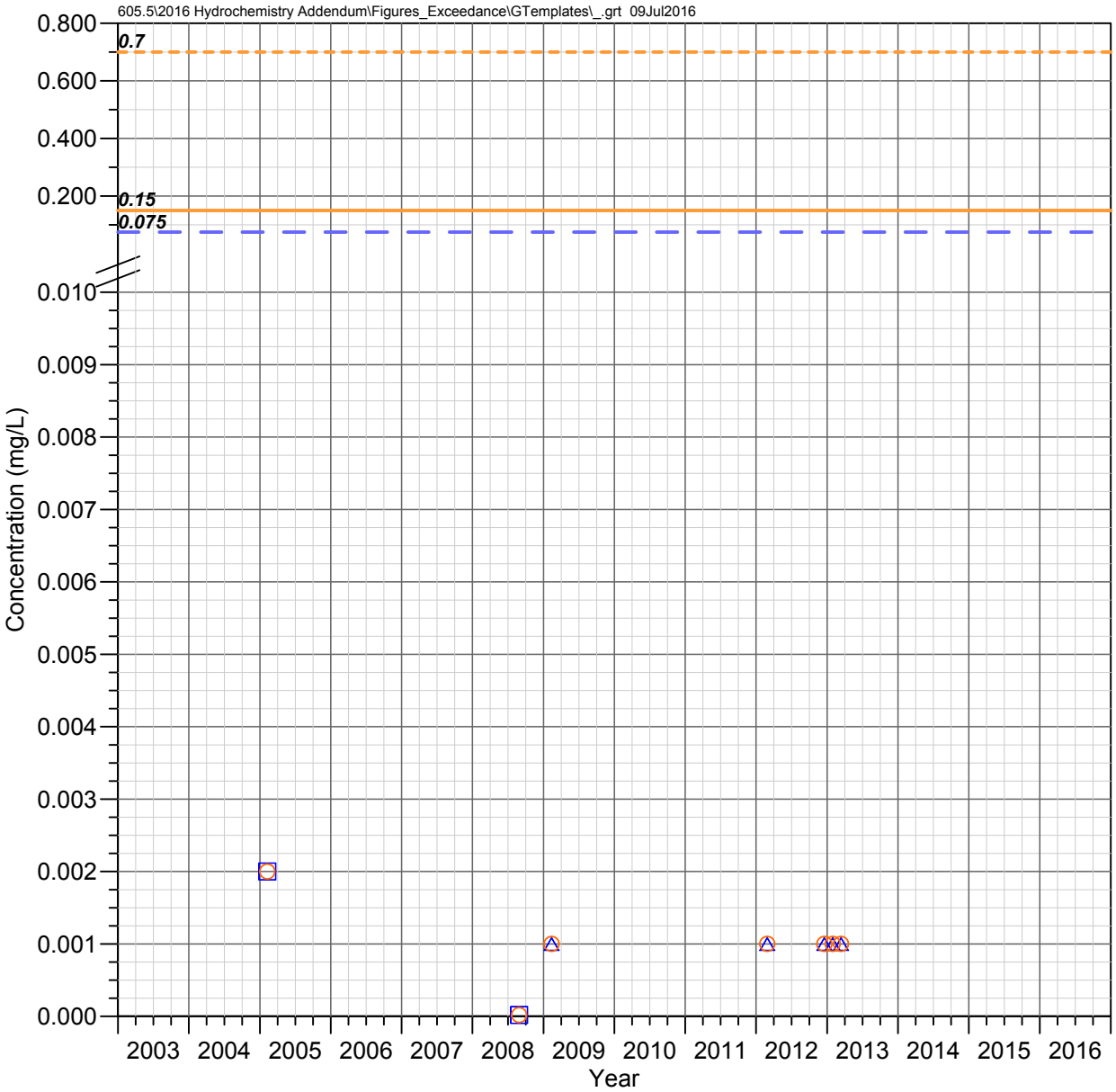


FIGURE F-737. THALLIUM CONCENTRATIONS OBSERVED AT BOULDER HOLE (QC 23.6 C), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 22.6 E (Karst Spring)
Queen Creek Watershed

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Partial Body Contact (TRC, 0.075 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.7 mg/L)

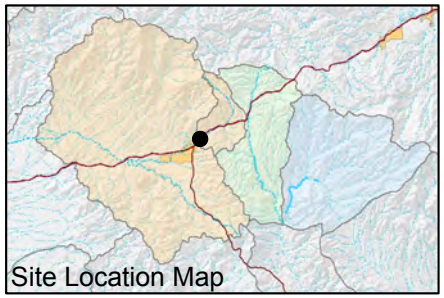
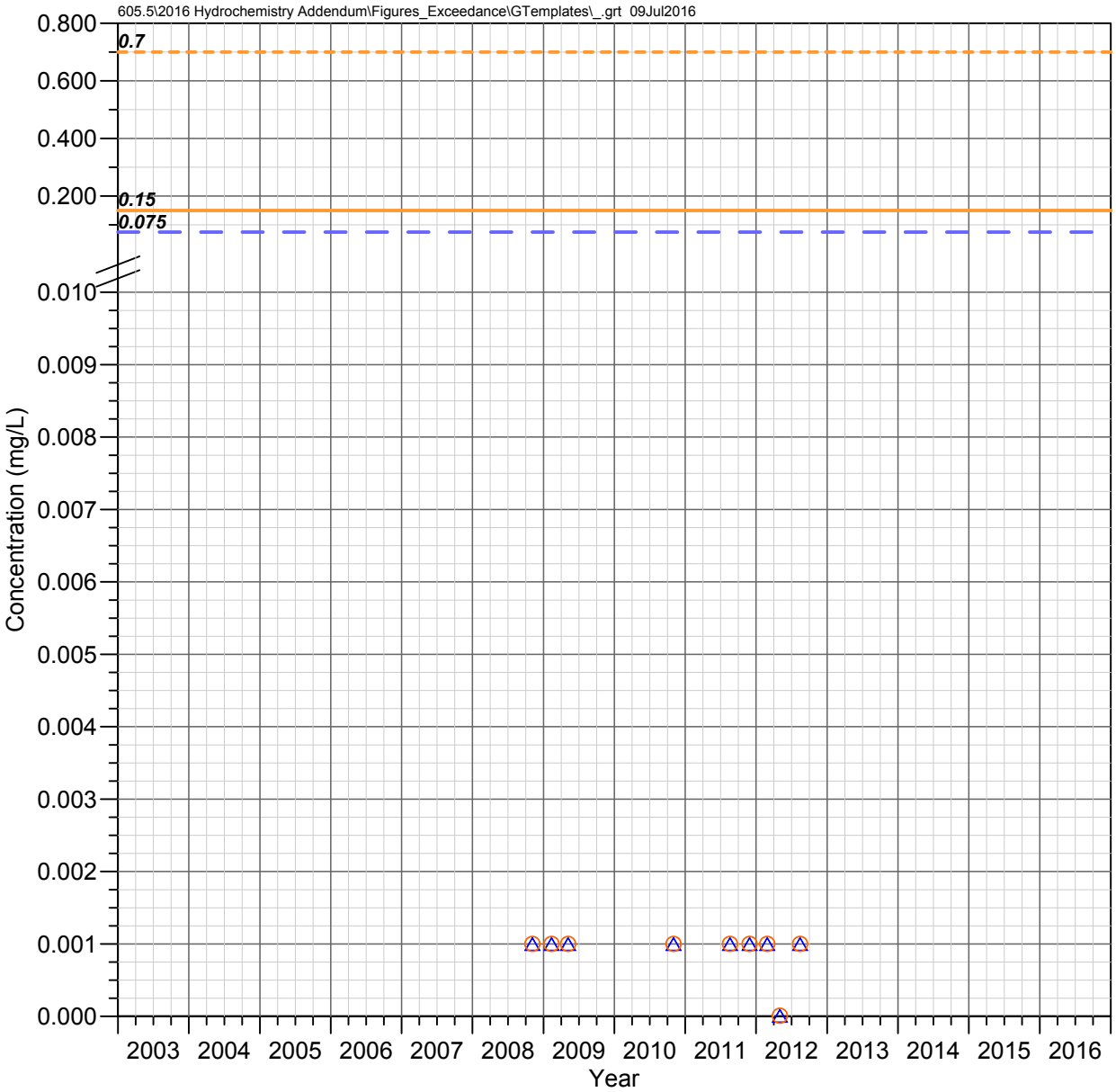


FIGURE F-738. THALLIUM CONCENTRATIONS OBSERVED AT QC 22.6 E (KARST SPRING), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 21.7 C (Magma Avenue)
Queen Creek Watershed

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Partial Body Contact (TRC, 0.075 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.7 mg/L)

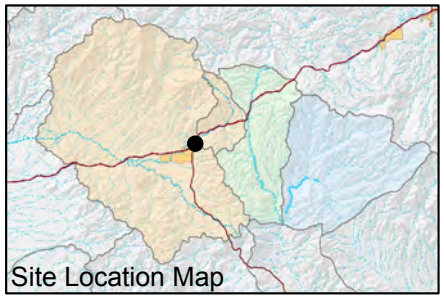
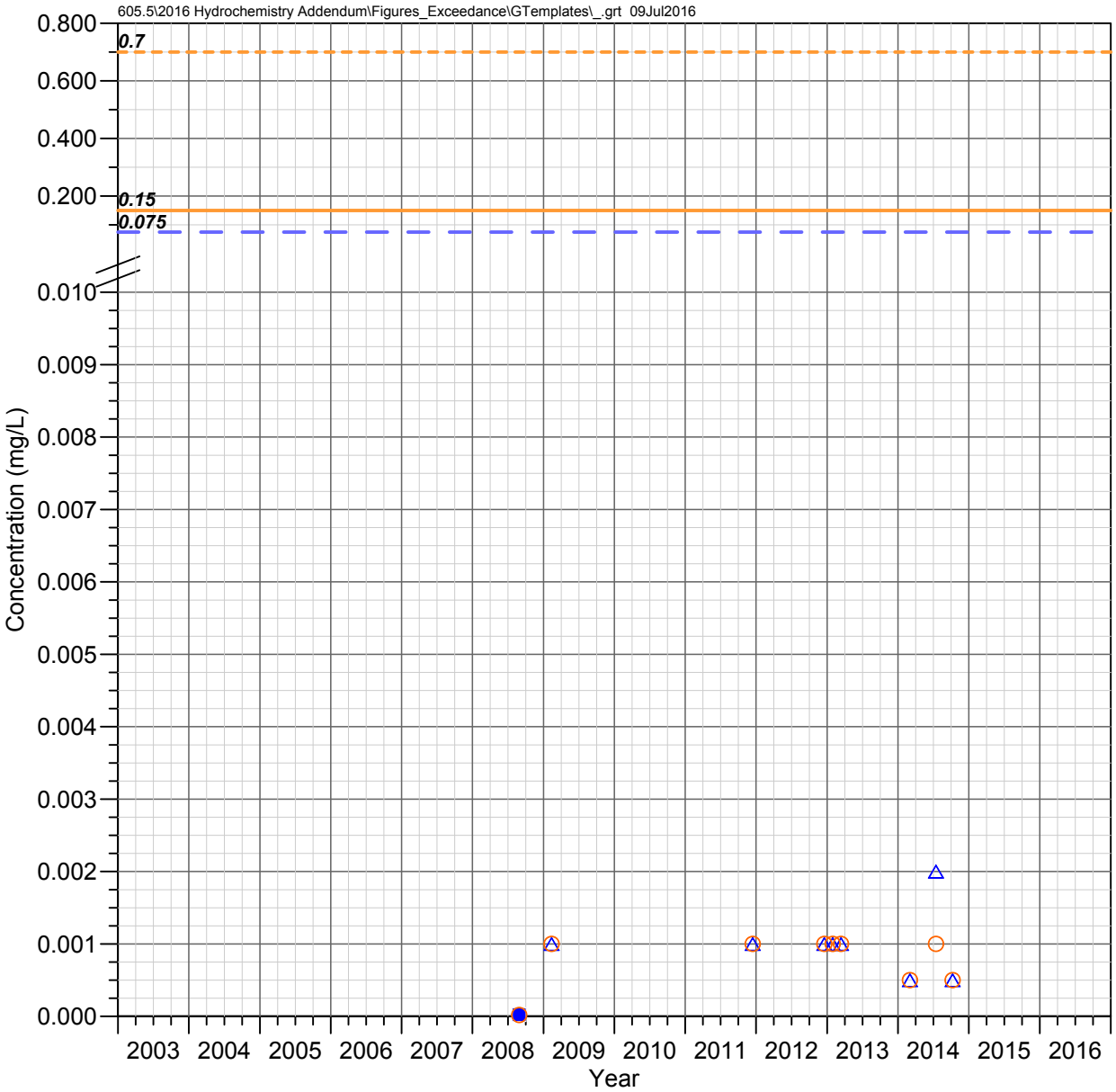


FIGURE F-739. THALLIUM CONCENTRATIONS OBSERVED AT QC 21.7 C (MAGMA AVENUE), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 19.7 C
Queen Creek Watershed

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; DIS = Dissolved

- AZ Partial Body Contact (TRC, 0.075 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.7 mg/L)

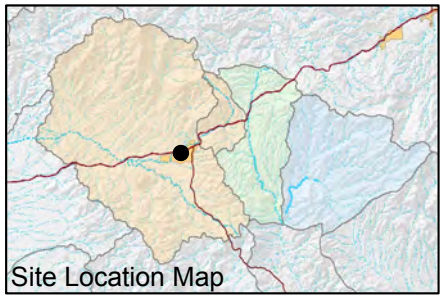
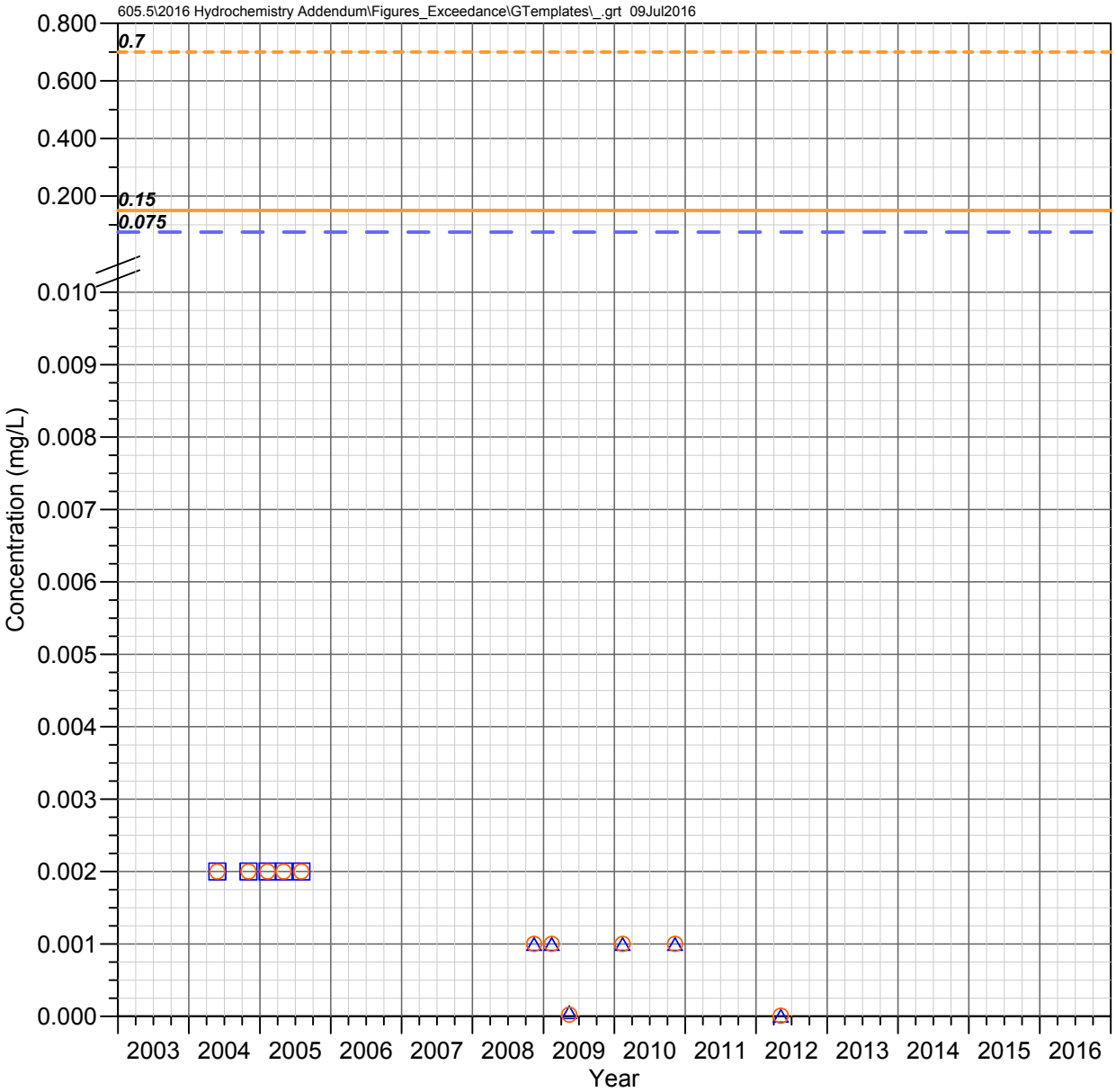


FIGURE F-740. THALLIUM CONCENTRATIONS OBSERVED AT QC 19.7 C, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Bored Spring
Queen Creek Watershed

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Partial Body Contact (TRC, 0.075 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.7 mg/L)

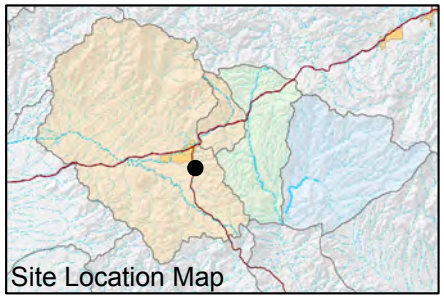
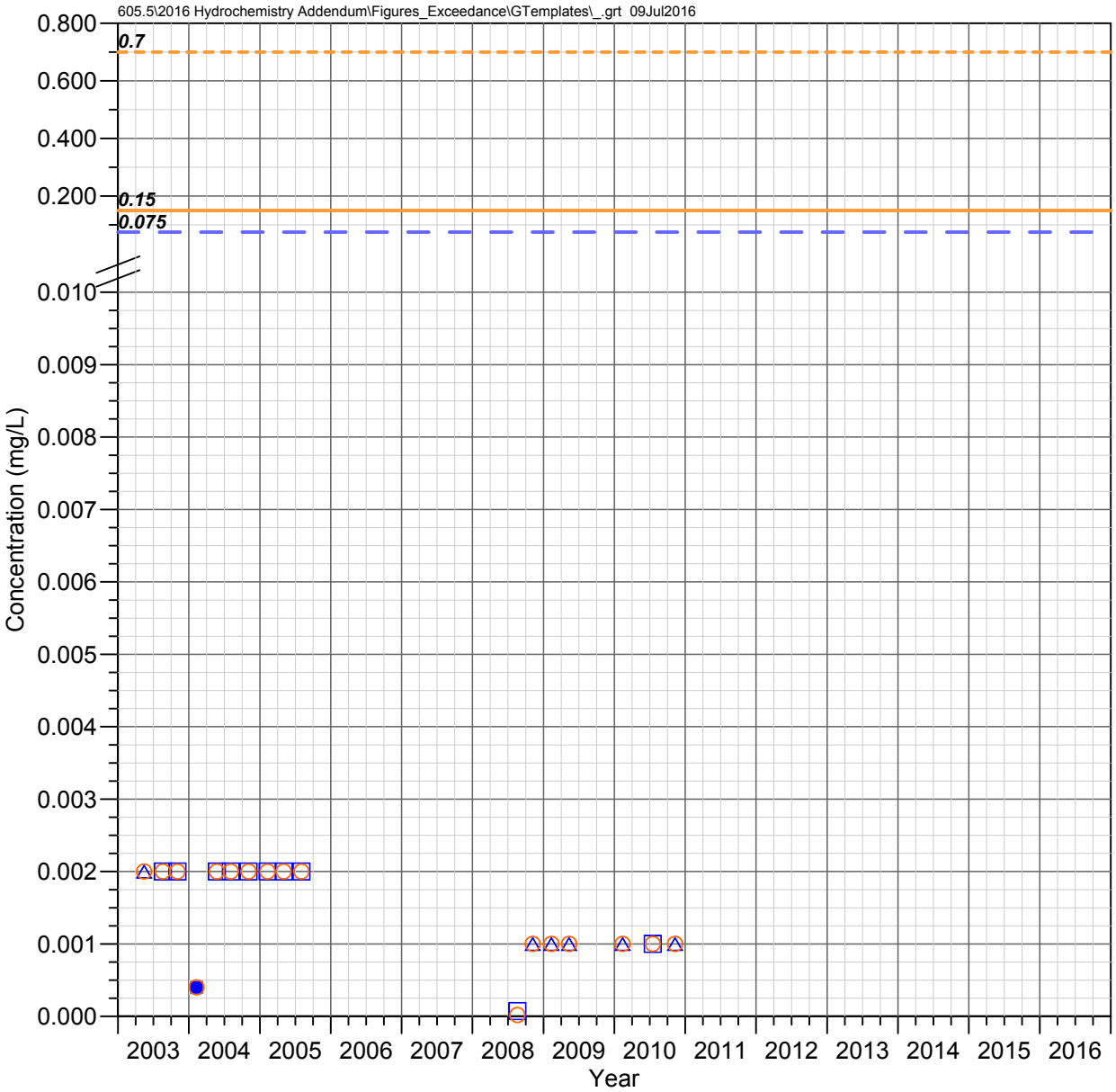


FIGURE F-741. THALLIUM CONCENTRATIONS OBSERVED AT BORED SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Hidden Spring
Queen Creek Watershed

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Partial Body Contact (TRC, 0.075 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.7 mg/L)

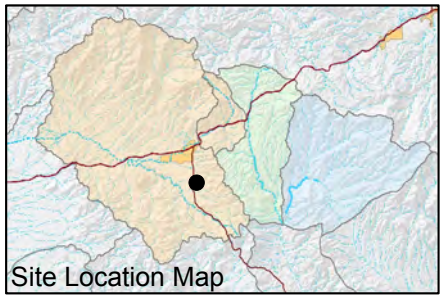
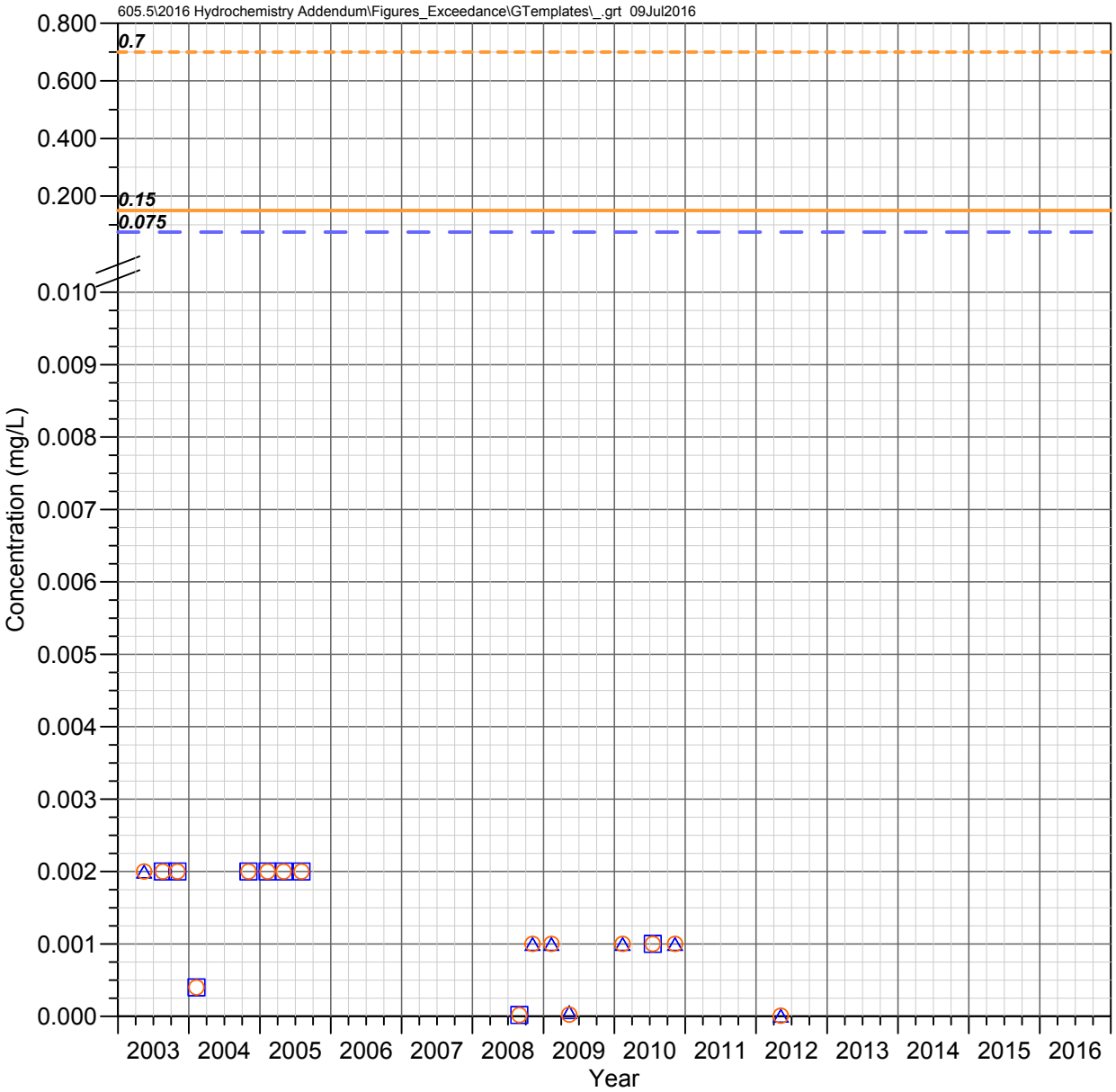


FIGURE F-742. THALLIUM CONCENTRATIONS OBSERVED AT HIDDEN SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Kane Spring
Queen Creek Watershed

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Partial Body Contact (TRC, 0.075 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.7 mg/L)

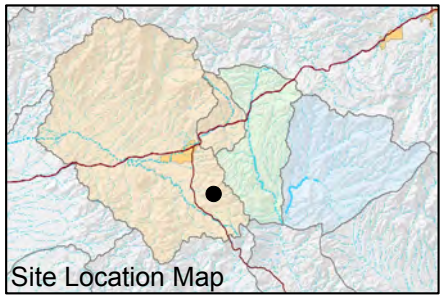
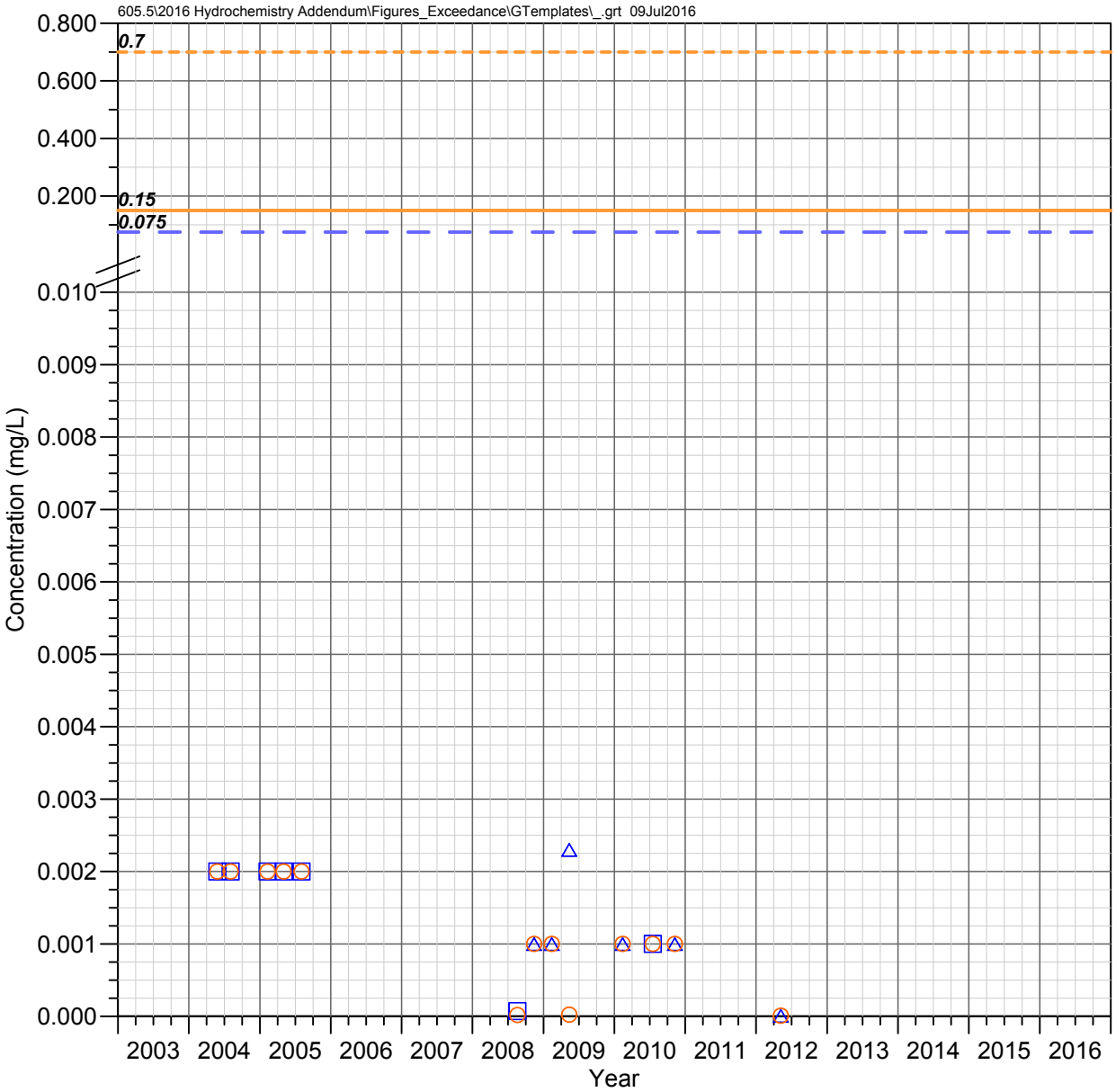


FIGURE F-743. THALLIUM CONCENTRATIONS OBSERVED AT KANE SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Blue Spring
Queen Creek Watershed

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Partial Body Contact (TRC, 0.075 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.7 mg/L)

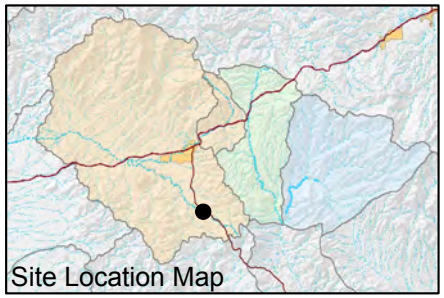
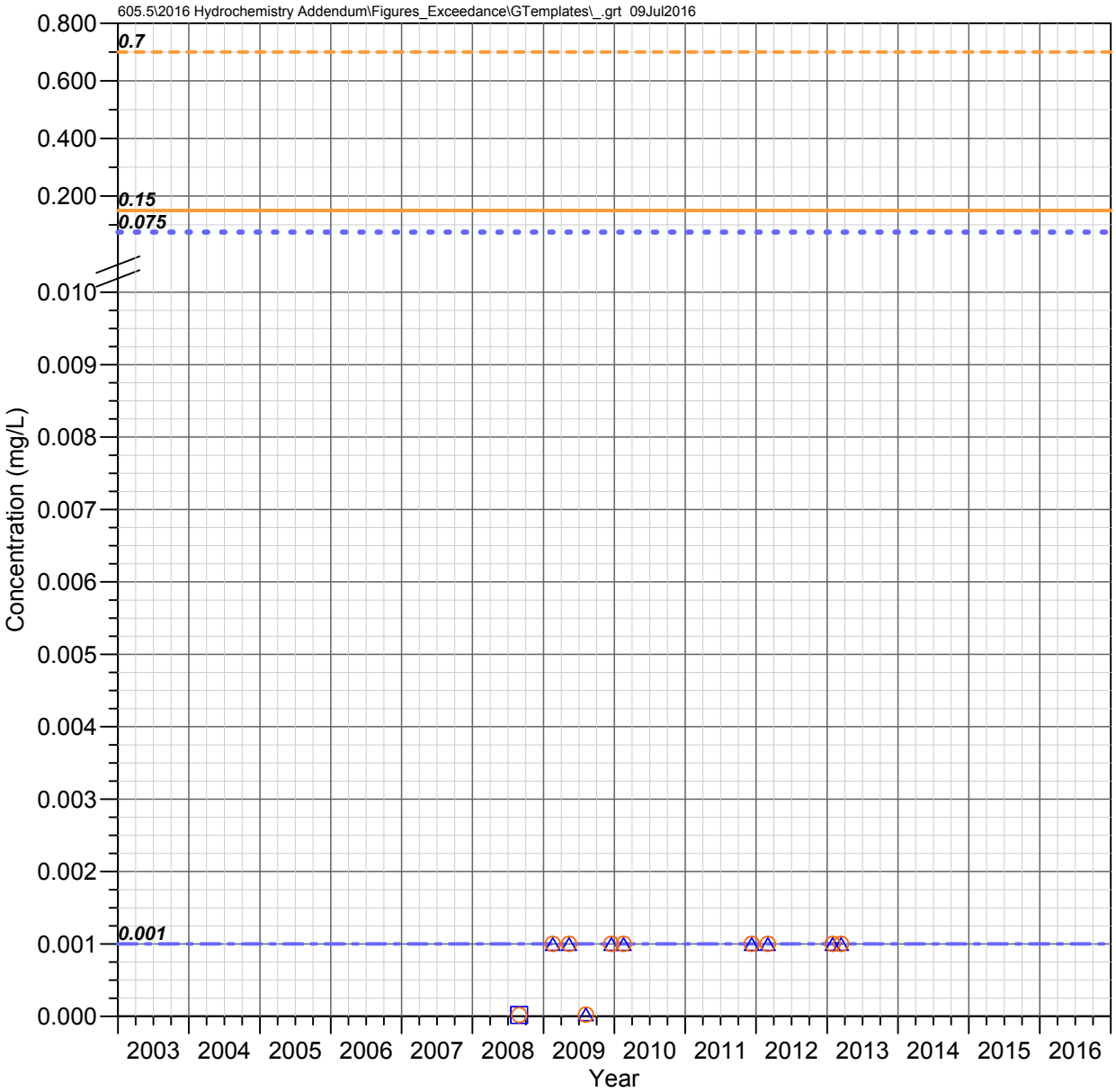


FIGURE F-744. THALLIUM CONCENTRATIONS OBSERVED AT BLUE SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



IC 1.0 C
Devils Canyon Watershed

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.075 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.7 mg/L)
- AZ Fish Consumption (TRC, 0.001 mg/L)

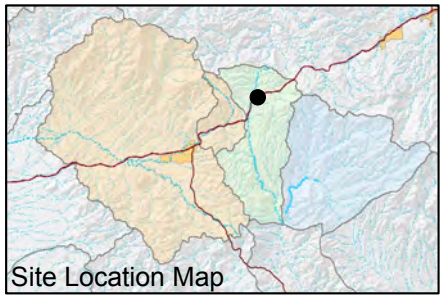
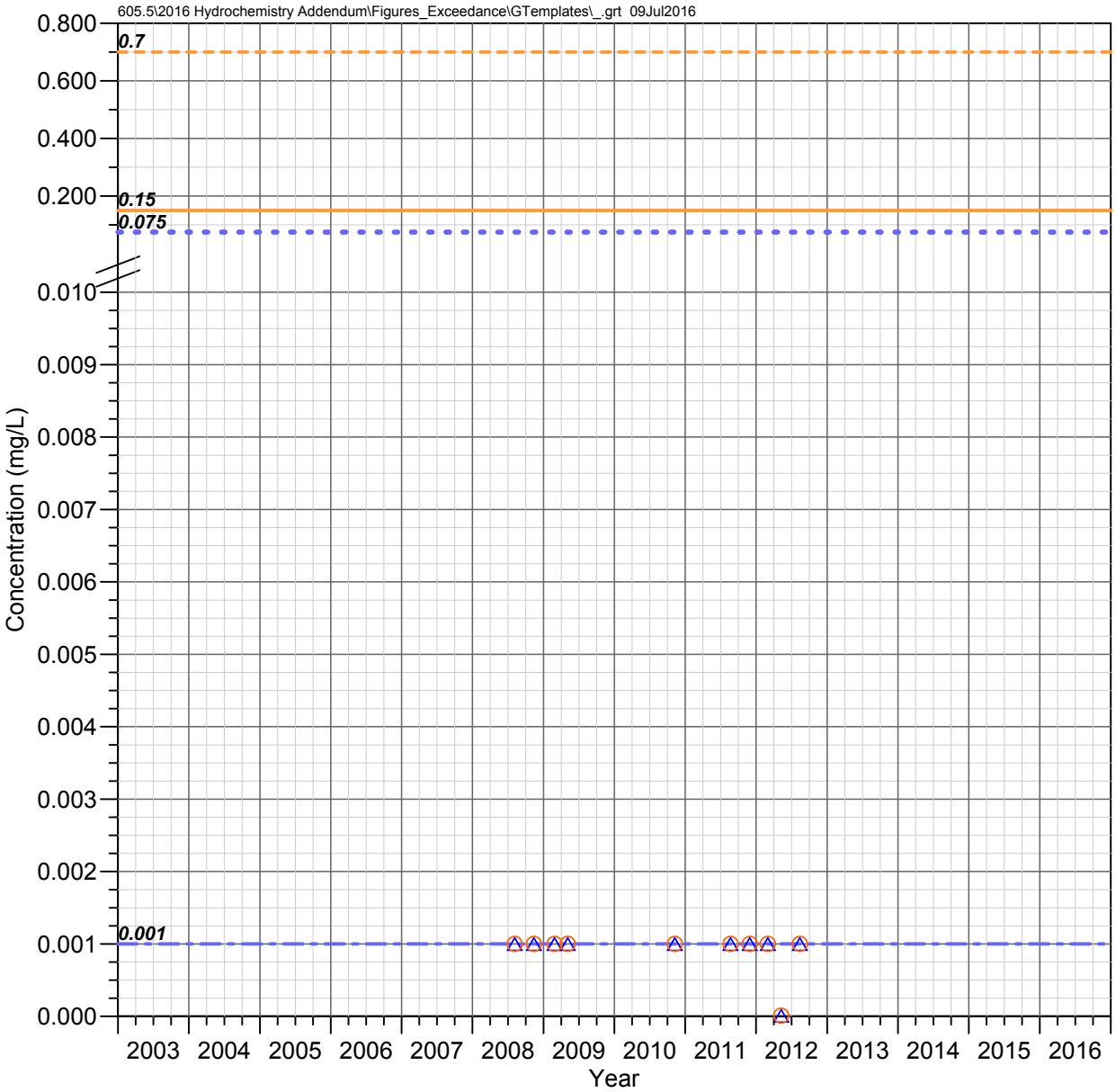


FIGURE F-745. THALLIUM CONCENTRATIONS OBSERVED AT IC 1.0 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 15.5 C
Devils Canyon Watershed

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.075 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.7 mg/L)
- AZ Fish Consumption (TRC, 0.001 mg/L)

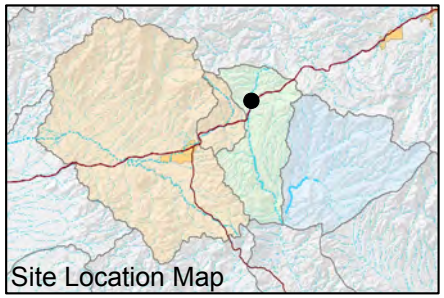
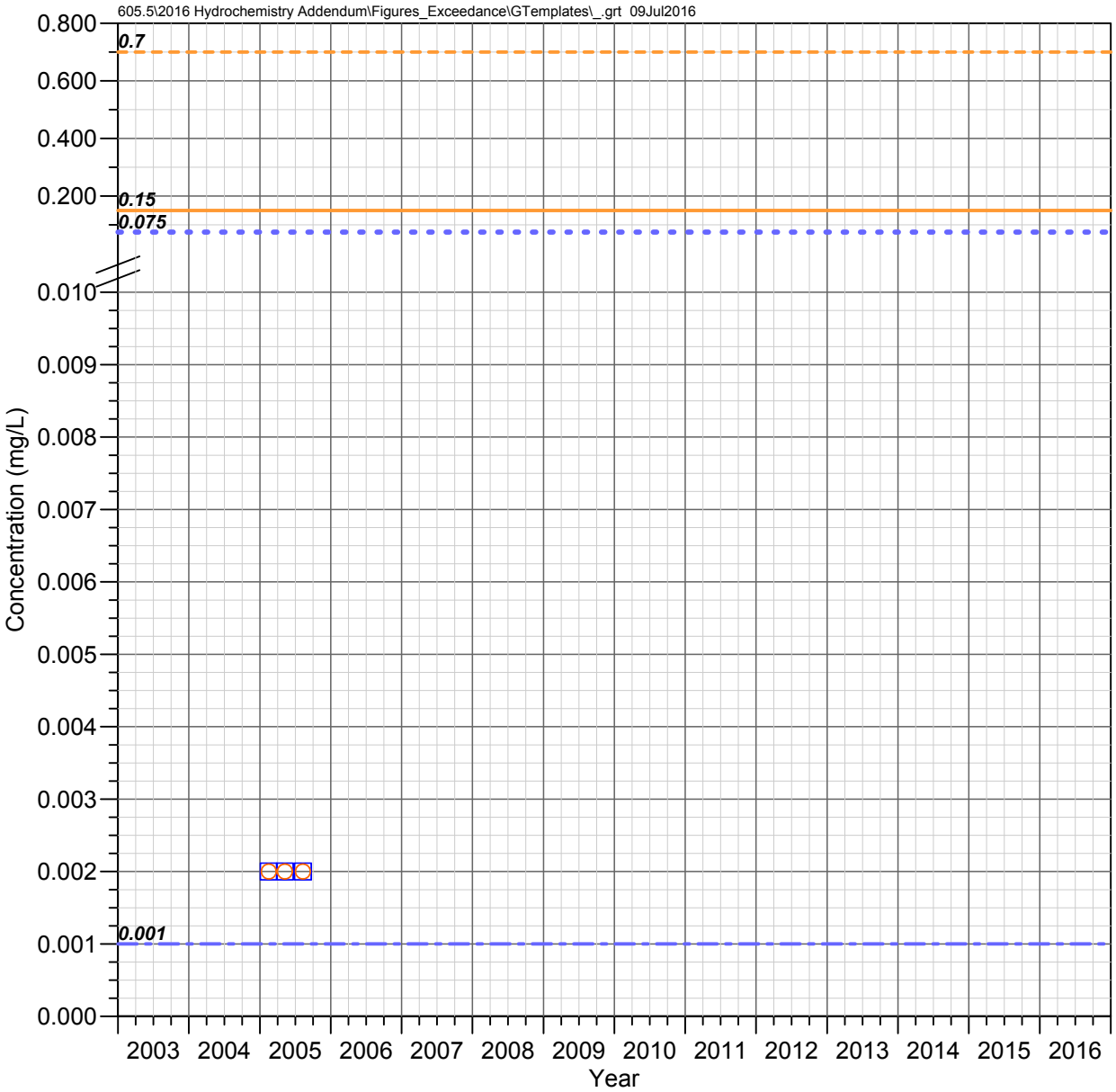


FIGURE F-746. THALLIUM CONCENTRATIONS OBSERVED AT DC 15.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 15.2 C
Devils Canyon Watershed

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.075 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.7 mg/L)
- AZ Fish Consumption (TRC, 0.001 mg/L)

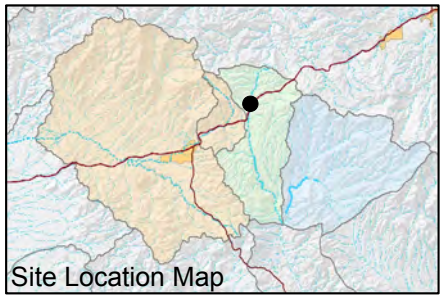
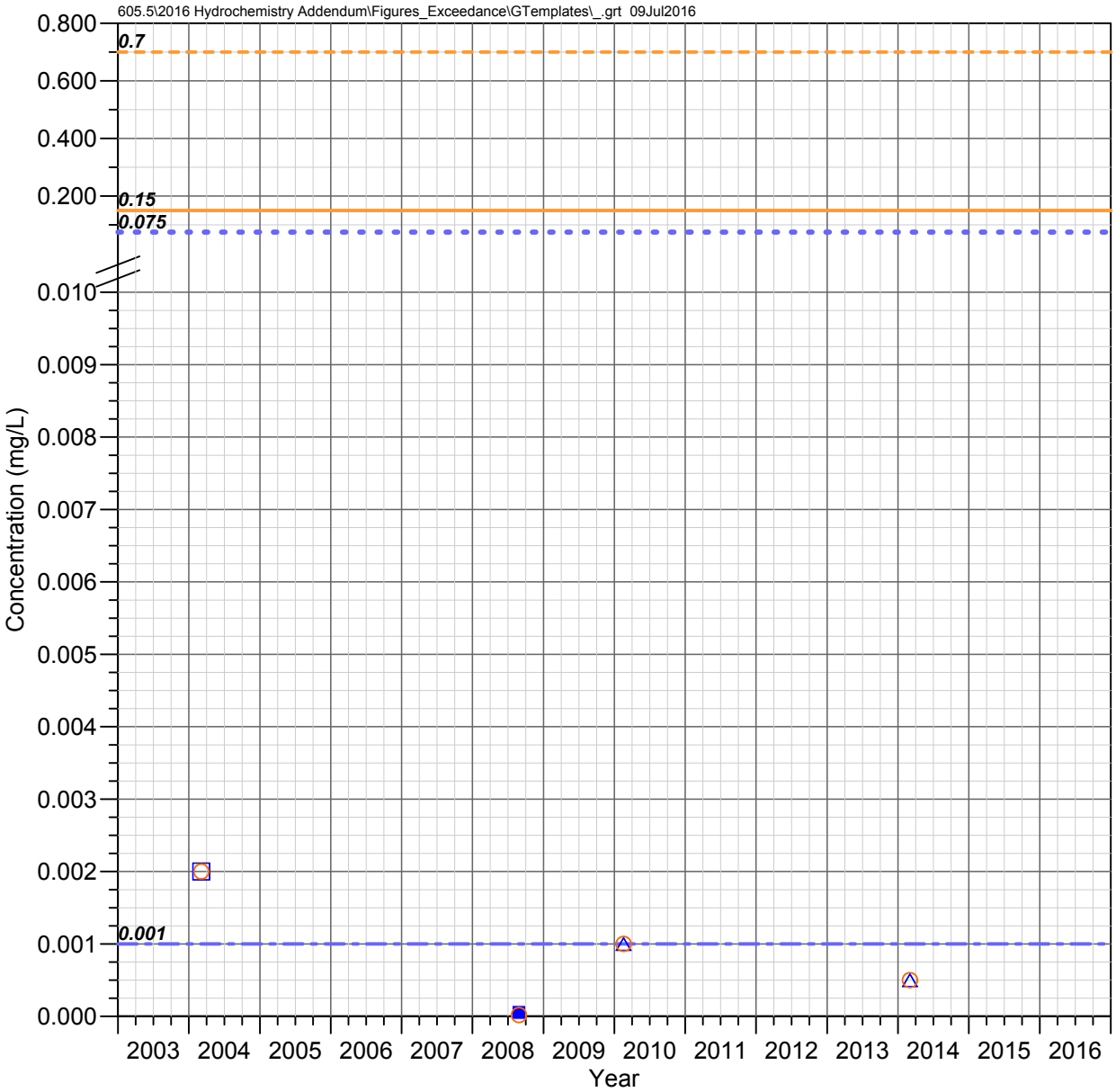


FIGURE F-747. THALLIUM CONCENTRATIONS OBSERVED AT DC 15.2 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 14.7 C
Devils Canyon Watershed

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.075 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.7 mg/L)
- AZ Fish Consumption (TRC, 0.001 mg/L)

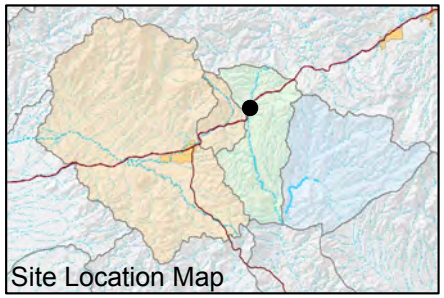
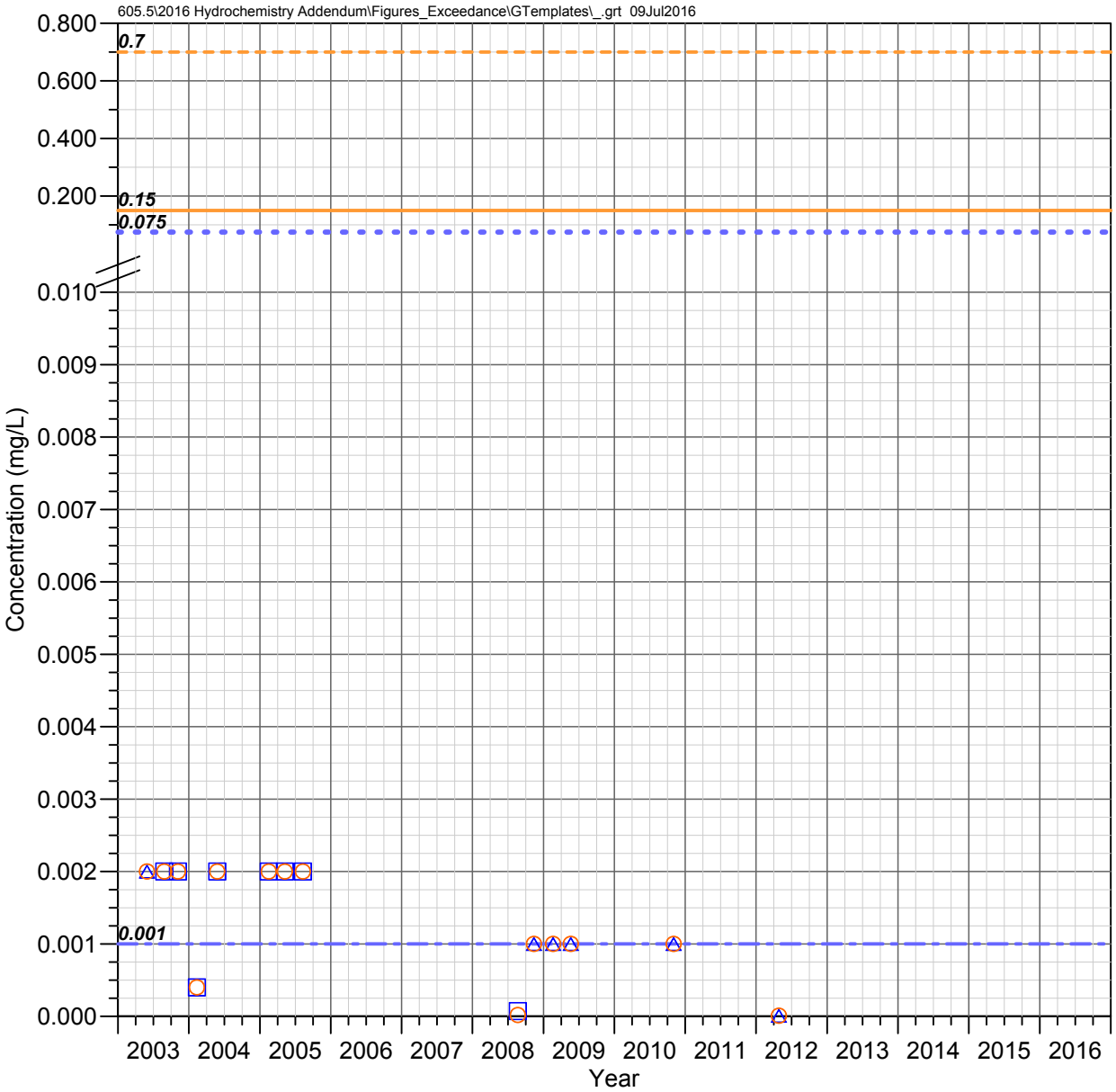


FIGURE F-748. THALLIUM CONCENTRATIONS OBSERVED AT DC 14.7 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 13.5 C
Devils Canyon Watershed

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.075 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.7 mg/L)
- AZ Fish Consumption (TRC, 0.001 mg/L)

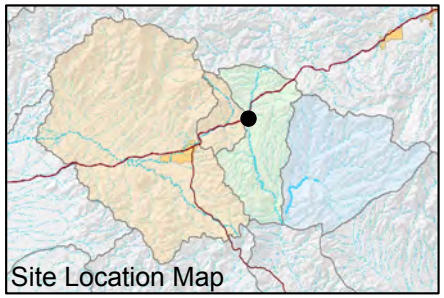
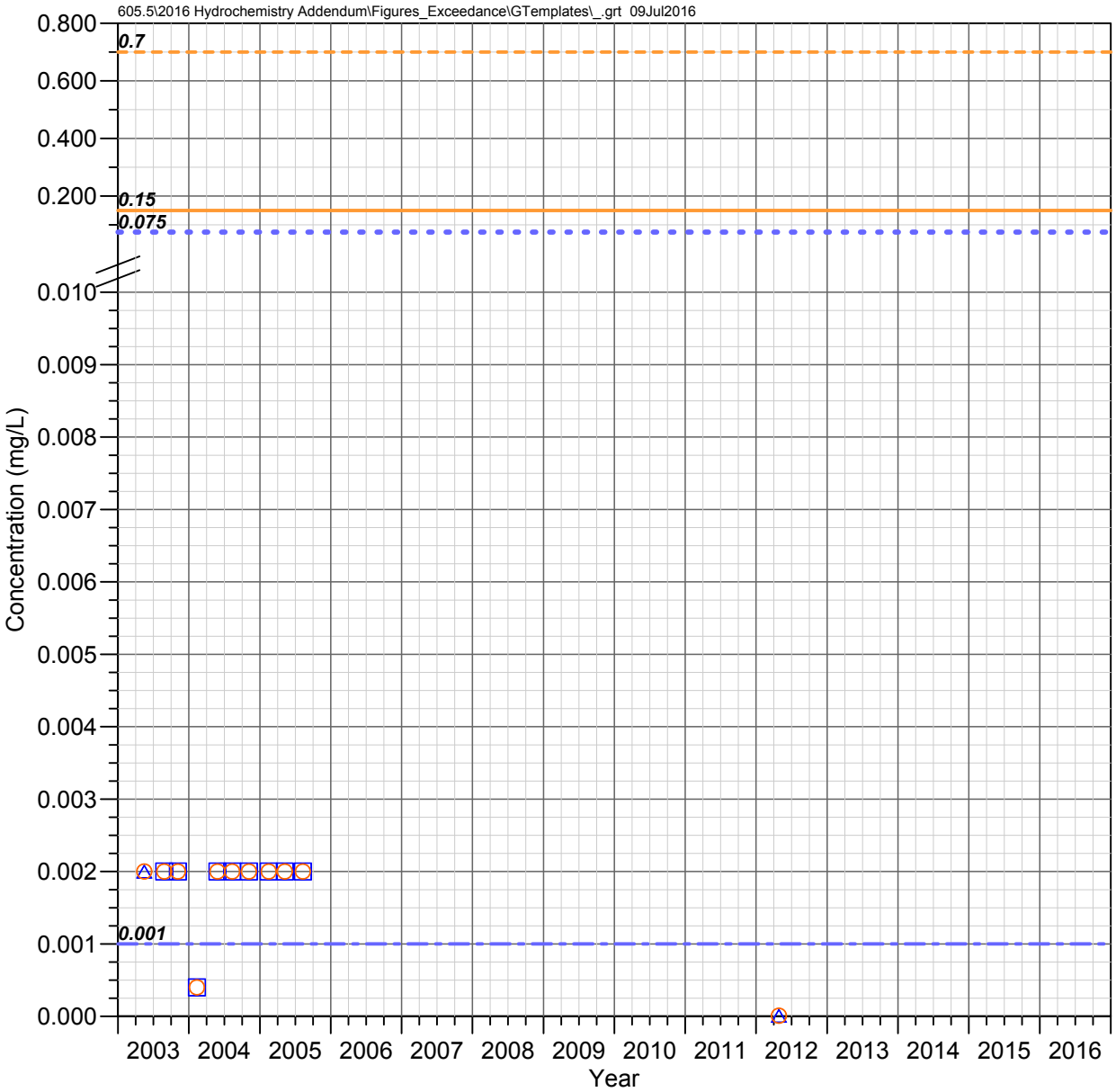


FIGURE F-749. THALLIUM CONCENTRATIONS OBSERVED AT DC 13.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 10.9 C
Devils Canyon Watershed

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.075 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.7 mg/L)
- AZ Fish Consumption (TRC, 0.001 mg/L)

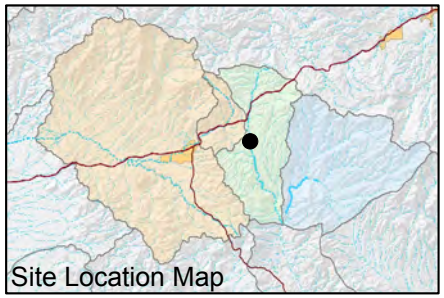
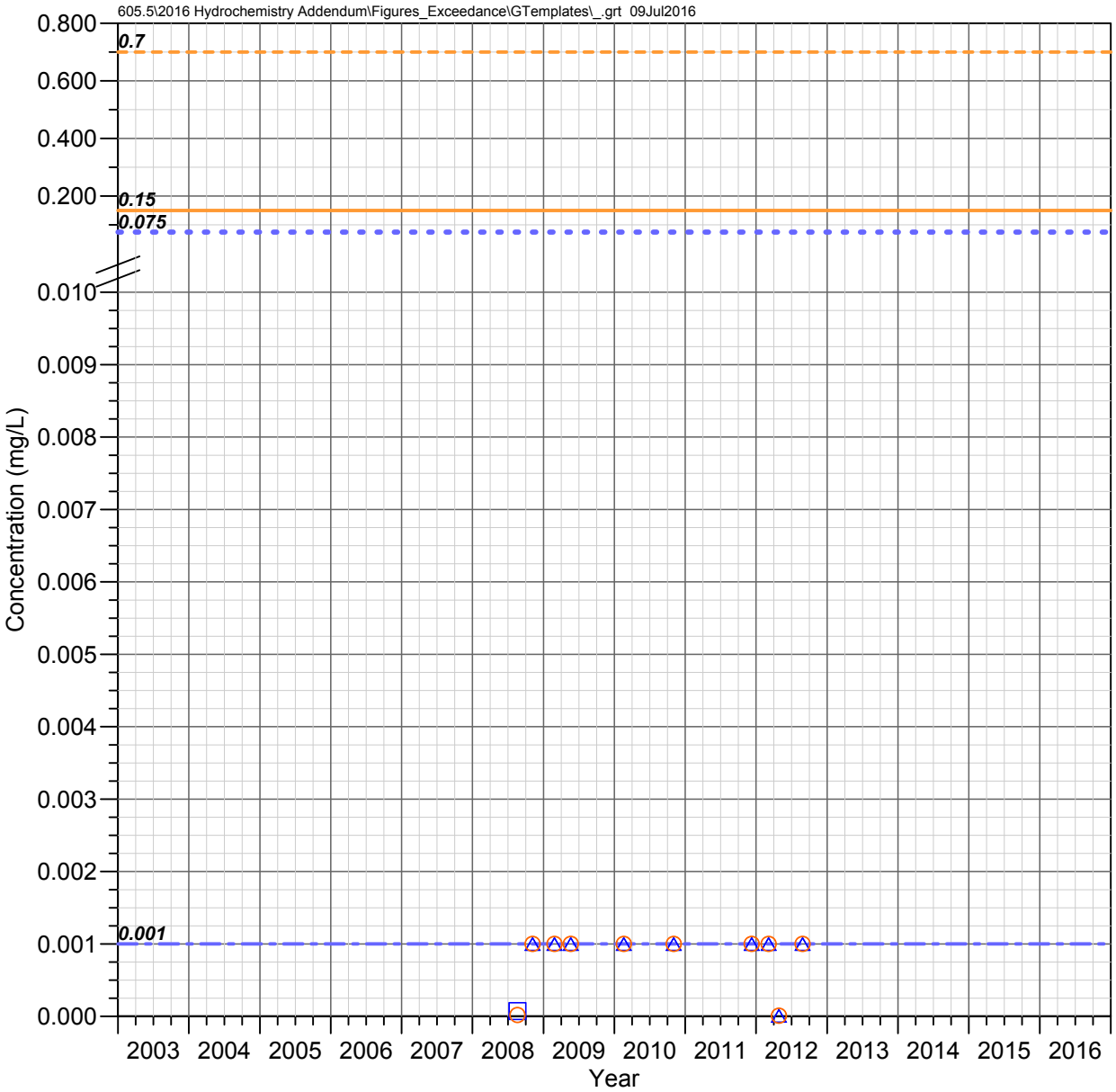


FIGURE F-750. THALLIUM CONCENTRATIONS OBSERVED AT DC 10.9 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



RR 1.5 C
Devils Canyon Watershed

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; DIS = Dissolved

- AZ Full Body Contact (TRC, 0.075 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.7 mg/L)
- AZ Fish Consumption (TRC, 0.001 mg/L)

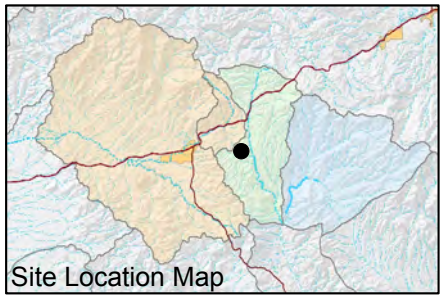
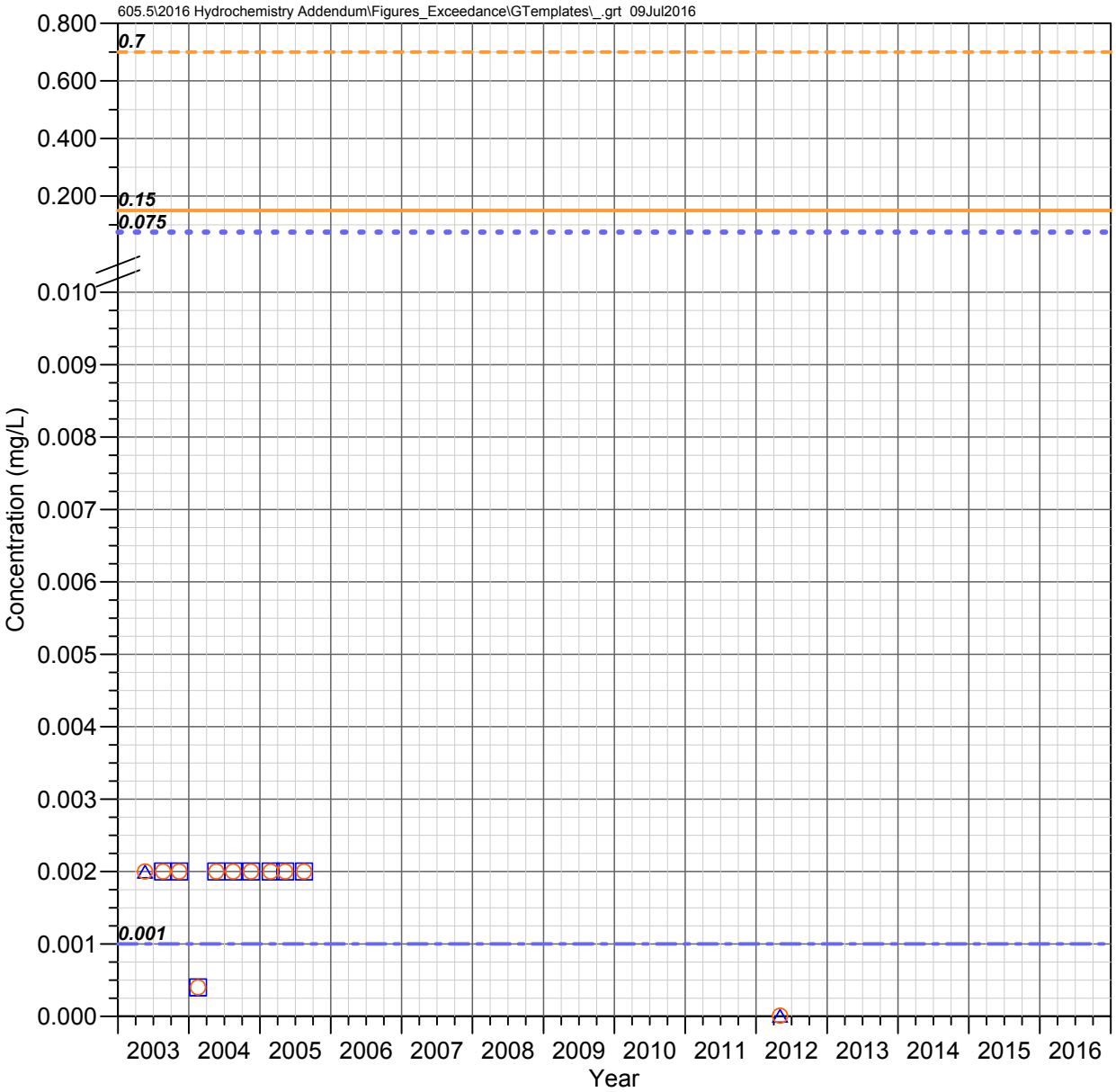


FIGURE F-751. THALLIUM CONCENTRATIONS OBSERVED AT RR 1.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.8 C
Devils Canyon Watershed

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.075 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.7 mg/L)
- AZ Fish Consumption (TRC, 0.001 mg/L)

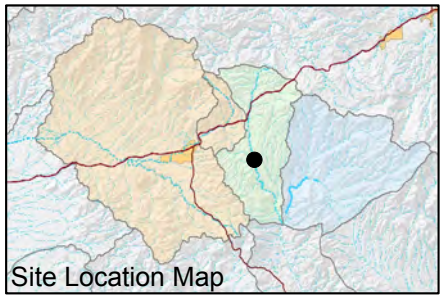
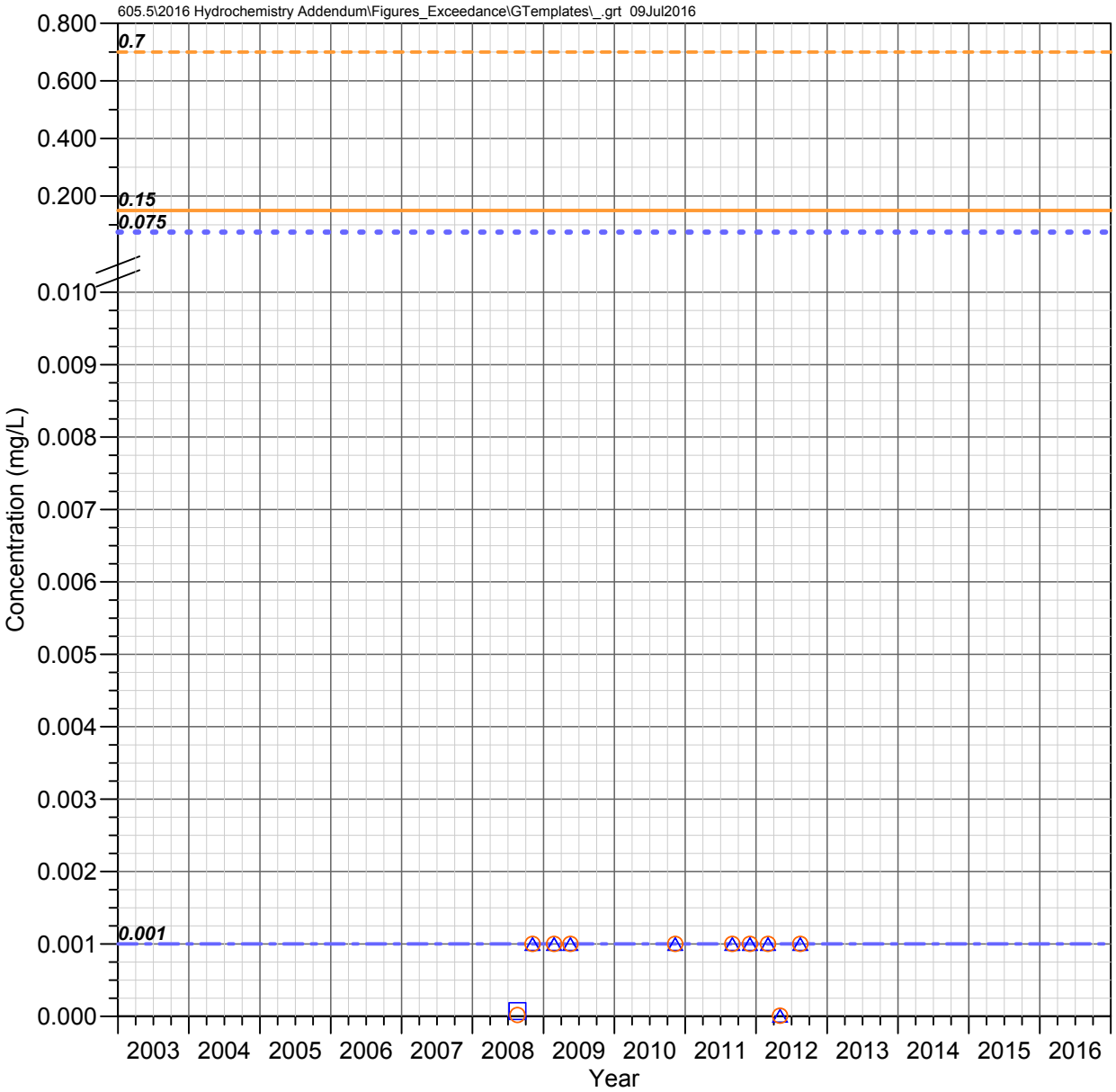


FIGURE F-752. THALLIUM CONCENTRATIONS OBSERVED AT DC 8.8 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



H 0.1 C
Devils Canyon Watershed

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.075 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.7 mg/L)
- AZ Fish Consumption (TRC, 0.001 mg/L)

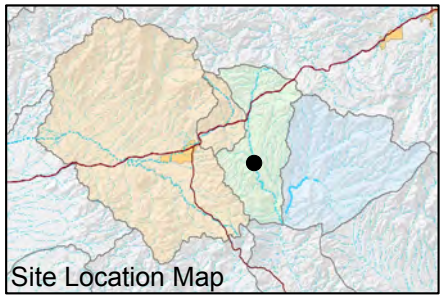
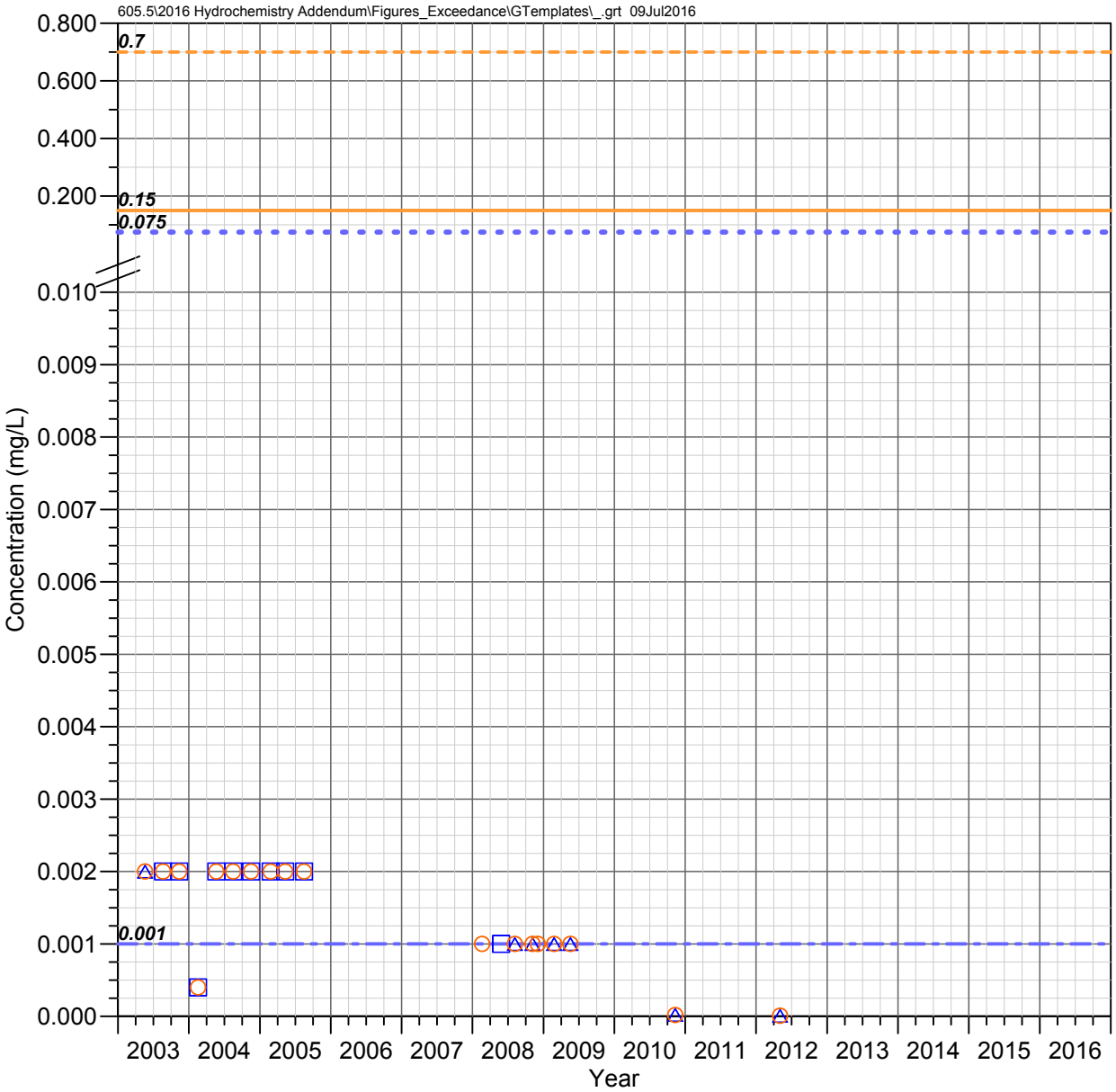


FIGURE F-753. THALLIUM CONCENTRATIONS OBSERVED AT H 0.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.2 W
Devils Canyon Watershed

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.075 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.7 mg/L)
- AZ Fish Consumption (TRC, 0.001 mg/L)

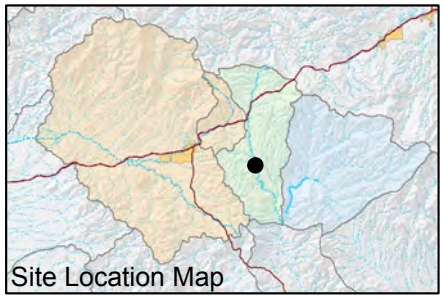
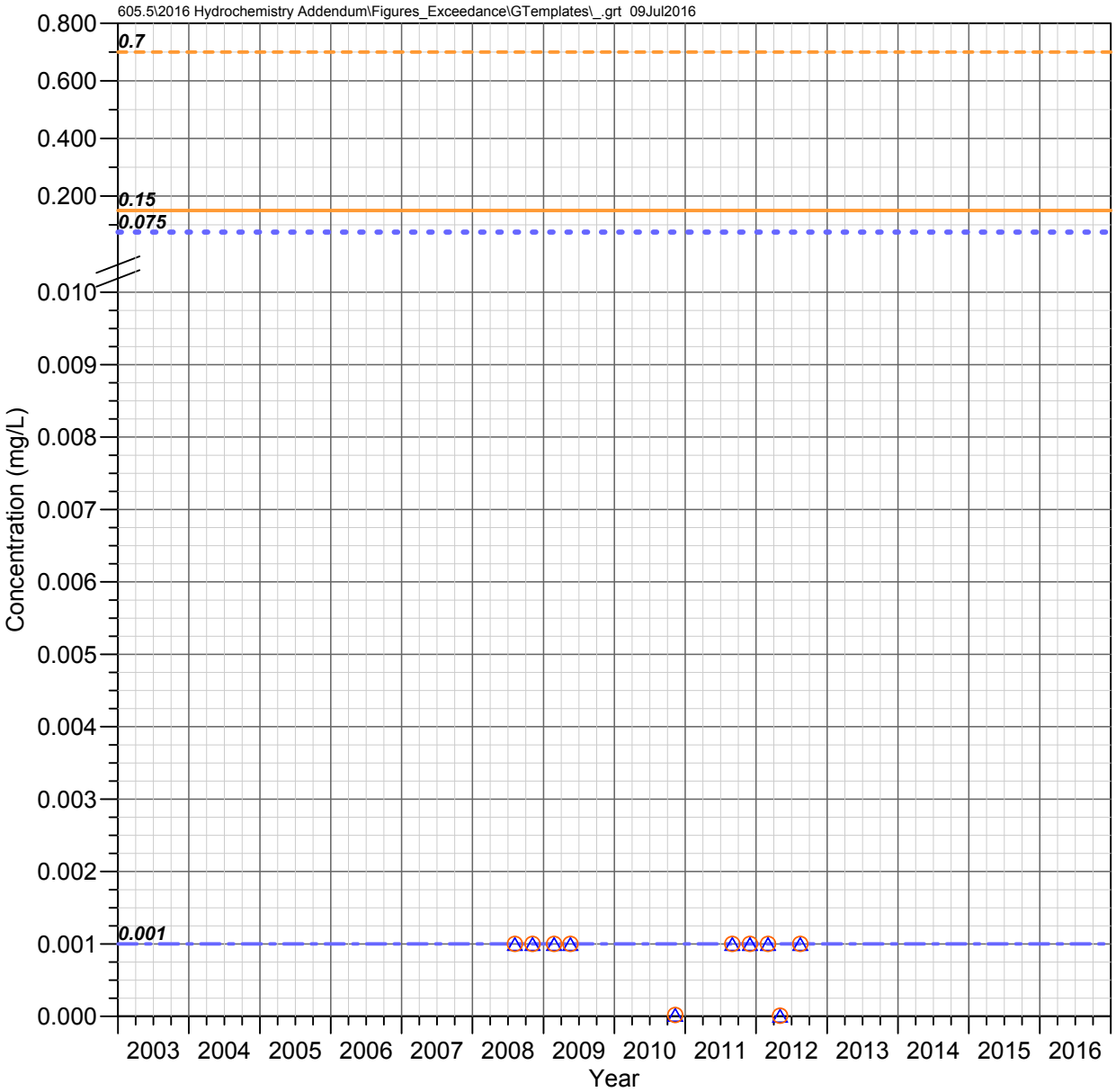


FIGURE F-754. THALLIUM CONCENTRATIONS OBSERVED AT DC 8.2 W, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.1 C
Devils Canyon Watershed

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.075 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.7 mg/L)
- AZ Fish Consumption (TRC, 0.001 mg/L)

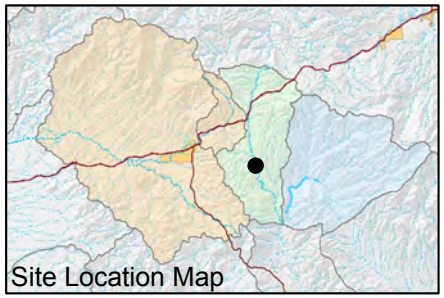
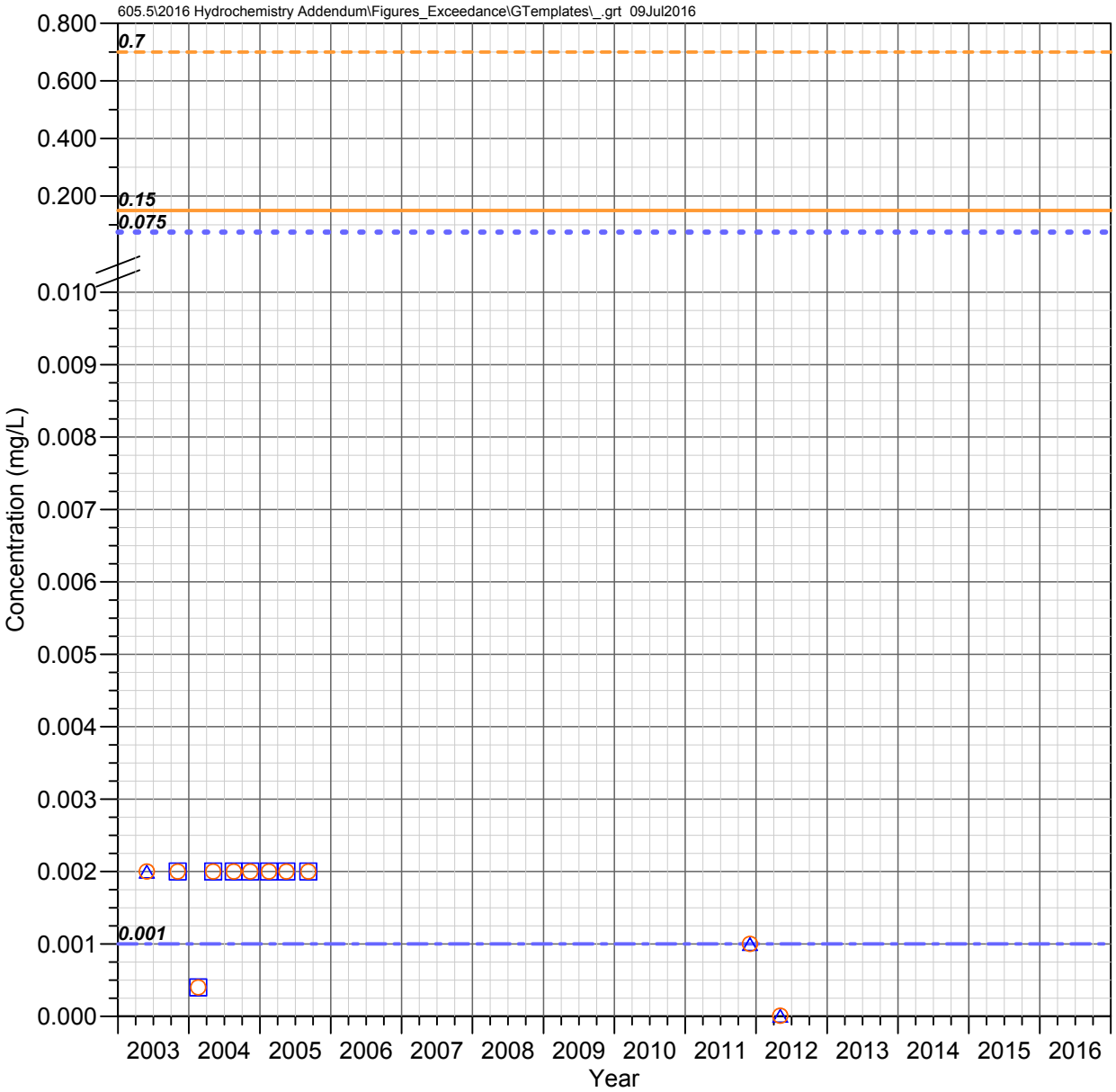


FIGURE F-755. THALLIUM CONCENTRATIONS OBSERVED AT DC 8.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 7.1 C
Devils Canyon Watershed

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.075 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.7 mg/L)
- AZ Fish Consumption (TRC, 0.001 mg/L)

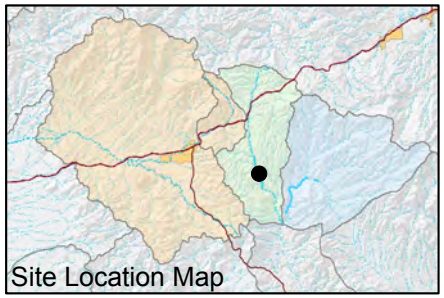
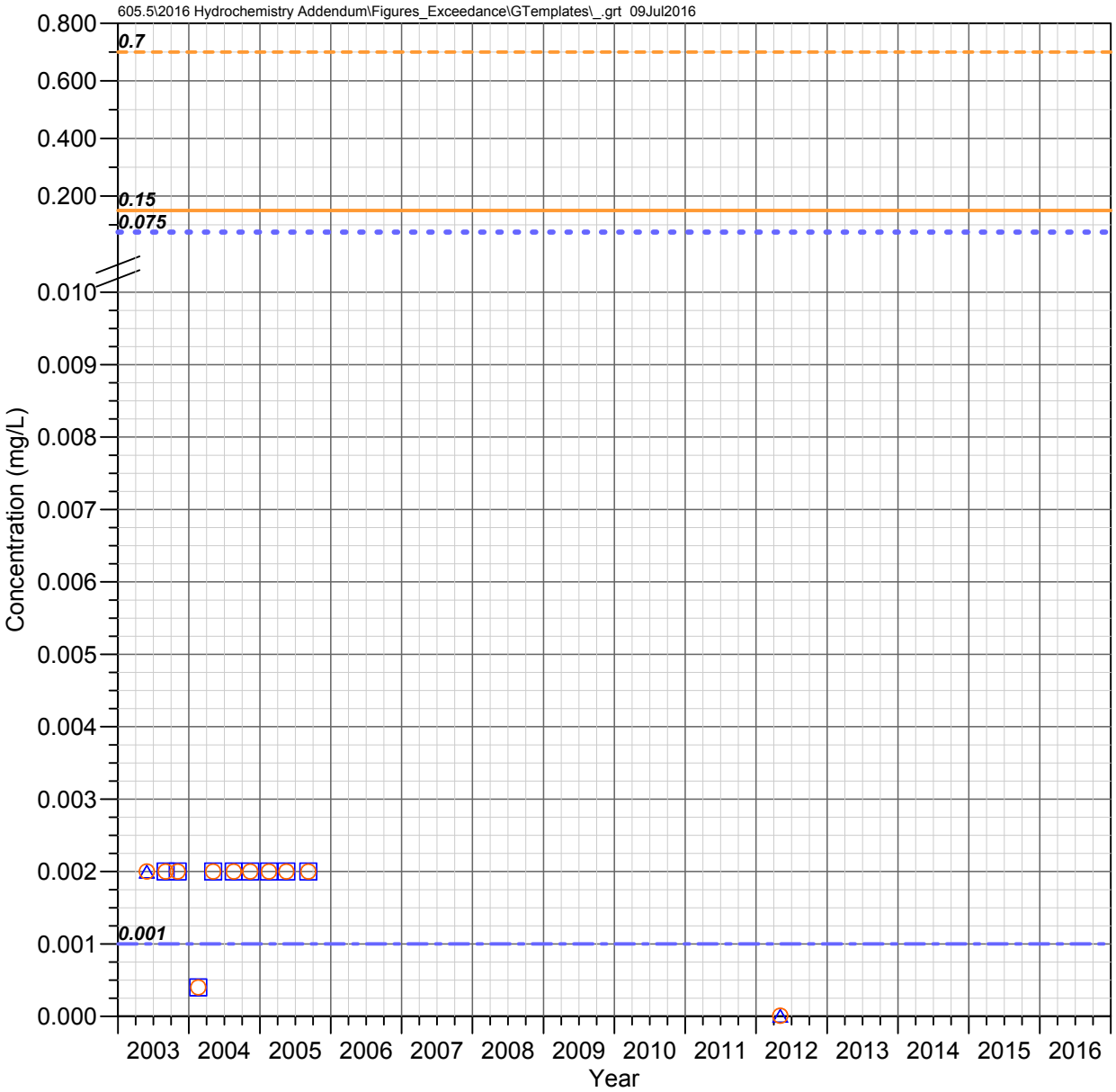


FIGURE F-756. THALLIUM CONCENTRATIONS OBSERVED AT DC 7.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.6 W (DCT 6.6 W)
Devils Canyon Watershed

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.075 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.7 mg/L)
- AZ Fish Consumption (TRC, 0.001 mg/L)

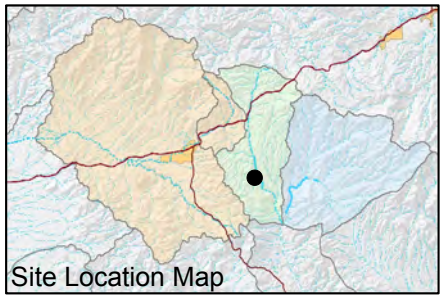
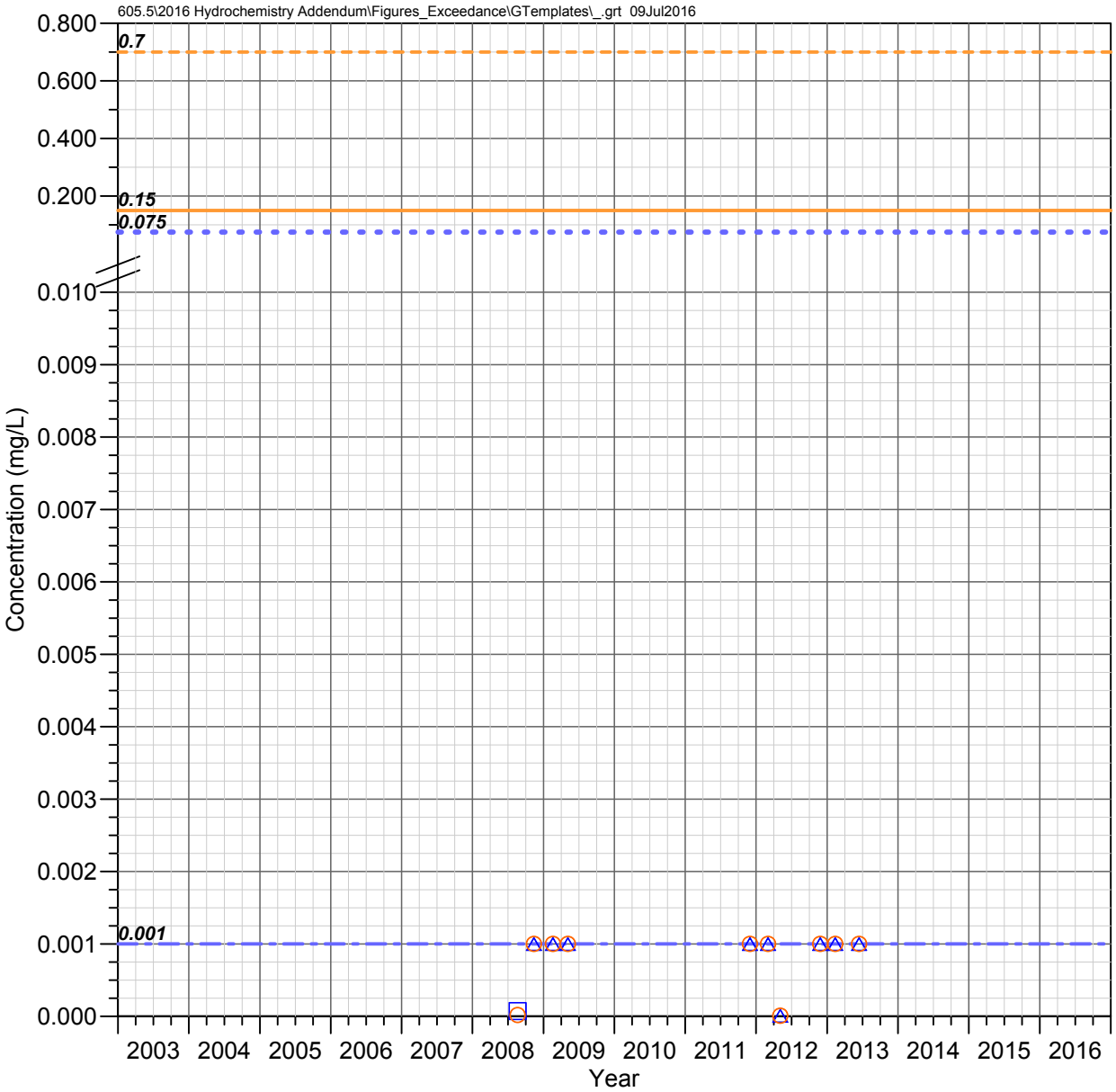


FIGURE F-757. THALLIUM CONCENTRATIONS OBSERVED AT DC 6.6 W (DCT 6.6 W), DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.14 C
Devils Canyon Watershed

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.075 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.7 mg/L)
- AZ Fish Consumption (TRC, 0.001 mg/L)

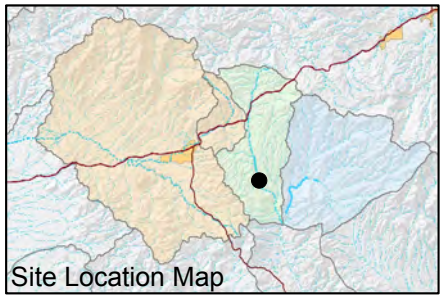
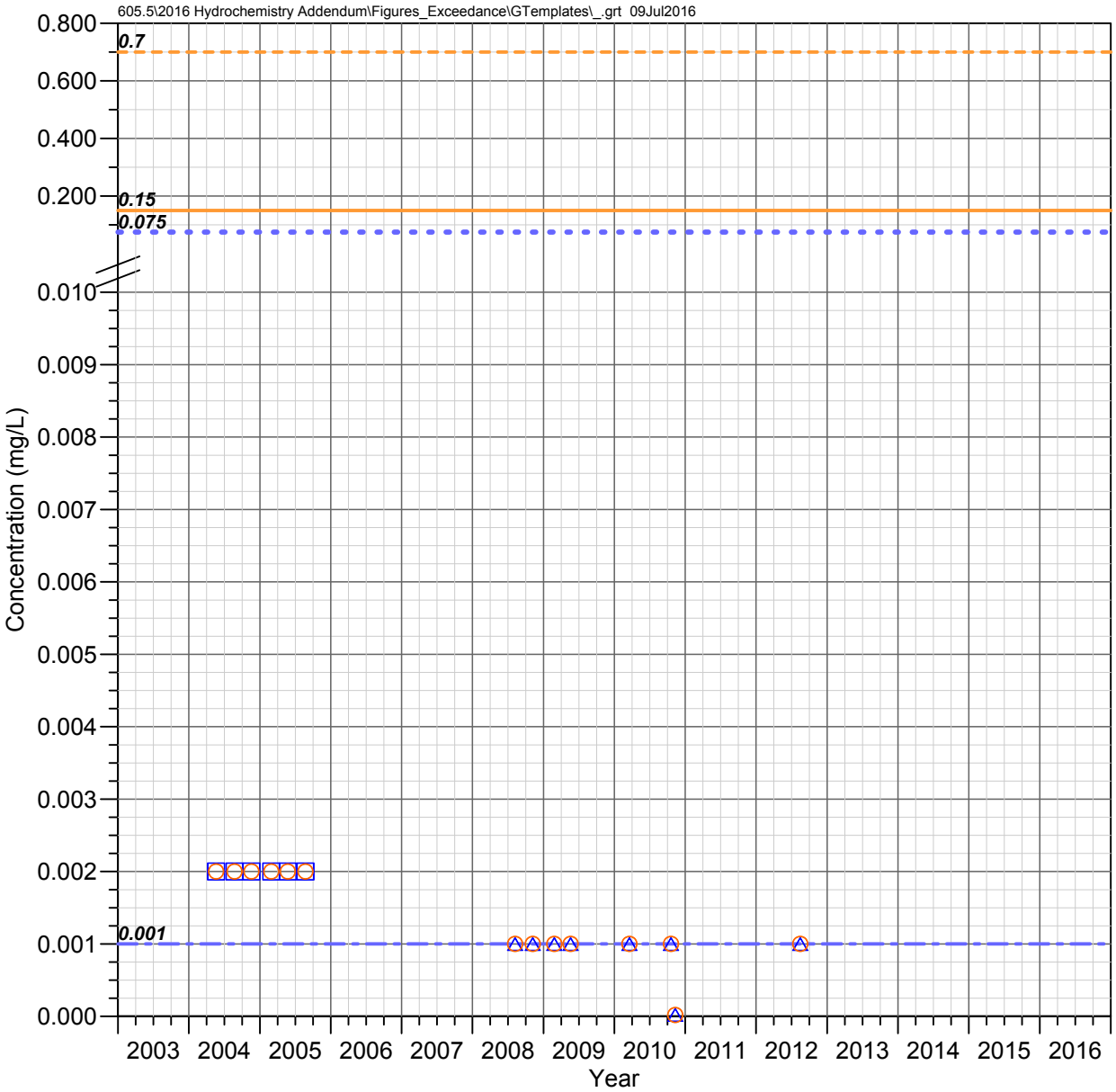


FIGURE F-758. THALLIUM CONCENTRATIONS OBSERVED AT DC 6.14 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.1 E
Devils Canyon Watershed

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; DIS = Dissolved

- AZ Full Body Contact (TRC, 0.075 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.7 mg/L)
- AZ Fish Consumption (TRC, 0.001 mg/L)

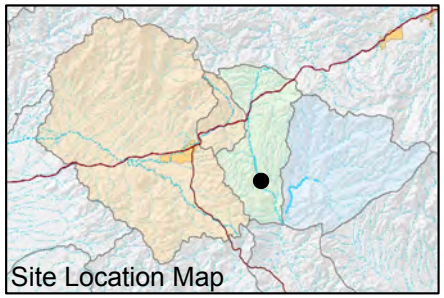
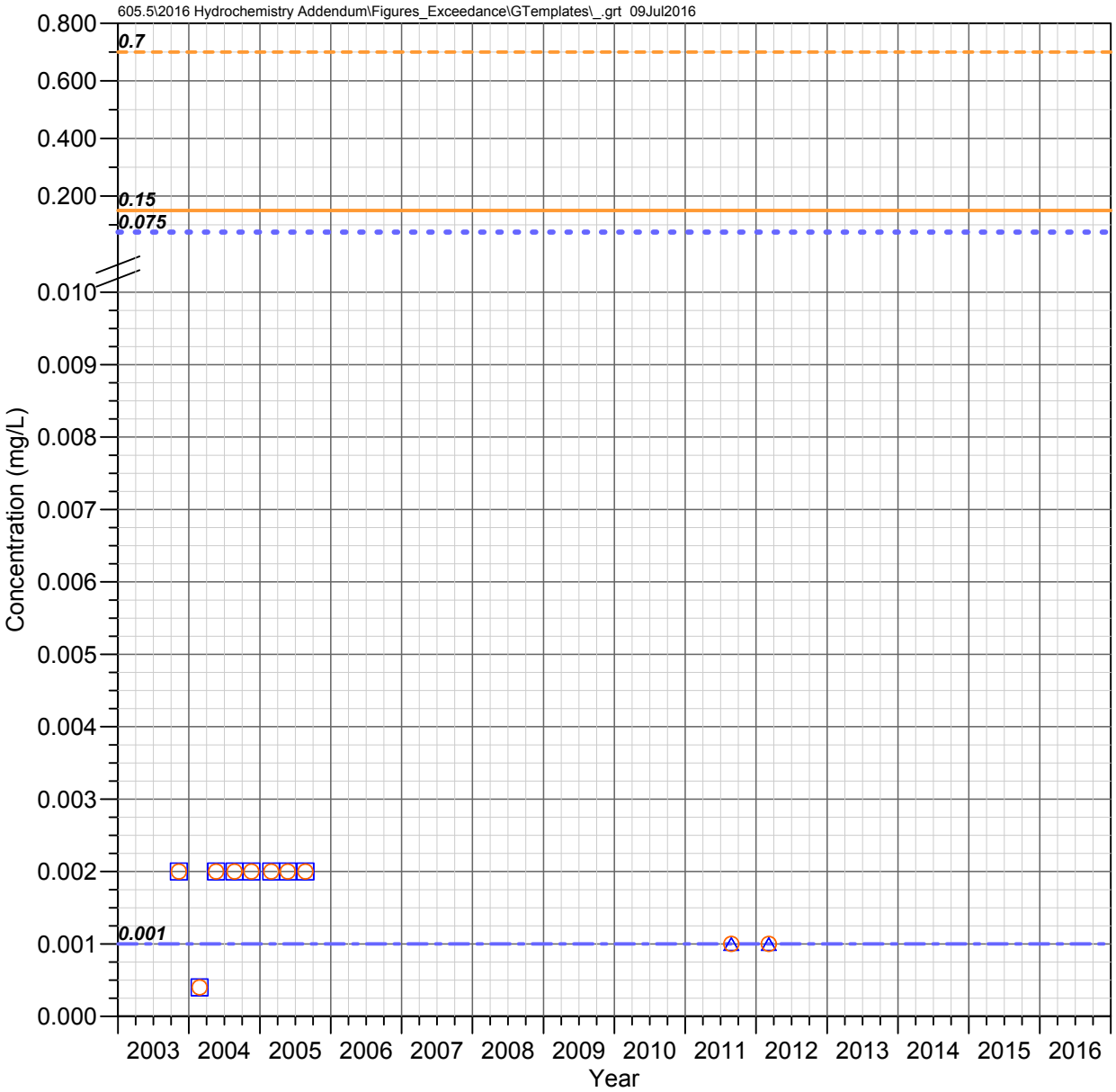


FIGURE F-759. THALLIUM CONCENTRATIONS OBSERVED AT DC 6.1 E, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 5.5 C
Devils Canyon Watershed

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.075 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.7 mg/L)
- AZ Fish Consumption (TRC, 0.001 mg/L)

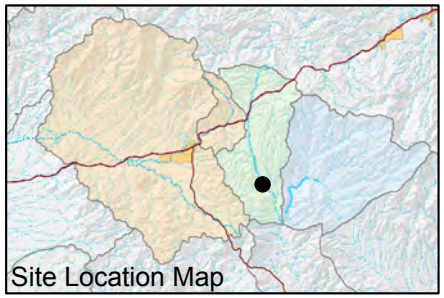
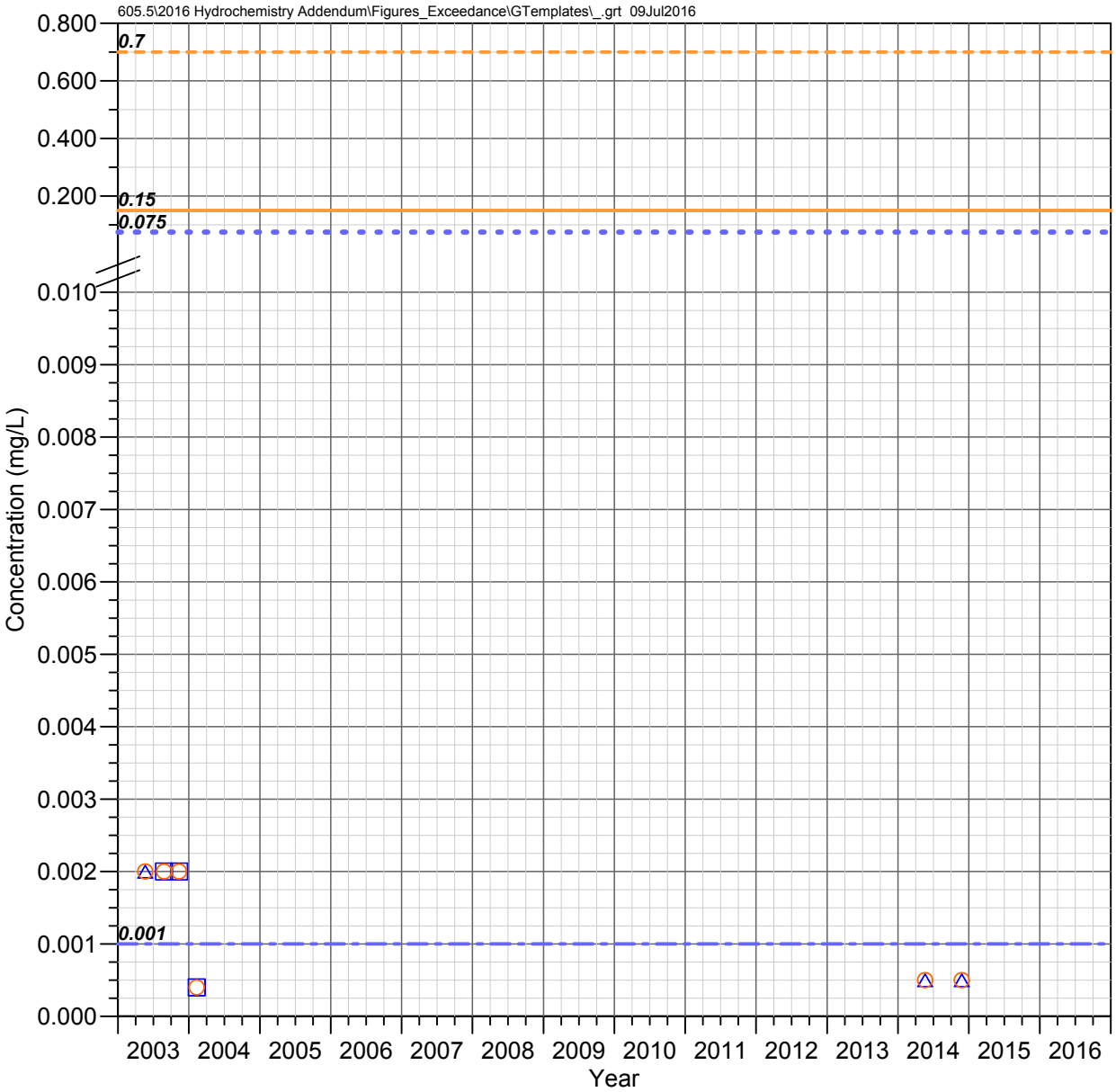


FIGURE F-760. THALLIUM CONCENTRATIONS OBSERVED AT DC 5.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 4.1 E
Devils Canyon Watershed

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.075 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.7 mg/L)
- AZ Fish Consumption (TRC, 0.001 mg/L)

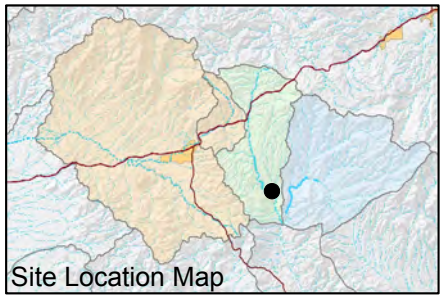
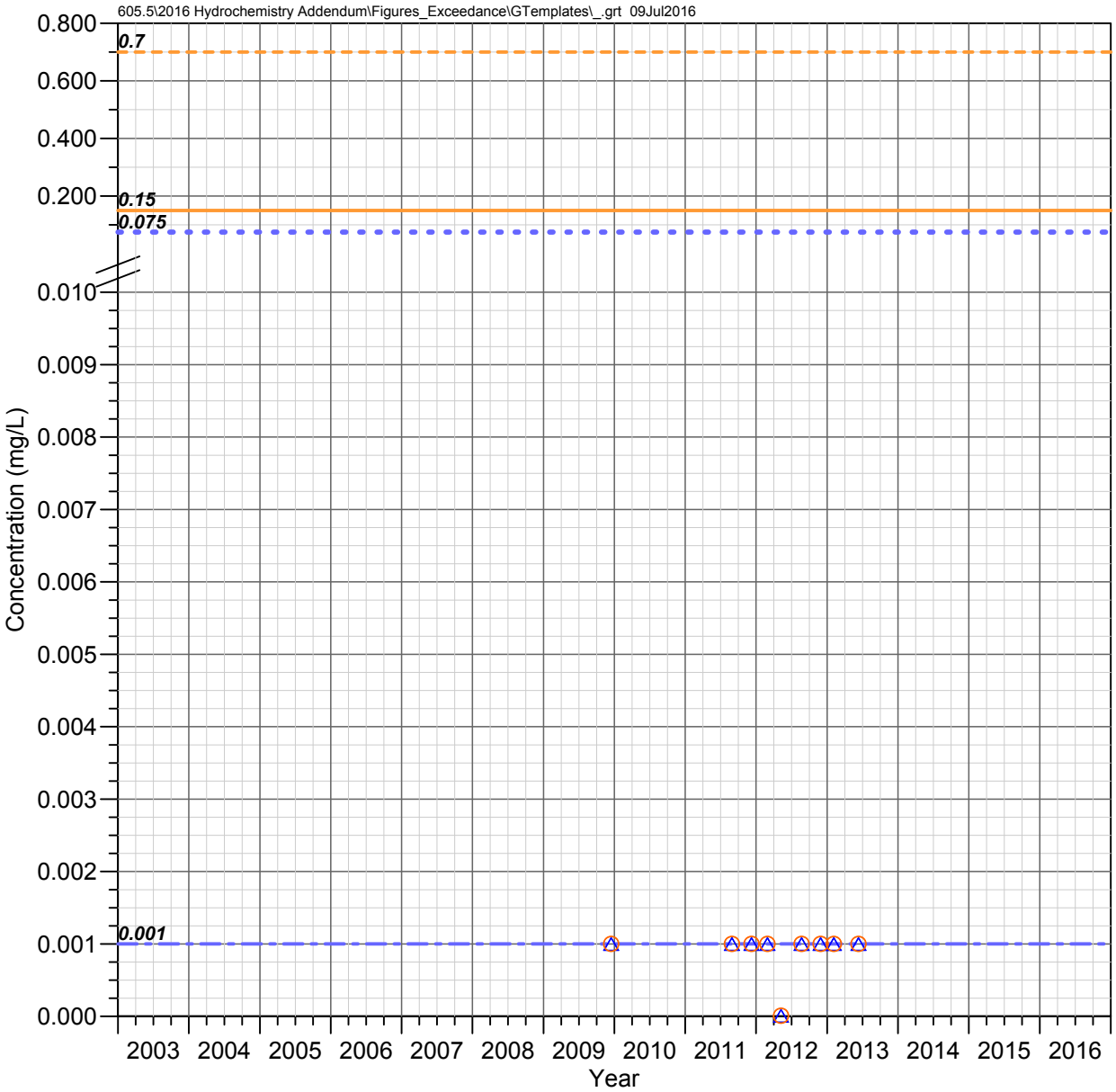


FIGURE F-761. THALLIUM CONCENTRATIONS OBSERVED AT DC 4.1 E, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Government Springs
Mineral Creek Watershed

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.075 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.7 mg/L)
- AZ Fish Consumption (TRC, 0.001 mg/L)

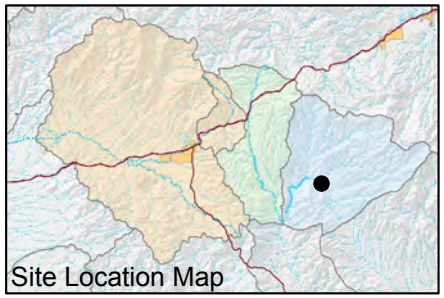
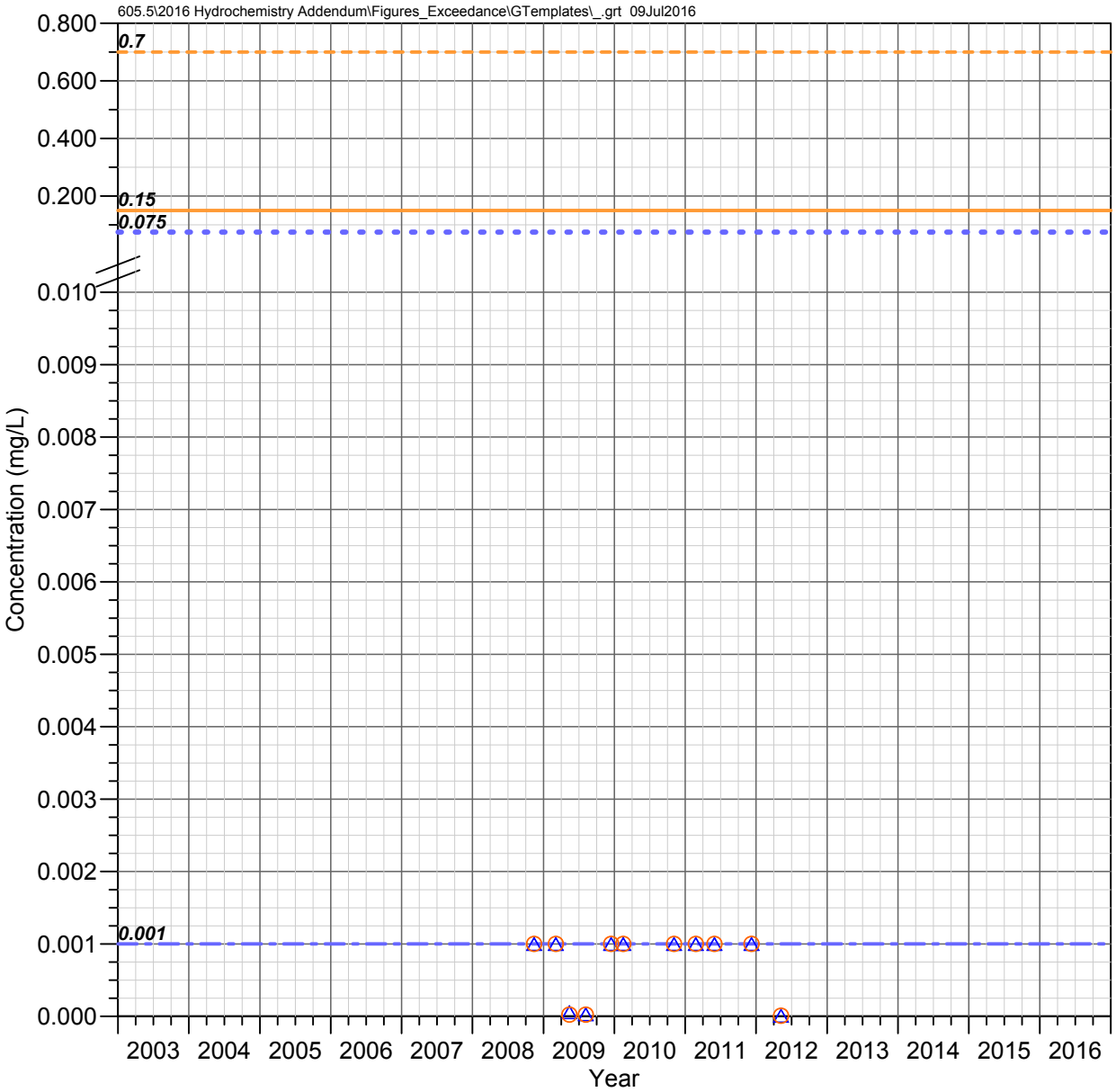


FIGURE F-762. THALLIUM CONCENTRATIONS OBSERVED AT GOVERNMENT SPRINGS, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 8.4 C
Mineral Creek Watershed

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.075 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.7 mg/L)
- AZ Fish Consumption (TRC, 0.001 mg/L)

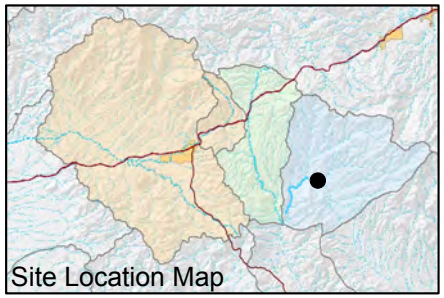
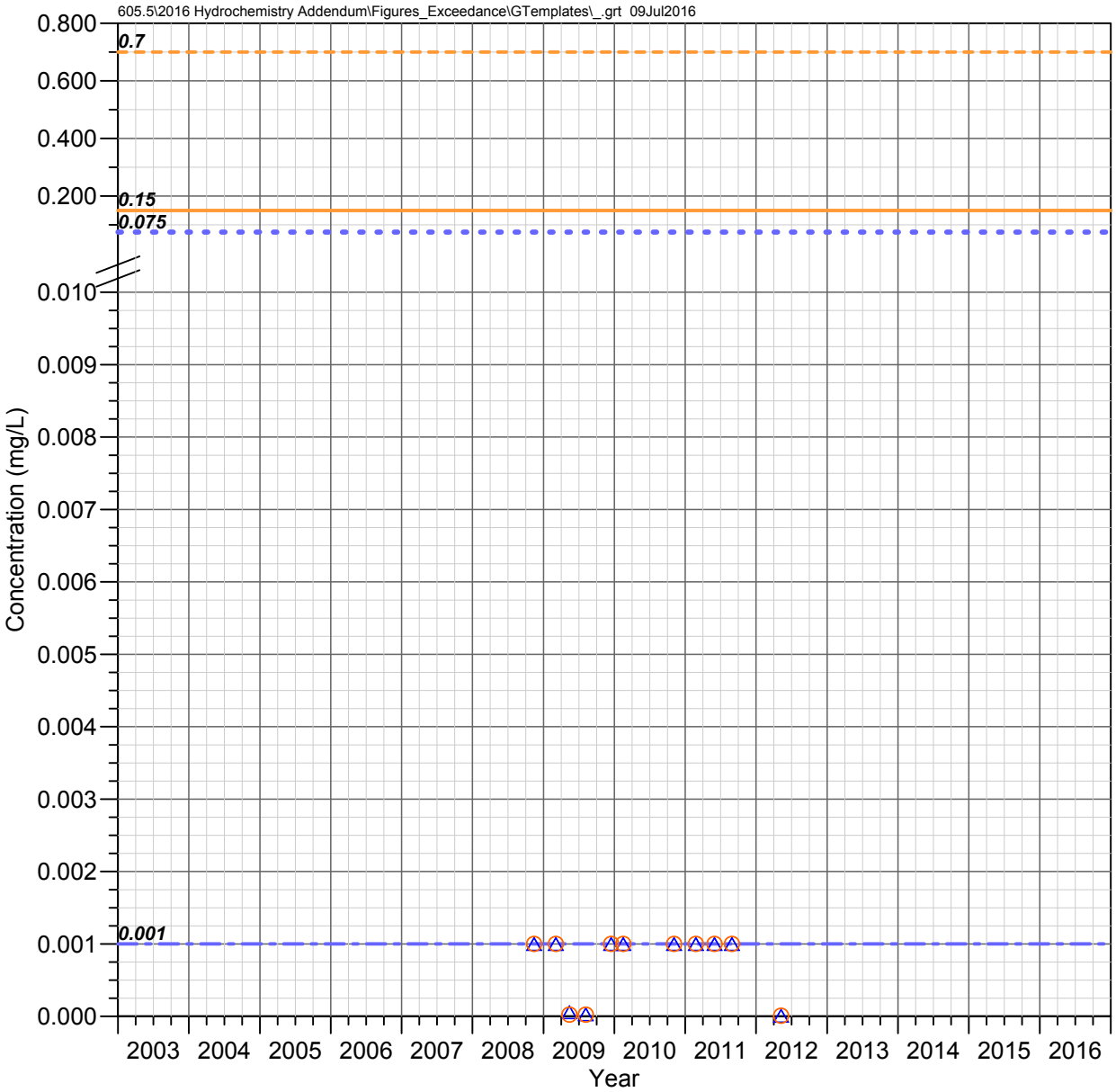


FIGURE F-763. THALLIUM CONCENTRATIONS OBSERVED AT MC 8.4 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



LF 0.2 C
Mineral Creek Watershed

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.075 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.7 mg/L)
- AZ Fish Consumption (TRC, 0.001 mg/L)

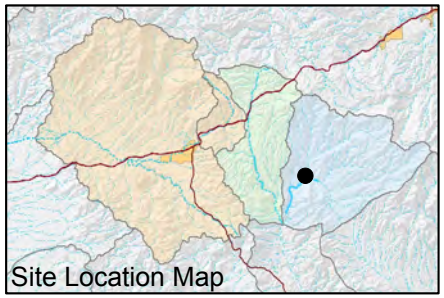
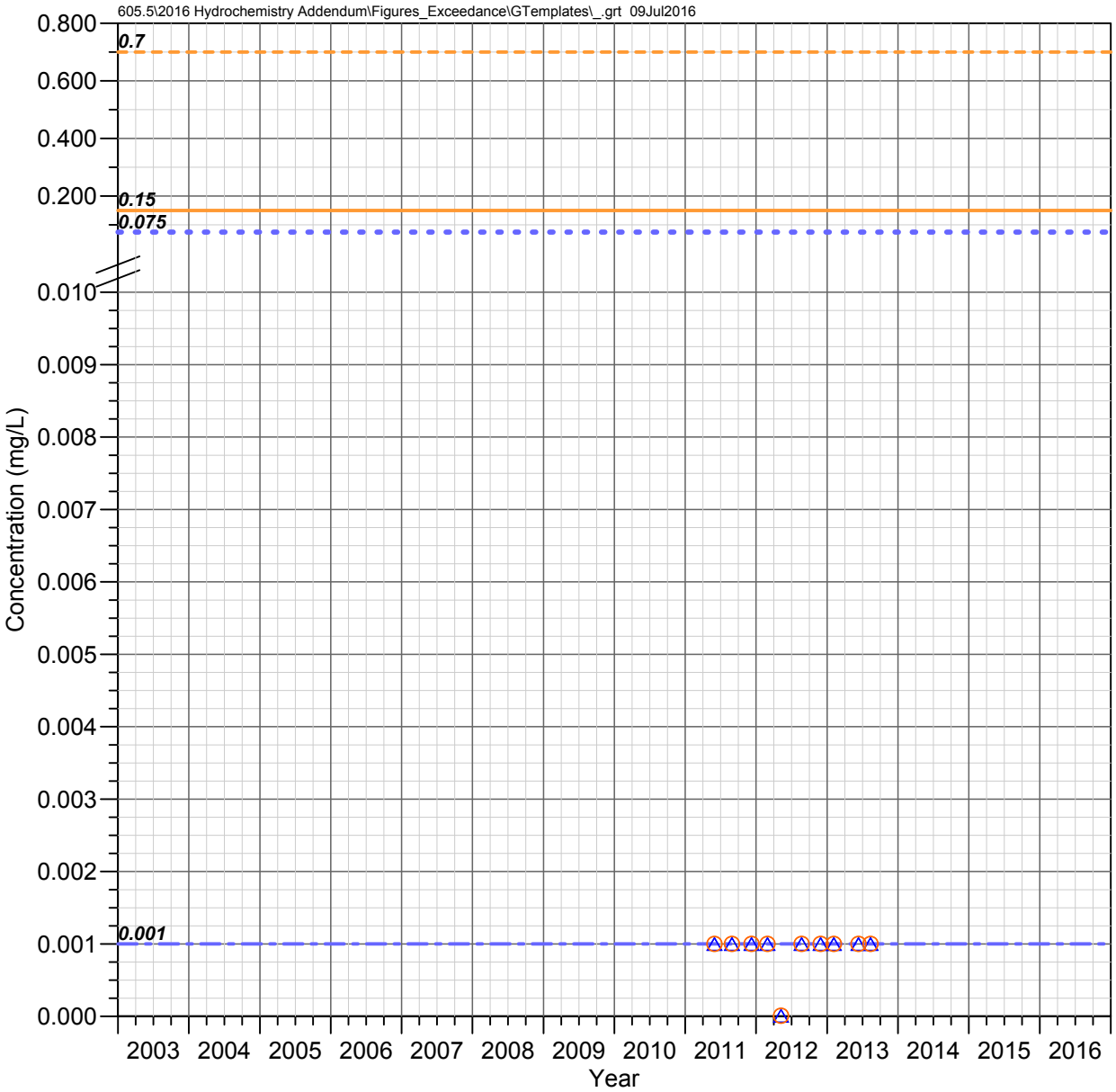


FIGURE F-764. THALLIUM CONCENTRATIONS OBSERVED AT LF 0.2 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 5.2 C
Mineral Creek Watershed

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.075 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.7 mg/L)
- AZ Fish Consumption (TRC, 0.001 mg/L)

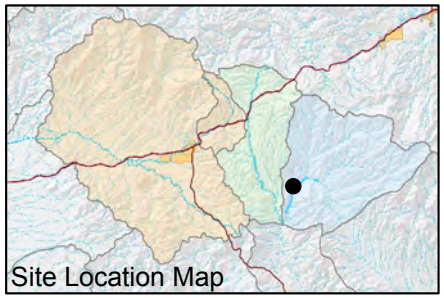
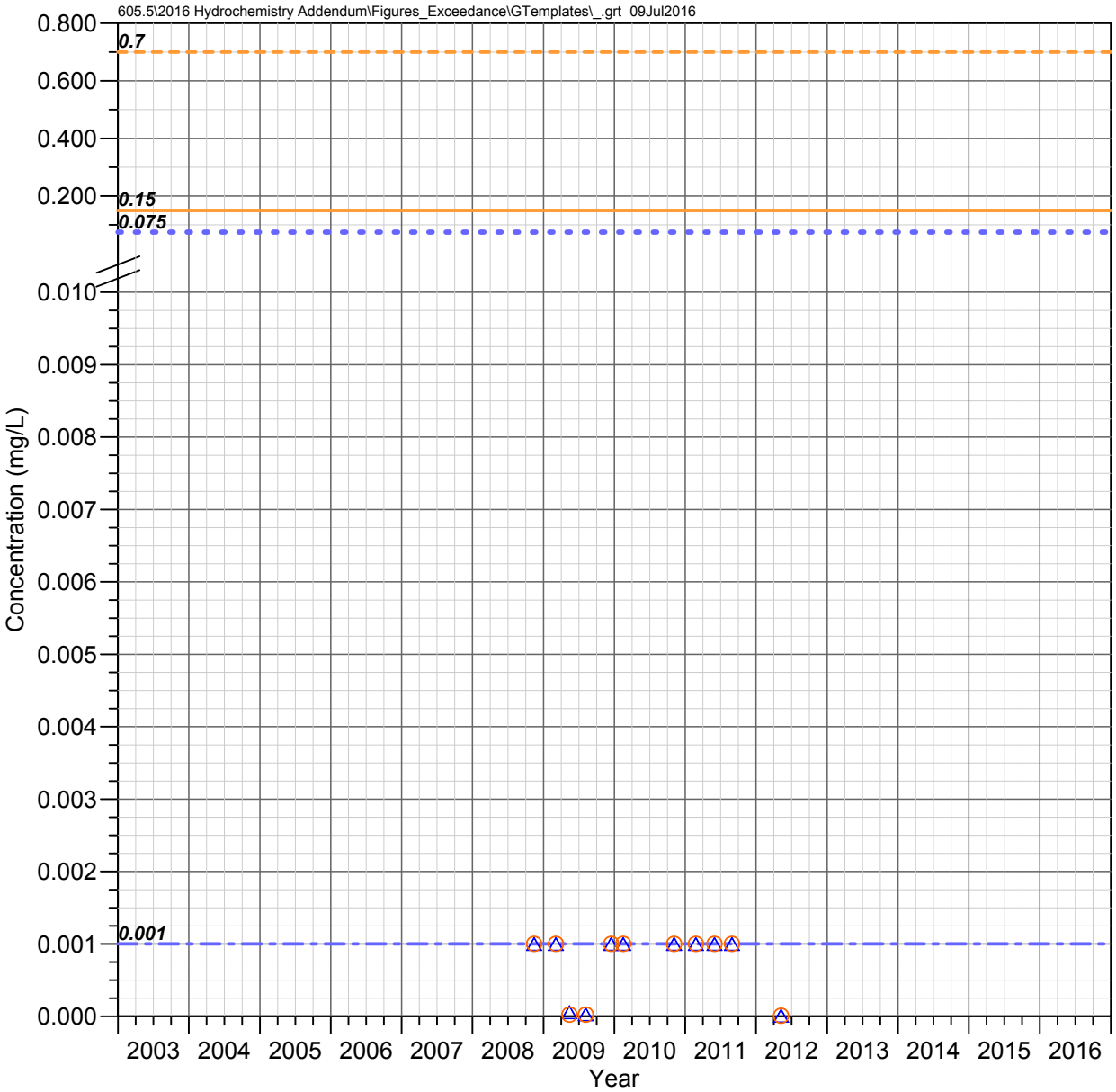


FIGURE F-765. THALLIUM CONCENTRATIONS OBSERVED AT MC 5.2 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 3.4 W (Wet Leg Spring)
Mineral Creek Watershed

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.075 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.7 mg/L)
- AZ Fish Consumption (TRC, 0.001 mg/L)

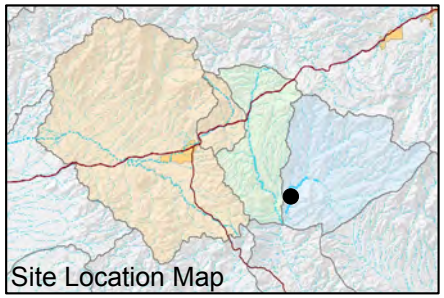
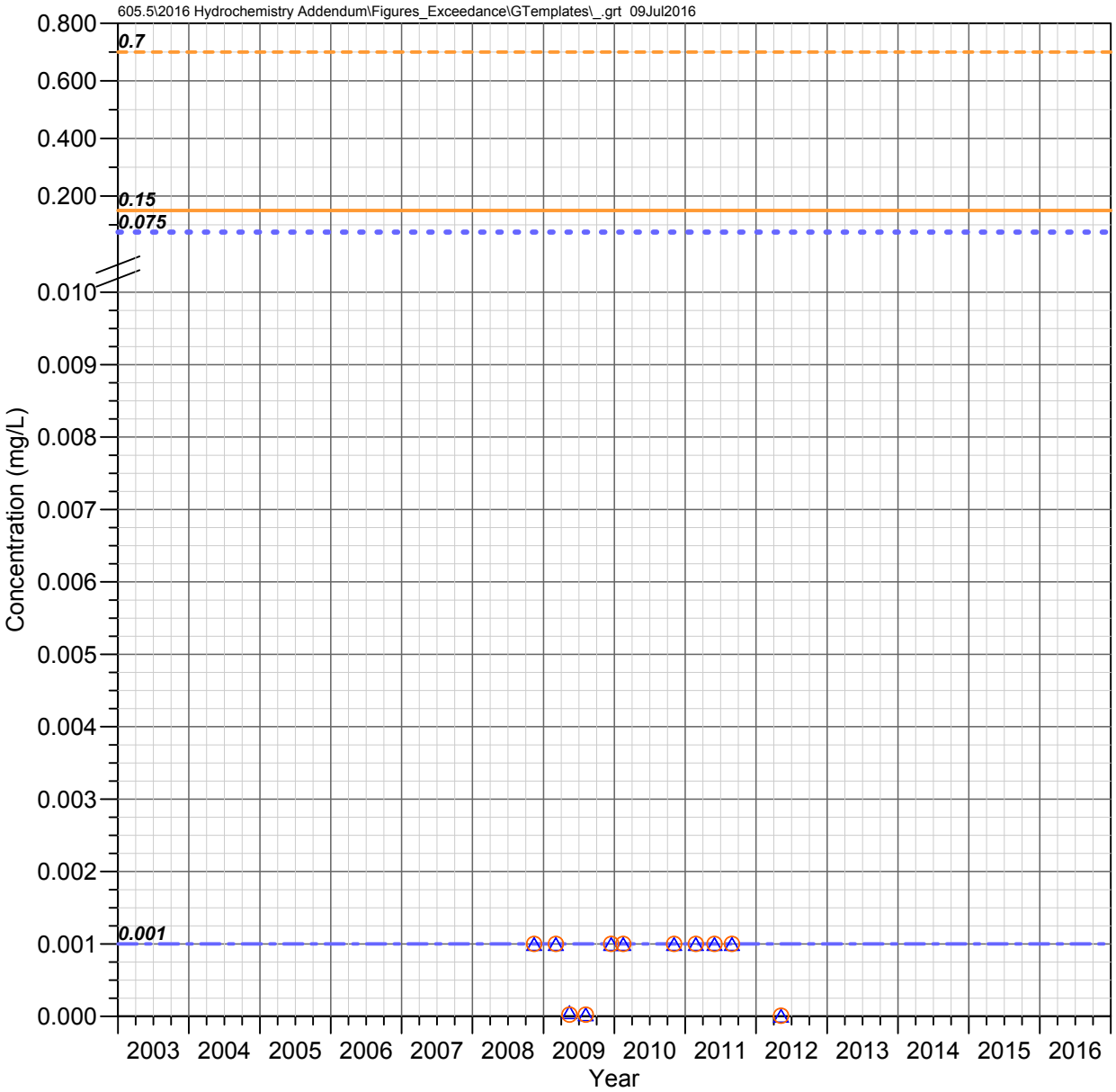


FIGURE F-766. THALLIUM CONCENTRATIONS OBSERVED AT MC 3.4 W (WET LEG SPRING), MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 3.3 C (Lower Mineral)
Mineral Creek Watershed

THALLIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved

- AZ Full Body Contact (TRC, 0.075 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, 0.15 mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, 0.7 mg/L)
- AZ Fish Consumption (TRC, 0.001 mg/L)

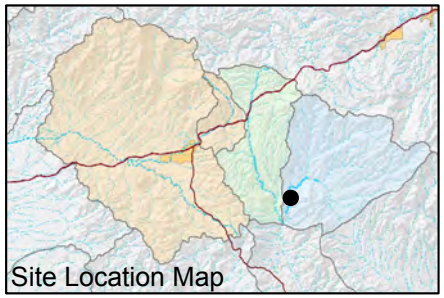
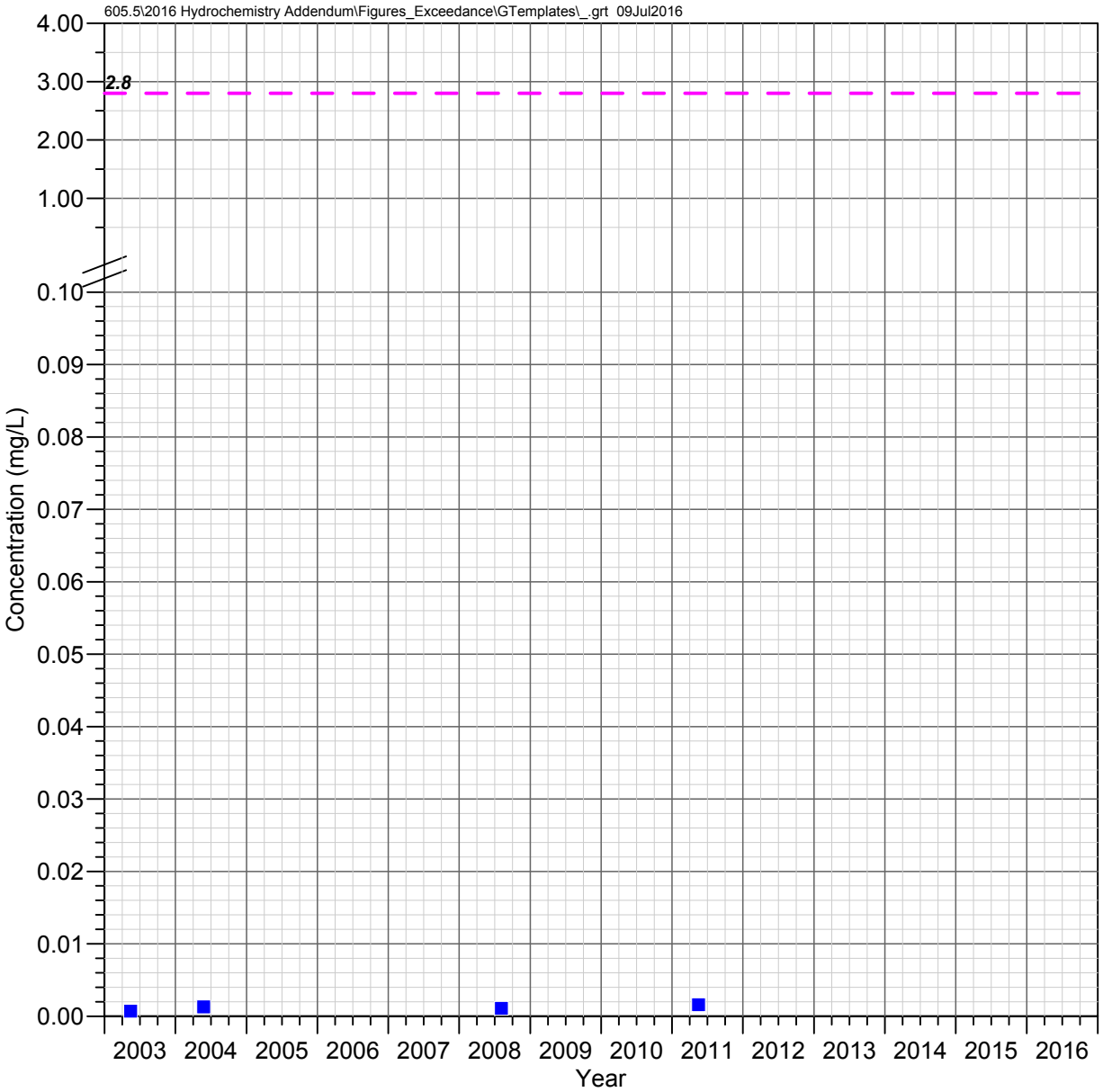


FIGURE F-767. THALLIUM CONCENTRATIONS OBSERVED AT MC 3.3 C (LOWER MINERAL), MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Pump Station Spring (QC 30.7 C)
Queen Creek Watershed

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — AZ Partial Body Contact (UNS, 2.8 mg/L)

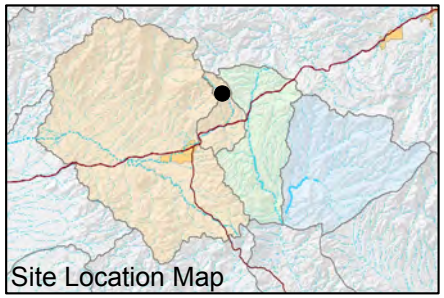
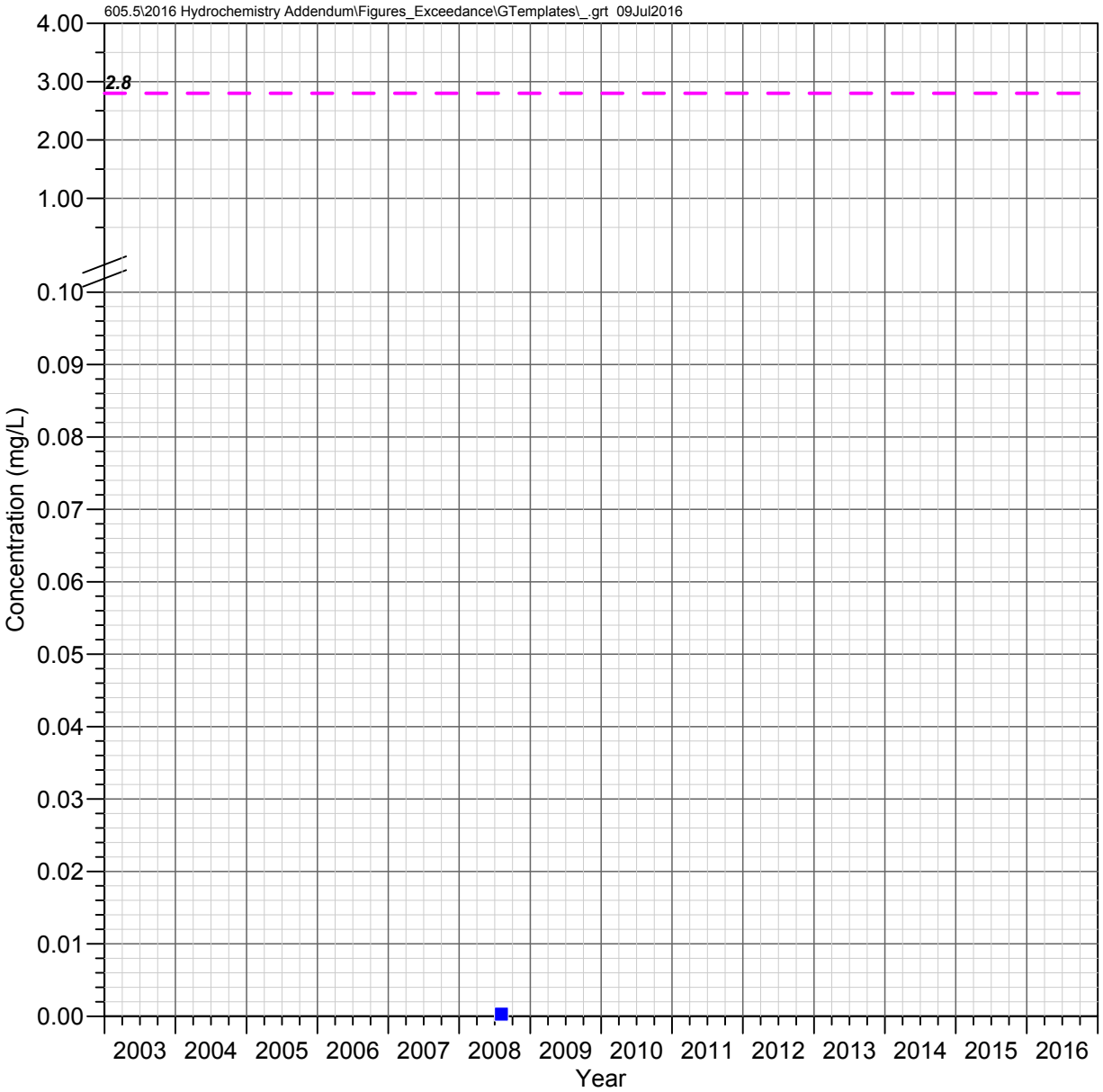


FIGURE F-768. URANIUM CONCENTRATIONS OBSERVED AT PUMP STATION SPRING (QC 30.7 C), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 27.3 C
Queen Creek Watershed

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Partial Body Contact (UNS, 2.8 mg/L)

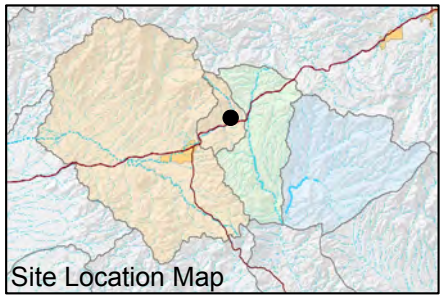
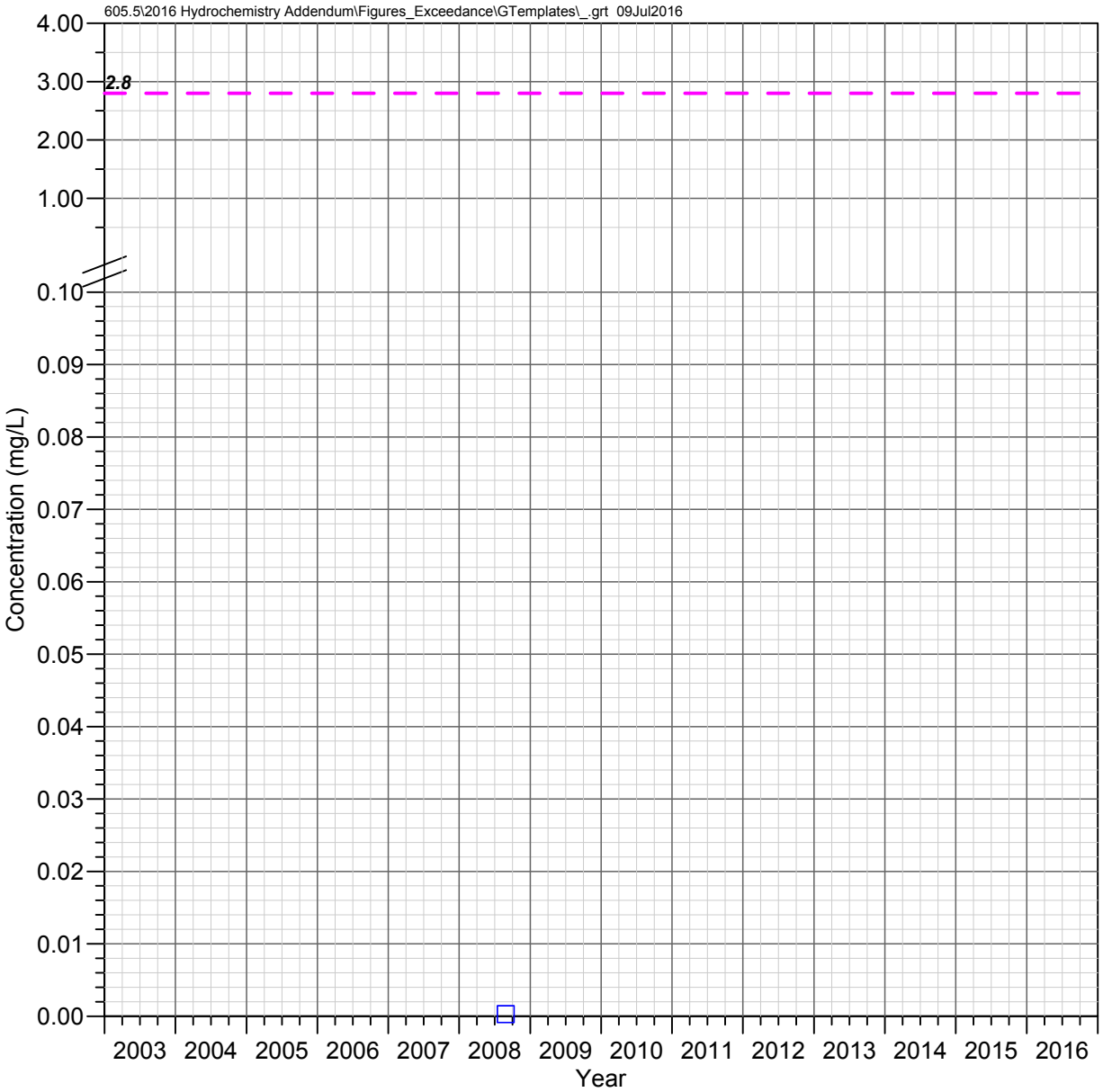


FIGURE F-769. URANIUM CONCENTRATIONS OBSERVED AT QC 27.3 C, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Oak Flat Wash
Queen Creek Watershed

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — AZ Partial Body Contact (UNS, 2.8 mg/L)

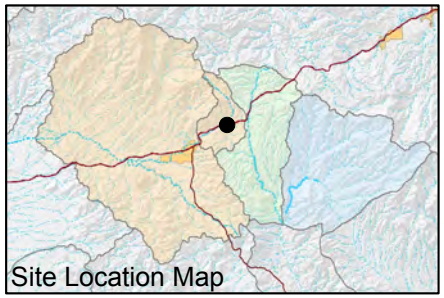
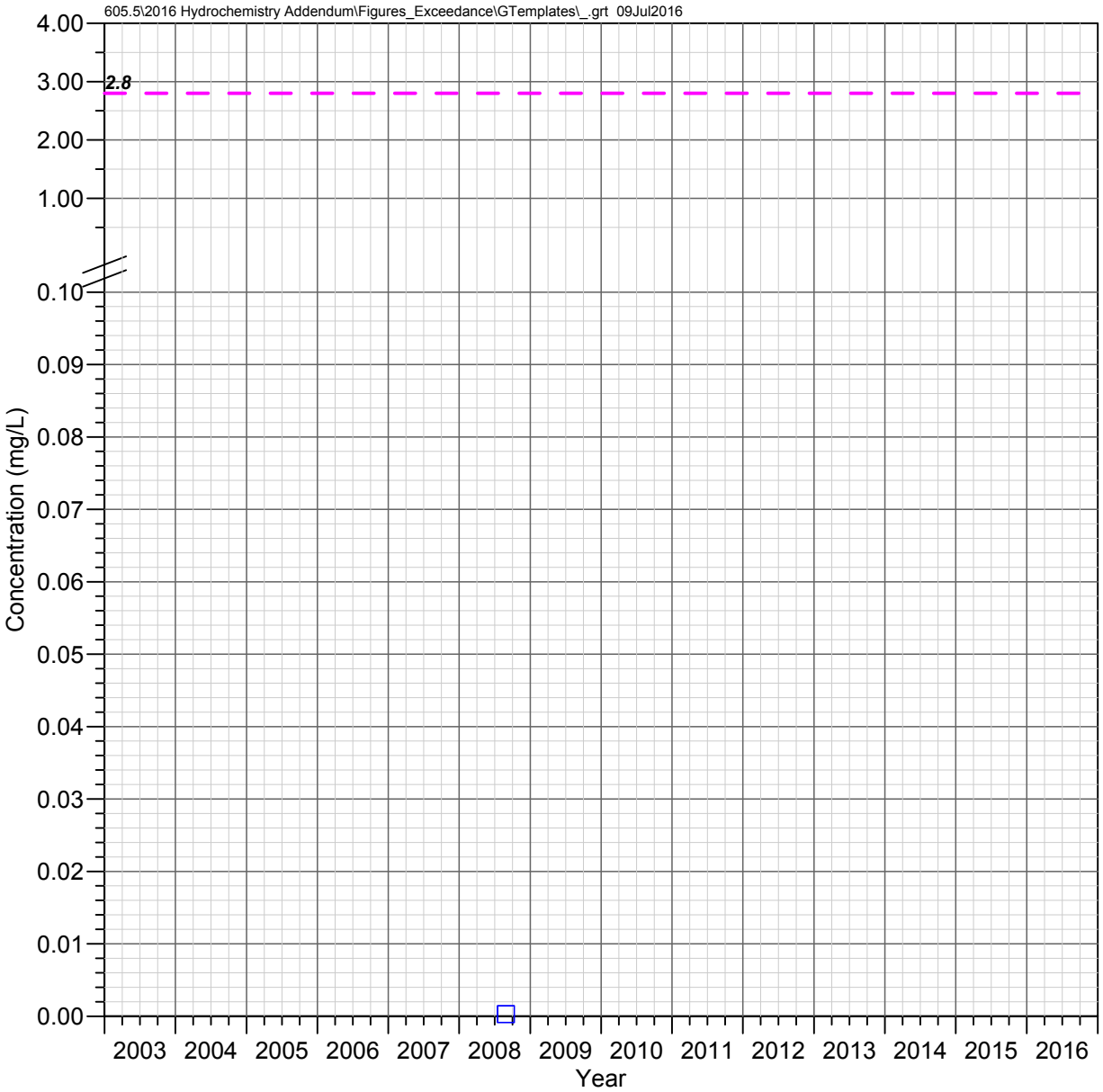


FIGURE F-770. URANIUM CONCENTRATIONS OBSERVED AT OAK FLAT WASH, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Number 9 Wash
Queen Creek Watershed

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Partial Body Contact (UNS, 2.8 mg/L)

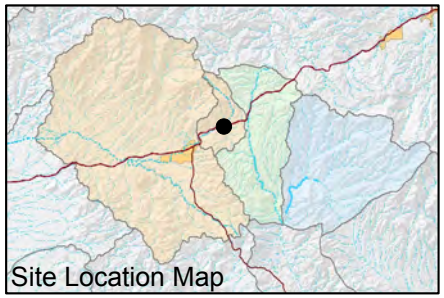
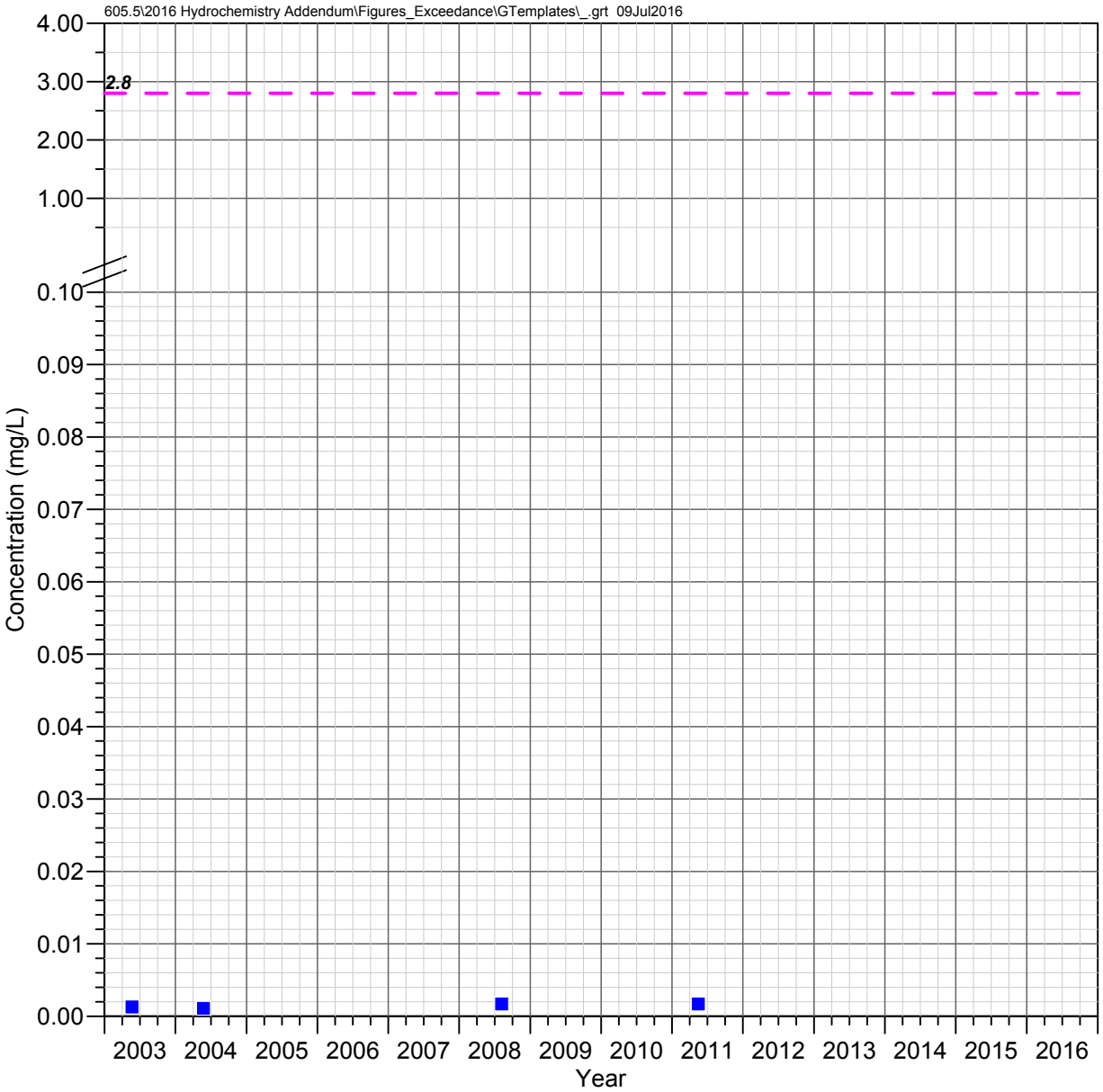


FIGURE F-771. URANIUM CONCENTRATIONS OBSERVED AT NUMBER 9 WASH, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Boulder Hole (QC 23.6 C)
Queen Creek Watershed

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Partial Body Contact (UNS, 2.8 mg/L)

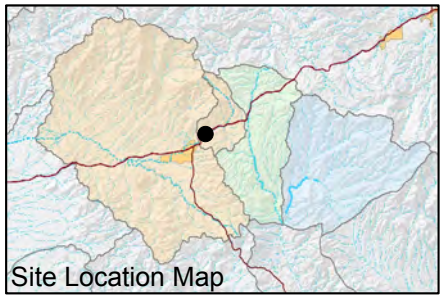
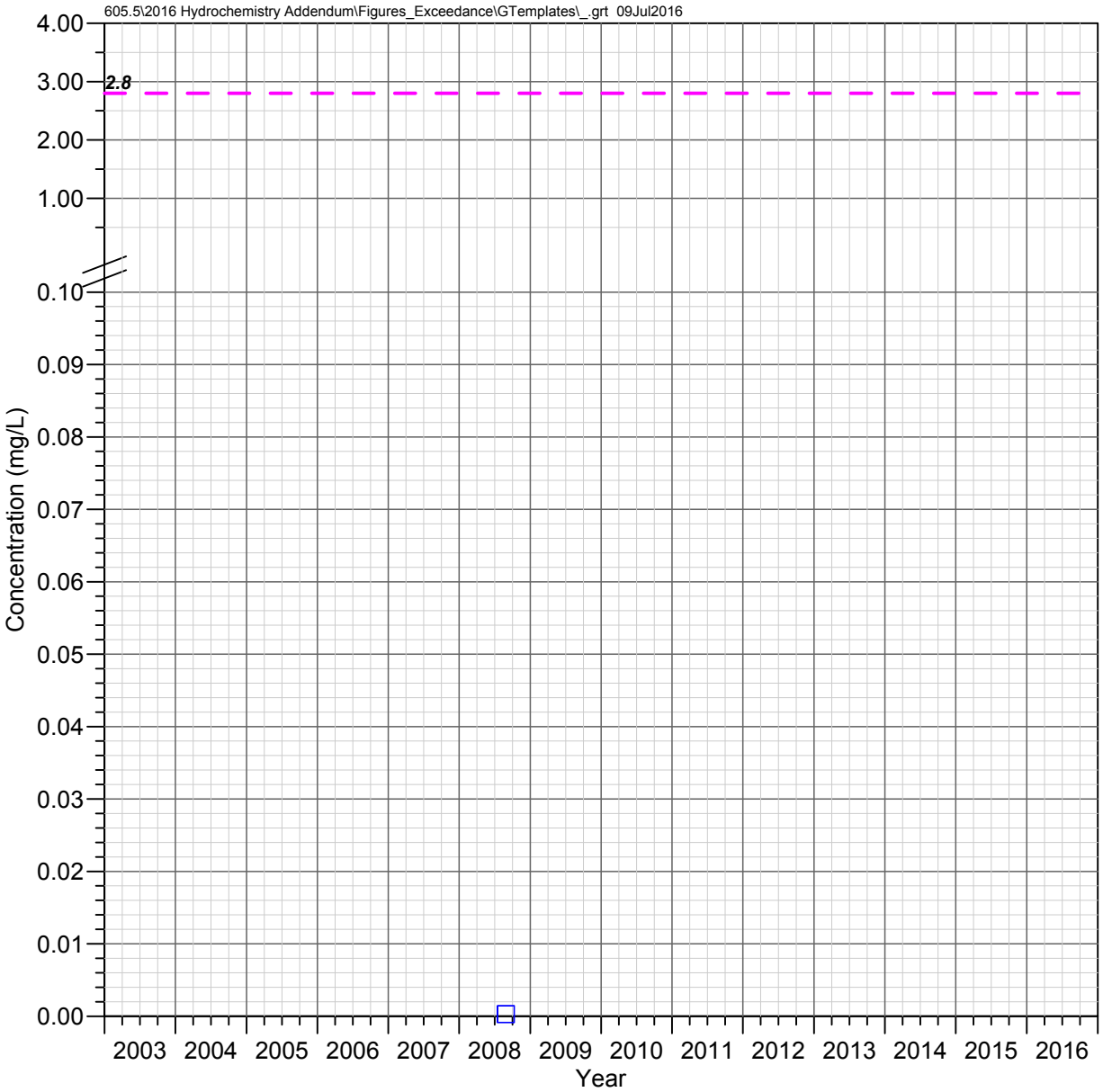


FIGURE F-772. URANIUM CONCENTRATIONS OBSERVED AT BOULDER HOLE (QC 23.6 C), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 22.6 E (Karst Spring)
Queen Creek Watershed

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — AZ Partial Body Contact (UNS, 2.8 mg/L)

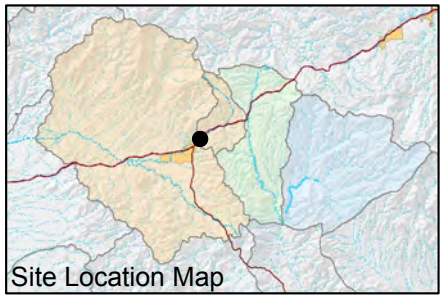
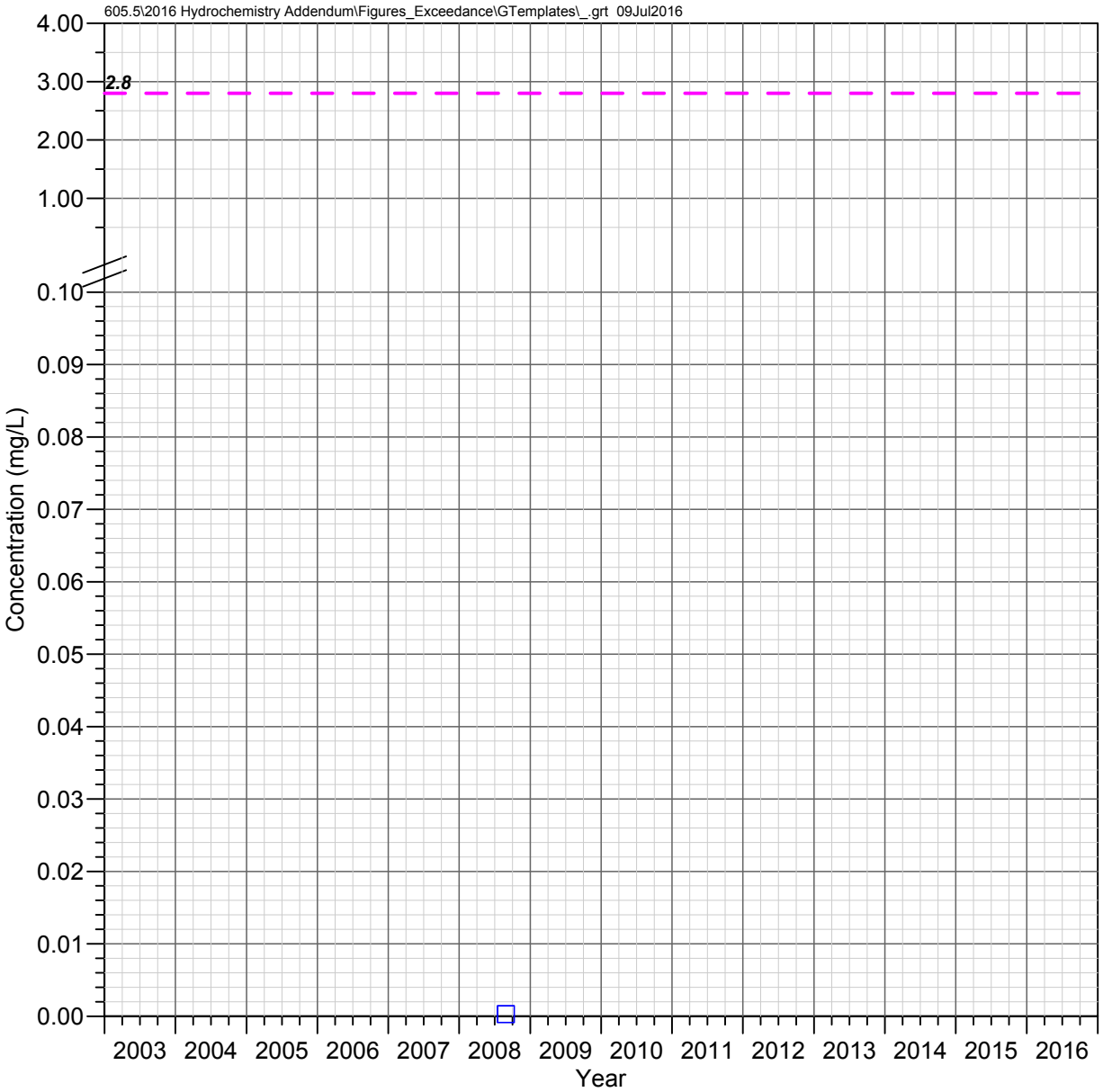


FIGURE F-773. URANIUM CONCENTRATIONS OBSERVED AT QC 22.6 E (KARST SPRING), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 21.7 C (Magma Avenue)
Queen Creek Watershed

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Partial Body Contact (UNS, 2.8 mg/L)

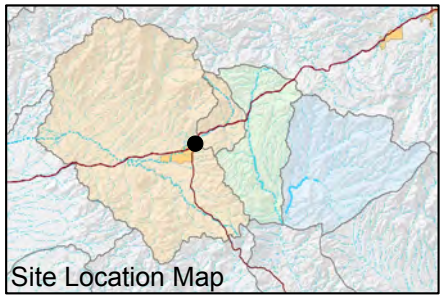
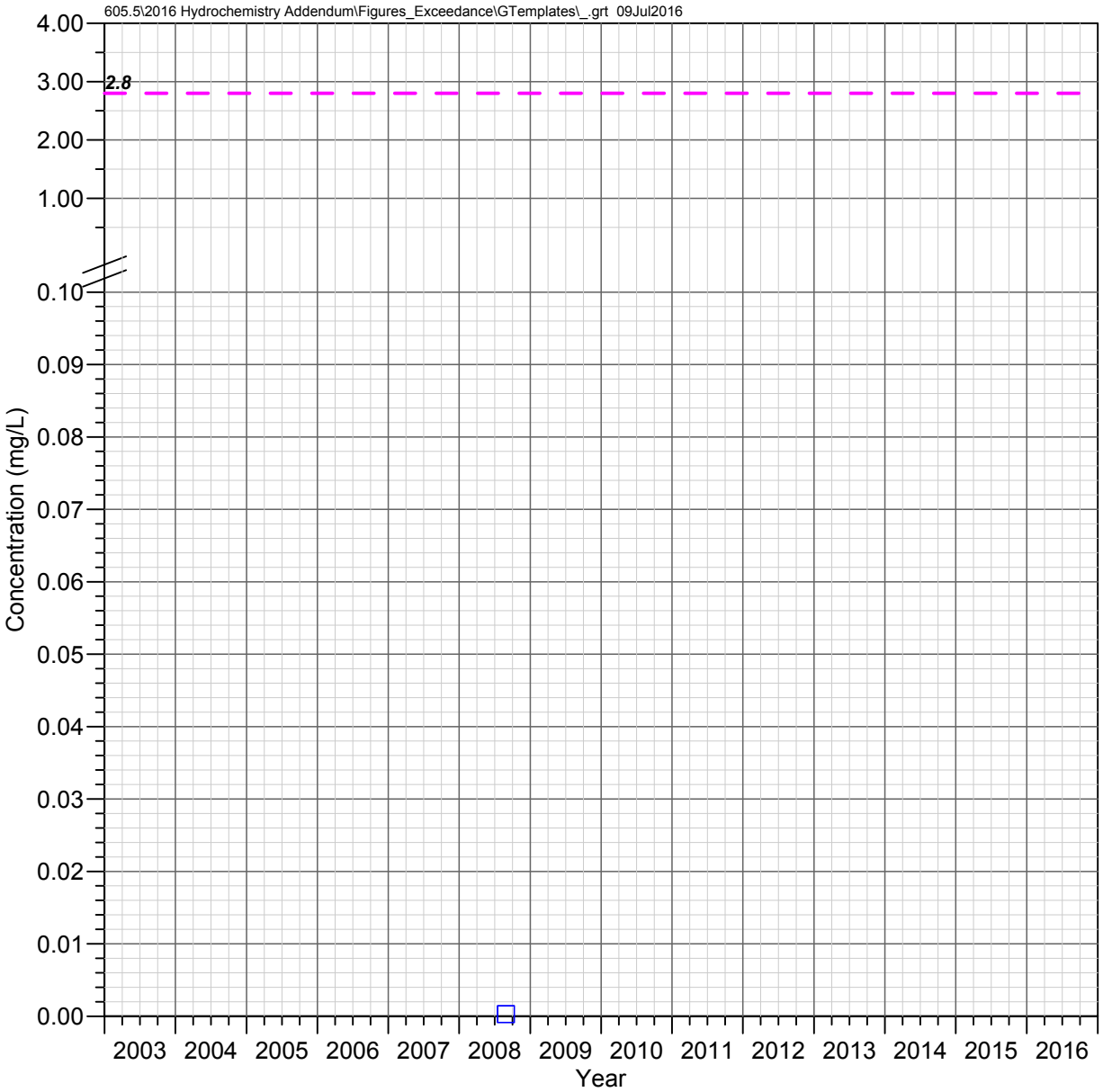


FIGURE F-774. URANIUM CONCENTRATIONS OBSERVED AT QC 21.7 C (MAGMA AVENUE), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 19.7 C
Queen Creek Watershed

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — AZ Partial Body Contact (UNS, 2.8 mg/L)

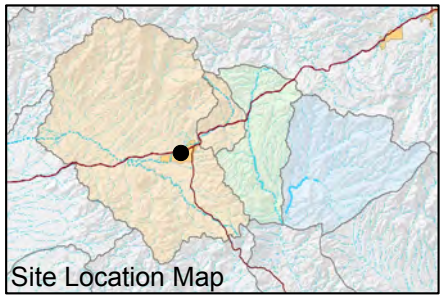
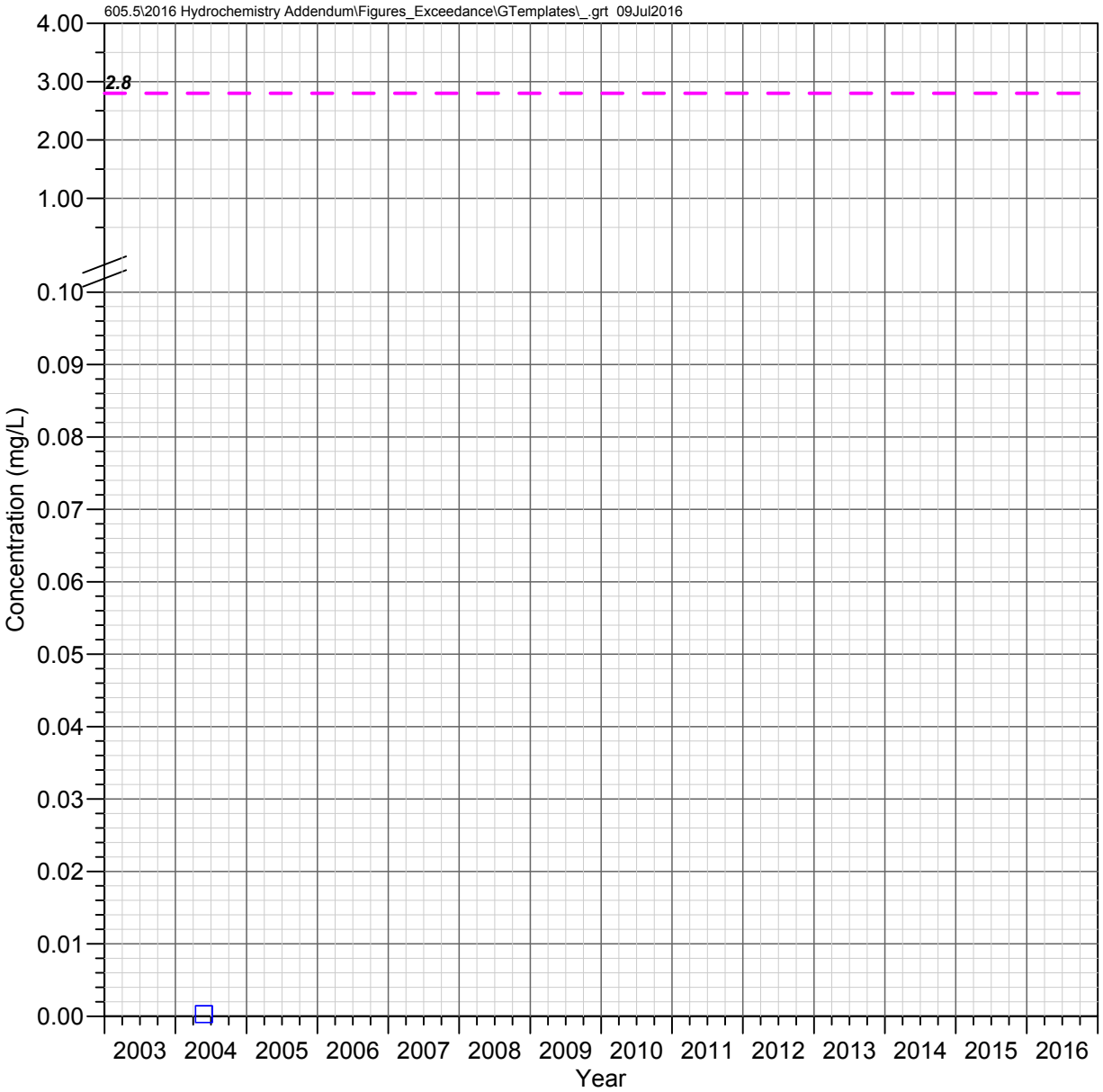


FIGURE F-775. URANIUM CONCENTRATIONS OBSERVED AT QC 19.7 C, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Bored Spring
Queen Creek Watershed

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Partial Body Contact (UNS, 2.8 mg/L)

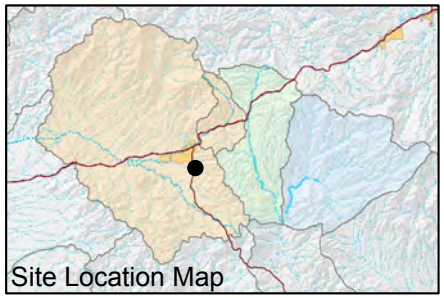
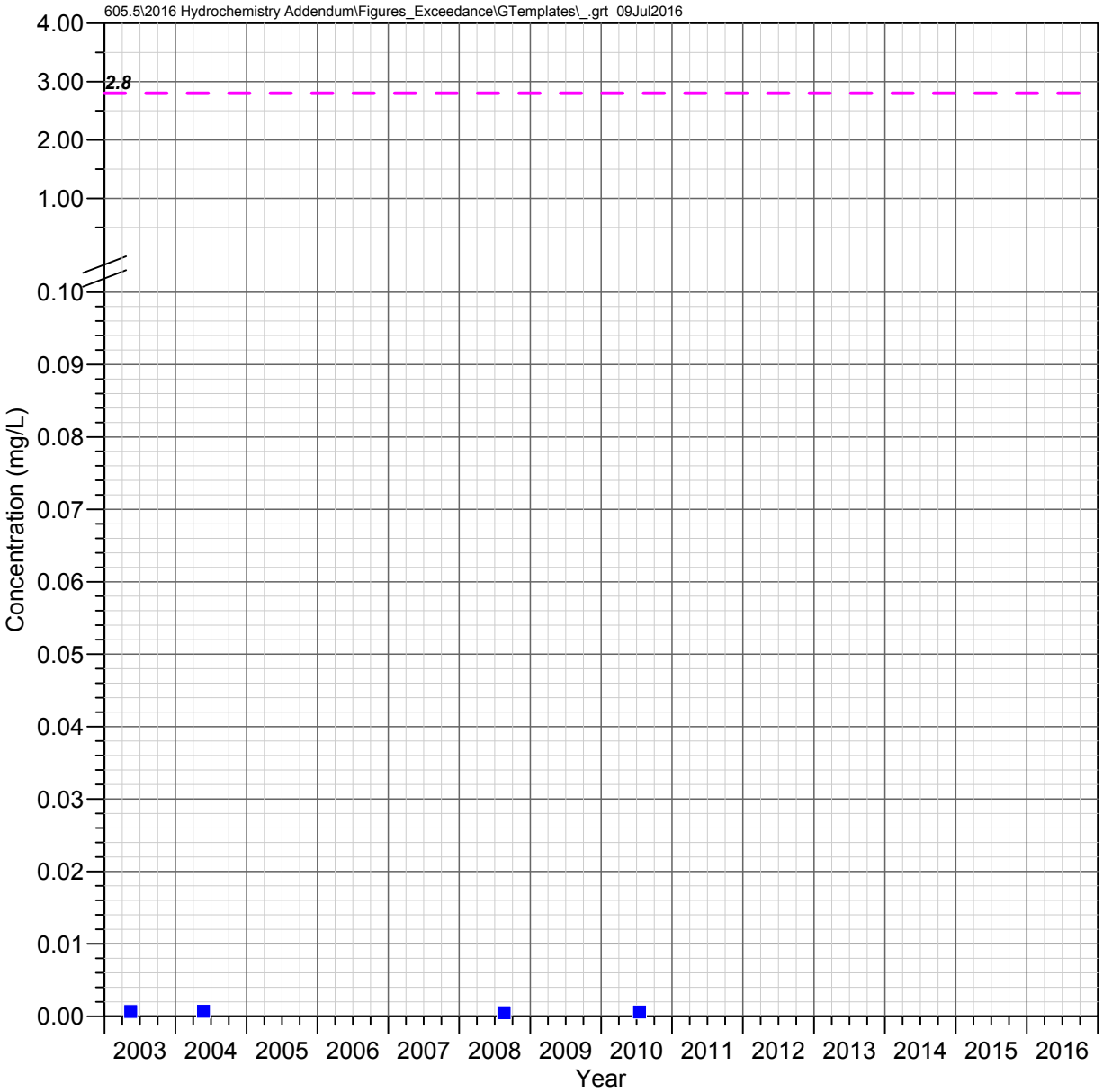


FIGURE F-776. URANIUM CONCENTRATIONS OBSERVED AT BORED SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Hidden Spring
Queen Creek Watershed

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — AZ Partial Body Contact (UNS, 2.8 mg/L)

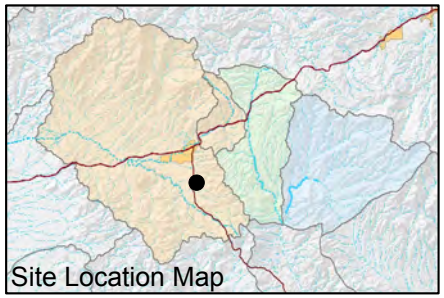
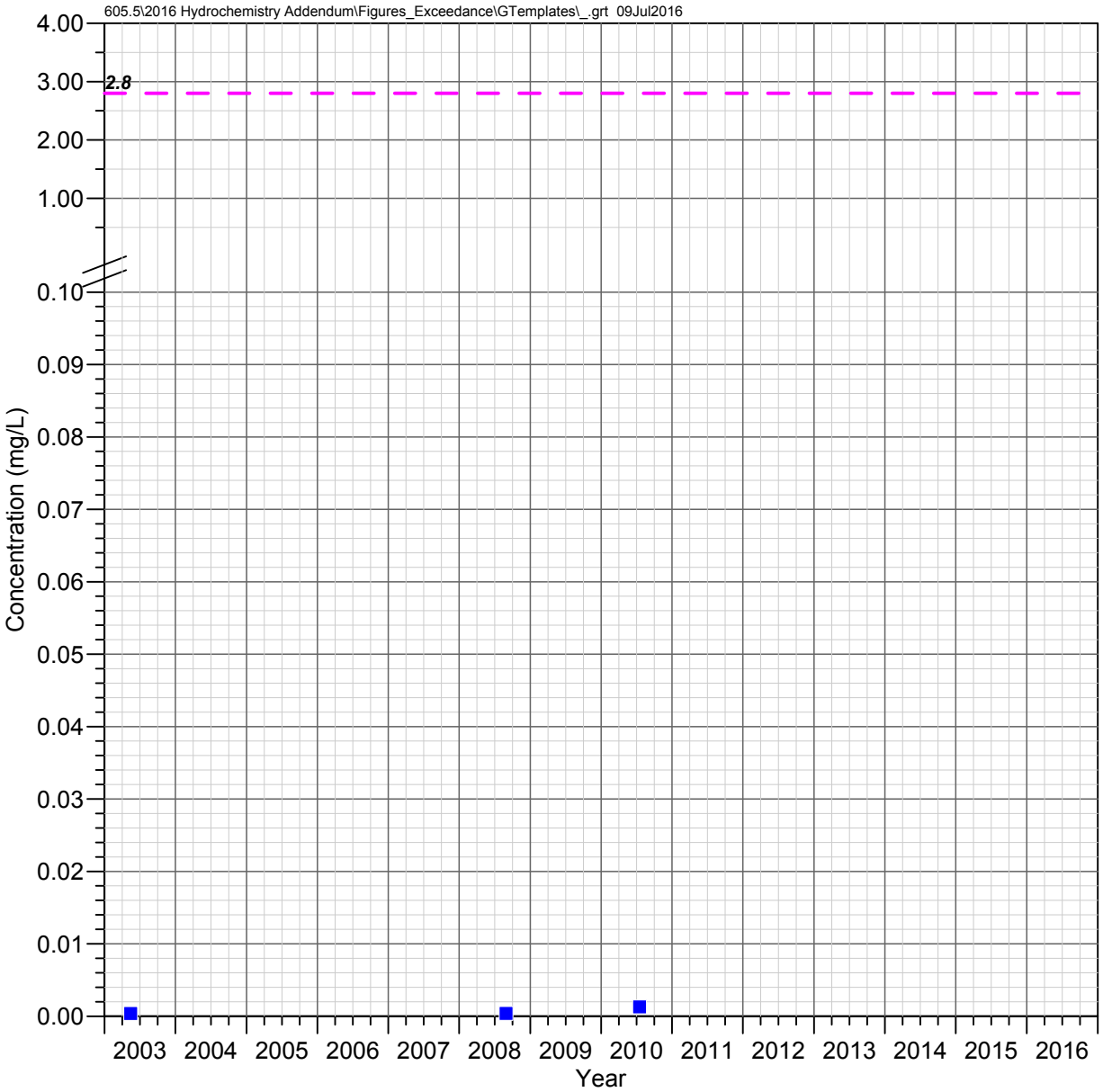


FIGURE F-777. URANIUM CONCENTRATIONS OBSERVED AT HIDDEN SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Kane Spring
Queen Creek Watershed

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — AZ Partial Body Contact (UNS, 2.8 mg/L)

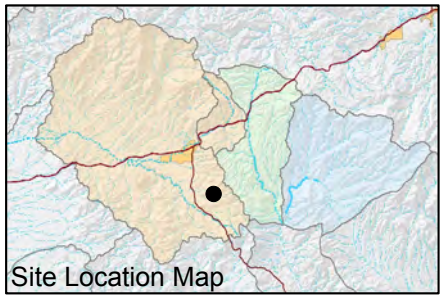
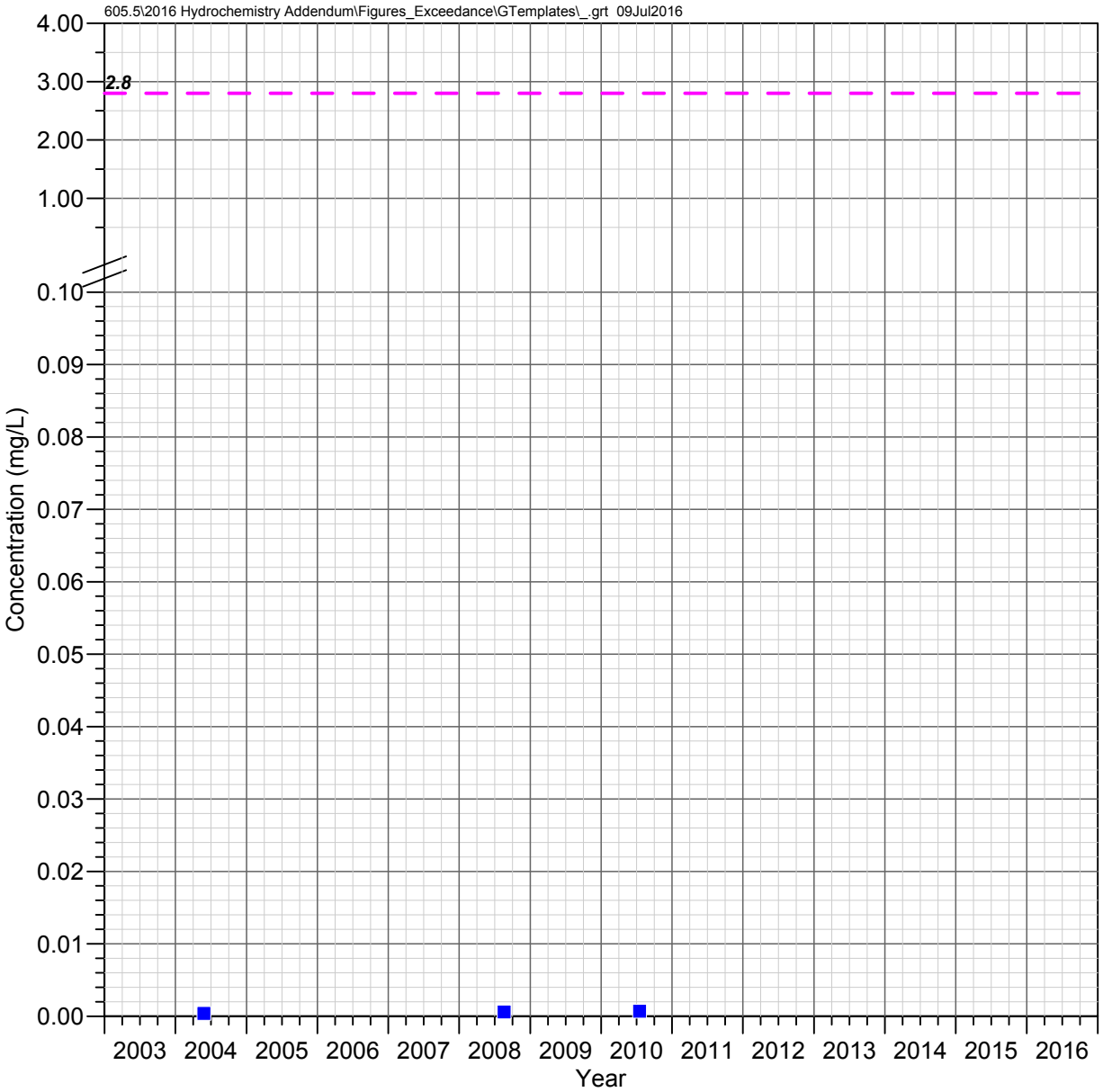


FIGURE F-778. URANIUM CONCENTRATIONS OBSERVED AT KANE SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Blue Spring
Queen Creek Watershed

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

— — AZ Partial Body Contact (UNS, 2.8 mg/L)

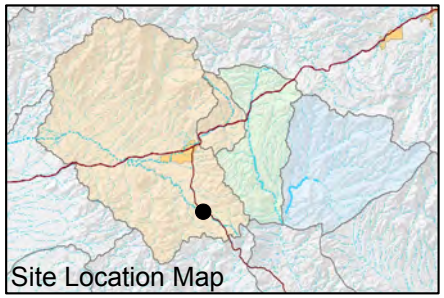
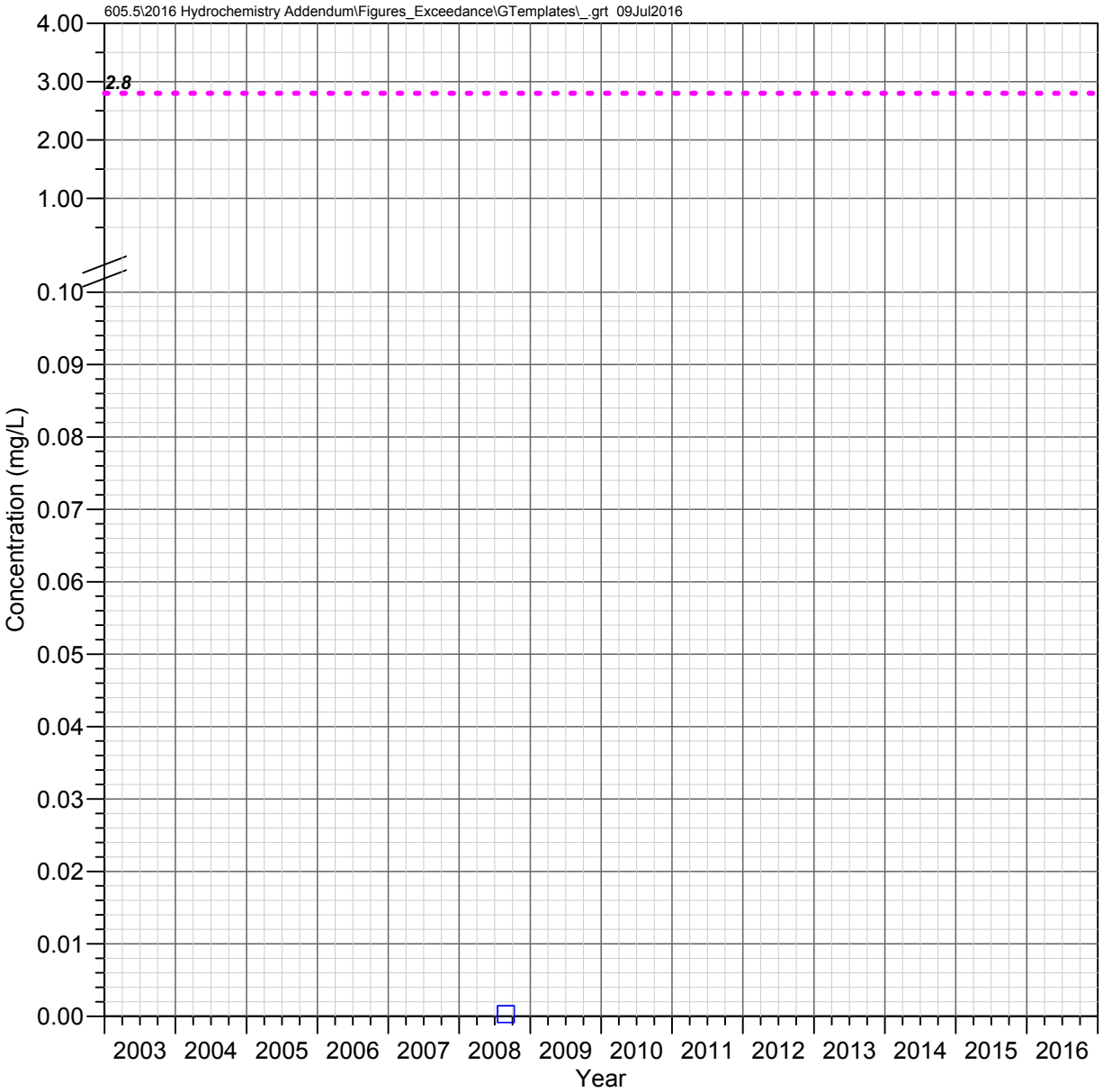


FIGURE F-779. URANIUM CONCENTRATIONS OBSERVED AT BLUE SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



IC 1.0 C
Devils Canyon Watershed

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- AZ Full Body Contact (UNS, 2.8 mg/L)

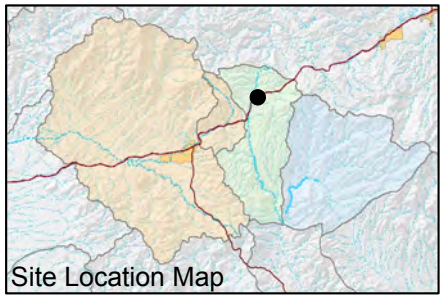
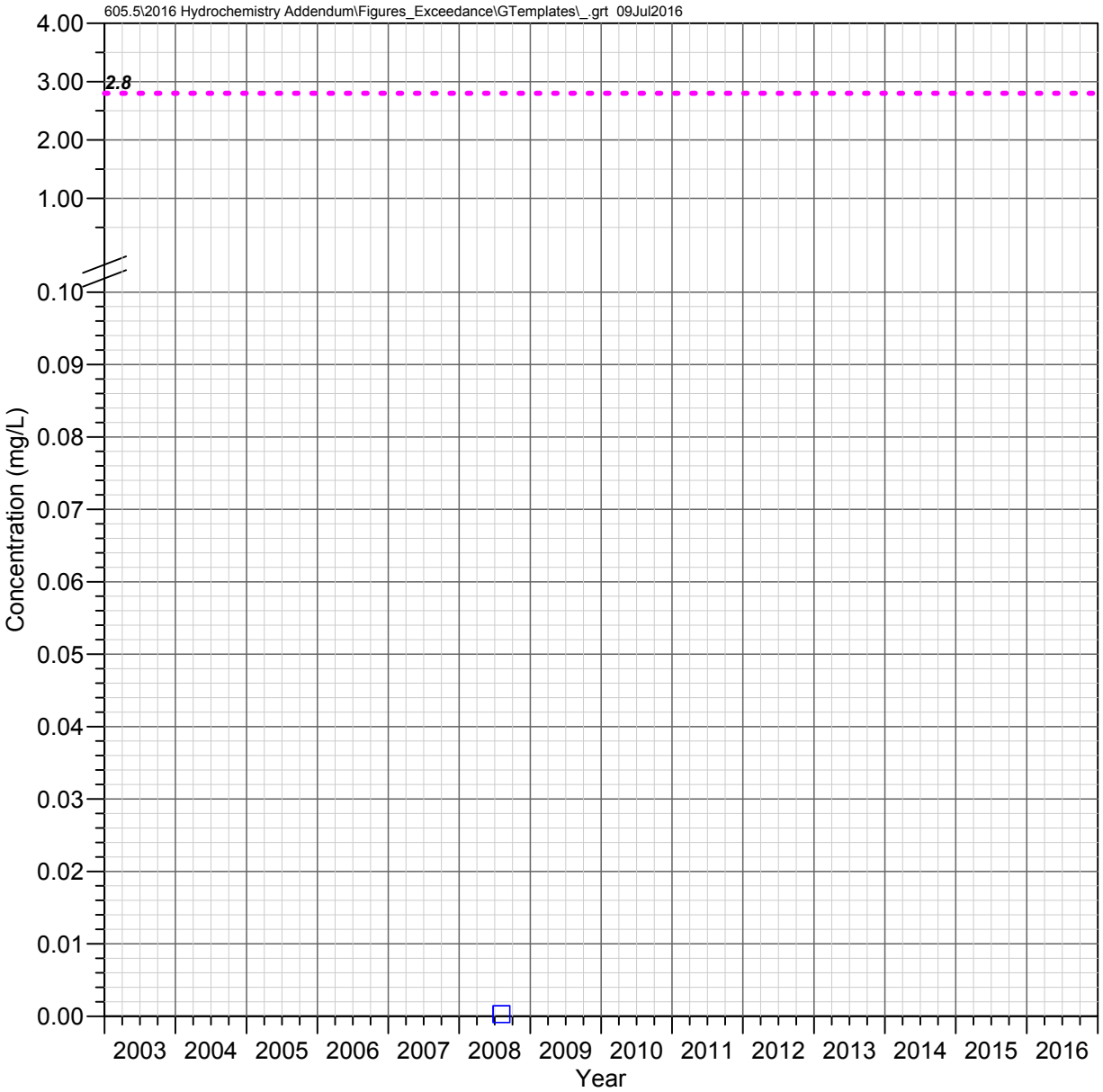


FIGURE F-780. URANIUM CONCENTRATIONS OBSERVED AT IC 1.0 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 15.5 C
Devils Canyon Watershed

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Full Body Contact (UNS, 2.8 mg/L)

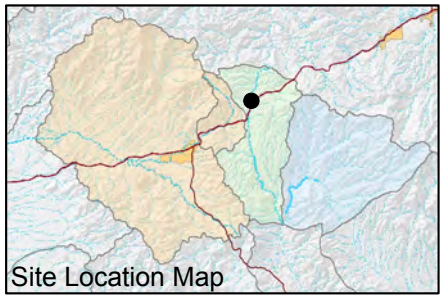
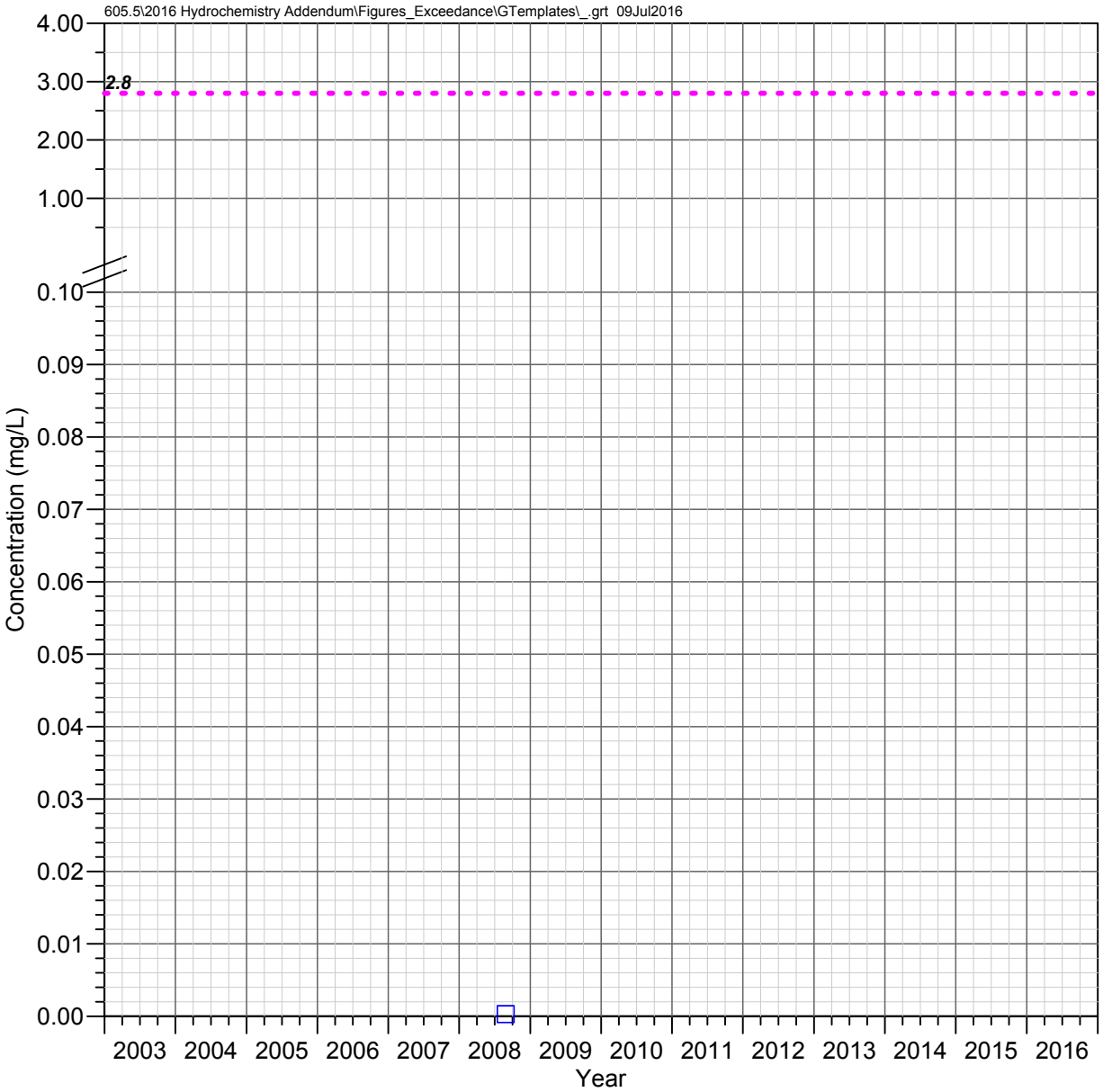


FIGURE F-781. URANIUM CONCENTRATIONS OBSERVED AT DC 15.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 14.7 C
Devils Canyon Watershed

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Full Body Contact (UNS, 2.8 mg/L)

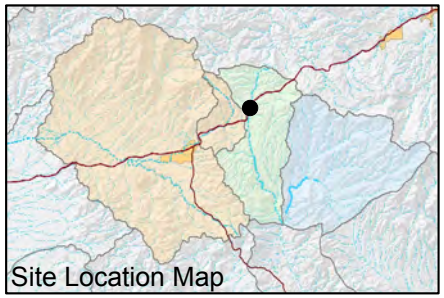
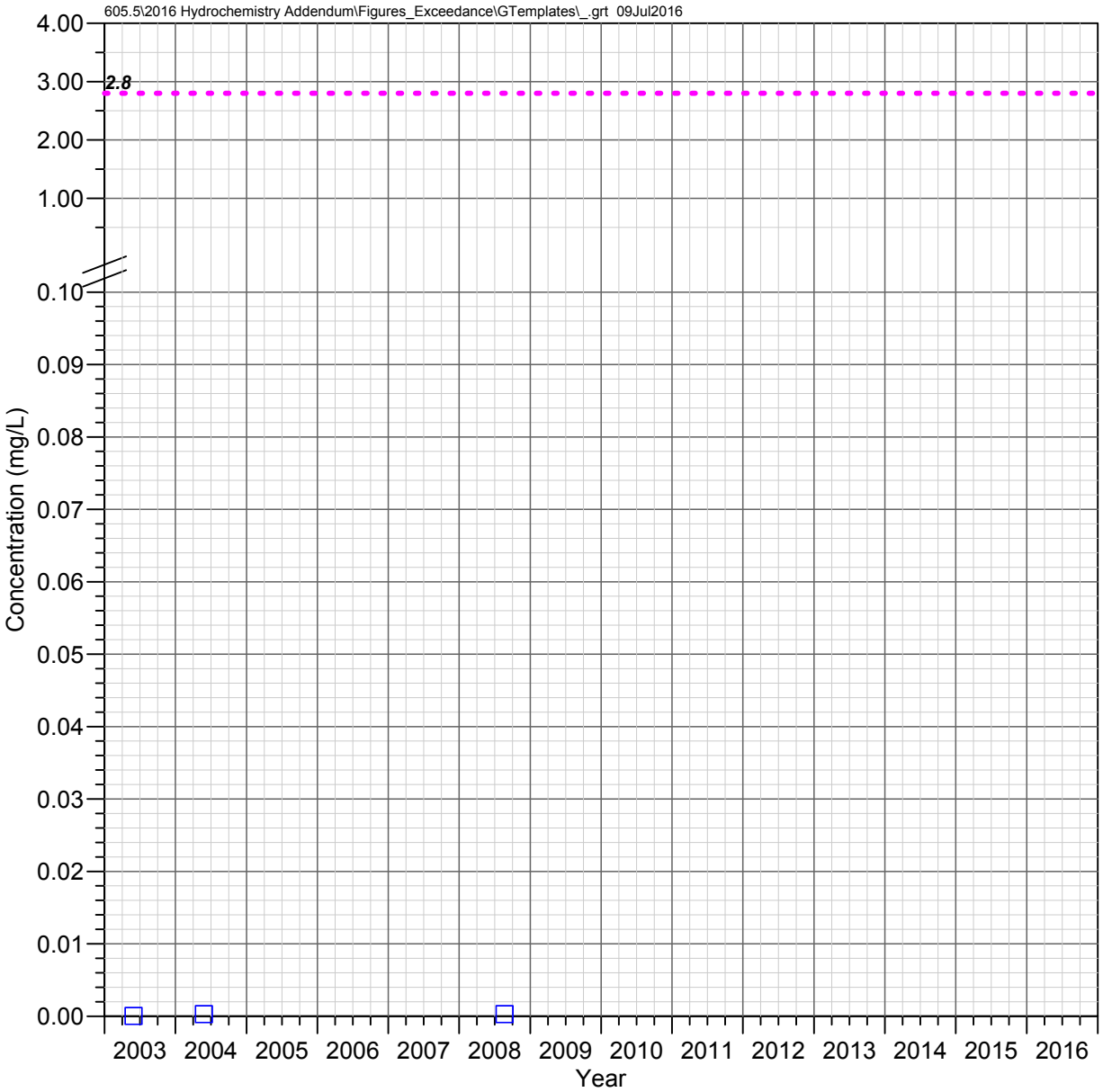


FIGURE F-782. URANIUM CONCENTRATIONS OBSERVED AT DC 14.7 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 13.5 C
Devils Canyon Watershed

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 2.8 mg/L)

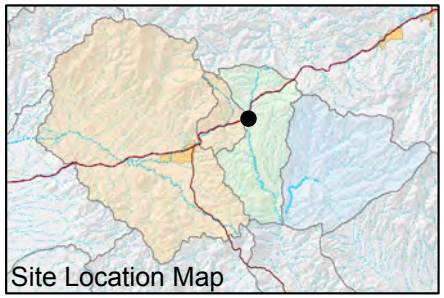
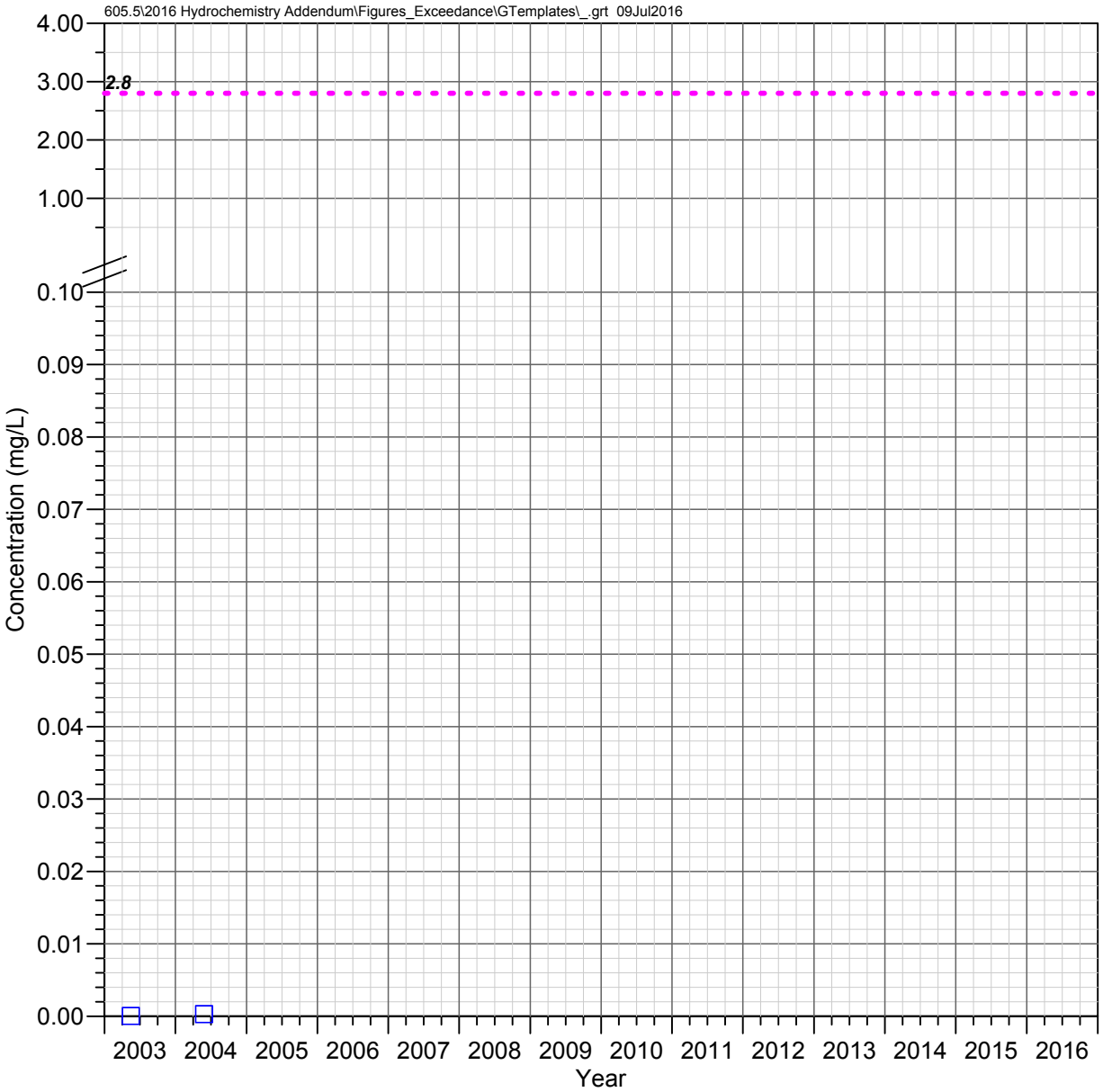


FIGURE F-783. URANIUM CONCENTRATIONS OBSERVED AT DC 13.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 10.9 C
Devils Canyon Watershed

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 2.8 mg/L)

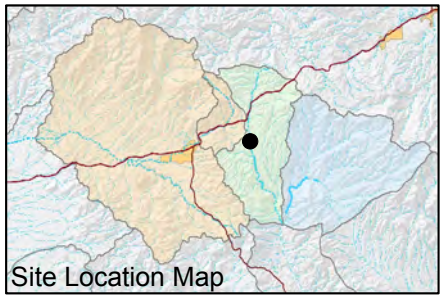
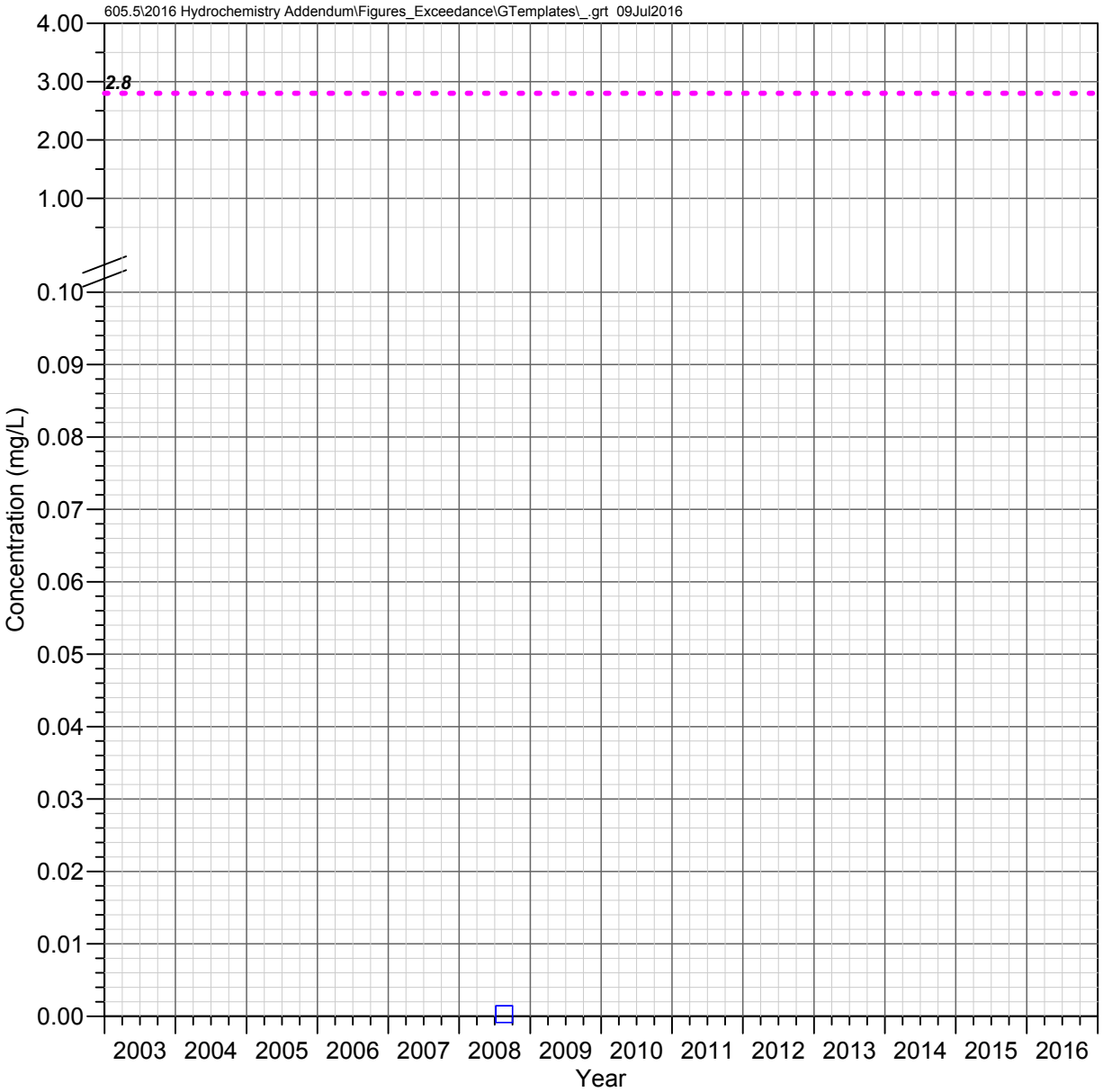


FIGURE F-784. URANIUM CONCENTRATIONS OBSERVED AT DC 10.9 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



RR 1.5 C
Devils Canyon Watershed

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Full Body Contact (UNS, 2.8 mg/L)

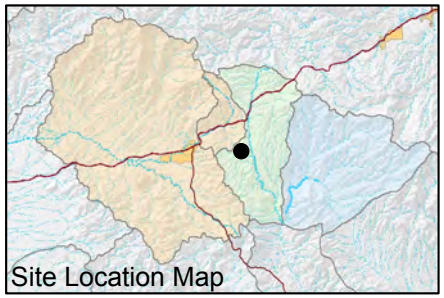
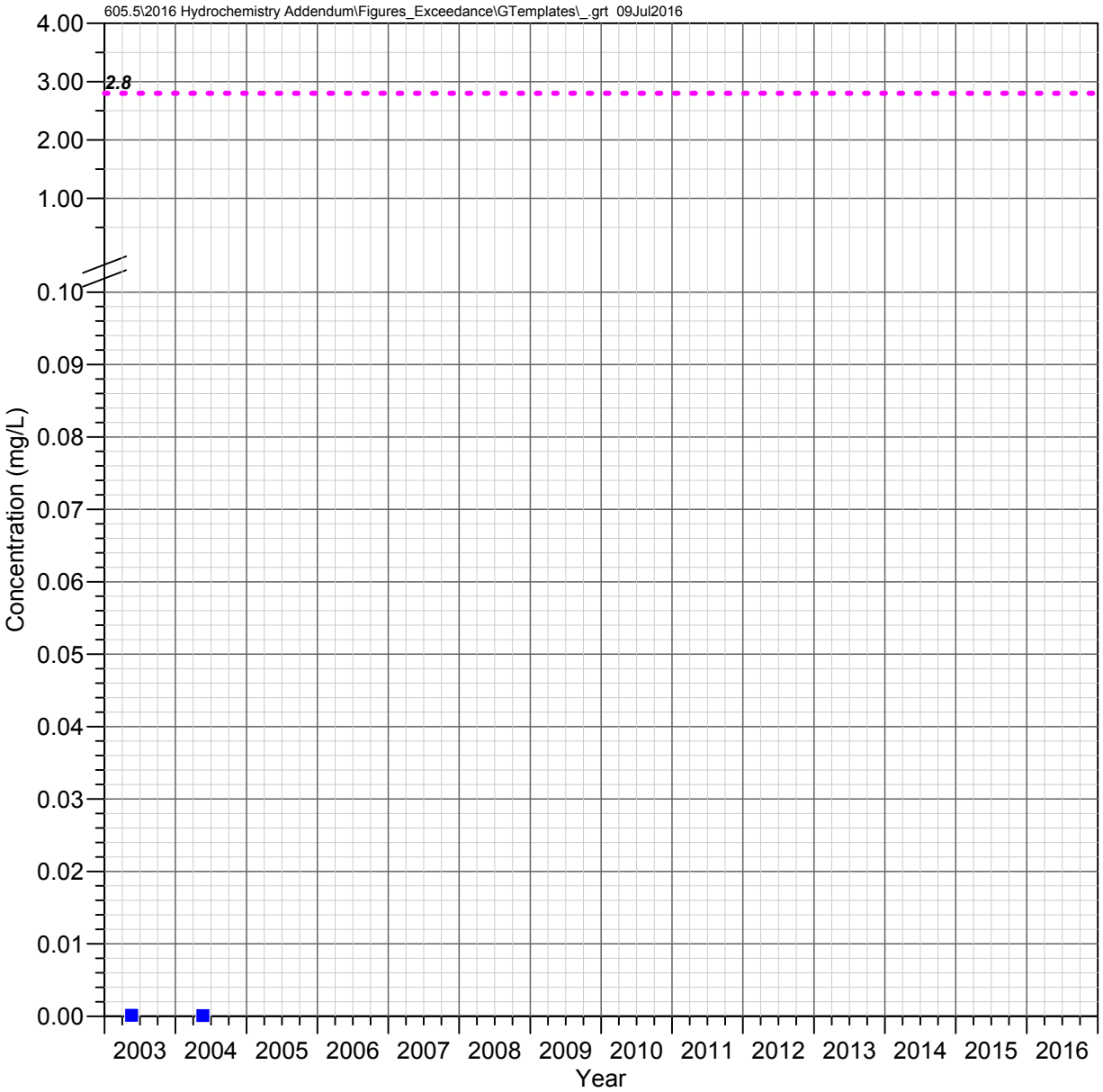


FIGURE F-785. URANIUM CONCENTRATIONS OBSERVED AT RR 1.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.8 C
Devils Canyon Watershed

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 2.8 mg/L)

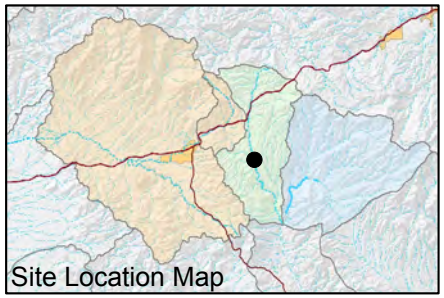
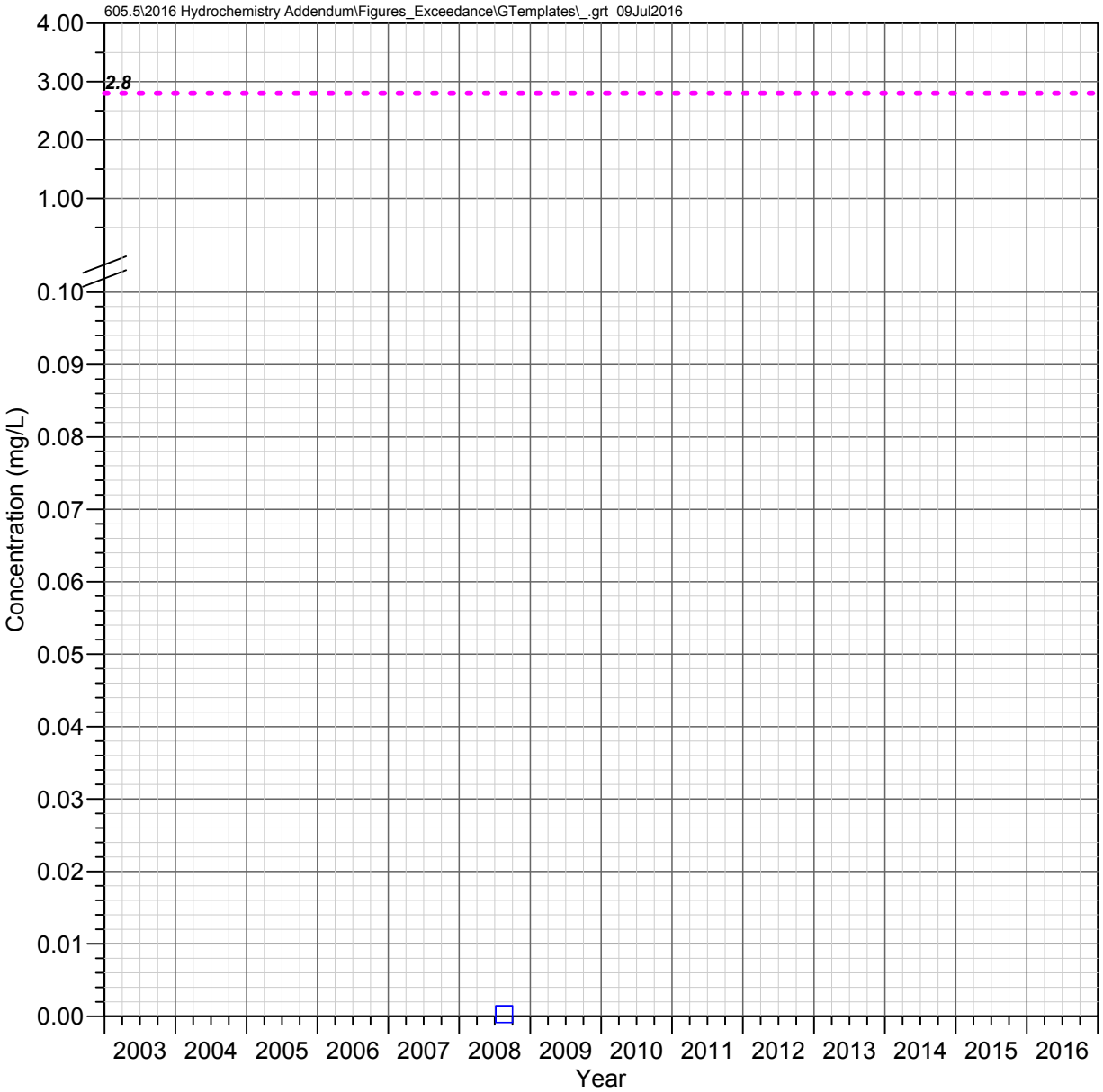


FIGURE F-786. URANIUM CONCENTRATIONS OBSERVED AT DC 8.8 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



H 0.1 C
Devils Canyon Watershed

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Full Body Contact (UNS, 2.8 mg/L)

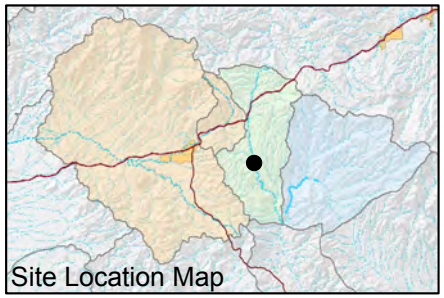
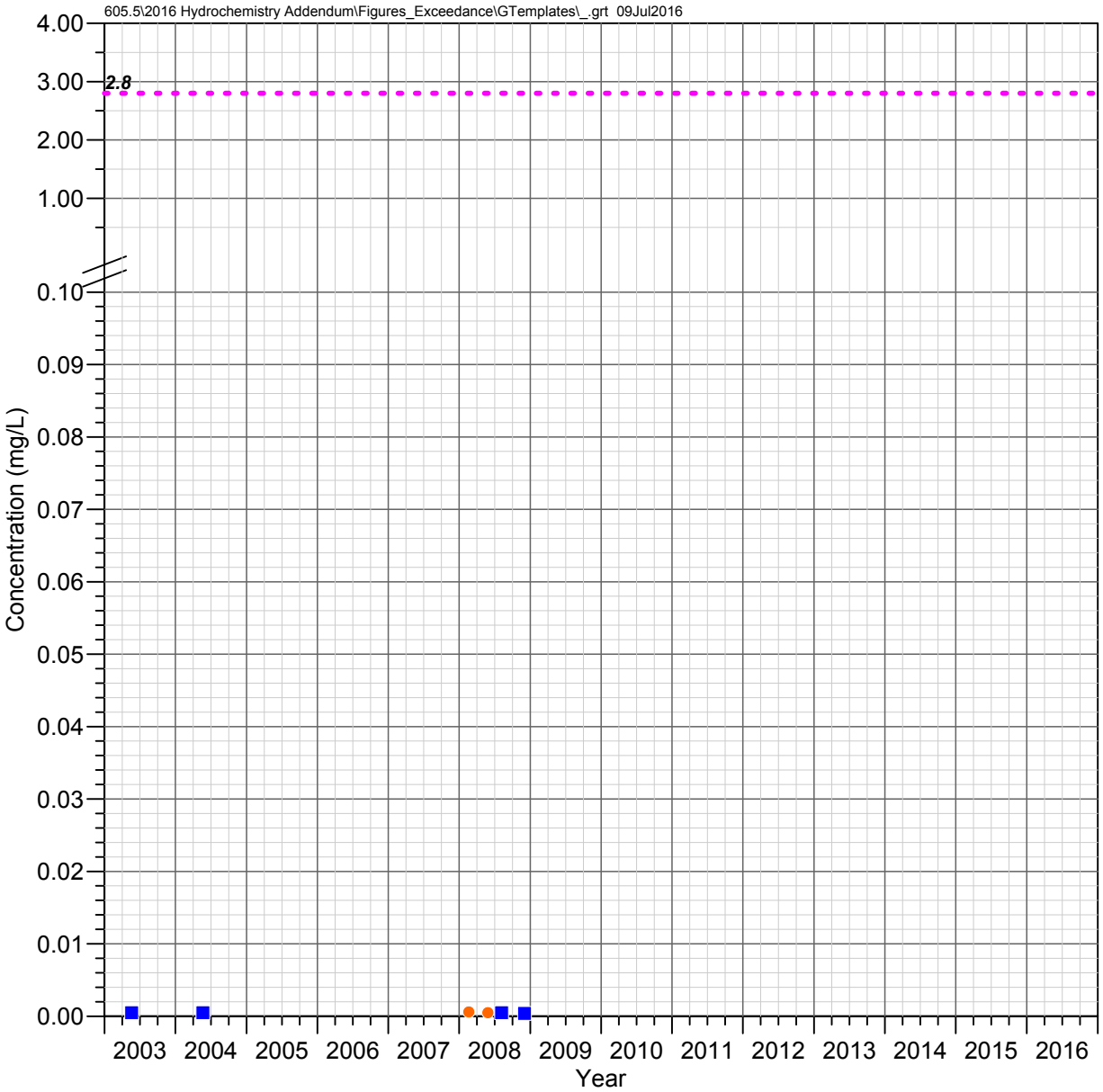


FIGURE F-787. URANIUM CONCENTRATIONS OBSERVED AT H 0.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.2 W
Devils Canyon Watershed

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 2.8 mg/L)

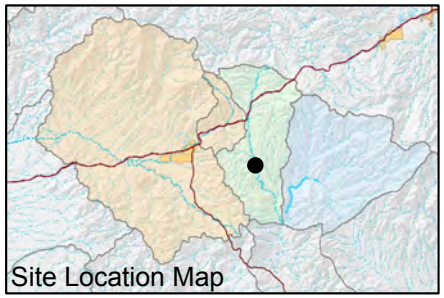
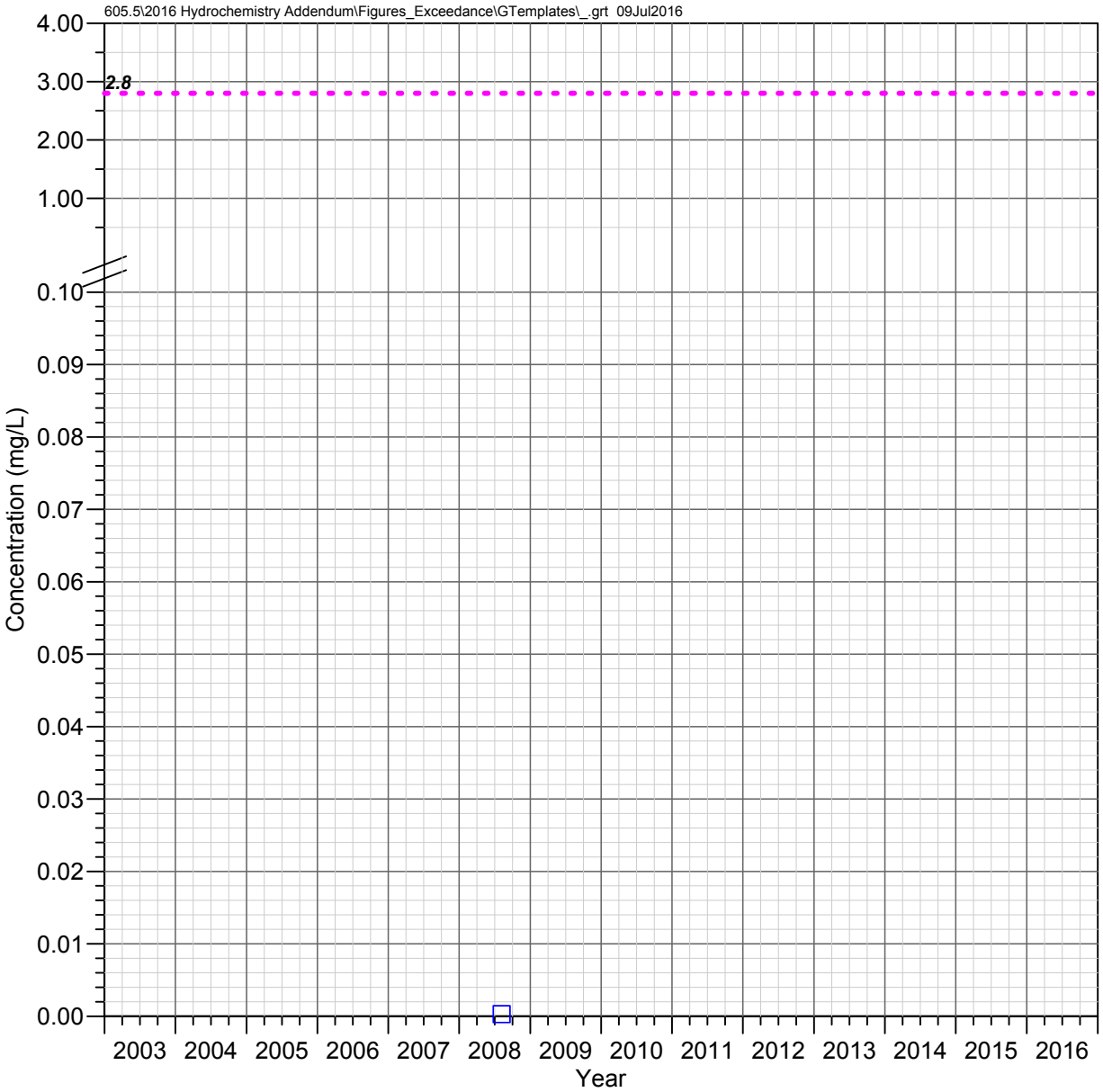


FIGURE F-788. URANIUM CONCENTRATIONS OBSERVED AT DC 8.2 W, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.1 C
Devils Canyon Watershed

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 2.8 mg/L)

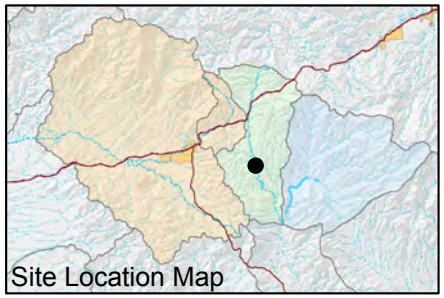
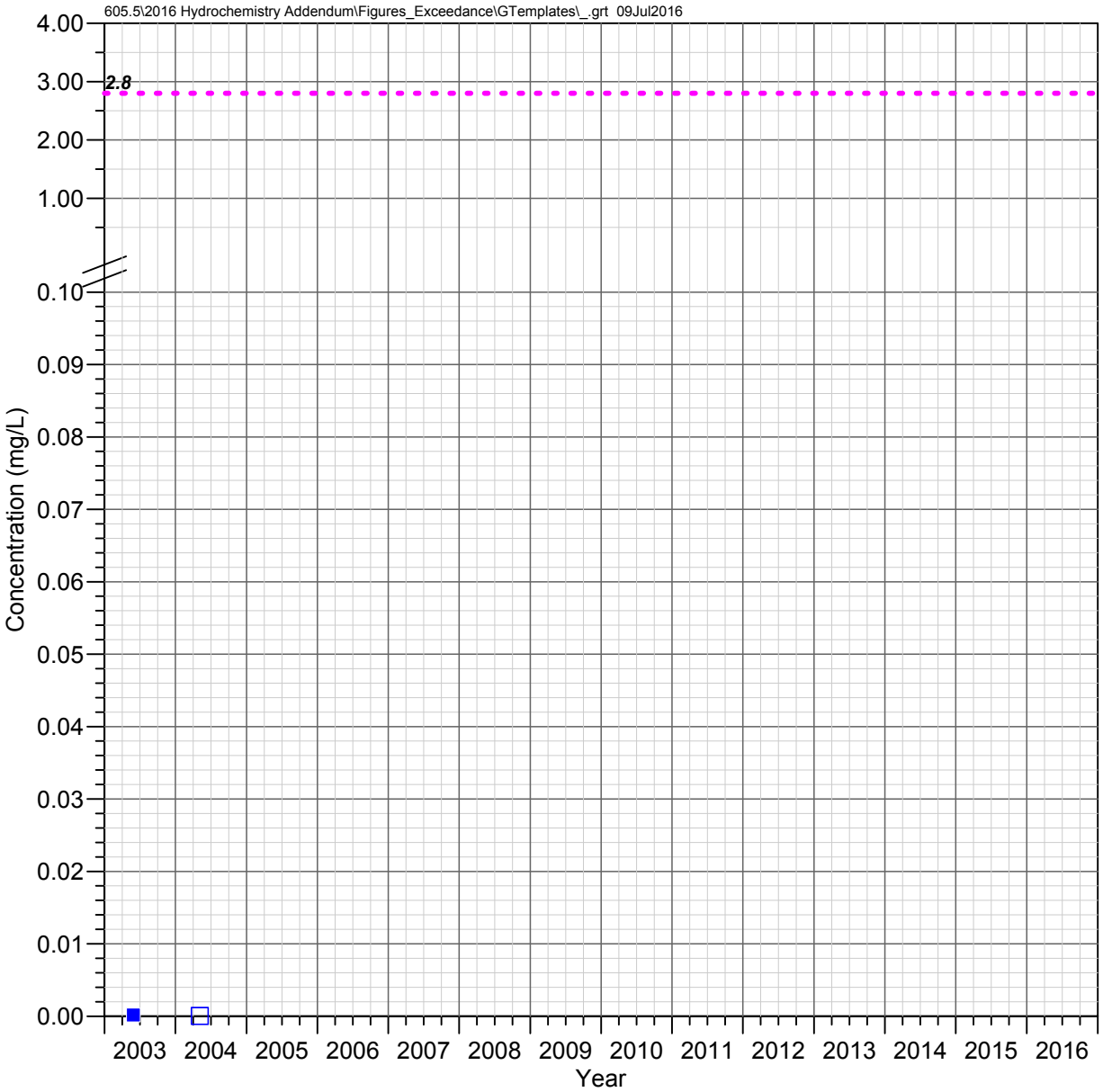


FIGURE F-789. URANIUM CONCENTRATIONS OBSERVED AT DC 8.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 7.1 C
Devils Canyon Watershed

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Full Body Contact (UNS, 2.8 mg/L)

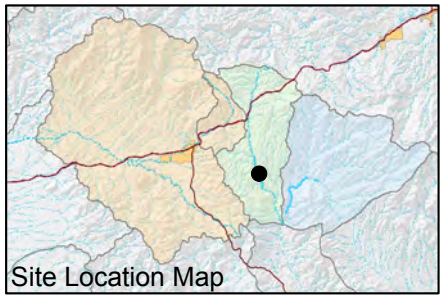
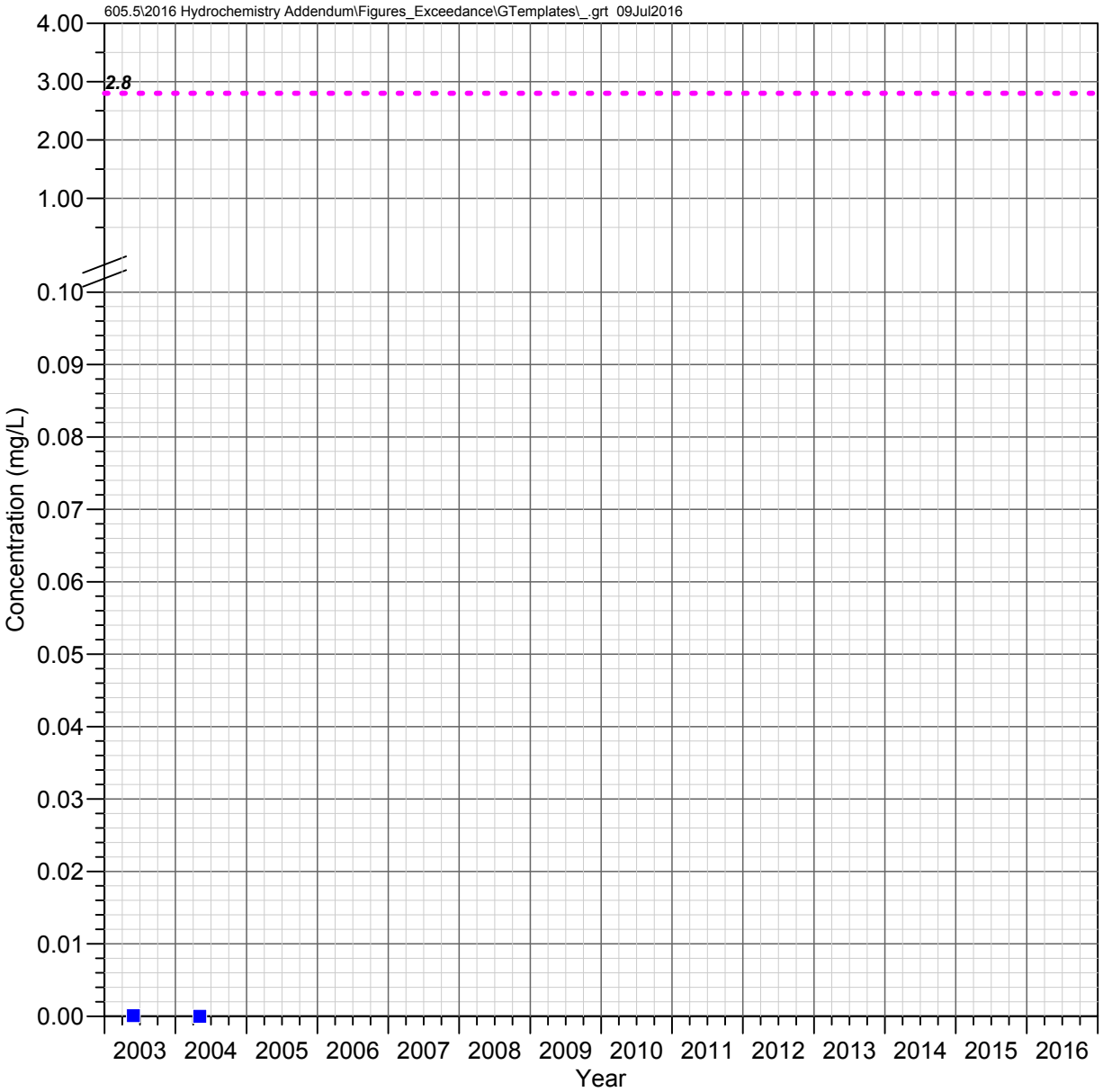


FIGURE F-790. URANIUM CONCENTRATIONS OBSERVED AT DC 7.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.6 W (DCT 6.6 W)
Devils Canyon Watershed

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 2.8 mg/L)

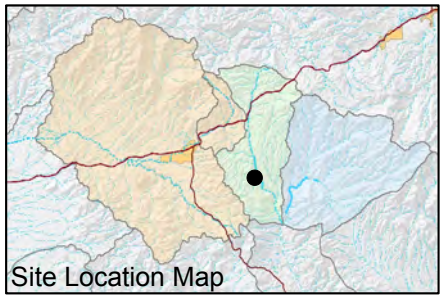
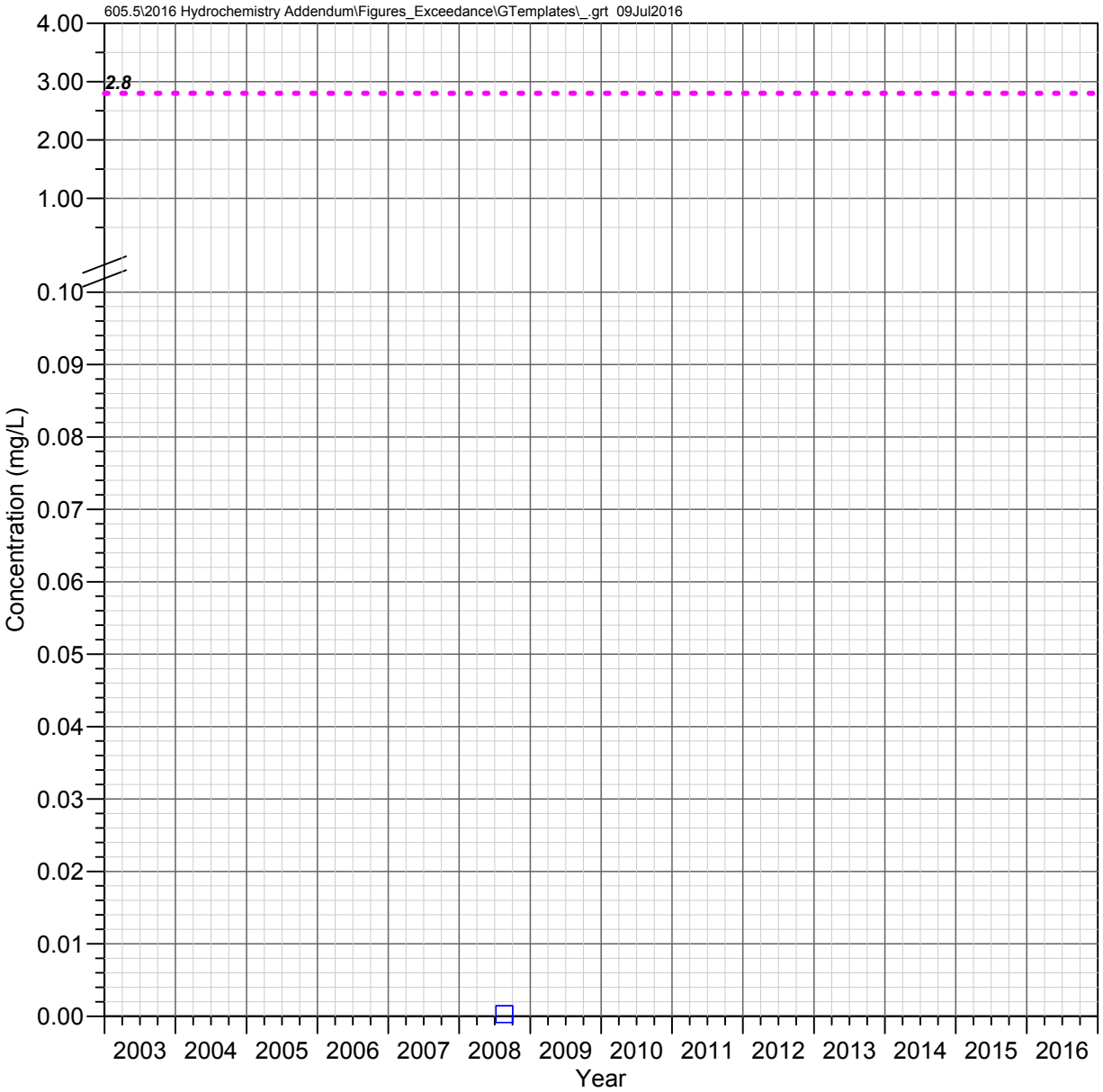


FIGURE F-791. URANIUM CONCENTRATIONS OBSERVED AT DC 6.6 W (DCT 6.6 W), DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.14 C
Devils Canyon Watershed

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 2.8 mg/L)

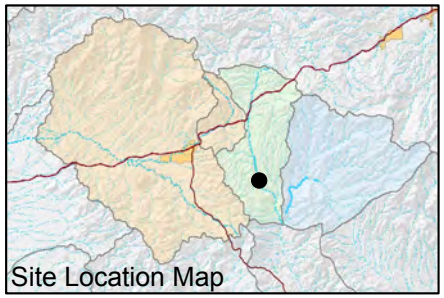
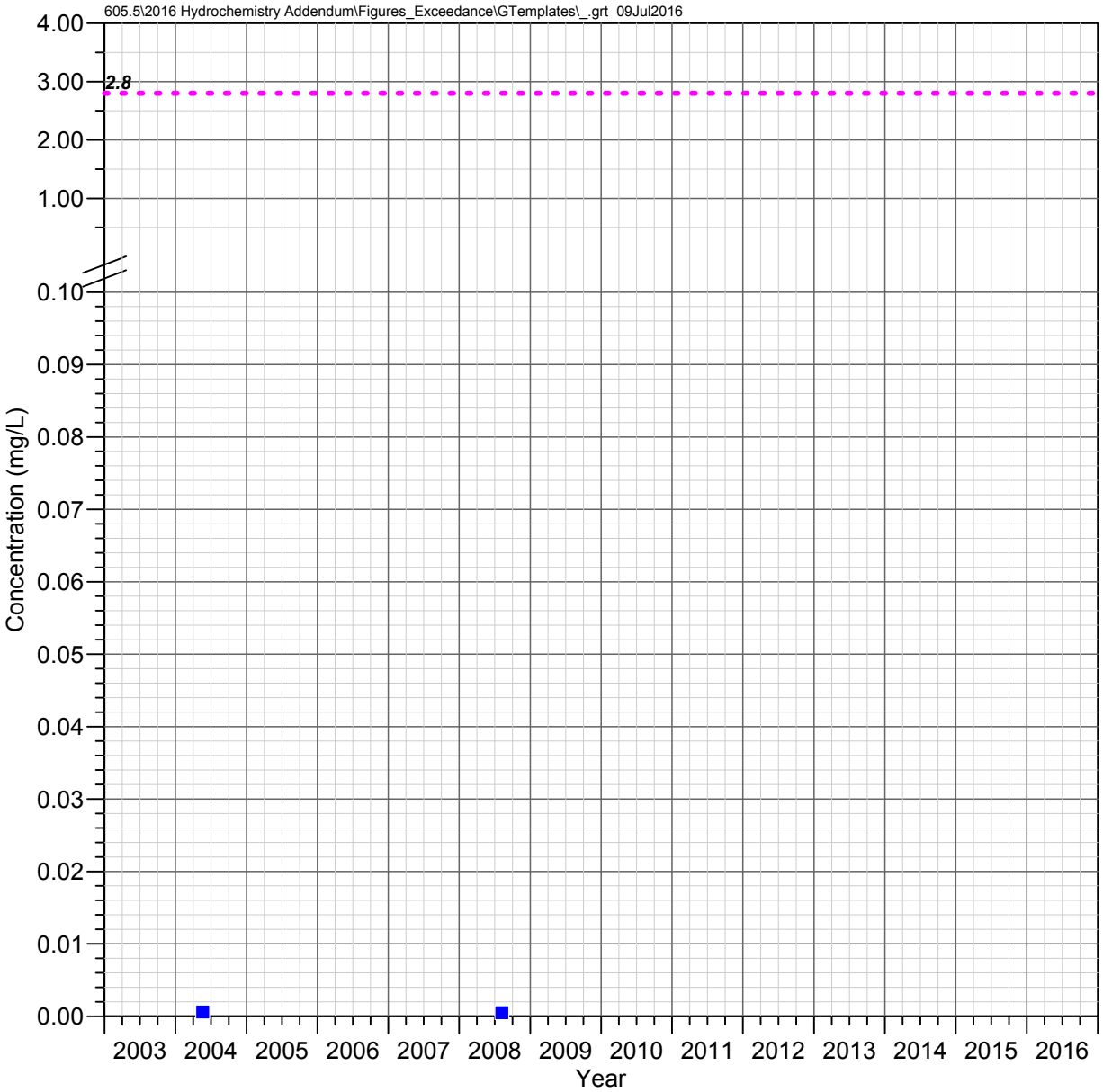


FIGURE F-792. URANIUM CONCENTRATIONS OBSERVED AT DC 6.14 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.1 E
Devils Canyon Watershed

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Full Body Contact (UNS, 2.8 mg/L)

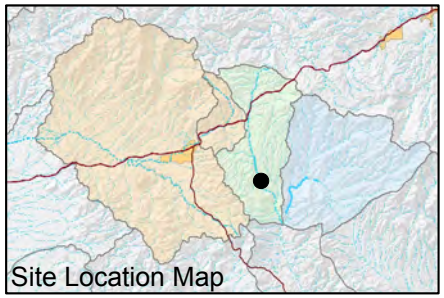
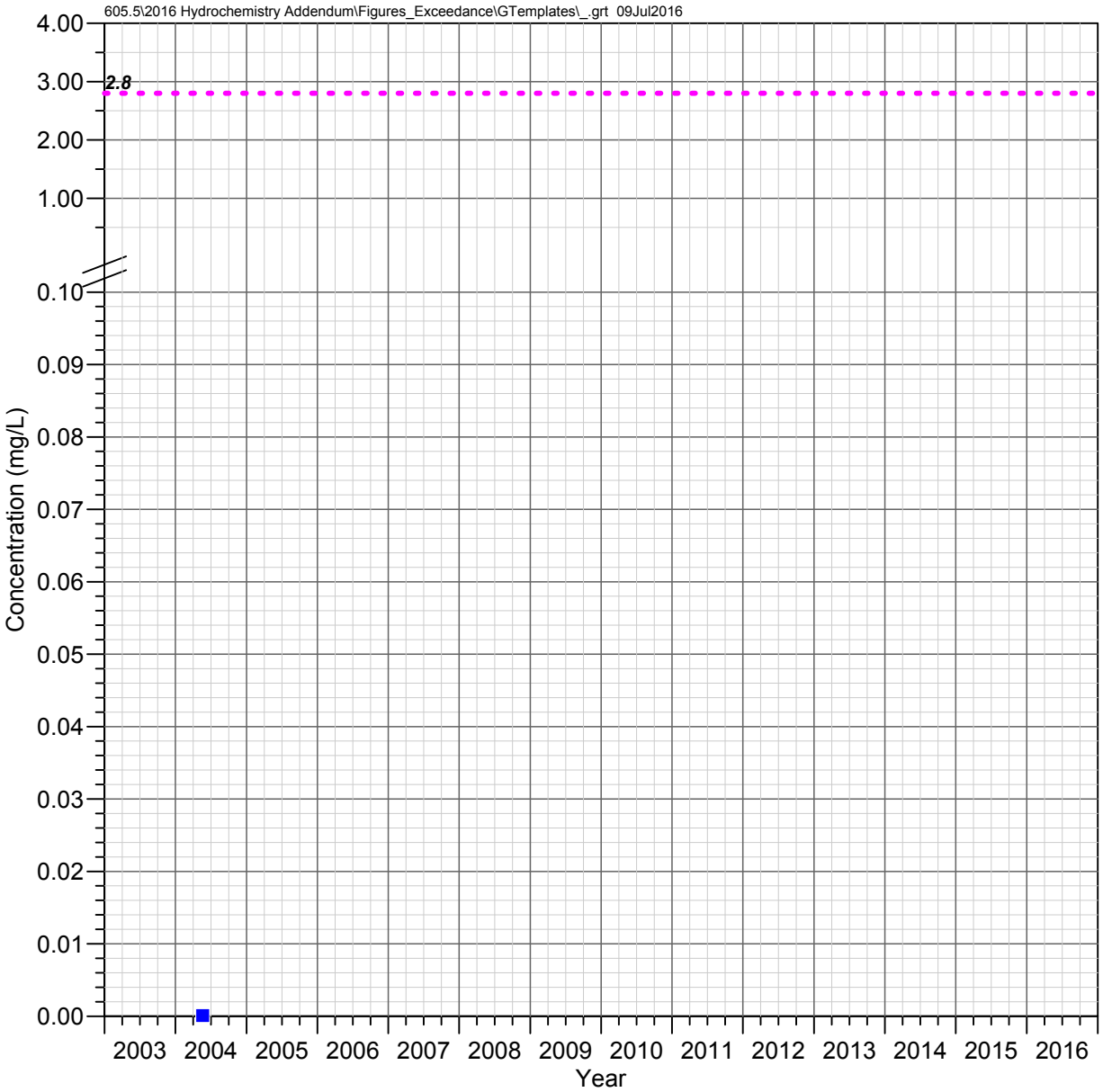


FIGURE F-793. URANIUM CONCENTRATIONS OBSERVED AT DC 6.1 E, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 5.5 C
Devils Canyon Watershed

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Full Body Contact (UNS, 2.8 mg/L)

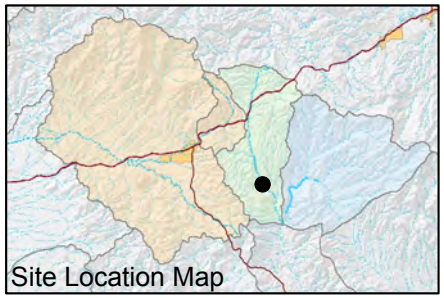
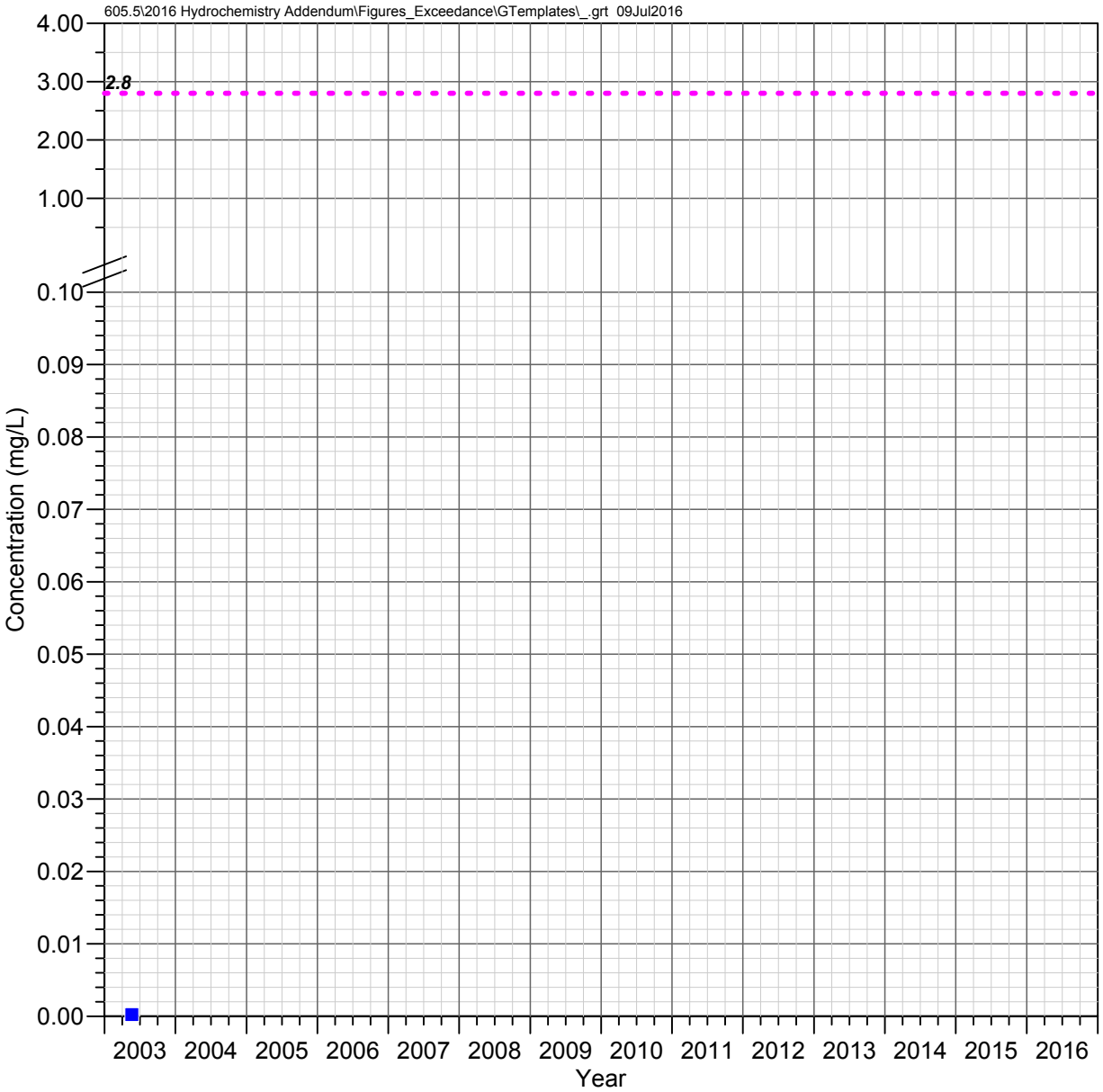


FIGURE F-794. URANIUM CONCENTRATIONS OBSERVED AT DC 5.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 4.1 E
Devils Canyon Watershed

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Full Body Contact (UNS, 2.8 mg/L)

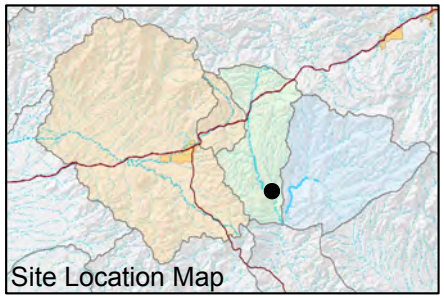
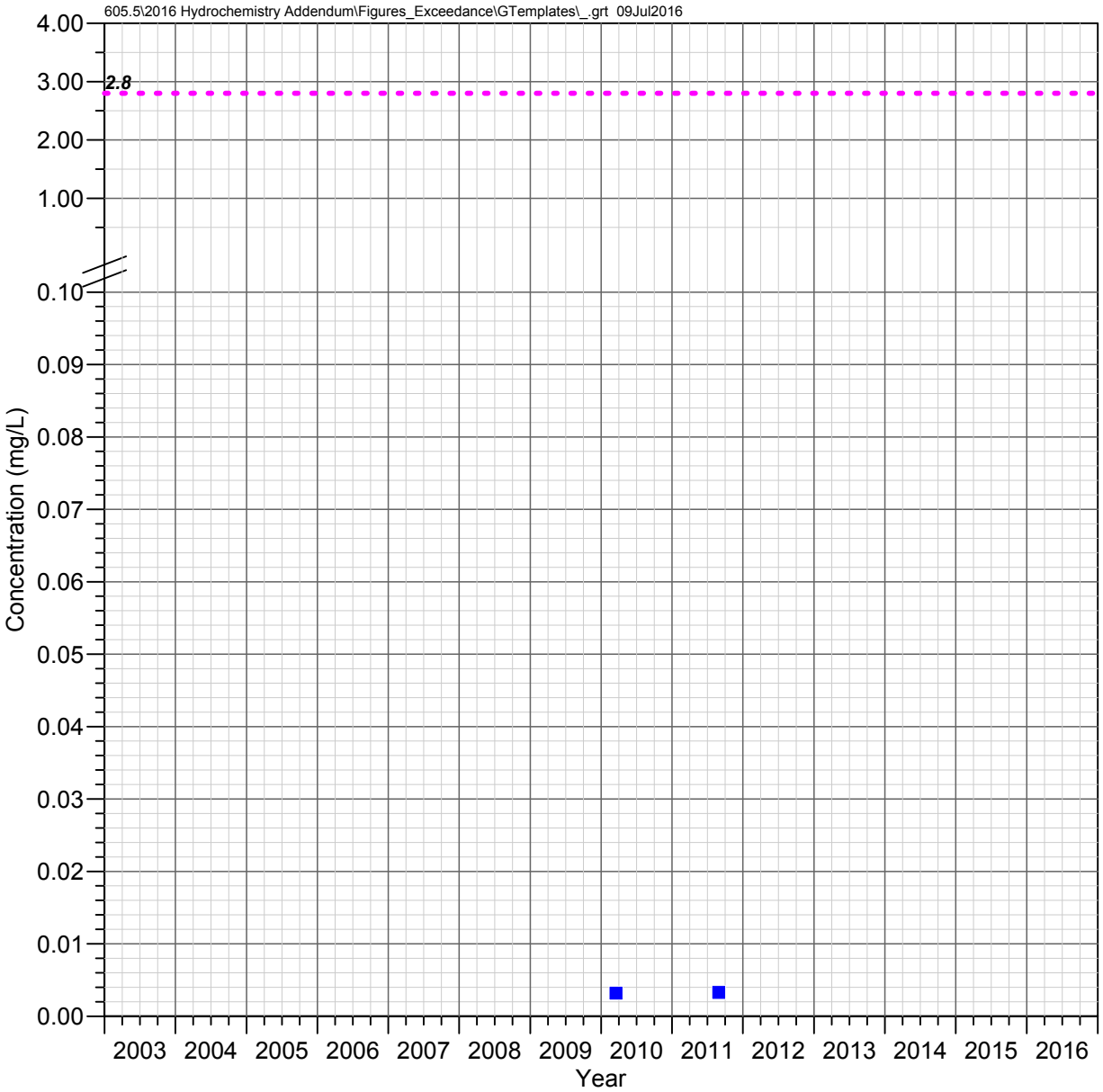


FIGURE F-795. URANIUM CONCENTRATIONS OBSERVED AT DC 4.1 E, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Government Springs Mineral Creek Watershed

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Full Body Contact (UNS, 2.8 mg/L)

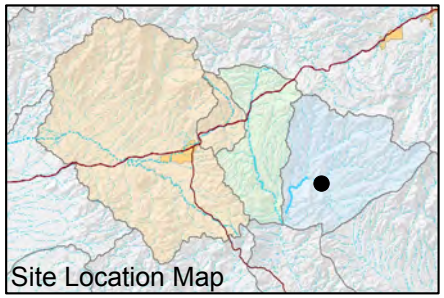
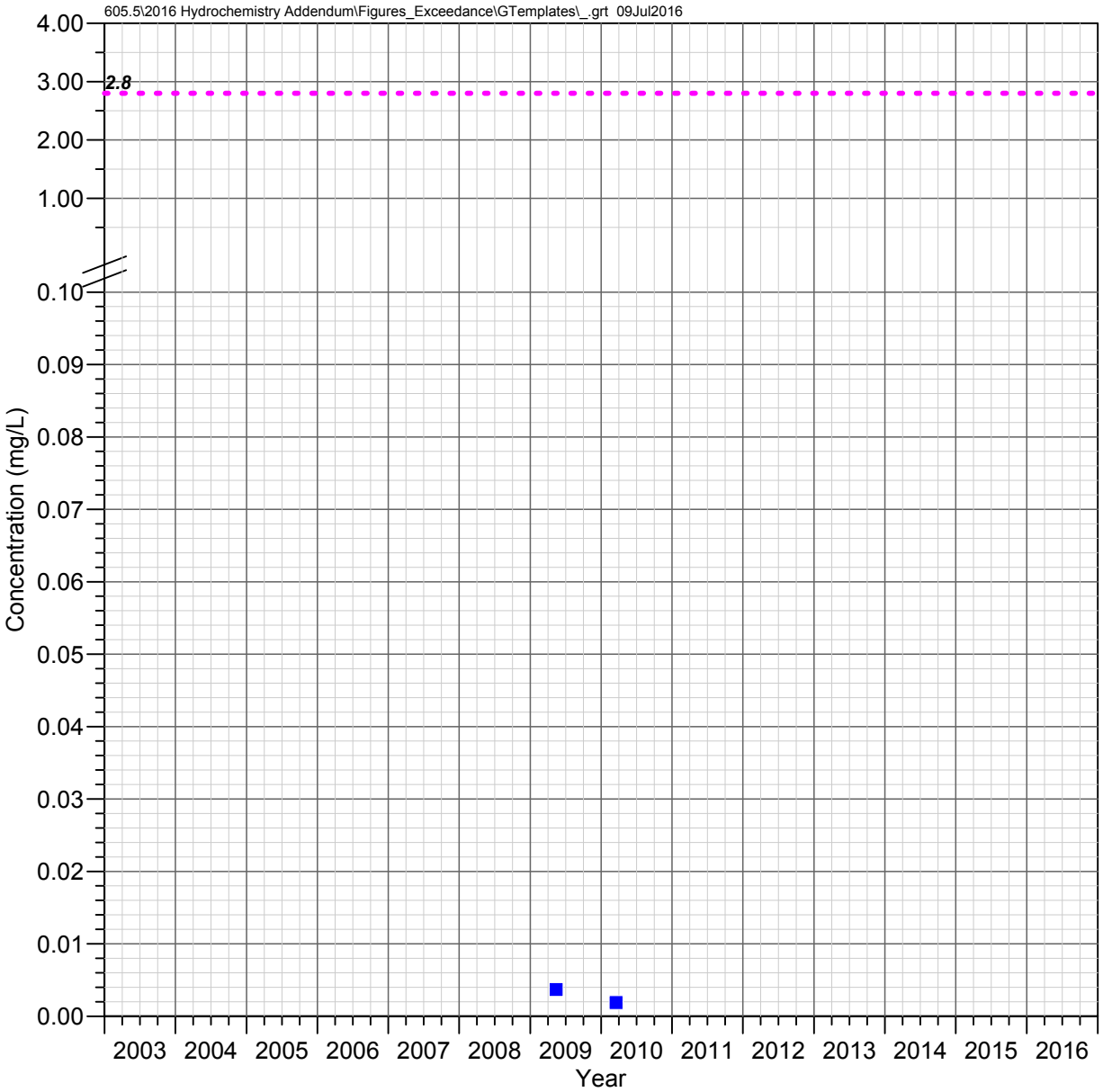


FIGURE F-796. URANIUM CONCENTRATIONS OBSERVED AT GOVERNMENT SPRINGS, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 8.4 C
Mineral Creek Watershed

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Full Body Contact (UNS, 2.8 mg/L)

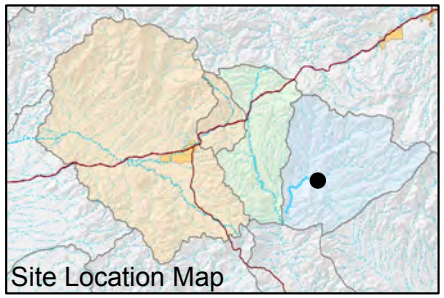
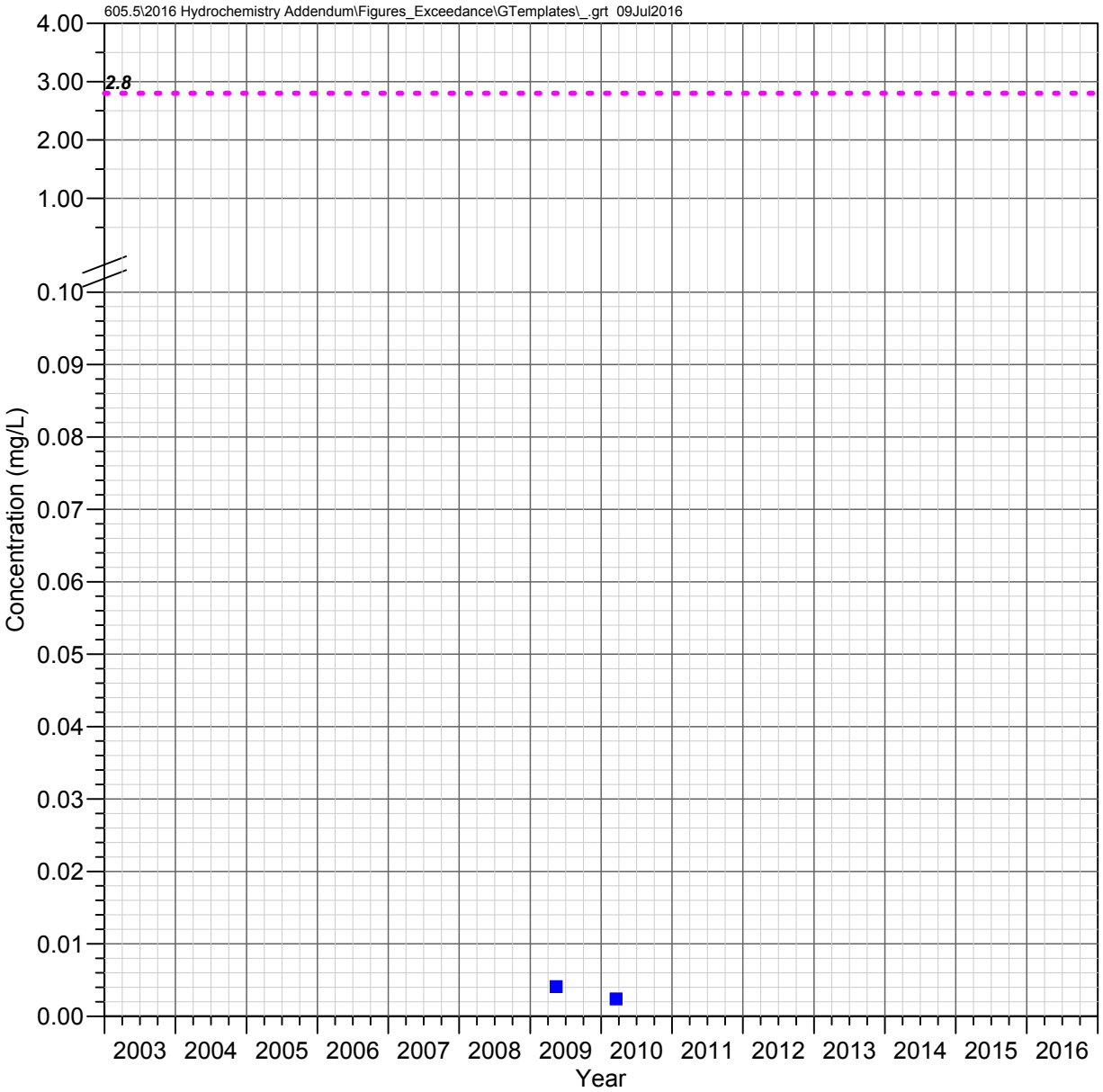


FIGURE F-797. URANIUM CONCENTRATIONS OBSERVED AT MC 8.4 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



LF 0.2 C
Mineral Creek Watershed

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- Dissolved, Detected Value
- Dissolved, Below Detection Limit*
- Total Recoverable, Detected Value
- Total Recoverable, Below Detection Limit*
- Total, Detected Value
- Total, Below Detection Limit*
- Unknown Filter Analysis, Detected Value
- Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

AZ Full Body Contact (UNS, 2.8 mg/L)

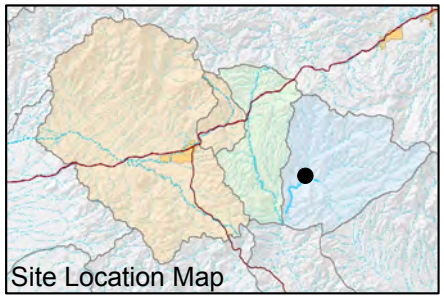
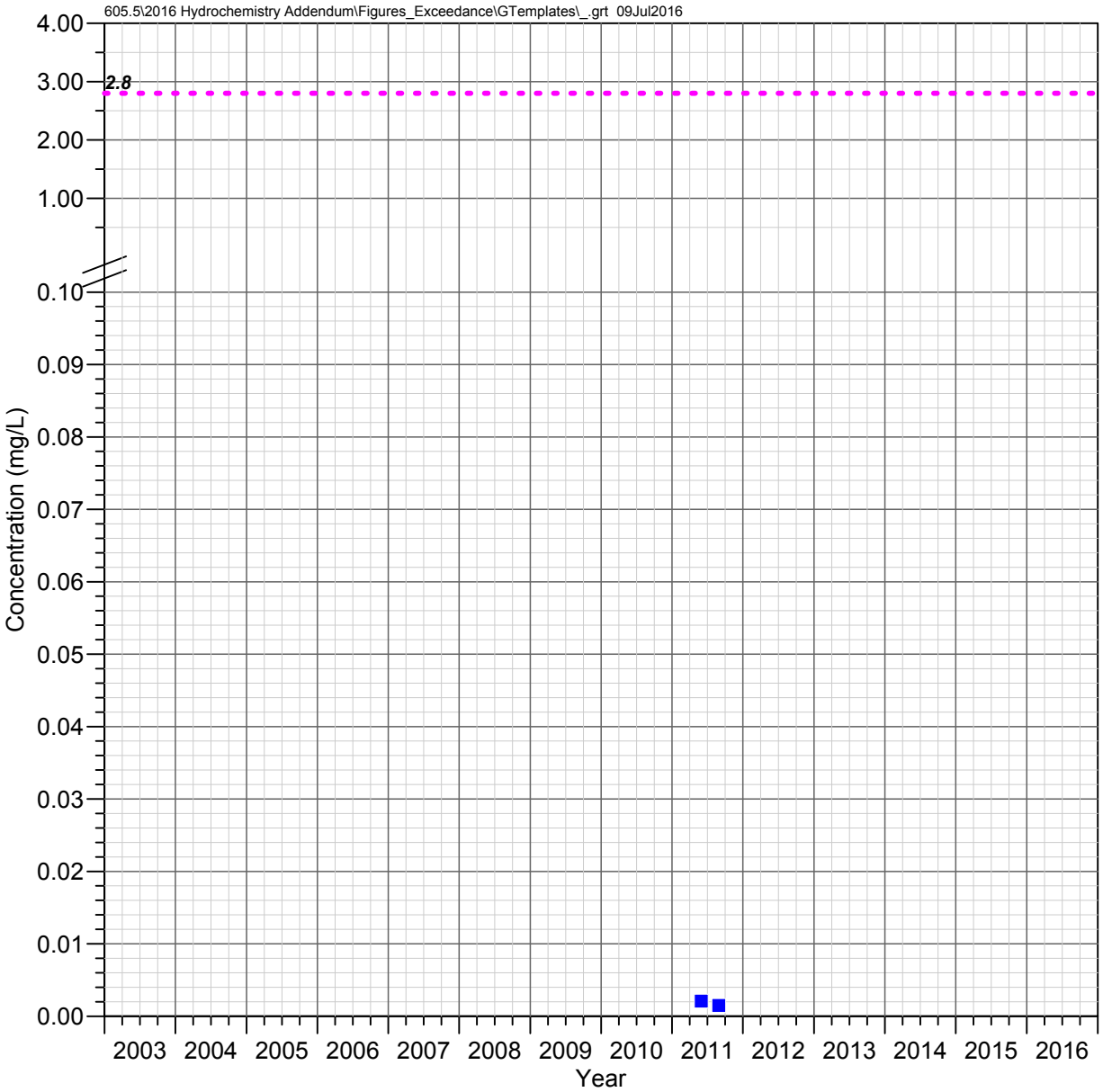


FIGURE F-798. URANIUM CONCENTRATIONS OBSERVED AT LF 0.2 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 5.2 C
Mineral Creek Watershed

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 2.8 mg/L)

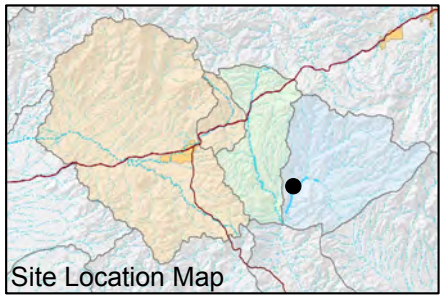
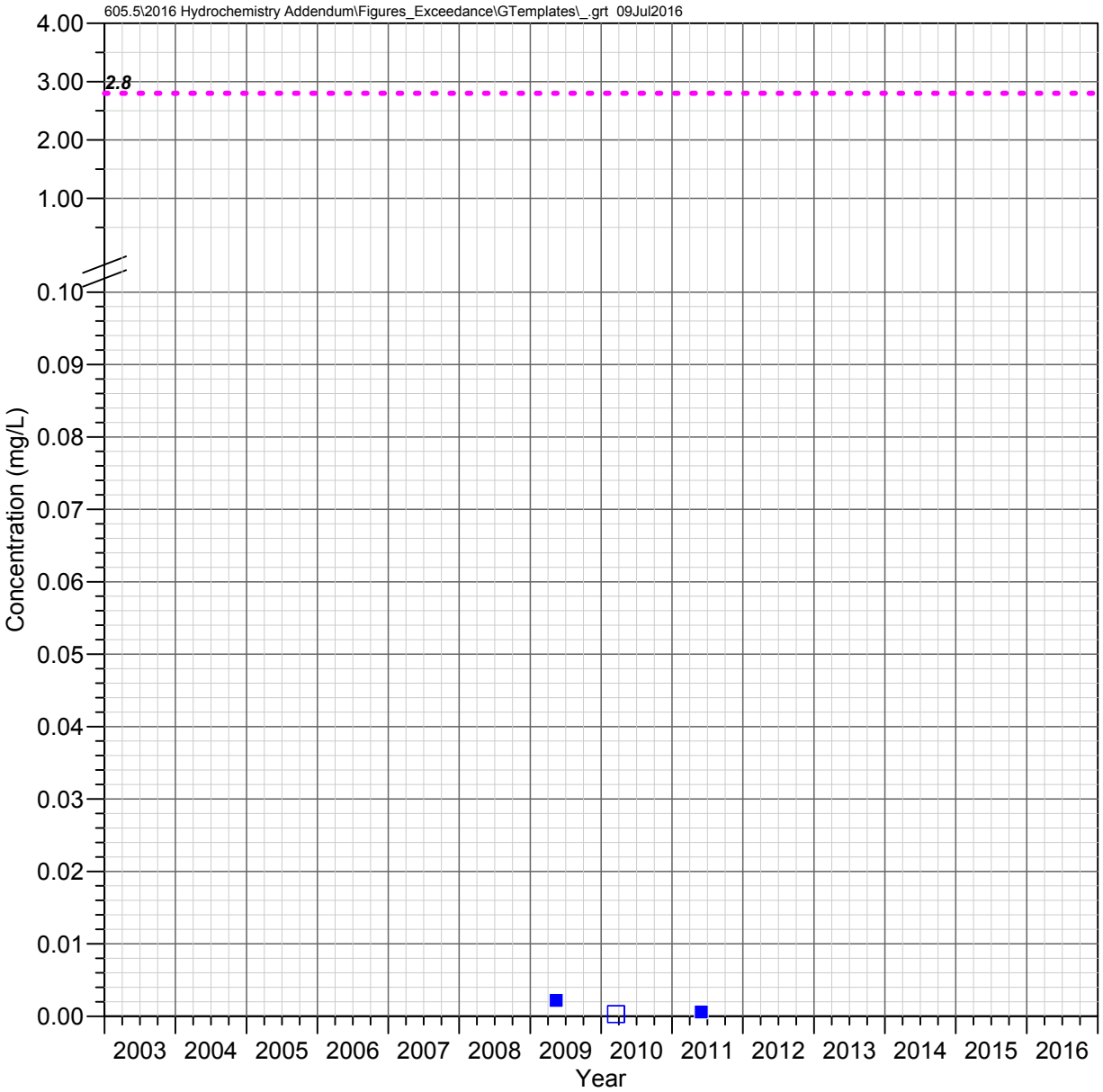


FIGURE F-799. URANIUM CONCENTRATIONS OBSERVED AT MC 5.2 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 3.4 W (Wet Leg Spring)
Mineral Creek Watershed

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 2.8 mg/L)

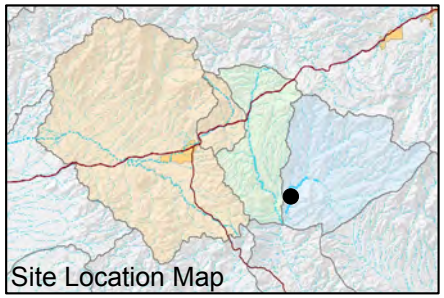
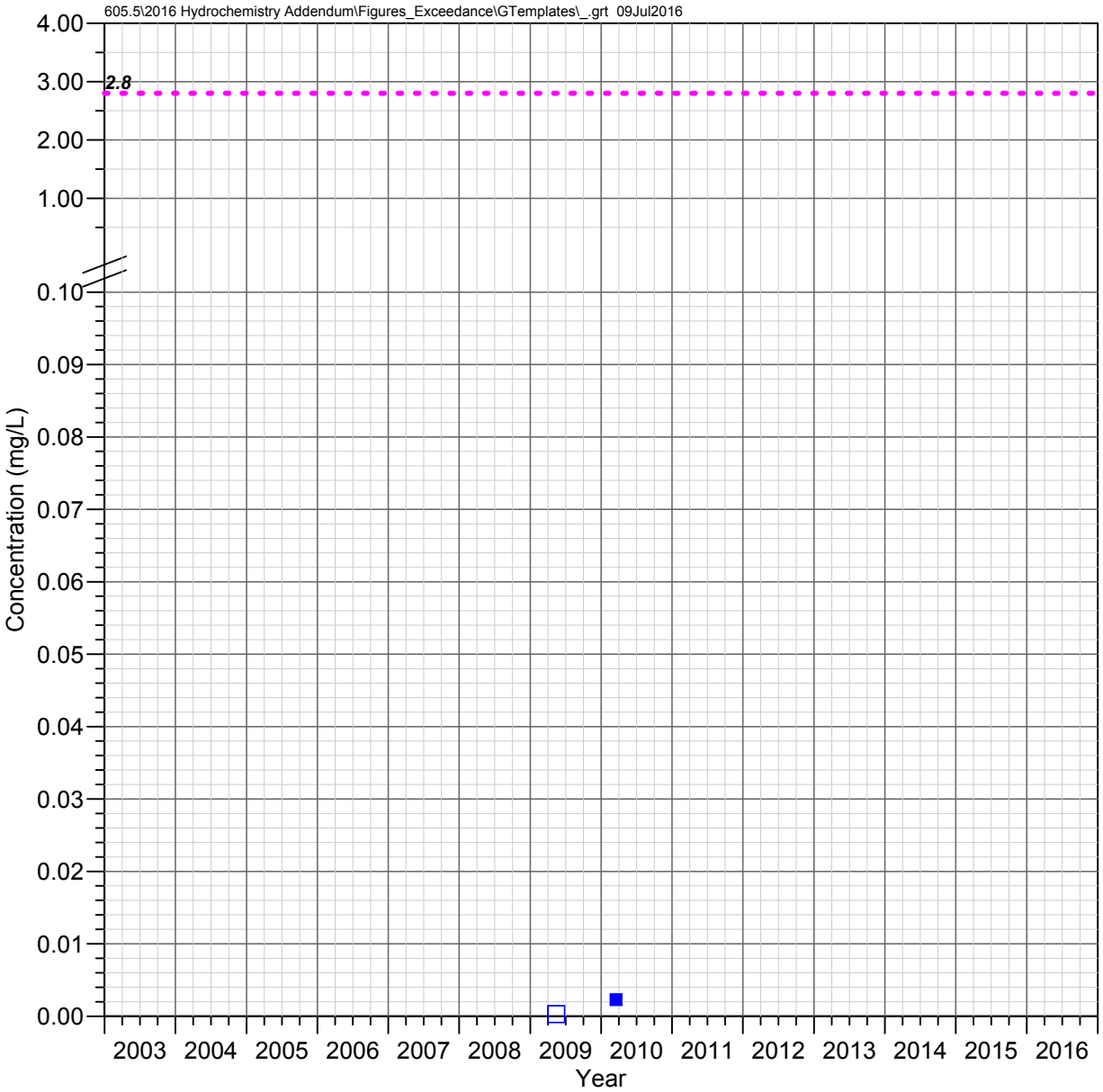


FIGURE F-800. URANIUM CONCENTRATIONS OBSERVED AT MC 3.4 W (WET LEG SPRING), MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 3.3 C (Lower Mineral)
Mineral Creek Watershed

URANIUM

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards

UNS = Unspecified filter analysis

- - - - AZ Full Body Contact (UNS, 2.8 mg/L)

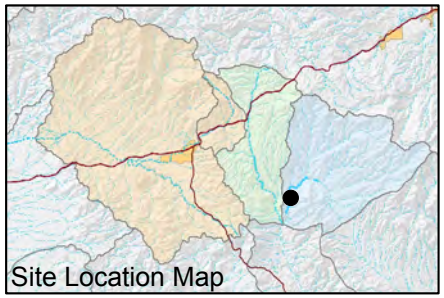
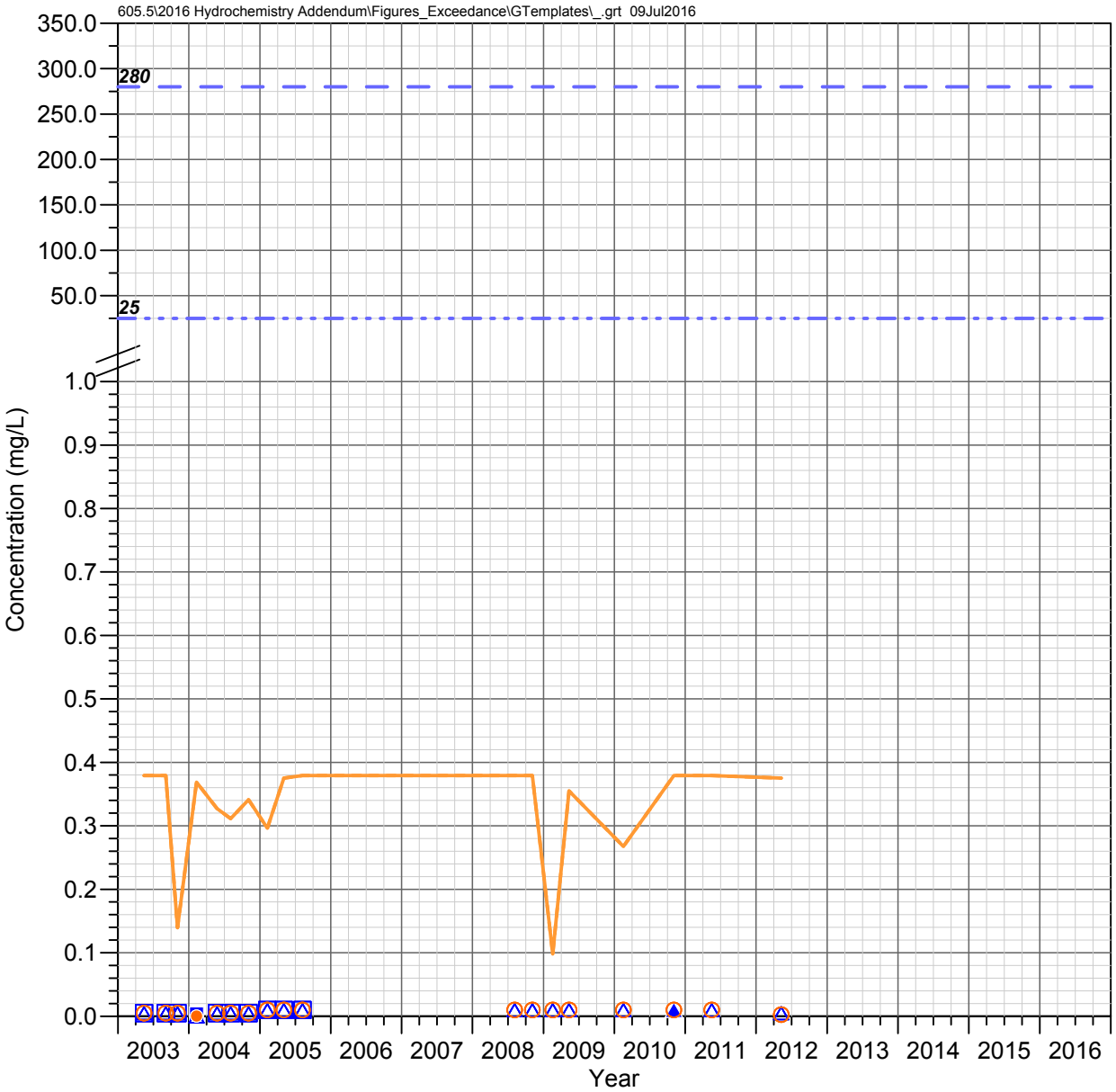


FIGURE F-801. URANIUM CONCENTRATIONS OBSERVED AT MC 3.3 C (LOWER MINERAL), MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Pump Station Spring (QC 30.7 C)
Queen Creek Watershed

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 280 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Agricultural Livestock Watering (TRC, 25 mg/L)

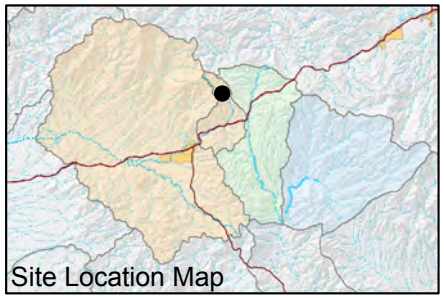
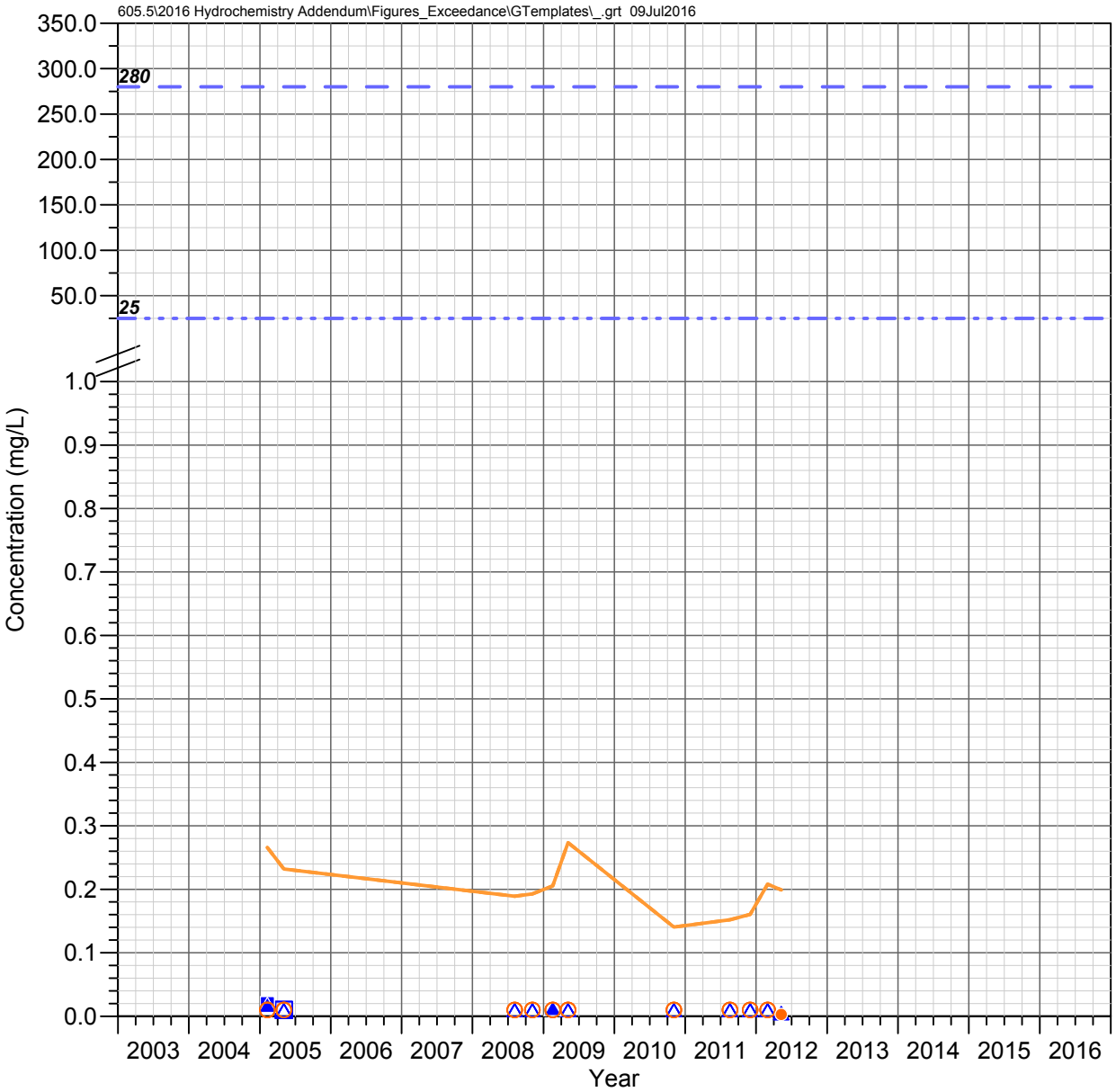


FIGURE F-802. ZINC CONCENTRATIONS OBSERVED AT PUMP STATION SPRING (QC 30.7 C), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 27.3 C
Queen Creek Watershed

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 280 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Agricultural Livestock Watering (TRC, 25 mg/L)

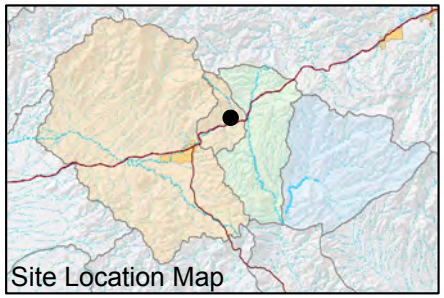
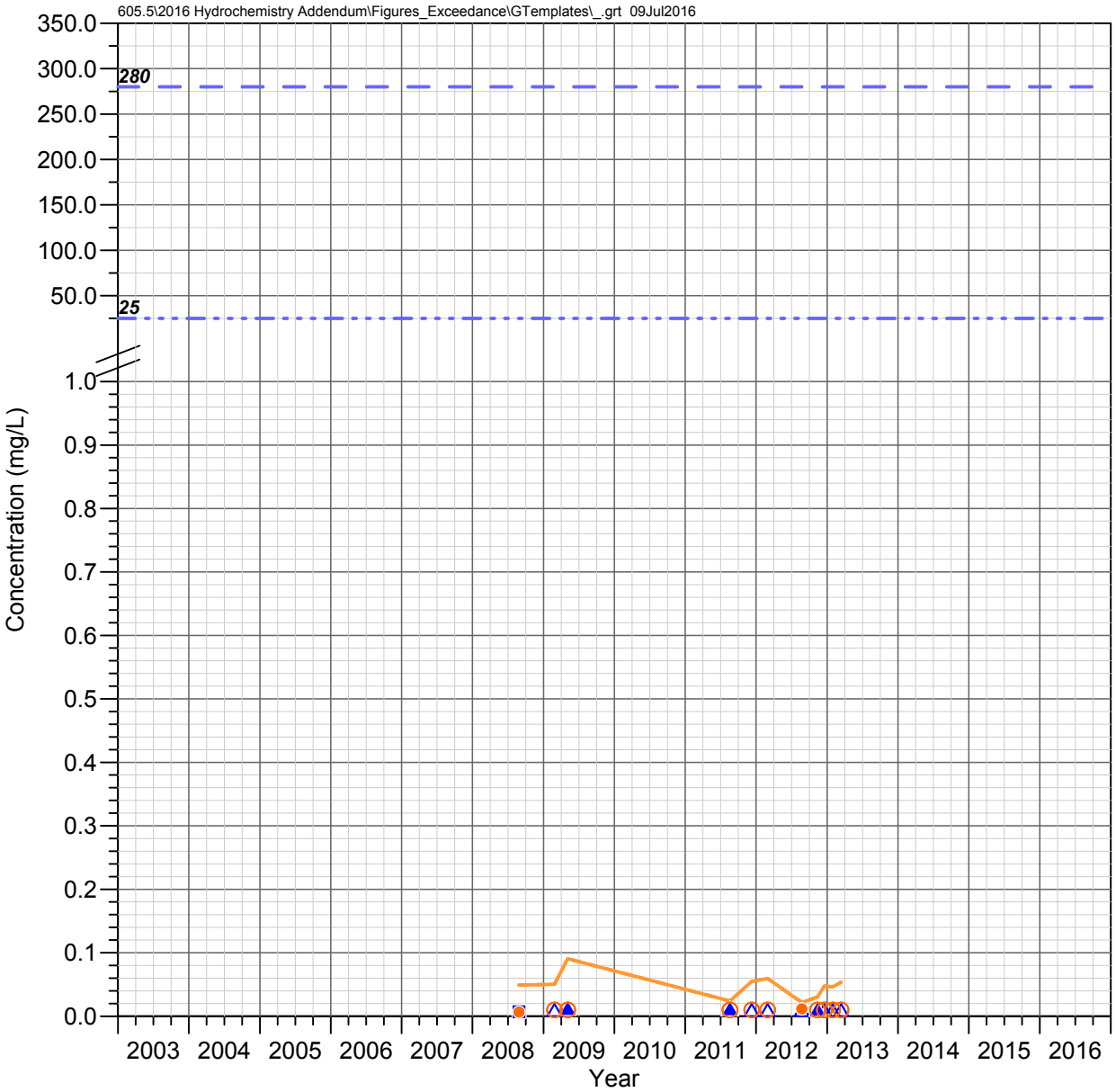


FIGURE F-803. ZINC CONCENTRATIONS OBSERVED AT QC 27.3 C, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Oak Flat Wash
Queen Creek Watershed

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 280 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Agricultural Livestock Watering (TRC, 25 mg/L)

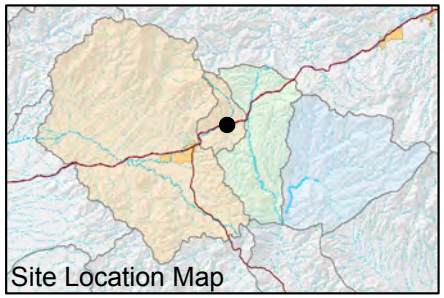
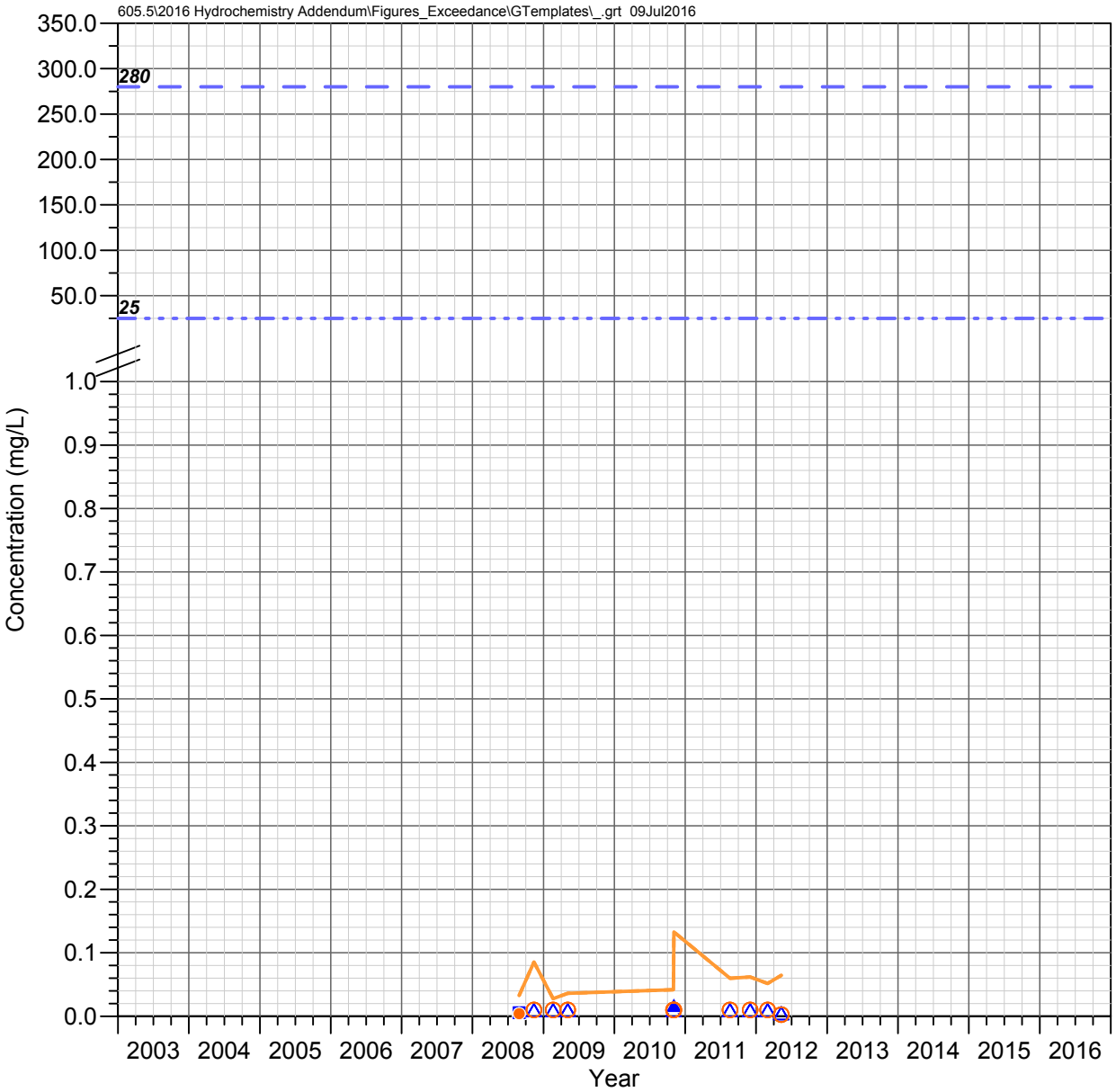


FIGURE F-804. ZINC CONCENTRATIONS OBSERVED AT OAK FLAT WASH, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Number 9 Wash
Queen Creek Watershed

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 280 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Agricultural Livestock Watering (TRC, 25 mg/L)

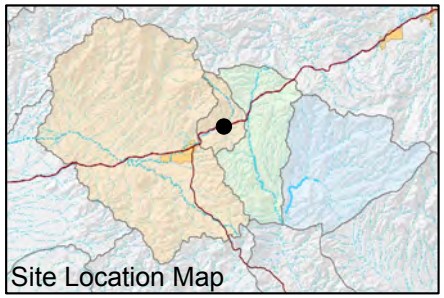
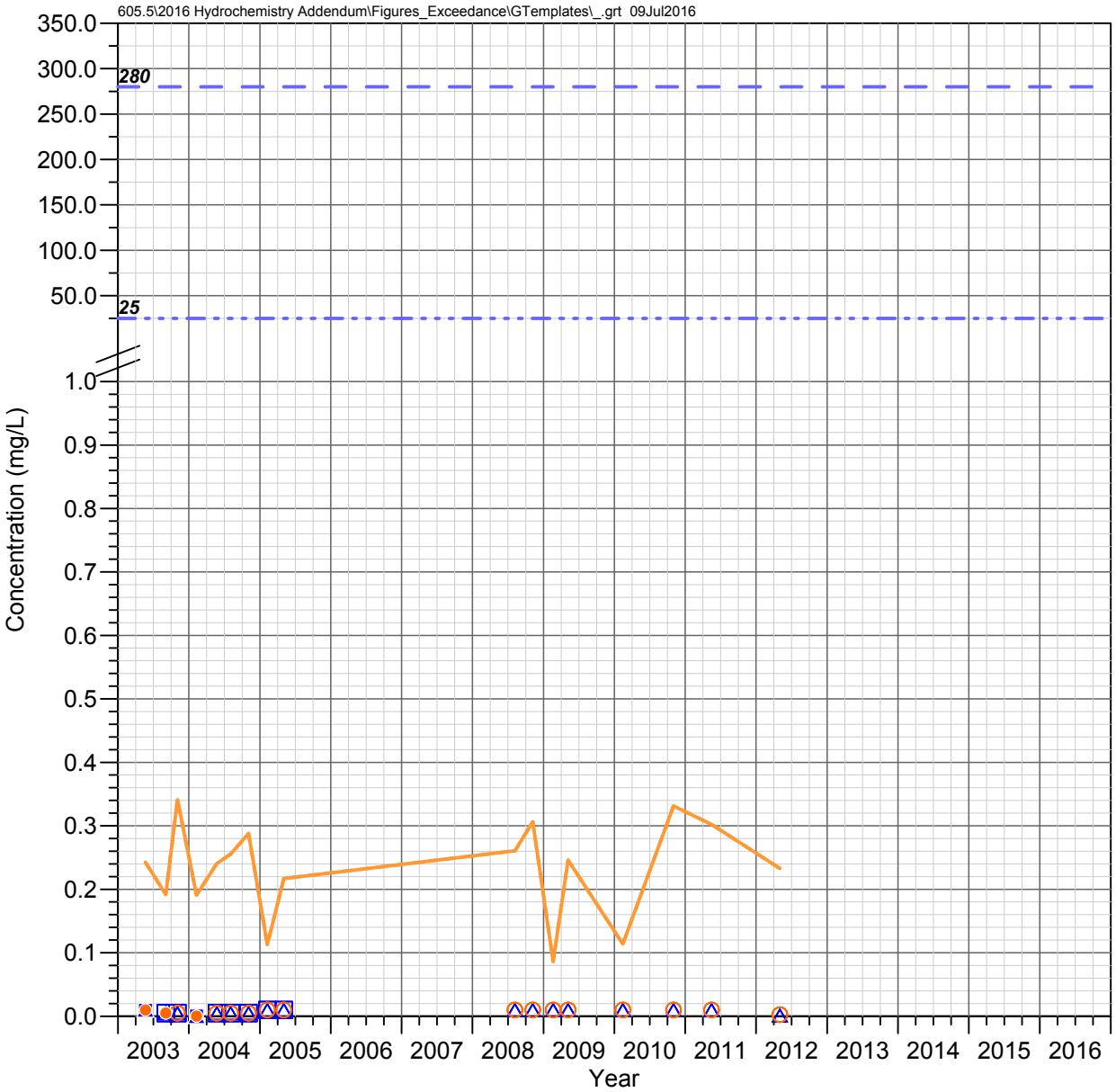


FIGURE F-805. ZINC CONCENTRATIONS OBSERVED AT NUMBER 9 WASH, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Boulder Hole (QC 23.6 C)
Queen Creek Watershed

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 280 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Agricultural Livestock Watering (TRC, 25 mg/L)

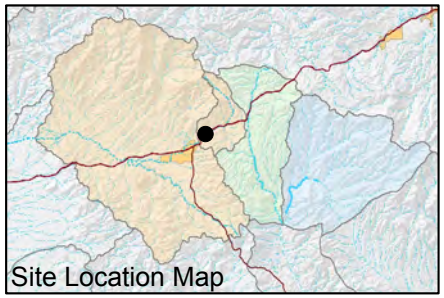
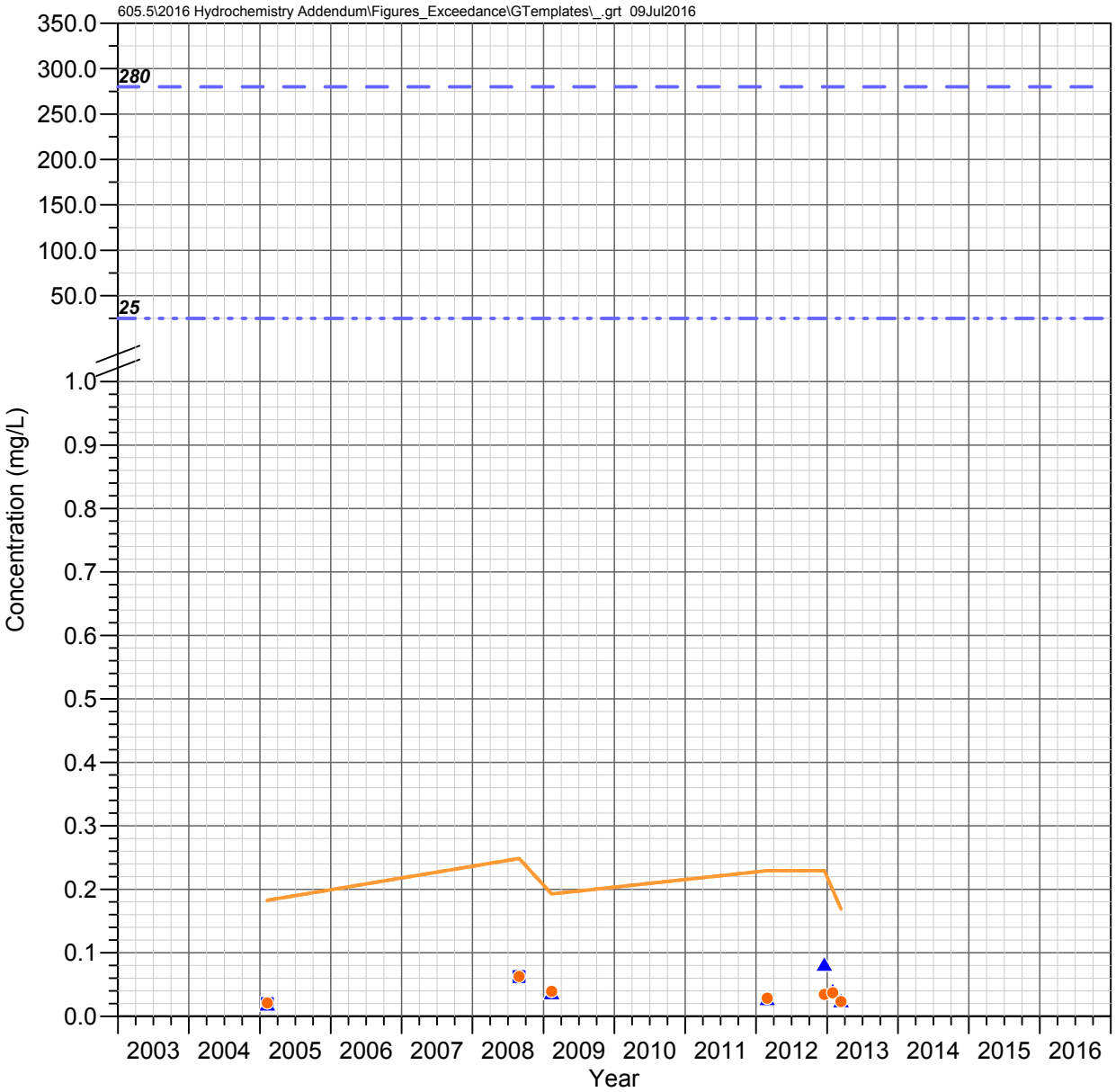


FIGURE F-806. ZINC CONCENTRATIONS OBSERVED AT BOULDER HOLE (QC 23.6 C), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 22.6 E (Karst Spring)
Queen Creek Watershed

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 280 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Agricultural Livestock Watering (TRC, 25 mg/L)

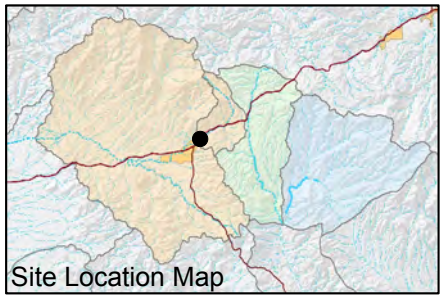
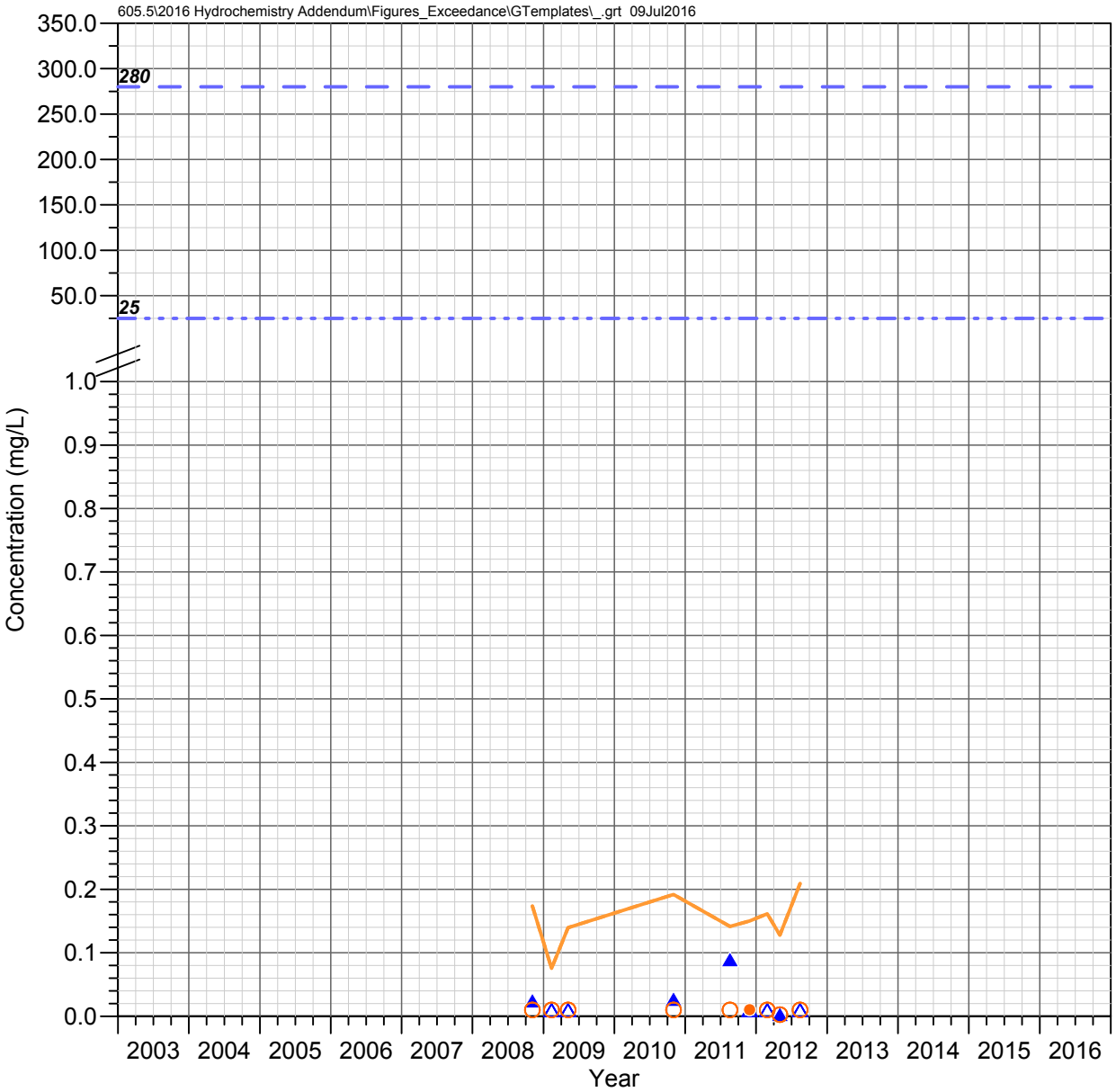


FIGURE F-807. ZINC CONCENTRATIONS OBSERVED AT QC 22.6 E (KARST SPRING), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 21.7 C (Magma Avenue)
Queen Creek Watershed

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 280 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Agricultural Livestock Watering (TRC, 25 mg/L)

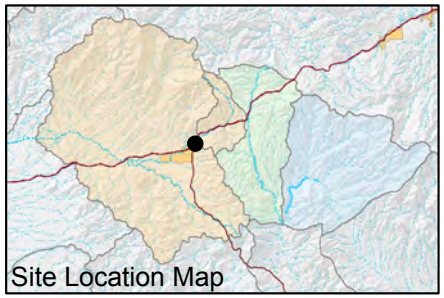
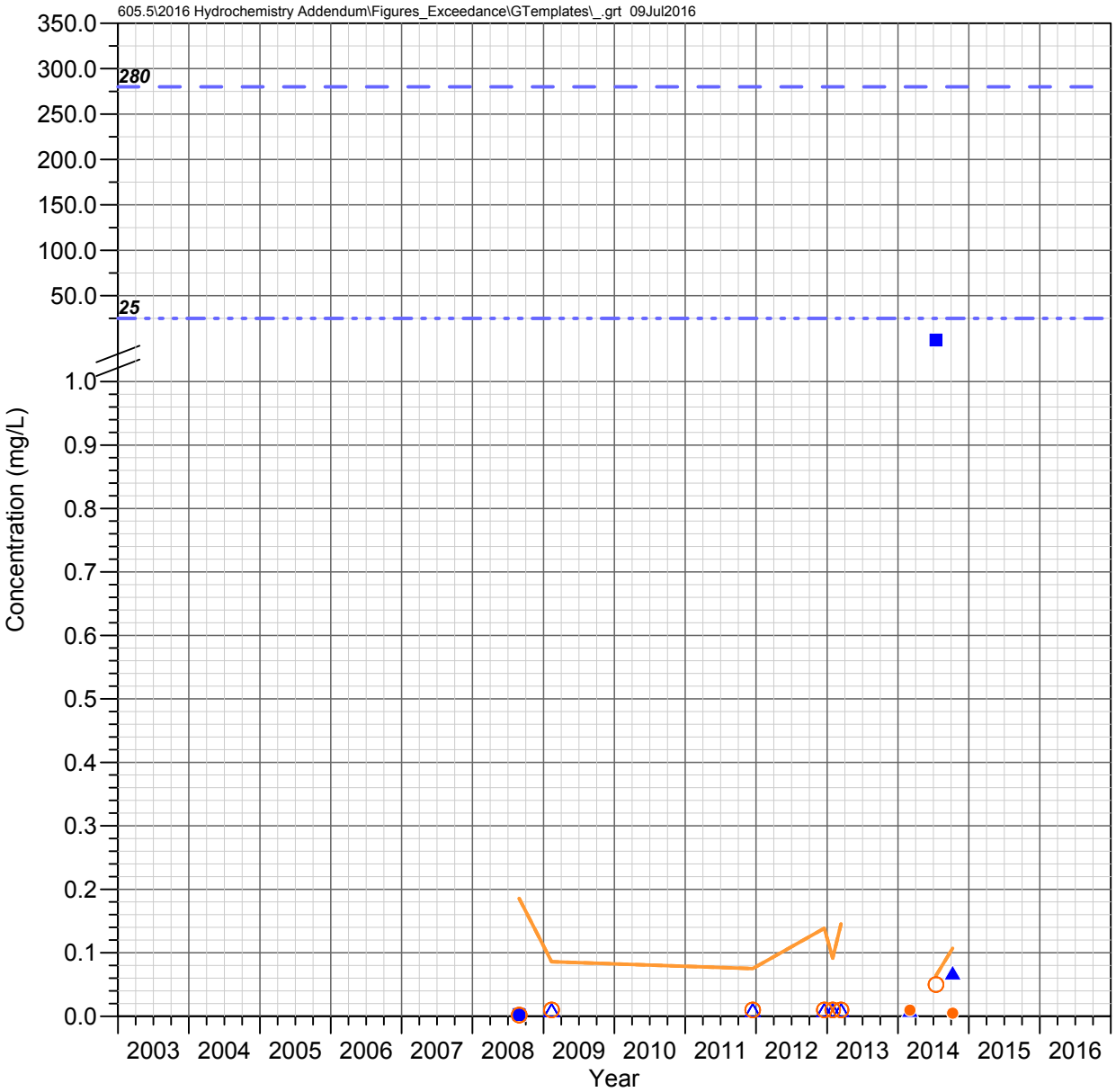


FIGURE F-808. ZINC CONCENTRATIONS OBSERVED AT QC 21.7 C (MAGMA AVENUE), QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



QC 19.7 C
Queen Creek Watershed

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 280 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Agricultural Livestock Watering (TRC, 25 mg/L)

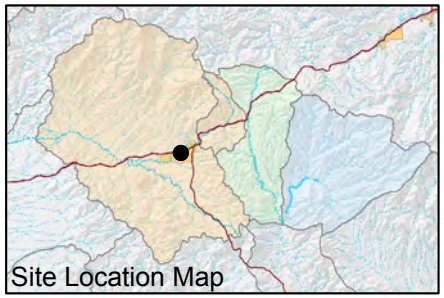
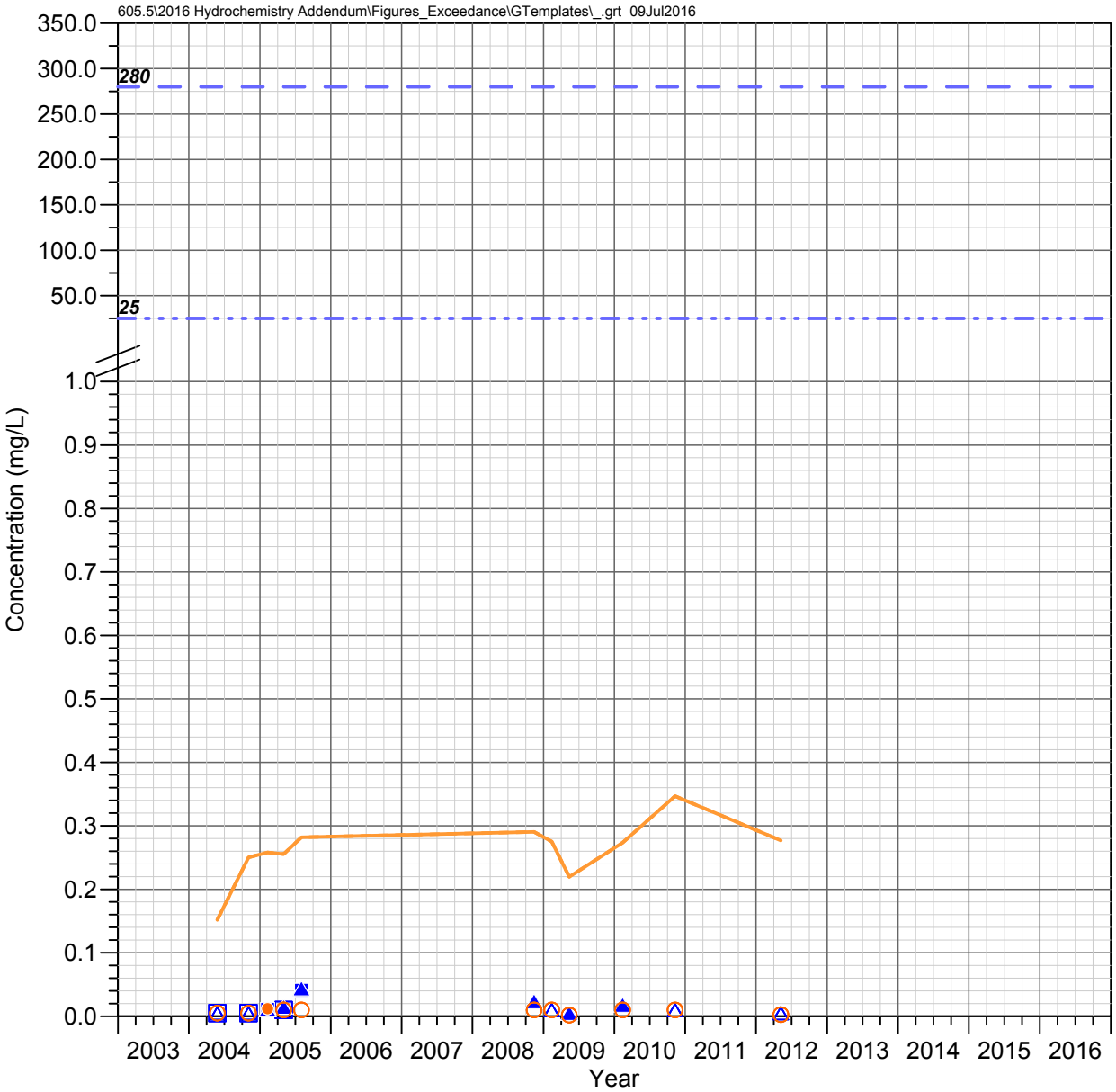


FIGURE F-809. ZINC CONCENTRATIONS OBSERVED AT QC 19.7 C, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Bored Spring
Queen Creek Watershed

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 280 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Agricultural Livestock Watering (TRC, 25 mg/L)

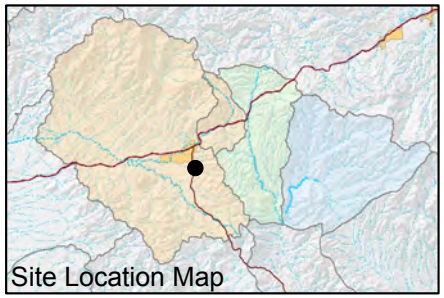
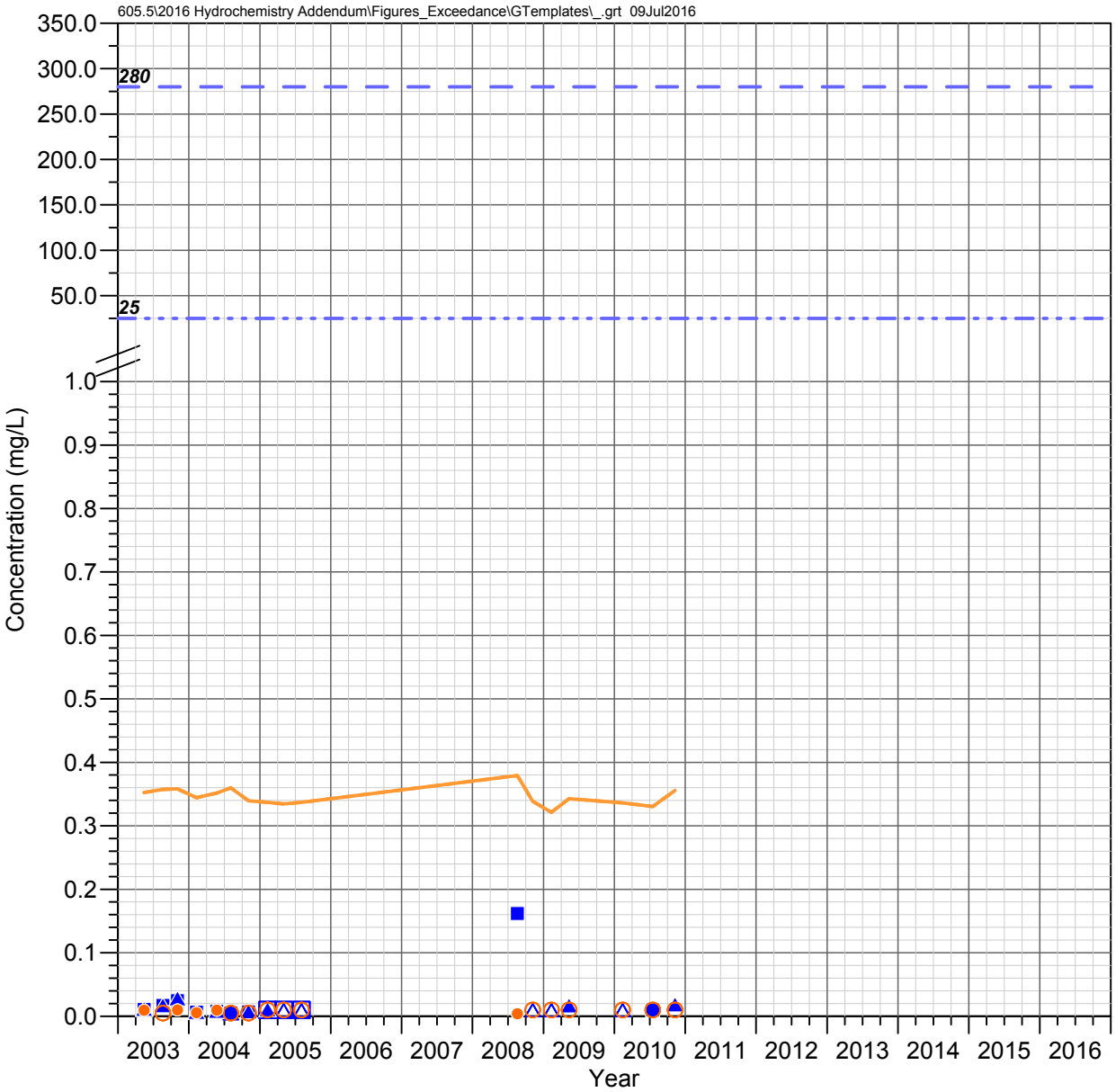


FIGURE F-810. ZINC CONCENTRATIONS OBSERVED AT BORED SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Hidden Spring
Queen Creek Watershed

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 280 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Agricultural Livestock Watering (TRC, 25 mg/L)

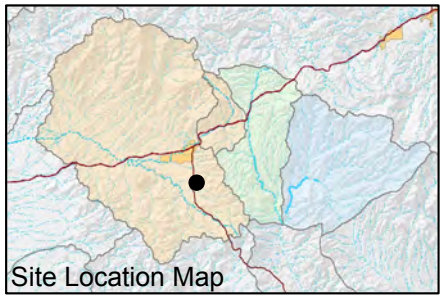
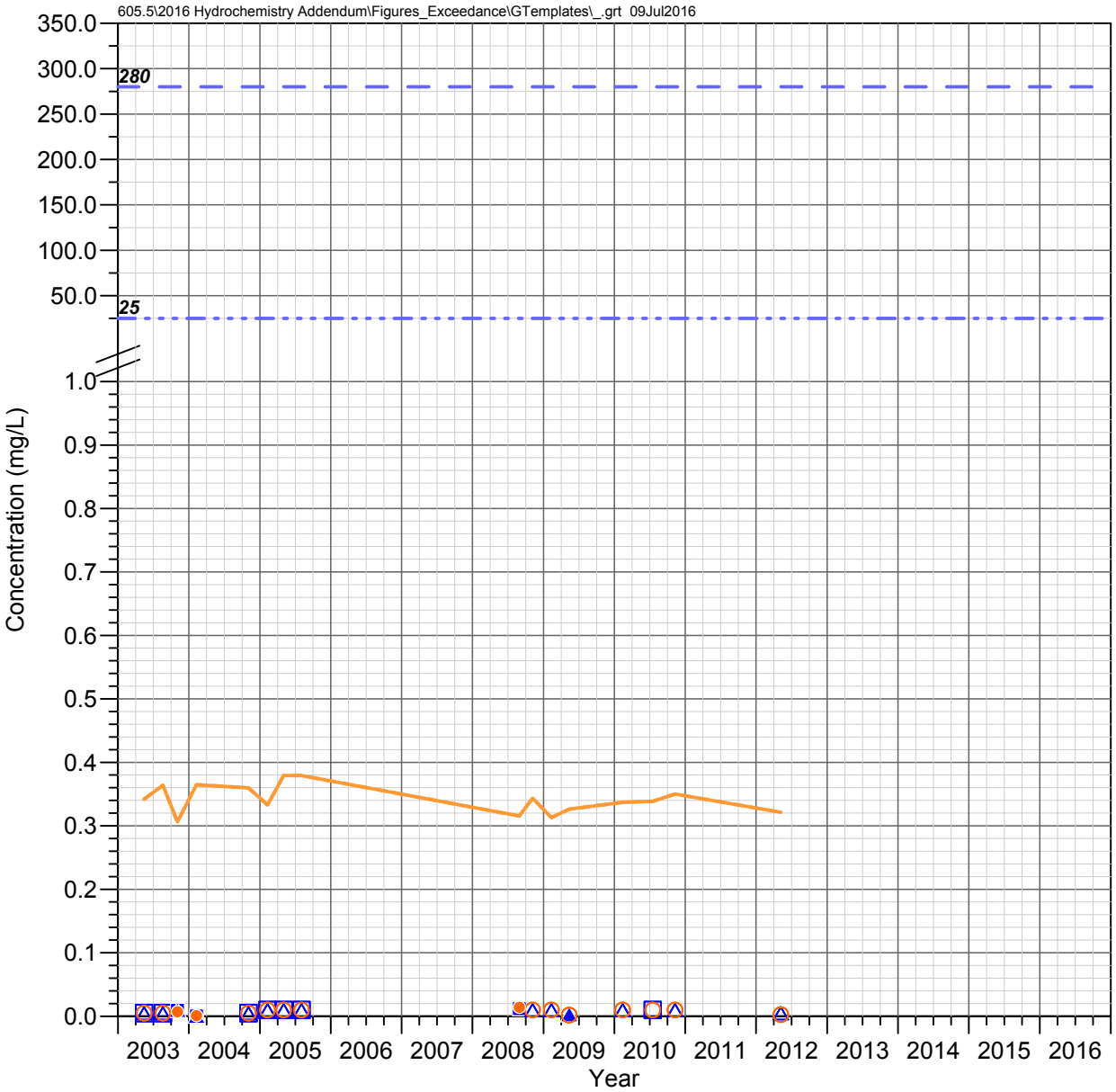


FIGURE F-811. ZINC CONCENTRATIONS OBSERVED AT HIDDEN SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Kane Spring
Queen Creek Watershed

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 280 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Agricultural Livestock Watering (TRC, 25 mg/L)

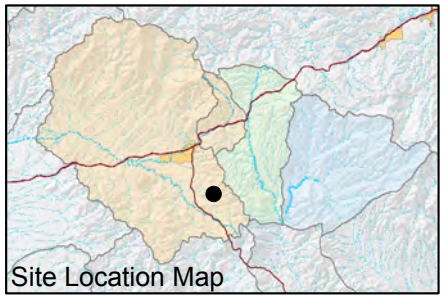
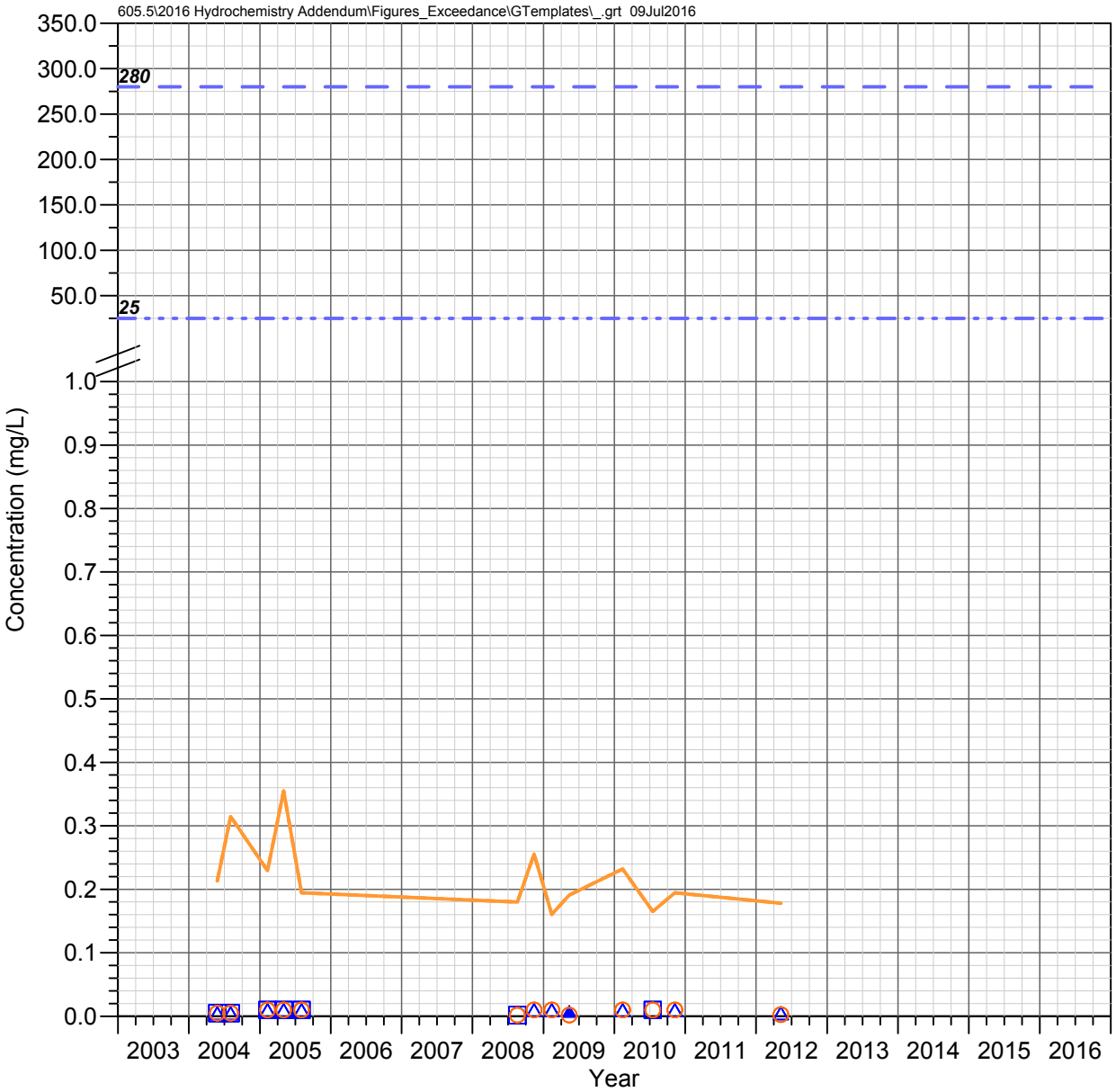


FIGURE F-812. ZINC CONCENTRATIONS OBSERVED AT KANE SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Blue Spring
Queen Creek Watershed

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Partial Body Contact (TRC, 280 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Agricultural Livestock Watering (TRC, 25 mg/L)

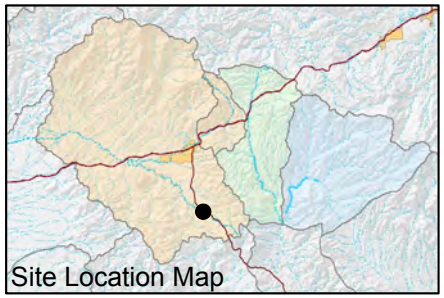
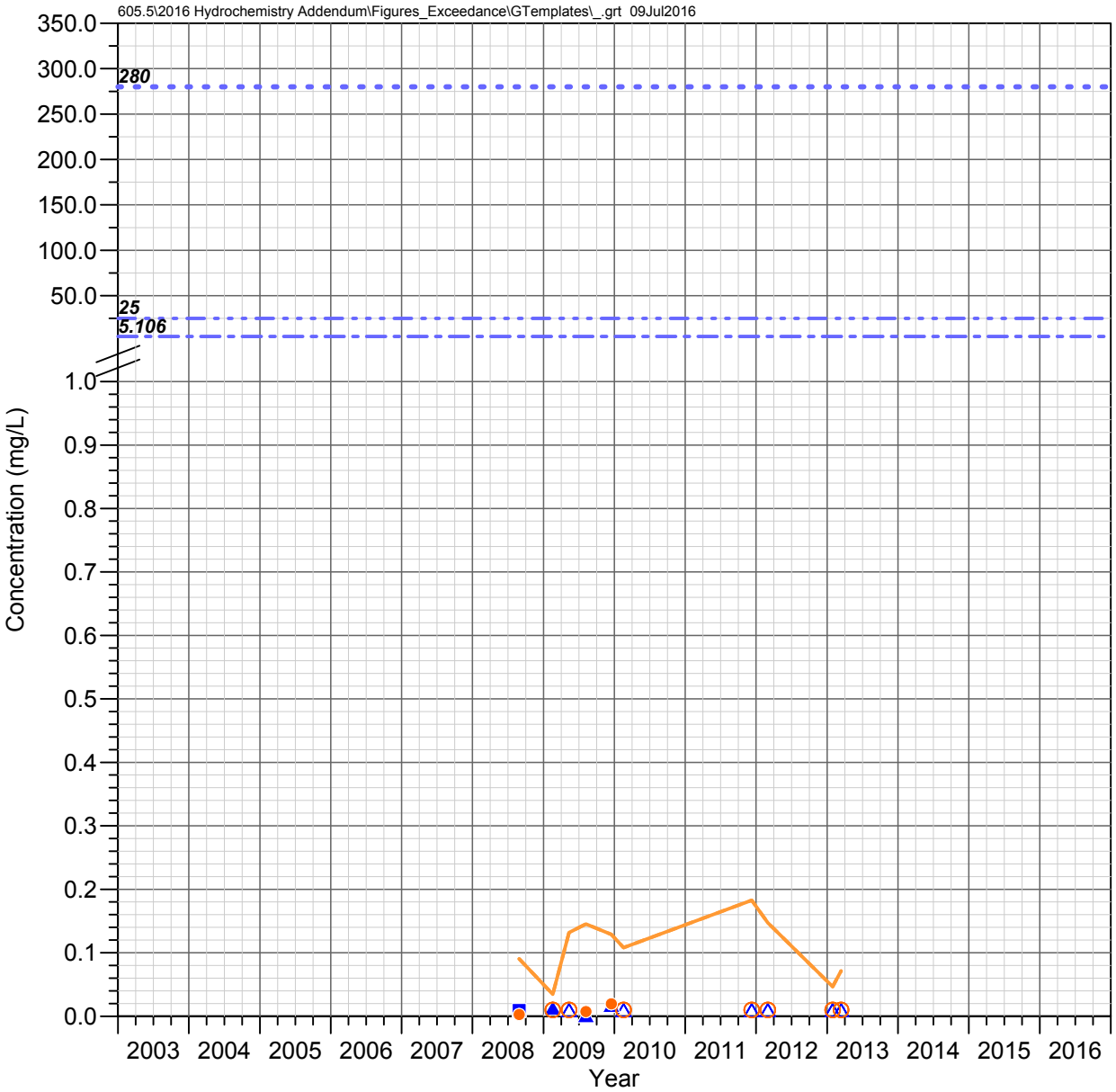


FIGURE F-813. ZINC CONCENTRATIONS OBSERVED AT BLUE SPRING, QUEEN CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



IC 1.0 C
Devils Canyon Watershed

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 280 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 5.106 mg/L)
- AZ Agricultural Livestock Watering (TRC, 25 mg/L)

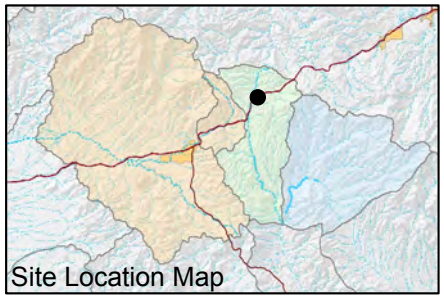
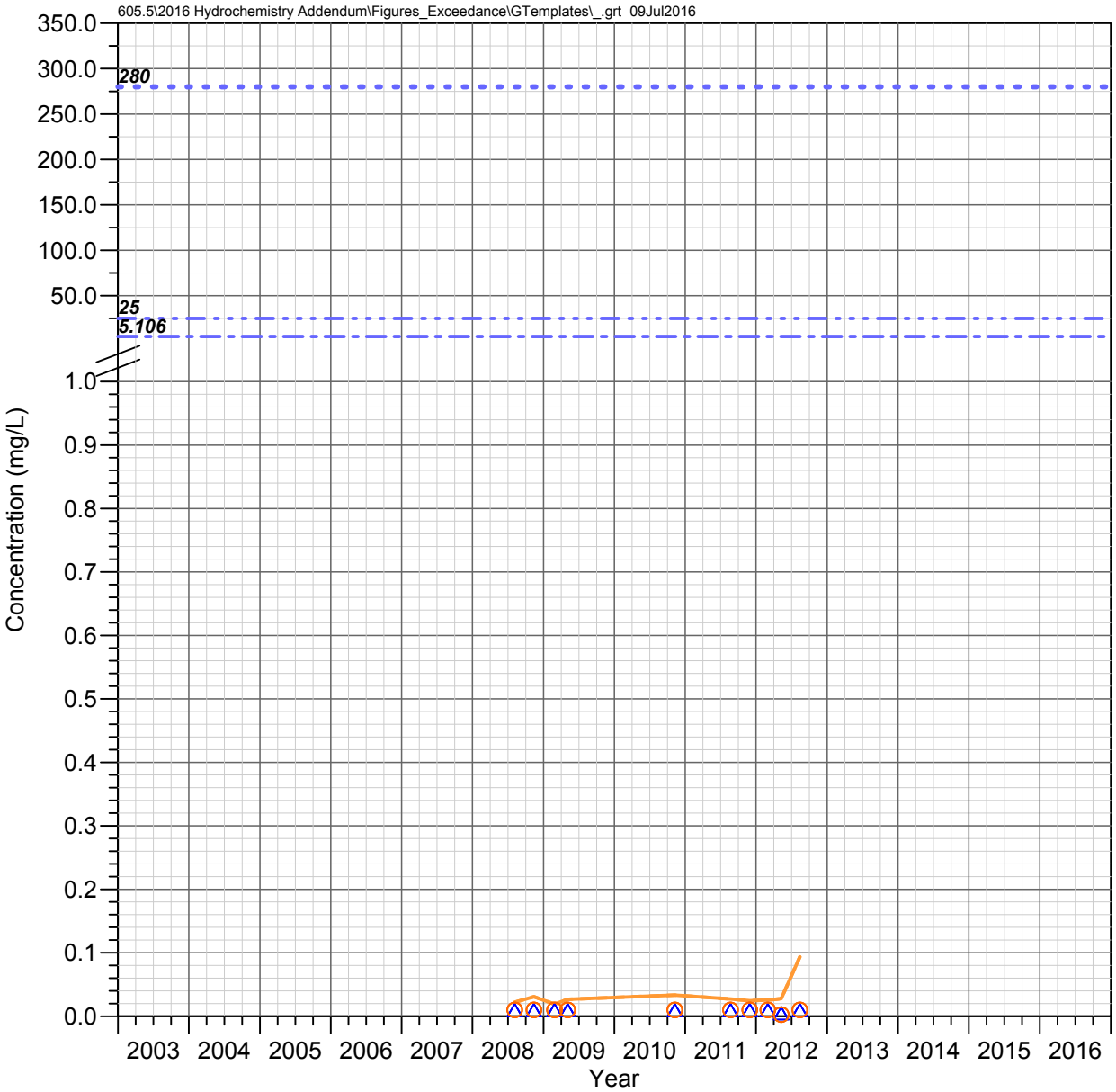


FIGURE F-814. ZINC CONCENTRATIONS OBSERVED AT IC 1.0 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 15.5 C
Devils Canyon Watershed

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 280 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 5.106 mg/L)
- AZ Agricultural Livestock Watering (TRC, 25 mg/L)

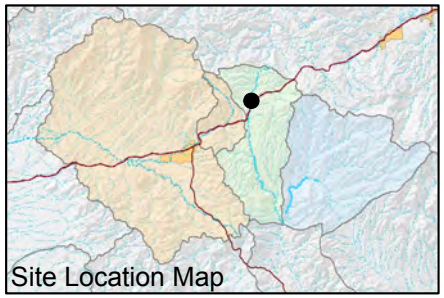
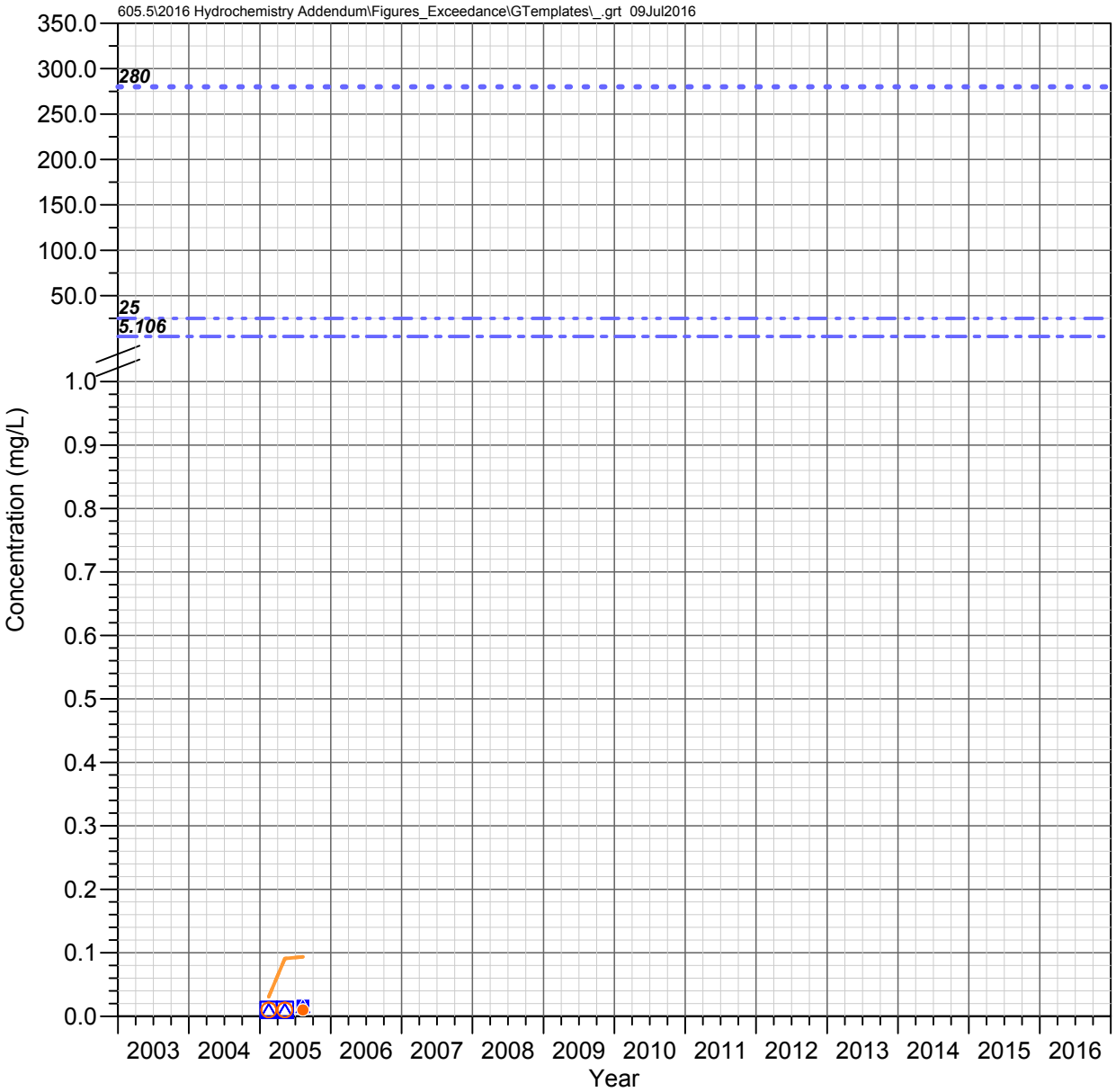


FIGURE F-815. ZINC CONCENTRATIONS OBSERVED AT DC 15.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 15.2 C
Devils Canyon Watershed

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 280 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 5.106 mg/L)
- AZ Agricultural Livestock Watering (TRC, 25 mg/L)

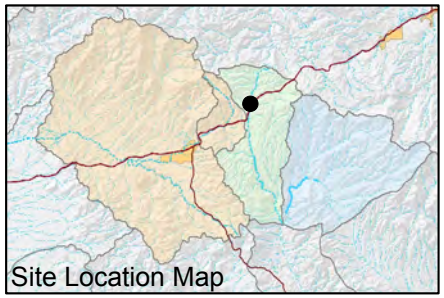
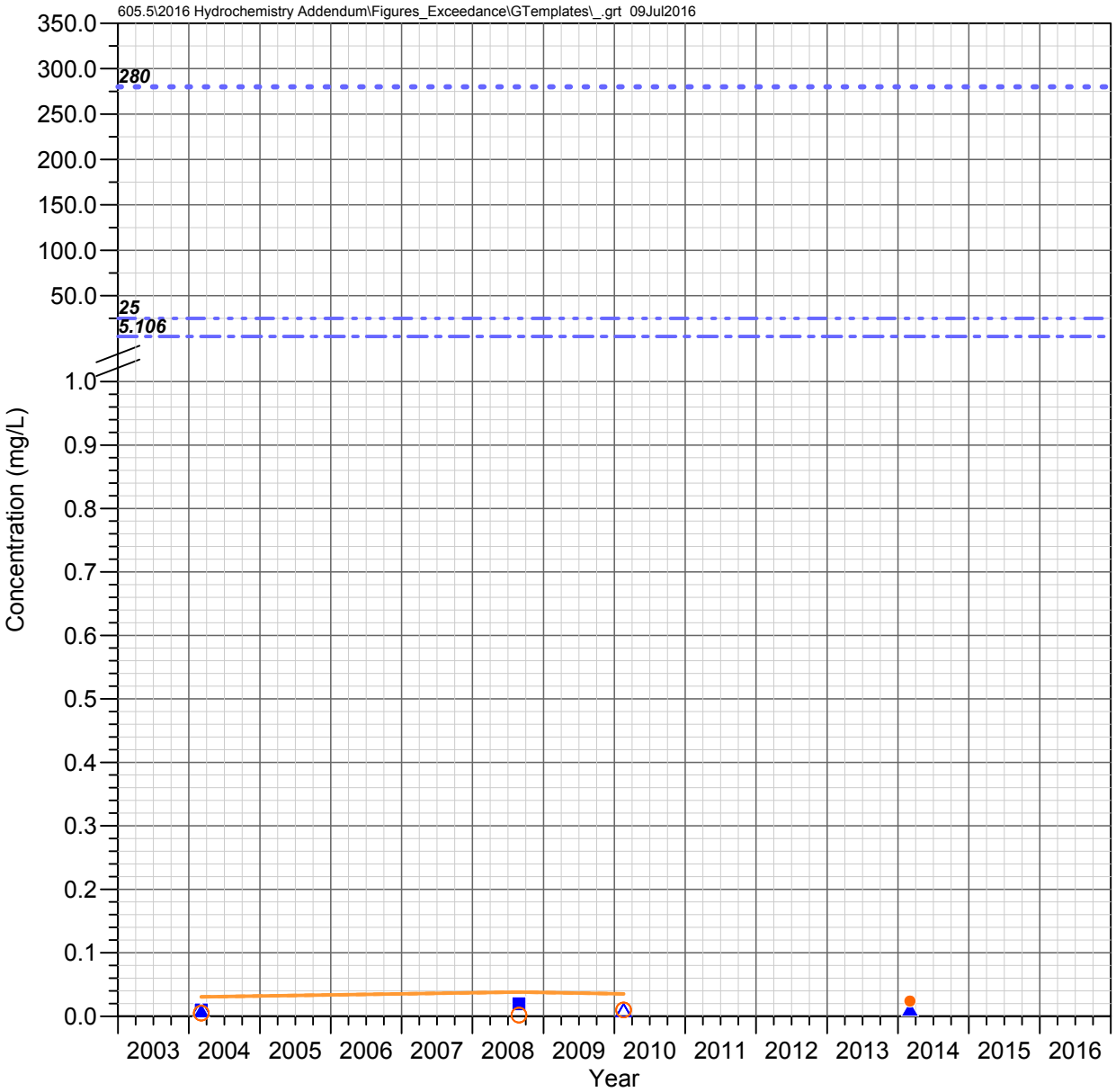


FIGURE F-816. ZINC CONCENTRATIONS OBSERVED AT DC 15.2 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 14.7 C
Devils Canyon Watershed

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 280 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 5.106 mg/L)
- AZ Agricultural Livestock Watering (TRC, 25 mg/L)

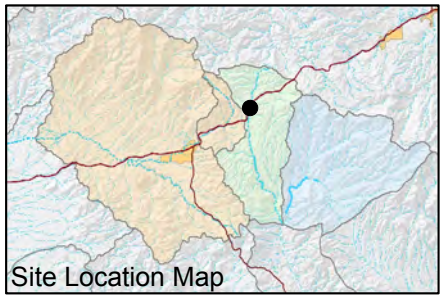
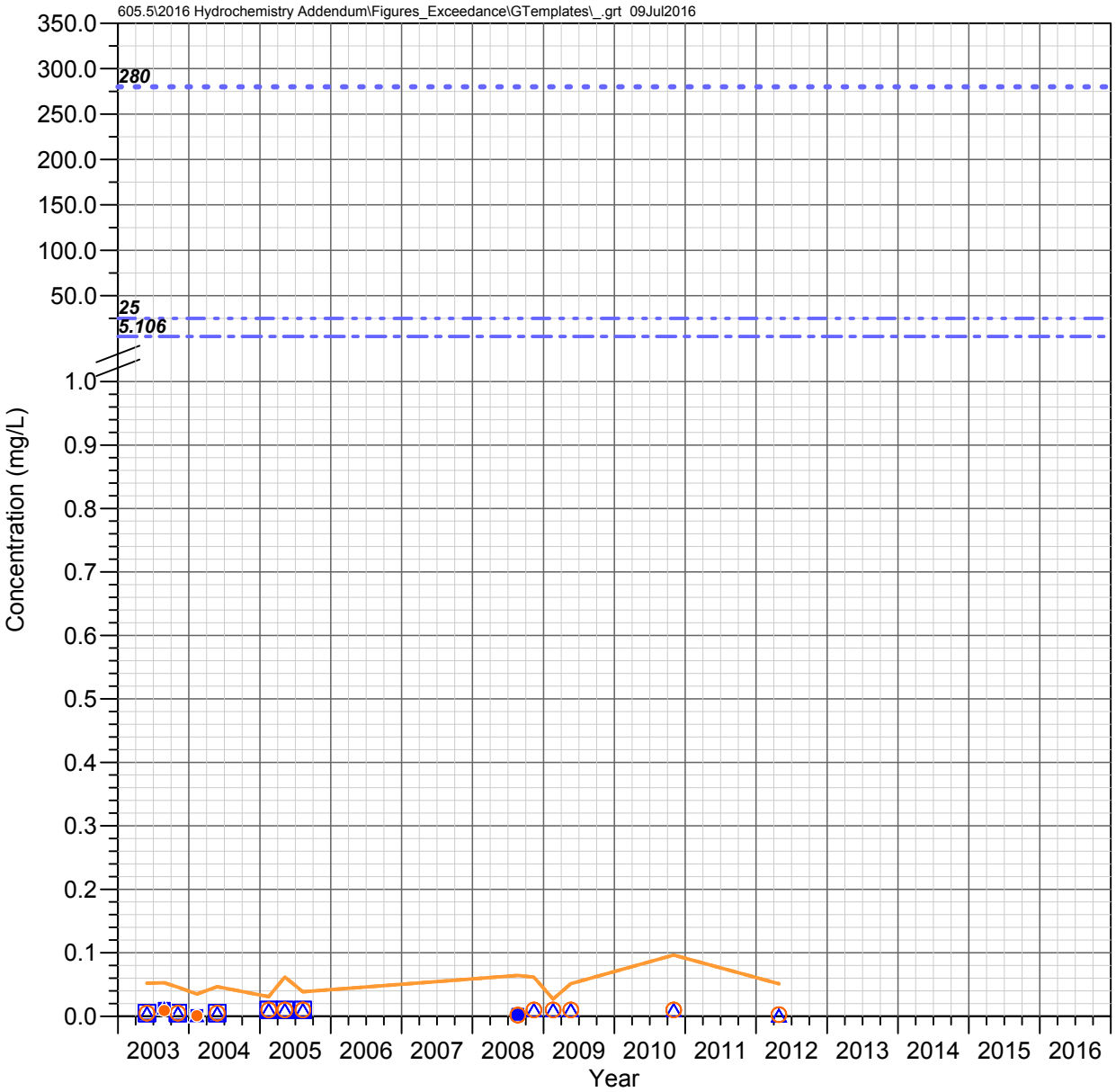


FIGURE F-817. ZINC CONCENTRATIONS OBSERVED AT DC 14.7 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 13.5 C
Devils Canyon Watershed

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 280 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 5.106 mg/L)
- AZ Agricultural Livestock Watering (TRC, 25 mg/L)

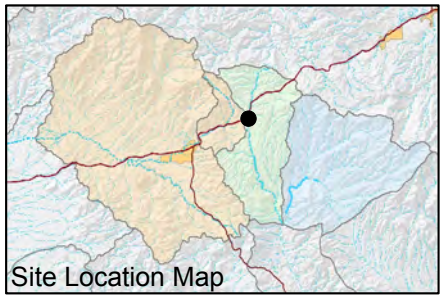
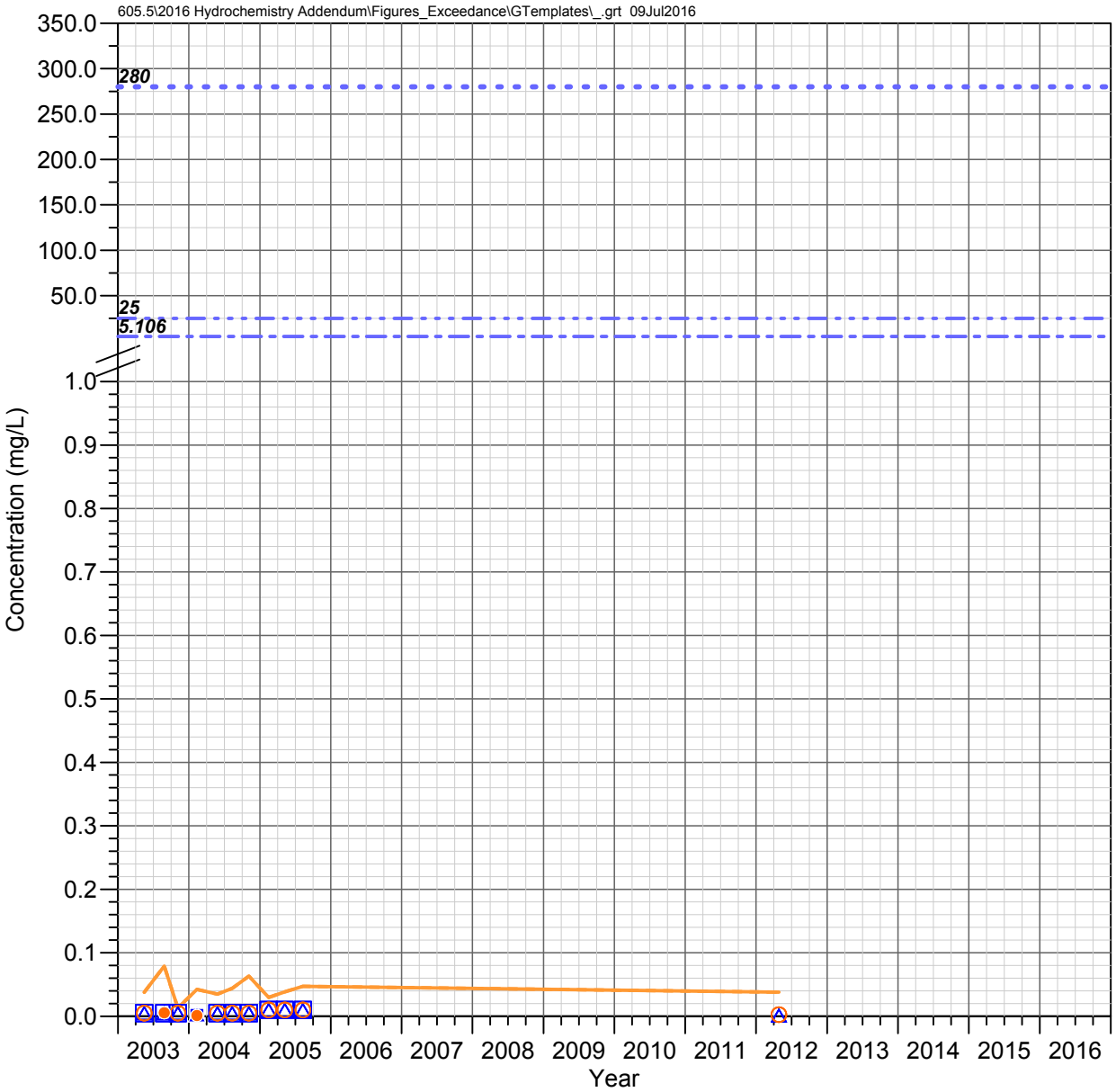


FIGURE F-818. ZINC CONCENTRATIONS OBSERVED AT DC 13.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 10.9 C
Devils Canyon Watershed

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 280 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 5.106 mg/L)
- AZ Agricultural Livestock Watering (TRC, 25 mg/L)

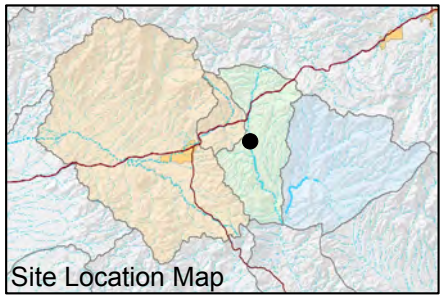
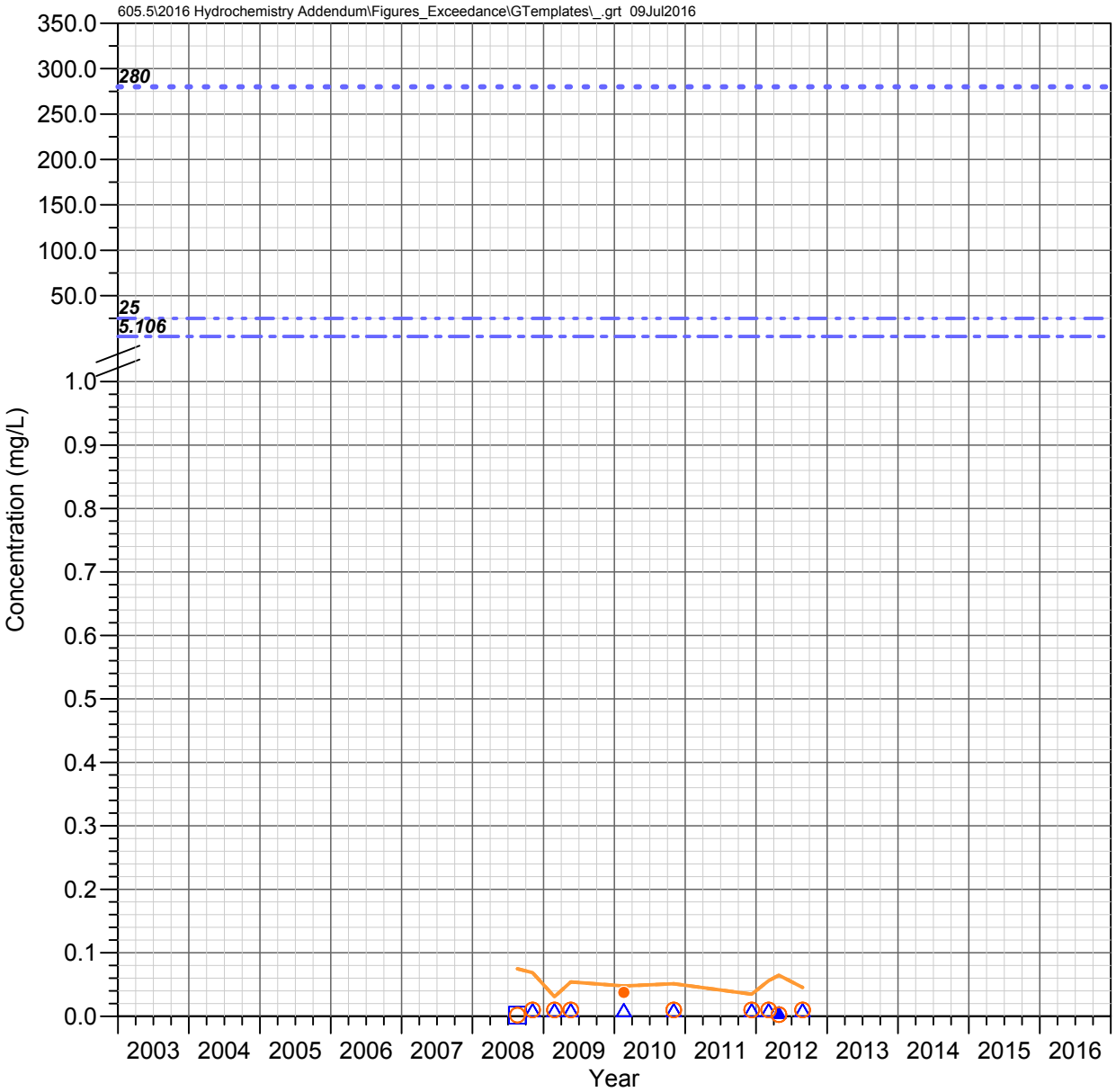


FIGURE F-819. ZINC CONCENTRATIONS OBSERVED AT DC 10.9 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



RR 1.5 C
Devils Canyon Watershed

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 280 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 5.106 mg/L)
- AZ Agricultural Livestock Watering (TRC, 25 mg/L)

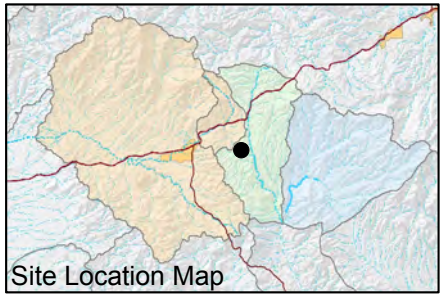
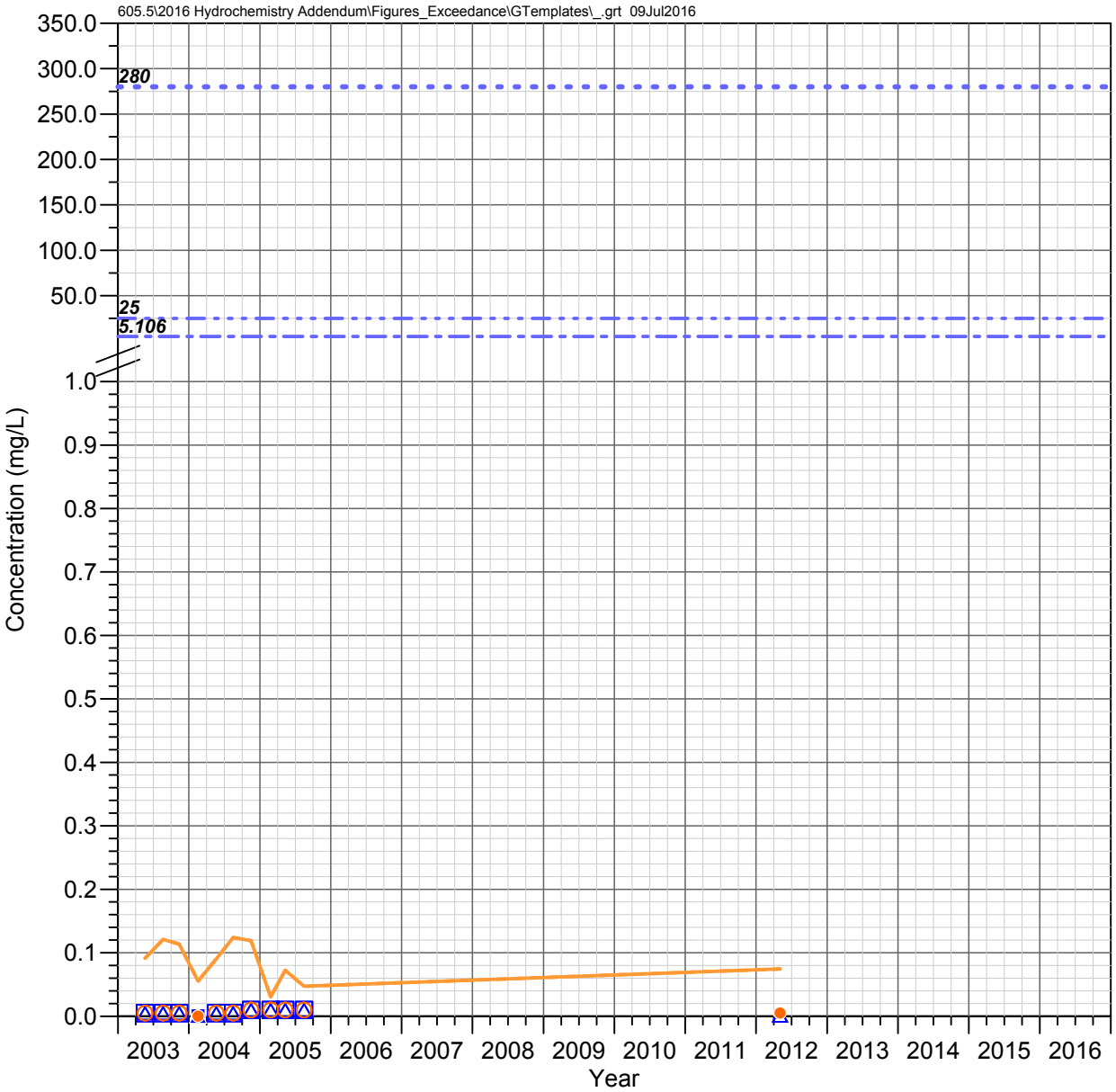


FIGURE F-820. ZINC CONCENTRATIONS OBSERVED AT RR 1.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.8 C
Devils Canyon Watershed

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 280 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 5.106 mg/L)
- AZ Agricultural Livestock Watering (TRC, 25 mg/L)

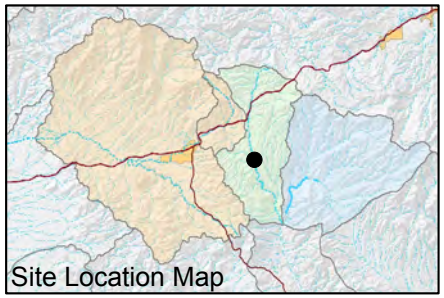
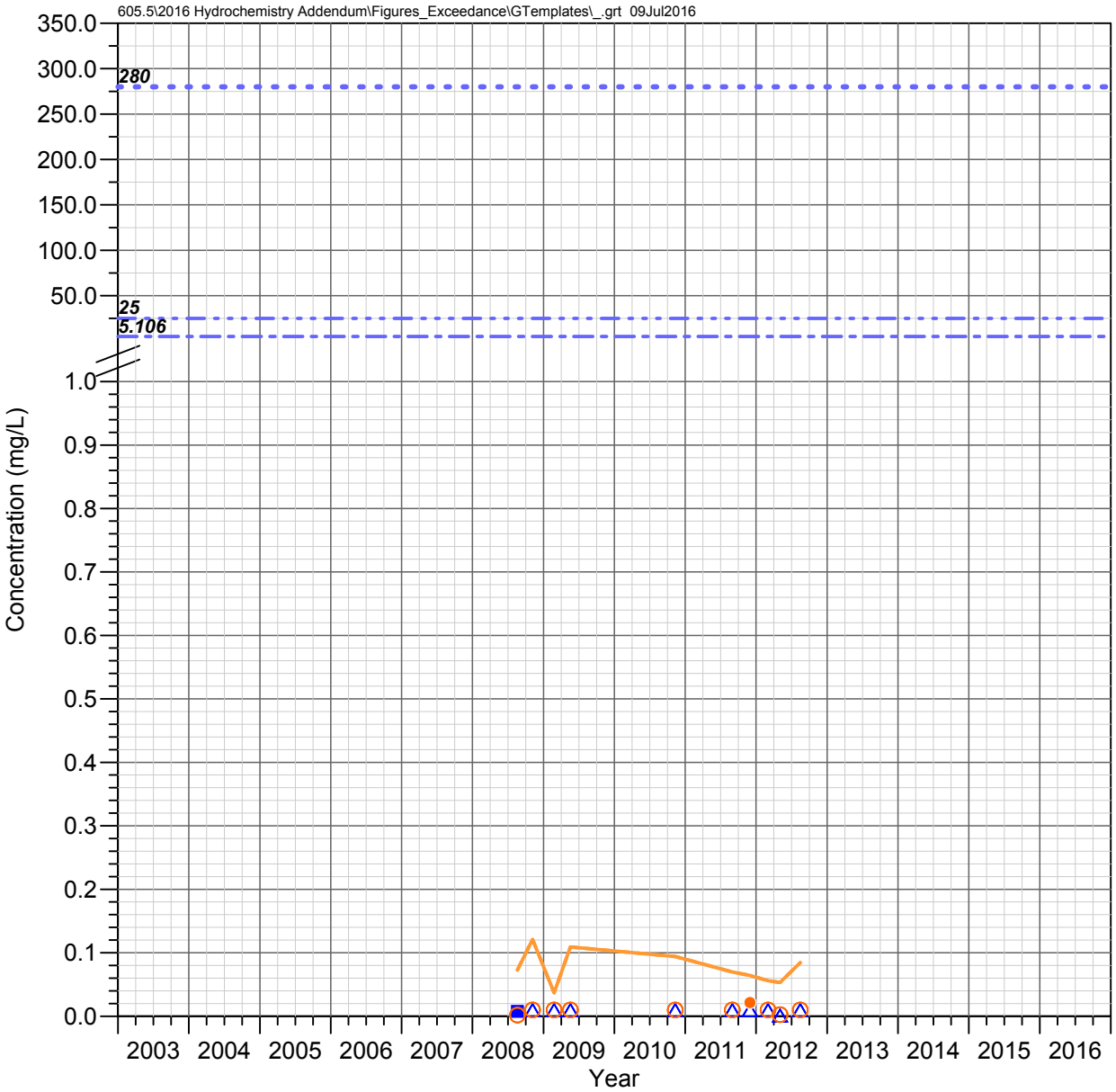


FIGURE F-821. ZINC CONCENTRATIONS OBSERVED AT DC 8.8 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



H 0.1 C
Devils Canyon Watershed

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 280 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 5.106 mg/L)
- AZ Agricultural Livestock Watering (TRC, 25 mg/L)

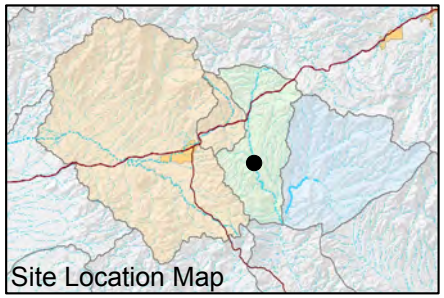
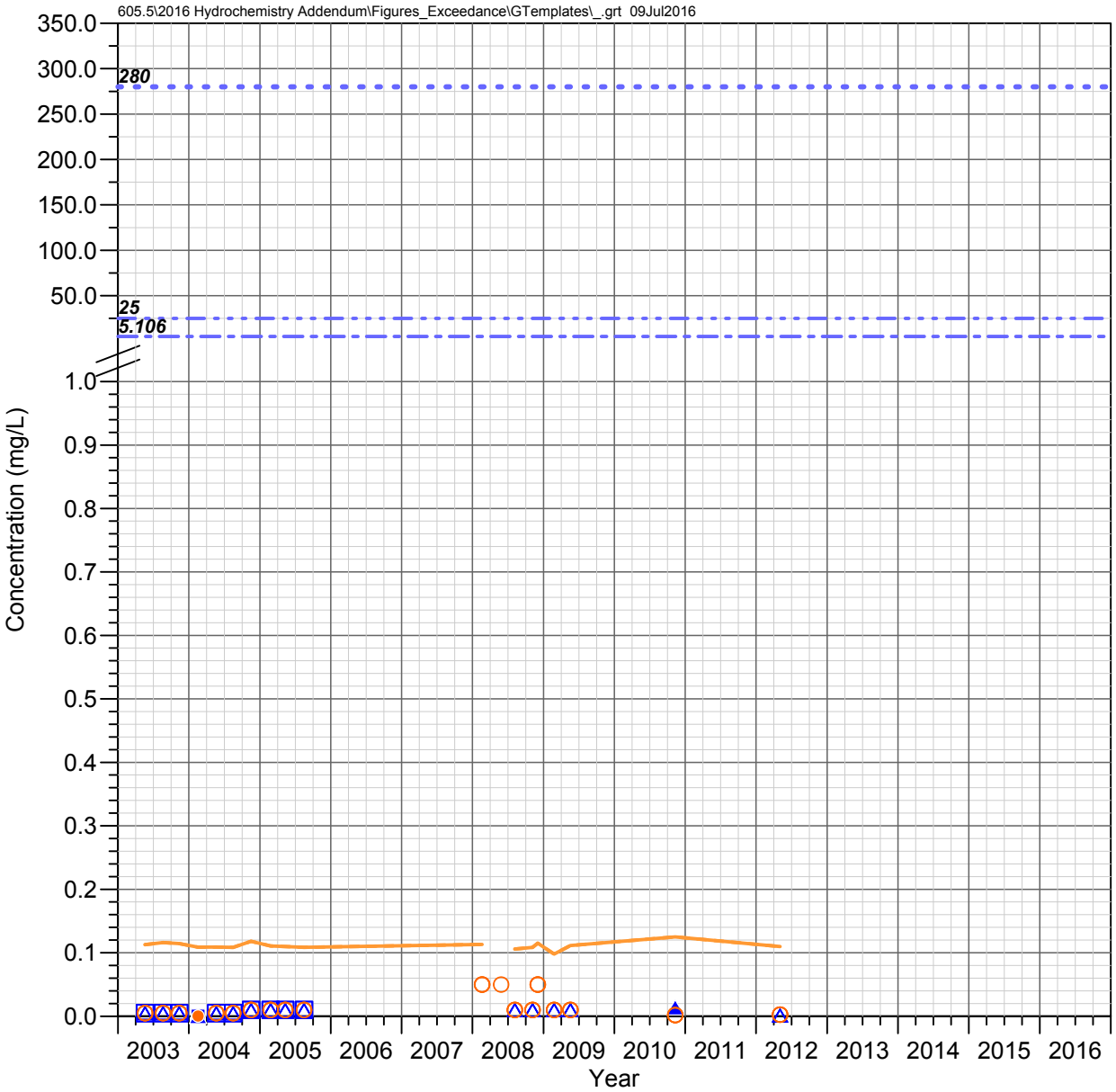


FIGURE F-822. ZINC CONCENTRATIONS OBSERVED AT H 0.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.2 W
Devils Canyon Watershed

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 280 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 5.106 mg/L)
- AZ Agricultural Livestock Watering (TRC, 25 mg/L)

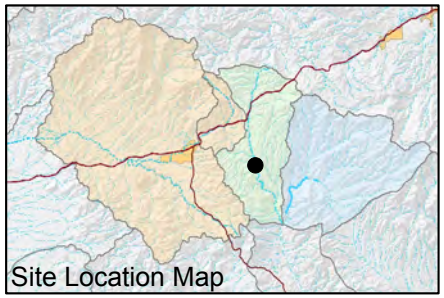
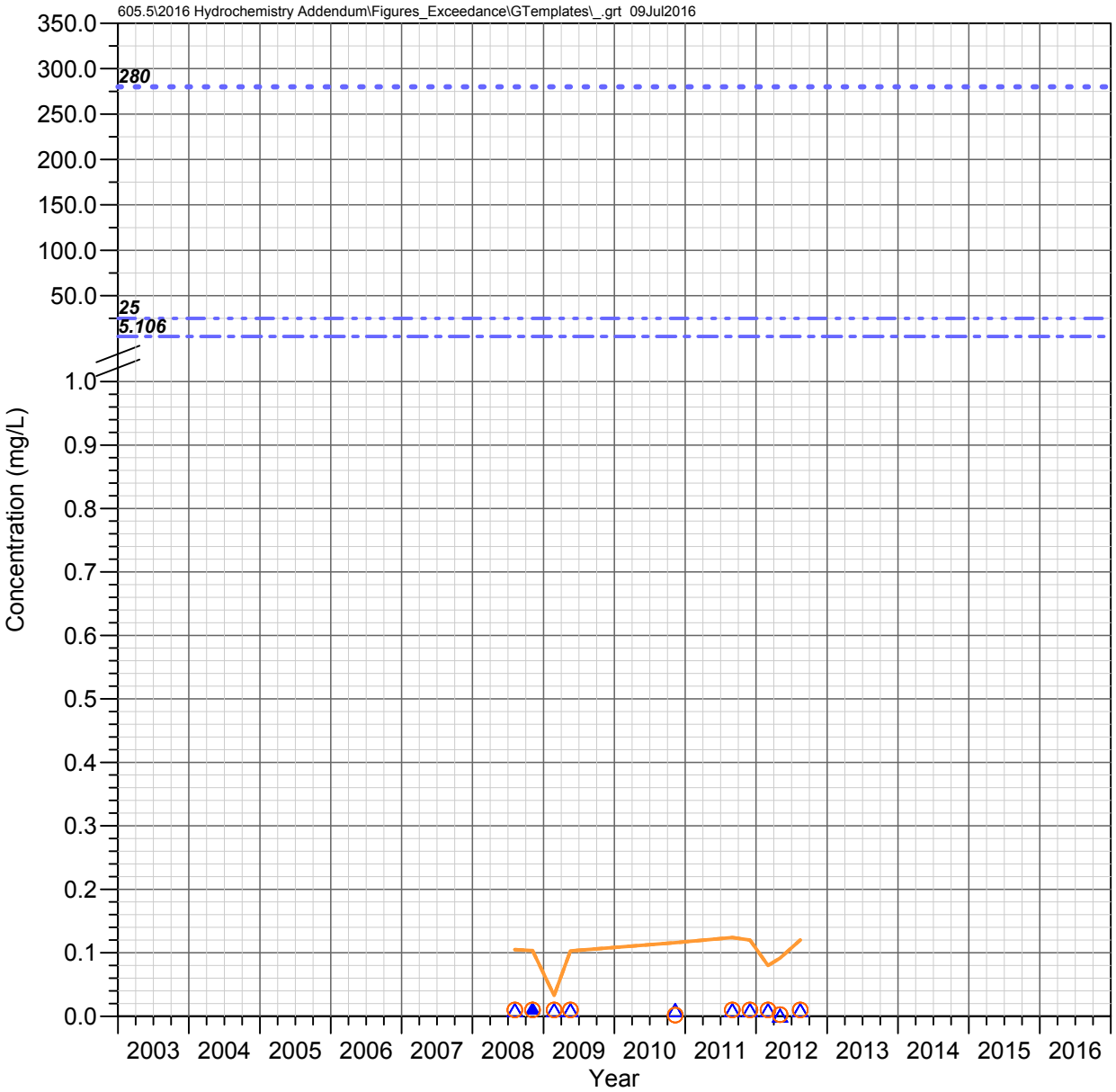


FIGURE F-823. ZINC CONCENTRATIONS OBSERVED AT DC 8.2 W, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 8.1 C
Devils Canyon Watershed

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 280 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 5.106 mg/L)
- AZ Agricultural Livestock Watering (TRC, 25 mg/L)

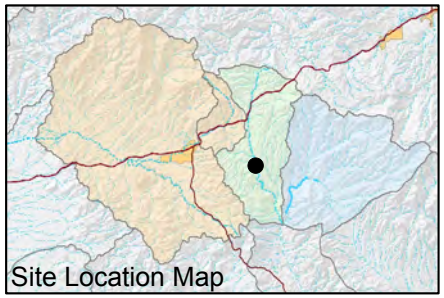
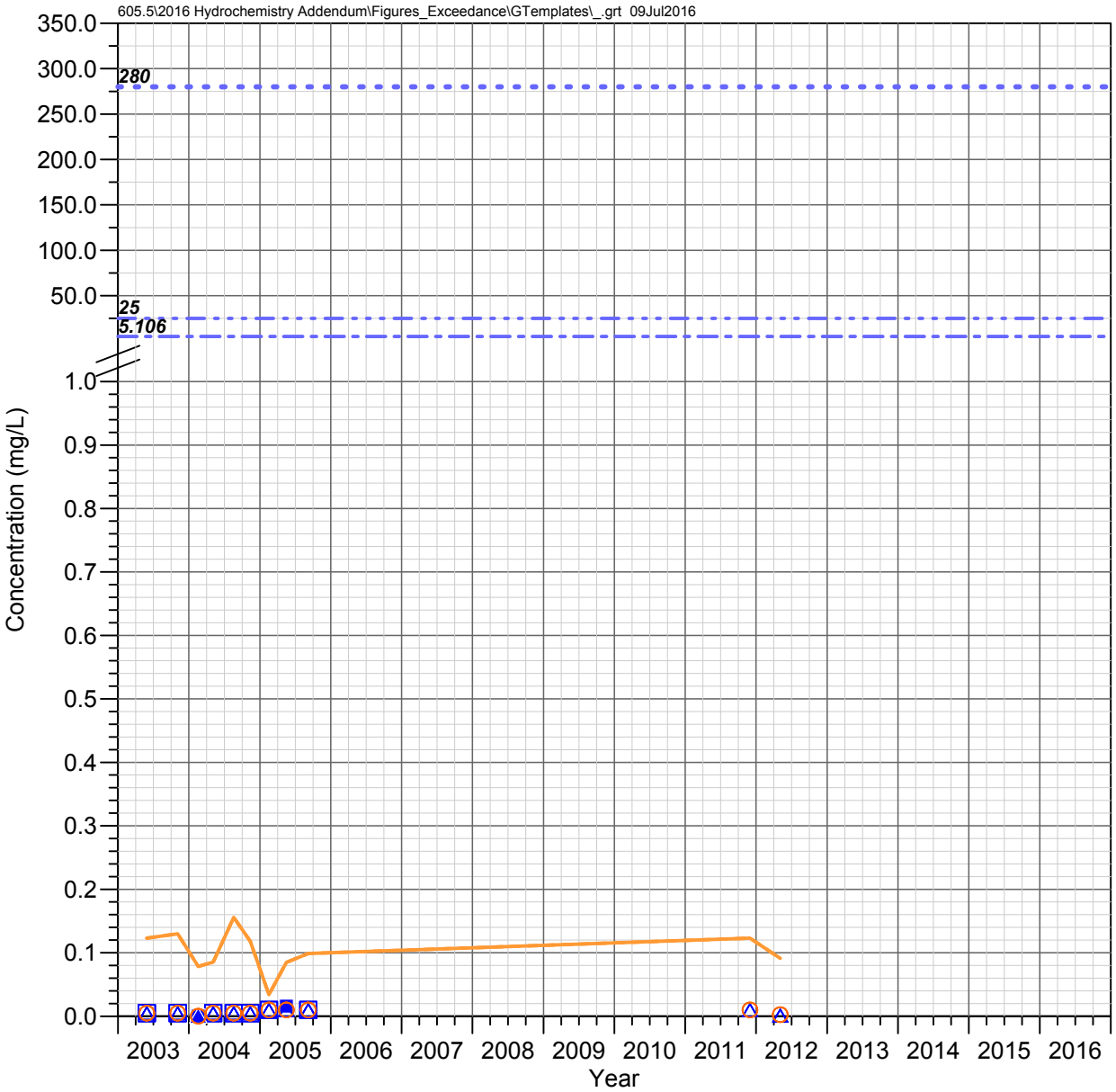


FIGURE F-824. ZINC CONCENTRATIONS OBSERVED AT DC 8.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 7.1 C
Devils Canyon Watershed

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 280 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 5.106 mg/L)
- AZ Agricultural Livestock Watering (TRC, 25 mg/L)

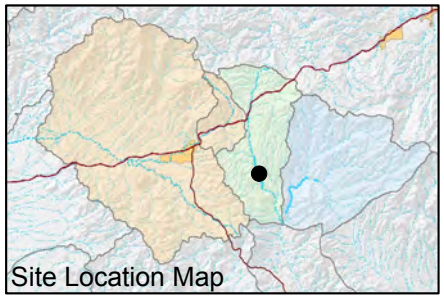
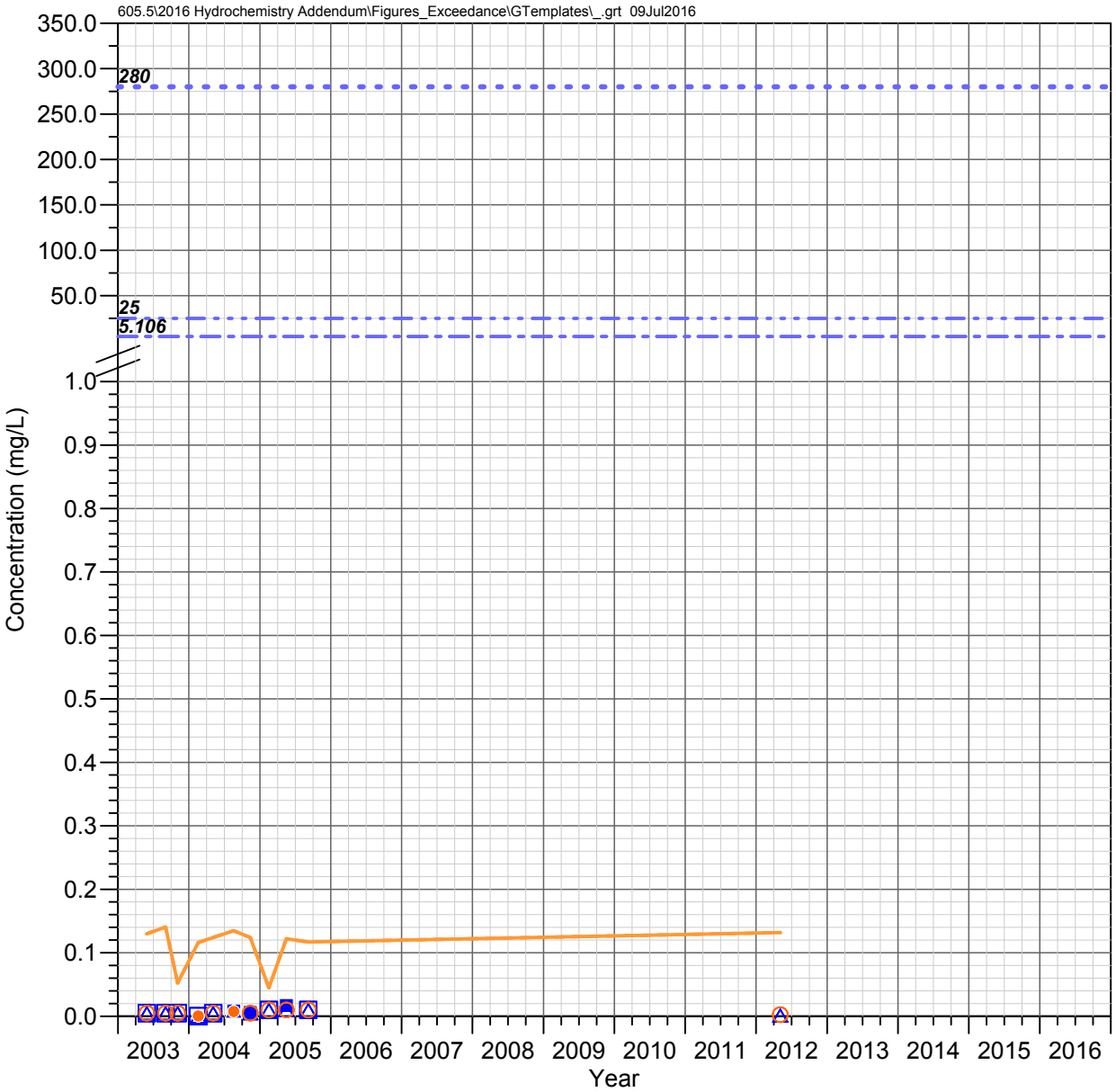


FIGURE F-825. ZINC CONCENTRATIONS OBSERVED AT DC 7.1 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.6 W (DCT 6.6 W)
Devils Canyon Watershed

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 280 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 5.106 mg/L)
- AZ Agricultural Livestock Watering (TRC, 25 mg/L)

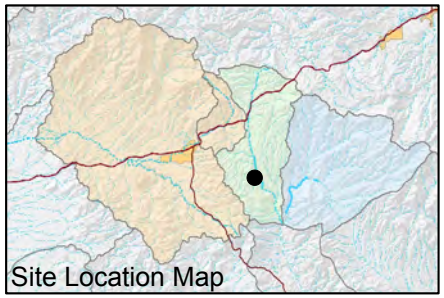
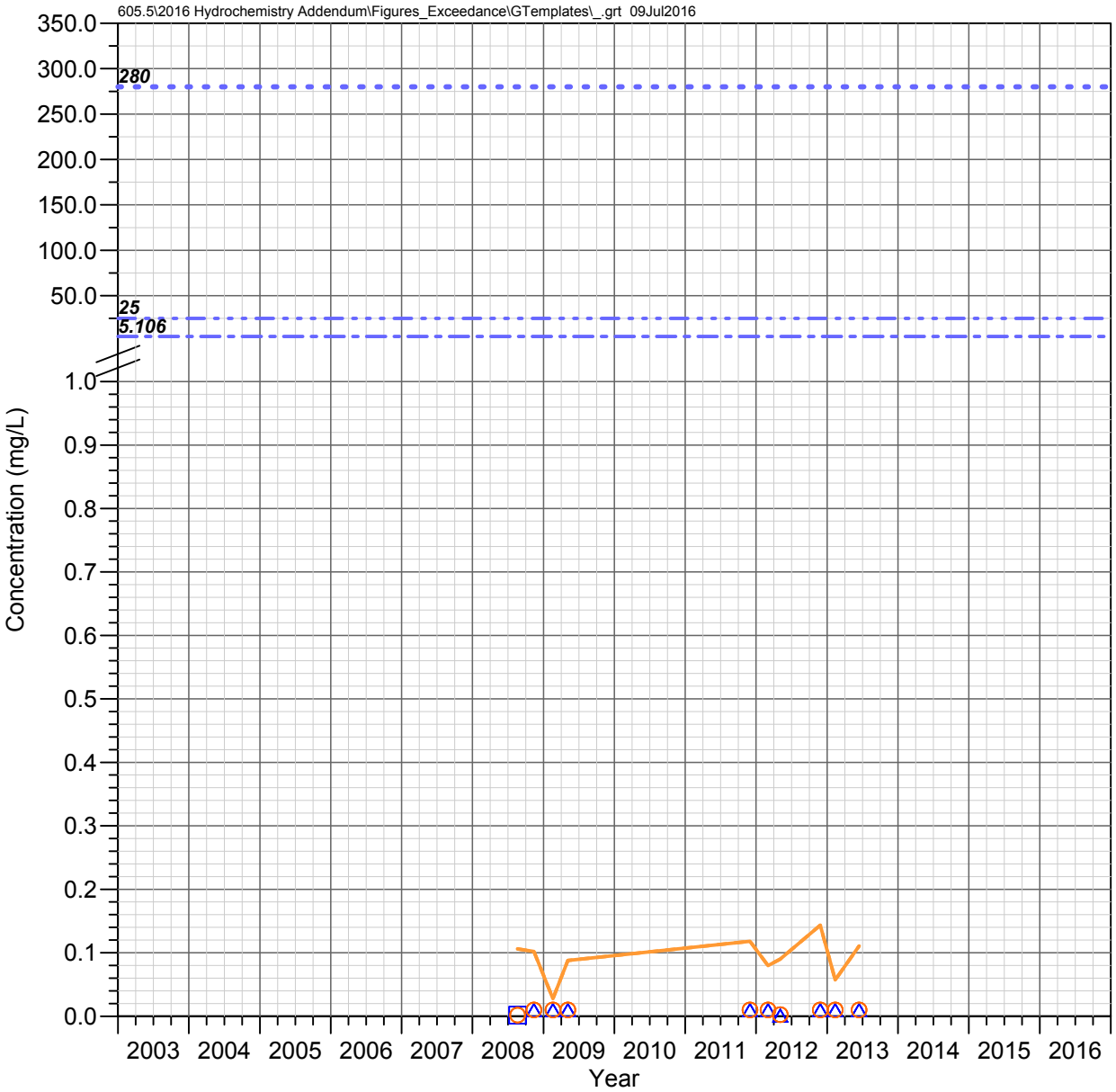


FIGURE F-826. ZINC CONCENTRATIONS OBSERVED AT DC 6.6 W (DCT 6.6 W), DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.14 C
Devils Canyon Watershed

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 280 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 5.106 mg/L)
- AZ Agricultural Livestock Watering (TRC, 25 mg/L)

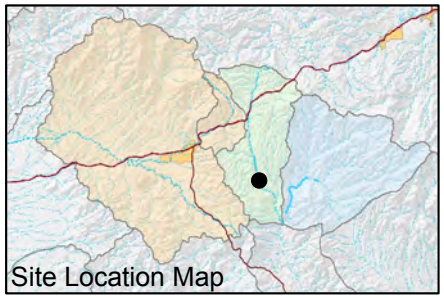
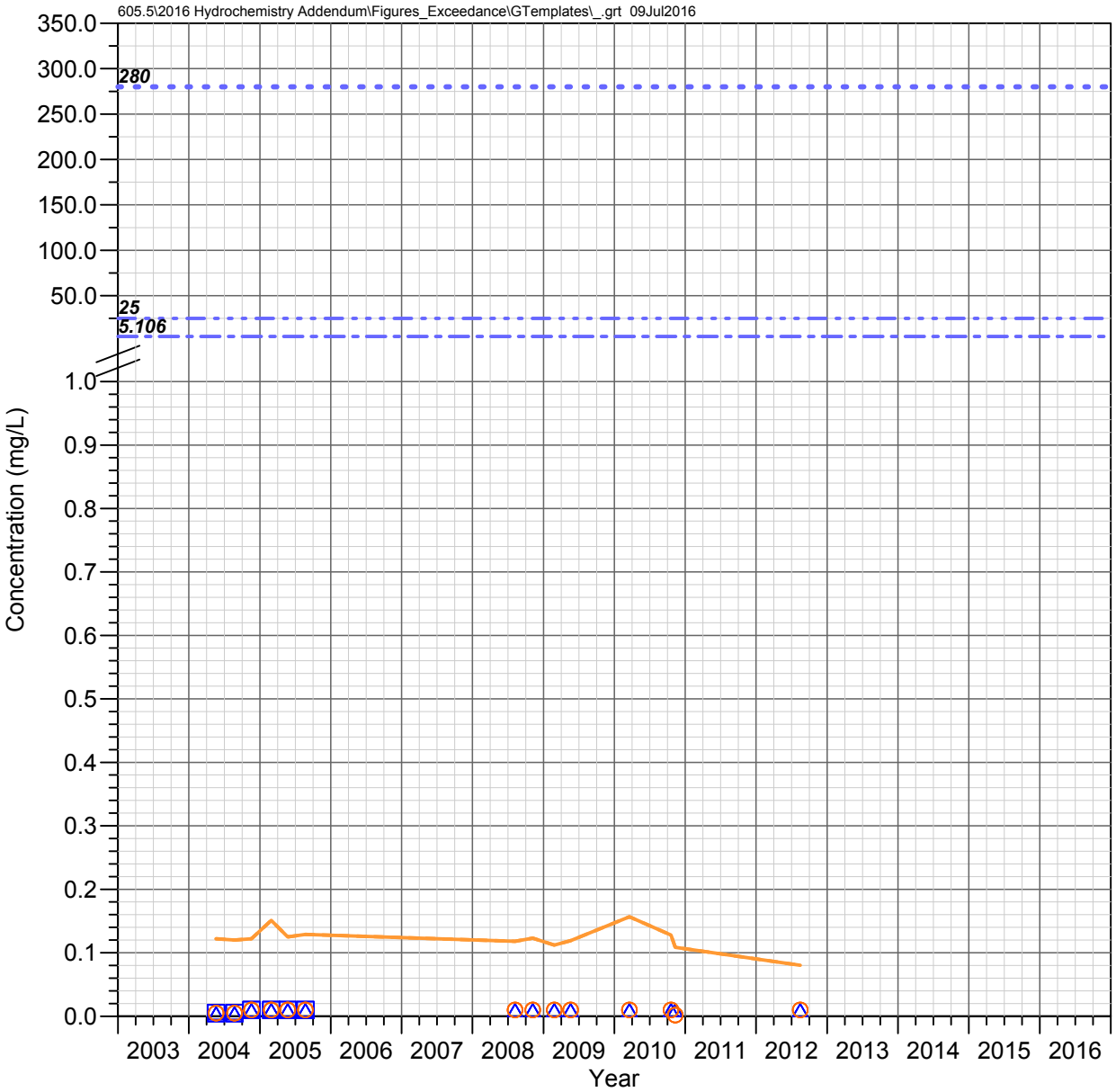


FIGURE F-827. ZINC CONCENTRATIONS OBSERVED AT DC 6.14 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 6.1 E
Devils Canyon Watershed

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 280 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 5.106 mg/L)
- AZ Agricultural Livestock Watering (TRC, 25 mg/L)

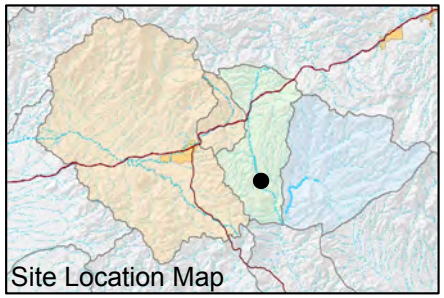
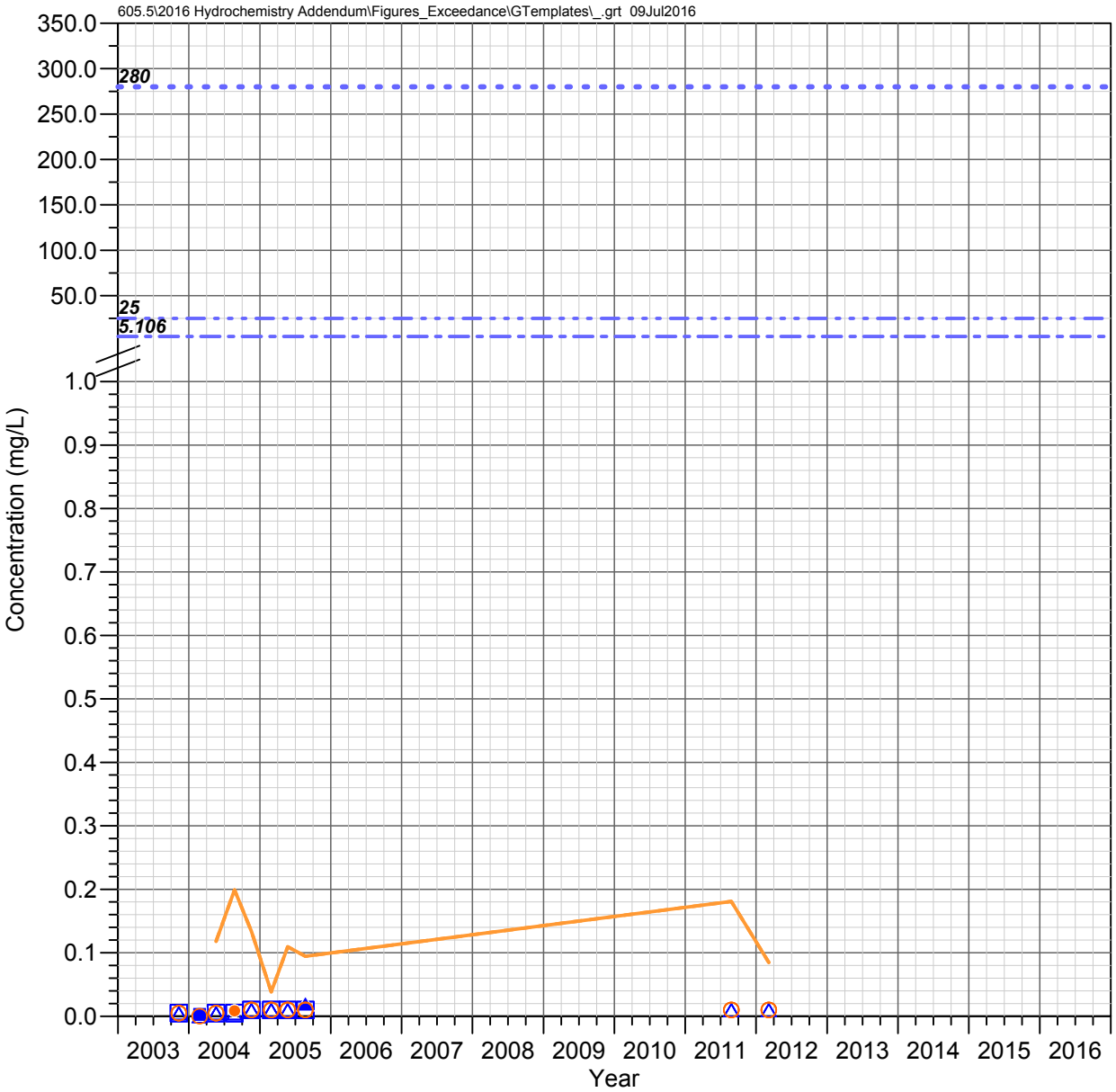


FIGURE F-828. ZINC CONCENTRATIONS OBSERVED AT DC 6.1 E, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 5.5 C
Devils Canyon Watershed

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 280 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 5.106 mg/L)
- AZ Agricultural Livestock Watering (TRC, 25 mg/L)

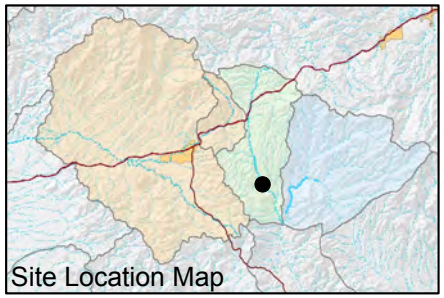
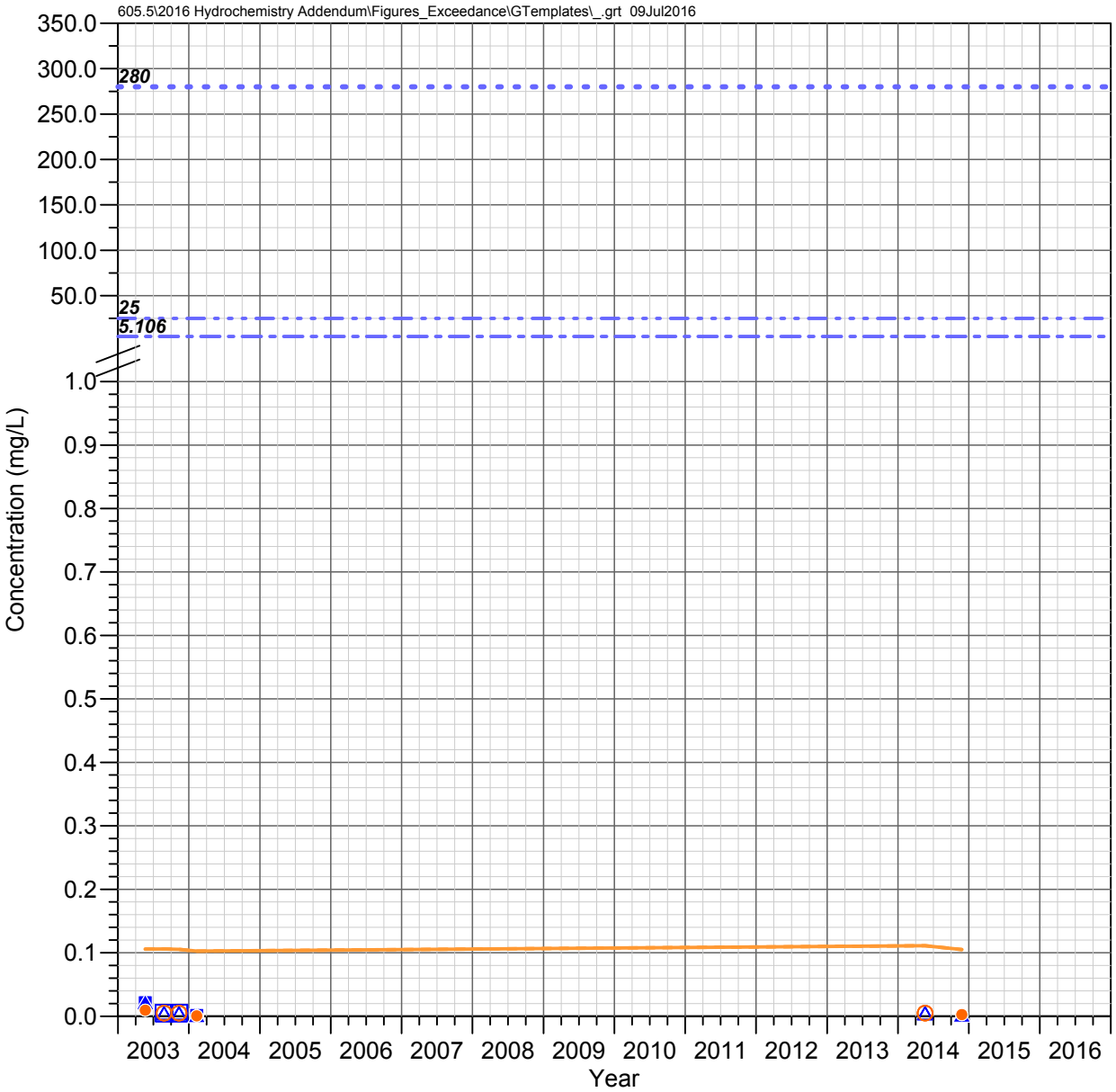


FIGURE F-829. ZINC CONCENTRATIONS OBSERVED AT DC 5.5 C, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



DC 4.1 E
Devils Canyon Watershed

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 280 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 5.106 mg/L)
- AZ Agricultural Livestock Watering (TRC, 25 mg/L)

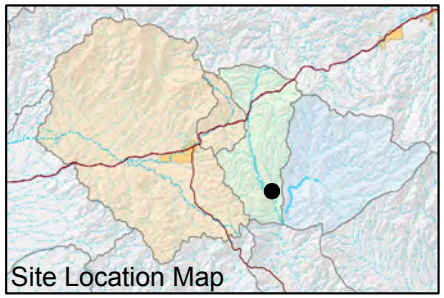
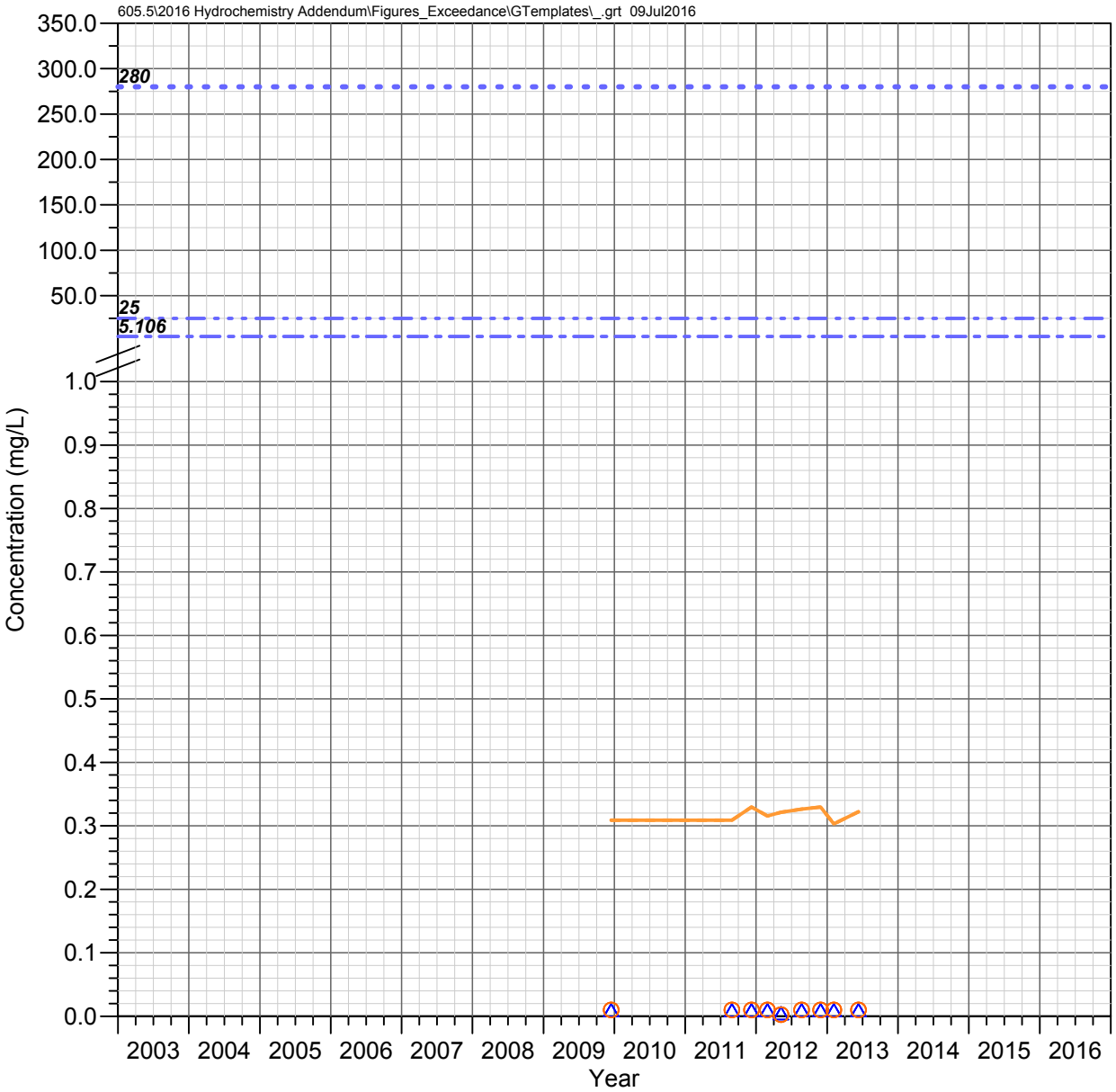


FIGURE F-830. ZINC CONCENTRATIONS OBSERVED AT DC 4.1 E, DEVILS CANYON WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



Government Springs
Mineral Creek Watershed

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 280 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 5.106 mg/L)
- AZ Agricultural Livestock Watering (TRC, 25 mg/L)

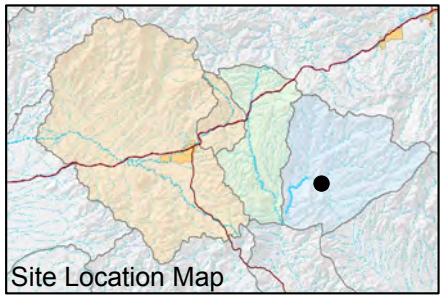
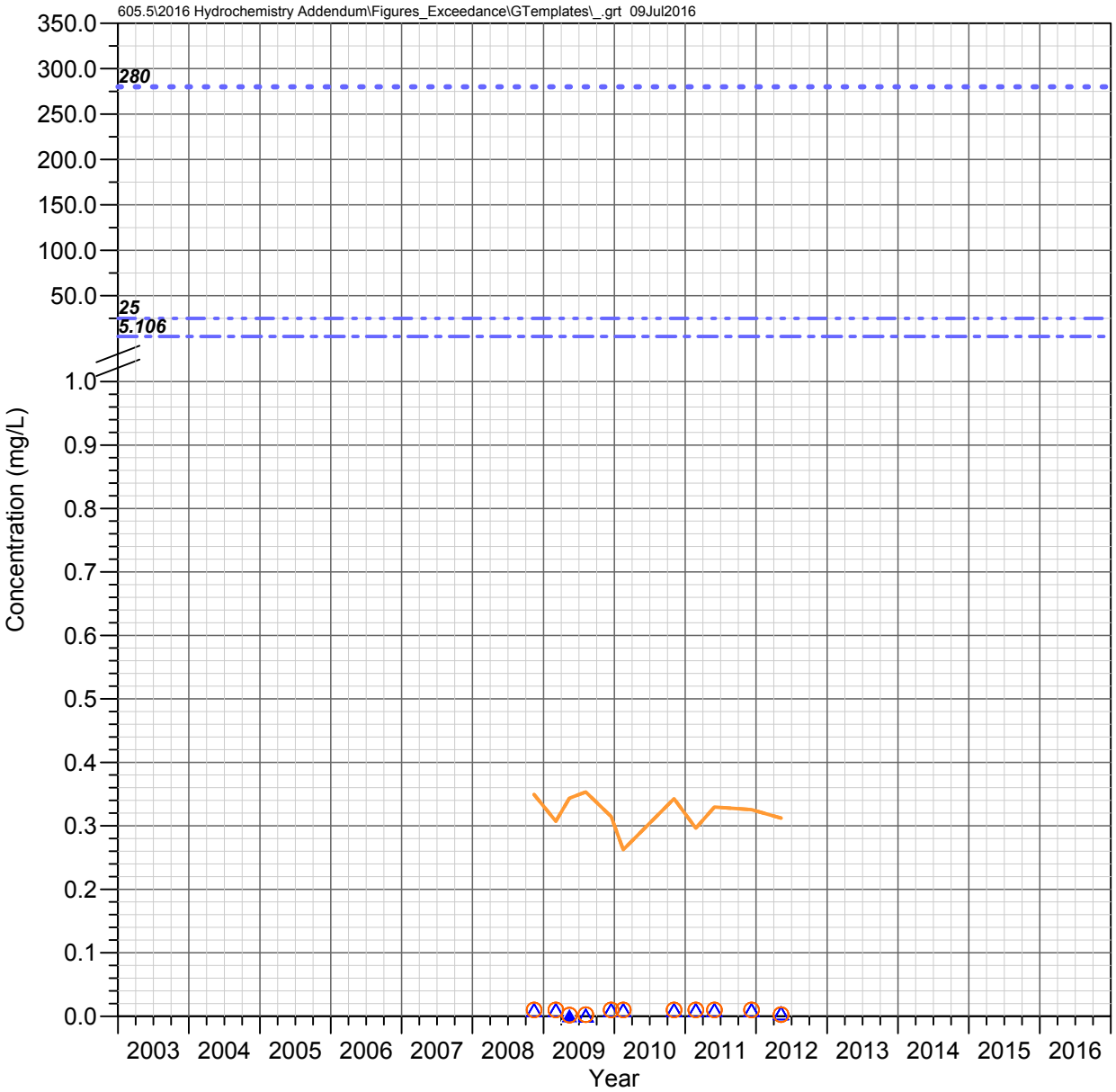


FIGURE F-831. ZINC CONCENTRATIONS OBSERVED AT GOVERNMENT SPRINGS, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 8.4 C
Mineral Creek Watershed

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 280 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 5.106 mg/L)
- AZ Agricultural Livestock Watering (TRC, 25 mg/L)

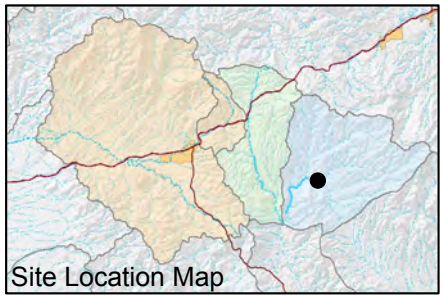
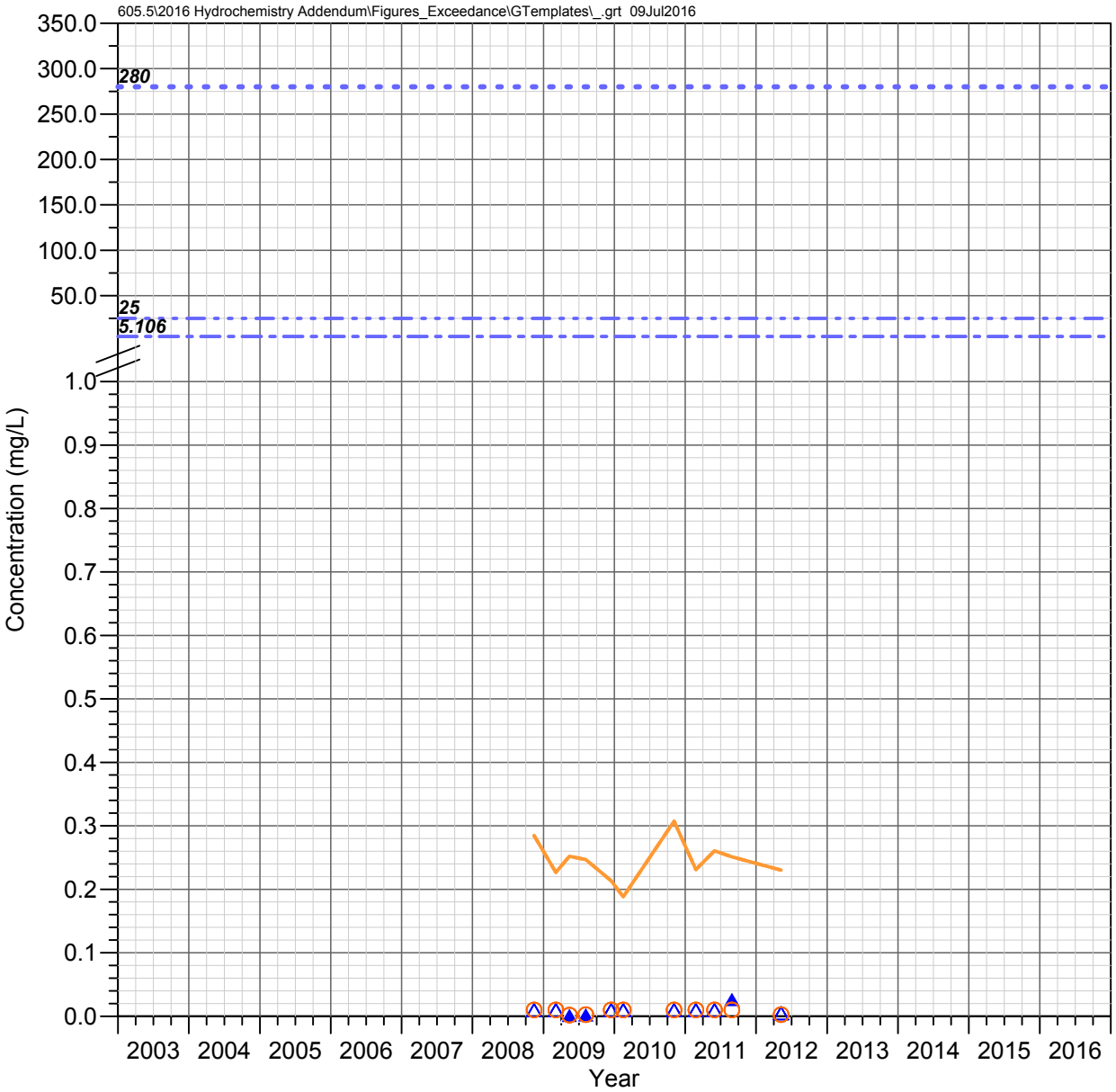


FIGURE F-832. ZINC CONCENTRATIONS OBSERVED AT MC 8.4 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



LF 0.2 C
Mineral Creek Watershed

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 280 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 5.106 mg/L)
- AZ Agricultural Livestock Watering (TRC, 25 mg/L)

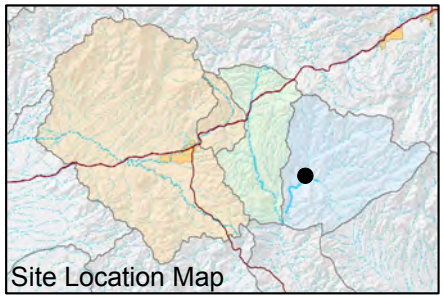
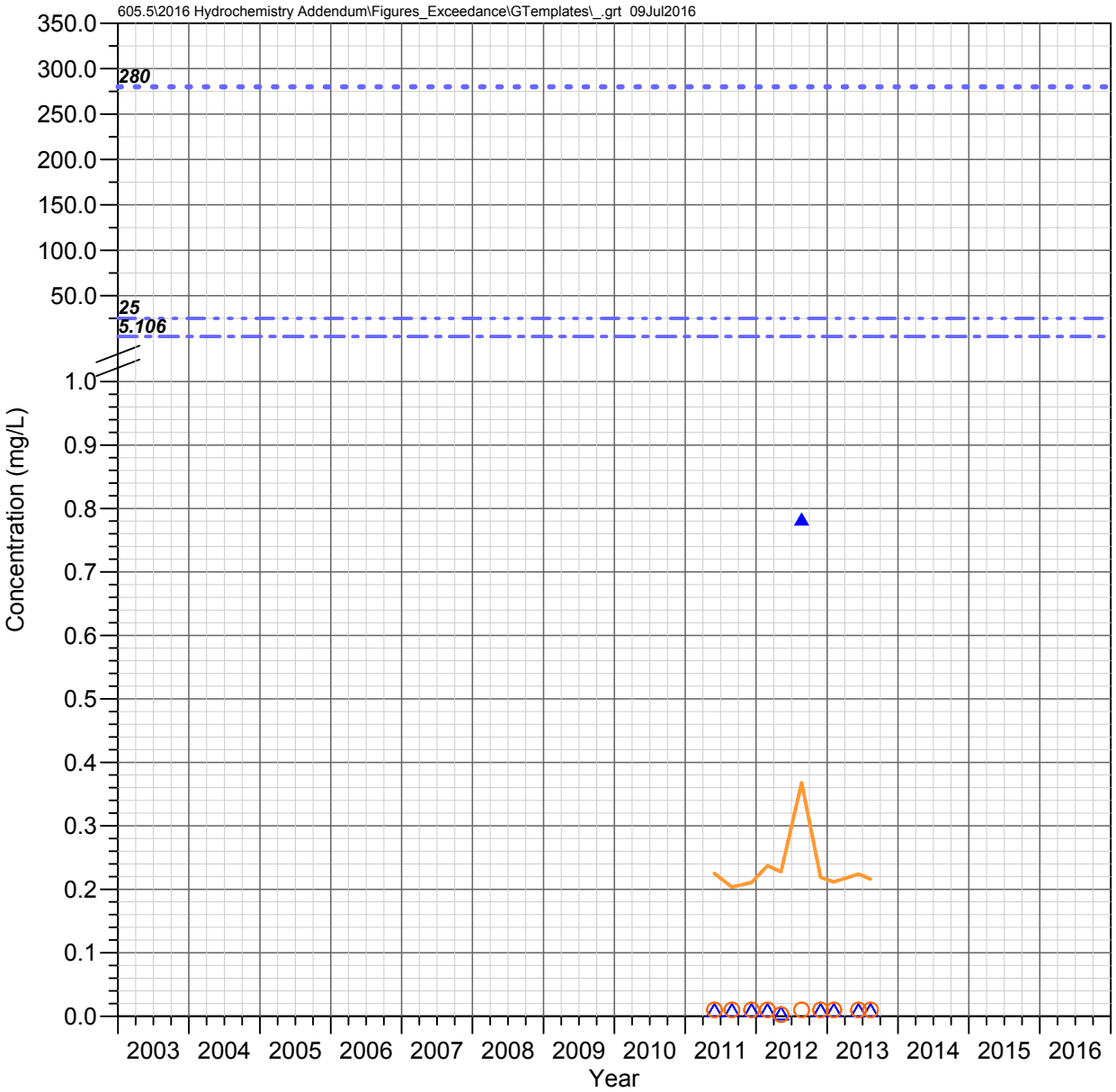


FIGURE F-833. ZINC CONCENTRATIONS OBSERVED AT LF 0.2 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 5.2 C
Mineral Creek Watershed

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 280 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 5.106 mg/L)
- AZ Agricultural Livestock Watering (TRC, 25 mg/L)

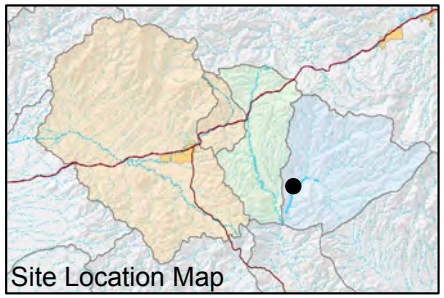
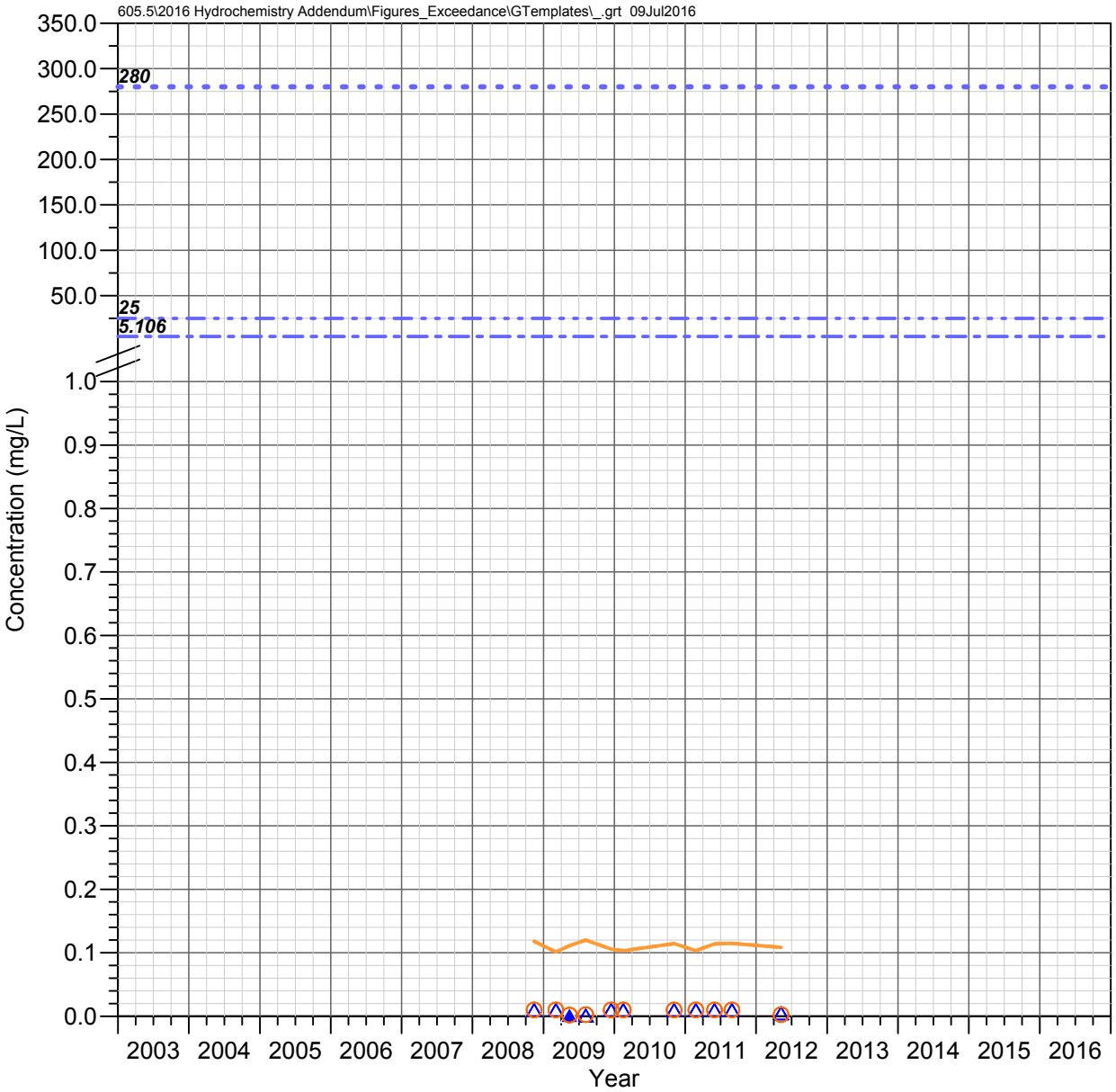


FIGURE F-834. ZINC CONCENTRATIONS OBSERVED AT MC 5.2 C, MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 3.4 W (Wet Leg Spring)
Mineral Creek Watershed

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 280 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 5.106 mg/L)
- AZ Agricultural Livestock Watering (TRC, 25 mg/L)

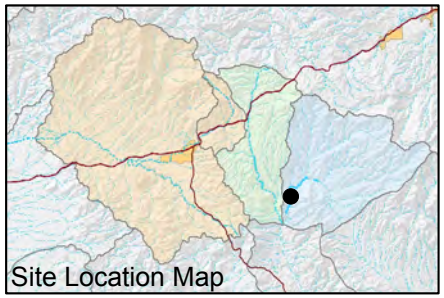
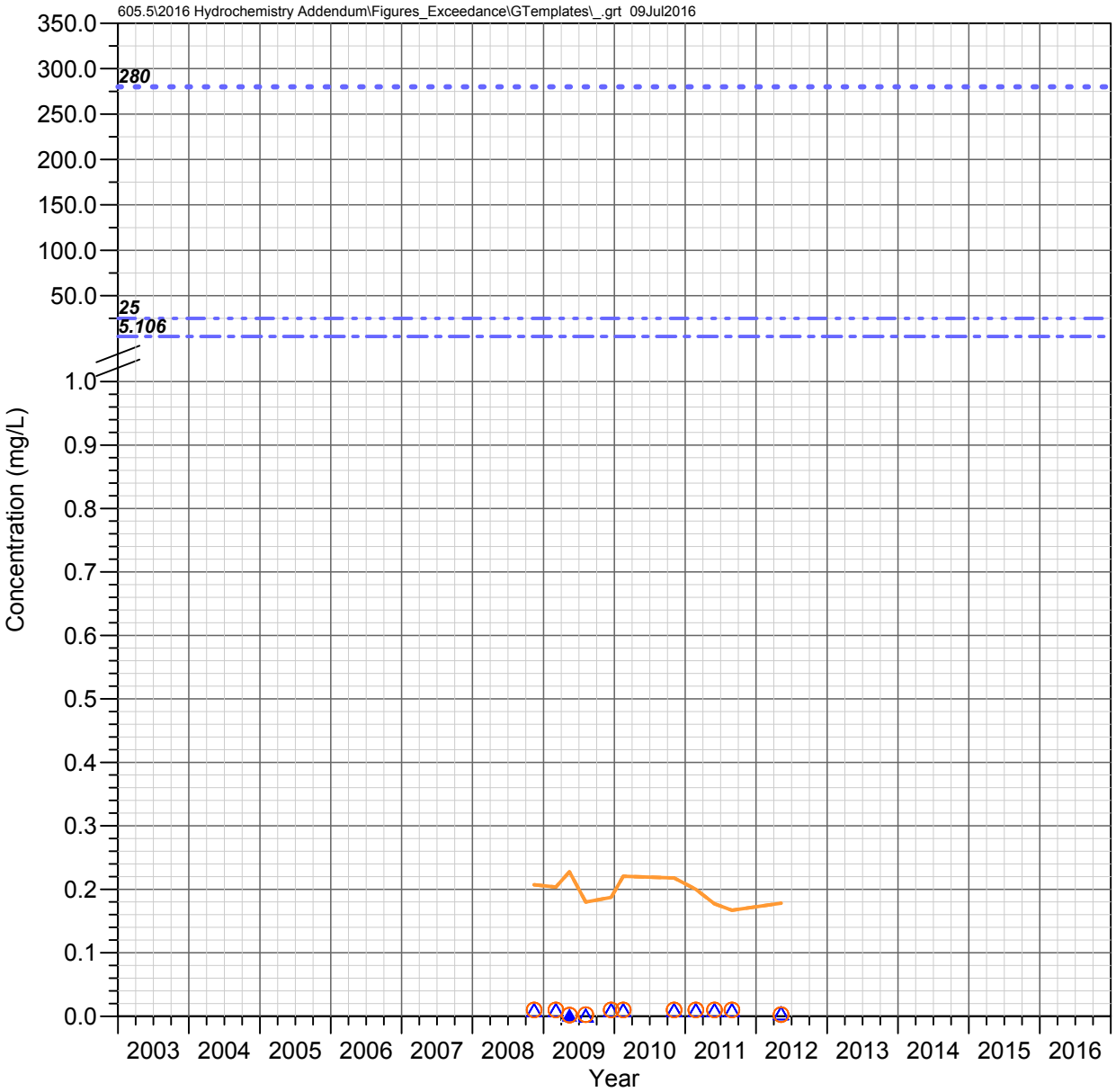


FIGURE F-835. ZINC CONCENTRATIONS OBSERVED AT MC 3.4 W (WET LEG SPRING), MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES



MC 3.3 C (Lower Mineral)
Mineral Creek Watershed

ZINC

Observed Concentrations

*Value shown at the reported detection limit

- ● Dissolved, Detected Value
- ○ Dissolved, Below Detection Limit*
- ▲ Total Recoverable, Detected Value
- △ Total Recoverable, Below Detection Limit*
- ■ Total, Detected Value
- □ Total, Below Detection Limit*
- ▼ Unknown Filter Analysis, Detected Value
- ▽ Unknown Filter Analysis, Below Detection Limit*

Water Quality Standards (filter analysis dependent)

TRC = Total or Total Recoverable; **DIS** = Dissolved
HRD = Hardness Dependent

- AZ Full Body Contact (TRC, 280 mg/L)
- AZ Aquatic and Wildlife - Warm Water Chronic (DIS, HRD mg/L)
- AZ Aquatic and Wildlife - Warm Water Acute (DIS, HRD mg/L)
- AZ Fish Consumption (TRC, 5.106 mg/L)
- AZ Agricultural Livestock Watering (TRC, 25 mg/L)

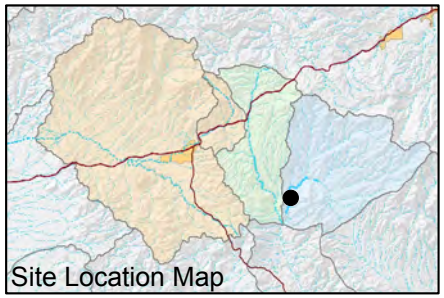


FIGURE F-836. ZINC CONCENTRATIONS OBSERVED AT MC 3.3 C (LOWER MINERAL), MINERAL CREEK WATERSHED

Resolution Copper Mining

MONTGOMERY & ASSOCIATES