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TECHNICAL MEMORANDUM

DATE: September 14, 2018 **PROJECT #**: 605.8401

TO: Vicky Peacey, Resolution Copper

FROM: Chris Gregory and Tim Bayley

PROJECT: Proposed Near West Tailing Storage Facility, Resolution Copper

SUBJECT: TSF Alternative 4 – Silver King: Life of Mine and Post-Closure Seepage Transport Modeling

Introduction

The draft environmental impact statement for the proposed Resolution Copper (RC) mine includes the following tailings storage facility (TSF) alternatives:

- Alternative 2: Near West Modified Proposed Action (Modified Centerline Embankment – "Wet")
- Alternative 3: Near West Modified Proposed Action (High-density Thickened NPAG Scavenger Tailings and Segregated PAG Pyrite Tailings Cell – "Dry")
- Alternative 4: Silver King Filtered
- Alternative 5: Peg Leg
- Alternative 6: Skunk Camp

At the request of RC, Montgomery & Associates (M&A) has prepared this technical memorandum to document groundwater transport modeling and results for TSF Alternative 4—Silver King Filtered. The purpose of the model is to provide a tool to compare the relative impacts of seepage (rate, transit time, and quality) among the different TSF alternatives. All TSF alternatives can comply with groundwater and surface water standards, but the degree of seepage management needed among alternatives would vary (minimal/simple to extensive/complex).

The model was developed using the Contaminant Transport (CT) Module of the GoldSim simulation platform (version 12.0). The results include time series estimates of chemical constituent concentrations at Whitlow Ranch Dam and within the Queen Creek alluvial aquifer nearest to the TSF—designated "Queen Creek 3". The model period spans

245 years, which includes the 41-year planned Life of Mine (LOM) and an additional 204 years following closure.

The GoldSim modeling provides a basis for comparison among the alternatives, but is not typically used or adequate for water quality permitting. The TSF will be required to obtain an aquifer protection permit from the Arizona Department of Environmental Quality. By regulation, every permitted facility must utilize Best Available Demonstrated Control Technology (BADCT) and demonstrate that Aquifer Water Quality Standards (AWQS) and surface water quality standards will not be exceeded at the point of compliance as a result of discharge from the facility. These requirements have not been addressed by the GoldSim model but will be incorporated into final design, construction and operation of the TSF.

This memorandum comprises the following sections:

- Conceptual Model
- GoldSim Seepage Transport Model
- Results
- Discussion and Conclusions

Conceptual Model

Site Description

The proposed Silver King tailings alternative is located approximately 4 miles north of the town of Superior, in Pinal County, Arizona (**Figure 1**). The TSF footprint is located within the subbasins that drain into Potts Canyon, Happy Camp Canyon, and Silver King Wash. The natural land surface elevation of the proposed TSF footprint varies from approximately 2,800 to 3,800 feet above mean sea level.

Geology

A geologic map of the area showing geologic units, structures, and the proposed TSF footprint considered for Alternative 4 is shown on **Figure 2**. General descriptions of the principal hydrogeologic units (HGUs) within the Superior Basin study area were presented in the conceptual hydrogeologic model report for Near West (M&A, 2017b). Detailed characterization of the geology comprising these HGUs were described by M&A (2013 and 2017a) based on characterization studies and the work of Spencer and Richard (1995), Spencer and others (1998), Scarborough (1989), Peterson (1969), Ferguson and Trapp (2001), Ferguson and Skotnicki (1995), Richard and Spencer (1998), and Keith (1983).

Surface Water Flows

Major drainages underlying the proposed TSF footprint include Silver King Wash to the east, Potts Canyon to the west, and Happy Camp Canyon in the center. Happy Camp Canyon is divided into East and West segments in the GoldSim model. Water moves through these drainages towards the southwest, where all water not lost to groundwater evapotranspiration (GET) eventually discharges into Queen Creek. From Queen Creek, flows are redirected approximately 7 miles west to Whitlow Ranch Dam, an earthen dam that serves as the exit point for all surface water leaving the basin. Surface water flows in the canyons are infrequent and generally require large precipitation events to generate run-off.

Groundwater Flow

The direction of groundwater movement in bedrock aquifers follows the general trend of land surface topography from upland areas in the northern, eastern, and southern boundaries of the Superior Basin toward Queen Creek. The bedrock aquifers are intersected in some locations by alluvial channels with much higher hydraulic conductivities that serve as conduits for relatively rapid subsurface flow towards Whitlow Ranch Dam (M&A, 2017b). Because these alluvial channels are the primary conduits for groundwater flow to Whitlow Ranch Dam, this model only considers groundwater transport through the alluvium. Whitlow Ranch Dam is conceptualized as the ultimate exit point for all groundwater leaving the Basin; in front of the dam, groundwater is forced to land surface and exits the basin as surface water. For TSF Alternative 4, Whitlow Ranch Dam is the first downstream location where all tailings seepage reaches the surface, and as such is considered a valuable location for monitoring potential tailings seepage impacts.

Tailings Storage Facility - Alternative 4

For TSF Alternative 4, tailings would be pumped as thickened slurry to the Silver King site and then further dewatered with pressure filters at a filter plant. The scavenger and pyrite filtered tailings would be transported using a conveyance system from the filter plant to separate filtered tailings piles. The top of the tailings piles would be sloped into the hillside to limit surface water runoff over, and erosion of, the TSF slope. Downstream slopes would be progressively reclaimed and non-contact runoff would be diverted around the water collection dams when possible (KCB, 2018).

A more complete description of the TSF Alternative 4 design is described in the technical memorandum for solute modeling parameters prepared by Klohn Crippen Berger (KCB, 2018).

GoldSim Seepage Transport Model

Contaminant Transport Module

The CT Module extension of GoldSim is a mass transport model, not a flow model. As such, it does not directly solve for the movement of water through the modeled environmental system (GoldSim, 2017). The CT Module relies on user-specified flow rates for all flows into and out of aquifers, and therefore the velocity at which water moves through the media depends on the flow rates and volume of the available pore space in the aquifer pathways.

The CT Module has been used to develop an advection-dispersion mass flux model with mixing of inflow and outflow components to estimate the transport of chemical constituents through time. Mechanical dispersion of the constituents occurs as a function of the porosity and tortuosity of the aquifer, and the dispersivity values specified in the model. The dispersivity values assigned to aquifer element pathways was estimated as 10% of aquifer subdomain length based on Gelhar and others (1992).

Model Domain

The model domain includes nine alluvial aquifer subdomains, as shown on **Figure 3**. In the model, seepage from the TSF enters the Silver King Wash, Happy Camp Canyon East and West, and Potts Canyon subdomains immediately downstream of the TSF footprint. Water flowing through the Happy Camp West subdomain enters the Happy Camp East subdomain. Water from the Silver King Wash, Happy Camp Canyon (East and West), and Potts Canyon subdomains enters the Queen Creek 5, 4, and 3 subdomains, respectively. Water that passes through the Queen Creek 3 subdomain flows into the Queen Creek 2 subdomain before reaching the Queen Creek 1 subdomain. Once mixed in the Queen Creek 1 subdomain, the water is conveyed through Whitlow Ranch Dam.

The nine alluvial aquifers subdomains have unique geometries; the areas, lengths, and average widths were estimated based on polygon areas for the alluvium using ArcGIS. Cross-sectional areas and saturated thicknesses of the aquifer subdomains were estimated based on Darcy's Law. Calculations were made using the average flow rate through the subdomains, and hydraulic conductivities of approximately 500 feet per day (ft/day) in the canyons and washes and 1,000 ft/day in Queen Creek, based on hydraulic testing conducted in the alluvium (M&A, 2017c). The dimensions of the aquifer subdomains used in the seepage transport model are given in **Table 1**.

Materials and Parameters

Water

The GoldSim CT Module requires properties for a reference fluid and the flow medium for models. The reference fluid was specified as water, with a diffusivity of 1E-9 meters squared per second. For the seepage transport model, the diffusivity reduction formula, relative diffusivities, and solubility input parameters did not apply as the media was fully saturated and the constituent concentrations did not approach solubility limits.

Alluvium

The medium in the model was native alluvium, with an assumed advective porosity of 0.15 and a dry (bulk) density of 2,000 kilograms per cubic meter based on reference estimates (Sharma, 1997). The tortuosity was estimated as the cube root of the porosity, with a value of 0.53 (GoldSim, 2017). Partition coefficients were not specified as it was assumed that the transport of constituents was conservative (i.e. constituents do not sorb onto the alluvium).

Water Budget

Water enters the aquifer subdomains as recharge, groundwater underflow, and seepage from the TSF impoundment. Water exits the aquifer subdomains as groundwater evapotranspiration (GET), as flow passing into the next aquifer subdomain immediately downstream, and at Whitlow Ranch Dam which is the ultimate discharge point for groundwater exiting the Superior Basin (M&A, 2017b).

Descriptions of aquifer inflows and outflows are presented below. A summary of water budget components used in the Alternative 4 model is given in **Table 2**. A complete water balance for the Superior Basin was included in the conceptual hydrogeologic model report for Near West (M&A, 2017b).

Inflows

Recharge

Recharge includes inflow from precipitation occurring within aquifer subbasins. Estimates of recharge for model subbasins were based on total recharge for the Near West study area (M&A, 2017b). Total recharge within the Near West study area was approximated using a method developed by Anderson and others (1992) that incorporates precipitation, basin area, and elevation. Average annual precipitation was estimated using the PRISM model (PRISM Climate Group, 2017).

The total recharge for the Near West study area was allocated to Alternative 4 model subbasins based on the fractional area of each subbasin within the study area. Once allocated, recharge within each subbasin was then subdivided into focused recharge—identified simply as "recharge" within the model—and diffuse recharge classified as groundwater underflow in the model. The model assumed 75% of recharge to be focused recharge and 25% to be diffuse recharge based on estimates provided by Meixner and others (2016). Recharge estimates for the aquifer subdomains are provided in **Table 2**.

Groundwater Underflow

Groundwater underflow includes inflow to aquifer subdomains from the movement of groundwater originating from upstream portions of aquifer subbasins or from areas outside of the model domain. As indicated in *Recharge* above, the seepage transport model assumed 25% of total recharge to be contributions to groundwater underflow.

Additional underflow into Queen Creek aquifers from upstream basin areas outside of the model domain to the south of Queen Creek and to the east of Silver King Wash represented a significant portion of inflow. Estimates of groundwater underflows are provided in **Table 2**.

TSF Seepage

For the LOM period, the TSF seepage rate was calculated as the average rate reported for mine operation in the Alternative 4 engineering design (KCB, 2018). The average LOM seepage rate, equal to approximately 0.60 acre-feet per year (af/yr), was then evenly distributed between the four downstream drainage pathways: Silver King Wash, Potts Canyon, Happy Camp Canyon East and Happy Camp Canyon West.

Post-closure seepage rates were based on values reported in the embankment oxidation tailings chemistry analysis (Rio Tinto, 2018). Total tailings seepage increases during the modeled post-closure period as meteoric precipitation wets the initially dry tailings impoundment. During this period, seepage increases from approximately 13 to 24 af/yr (Rio Tinto, 2018). Post-closure seepage was divided evenly between the four downstream drainage pathways.

Seepage estimates included in the model are presented in **Table 2** and summarized below.

Aquifer Subdomain	Seepage Rates During Life of Mine (Years 0 – 41) [1] Seepage (af/yr[2])	Seepage (gpm[3])
Silver King Wash	0.15	0.093
Happy Camp East	0.15	0.093
Happy Camp West	0.15	0.093
Potts Canyon	0.15	0.093

[1] Post-closure (years 42 – 245) total seepage rate varies annually from 13.6 to 23.8 af/yr (Rio Tinto, 2018)

[2] af/yr = acre-feet per year

[3] gpm = gallons per minute

Outflows

Groundwater Evapotranspiration (GET)

GET includes outflow from aquifer subdomains due to evaporation and transpiration. GET occurs after inflows from all sources—recharge, groundwater underflow, TSF seepage, and discharge from upstream alluvial reaches—have mixed in the aquifer subdomain; consequently, the masses of chemical constituents are removed in proportion to their concentrations in the aquifer subdomains after mixing. GET was estimated for the subdomains in the Near West study area and the areas east of Near West using the water balance developed for the Near West conceptual model report (M&A, 2017b). Total GET was distributed across the Near West study area based on the fractional areas of the subdomains. Estimates of GET are given in **Table 2**.

Outflow to Downstream Aquifer Subdomain

After GET is removed from each aquifer subdomain, the remaining water flows into the next adjacent subdomain located immediately downstream. The flow direction between aquifer subdomains is indicated with blue arrows on **Figure 3**. Outflow from the upstream subdomain becomes inflow to the downstream subdomain. Water discharging from the last aquifer subdomain, Queen Creek 1, passes through Whitlow Ranch Dam and ultimately terminates in a sink pathway cell. The outflow at Whitlow Ranch Dam is based on median baseflow conditions (M&A, 2017b). This is a conservative assumption, since average baseflow is higher and would further dilute aquifer discharge at Whitlow Ranch Dam. The outflow values used in the Alternative 4 model for each subdomain are given in **Table 2**.

Timing of Seepage Transit from TSF to Model Domain

The Alternative 4 footprint lies directly above four aquifer subdomains included in the model—Potts Canyon, Happy Camp Canyon East, Happy Camp Canyon West, and Silver King Wash. As a result, the time required for seepage leaving the tailings to enter the aquifer subdomains should me minimal, and no transit delay was incorporated into the model.

Chemical Constituents

A total of 30 chemical constituents were included in process circuit and embankment oxidation chemistry models developed for LOM and post-closure years (Enchemica, 2018 and Rio Tinto, 2018). All of the constituents were included in the seepage transport model. The constituents include common and trace metals, as well as bicarbonate, nitrate-N, sulfate and total dissolved solids, and are shown in **Tables 3 through 9**.

Concentration and Mass Flux of Constituents

The CT Module requires mass and flow inputs in order to simulate the movement of constituent mass through the model domain. Constituent concentrations can be monitored at discreet locations through time based on the amount of fluid (water) and constituent mass at the monitoring location.

In order to simplify the modeling approach, the seepage transport model developed for Alternative 4 assumed a mass flux of zero milligrams per day from all natural waters—i.e. meteoric precipitation and groundwater. The only mass flux included in the model was derived from TSF seepage.

The last step of the analysis was to add background concentrations of natural waters to modeled concentrations, in order to estimate total predicted concentrations downstream of the tailings impoundment during and after mining. Background concentrations were determined by calculating the median constituent concentrations from samples collected at well DS17-17, located within the Queen Creek 3 subdomain, and at Whitlow Ranch Dam. Summaries of historical water quality samples collected at DS17-17 and Whitlow Ranch Dam are given in **Tables 3 and 4**, respectively. Median background concentrations and applicable water quality standards for each location are also shown included in the tables.

Tailings seepage concentrations for LOM years were based on a tailings circuit predictive model for the entire TSF during mine operations (Enchemica, 2018). Tailings concentrations for post-closure years were based on a second model, which analyzed the effects of weathering processes, such as sulfide oxidation, on the TSF embankment over time (Rio Tinto, 2018). As both the process circuit and weathering analyses were used to construct the tailings seepage chemistry for the GoldSim model, slight differences were observed in solute concentrations between the end of the LOM (year 41) and beginning of post-closure (year 42). These differences were addressed in a conservative manner by maintaining the LOM concentration until it was exceeded by the post-closure concentration. If the concentration at the end of LOM (year 42) was not exceeded during post-closure, the LOM concentration was maintained through the end of the model period (year 245).

The constituent concentrations of TSF seepage during the 245-year model period are given in **Table 5**. The mass fluxes entering Potts Canyon, Happy Camp Canyon East and West, and Silver King Wash were calculated by multiplying the constituent concentrations shown in **Tables 5** by estimated seepage rates for the LOM and post-closure periods (see *TSF Seepage*, **Table 2** and Rio Tinto, 2018).

Model Simulation Settings

The model was designed to simulate 245 years after the start of mining, which includes the 41 years of planned LOM and 204 additional years following closure. Basic time steps of 0.1 years (36.525 days) were used for model calculations, with reporting steps of 1 year. All aquifer subdomain elements were given the maximum number of cell divisions (100 cells) in order to minimize numerical dispersion in model calculations.

Conservative Assumptions

The modeling approach includes many assumptions because detailed information is not available for this site. The model is intentionally simple and intended to be used as a tool for comparison between the proposed TSF alternatives. Some assumptions are conservative and result in overestimates of modeled concentrations from TSF seepage.

The flow rate used at Whitlow Ranch Dam is based on median baseflow conditions. Average baseflow includes periods of higher flow associated with rainfall events, and would be expected to further reduce concentrations observed at Whitlow Ranch Dam. In addition, hardness-dependent surface water standards at Whitlow Ranch Dam (cadmium, copper, lead, nickel, and zinc) were calculated using the lowest available hardness measurement at the dam; using average or median hardness would increase the calculated thresholds for the hardness-dependent standards.

Differences in tailings seepage concentrations generated for the LOM and post-closure periods were addressed using a conservative approach. When circuit chemistry seepage concentrations at the end of the LOM (year 41) were higher than embankment oxidation concentrations at the beginning of post-closure (year 42), the higher LOM concentration was maintained through the end of the model period (year 245) or until it was exceeded by post-closure concentrations.

Due to assumptions described above, predicted constituent concentrations should not be considered definitive, and arguably contribute more value in relative rather than absolute terms, through comparisons with other TSF alternatives.

Results

Modeled Constituent Concentrations

Modeled constituent concentrations in groundwater downstream of the TSF were monitored in the Queen Creek 3 subdomain. The results—which show the contributions to solute concentrations from TSF seepage, and do not include background concentrations of local groundwater—are given in **Table 6**. Following mixing and transport in the model, constituent concentrations downstream of the TSF decreased by approximately 99.9% during LOM, and by approximately 98.2 to 99.9% during post-closure, compared to initial tailings seepage concentrations (**Tables 5 and 6**).

Modeled constituent concentrations in surface water downstream of the TSF were monitored at Whitlow Ranch Dam. The results are provided in **Table 7**. Following transport and mixing in the model, constituent concentrations decreased by approximately 99.9% during LOM, and by approximately 99.1 to 99.9% following closure, compared to initial tailings concentrations (**Tables 5 and 7**).

Predicted Total Constituent Concentrations

In order to estimate total constituent concentrations, median background concentrations derived from water quality samples from well DS17-17 (**Table 3**), located within Queen Creek 3, and from Whitlow Ranch Dam (**Table 4**) were added to modeled concentrations. The total predicted constituent concentrations due to natural background and TSF seepage at Queen Creek 3 after the start of mining are given in **Table 8**. Predicted total concentrations at Whitlow Ranch Dam are given in **Table 9**.

Comparison to Water Quality Standards

Modeled concentrations are compared to promulgated water quality standards to provide an indication of potential chemical constituents of concern and to assess the relative performance of different TSF alternatives. Model results are useful indicators for comparative purposes, but are not considered definitive or final.

Water quality standards for the Queen Creek 3 subdomain are the Arizona Department of Environmental Quality (ADEQ) Numeric Aquifer Water Quality Standards (AWQS) (ADEQ, 2016). Water quality standards at Whitlow Ranch Dam are the ADEQ Numeric Surface Water Quality Standards (SWQS) for the aquatic and wildlife warm (chronic) designation (ADEQ, 2016), which are the most restrictive standards that apply at the dam. Five of the modeled constituents—cadmium, copper, lead, nickel, and zinc—have surface water standards that are hardness dependent and were conservatively calculated (worst case) by using the lowest available hardness value recorded at Whitlow Ranch Dam (307 milligrams per liter calcium carbonate on 8/25/2017). The regulatory standards for the chemical constituents are given in **Tables 3 and 4** and are included for comparison with calculated values in **Tables 6 through 9**.

At the Queen Creek 3 groundwater monitoring location, none of the constituent concentrations in the model results (with zero background concentration) or in the predicted concentrations (with background concentrations included) are shown to occur above AWQS at any time during the model period.

At Whitlow Ranch Dam, only selenium is shown to occur above SWQS during the model period, which occurs in both model results (with zero background concentration) and predicted concentrations (with background concentrations included).

Discussion and Conclusions

Modeled concentrations are compared to promulgated water quality standards to provide an indication of potential chemical constituents of concern and to assess the relative performance of different TSF alternatives against standards. Model results are useful indicators for comparative purposes, but are not considered definitive or final.

Based on the Alternative 4 engineering design report (KCB, 2018) and an embankment oxidation analysis (Rio Tinto, 2018), the rate of TSF seepage is minimal—approximately 0.6 af/yr during the LOM and 13 to 24 af/yr during post-closure. As a result of increased seepage following mine closure, model results indicate that concentrations in groundwater and surface water are higher during post-closure than during mine life.

Constituent concentrations were monitored at the Queen Creek 3 subdomain and Whitlow Ranch Dam. When tailings seepage reached these locations, the constituent concentrations had decreased by approximately 98.2% to 99.9% from initial tailings concentrations. Modeled concentrations were added to background concentrations at Queen Creek 3 and

Whitlow Ranch Dam in order to predict total constituent concentrations at these locations. The results indicate that aquifer and surface water quality would be beneath standards with the exception of selenium at Whitlow Ranch Dam during some of the modeled period.

The TSF alternatives are located at four different sites and incorporate differing technologies, but for the purpose of comparing the alternatives, only the minimum seepage controls required for geotechnical stability were incorporated. Additional seepage collection controls will be incorporated into future TSF designs.

The modeled flow at Whitlow Ranch Dam was based on median baseflow conditions. Average conditions, which are influenced by periods of higher flow associated with rainfall events, would be expected to be greater than the flow used in the model, and would further reduce concentrations. Therefore, the model results may overestimate constituent concentrations. Additionally, conservative methods applied to the determination of tailings chemistry incorporated in the model may also overestimate actual constituent concentrations.

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Table 1. Dimensions of Aquifer Subdomains

Aquifer Subdomain	Length (ft)	Area [a] (ft^2)	Average Width [b] (ft)	Saturated Thickness [c] (ft)	Cross Sectional Area [c] (ft^2)
Silver King	20,100	10,219,800	510	1.1	600
Happy Camp E	23,700	14,186,100	600	0.2	100
Happy Camp W	12,300	6,052,900	490	0.1	100
Potts Canyon	23,400	8,340,600	360	6.3	2,300
Queen Creek 5	3,500	1,082,900	310	2.2	700
Queen Creek 4	9,900	5,398,500	550	3.4	1,900
Queen Creek 3	15,700	17,899,700	1,140	5.6	6,400
Queen Creek 2	6,400	5,656,700	880	17.1	15,000
Queen Creek 1	6,300	8,328,000	1,320	12.1	15,900

Notes:

[a] Calculated based on polygon area of each subdomain in ArcGIS

[b] Calculated by dividing aquifer polygon area by width

[c] Based on Darcy's Law using the average flow rate through the subdomain during Life of Mine

Table 2. Water Budget Components

Aquifer Subdomain	INFLOW		OUTFLOW	
	Source	af/yr	Source	af/yr
Silver King Wash	Recharge	68	Groundwater Evapotranspiration (GET)	57
	Underflow	23	Discharge to Queen Creek 5	34.15
	TSF Seepage during Life of Mine (LOM)	0.15		
Happy Camp East	Recharge	20	Groundwater Evapotranspiration (GET)	25
	Underflow	7	Discharge to Queen Creek 4	2.3
	TSF Seepage during Life of Mine (LOM)	0.15		
	Happy Camp W Discharge	0.15		
Happy Camp West	Recharge	10	Groundwater Evapotranspiration (GET)	13
	Underflow	3	Discharge to Happy Camp E	0.15
	TSF Seepage during Life of Mine (LOM)	0.15		
Potts Canyon	Recharge	169	Groundwater Evapotranspiration (GET)	81
	Underflow	57	Discharge to Queen Creek 3	145.15
	TSF Seepage during Life of Mine (LOM)	0.15		
Queen Creek 5	Recharge	1.5	Groundwater Evapotranspiration (GET)	1
	Underflow	0.5	Discharge to Queen Creek 4	35.15
	Silver King Wash Discharge	34.15		
Queen Creek 4	Recharge	9	Groundwater Evapotranspiration (GET)	4
	Underflow	123	Discharge to Queen Creek 3	165.45
	Queen Creek 5 Discharge	35.15		
	Happy Canyon E Discharge	2.30		
Queen Creek 3	Recharge	89	Groundwater Evapotranspiration (GET)	32
	Underflow	88	Discharge to Queen Creek 2	455.6
	Queen Creek 4 Discharge	165.45		
	Potts Canyon Discharge	145.15		
Queen Creek 2	Recharge	225	Groundwater Evapotranspiration (GET)	80
	Underflow	122	Discharge to Queen Creek 1	722.6
	Queen Creek 3 Discharge	455.6		
Queen Creek 1	Recharge	30	Groundwater Evapotranspiration (GET)	11
	Underflow	53	Discharge to Whitlow Ranch Dam (WRD)	794.6
	Queen Creek 2 Discharge	722.6		

Notes:
1. Recharge, underflow and GET estimates based conceptual model report (M&A, 2017a) and subbasin areas
2. TSF seepage estimates during Life of Mine based on three-dimensional steady-state groundwater flow model (M&A, 2018)
3. During Post-Closure, total TSF seepage ranges from 13.6 to 23.8 af/yr and Queen Creek 1 discharge ranges from 807.6 to 817.8 af/yr

Table 3. Median Background Concentrations and Water Quality Standards at Well DS17-17 in Queen Creek 3 Subdomain

Sample Date	Al DIS mg/L	Sb DIS mg/L	As DIS mg/L	Ba DIS mg/L	Be DIS mg/L	HCO3 TOT mg/L	B DIS mg/L	Cd DIS mg/L	Ca DIS mg/L	Cl TOT mg/L	Cr DIS mg/L	Co DIS mg/L	Cu DIS mg/L	F TOT mg/L	Fe DIS mg/L	Pb DIS mg/L	Mg DIS mg/L	Mn DIS mg/L	Mo DIS mg/L	Ni DIS mg/L	NO3-N TOT[a] mg/L	K DIS mg/L	Se TOT mg/L	Si DIS mg/L	Ag DIS mg/L	Na DIS mg/L	SO4 TOT mg/L	Tl DIS mg/L	Zn DIS mg/L	TDS DIS mg/L
2/22/2018	<0.05	<0.00023	0.0010	0.0251	<0.0017	437	0.073	<0.000063	102	26.1	<0.0020	<0.0016	0.00056	0.624	<0.056	<0.00011	21.6	<0.0034	<0.003	<0.0023		2.47	0.0004	53.5	<0.000061	60.0	129	<0.00008	<0.005	576
1/16/2018	<0.04	<0.000033	0.0009	0.0201	<0.0010	414	0.074	<0.000038	102	27.3	<0.0019	<0.0013	0.00161	0.578	<0.045	0.00039	22.5	0.0079	<0.003	<0.0027		2.79	0.0004	48.2	<0.000036	58.4	133	<0.00003	0.016	589
12/6/2017	<0.04	0.00022	0.0013	0.0222	<0.0010	351	0.069	<0.000038	84.0	24.7	<0.0019	<0.0013	0.00048	0.553	<0.045	<0.000065	21.2	<0.0049	<0.003	<0.0027		3.39	0.0004	42.9	<0.000036	49.5	111	<0.00003	<0.003	477
11/10/2017	<0.04	0.00021	0.0012	0.0261	<0.0010	342	0.070	<0.000038	103	29.4	<0.0019	<0.0013	0.00057	0.529	<0.045	<0.000065	26.5	<0.0049	<0.003	<0.0027		3.49	0.0005	43.5	<0.000036	52.3	162	<0.00003	<0.003	554
10/10/2017	<0.04	0.00017	0.0013	0.0284	<0.0010	340	0.068	0.00006	99.6	29.7	<0.0019	<0.0013	0.00076	0.554	<0.045	<0.00013	26.0	<0.0049	<0.003	<0.0027		3.65	0.0009	42.5	<0.000036	51.2	176	<0.00006	0.0030	606
9/11/2017	<0.04	0.00023	0.0013	0.0318	<0.0010	327	0.068	<0.000038	111	36.9	<0.0019	<0.0013	0.00075	0.388	<0.045	<0.000065	29.0	<0.0049	<0.003	<0.0027		3.70	0.0011	42.8	<0.000036	53.3	218	<0.00003	0.0040	657
8/20/2017	<0.04	0.00026		0.0254	<0.0010	316	0.069	<0.000038	100	31.7	<0.0019	<0.0013	0.00085	0.463	<0.045	<0.000065	25.7	<0.0049	<0.003	<0.0027			0.0012	40.6	<0.000036		173	<0.00003	0.018	583
8/19/2017	<0.04	0.00021		0.0274	<0.0010	316	0.069	<0.000038	101	32.2	<0.0019	<0.0013	0.00098	0.432	<0.045	<0.000065	26.3	<0.0049	<0.003	<0.0027			0.0009	40.9	<0.000036		180	<0.00003	0.025	591
5/19/2017	<0.03	0.00020	0.0014	0.0312	<0.0007	334	0.072	<0.000038		34.4	<0.0019	<0.0013	0.00106	0.457	<0.045	<0.000065		<0.0049	<0.003	<0.0027			0.0015	41.6	<0.000036		206	<0.00003	0.0090	641
Median =	0.04	0.00021	0.0013	0.0261	0.0010	340	0.069	0.00004	101.5	29.7	0.0019	0.0013	0.00076	0.529	0.045	0.000065	25.9	0.0049	0.003	0.0027	0.38	3.44	0.0009	42.8	0.000036	52.8	173	0.00003	0.005	589
Aquifer WQ Standard =		0.006	0.05	2	0.004			0.005			0.1			4.0		0.05				0.1	10		0.05					0.002		

Notes:

[a] No available data for well DS17-17. NO3-N median value calculated as median of three samples collected from Bear Tank and Benson Springs between November 2014 and March 2015

1. Values less than laboratory detection limit ("non-detects") assumed equal to detection limit for calculation of median concentrations
2. Dissolved (DIS) and total (TOT) constituent concentrations shown based on available data
3. Aquifer WQ Standard = Arizona Department of Environmental Quality Numeric Aquifer Water Quality Standards (Arizona Administrative Code - Title 18, Ch. 11, Art. 4, Sup. 16-4, 2016)
4. mg/L = milligrams per liter

Table 4. Median Background Concentrations and Water Quality Standards at Whitlow Ranch Dam

Sample Date	Al	Sb	As	Ba	Be	HCO3	B	Cd	Ca	Cl	Cr	Co	Cu	F	Fe	Pb	Mg	Mn	Mo	Ni	NO3-N	K	Se	Si	Ag	Na	SO4	Tl	Zn	TDS
	DIS	DIS	DIS	DIS	DIS	TOT	DIS	DIS	DIS	TOT	DIS	DIS	DIS	TOT	DIS	DIS	DIS	DIS	DIS	DIS	TOT	DIS	TOT	DIS	DIS	DIS	TOT	DIS	DIS	DIS
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
12/7/2017	<0.04	0.00048	0.0014	0.0300	<0.0010	367	0.054	0.00004	104.0	23.5	<0.0019	<0.0013	0.00102	0.369	0.045	0.00011	25.5	0.017	<0.003	<0.0027		3.0	0.0004	39.3	<0.000036	38.8	132	<0.00003	0.0040	524
11/15/2017	<0.04	0.00046	0.0016	0.0259	<0.0010	334	0.050	<0.000038	95.0	22.3	<0.0019	<0.0013	0.00100	0.369	0.045	0.00013	22.8	0.016	<0.003	<0.0027		2.9	0.0006	35.5	<0.000072	36.0	119	<0.00003	<0.003	500
10/18/2017	<0.04	0.00045	0.0025	0.0512	<0.0010	351	0.053	0.00005	90.3	22.0	<0.0019	<0.0013	0.0008	0.377	0.180	<0.000065	22.4	0.399	<0.003	<0.0027		3.1	0.0007	36.5	<0.000036	35.7	111	<0.00003	0.0050	495
9/27/2017	<0.04	0.00038	0.0025	0.0311	<0.0010	331	0.050	<0.000038	89.5	21.1	<0.0019	<0.0013	0.0007	0.407	0.064	<0.000065	21.5	0.193	<0.003	<0.0027		2.8	0.0006	34.4	<0.000036	35.6	108	<0.00003	0.0030	490
8/25/2017	<0.04	0.00056	0.00359	0.0345	<0.0010	327	0.047	<0.000038	87.5	21.9	<0.0019	<0.0013	0.0010	0.435	0.047	<0.000065	21.4	0.276	<0.003	<0.0027		3.0	0.0007	33.5	<0.000036	34.8	113	<0.00003	<0.003	494
6/29/2017	<0.04	0.00035	0.0017	0.0284	<0.0010	285	0.050	0.00005		21.0	<0.0019	<0.0013	0.00130	0.417	0.045	<0.000065		0.028	<0.003	<0.0027			0.0008	34.4	<0.000036		112	<0.00003	<0.003	491
3/23/2017	0.040	0.00051	0.0026	0.0509	<0.0010	320	0.055			21.2	<0.0015	<0.0010	0.00398	0.467	0.104	0.00030		0.152	<0.003	<0.0026			0.0011	36.6	<0.000036		136	<0.00003	<0.003	632
12/9/2016	<0.03	0.00041	0.0019	0.0321	<0.0010	336	0.057	<0.000021		26.2	<0.0015	<0.0010	<0.0026	0.344	0.079	0.00012		0.059	<0.003	<0.0026			0.0007	37.4	<0.000025		142	<0.000034	<0.003	546
7/22/2016	<0.03	0.00056	0.0024	0.0348	<0.0010	348	0.058			24.0	<0.0015	<0.0010	<0.0026	0.327	0.039	<0.000075		0.117	<0.004	<0.0026			0.0009	39.1	<0.000025		133	<0.000034	<0.003	531
4/14/2016	<0.0364	0.00061	0.0020	0.035	<0.00057	348	0.067	0.00003		26.0	<0.00076	<0.0019	<0.0023	0.356	0.049	<0.000076		0.089	<0.0055	<0.0037			0.0010	40.5	<0.000025		141	<0.000034	<0.0039	558
2/12/2016	<0.04	0.00060	0.0024	0.0407	<0.0006	387	0.065	<0.000072		32.6	<0.0008	<0.0019	<0.0023	0.354	0.048	<0.000031		0.220	<0.005	<0.0037			0.0008	37.4	<0.000021		182	<0.000026	<0.004	612
10/20/2015	<0.04	0.00057	0.0025	0.0412	<0.0009	346	0.064	<0.000072		28.8	<0.0010	<0.0019	<0.0023	0.433	0.048	0.00006		0.258	<0.005	<0.0037			<0.0006	39.3	<0.000021		136	<0.000026	<0.004	566
9/9/2015	<0.0364	0.00061	0.0039	0.0438	<0.00095	350	0.062	<0.000073		28.1	<0.001	<0.0019	<0.0023	0.425	0.057	0.00006		0.500	<0.0055	<0.0037			<0.00062	38.8	<0.000021		142	<0.000026	<0.0039	580
5/13/2015	<0.04	0.00057	0.0020	0.0357	<0.0009	328	0.061	<0.000072		27.4	<0.0018	<0.0008	<0.0023	0.497	0.026	0.00010		0.150	<0.005	<0.0028			<0.0006	37.8	<0.000021		142	<0.000026	<0.003	570
3/4/2015	0.027	0.00052	0.0017	0.037	<0.00020	342	0.068	<0.00025		28.0	<0.00050	<0.00050	0.0020	0.43	0.024	<0.00050		0.049	0.0016	<0.0016	1.9		0.0007	37.0	<0.00050		150	<0.00050	<0.0025	560
Median =	0.04	0.00052	0.0024	0.0350	0.0010	342	0.057	0.00005	90.3	24.0	0.0015	0.0013	0.00230	0.407	0.048	0.000075	22.4	0.1500	0.003	0.0027	1.90	2.95	0.0007	37.4	0.000036	35.7	136	0.00003	0.003	546
Surface WQ Standard =		0.03000	0.1500					0.00512 [a]					0.02335 [a]		1.000	0.00833 [a]				0.13433 [a]			0.0020					0.150000	0.3031 [b]	

Notes:

[a] Cd, Cu, Pb, Ni and Zn standards are hardness dependent and were calculated using lowest (most stringent) hardness value recorded for Whitlow Ranch Dam (307 mg/L CaCO3 on 8/25/2017)

1. Values less than laboratory detection limit ("non-detects") assumed equal to detection limit for calculation of median concentrations
2. Dissolved (DIS) and total (TOT) species concentrations shown based on Arizona water quality standards requirements and available data
3. Surface WQ Standard = Arizona Department of Environmental Quality Water Quality Standard for "Aquatic and wildlife warm" (A&ww) water with chronic exposure (Arizona Administrative Code - Title 18, Ch. 11, Sup. 16-4, 2016)
4. mg/L = milligrams per liter

Table 5. Tailings Seepage Concentrations - Alternative 4

Years since Mine Start	Al mg/L	Sb mg/L	As mg/L	Ba mg/L	Be mg/L	HCO3 mg/L	B mg/L	Cd mg/L	Ca mg/L	Cl mg/L	Cr mg/L	Co mg/L	Cu mg/L	F mg/L	Fe mg/L	Pb mg/L	Mg mg/L	Mn mg/L	Mo mg/L	Ni mg/L	NO3-N mg/L	K mg/L	Se mg/L	Si mg/L	Ag mg/L	Na mg/L	SO4 mg/L	Tl mg/L	Zn mg/L	TDS mg/L
1	0.077	0.00030	0.0056	0.014	0.0006	31	0.033	0.00003	11.3	2.6	0.0010	0.0011	0.0794	0.140	0.002	0.00011	4.3	0.023	0.0017	0.002	3.40	4.3	0.0003	7.1	0.00002	2.8	9	0.00002	0.003	60
2	0.135	0.00031	0.0056	0.014	0.0006	30	0.032	0.00004	12.4	2.6	0.0010	0.0021	0.1873	0.138	0.002	0.00012	4.4	0.034	0.0020	0.004	3.38	4.4	0.0005	7.1	0.00002	2.8	14	0.00002	0.006	66
3	0.198	0.00032	0.0055	0.014	0.0006	30	0.032	0.00006	13.6	2.6	0.0010	0.0032	0.1925	0.137	0.002	0.00012	4.6	0.047	0.0023	0.006	3.34	4.6	0.0007	7.0	0.00002	2.9	18	0.00002	0.009	72
4	0.261	0.00032	0.0054	0.014	0.0006	29	0.031	0.00008	14.6	2.5	0.0010	0.0043	0.1926	0.133	0.002	0.00012	4.7	0.060	0.0026	0.008	3.24	4.6	0.0008	6.9	0.00002	2.9	23	0.00002	0.012	77
5	0.325	0.00033	0.0052	0.014	0.0007	28	0.030	0.00010	15.7	2.4	0.0010	0.0054	0.1927	0.129	0.002	0.00012	4.8	0.072	0.0030	0.010	3.14	4.7	0.0010	6.7	0.00002	2.9	28	0.00002	0.015	82
6	0.389	0.00034	0.0051	0.014	0.0007	27	0.030	0.00011	16.8	2.4	0.0010	0.0065	0.1928	0.127	0.002	0.00013	4.9	0.085	0.0033	0.012	3.09	4.8	0.0011	6.6	0.00002	2.9	33	0.00002	0.018	88
7	0.464	0.00035	0.0050	0.014	0.0007	27	0.029	0.00014	18.2	2.3	0.0010	0.0078	0.1929	0.124	0.002	0.00013	5.1	0.100	0.0036	0.015	3.02	5.0	0.0013	6.6	0.00002	3.0	39	0.00002	0.022	95
8	0.554	0.00036	0.0049	0.014	0.0008	26	0.029	0.00016	19.8	2.3	0.0009	0.0094	0.1931	0.121	0.002	0.00013	5.3	0.118	0.0041	0.018	2.94	5.1	0.0015	6.5	0.00002	3.0	45	0.00003	0.027	103
9	0.645	0.00037	0.0048	0.014	0.0008	25	0.028	0.00019	21.5	2.2	0.0009	0.0109	0.1933	0.117	0.002	0.00014	5.5	0.136	0.0045	0.021	2.86	5.3	0.0018	6.3	0.00002	3.1	52	0.00003	0.031	112
10	0.737	0.00038	0.0046	0.014	0.0009	24	0.027	0.00021	23.1	2.1	0.0009	0.0125	0.1935	0.114	0.002	0.00014	5.7	0.155	0.0050	0.024	2.78	5.5	0.0020	6.2	0.00002	3.1	59	0.00003	0.036	120
11	0.820	0.00040	0.0045	0.014	0.0009	23	0.027	0.00024	24.6	2.1	0.0009	0.0140	0.1937	0.111	0.002	0.00015	5.9	0.171	0.0054	0.027	2.70	5.6	0.0022	6.1	0.00002	3.2	66	0.00003	0.040	128
12	0.888	0.00040	0.0044	0.014	0.0009	22	0.026	0.00025	25.8	2.0	0.0009	0.0152	0.1939	0.108	0.002	0.00015	6.0	0.185	0.0057	0.029	2.64	5.8	0.0024	6.0	0.00002	3.2	71	0.00003	0.043	134
13	0.957	0.00041	0.0043	0.014	0.0010	21	0.025	0.00027	27.1	2.0	0.0009	0.0163	0.1942	0.106	0.002	0.00015	6.2	0.198	0.0061	0.031	2.57	5.9	0.0026	6.0	0.00002	3.2	76	0.00003	0.047	140
14	1.025	0.00042	0.0042	0.014	0.0010	21	0.025	0.00029	28.3	1.9	0.0009	0.0175	0.1944	0.103	0.002	0.00016	6.3	0.212	0.0064	0.033	2.51	6.0	0.0027	5.9	0.00002	3.3	81	0.00004	0.050	146
15	1.094	0.00043	0.0041	0.014	0.0010	20	0.024	0.00031	29.6	1.9	0.0008	0.0187	0.1947	0.100	0.002	0.00016	6.5	0.226	0.0067	0.036	2.45	6.1	0.0029	5.8	0.00002	3.3	86	0.00004	0.054	152
16	1.163	0.00044	0.0040	0.014	0.0011	19	0.024	0.00033	30.8	1.8	0.0008	0.0199	0.1950	0.098	0.002	0.00016	6.6	0.240	0.0071	0.038	2.38	6.3	0.0031	5.7	0.00002	3.4	92	0.00004	0.057	159
17	1.231	0.00045	0.0039	0.014	0.0011	18	0.023	0.00035	32.0	1.8	0.0008	0.0211	0.1953	0.095	0.002	0.00017	6.8	0.253	0.0074	0.040	2.32	6.4	0.0032	5.6	0.00002	3.4	97	0.00004	0.060	165
18	1.300	0.00046	0.0038	0.014	0.0011	18	0.023	0.00037	33.2	1.7	0.0008	0.0223	0.1957	0.092	0.002	0.00017	6.9	0.267	0.0077	0.042	2.26	6.5	0.0034	5.5	0.00002	3.4	102	0.00004	0.064	171
19	1.369	0.00047	0.0037	0.014	0.0012	17	0.022	0.00039	34.5	1.7	0.0008	0.0235	0.1961	0.090	0.002	0.00017	7.1	0.281	0.0081	0.045	2.19	6.6	0.0036	5.4	0.00001	3.5	107	0.00004	0.067	177
20	1.438	0.00048	0.0036	0.014	0.0012	16	0.022	0.00041	35.7	1.6	0.0008	0.0247	0.1966	0.087	0.002	0.00017	7.2	0.294	0.0084	0.047	2.13	6.8	0.0038	5.3	0.00001	3.5	113	0.00004	0.071	184
21	1.490	0.00049	0.0035	0.014	0.0012	16	0.021	0.00042	36.7	1.6	0.0008	0.0256	0.1971	0.085	0.002	0.00018	7.3	0.305	0.0087	0.049	2.08	6.9	0.0039	5.3	0.00001	3.5	117	0.00004	0.073	188
22	1.521	0.00049	0.0035	0.014	0.0013	15	0.021	0.00043	37.2	1.6	0.0008	0.0261	0.1973	0.084	0.002	0.00018	7.4	0.311	0.0088	0.050	2.05	6.9	0.0040	5.2	0.00001	3.5	119	0.00004	0.075	191
23	1.554	0.00049	0.0034	0.014	0.0013	15	0.021	0.00044	37.8	1.5	0.0008	0.0267	0.1976	0.083	0.002	0.00018	7.5	0.318	0.0090	0.051	2.02	7.0	0.0041	5.2	0.00001	3.6	121	0.00005	0.076	194
24	1.586	0.00050	0.0034	0.014	0.0013	15	0.020	0.00045	38.4	1.5	0.0008	0.0272	0.1980	0.082	0.002	0.00018	7.5	0.324	0.0092	0.052	1.99	7.0	0.0041	5.2	0.00001	3.6	124	0.00005	0.078	197
25	1.618	0.00050	0.0033	0.014	0.0013	14	0.020	0.00046	39.0	1.5	0.0008	0.0278	0.1983	0.080	0.002	0.00018	7.6	0.330	0.0093	0.053	1.96	7.1	0.0042	5.1	0.00001	3.6	126	0.00005	0.080	200
26	1.650	0.00051	0.0033	0.014	0.0013	14	0.020	0.00047	39.5	1.5	0.0008	0.0283	0.1987	0.079	0.002	0.00018	7.7	0.337	0.0095	0.054	1.93	7.2	0.0043	5.1	0.00001	3.6	129	0.00005	0.081	203
27	1.682	0.00051	0.0032	0.014	0.0013	14	0.020	0.00048	40.1	1.5	0.0007	0.0289	0.1991	0.078	0.002	0.00019	7.7	0.343	0.0096	0.055	1.90	7.2	0.0044	5.0	0.00001	3.6	131	0.00005	0.083	206
28	1.711	0.00052	0.0032	0.014	0.0014	13	0.019	0.00049	40.7	1.4	0.0007	0.0294	0.1995	0.077	0.002	0.00019	7.8	0.349	0.0098	0.056	1.87	7.3	0.0045	5.0	0.00001	3.7	134	0.00005	0.084	209
29	1.696	0.00052	0.0031	0.014	0.0014	13	0.019	0.00049	41.3	1.4	0.0007	0.0300	0.1997	0.075	0.002	0.00019	7.9	0.356	0.0099	0.057	1.84	7.3	0.0045	5.0	0.00001	3.7	136	0.00005	0.086	211
30	1.661	0.00052	0.0031	0.014	0.0014	13	0.019	0.00050	41.8	1.4	0.0007	0.0305	0.1998	0.074	0.002	0.00019	7.9	0.362	0.0101	0.058	1.81	7.3	0.0046	4.9	0.00001	3.7	138	0.00005	0.088	214
31	1.628	0.00053	0.0030	0.014	0.0014	13	0.019	0.00051	42.4	1.4	0.0007	0.0311	0.1999	0.073	0.002	0.00019	8.0	0.369	0.0103	0.059	1.79	7.4	0.0047	4.9	0.00001	3.7	140	0.00005	0.089	217
32	1.593	0.00053	0.0030	0.014	0.0014	13	0.018	0.00052	42.9	1.3	0.0007	0.0316	0.2000	0.072	0.002	0.00019	8.1	0.375	0.0104	0.060	1.75	7.4	0.0048	4.8	0.00001	3.7	143	0.00005	0.091	220
33	1.558	0.00054	0.0029	0.014	0.0014	13	0.018	0.00053	43.5	1.3	0.0007	0.0322	0.2002	0.070	0.002	0.00019	8.1	0.381	0.0105	0.061	1.72	7.4	0.0048	4.8	0.00001	3.7	145	0.00005	0.092	222
34	1.526	0.00054	0.0029	0.014	0.0014	13	0.018	0.00054	44.0	1.3	0.0007	0.0327	0.2003	0.069	0.002	0.00020	8.2	0.387	0.0107	0.062	1.69	7.4	0.0049	4.8	0.00001	3.8	147	0.00005	0.094	225
35	1.493	0.00055	0.0028	0.014	0.0015	13	0.017	0.00055	44.6	1.3	0.0007	0.0333	0.2004	0.068	0.002	0.00020	8.3	0.393	0.0109	0.063	1.66	7.5	0.0050	4.7	0.00001	3.8	149	0.00005	0.095	228
36	1.466	0.00055	0.0028	0.014	0.0015	13	0.017	0.00056	45.4	1.3	0.0007	0.0339	0.2005	0.067	0.002	0.00020	8.4	0.401	0.0111	0.064	1.64	7.5	0.0051	4.7	0.00001	3.8	152	0.00005	0.097	232
37	1.427	0.00055	0.0027	0.014	0.0015	12	0.017	0.00056	45.7	1.2	0.0007	0.0343	0.2007	0.065	0.002	0.00020	8.4	0.405	0.0112	0.065	1.60	7.5	0.0052	4.6	0.00001	3.8	154	0.00005	0.098	233
38	1.398	0.00056	0.0027	0.014	0.0015	12	0.017	0.00057	46.3	1.2	0.0007	0.0349	0.2008	0.064	0.002	0.00020	8.5	0.412	0.0113	0.066	1.57	7.5	0.0052	4.6	0.00001	3.8	156	0.00005	0.100	237
39	1.370	0.00056	0.0027	0.014	0.0015	12	0.016	0.00058	47.0	1.2	0.0007	0.0355	0.2010	0.063	0.002	0.00020	8.6	0.420	0.0115	0.067	1.55	7.6	0.0053	4.6	0.00001	3.8	159	0.00006	0.102	240
40	1.340	0.00057	0.0026	0.014	0.0015	12	0.016	0.00059	47.6	1.2	0.0007	0.0361	0.2011	0.062	0.002	0.00021	8.6	0.427	0.0117	0.069	1.52	7.6	0.0054	4.5	0.00001	3.9	161	0.00006	0.104	243
41	1.309	0.00057	0.0026	0.014	0.0016	12	0.016	0.00060	48.2	1.1	0.0007	0.0367	0.2012	0.061	0.002	0.00021	8.7	0.433	0.0118	0.070	1.49	7.6	0.0055	4.5	0.00001	3.9	163	0.00006	0.105	246
42	1.309	0.02210	0.0188	0.014	0.0016	26	0.923	0.01584	517.6	103.5	0.0538	0.2248	0.2012	2.373	0.002	0.00358	270.5	3.992	0.9949	0.273	1.49	278.7	0.3377	4.5	0.06460	118.5	2736	0.00431	3.472	4066
43	1.309	0.02213	0.0188	0.014	0.0016	26	0.924	0.01585	517.5	103.5	0.0538	0.2249	0.2012	2.373	0.002	0.00359	271.0	3.992	0.9951	0.273	1.49	278.8	0.3378	4.5	0.06460	118.5	2738	0.00431	3.474	4069
44	1.309	0.02215	0.0189	0.014	0.0016	26	0.925	0.01585	517.4	103.5	0.0538	0.2250	0.2012	2.373	0.002	0.00359	271.5	3.992	0.9954	0.273	1.49	279.0	0.3380	4.5	0.06460	118.5	2740	0.00431	3.475	4071
45	1.309	0.02218	0.0189	0.014	0.0016	26	0.926	0.01586	517.4	103.5	0.0538	0.2252	0.2012	2.373	0.002	0.00360	271.9	3.992	0.9956	0.273	1.49	279.1	0.3381	4.5	0.06460	118.5	2742	0.00431	3.477	4073
46	1.309	0.02220	0.0189	0.014	0.0016	26	0.927	0.01586	517.3	103.5	0.0538	0.2253	0.2012	2.373	0.002	0.00360	272.3	3.992	0.9957	0.274	1.49	279.2	0.3382	4.5	0.06460	118.5	2743	0.00431	3.478	4075
47	1.309	0.02221	0.0189	0.014	0.0016	26	0.927	0.01586	517.3	103.5	0.0538	0.2253	0.2012	2.373	0.002	0.00360	272.5	3.992	0.9958	0.274	1.49	279.3	0.3383	4.5	0.06460	118.5	2744	0.00431	3.478	4076
48	1.309	0.02224	0.0190	0.014	0.0016	26	0.928	0.01587	517.2	103.4	0.0538	0.2254	0.2012	2.373	0.002	0.00361	272.9	3.992	0.9960	0.274	1.49	279.5	0.3384	4.5	0.06460	118.5	2746	0.00431	3.479	4079
49	1.309	0.02226	0.0190	0.014	0.0016	26	0.930	0.01587	517.1	103.4	0.0538	0.2256	0.2012	2.373	0.002	0.00361	273.4	3.992	0.9962	0.274	1.49	279.6	0.3385	4.5	0.06460	118.5	2748	0.00431	3.481	4081
50	1.309	0.02229	0.0190	0.014	0.0016	26	0.930	0.01588	517.0	103.4	0.0538	0.2257	0.2012	2.373	0.002	0.00362	273.8	3.992	0.9963	0.274	1.49	279.7	0.3386	4.5	0.06460	118.5	2749	0.00431	3.482	4083
51	1.309	0.02231	0.0191	0.014	0.0016	26	0.931	0.01588	517.0	103.4	0.0538	0.2258	0.2012	2.373	0.002	0.00362	274.2	3.992	0.9965	0.275	1.49	279.8	0.3387	4.5	0.06459	118.5	2751	0.00430	3.483	4085
52	1.309	0.02232	0.0191	0.014	0.0016	26	0.932	0.01588	517.0	103.4	0.0538	0.2258	0.2012	2.373	0.002	0.00362	274.3	3.992	0.9965	0.275	1.49	279.9	0.3387	4.5	0.06459	118.5	2751	0.00430	3.483	4086
53	1.309	0.02234	0.0191	0.014	0.0016	26	0.933	0.01588	516.9	103.4	0.0538	0.2259	0.2012	2.373	0.002	0.00363	274.8	3.991	0.9966	0.275	1.49	280.0	0.3388	4.5	0.06459	118.5	2753	0.00430	3.484	4088
54	1.309	0.02236	0.0192	0.014	0.0016	26	0.934	0.01589	516.8	103.4	0.0538	0.2261	0.2012	2.372	0.002	0.00363	275.2	3.991	0.9967	0.275	1.49	280.1	0.3389	4.5	0.06458	118.5	2755	0.00430	3.485	4090
55	1.309	0.02239	0.0192	0.014	0.0016	26	0.934	0.01589	516.8	103.4	0.0538	0.2261	0.2012	2.372	0.002	0.00364	275.6	3.991	0.9968	0.275	1.49	280.2	0.3390	4.5	0.06457	118.5	2756	0.00430	3.486	4092
56	1.309	0.02240	0.0192	0.014	0.0016	26	0.935	0.01589	516.7	103.4	0.0538	0.2262	0.2012	2.372	0.002	0.00364	275.9	3.990	0.9969	0.275	1.49	280.3	0.3391	4.5	0.06457	118.5	2757	0.00430	3.487	4093
57	1.309	0.02241	0.0192	0.014	0.0016	26	0.935	0.01589	516.7	103.4	0.0538	0.2263	0.2012	2.372	0.002	0.00364	276.0	3.990	0.9969	0.275	1.49	280.4	0.3391	4.5	0.06457	118.5	2758	0.00430	3.487	4094
58	1.309	0.02243	0.0192	0.014	0.0016	26	0.936	0.01589	516.6	103.4	0.0538	0.2263	0.2012	2.371	0.002	0.00364	276.4	3.989	0.9969	0.276	1.49	280.4	0.3392	4.5	0.06455	118.4	2759	0.00430	3.488	4096
59	1.309	0.02245	0.0193	0.014	0.0016	26	0.937	0.01590	516.6	103.3	0.0538	0.2264	0.2012	2.371	0.002	0.00365	276.7	3.989	0.9968	0.276	1.49	280.5	0.3392	4.5	0.06454	118.4	2760	0.00430	3.488	4097
60	1.309	0.02247	0.0193	0.014	0.0016	26	0.938	0.01590	516.5	103.3	0.0538	0.2265	0.2012	2.370	0.002	0.00365	277.1	3.988	0.9968	0.276	1.49	280.6	0.3392	4.5	0.06452	118.4	2762	0.00430	3.488	4099
61	1.309	0.02248	0.0193	0.014	0.0016	26	0.938	0.01590	516.5	103.3	0.0537	0.2265	0.2012	2.370	0.002	0.00365	277.4	3.987	0.9968	0.276	1.49	280.6	0.3393	4.5	0.06451	118.4	2763	0.00430	3.489	4100
62	1.309	0.02249	0.0193	0.014	0.0016	26	0.938	0.01590	516.5	103.3	0.0537	0.2265	0.2012	2.370	0.002	0.00366	277.5	3.987	0.9967	0.276	1.49	280.7	0.3393	4.5	0.06450	118.3	2763	0.00430	3.489	4101
63	1.309	0.02250	0.0194	0.014	0.0016	26	0.939	0.01590	516.4	103.2	0.0537	0.2266	0.2012	2.369	0.002	0.00366	277.8	3.985	0.9965	0.276	1.49	280.7	0.3393	4.5	0.06448	118.3	2764	0.00430	3.489	4102
64	1.309	0.02251	0.0194	0.014	0.0016	26	0.940	0.01589	516.4	103.2	0.0537	0.2266	0.2012	2.368	0.002	0.00366	278.1	3.983	0.9963	0.276	1.49	280.7	0.3392	4.5	0.06445	118.2	2765	0.00430	3.488	4103
65	1.309	0.02253	0.0194	0.014	0.0016	26	0.940	0.01589	516.4	103.2	0.0537	0.2266	0.2012	2.367	0.002	0.00366	278.4	3.982	0.9961	0.276	1.49	280.7	0.3392	4.5	0.06443	118.2	2766	0.00429	3.488	4105
66	1.309	0.02254	0.0194	0.014	0.0016	26	0.940	0.01589	516.3	103.1	0.0537	0.2266	0.2012	2.366	0.002	0.00367	278.6	3.980	0.9959	0.276	1.49	280.7	0.3392	4.5	0.06440	118.2	2767	0.00429	3.488	4105

Table 5. Tailings Seepage Concentrations - Alternative 4

Years since Mine Start	Al mg/L	Sb mg/L	As mg/L	Ba mg/L	Be mg/L	HCO3 mg/L	B mg/L	Cd mg/L	Ca mg/L	Cl mg/L	Cr mg/L	Co mg/L	Cu mg/L	F mg/L	Fe mg/L	Pb mg/L	Mg mg/L	Mn mg/L	Mo mg/L	Ni mg/L	NO3-N mg/L	K mg/L	Se mg/L	Si mg/L	Ag mg/L	Na mg/L	SO4 mg/L	Tl mg/L	Zn mg/L	TDS mg/L
67	1.309	0.02255	0.0194	0.014	0.0016	26	0.941	0.01589	516.3	103.1	0.0536	0.2266	0.2012	2.365	0.002	0.00367	278.7	3.980	0.9957	0.276	1.49	280.7	0.3392	4.5	0.06439	118.1	2768	0.00429	3.488	4106
68	1.309	0.02255	0.0195	0.014	0.0016	26	0.941	0.01588	516.3	103.0	0.0536	0.2266	0.2012	2.364	0.002	0.00367	278.9	3.977	0.9953	0.276	1.49	280.7	0.3390	4.5	0.06435	118.1	2768	0.00429	3.486	4106
69	1.309	0.02256	0.0195	0.014	0.0016	26	0.941	0.01588	516.3	103.0	0.0536	0.2265	0.2012	2.362	0.002	0.00367	279.1	3.975	0.9948	0.276	1.49	280.6	0.3389	4.5	0.06431	118.0	2769	0.00429	3.485	4107
70	1.309	0.02256	0.0195	0.014	0.0016	26	0.941	0.01587	516.3	102.9	0.0535	0.2265	0.2012	2.361	0.002	0.00367	279.3	3.972	0.9943	0.276	1.49	280.6	0.3388	4.5	0.06427	117.9	2769	0.00428	3.484	4108
71	1.309	0.02257	0.0195	0.014	0.0016	26	0.942	0.01586	516.3	102.8	0.0535	0.2265	0.2012	2.359	0.002	0.00367	279.4	3.970	0.9939	0.276	1.49	280.5	0.3387	4.5	0.06423	117.8	2770	0.00428	3.483	4108
72	1.309	0.02257	0.0195	0.014	0.0016	26	0.942	0.01586	516.3	102.8	0.0535	0.2265	0.2012	2.359	0.002	0.00367	279.5	3.969	0.9937	0.276	1.49	280.5	0.3387	4.5	0.06421	117.8	2770	0.00428	3.483	4108
73	1.309	0.02257	0.0195	0.014	0.0016	26	0.942	0.01585	516.3	102.7	0.0534	0.2263	0.2012	2.356	0.002	0.00367	279.6	3.965	0.9929	0.276	1.49	280.3	0.3385	4.5	0.06415	117.7	2770	0.00427	3.480	4108
74	1.309	0.02257	0.0195	0.014	0.0016	26	0.942	0.01584	516.3	102.6	0.0534	0.2262	0.2012	2.354	0.002	0.00367	279.7	3.961	0.9921	0.276	1.49	280.2	0.3382	4.5	0.06409	117.6	2770	0.00427	3.478	4108
75	1.309	0.02257	0.0195	0.014	0.0016	26	0.942	0.01583	516.3	102.5	0.0533	0.2261	0.2012	2.352	0.002	0.00367	279.8	3.957	0.9913	0.276	1.49	280.0	0.3380	4.5	0.06403	117.5	2770	0.00427	3.476	4108
76	1.309	0.02257	0.0196	0.014	0.0016	26	0.942	0.01582	516.3	102.4	0.0533	0.2260	0.2012	2.350	0.002	0.00367	279.9	3.954	0.9906	0.276	1.49	279.9	0.3378	4.5	0.06398	117.4	2771	0.00426	3.474	4108
77	1.309	0.02257	0.0196	0.014	0.0016	26	0.941	0.01581	516.3	102.4	0.0533	0.2260	0.2012	2.349	0.002	0.00367	279.9	3.953	0.9903	0.276	1.49	279.8	0.3377	4.5	0.06395	117.3	2770	0.00426	3.473	4107
78	1.309	0.02256	0.0196	0.014	0.0016	26	0.941	0.01580	516.4	102.3	0.0532	0.2258	0.2012	2.346	0.002	0.00367	279.9	3.948	0.9892	0.276	1.49	279.6	0.3374	4.5	0.06387	117.2	2770	0.00426	3.470	4107
79	1.309	0.02255	0.0196	0.014	0.0016	26	0.941	0.01578	516.4	102.1	0.0531	0.2256	0.2012	2.343	0.002	0.00367	279.9	3.943	0.9881	0.276	1.49	279.3	0.3371	4.5	0.06379	117.0	2770	0.00425	3.466	4106
80	1.309	0.02254	0.0196	0.014	0.0016	26	0.940	0.01576	516.4	102.0	0.0531	0.2254	0.2012	2.340	0.002	0.00367	279.9	3.937	0.9869	0.275	1.49	279.1	0.3367	4.5	0.06370	116.9	2769	0.00424	3.463	4105
81	1.309	0.02254	0.0196	0.014	0.0016	26	0.940	0.01575	516.5	101.9	0.0530	0.2253	0.2012	2.337	0.002	0.00367	279.9	3.933	0.9860	0.275	1.49	278.9	0.3364	4.5	0.06363	116.7	2769	0.00424	3.460	4104
82	1.309	0.02253	0.0196	0.014	0.0016	26	0.940	0.01574	516.5	101.8	0.0530	0.2252	0.2012	2.336	0.002	0.00367	279.9	3.931	0.9855	0.275	1.49	278.8	0.3363	4.5	0.06360	116.7	2769	0.00424	3.458	4104
83	1.309	0.02251	0.0196	0.014	0.0016	26	0.939	0.01572	516.6	101.7	0.0529	0.2249	0.2012	2.332	0.002	0.00367	279.8	3.925	0.9841	0.275	1.49	278.5	0.3358	4.5	0.06349	116.5	2768	0.00423	3.454	4102
84	1.309	0.02250	0.0196	0.014	0.0016	26	0.938	0.01570	516.6	101.5	0.0528	0.2246	0.2012	2.328	0.002	0.00367	279.7	3.918	0.9826	0.275	1.49	278.1	0.3354	4.5	0.06339	116.3	2767	0.00422	3.449	4101
85	1.309	0.02248	0.0196	0.014	0.0016	26	0.938	0.01568	516.7	101.3	0.0527	0.2244	0.2012	2.324	0.002	0.00366	279.6	3.912	0.9811	0.274	1.49	277.8	0.3349	4.5	0.06328	116.1	2766	0.00422	3.444	4099
86	1.309	0.02246	0.0195	0.014	0.0016	26	0.937	0.01566	516.8	101.2	0.0526	0.2241	0.2012	2.321	0.002	0.00366	279.5	3.906	0.9799	0.274	1.49	277.5	0.3345	4.5	0.06319	115.9	2766	0.00421	3.440	4097
87	1.309	0.02245	0.0195	0.014	0.0016	26	0.936	0.01565	516.8	101.1	0.0526	0.2240	0.2012	2.319	0.002	0.00366	279.4	3.903	0.9792	0.274	1.49	277.3	0.3343	4.5	0.06315	115.8	2765	0.00421	3.438	4097
88	1.309	0.02243	0.0195	0.014	0.0016	26	0.936	0.01562	516.9	100.9	0.0525	0.2237	0.2012	2.315	0.002	0.00366	279.2	3.896	0.9775	0.274	1.49	276.9	0.3338	4.5	0.06302	115.6	2764	0.00420	3.432	4095
89	1.309	0.02241	0.0195	0.014	0.0016	26	0.934	0.01559	517.0	100.7	0.0524	0.2233	0.2012	2.310	0.002	0.00365	279.0	3.888	0.9757	0.273	1.49	276.5	0.3332	4.5	0.06290	115.4	2763	0.00419	3.427	4092
90	1.309	0.02238	0.0195	0.014	0.0016	26	0.933	0.01557	517.0	100.5	0.0523	0.2230	0.2012	2.305	0.002	0.00365	278.8	3.880	0.9738	0.273	1.49	276.0	0.3326	4.5	0.06277	115.1	2761	0.00418	3.421	4090
91	1.309	0.02236	0.0195	0.014	0.0016	26	0.932	0.01554	517.1	100.3	0.0522	0.2227	0.2012	2.302	0.002	0.00365	278.6	3.874	0.9724	0.272	1.49	275.6	0.3322	4.5	0.06267	115.0	2760	0.00418	3.416	4088
92	1.309	0.02235	0.0195	0.014	0.0016	26	0.932	0.01553	517.2	100.2	0.0522	0.2225	0.2012	2.300	0.002	0.00364	278.5	3.870	0.9716	0.272	1.49	275.4	0.3319	4.5	0.06261	114.9	2759	0.00417	3.413	4086
93	1.309	0.02232	0.0195	0.014	0.0016	26	0.931	0.01550	517.3	100.0	0.0520	0.2221	0.2012	2.294	0.002	0.00364	278.2	3.862	0.9695	0.272	1.49	274.9	0.3313	4.5	0.06247	114.6	2758	0.00416	3.407	4084
94	1.309	0.02229	0.0195	0.014	0.0016	26	0.929	0.01547	517.4	99.8	0.0519	0.2217	0.2012	2.289	0.002	0.00363	277.9	3.853	0.9674	0.271	1.49	274.4	0.3306	4.5	0.06232	114.3	2756	0.00415	3.400	4081
95	1.309	0.02225	0.0194	0.014	0.0016	26	0.928	0.01544	517.5	99.6	0.0518	0.2213	0.2012	2.284	0.002	0.00363	277.6	3.844	0.9654	0.271	1.49	273.9	0.3299	4.5	0.06218	114.1	2754	0.00414	3.393	4077
96	1.309	0.02223	0.0194	0.014	0.0016	26	0.927	0.01541	517.6	99.3	0.0517	0.2209	0.2012	2.279	0.002	0.00363	277.4	3.836	0.9635	0.271	1.49	273.4	0.3293	4.5	0.06206	113.8	2753	0.00413	3.387	4075
97	1.309	0.02221	0.0194	0.014	0.0016	26	0.926	0.01540	517.7	99.3	0.0516	0.2207	0.2012	2.277	0.002	0.00362	277.2	3.833	0.9627	0.270	1.49	273.2	0.3291	4.5	0.06200	113.7	2752	0.00413	3.384	4073
98	1.309	0.02217	0.0194	0.014	0.0016	26	0.925	0.01536	517.8	99.0	0.0515	0.2203	0.2012	2.271	0.002	0.00362	276.8	3.823	0.9604	0.270	1.49	272.6	0.3283	4.5	0.06184	113.4	2749	0.00412	3.376	4070
99	1.309	0.02214	0.0194	0.014	0.0016	26	0.923	0.01532	517.9	98.7	0.0514	0.2198	0.2012	2.265	0.002	0.00361	276.5	3.813	0.9580	0.269	1.49	272.0	0.3276	4.5	0.06168	113.1	2747	0.00411	3.369	4066
100	1.309	0.02210	0.0193	0.014	0.0016	26	0.921	0.01529	518.1	98.5	0.0512	0.2193	0.2012	2.259	0.002	0.00361	276.1	3.803	0.9557	0.269	1.49	271.4	0.3268	4.5	0.06152	112.8	2745	0.00410	3.361	4063
101	1.309	0.02207	0.0193	0.014	0.0016	26	0.920	0.01526	518.2	98.3	0.0511	0.2189	0.2012	2.254	0.002	0.00360	275.8	3.795	0.9537	0.268	1.49	270.9	0.3262	4.5	0.06138	112.6	2743	0.00409	3.354	4060
102	1.309	0.02205	0.0193	0.014	0.0016	26	0.919	0.01524	518.3	98.2	0.0511	0.2187	0.2012	2.252	0.002	0.00360	275.5	3.791	0.9528	0.268	1.49	270.7	0.3259	4.5	0.06132	112.5	2742	0.00409	3.351	4058
103	1.309	0.02201	0.0193	0.014	0.0016	26	0.917	0.01520	518.4	97.9	0.0509	0.2182	0.2012	2.246	0.002	0.00359	275.2	3.780	0.9502	0.267	1.49	270.0	0.3250	4.5	0.06114	112.2	2740	0.00407	3.343	4054
104	1.309	0.02196	0.0193	0.014	0.0016	26	0.916	0.01516	518.6	97.6	0.0508	0.2177	0.2012	2.239	0.002	0.00359	274.7	3.770	0.9478	0.267	1.49	269.4	0.3242	4.5	0.06098	111.8	2737	0.00406	3.334	4050
105	1.309	0.02192	0.0192	0.014	0.0016	26	0.914	0.01513	518.7	97.3	0.0506	0.2172	0.2012	2.233	0.002	0.00358	274.3	3.759	0.9452	0.266	1.49	268.7	0.3234	4.5	0.06080	111.5	2735	0.00405	3.326	4046
106	1.309	0.02188	0.0192	0.014	0.0016	26	0.912	0.01509	518.8	97.1	0.0505	0.2167	0.2012	2.227	0.002	0.00357	273.9	3.750	0.9430	0.266	1.49	268.2	0.3227	4.5	0.06065	111.2	2733	0.00404	3.318	4043
107	1.309	0.02186	0.0192	0.014	0.0016	26	0.911	0.01508	518.9	97.0	0.0505	0.2165	0.2012	2.225	0.002	0.00357	273.7	3.746	0.9420	0.265	1.49	267.9	0.3223	4.5	0.06058	111.1	2732	0.00404	3.315	4041
108	1.309	0.02182	0.0192	0.014	0.0016	26	0.909	0.01504	519.1	96.7	0.0503	0.2160	0.2012	2.219	0.002	0.00356	273.2	3.735	0.9394	0.265	1.49	267.2	0.3215	4.5	0.06041	110.8	2729	0.00402	3.306	4037
109	1.309	0.02177	0.0191	0.014	0.0016	26	0.908	0.01499	519.2	96.4	0.0502	0.2154	0.2012	2.212	0.002	0.00356	272.7	3.724	0.9368	0.264	1.49	266.5	0.3206	4.5	0.06023	110.5	2727	0.00401	3.298	4032
110	1.309	0.02173	0.0191	0.014	0.0016	26	0.906	0.01495	519.4	96.1	0.0500	0.2149	0.2012	2.205	0.002	0.00355	272.3	3.713	0.9341	0.264	1.49	265.9	0.3198	4.5	0.06005	110.1	2724	0.00400	3.289	4028
111	1.309	0.02169	0.0191	0.014	0.0016	26	0.904	0.01492	519.5	95.9	0.0499	0.2144	0.2012	2.200	0.002	0.00354	271.9	3.703	0.9319	0.263	1.49	265.3	0.3191	4.5	0.05990	109.9	2722	0.00399	3.281	4025
112	1.309	0.02167	0.0191	0.014	0.0016	26	0.903	0.01490	519.6	95.8	0.0498	0.2142	0.2012	2.197	0.002	0.00354	271.7	3.699	0.9307	0.263	1.49	265.0	0.3187	4.5	0.05982	109.7	2721	0.00399	3.277	4023
113	1.309	0.02162	0.0190	0.014	0.0016	26	0.901	0.01486	519.8	95.5	0.0497	0.2137	0.2012	2.190	0.002	0.00353	271.2	3.688	0.9281	0.262	1.49	264.3	0.3178	4.5	0.05964	109.4	2718	0.00397	3.269	4018
114	1.309	0.02158	0.0190	0.014	0.0016	26	0.899	0.01482	520.0	95.2	0.0495	0.2131	0.2012	2.183	0.002	0.00353	270.7	3.677	0.9254	0.262	1.49	263.6	0.3169	4.5	0.05946	109.1	2715	0.00396	3.259	4014
115	1.309	0.02153	0.0190	0.014	0.0016	26	0.897	0.01478	520.1	94.9	0.0494	0.2125	0.2012	2.177	0.002	0.00352	270.2	3.665	0.9227	0.261	1.49	262.9	0.3161	4.5	0.05927	108.7	2713	0.00395	3.250	4010
116	1.309	0.02149	0.0190	0.014	0.0016	26	0.896	0.01474	520.3	94.6	0.0492	0.2121	0.2012	2.171	0.002	0.00351	269.8	3.656	0.9204	0.260	1.49	262.3	0.3153	4.5	0.05912	108.4	2710	0.00394	3.243	4006
117	1.309	0.02147	0.0189	0.014	0.0016	26	0.895	0.01472	520.3	94.5	0.0492	0.2118	0.2012	2.168	0.002	0.00351	269.6	3.651	0.9193	0.260	1.49	262.0	0.3150	4.5	0.05904	108.3	2709	0.00393	3.239	4004
118	1.309	0.02143	0.0189	0.014	0.0016	26	0.893	0.01468	520.5	94.2	0.0490	0.2113	0.2012	2.162	0.002	0.00350	269.2	3.641	0.9167	0.260	1.49	261.4	0.3141	4.5	0.05886	108.0	2707	0.00392	3.230	4000
119	1.309	0.02138	0.0189	0.014	0.0016	26	0.891	0.01464	520.7	93.9	0.0489	0.2107	0.2012	2.154	0.002	0.00350	268.7	3.629	0.9139	0.259	1.49	260.6	0.3132	4.5	0.05867	107.6	2704	0.00391	3.221	3996
120	1.309	0.02134	0.0189	0.014	0.0016	26	0.889	0.01460	520.8	93.7	0.0487	0.2102	0.2012	2.148	0.002	0.00349	268.2	3.619	0.9114	0.258	1.49	260.0	0.3124	4.5	0.05850	107.3	2702	0.00390	3.213	3992
121	1.309	0.02130	0.0188	0.014	0.0016	26	0.888	0.01456	521.0	93.4	0.0486	0.2097	0.2012	2.142	0.002	0.00348	267.9	3.609	0.9090	0.258	1.49	259.4	0.3116	4.5	0.05834	107.0	2700	0.00389	3.205	3988
122	1.309	0.02129	0.0188	0.014	0.0016	26	0.887	0.01455	521.0	93.3	0.0485	0.2096	0.2012	2.140	0.002	0.00348	267.8	3.605	0.9081	0.258	1.49	259.1	0.3113	4.5	0.05827	106.9	2699	0.00388	3.202	3987
123	1.309	0.02124	0.0188	0.014	0.0016	26	0.885	0.01451	521.2	93.0	0.0484	0.2090	0.2012	2.133	0.002	0.00347	267.3	3.594	0.9054	0.257	1.49	258.5	0.3105	4.5	0.05809	106.5	2696	0.00387	3.193	3983
124	1.309	0.02120	0.0188	0.014	0.0016	26	0.883	0.01447	521.4	92.7	0.0482	0.2085	0.2012	2.126	0.002	0.00347	266.9	3.582	0.9026	0.256	1.49	257.8	0.3096	4.5	0.05790	106.2	2694	0.00386	3.184	3979
125	1.309	0.02116	0.0187	0.014	0.0016	26	0.882	0.01443	521.5	92.4	0.0481	0.2079	0.2012	2.120	0.002	0.00346	266.5	3.571	0.9001	0.256	1.49	257.1	0.3088	4.5	0.05773	105.9	2692	0.00385	3.175	3975
126	1.309	0.02113	0.0187	0.014	0.0016	26	0.880	0.01440	521.7	92.2	0.0480	0.2075	0.2012	2.115	0.002	0.00346	266.2	3.563	0.8981	0.255	1.49	256.6	0.3081	4.5	0.05759	105.6	2690	0.00384	3.169	3972
127	1.309	0.02111	0.0187	0.014	0.0016	26	0.880	0.01438	521.7	92.1	0.0479	0.2073	0.2012	2.112	0.002	0.00345	266.1	3.558	0.8970	0.255	1.49	256.4	0.3078	4.5	0.05751	105.5	2689	0.00383	3.165	3971
128	1.309	0.02107	0.0187	0.014	0.0016	26	0.878	0.01434	521.9	91.8	0.0477	0.2068	0.2012	2.105	0.002	0.00345	265.7	3.548	0.8945	0.255	1.49	255.7	0.3070	4.5	0.05734	105.2	2687	0.00382	3.157	3967
129	1.309	0.02103	0.0187	0.014	0.0016	26	0.876	0.01430	522.0	91.5	0.0476	0.2063	0.2012	2.099	0.002	0.00344	265.4	3.537	0.8919	0.254	1.49	255.1	0.3061	4.5	0.05716	104.8	2685	0.00381	3.149	3963
130	1.309	0.02100	0.0187	0.014	0.0016	26	0.875	0.01426	522.2	91.2	0.0475	0.2058	0.2012	2.092	0.002	0.00344	265.0	3.526	0.8894	0.253	1.49	254.4	0.3053	4.5	0.05698	104.5	2683	0.00380	3.140	3960
131	1.309	0.02097	0.0186	0.014	0.0016	26	0.873	0.01424	522.3	91.0	0.0474	0.2055	0.2012	2.088	0.002	0.00343	264.8	3.519	0.8876	0.253	1.49	254.0	0.3048	4.5	0.05686	104.3	2681	0.00379	3.134	3957
132	1.309	0.02096	0.0186	0.014	0.0016	26	0.873	0.01422	522.3	90.9	0.0473	0.2053	0.2012	2.085	0.002	0.00343	264.7	3.514	0.8865	0.253	1.49	253.7	0.3044	4.5	0.05678	104.1	2681	0.00378	3.131	3956

Table 5. Tailings Seepage Concentrations - Alternative 4

Years since Mine Start	Al mg/L	Sb mg/L	As mg/L	Ba mg/L	Be mg/L	HCO3 mg/L	B mg/L	Cd mg/L	Ca mg/L	Cl mg/L	Cr mg/L	Co mg/L	Cu mg/L	F mg/L	Fe mg/L	Pb mg/L	Mg mg/L	Mn mg/L	Mo mg/L	Ni mg/L	NO3-N mg/L	K mg/L	Se mg/L	Si mg/L	Ag mg/L	Na mg/L	SO4 mg/L	Tl mg/L	Zn mg/L	TDS mg/L
133	1.309	0.02092	0.0186	0.014	0.0016	26	0.872	0.01418	522.5	90.6	0.0471	0.2048	0.2012	2.079	0.002	0.00343	264.4	3.504	0.8841	0.252	1.49	253.2	0.3037	4.5	0.05661	103.8	2679	0.00377	3.123	3953
134	1.309	0.02089	0.0186	0.014	0.0016	26	0.870	0.01415	522.6	90.4	0.0470	0.2043	0.2012	2.072	0.002	0.00342	264.1	3.493	0.8817	0.252	1.49	252.6	0.3029	4.5	0.05644	103.5	2677	0.00376	3.115	3950
135	1.309	0.02086	0.0186	0.014	0.0016	26	0.869	0.01411	522.7	90.1	0.0469	0.2039	0.2012	2.066	0.002	0.00342	263.8	3.483	0.8793	0.251	1.49	252.0	0.3021	4.5	0.05628	103.2	2675	0.00375	3.107	3946
136	1.309	0.02083	0.0186	0.014	0.0016	26	0.868	0.01408	522.8	89.9	0.0468	0.2035	0.2012	2.062	0.002	0.00341	263.7	3.475	0.8775	0.251	1.49	251.5	0.3016	4.5	0.05615	103.0	2674	0.00374	3.102	3944
137	1.309	0.02083	0.0186	0.014	0.0016	26	0.867	0.01407	522.9	89.8	0.0467	0.2034	0.2012	2.059	0.002	0.00341	263.7	3.472	0.8767	0.251	1.49	251.4	0.3013	4.5	0.05609	102.9	2674	0.00374	3.099	3944
138	1.309	0.02080	0.0186	0.014	0.0016	26	0.866	0.01404	523.0	89.5	0.0466	0.2030	0.2012	2.054	0.002	0.00341	263.5	3.463	0.8746	0.250	1.49	250.8	0.3007	4.5	0.05594	102.6	2672	0.00373	3.092	3941
139	1.309	0.02077	0.0186	0.014	0.0016	26	0.865	0.01400	523.1	89.3	0.0464	0.2026	0.2012	2.048	0.002	0.00340	263.2	3.452	0.8722	0.250	1.49	250.3	0.2999	4.5	0.05577	102.3	2671	0.00371	3.085	3938
140	1.309	0.02074	0.0186	0.014	0.0016	26	0.864	0.01397	523.3	89.0	0.0463	0.2022	0.2012	2.042	0.002	0.00340	263.0	3.443	0.8701	0.249	1.49	249.8	0.2993	4.5	0.05562	102.0	2669	0.00370	3.078	3936
141	1.309	0.02072	0.0186	0.014	0.0016	26	0.863	0.01394	523.3	88.8	0.0462	0.2018	0.2012	2.038	0.002	0.00340	262.9	3.435	0.8683	0.249	1.49	249.4	0.2987	4.5	0.05550	101.8	2668	0.00370	3.072	3934
142	1.309	0.02072	0.0186	0.014	0.0016	26	0.863	0.01393	523.4	88.7	0.0461	0.2017	0.2012	2.035	0.002	0.00340	263.0	3.431	0.8674	0.249	1.49	249.2	0.2985	4.5	0.05542	101.6	2669	0.00369	3.070	3934
143	1.309	0.02070	0.0186	0.014	0.0016	26	0.862	0.01391	523.5	88.5	0.0460	0.2014	0.2012	2.030	0.002	0.00339	262.8	3.424	0.8657	0.249	1.49	248.8	0.2979	4.5	0.05530	101.4	2667	0.00368	3.064	3932
144	1.309	0.02067	0.0185	0.014	0.0016	26	0.861	0.01387	523.6	88.3	0.0459	0.2010	0.2012	2.025	0.002	0.00339	262.7	3.415	0.8637	0.248	1.49	248.3	0.2973	4.5	0.05516	101.1	2666	0.00367	3.058	3929
145	1.309	0.02065	0.0185	0.014	0.0016	26	0.860	0.01384	523.7	88.0	0.0458	0.2006	0.2012	2.020	0.002	0.00339	262.5	3.406	0.8616	0.248	1.49	247.8	0.2967	4.5	0.05501	100.9	2665	0.00366	3.051	3927
146	1.309	0.02063	0.0185	0.014	0.0016	26	0.859	0.01382	523.8	87.8	0.0457	0.2003	0.2012	2.015	0.002	0.00339	262.5	3.398	0.8598	0.248	1.49	247.4	0.2961	4.5	0.05488	100.6	2664	0.00365	3.045	3926
147	1.309	0.02064	0.0186	0.014	0.0016	26	0.859	0.01380	523.8	87.7	0.0456	0.2002	0.2012	2.012	0.002	0.00339	262.6	3.394	0.8589	0.247	1.49	247.2	0.2959	4.5	0.05481	100.5	2665	0.00365	3.043	3926
148	1.309	0.02062	0.0186	0.014	0.0016	26	0.858	0.01377	523.9	87.5	0.0455	0.1998	0.2012	2.007	0.002	0.00338	262.5	3.384	0.8569	0.247	1.49	246.8	0.2952	4.5	0.05466	100.2	2664	0.00364	3.037	3924
149	1.309	0.02059	0.0186	0.014	0.0016	26	0.857	0.01374	524.0	87.2	0.0454	0.1995	0.2012	2.001	0.002	0.00338	262.4	3.375	0.8548	0.247	1.49	246.3	0.2946	4.5	0.05451	100.0	2663	0.00363	3.030	3922
150	1.309	0.02057	0.0186	0.014	0.0016	26	0.856	0.01371	524.1	87.0	0.0453	0.1991	0.2012	1.996	0.002	0.00338	262.4	3.366	0.8527	0.246	1.49	245.8	0.2940	4.5	0.05436	99.7	2662	0.00362	3.024	3920
151	1.309	0.02056	0.0186	0.014	0.0016	26	0.856	0.01369	524.2	86.8	0.0452	0.1988	0.2012	1.991	0.002	0.00338	262.4	3.359	0.8510	0.246	1.49	245.5	0.2935	4.5	0.05424	99.4	2661	0.00361	3.018	3919
152	1.309	0.02057	0.0186	0.014	0.0016	26	0.856	0.01368	524.2	86.7	0.0451	0.1987	0.2012	1.989	0.002	0.00338	262.6	3.355	0.8503	0.246	1.49	245.3	0.2933	4.5	0.05417	99.3	2662	0.00361	3.016	3919
153	1.309	0.02055	0.0186	0.014	0.0016	26	0.855	0.01365	524.3	86.5	0.0450	0.1984	0.2012	1.984	0.002	0.00338	262.5	3.346	0.8484	0.246	1.49	244.9	0.2927	4.5	0.05404	99.1	2661	0.00360	3.011	3917
154	1.309	0.02053	0.0186	0.014	0.0016	26	0.854	0.01362	524.4	86.3	0.0449	0.1981	0.2012	1.979	0.002	0.00337	262.5	3.339	0.8467	0.245	1.49	244.5	0.2922	4.5	0.05391	98.9	2661	0.00359	3.005	3916
155	1.309	0.02051	0.0186	0.014	0.0016	26	0.854	0.01359	524.5	86.0	0.0448	0.1977	0.2012	1.973	0.002	0.00337	262.4	3.329	0.8446	0.245	1.49	244.1	0.2916	4.5	0.05376	98.6	2660	0.00358	2.999	3914
156	1.309	0.02051	0.0186	0.014	0.0016	26	0.853	0.01357	524.5	85.9	0.0447	0.1975	0.2012	1.970	0.002	0.00337	262.5	3.323	0.8433	0.245	1.49	243.8	0.2912	4.5	0.05366	98.4	2660	0.00357	2.995	3914
157	1.309	0.02051	0.0186	0.014	0.0016	26	0.853	0.01356	524.5	85.8	0.0446	0.1975	0.2012	1.968	0.002	0.00337	262.7	3.320	0.8426	0.245	1.49	243.7	0.2910	4.5	0.05360	98.3	2660	0.00357	2.993	3914
158	1.309	0.02050	0.0186	0.014	0.0016	26	0.853	0.01354	524.6	85.6	0.0445	0.1971	0.2012	1.962	0.002	0.00337	262.7	3.311	0.8407	0.245	1.49	243.3	0.2904	4.5	0.05346	98.0	2660	0.00356	2.987	3913
159	1.309	0.02049	0.0186	0.014	0.0016	26	0.852	0.01351	524.7	85.4	0.0444	0.1969	0.2012	1.958	0.002	0.00337	262.7	3.304	0.8392	0.244	1.49	243.0	0.2900	4.5	0.05335	97.8	2659	0.00355	2.983	3912
160	1.309	0.02047	0.0186	0.014	0.0016	26	0.851	0.01349	524.8	85.1	0.0443	0.1966	0.2012	1.953	0.002	0.00337	262.7	3.296	0.8372	0.244	1.49	242.5	0.2894	4.5	0.05320	97.5	2659	0.00354	2.977	3910
161	1.309	0.02047	0.0186	0.014	0.0016	26	0.851	0.01347	524.9	85.0	0.0442	0.1964	0.2012	1.950	0.002	0.00337	262.8	3.290	0.8361	0.244	1.49	242.3	0.2891	4.5	0.05312	97.4	2659	0.00354	2.973	3910
162	1.309	0.02048	0.0187	0.014	0.0016	26	0.852	0.01346	524.9	84.9	0.0442	0.1963	0.2012	1.948	0.002	0.00337	263.0	3.287	0.8355	0.244	1.49	242.2	0.2889	4.5	0.05306	97.3	2660	0.00353	2.972	3911
163	1.309	0.02047	0.0187	0.014	0.0016	26	0.851	0.01344	524.9	84.7	0.0441	0.1961	0.2012	1.943	0.002	0.00337	263.1	3.280	0.8340	0.244	1.49	241.9	0.2885	4.5	0.05295	97.1	2659	0.00353	2.967	3910
164	1.309	0.02046	0.0187	0.014	0.0016	26	0.851	0.01342	525.0	84.6	0.0440	0.1958	0.2012	1.939	0.002	0.00337	263.1	3.273	0.8324	0.243	1.49	241.6	0.2880	4.5	0.05283	96.9	2659	0.00352	2.962	3909
165	1.309	0.02045	0.0187	0.014	0.0016	26	0.850	0.01339	525.1	84.4	0.0439	0.1956	0.2012	1.935	0.002	0.00337	263.1	3.266	0.8308	0.243	1.49	241.2	0.2876	4.5	0.05272	96.6	2659	0.00351	2.958	3908
166	1.309	0.02044	0.0187	0.014	0.0016	26	0.850	0.01338	525.1	84.2	0.0438	0.1954	0.2012	1.931	0.002	0.00337	263.2	3.260	0.8296	0.243	1.49	241.0	0.2872	4.5	0.05262	96.5	2659	0.00350	2.954	3907
167	1.309	0.02045	0.0187	0.014	0.0016	26	0.850	0.01337	525.1	84.1	0.0438	0.1954	0.2012	1.930	0.002	0.00337	263.5	3.257	0.8291	0.243	1.49	241.0	0.2871	4.5	0.05258	96.4	2660	0.00350	2.953	3908
168	1.309	0.02045	0.0187	0.014	0.0016	26	0.850	0.01335	525.2	84.0	0.0437	0.1952	0.2012	1.926	0.002	0.00337	263.6	3.251	0.8277	0.243	1.49	240.7	0.2867	4.5	0.05247	96.2	2660	0.00349	2.949	3908
169	1.309	0.02044	0.0187	0.014	0.0016	26	0.850	0.01333	525.3	83.8	0.0436	0.1949	0.2012	1.922	0.002	0.00337	263.6	3.245	0.8264	0.243	1.49	240.4	0.2863	4.5	0.05237	96.0	2659	0.00349	2.945	3907
170	1.309	0.02043	0.0188	0.014	0.0016	26	0.849	0.01331	525.3	83.6	0.0435	0.1947	0.2012	1.918	0.002	0.00337	263.7	3.238	0.8250	0.242	1.49	240.1	0.2859	4.5	0.05227	95.8	2659	0.00348	2.941	3906
171	1.309	0.02043	0.0188	0.014	0.0016	26	0.849	0.01329	525.4	83.5	0.0434	0.1946	0.2012	1.915	0.002	0.00337	263.8	3.233	0.8239	0.242	1.49	239.9	0.2856	4.5	0.05218	95.7	2660	0.00347	2.938	3906
172	1.309	0.02045	0.0188	0.014	0.0016	26	0.850	0.01329	525.3	83.5	0.0434	0.1946	0.2012	1.914	0.002	0.00337	264.1	3.232	0.8237	0.242	1.49	239.9	0.2856	4.5	0.05216	95.6	2661	0.00347	2.937	3908
173	1.309	0.02044	0.0188	0.014	0.0016	26	0.850	0.01327	525.4	83.3	0.0433	0.1944	0.2012	1.910	0.002	0.00337	264.2	3.225	0.8223	0.242	1.49	239.6	0.2852	4.5	0.05205	95.4	2661	0.00347	2.933	3907
174	1.309	0.02044	0.0188	0.014	0.0016	26	0.849	0.01326	525.5	83.2	0.0433	0.1942	0.2012	1.907	0.002	0.00337	264.3	3.220	0.8213	0.242	1.49	239.4	0.2849	4.5	0.05197	95.3	2661	0.00346	2.930	3907
175	1.309	0.02043	0.0188	0.014	0.0016	26	0.849	0.01324	525.5	83.0	0.0432	0.1940	0.2012	1.904	0.002	0.00337	264.4	3.214	0.8201	0.242	1.49	239.2	0.2845	4.5	0.05188	95.1	2661	0.00345	2.927	3906
176	1.309	0.02043	0.0188	0.014	0.0016	26	0.849	0.01322	525.6	82.9	0.0431	0.1939	0.2012	1.900	0.002	0.00337	264.6	3.209	0.8189	0.242	1.49	239.0	0.2842	4.5	0.05179	94.9	2661	0.00345	2.923	3906
177	1.309	0.02045	0.0189	0.014	0.0016	26	0.850	0.01322	525.5	82.8	0.0431	0.1939	0.2012	1.900	0.002	0.00337	264.8	3.208	0.8188	0.242	1.49	239.0	0.2842	4.5	0.05177	94.9	2662	0.00345	2.923	3908
178	1.309	0.02044	0.0189	0.014	0.0016	26	0.850	0.01321	525.6	82.7	0.0430	0.1937	0.2012	1.896	0.002	0.00337	265.0	3.202	0.8175	0.242	1.49	238.8	0.2838	4.5	0.05167	94.7	2662	0.00344	2.920	3908
179	1.309	0.02044	0.0189	0.014	0.0016	26	0.850	0.01319	525.6	82.6	0.0429	0.1936	0.2012	1.894	0.002	0.00337	265.1	3.198	0.8167	0.242	1.49	238.6	0.2836	4.5	0.05160	94.6	2663	0.00344	2.917	3907
180	1.309	0.02044	0.0189	0.014	0.0016	26	0.849	0.01318	525.7	82.4	0.0429	0.1935	0.2012	1.891	0.002	0.00338	265.2	3.193	0.8156	0.241	1.49	238.4	0.2833	4.5	0.05152	94.4	2663	0.00343	2.914	3907
181	1.309	0.02045	0.0189	0.014	0.0016	26	0.850	0.01317	525.7	82.3	0.0428	0.1934	0.2012	1.888	0.002	0.00338	265.4	3.189	0.8148	0.241	1.49	238.3	0.2831	4.5	0.05145	94.3	2663	0.00343	2.912	3908
182	1.309	0.02046	0.0189	0.014	0.0016	26	0.850	0.01316	525.7	82.3	0.0428	0.1934	0.2012	1.887	0.002	0.00338	265.7	3.187	0.8145	0.242	1.49	238.3	0.2831	4.5	0.05143	94.3	2664	0.00342	2.912	3909
183	1.309	0.02046	0.0190	0.014	0.0016	26	0.850	0.01315	525.7	82.2	0.0427	0.1933	0.2012	1.884	0.002	0.00338	265.8	3.182	0.8136	0.241	1.49	238.1	0.2828	4.5	0.05135	94.1	2665	0.00342	2.909	3909
184	1.309	0.02046	0.0190	0.014	0.0016	26	0.850	0.01314	525.8	82.0	0.0427	0.1931	0.2012	1.882	0.002	0.00338	265.9	3.178	0.8127	0.241	1.49	237.9	0.2825	4.5	0.05128	94.0	2665	0.00341	2.906	3909
185	1.309	0.02046	0.0190	0.014	0.0016	26	0.850	0.01313	525.8	81.9	0.0426	0.1930	0.2012	1.879	0.002	0.00338	266.1	3.174	0.8118	0.241	1.49	237.8	0.2823	4.5	0.05121	93.9	2665	0.00341	2.904	3909
186	1.309	0.02047	0.0190	0.014	0.0016	26	0.850	0.01312	525.8	81.8	0.0426	0.1929	0.2012	1.877	0.002	0.00338	266.3	3.170	0.8111	0.241	1.49	237.7	0.2821	4.5	0.05115	93.8	2666	0.00340	2.902	3910
187	1.309	0.02048	0.0190	0.014	0.0016	26	0.851	0.01312	525.8	81.8	0.0425	0.1930	0.2012	1.876	0.002	0.00339	266.6	3.169	0.8109	0.241	1.49	237.7	0.2821	4.5	0.05113	93.7	2667	0.00340	2.902	3911
188	1.309	0.02048	0.0190	0.014	0.0016	26	0.851	0.01310	525.8	81.7	0.0425	0.1929	0.2012	1.874	0.002	0.00339	266.7	3.165	0.8101	0.241	1.49	237.6	0.2819	4.5	0.05106	93.6	2668	0.00340	2.900	3911
189	1.309	0.02048	0.0191	0.014	0.0016	26	0.851	0.01309	525.9	81.6	0.0424	0.1928	0.2012	1.871	0.002	0.00339	266.9	3.161	0.8093	0.241	1.49	237.4	0.2817	4.5	0.05100	93.5	2668	0.00339	2.898	3911
190	1.309	0.02049	0.0191	0.014	0.0016	26	0.851	0.01309	525.9	81.5	0.0424	0.1927	0.2012	1.870	0.002	0.00339	267.0	3.158	0.8088	0.241	1.49	237.3	0.2815	4.5	0.05096	93.4	2668	0.00339	2.896	3912
191	1.309	0.02049	0.0191	0.014	0.0016	26	0.851	0.01307	525.9	81.4	0.0423	0.1926	0.2012	1.867	0.002	0.00339	267.3	3.154	0.8079	0.241	1.49	237.2	0.2813	4.5	0.05089	93.3	2669	0.00339	2.894	3912
192	1.309	0.02051	0.0191	0.014	0.0016	26	0.852	0.01308	525.9	81.4	0.0423	0.1927	0.2012	1.867	0.002	0.00339	267.5	3.154	0.8080	0.241	1.49	237.3	0.2814	4.5	0.05089	93.3	2670	0.00339	2.895	3914
193	1.309	0.02051	0.0191	0.014	0.0016	26	0.852	0.01307	525.9	81.3	0.0423	0.1926	0.2012	1.865	0.002	0.00339	267.7	3.151	0.8074	0.241	1.49	237.2	0.2812	4.5	0.05083	93.2	2671	0.00338	2.893	3914
194	1.309	0.02052	0.0191	0.014	0.0016	26	0.852	0.01306	525.9	81.2	0.0422	0.1925	0.2012	1.862	0.002	0.00339	267.9	3.146	0.8065	0.241	1.49	237.0	0.2810	4.5	0.05076	93.0	2671	0.00338	2.890	3914
195	1.309	0.02052	0.0192	0.014	0.0016	26	0.852	0.01305	526.0	81.1	0.0422	0.1925	0.2012	1.861	0.002	0.00340	268.0	3.144	0.8060	0.241	1.49	237.0	0.2809	4.5	0.05072	93.0	2672	0.00338	2.889	3915
196	1.309	0.02053	0.0192	0.014	0.0016	26	0.852	0.01304	526.0	81.0	0.0422	0.1924	0.2012	1.859	0.002	0.00340	268.3	3.140	0.8053	0.241	1.49	236.9	0.2807	4.5	0.05066	92.8	2672	0.00337	2.887	3915
197	1.309	0.02054	0.0192	0.014	0.0016	26	0.853	0.01305	525.9	81.1	0.0422	0.1925	0.2012	1.859	0.002	0.00340	268.5	3.140	0.8055	0.241	1.49	237.0	0.2808	4.5	0.05066	92.9	2673	0.00337	2.888	3917
198	1.309	0.02055	0.0192	0.014	0.0016	26	0.853	0.01304	526.0	81.0	0.0421	0.1924	0.2012	1.857	0.002	0.00340	268.7	3.138	0.8050	0.241	1.49	236.9	0.2807	4.5	0.05062	92.8	2674	0.00337	2.887	3918

Table 5. Tailings Seepage Concentrations - Alternative 4

Years since	Al	Sb	As	Ba	Be	HCO3	B	Cd	Ca	Cl	Cr	Co	Cu	F	Fe	Pb	Mg	Mn	Mo	Ni	NO3-N	K	Se	Si	Ag	Na	SO4	Tl	Zn	TDS
Mine Start	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
199	1.309	0.02055	0.0192	0.014	0.0016	26	0.853	0.01303	526.0	80.9	0.0421	0.1924	0.2012	1.855	0.002	0.00340	268.9	3.135	0.8044	0.241	1.49	236.8	0.2805	4.5	0.05057	92.7	2675	0.00337	2.886	3918
200	1.309	0.02056	0.0193	0.014	0.0016	26	0.854	0.01302	526.0	80.8	0.0420	0.1923	0.2012	1.854	0.002	0.00340	269.1	3.132	0.8038	0.241	1.49	236.8	0.2804	4.5	0.05052	92.6	2675	0.00336	2.884	3919
201	1.309	0.02057	0.0193	0.014	0.0016	26	0.854	0.01301	526.0	80.7	0.0420	0.1922	0.2012	1.852	0.002	0.00341	269.3	3.129	0.8032	0.241	1.49	236.7	0.2802	4.5	0.05047	92.5	2676	0.00336	2.883	3919
202	1.309	0.02058	0.0193	0.014	0.0016	26	0.855	0.01302	526.0	80.7	0.0420	0.1923	0.2012	1.852	0.002	0.00341	269.6	3.129	0.8034	0.241	1.49	236.8	0.2803	4.5	0.05048	92.5	2677	0.00336	2.884	3921
203	1.309	0.02059	0.0193	0.014	0.0016	26	0.855	0.01301	526.0	80.7	0.0420	0.1923	0.2012	1.850	0.002	0.00341	269.8	3.127	0.8030	0.241	1.49	236.7	0.2802	4.5	0.05044	92.4	2678	0.00336	2.883	3922
204	1.309	0.02060	0.0193	0.014	0.0016	26	0.855	0.01301	526.0	80.6	0.0419	0.1923	0.2012	1.849	0.002	0.00341	269.9	3.124	0.8025	0.241	1.49	236.7	0.2801	4.5	0.05040	92.4	2678	0.00335	2.882	3922
205	1.309	0.02060	0.0193	0.014	0.0016	26	0.855	0.01300	526.0	80.6	0.0419	0.1922	0.2012	1.848	0.002	0.00341	270.1	3.122	0.8021	0.241	1.49	236.6	0.2800	4.5	0.05036	92.3	2679	0.00335	2.880	3923
206	1.309	0.02061	0.0194	0.014	0.0016	26	0.856	0.01300	526.0	80.5	0.0419	0.1923	0.2012	1.847	0.002	0.00342	270.3	3.121	0.8021	0.241	1.49	236.7	0.2800	4.5	0.05035	92.3	2680	0.00335	2.881	3924
207	1.309	0.02063	0.0194	0.014	0.0016	26	0.856	0.01300	526.0	80.5	0.0419	0.1923	0.2012	1.846	0.002	0.00342	270.6	3.120	0.8018	0.241	1.49	236.7	0.2800	4.5	0.05032	92.2	2681	0.00335	2.880	3925
208	1.309	0.02064	0.0194	0.014	0.0016	26	0.857	0.01300	526.0	80.5	0.0419	0.1923	0.2012	1.846	0.002	0.00342	270.8	3.119	0.8017	0.242	1.49	236.7	0.2800	4.5	0.05031	92.2	2682	0.00335	2.880	3926
209	1.309	0.02064	0.0194	0.014	0.0016	26	0.857	0.01299	526.0	80.4	0.0418	0.1923	0.2012	1.844	0.002	0.00342	271.0	3.116	0.8011	0.242	1.49	236.6	0.2798	4.5	0.05026	92.1	2682	0.00334	2.879	3926
210	1.309	0.02065	0.0194	0.014	0.0016	26	0.857	0.01299	526.0	80.3	0.0418	0.1922	0.2012	1.842	0.002	0.00342	271.2	3.114	0.8008	0.242	1.49	236.6	0.2798	4.5	0.05022	92.0	2683	0.00334	2.878	3927
211	1.309	0.02066	0.0195	0.014	0.0016	26	0.858	0.01299	526.0	80.3	0.0418	0.1923	0.2012	1.842	0.002	0.00343	271.4	3.113	0.8008	0.242	1.49	236.6	0.2798	4.5	0.05022	92.0	2684	0.00334	2.878	3928
212	1.309	0.02068	0.0195	0.014	0.0016	26	0.858	0.01299	526.0	80.3	0.0418	0.1923	0.2012	1.841	0.002	0.00343	271.7	3.112	0.8006	0.242	1.49	236.7	0.2798	4.5	0.05020	92.0	2685	0.00334	2.878	3930
213	1.309	0.02069	0.0195	0.014	0.0016	26	0.859	0.01299	526.0	80.3	0.0418	0.1924	0.2012	1.841	0.002	0.00343	271.9	3.111	0.8006	0.242	1.49	236.7	0.2798	4.5	0.05019	92.0	2686	0.00334	2.879	3931
214	1.309	0.02069	0.0195	0.014	0.0016	26	0.859	0.01298	526.0	80.2	0.0417	0.1923	0.2012	1.839	0.002	0.00343	272.1	3.109	0.8000	0.242	1.49	236.6	0.2797	4.5	0.05014	91.9	2686	0.00334	2.877	3931
215	1.309	0.02070	0.0195	0.014	0.0016	26	0.859	0.01298	526.0	80.2	0.0417	0.1923	0.2012	1.839	0.002	0.00343	272.3	3.108	0.8000	0.242	1.49	236.7	0.2797	4.5	0.05014	91.9	2687	0.00334	2.877	3932
216	1.309	0.02071	0.0195	0.014	0.0016	26	0.860	0.01298	526.0	80.2	0.0417	0.1924	0.2012	1.838	0.002	0.00344	272.5	3.107	0.7999	0.242	1.49	236.7	0.2797	4.5	0.05012	91.8	2688	0.00334	2.877	3933
217	1.309	0.02073	0.0196	0.014	0.0016	26	0.860	0.01298	526.0	80.2	0.0417	0.1924	0.2012	1.838	0.002	0.00344	272.8	3.107	0.8000	0.242	1.49	236.8	0.2798	4.5	0.05011	91.8	2689	0.00333	2.878	3935
218	1.309	0.02074	0.0196	0.014	0.0016	26	0.861	0.01298	526.0	80.1	0.0417	0.1925	0.2012	1.837	0.002	0.00344	273.0	3.106	0.7998	0.242	1.49	236.8	0.2797	4.5	0.05009	91.8	2690	0.00333	2.878	3936
219	1.309	0.02075	0.0196	0.014	0.0016	26	0.861	0.01297	526.0	80.1	0.0416	0.1924	0.2012	1.836	0.002	0.00344	273.2	3.103	0.7993	0.242	1.49	236.7	0.2796	4.5	0.05005	91.7	2691	0.00333	2.877	3936
220	1.309	0.02076	0.0196	0.014	0.0016	26	0.861	0.01298	526.0	80.1	0.0416	0.1925	0.2012	1.836	0.002	0.00344	273.4	3.103	0.7994	0.242	1.49	236.8	0.2797	4.5	0.05005	91.7	2691	0.00333	2.877	3937
221	1.309	0.02077	0.0196	0.014	0.0016	26	0.862	0.01298	526.0	80.0	0.0416	0.1925	0.2012	1.835	0.002	0.00345	273.6	3.102	0.7993	0.242	1.49	236.8	0.2797	4.5	0.05004	91.7	2692	0.00333	2.877	3938
222	1.309	0.02078	0.0197	0.014	0.0016	26	0.862	0.01298	525.9	80.0	0.0416	0.1926	0.2012	1.835	0.002	0.00345	273.9	3.102	0.7994	0.242	1.49	236.9	0.2798	4.5	0.05004	91.7	2693	0.00333	2.878	3940
223	1.309	0.02079	0.0197	0.014	0.0016	26	0.863	0.01298	525.9	80.0	0.0416	0.1926	0.2012	1.835	0.002	0.00345	274.1	3.101	0.7993	0.243	1.49	236.9	0.2798	4.5	0.05002	91.6	2694	0.00333	2.878	3941
224	1.309	0.02080	0.0197	0.014	0.0016	26	0.863	0.01298	525.9	80.0	0.0416	0.1927	0.2012	1.835	0.002	0.00345	274.3	3.102	0.7994	0.243	1.49	237.0	0.2798	4.5	0.05002	91.7	2695	0.00333	2.879	3942
225	1.309	0.02081	0.0197	0.014	0.0016	26	0.864	0.01298	525.9	79.9	0.0416	0.1926	0.2012	1.834	0.002	0.00345	274.5	3.099	0.7990	0.243	1.49	237.0	0.2797	4.5	0.04999	91.6	2696	0.00333	2.878	3943
226	1.309	0.02083	0.0197	0.014	0.0016	26	0.864	0.01298	525.9	80.0	0.0416	0.1927	0.2012	1.834	0.002	0.00346	274.7	3.100	0.7992	0.243	1.49	237.1	0.2798	4.5	0.04999	91.6	2697	0.00333	2.879	3944
227	1.309	0.02084	0.0197	0.014	0.0016	26	0.865	0.01298	525.9	79.9	0.0416	0.1928	0.2012	1.833	0.002	0.00346	275.0	3.099	0.7991	0.243	1.49	237.1	0.2798	4.5	0.04998	91.6	2698	0.00333	2.879	3945
228	1.309	0.02085	0.0198	0.014	0.0016	26	0.865	0.01298	525.9	79.9	0.0416	0.1928	0.2012	1.833	0.002	0.00346	275.2	3.098	0.7990	0.243	1.49	237.1	0.2799	4.5	0.04997	91.5	2699	0.00332	2.879	3946
229	1.309	0.02086	0.0198	0.014	0.0016	26	0.866	0.01298	525.9	79.9	0.0416	0.1929	0.2012	1.833	0.002	0.00346	275.4	3.099	0.7992	0.243	1.49	237.2	0.2799	4.5	0.04997	91.6	2699	0.00333	2.880	3947
230	1.309	0.02087	0.0198	0.014	0.0016	26	0.866	0.01298	525.9	79.9	0.0415	0.1929	0.2012	1.832	0.002	0.00347	275.6	3.097	0.7989	0.243	1.49	237.2	0.2799	4.5	0.04994	91.5	2700	0.00332	2.879	3948
231	1.309	0.02089	0.0198	0.014	0.0016	26	0.866	0.01298	525.8	79.9	0.0416	0.1929	0.2012	1.832	0.002	0.00347	275.8	3.097	0.7991	0.243	1.49	237.3	0.2800	4.5	0.04995	91.5	2701	0.00332	2.880	3950
232	1.309	0.02090	0.0198	0.014	0.0016	26	0.867	0.01298	525.8	79.9	0.0415	0.1930	0.2012	1.832	0.002	0.00347	276.1	3.097	0.7991	0.243	1.49	237.3	0.2800	4.5	0.04994	91.5	2702	0.00332	2.880	3951
233	1.309	0.02091	0.0199	0.014	0.0016	26	0.868	0.01299	525.8	79.9	0.0415	0.1931	0.2012	1.832	0.002	0.00347	276.3	3.097	0.7993	0.243	1.49	237.4	0.2801	4.5	0.04995	91.5	2703	0.00332	2.881	3952
234	1.309	0.02092	0.0199	0.014	0.0016	26	0.868	0.01299	525.8	79.9	0.0415	0.1931	0.2012	1.832	0.002	0.00347	276.5	3.097	0.7992	0.243	1.49	237.5	0.2801	4.5	0.04994	91.5	2704	0.00332	2.882	3953
235	1.309	0.02093	0.0199	0.014	0.0016	26	0.868	0.01299	525.8	79.9	0.0415	0.1931	0.2012	1.831	0.002	0.00348	276.7	3.096	0.7992	0.244	1.49	237.5	0.2801	4.5	0.04993	91.5	2704	0.00332	2.882	3954
236	1.309	0.02094	0.0199	0.014	0.0016	26	0.869	0.01299	525.8	79.8	0.0415	0.1932	0.2012	1.831	0.002	0.00348	276.9	3.096	0.7993	0.244	1.49	237.6	0.2802	4.5	0.04993	91.5	2705	0.00332	2.882	3955
237	1.309	0.02096	0.0199	0.014	0.0016	26	0.869	0.01299	525.7	79.8	0.0415	0.1933	0.2012	1.831	0.002	0.00348	277.2	3.095	0.7992	0.244	1.49	237.6	0.2802	4.5	0.04991	91.4	2707	0.00332	2.883	3957
238	1.309	0.02097	0.0199	0.014	0.0016	26	0.870	0.01300	525.7	79.8	0.0415	0.1933	0.2012	1.831	0.002	0.00348	277.4	3.096	0.7995	0.244	1.49	237.7	0.2803	4.5	0.04993	91.5	2707	0.00332	2.884	3958
239	1.309	0.02098	0.0200	0.014	0.0016	26	0.870	0.01300	525.7	79.8	0.0415	0.1934	0.2012	1.831	0.002	0.00349	277.6	3.096	0.7995	0.244	1.49	237.8	0.2803	4.5	0.04992	91.5	2708	0.00332	2.884	3959
240	1.309	0.02099	0.0200	0.014	0.0016	26	0.871	0.01300	525.7	79.8	0.0415	0.1934	0.2012	1.831	0.002	0.00349	277.8	3.095	0.7995	0.244	1.49	237.8	0.2804	4.5	0.04991	91.4	2709	0.00332	2.884	3960
241	1.309	0.02100	0.0200	0.014	0.0016	26	0.871	0.01300	525.7	79.8	0.0415	0.1935	0.2012	1.831	0.002	0.00349	278.0	3.095	0.7996	0.244	1.49	237.9	0.2804	4.5	0.04991	91.4	2710	0.00332	2.885	3961
242	1.309	0.02102	0.0200	0.014	0.0016	26	0.872	0.01301	525.6	79.9	0.0415	0.1936	0.2012	1.832	0.002	0.00349	278.2	3.097	0.8000	0.244	1.49	238.1	0.2806	4.5	0.04994	91.5	2711	0.00332	2.887	3962
243	1.309	0.02103	0.0200	0.014	0.0016	26	0.872	0.01301	525.6	79.8	0.0415	0.1936	0.2012	1.831	0.002	0.00350	278.4	3.096	0.7998	0.244	1.49	238.1	0.2806	4.5	0.04992	91.5	2712	0.00332	2.886	3963
244	1.309	0.02104	0.0200	0.014	0.0016	26	0.873	0.01301	525.6	79.9	0.0415	0.1937	0.2012	1.831	0.002	0.00350	278.6	3.097	0.8001	0.245	1.49	238.2	0.2807	4.5	0.04993	91.5	2712	0.00332	2.888	3964
245	1.309	0.02105	0.0201	0.014	0.0016	26	0.873	0.01301	525.6	79.8	0.0415	0.1937	0.2012	1.831	0.002	0.00350	278.8	3.095	0.7999	0.245	1.49	238.2	0.2807	4.5	0.04991	91.4	2713	0.00332	2.887	3965

Notes:

1. Tailings solute chemistry based on process circuit modeling for Life of Mine (Enchemica, 2018) and sulfide oxidation modeling during Post-Closure (Rio Tinto, 2018)
2. Chemistry data based on base case (non-conservative) mobile/immobile exchange factor assumptions during the post closure period (Rio Tinto, 2018)
3. mg/L = milligrams per liter

Table 6. Model Results at Queen Creek 3 Aquifer Subdomain - Alternative 4

Years since Mine Start	Al mg/L	Sb mg/L	As mg/L	Ba mg/L	Be mg/L	HCO3 mg/L	B mg/L	Cd mg/L	Ca mg/L	Cl mg/L	Cr mg/L	Co mg/L	Cu mg/L	F mg/L	Fe mg/L	Pb mg/L	Mg mg/L	Mn mg/L	Mo mg/L	Ni mg/L	NO3-N mg/L	K mg/L	Se mg/L	Si mg/L	Ag mg/L	Na mg/L	SO4 mg/L	Tl mg/L	Zn mg/L	TDS mg/L
1	0.000	0.00000	0.00000	0.00000	0.00000	0	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0000	0.00	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.0	0.00000	0.0	0	0.00000	0.000	0
2	0.000	0.00000	0.00000	0.00000	0.00000	0	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0000	0.00	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.0	0.00000	0.0	0	0.00000	0.000	0
3	0.000	0.00000	0.00000	0.00000	0.00000	0	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0001	0.00	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.0	0.00000	0.0	0	0.00000	0.000	0
4	0.000	0.00000	0.00000	0.00000	0.00000	0	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0001	0.00	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.0	0.00000	0.0	0	0.00000	0.000	0
5	0.000	0.00000	0.00000	0.00000	0.00000	0	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0001	0.00	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.0	0.00000	0.0	0	0.00000	0.000	0
6	0.000	0.00000	0.00000	0.00000	0.00000	0	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0001	0.00	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.0	0.00000	0.0	0	0.00000	0.000	0
7	0.000	0.00000	0.00000	0.00000	0.00000	0	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0001	0.00	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.0	0.00000	0.0	0	0.00000	0.000	0
8	0.000	0.00000	0.00000	0.00000	0.00000	0	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0001	0.00	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.0	0.00000	0.0	0	0.00000	0.000	0
9	0.000	0.00000	0.00000	0.00000	0.00000	0	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0001	0.00	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.0	0.00000	0.0	0	0.00000	0.000	0
10	0.000	0.00000	0.00000	0.00000	0.00000	0	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0001	0.00	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.0	0.00000	0.0	0	0.00000	0.000	0
11	0.000	0.00000	0.00000	0.00000	0.00000	0	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0001	0.00	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.0	0.00000	0.0	0	0.00000	0.000	0
12	0.000	0.00000	0.00000	0.00000	0.00000	0	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0001	0.00	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.0	0.00000	0.0	0	0.00000	0.000	0
13	0.000	0.00000	0.00000	0.00000	0.00000	0	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0001	0.00	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.0	0.00000	0.0	0	0.00000	0.000	0
14	0.000	0.00000	0.00000	0.00000	0.00000	0	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0001	0.00	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.0	0.00000	0.0	0	0.00000	0.000	0
15	0.000	0.00000	0.00000	0.00000	0.00000	0	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0001	0.00	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.0	0.00000	0.0	0	0.00000	0.000	0
16	0.000	0.00000	0.00000	0.00000	0.00000	0	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0001	0.00	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.0	0.00000	0.0	0	0.00000	0.000	0
17	0.000	0.00000	0.00000	0.00000	0.00000	0	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0001	0.00	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.0	0.00000	0.0	0	0.00000	0.000	0
18	0.000	0.00000	0.00000	0.00000	0.00000	0	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0001	0.00	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.0	0.00000	0.0	0	0.00000	0.000	0
19	0.000	0.00000	0.00000	0.00000	0.00000	0	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0001	0.00	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.0	0.00000	0.0	0	0.00000	0.000	0
20	0.000	0.00000	0.00000	0.00000	0.00000	0	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0001	0.00	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.0	0.00000	0.0	0	0.00000	0.000	0
21	0.000	0.00000	0.00000	0.00000	0.00000	0	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0001	0.00	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.0	0.00000	0.0	0	0.00000	0.000	0
22	0.000	0.00000	0.00000	0.00000	0.00000	0	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0001	0.00	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.0	0.00000	0.0	0	0.00000	0.000	0
23	0.001	0.00000	0.00000	0.00000	0.00000	0	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0001	0.00	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.0	0.00000	0.0	0	0.00000	0.000	0
24	0.001	0.00000	0.00000	0.00000	0.00000	0	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0001	0.00	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.0	0.00000	0.0	0	0.00000	0.000	0
25	0.001	0.00000	0.00000	0.00000	0.00000	0	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0001	0.00	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.0	0.00000	0.0	0	0.00000	0.000	0
26	0.001	0.00000	0.00000	0.00000	0.00000	0	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0001	0.00	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.0	0.00000	0.0	0	0.00000	0.000	0
27	0.001	0.00000	0.00000	0.00000	0.00000	0	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0001	0.00	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.0	0.00000	0.0	0	0.00000	0.000	0
28	0.001	0.00000	0.00000	0.00000	0.00000	0	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0001	0.00	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.0	0.00000	0.0	0	0.00000	0.000	0
29	0.001	0.00000	0.00000	0.00000	0.00000	0	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0001	0.00	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.0	0.00000	0.0	0	0.00000	0.000	0
30	0.001	0.00000	0.00000	0.00000	0.00000	0	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0001	0.00	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.0	0.00000	0.0	0	0.00000	0.000	0
31	0.001	0.00000	0.00000	0.00000	0.00000	0	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0001	0.00	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.0	0.00000	0.0	0	0.00000	0.000	0
32	0.001	0.00000	0.00000	0.00000	0.00000	0	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0001	0.00	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.0	0.00000	0.0	0	0.00000	0.000	0
33	0.001	0.00000	0.00000	0.00000	0.00000	0	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0001	0.00	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.0	0.00000	0.0	0	0.00000	0.000	0
34	0.001	0.00000	0.00000	0.00000	0.00000	0	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0001	0.00	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.0	0.00000	0.0	0	0.00000	0.000	0
35	0.001	0.00000	0.00000	0.00000	0.00000	0	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0001	0.00	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.0	0.00000	0.0	0	0.00000	0.000	0
36	0.000	0.00000	0.00000	0.00000	0.00000	0	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0001	0.00	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.0	0.00000	0.0	0	0.00000	0.000	0
37	0.000	0.00000	0.00000	0.00000	0.00000	0	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0001	0.00	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.0	0.00000	0.0	0	0.00000	0.000	0
38	0.000	0.00000	0.00000	0.00000	0.00000	0	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0001	0.00	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.0	0.00000	0.0	0	0.00000	0.000	0
39	0.000	0.00000	0.00000	0.00000	0.00000	0	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0001	0.00	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.0	0.00000	0.0	0	0.00000	0.000	0
40	0.000	0.00000	0.00000	0.00000	0.00000	0	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0001	0.00	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.0	0.00000	0.0	0	0.00000	0.000	0
41	0.000	0.00000	0.00000	0.00000	0.00000	0	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0001	0.00	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.0	0.00000	0.0	0	0.00000	0.000	0
42	0.001	0.00001	0.00001	0.00001	0.00000	0	0.000	0.00001	0.3	0.0	0.0000	0.0001	0.0002	0.00	0.00000	0.00000	0.1	0.002	0.0005	0.0001	0.00	0.1	0.0002	0.0	0.00003	0.1	1	0.00000	0.002	2
43	0.009	0.00016	0.00013	0.00010	0.00001	0	0.006	0.00011	3.6	0.7	0.0004	0.0016	0.0014	0.02	0.00001	0.00003	1.9	0.028	0.0070	0.0019	0.01	2.0	0.0024	0.0	0.00045	0.8	19	0.00003	0.024	29
44	0.012	0.00020	0.00017	0.00013	0.00001	0	0.008	0.00014	4.7	0.9	0.0005	0.0020	0.0018	0.02	0.00002	0.00003	2.4	0.036	0.0090	0.0025	0.01	2.5	0.0030	0.0	0.00058	1.1	25	0.00004	0.031	37
45	0.012	0.00020	0.00017	0.00013	0.00001	0	0.008	0.00015	4.7	0.9	0.0005	0.0021	0.0018	0.02	0.00002	0.00003	2.5	0.037	0.0091	0.0025	0.01	2.6	0.0031	0.0	0.00059	1.1	25	0.00004	0.032	37
46	0.012	0.00020	0.00017	0.00013	0.00001	0	0.009	0.00015	4.8	1.0	0.0005	0.0021	0.0019	0.02	0.00002	0.00003	2.5	0.037	0.0092	0.0025	0.01	2.6	0.0031	0.0	0.00060	1.1	25	0.00004	0.032	38
47	0.012	0.00021	0.00018	0.00013	0.00001	0	0.009	0.00015	4.8	1.0	0.0005	0.0021	0.0019	0.02	0.00002	0.00003	2.5	0.037	0.0093	0.0025	0.01	2.6	0.0031	0.0	0.00060	1.1	25	0.00004	0.032	38
48	0.012	0.00021	0.00018	0.00013	0.00001	0	0.009	0.00015	4.8	1.0	0.0005	0.0021	0.0019	0.02	0.00002	0.00003	2.5	0.037	0.0093	0.0026	0.01	2.6	0.0032	0.0	0.00060	1.1	26	0.00004	0.032	38
49	0.012	0.00021	0.00018	0.00013	0.00001	0	0.009	0.00015	4.9	1.0	0.0005	0.0021	0.0019	0.02	0.00002	0.00003	2.6	0.037	0.0093	0.0026	0.01	2.6	0.0032	0.0	0.00061	1.1	26	0.00004	0.033	38
50	0.012	0.00021	0.00018	0.00013	0.00001	0	0.009	0.00015	4.9	1.0	0.0005	0.0021	0.0019	0.02	0.00002	0.00003	2.6	0.038	0.0094	0.0026	0.01	2.6	0.0032	0.0	0.00061	1.1	26	0.00004	0.033	38
51	0.012	0.00021	0.00018	0.00013	0.00001	0	0.009	0.00015	4.9	1.0	0.0005	0.0021	0.0019	0.02	0.00002	0.00003	2.6	0.038	0.0094	0.0026	0.01	2.7	0.0032	0.0	0.00061	1.1	26	0.00004	0.033	39
52	0.013	0.00021	0.00018	0.00013	0.00001	0	0.009	0.00015	4.9	1.0	0.0005	0.0022	0.0019	0.02	0.00002	0.00003	2.6	0.038	0.0095	0.0026	0.01	2.7	0.0032	0.0	0.00062	1.1	26	0.00004	0.033	39
53	0.013	0.00021	0.00018	0.00013	0.00001	0	0.009	0.00015	5.0	1.0	0.0005	0.0022	0.0019	0.02	0.00002	0.00003	2.6	0.038	0.0096	0.0026	0.01	2.7	0.0033	0.0	0.00062	1.1	26	0.00004	0.033	39
54	0.013	0.00022	0.00018	0.00013	0.00002	0	0.009	0.00015	5.0	1.0	0.0005	0.0022	0.0019	0.02	0.00002	0.00003	2.7	0.039	0.0096	0.0027	0.01	2.7	0.0033	0.0	0.00062	1.1	27	0.00004	0.034	39
55	0.013	0.00022	0.00019	0.00013	0.00002	0	0.009	0.00015	5.0	1.0	0.0005	0.0022	0.0019	0.02	0.00002	0.00004	2.7	0.039	0.0096	0.0027	0.01	2.7	0.0033	0.0	0.00063	1.1	27	0.00004	0.034	40
56	0.013	0.00022	0.00019	0.00014	0.00002	0	0.009	0.00015	5.0	1.0	0.0005	0.0022	0.0020	0.02	0.00002	0.00004	2.7	0.039	0.0097	0.0027	0.01	2.7	0.0033	0.0	0.00063	1.2	27	0.00004	0.034	40
57	0.013	0.00022	0.00019	0.00014	0.00002	0	0.009	0.00016	5.1	1.0	0.0005	0.0022	0.0020	0.02	0.00002	0.00004	2.7	0.039	0.0098	0.0027	0.01	2.8	0.0033	0.0	0.00063	1.2	27	0.00004	0.034	40
58	0.013	0.00022	0.00019	0.00014	0.00002	0	0.009	0.00016	5.1	1.0	0.0005	0.0022	0.0020	0.02	0.00002	0.00004	2.7	0.039	0.0098	0.0027	0.01	2.8	0.0033	0.0	0.00064	1.2	27	0.00004	0.034	40
59	0.013	0.00022	0.00019	0.00014	0.00002	0	0.009	0.00016	5.1	1.0	0.0005	0.0022	0.0020	0.02	0.00002	0.00004	2.7	0.040	0.0099	0.0027	0.01	2.8	0.0034	0.0	0.00064	1.2	27	0.00004	0.035	41
60	0.013	0.00022	0.00019	0.00014	0.00002	0	0.009	0.00016	5.2	1.0	0.0005	0.0023	0.0020	0.02	0.00002	0.00004	2.8	0.040	0.0099	0.0028	0.01	2.8	0.0034	0.0	0.00064	1.2	28	0.00004	0.035	41
61	0.013	0.00023	0.00019	0.00014	0.00002	0	0.009	0.00016	5.2	1.0	0.0005	0.0023	0.0020	0.02	0.00002	0.00004	2.8	0.040	0.0100	0.0028	0.01	2.8	0.0034	0.0	0.00065	1.2	28	0.00004	0.035	41
62	0.013	0.00023	0.00019	0.00014	0.00002	0	0.009	0.00016	5.2	1.0	0.0005	0.0023	0.0020	0.02	0.00002	0.00004	2.8	0.040	0.0100	0.0028	0.02	2.8	0.0034	0.0	0.00065	1.2	28	0.00004	0.035	41
63	0.013	0.00023	0.00020	0.00014	0.00002	0	0.010	0.00016	5.2	1.0	0.0005	0.0023	0.0020	0.02	0.00002	0.00004	2.8	0.040	0.0101	0.0028	0.02	2.8	0.0034	0.0	0.00065	1.2	28	0.00004	0.035	42
64	0.013	0.00023	0.00020	0.00014	0.00002	0	0.010	0.00016	5.3	1.1	0.0005	0.0023	0.0020	0.02	0.00002	0.00004	2.8	0.041	0.0101	0.0028	0.02	2.9	0.0035	0.0	0.00066	1.2	28	0.00004	0.036	42
65	0.013	0.00023	0.00020	0.00014	0.00002	0	0.010	0.00016	5.3	1.1	0.0005	0.0023	0.0021	0.02	0.00002	0.00004	2.8	0.041	0.0102	0.0028	0.02	2.9	0.0035	0.0	0.00066	1.2	28	0.00004	0.036	42
66	0.013	0.00023	0.00020	0.00014	0.00002	0	0.010	0.00016	5.3	1.1	0.0006	0.0023	0.0021	0.02	0.00002	0.00004	2.9	0.041	0.0102	0.0028	0.02	2.9	0.0035	0.0	0.00066	1.2	28	0.00004	0.036	42
67	0.014	0.00023	0.00020	0.00014	0.00002	0	0.010	0.00016	5.3	1.1	0.0006	0.0023	0.0021	0.02	0.00002	0.00004	2.9	0.041	0.0103	0.0029	0.02	2.9	0.0035	0.0	0.00067	1.2	29	0.00004	0.036	42

Table 6. Model Results at Queen Creek 3 Aquifer Subdomain - Alternative 4

Years since Mine Start	Al mg/L	Sb mg/L	As mg/L	Ba mg/L	Be mg/L	HCO3 mg/L	B mg/L	Cd mg/L	Ca mg/L	Cl mg/L	Cr mg/L	Co mg/L	Cu mg/L	F mg/L	Fe mg/L	Pb mg/L	Mg mg/L	Mn mg/L	Mo mg/L	Ni mg/L	NO3-N mg/L	K mg/L	Se mg/L	Si mg/L	Ag mg/L	Na mg/L	SO4 mg/L	Tl mg/L	Zn mg/L	TDS mg/L
68	0.014	0.00023	0.00020	0.00014	0.00002	0	0.010	0.00016	5.4	1.1	0.0006	0.0024	0.0021	0.02	0.00002	0.00004	2.9	0.041	0.0103	0.0029	0.02	2.9	0.0035	0.0	0.00067	1.2	29	0.00004	0.036	43
69	0.014	0.00024	0.00020	0.00014	0.00002	0	0.010	0.00017	5.4	1.1	0.0006	0.0024	0.0021	0.02	0.00002	0.00004	2.9	0.042	0.0104	0.0029	0.02	2.9	0.0035	0.0	0.00067	1.2	29	0.00004	0.036	43
70	0.014	0.00024	0.00020	0.00015	0.00002	0	0.010	0.00017	5.4	1.1	0.0006	0.0024	0.0021	0.02	0.00002	0.00004	2.9	0.042	0.0105	0.0029	0.02	3.0	0.0036	0.0	0.00068	1.2	29	0.00005	0.037	43
71	0.014	0.00024	0.00021	0.00015	0.00002	0	0.010	0.00017	5.5	1.1	0.0006	0.0024	0.0021	0.02	0.00002	0.00004	2.9	0.042	0.0105	0.0029	0.02	3.0	0.0036	0.0	0.00068	1.2	29	0.00005	0.037	43
72	0.014	0.00024	0.00021	0.00015	0.00002	0	0.010	0.00017	5.5	1.1	0.0006	0.0024	0.0021	0.03	0.00002	0.00004	3.0	0.042	0.0105	0.0029	0.02	3.0	0.0036	0.0	0.00068	1.3	29	0.00005	0.037	44
73	0.014	0.00024	0.00021	0.00015	0.00002	0	0.010	0.00017	5.5	1.1	0.0006	0.0024	0.0021	0.03	0.00002	0.00004	3.0	0.042	0.0106	0.0029	0.02	3.0	0.0036	0.0	0.00068	1.3	29	0.00005	0.037	44
74	0.014	0.00024	0.00021	0.00015	0.00002	0	0.010	0.00017	5.5	1.1	0.0006	0.0024	0.0022	0.03	0.00002	0.00004	3.0	0.042	0.0106	0.0030	0.02	3.0	0.0036	0.0	0.00069	1.3	30	0.00005	0.037	44
75	0.014	0.00024	0.00021	0.00015	0.00002	0	0.010	0.00017	5.6	1.1	0.0006	0.0024	0.0022	0.03	0.00002	0.00004	3.0	0.043	0.0107	0.0030	0.02	3.0	0.0036	0.0	0.00069	1.3	30	0.00005	0.037	44
76	0.014	0.00024	0.00021	0.00015	0.00002	0	0.010	0.00017	5.6	1.1	0.0006	0.0024	0.0022	0.03	0.00002	0.00004	3.0	0.043	0.0107	0.0030	0.02	3.0	0.0037	0.0	0.00069	1.3	30	0.00005	0.038	44
77	0.014	0.00025	0.00021	0.00015	0.00002	0	0.010	0.00017	5.6	1.1	0.0006	0.0025	0.0022	0.03	0.00002	0.00004	3.0	0.043	0.0108	0.0030	0.02	3.0	0.0037	0.0	0.00070	1.3	30	0.00005	0.038	45
78	0.014	0.00025	0.00021	0.00015	0.00002	0	0.010	0.00017	5.6	1.1	0.0006	0.0025	0.0022	0.03	0.00002	0.00004	3.1	0.043	0.0108	0.0030	0.02	3.1	0.0037	0.0	0.00070	1.3	30	0.00005	0.038	45
79	0.014	0.00025	0.00021	0.00015	0.00002	0	0.010	0.00017	5.7	1.1	0.0006	0.0025	0.0022	0.03	0.00002	0.00004	3.1	0.043	0.0109	0.0030	0.02	3.1	0.0037	0.0	0.00070	1.3	30	0.00005	0.038	45
80	0.014	0.00025	0.00022	0.00015	0.00002	0	0.010	0.00017	5.7	1.1	0.0006	0.0025	0.0022	0.03	0.00002	0.00004	3.1	0.044	0.0109	0.0030	0.02	3.1	0.0037	0.0	0.00071	1.3	31	0.00005	0.038	45
81	0.015	0.00025	0.00022	0.00015	0.00002	0	0.010	0.00018	5.7	1.1	0.0006	0.0025	0.0022	0.03	0.00002	0.00004	3.1	0.044	0.0110	0.0031	0.02	3.1	0.0037	0.0	0.00071	1.3	31	0.00005	0.038	46
82	0.015	0.00025	0.00022	0.00015	0.00002	0	0.010	0.00018	5.8	1.1	0.0006	0.0025	0.0022	0.03	0.00002	0.00004	3.1	0.044	0.0110	0.0031	0.02	3.1	0.0038	0.0	0.00071	1.3	31	0.00005	0.039	46
83	0.015	0.00025	0.00022	0.00016	0.00002	0	0.011	0.00018	5.8	1.1	0.0006	0.0025	0.0023	0.03	0.00002	0.00004	3.1	0.044	0.0110	0.0031	0.02	3.1	0.0038	0.1	0.00071	1.3	31	0.00005	0.039	46
84	0.015	0.00025	0.00022	0.00016	0.00002	0	0.011	0.00018	5.8	1.1	0.0006	0.0025	0.0023	0.03	0.00002	0.00004	3.1	0.044	0.0111	0.0031	0.02	3.1	0.0038	0.1	0.00071	1.3	31	0.00005	0.039	46
85	0.015	0.00025	0.00022	0.00016	0.00002	0	0.011	0.00018	5.8	1.1	0.0006	0.0025	0.0023	0.03	0.00002	0.00004	3.2	0.044	0.0111	0.0031	0.02	3.1	0.0038	0.1	0.00072	1.3	31	0.00005	0.039	46
86	0.015	0.00026	0.00022	0.00016	0.00002	0	0.011	0.00018	5.9	1.2	0.0006	0.0026	0.0023	0.03	0.00002	0.00004	3.2	0.044	0.0112	0.0031	0.02	3.2	0.0038	0.1	0.00072	1.3	31	0.00005	0.039	47
87	0.015	0.00026	0.00022	0.00016	0.00002	0	0.011	0.00018	5.9	1.2	0.0006	0.0026	0.0023	0.03	0.00002	0.00004	3.2	0.045	0.0112	0.0031	0.02	3.2	0.0038	0.1	0.00072	1.3	32	0.00005	0.039	47
88	0.015	0.00026	0.00022	0.00016	0.00002	0	0.011	0.00018	5.9	1.2	0.0006	0.0026	0.0023	0.03	0.00002	0.00004	3.2	0.045	0.0112	0.0031	0.02	3.2	0.0038	0.1	0.00073	1.3	32	0.00005	0.039	47
89	0.015	0.00026	0.00023	0.00016	0.00002	0	0.011	0.00018	6.0	1.2	0.0006	0.0026	0.0023	0.03	0.00002	0.00004	3.2	0.045	0.0113	0.0032	0.02	3.2	0.0038	0.1	0.00073	1.3	32	0.00005	0.040	47
90	0.015	0.00026	0.00023	0.00016	0.00002	0	0.011	0.00018	6.0	1.2	0.0006	0.0026	0.0023	0.03	0.00002	0.00004	3.2	0.045	0.0113	0.0032	0.02	3.2	0.0039	0.1	0.00073	1.3	32	0.00005	0.040	47
91	0.015	0.00026	0.00023	0.00016	0.00002	0	0.011	0.00018	6.0	1.2	0.0006	0.0026	0.0023	0.03	0.00002	0.00004	3.2	0.045	0.0113	0.0032	0.02	3.2	0.0039	0.1	0.00073	1.3	32	0.00005	0.040	48
92	0.015	0.00026	0.00023	0.00016	0.00002	0	0.011	0.00018	6.0	1.2	0.0006	0.0026	0.0024	0.03	0.00002	0.00004	3.3	0.045	0.0114	0.0032	0.02	3.2	0.0039	0.1	0.00073	1.3	32	0.00005	0.040	48
93	0.015	0.00026	0.00023	0.00016	0.00002	0	0.011	0.00018	6.1	1.2	0.0006	0.0026	0.0024	0.03	0.00002	0.00004	3.3	0.046	0.0114	0.0032	0.02	3.2	0.0039	0.1	0.00074	1.4	32	0.00005	0.040	48
94	0.015	0.00026	0.00023	0.00016	0.00002	0	0.011	0.00018	6.1	1.2	0.0006	0.0026	0.0024	0.03	0.00002	0.00004	3.3	0.046	0.0115	0.0032	0.02	3.2	0.0039	0.1	0.00074	1.4	33	0.00005	0.040	48
95	0.016	0.00026	0.00023	0.00016	0.00002	0	0.011	0.00018	6.1	1.2	0.0006	0.0026	0.0024	0.03	0.00002	0.00004	3.3	0.046	0.0115	0.0032	0.02	3.3	0.0039	0.1	0.00074	1.4	33	0.00005	0.040	48
96	0.016	0.00027	0.00023	0.00017	0.00002	0	0.011	0.00018	6.2	1.2	0.0006	0.0026	0.0024	0.03	0.00002	0.00004	3.3	0.046	0.0115	0.0032	0.02	3.3	0.0039	0.1	0.00074	1.4	33	0.00005	0.040	49
97	0.016	0.00027	0.00023	0.00017	0.00002	0	0.011	0.00018	6.2	1.2	0.0006	0.0026	0.0024	0.03	0.00002	0.00004	3.3	0.046	0.0115	0.0032	0.02	3.3	0.0039	0.1	0.00074	1.4	33	0.00005	0.041	49
98	0.016	0.00027	0.00023	0.00017	0.00002	0	0.011	0.00019	6.2	1.2	0.0006	0.0027	0.0024	0.03	0.00002	0.00004	3.3	0.046	0.0116	0.0033	0.02	3.3	0.0040	0.1	0.00075	1.4	33	0.00005	0.041	49
99	0.016	0.00027	0.00023	0.00017	0.00002	0	0.011	0.00019	6.3	1.2	0.0006	0.0027	0.0024	0.03	0.00002	0.00004	3.3	0.046	0.0116	0.0033	0.02	3.3	0.0040	0.1	0.00075	1.4	33	0.00005	0.041	49
100	0.016	0.00027	0.00024	0.00017	0.00002	0	0.011	0.00019	6.3	1.2	0.0006	0.0027	0.0024	0.03	0.00002	0.00004	3.4	0.046	0.0116	0.0033	0.02	3.3	0.0040	0.1	0.00075	1.4	33	0.00005	0.041	49
101	0.016	0.00027	0.00024	0.00017	0.00002	0	0.011	0.00019	6.3	1.2	0.0006	0.0027	0.0025	0.03	0.00002	0.00004	3.4	0.046	0.0117	0.0033	0.02	3.3	0.0040	0.1	0.00075	1.4	33	0.00005	0.041	50
102	0.016	0.00027	0.00024	0.00017	0.00002	0	0.011	0.00019	6.3	1.2	0.0006	0.0027	0.0025	0.03	0.00002	0.00004	3.4	0.046	0.0117	0.0033	0.02	3.3	0.0040	0.1	0.00075	1.4	34	0.00005	0.041	50
103	0.016	0.00027	0.00024	0.00017	0.00002	0	0.011	0.00019	6.4	1.2	0.0006	0.0027	0.0025	0.03	0.00002	0.00004	3.4	0.047	0.0117	0.0033	0.02	3.3	0.0040	0.1	0.00076	1.4	34	0.00005	0.041	50
104	0.016	0.00027	0.00024	0.00017	0.00002	0	0.011	0.00019	6.4	1.2	0.0006	0.0027	0.0025	0.03	0.00002	0.00004	3.4	0.047	0.0118	0.0033	0.02	3.3	0.0040	0.1	0.00076	1.4	34	0.00005	0.041	50
105	0.016	0.00027	0.00024	0.00017	0.00002	0	0.011	0.00019	6.4	1.2	0.0006	0.0027	0.0025	0.03	0.00002	0.00004	3.4	0.047	0.0118	0.0033	0.02	3.3	0.0040	0.1	0.00076	1.4	34	0.00005	0.041	50
106	0.016	0.00027	0.00024	0.00017	0.00002	0	0.011	0.00019	6.5	1.2	0.0006	0.0027	0.0025	0.03	0.00002	0.00004	3.4	0.047	0.0118	0.0033	0.02	3.4	0.0040	0.1	0.00076	1.4	34	0.00005	0.041	50
107	0.016	0.00027	0.00024	0.00017	0.00002	0	0.011	0.00019	6.5	1.2	0.0006	0.0027	0.0025	0.03	0.00002	0.00004	3.4	0.047	0.0118	0.0033	0.02	3.4	0.0040	0.1	0.00076	1.4	34	0.00005	0.042	51
108	0.016	0.00028	0.00024	0.00017	0.00002	0	0.011	0.00019	6.5	1.2	0.0006	0.0027	0.0025	0.03	0.00002	0.00004	3.4	0.047	0.0119	0.0033	0.02	3.4	0.0041	0.1	0.00076	1.4	34	0.00005	0.042	51
109	0.017	0.00028	0.00024	0.00018	0.00002	0	0.012	0.00019	6.6	1.2	0.0006	0.0027	0.0025	0.03	0.00002	0.00005	3.5	0.047	0.0119	0.0034	0.02	3.4	0.0041	0.1	0.00076	1.4	35	0.00005	0.042	51
110	0.017	0.00028	0.00024	0.00018	0.00002	0	0.012	0.00019	6.6	1.2	0.0006	0.0027	0.0026	0.03	0.00002	0.00005	3.5	0.047	0.0119	0.0034	0.02	3.4	0.0041	0.1	0.00077	1.4	35	0.00005	0.042	51
111	0.017	0.00028	0.00024	0.00018	0.00002	0	0.012	0.00019	6.6	1.2	0.0006	0.0027	0.0026	0.03	0.00002	0.00005	3.5	0.047	0.0119	0.0034	0.02	3.4	0.0041	0.1	0.00077	1.4	35	0.00005	0.042	51
112	0.017	0.00028	0.00024	0.00018	0.00002	0	0.012	0.00019	6.7	1.2	0.0006	0.0027	0.0026	0.03	0.00002	0.00005	3.5	0.047	0.0119	0.0034	0.02	3.4	0.0041	0.1	0.00077	1.4	35	0.00005	0.042	52
113	0.017	0.00028	0.00025	0.00018	0.00002	0	0.012	0.00019	6.7	1.2	0.0006	0.0028	0.0026	0.03	0.00002	0.00005	3.5	0.048	0.0120	0.0034	0.02	3.4	0.0041	0.1	0.00077	1.4	35	0.00005	0.042	52
114	0.017	0.00028	0.00025	0.00018	0.00002	0	0.012	0.00019	6.7	1.2	0.0006	0.0028	0.0026	0.03	0.00002	0.00005	3.5	0.048	0.0120	0.0034	0.02	3.4	0.0041	0.1	0.00077	1.4	35	0.00005	0.042	52
115	0.017	0.00028	0.00025	0.00018	0.00002	0	0.012	0.00019	6.7	1.2	0.0006	0.0028	0.0026	0.03	0.00002	0.00005	3.5	0.048	0.0120	0.0034	0.02	3.4	0.0041	0.1	0.00077	1.4	35	0.00005	0.042	52
116	0.017	0.00028	0.00025	0.00018	0.00002	0	0.012	0.00019	6.8	1.2	0.0006	0.0028	0.0026	0.03	0.00002	0.00005	3.5	0.048	0.0120	0.0034	0.02	3.4	0.0041	0.1	0.00077	1.4	35	0.00005	0.042	52
117	0.017	0.00028	0.00025	0.00018	0.00002	0	0.012	0.00019	6.8	1.2	0.0006	0.0028	0.0026	0.03	0.00002	0.00005	3.5	0.048	0.0120	0.0034	0.02	3.4	0.0041	0.1	0.00077	1.4	35	0.00005	0.042	52
118	0.017	0.00028	0.00025	0.00018	0.00002	0	0.012	0.00019	6.8	1.2	0.0006	0.0028	0.0026	0.03	0.00002	0.00005	3.5	0.048	0.0121	0.0034	0.02	3.4	0.0041	0.1	0.00078	1.4	36	0.00005	0.043	53
119	0.017	0.00028	0.00025	0.00018	0.00002	0	0.012	0.00019	6.9	1.2	0.0006	0.0028	0.0027	0.03	0.00002	0.00005	3.6	0.048	0.0121	0.0034	0.02	3.5	0.0041	0.1	0.00078	1.4	36	0.00005	0.043	53
120	0.017	0.00028	0.00025	0.00018	0.00002	0	0.012	0.00019	6.9	1.2	0.0006	0.0028	0.0027	0.03	0.00002	0.00005	3.6	0.048	0.0121	0.0034	0.02	3.5	0.0042	0.1	0.00078	1.4	36	0.00005	0.043	53
121	0.017	0.00028	0.00025	0.00018	0.00002	0	0.012	0.00019	6.9	1.2	0.0006	0.0028	0.0027	0.03	0.00002	0.00005	3.6	0.048	0.0121	0.0034	0.02	3.5	0.0042	0.1	0.00078	1.4	36	0.00005	0.043	53
122	0.018	0.00028	0.00025	0.00019	0.00002	0	0.012	0.00019	7.0	1.2	0.0006	0.0028	0.0027	0.03	0.00002	0.00005	3.6	0.048	0.0122	0.0034	0.02	3.5	0.0042	0.1	0.00078	1.4	36	0.00005	0.043	53
123	0.018	0.00029	0.00025	0.00019	0.00002	0	0.012	0.00020	7.0	1.3	0.0007	0.0028	0.0027	0.03	0.00002	0.00005	3.6	0.048	0.0122	0.0035	0.02	3.5	0.0042	0.1	0.00078	1.4	36	0.00005	0.043	54
124	0.018	0.00029	0.00025	0.00019	0.00002	0	0.012	0.00020	7.0	1.3	0.0007	0.0028	0.0027	0.03	0.00002	0.00005	3.6	0.048	0.0122	0.0035	0.02	3.5	0.0042	0.1	0.00078	1.4	36	0.00005	0.043	54
125	0.018	0.00029	0.00025	0.00019	0.00002	0	0.012	0.00020	7.0	1.3	0.0007	0.0028	0.0027	0.03	0.00002	0.00005	3.6	0.048	0.0122	0.0035	0.02	3.5	0.0042	0.1	0.00078	1.4	36	0.00005	0.043	54
126	0.018	0.00029	0.00025	0.00019	0.00002	0	0.012	0.00020	7.1	1.3	0.0007	0.0028	0.0027	0.03	0.00002	0.00005	3.6	0.049	0.0122	0.0035	0.02	3.5	0.0042	0.1	0.00078	1.4	37	0.00005	0.043	54
127	0.018	0.00029	0.00026	0.00019	0.00002	0	0.012	0.00020	7.1	1.3	0.0007	0.0028	0.0027	0.03	0.00002	0.00005	3.6	0.049	0.0123	0.0035	0.02	3.5	0.0042	0.1	0.00079	1.4	37	0.00005	0.043	54
128	0.018	0.00029	0.00026	0.00019	0.00002	0	0.012	0.00020	7.2	1.3	0.0007	0.0028	0.0028	0.03	0.00002	0.00005	3.6	0.049	0.0123	0.0035	0.02	3.5	0.0042	0.1	0.00079	1.4	37	0.00005	0.043	54
129	0.018	0.00029	0.00026	0.00019	0.00002	0	0.012	0.00020	7.2	1.3	0.0007	0.0028	0.0028	0.03	0.00002	0.00005	3.7	0.049	0.0123	0.0035	0.02	3.5	0.0042	0.1	0.00079	1.4	37	0.00005	0.043	55
130	0.018	0.00029	0.00026	0.00019	0.00002	0	0.012	0.00020	7.2	1.3	0.0007	0.0029	0.0028	0.03	0.00002	0.00005	3.7	0.049	0.0123	0.0035	0.02	3.5	0.0042	0.1	0.00079	1.4	37	0.00005	0.044	55
131	0.018	0.00029	0.00026	0.00019	0.00002	0	0.012	0.00020	7.2	1.3	0.0007	0.0029	0.0028	0.03	0.00002	0.00005	3.7	0.049	0.0124	0.0035	0.02	3.5	0.0042	0.1	0.00079	1.5	37	0.00005	0.044	55
132	0.018	0.00029	0.00026	0.00019	0.00002	0	0.012	0.00020	7.3	1.3	0.0007	0.0029	0.0028	0.03	0.00002	0.00005	3.7	0.049	0.0124	0.0035	0.02	3.5	0.0043	0.1	0.00079	1.5	37	0.00005	0.044	55
133	0.018	0.00029	0.00026	0.00019	0.00002	0	0.012	0.00020	7.3	1.3	0.0007	0.0029	0.0028	0.03	0.00002	0.00005	3.7	0.049	0.0124	0.0035	0.02	3.6	0.0043	0.1	0.00079	1.5	38	0.00005	0.044	55
134	0.018	0.00029	0.00026	0.00019	0.00002	0	0.012	0.00020	7.3	1.3	0.0007	0.0029	0.0028	0.03	0.00002	0.00005	3.7	0.049	0.0124	0.0035	0.02	3.6	0.0043	0.1	0.00080	1.5	38	0.00005	0.044	56

Table 6. Model Results at Queen Creek 3 Aquifer Subdomain - Alternative 4

Years since Mine Start	Al mg/L	Sb mg/L	As mg/L	Ba mg/L	Be mg/L	HCO3 mg/L	B mg/L	Cd mg/L	Ca mg/L	Cl mg/L	Cr mg/L	Co mg/L	Cu mg/L	F mg/L	Fe mg/L	Pb mg/L	Mg mg/L	Mn mg/L	Mo mg/L	Ni mg/L	NO3-N mg/L	K mg/L	Se mg/L	Si mg/L	Ag mg/L	Na mg/L	SO4 mg/L	Tl mg/L	Zn mg/L	TDS mg/L
135	0.018	0.00029	0.00026	0.00020	0.00002	0	0.012	0.00020	7.4	1.3	0.0007	0.0029	0.0028	0.03	0.00002	0.00005	3.7	0.049	0.0124	0.0036	0.02	3.6	0.0043	0.1	0.00080	1.5	38	0.00005	0.044	56
136	0.019	0.00030	0.00026	0.00020	0.00002	0	0.012	0.00020	7.4	1.3	0.0007	0.0029	0.0028	0.03	0.00002	0.00005	3.7	0.049	0.0125	0.0036	0.02	3.6	0.0043	0.1	0.00080	1.5	38	0.00005	0.044	56
137	0.019	0.00030	0.00026	0.00020	0.00002	0	0.012	0.00020	7.4	1.3	0.0007	0.0029	0.0029	0.03	0.00002	0.00005	3.8	0.049	0.0125	0.0036	0.02	3.6	0.0043	0.1	0.00080	1.5	38	0.00005	0.044	56
138	0.019	0.00030	0.00027	0.00020	0.00002	0	0.012	0.00020	7.5	1.3	0.0007	0.0029	0.0029	0.03	0.00003	0.00005	3.8	0.050	0.0125	0.0036	0.02	3.6	0.0043	0.1	0.00080	1.5	38	0.00005	0.044	56
139	0.019	0.00030	0.00027	0.00020	0.00002	0	0.012	0.00020	7.5	1.3	0.0007	0.0029	0.0029	0.03	0.00003	0.00005	3.8	0.050	0.0126	0.0036	0.02	3.6	0.0043	0.1	0.00080	1.5	38	0.00005	0.044	57
140	0.019	0.00030	0.00027	0.00020	0.00002	0	0.012	0.00020	7.5	1.3	0.0007	0.0029	0.0029	0.03	0.00003	0.00005	3.8	0.050	0.0126	0.0036	0.02	3.6	0.0043	0.1	0.00080	1.5	38	0.00005	0.044	57
141	0.019	0.00030	0.00027	0.00020	0.00002	0	0.012	0.00020	7.6	1.3	0.0007	0.0029	0.0029	0.03	0.00003	0.00005	3.8	0.050	0.0126	0.0036	0.02	3.6	0.0043	0.1	0.00080	1.5	39	0.00005	0.045	57
142	0.019	0.00030	0.00027	0.00020	0.00002	0	0.013	0.00020	7.6	1.3	0.0007	0.0029	0.0029	0.03	0.00003	0.00005	3.8	0.050	0.0126	0.0036	0.02	3.6	0.0043	0.1	0.00081	1.5	39	0.00005	0.045	57
143	0.019	0.00030	0.00027	0.00020	0.00002	0	0.013	0.00020	7.6	1.3	0.0007	0.0029	0.0029	0.03	0.00003	0.00005	3.8	0.050	0.0126	0.0036	0.02	3.6	0.0043	0.1	0.00081	1.5	39	0.00005	0.045	57
144	0.019	0.00030	0.00027	0.00020	0.00002	0	0.013	0.00020	7.7	1.3	0.0007	0.0029	0.0029	0.03	0.00003	0.00005	3.8	0.050	0.0127	0.0036	0.02	3.6	0.0044	0.1	0.00081	1.5	39	0.00005	0.045	58
145	0.019	0.00030	0.00027	0.00020	0.00002	0	0.013	0.00020	7.7	1.3	0.0007	0.0030	0.0030	0.03	0.00003	0.00005	3.9	0.050	0.0127	0.0036	0.02	3.6	0.0044	0.1	0.00081	1.5	39	0.00005	0.045	58
146	0.019	0.00030	0.00027	0.00020	0.00002	0	0.013	0.00020	7.7	1.3	0.0007	0.0030	0.0030	0.03	0.00003	0.00005	3.9	0.050	0.0127	0.0037	0.02	3.7	0.0044	0.1	0.00081	1.5	39	0.00005	0.045	58
147	0.019	0.00030	0.00027	0.00020	0.00002	0	0.013	0.00020	7.7	1.3	0.0007	0.0030	0.0030	0.03	0.00003	0.00005	3.9	0.050	0.0127	0.0037	0.02	3.7	0.0044	0.1	0.00081	1.5	39	0.00005	0.045	58
148	0.019	0.00031	0.00027	0.00021	0.00002	0	0.013	0.00020	7.7	1.3	0.0007	0.0030	0.0030	0.03	0.00003	0.00005	3.9	0.050	0.0127	0.0037	0.02	3.7	0.0044	0.1	0.00081	1.5	39	0.00005	0.045	58
149	0.019	0.00031	0.00028	0.00021	0.00002	0	0.013	0.00020	7.8	1.3	0.0007	0.0030	0.0030	0.03	0.00003	0.00005	3.9	0.050	0.0127	0.0037	0.02	3.7	0.0044	0.1	0.00081	1.5	39	0.00005	0.045	58
150	0.019	0.00030	0.00027	0.00020	0.00002	0	0.013	0.00020	7.7	1.3	0.0007	0.0029	0.0029	0.03	0.00003	0.00005	3.8	0.049	0.0125	0.0036	0.02	3.6	0.0043	0.1	0.00080	1.5	39	0.00005	0.044	57
151	0.019	0.00031	0.00028	0.00021	0.00002	0	0.013	0.00020	7.8	1.3	0.0007	0.0030	0.0030	0.03	0.00003	0.00005	3.9	0.050	0.0127	0.0037	0.02	3.6	0.0044	0.1	0.00081	1.5	40	0.00005	0.045	58
152	0.020	0.00031	0.00028	0.00021	0.00002	0	0.013	0.00020	7.8	1.3	0.0007	0.0030	0.0030	0.03	0.00003	0.00005	3.9	0.050	0.0127	0.0037	0.02	3.7	0.0044	0.1	0.00081	1.5	40	0.00005	0.045	58
153	0.020	0.00031	0.00028	0.00021	0.00002	0	0.013	0.00020	7.8	1.3	0.0007	0.0030	0.0030	0.03	0.00003	0.00005	3.9	0.050	0.0127	0.0037	0.02	3.7	0.0044	0.1	0.00081	1.5	40	0.00005	0.045	58
154	0.020	0.00031	0.00028	0.00021	0.00002	0	0.013	0.00020	7.8	1.3	0.0007	0.0030	0.0030	0.03	0.00003	0.00005	3.9	0.050	0.0127	0.0037	0.02	3.7	0.0044	0.1	0.00081	1.5	40	0.00005	0.045	59
155	0.020	0.00031	0.00028	0.00021	0.00002	0	0.013	0.00020	7.9	1.3	0.0007	0.0030	0.0030	0.03	0.00003	0.00005	3.9	0.050	0.0127	0.0037	0.02	3.7	0.0044	0.1	0.00081	1.5	40	0.00005	0.045	59
156	0.020	0.00031	0.00028	0.00021	0.00002	0	0.013	0.00020	7.9	1.3	0.0007	0.0030	0.0030	0.03	0.00003	0.00005	3.9	0.050	0.0127	0.0037	0.02	3.7	0.0044	0.1	0.00081	1.5	40	0.00005	0.045	59
157	0.020	0.00031	0.00028	0.00021	0.00002	0	0.013	0.00020	7.9	1.3	0.0007	0.0030	0.0030	0.03	0.00003	0.00005	4.0	0.050	0.0127	0.0037	0.02	3.7	0.0044	0.1	0.00081	1.5	40	0.00005	0.045	59
158	0.020	0.00031	0.00028	0.00021	0.00002	0	0.013	0.00020	7.9	1.3	0.0007	0.0030	0.0030	0.03	0.00003	0.00005	4.0	0.050	0.0127	0.0037	0.02	3.7	0.0044	0.1	0.00081	1.5	40	0.00005	0.045	59
159	0.020	0.00031	0.00028	0.00021	0.00002	0	0.013	0.00020	7.9	1.3	0.0007	0.0030	0.0030	0.03	0.00003	0.00005	4.0	0.050	0.0127	0.0037	0.02	3.7	0.0044	0.1	0.00081	1.5	40	0.00005	0.045	59
160	0.020	0.00031	0.00028	0.00021	0.00002	0	0.013	0.00020	7.9	1.3	0.0007	0.0030	0.0030	0.03	0.00003	0.00005	4.0	0.050	0.0127	0.0037	0.02	3.7	0.0044	0.1	0.00081	1.5	40	0.00005	0.045	59
161	0.020	0.00031	0.00028	0.00021	0.00002	0	0.013	0.00020	7.9	1.3	0.0007	0.0030	0.0030	0.03	0.00003	0.00005	4.0	0.050	0.0127	0.0037	0.02	3.7	0.0044	0.1	0.00081	1.5	40	0.00005	0.045	59
162	0.020	0.00031	0.00028	0.00021	0.00002	0	0.013	0.00020	8.0	1.3	0.0007	0.0030	0.0031	0.03	0.00003	0.00005	4.0	0.050	0.0127	0.0037	0.02	3.7	0.0044	0.1	0.00081	1.5	40	0.00005	0.045	59
163	0.020	0.00031	0.00028	0.00021	0.00002	0	0.013	0.00020	8.0	1.3	0.0007	0.0030	0.0031	0.03	0.00003	0.00005	4.0	0.050	0.0127	0.0037	0.02	3.7	0.0044	0.1	0.00081	1.5	40	0.00005	0.045	59
164	0.020	0.00031	0.00028	0.00021	0.00002	0	0.013	0.00020	8.0	1.3	0.0007	0.0030	0.0031	0.03	0.00003	0.00005	4.0	0.050	0.0127	0.0037	0.02	3.7	0.0044	0.1	0.00081	1.5	41	0.00005	0.045	60
165	0.020	0.00031	0.00029	0.00021	0.00002	0	0.013	0.00020	8.0	1.3	0.0007	0.0030	0.0031	0.03	0.00003	0.00005	4.0	0.050	0.0127	0.0037	0.02	3.7	0.0044	0.1	0.00081	1.5	41	0.00005	0.045	60
166	0.020	0.00031	0.00029	0.00021	0.00002	0	0.013	0.00020	8.0	1.3	0.0007	0.0030	0.0031	0.03	0.00003	0.00005	4.0	0.050	0.0127	0.0037	0.02	3.7	0.0044	0.1	0.00081	1.5	41	0.00005	0.045	60
167	0.020	0.00031	0.00029	0.00021	0.00002	0	0.013	0.00020	8.0	1.3	0.0007	0.0030	0.0031	0.03	0.00003	0.00005	4.0	0.050	0.0127	0.0037	0.02	3.7	0.0044	0.1	0.00081	1.5	41	0.00005	0.045	60
168	0.020	0.00031	0.00029	0.00021	0.00002	0	0.013	0.00021	8.1	1.3	0.0007	0.0030	0.0031	0.03	0.00003	0.00005	4.0	0.050	0.0127	0.0037	0.02	3.7	0.0044	0.1	0.00081	1.5	41	0.00005	0.045	60
169	0.020	0.00031	0.00029	0.00021	0.00002	0	0.013	0.00021	8.1	1.3	0.0007	0.0030	0.0031	0.03	0.00003	0.00005	4.1	0.050	0.0127	0.0037	0.02	3.7	0.0044	0.1	0.00081	1.5	41	0.00005	0.045	60
170	0.020	0.00031	0.00029	0.00021	0.00002	0	0.013	0.00021	8.1	1.3	0.0007	0.0030	0.0031	0.03	0.00003	0.00005	4.1	0.050	0.0127	0.0037	0.02	3.7	0.0044	0.1	0.00081	1.5	41	0.00005	0.045	60
171	0.020	0.00032	0.00029	0.00021	0.00002	0	0.013	0.00021	8.1	1.3	0.0007	0.0030	0.0031	0.03	0.00003	0.00005	4.1	0.050	0.0127	0.0037	0.02	3.7	0.0044	0.1	0.00081	1.5	41	0.00005	0.045	60
172	0.020	0.00032	0.00029	0.00021	0.00002	0	0.013	0.00021	8.1	1.3	0.0007	0.0030	0.0031	0.03	0.00003	0.00005	4.1	0.050	0.0127	0.0037	0.02	3.7	0.0044	0.1	0.00081	1.5	41	0.00005	0.045	60
173	0.020	0.00032	0.00029	0.00021	0.00002	0	0.013	0.00021	8.1	1.3	0.0007	0.0030	0.0031	0.03	0.00003	0.00005	4.1	0.050	0.0128	0.0038	0.02	3.7	0.0044	0.1	0.00081	1.5	41	0.00005	0.046	61
174	0.020	0.00032	0.00029	0.00021	0.00002	0	0.013	0.00021	8.1	1.3	0.0007	0.0030	0.0031	0.03	0.00003	0.00005	4.1	0.050	0.0128	0.0038	0.02	3.7	0.0044	0.1	0.00081	1.5	41	0.00005	0.045	61
175	0.020	0.00032	0.00029	0.00022	0.00002	0	0.013	0.00021	8.2	1.3	0.0007	0.0030	0.0031	0.03	0.00003	0.00005	4.1	0.050	0.0128	0.0038	0.02	3.7	0.0044	0.1	0.00081	1.5	41	0.00005	0.046	61
176	0.020	0.00032	0.00029	0.00022	0.00002	0	0.013	0.00021	8.2	1.3	0.0007	0.0030	0.0031	0.03	0.00003	0.00005	4.1	0.050	0.0128	0.0038	0.02	3.7	0.0044	0.1	0.00081	1.5	41	0.00005	0.046	61
177	0.020	0.00032	0.00029	0.00022	0.00002	0	0.013	0.00021	8.2	1.3	0.0007	0.0030	0.0031	0.03	0.00003	0.00005	4.1	0.050	0.0128	0.0038	0.02	3.7	0.0044	0.1	0.00081	1.5	41	0.00005	0.046	61
178	0.020	0.00032	0.00029	0.00022	0.00002	0	0.013	0.00021	8.2	1.3	0.0007	0.0030	0.0031	0.03	0.00003	0.00005	4.1	0.050	0.0128	0.0038	0.02	3.7	0.0044	0.1	0.00081	1.5	42	0.00005	0.046	61
179	0.020	0.00032	0.00030	0.00022	0.00002	0	0.013	0.00021	8.2	1.3	0.0007	0.0030	0.0031	0.03	0.00003	0.00005	4.1	0.050	0.0128	0.0038	0.02	3.7	0.0044	0.1	0.00081	1.5	42	0.00005	0.046	61
180	0.021	0.00032	0.00030	0.00022	0.00002	0	0.013	0.00021	8.2	1.3	0.0007	0.0030	0.0032	0.03	0.00003	0.00005	4.2	0.050	0.0128	0.0038	0.02	3.7	0.0044	0.1	0.00081	1.5	42	0.00005	0.046	61
181	0.021	0.00032	0.00030	0.00022	0.00002	0	0.013	0.00021	8.3	1.3	0.0007	0.0030	0.0032	0.03	0.00003	0.00005	4.2	0.050	0.0128	0.0038	0.02	3.7	0.0045	0.1	0.00081	1.5	42	0.00005	0.046	61
182	0.021	0.00032	0.00030	0.00022	0.00002	0	0.013	0.00021	8.3	1.3	0.0007	0.0030	0.0032	0.03	0.00003	0.00005	4.2	0.050	0.0128	0.0038	0.02	3.7	0.0045	0.1	0.00081	1.5	42	0.00005	0.046	61
183	0.021	0.00032	0.00030	0.00022	0.00002	0	0.013	0.00021	8.3	1.3	0.0007	0.0030	0.0032	0.03	0.00003	0.00005	4.2	0.050	0.0128	0.0038	0.02	3.8	0.0045	0.1	0.00081	1.5	42	0.00005	0.046	62
184	0.021	0.00032	0.00030	0.00022	0.00002	0	0.013	0.00021	8.3	1.3	0.0007	0.0031	0.0032	0.03	0.00003	0.00005	4.2	0.050	0.0129	0.0038	0.02	3.8	0.0045	0.1	0.00081	1.5	42	0.00005	0.046	62
185	0.021	0.00032	0.00030	0.00022	0.00002	0	0.013	0.00021	8.3	1.3	0.0007	0.0031	0.0032	0.03	0.00003	0.00005	4.2	0.050	0.0129	0.0038	0.02	3.8	0.0045	0.1	0.00081	1.5	42	0.00005	0.046	62
186	0.021	0.00032	0.00030	0.00022	0.00002	0	0.013	0.00021	8.3	1.3	0.0007	0.0031	0.0032	0.03	0.00003	0.00005	4.2	0.050	0.0129	0.0038	0.02	3.8	0.0045	0.1	0.00081	1.5	42	0.00005	0.046	62
187	0.021	0.00032	0.00030	0.00022	0.00002	0	0.013	0.00021	8.3	1.3	0.0007	0.0031	0.0032	0.03	0.00003	0.00005	4.2	0.050	0.0129	0.0038	0.02	3.8	0.0045	0.1	0.00081	1.5	42	0.00005	0.046	62
188	0.021	0.00033	0.00030	0.00022	0.00002	0	0.014	0.00021	8.4	1.3	0.0007	0.0031	0.0032	0.03	0.00003	0.00005	4.2	0.050	0.0129	0.0038	0.02	3.8	0.0045	0.1	0.00081	1.5	42	0.00005	0.046	62
189	0.021	0.00033	0.00030	0.00022	0.00002	0	0.014	0.00021	8.4	1.3	0.0007	0.0031	0.0032	0.03	0.00003	0.00005	4.2	0.050	0.0129	0.0038	0.02	3.8	0.0045	0.1	0.00081	1.5	42	0.00005	0.046	62
190	0.021	0.00033	0.00030	0.00022	0.00002	0	0.014	0.00021	8.4	1.3	0.0007	0.0031	0.0032	0.03	0.00003	0.00005	4.3	0.050	0.0129	0.0038	0.02	3.8	0.0045	0.1	0.00081	1.5	43	0.00005	0.046	62
191	0.021	0.00033	0.00030	0.00022	0.00002	0	0.014	0.00021	8.4	1.3	0.0007	0.0031	0.0032	0.03	0.00003	0.00005	4.3	0.050	0.0129	0.0039	0.02	3.8	0.0045	0.1	0.00081	1.5	43	0.00005	0.046	63
192	0.021	0.00033	0.00031	0.00022	0.00002	0	0.014	0.00021	8.4	1.3	0.0007	0.0031	0.0032	0.03	0.00003	0.00005	4.3	0.050	0.0129	0.0039	0.02	3.8	0.0045	0.1	0.00081	1.5	43	0.00005	0.046	63
193	0.021	0.00033	0.00031	0.00022	0.00002	0	0.014	0.00021	8.4	1.3	0.0007	0.0031	0.0032	0.03	0.00003	0.00005	4.3	0.051	0.0130	0.0039	0.02	3.8	0.0045	0.1	0.00082	1.5	43	0.00005	0.046	63
194	0.021	0.00033	0.00031	0.00022	0.00003	0	0.014	0.00021	8.5	1.3	0.0007	0.0031	0.0032	0.03	0.00003	0.00005	4.3	0.051	0.0130	0.0039	0.02	3.8	0.0045	0.1	0.00082	1.5	43	0.00005	0.047	63
195	0.021	0.00033	0.00031	0.00022	0.00003	0	0.014	0.00021	8.5	1.3	0.0007	0.0031	0.0032	0.03	0.00003	0.00005	4.3	0.051	0.0130	0.0039	0.02	3.8	0.0045	0.1	0.00082	1.5	43	0.00005	0.047	63
196	0.021	0.00033	0.00031	0.00022	0.00003	0	0.014	0.00021	8.5	1.3	0.0007	0.0031	0.0032	0.03	0.00003	0.00005	4.3	0.051	0.0130	0.0039	0.02	3.8	0.0045	0.1	0.00082	1.5	43	0.00005	0.047	63
197	0.021	0.00033	0.00031	0.00022	0.00003	0	0.014	0.00021	8.5	1.3	0.0007	0.0031	0.0032	0.03	0.00003	0.00005	4.3	0.051	0.0130	0.0039	0.02	3.8	0.0045	0.1	0.00082	1.5	43	0.00005	0.047	63
198	0.021	0.00033	0.00031	0.00022	0.00003	0	0.014	0.00021	8.5	1.3	0.0007	0.0031	0.0033	0.03	0.00003	0.00006	4.3	0.051	0.0130	0.0039	0.02	3.8	0.0045	0.1	0.00082	1.5	43	0.00005	0.047	63
199	0.021	0.00033	0.00031	0.00022	0.00003	0	0.014	0.00021	8.5	1.3	0.0007	0.0031	0.0033	0.03	0.00003	0.00006	4.4	0.051	0.0131	0.0039	0.02	3.8	0.0045	0.1	0.00082	1.5	43	0.00005	0.047	63
200	0.021	0.00033	0.00031	0.00023	0.00003	0	0.014	0.00021	8.5	1.3	0.0007	0.0031	0.0033	0.03	0.00003	0.00006	4.4	0.051	0.0131	0.0039	0.02	3.8	0.0046	0.1	0.00082	1.5	43	0.00005	0.047	64
201	0.021	0.00033	0.00031	0.00022	0.00002	0	0.014	0.00021	8.4	1.3	0.0007	0.0031	0.0032	0.03	0.00003	0.00005	4.3	0.050	0.0129	0.0039	0.02	3.8	0.0045	0.1	0.00081	1.5	43	0.00005	0.046	63

Table 6. Model Results at Queen Creek 3 Aquifer Subdomain - Alternative 4

Years since Mine Start	Al	Sb	As	Ba	Be	HCO3	B	Cd	Ca	Cl	Cr	Co	Cu	F	Fe	Pb	Mg	Mn	Mo	Ni	NO3-N	K	Se	Si	Ag	Na	SO4	Tl	Zn	TDS
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
202	0.021	0.00033	0.00031	0.00022	0.00003	0	0.014	0.00021	8.5	1.3	0.0007	0.0031	0.0033	0.03	0.00003	0.00006	4.4	0.051	0.0130	0.0039	0.02	3.8	0.0045	0.1	0.00082	1.5	43	0.00005	0.047	64
203	0.021	0.00034	0.00031	0.00023	0.00003	0	0.014	0.00021	8.6	1.3	0.0007	0.0031	0.0033	0.03	0.00003	0.00006	4.4	0.051	0.0131	0.0039	0.02	3.9	0.0046	0.1	0.00082	1.5	44	0.00005	0.047	64
204	0.021	0.00034	0.00032	0.00023	0.00003	0	0.014	0.00021	8.6	1.3	0.0007	0.0031	0.0033	0.03	0.00003	0.00006	4.4	0.051	0.0131	0.0039	0.02	3.9	0.0046	0.1	0.00082	1.5	44	0.00005	0.047	64
205	0.021	0.00034	0.00032	0.00023	0.00003	0	0.014	0.00021	8.6	1.3	0.0007	0.0031	0.0033	0.03	0.00003	0.00006	4.4	0.051	0.0131	0.0040	0.02	3.9	0.0046	0.1	0.00083	1.5	44	0.00005	0.047	64
206	0.021	0.00034	0.00032	0.00023	0.00003	0	0.014	0.00021	8.6	1.3	0.0007	0.0032	0.0033	0.03	0.00003	0.00006	4.4	0.051	0.0132	0.0040	0.02	3.9	0.0046	0.1	0.00083	1.5	44	0.00005	0.047	64
207	0.022	0.00034	0.00032	0.00023	0.00003	0	0.014	0.00021	8.6	1.3	0.0007	0.0032	0.0033	0.03	0.00003	0.00006	4.4	0.051	0.0132	0.0040	0.02	3.9	0.0046	0.1	0.00083	1.5	44	0.00006	0.047	64
208	0.022	0.00034	0.00032	0.00023	0.00003	0	0.014	0.00021	8.7	1.3	0.0007	0.0032	0.0033	0.03	0.00003	0.00006	4.5	0.051	0.0132	0.0040	0.02	3.9	0.0046	0.1	0.00083	1.5	44	0.00006	0.047	65
209	0.022	0.00034	0.00032	0.00023	0.00003	0	0.014	0.00021	8.7	1.3	0.0007	0.0032	0.0033	0.03	0.00003	0.00006	4.5	0.051	0.0132	0.0040	0.02	3.9	0.0046	0.1	0.00083	1.5	44	0.00006	0.048	65
210	0.022	0.00034	0.00032	0.00023	0.00003	0	0.014	0.00021	8.7	1.3	0.0007	0.0032	0.0033	0.03	0.00003	0.00006	4.5	0.051	0.0132	0.0040	0.02	3.9	0.0046	0.1	0.00083	1.5	44	0.00006	0.048	65
211	0.022	0.00034	0.00032	0.00023	0.00003	0	0.014	0.00021	8.7	1.3	0.0007	0.0032	0.0033	0.03	0.00003	0.00006	4.5	0.051	0.0132	0.0040	0.02	3.9	0.0046	0.1	0.00083	1.5	44	0.00006	0.048	65
212	0.022	0.00034	0.00032	0.00023	0.00003	0	0.014	0.00022	8.7	1.3	0.0007	0.0032	0.0033	0.03	0.00003	0.00006	4.5	0.052	0.0133	0.0040	0.02	3.9	0.0046	0.1	0.00083	1.5	44	0.00006	0.048	65
213	0.022	0.00034	0.00032	0.00023	0.00003	0	0.014	0.00022	8.7	1.3	0.0007	0.0032	0.0033	0.03	0.00003	0.00006	4.5	0.052	0.0133	0.0040	0.02	3.9	0.0046	0.1	0.00083	1.5	45	0.00006	0.048	65
214	0.022	0.00034	0.00032	0.00023	0.00003	0	0.014	0.00022	8.7	1.3	0.0007	0.0032	0.0033	0.03	0.00003	0.00006	4.5	0.052	0.0133	0.0040	0.02	3.9	0.0047	0.1	0.00083	1.5	45	0.00006	0.048	65
215	0.022	0.00034	0.00032	0.00023	0.00003	0	0.014	0.00022	8.8	1.3	0.0007	0.0032	0.0033	0.03	0.00003	0.00006	4.5	0.052	0.0133	0.0040	0.02	3.9	0.0047	0.1	0.00083	1.5	45	0.00006	0.048	65
216	0.022	0.00035	0.00033	0.00023	0.00003	0	0.014	0.00022	8.8	1.3	0.0007	0.0032	0.0034	0.03	0.00003	0.00006	4.5	0.052	0.0134	0.0040	0.02	3.9	0.0047	0.1	0.00084	1.5	45	0.00006	0.048	66
217	0.022	0.00035	0.00033	0.00023	0.00003	0	0.014	0.00022	8.8	1.3	0.0007	0.0032	0.0034	0.03	0.00003	0.00006	4.6	0.052	0.0134	0.0040	0.02	4.0	0.0047	0.1	0.00084	1.5	45	0.00006	0.048	66
218	0.022	0.00035	0.00033	0.00023	0.00003	0	0.014	0.00022	8.8	1.3	0.0007	0.0032	0.0034	0.03	0.00003	0.00006	4.6	0.052	0.0134	0.0041	0.03	4.0	0.0047	0.1	0.00084	1.5	45	0.00006	0.048	66
219	0.022	0.00035	0.00033	0.00023	0.00003	0	0.014	0.00022	8.8	1.3	0.0007	0.0032	0.0034	0.03	0.00003	0.00006	4.6	0.052	0.0134	0.0041	0.03	4.0	0.0047	0.1	0.00084	1.5	45	0.00006	0.048	66
220	0.022	0.00035	0.00033	0.00023	0.00003	0	0.014	0.00022	8.8	1.3	0.0007	0.0032	0.0034	0.03	0.00003	0.00006	4.6	0.052	0.0134	0.0041	0.03	4.0	0.0047	0.1	0.00084	1.5	45	0.00006	0.048	66
221	0.022	0.00035	0.00033	0.00023	0.00003	0	0.014	0.00022	8.8	1.3	0.0007	0.0032	0.0034	0.03	0.00003	0.00006	4.6	0.052	0.0134	0.0041	0.03	4.0	0.0047	0.1	0.00084	1.5	45	0.00006	0.048	66
222	0.022	0.00035	0.00033	0.00023	0.00003	0	0.015	0.00022	8.9	1.3	0.0007	0.0032	0.0034	0.03	0.00003	0.00006	4.6	0.052	0.0135	0.0041	0.03	4.0	0.0047	0.1	0.00084	1.5	45	0.00006	0.048	66
223	0.022	0.00035	0.00033	0.00023	0.00003	0	0.015	0.00022	8.9	1.4	0.0007	0.0032	0.0034	0.03	0.00003	0.00006	4.6	0.052	0.0135	0.0041	0.03	4.0	0.0047	0.1	0.00084	1.5	45	0.00006	0.049	66
224	0.022	0.00035	0.00033	0.00023	0.00003	0	0.015	0.00022	8.9	1.4	0.0007	0.0033	0.0034	0.03	0.00003	0.00006	4.6	0.052	0.0135	0.0041	0.03	4.0	0.0047	0.1	0.00085	1.5	46	0.00006	0.049	67
225	0.022	0.00035	0.00033	0.00023	0.00003	0	0.015	0.00022	8.9	1.4	0.0007	0.0033	0.0034	0.03	0.00003	0.00006	4.6	0.053	0.0135	0.0041	0.03	4.0	0.0047	0.1	0.00085	1.6	46	0.00006	0.049	67
226	0.022	0.00035	0.00033	0.00024	0.00003	0	0.015	0.00022	8.9	1.4	0.0007	0.0033	0.0034	0.03	0.00003	0.00006	4.7	0.053	0.0136	0.0041	0.03	4.0	0.0047	0.1	0.00085	1.6	46	0.00006	0.049	67
227	0.022	0.00035	0.00034	0.00024	0.00003	0	0.015	0.00022	8.9	1.4	0.0007	0.0033	0.0034	0.03	0.00003	0.00006	4.7	0.053	0.0136	0.0041	0.03	4.0	0.0048	0.1	0.00085	1.6	46	0.00006	0.049	67
228	0.022	0.00035	0.00034	0.00024	0.00003	0	0.015	0.00022	8.9	1.4	0.0007	0.0033	0.0034	0.03	0.00003	0.00006	4.7	0.053	0.0136	0.0041	0.03	4.0	0.0048	0.1	0.00085	1.6	46	0.00006	0.049	67
229	0.022	0.00036	0.00034	0.00024	0.00003	0	0.015	0.00022	9.0	1.4	0.0007	0.0033	0.0034	0.03	0.00003	0.00006	4.7	0.053	0.0136	0.0041	0.03	4.0	0.0048	0.1	0.00085	1.6	46	0.00006	0.049	67
230	0.022	0.00036	0.00034	0.00024	0.00003	0	0.015	0.00022	9.0	1.4	0.0007	0.0033	0.0034	0.03	0.00003	0.00006	4.7	0.053	0.0136	0.0041	0.03	4.1	0.0048	0.1	0.00085	1.6	46	0.00006	0.049	67
231	0.022	0.00036	0.00034	0.00024	0.00003	0	0.015	0.00022	9.0	1.4	0.0007	0.0033	0.0034	0.03	0.00003	0.00006	4.7	0.053	0.0137	0.0042	0.03	4.1	0.0048	0.1	0.00085	1.6	46	0.00006	0.049	67
232	0.022	0.00036	0.00034	0.00024	0.00003	0	0.015	0.00022	9.0	1.4	0.0007	0.0033	0.0034	0.03	0.00003	0.00006	4.7	0.053	0.0137	0.0042	0.03	4.1	0.0048	0.1	0.00086	1.6	46	0.00006	0.049	68
233	0.022	0.00036	0.00034	0.00024	0.00003	0	0.015	0.00022	9.0	1.4	0.0007	0.0033	0.0035	0.03	0.00003	0.00006	4.7	0.053	0.0137	0.0042	0.03	4.1	0.0048	0.1	0.00086	1.6	46	0.00006	0.049	68
234	0.023	0.00036	0.00034	0.00024	0.00003	0	0.015	0.00022	9.0	1.4	0.0007	0.0033	0.0035	0.03	0.00003	0.00006	4.7	0.053	0.0137	0.0042	0.03	4.1	0.0048	0.1	0.00086	1.6	46	0.00006	0.050	68
235	0.023	0.00036	0.00034	0.00024	0.00003	0	0.015	0.00022	9.1	1.4	0.0007	0.0033	0.0035	0.03	0.00003	0.00006	4.8	0.053	0.0138	0.0042	0.03	4.1	0.0048	0.1	0.00086	1.6	47	0.00006	0.050	68
236	0.023	0.00036	0.00034	0.00024	0.00003	0	0.015	0.00022	9.1	1.4	0.0007	0.0033	0.0035	0.03	0.00003	0.00006	4.8	0.053	0.0138	0.0042	0.03	4.1	0.0048	0.1	0.00086	1.6	47	0.00006	0.050	68
237	0.023	0.00036	0.00034	0.00024	0.00003	0	0.015	0.00022	9.1	1.4	0.0007	0.0033	0.0035	0.03	0.00003	0.00006	4.8	0.053	0.0138	0.0042	0.03	4.1	0.0048	0.1	0.00086	1.6	47	0.00006	0.050	68
238	0.023	0.00036	0.00034	0.00024	0.00003	0	0.015	0.00022	9.1	1.4	0.0007	0.0033	0.0035	0.03	0.00003	0.00006	4.8	0.053	0.0138	0.0042	0.03	4.1	0.0048	0.1	0.00086	1.6	47	0.00006	0.050	68
239	0.023	0.00036	0.00035	0.00024	0.00003	0	0.015	0.00023	9.1	1.4	0.0007	0.0033	0.0035	0.03	0.00003	0.00006	4.8	0.054	0.0139	0.0042	0.03	4.1	0.0049	0.1	0.00086	1.6	47	0.00006	0.050	69
240	0.023	0.00036	0.00035	0.00024	0.00003	0	0.015	0.00023	9.1	1.4	0.0007	0.0034	0.0035	0.03	0.00003	0.00006	4.8	0.054	0.0139	0.0042	0.03	4.1	0.0049	0.1	0.00087	1.6	47	0.00006	0.050	69
241	0.023	0.00036	0.00035	0.00024	0.00003	0	0.015	0.00023	9.1	1.4	0.0007	0.0034	0.0035	0.03	0.00003	0.00006	4.8	0.054	0.0139	0.0042	0.03	4.1	0.0049	0.1	0.00087	1.6	47	0.00006	0.050	69
242	0.023	0.00037	0.00035	0.00024	0.00003	0	0.015	0.00023	9.2	1.4	0.0007	0.0034	0.0035	0.03	0.00003	0.00006	4.8	0.054	0.0139	0.0043	0.03	4.1	0.0049	0.1	0.00087	1.6	47	0.00006	0.050	69
243	0.023	0.00037	0.00035	0.00024	0.00003	0	0.015	0.00023	9.2	1.4	0.0007	0.0034	0.0035	0.03	0.00003	0.00006	4.9	0.054	0.0140	0.0043	0.03	4.2	0.0049	0.1	0.00087	1.6	47	0.00006	0.050	69
244	0.023	0.00037	0.00035	0.00024	0.00003	0	0.015	0.00023	9.2	1.4	0.0007	0.0034	0.0035	0.03	0.00003	0.00006	4.9	0.054	0.0140	0.0043	0.03	4.2	0.0049	0.1	0.00087	1.6	47	0.00006	0.050	69
245	0.023	0.00037	0.00035	0.00024	0.00003	0	0.015	0.00023	9.2	1.4	0.0007	0.0034	0.0035	0.03	0.00003	0.00006	4.9	0.054	0.0140	0.0043	0.03	4.2	0.0049	0.1	0.00087	1.6	47	0.00006	0.051	69
Minimum	0.000	0.00000	0.00000	0.00000	0.00000	0	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0000	0.00	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.0	0.00000	0.0	0	0.00000	0.000	0
Maximum	0.023	0.00037	0.00035	0.00024	0.00003	0	0.015	0.00023	9.2	1.4	0.0007	0.0034	0.0035	0.03	0.00003	0.00006	4.9	0.054	0.0140	0.0043	0.03	4.2	0.0049	0.1	0.00087	1.6	47	0.00006	0.051	69
Average	0.015	0.00024	0.00022	0.00016	0.00002	0	0.010	0.00016	6.0	1.0	0.0005	0.0024	0.0023	0.02	0.00002	0.00004	3.1	0.040	0.0101	0.0029	0.02	2.9	0.0035	0.1	0.00064	1.2	31	0.00004	0.036	46
Aquifer WQ Standard =		0.006	0.05	2	0.004			0.005			0.1			4.0		0.05				0.1	10		0.05					0.002		

Notes:

1. Model results do not include background concentrations and assume no mass flux from recharge or natural groundwater sources
2. Aquifer WQ Standard = Arizona Department of Environmental Quality Numeric Aquifer Water Quality Standards (Arizona Administrative Code - Title 18, Ch. 11, Art. 4, Sup. 16-4, 2016)
3. Values in bold italic indicate that concentration is above water quality standard
4. mg/L = milligrams per liter

Table 7. Model Results at Whitlow Ranch Dam - Alternative 4

Years since Mine Start	Al mg/L	Sb mg/L	As mg/L	Ba mg/L	Be mg/L	HCO3 mg/L	B mg/L	Cd mg/L	Ca mg/L	Cl mg/L	Cr mg/L	Co mg/L	Cu mg/L	F mg/L	Fe mg/L	Pb mg/L	Mg mg/L	Mn mg/L	Mo mg/L	Ni mg/L	NO3-N mg/L	K mg/L	Se mg/L	Si mg/L	Ag mg/L	Na mg/L	SO4 mg/L	Tl mg/L	Zn mg/L	TDS mg/L
1	0.000	0.00000	0.0000	0.00000	0.00000	0.000	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0000	0.000	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.000	0.00000	0.0	0	0.00000	0.0000	0
2	0.000	0.00000	0.0000	0.00000	0.00000	0.001	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0000	0.000	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.000	0.00000	0.0	0	0.00000	0.0000	0
3	0.000	0.00000	0.0000	0.00000	0.00000	0.004	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0000	0.000	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.001	0.00000	0.0	0	0.00000	0.0000	0
4	0.000	0.00000	0.0000	0.00000	0.00000	0.005	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0000	0.000	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.001	0.00000	0.0	0	0.00000	0.0000	0
5	0.000	0.00000	0.0000	0.00000	0.00000	0.005	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0000	0.000	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.001	0.00000	0.0	0	0.00000	0.0000	0
6	0.000	0.00000	0.0000	0.00000	0.00000	0.005	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0000	0.000	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.001	0.00000	0.0	0	0.00000	0.0000	0
7	0.000	0.00000	0.0000	0.00000	0.00000	0.005	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0000	0.000	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.001	0.00000	0.0	0	0.00000	0.0000	0
8	0.000	0.00000	0.0000	0.00000	0.00000	0.005	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0000	0.000	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.001	0.00000	0.0	0	0.00000	0.0000	0
9	0.000	0.00000	0.0000	0.00000	0.00000	0.004	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0000	0.000	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.001	0.00000	0.0	0	0.00000	0.0000	0
10	0.000	0.00000	0.0000	0.00000	0.00000	0.004	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0000	0.000	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.001	0.00000	0.0	0	0.00000	0.0000	0
11	0.000	0.00000	0.0000	0.00000	0.00000	0.004	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0000	0.000	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.001	0.00000	0.0	0	0.00000	0.0000	0
12	0.000	0.00000	0.0000	0.00000	0.00000	0.004	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0000	0.000	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.001	0.00000	0.0	0	0.00000	0.0000	0
13	0.000	0.00000	0.0000	0.00000	0.00000	0.004	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0000	0.000	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.001	0.00000	0.0	0	0.00000	0.0000	0
14	0.000	0.00000	0.0000	0.00000	0.00000	0.004	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0000	0.000	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.001	0.00000	0.0	0	0.00000	0.0000	0
15	0.000	0.00000	0.0000	0.00000	0.00000	0.004	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0000	0.000	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.001	0.00000	0.0	0	0.00000	0.0000	0
16	0.000	0.00000	0.0000	0.00000	0.00000	0.003	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0000	0.000	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.001	0.00000	0.0	0	0.00000	0.0000	0
17	0.000	0.00000	0.0000	0.00000	0.00000	0.003	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0000	0.000	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.001	0.00000	0.0	0	0.00000	0.0000	0
18	0.000	0.00000	0.0000	0.00000	0.00000	0.003	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0000	0.000	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.001	0.00000	0.0	0	0.00000	0.0000	0
19	0.000	0.00000	0.0000	0.00000	0.00000	0.003	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0000	0.000	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.001	0.00000	0.0	0	0.00000	0.0000	0
20	0.000	0.00000	0.0000	0.00000	0.00000	0.003	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0000	0.000	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.001	0.00000	0.0	0	0.00000	0.0000	0
21	0.000	0.00000	0.0000	0.00000	0.00000	0.003	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0000	0.000	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.001	0.00000	0.0	0	0.00000	0.0000	0
22	0.000	0.00000	0.0000	0.00000	0.00000	0.003	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0000	0.000	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.001	0.00000	0.0	0	0.00000	0.0000	0
23	0.000	0.00000	0.0000	0.00000	0.00000	0.003	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0000	0.000	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.001	0.00000	0.0	0	0.00000	0.0000	0
24	0.000	0.00000	0.0000	0.00000	0.00000	0.003	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0000	0.000	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.001	0.00000	0.0	0	0.00000	0.0000	0
25	0.000	0.00000	0.0000	0.00000	0.00000	0.003	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0000	0.000	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.001	0.00000	0.0	0	0.00000	0.0000	0
26	0.000	0.00000	0.0000	0.00000	0.00000	0.002	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0000	0.000	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.001	0.00000	0.0	0	0.00000	0.0000	0
27	0.000	0.00000	0.0000	0.00000	0.00000	0.002	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0000	0.000	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.001	0.00000	0.0	0	0.00000	0.0000	0
28	0.000	0.00000	0.0000	0.00000	0.00000	0.002	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0000	0.000	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.001	0.00000	0.0	0	0.00000	0.0000	0
29	0.000	0.00000	0.0000	0.00000	0.00000	0.002	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0000	0.000	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.001	0.00000	0.0	0	0.00000	0.0000	0
30	0.000	0.00000	0.0000	0.00000	0.00000	0.002	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0000	0.000	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.001	0.00000	0.0	0	0.00000	0.0000	0
31	0.000	0.00000	0.0000	0.00000	0.00000	0.002	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0000	0.000	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.001	0.00000	0.0	0	0.00000	0.0000	0
32	0.000	0.00000	0.0000	0.00000	0.00000	0.002	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0000	0.000	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.001	0.00000	0.0	0	0.00000	0.0000	0
33	0.000	0.00000	0.0000	0.00000	0.00000	0.002	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0000	0.000	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.001	0.00000	0.0	0	0.00000	0.0000	0
34	0.000	0.00000	0.0000	0.00000	0.00000	0.002	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0000	0.000	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.001	0.00000	0.0	0	0.00000	0.0000	0
35	0.000	0.00000	0.0000	0.00000	0.00000	0.002	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0000	0.000	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.001	0.00000	0.0	0	0.00000	0.0000	0
36	0.000	0.00000	0.0000	0.00000	0.00000	0.002	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0000	0.000	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.001	0.00000	0.0	0	0.00000	0.0000	0
37	0.000	0.00000	0.0000	0.00000	0.00000	0.002	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0000	0.000	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.001	0.00000	0.0	0	0.00000	0.0000	0
38	0.000	0.00000	0.0000	0.00000	0.00000	0.002	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0000	0.000	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.001	0.00000	0.0	0	0.00000	0.0000	0
39	0.000	0.00000	0.0000	0.00000	0.00000	0.002	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0000	0.000	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.001	0.00000	0.0	0	0.00000	0.0000	0
40	0.000	0.00000	0.0000	0.00000	0.00000	0.002	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0000	0.000	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.001	0.00000	0.0	0	0.00000	0.0000	0
41	0.000	0.00000	0.0000	0.00000	0.00000	0.002	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0000	0.000	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.001	0.00000	0.0	0	0.00000	0.0000	0
42	0.000	0.00000	0.0000	0.00000	0.00000	0.002	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0000	0.000	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.001	0.00000	0.0	0	0.00000	0.0000	0
43	0.001	0.00002	0.0000	0.00001	0.00000	0.021	0.001	0.00001	0.4	0.1	0.0000	0.0002	0.0002	0.002	0.00000	0.00000	0.2	0.003	0.0007	0.0002	0.00	0.2	0.0002	0.004	0.00005	0.1	2	0.00000	0.0025	3
44	0.005	0.00008	0.0001	0.00005	0.00001	0.099	0.003	0.00006	1.9	0.4	0.0002	0.0008	0.0008	0.009	0.00001	0.00001	1.0	0.015	0.0037	0.0010	0.01	1.0	0.0013	0.017	0.00024	0.4	10	0.00002	0.0130	15
45	0.006	0.00010	0.0001	0.00006	0.00001	0.122	0.004	0.00007	2.4	0.5	0.0003	0.0010	0.0009	0.011	0.00001	0.00002	1.3	0.019	0.0046	0.0013	0.01	1.3	0.0016	0.021	0.00030	0.6	13	0.00002	0.0162	19
46	0.006	0.00010	0.0001	0.00007	0.00001	0.124	0.004	0.00008	2.5	0.5	0.0003	0.0011	0.0010	0.011	0.00001	0.00002	1.3	0.019	0.0047	0.0013	0.01	1.3	0.0016	0.021	0.00031	0.6	13	0.00002	0.0165	19
47	0.006	0.00011	0.0001	0.00007	0.00001	0.125	0.004	0.00008	2.5	0.5	0.0003	0.0011	0.0010	0.011	0.00001	0.00002	1.3	0.019	0.0047	0.0013	0.01	1.3	0.0016	0.021	0.00031	0.6	13	0.00002	0.0166	19
48	0.006	0.00011	0.0001	0.00007	0.00001	0.126	0.004	0.00008	2.5	0.5	0.0003	0.0011	0.0010	0.011	0.00001	0.00002	1.3	0.019	0.0048	0.0013	0.01	1.3	0.0016	0.022	0.00031	0.6	13	0.00002	0.0167	20
49	0.006	0.00011	0.0001	0.00007	0.00001	0.126	0.004	0.00008	2.5	0.5	0.0003	0.0011	0.0010	0.011	0.00001	0.00002	1.3	0.019	0.0048	0.0013	0.01	1.3	0.0016	0.022	0.00031	0.6	13	0.00002	0.0168	20
50	0.006	0.00011	0.0001	0.00007	0.00001	0.127	0.005	0.00008	2.5	0.5	0.0003	0.0011	0.0010	0.012	0.00001	0.00002	1.3	0.019	0.0048	0.0013	0.01	1.4	0.0016	0.022	0.00031	0.6	13	0.00002	0.0169	20
51	0.006	0.00011	0.0001	0.00007	0.00001	0.128	0.005	0.00008	2.5	0.5	0.0003	0.0011	0.0010	0.012	0.00001	0.00002	1.3	0.019	0.0049	0.0013	0.01	1.4	0.0016	0.022	0.00031	0.6	13	0.00002	0.0170	20
52	0.006	0.00011	0.0001	0.00007	0.00001	0.129	0.005	0.00008	2.5	0.5	0.0003	0.0011	0.0010	0.012	0.00001	0.00002	1.3	0.020	0.0049	0.0013	0.01	1.4	0.0017	0.022	0.00032	0.6	13	0.00002	0.0171	20
53	0.006	0.00011	0.0001	0.00007	0.00001	0.130	0.005	0.00008	2.6	0.5	0.0003	0.0011	0.0010	0.012	0.00001	0.00002	1.4	0.020	0.0049	0.0014	0.01	1.4	0.0017	0.022	0.00032	0.6	14	0.00002	0.0172	20
54	0.007	0.00011	0.0001	0.00007	0.00001	0.130	0.005	0.00008	2.6	0.5	0.0003	0.0011	0.0010	0.012	0.00001	0.00002	1.4	0.020	0.0049	0.0014	0.01	1.4	0.0017	0.022	0.00032	0.6	14	0.00002	0.0173	20
55	0.007	0.00011	0.0001	0.00007	0.00001	0.131	0.005	0.00008	2.6	0.5	0.0003	0.0011	0.0010	0.012	0.00001	0.00002	1.4	0.020	0.0050	0.0014	0.01	1.4	0.0017	0.022	0.00032	0.6	14	0.00002	0.0174	20
56	0.007	0.00011	0.0001	0.00007	0.00001	0.131	0.005	0.00008	2.6	0.5	0.0003	0.0011	0.0010	0.012	0.00001	0.00002	1.4	0.020	0.0050	0.0014	0.01	1.4	0.0017	0.022	0.00032	0.6	14	0.00002	0.0175	20
57	0.007	0.00011	0.0001	0.00007	0.00001	0.132	0.005	0.00008	2.6	0.5	0.0003	0.0011	0.0010	0.012	0.00001	0.00002	1.4	0.020	0.0050	0.0014	0.01	1.4	0.0017	0.023	0.00033	0.6	14	0.00002	0.0176	21
58	0.007	0.00011	0.0001	0.00007	0.00001	0.133	0.005	0.00008	2.6	0.5	0.0003	0.0011	0.0010	0.012	0.00001	0.00002	1.4	0.020	0.0051	0.0014	0.01	1.4	0.0017	0.023	0.00033	0.6	14	0.00002	0.0177	21
59	0.007	0.00011	0.0001	0.00007	0.00001	0.134	0.005	0.00008	2.6	0.5	0.0003	0.0012	0.0010	0.012	0.00001	0.00002	1.4	0.020	0.0051	0.0014	0.01	1.4	0.0017	0.023	0.00033	0.6	14	0.00002	0.0178	21
60	0.007	0.00012	0.0001	0.00007	0.00001	0.135	0.005	0.00008	2.7	0.5	0.0003	0.0012	0.0010	0.012	0.00001	0.00002	1.4	0.020	0.0051	0.0014	0.01	1.4	0.0017	0.023	0.00033	0.6	14	0.00002	0.0179	21
61	0.007	0.00012	0.0001	0.00007	0.00001	0.136	0.005	0.00008	2.7	0.5	0.0003	0.0012	0.0010	0.012	0.00001	0.00002	1.4	0.021	0.0051	0.0014	0.01	1.4	0.0018	0.023	0.00033	0.6	14	0.00002	0.0180	21
62	0.007	0.00012	0.0001	0.00007	0.00001	0.136	0.005	0.00008	2.7	0.5	0.0003	0.0012	0.0010	0.012	0.00001	0.00002	1.4	0.021	0.0052	0.0014	0.01	1.5	0.0018	0.023	0.00033	0.6	14	0.00002	0.0181	21
63	0.007	0.00012	0.0001	0.00007	0.00001	0.137	0.005	0.00008	2.7	0.5	0.0003	0.0012	0.0010	0.012	0.00001	0.00002	1.4	0.021	0.0052	0.0014	0.01	1.5	0.0018	0.023	0.00034	0.6	14	0.00002	0.0182	21
64	0.007	0.00012	0.0001	0.00007	0.00001	0.138	0.005	0.00008	2.7	0.5	0.0003	0.0012	0.0011	0.012	0.00001	0.00002	1.5	0.021	0.0052	0.0014	0.01	1.5	0.0018	0.023	0.00034	0.6	14	0.00002	0.0183	21
65	0.007	0.00012	0.0001	0.00007	0.00001	0.138	0.005	0.00008	2.7	0.5	0.0003	0.0012	0.0011	0.012	0.00001	0.00002	1.5	0.021	0.0052	0.0015	0.01	1.5	0.0018	0.024	0.00034	0.6	15	0.00002	0.0184	22
66	0.007	0.00012	0.0001	0.00007	0.00001	0.139	0.005	0.00008	2.7	0.5	0.0003	0.0012	0.0011	0.013	0.00001	0.00002	1.5	0.021	0.0053	0.0015	0.01	1.5	0.0018	0.024	0.00034	0.6	15	0.00002	0.0185	22
67	0.007	0.00012	0.0001	0.00007	0.00001	0.140	0.005	0.00008	2.7	0.5	0.0003	0.0012	0.0011	0.013	0.00001	0.00002	1.5	0.021	0.0053	0.0015	0.01	1.5	0.0018	0.024	0.00034	0.6	15	0.00002	0.0186	22
68	0.007	0.00012	0.0001	0.00007	0.00001	0.141	0.005	0.00008	2.8	0.6	0.0003	0.0012	0.0011	0.013	0.00001	0.00002	1.5	0.021	0.0053	0.0015	0.01	1.5	0.0018	0.024	0.00034	0.6	15	0.00002	0.0187	22

Table 7. Model Results at Whitlow Ranch Dam - Alternative 4

Years since Mine Start	Al mg/L	Sb mg/L	As mg/L	Ba mg/L	Be mg/L	HCO3 mg/L	B mg/L	Cd mg/L	Ca mg/L	Cl mg/L	Cr mg/L	Co mg/L	Cu mg/L	F mg/L	Fe mg/L	Pb mg/L	Mg mg/L	Mn mg/L	Mo mg/L	Ni mg/L	NO3-N mg/L	K mg/L	Se mg/L	Si mg/L	Ag mg/L	Na mg/L	SO4 mg/L	Tl mg/L	Zn mg/L	TDS mg/L
69	0.007	0.00012	0.0001	0.00007	0.00001	0.141	0.005	0.00009	2.8	0.6	0.0003	0.0012	0.0011	0.013	0.00001	0.00002	1.5	0.021	0.0054	0.0015	0.01	1.5	0.0018	0.024	0.00035	0.6	15	0.00002	0.0187	22
70	0.007	0.00012	0.0001	0.00008	0.00001	0.142	0.005	0.00009	2.8	0.6	0.0003	0.0012	0.0011	0.013	0.00001	0.00002	1.5	0.022	0.0054	0.0015	0.01	1.5	0.0018	0.024	0.00035	0.6	15	0.00002	0.0189	22
71	0.007	0.00012	0.0001	0.00008	0.00001	0.143	0.005	0.00009	2.8	0.6	0.0003	0.0012	0.0011	0.013	0.00001	0.00002	1.5	0.022	0.0054	0.0015	0.01	1.5	0.0018	0.024	0.00035	0.6	15	0.00002	0.0190	22
72	0.007	0.00012	0.0001	0.00008	0.00001	0.144	0.005	0.00009	2.8	0.6	0.0003	0.0012	0.0011	0.013	0.00001	0.00002	1.5	0.022	0.0054	0.0015	0.01	1.5	0.0019	0.024	0.00035	0.6	15	0.00002	0.0191	22
73	0.007	0.00012	0.0001	0.00008	0.00001	0.144	0.005	0.00009	2.8	0.6	0.0003	0.0012	0.0011	0.013	0.00001	0.00002	1.5	0.022	0.0055	0.0015	0.01	1.5	0.0019	0.025	0.00035	0.6	15	0.00002	0.0191	23
74	0.007	0.00012	0.0001	0.00008	0.00001	0.145	0.005	0.00009	2.8	0.6	0.0003	0.0012	0.0011	0.013	0.00001	0.00002	1.5	0.022	0.0055	0.0015	0.01	1.5	0.0019	0.025	0.00035	0.6	15	0.00002	0.0192	23
75	0.007	0.00013	0.0001	0.00008	0.00001	0.146	0.005	0.00009	2.9	0.6	0.0003	0.0013	0.0011	0.013	0.00001	0.00002	1.6	0.022	0.0055	0.0015	0.01	1.6	0.0019	0.025	0.00036	0.7	15	0.00002	0.0193	23
76	0.007	0.00013	0.0001	0.00008	0.00001	0.147	0.005	0.00009	2.9	0.6	0.0003	0.0013	0.0011	0.013	0.00001	0.00002	1.6	0.022	0.0055	0.0015	0.01	1.6	0.0019	0.025	0.00036	0.7	15	0.00002	0.0194	23
77	0.007	0.00013	0.0001	0.00008	0.00001	0.147	0.005	0.00009	2.9	0.6	0.0003	0.0013	0.0011	0.013	0.00001	0.00002	1.6	0.022	0.0056	0.0015	0.01	1.6	0.0019	0.025	0.00036	0.7	16	0.00002	0.0195	23
78	0.007	0.00013	0.0001	0.00008	0.00001	0.148	0.005	0.00009	2.9	0.6	0.0003	0.0013	0.0011	0.013	0.00001	0.00002	1.6	0.022	0.0056	0.0016	0.01	1.6	0.0019	0.025	0.00036	0.7	16	0.00002	0.0196	23
79	0.007	0.00013	0.0001	0.00008	0.00001	0.149	0.005	0.00009	2.9	0.6	0.0003	0.0013	0.0011	0.013	0.00001	0.00002	1.6	0.022	0.0056	0.0016	0.01	1.6	0.0019	0.025	0.00036	0.7	16	0.00002	0.0197	23
80	0.007	0.00013	0.0001	0.00008	0.00001	0.150	0.005	0.00009	2.9	0.6	0.0003	0.0013	0.0011	0.013	0.00001	0.00002	1.6	0.022	0.0056	0.0016	0.01	1.6	0.0019	0.026	0.00036	0.7	16	0.00002	0.0197	23
81	0.007	0.00013	0.0001	0.00008	0.00001	0.151	0.005	0.00009	3.0	0.6	0.0003	0.0013	0.0012	0.013	0.00001	0.00002	1.6	0.023	0.0057	0.0016	0.01	1.6	0.0019	0.026	0.00037	0.7	16	0.00002	0.0199	24
82	0.008	0.00013	0.0001	0.00008	0.00001	0.151	0.005	0.00009	3.0	0.6	0.0003	0.0013	0.0012	0.013	0.00001	0.00002	1.6	0.023	0.0057	0.0016	0.01	1.6	0.0019	0.026	0.00037	0.7	16	0.00002	0.0199	24
83	0.008	0.00013	0.0001	0.00008	0.00001	0.152	0.005	0.00009	3.0	0.6	0.0003	0.0013	0.0012	0.014	0.00001	0.00002	1.6	0.023	0.0057	0.0016	0.01	1.6	0.0019	0.026	0.00037	0.7	16	0.00002	0.0200	24
84	0.008	0.00013	0.0001	0.00008	0.00001	0.153	0.005	0.00009	3.0	0.6	0.0003	0.0013	0.0012	0.014	0.00001	0.00002	1.6	0.023	0.0057	0.0016	0.01	1.6	0.0020	0.026	0.00037	0.7	16	0.00002	0.0201	24
85	0.008	0.00013	0.0001	0.00008	0.00001	0.153	0.005	0.00009	3.0	0.6	0.0003	0.0013	0.0012	0.014	0.00001	0.00002	1.6	0.023	0.0057	0.0016	0.01	1.6	0.0020	0.026	0.00037	0.7	16	0.00002	0.0201	24
86	0.008	0.00013	0.0001	0.00008	0.00001	0.154	0.005	0.00009	3.0	0.6	0.0003	0.0013	0.0012	0.014	0.00001	0.00002	1.6	0.023	0.0058	0.0016	0.01	1.6	0.0020	0.026	0.00037	0.7	16	0.00002	0.0202	24
87	0.008	0.00013	0.0001	0.00008	0.00001	0.155	0.006	0.00009	3.0	0.6	0.0003	0.0013	0.0012	0.014	0.00001	0.00002	1.6	0.023	0.0058	0.0016	0.01	1.6	0.0020	0.026	0.00037	0.7	16	0.00002	0.0203	24
88	0.008	0.00013	0.0001	0.00008	0.00001	0.156	0.006	0.00009	3.1	0.6	0.0003	0.0013	0.0012	0.014	0.00001	0.00002	1.7	0.023	0.0058	0.0016	0.01	1.6	0.0020	0.027	0.00037	0.7	16	0.00002	0.0204	24
89	0.008	0.00013	0.0001	0.00008	0.00001	0.156	0.006	0.00009	3.1	0.6	0.0003	0.0013	0.0012	0.014	0.00001	0.00002	1.7	0.023	0.0058	0.0016	0.01	1.7	0.0020	0.027	0.00038	0.7	16	0.00003	0.0205	24
90	0.008	0.00013	0.0001	0.00008	0.00001	0.157	0.006	0.00009	3.1	0.6	0.0003	0.0013	0.0012	0.014	0.00001	0.00002	1.7	0.023	0.0058	0.0016	0.01	1.7	0.0020	0.027	0.00038	0.7	17	0.00003	0.0205	24
91	0.008	0.00013	0.0001	0.00008	0.00001	0.158	0.006	0.00009	3.1	0.6	0.0003	0.0013	0.0012	0.014	0.00001	0.00002	1.7	0.023	0.0059	0.0016	0.01	1.7	0.0020	0.027	0.00038	0.7	17	0.00003	0.0206	25
92	0.008	0.00013	0.0001	0.00008	0.00001	0.158	0.006	0.00009	3.1	0.6	0.0003	0.0013	0.0012	0.014	0.00001	0.00002	1.7	0.023	0.0059	0.0016	0.01	1.7	***0.0020***	0.027	0.00038	0.7	17	0.00003	0.0206	25
93	0.008	0.00014	0.0001	0.00008	0.00001	0.159	0.006	0.00009	3.1	0.6	0.0003	0.0014	0.0012	0.014	0.00001	0.00002	1.7	0.024	0.0059	0.0017	0.01	1.7	***0.0020***	0.027	0.00038	0.7	17	0.00003	0.0207	25
94	0.008	0.00014	0.0001	0.00008	0.00001	0.160	0.006	0.00009	3.2	0.6	0.0003	0.0014	0.0012	0.014	0.00001	0.00002	1.7	0.024	0.0059	0.0017	0.01	1.7	***0.0020***	0.027	0.00038	0.7	17	0.00003	0.0208	25
95	0.008	0.00014	0.0001	0.00008	0.00001	0.161	0.006	0.00009	3.2	0.6	0.0003	0.0014	0.0012	0.014	0.00001	0.00002	1.7	0.024	0.0059	0.0017	0.01	1.7	***0.0020***	0.027	0.00038	0.7	17	0.00003	0.0209	25
96	0.008	0.00014	0.0001	0.00009	0.00001	0.161	0.006	0.00010	3.2	0.6	0.0003	0.0014	0.0012	0.014	0.00001	0.00002	1.7	0.024	0.0060	0.0017	0.01	1.7	***0.0020***	0.028	0.00038	0.7	17	0.00003	0.0209	25
97	0.008	0.00014	0.0001	0.00009	0.00001	0.162	0.006	0.00010	3.2	0.6	0.0003	0.0014	0.0012	0.014	0.00001	0.00002	1.7	0.024	0.0060	0.0017	0.01	1.7	***0.0020***	0.028	0.00038	0.7	17	0.00003	0.0210	25
98	0.008	0.00014	0.0001	0.00009	0.00001	0.163	0.006	0.00010	3.2	0.6	0.0003	0.0014	0.0012	0.014	0.00001	0.00002	1.7	0.024	0.0060	0.0017	0.01	1.7	***0.0020***	0.028	0.00039	0.7	17	0.00003	0.0210	25
99	0.008	0.00014	0.0001	0.00009	0.00001	0.163	0.006	0.00010	3.2	0.6	0.0003	0.0014	0.0013	0.014	0.00001	0.00002	1.7	0.024	0.0060	0.0017	0.01	1.7	***0.0021***	0.028	0.00039	0.7	17	0.00003	0.0211	25
100	0.008	0.00014	0.0001	0.00009	0.00001	0.163	0.006	0.00010	3.2	0.6	0.0003	0.0014	0.0013	0.014	0.00001	0.00002	1.7	0.024	0.0060	0.0017	0.01	1.7	***0.0020***	0.028	0.00039	0.7	17	0.00003	0.0211	25
101	0.008	0.00014	0.0001	0.00009	0.00001	0.165	0.006	0.00010	3.3	0.6	0.0003	0.0014	0.0013	0.014	0.00001	0.00002	1.7	0.024	0.0060	0.0017	0.01	1.7	***0.0021***	0.028	0.00039	0.7	17	0.00003	0.0212	26
102	0.008	0.00014	0.0001	0.00009	0.00001	0.166	0.006	0.00010	3.3	0.6	0.0003	0.0014	0.0013	0.014	0.00001	0.00002	1.7	0.024	0.0060	0.0017	0.01	1.7	***0.0021***	0.028	0.00039	0.7	17	0.00003	0.0213	26
103	0.008	0.00014	0.0001	0.00009	0.00001	0.166	0.006	0.00010	3.3	0.6	0.0003	0.0014	0.0013	0.014	0.00001	0.00002	1.8	0.024	0.0061	0.0017	0.01	1.7	***0.0021***	0.028	0.00039	0.7	17	0.00003	0.0213	26
104	0.008	0.00014	0.0001	0.00009	0.00001	0.167	0.006	0.00010	3.3	0.6	0.0003	0.0014	0.0013	0.014	0.00001	0.00002	1.8	0.024	0.0061	0.0017	0.01	1.7	***0.0021***	0.029	0.00039	0.7	18	0.00003	0.0214	26
105	0.008	0.00014	0.0001	0.00009	0.00001	0.168	0.006	0.00010	3.3	0.6	0.0003	0.0014	0.0013	0.014	0.00001	0.00002	1.8	0.024	0.0061	0.0017	0.01	1.7	***0.0021***	0.029	0.00039	0.7	18	0.00003	0.0214	26
106	0.008	0.00014	0.0001	0.00009	0.00001	0.169	0.006	0.00010	3.3	0.6	0.0003	0.0014	0.0013	0.014	0.00001	0.00002	1.8	0.024	0.0061	0.0017	0.01	1.7	***0.0021***	0.029	0.00039	0.7	18	0.00003	0.0215	26
107	0.008	0.00014	0.0001	0.00009	0.00001	0.169	0.006	0.00010	3.4	0.6	0.0003	0.0014	0.0013	0.014	0.00001	0.00002	1.8	0.024	0.0061	0.0017	0.01	1.7	***0.0021***	0.029	0.00039	0.7	18	0.00003	0.0215	26
108	0.009	0.00014	0.0001	0.00009	0.00001	0.170	0.006	0.00010	3.4	0.6	0.0003	0.0014	0.0013	0.014	0.00001	0.00002	1.8	0.024	0.0061	0.0017	0.01	1.7	***0.0021***	0.029	0.00039	0.7	18	0.00003	0.0216	26
109	0.009	0.00014	0.0001	0.00009	0.00001	0.171	0.006	0.00010	3.4	0.6	0.0003	0.0014	0.0013	0.015	0.00001	0.00002	1.8	0.024	0.0061	0.0017	0.01	1.7	***0.0021***	0.029	0.00040	0.7	18	0.00003	0.0216	26
110	0.009	0.00014	0.0001	0.00009	0.00001	0.171	0.006	0.00010	3.4	0.6	0.0003	0.0014	0.0013	0.015	0.00001	0.00002	1.8	0.025	0.0062	0.0017	0.01	1.8	***0.0021***	0.029	0.00040	0.7	18	0.00003	0.0217	27
111	0.009	0.00014	0.0001	0.00009	0.00001	0.172	0.006	0.00010	3.4	0.6	0.0003	0.0014	0.0013	0.015	0.00001	0.00002	1.8	0.025	0.0062	0.0017	0.01	1.8	***0.0021***	0.030	0.00040	0.7	18	0.00003	0.0217	27
112	0.009	0.00014	0.0001	0.00009	0.00001	0.173	0.006	0.00010	3.4	0.6	0.0003	0.0014	0.0013	0.015	0.00001	0.00002	1.8	0.025	0.0062	0.0017	0.01	1.8	***0.0021***	0.030	0.00040	0.7	18	0.00003	0.0218	27
113	0.009	0.00014	0.0001	0.00009	0.00001	0.173	0.006	0.00010	3.5	0.6	0.0003	0.0014	0.0013	0.015	0.00001	0.00002	1.8	0.025	0.0062	0.0017	0.01	1.8	***0.0021***	0.030	0.00040	0.7	18	0.00003	0.0218	27
114	0.009	0.00014	0.0001	0.00009	0.00001	0.174	0.006	0.00010	3.5	0.6	0.0003	0.0014	0.0013	0.015	0.00001	0.00002	1.8	0.025	0.0062	0.0018	0.01	1.8	***0.0021***	0.030	0.00040	0.7	18	0.00003	0.0219	27
115	0.009	0.00015	0.0001	0.00009	0.00001	0.175	0.006	0.00010	3.5	0.6	0.0003	0.0014	0.0014	0.015	0.00001	0.00002	1.8	0.025	0.0062	0.0018	0.01	1.8	***0.0021***	0.030	0.00040	0.7	18	0.00003	0.0219	27
116	0.009	0.00015	0.0001	0.00009	0.00001	0.176	0.006	0.00010	3.5	0.6	0.0003	0.0014	0.0014	0.015	0.00001	0.00002	1.8	0.025	0.0062	0.0018	0.01	1.8	***0.0021***	0.030	0.00040	0.7	18	0.00003	0.0220	27
117	0.009	0.00015	0.0001	0.00009	0.00001	0.176	0.006	0.00010	3.5	0.6	0.0003	0.0014	0.0014	0.015	0.00001	0.00002	1.8	0.025	0.0062	0.0018	0.01	1.8	***0.0021***	0.030	0.00040	0.7	18	0.00003	0.0220	27
118	0.009	0.00015	0.0001	0.00009	0.00001	0.177	0.006	0.00010	3.5	0.6	0.0003	0.0014	0.0014	0.015	0.00001	0.00002	1.8	0.025	0.0063	0.0018	0.01	1.8	***0.0021***	0.030	0.00040	0.7	18	0.00003	0.0220	27
119	0.009	0.00015	0.0001	0.00009	0.00001	0.178	0.006	0.00010	3.5	0.6	0.0003	0.0014	0.0014	0.015	0.00001	0.00002	1.8	0.025	0.0063	0.0018	0.01	1.8	***0.0021***	0.031	0.00040	0.7	18	0.00003	0.0221	27
120	0.009	0.00015	0.0001	0.00009	0.00001	0.178	0.006	0.00010	3.6	0.6	0.0003	0.0014	0.0014	0.015	0.00001	0.00002	1.8	0.025	0.0063	0.0018	0.01	1.8	***0.0022***	0.031	0.00040	0.7	19	0.00003	0.0221	27
121	0.009	0.00015	0.0001	0.00010	0.00001	0.179	0.006	0.00010	3.6	0.6	0.0003	0.0015	0.0014	0.015	0.00001	0.00002	1.8	0.025	0.0063	0.0018	0.01	1.8	***0.0022***	0.031	0.00040	0.7	19	0.00003	0.0222	27
122	0.009	0.00015	0.0001	0.00010	0.00001	0.180	0.006	0.00010	3.6	0.6	0.0003	0.0015	0.0014	0.015	0.00001	0.00002	1.9	0.025	0.0063	0.0018	0.01	1.8	***0.0022***	0.031	0.00040	0.7	19	0.00003	0.0222	28
123	0.009	0.00015	0.0001	0.00010	0.00001	0.180	0.006	0.00010	3.6	0.6	0.0003	0.0015	0.0014	0.015	0.00001	0.00002	1.9	0.025	0.0063	0.0018	0.01	1.8	***0.0022***	0.031	0.00041	0.7	19	0.00003	0.0223	28
124	0.009	0.00015	0.0001	0.00010	0.00001	0.181	0.006	0.00010	3.6	0.7	0.0003	0.0015	0.0014	0.015	0.00001	0.00002	1.9	0.025	0.0063	0.0018	0.01	1.8	***0.0022***	0.031	0.00041	0.7	19	0.00003	0.0223	28
125	0.009	0.00015	0.0001	0.00010	0.00001	0.182	0.006	0.00010	3.7	0.7	0.0003	0.0015	0.0014	0.015	0.00001	0.00002	1.9	0.025	0.0063	0.0018	0.01	1.8	***0.0022***	0.031	0.00041	0.7	19	0.00003	0.0224	28
126	0.009	0.00015	0.0001	0.00010	0.00001	0.182	0.006	0.00010	3.7	0.7	0.0003	0.0015	0.0014	0.015	0.00001	0.00002	1.9	0.025	0.0063	0.0018	0.01	1.8	***0.0022***	0.031	0.00041	0.7	19	0.00003	0.0224	28
127	0.009	0.00015	0.0001	0.00010	0.00001	0.183	0.006	0.00010	3.7	0.7	0.0003	0.0015	0.0014	0.015	0.00001	0.00002	1.9	0.025	0.0064	0.0018	0.01	1.8	***0.0022***	0.032	0.00041	0.7	19	0.00003	0.0224	28
128	0.009	0.00015	0.0001	0.00010	0.00001	0.184	0.006	0.00010	3.7	0.7	0.0003	0.0015	0.0014	0.015	0.00001	0.00002	1.9	0.025	0.0064	0.0018	0.01	1.8	***0.0022***	0.032	0.00041	0.7	19	0.00003	0.0225	28
129	0.009	0.00015	0.0001	0.00010	0.00001	0.185	0.006	0.00010	3.7	0.7	0.0003	0.0015	0.0014	0.015	0.00001	0.00002	1.9	0.025	0.0064	0.0018	0.01	1.8	***0.0022***	0.032	0.00041	0.8	19	0.00003	0.0226	28
130	0.009	0.00015	0.0001	0.00010	0.00001	0.186	0.006	0.00010	3.7	0.7	0.0003	0.0015	0.0014	0.015	0.00001	0.00002	1.9	0.025	0.0064	0.0018	0.01	1.8	***0.0022***	0.032	0.00041	0.8	19	0.00003	0.0226	28
131	0.009	0.00015	0.0001	0.00010	0.00001	0.186	0.006	0.00010	3.7	0.7	0.0003	0.0015	0.0014	0.015	0.00001	0.00002	1.9	0.025	0.0064	0.0018	0.01	1.8	***0.0022***	0.032	0.00041	0.8	19	0.00003	0.0226	28
132	0.009	0.00015	0.0001	0.00010	0.00001	0.187	0.006	0.00010	3.8	0.7	0.0003	0.0015	0.0015	0.015	0.00001	0.00002	1.9	0.025	0.0064	0.0018	0.01	1.8	***0.0022***	0.032	0.00041	0.8	19	0.00003	0.0227	29
133	0.009	0.00015	0.0001	0.00010	0.00001	0.188	0.006	0.00010	3.8	0.7	0.0003	0.0015	0.0015	0.015	0.00001	0.00002	1.9	0.026	0.0064	0.0018	0.01	1.8	***0.0022***	0.033	0.00041	0.8	19	0.00003	0.0227	29
134	0.010	0.00015	0.0001	0.00010	0.00001	0.188	0.006	0.00010	3.8	0.7	0.0003	0.0015	0.0015	0.015	0.00001	0.00002	1.9	0.026	0.0064	0.0018	0.01	1.8	***0.0022***	0.033	0.00041	0.8	20	0.00003	0.0228	29
135	0.010	0.00015	0.0001	0.00010	0.00001	0.189	0.006	0.00010	3.8	0.7	0.0003	0.0015	0.0015	0.015	0.00001	0.00003	1.9	0.026	0.0065	0.0018	0.01	1.8	***0.0022***	0.033	0.00041	0.8	20	0.00003	0.0228	29
136	0.010	0.00015	0.0001	0.00010	0.00001	0.190	0.006	0.00010	3.8	0.7	0.0003	0.0015	0.0015	0.015	0.00001	0.00003	1.9	0.026	0.0065	0.0018	0.01	1.9	***0.0022***	0.033	0.00041	0.8	20	0.00003	0.0228	29

Table 7. Model Results at Whitlow Ranch Dam - Alternative 4

Years since Mine Start	Al mg/L	Sb mg/L	As mg/L	Ba mg/L	Be mg/L	HCO3 mg/L	B mg/L	Cd mg/L	Ca mg/L	Cl mg/L	Cr mg/L	Co mg/L	Cu mg/L	F mg/L	Fe mg/L	Pb mg/L	Mg mg/L	Mn mg/L	Mo mg/L	Ni mg/L	NO3-N mg/L	K mg/L	Se mg/L	Si mg/L	Ag mg/L	Na mg/L	SO4 mg/L	Tl mg/L	Zn mg/L	TDS mg/L
137	0.010	0.00015	0.0001	0.00010	0.00001	0.190	0.006	0.00010	3.8	0.7	0.0003	0.0015	0.0015	0.015	0.00001	0.00003	1.9	0.026	0.0065	0.0019	0.01	1.9	***0.0022***	0.033	0.00041	0.8	20	0.00003	0.0229	29
138	0.010	0.00015	0.0001	0.00010	0.00001	0.191	0.006	0.00010	3.9	0.7	0.0003	0.0015	0.0015	0.015	0.00001	0.00003	2.0	0.026	0.0065	0.0019	0.01	1.9	***0.0022***	0.033	0.00042	0.8	20	0.00003	0.0229	29
139	0.010	0.00015	0.0001	0.00010	0.00001	0.192	0.006	0.00010	3.9	0.7	0.0003	0.0015	0.0015	0.015	0.00001	0.00003	2.0	0.026	0.0065	0.0019	0.01	1.9	***0.0022***	0.033	0.00042	0.8	20	0.00003	0.0230	29
140	0.010	0.00016	0.0001	0.00010	0.00001	0.193	0.006	0.00010	3.9	0.7	0.0003	0.0015	0.0015	0.015	0.00001	0.00003	2.0	0.026	0.0065	0.0019	0.01	1.9	***0.0022***	0.033	0.00042	0.8	20	0.00003	0.0231	29
141	0.010	0.00016	0.0001	0.00010	0.00001	0.194	0.006	0.00010	3.9	0.7	0.0003	0.0015	0.0015	0.015	0.00001	0.00003	2.0	0.026	0.0065	0.0019	0.01	1.9	***0.0022***	0.034	0.00042	0.8	20	0.00003	0.0231	29
142	0.010	0.00016	0.0001	0.00010	0.00001	0.194	0.006	0.00011	3.9	0.7	0.0003	0.0015	0.0015	0.015	0.00001	0.00003	2.0	0.026	0.0065	0.0019	0.01	1.9	***0.0023***	0.034	0.00042	0.8	20	0.00003	0.0231	30
143	0.010	0.00016	0.0001	0.00010	0.00001	0.195	0.007	0.00011	3.9	0.7	0.0003	0.0015	0.0015	0.015	0.00001	0.00003	2.0	0.026	0.0066	0.0019	0.01	1.9	***0.0023***	0.034	0.00042	0.8	20	0.00003	0.0232	30
144	0.010	0.00016	0.0001	0.00010	0.00001	0.196	0.007	0.00011	4.0	0.7	0.0003	0.0015	0.0015	0.015	0.00001	0.00003	2.0	0.026	0.0066	0.0019	0.01	1.9	***0.0023***	0.034	0.00042	0.8	20	0.00003	0.0232	30
145	0.010	0.00016	0.0001	0.00011	0.00001	0.197	0.007	0.00011	4.0	0.7	0.0004	0.0015	0.0015	0.015	0.00001	0.00003	2.0	0.026	0.0066	0.0019	0.01	1.9	***0.0023***	0.034	0.00042	0.8	20	0.00003	0.0233	30
146	0.010	0.00016	0.0001	0.00011	0.00001	0.197	0.007	0.00011	4.0	0.7	0.0004	0.0015	0.0015	0.015	0.00001	0.00003	2.0	0.026	0.0066	0.0019	0.01	1.9	***0.0023***	0.034	0.00042	0.8	20	0.00003	0.0234	30
147	0.010	0.00016	0.0001	0.00011	0.00001	0.198	0.007	0.00011	4.0	0.7	0.0004	0.0015	0.0015	0.015	0.00001	0.00003	2.0	0.026	0.0066	0.0019	0.01	1.9	***0.0023***	0.034	0.00042	0.8	20	0.00003	0.0234	30
148	0.010	0.00016	0.0001	0.00011	0.00001	0.198	0.007	0.00011	4.0	0.7	0.0004	0.0015	0.0015	0.015	0.00001	0.00003	2.0	0.026	0.0066	0.0019	0.01	1.9	***0.0023***	0.034	0.00042	0.8	20	0.00003	0.0234	30
149	0.010	0.00016	0.0001	0.00011	0.00001	0.199	0.007	0.00011	4.0	0.7	0.0004	0.0015	0.0015	0.015	0.00001	0.00003	2.0	0.026	0.0066	0.0019	0.01	1.9	***0.0023***	0.034	0.00042	0.8	21	0.00003	0.0234	30
150	0.010	0.00016	0.0001	0.00011	0.00001	0.199	0.007	0.00011	4.0	0.7	0.0004	0.0015	0.0016	0.015	0.00001	0.00003	2.0	0.026	0.0066	0.0019	0.01	1.9	***0.0023***	0.035	0.00042	0.8	21	0.00003	0.0234	30
151	0.010	0.00016	0.0001	0.00011	0.00001	0.197	0.007	0.00011	4.0	0.7	0.0003	0.0015	0.0015	0.015	0.00001	0.00003	2.0	0.026	0.0065	0.0019	0.01	1.9	***0.0023***	0.034	0.00042	0.8	20	0.00003	0.0231	30
152	0.010	0.00016	0.0001	0.00011	0.00001	0.199	0.007	0.00011	4.0	0.7	0.0003	0.0015	0.0016	0.015	0.00001	0.00003	2.0	0.026	0.0066	0.0019	0.01	1.9	***0.0023***	0.035	0.00042	0.8	21	0.00003	0.0233	30
153	0.010	0.00016	0.0001	0.00011	0.00001	0.200	0.007	0.00011	4.1	0.7	0.0004	0.0015	0.0016	0.015	0.00001	0.00003	2.0	0.026	0.0066	0.0019	0.01	1.9	***0.0023***	0.035	0.00042	0.8	21	0.00003	0.0234	30
154	0.010	0.00016	0.0001	0.00011	0.00001	0.200	0.007	0.00011	4.1	0.7	0.0004	0.0015	0.0016	0.015	0.00001	0.00003	2.0	0.026	0.0066	0.0019	0.01	1.9	***0.0023***	0.035	0.00042	0.8	21	0.00003	0.0234	30
155	0.010	0.00016	0.0001	0.00011	0.00001	0.201	0.007	0.00011	4.1	0.7	0.0004	0.0015	0.0016	0.015	0.00001	0.00003	2.0	0.026	0.0066	0.0019	0.01	1.9	***0.0023***	0.035	0.00042	0.8	21	0.00003	0.0234	30
156	0.010	0.00016	0.0001	0.00011	0.00001	0.201	0.007	0.00011	4.1	0.7	0.0004	0.0015	0.0016	0.015	0.00001	0.00003	2.0	0.026	0.0066	0.0019	0.01	1.9	***0.0023***	0.035	0.00042	0.8	21	0.00003	0.0234	31
157	0.010	0.00016	0.0001	0.00011	0.00001	0.201	0.007	0.00011	4.1	0.7	0.0003	0.0015	0.0016	0.015	0.00001	0.00003	2.1	0.026	0.0066	0.0019	0.01	1.9	***0.0023***	0.035	0.00042	0.8	21	0.00003	0.0234	31
158	0.010	0.00016	0.0001	0.00011	0.00001	0.202	0.007	0.00011	4.1	0.7	0.0003	0.0015	0.0016	0.015	0.00001	0.00003	2.1	0.026	0.0066	0.0019	0.01	1.9	***0.0023***	0.035	0.00042	0.8	21	0.00003	0.0235	31
159	0.010	0.00016	0.0001	0.00011	0.00001	0.202	0.007	0.00011	4.1	0.7	0.0004	0.0015	0.0016	0.015	0.00001	0.00003	2.1	0.026	0.0066	0.0019	0.01	1.9	***0.0023***	0.035	0.00042	0.8	21	0.00003	0.0235	31
160	0.010	0.00016	0.0001	0.00011	0.00001	0.202	0.007	0.00011	4.1	0.7	0.0003	0.0015	0.0016	0.015	0.00001	0.00003	2.1	0.026	0.0066	0.0019	0.01	1.9	***0.0023***	0.035	0.00042	0.8	21	0.00003	0.0235	31
161	0.010	0.00016	0.0001	0.00011	0.00001	0.203	0.007	0.00011	4.1	0.7	0.0003	0.0015	0.0016	0.015	0.00001	0.00003	2.1	0.026	0.0066	0.0019	0.01	1.9	***0.0023***	0.035	0.00042	0.8	21	0.00003	0.0235	31
162	0.010	0.00016	0.0001	0.00011	0.00001	0.203	0.007	0.00011	4.1	0.7	0.0003	0.0015	0.0016	0.015	0.00001	0.00003	2.1	0.026	0.0066	0.0019	0.01	1.9	***0.0023***	0.035	0.00042	0.8	21	0.00003	0.0235	31
163	0.010	0.00016	0.0001	0.00011	0.00001	0.204	0.007	0.00011	4.1	0.7	0.0003	0.0016	0.0016	0.015	0.00001	0.00003	2.1	0.026	0.0066	0.0019	0.01	1.9	***0.0023***	0.035	0.00042	0.8	21	0.00003	0.0235	31
164	0.010	0.00016	0.0001	0.00011	0.00001	0.204	0.007	0.00011	4.2	0.7	0.0003	0.0016	0.0016	0.015	0.00001	0.00003	2.1	0.026	0.0066	0.0019	0.01	1.9	***0.0023***	0.035	0.00042	0.8	21	0.00003	0.0235	31
165	0.010	0.00016	0.0001	0.00011	0.00001	0.204	0.007	0.00011	4.2	0.7	0.0003	0.0016	0.0016	0.015	0.00001	0.00003	2.1	0.026	0.0066	0.0019	0.01	1.9	***0.0023***	0.036	0.00042	0.8	21	0.00003	0.0235	31
166	0.010	0.00016	0.0001	0.00011	0.00001	0.205	0.007	0.00011	4.2	0.7	0.0003	0.0016	0.0016	0.015	0.00001	0.00003	2.1	0.026	0.0066	0.0019	0.01	1.9	***0.0023***	0.036	0.00042	0.8	21	0.00003	0.0235	31
167	0.010	0.00016	0.0001	0.00011	0.00001	0.205	0.007	0.00011	4.2	0.7	0.0003	0.0016	0.0016	0.015	0.00001	0.00003	2.1	0.026	0.0066	0.0019	0.01	1.9	***0.0023***	0.036	0.00042	0.8	21	0.00003	0.0235	31
168	0.010	0.00016	0.0001	0.00011	0.00001	0.205	0.007	0.00011	4.2	0.7	0.0003	0.0016	0.0016	0.015	0.00001	0.00003	2.1	0.026	0.0066	0.0019	0.01	1.9	***0.0023***	0.036	0.00042	0.8	21	0.00003	0.0236	31
169	0.010	0.00016	0.0001	0.00011	0.00001	0.206	0.007	0.00011	4.2	0.7	0.0003	0.0016	0.0016	0.015	0.00001	0.00003	2.1	0.026	0.0066	0.0019	0.01	1.9	***0.0023***	0.036	0.00042	0.8	21	0.00003	0.0236	31
170	0.010	0.00016	0.0001	0.00011	0.00001	0.206	0.007	0.00011	4.2	0.7	0.0003	0.0016	0.0016	0.015	0.00001	0.00003	2.1	0.026	0.0066	0.0019	0.01	1.9	***0.0023***	0.036	0.00042	0.8	21	0.00003	0.0236	31
171	0.010	0.00016	0.0002	0.00011	0.00001	0.206	0.007	0.00011	4.2	0.7	0.0003	0.0016	0.0016	0.015	0.00001	0.00003	2.1	0.026	0.0066	0.0019	0.01	1.9	***0.0023***	0.036	0.00042	0.8	21	0.00003	0.0236	31
172	0.011	0.00016	0.0002	0.00011	0.00001	0.207	0.007	0.00011	4.2	0.7	0.0003	0.0016	0.0016	0.015	0.00001	0.00003	2.1	0.026	0.0066	0.0019	0.01	1.9	***0.0023***	0.036	0.00042	0.8	21	0.00003	0.0236	31
173	0.011	0.00016	0.0002	0.00011	0.00001	0.207	0.007	0.00011	4.2	0.7	0.0003	0.0016	0.0016	0.015	0.00001	0.00003	2.1	0.026	0.0066	0.0019	0.01	1.9	***0.0023***	0.036	0.00042	0.8	21	0.00003	0.0236	31
174	0.011	0.00016	0.0002	0.00011	0.00001	0.208	0.007	0.00011	4.2	0.7	0.0003	0.0016	0.0016	0.015	0.00001	0.00003	2.1	0.026	0.0066	0.0020	0.01	1.9	***0.0023***	0.036	0.00042	0.8	21	0.00003	0.0237	32
175	0.011	0.00017	0.0002	0.00011	0.00001	0.208	0.007	0.00011	4.2	0.7	0.0003	0.0016	0.0016	0.015	0.00001	0.00003	2.1	0.026	0.0066	0.0020	0.01	1.9	***0.0023***	0.036	0.00042	0.8	21	0.00003	0.0237	32
176	0.011	0.00017	0.0002	0.00011	0.00001	0.208	0.007	0.00011	4.3	0.7	0.0004	0.0016	0.0016	0.015	0.00001	0.00003	2.1	0.026	0.0066	0.0020	0.01	1.9	***0.0023***	0.036	0.00042	0.8	22	0.00003	0.0237	32
177	0.011	0.00017	0.0002	0.00011	0.00001	0.209	0.007	0.00011	4.3	0.7	0.0004	0.0016	0.0016	0.015	0.00001	0.00003	2.1	0.026	0.0066	0.0020	0.01	1.9	***0.0023***	0.036	0.00042	0.8	22	0.00003	0.0237	32
178	0.011	0.00017	0.0002	0.00011	0.00001	0.209	0.007	0.00011	4.3	0.7	0.0003	0.0016	0.0016	0.015	0.00001	0.00003	2.1	0.026	0.0066	0.0020	0.01	1.9	***0.0023***	0.036	0.00042	0.8	22	0.00003	0.0237	32
179	0.011	0.00017	0.0002	0.00011	0.00001	0.209	0.007	0.00011	4.3	0.7	0.0004	0.0016	0.0016	0.015	0.00001	0.00003	2.2	0.026	0.0067	0.0020	0.01	1.9	***0.0023***	0.036	0.00042	0.8	22	0.00003	0.0238	32
180	0.011	0.00017	0.0002	0.00011	0.00001	0.210	0.007	0.00011	4.3	0.7	0.0004	0.0016	0.0016	0.015	0.00001	0.00003	2.2	0.026	0.0067	0.0020	0.01	1.9	***0.0023***	0.036	0.00042	0.8	22	0.00003	0.0238	32
181	0.011	0.00017	0.0002	0.00011	0.00001	0.210	0.007	0.00011	4.3	0.7	0.0004	0.0016	0.0016	0.015	0.00001	0.00003	2.2	0.026	0.0067	0.0020	0.01	1.9	***0.0023***	0.037	0.00042	0.8	22	0.00003	0.0238	32
182	0.011	0.00017	0.0002	0.00011	0.00001	0.211	0.007	0.00011	4.3	0.7	0.0004	0.0016	0.0016	0.015	0.00001	0.00003	2.2	0.026	0.0067	0.0020	0.01	2.0	***0.0023***	0.037	0.00042	0.8	22	0.00003	0.0238	32
183	0.011	0.00017	0.0002	0.00011	0.00001	0.211	0.007	0.00011	4.3	0.7	0.0004	0.0016	0.0016	0.015	0.00001	0.00003	2.2	0.026	0.0067	0.0020	0.01	2.0	***0.0023***	0.037	0.00042	0.8	22	0.00003	0.0239	32
184	0.011	0.00017	0.0002	0.00011	0.00001	0.211	0.007	0.00011	4.3	0.7	0.0004	0.0016	0.0017	0.015	0.00001	0.00003	2.2	0.026	0.0067	0.0020	0.01	2.0	***0.0023***	0.037	0.00042	0.8	22	0.00003	0.0239	32
185	0.011	0.00017	0.0002	0.00011	0.00001	0.212	0.007	0.00011	4.3	0.7	0.0004	0.0016	0.0017	0.015	0.00001	0.00003	2.2	0.026	0.0067	0.0020	0.01	2.0	***0.0023***	0.037	0.00042	0.8	22	0.00003	0.0239	32
186	0.011	0.00017	0.0002	0.00011	0.00001	0.212	0.007	0.00011	4.3	0.7	0.0004	0.0016	0.0017	0.016	0.00001	0.00003	2.2	0.026	0.0067	0.0020	0.01	2.0	***0.0023***	0.037	0.00042	0.8	22	0.00003	0.0239	32
187	0.011	0.00017	0.0002	0.00011	0.00001	0.212	0.007	0.00011	4.3	0.7	0.0004	0.0016	0.0017	0.016	0.00001	0.00003	2.2	0.026	0.0067	0.0020	0.01	2.0	***0.0023***	0.037	0.00042	0.8	22	0.00003	0.0240	32
188	0.011	0.00017	0.0002	0.00011	0.00001	0.213	0.007	0.00011	4.3	0.7	0.0004	0.0016	0.0017	0.016	0.00001	0.00003	2.2	0.026	0.0067	0.0020	0.01	2.0	***0.0023***	0.037	0.00042	0.8	22	0.00003	0.0240	32
189	0.011	0.00017	0.0002	0.00011	0.00001	0.213	0.007	0.00011	4.4	0.7	0.0004	0.0016	0.0017	0.016	0.00001	0.00003	2.2	0.026	0.0067	0.0020	0.01	2.0	***0.0023***	0.037	0.00042	0.8	22	0.00003	0.0240	32
190	0.011	0.00017	0.0002	0.00011	0.00001	0.214	0.007	0.00011	4.4	0.7	0.0004	0.0016	0.0017	0.016	0.00001	0.00003	2.2	0.026	0.0067	0.0020	0.01	2.0	***0.0023***	0.037	0.00042	0.8	22	0.00003	0.0240	32
191	0.011	0.00017	0.0002	0.00012	0.00001	0.214	0.007	0.00011	4.4	0.7	0.0004	0.0016	0.0017	0.016	0.00001	0.00003	2.2	0.026	0.0067	0.0020	0.01	2.0	***0.0023***	0.037	0.00042	0.8	22	0.00003	0.0241	32
192	0.011	0.00017	0.0002	0.00012	0.00001	0.214	0.007	0.00011	4.4	0.7	0.0004	0.0016	0.0017	0.016	0.00001	0.00003	2.2	0.026	0.0067	0.0020	0.01	2.0	***0.0023***	0.037	0.00042	0.8	22	0.00003	0.0241	33
193	0.011	0.00017	0.0002	0.00012	0.00001	0.215	0.007	0.00011	4.4	0.7	0.0004	0.0016	0.0017	0.016	0.00001	0.00003	2.2	0.026	0.0067	0.0020	0.01	2.0	***0.0023***	0.037	0.00042	0.8	22	0.00003	0.0241	33
194	0.011	0.00017	0.0002	0.00012	0.00001	0.215	0.007	0.00011	4.4	0.7	0.0004	0.0016	0.0017	0.016	0.00001	0.00003	2.2	0.026	0.0068	0.0020	0.01	2.0	***0.0024***	0.037	0.00043	0.8	22	0.00003	0.0242	33
195	0.011	0.00017	0.0002	0.00012	0.00001	0.216	0.007	0.00011	4.4	0.7	0.0004	0.0016	0.0017	0.016	0.00001	0.00003	2.2	0.026	0.0068	0.0020	0.01	2.0	***0.0024***	0.038	0.00043	0.8	22	0.00003	0.0242	33
196	0.011	0.00017	0.0002	0.00012	0.00001	0.216	0.007	0.00011	4.4	0.7	0.0004	0.0016	0.0017	0.016	0.00001	0.00003	2.2	0.026	0.0068	0.0020	0.01	2.0	***0.0024***	0.038	0.00043	0.8	22	0.00003	0.0242	33
197	0.011	0.00017	0.0002	0.00012	0.00001	0.216	0.007	0.00011	4.4	0.7	0.0004	0.0016	0.0017	0.016	0.00001	0.00003	2.3	0.026	0.0068	0.0020	0.01	2.0	***0.0024***	0.038	0.00043	0.8	22	0.00003	0.0243	33
198	0.011	0.00017	0.0002	0.00012	0.00001	0.217	0.007	0.00011	4.4	0.7	0.0004	0.0016	0.0017	0.016	0.00001	0.00003	2.3	0.026	0.0068	0.0020	0.01	2.0	***0.0024***	0.038	0.00043	0.8	22	0.00003	0.0243	33
199	0.011	0.00017	0.0002	0.00012	0.00001	0.217	0.007	0.00011	4.4	0.7	0.0004	0.0016	0.0017	0.016	0.00001	0.00003	2.3	0.026	0.0068	0.0020	0.01	2.0	***0.0024***	0.038	0.00043	0.8	23	0.00003	0.0243	33
200	0.011	0.00017	0.0002	0.00012	0.00001	0.217	0.007	0.00011	4.4	0.7	0.0004	0.0016	0.0017	0.016	0.00001	0.00003	2.3	0.026	0.0068	0.0020	0.01	2.0	***0.0024***	0.038	0.00043	0.8	23	0.00003	0.0243	33
201	0.011	0.00017	0.0002	0.00012	0.00001	0.218	0.007	0.00011	4.4	0.7	0.0004	0.0016	0.0017	0.016	0.00001	0.00003	2.3	0.026	0.0068	0.0020	0.01	2.0	***0.0024***	0.038	0.00043	0.8	23	0.00003	0.0244	33
202	0.011	0.00017	0.0002	0.00012	0.00001	0.216	0.007	0.00011	4.4	0.7	0.0004	0.0016	0.0017	0.016	0.00001	0.00003	2.3	0.026	0.0067	0.0020	0.01	2.0	***0.0024***	0.038	0.00042	0.8	22	0.00003	0.0242	33
203	0.011	0.00017	0.0002	0.00012	0.00001	0.218	0.007	0.00011	4.4	0.7	0.0004	0.0016	0.0017	0.016	0.00001	0.00003	2.3	0.026	0.0068	0.0020	0.01	2.0	***0.0024***	0.038	0.00043	0.8	23	0.00003	0.0244	33
204	0.011	0.00017	0.0002	0.00012	0.00001	0.219	0.007	0.00011	4.5	0.7	0.0004	0.0016	0.0017	0.016	0.00001	0.00003	2.3	0.027	0.0068	0.0021	0.01	2.0	***0.0024***	0.038	0.00043	0.8	23	0.00003	0.0245	33

Table 7. Model Results at Whitlow Ranch Dam - Alternative 4

Years since Mine Start	Al mg/L	Sb mg/L	As mg/L	Ba mg/L	Be mg/L	HCO3 mg/L	B mg/L	Cd mg/L	Ca mg/L	Cl mg/L	Cr mg/L	Co mg/L	Cu mg/L	F mg/L	Fe mg/L	Pb mg/L	Mg mg/L	Mn mg/L	Mo mg/L	Ni mg/L	NO3-N mg/L	K mg/L	Se mg/L	Si mg/L	Ag mg/L	Na mg/L	SO4 mg/L	Tl mg/L	Zn mg/L	TDS mg/L
205	0.011	0.00018	0.0002	0.00012	0.00001	0.219	0.007	0.00011	4.5	0.7	0.0004	0.0016	0.0017	0.016	0.00001	0.00003	2.3	0.027	0.0068	0.0021	0.01	2.0	***0.0024***	0.038	0.00043	0.8	23	0.00003	0.0246	33
206	0.011	0.00018	0.0002	0.00012	0.00001	0.220	0.007	0.00011	4.5	0.7	0.0004	0.0016	0.0017	0.016	0.00001	0.00003	2.3	0.027	0.0068	0.0021	0.01	2.0	***0.0024***	0.038	0.00043	0.8	23	0.00003	0.0246	33
207	0.011	0.00018	0.0002	0.00012	0.00001	0.220	0.007	0.00011	4.5	0.7	0.0004	0.0016	0.0017	0.016	0.00001	0.00003	2.3	0.027	0.0069	0.0021	0.01	2.0	***0.0024***	0.038	0.00043	0.8	23	0.00003	0.0246	34
208	0.011	0.00018	0.0002	0.00012	0.00001	0.221	0.007	0.00011	4.5	0.7	0.0004	0.0016	0.0017	0.016	0.00001	0.00003	2.3	0.027	0.0069	0.0021	0.01	2.0	***0.0024***	0.038	0.00043	0.8	23	0.00003	0.0247	34
209	0.011	0.00018	0.0002	0.00012	0.00001	0.221	0.007	0.00011	4.5	0.7	0.0004	0.0017	0.0017	0.016	0.00002	0.00003	2.3	0.027	0.0069	0.0021	0.01	2.0	***0.0024***	0.038	0.00043	0.8	23	0.00003	0.0247	34
210	0.011	0.00018	0.0002	0.00012	0.00001	0.222	0.007	0.00011	4.5	0.7	0.0004	0.0017	0.0017	0.016	0.00002	0.00003	2.3	0.027	0.0069	0.0021	0.01	2.0	***0.0024***	0.039	0.00043	0.8	23	0.00003	0.0248	34
211	0.011	0.00018	0.0002	0.00012	0.00001	0.222	0.007	0.00011	4.5	0.7	0.0004	0.0017	0.0017	0.016	0.00002	0.00003	2.3	0.027	0.0069	0.0021	0.01	2.0	***0.0024***	0.039	0.00043	0.8	23	0.00003	0.0248	34
212	0.011	0.00018	0.0002	0.00012	0.00001	0.222	0.007	0.00011	4.5	0.7	0.0004	0.0017	0.0017	0.016	0.00002	0.00003	2.3	0.027	0.0069	0.0021	0.01	2.0	***0.0024***	0.039	0.00043	0.8	23	0.00003	0.0248	34
213	0.011	0.00018	0.0002	0.00012	0.00001	0.223	0.007	0.00011	4.5	0.7	0.0004	0.0017	0.0017	0.016	0.00002	0.00003	2.3	0.027	0.0069	0.0021	0.01	2.0	***0.0024***	0.039	0.00043	0.8	23	0.00003	0.0249	34
214	0.011	0.00018	0.0002	0.00012	0.00001	0.223	0.007	0.00011	4.5	0.7	0.0004	0.0017	0.0017	0.016	0.00002	0.00003	2.4	0.027	0.0069	0.0021	0.01	2.0	***0.0024***	0.039	0.00043	0.8	23	0.00003	0.0249	34
215	0.011	0.00018	0.0002	0.00012	0.00001	0.223	0.007	0.00011	4.6	0.7	0.0004	0.0017	0.0017	0.016	0.00002	0.00003	2.4	0.027	0.0069	0.0021	0.01	2.1	***0.0024***	0.039	0.00043	0.8	23	0.00003	0.0249	34
216	0.011	0.00018	0.0002	0.00012	0.00001	0.224	0.007	0.00011	4.6	0.7	0.0004	0.0017	0.0017	0.016	0.00002	0.00003	2.4	0.027	0.0069	0.0021	0.01	2.1	***0.0024***	0.039	0.00044	0.8	23	0.00003	0.0250	34
217	0.011	0.00018	0.0002	0.00012	0.00001	0.224	0.007	0.00011	4.6	0.7	0.0004	0.0017	0.0018	0.016	0.00002	0.00003	2.4	0.027	0.0070	0.0021	0.01	2.1	***0.0024***	0.039	0.00044	0.8	23	0.00003	0.0250	34
218	0.011	0.00018	0.0002	0.00012	0.00001	0.225	0.007	0.00011	4.6	0.7	0.0004	0.0017	0.0018	0.016	0.00002	0.00003	2.4	0.027	0.0070	0.0021	0.01	2.1	***0.0024***	0.039	0.00044	0.8	23	0.00003	0.0251	34
219	0.011	0.00018	0.0002	0.00012	0.00001	0.225	0.008	0.00011	4.6	0.7	0.0004	0.0017	0.0018	0.016	0.00002	0.00003	2.4	0.027	0.0070	0.0021	0.01	2.1	***0.0024***	0.039	0.00044	0.8	23	0.00003	0.0251	34
220	0.011	0.00018	0.0002	0.00012	0.00001	0.225	0.008	0.00011	4.6	0.7	0.0004	0.0017	0.0018	0.016	0.00002	0.00003	2.4	0.027	0.0070	0.0021	0.01	2.1	***0.0024***	0.039	0.00044	0.8	24	0.00003	0.0251	34
221	0.011	0.00018	0.0002	0.00012	0.00001	0.226	0.008	0.00011	4.6	0.7	0.0004	0.0017	0.0018	0.016	0.00002	0.00003	2.4	0.027	0.0070	0.0021	0.01	2.1	***0.0024***	0.039	0.00044	0.8	24	0.00003	0.0252	34
222	0.011	0.00018	0.0002	0.00012	0.00001	0.226	0.008	0.00011	4.6	0.7	0.0004	0.0017	0.0018	0.016	0.00002	0.00003	2.4	0.027	0.0070	0.0021	0.01	2.1	***0.0025***	0.039	0.00044	0.8	24	0.00003	0.0252	35
223	0.012	0.00018	0.0002	0.00012	0.00001	0.227	0.008	0.00011	4.6	0.7	0.0004	0.0017	0.0018	0.016	0.00002	0.00003	2.4	0.027	0.0070	0.0021	0.01	2.1	***0.0025***	0.039	0.00044	0.8	24	0.00003	0.0253	35
224	0.012	0.00018	0.0002	0.00012	0.00001	0.227	0.008	0.00011	4.6	0.7	0.0004	0.0017	0.0018	0.016	0.00002	0.00003	2.4	0.027	0.0070	0.0021	0.01	2.1	***0.0025***	0.039	0.00044	0.8	24	0.00003	0.0253	35
225	0.012	0.00018	0.0002	0.00012	0.00001	0.228	0.008	0.00011	4.6	0.7	0.0004	0.0017	0.0018	0.016	0.00002	0.00003	2.4	0.027	0.0070	0.0021	0.01	2.1	***0.0025***	0.040	0.00044	0.8	24	0.00003	0.0254	35
226	0.012	0.00018	0.0002	0.00012	0.00001	0.228	0.008	0.00011	4.6	0.7	0.0004	0.0017	0.0018	0.016	0.00002	0.00003	2.4	0.027	0.0071	0.0021	0.01	2.1	***0.0025***	0.040	0.00044	0.8	24	0.00003	0.0254	35
227	0.012	0.00018	0.0002	0.00012	0.00001	0.228	0.008	0.00011	4.7	0.7	0.0004	0.0017	0.0018	0.016	0.00002	0.00003	2.4	0.027	0.0071	0.0021	0.01	2.1	***0.0025***	0.040	0.00044	0.8	24	0.00003	0.0255	35
228	0.012	0.00018	0.0002	0.00012	0.00001	0.229	0.008	0.00012	4.7	0.7	0.0004	0.0017	0.0018	0.016	0.00002	0.00003	2.4	0.027	0.0071	0.0022	0.01	2.1	***0.0025***	0.040	0.00044	0.8	24	0.00003	0.0255	35
229	0.012	0.00018	0.0002	0.00012	0.00001	0.229	0.008	0.00012	4.7	0.7	0.0004	0.0017	0.0018	0.016	0.00002	0.00003	2.4	0.027	0.0071	0.0022	0.01	2.1	***0.0025***	0.040	0.00044	0.8	24	0.00003	0.0255	35
230	0.012	0.00019	0.0002	0.00012	0.00001	0.229	0.008	0.00012	4.7	0.7	0.0004	0.0017	0.0018	0.016	0.00002	0.00003	2.4	0.028	0.0071	0.0022	0.01	2.1	***0.0025***	0.040	0.00044	0.8	24	0.00003	0.0256	35
231	0.012	0.00019	0.0002	0.00012	0.00001	0.230	0.008	0.00012	4.7	0.7	0.0004	0.0017	0.0018	0.016	0.00002	0.00003	2.5	0.028	0.0071	0.0022	0.01	2.1	***0.0025***	0.040	0.00044	0.8	24	0.00003	0.0256	35
232	0.012	0.00019	0.0002	0.00012	0.00001	0.230	0.008	0.00012	4.7	0.7	0.0004	0.0017	0.0018	0.016	0.00002	0.00003	2.5	0.028	0.0071	0.0022	0.01	2.1	***0.0025***	0.040	0.00045	0.8	24	0.00003	0.0257	35
233	0.012	0.00019	0.0002	0.00012	0.00001	0.231	0.008	0.00012	4.7	0.7	0.0004	0.0017	0.0018	0.016	0.00002	0.00003	2.5	0.028	0.0071	0.0022	0.01	2.1	***0.0025***	0.040	0.00045	0.8	24	0.00003	0.0257	35
234	0.012	0.00019	0.0002	0.00012	0.00001	0.231	0.008	0.00012	4.7	0.7	0.0004	0.0017	0.0018	0.016	0.00002	0.00003	2.5	0.028	0.0071	0.0022	0.01	2.1	***0.0025***	0.040	0.00045	0.8	24	0.00003	0.0258	35
235	0.012	0.00019	0.0002	0.00012	0.00001	0.232	0.008	0.00012	4.7	0.7	0.0004	0.0017	0.0018	0.016	0.00002	0.00003	2.5	0.028	0.0072	0.0022	0.01	2.1	***0.0025***	0.040	0.00045	0.8	24	0.00003	0.0258	35
236	0.012	0.00019	0.0002	0.00012	0.00001	0.232	0.008	0.00012	4.7	0.7	0.0004	0.0017	0.0018	0.016	0.00002	0.00003	2.5	0.028	0.0072	0.0022	0.01	2.1	***0.0025***	0.040	0.00045	0.8	24	0.00003	0.0259	36
237	0.012	0.00019	0.0002	0.00012	0.00001	0.232	0.008	0.00012	4.7	0.7	0.0004	0.0017	0.0018	0.016	0.00002	0.00003	2.5	0.028	0.0072	0.0022	0.01	2.1	***0.0025***	0.040	0.00045	0.8	24	0.00003	0.0259	36
238	0.012	0.00019	0.0002	0.00012	0.00001	0.233	0.008	0.00012	4.7	0.7	0.0004	0.0017	0.0018	0.016	0.00002	0.00003	2.5	0.028	0.0072	0.0022	0.01	2.1	***0.0025***	0.040	0.00045	0.8	24	0.00003	0.0260	36
239	0.012	0.00019	0.0002	0.00013	0.00001	0.233	0.008	0.00012	4.7	0.7	0.0004	0.0017	0.0018	0.017	0.00002	0.00003	2.5	0.028	0.0072	0.0022	0.01	2.1	***0.0025***	0.040	0.00045	0.8	24	0.00003	0.0260	36
240	0.012	0.00019	0.0002	0.00013	0.00001	0.234	0.008	0.00012	4.8	0.7	0.0004	0.0017	0.0018	0.017	0.00002	0.00003	2.5	0.028	0.0072	0.0022	0.01	2.1	***0.0025***	0.041	0.00045	0.8	24	0.00003	0.0261	36
241	0.012	0.00019	0.0002	0.00013	0.00001	0.234	0.008	0.00012	4.8	0.7	0.0004	0.0018	0.0018	0.017	0.00002	0.00003	2.5	0.028	0.0072	0.0022	0.01	2.2	***0.0025***	0.041	0.00045	0.8	25	0.00003	0.0261	36
242	0.012	0.00019	0.0002	0.00013	0.00001	0.234	0.008	0.00012	4.8	0.7	0.0004	0.0018	0.0018	0.017	0.00002	0.00003	2.5	0.028	0.0072	0.0022	0.01	2.2	***0.0025***	0.041	0.00045	0.8	25	0.00003	0.0262	36
243	0.012	0.00019	0.0002	0.00013	0.00001	0.235	0.008	0.00012	4.8	0.7	0.0004	0.0018	0.0018	0.017	0.00002	0.00003	2.5	0.028	0.0073	0.0022	0.01	2.2	***0.0025***	0.041	0.00045	0.8	25	0.00003	0.0262	36
244	0.012	0.00019	0.0002	0.00013	0.00001	0.235	0.008	0.00012	4.8	0.7	0.0004	0.0018	0.0018	0.017	0.00002	0.00003	2.5	0.028	0.0073	0.0022	0.01	2.2	***0.0026***	0.041	0.00045	0.8	25	0.00003	0.0263	36
245	0.012	0.00019	0.0002	0.00013	0.00001	0.236	0.008	0.00012	4.8	0.7	0.0004	0.0018	0.0018	0.017	0.00002	0.00003	2.5	0.028	0.0073	0.0022	0.01	2.2	***0.0026***	0.041	0.00046	0.8	25	0.00003	0.0263	36
Minimum	0.000	0.00000	0.0000	0.00000	0.00000	0.000	0.000	0.00000	0.0	0.0	0.0000	0.0000	0.0000	0.000	0.00000	0.00000	0.0	0.000	0.0000	0.0000	0.00	0.0	0.0000	0.000	0.00000	0.0	0	0.00000	0.0000	0
Maximum	0.012	0.00019	0.0002	0.00013	0.00001	0.236	0.008	0.00012	4.8	0.7	0.0004	0.0018	0.0018	0.017	0.00002	0.00003	2.5	0.028	0.0073	0.0022	0.01	2.2	0.0026	0.041	0.00046	0.8	25	0.00003	0.0263	36
Average	0.008	0.00013	0.0001	0.00008	0.00001	0.155	0.005	0.00008	3.1	0.5	0.0003	0.0012	0.0012	0.012	0.00001	0.00002	1.6	0.020	0.0052	0.0015	0.01	1.5	0.0018	0.027	0.00033	0.6	16	0.00002	0.0185	24
Surface WQ Standard =		0.03000	0.1500					0.00512 [a]					0.02335 [a]		1.000	0.00833 [a]				0.13433 [a]			0.0020					0.15000	0.3031 [b]	

Notes:

1. Model results do not include background concentrations and assume no mass flux from recharge or natural groundwater sources
2. Surface WQ Standard = Arizona Department of Environmental Quality Water Quality Standard for "Aquatic and wildlife warm" (A&ww) water with chronic exposure (Arizona Administrative Code - Title 18, Ch. 11, Sup. 16-4, 2016)
3. Values in bold italic indicate that concentration is above water quality standard
4. mg/L = milligrams per liter

Table 8. Predicted Total Concentrations at Queen Creek 3 Aquifer Subdomain - Alternative 4

Years since Mine Start	Al	Sb	As	Ba	Be	HCO3	B	Cd	Ca	Cl	Cr	Co	Cu	F	Fe	Pb	Mg	Mn	Mo	Ni	NO3-N	K	Se	Si	Ag	Na	SO4	Tl	Zn	TDS
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1	0.040	0.00021	0.0013	0.026	0.0010	340	0.069	0.00004	101.5	29.7	0.0019	0.0013	0.0008	0.53	0.045	0.00007	25.9	0.005	0.0030	0.0027	0.38	3.4	0.0009	42.8	0.00004	52.8	173	0.00003	0.005	589
2	0.040	0.00021	0.0013	0.026	0.0010	340	0.069	0.00004	101.5	29.7	0.0019	0.0013	0.0008	0.53	0.045	0.00007	25.9	0.005	0.0030	0.0027	0.38	3.4	0.0009	42.8	0.00004	52.8	173	0.00003	0.005	589
3	0.040	0.00021	0.0013	0.026	0.0010	340	0.069	0.00004	101.5	29.7	0.0019	0.0013	0.0008	0.53	0.045	0.00007	25.9	0.005	0.0030	0.0027	0.38	3.4	0.0009	42.8	0.00004	52.8	173	0.00003	0.005	589
4	0.040	0.00021	0.0013	0.026	0.0010	340	0.069	0.00004	101.5	29.7	0.0019	0.0013	0.0008	0.53	0.045	0.00007	25.9	0.005	0.0030	0.0027	0.38	3.4	0.0009	42.8	0.00004	52.8	173	0.00003	0.005	589
5	0.040	0.00021	0.0013	0.026	0.0010	340	0.069	0.00004	101.5	29.7	0.0019	0.0013	0.0008	0.53	0.045	0.00007	25.9	0.005	0.0030	0.0027	0.38	3.4	0.0009	42.8	0.00004	52.8	173	0.00003	0.005	589
6	0.040	0.00021	0.0013	0.026	0.0010	340	0.069	0.00004	101.5	29.7	0.0019	0.0013	0.0008	0.53	0.045	0.00007	25.9	0.005	0.0030	0.0027	0.38	3.4	0.0009	42.8	0.00004	52.8	173	0.00003	0.005	589
7	0.040	0.00021	0.0013	0.026	0.0010	340	0.069	0.00004	101.5	29.7	0.0019	0.0013	0.0008	0.53	0.045	0.00007	25.9	0.005	0.0030	0.0027	0.38	3.4	0.0009	42.8	0.00004	52.8	173	0.00003	0.005	589
8	0.040	0.00021	0.0013	0.026	0.0010	340	0.069	0.00004	101.5	29.7	0.0019	0.0013	0.0008	0.53	0.045	0.00007	25.9	0.005	0.0030	0.0027	0.38	3.4	0.0009	42.8	0.00004	52.8	173	0.00003	0.005	589
9	0.040	0.00021	0.0013	0.026	0.0010	340	0.069	0.00004	101.5	29.7	0.0019	0.0013	0.0008	0.53	0.045	0.00007	25.9	0.005	0.0030	0.0027	0.38	3.4	0.0009	42.8	0.00004	52.8	173	0.00003	0.005	589
10	0.040	0.00021	0.0013	0.026	0.0010	340	0.069	0.00004	101.5	29.7	0.0019	0.0013	0.0008	0.53	0.045	0.00007	25.9	0.005	0.0030	0.0027	0.38	3.4	0.0009	42.8	0.00004	52.8	173	0.00003	0.005	589
11	0.040	0.00021	0.0013	0.026	0.0010	340	0.069	0.00004	101.5	29.7	0.0019	0.0013	0.0008	0.53	0.045	0.00007	25.9	0.005	0.0030	0.0027	0.38	3.4	0.0009	42.8	0.00004	52.8	173	0.00003	0.005	589
12	0.040	0.00021	0.0013	0.026	0.0010	340	0.069	0.00004	101.5	29.7	0.0019	0.0013	0.0008	0.53	0.045	0.00007	25.9	0.005	0.0030	0.0027	0.38	3.4	0.0009	42.8	0.00004	52.8	173	0.00003	0.005	589
13	0.040	0.00021	0.0013	0.026	0.0010	340	0.069	0.00004	101.5	29.7	0.0019	0.0013	0.0008	0.53	0.045	0.00007	25.9	0.005	0.0030	0.0027	0.38	3.4	0.0009	42.8	0.00004	52.8	173	0.00003	0.005	589
14	0.040	0.00021	0.0013	0.026	0.0010	340	0.069	0.00004	101.5	29.7	0.0019	0.0013	0.0008	0.53	0.045	0.00007	25.9	0.005	0.0030	0.0027	0.38	3.4	0.0009	42.8	0.00004	52.8	173	0.00003	0.005	589
15	0.040	0.00021	0.0013	0.026	0.0010	340	0.069	0.00004	101.5	29.7	0.0019	0.0013	0.0008	0.53	0.045	0.00007	25.9	0.005	0.0030	0.0027	0.38	3.4	0.0009	42.8	0.00004	52.8	173	0.00003	0.005	589
16	0.040	0.00021	0.0013	0.026	0.0010	340	0.069	0.00004	101.5	29.7	0.0019	0.0013	0.0008	0.53	0.045	0.00007	25.9	0.005	0.0030	0.0027	0.38	3.4	0.0009	42.8	0.00004	52.8	173	0.00003	0.005	589
17	0.040	0.00021	0.0013	0.026	0.0010	340	0.069	0.00004	101.5	29.7	0.0019	0.0013	0.0008	0.53	0.045	0.00007	25.9	0.005	0.0030	0.0027	0.38	3.4	0.0009	42.8	0.00004	52.8	173	0.00003	0.005	589
18	0.040	0.00021	0.0013	0.026	0.0010	340	0.069	0.00004	101.5	29.7	0.0019	0.0013	0.0008	0.53	0.045	0.00007	25.9	0.005	0.0030	0.0027	0.38	3.4	0.0009	42.8	0.00004	52.8	173	0.00003	0.005	589
19	0.040	0.00021	0.0013	0.026	0.0010	340	0.069	0.00004	101.5	29.7	0.0019	0.0013	0.0008	0.53	0.045	0.00007	25.9	0.005	0.0030	0.0027	0.38	3.4	0.0009	42.8	0.00004	52.8	173	0.00003	0.005	589
20	0.040	0.00021	0.0013	0.026	0.0010	340	0.069	0.00004	101.5	29.7	0.0019	0.0013	0.0008	0.53	0.045	0.00007	25.9	0.005	0.0030	0.0027	0.38	3.4	0.0009	42.8	0.00004	52.8	173	0.00003	0.005	589
21	0.040	0.00021	0.0013	0.026	0.0010	340	0.069	0.00004	101.5	29.7	0.0019	0.0013	0.0008	0.53	0.045	0.00007	25.9	0.005	0.0030	0.0027	0.38	3.4	0.0009	42.8	0.00004	52.8	173	0.00003	0.005	589
22	0.040	0.00021	0.0013	0.026	0.0010	340	0.069	0.00004	101.5	29.7	0.0019	0.0013	0.0008	0.53	0.045	0.00007	25.9	0.005	0.0030	0.0027	0.38	3.4	0.0009	42.8	0.00004	52.8	173	0.00003	0.005	589
23	0.041	0.00021	0.0013	0.026	0.0010	340	0.069	0.00004	101.5	29.7	0.0019	0.0013	0.0008	0.53	0.045	0.00007	25.9	0.005	0.0030	0.0027	0.38	3.4	0.0009	42.8	0.00004	52.8	173	0.00003	0.005	589
24	0.041	0.00021	0.0013	0.026	0.0010	340	0.069	0.00004	101.5	29.7	0.0019	0.0013	0.0008	0.53	0.045	0.00007	25.9	0.005	0.0030	0.0027	0.38	3.4	0.0009	42.8	0.00004	52.8	173	0.00003	0.005	589
25	0.041	0.00021	0.0013	0.026	0.0010	340	0.069	0.00004	101.5	29.7	0.0019	0.0013	0.0008	0.53	0.045	0.00007	25.9	0.005	0.0030	0.0027	0.38	3.4	0.0009	42.8	0.00004	52.8	173	0.00003	0.005	589
26	0.041	0.00021	0.0013	0.026	0.0010	340	0.069	0.00004	101.5	29.7	0.0019	0.0013	0.0008	0.53	0.045	0.00007	25.9	0.005	0.0030	0.0027	0.38	3.4	0.0009	42.8	0.00004	52.8	173	0.00003	0.005	589
27	0.041	0.00021	0.0013	0.026	0.0010	340	0.069	0.00004	101.5	29.7	0.0019	0.0013	0.0008	0.53	0.045	0.00007	25.9	0.005	0.0030	0.0027	0.38	3.4	0.0009	42.8	0.00004	52.8	173	0.00003	0.005	589
28	0.041	0.00021	0.0013	0.026	0.0010	340	0.069	0.00004	101.5	29.7	0.0019	0.0013	0.0008	0.53	0.045	0.00007	25.9	0.005	0.0030	0.0027	0.38	3.4	0.0009	42.8	0.00004	52.8	173	0.00003	0.005	589
29	0.041	0.00021	0.0013	0.026	0.0010	340	0.069	0.00004	101.5	29.7	0.0019	0.0013	0.0008	0.53	0.045	0.00007	25.9	0.005	0.0030	0.0027	0.38	3.4	0.0009	42.8	0.00004	52.8	173	0.00003	0.005	589
30	0.041	0.00021	0.0013	0.026	0.0010	340	0.069	0.00004	101.5	29.7	0.0019	0.0013	0.0008	0.53	0.045	0.00007	25.9	0.005	0.0030	0.0027	0.38	3.4	0.0009	42.8	0.00004	52.8	173	0.00003	0.005	589
31	0.041	0.00021	0.0013	0.026	0.0010	340	0.069	0.00004	101.5	29.7	0.0019	0.0013	0.0008	0.53	0.045	0.00007	25.9	0.005	0.0030	0.0027	0.38	3.4	0.0009	42.8	0.00004	52.8	173	0.00003	0.005	589
32	0.041	0.00021	0.0013	0.026	0.0010	340	0.069	0.00004	101.5	29.7	0.0019	0.0013	0.0008	0.53	0.045	0.00007	25.9	0.005	0.0030	0.0027	0.38	3.4	0.0009	42.8	0.00004	52.8	173	0.00003	0.005	589
33	0.041	0.00021	0.0013	0.026	0.0010	340	0.069	0.00004	101.5	29.7	0.0019	0.0013	0.0008	0.53	0.045	0.00007	25.9	0.005	0.0030	0.0027	0.38	3.4	0.0009	42.8	0.00004	52.8	173	0.00003	0.005	589
34	0.041	0.00021	0.0013	0.026	0.0010	340	0.069	0.00004	101.5	29.7	0.0019	0.0013	0.0008	0.53	0.045	0.00007	25.9	0.005	0.0030	0.0027	0.38	3.4	0.0009	42.8	0.00004	52.8	173	0.00003	0.005	589
35	0.041	0.00021	0.0013	0.026	0.0010	340	0.069	0.00004	101.5	29.7	0.0019	0.0013	0.0008	0.53	0.045	0.00007	25.9	0.005	0.0030	0.0027	0.38	3.4	0.0009	42.8	0.00004	52.8	173	0.00003	0.005	589
36	0.040	0.00021	0.0013	0.026	0.0010	340	0.069	0.00004	101.5	29.7	0.0019	0.0013	0.0008	0.53	0.045	0.00007	25.9	0.005	0.0030	0.0027	0.38	3.4	0.0009	42.8	0.00004	52.8	173	0.00003	0.005	589
37	0.040	0.00021	0.0013	0.026	0.0010	340	0.069	0.00004	101.5	29.7	0.0019	0.0013	0.0008	0.53	0.045	0.00007	25.9	0.005	0.0030	0.0027	0.38	3.4	0.0009	42.8	0.00004	52.8	173	0.00003	0.005	589
38	0.040	0.00021	0.0013	0.026	0.0010	340	0.069	0.00004	101.5	29.7	0.0019	0.0013	0.0008	0.53	0.045	0.00007	25.9	0.005	0.0030	0.0027	0.38	3.4	0.0009	42.8	0.00004	52.8	173	0.00003	0.005	589
39	0.040	0.00021	0.0013	0.026	0.0010	340	0.069	0.00004	101.5	29.7	0.0019	0.0013	0.0008	0.53	0.045	0.00007	25.9	0.005	0.0030	0.0027	0.38	3.4	0.0009	42.8	0.00004	52.8	173	0.00003	0.005	589
40	0.040	0.00021	0.0013	0.026	0.0010	340	0.069	0.00004	101.5	29.7	0.0019	0.0013	0.0008	0.53	0.045	0.00007	25.9	0.005	0.0030	0.0027	0.38	3.4	0.0009	42.8	0.00004	52.8	173	0.00003	0.005	589
41	0.040	0.00021	0.0013	0.026	0.0010	340	0.069	0.00004	101.5	29.7	0.0019	0.0013	0.0008	0.53	0.045	0.00007	25.9	0.005	0.0030	0.0027	0.38	3.4	0.0009	42.8	0.00004	52.8	173	0.00003	0.005	589
42	0.041	0.00022	0.0013	0.026	0.0010	340	0.069	0.00005	101.8	29.7	0.0019	0.0014	0.0009	0.53	0.045	0.00007	26.0	0.007	0.0035	0.0028	0.38	3.6	0.0011	42.8	0.00007	52.9	174	0.00003	0.007	591
43	0.049	0.00037	0.0014	0.026	0.0010	340	0.075	0.00015	105.1	30.4	0.0023	0.0029	0.0022	0.55	0.045	0.00009	27.8	0.033	0.0100	0.0046	0.39	5.4	0.0033	42.8	0.00049	53.6	192	0.00006	0.029	618
44	0.052	0.00041	0.0014	0.026	0.0010	340	0.077	0.00018	106.2	30.6	0.0024	0.0033	0.0026	0.55	0.045	0.00010	28.3	0.041	0.0120	0.0052	0.39	6.0	0.0039	42.8	0.00062	53.9	198	0.00007	0.036	626
45	0.052	0.00041	0.0015	0.026	0.0010	340	0.077	0.00018	106.2	30.6	0.0024	0.0034	0.0026	0.55	0.045	0.00010	28.3	0.041	0.0121	0.0052	0.39	6.0	0.0040	42.8	0.00063	53.9	198	0.00007	0.037	626
46	0.052	0.00041	0.0015	0.026	0.0010	340	0.078	0.00018	106.3	30.7	0.0024	0.0034	0.0026	0.55	0.045	0.00010	28.4	0.042	0.0122	0.0052	0.39	6.0	0.0040	42.8	0.00063	53.9	198	0.00007	0.037	627
47	0.052	0.00042	0.0015	0.026	0.0010	340	0.078	0.00019	106.3	30.7	0.0024	0.0034	0.0026	0.55	0.045	0.00010	28.4	0.042	0.0123	0.0052	0.39	6.0	0.0040	42.8	0.00064	53.9	198	0.00007	0.037	627
48	0.052	0.00042	0.0015	0.026	0.0010	340	0.078	0.00019	106.3	30.7	0.0024	0.0034	0.0026	0.55	0.045	0.00010	28.4	0.042	0.0123	0.0053	0.39	6.0	0.0041	42.8	0.00064	53.9	199	0.00007	0.037	627
49	0.052	0.00042	0.0015	0.026	0.0010	340	0.078	0.00019	106.4	30.7	0.0024	0.0034	0.0026	0.55	0.045	0.00010	28.4	0.042	0.0123	0.0053	0.39	6.1	0.0041	42.8	0.00064	53.9	199	0.00007	0.038	627
50	0.052	0.00042	0.0015	0.026	0.0010	340	0.078	0.00019	106.4	30.7	0.0024	0.0034	0.0027	0.55	0.045	0.00010	28.4	0.043	0.0124	0.0053	0.39	6.1	0.0041	42.8	0.00064	53.9	199	0.00007	0.038	627
51	0.052	0.00042	0.0015	0.026	0.0010	340	0.078	0.00019	106.4	30.7	0.0024	0.0034	0.0027	0.55	0.045	0.00010	28.4	0.043	0.0124	0.0053	0.39	6.1	0.0041	42.8	0.00065	53.9	199	0.00007	0.038	628
52	0.053	0.00042	0.0015	0.026	0.0010	340	0.078	0.00019	106.4	30.7	0.0024	0.0035	0.0027	0.55	0.045	0.00010	28.5	0.043	0.0125	0.0053	0.39	6.1	0.0041	42.8	0.00065	53.9	199	0.00007	0.038	628
53	0.053	0.00042	0.0015	0.026	0.0010	340	0.078	0.00019	106.5	30.7	0.0024	0.0035	0.0027	0.55	0.045	0.00010	28.5	0.043	0.0126	0.0053	0.39	6.1	0.0042	42.8	0.00066	53.9	199	0.00007	0.038	628
54	0.053	0.00043	0.0015	0.026	0.0010	340	0.078	0.00019	106.5	30.7	0.0024	0.0035	0.0027	0.55	0.045	0.00010	28.5	0.043	0.0126	0.0054	0.39	6.1	0.0042	42.8	0.00066	53.9	200	0.00007	0.039	628
55	0.053	0.00043	0.0015	0.026	0.0010	340	0.078	0.00019	106.5	30.7	0.0024	0.0035	0.0027	0.55	0.045	0.00010	28.5	0.044	0.0126	0.0054	0.39	6.2	0.0042	42.8	0.00066	53.9	200	0.00007	0.039	629
56	0.053	0.00043	0.0015	0.026	0.0010	340	0.078	0.00019	106.5	30.7	0.0024	0.0035	0.0027	0.55	0.045	0.00010	28.5	0.044	0.0127	0.0054	0.39	6.2	0.0042	42.8	0.00067	54.0	200	0.00007	0.039	629
57	0.053	0.00043	0.0015	0.026	0.0010	340	0.078	0.00019	106.6	30.7	0.0024	0.0035	0.0027	0.55	0.045	0.00010	28.6	0.044	0.0128	0.0054	0.39	6.2	0.0042	42.8	0.00067	54.0	200	0.00007	0.039	629
58	0.053	0.00043	0.0015	0.026	0.0010	340	0.078	0.00019	106.6	30.7	0.0024	0.0035	0.0027	0.55	0.045	0.00010	28.6	0.044	0.0128	0.0054	0.39	6.2	0.0042	42.8	0.00067	54.0	200	0.00007	0.039	629
59	0.053	0.00043	0.0015	0.026	0.0010	340	0.078	0.00020	106.6	30.7	0.0024	0.0035	0.0028	0.55	0.045	0.00010	28.6	0.044	0.0129	0.0054	0.39	6.2	0.0043	42.8	0.00068	54.0	200	0.00007	0.040	630
60	0.053	0.00043	0.0015	0.026	0.0010	340	0.078	0.00020	106.7	30.7	0.0024	0.0036	0.0028	0.55	0.045	0.00010	28.6	0.045	0.0129	0.0055	0.39	6.2	0.0043	42.8	0.00068	54.0	201	0.00007	0.040	630
61	0.053	0.00044	0.0015	0.026	0.0010	340	0.078	0.00020	106.7	30.7	0.0024	0.0036	0.0028	0.55	0.045	0.00010	28.6	0.045	0.0130	0.0055	0.39	6.3	0.0043	42.8	0.00068	54.0	201	0.00007	0.040	630
62	0.053	0.00044	0.0015	0.026	0.0010	340	0.078	0.00020	106.7	30.7	0.0024	0.0036	0.0028	0.55	0.045	0.00010	28.6	0.045	0.0130	0.0055	0.40	6.3	0.0043	42.8	0.00069	54.0	201	0.00007	0.040	630
63	0.053	0.00044	0.0015	0.026	0.0010	340	0.079	0.00020	106.7	30.7	0.0024	0.0036	0.0028	0.55	0.045	0.00010	28.7	0.045	0.0131	0.0055	0.40	6.3	0.0043	42.8	0.00069	54.0	201	0.00007	0.040	631
64	0.053	0.00044	0.0015	0.026	0.0010	340	0.079	0.00020	106.8	30.8	0.0024	0.0036	0.0028	0.55	0.045	0.00010	28.7	0.045	0.0131	0.0055	0.40	6.3	0.0044	42.8	0.00069	54.0	201	0.00007	0.041	631
65	0.053	0.00044	0.0015	0.026	0.0010	340	0.079	0.00020	106.8	30.8	0.0024	0.0036	0.0028	0.55	0.045	0.00010	28.7	0.046	0.0132	0.0055	0.40	6.3	0.0044	42.8	0.00070	54.0	201	0.00007	0.041	631
66	0.053	0.00044	0.0015	0.026	0.0010	340	0.079	0.00020	106.8	30.8	0.0025	0.0036	0.0028	0.55	0.045	0.00010	28.7	0.046	0.0132	0.0055	0.40	6.3	0.0044	42.8	0.00070	54.0	201	0.00007	0.041	631
67	0.054	0.00044	0.0015	0.026	0.0010	340	0.079	0.00020	106.8	30.8	0.0025	0.0036	0.0028	0.55	0.045	0.00010	28.7	0.046	0.0133	0.0056	0.40	6.3	0.0044	42.8	0.00070	54.0	202	0.00007	0.041	631

Table 8. Predicted Total Concentrations at Queen Creek 3 Aquifer Subdomain - Alternative 4

Years since Mine Start	Al mg/L	Sb mg/L	As mg/L	Ba mg/L	Be mg/L	HCO3 mg/L	B mg/L	Cd mg/L	Ca mg/L	Cl mg/L	Cr mg/L	Co mg/L	Cu mg/L	F mg/L	Fe mg/L	Pb mg/L	Mg mg/L	Mn mg/L	Mo mg/L	Ni mg/L	NO3-N mg/L	K mg/L	Se mg/L	Si mg/L	Ag mg/L	Na mg/L	SO4 mg/L	Tl mg/L	Zn mg/L	TDS mg/L
68	0.054	0.00044	0.0015	0.026	0.0010	340	0.079	0.00020	106.9	30.8	0.0025	0.0037	0.0028	0.55	0.045	0.00010	28.7	0.046	0.0133	0.0056	0.40	6.4	0.0044	42.8	0.00070	54.0	202	0.00007	0.041	632
69	0.054	0.00045	0.0015	0.026	0.0010	340	0.079	0.00020	106.9	30.8	0.0025	0.0037	0.0029	0.55	0.045	0.00010	28.8	0.046	0.0134	0.0056	0.40	6.4	0.0044	42.8	0.00071	54.0	202	0.00007	0.041	632
70	0.054	0.00045	0.0015	0.026	0.0010	340	0.079	0.00020	106.9	30.8	0.0025	0.0037	0.0029	0.55	0.045	0.00010	28.8	0.047	0.0135	0.0056	0.40	6.4	0.0045	42.8	0.00071	54.0	202	0.00008	0.042	632
71	0.054	0.00045	0.0015	0.026	0.0010	340	0.079	0.00021	107.0	30.8	0.0025	0.0037	0.0029	0.55	0.045	0.00010	28.8	0.047	0.0135	0.0056	0.40	6.4	0.0045	42.8	0.00071	54.0	202	0.00008	0.042	632
72	0.054	0.00045	0.0015	0.026	0.0010	340	0.079	0.00021	107.0	30.8	0.0025	0.0037	0.0029	0.55	0.045	0.00010	28.8	0.047	0.0135	0.0056	0.40	6.4	0.0045	42.8	0.00072	54.1	202	0.00008	0.042	633
73	0.054	0.00045	0.0015	0.026	0.0010	340	0.079	0.00021	107.0	30.8	0.0025	0.0037	0.0029	0.55	0.045	0.00010	28.8	0.047	0.0136	0.0056	0.40	6.4	0.0045	42.8	0.00072	54.1	202	0.00008	0.042	633
74	0.054	0.00045	0.0015	0.026	0.0010	340	0.079	0.00021	107.0	30.8	0.0025	0.0037	0.0029	0.55	0.045	0.00010	28.8	0.047	0.0136	0.0057	0.40	6.4	0.0045	42.8	0.00072	54.1	203	0.00008	0.042	633
75	0.054	0.00045	0.0015	0.026	0.0010	340	0.079	0.00021	107.1	30.8	0.0025	0.0037	0.0029	0.55	0.045	0.00010	28.9	0.048	0.0137	0.0057	0.40	6.5	0.0045	42.8	0.00073	54.1	203	0.00008	0.042	633
76	0.054	0.00045	0.0015	0.026	0.0010	340	0.079	0.00021	107.1	30.8	0.0025	0.0037	0.0029	0.55	0.045	0.00010	28.9	0.048	0.0137	0.0057	0.40	6.5	0.0046	42.8	0.00073	54.1	203	0.00008	0.043	633
77	0.054	0.00046	0.0015	0.026	0.0010	340	0.079	0.00021	107.1	30.8	0.0025	0.0038	0.0029	0.55	0.045	0.00010	28.9	0.048	0.0138	0.0057	0.40	6.5	0.0046	42.8	0.00073	54.1	203	0.00008	0.043	634
78	0.054	0.00046	0.0015	0.026	0.0010	340	0.079	0.00021	107.1	30.8	0.0025	0.0038	0.0030	0.55	0.045	0.00011	28.9	0.048	0.0138	0.0057	0.40	6.5	0.0046	42.8	0.00074	54.1	203	0.00008	0.043	634
79	0.054	0.00046	0.0015	0.026	0.0010	340	0.079	0.00021	107.2	30.8	0.0025	0.0038	0.0030	0.55	0.045	0.00011	28.9	0.048	0.0139	0.0057	0.40	6.5	0.0046	42.8	0.00074	54.1	203	0.00008	0.043	634
80	0.054	0.00046	0.0015	0.026	0.0010	340	0.079	0.00021	107.2	30.8	0.0025	0.0038	0.0030	0.55	0.045	0.00011	28.9	0.049	0.0139	0.0057	0.40	6.5	0.0046	42.8	0.00074	54.1	204	0.00008	0.043	634
81	0.055	0.00046	0.0015	0.026	0.0010	340	0.079	0.00021	107.2	30.8	0.0025	0.0038	0.0030	0.55	0.045	0.00011	29.0	0.049	0.0140	0.0058	0.40	6.5	0.0046	42.8	0.00074	54.1	204	0.00008	0.043	635
82	0.055	0.00046	0.0015	0.026	0.0010	340	0.079	0.00021	107.3	30.8	0.0025	0.0038	0.0030	0.56	0.045	0.00011	29.0	0.049	0.0140	0.0058	0.40	6.5	0.0047	42.8	0.00075	54.1	204	0.00008	0.044	635
83	0.055	0.00046	0.0015	0.026	0.0010	340	0.080	0.00021	107.3	30.8	0.0025	0.0038	0.0030	0.56	0.045	0.00011	29.0	0.049	0.0140	0.0058	0.40	6.6	0.0047	42.9	0.00075	54.1	204	0.00008	0.044	635
84	0.055	0.00046	0.0015	0.026	0.0010	340	0.080	0.00021	107.3	30.8	0.0025	0.0038	0.0030	0.56	0.045	0.00011	29.0	0.049	0.0141	0.0058	0.40	6.6	0.0047	42.9	0.00075	54.1	204	0.00008	0.044	635
85	0.055	0.00046	0.0015	0.026	0.0010	340	0.080	0.00022	107.3	30.8	0.0025	0.0038	0.0030	0.56	0.045	0.00011	29.0	0.049	0.0141	0.0058	0.40	6.6	0.0047	42.9	0.00075	54.1	204	0.00008	0.044	635
86	0.055	0.00047	0.0015	0.026	0.0010	340	0.080	0.00022	107.4	30.9	0.0025	0.0039	0.0030	0.56	0.045	0.00011	29.0	0.049	0.0142	0.0058	0.40	6.6	0.0047	42.9	0.00076	54.1	204	0.00008	0.044	636
87	0.055	0.00047	0.0015	0.026	0.0010	340	0.080	0.00022	107.4	30.9	0.0025	0.0039	0.0031	0.56	0.045	0.00011	29.0	0.050	0.0142	0.0058	0.40	6.6	0.0047	42.9	0.00076	54.1	205	0.00008	0.044	636
88	0.055	0.00047	0.0015	0.026	0.0010	340	0.080	0.00022	107.4	30.9	0.0025	0.0039	0.0031	0.56	0.045	0.00011	29.1	0.050	0.0142	0.0058	0.40	6.6	0.0047	42.9	0.00076	54.1	205	0.00008	0.044	636
89	0.055	0.00047	0.0015	0.026	0.0010	340	0.080	0.00022	107.5	30.9	0.0025	0.0039	0.0031	0.56	0.045	0.00011	29.1	0.050	0.0143	0.0059	0.40	6.6	0.0047	42.9	0.00076	54.1	205	0.00008	0.045	636
90	0.055	0.00047	0.0015	0.026	0.0010	340	0.080	0.00022	107.5	30.9	0.0025	0.0039	0.0031	0.56	0.045	0.00011	29.1	0.050	0.0143	0.0059	0.40	6.6	0.0048	42.9	0.00076	54.1	205	0.00008	0.045	636
91	0.055	0.00047	0.0015	0.026	0.0010	340	0.080	0.00022	107.5	30.9	0.0025	0.0039	0.0031	0.56	0.045	0.00011	29.1	0.050	0.0143	0.0059	0.40	6.6	0.0048	42.9	0.00077	54.1	205	0.00008	0.045	637
92	0.055	0.00047	0.0015	0.026	0.0010	340	0.080	0.00022	107.5	30.9	0.0025	0.0039	0.0031	0.56	0.045	0.00011	29.1	0.050	0.0144	0.0059	0.40	6.7	0.0048	42.9	0.00077	54.1	205	0.00008	0.045	637
93	0.055	0.00047	0.0015	0.026	0.0010	340	0.080	0.00022	107.6	30.9	0.0025	0.0039	0.0031	0.56	0.045	0.00011	29.1	0.050	0.0144	0.0059	0.40	6.7	0.0048	42.9	0.00077	54.2	205	0.00008	0.045	637
94	0.055	0.00047	0.0015	0.026	0.0010	340	0.080	0.00022	107.6	30.9	0.0025	0.0039	0.0031	0.56	0.045	0.00011	29.1	0.051	0.0145	0.0059	0.40	6.7	0.0048	42.9	0.00077	54.2	206	0.00008	0.045	637
95	0.056	0.00047	0.0015	0.026	0.0010	340	0.080	0.00022	107.6	30.9	0.0025	0.0039	0.0031	0.56	0.045	0.00011	29.1	0.051	0.0145	0.0059	0.40	6.7	0.0048	42.9	0.00078	54.2	206	0.00008	0.045	637
96	0.056	0.00048	0.0015	0.026	0.0010	340	0.080	0.00022	107.7	30.9	0.0025	0.0039	0.0032	0.56	0.045	0.00011	29.2	0.051	0.0145	0.0059	0.40	6.7	0.0048	42.9	0.00078	54.2	206	0.00008	0.045	638
97	0.056	0.00048	0.0015	0.026	0.0010	340	0.080	0.00022	107.7	30.9	0.0025	0.0039	0.0032	0.56	0.045	0.00011	29.2	0.051	0.0145	0.0059	0.40	6.7	0.0048	42.9	0.00078	54.2	206	0.00008	0.046	638
98	0.056	0.00048	0.0015	0.026	0.0010	340	0.080	0.00022	107.7	30.9	0.0025	0.0040	0.0032	0.56	0.045	0.00011	29.2	0.051	0.0146	0.0060	0.40	6.7	0.0049	42.9	0.00078	54.2	206	0.00008	0.046	638
99	0.056	0.00048	0.0015	0.026	0.0010	340	0.080	0.00022	107.8	30.9	0.0025	0.0040	0.0032	0.56	0.045	0.00011	29.2	0.051	0.0146	0.0060	0.40	6.7	0.0049	42.9	0.00078	54.2	206	0.00008	0.046	638
100	0.056	0.00048	0.0015	0.026	0.0010	340	0.080	0.00022	107.8	30.9	0.0025	0.0040	0.0032	0.56	0.045	0.00011	29.2	0.051	0.0146	0.0060	0.40	6.7	0.0049	42.9	0.00078	54.2	206	0.00008	0.046	638
101	0.056	0.00048	0.0015	0.026	0.0010	340	0.080	0.00022	107.8	30.9	0.0025	0.0040	0.0032	0.56	0.045	0.00011	29.2	0.051	0.0147	0.0060	0.40	6.8	0.0049	42.9	0.00079	54.2	206	0.00008	0.046	639
102	0.056	0.00048	0.0015	0.026	0.0010	340	0.080	0.00022	107.8	30.9	0.0025	0.0040	0.0032	0.56	0.045	0.00011	29.2	0.051	0.0147	0.0060	0.40	6.8	0.0049	42.9	0.00079	54.2	207	0.00008	0.046	639
103	0.056	0.00048	0.0015	0.026	0.0010	340	0.080	0.00023	107.9	30.9	0.0025	0.0040	0.0032	0.56	0.045	0.00011	29.2	0.052	0.0147	0.0060	0.40	6.8	0.0049	42.9	0.00079	54.2	207	0.00008	0.046	639
104	0.056	0.00048	0.0015	0.026	0.0010	340	0.080	0.00023	107.9	30.9	0.0025	0.0040	0.0032	0.56	0.045	0.00011	29.3	0.052	0.0148	0.0060	0.40	6.8	0.0049	42.9	0.00079	54.2	207	0.00008	0.046	639
105	0.056	0.00048	0.0015	0.026	0.0010	340	0.080	0.00023	107.9	30.9	0.0025	0.0040	0.0033	0.56	0.045	0.00011	29.3	0.052	0.0148	0.0060	0.40	6.8	0.0049	42.9	0.00079	54.2	207	0.00008	0.046	639
106	0.056	0.00048	0.0015	0.026	0.0010	340	0.080	0.00023	108.0	30.9	0.0025	0.0040	0.0033	0.56	0.045	0.00011	29.3	0.052	0.0148	0.0060	0.40	6.8	0.0049	42.9	0.00079	54.2	207	0.00008	0.046	639
107	0.056	0.00048	0.0015	0.026	0.0010	340	0.080	0.00023	108.0	30.9	0.0025	0.0040	0.0033	0.56	0.045	0.00011	29.3	0.052	0.0148	0.0060	0.40	6.8	0.0049	42.9	0.00080	54.2	207	0.00008	0.047	640
108	0.056	0.00049	0.0015	0.026	0.0010	340	0.080	0.00023	108.0	30.9	0.0025	0.0040	0.0033	0.56	0.045	0.00011	29.3	0.052	0.0149	0.0060	0.40	6.8	0.0050	42.9	0.00080	54.2	207	0.00008	0.047	640
109	0.057	0.00049	0.0015	0.026	0.0010	340	0.081	0.00023	108.1	30.9	0.0025	0.0040	0.0033	0.56	0.045	0.00011	29.3	0.052	0.0149	0.0061	0.40	6.8	0.0050	42.9	0.00080	54.2	208	0.00008	0.047	640
110	0.057	0.00049	0.0015	0.026	0.0010	340	0.081	0.00023	108.1	30.9	0.0025	0.0040	0.0033	0.56	0.045	0.00011	29.3	0.052	0.0149	0.0061	0.40	6.8	0.0050	42.9	0.00080	54.2	208	0.00008	0.047	640
111	0.057	0.00049	0.0015	0.026	0.0010	340	0.081	0.00023	108.1	30.9	0.0025	0.0040	0.0033	0.56	0.045	0.00011	29.3	0.052	0.0149	0.0061	0.40	6.8	0.0050	42.9	0.00080	54.2	208	0.00008	0.047	640
112	0.057	0.00049	0.0015	0.026	0.0010	340	0.081	0.00023	108.2	30.9	0.0025	0.0040	0.0033	0.56	0.045	0.00011	29.3	0.052	0.0149	0.0061	0.40	6.8	0.0050	42.9	0.00080	54.2	208	0.00008	0.047	641
113	0.057	0.00049	0.0015	0.026	0.0010	340	0.081	0.00023	108.2	30.9	0.0025	0.0041	0.0033	0.56	0.045	0.00011	29.3	0.052	0.0150	0.0061	0.40	6.8	0.0050	42.9	0.00081	54.2	208	0.00008	0.047	641
114	0.057	0.00049	0.0015	0.026	0.0010	340	0.081	0.00023	108.2	30.9	0.0025	0.0041	0.0034	0.56	0.045	0.00011	29.4	0.053	0.0150	0.0061	0.40	6.9	0.0050	42.9	0.00081	54.2	208	0.00008	0.047	641
115	0.057	0.00049	0.0015	0.026	0.0010	340	0.081	0.00023	108.2	30.9	0.0025	0.0041	0.0034	0.56	0.045	0.00011	29.4	0.053	0.0150	0.0061	0.40	6.9	0.0050	42.9	0.00081	54.2	208	0.00008	0.047	641
116	0.057	0.00049	0.0015	0.026	0.0010	340	0.081	0.00023	108.3	30.9	0.0025	0.0041	0.0034	0.56	0.045	0.00011	29.4	0.053	0.0150	0.0061	0.40	6.9	0.0050	42.9	0.00081	54.2	208	0.00008	0.047	641
117	0.057	0.00049	0.0015	0.026	0.0010	340	0.081	0.00023	108.3	30.9	0.0025	0.0041	0.0034	0.56	0.045	0.00011	29.4	0.053	0.0150	0.0061	0.40	6.9	0.0050	42.9	0.00081	54.2	208	0.00008	0.047	641
118	0.057	0.00049	0.0015	0.026	0.0010	340	0.081	0.00023	108.3	30.9	0.0025	0.0041	0.0034	0.56	0.045	0.00011	29.4	0.053	0.0151	0.0061	0.40	6.9	0.0050	42.9	0.00081	54.2	209	0.00008	0.048	642
119	0.057	0.00049	0.0015	0.026	0.0010	340	0.081	0.00023	108.4	30.9	0.0025	0.0041	0.0034	0.56	0.045	0.00011	29.4	0.053	0.0151	0.0061	0.40	6.9	0.0050	42.9	0.00081	54.2	209	0.00008	0.048	642
120	0.057	0.00049	0.0015	0.026	0.0010	340	0.081	0.00023	108.4	30.9	0.0025	0.0041	0.0034	0.56	0.045	0.00011	29.4	0.053	0.0151	0.0061	0.40	6.9	0.0051	42.9	0.00081	54.2	209	0.00008	0.048	642
121	0.057	0.00049	0.0015	0.026	0.0010	340	0.081	0.00023	108.4	30.9	0.0025	0.0041	0.0034	0.56	0.045	0.00011	29.4	0.053	0.0151	0.0061	0.40	6.9	0.0051	42.9	0.00082	54.2	209	0.00008	0.048	642
122	0.058	0.00049	0.0015	0.026	0.0010	340	0.081	0.00023	108.5	30.9	0.0025	0.0041	0.0035	0.56	0.045	0.00011	29.4	0.053	0.0152	0.0061	0.40	6.9	0.0051	42.9	0.00082	54.2	209	0.00008	0.048	642
123	0.058	0.00050	0.0015	0.026	0.0010	340	0.081	0.00023	108.5	31.0	0.0026	0.0041	0.0035	0.56	0.045	0.00011	29.4	0.053	0.0152	0.0062	0.40	6.9	0.0051	42.9	0.00082	54.2	209	0.00008	0.048	643
124	0.058	0.00050	0.0015	0.026	0.0010	340	0.081	0.00023	108.5	31.0	0.0026	0.0041	0.0035	0.56	0.045	0.00011	29.5	0.053	0.0152	0.0062	0.40	6.9	0.0051	42.9	0.00082	54.2	209	0.00008	0.048	643
125	0.058	0.00050	0.0015	0.026	0.0010	340	0.081	0.00023	108.5	31.0	0.0026	0.0041	0.0035	0.56	0.045	0.00011	29.5	0.053	0.0152	0.0062	0.40	6.9	0.0051	42.9	0.00082	54.2	209	0.00008	0.048	643
126	0.058	0.00050	0.0015	0.026	0.0010	340	0.081	0.00023	108.6	31.0	0.0026	0.0041	0.0035	0.56	0.045	0.00011	29.5	0.053	0.0152	0.0062	0.40	6.9	0.0051	42.9	0.00082	54.2	210	0.00008	0.048	643
127	0.058	0.00050	0.0015	0.026	0.0010	340	0.081	0.00023	108.6	31.0	0.0026	0.0041	0.0035	0.56	0.045	0.00011	29.5	0.054	0.0153	0.0062	0.40	6.9	0.0051	42.9	0.00082	54.2	210	0.00008	0.048	643
128	0.058	0.00050	0.0015	0.026	0.0010	340	0.081	0.00024	108.7	31.0	0.0026	0.0041	0.0035	0.56	0.045	0.00011	29.5	0.054	0.0153	0.0062	0.40	7.0	0.0051	42.9	0.00082	54.2	210	0.00008	0.048	643
129	0.058	0.00050	0.0015	0.026	0.0010	340	0.081	0.00024	108.7	31.0	0.0026	0.0041	0.0035	0.56	0.045	0.00011	29.5	0.054	0.0153	0.0062	0.40	7.0	0.0051	42.9	0.00083	54.2	210	0.00008	0.048	644
130	0.058	0.00050	0.0015	0.026	0.0010	340	0.081	0.00024	108.7	31.0	0.0026	0.0042	0.0035	0.56	0.045	0.00011	29.5	0.054	0.0153	0.0062	0.40	7.0	0.0051	42.9	0.00083	54.2	210	0.00008	0.049	644
131	0.058	0.00050	0.0015	0.026	0.0010	340	0.081	0.00024	108.7	31.0	0.0026	0.0042	0.0036	0.56	0.045	0.00011	29.5	0.054	0.0154	0.0062	0.40	7.0	0.0051	42.9	0.00083	54.3	210	0.00008	0.049	644
132	0.058	0.00050	0.0015	0.026	0.0010	340	0.081	0.00024	108.8	31.0	0.0026	0.0042	0.0036	0.56	0.045	0.00011	29.5	0.054	0.0154	0.0062	0.40	7.0	0.0052	42.9	0.00083	54.3	210	0.00008	0.049	644
133	0.058	0.00050	0.0015	0.026	0.0010	340	0.081	0.00024	108.8	31.0	0.0026	0.0042	0.0036	0.56	0.045	0.00011	29.6	0.054	0.0154	0.0062	0.40	7.0	0.0052	42.9	0.00083	54.3	211	0.00008	0.049	644
134	0.058	0.00050	0.0015	0.026	0.0010	340	0.081	0.00024	108.8	31.0	0.0026	0.0042	0.0036	0.56	0.045	0.00011	29.6	0.054	0.0154	0.0062	0.40	7.0	0.0052	42.9	0.00083	54.3	211	0.00008	0.049	645

Table 8. Predicted Total Concentrations at Queen Creek 3 Aquifer Subdomain - Alternative 4

Years since Mine Start	Al	Sb	As	Ba	Be	HCO3	B	Cd	Ca	Cl	Cr	Co	Cu	F	Fe	Pb	Mg	Mn	Mo	Ni	NO3-N	K	Se	Si	Ag	Na	SO4	Tl	Zn	TDS
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
135	0.058	0.00050	0.0015	0.026	0.0010	340	0.081	0.00024	108.9	31.0	0.0026	0.0042	0.0036	0.56	0.045	0.00011	29.6	0.054	0.0154	0.0063	0.40	7.0	0.0052	42.9	0.00083	54.3	211	0.00008	0.049	645
136	0.059	0.00051	0.0015	0.026	0.0010	340	0.081	0.00024	108.9	31.0	0.0026	0.0042	0.0036	0.56	0.045	0.00011	29.6	0.054	0.0155	0.0063	0.40	7.0	0.0052	42.9	0.00083	54.3	211	0.00008	0.049	645
137	0.059	0.00051	0.0015	0.026	0.0010	340	0.081	0.00024	108.9	31.0	0.0026	0.0042	0.0036	0.56	0.045	0.00011	29.6	0.054	0.0155	0.0063	0.40	7.0	0.0052	42.9	0.00083	54.3	211	0.00008	0.049	645
138	0.059	0.00051	0.0015	0.026	0.0010	340	0.081	0.00024	109.0	31.0	0.0026	0.0042	0.0036	0.56	0.045	0.00011	29.6	0.054	0.0155	0.0063	0.40	7.0	0.0052	42.9	0.00084	54.3	211	0.00008	0.049	645
139	0.059	0.00051	0.0015	0.026	0.0010	340	0.081	0.00024	109.0	31.0	0.0026	0.0042	0.0036	0.56	0.045	0.00011	29.6	0.055	0.0156	0.0063	0.40	7.0	0.0052	42.9	0.00084	54.3	211	0.00008	0.049	646
140	0.059	0.00051	0.0015	0.026	0.0010	340	0.081	0.00024	109.0	31.0	0.0026	0.0042	0.0037	0.56	0.045	0.00011	29.6	0.055	0.0156	0.0063	0.40	7.0	0.0052	42.9	0.00084	54.3	211	0.00008	0.049	646
141	0.059	0.00051	0.0015	0.026	0.0010	340	0.081	0.00024	109.1	31.0	0.0026	0.0042	0.0037	0.56	0.045	0.00011	29.7	0.055	0.0156	0.0063	0.40	7.1	0.0052	42.9	0.00084	54.3	212	0.00008	0.050	646
142	0.059	0.00051	0.0015	0.026	0.0010	340	0.082	0.00024	109.1	31.0	0.0026	0.0042	0.0037	0.56	0.045	0.00011	29.7	0.055	0.0156	0.0063	0.40	7.1	0.0052	42.9	0.00084	54.3	212	0.00008	0.050	646
143	0.059	0.00051	0.0016	0.026	0.0010	340	0.082	0.00024	109.1	31.0	0.0026	0.0042	0.0037	0.56	0.045	0.00011	29.7	0.055	0.0156	0.0063	0.40	7.1	0.0052	42.9	0.00084	54.3	212	0.00008	0.050	646
144	0.059	0.00051	0.0016	0.026	0.0010	340	0.082	0.00024	109.2	31.0	0.0026	0.0042	0.0037	0.56	0.045	0.00011	29.7	0.055	0.0157	0.0063	0.40	7.1	0.0053	42.9	0.00085	54.3	212	0.00008	0.050	647
145	0.059	0.00051	0.0016	0.026	0.0010	340	0.082	0.00024	109.2	31.0	0.0026	0.0043	0.0037	0.56	0.045	0.00011	29.7	0.055	0.0157	0.0063	0.40	7.1	0.0053	42.9	0.00085	54.3	212	0.00008	0.050	647
146	0.059	0.00051	0.0016	0.026	0.0010	340	0.082	0.00024	109.2	31.0	0.0026	0.0043	0.0037	0.56	0.045	0.00011	29.7	0.055	0.0157	0.0064	0.40	7.1	0.0053	42.9	0.00085	54.3	212	0.00008	0.050	647
147	0.059	0.00051	0.0016	0.026	0.0010	340	0.082	0.00024	109.2	31.0	0.0026	0.0043	0.0037	0.56	0.045	0.00012	29.7	0.055	0.0157	0.0064	0.40	7.1	0.0053	42.9	0.00085	54.3	212	0.00008	0.050	647
148	0.059	0.00052	0.0016	0.026	0.0010	340	0.082	0.00024	109.2	31.0	0.0026	0.0043	0.0037	0.56	0.045	0.00012	29.7	0.055	0.0157	0.0064	0.40	7.1	0.0053	42.9	0.00085	54.3	212	0.00008	0.050	647
149	0.059	0.00052	0.0016	0.026	0.0010	340	0.082	0.00024	109.3	31.0	0.0026	0.0043	0.0037	0.56	0.045	0.00012	29.7	0.055	0.0157	0.0064	0.40	7.1	0.0053	42.9	0.00085	54.3	212	0.00008	0.050	647
150	0.059	0.00051	0.0016	0.026	0.0010	340	0.082	0.00024	109.2	31.0	0.0026	0.0042	0.0037	0.56	0.045	0.00011	29.7	0.054	0.0155	0.0063	0.40	7.0	0.0052	42.9	0.00083	54.3	212	0.00008	0.049	646
151	0.059	0.00052	0.0016	0.026	0.0010	340	0.082	0.00024	109.3	31.0	0.0026	0.0043	0.0037	0.56	0.045	0.00012	29.7	0.055	0.0157	0.0064	0.40	7.1	0.0053	42.9	0.00084	54.3	213	0.00008	0.050	647
152	0.060	0.00052	0.0016	0.026	0.0010	340	0.082	0.00024	109.3	31.0	0.0026	0.0043	0.0038	0.56	0.045	0.00012	29.8	0.055	0.0157	0.0064	0.40	7.1	0.0053	42.9	0.00084	54.3	213	0.00008	0.050	647
153	0.060	0.00052	0.0016	0.026	0.0010	340	0.082	0.00024	109.3	31.0	0.0026	0.0043	0.0038	0.56	0.045	0.00012	29.8	0.055	0.0157	0.0064	0.40	7.1	0.0053	42.9	0.00084	54.3	213	0.00008	0.050	647
154	0.060	0.00052	0.0016	0.026	0.0010	340	0.082	0.00024	109.3	31.0	0.0026	0.0043	0.0038	0.56	0.045	0.00012	29.8	0.055	0.0157	0.0064	0.40	7.1	0.0053	42.9	0.00084	54.3	213	0.00008	0.050	648
155	0.060	0.00052	0.0016	0.026	0.0010	340	0.082	0.00024	109.4	31.0	0.0026	0.0043	0.0038	0.56	0.045	0.00012	29.8	0.055	0.0157	0.0064	0.40	7.1	0.0053	42.9	0.00084	54.3	213	0.00008	0.050	648
156	0.060	0.00052	0.0016	0.026	0.0010	340	0.082	0.00024	109.4	31.0	0.0026	0.0043	0.0038	0.56	0.045	0.00012	29.8	0.055	0.0157	0.0064	0.40	7.1	0.0053	42.9	0.00084	54.3	213	0.00008	0.050	648
157	0.060	0.00052	0.0016	0.026	0.0010	340	0.082	0.00024	109.4	31.0	0.0026	0.0043	0.0038	0.56	0.045	0.00012	29.8	0.055	0.0157	0.0064	0.40	7.1	0.0053	42.9	0.00084	54.3	213	0.00008	0.050	648
158	0.060	0.00052	0.0016	0.026	0.0010	340	0.082	0.00024	109.4	31.0	0.0026	0.0043	0.0038	0.56	0.045	0.00012	29.8	0.055	0.0157	0.0064	0.40	7.1	0.0053	42.9	0.00084	54.3	213	0.00008	0.050	648
159	0.060	0.00052	0.0016	0.026	0.0010	340	0.082	0.00024	109.4	31.0	0.0026	0.0043	0.0038	0.56	0.045	0.00012	29.8	0.055	0.0157	0.0064	0.40	7.1	0.0053	42.9	0.00084	54.3	213	0.00008	0.050	648
160	0.060	0.00052	0.0016	0.026	0.0010	340	0.082	0.00024	109.4	31.0	0.0026	0.0043	0.0038	0.56	0.045	0.00012	29.8	0.055	0.0157	0.0064	0.40	7.1	0.0053	42.9	0.00084	54.3	213	0.00008	0.050	648
161	0.060	0.00052	0.0016	0.026	0.0010	340	0.082	0.00024	109.4	31.0	0.0026	0.0043	0.0038	0.56	0.045	0.00012	29.8	0.055	0.0157	0.0064	0.40	7.1	0.0053	42.9	0.00084	54.3	213	0.00008	0.050	648
162	0.060	0.00052	0.0016	0.026	0.0010	340	0.082	0.00024	109.5	31.0	0.0026	0.0043	0.0038	0.56	0.045	0.00012	29.8	0.055	0.0157	0.0064	0.40	7.1	0.0053	42.9	0.00084	54.3	213	0.00008	0.050	648
163	0.060	0.00052	0.0016	0.026	0.0010	340	0.082	0.00024	109.5	31.0	0.0026	0.0043	0.0038	0.56	0.045	0.00012	29.8	0.055	0.0157	0.0064	0.40	7.1	0.0053	42.9	0.00084	54.3	213	0.00008	0.050	648
164	0.060	0.00052	0.0016	0.026	0.0010	340	0.082	0.00024	109.5	31.0	0.0026	0.0043	0.0038	0.56	0.045	0.00012	29.9	0.055	0.0157	0.0064	0.40	7.1	0.0053	42.9	0.00084	54.3	214	0.00008	0.050	649
165	0.060	0.00052	0.0016	0.026	0.0010	340	0.082	0.00024	109.5	31.0	0.0026	0.0043	0.0038	0.56	0.045	0.00012	29.9	0.055	0.0157	0.0064	0.40	7.1	0.0053	42.9	0.00084	54.3	214	0.00008	0.050	649
166	0.060	0.00052	0.0016	0.026	0.0010	340	0.082	0.00024	109.5	31.0	0.0026	0.0043	0.0038	0.56	0.045	0.00012	29.9	0.055	0.0157	0.0064	0.40	7.1	0.0053	42.9	0.00084	54.3	214	0.00008	0.050	649
167	0.060	0.00052	0.0016	0.026	0.0010	340	0.082	0.00024	109.5	31.0	0.0026	0.0043	0.0038	0.56	0.045	0.00012	29.9	0.055	0.0157	0.0064	0.40	7.1	0.0053	42.9	0.00084	54.3	214	0.00008	0.050	649
168	0.060	0.00052	0.0016	0.026	0.0010	340	0.082	0.00024	109.6	31.0	0.0026	0.0043	0.0038	0.56	0.045	0.00012	29.9	0.055	0.0157	0.0064	0.40	7.1	0.0053	42.9	0.00084	54.3	214	0.00008	0.050	649
169	0.060	0.00052	0.0016	0.026	0.0010	340	0.082	0.00024	109.6	31.0	0.0026	0.0043	0.0039	0.56	0.045	0.00012	29.9	0.055	0.0157	0.0064	0.40	7.1	0.0053	42.9	0.00084	54.3	214	0.00008	0.050	649
170	0.060	0.00052	0.0016	0.026	0.0010	340	0.082	0.00024	109.6	31.0	0.0026	0.0043	0.0039	0.56	0.045	0.00012	29.9	0.055	0.0157	0.0064	0.40	7.1	0.0053	42.9	0.00084	54.3	214	0.00008	0.050	649
171	0.060	0.00053	0.0016	0.026	0.0010	340	0.082	0.00024	109.6	31.0	0.0026	0.0043	0.0039	0.56	0.045	0.00012	29.9	0.055	0.0157	0.0064	0.40	7.1	0.0053	42.9	0.00084	54.3	214	0.00008	0.050	649
172	0.060	0.00053	0.0016	0.026	0.0010	340	0.082	0.00024	109.6	31.0	0.0026	0.0043	0.0039	0.56	0.045	0.00012	29.9	0.055	0.0157	0.0064	0.40	7.1	0.0053	42.9	0.00084	54.3	214	0.00008	0.050	649
173	0.060	0.00053	0.0016	0.026	0.0010	340	0.082	0.00024	109.6	31.0	0.0026	0.0043	0.0039	0.56	0.045	0.00012	29.9	0.055	0.0158	0.0065	0.40	7.2	0.0053	42.9	0.00084	54.3	214	0.00008	0.051	650
174	0.060	0.00053	0.0016	0.026	0.0010	340	0.082	0.00024	109.6	31.0	0.0026	0.0043	0.0039	0.56	0.045	0.00012	29.9	0.055	0.0158	0.0065	0.40	7.2	0.0053	42.9	0.00084	54.3	214	0.00008	0.050	650
175	0.060	0.00053	0.0016	0.026	0.0010	340	0.082	0.00024	109.7	31.0	0.0026	0.0043	0.0039	0.56	0.045	0.00012	30.0	0.055	0.0158	0.0065	0.40	7.2	0.0053	42.9	0.00084	54.3	214	0.00008	0.051	650
176	0.060	0.00053	0.0016	0.026	0.0010	340	0.082	0.00024	109.7	31.0	0.0026	0.0043	0.0039	0.56	0.045	0.00012	30.0	0.055	0.0158	0.0065	0.40	7.2	0.0053	42.9	0.00084	54.3	214	0.00008	0.051	650
177	0.060	0.00053	0.0016	0.026	0.0010	340	0.082	0.00024	109.7	31.0	0.0026	0.0043	0.0039	0.56	0.045	0.00012	30.0	0.055	0.0158	0.0065	0.40	7.2	0.0053	42.9	0.00084	54.3	214	0.00008	0.051	650
178	0.060	0.00053	0.0016	0.026	0.0010	340	0.082	0.00024	109.7	31.0	0.0026	0.0043	0.0039	0.56	0.045	0.00012	30.0	0.055	0.0158	0.0065	0.40	7.2	0.0053	42.9	0.00084	54.3	215	0.00008	0.051	650
179	0.060	0.00053	0.0016	0.026	0.0010	340	0.082	0.00024	109.7	31.0	0.0026	0.0043	0.0039	0.56	0.045	0.00012	30.0	0.055	0.0158	0.0065	0.40	7.2	0.0053	42.9	0.00084	54.3	215	0.00008	0.051	650
180	0.061	0.00053	0.0016	0.026	0.0010	340	0.082	0.00024	109.7	31.0	0.0026	0.0043	0.0039	0.56	0.045	0.00012	30.0	0.055	0.0158	0.0065	0.40	7.2	0.0053	42.9	0.00085	54.3	215	0.00008	0.051	650
181	0.061	0.00053	0.0016	0.026	0.0010	340	0.082	0.00025	109.8	31.0	0.0026	0.0043	0.0039	0.56	0.045	0.00012	30.0	0.055	0.0158	0.0065	0.40	7.2	0.0054	42.9	0.00085	54.3	215	0.00008	0.051	650
182	0.061	0.00053	0.0016	0.026	0.0010	340	0.082	0.00025	109.8	31.0	0.0026	0.0043	0.0039	0.56	0.045	0.00012	30.0	0.055	0.0158	0.0065	0.40	7.2	0.0054	42.9	0.00085	54.3	215	0.00008	0.051	650
183	0.061	0.00053	0.0016	0.026	0.0010	340	0.082	0.00025	109.8	31.0	0.0026	0.0043	0.0039	0.56	0.045	0.00012	30.0	0.055	0.0158	0.0065	0.40	7.2	0.0054	42.9	0.00085	54.3	215	0.00008	0.051	651
184	0.061	0.00053	0.0016	0.026	0.0010	340	0.082	0.00025	109.8	31.0	0.0026	0.0044	0.0039	0.56	0.045	0.00012	30.0	0.055	0.0159	0.0065	0.40	7.2	0.0054	42.9	0.00085	54.3	215	0.00008	0.051	651
185	0.061	0.00053	0.0016	0.026	0.0010	340	0.082	0.00025	109.8	31.0	0.0026	0.0044	0.0039	0.56	0.045	0.00012	30.1	0.055	0.0159	0.0065	0.40	7.2	0.0054	42.9	0.00085	54.3	215	0.00008	0.051	651
186	0.061	0.00053	0.0016	0.026	0.0010	340	0.082	0.00025	109.8	31.0	0.0026	0.0044	0.0039	0.56	0.045	0.00012	30.1	0.055	0.0159	0.0065	0.40	7.2	0.0054	42.9	0.00085	54.3	215	0.00008	0.051	651
187	0.061	0.00053	0.0016	0.026	0.0010	340	0.082	0.00025	109.8	31.0	0.0026	0.0044	0.0040	0.56	0.045	0.00012	30.1	0.055	0.0159	0.0065	0.40	7.2	0.0054	42.9	0.00085	54.3	215	0.00008	0.051	651
188	0.061	0.00054	0.0016	0.026	0.0010	340	0.083	0.00025	109.9	31.0	0.0026	0.0044	0.0040	0.56	0.045	0.00012	30.1	0.055	0.0159	0.0065	0.40	7.2	0.0054	42.9	0.00085	54.3	215	0.00008	0.051	651
189	0.061	0.00054	0.0016	0.026	0.0010	340	0.083	0.00025	109.9	31.0	0.0026	0.0044	0.0040	0.56	0.045	0.00012	30.1	0.055	0.0159	0.0065	0.40	7.2	0.0054	42.9	0.00085	54.3	215	0.00008	0.051	651
190	0.061	0.00054	0.0016	0.026	0.0010	340	0.083	0.00025	109.9	31.0	0.0026	0.0044	0.0040	0.56	0.045	0.00012	30.1	0.055	0.0159	0.0065	0.40	7.2	0.0054	42.9	0.00085	54.3	216	0.00008	0.051	651
191	0.061	0.00054	0.0016	0.026	0.0010	340	0.083	0.00025	109.9	31.0	0.0026	0.0044	0.0040	0.56	0.045	0.00012	30.1	0.055	0.0159	0.0066	0.40	7.2	0.0054	42.9	0.00085	54.3	216	0.00008	0.051	652
192	0.061	0.00054	0.0016	0.026	0.0010	340	0.083	0.00025	109.9	31.0	0.0026	0.0044	0.0040	0.56	0.045	0.00012	30.1	0.055	0.0159	0.0066	0.40	7.2	0.0054	42.9	0.00085	54.3	216	0.00008	0.051	652
193	0.061	0.00054	0.0016	0.026	0.0010	340	0.083	0.00025	109.9	31.0	0.0026	0.0044	0.0040	0.56	0.045	0.00012	30.1	0.056	0.0160	0.0066	0.40	7.2	0.0054	42.9	0.00085	54.3	216	0.00008	0.051	652
194	0.061	0.00054	0.0016	0.026	0.0010	340	0.083	0.00025	110.0	31.0	0.0026	0.0044	0.0040	0.56	0.045	0.00012	30.2	0.056	0.0160	0.0066	0.40	7.3	0.0054	42.9	0.00085	54.3	216	0.00008	0.052	652
195	0.061	0.00054	0.0016	0.026	0.0010	340	0.083	0.00025	110.0	31.0	0.0026	0.0044	0.0040	0.56	0.045	0.00012	30.2	0.056	0.0160	0.0066	0.40	7.3	0.0054	42.9	0.00085	54.3	216	0.00008	0.052	652
196	0.061	0.00054	0.0016	0.026	0.0010	340	0.083	0.00025	110.0	31.0	0.0026	0.0044	0.0040	0.56	0.045	0.00012	30.2	0.056	0.0160	0.0066	0.40	7.3	0.0054	42.9	0.00085	54.3	216	0.00008	0.052	652
197	0.061	0.00054	0.0016	0.026	0.0010	340	0.083	0.00025	110.0	31.0	0.0026	0.0044	0.0040	0.56	0.045	0.00012	30.2	0.056	0.0160	0.0066	0.40	7.3	0.0054	42.9	0.00085	54.3	216	0.00008	0.052	652
198	0.061	0.00054	0.0016	0.026	0.0010	340	0.083	0.00025	110.0	31.0	0.0026	0.0044	0.0040	0.56	0.045	0.00012	30.2	0.056	0.0160	0.0066	0.40	7.3	0.0054	42.9	0.00086	54.3	216	0.00008	0.052	652
199	0.061	0.00054	0.0016	0.026	0.0010	340	0.083	0.00025	110.0	31.0	0.0026	0.0044	0.0040	0.56	0.045	0.00012	30.2	0.056	0.0161	0.0066	0.40	7.3	0.0054	42.9	0.00086	54.3	216	0.00008	0.052	652
200	0.061	0.00054	0.0016	0.026	0.0010	340	0.083	0.00025	110.0	31.0	0.0026	0.0044	0.0040	0.56	0.045	0.00012	30.2	0.056	0.0161	0.0066	0.40	7.3	0.0055	42.9	0.00086	54.3	216	0.00008	0.052	653
201	0.061	0.00054	0.0016	0.026	0.0010	340	0.083	0.00025	109.9	31.0	0.0026	0.0044	0.0040	0.56	0.045	0.00012	30.2	0.055	0.0159	0.0066	0.40	7.2	0.0054	42.9	0.00085	54.3	216	0.00008	0.051	652

Table 8. Predicted Total Concentrations at Queen Creek 3 Aquifer Subdomain - Alternative 4

Years since Mine Start	Al	Sb	As	Ba	Be	HCO3	B	Cd	Ca	Cl	Cr	Co	Cu	F	Fe	Pb	Mg	Mn	Mo	Ni	NO3-N	K	Se	Si	Ag	Na	SO4	Tl	Zn	TDS
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
202	0.061	0.00054	0.0016	0.026	0.0010	340	0.083	0.00025	110.0	31.0	0.0026	0.0044	0.0040	0.56	0.045	0.00012	30.2	0.056	0.0160	0.0066	0.40	7.3	0.0054	42.9	0.00086	54.3	216	0.00008	0.052	653
203	0.061	0.00055	0.0016	0.026	0.0010	340	0.083	0.00025	110.1	31.0	0.0026	0.0044	0.0040	0.56	0.045	0.00012	30.2	0.056	0.0161	0.0066	0.40	7.3	0.0055	42.9	0.00086	54.3	217	0.00008	0.052	653
204	0.061	0.00055	0.0016	0.026	0.0010	340	0.083	0.00025	110.1	31.0	0.0026	0.0044	0.0040	0.56	0.045	0.00012	30.3	0.056	0.0161	0.0066	0.40	7.3	0.0055	42.9	0.00086	54.3	217	0.00008	0.052	653
205	0.061	0.00055	0.0016	0.026	0.0010	340	0.083	0.00025	110.1	31.0	0.0026	0.0044	0.0041	0.56	0.045	0.00012	30.3	0.056	0.0161	0.0067	0.40	7.3	0.0055	42.9	0.00086	54.3	217	0.00008	0.052	653
206	0.061	0.00055	0.0016	0.026	0.0010	340	0.083	0.00025	110.1	31.0	0.0026	0.0045	0.0041	0.56	0.045	0.00012	30.3	0.056	0.0162	0.0067	0.40	7.3	0.0055	42.9	0.00086	54.3	217	0.00008	0.052	653
207	0.062	0.00055	0.0016	0.026	0.0010	340	0.083	0.00025	110.1	31.0	0.0026	0.0045	0.0041	0.56	0.045	0.00012	30.3	0.056	0.0162	0.0067	0.40	7.3	0.0055	42.9	0.00086	54.3	217	0.00009	0.052	653
208	0.062	0.00055	0.0016	0.026	0.0010	340	0.083	0.00025	110.2	31.0	0.0026	0.0045	0.0041	0.56	0.045	0.00012	30.3	0.056	0.0162	0.0067	0.40	7.3	0.0055	42.9	0.00086	54.3	217	0.00009	0.052	654
209	0.062	0.00055	0.0016	0.026	0.0010	340	0.083	0.00025	110.2	31.0	0.0026	0.0045	0.0041	0.56	0.045	0.00012	30.3	0.056	0.0162	0.0067	0.40	7.3	0.0055	42.9	0.00087	54.3	217	0.00009	0.053	654
210	0.062	0.00055	0.0016	0.026	0.0010	340	0.083	0.00025	110.2	31.0	0.0026	0.0045	0.0041	0.56	0.045	0.00012	30.3	0.056	0.0162	0.0067	0.40	7.3	0.0055	42.9	0.00087	54.3	217	0.00009	0.053	654
211	0.062	0.00055	0.0016	0.026	0.0010	340	0.083	0.00025	110.2	31.0	0.0026	0.0045	0.0041	0.56	0.045	0.00012	30.3	0.056	0.0162	0.0067	0.40	7.4	0.0055	42.9	0.00087	54.3	217	0.00009	0.053	654
212	0.062	0.00055	0.0016	0.026	0.0010	340	0.083	0.00025	110.2	31.0	0.0026	0.0045	0.0041	0.56	0.045	0.00012	30.3	0.056	0.0163	0.0067	0.40	7.4	0.0055	42.9	0.00087	54.3	217	0.00009	0.053	654
213	0.062	0.00055	0.0016	0.026	0.0010	340	0.083	0.00025	110.2	31.0	0.0026	0.0045	0.0041	0.56	0.045	0.00012	30.4	0.057	0.0163	0.0067	0.40	7.4	0.0055	42.9	0.00087	54.3	218	0.00009	0.053	654
214	0.062	0.00055	0.0016	0.026	0.0010	340	0.083	0.00025	110.2	31.0	0.0026	0.0045	0.0041	0.56	0.045	0.00012	30.4	0.057	0.0163	0.0067	0.40	7.4	0.0056	42.9	0.00087	54.3	218	0.00009	0.053	654
215	0.062	0.00055	0.0016	0.026	0.0010	340	0.083	0.00025	110.3	31.0	0.0026	0.0045	0.0041	0.56	0.045	0.00012	30.4	0.057	0.0163	0.0067	0.40	7.4	0.0056	42.9	0.00087	54.3	218	0.00009	0.053	654
216	0.062	0.00056	0.0016	0.026	0.0010	340	0.083	0.00025	110.3	31.0	0.0026	0.0045	0.0041	0.56	0.045	0.00012	30.4	0.057	0.0164	0.0067	0.40	7.4	0.0056	42.9	0.00087	54.3	218	0.00009	0.053	655
217	0.062	0.00056	0.0016	0.026	0.0010	340	0.083	0.00025	110.3	31.0	0.0026	0.0045	0.0041	0.56	0.045	0.00012	30.4	0.057	0.0164	0.0067	0.40	7.4	0.0056	42.9	0.00087	54.3	218	0.00009	0.053	655
218	0.062	0.00056	0.0016	0.026	0.0010	340	0.083	0.00026	110.3	31.0	0.0026	0.0045	0.0041	0.56	0.045	0.00012	30.4	0.057	0.0164	0.0068	0.41	7.4	0.0056	42.9	0.00087	54.3	218	0.00009	0.053	655
219	0.062	0.00056	0.0016	0.026	0.0010	340	0.083	0.00026	110.3	31.0	0.0026	0.0045	0.0041	0.56	0.045	0.00012	30.4	0.057	0.0164	0.0068	0.41	7.4	0.0056	42.9	0.00088	54.3	218	0.00009	0.053	655
220	0.062	0.00056	0.0016	0.026	0.0010	340	0.083	0.00026	110.3	31.0	0.0026	0.0045	0.0041	0.56	0.045	0.00012	30.4	0.057	0.0164	0.0068	0.41	7.4	0.0056	42.9	0.00088	54.3	218	0.00009	0.053	655
221	0.062	0.00056	0.0016	0.026	0.0010	340	0.083	0.00026	110.3	31.0	0.0026	0.0045	0.0041	0.56	0.045	0.00012	30.4	0.057	0.0164	0.0068	0.41	7.4	0.0056	42.9	0.00088	54.3	218	0.00009	0.053	655
222	0.062	0.00056	0.0016	0.026	0.0010	340	0.084	0.00026	110.4	31.0	0.0026	0.0045	0.0042	0.56	0.045	0.00012	30.5	0.057	0.0165	0.0068	0.41	7.4	0.0056	42.9	0.00088	54.3	218	0.00009	0.053	655
223	0.062	0.00056	0.0016	0.026	0.0010	340	0.084	0.00026	110.4	31.1	0.0026	0.0045	0.0042	0.56	0.045	0.00012	30.5	0.057	0.0165	0.0068	0.41	7.4	0.0056	42.9	0.00088	54.3	218	0.00009	0.054	655
224	0.062	0.00056	0.0016	0.026	0.0010	340	0.084	0.00026	110.4	31.1	0.0026	0.0046	0.0042	0.56	0.045	0.00012	30.5	0.057	0.0165	0.0068	0.41	7.4	0.0056	42.9	0.00088	54.3	219	0.00009	0.054	656
225	0.062	0.00056	0.0016	0.026	0.0010	340	0.084	0.00026	110.4	31.1	0.0026	0.0046	0.0042	0.56	0.045	0.00012	30.5	0.057	0.0165	0.0068	0.41	7.5	0.0056	42.9	0.00088	54.4	219	0.00009	0.054	656
226	0.062	0.00056	0.0016	0.026	0.0010	340	0.084	0.00026	110.4	31.1	0.0026	0.0046	0.0042	0.56	0.045	0.00012	30.5	0.057	0.0166	0.0068	0.41	7.5	0.0056	42.9	0.00088	54.4	219	0.00009	0.054	656
227	0.062	0.00056	0.0016	0.026	0.0010	340	0.084	0.00026	110.4	31.1	0.0026	0.0046	0.0042	0.56	0.045	0.00012	30.5	0.058	0.0166	0.0068	0.41	7.5	0.0057	42.9	0.00089	54.4	219	0.00009	0.054	656
228	0.062	0.00056	0.0016	0.026	0.0010	340	0.084	0.00026	110.4	31.1	0.0026	0.0046	0.0042	0.56	0.045	0.00012	30.5	0.058	0.0166	0.0068	0.41	7.5	0.0057	42.9	0.00089	54.4	219	0.00009	0.054	656
229	0.062	0.00057	0.0016	0.026	0.0010	340	0.084	0.00026	110.5	31.1	0.0026	0.0046	0.0042	0.56	0.045	0.00012	30.5	0.058	0.0166	0.0068	0.41	7.5	0.0057	42.9	0.00089	54.4	219	0.00009	0.054	656
230	0.062	0.00057	0.0016	0.026	0.0010	340	0.084	0.00026	110.5	31.1	0.0026	0.0046	0.0042	0.56	0.045	0.00012	30.6	0.058	0.0166	0.0068	0.41	7.5	0.0057	42.9	0.00089	54.4	219	0.00009	0.054	656
231	0.062	0.00057	0.0016	0.026	0.0010	340	0.084	0.00026	110.5	31.1	0.0026	0.0046	0.0042	0.56	0.045	0.00012	30.6	0.058	0.0167	0.0069	0.41	7.5	0.0057	42.9	0.00089	54.4	219	0.00009	0.054	656
232	0.062	0.00057	0.0016	0.026	0.0010	340	0.084	0.00026	110.5	31.1	0.0026	0.0046	0.0042	0.56	0.045	0.00012	30.6	0.058	0.0167	0.0069	0.41	7.5	0.0057	42.9	0.00089	54.4	219	0.00009	0.054	657
233	0.062	0.00057	0.0016	0.026	0.0010	340	0.084	0.00026	110.5	31.1	0.0026	0.0046	0.0042	0.56	0.045	0.00012	30.6	0.058	0.0167	0.0069	0.41	7.5	0.0057	42.9	0.00089	54.4	219	0.00009	0.054	657
234	0.063	0.00057	0.0016	0.026	0.0010	340	0.084	0.00026	110.5	31.1	0.0026	0.0046	0.0042	0.56	0.045	0.00012	30.6	0.058	0.0167	0.0069	0.41	7.5	0.0057	42.9	0.00089	54.4	219	0.00009	0.055	657
235	0.063	0.00057	0.0016	0.026	0.0010	340	0.084	0.00026	110.6	31.1	0.0026	0.0046	0.0042	0.56	0.045	0.00012	30.6	0.058	0.0168	0.0069	0.41	7.5	0.0057	42.9	0.00090	54.4	220	0.00009	0.055	657
236	0.063	0.00057	0.0016	0.026	0.0010	340	0.084	0.00026	110.6	31.1	0.0026	0.0046	0.0042	0.56	0.045	0.00012	30.6	0.058	0.0168	0.0069	0.41	7.5	0.0057	42.9	0.00090	54.4	220	0.00009	0.055	657
237	0.063	0.00057	0.0016	0.026	0.0010	340	0.084	0.00026	110.6	31.1	0.0026	0.0046	0.0042	0.56	0.045	0.00013	30.6	0.058	0.0168	0.0069	0.41	7.5	0.0057	42.9	0.00090	54.4	220	0.00009	0.055	657
238	0.063	0.00057	0.0016	0.026	0.0010	340	0.084	0.00026	110.6	31.1	0.0026	0.0046	0.0042	0.56	0.045	0.00013	30.6	0.058	0.0168	0.0069	0.41	7.5	0.0057	42.9	0.00090	54.4	220	0.00009	0.055	657
239	0.063	0.00057	0.0016	0.026	0.0010	340	0.084	0.00026	110.6	31.1	0.0026	0.0046	0.0042	0.56	0.045	0.00013	30.7	0.059	0.0169	0.0069	0.41	7.6	0.0058	42.9	0.00090	54.4	220	0.00009	0.055	658
240	0.063	0.00057	0.0016	0.026	0.0010	340	0.084	0.00026	110.6	31.1	0.0026	0.0047	0.0043	0.56	0.045	0.00013	30.7	0.059	0.0169	0.0069	0.41	7.6	0.0058	42.9	0.00090	54.4	220	0.00009	0.055	658
241	0.063	0.00057	0.0016	0.026	0.0010	340	0.084	0.00026	110.6	31.1	0.0026	0.0047	0.0043	0.56	0.045	0.00013	30.7	0.059	0.0169	0.0069	0.41	7.6	0.0058	42.9	0.00090	54.4	220	0.00009	0.055	658
242	0.063	0.00058	0.0016	0.026	0.0010	340	0.084	0.00026	110.7	31.1	0.0026	0.0047	0.0043	0.56	0.045	0.00013	30.7	0.059	0.0169	0.0070	0.41	7.6	0.0058	42.9	0.00091	54.4	220	0.00009	0.055	658
243	0.063	0.00058	0.0016	0.026	0.0010	340	0.084	0.00027	110.7	31.1	0.0026	0.0047	0.0043	0.56	0.045	0.00013	30.7	0.059	0.0170	0.0070	0.41	7.6	0.0058	42.9	0.00091	54.4	220	0.00009	0.055	658
244	0.063	0.00058	0.0016	0.026	0.0010	340	0.084	0.00027	110.7	31.1	0.0026	0.0047	0.0043	0.56	0.045	0.00013	30.7	0.059	0.0170	0.0070	0.41	7.6	0.0058	42.9	0.00091	54.4	220	0.00009	0.055	658
245	0.063	0.00058	0.0016	0.026	0.0010	340	0.084	0.00027	110.7	31.1	0.0026	0.0047	0.0043	0.56	0.045	0.00013	30.7	0.059	0.0170	0.0070	0.41	7.6	0.0058	42.9	0.00091	54.4	220	0.00009	0.056	658

	Al	Sb	As	Ba	Be	HCO3	B	Cd	Ca	Cl	Cr	Co	Cu	F	Fe	Pb	Mg	Mn	Mo	Ni	NO3-N	K	Se	Si	Ag	Na	SO4	Tl	Zn	TDS
Minimum	0.040	0.00021	0.0013	0.026	0.0010	340	0.069	0.00004	101.5	29.7	0.0019	0.0013	0.0008	0.53	0.045	0.00007	25.9	0.005	0.0030	0.0027	0.38	3.4	0.0009	42.8	0.00004	52.8	173	0.00003	0.005	589
Maximum	0.063	0.00058	0.0016	0.026	0.0010	340	0.084	0.00027	110.7	31.1	0.0026	0.0047	0.0043	0.56	0.045	0.00013	30.7	0.059	0.0170	0.0070	0.41	7.6	0.0058	42.9	0.00091	54.4	220	0.00009	0.056	658
Average	0.055	0.00045	0.0015	0.026	0.0010	340	0.079	0.00020	107.5	30.7	0.0024	0.0037	0.0031	0.55	0.045	0.00011	29.0	0.045	0.0131	0.0056	0.40	6.3	0.0044	42.9	0.00068	54.0	204	0.00007	0.041	635

	Al	Sb	As	Ba	Be	HCO3	B	Cd	Ca	Cl	Cr	Co	Cu	F	Fe	Pb	Mg	Mn	Mo	Ni	NO3-N	K	Se	Si	Ag	Na	SO4	Tl	Zn	TDS
Aquifer WQ Standard =		0.006	0.05	2	0.004			0.005			0.1			4.0		0.05				0.1	10		0.05					0.002		

Notes:

1. Predicted total constituent concentrations calculated by adding model results to median background constituent concentrations at well DS17-17 in Queen Creek 3 subdomain
2. Aquifer WQ Standard = Arizona Department of Environmental Quality Numeric Aquifer Water Quality Standards (Arizona Administrative Code - Title 18, Ch. 11, Art. 4, Sup. 16-4, 2016)
3. Values in bold italic indicate that concentration is above water quality standard
4. mg/L = milligrams per liter

Table 9. Predicted Total Concentrations at Whitlow Ranch Dam - Alternative 4

Years since Mine Start	Al mg/L	Sb mg/L	As mg/L	Ba mg/L	Be mg/L	HCO3 mg/L	B mg/L	Cd mg/L	Ca mg/L	Cl mg/L	Cr mg/L	Co mg/L	Cu mg/L	F mg/L	Fe mg/L	Pb mg/L	Mg mg/L	Mn mg/L	Mo mg/L	Ni mg/L	NO3-N mg/L	K mg/L	Se mg/L	Si mg/L	Ag mg/L	Na mg/L	SO4 mg/L	Tl mg/L	Zn mg/L	TDS mg/L
1	0.040	0.00052	0.0024	0.035	0.0010	342	0.057	0.00005	90.3	24.0	0.0015	0.0013	0.0023	0.41	0.048	0.00008	22.4	0.150	0.0030	0.0027	1.90	3.0	0.0007	37.4	0.00004	35.7	136	0.00003	0.0030	546
2	0.040	0.00052	0.0024	0.035	0.0010	342	0.057	0.00005	90.3	24.0	0.0015	0.0013	0.0023	0.41	0.048	0.00008	22.4	0.150	0.0030	0.0027	1.90	3.0	0.0007	37.4	0.00004	35.7	136	0.00003	0.0030	546
3	0.040	0.00052	0.0024	0.035	0.0010	342	0.057	0.00005	90.3	24.0	0.0015	0.0013	0.0023	0.41	0.048	0.00008	22.4	0.150	0.0030	0.0027	1.90	3.0	0.0007	37.4	0.00004	35.7	136	0.00003	0.0030	546
4	0.040	0.00052	0.0024	0.035	0.0010	342	0.057	0.00005	90.3	24.0	0.0015	0.0013	0.0023	0.41	0.048	0.00008	22.4	0.150	0.0030	0.0027	1.90	3.0	0.0007	37.4	0.00004	35.7	136	0.00003	0.0030	546
5	0.040	0.00052	0.0024	0.035	0.0010	342	0.057	0.00005	90.3	24.0	0.0015	0.0013	0.0023	0.41	0.048	0.00008	22.4	0.150	0.0030	0.0027	1.90	3.0	0.0007	37.4	0.00004	35.7	136	0.00003	0.0030	546
6	0.040	0.00052	0.0024	0.035	0.0010	342	0.057	0.00005	90.3	24.0	0.0015	0.0013	0.0023	0.41	0.048	0.00008	22.4	0.150	0.0030	0.0027	1.90	3.0	0.0007	37.4	0.00004	35.7	136	0.00003	0.0030	546
7	0.040	0.00052	0.0024	0.035	0.0010	342	0.057	0.00005	90.3	24.0	0.0015	0.0013	0.0023	0.41	0.048	0.00008	22.4	0.150	0.0030	0.0027	1.90	3.0	0.0007	37.4	0.00004	35.7	136	0.00003	0.0030	546
8	0.040	0.00052	0.0024	0.035	0.0010	342	0.057	0.00005	90.3	24.0	0.0015	0.0013	0.0023	0.41	0.048	0.00008	22.4	0.150	0.0030	0.0027	1.90	3.0	0.0007	37.4	0.00004	35.7	136	0.00003	0.0030	546
9	0.040	0.00052	0.0024	0.035	0.0010	342	0.057	0.00005	90.3	24.0	0.0015	0.0013	0.0023	0.41	0.048	0.00008	22.4	0.150	0.0030	0.0027	1.90	3.0	0.0007	37.4	0.00004	35.7	136	0.00003	0.0030	546
10	0.040	0.00052	0.0024	0.035	0.0010	342	0.057	0.00005	90.3	24.0	0.0015	0.0013	0.0023	0.41	0.048	0.00008	22.4	0.150	0.0030	0.0027	1.90	3.0	0.0007	37.4	0.00004	35.7	136	0.00003	0.0030	546
11	0.040	0.00052	0.0024	0.035	0.0010	342	0.057	0.00005	90.3	24.0	0.0015	0.0013	0.0023	0.41	0.048	0.00008	22.4	0.150	0.0030	0.0027	1.90	3.0	0.0007	37.4	0.00004	35.7	136	0.00003	0.0030	546
12	0.040	0.00052	0.0024	0.035	0.0010	342	0.057	0.00005	90.3	24.0	0.0015	0.0013	0.0023	0.41	0.048	0.00008	22.4	0.150	0.0030	0.0027	1.90	3.0	0.0007	37.4	0.00004	35.7	136	0.00003	0.0030	546
13	0.040	0.00052	0.0024	0.035	0.0010	342	0.057	0.00005	90.3	24.0	0.0015	0.0013	0.0023	0.41	0.048	0.00008	22.4	0.150	0.0030	0.0027	1.90	3.0	0.0007	37.4	0.00004	35.7	136	0.00003	0.0030	546
14	0.040	0.00052	0.0024	0.035	0.0010	342	0.057	0.00005	90.3	24.0	0.0015	0.0013	0.0023	0.41	0.048	0.00008	22.4	0.150	0.0030	0.0027	1.90	3.0	0.0007	37.4	0.00004	35.7	136	0.00003	0.0030	546
15	0.040	0.00052	0.0024	0.035	0.0010	342	0.057	0.00005	90.3	24.0	0.0015	0.0013	0.0023	0.41	0.048	0.00008	22.4	0.150	0.0030	0.0027	1.90	3.0	0.0007	37.4	0.00004	35.7	136	0.00003	0.0030	546
16	0.040	0.00052	0.0024	0.035	0.0010	342	0.057	0.00005	90.3	24.0	0.0015	0.0013	0.0023	0.41	0.048	0.00008	22.4	0.150	0.0030	0.0027	1.90	3.0	0.0007	37.4	0.00004	35.7	136	0.00003	0.0030	546
17	0.040	0.00052	0.0024	0.035	0.0010	342	0.057	0.00005	90.3	24.0	0.0015	0.0013	0.0023	0.41	0.048	0.00008	22.4	0.150	0.0030	0.0027	1.90	3.0	0.0007	37.4	0.00004	35.7	136	0.00003	0.0030	546
18	0.040	0.00052	0.0024	0.035	0.0010	342	0.057	0.00005	90.3	24.0	0.0015	0.0013	0.0023	0.41	0.048	0.00008	22.4	0.150	0.0030	0.0027	1.90	3.0	0.0007	37.4	0.00004	35.7	136	0.00003	0.0030	546
19	0.040	0.00052	0.0024	0.035	0.0010	342	0.057	0.00005	90.3	24.0	0.0015	0.0013	0.0023	0.41	0.048	0.00008	22.4	0.150	0.0030	0.0027	1.90	3.0	0.0007	37.4	0.00004	35.7	136	0.00003	0.0030	546
20	0.040	0.00052	0.0024	0.035	0.0010	342	0.057	0.00005	90.3	24.0	0.0015	0.0013	0.0023	0.41	0.048	0.00008	22.4	0.150	0.0030	0.0027	1.90	3.0	0.0007	37.4	0.00004	35.7	136	0.00003	0.0030	546
21	0.040	0.00052	0.0024	0.035	0.0010	342	0.057	0.00005	90.3	24.0	0.0015	0.0013	0.0023	0.41	0.048	0.00008	22.4	0.150	0.0030	0.0027	1.90	3.0	0.0007	37.4	0.00004	35.7	136	0.00003	0.0030	546
22	0.040	0.00052	0.0024	0.035	0.0010	342	0.057	0.00005	90.3	24.0	0.0015	0.0013	0.0023	0.41	0.048	0.00008	22.4	0.150	0.0030	0.0027	1.90	3.0	0.0007	37.4	0.00004	35.7	136	0.00003	0.0030	546
23	0.040	0.00052	0.0024	0.035	0.0010	342	0.057	0.00005	90.3	24.0	0.0015	0.0013	0.0023	0.41	0.048	0.00008	22.4	0.150	0.0030	0.0027	1.90	3.0	0.0007	37.4	0.00004	35.7	136	0.00003	0.0030	546
24	0.040	0.00052	0.0024	0.035	0.0010	342	0.057	0.00005	90.3	24.0	0.0015	0.0013	0.0023	0.41	0.048	0.00008	22.4	0.150	0.0030	0.0027	1.90	3.0	0.0007	37.4	0.00004	35.7	136	0.00003	0.0030	546
25	0.040	0.00052	0.0024	0.035	0.0010	342	0.057	0.00005	90.3	24.0	0.0015	0.0013	0.0023	0.41	0.048	0.00008	22.4	0.150	0.0030	0.0027	1.90	3.0	0.0007	37.4	0.00004	35.7	136	0.00003	0.0030	546
26	0.040	0.00052	0.0024	0.035	0.0010	342	0.057	0.00005	90.3	24.0	0.0015	0.0013	0.0023	0.41	0.048	0.00008	22.4	0.150	0.0030	0.0027	1.90	3.0	0.0007	37.4	0.00004	35.7	136	0.00003	0.0030	546
27	0.040	0.00052	0.0024	0.035	0.0010	342	0.057	0.00005	90.3	24.0	0.0015	0.0013	0.0023	0.41	0.048	0.00008	22.4	0.150	0.0030	0.0027	1.90	3.0	0.0007	37.4	0.00004	35.7	136	0.00003	0.0030	546
28	0.040	0.00052	0.0024	0.035	0.0010	342	0.057	0.00005	90.3	24.0	0.0015	0.0013	0.0023	0.41	0.048	0.00008	22.4	0.150	0.0030	0.0027	1.90	3.0	0.0007	37.4	0.00004	35.7	136	0.00003	0.0030	546
29	0.040	0.00052	0.0024	0.035	0.0010	342	0.057	0.00005	90.3	24.0	0.0015	0.0013	0.0023	0.41	0.048	0.00008	22.4	0.150	0.0030	0.0027	1.90	3.0	0.0007	37.4	0.00004	35.7	136	0.00003	0.0030	546
30	0.040	0.00052	0.0024	0.035	0.0010	342	0.057	0.00005	90.3	24.0	0.0015	0.0013	0.0023	0.41	0.048	0.00008	22.4	0.150	0.0030	0.0027	1.90	3.0	0.0007	37.4	0.00004	35.7	136	0.00003	0.0030	546
31	0.040	0.00052	0.0024	0.035	0.0010	342	0.057	0.00005	90.3	24.0	0.0015	0.0013	0.0023	0.41	0.048	0.00008	22.4	0.150	0.0030	0.0027	1.90	3.0	0.0007	37.4	0.00004	35.7	136	0.00003	0.0030	546
32	0.040	0.00052	0.0024	0.035	0.0010	342	0.057	0.00005	90.3	24.0	0.0015	0.0013	0.0023	0.41	0.048	0.00008	22.4	0.150	0.0030	0.0027	1.90	3.0	0.0007	37.4	0.00004	35.7	136	0.00003	0.0030	546
33	0.040	0.00052	0.0024	0.035	0.0010	342	0.057	0.00005	90.3	24.0	0.0015	0.0013	0.0023	0.41	0.048	0.00008	22.4	0.150	0.0030	0.0027	1.90	3.0	0.0007	37.4	0.00004	35.7	136	0.00003	0.0030	546
34	0.040	0.00052	0.0024	0.035	0.0010	342	0.057	0.00005	90.3	24.0	0.0015	0.0013	0.0023	0.41	0.048	0.00008	22.4	0.150	0.0030	0.0027	1.90	3.0	0.0007	37.4	0.00004	35.7	136	0.00003	0.0030	546
35	0.040	0.00052	0.0024	0.035	0.0010	342	0.057	0.00005	90.3	24.0	0.0015	0.0013	0.0023	0.41	0.048	0.00008	22.4	0.150	0.0030	0.0027	1.90	3.0	0.0007	37.4	0.00004	35.7	136	0.00003	0.0030	546
36	0.040	0.00052	0.0024	0.035	0.0010	342	0.057	0.00005	90.3	24.0	0.0015	0.0013	0.0023	0.41	0.048	0.00008	22.4	0.150	0.0030	0.0027	1.90	3.0	0.0007	37.4	0.00004	35.7	136	0.00003	0.0030	546
37	0.040	0.00052	0.0024	0.035	0.0010	342	0.057	0.00005	90.3	24.0	0.0015	0.0013	0.0023	0.41	0.048	0.00008	22.4	0.150	0.0030	0.0027	1.90	3.0	0.0007	37.4	0.00004	35.7	136	0.00003	0.0030	546
38	0.040	0.00052	0.0024	0.035	0.0010	342	0.057	0.00005	90.3	24.0	0.0015	0.0013	0.0023	0.41	0.048	0.00008	22.4	0.150	0.0030	0.0027	1.90	3.0	0.0007	37.4	0.00004	35.7	136	0.00003	0.0030	546
39	0.040	0.00052	0.0024	0.035	0.0010	342	0.057	0.00005	90.3	24.0	0.0015	0.0013	0.0023	0.41	0.048	0.00008	22.4	0.150	0.0030	0.0027	1.90	3.0	0.0007	37.4	0.00004	35.7	136	0.00003	0.0030	546
40	0.040	0.00052	0.0024	0.035	0.0010	342	0.057	0.00005	90.3	24.0	0.0015	0.0013	0.0023	0.41	0.048	0.00008	22.4	0.150	0.0030	0.0027	1.90	3.0	0.0007	37.4	0.00004	35.7	136	0.00003	0.0030	546
41	0.040	0.00052	0.0024	0.035	0.0010	342	0.057	0.00005	90.3	24.0	0.0015	0.0013	0.0023	0.41	0.048	0.00008	22.4	0.150	0.0030	0.0027	1.90	3.0	0.0007	37.4	0.00004	35.7	136	0.00003	0.0030	546
42	0.040	0.00052	0.0024	0.035	0.0010	342	0.057	0.00005	90.3	24.0	0.0015	0.0013	0.0023	0.41	0.048	0.00008	22.4	0.150	0.0030	0.0027	1.90	3.0	0.0007	37.4	0.00004	35.7	136	0.00003	0.0030	546
43	0.041	0.00054	0.0024	0.035	0.0010	342	0.058	0.00006	90.7	24.1	0.0015	0.0015	0.0025	0.41	0.048	0.00008	22.6	0.153	0.0037	0.0029	1.90	3.2	0.0009	37.4	0.00008	35.8	138	0.00003	0.0055	549
44	0.045	0.00060	0.0024	0.035	0.0010	342	0.060	0.00011	92.2	24.4	0.0017	0.0021	0.0031	0.42	0.048	0.00009	23.4	0.165	0.0067	0.0037	1.91	4.0	0.0020	37.4	0.00028	36.1	146	0.00005	0.0160	561
45	0.046	0.00062	0.0024	0.035	0.0010	342	0.061	0.00012	92.7	24.5	0.0018	0.0023	0.0032	0.42	0.048	0.00009	23.7	0.169	0.0076	0.0040	1.91	4.2	***0.0023***	37.4	0.00034	36.3	149	0.00005	0.0192	565
46	0.046	0.00062	0.0024	0.035	0.0010	342	0.061	0.00013	92.8	24.5	0.0018	0.0024	0.0033	0.42	0.048	0.00009	23.7	0.169	0.0077	0.0040	1.91	4.3	***0.0023***	37.4	0.00034	36.3	149	0.00005	0.0195	565
47	0.046	0.00063	0.0024	0.035	0.0010	342	0.061	0.00013	92.8	24.5	0.0018	0.0024	0.0033	0.42	0.048	0.00009	23.7	0.169	0.0077	0.0040	1.91	4.3	***0.0023***	37.4	0.00034	36.3	149	0.00005	0.0196	565
48	0.046	0.00063	0.0024	0.035	0.0010	342	0.061	0.00013	92.8	24.5	0.0018	0.0024	0.0033	0.42	0.048	0.00009	23.7	0.169	0.0078	0.0040	1.91	4.3	***0.0023***	37.4	0.00035	36.3	149	0.00005	0.0197	566
49	0.046	0.00063	0.0024	0.035	0.0010	342	0.061	0.00013	92.8	24.5	0.0018	0.0024	0.0033	0.42	0.048	0.00009	23.7	0.169	0.0078	0.0040	1.91	4.3	***0.0023***	37.4	0.00035	36.3	149	0.00005	0.0198	566
50	0.046	0.00063	0.0024	0.035	0.0010	342	0.062	0.00013	92.8	24.5	0.0018	0.0024	0.0033	0.42	0.048	0.00009	23.7	0.169	0.0078	0.0040	1.91	4.3	***0.0023***	37.4	0.00035	36.3	149	0.00005	0.0199	566
51	0.046	0.00063	0.0024	0.035	0.0010	342	0.062	0.00013	92.8	24.5	0.0018	0.0024	0.0033	0.42	0.048	0.00009	23.7	0.169	0.0079	0.0040	1.91	4.3	***0.0023***	37.4	0.00035	36.3	149	0.00005	0.0200	566
52	0.046	0.00063	0.0024	0.035	0.0010	342	0.062	0.00013	92.8	24.5	0.0018	0.0024	0.0033	0.42	0.048	0.00009	23.7	0.170	0.0079	0.0040	1.91	4.3	***0.0024***	37.4	0.00035	36.3	149	0.00005	0.0201	566
53	0.046	0.00063	0.0024	0.035	0.0010	342	0.062	0.00013	92.9	24.5	0.0018	0.0024	0.0033	0.42	0.048	0.00009	23.8	0.170	0.0079	0.0041	1.91	4.3	***0.0024***	37.4	0.00036	36.3	150	0.00005	0.0202	566
54	0.047	0.00063	0.0024	0.035	0.0010	342	0.062	0.00013	92.9	24.5	0.0018	0.0024	0.0033	0.42	0.048	0.00009	23.8	0.170	0.0079	0.0041	1.91	4.3	***0.0024***	37.4	0.00036	36.3	150	0.00005	0.0203	566
55	0.047	0.00063	0.0024	0.035	0.0010	342	0.062	0.00013	92.9	24.5	0.0018	0.0024	0.0033	0.42	0.048	0.00009	23.8	0.170	0.0080	0.0041	1.91	4.3	***0.0024***	37.4	0.00036	36.3	150	0.00005	0.0204	566
56	0.047	0.00063	0.0024	0.035	0.0010	342	0.062	0.00013	92.9	24.5	0.0018	0.0024	0.0033	0.42	0.048	0.00009	23.8	0.170	0.0080	0.0041	1.91	4.4	***0.0024***	37.4	0.00036	36.3	150	0.00005	0.0205	566
57	0.047	0.00063	0.0024	0.035	0.0010	342	0.062	0.00013	92.9	24.5	0.0018	0.0024	0.0033	0.42	0.048	0.00009	23.8	0.170	0.0080	0.0041	1.91	4.4	***0.0024***	37.4	0.00036	36.3	150	0.00005	0.0206	567
58	0.047	0.00063	0.0024	0.035	0.0010	342	0.062	0.00013	92.9	24.5	0.0018	0.0024	0.0033	0.42	0.048	0.00009	23.8	0.170	0.0081	0.0041	1.91	4.4	***0.0024***	37.4	0.00036	36.3	150	0.00005	0.0207	567
59	0.047	0.00063	0.0024	0.035	0.0010	342	0.062	0.00013	92.9	24.5	0.0018	0.0025	0.0033	0.42	0.048	0.00009	23.8	0.170	0.0081	0.0041	1.91	4.4	***0.0024***	37.4	0.00037	36.3	150	0.00005	0.0208	567
60	0.047	0.00064	0.0024	0.035	0.0010	342	0.062	0.00013	93.0	24.5	0.0018	0.0025	0.0033	0.42	0.048	0.00009	23.8	0.170	0.0081	0.0041	1.91	4.4	***0.0024***	37.4	0.00037	36.3	150	0.00005	0.0209	567
61	0.047	0.00064	0.0024	0.035	0.0010	342	0.062	0.00013	93.0	24.5	0.0018	0.0025	0.0033	0.42	0.048	0.00009	23.8	0.171	0.0081	0.0041	1.91	4.4	***0.0025***	37.4	0.00037	36.3	150	0.00005	0.0210	567
62	0.047	0.00064	0.0025	0.035	0.0010	342	0.062	0.00013	93.0	24.5	0.0018	0.0025	0.0033	0.42	0.048	0.00009	23.8	0.171	0.0082	0.0041	1.91	4.4	***0.0025***	37.4	0.00037	36.3	150	0.00005	0.0211	567
63	0.047	0.00064	0.0025	0.035	0.0010	342	0.062	0.00013	93.0	24.5	0.0018	0.0025	0.0033	0.42	0.048	0.00009	23.8	0.171	0.0082	0.0041	1.91	4.4	***0.0025***	37.4	0.00037	36.3	150	0.00005	0.0212	567
64	0.047	0.00064	0.0025	0.035	0.0010	342	0.062	0.00013	93.0	24.5	0.0018	0.0025	0.0034	0.42	0.048	0.00009	23.9	0.171	0.0082	0.0041	1.91	4.4	***0.0025***	37.4	0.00037	36.3	150	0.00005	0.0213	567
65	0.047	0.00064	0.0025	0.035	0.0010	342	0.062	0.00013	93.0	24.5	0.0018	0.0025	0.0034	0.42	0.048	0.00009	23.9	0.171	0.0082	0.0042	1.91	4.4	***0.0025***	37.4	0.00038	36.3	151	0.00005	0.0214	568
66	0.047	0.00064	0.0025	0.035	0.0010	342	0.062	0.00013	93.0	24.5	0.0018	0.0025	0.0034	0.42	0.048	0.00009	23.9	0.171	0.0083	0.0042	1.91	4.4	***0.0025***	37.4	0.00038	36.3	151	0.00005	0.0215	568
67	0.047	0.00064	0.0025	0.035	0.0010	342	0.062	0.00013	93.0	24.5	0.0018	0.0025	0.0034	0.42	0.048	0.00009	23.9	0.171	0.0083	0.0042	1.91	4.4	***0.0025***	37.4	0.00038	36.3	151	0.00005	0.0216	568
68	0.047	0.00064	0.0025	0.035	0.0010	342	0.062	0.00013	93.1	24.6	0.0018	0.0025	0.0034	0.42	0.048	0.00009	23.9	0.171	0.0083	0.0042	1.91	4.5	***0.0025***	37.4	0.00038	36.3	151	0.00005	0.0217	568

Table 9. Predicted Total Concentrations at Whitlow Ranch Dam - Alternative 4

Years since Mine Start	Al mg/L	Sb mg/L	As mg/L	Ba mg/L	Be mg/L	HCO3 mg/L	B mg/L	Cd mg/L	Ca mg/L	Cl mg/L	Cr mg/L	Co mg/L	Cu mg/L	F mg/L	Fe mg/L	Pb mg/L	Mg mg/L	Mn mg/L	Mo mg/L	Ni mg/L	NO3-N mg/L	K mg/L	Se mg/L	Si mg/L	Ag mg/L	Na mg/L	SO4 mg/L	Tl mg/L	Zn mg/L	TDS mg/L
69	0.047	0.00064	0.0025	0.035	0.0010	342	0.062	0.00014	93.1	24.6	0.0018	0.0025	0.0034	0.42	0.048	0.00009	23.9	0.171	0.0084	0.0042	1.91	4.5	***0.0025***	37.4	0.00038	36.3	151	0.00005	0.0217	568
70	0.047	0.00064	0.0025	0.035	0.0010	342	0.062	0.00014	93.1	24.6	0.0018	0.0025	0.0034	0.42	0.048	0.00009	23.9	0.172	0.0084	0.0042	1.91	4.5	***0.0025***	37.4	0.00038	36.3	151	0.00005	0.0219	568
71	0.047	0.00064	0.0025	0.035	0.0010	342	0.062	0.00014	93.1	24.6	0.0018	0.0025	0.0034	0.42	0.048	0.00009	23.9	0.172	0.0084	0.0042	1.91	4.5	***0.0025***	37.4	0.00039	36.3	151	0.00005	0.0220	568
72	0.047	0.00064	0.0025	0.035	0.0010	342	0.062	0.00014	93.1	24.6	0.0018	0.0025	0.0034	0.42	0.048	0.00010	23.9	0.172	0.0084	0.0042	1.91	4.5	***0.0026***	37.4	0.00039	36.3	151	0.00005	0.0221	568
73	0.047	0.00064	0.0025	0.035	0.0010	342	0.062	0.00014	93.1	24.6	0.0018	0.0025	0.0034	0.42	0.048	0.00010	23.9	0.172	0.0085	0.0042	1.91	4.5	***0.0026***	37.4	0.00039	36.3	151	0.00005	0.0221	569
74	0.047	0.00064	0.0025	0.035	0.0010	342	0.062	0.00014	93.1	24.6	0.0018	0.0025	0.0034	0.42	0.048	0.00010	23.9	0.172	0.0085	0.0042	1.91	4.5	***0.0026***	37.4	0.00039	36.3	151	0.00005	0.0222	569
75	0.047	0.00065	0.0025	0.035	0.0010	342	0.062	0.00014	93.2	24.6	0.0018	0.0026	0.0034	0.42	0.048	0.00010	24.0	0.172	0.0085	0.0042	1.91	4.5	***0.0026***	37.4	0.00039	36.4	151	0.00005	0.0223	569
76	0.047	0.00065	0.0025	0.035	0.0010	342	0.062	0.00014	93.2	24.6	0.0018	0.0026	0.0034	0.42	0.048	0.00010	24.0	0.172	0.0085	0.0042	1.91	4.5	***0.0026***	37.4	0.00039	36.4	151	0.00005	0.0224	569
77	0.047	0.00065	0.0025	0.035	0.0010	342	0.062	0.00014	93.2	24.6	0.0018	0.0026	0.0034	0.42	0.048	0.00010	24.0	0.172	0.0086	0.0042	1.91	4.5	***0.0026***	37.4	0.00040	36.4	152	0.00005	0.0225	569
78	0.047	0.00065	0.0025	0.035	0.0010	342	0.062	0.00014	93.2	24.6	0.0018	0.0026	0.0034	0.42	0.048	0.00010	24.0	0.172	0.0086	0.0043	1.91	4.5	***0.0026***	37.4	0.00040	36.4	152	0.00005	0.0226	569
79	0.047	0.00065	0.0025	0.035	0.0010	342	0.062	0.00014	93.2	24.6	0.0018	0.0026	0.0034	0.42	0.048	0.00010	24.0	0.172	0.0086	0.0043	1.91	4.5	***0.0026***	37.4	0.00040	36.4	152	0.00005	0.0227	569
80	0.047	0.00065	0.0025	0.035	0.0010	342	0.062	0.00014	93.2	24.6	0.0018	0.0026	0.0034	0.42	0.048	0.00010	24.0	0.172	0.0086	0.0043	1.91	4.5	***0.0026***	37.4	0.00040	36.4	152	0.00005	0.0227	569
81	0.047	0.00065	0.0025	0.035	0.0010	342	0.062	0.00014	93.3	24.6	0.0018	0.0026	0.0035	0.42	0.048	0.00010	24.0	0.173	0.0087	0.0043	1.91	4.6	***0.0026***	37.4	0.00040	36.4	152	0.00005	0.0229	570
82	0.048	0.00065	0.0025	0.035	0.0010	342	0.062	0.00014	93.3	24.6	0.0018	0.0026	0.0035	0.42	0.048	0.00010	24.0	0.173	0.0087	0.0043	1.91	4.6	***0.0026***	37.4	0.00040	36.4	152	0.00005	0.0229	570
83	0.048	0.00065	0.0025	0.035	0.0010	342	0.062	0.00014	93.3	24.6	0.0018	0.0026	0.0035	0.42	0.048	0.00010	24.0	0.173	0.0087	0.0043	1.91	4.6	***0.0026***	37.4	0.00040	36.4	152	0.00005	0.0230	570
84	0.048	0.00065	0.0025	0.035	0.0010	342	0.062	0.00014	93.3	24.6	0.0018	0.0026	0.0035	0.42	0.048	0.00010	24.0	0.173	0.0087	0.0043	1.91	4.6	***0.0027***	37.4	0.00041	36.4	152	0.00005	0.0231	570
85	0.048	0.00065	0.0025	0.035	0.0010	342	0.062	0.00014	93.3	24.6	0.0018	0.0026	0.0035	0.42	0.048	0.00010	24.0	0.173	0.0087	0.0043	1.91	4.6	***0.0027***	37.4	0.00041	36.4	152	0.00005	0.0231	570
86	0.048	0.00065	0.0025	0.035	0.0010	342	0.062	0.00014	93.3	24.6	0.0018	0.0026	0.0035	0.42	0.048	0.00010	24.0	0.173	0.0088	0.0043	1.91	4.6	***0.0027***	37.4	0.00041	36.4	152	0.00005	0.0232	570
87	0.048	0.00065	0.0025	0.035	0.0010	342	0.063	0.00014	93.3	24.6	0.0018	0.0026	0.0035	0.42	0.048	0.00010	24.0	0.173	0.0088	0.0043	1.91	4.6	***0.0027***	37.4	0.00041	36.4	152	0.00005	0.0233	570
88	0.048	0.00065	0.0025	0.035	0.0010	342	0.063	0.00014	93.4	24.6	0.0018	0.0026	0.0035	0.42	0.048	0.00010	24.1	0.173	0.0088	0.0043	1.91	4.6	***0.0027***	37.4	0.00041	36.4	152	0.00005	0.0234	570
89	0.048	0.00065	0.0025	0.035	0.0010	342	0.063	0.00014	93.4	24.6	0.0018	0.0026	0.0035	0.42	0.048	0.00010	24.1	0.173	0.0088	0.0043	1.91	4.6	***0.0027***	37.4	0.00041	36.4	152	0.00006	0.0235	570
90	0.048	0.00065	0.0025	0.035	0.0010	342	0.063	0.00014	93.4	24.6	0.0018	0.0026	0.0035	0.42	0.048	0.00010	24.1	0.173	0.0088	0.0043	1.91	4.6	***0.0027***	37.4	0.00041	36.4	153	0.00006	0.0235	570
91	0.048	0.00065	0.0025	0.035	0.0010	342	0.063	0.00014	93.4	24.6	0.0018	0.0026	0.0035	0.42	0.048	0.00010	24.1	0.173	0.0089	0.0043	1.91	4.6	***0.0027***	37.4	0.00041	36.4	153	0.00006	0.0236	571
92	0.048	0.00065	0.0025	0.035	0.0010	342	0.063	0.00014	93.4	24.6	0.0018	0.0026	0.0035	0.42	0.048	0.00010	24.1	0.173	0.0089	0.0043	1.91	4.6	***0.0027***	37.4	0.00041	36.4	153	0.00006	0.0236	571
93	0.048	0.00066	0.0025	0.035	0.0010	342	0.063	0.00014	93.4	24.6	0.0018	0.0027	0.0035	0.42	0.048	0.00010	24.1	0.174	0.0089	0.0044	1.91	4.6	***0.0027***	37.4	0.00042	36.4	153	0.00006	0.0237	571
94	0.048	0.00066	0.0025	0.035	0.0010	342	0.063	0.00014	93.5	24.6	0.0018	0.0027	0.0035	0.42	0.048	0.00010	24.1	0.174	0.0089	0.0044	1.91	4.6	***0.0027***	37.4	0.00042	36.4	153	0.00006	0.0238	571
95	0.048	0.00066	0.0025	0.035	0.0010	342	0.063	0.00014	93.5	24.6	0.0018	0.0027	0.0035	0.42	0.048	0.00010	24.1	0.174	0.0089	0.0044	1.91	4.6	***0.0027***	37.4	0.00042	36.4	153	0.00006	0.0239	571
96	0.048	0.00066	0.0025	0.035	0.0010	342	0.063	0.00015	93.5	24.6	0.0018	0.0027	0.0035	0.42	0.048	0.00010	24.1	0.174	0.0090	0.0044	1.91	4.6	***0.0027***	37.4	0.00042	36.4	153	0.00006	0.0239	571
97	0.048	0.00066	0.0025	0.035	0.0010	342	0.063	0.00015	93.5	24.6	0.0018	0.0027	0.0035	0.42	0.048	0.00010	24.1	0.174	0.0090	0.0044	1.91	4.6	***0.0027***	37.4	0.00042	36.4	153	0.00006	0.0240	571
98	0.048	0.00066	0.0025	0.035	0.0010	342	0.063	0.00015	93.5	24.6	0.0018	0.0027	0.0035	0.42	0.048	0.00010	24.1	0.174	0.0090	0.0044	1.91	4.6	***0.0027***	37.4	0.00042	36.4	153	0.00006	0.0240	571
99	0.048	0.00066	0.0025	0.035	0.0010	342	0.063	0.00015	93.5	24.6	0.0018	0.0027	0.0036	0.42	0.048	0.00010	24.1	0.174	0.0090	0.0044	1.91	4.7	***0.0028***	37.4	0.00042	36.4	153	0.00006	0.0241	571
100	0.048	0.00066	0.0025	0.035	0.0010	342	0.063	0.00015	93.5	24.6	0.0018	0.0027	0.0036	0.42	0.048	0.00010	24.1	0.174	0.0090	0.0044	1.91	4.7	***0.0027***	37.4	0.00042	36.4	153	0.00006	0.0241	571
101	0.048	0.00066	0.0025	0.035	0.0010	342	0.063	0.00015	93.6	24.6	0.0018	0.0027	0.0036	0.42	0.048	0.00010	24.1	0.174	0.0090	0.0044	1.91	4.7	***0.0028***	37.4	0.00042	36.4	153	0.00006	0.0242	572
102	0.048	0.00066	0.0025	0.035	0.0010	342	0.063	0.00015	93.6	24.6	0.0018	0.0027	0.0036	0.42	0.048	0.00010	24.1	0.174	0.0090	0.0044	1.91	4.7	***0.0028***	37.4	0.00043	36.4	153	0.00006	0.0243	572
103	0.048	0.00066	0.0025	0.035	0.0010	342	0.063	0.00015	93.6	24.6	0.0018	0.0027	0.0036	0.42	0.048	0.00010	24.2	0.174	0.0091	0.0044	1.91	4.7	***0.0028***	37.4	0.00043	36.4	153	0.00006	0.0243	572
104	0.048	0.00066	0.0025	0.035	0.0010	342	0.063	0.00015	93.6	24.6	0.0018	0.0027	0.0036	0.42	0.048	0.00010	24.2	0.174	0.0091	0.0044	1.91	4.7	***0.0028***	37.4	0.00043	36.4	154	0.00006	0.0244	572
105	0.048	0.00066	0.0025	0.035	0.0010	342	0.063	0.00015	93.6	24.6	0.0018	0.0027	0.0036	0.42	0.048	0.00010	24.2	0.174	0.0091	0.0044	1.91	4.7	***0.0028***	37.4	0.00043	36.4	154	0.00006	0.0244	572
106	0.048	0.00066	0.0025	0.035	0.0010	342	0.063	0.00015	93.6	24.6	0.0018	0.0027	0.0036	0.42	0.048	0.00010	24.2	0.174	0.0091	0.0044	1.91	4.7	***0.0028***	37.4	0.00043	36.4	154	0.00006	0.0245	572
107	0.048	0.00066	0.0025	0.035	0.0010	342	0.063	0.00015	93.7	24.6	0.0018	0.0027	0.0036	0.42	0.048	0.00010	24.2	0.174	0.0091	0.0044	1.91	4.7	***0.0028***	37.4	0.00043	36.4	154	0.00006	0.0245	572
108	0.049	0.00066	0.0025	0.035	0.0010	342	0.063	0.00015	93.7	24.6	0.0018	0.0027	0.0036	0.42	0.048	0.00010	24.2	0.174	0.0091	0.0044	1.91	4.7	***0.0028***	37.4	0.00043	36.4	154	0.00006	0.0246	572
109	0.049	0.00066	0.0025	0.035	0.0010	342	0.063	0.00015	93.7	24.6	0.0018	0.0027	0.0036	0.42	0.048	0.00010	24.2	0.174	0.0091	0.0044	1.91	4.7	***0.0028***	37.4	0.00043	36.4	154	0.00006	0.0246	572
110	0.049	0.00066	0.0025	0.035	0.0010	342	0.063	0.00015	93.7	24.6	0.0018	0.0027	0.0036	0.42	0.048	0.00010	24.2	0.175	0.0092	0.0044	1.91	4.7	***0.0028***	37.4	0.00043	36.4	154	0.00006	0.0247	573
111	0.049	0.00066	0.0025	0.035	0.0010	342	0.063	0.00015	93.7	24.6	0.0018	0.0027	0.0036	0.42	0.048	0.00010	24.2	0.175	0.0092	0.0044	1.91	4.7	***0.0028***	37.4	0.00043	36.4	154	0.00006	0.0247	573
112	0.049	0.00066	0.0025	0.035	0.0010	342	0.063	0.00015	93.7	24.6	0.0018	0.0027	0.0036	0.42	0.048	0.00010	24.2	0.175	0.0092	0.0044	1.91	4.7	***0.0028***	37.4	0.00043	36.4	154	0.00006	0.0248	573
113	0.049	0.00066	0.0025	0.035	0.0010	342	0.063	0.00015	93.8	24.6	0.0018	0.0027	0.0036	0.42	0.048	0.00010	24.2	0.175	0.0092	0.0044	1.91	4.7	***0.0028***	37.4	0.00043	36.4	154	0.00006	0.0248	573
114	0.049	0.00066	0.0025	0.035	0.0010	342	0.063	0.00015	93.8	24.6	0.0018	0.0027	0.0036	0.42	0.048	0.00010	24.2	0.175	0.0092	0.0045	1.91	4.7	***0.0028***	37.4	0.00044	36.4	154	0.00006	0.0249	573
115	0.049	0.00067	0.0025	0.035	0.0010	342	0.063	0.00015	93.8	24.6	0.0018	0.0027	0.0037	0.42	0.048	0.00010	24.2	0.175	0.0092	0.0045	1.91	4.7	***0.0028***	37.4	0.00044	36.4	154	0.00006	0.0249	573
116	0.049	0.00067	0.0025	0.035	0.0010	342	0.063	0.00015	93.8	24.6	0.0018	0.0027	0.0037	0.42	0.048	0.00010	24.2	0.175	0.0092	0.0045	1.91	4.7	***0.0028***	37.4	0.00044	36.4	154	0.00006	0.0250	573
117	0.049	0.00067	0.0025	0.035	0.0010	342	0.063	0.00015	93.8	24.6	0.0018	0.0027	0.0037	0.42	0.048	0.00010	24.2	0.175	0.0092	0.0045	1.91	4.7	***0.0028***	37.4	0.00044	36.4	154	0.00006	0.0250	573
118	0.049	0.00067	0.0025	0.035	0.0010	342	0.063	0.00015	93.8	24.6	0.0018	0.0027	0.0037	0.42	0.048	0.00010	24.2	0.175	0.0093	0.0045	1.91	4.7	***0.0028***	37.4	0.00044	36.4	154	0.00006	0.0250	573
119	0.049	0.00067	0.0025	0.035	0.0010	342	0.063	0.00015	93.8	24.6	0.0018	0.0027	0.0037	0.42	0.048	0.00010	24.2	0.175	0.0093	0.0045	1.91	4.7	***0.0028***	37.4	0.00044	36.4	154	0.00006	0.0251	573
120	0.049	0.00067	0.0025	0.035	0.0010	342	0.063	0.00015	93.9	24.6	0.0018	0.0027	0.0037	0.42	0.048	0.00010	24.2	0.175	0.0093	0.0045	1.91	4.7	***0.0029***	37.4	0.00044	36.4	155	0.00006	0.0251	573
121	0.049	0.00067	0.0025	0.035	0.0010	342	0.063	0.00015	93.9	24.6	0.0018	0.0028	0.0037	0.42	0.048	0.00010	24.2	0.175	0.0093	0.0045	1.91	4.7	***0.0029***	37.4	0.00044	36.4	155	0.00006	0.0252	573
122	0.049	0.00067	0.0025	0.035	0.0010	342	0.063	0.00015	93.9	24.6	0.0018	0.0028	0.0037	0.42	0.048	0.00010	24.3	0.175	0.0093	0.0045	1.91	4.7	***0.0029***	37.4	0.00044	36.4	155	0.00006	0.0252	574
123	0.049	0.00067	0.0025	0.035	0.0010	342	0.063	0.00015	93.9	24.6	0.0018	0.0028	0.0037	0.42	0.048	0.00010	24.3	0.175	0.0093	0.0045	1.91	4.8	***0.0029***	37.4	0.00044	36.4	155	0.00006	0.0253	574
124	0.049	0.00067	0.0025	0.035	0.0010	342	0.063	0.00015	93.9	24.7	0.0018	0.0028	0.0037	0.42	0.048	0.00010	24.3	0.175	0.0093	0.0045	1.91	4.8	***0.0029***	37.4	0.00044	36.4	155	0.00006	0.0253	574
125	0.049	0.00067	0.0025	0.035	0.0010	342	0.063	0.00015	94.0	24.7	0.0018	0.0028	0.0037	0.42	0.048	0.00010	24.3	0.175	0.0093	0.0045	1.91	4.8	***0.0029***	37.4	0.00044	36.4	155	0.00006	0.0254	574
126	0.049	0.00067	0.0025	0.035	0.0010	342	0.063	0.00015	94.0	24.7	0.0018	0.0028	0.0037	0.42	0.048	0.00010	24.3	0.175	0.0093	0.0045	1.91	4.8	***0.0029***	37.4	0.00044	36.4	155	0.00006	0.0254	574
127	0.049	0.00067	0.0025	0.035	0.0010	342	0.063	0.00015	94.0	24.7	0.0018	0.0028	0.0037	0.42	0.048	0.00010	24.3	0.175	0.0094	0.0045	1.91	4.8	***0.0029***	37.4	0.00044	36.4	155	0.00006	0.0254	574
128	0.049	0.00067	0.0025	0.035	0.0010	342	0.063	0.00015	94.0	24.7	0.0018	0.0028	0.0037	0.42	0.048	0.00010	24.3	0.175	0.0094	0.0045	1.91	4.8	***0.0029***	37.4	0.00044	36.4	155	0.00006	0.0255	574
129	0.049	0.00067	0.0025	0.035	0.0010	342	0.063	0.00015	94.0	24.7	0.0018	0.0028	0.0037	0.42	0.048	0.00010	24.3	0.175	0.0094	0.0045	1.91	4.8	***0.0029***	37.4	0.00045	36.5	155	0.00006	0.0256	574
130	0.049	0.00067	0.0025	0.035	0.0010	342	0.063	0.00015	94.0	24.7	0.0018	0.0028	0.0037	0.42	0.048	0.00010	24.3	0.175	0.0094	0.0045	1.91	4.8	***0.0029***	37.4	0.00045	36.5	155	0.00006	0.0256	574
131	0.049	0.00067	0.0025	0.035	0.0010	342	0.063	0.00015	94.0	24.7	0.0018	0.0028	0.0037	0.42	0.048	0.00010	24.3	0.175	0.0094	0.0045	1.91	4.8	***0.0029***	37.4	0.00045	36.5	155	0.00006	0.0256	574
132	0.049	0.00067	0.0025	0.035	0.0010	342	0.063	0.00015	94.1	24.7	0.0018	0.0028	0.0038	0.42	0.048	0.00010	24.3	0.175	0.0094	0.0045	1.91	4.8	***0.0029***	37.4	0.00045	36.5	155	0.00006	0.0257	575
133	0.049	0.00067	0.0025	0.035	0.0010	342	0.063	0.00015	94.1	24.7	0.0018	0.0028	0.0038	0.42	0.048	0.00010	24.3	0.176	0.0094	0.0045	1.91	4.8	***0.0029***	37.4	0.00045	36.5	155	0.00006	0.0257	575
134	0.050	0.00067	0.0025	0.035	0.0010	342	0.063	0.00015	94.1	24.7	0.0018	0.0028	0.0038	0.42	0.048	0.00010	24.3	0.176	0.0094	0.0045	1.91	4.8	***0.0029***	37.4	0.00045	36.5	156	0.00006	0.0258	575
135	0.050	0.00067	0.0025	0.035	0.0010	342	0.063	0.00015	94.1	24.7	0.0018	0.0028	0.0038	0.42	0.048	0.00010	24.3	0.176	0.0095	0.0045	1.91	4.8	***0.0029***	37.4	0.00045	36.5	156	0.00006	0.0258	575
136	0.050	0.00067	0.0025	0.035	0.0010	342	0.063	0.00015	94.1	24.7	0.0018	0.0028	0.0038	0.42	0.048	0.00010	24.3	0.176	0.0095	0.0045	1.91	4.8	***0.0029***	37.4	0.00045	36.5	156	0.00006	0.0258	575

Table 9. Predicted Total Concentrations at Whitlow Ranch Dam - Alternative 4

Years since Mine Start	Al	Sb	As	Ba	Be	HCO3	B	Cd	Ca	Cl	Cr	Co	Cu	F	Fe	Pb	Mg	Mn	Mo	Ni	NO3-N	K	Se	Si	Ag	Na	SO4	Tl	Zn	TDS
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
137	0.050	0.00067	0.0025	0.035	0.0010	342	0.063	0.00015	94.1	24.7	0.0018	0.0028	0.0038	0.42	0.048	0.00010	24.3	0.176	0.0095	0.0046	1.91	4.8	***0.0029***	37.4	0.00045	36.5	156	0.00006	0.0259	575
138	0.050	0.00067	0.0025	0.035	0.0010	342	0.063	0.00015	94.2	24.7	0.0018	0.0028	0.0038	0.42	0.048	0.00010	24.4	0.176	0.0095	0.0046	1.91	4.8	***0.0029***	37.4	0.00045	36.5	156	0.00006	0.0259	575
139	0.050	0.00067	0.0025	0.035	0.0010	342	0.063	0.00015	94.2	24.7	0.0018	0.0028	0.0038	0.42	0.048	0.00010	24.4	0.176	0.0095	0.0046	1.91	4.8	***0.0029***	37.4	0.00045	36.5	156	0.00006	0.0260	575
140	0.050	0.00068	0.0025	0.035	0.0010	342	0.063	0.00015	94.2	24.7	0.0018	0.0028	0.0038	0.42	0.048	0.00010	24.4	0.176	0.0095	0.0046	1.91	4.8	***0.0029***	37.4	0.00045	36.5	156	0.00006	0.0261	575
141	0.050	0.00068	0.0025	0.035	0.0010	342	0.063	0.00015	94.2	24.7	0.0018	0.0028	0.0038	0.42	0.048	0.00010	24.4	0.176	0.0095	0.0046	1.91	4.8	***0.0029***	37.4	0.00045	36.5	156	0.00006	0.0261	575
142	0.050	0.00068	0.0025	0.035	0.0010	342	0.063	0.00016	94.2	24.7	0.0018	0.0028	0.0038	0.42	0.048	0.00010	24.4	0.176	0.0095	0.0046	1.91	4.8	***0.0030***	37.4	0.00045	36.5	156	0.00006	0.0261	576
143	0.050	0.00068	0.0025	0.035	0.0010	342	0.064	0.00016	94.2	24.7	0.0018	0.0028	0.0038	0.42	0.048	0.00010	24.4	0.176	0.0096	0.0046	1.91	4.8	***0.0030***	37.4	0.00045	36.5	156	0.00006	0.0262	576
144	0.050	0.00068	0.0025	0.035	0.0010	342	0.064	0.00016	94.3	24.7	0.0018	0.0028	0.0038	0.42	0.048	0.00010	24.4	0.176	0.0096	0.0046	1.91	4.8	***0.0030***	37.4	0.00046	36.5	156	0.00006	0.0262	576
145	0.050	0.00068	0.0025	0.035	0.0010	342	0.064	0.00016	94.3	24.7	0.0019	0.0028	0.0038	0.42	0.048	0.00010	24.4	0.176	0.0096	0.0046	1.91	4.8	***0.0030***	37.4	0.00046	36.5	156	0.00006	0.0263	576
146	0.050	0.00068	0.0025	0.035	0.0010	342	0.064	0.00016	94.3	24.7	0.0019	0.0028	0.0038	0.42	0.048	0.00010	24.4	0.176	0.0096	0.0046	1.91	4.8	***0.0030***	37.4	0.00046	36.5	156	0.00006	0.0264	576
147	0.050	0.00068	0.0025	0.035	0.0010	342	0.064	0.00016	94.3	24.7	0.0019	0.0028	0.0038	0.42	0.048	0.00010	24.4	0.176	0.0096	0.0046	1.91	4.9	***0.0030***	37.4	0.00046	36.5	156	0.00006	0.0264	576
148	0.050	0.00068	0.0025	0.035	0.0010	342	0.064	0.00016	94.3	24.7	0.0019	0.0028	0.0038	0.42	0.048	0.00010	24.4	0.176	0.0096	0.0046	1.91	4.9	***0.0030***	37.4	0.00046	36.5	156	0.00006	0.0264	576
149	0.050	0.00068	0.0025	0.035	0.0010	342	0.064	0.00016	94.3	24.7	0.0019	0.0028	0.0038	0.42	0.048	0.00010	24.4	0.176	0.0096	0.0046	1.91	4.9	***0.0030***	37.4	0.00046	36.5	157	0.00006	0.0264	576
150	0.050	0.00068	0.0025	0.035	0.0010	342	0.064	0.00016	94.3	24.7	0.0019	0.0028	0.0039	0.42	0.048	0.00010	24.4	0.176	0.0096	0.0046	1.91	4.9	***0.0030***	37.4	0.00046	36.5	157	0.00006	0.0264	576
151	0.050	0.00068	0.0025	0.035	0.0010	342	0.064	0.00016	94.3	24.7	0.0018	0.0028	0.0038	0.42	0.048	0.00010	24.4	0.176	0.0095	0.0046	1.91	4.8	***0.0030***	37.4	0.00045	36.5	156	0.00006	0.0261	576
152	0.050	0.00068	0.0025	0.035	0.0010	342	0.064	0.00016	94.3	24.7	0.0018	0.0028	0.0039	0.42	0.048	0.00010	24.4	0.176	0.0096	0.0046	1.91	4.8	***0.0030***	37.4	0.00046	36.5	157	0.00006	0.0263	576
153	0.050	0.00068	0.0025	0.035	0.0010	342	0.064	0.00016	94.4	24.7	0.0019	0.0028	0.0039	0.42	0.048	0.00010	24.4	0.176	0.0096	0.0046	1.91	4.9	***0.0030***	37.4	0.00046	36.5	157	0.00006	0.0264	576
154	0.050	0.00068	0.0025	0.035	0.0010	342	0.064	0.00016	94.4	24.7	0.0019	0.0028	0.0039	0.42	0.048	0.00010	24.4	0.176	0.0096	0.0046	1.91	4.9	***0.0030***	37.4	0.00046	36.5	157	0.00006	0.0264	576
155	0.050	0.00068	0.0025	0.035	0.0010	342	0.064	0.00016	94.4	24.7	0.0019	0.0028	0.0039	0.42	0.048	0.00010	24.4	0.176	0.0096	0.0046	1.91	4.9	***0.0030***	37.4	0.00046	36.5	157	0.00006	0.0264	576
156	0.050	0.00068	0.0025	0.035	0.0010	342	0.064	0.00016	94.4	24.7	0.0019	0.0028	0.0039	0.42	0.048	0.00010	24.4	0.176	0.0096	0.0046	1.91	4.9	***0.0030***	37.4	0.00046	36.5	157	0.00006	0.0264	577
157	0.050	0.00068	0.0025	0.035	0.0010	342	0.064	0.00016	94.4	24.7	0.0018	0.0028	0.0039	0.42	0.048	0.00010	24.5	0.176	0.0096	0.0046	1.91	4.9	***0.0030***	37.4	0.00046	36.5	157	0.00006	0.0264	577
158	0.050	0.00068	0.0025	0.035	0.0010	342	0.064	0.00016	94.4	24.7	0.0018	0.0028	0.0039	0.42	0.048	0.00010	24.5	0.176	0.0096	0.0046	1.91	4.9	***0.0030***	37.4	0.00046	36.5	157	0.00006	0.0265	577
159	0.050	0.00068	0.0025	0.035	0.0010	342	0.064	0.00016	94.4	24.7	0.0019	0.0028	0.0039	0.42	0.048	0.00010	24.5	0.176	0.0096	0.0046	1.91	4.9	***0.0030***	37.4	0.00046	36.5	157	0.00006	0.0265	577
160	0.050	0.00068	0.0025	0.035	0.0010	342	0.064	0.00016	94.4	24.7	0.0018	0.0028	0.0039	0.42	0.048	0.00010	24.5	0.176	0.0096	0.0046	1.91	4.9	***0.0030***	37.4	0.00046	36.5	157	0.00006	0.0265	577
161	0.050	0.00068	0.0025	0.035	0.0010	342	0.064	0.00016	94.4	24.7	0.0018	0.0028	0.0039	0.42	0.048	0.00010	24.5	0.176	0.0096	0.0046	1.91	4.9	***0.0030***	37.4	0.00046	36.5	157	0.00006	0.0265	577
162	0.050	0.00068	0.0025	0.035	0.0010	342	0.064	0.00016	94.4	24.7	0.0018	0.0028	0.0039	0.42	0.048	0.00010	24.5	0.176	0.0096	0.0046	1.91	4.9	***0.0030***	37.4	0.00046	36.5	157	0.00006	0.0265	577
163	0.050	0.00068	0.0025	0.035	0.0010	342	0.064	0.00016	94.4	24.7	0.0018	0.0029	0.0039	0.42	0.048	0.00010	24.5	0.176	0.0096	0.0046	1.91	4.9	***0.0030***	37.4	0.00046	36.5	157	0.00006	0.0265	577
164	0.050	0.00068	0.0025	0.035	0.0010	342	0.064	0.00016	94.5	24.7	0.0018	0.0029	0.0039	0.42	0.048	0.00010	24.5	0.176	0.0096	0.0046	1.91	4.9	***0.0030***	37.4	0.00046	36.5	157	0.00006	0.0265	577
165	0.050	0.00068	0.0025	0.035	0.0010	342	0.064	0.00016	94.5	24.7	0.0018	0.0029	0.0039	0.42	0.048	0.00010	24.5	0.176	0.0096	0.0046	1.91	4.9	***0.0030***	37.4	0.00046	36.5	157	0.00006	0.0265	577
166	0.050	0.00068	0.0025	0.035	0.0010	342	0.064	0.00016	94.5	24.7	0.0018	0.0029	0.0039	0.42	0.048	0.00010	24.5	0.176	0.0096	0.0046	1.91	4.9	***0.0030***	37.4	0.00046	36.5	157	0.00006	0.0265	577
167	0.050	0.00068	0.0025	0.035	0.0010	342	0.064	0.00016	94.5	24.7	0.0018	0.0029	0.0039	0.42	0.048	0.00010	24.5	0.176	0.0096	0.0046	1.91	4.9	***0.0030***	37.4	0.00046	36.5	157	0.00006	0.0265	577
168	0.050	0.00068	0.0025	0.035	0.0010	342	0.064	0.00016	94.5	24.7	0.0018	0.0029	0.0039	0.42	0.048	0.00010	24.5	0.176	0.0096	0.0046	1.91	4.9	***0.0030***	37.4	0.00046	36.5	157	0.00006	0.0266	577
169	0.050	0.00068	0.0025	0.035	0.0010	342	0.064	0.00016	94.5	24.7	0.0018	0.0029	0.0039	0.42	0.048	0.00010	24.5	0.176	0.0096	0.0046	1.91	4.9	***0.0030***	37.4	0.00046	36.5	157	0.00006	0.0266	577
170	0.050	0.00068	0.0025	0.035	0.0010	342	0.064	0.00016	94.5	24.7	0.0018	0.0029	0.0039	0.42	0.048	0.00010	24.5	0.176	0.0096	0.0046	1.91	4.9	***0.0030***	37.4	0.00046	36.5	157	0.00006	0.0266	577
171	0.050	0.00068	0.0025	0.035	0.0010	342	0.064	0.00016	94.5	24.7	0.0018	0.0029	0.0039	0.42	0.048	0.00010	24.5	0.176	0.0096	0.0046	1.91	4.9	***0.0030***	37.4	0.00046	36.5	157	0.00006	0.0266	577
172	0.051	0.00068	0.0025	0.035	0.0010	342	0.064	0.00016	94.5	24.7	0.0018	0.0029	0.0039	0.42	0.048	0.00010	24.5	0.176	0.0096	0.0046	1.91	4.9	***0.0030***	37.4	0.00046	36.5	157	0.00006	0.0266	577
173	0.051	0.00068	0.0025	0.035	0.0010	342	0.064	0.00016	94.5	24.7	0.0018	0.0029	0.0039	0.42	0.048	0.00010	24.5	0.176	0.0096	0.0046	1.91	4.9	***0.0030***	37.4	0.00046	36.5	157	0.00006	0.0266	577
174	0.051	0.00068	0.0025	0.035	0.0010	342	0.064	0.00016	94.5	24.7	0.0018	0.0029	0.0039	0.42	0.048	0.00010	24.5	0.176	0.0096	0.0047	1.91	4.9	***0.0030***	37.4	0.00046	36.5	157	0.00006	0.0267	578
175	0.051	0.00069	0.0025	0.035	0.0010	342	0.064	0.00016	94.5	24.7	0.0018	0.0029	0.0039	0.42	0.048	0.00010	24.5	0.176	0.0096	0.0047	1.91	4.9	***0.0030***	37.4	0.00046	36.5	157	0.00006	0.0267	578
176	0.051	0.00069	0.0025	0.035	0.0010	342	0.064	0.00016	94.6	24.7	0.0019	0.0029	0.0039	0.42	0.048	0.00010	24.5	0.176	0.0096	0.0047	1.91	4.9	***0.0030***	37.4	0.00046	36.5	158	0.00006	0.0267	578
177	0.051	0.00069	0.0025	0.035	0.0010	342	0.064	0.00016	94.6	24.7	0.0019	0.0029	0.0039	0.42	0.048	0.00010	24.5	0.176	0.0096	0.0047	1.91	4.9	***0.0030***	37.4	0.00046	36.5	158	0.00006	0.0267	578
178	0.051	0.00069	0.0025	0.035	0.0010	342	0.064	0.00016	94.6	24.7	0.0018	0.0029	0.0039	0.42	0.048	0.00010	24.5	0.176	0.0096	0.0047	1.91	4.9	***0.0030***	37.4	0.00046	36.5	158	0.00006	0.0267	578
179	0.051	0.00069	0.0025	0.035	0.0010	342	0.064	0.00016	94.6	24.7	0.0019	0.0029	0.0039	0.42	0.048	0.00010	24.6	0.176	0.0097	0.0047	1.91	4.9	***0.0030***	37.4	0.00046	36.5	158	0.00006	0.0268	578
180	0.051	0.00069	0.0025	0.035	0.0010	342	0.064	0.00016	94.6	24.7	0.0019	0.0029	0.0039	0.42	0.048	0.00010	24.6	0.176	0.0097	0.0047	1.91	4.9	***0.0030***	37.4	0.00046	36.5	158	0.00006	0.0268	578
181	0.051	0.00069	0.0025	0.035	0.0010	342	0.064	0.00016	94.6	24.7	0.0019	0.0029	0.0039	0.42	0.048	0.00010	24.6	0.176	0.0097	0.0047	1.91	4.9	***0.0030***	37.4	0.00046	36.5	158	0.00006	0.0268	578
182	0.051	0.00069	0.0025	0.035	0.0010	342	0.064	0.00016	94.6	24.7	0.0019	0.0029	0.0039	0.42	0.048	0.00010	24.6	0.176	0.0097	0.0047	1.91	4.9	***0.0030***	37.4	0.00046	36.5	158	0.00006	0.0268	578
183	0.051	0.00069	0.0025	0.035	0.0010	342	0.064	0.00016	94.6	24.7	0.0019	0.0029	0.0039	0.42	0.048	0.00010	24.6	0.176	0.0097	0.0047	1.91	4.9	***0.0030***	37.4	0.00046	36.5	158	0.00006	0.0269	578
184	0.051	0.00069	0.0025	0.035	0.0010	342	0.064	0.00016	94.6	24.7	0.0019	0.0029	0.0040	0.42	0.048	0.00010	24.6	0.176	0.0097	0.0047	1.91	4.9	***0.0030***	37.4	0.00046	36.5	158	0.00006	0.0269	578
185	0.051	0.00069	0.0025	0.035	0.0010	342	0.064	0.00016	94.6	24.7	0.0019	0.0029	0.0040	0.42	0.048	0.00010	24.6	0.176	0.0097	0.0047	1.91	4.9	***0.0030***	37.4	0.00046	36.5	158	0.00006	0.0269	578
186	0.051	0.00069	0.0025	0.035	0.0010	342	0.064	0.00016	94.6	24.7	0.0019	0.0029	0.0040	0.42	0.048	0.00010	24.6	0.176	0.0097	0.0047	1.91	4.9	***0.0030***	37.4	0.00046	36.5	158	0.00006	0.0269	578
187	0.051	0.00069	0.0025	0.035	0.0010	342	0.064	0.00016	94.6	24.7	0.0019	0.0029	0.0040	0.42	0.048	0.00010	24.6	0.176	0.0097	0.0047	1.91	4.9	***0.0030***	37.4	0.00046	36.5	158	0.00006	0.0270	578
188	0.051	0.00069	0.0025	0.035	0.0010	342	0.064	0.00016	94.6	24.7	0.0019	0.0029	0.0040	0.42	0.048	0.00010	24.6	0.176	0.0097	0.0047	1.91	4.9	***0.0030***	37.4	0.00046	36.5	158	0.00006	0.0270	578
189	0.051	0.00069	0.0025	0.035	0.0010	342	0.064	0.00016	94.7	24.7	0.0019	0.0029	0.0040	0.42	0.048	0.00010	24.6	0.176	0.0097	0.0047	1.91	4.9	***0.0030***	37.4	0.00046	36.5	158	0.00006	0.0270	578
190	0.051	0.00069	0.0025	0.035	0.0010	342	0.064	0.00016	94.7	24.7	0.0019	0.0029	0.0040	0.42	0.048	0.00010	24.6	0.176	0.0097	0.0047	1.91	4.9	***0.0030***	37.4	0.00046	36.5	158	0.00006	0.0270	578
191	0.051	0.00069	0.0025	0.035	0.0010	342	0.064	0.00016	94.7	24.7	0.0019	0.0029	0.0040	0.42	0.048	0.00010	24.6	0.176	0.0097	0.0047	1.91	4.9	***0.0030***	37.4	0.00046	36.5	158	0.00006	0.0271	578
192	0.051	0.00069	0.0025	0.035	0.0010	342	0.064	0.00016	94.7	24.7	0.0019	0.0029	0.0040	0.42	0.048	0.00010	24.6	0.176	0.0097	0.0047	1.91	4.9	***0.0030***	37.4	0.00046	36.5	158	0.00006	0.0271	579
193	0.051	0.00069	0.0025	0.035	0.0010	342	0.064	0.00016	94.7	24.7	0.0019	0.0029	0.0040	0.42	0.048	0.00010	24.6	0.176	0.0097	0.0047	1.91	4.9	***0.0030***	37.4	0.00046	36.5	158	0.00006	0.0271	579
194	0.051	0.00069	0.0025	0.035	0.0010	342	0.064	0.00016	94.7	24.7	0.0019	0.0029	0.0040	0.42	0.048	0.00010	24.6	0.176	0.0098	0.0047	1.91	4.9	***0.0031***	37.4	0.00046	36.5	158	0.00006	0.0272	579
195	0.051	0.00069	0.0025	0.035	0.0010	342	0.064	0.00016	94.7	24.7	0.0019	0.0029	0.0040	0.42	0.048	0.00010	24.6	0.176	0.0098	0.0047	1.91	4.9	***0.0031***	37.4	0.00046	36.5	158	0.00006	0.0272	579
196	0.051	0.00069	0.0025	0.035	0.0010	342	0.064	0.00016	94.7	24.7	0.0019	0.0029	0.0040	0.42	0.048	0.00010	24.6	0.176	0.0098	0.0047	1.91	4.9	***0.0031***	37.4	0.00046	36.5	158	0.00006	0.0272	579
197	0.051	0.00069	0.0025	0.035	0.0010	342	0.064	0.00016	94.7	24.7	0.0019	0.0029	0.0040	0.42	0.048	0.00010	24.7	0.176	0.0098	0.0047	1.91	4.9	***0.0031***	37.4	0.00046	36.5	158	0.00006	0.0273	579
198	0.051	0.00069	0.0025	0.035	0.0010	342	0.064	0.00016	94.7	24.7	0.0019	0.0029	0.0040	0.42	0.048	0.00010	24.7	0.176	0.0098	0.0047	1.91	4.9	***0.0031***	37.4	0.00046	36.5	158	0.00006	0.0273	579
199	0.051	0.00069	0.0025	0.035	0.0010	342	0.064	0.00016	94.7	24.7	0.0019	0.0029	0.0040	0.42	0.048	0.00010	24.7	0.176	0.0098	0.0047	1.91	4.9	***0.0031***	37.4	0.00046	36.5	159	0.00006	0.0273	579
200	0.051	0.00069	0.0025	0.035	0.0010	342	0.064	0.00016	94.7	24.7	0.0019	0.0029	0.0040	0.42	0.048	0.00010	24.7	0.176	0.0098	0.0047	1.91	4.9	***0.0031***	37.4	0.00046	36.5	159	0.00006	0.0273	579
201	0.051	0.00069	0.0025	0.035	0.0010	342	0.064	0.00016	94.7	24.7	0.0019	0.0029	0.0040	0.42	0.048	0.00010	24.7	0.176	0.0098	0.0047	1.91	5.0	***0.0031***	37.4	0.00046	36.5	159	0.00006	0.0274	579
202	0.051	0.00069	0.0025	0.035	0.0010	342	0.064	0.00016	94.7	24.7	0.0019	0.0029	0.0040	0.42	0.048	0.00010	24.7	0.176	0.0097	0.0047	1.91	4.9	***0.0031***	37.4	0.00046	36.5	158	0.00006	0.0272	579
203	0.051	0.00069	0.0025	0.035	0.0010	342	0.064	0.00016	94.7	24.7	0.0019	0.0029	0.0040	0.42	0.048	0.00010	24.7	0.176	0.0098	0.0047	1.91	5.0	***0.0031***	37.4	0.00046	36.5	159	0.00006	0.0274	579
204	0.051	0.00069	0.0025	0.035	0.0010	342	0.064	0.00016	94.8	24.7	0.0019	0.0029	0.0040	0.42	0.048	0.00010	24.7	0.177	0.0098	0.0048	1.91	5.0	***0.0031***	37.4	0.00046	36.5	159	0.00006	0.0275	579

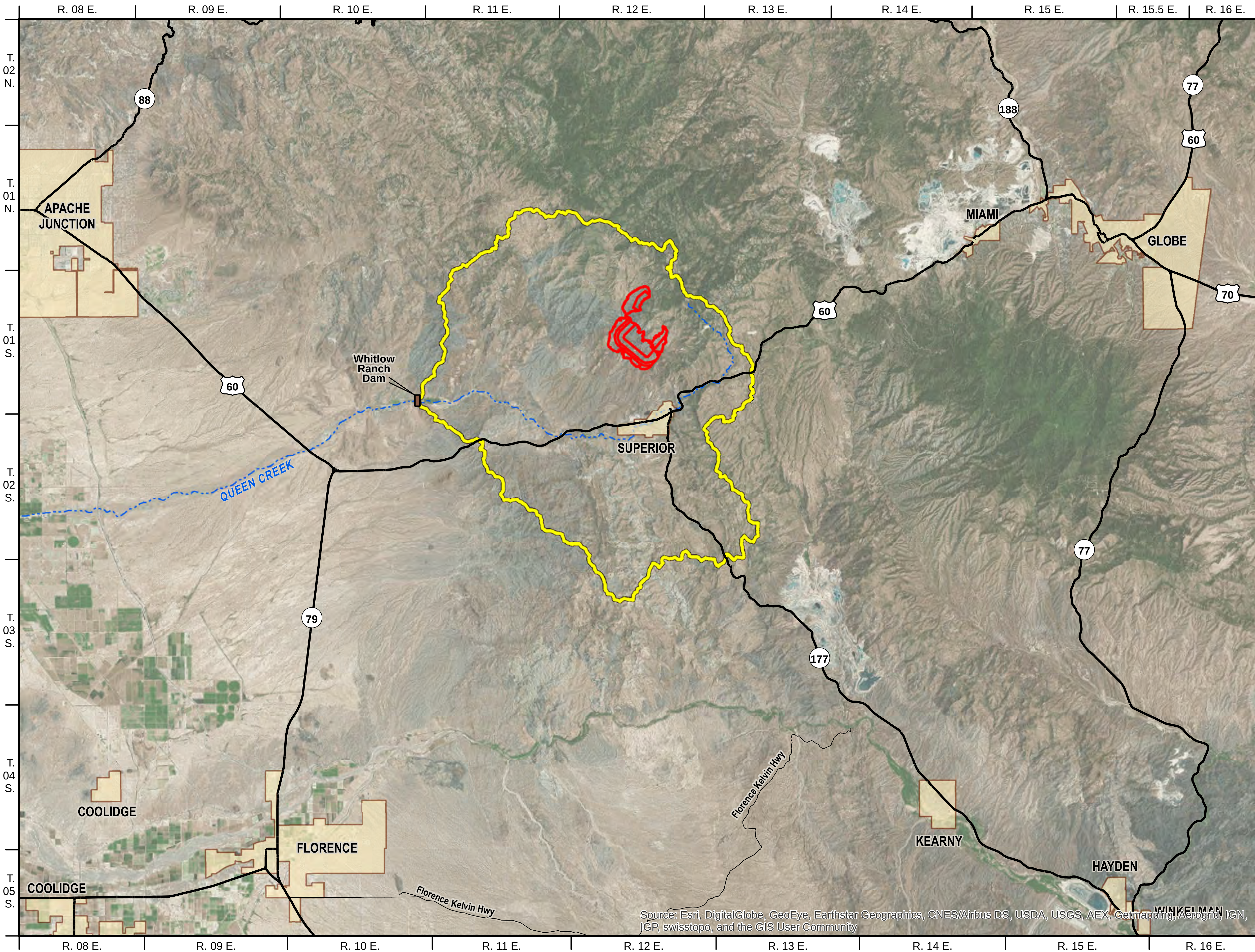
Table 9. Predicted Total Concentrations at Whitlow Ranch Dam - Alternative 4

Years since Mine Start	Al mg/L	Sb mg/L	As mg/L	Ba mg/L	Be mg/L	HCO3 mg/L	B mg/L	Cd mg/L	Ca mg/L	Cl mg/L	Cr mg/L	Co mg/L	Cu mg/L	F mg/L	Fe mg/L	Pb mg/L	Mg mg/L	Mn mg/L	Mo mg/L	Ni mg/L	NO3-N mg/L	K mg/L	Se mg/L	Si mg/L	Ag mg/L	Na mg/L	SO4 mg/L	Tl mg/L	Zn mg/L	TDS mg/L
205	0.051	0.00070	0.0025	0.035	0.0010	342	0.064	0.00016	94.8	24.7	0.0019	0.0029	0.0040	0.42	0.048	0.00010	24.7	0.177	0.0098	0.0048	1.91	5.0	***0.0031***	37.4	0.00047	36.5	159	0.00006	0.0276	579
206	0.051	0.00070	0.0025	0.035	0.0010	342	0.064	0.00016	94.8	24.7	0.0019	0.0029	0.0040	0.42	0.048	0.00010	24.7	0.177	0.0098	0.0048	1.91	5.0	***0.0031***	37.4	0.00047	36.5	159	0.00006	0.0276	579
207	0.051	0.00070	0.0025	0.035	0.0010	342	0.064	0.00016	94.8	24.7	0.0019	0.0029	0.0040	0.42	0.048	0.00010	24.7	0.177	0.0099	0.0048	1.91	5.0	***0.0031***	37.4	0.00047	36.5	159	0.00006	0.0276	580
208	0.051	0.00070	0.0025	0.035	0.0010	342	0.064	0.00016	94.8	24.7	0.0019	0.0029	0.0040	0.42	0.048	0.00010	24.7	0.177	0.0099	0.0048	1.91	5.0	***0.0031***	37.4	0.00047	36.5	159	0.00006	0.0277	580
209	0.051	0.00070	0.0025	0.035	0.0010	342	0.064	0.00016	94.8	24.7	0.0019	0.0030	0.0040	0.42	0.048	0.00010	24.7	0.177	0.0099	0.0048	1.91	5.0	***0.0031***	37.4	0.00047	36.5	159	0.00006	0.0277	580
210	0.051	0.00070	0.0025	0.035	0.0010	342	0.064	0.00016	94.8	24.7	0.0019	0.0030	0.0040	0.42	0.048	0.00010	24.7	0.177	0.0099	0.0048	1.91	5.0	***0.0031***	37.4	0.00047	36.5	159	0.00006	0.0278	580
211	0.051	0.00070	0.0025	0.035	0.0010	342	0.064	0.00016	94.8	24.7	0.0019	0.0030	0.0040	0.42	0.048	0.00010	24.7	0.177	0.0099	0.0048	1.91	5.0	***0.0031***	37.4	0.00047	36.5	159	0.00006	0.0278	580
212	0.051	0.00070	0.0025	0.035	0.0010	342	0.064	0.00016	94.8	24.7	0.0019	0.0030	0.0040	0.42	0.048	0.00010	24.7	0.177	0.0099	0.0048	1.91	5.0	***0.0031***	37.4	0.00047	36.5	159	0.00006	0.0278	580
213	0.051	0.00070	0.0025	0.035	0.0010	342	0.064	0.00016	94.8	24.7	0.0019	0.0030	0.0040	0.42	0.048	0.00010	24.7	0.177	0.0099	0.0048	1.91	5.0	***0.0031***	37.4	0.00047	36.5	159	0.00006	0.0279	580
214	0.051	0.00070	0.0025	0.035	0.0010	342	0.064	0.00016	94.8	24.7	0.0019	0.0030	0.0040	0.42	0.048	0.00010	24.8	0.177	0.0099	0.0048	1.91	5.0	***0.0031***	37.4	0.00047	36.5	159	0.00006	0.0279	580
215	0.051	0.00070	0.0025	0.035	0.0010	342	0.064	0.00016	94.9	24.7	0.0019	0.0030	0.0040	0.42	0.048	0.00010	24.8	0.177	0.0099	0.0048	1.91	5.0	***0.0031***	37.4	0.00047	36.5	159	0.00006	0.0279	580
216	0.051	0.00070	0.0025	0.035	0.0010	342	0.064	0.00016	94.9	24.7	0.0019	0.0030	0.0040	0.42	0.048	0.00010	24.8	0.177	0.0099	0.0048	1.91	5.0	***0.0031***	37.4	0.00047	36.5	159	0.00006	0.0280	580
217	0.051	0.00070	0.0025	0.035	0.0010	342	0.064	0.00016	94.9	24.7	0.0019	0.0030	0.0041	0.42	0.048	0.00010	24.8	0.177	0.0100	0.0048	1.91	5.0	***0.0031***	37.4	0.00047	36.5	159	0.00006	0.0280	580
218	0.051	0.00070	0.0025	0.035	0.0010	342	0.064	0.00016	94.9	24.7	0.0019	0.0030	0.0041	0.42	0.048	0.00010	24.8	0.177	0.0100	0.0048	1.91	5.0	***0.0031***	37.4	0.00047	36.5	159	0.00006	0.0281	580
219	0.051	0.00070	0.0025	0.035	0.0010	342	0.065	0.00016	94.9	24.7	0.0019	0.0030	0.0041	0.42	0.048	0.00011	24.8	0.177	0.0100	0.0048	1.91	5.0	***0.0031***	37.4	0.00047	36.5	159	0.00006	0.0281	580
220	0.051	0.00070	0.0025	0.035	0.0010	342	0.065	0.00016	94.9	24.7	0.0019	0.0030	0.0041	0.42	0.048	0.00011	24.8	0.177	0.0100	0.0048	1.91	5.0	***0.0031***	37.4	0.00047	36.5	160	0.00006	0.0281	580
221	0.051	0.00070	0.0025	0.035	0.0010	342	0.065	0.00016	94.9	24.7	0.0019	0.0030	0.0041	0.42	0.048	0.00011	24.8	0.177	0.0100	0.0048	1.91	5.0	***0.0031***	37.4	0.00047	36.5	160	0.00006	0.0282	580
222	0.051	0.00070	0.0025	0.035	0.0010	342	0.065	0.00016	94.9	24.7	0.0019	0.0030	0.0041	0.42	0.048	0.00011	24.8	0.177	0.0100	0.0048	1.91	5.0	***0.0032***	37.4	0.00047	36.5	160	0.00006	0.0282	581
223	0.052	0.00070	0.0025	0.035	0.0010	342	0.065	0.00016	94.9	24.7	0.0019	0.0030	0.0041	0.42	0.048	0.00011	24.8	0.177	0.0100	0.0048	1.91	5.0	***0.0032***	37.4	0.00048	36.5	160	0.00006	0.0283	581
224	0.052	0.00070	0.0025	0.035	0.0010	342	0.065	0.00016	94.9	24.7	0.0019	0.0030	0.0041	0.42	0.048	0.00011	24.8	0.177	0.0100	0.0048	1.91	5.0	***0.0032***	37.4	0.00048	36.5	160	0.00006	0.0283	581
225	0.052	0.00070	0.0025	0.035	0.0010	342	0.065	0.00016	94.9	24.7	0.0019	0.0030	0.0041	0.42	0.048	0.00011	24.8	0.177	0.0100	0.0048	1.91	5.0	***0.0032***	37.4	0.00048	36.5	160	0.00006	0.0284	581
226	0.052	0.00070	0.0025	0.035	0.0010	342	0.065	0.00016	94.9	24.7	0.0019	0.0030	0.0041	0.42	0.048	0.00011	24.8	0.177	0.0101	0.0048	1.91	5.0	***0.0032***	37.4	0.00048	36.5	160	0.00006	0.0284	581
227	0.052	0.00070	0.0025	0.035	0.0010	342	0.065	0.00016	95.0	24.7	0.0019	0.0030	0.0041	0.42	0.048	0.00011	24.8	0.177	0.0101	0.0048	1.91	5.0	***0.0032***	37.4	0.00048	36.5	160	0.00006	0.0285	581
228	0.052	0.00070	0.0025	0.035	0.0010	342	0.065	0.00017	95.0	24.7	0.0019	0.0030	0.0041	0.42	0.048	0.00011	24.8	0.177	0.0101	0.0049	1.91	5.1	***0.0032***	37.4	0.00048	36.5	160	0.00006	0.0285	581
229	0.052	0.00070	0.0025	0.035	0.0010	342	0.065	0.00017	95.0	24.7	0.0019	0.0030	0.0041	0.42	0.048	0.00011	24.8	0.177	0.0101	0.0049	1.91	5.1	***0.0032***	37.4	0.00048	36.5	160	0.00006	0.0285	581
230	0.052	0.00071	0.0025	0.035	0.0010	342	0.065	0.00017	95.0	24.7	0.0019	0.0030	0.0041	0.42	0.048	0.00011	24.8	0.178	0.0101	0.0049	1.91	5.1	***0.0032***	37.4	0.00048	36.5	160	0.00006	0.0286	581
231	0.052	0.00071	0.0025	0.035	0.0010	342	0.065	0.00017	95.0	24.7	0.0019	0.0030	0.0041	0.42	0.048	0.00011	24.9	0.178	0.0101	0.0049	1.91	5.1	***0.0032***	37.4	0.00048	36.5	160	0.00006	0.0286	581
232	0.052	0.00071	0.0025	0.035	0.0010	342	0.065	0.00017	95.0	24.7	0.0019	0.0030	0.0041	0.42	0.048	0.00011	24.9	0.178	0.0101	0.0049	1.91	5.1	***0.0032***	37.4	0.00048	36.5	160	0.00006	0.0287	581
233	0.052	0.00071	0.0025	0.035	0.0010	342	0.065	0.00017	95.0	24.7	0.0019	0.0030	0.0041	0.42	0.048	0.00011	24.9	0.178	0.0101	0.0049	1.91	5.1	***0.0032***	37.4	0.00048	36.5	160	0.00006	0.0287	581
234	0.052	0.00071	0.0025	0.035	0.0010	342	0.065	0.00017	95.0	24.7	0.0019	0.0030	0.0041	0.42	0.048	0.00011	24.9	0.178	0.0101	0.0049	1.91	5.1	***0.0032***	37.4	0.00048	36.5	160	0.00006	0.0288	581
235	0.052	0.00071	0.0025	0.035	0.0010	342	0.065	0.00017	95.0	24.7	0.0019	0.0030	0.0041	0.42	0.048	0.00011	24.9	0.178	0.0102	0.0049	1.91	5.1	***0.0032***	37.4	0.00048	36.5	160	0.00006	0.0288	581
236	0.052	0.00071	0.0025	0.035	0.0010	342	0.065	0.00017	95.0	24.7	0.0019	0.0030	0.0041	0.42	0.048	0.00011	24.9	0.178	0.0102	0.0049	1.91	5.1	***0.0032***	37.4	0.00048	36.5	160	0.00006	0.0289	582
237	0.052	0.00071	0.0025	0.035	0.0010	342	0.065	0.00017	95.0	24.7	0.0019	0.0030	0.0041	0.42	0.048	0.00011	24.9	0.178	0.0102	0.0049	1.91	5.1	***0.0032***	37.4	0.00049	36.5	160	0.00006	0.0289	582
238	0.052	0.00071	0.0025	0.035	0.0010	342	0.065	0.00017	95.0	24.7	0.0019	0.0030	0.0041	0.42	0.048	0.00011	24.9	0.178	0.0102	0.0049	1.91	5.1	***0.0032***	37.4	0.00049	36.5	160	0.00006	0.0290	582
239	0.052	0.00071	0.0025	0.035	0.0010	342	0.065	0.00017	95.0	24.7	0.0019	0.0030	0.0041	0.42	0.048	0.00011	24.9	0.178	0.0102	0.0049	1.91	5.1	***0.0032***	37.4	0.00049	36.5	160	0.00006	0.0290	582
240	0.052	0.00071	0.0025	0.035	0.0010	342	0.065	0.00017	95.1	24.7	0.0019	0.0030	0.0041	0.42	0.048	0.00011	24.9	0.178	0.0102	0.0049	1.91	5.1	***0.0032***	37.4	0.00049	36.5	160	0.00006	0.0291	582
241	0.052	0.00071	0.0025	0.035	0.0010	342	0.065	0.00017	95.1	24.7	0.0019	0.0031	0.0041	0.42	0.048	0.00011	24.9	0.178	0.0102	0.0049	1.91	5.1	***0.0032***	37.4	0.00049	36.5	161	0.00006	0.0291	582
242	0.052	0.00071	0.0025	0.035	0.0010	342	0.065	0.00017	95.1	24.7	0.0019	0.0031	0.0041	0.42	0.048	0.00011	24.9	0.178	0.0102	0.0049	1.91	5.1	***0.0032***	37.4	0.00049	36.5	161	0.00006	0.0292	582
243	0.052	0.00071	0.0025	0.035	0.0010	342	0.065	0.00017	95.1	24.7	0.0019	0.0031	0.0041	0.42	0.048	0.00011	24.9	0.178	0.0103	0.0049	1.91	5.1	***0.0032***	37.4	0.00049	36.5	161	0.00006	0.0292	582
244	0.052	0.00071	0.0025	0.035	0.0010	342	0.065	0.00017	95.1	24.7	0.0019	0.0031	0.0041	0.42	0.048	0.00011	24.9	0.178	0.0103	0.0049	1.91	5.1	***0.0033***	37.4	0.00049	36.5	161	0.00006	0.0293	582
245	0.052	0.00071	0.0025	0.035	0.0010	342	0.065	0.00017	95.1	24.7	0.0019	0.0031	0.0041	0.42	0.048	0.00011	24.9	0.178	0.0103	0.0049	1.91	5.1	***0.0033***	37.4	0.00049	36.5	161	0.00006	0.0293	582
Minimum	0.040	0.00052	0.0024	0.035	0.0010	342	0.057	0.00005	90.3	24.0	0.0015	0.0013	0.0023	0.41	0.048	0.00008	22.4	0.150	0.0030	0.0027	1.90	3.0	0.0007	37.4	0.00004	35.7	136	0.00003	0.0030	546
Maximum	0.052	0.00071	0.0025	0.035	0.0010	342	0.065	0.00017	95.1	24.7	0.0019	0.0031	0.0041	0.42	0.048	0.00011	24.9	0.178	0.0103	0.0049	1.91	5.1	0.0033	37.4	0.00049	36.5	161	0.00006	0.0293	582
Average	0.048	0.00065	0.0025	0.035	0.0010	342	0.062	0.00013	93.4	24.5	0.0018	0.0025	0.0035	0.42	0.048	0.00010	24.0	0.170	0.0082	0.0042	1.91	4.5	0.0025	37.4	0.00037	36.3	152	0.00005	0.0215	570
Surface WQ Standard =		0.03000	0.1500					0.00512 [a]					0.02335 [a]		1.000	0.00833 [a]				0.13433 [a]			0.0020					0.15000	0.3031 [a]	

Notes:

[a] Cd, Cu, Pb, Ni and Zn standards are hardness dependent and were calculated using lowest (most stringent) hardness value recorded for Whitlow Ranch Dam (307 mg/L CaCO3 on 8/25/2017)

1. Constituent concentrations calculated by adding model results to median background constituent concentrations at Whitlow Ranch Dam
2. Surface WQ Standard = Arizona Department of Environmental Quality Water Quality Standard for "Aquatic and wildlife warm" (A&ww) water with chronic exposure (Arizona Administrative Code - Title 18, Ch. 11, Sup. 16-4, 2016)
3. Values in bold italic indicate that concentration is above water quality standard
4. mg/L = milligrams per liter



EXPLANATION

- Proposed TSF Footprint
- Superior Basin Boundary
- City

0 2,500 5,000 7,500 10,000
Meters

0 2 4 6 8 10
Miles

RESOLUTION COPPER

LOCATION MAP
TSF ALTERNATIVE 4

MONTGOMERY & ASSOCIATES
Water Resource Consultants

2018

FIGURE 1

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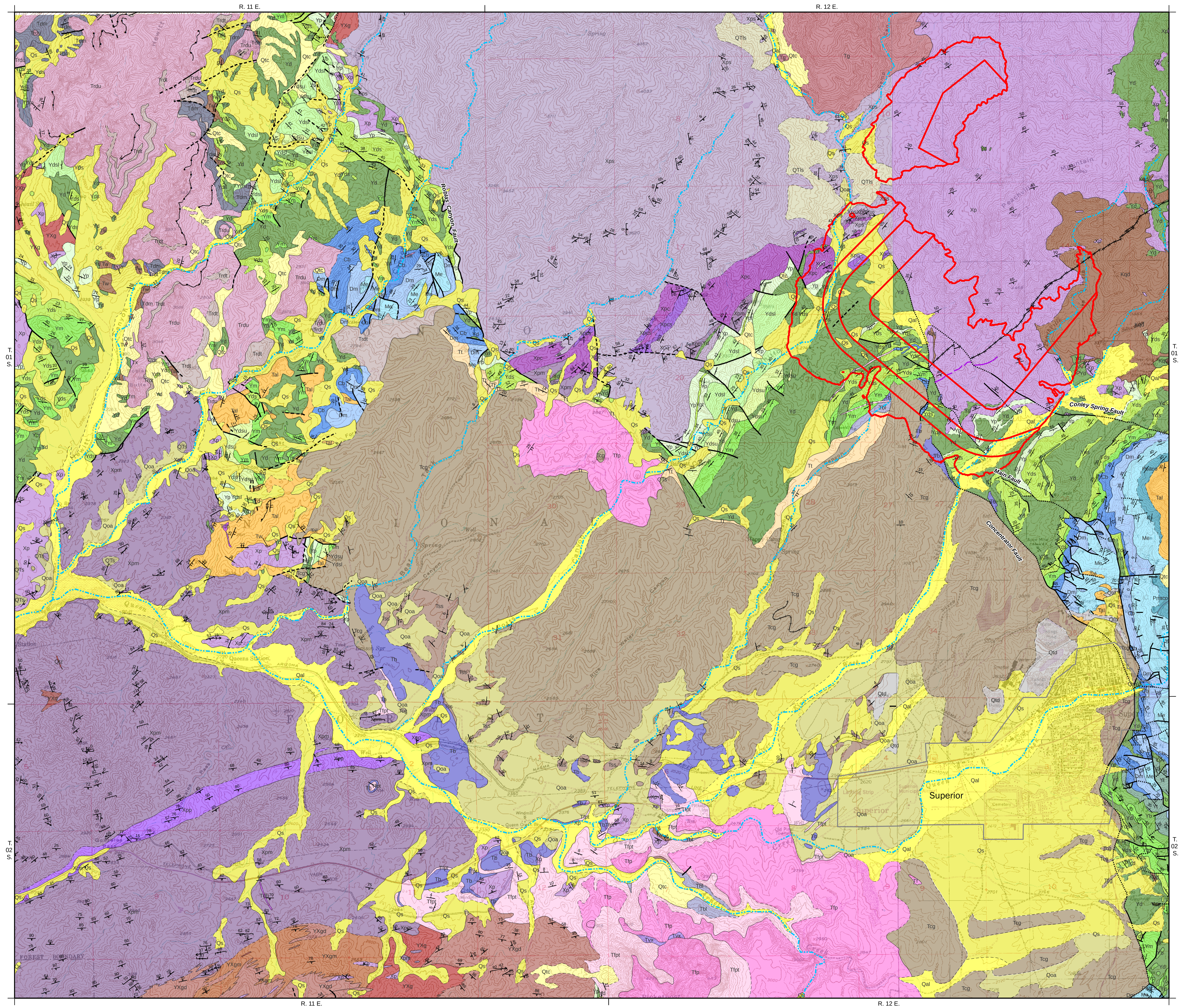

(Geology modified from Spencer and others, 1998; Peterson, 1969, and Spencer and Richard, 1995)

EXPLANATION

Proposed TSF Footprint

Geologic Structural Features

- Felsic Dike
- Fault
- Fault - approximate
- Fault - concealed
- Quartz Vein

Contact

- Contact
- Contact - approximate
- Contact - inferred
- Marker Horizon
- Contact Between Pinal Schist Clast-rich Congomerate Below and Dripping Spring Quartzite Clast-rich Conglomerate Above

FOLIATION; strike and dip

Broken and wavy lines may be used to indicate approximate measurments or curviplanar foliation in conjunction with any symbol

Primary foliation

BEDDING

upright vertical overturned irregular approximate

dots on strike line indicate facing direction based on primary features

FLOW FOLIATION

flow banding in lavas or hypabyssal intrusions, eutaxitic foliation in welded tuffs; igneous flow foliation in plutons

Tectonic foliations

Generic foliation

Compositional banding, > 1 cm-scale

Banding formed by transposed bedding

Banding of uncertain or metamorphic origin

Compositional banding, < 1 cm-scale

Banding of metamorphic origin

Schistosity, continuous cleavage

Disjunct cleavage (fracture cleavage)

Disjunct cleavage parallel to bedding

Superimposed Fabrics symbols as above, double dip tics indicate that fabric is superimposed

Axial surface to small-scale crenulation

Disjunct cleavage

Compositional layering <1cm thick, formed by transposition of thin compositional layering

Similar to above, but fabric is very planar; quartz veins mostly transposed to concordant lenses

LINEAR FEATURES; trend and plunge

MINOR FOLD HINGE, showing plunge direction

upright, symmetrical fold

cascade fold

asymmetrical fold showing vergence ('S' or 'Z').

LINEATIONS

Mineral lineation in L-tectonites

APPARENT DIP

Trace of bedding on cliffs or steep slopes

GEOLOGIC UNITS

Qs	Undivided Surficial Deposits (Quaternary)
Qtd	Disturbed Surficial Deposits (Holocene)
Qtc	Talus and Colluvium (Quaternary)
Qal	Unconsolidated Alluvium (Holocene)
Qoa	Old Alluvium (late Pleistocene to early Pleistocene)
QTls	Older Landslide Deposits (early Quaternary to late Tertiary)
QTs	Older Alluvium (early Quaternary to late Tertiary)
Tbl	Lower Basalt (middle Tertiary)
Tdf	Felsic Dikes (middle or early Tertiary or Cretaceous)
Tda	Aphanitic Felsic to Intermediate Dikes (middle Tertiary)
Tdb	Basaltic Dikes (middle Tertiary)
Tg	Granite of Wood Camp Canyon (middle Tertiary)

Superstition Volcanic Complex

Gila Group

Tcg	Conglomerate (Miocene)
Tss	Sandstone (Miocene)
Tb	Basalt (middle to early Miocene)
Tt	Tuff (poorly welded) (Miocene)

Picketpost Mountain Formation

Tfp	Felsic Lava Flows (middle to early Miocene)
Tfpt	Felsic Tuffs (middle to early Miocene)
Tvx	Volcanogenic Breccia (middle to early Miocene)

Apache Leap Tuff

Tal	Apache Leap Tuff (early Miocene)

Superstition Group

Trdu	Undifferentiated Felsic Lavas (early Miocene)
Trdt	Tuffs associated with Trdu (early Miocene)
Tdm	Intermediate to mafic lavas (early Miocene)

Whitetail Formation

Tw	Conglomerate (Miocene to late Oligocene)
Tx	Rock Avalanche Breccia (Miocene or Oligocene)

Kqd	Quartz Diorite of Peachville Wash (late Cretaceous)
Kd	Quartz Diorite of Arnett Creek (late Cretaceous)
Pnaco	Naco Formation (Pennsylvanian)
Me	Escabrosa Limestone (Mississippian)
Dm	Martin Formation (Devonian)
Cb	Bolsa Quartzite (Cambrian)
Yd	Diabase (middle Proterozoic)
Yt	Troy Quartzite (middle Proterozoic)
Yb	Basalt (middle Proterozoic)
Ym	Mescal Limestone (middle Proterozoic)
Yds	Dripping Spring Quartzite, undivided (middle Proterozoic)
Ydsu	Dripping Spring Quartzite, Upper Unit (middle Proterozoic)
Ydsl	Dripping Spring Quartzite, Lower Unit (middle Proterozoic)
Yds+Yp	Dripping Spring Quartzite and Pioneer Formation (middle Proterozoic)
Yp	Pioneer Formation (middle Proterozoic)
Ypt	Pioneer Formation, Tuff Unit (middle Proterozoic)
YXd	Diorite (early or middle Proterozoic)
YXg	Granite (early or middle Proterozoic)
YXgd	Granodiorite (early or middle Proterozoic)
YXgm	Mixed Schist and Granite (early or middle Proterozoic)
Xp	Pinal Schist, undivided (early Proterozoic)
Xpc	Pinal Schist, Calc-silicate Facies (early Proterozoic)
Xpcs	Pinal Schist, Calc-silicate and Schist Facies (early Proterozoic)
Xpm	Pinal Schist, Psammite Facies (early Proterozoic)
Xpp	Pinal Schist, Phyllite Facies (early Proterozoic)
Xpq	Pinal Schist, Quartzite Layers (early Proterozoic)
Xps	Pinal Schist, Pelitic Schist (early Proterozoic)

0 250 500 750 1,000
Meters

0 1,000 2,000 3,000 4,000
Feet

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GEOLOGIC MAP
TSF ALTERNATIVE 4

MONTGOMERY & ASSOCIATES
Water Resource Consultants

2018

FIGURE 2

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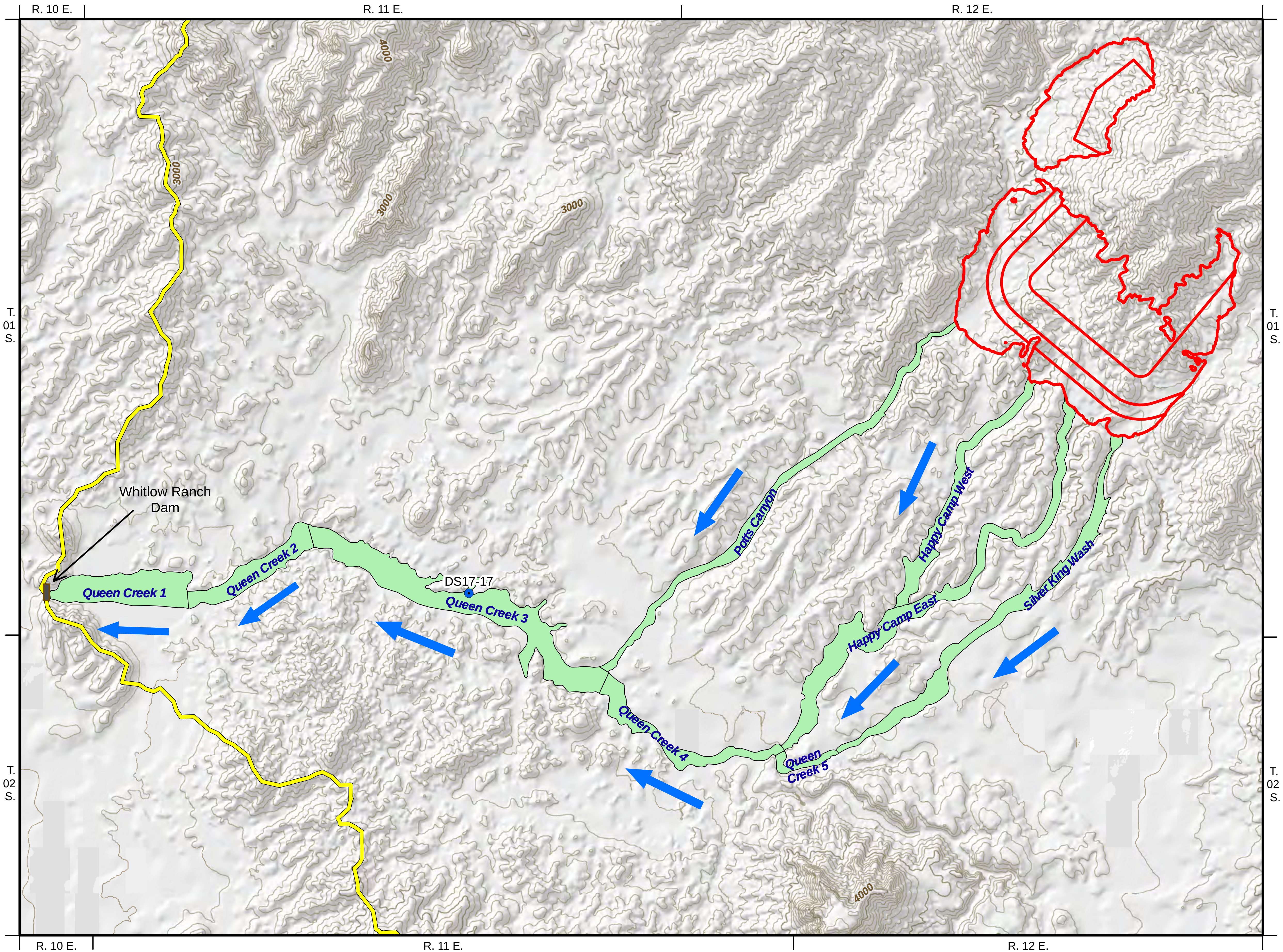

EXPLANATION

- Aquifer Subdomain
- Proposed TSF Footprint
- Superior Basin Boundary
- Flow Direction
- Well DS17-17

Aquifer Subdomain	Length (ft)	Area (ft^2)	Average Width (ft)
Silver King	20,100	10,219,800	510
Happy Camp E	23,700	14,186,100	600
Happy Camp W	12,300	6,052,900	490
Potts Canyon	23,400	8,340,600	360
Queen Creek 5	3,500	1,082,900	310
Queen Creek 4	9,900	5,398,500	550
Queen Creek 3	15,700	17,899,700	1,140
Queen Creek 2	6,400	5,656,700	880
Queen Creek 1	6,300	8,328,000	1,320

Notes:

1. Average widths of aquifer elements calculated by dividing aquifer polygon areas by lengths

0 1,000 2,000 3,000 4,000

Meters

0 0.5 1 1.5 2

Miles

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TSF ALTERNATIVE 4
GOLDSIM MODEL
AQUIFER SUBDOMAINS

MONTGOMERY & ASSOCIATES Water Resource Consultants

2018

FIGURE 3

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September 17, 2018

Mr. Neil Bosworth
Supervisor – Tonto National Forest
US Forest Service
Supervisor's Office
2324 East McDowell Road
Phoenix, AZ 85006-2496

Subject: Response to ANALYSIS DATA REQUEST #1 – Request for Analysis of Tailings Seepage – Item #4 GoldSim Contaminant Transport Module.

Dear Mr. Bosworth,

To complete the response to item #4 from your March 8, 2018 letter, the following documents from Montgomery and Associates are enclosed:

- TSF Alternatives 2 and 3 – Near West: Life of Mine and Post-Closure Seepage Transport Modeling
- TSF Alternative 4 – Silver King: Life of Mine and Post-Closure Seepage Transport Modeling
- TSF Alternative 5 – Peg Leg: Life of Mine and Post-Closure Seepage Transport Modeling
- TSF Alternative 6 – Skunk Camp: Life of Mine and Post-Closure Seepage Transport Modeling

Sincerely,

Vicky Peacey

Vicky Peacey,

Senior Manager, Environment, Permitting and Approvals; Resolution Copper Company, as Manager of Resolution Copper Mining, LLC

Cc: Ms. Mary Morissette; Senior Environmental Specialist; Resolution Copper Company

Enclosure(s):

Montgomery & Associates, September 2018. *TSF Alternatives 2 & 3 – Near West: Life of Mine and Post-Closure Seepage Transport Modeling.*
Montgomery & Associates, September 2018. *TSF Alternatives 4 – Silver King: Life of Mine and Post-Closure Seepage Transport Modeling.*
Montgomery & Associates, September 2018. *TSF Alternatives 5 – Peg Leg: Life of Mine and Post-Closure Seepage Transport Modeling.*
Montgomery & Associates, September 2018. *TSF Alternatives 6 – Near West: Life of Mine and Post-Closure Seepage Transport Modeling.*