TECHNICAL MEMORANDUM



Golder Associates Inc.

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RE:	WELL INSTALLATION REPORT FOR NEW I ALERT WELLS, WEST PLANT SITE, SUPER		PLIANCE AND
FROM:	John Malusa, R.G Golder Associates Inc.	OUR REF.:	073-92522
то:	Dr. Casey McKeon Resolution Copper Mining LLC	DATE:	November 21, 2007

1.0 INTRODUCTION

This technical memorandum presents the "Well Installation Report" for new point of compliance (POC) and alert wells prepared by Golder Associates Inc. (Golder) on behalf of Resolution Copper Mining Company LLC (RCML) as part of their area-wide Aquifer Protection Permit (APP), No. P-101703. This technical memorandum fulfills APP Compliance Schedule Items No's 6 and 7, as follows:

- **Compliance Schedule Item No. 6** Install new Point of Compliance (POC) wells and alert wells as identified in Section 2.4 of the APP and collect initial groundwater sample.
- **Compliance Schedule Item No. 7** Submit well installation report for new POC Wells and alert well (including geologic logs, construction diagrams and results of initial sampling event) in accordance with APP section 2.7.4.4.

A work plan for the new POC Wells and the new alert well was prepared by Golder (Golder, 2006) and submitted to the Arizona Department of Environmental Quality (ADEQ). The groundwater monitoring well network, consisting of new wells and existing wells, was designed to monitor potential groundwater pathways downgradient of APP regulated facilities. Based on surface elevation and projected depths to water from existing data submitted in the APP application (Golder, 2005), screen intervals were designed so that 10 feet of screen would be above the water table and 30 feet of screen would be below the water (for a total of 40 feet of screen).

The estimation of the depth to groundwater at the proposed 500 Yard POC Well was not straightforward, because of the change from the basin fill hydrologic regime (i.e., the Gila Conglomerate) to the bedrock hydrologic regime on the east side of the Concentrator Fault (Figure 1), a range front fault interpreted to be a hydrologic barrier. Because of the lack of

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data regarding the water levels in this area and the historical mine dewatering, the estimated water level was tenuous. Consequently, an approach consisting of cuttings analysis and well installation was used to evaluate the potential for groundwater impacts from the 500 yard development rock pile.

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2.0 DRILLING, SOLIDS SAMPLING, AND WELL INSTALLATION

All wells were drilled and installed by Yellow Jacket Drilling of Phoenix. A Golder geologist supervised the drilling and logged samples using methods from the American Society for Testing and Materials (ASTM) Standard Practice for Description and Identification of Soils (Visual-Manual Procedure, 1993). The well locations are identified on Figure 1, with supporting information presented in Table 1. The Arizona Department of Water Resources (ADWR) Notice of Intent and Well Drilling Reports for the wells are included in Attachment 1.

With the exception of the Smelter Pond POC Well, all wells were completed using a Speedstar 50K-CH drill rig using Air Rotary Casing Hammer (ARCH) methods. The ARCH drilling/well installation was performed between May 21 and June 5, 2007. The ARCH method utilized an 8.75-inch bit and a 10-inch drive casing. The drive casing was advanced through unconsolidated materials using a tri-cone bit, to prevent borehole caving during well construction. Because caving is not a problem in consolidated formations (i.e., Gila Conglomerate and Apache Leap Tuff, drilled with a hammer bit) and advancing a drive casing in consolidated materials can be difficult, the drive casing was not used in these conditions. With the exception of the 500 Yard POC Well that had 5-foot composite samples collected, 10-foot composite samples of cuttings were collected at all boreholes from the drill rig cyclone. Sampling frequency was increased at the 500 Yard POC Well borehole because more detail was needed in order to assess the potential existence and extent of discharge underneath the 500 Yard development rock facility. All of the samples were double bagged and archived following logging until the drilling program had been completed.

4 inch schedule 40 polyvinyl chloride (PVC) wells with 40 feet of 0.020 slot screen were completed in all of the ARCH boreholes. With the exception of the Settling Ponds 1 and 2 Alert Well, all of the wells were constructed using the same, general annular material design (Attachment 2). The annular material design at the Settling Ponds 1 and 2 Alert Well required a cement seal across the pond sediments and contact with the Gila Conglomerate, to prevent the pond porewater from migrating downward into the underlying Gila Conglomerate aquifer, the targeted aquifer.

The Smelter Pond POC Well was installed by auger drilling on January 29, 2007. An 8-inch hollow stem auger with a continuous sampling core barrel advanced by a truck mounted BK-81 rig was used to install the Smelter Pond POC Well. The auger was advanced through 12.5 feet of alluvium and then 5 feet into the Gila Conglomerate. Because of the presence of

cobbles, the continuous core sampler was only used down to a depth of 5 feet below ground surface (ft bgs). Split-spoon samples were collected below this depth. A 2 inch schedule 40 PVC well with 10 feet of screen was completed across the alluvium/Gila Conglomerate contact (approximately 6.5 feet of screen in the alluvium and 3.5 feet in the Gila Conglomerate). A boring log and as-built well construction diagram for the Smelter Pond POC Well is included in Attachment 2.

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Two of the five newly installed APP wells were dry. The 500 Yard POC Well was designed to be screened across the water table in the event that water was encountered less than 150 ft bgs. Though groundwater was not encountered at this location, a well was constructed according to the specification in the ADEQ approved workplan (Golder, 2006). The second dry well, the Indian Ponds POC Well, was designed to monitor groundwater in the alluvium. Although the well was screened across the Gila Conglomerate/alluvium contact (the most likely zone to encounter alluvial water), the well was dry. This well is anticipated to have seasonal groundwater.

Three of the five newly installed APP wells encountered groundwater, but were not screened across the water table as initially designed (Golder, 2006). Depths to water were estimated for the work plan using the existing information which proved to be inaccurate. The actual water levels encountered at the Settling Ponds 1 and 2 Alert Well and the Tailings Pond 5 POC Well were approximately 80 and 90 feet higher than originally estimated, respectively. These elevated levels may be due to groundwater mounding from overlying facilities.

Determining the water levels from borehole observations at the Settling Ponds 1 and 2 Alert well locations was especially complicated because pond sediments containing porewater needed to be penetrated prior to reaching the Gila Conglomerate Aquifer. Although the drive casing prevented porewater from infiltrating into the lower portion of the borehole (which penetrated the Gila Conglomerate), some water did infiltrate the drive casing, thus making moisture observations from the cuttings useless for identifying the saturated zone. Consequently, with a lack of reliable Gila Conglomerate moisture observations, the well screen was placed at the original target interval to assure the well would produce sufficient water for sampling. Any infiltrating water was removed during development (Section 3.0).

Additional complications identifying the water table were encountered while drilling the Tailings Pond 5 POC Well. The Tailing Pond 5 POC Well borehole was advanced to a depth of 100 ft bgs and allowed to sit for four days before drilling resumed. Following this break a water level of approximately 90 ft bgs was measured. Given that the borehole was not disturbed for four days, this water level measurement was thought to represent the static water level. Consequently, the screen interval was completed from 80 to 120 ft bgs. However, after two weeks, the water level eventually recovered to approximately 70 ft bgs, 10 feet above the top of the screen interval. A combination of extremely low formation

permeability and the air rotary drilling technique was likely responsible for the misidentification of the water table depth. That combination probably depresses the water table, when advancing the borehole.

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3.0 WELL DEVELOPMENT

Development consisted of swabbing the screened intervals for approximately 15 minutes and bailing the well until it was dry. The wells were drilled using the ARCH method, and they were allowed to recover for two days before being bailed dry again. This process was performed on June 4 and June 6, 2007. The auger-drilled well was developed once on February 15, 2007, (instead of twice as on the ARCH wells, using the same method. The total volume bailed for well development of each well, not including sample purging, was:

- 500 Yard POC Well dry well,
- Indian Ponds POC Well dry well,
- Settling Ponds 1 & 2 Alert Well 325 gallons,
- Smelter Pond POC Well 8 gallons, and
- Tailings Pond 5 POC Well 110 gallons.

4.0 CUTTINGS SAMPLING AND ANALYTICAL RESULTS

Upon completion of the drilling program a subset of solid samples was selected for additional analysis. Gila Conglomerate and alluvium samples were chosen to capture spatial and material variability (i.e., variations between well location and material types). Six samples were selected and analyzed for:

- paste pH (method ASAM10-3.2),
- paste electrical conductivity (EC) (method ASA10-3),
- total metals (method SW6010B and SW7471A),
- acid-base accounting (ABA) including sulfur forms (method modified Sobek),
- cation exchange capacity (CEC), and
- x-ray diffraction (XRD).

A subset of half of the samples collected during the installation of the 500 Yard POC Well was subjected to paste pH and paste EC testing. These samples were selected to capture the spatial (i.e. vertical variability) and material variability of both the 500 Yard development rock and underlying Apache Leap Dacite Tuff (Apache Leap). Based on the screening

results (i.e., paste pH and paste EC results), three samples from the development rock and six samples from the Apache Leap were selected for additional analysis. The development rock samples were analyzed for ABA and total metals. The Apache Leap samples were analyzed for acid neutralization potential (ANP) and total metals.

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All laboratory analysis of cuttings samples was performed by SVL Analytical in Kellogg, Idaho, under contract to Golder. United States Environmental Protection Agency (USEPA) Level IV laboratory reporting was requested for the total metals analysis to allow validation. Data validation was performed by Innovative Technical Solutions Inc. (ITSI) under direct contract to RCML (Attachment 3). All of the data was considered useable for the intended purposes, with the exception of one rejected non-detect mercury result from the Apache Leap (sample ID, 500 Yard 40-45).

4.1 Gila Conglomerate

Total metals analysis of five Gila Conglomerate samples indicated that iron, aluminum, manganese, and barium were the dominant metals (Table 2). The average concentrations of these metals were 11,220; 8,312; 480; and 136 milligrams per kilogram (mg/kg), respectively. There were no exceedances to the non-residential soil remediation levels (SRLs) or the minimum ground water protection limits (GPLs) noted.

Paste pH for ten Gila Conglomerate samples ranged from 7.74 to 8.47 with an average of 8.19 standard units (s.u.) (Table 3). Paste EC ranged from 0.25 to 1.78 milliSiemens per centimeter (mS/cm), with an average of 0.72 mS/cm.

ABA results for Gila Conglomerate samples indicated that only two of the five samples had total sulfur concentrations slightly above the practical quantitative limit of 0.01 percent sulfur (Table 3). The samples from the Settling Ponds 1 and 2 POC Well boreholes had a maximum of 0.03 percent total sulfur, which was present as sulfate, indicating oxidized conditions. The ANP ranged from approximately 50 to 250 tons of CaCO₃ per kiloton of material (tCaCO₃/kt) with an average of 150. Using the Price criteria (Price, 1997), the five Gila Conglomerate samples analyzed are classified as having no potential to generate acid.

The bulk mineralogy of the Gila Conglomerate was determined using XRD (Table 4). In order of abundance, plagioclase, calcite, quartz and smectite were the dominant mineral phases. Cristobalite, potassium feldspar, mica, clinoptiloite, and hematite were also detected in minor amounts (\leq 10 percent) in the Gila Conglomerate. No sulfide or sulfate mineral phases were detected in the Gila Conglomerate.

CEC values in the Gila Conglomerate ranged from 4.4 to 40.4 milliequivalents per 100 grams (meq/g) with an average of 14 meq/g (Table 4). Increased CEC generally corresponded with the abundance of clays.

4.2 Alluvium

Total metals results in the alluvium sample were similar to the results in the Gila Conglomerate samples with iron, aluminum, manganese, and barium being the dominant metals (Table 2). Concentrations were 16,100; 15,500; 627; and 181 mg/kg, respectively. There were no exceedances to the non-residential SRLs or the minimum GPLs noted.

As with the Gila Conglomerate, ABA results of the alluvium sample indicated there is no potential to generate acid with the total sulfur content being low (0.02 percent) (Table 3). The ANP for the alluvium was 108 tCaCO₃/kt. Analysis of one alluvium sample produced a paste pH of 8.13 s.u. and paste EC of 2.62 mS/cm.

In order of abundance, the primary mineral phases in the alluvium sample included smectite, calcite, quartz, plagioclase, and clinoptilolite. No sulfide or sulfate mineral phases were detected in the alluvium sample (Table 4). The CEC for the alluvium sample was 34.84 meq/g (Table 4).

4.3 500 Yard Development Rock

Total metals analysis of three 500 Yard development rock samples indicated that iron, aluminum, copper, manganese, and zinc were the dominant metals (Table 2). Average concentrations of these metals were 28,613; 9,830; 2,958; 1,390; and 790 mg/kg, respectively. Two of the three samples exceeded non-residential SRLs for arsenic and one of the samples exceeded the minimum GPL for lead.

Paste pH of four development rock samples ranged from 7.28 to 8.05 s.u. with an average of 7.8 s.u. (Table 3). Paste EC ranged from 3.01 to 4.95 mS/cm, with an average of 4.38 mS/cm.

ABA results for three development rock samples indicated that total sulfur ranged from 0.15 to 1.94 percent with the concentration decreasing with depth (Table 4). In all of the samples, the majority of the sulfur is present as sulfate sulfur, indicating oxidized conditions. The ANP for the same three samples ranges from approximately 54 to 98 tCaCO₃/kt. Because of the relatively high ANP in the lower portions of the facility at this location, all three samples were classified as having no potential to generate acid when using the Price criteria (Price, 1997).

4.4 Apache Leap Dacite Tuff

Total metals analysis of six Apache Leap samples from a formation underlying the 500 Yard, indicated that aluminum, iron, manganese, and zinc were the dominant metals (based on average concentrations) (Table 2). Average concentrations of these metals were 12,750;

5,135; 469; and 311 mg/kg, respectively. None of the samples exceeded the non-residential SRLs or minimum GPLs.

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Figure 2 shows profiles of copper, lead, manganese, and zinc concentrations with depth below the 500 Yard. These profiles suggest historical releases to the vadose zone penetrated approximately 30 to 90 feet below the contact between the development rock and Apache Leap (i.e., approximately 60 to 120 ft bgs). Because a total metals analysis was not performed on cutting samples between 30 and 90 feet below the contact, the extent of impacts in this interval cannot be positively identified.

Whether the historical impacts to the Apache Leap penetrate 30 or 90 feet does not matter because current and probable future dry conditions do not provide a transport mechanism to move metals down to the aquifer. Historical conditions probably had seepage emanating from the 500 Yard into the Apache Leap; however, this likely stopped due to the 500 Yard being closed, in order to prevent discharges as much as possible (Golder, 2007). Also, due to mine dewatering, groundwater levels are expected to stay below the zone of impacted Apache Leap.

Paste pH for 11 Apache Leap samples ranged from 7.80 to 8.55 s.u. with an average of 8.13 s.u.(Table 3). Paste EC ranged from 0.24 to 4.6 mS/cm, with an average of 1.9 mS/cm. ANP results for six Apache Leap samples ranged from 5.28 to 31.68 tCaCO₃/kt with an average of 17.3 tCaCO₃/kt (Table 4).

5.0 INITIAL GROUNDWATER SAMPLING

Groundwater samples were collected from three of the five new APP wells on June 21, 2007. Samples were not collected from two of the new APP wells (i.e., 500 Yard POC and Indian Ponds POC) because both wells were dry. Well purging and sample collection was performed using a Grundfos Ready Flow-2 submersible pump. All sampling equipment was decontaminated using an Alconox solution followed by a distilled water rinse. Static water levels collected prior to sample purging are included in Table 1 and on the well construction diagrams (Attachment 2). Because all the wells have low yields, the wells were purged until dry while monitoring field parameters and allowed to recover for a minimum of 24 hours before sampling. Sample aliquots for dissolved metals were field-filtered using a 0.45-micron disposable filter.

The groundwater analytical suite and laboratory methods are included in Table 5. The analytical suite was the same for all wells with the exception of the addition of benzene, toluene, ethylbenzene, and xylene (BTEX) to the alert well suite. This suite is consistent with that required for new POC Wells (APP Table 4.2-1) and the Alert Well (APP Tables 4.2-2 and 4.2-3). Quality control samples included a duplicate sample from the Alert Well

(sample DS-1) and a decontamination rinseate sample (i.e., EB-1). Additionally a trip blank was added to the organic samples collected from the alert well.

With the exception of the BTEX that was analyzed by Test America in Phoenix, Arizona and the radionuclides that were analyzed by ACZ laboratories in Steamboat, Colorado, all other analyses were performed by was SVL Analytical in Kellogg, Idaho. EPA Level IV laboratory reporting was requested to allow data validation by ITSI in Tempe, Arizona (Attachment 3). All data was considered useable for the intended purposes, with the exception of the BTEX analyses, which were rejected due to an elevated sample receipt temperature.

Table 6 shows the results of the initial groundwater samples. There were no exceedances of the Arizona Aquifer Water Quality Standards (AWQS), except for gross alpha activity at the Smelter Pond POC Well.

6.0 SUMMARY

RCML installed five new wells and collected initial groundwater samples to fulfill APP Compliance Item No. 6. This technical memorandum fulfills Compliance Schedule Item No.7. The key findings include:

- Conditions Underlying the 500 Yard Development Rock Facility
 - Apache Leap underlies the 500 Yard facility (not limestone as originally anticipated); and
 - although historical impacts to the underlying vadose zone were observed, there is no transport mechanism to the groundwater because groundwater is deep and the 500 Yard was closed to prevent discharges to the extent practicable.
- Initial Groundwater Sampling Results
 - No exceedances of the AWQS were identified, except for gross alpha in the Smelter Pond POC Well. Additional sampling during the ambient monitoring period will provide further information.
 - BTEX results were all non-detect for the Settling Ponds 1 and 2 Alert well; however, results were rejected due to an elevated sample receipt temperature. Care will be taken to avoid this issue in the future. Additional sampling during the ambient monitoring period will provide further information.

7.0 REFERENCES

- Golder, 2005. Aquifer Protection Permit Application, West Plant Site, Superior Mine, Superior, Arizona. Submitted to Resolution Copper Company. June 24, 2005.
- Golder, 2006. Proposed Program for New Point of Compliance and Alert Wells, West Plant Site, Superior, Arizona. Submitted to Resolution Copper Company. August 29, 2006.
- Golder, 2007. Closure Completion Report for the 500 Yard West Plant Site, Superior, Arizona. Submitted to Resolution Copper Mining LLC. August 2007
- Price, W.A., 1997. Draft Guidelines and Recommended Methods for the Prediction of Metal Leaching and Acid Rock Drainage at Minesites in British Columbia. Reclamation Section, Energy and Minerals Division, Ministry of Employment and Investment, Smithers, B.C.

Attachments: Tables 1-6

Figures 1-2

Attachment 1 - Well Driller Reports and Well Logs

Attachment 2 - Borehole Logs and As-Built Drawings

Attachment 3 - ITSI Data Validation Reports

TABLES

TABLE 1 WELL COORDINATES, SPECIFICATIONS, AND WATER LEVELS

		Well	Coordinates					W	ater Levels	
Well ID	Latitude	Longitude	Water Level Measuring Point Elevation (TOC) (ft-amsl)	Ground Surface Elevation (ft-amsl)	Casing Diameter (inch)	Total Depth of Well (ft-bgs)	Screen Interval (ft-bgs)	Date Measured (month/day/year)	Depth to Water (ft-btoc)	Water Level Elevation (ft-amsl)
500 Yard POC Well	33° 17' 56.9"	111° 5' 45.4"	2,998.67	2,996.10	4	140	95-135	6/20/2007	dry	dry
Indian Ponds POC Well	33° 17' 13.6"	111° 6' 53.3"	2,674.25	2,672.37	4	52	7-47	6/20/2007	dry	dry
Settling Ponds 1 and 2 Alert Well	33° 18' 1.2"	111° 6' 14.4"	2,976.20	2,974.14	4	185	140-180	6/19/2007	79.92	2,896.28
Smelter Pond POC Well	33° 17' 29.8"	111° 6' 25.5"	2,746.28	2,745.30	2	17.5	7-17	6/20/2007	7.89	2,738.39
Tailings Pond 5 POC Well	33° 17' 57.0"	111° 6' 24.5"	2,965.32	2,963.47	4	125	80-120	6/20/2007	71.05	2,894.27

Notes:

All coordinates in AZ state plane central, NAD 83

amsl = above mean sea level

bgs = below ground surface TOC = Top of Casing ft btoc = feet below top of casing

ft = feet

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TABLE 2TOTAL METALS RESULTS FROM CUTTINGS SAMPLES

Sample Location	Sample	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Copper	Fluoride	Iron	Lead	Manganese	Mercury	Molybdenum	Nickel	Selenium	Thallium	Zinc
(depth, feet)	Date	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Non-residential S	SRL	920,000	410	10	170,000	1,900	510	65	41,000	37,000	NS	800	19,000	310	5,100	20,000	5,100	67	310,000
Minimum GP	L	NS	35	290	12,000	23	29	590	NS	NS	NS	290	NS	12	NS	590	290	12	NS
500 Yard Development Ro	ock																		
500 Yard 15-20	6/1/2007	14,800	4.1	166	55	1.2	7.20	19.6	7,490	1.07	68,000	513	2,380	0.49	<1.6	13.1	< 0.43	< 0.23	1790
500 Yard 20-25	6/1/2007	5,820	1.1	27	81	0.85	1.30	5.0	1,130	NA	12,200	86.8	1,050	0.22	<1.3	5.0	< 0.43	< 0.23	431
500 Yard 25-30	6/1/2007	8,870	0.64	3.8	116	0.9	0.66	3.0	253	3.80	5,640	23.4	740	0.02	< 0.38	3.2	< 0.43	< 0.23	150
Apache Leap Dacite Tuff																			
500 Yard 35-40	6/1/2007	12,500	0.36	2.7	152	1.2	0.41	2.7	90.1	10.9	5,150	11.8	660	0.02	< 0.98	3.5	< 0.43	< 0.23	1,560
500 Yard 40-45	6/1/2007	12,400	0.63	2.4	183	1.2	0.46	2.2	121	10.8	4,870	9.1	557		< 0.97	2.8	< 0.43	< 0.23	130
500 Yard 50-55	6/1/2007	13,800	0.6	3.8	181	1.2	0.49	3.0	140	5.32	6,380	15.4	547	0.03	<0.9	3.3	< 0.43	< 0.23	108
500 Yard 60-65	6/1/2007	12,300	0.43	1.8	144	1.3	0.22	2.2	37.4	4.09	4,550	8.0	424	0.02	< 0.87	2.3	< 0.43	< 0.23	35
500 Yard 120-125	6/4/2007	11,200	< 0.33	1.6	106	0.9	0.22	3.1	12.2	2.94	4,780	5.3	311	0.20	< 0.99	3.2	< 0.43	< 0.23	16.8
500 Yard 145-150	6/4/2007	14,300	0.48	1.2	132	1.0	0.21	2.7	12.6	3.07	5,080	6.2	315	0.02	<1	2.8	< 0.43	< 0.23	16.4
Alluvium																			
Indian Ponds 10-15	5/31/2007	15,500	0.35	5.9	181	1.1	0.98	10.4	34.9	6.53	16,100	15.7	627	0.06	< 0.58	20.2	< 0.43	< 0.23	52
Gila Conglomerate																			
Indian Ponds 55-60	5/31/2007	16,600	0.43	8.6	247	1.2	1.10	12.0	38.2	12.6	19,400	20.2	736	0.55	<1.3	23.4	< 0.43	< 0.23	65.8
S. Ponds 1&2 100-110	5/23/2007	6,600	0.51	2.7	91.2	0.6	0.40	4.9	92.7	2.63	7,260	9.9	398	0.03	<1	3.2	< 0.43	< 0.23	43.3
S. Ponds 1&2 140-150	5/23/2007	5,140	0.52	3.4	78	0.47	0.40	3.6	98.0	2.25	7,740	17.7	532	0.03	<1.2	2.3	< 0.43	< 0.23	71
T. Pond 5 90-100	5/25/2007	1,220	0.63	6.8	133	0.55	0.71	5.4	17.8	1.92	11,300	14.5	368	0.04	< 0.7	6.1	< 0.43	< 0.23	55.4
T. Pond 5 120-130	5/28/2007	12,000	0.36	5.0	130	0.54	0.66	4.9	18.0	1.86	10,400	17.8	368	0.04	< 0.53	5.8	< 0.43	< 0.23	63.2
Notes:																•	•		

Notes:

SRL - Soil Remediation Level

GPL - Groundwater Protection Limit

NS - No Standard

NA - Not Analyzed

mg/kg - milligrams per kilogram

--- Datum Rejected

Exceeds non-residential SRL

Exceeds minimum GPL

Exceeds SRL and GPL

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TABLE 3 ACID-BASE ACCOUNTING RESULTS FROM CUTTINGS SAMPLES

Indian Ponds 10-15 Sandy silt (SL) 5/31/2007 8.13 2.62 < 0.01	Sulfur ABA Results													
Image: base in the section of the s							Sul	fur			ABA I			
00 Yard Development Rock 500 Yard 5-10 Silty gravel with som (GM) $6/12007$ 7.87 3.01 $ -$ <		ASTM Classification		[Acid Generating Potential
500 Yard 5.10 Sity graved with same (GM) 6/1/2007 7.87 3.01 <t< th=""><th></th><th></th><th></th><th>S.U.</th><th>mS/cm</th><th>%</th><th>%</th><th>%</th><th>%</th><th>tCaCO₃/kt</th><th>tCaCO₃/kt</th><th>tCaCO₃/kt</th><th>tCaCO₃/kt</th><th></th></t<>				S.U.	mS/cm	%	%	%	%	tCaCO ₃ /kt	tCaCO ₃ /kt	tCaCO ₃ /kt	tCaCO ₃ /kt	
500 Yard 15:20 Silly sand with some gravels (SM) 61/2007 7.28 4.87 0.01 0.78 1.15 1.94 24 98 73 4 None 500 Yard 25:25 Silly sand with some gravels (SM) 61/2007 8.05 4.67 <0.01	500 Yard Development R	ock												
500 Yard 20-25 Silty sand with some gravels (SM) 6/1/2007 8.00 4.67 < 0.01 0.04 0.23 0.027 1 54 53 43 None spoth Leap Dacite Tuff 500 Yard 30-35 6/1/2007 7.80 4.43 1.3 <t< td=""><td>500 Yard 5-10</td><td>Silty gravel with sand (GM)</td><td>6/1/2007</td><td>7.87</td><td>3.01</td><td></td><td></td><td>-</td><td>-</td><td></td><td></td><td></td><td></td><td></td></t<>	500 Yard 5-10	Silty gravel with sand (GM)	6/1/2007	7.87	3.01			-	-					
500 Yard 25.30 Silty sand with some gravels (SM) 6/1/2007 8.05 4.95 < 0.01 0.015 0.15 < < 0.3 98 98 651 None pache Leap Dacie U U U U U U U U 500 Yard 30.35 61/2007 7.80 4.60	500 Yard 15-20	Silty sand with some gravels (SM)	6/1/2007	7.28	4.87	0.01	0.78	1.15	1.94	24	98	73	4	None
packe Leap Dacite Tuff	500 Yard 20-25	Silty sand with some gravels (SM)	6/1/2007	8.00	4.67	< 0.01	0.04	0.23	0.27	1	54	53	43	None
500 Yard 30-35 6/1/2007 7.97 1.12 13 <th-< td=""><td>500 Yard 25-30</td><td>Silty sand with some gravels (SM)</td><td>6/1/2007</td><td>8.05</td><td>4.95</td><td>< 0.01</td><td>< 0.01</td><td>0.15</td><td>0.15</td><td>< 0.3</td><td>98</td><td>98</td><td>651</td><td>None</td></th-<>	500 Yard 25-30	Silty sand with some gravels (SM)	6/1/2007	8.05	4.95	< 0.01	< 0.01	0.15	0.15	< 0.3	98	98	651	None
500 Yard 35:40 6/1/2007 7.80 4.60	Apache Leap Dacite Tuff													
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	500 Yard 30-35		6/1/2007	7.97	1.12						13			
500 Yard 45-50 6/1/2007 7.91 3.60	500 Yard 35-40		6/1/2007	7.80	4.60									
500 Yard 50-55 6/1/2007 7.90 3.40 32 500 Yard 60-65 6/1/2007 8.38 0.62 12 500 Yard 105-10 6/1/2007 8.28 0.51 <t< td=""><td>500 Yard 40-45</td><td></td><td>6/1/2007</td><td>7.83</td><td>4.43</td><td></td><td></td><td></td><td></td><td></td><td>26</td><td></td><td></td><td></td></t<>	500 Yard 40-45		6/1/2007	7.83	4.43						26			
500 Yard 60-65 6/1/2007 8.38 0.62 12 500 Yard 15-10 6/1/2007 7.87 1.76 <	500 Yard 45-50		6/1/2007	7.91	3.60									
500 Yard 75-80 6/1/2007 7.87 1.76	500 Yard 50-55		6/1/2007	7.90	3.40						32			
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	500 Yard 60-65		6/1/2007	8.38	0.62						12			
500 Yard 120-125 6/4/2007 8.55 0.29 16 16 16	500 Yard 75-80		6/1/2007	7.87	1.76									
500 Yard 135-140 6/4/2007 8.53 0.24	500 Yard 105-110		6/1/2007	8.28	0.51									
500 Yard 145-150 6/4/2007 8.43 0.43 5 5	500 Yard 120-125		6/4/2007	8.55	0.29						16			
Illuvium Indian Ponds 10-15 Sandy silt (SL) 5/31/2007 8.13 2.62 < 0.01 0.02 0.02 < 0.3 108 108 722 None Indian Ponds 35-40* Sandy clay (CL) 5/31/2007 8.09 0.79 -	500 Yard 135-140		6/4/2007	8.53	0.24									
Indian Ponds 10-15 Sandy silt (SL) 5/31/2007 8.13 2.62 < 0.01 < 0.02 < 0.3 108 108 722 None Indian Ponds 35-40* Sandy clay (CL) 5/31/2007 8.09 0.79	500 Yard 145-150		6/4/2007	8.43	0.43						5			
Indian Ponds 35-40* Sandy clay (CL) 5/31/2007 8.09 0.79	Alluvium													
Sile Conglomerate Indian Ponds 55-60 Sandy clay (CL) 5/31/2007 8.26 0.59 < 0.01 < 0.01 < 0.01 < 0.03 50 50 334 None S. Ponds 1&2 90-100 Poorly-graded gravel and sand (GP) 5/22/2007 8.06 0.76	Indian Ponds 10-15	Sandy silt (SL)	5/31/2007	8.13	2.62	< 0.01	< 0.01	0.02	0.02	< 0.3	108	108	722	None
Indian Ponds 55-60 Sandy clay (CL) 5/31/2007 8.26 0.59 < 0.01 < 0.01 < 0.01 < 0.03 50 50 334 None S. Ponds 1&2 90-100 Poorly-graded gravel and sand (GP) 5/22/2007 8.06 0.76 <td>Indian Ponds 35-40*</td> <td>Sandy clay (CL)</td> <td>5/31/2007</td> <td>8.09</td> <td>0.79</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Indian Ponds 35-40*	Sandy clay (CL)	5/31/2007	8.09	0.79									
S. Ponds 1&2 90-100 Poorly-graded gravel and sand (GP) 5/22/2007 8.06 0.76	Gila Conglomerate													
S. Ponds 1&2 100-110 Poorly-graded sand (SP) 5/23/2007 8.14 0.96 < 0.01 < 0.01 0.02 < 0.3 193 193 1285 None S. Ponds 1&2 110-120 Poorly-graded sand (SP) 5/23/2007 8.10 0.90 <td>Indian Ponds 55-60</td> <td>Sandy clay (CL)</td> <td>5/31/2007</td> <td>8.26</td> <td>0.59</td> <td>< 0.01</td> <td>< 0.01</td> <td>< 0.01</td> <td>< 0.01</td> <td>< 0.3</td> <td>50</td> <td>50</td> <td>334</td> <td>None</td>	Indian Ponds 55-60	Sandy clay (CL)	5/31/2007	8.26	0.59	< 0.01	< 0.01	< 0.01	< 0.01	< 0.3	50	50	334	None
S. Ponds 1&2 110-120 Poorly-graded sand (SP) 5/23/2007 8.10 0.90 <	S. Ponds 1&2 90-100	Poorly-graded gravel and sand (GP)	5/22/2007	8.06	0.76									
S. Ponds 1&2 110-120 Poorly-graded sand (SP) 5/23/2007 8.10 0.90 <	S. Ponds 1&2 100-110		5/23/2007	8.14	0.96	< 0.01	< 0.01	0.02	0.02	< 0.3	193	193	1285	None
S. Ponds 1&2 180-190 Poorly-graded sand (SP) 5/23/2007 8.10 1.00	S. Ponds 1&2 110-120	Poorly-graded sand (SP)	5/23/2007	8.10	0.90									
T. Pond 5 20-30 Clayey sand with gravel (SC) 5/25/2007 8.07 0.34	S. Ponds 1&2 140-150	Poorly-graded sand (SP)	5/23/2007	7.74	1.78	0.01	< 0.01	0.03	0.03	< 0.3	98	98	651	None
T. Pond 5 20-30 Clayey sand with gravel (SC) 5/25/2007 8.07 0.34 <	S. Ponds 1&2 180-190	Poorly-graded sand (SP)	5/23/2007	8.10	1.00									
T. Pond 5 70-80 Clayey sand with gravel (SC) 5/25/2007 8.70 0.32														
T. Pond 5 90-100 Clayey gravel with sand (GC) 5/25/2007 8.47 0.25 < 0.01 < 0.01 < 0.01 < 0.01 < 0.3 161 161 1074 None														
	T. Pond 5 90-100	Clayey gravel with sand (GC)	5/25/2007	8.47	0.25	< 0.01	< 0.01	< 0.01	< 0.01	< 0.3	161	161	1074	None
							< 0.01	< 0.01	< 0.01	< 0.3	254			None

Notes:

* - Alluvial sample may contain some Gila Conglomerate S.U. - Standard Units

EC - Electrical Conductivity

mS/cm - milliSiemens per centimeter

073-92522

TABLE 4XRD AND CEC RESULTS FROM CUTTINGS SAMPLES

Sample Location (depth, feet)	Material Sampled	ASTM Classification	CEC	Quartz	Cristobalite	Calcite	K-Feldspar		Smectite	Mica	Clinoptilolite	Hematite	Unaccounted
Units			(meq/100 g)					%	6				
Indian Ponds POC Well (55-60')	Gila Conglomerate	Poorly-graded sand (SP)	40.40	20	3*	22	6	12	22	4	10		<5
Settling Ponds 1 and 2 Alert Well (100-110')	Gila Conglomerate	Poorly-graded sand (SP)	6.75	9	10	15	8	41	4	2	5	2	<5
Settling Ponds 1 and 2 Alert Well (140-150')	Gila Conglomerate	Poorly-graded sand (SP)	4.40	10	9	12	8	48	2	2	5	2	<5
Tailing Pond 5 POC Well (90-100')	Gila Conglomerate	Clayey Gravel with Sand (GC)	6.27	15	4	20	4	30	6	1	15	2	<5
Tailing Pond 5 POC Well (120-130')	Gila Conglomerate	Clayey Sand (SC)	5.30	16	4	23	5	26	5	1	14	2	<5

Notes:

POC= Point of Compliance

XRD = x-ray diffraction

CEC = cation exchange capacity

meq/100 g = milliequivalents per 100 grams

* May be present

- - Not present

TABLE 5INITIAL WATER QUALITY SAMPLING SUITE

		Descreted	
Parameter	Units	Requested Reporting Limit	Method
Major Ions and Miscellaneous			
Alkalinity	mg/L		2320B
Bicarbonate	mg/L		2320B
Carbonate	mg/L		2320B
Chloride	mg/L		300
Fluoride	mg/L	2	300
Magnesium	mg/L		200.7
Potassium	mg/L		200.7
Sodium	mg/L mg/L		200.7
Calcium	mg/L mg/L		200.7
Hardness	mg/L mg/L		calculated
Sulfate	mg/L mg/L		300
Total Dissolved Solids	mg/L mg/L		2540C
Nitrate + Nitrite (as N)		5	353.2
Dissolved Metals	mg/L	5	535.2
			200.7
Aluminum	mg/L		200.7
Antimony	mg/L	0.003	200.8
Arsenic	mg/L	0.025	200.7
Barium	mg/L	1	200.7
Beryllium	mg/L	0.002	200.7
Cadmium	mg/L	0.0025	200.7
Chromium (total)	mg/L	0.05	200.7
Copper	mg/L		200.7
Iron	mg/L		200.7
Lead	mg/L	0.025	200.7
Manganese	mg/L		200.7
Molybdenum	mg/L		200.7
Mercury	mg/L	0.001	245.1
Nickel	mg/L	0.05	200.7
Selenium	mg/L	0.025	200.7
Thallium	mg/L	0.001	200.8
Zinc	mg/L		200.7
Radionuclides			
Gross Alpha (including Radium 226)	pCi/L	7.5	M9310
Radium 226 and Radium 228	pCi/L	2.5	M903.1 & M904.0
Field Parameters			
pН	S.U.		
Conductivity	mmhos/cm		
Temperature	Degrees F		
Volatile Organic Compounds (Alert	0		
Benzene	mg/L	0.0025	8021B
Ethylbenzene	mg/L mg/L	0.035	8021B
Toluene	mg/L mg/L	0.035	8021B
Xylenes	mg/L mg/L	5	8021B 8021B
Луюнся	ing/L	5	0021D

Notes:

AWQS = Arizona Aquifer Water Quality Standard

mg/L = milligrams per liter

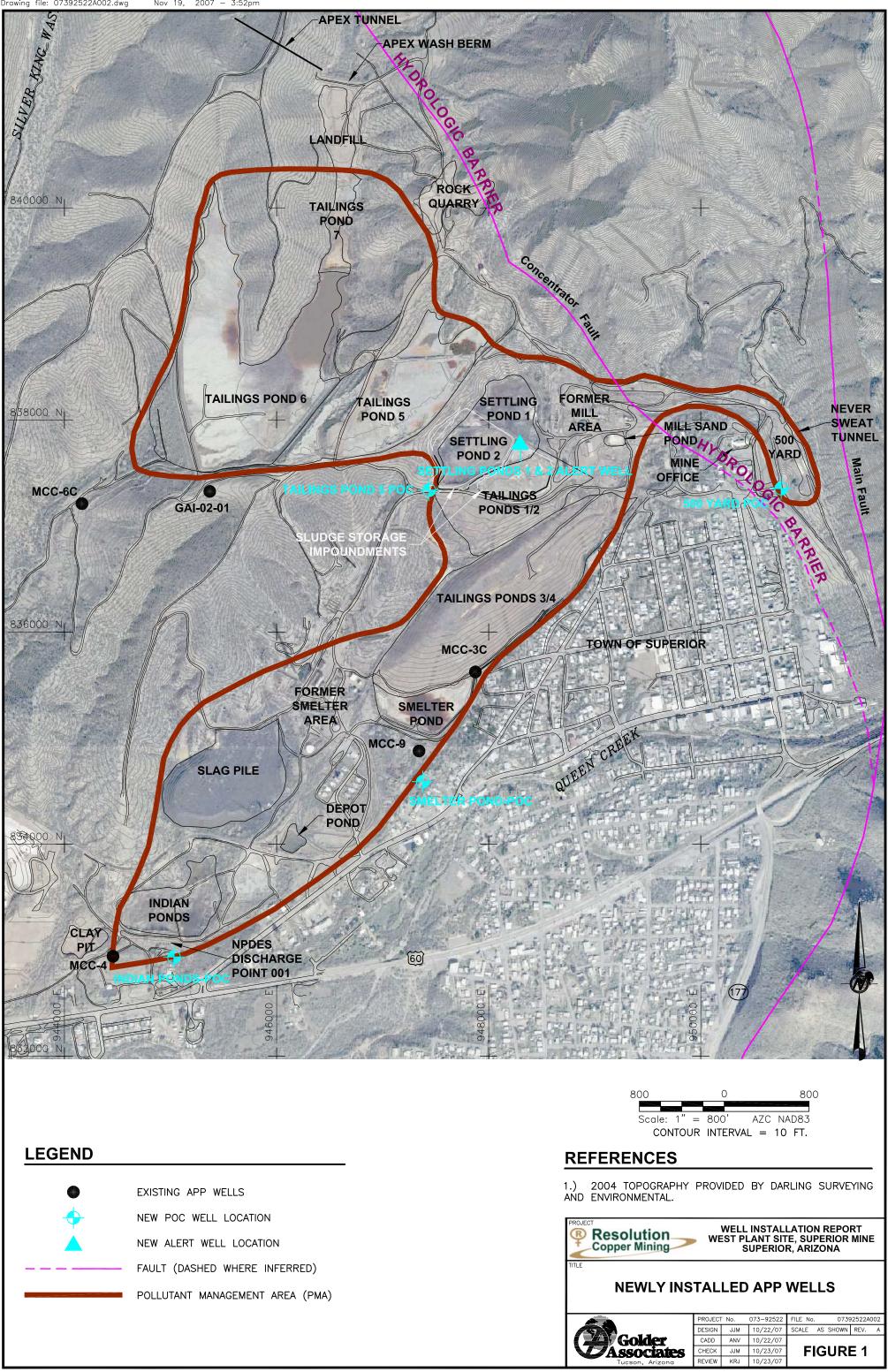
pCi/L = pico Curies per liter

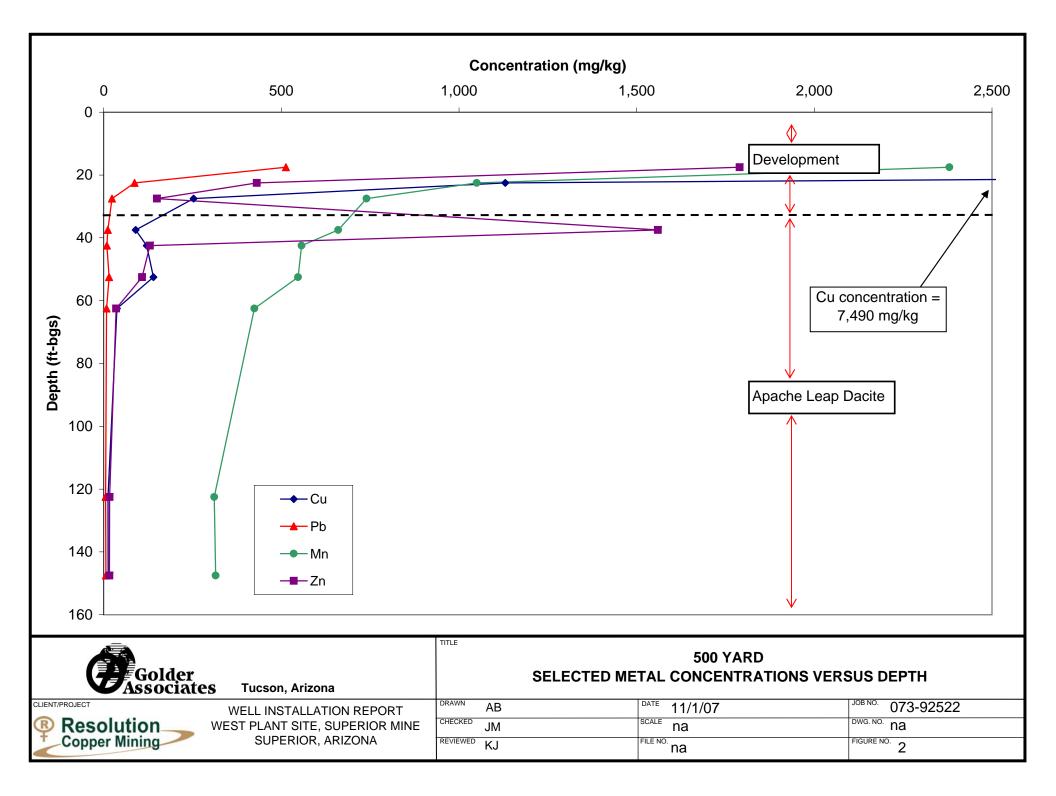
TABLE 6 INITIAL GROUNDWATER SAMPLE RESULTS

			_	Phys	ical Para	ameters	and Ot	her Co	onstituen	ts			Radi	ochemisti	y			Majo	or Catio	ons and A	Anions											Dissolve	d Metals								
Sample Location	Sample Date	Field Temperature	Field pH	Field Conductivity	Alkalinity	Carbonate (CO,)		Bicar bonate (HCO ₃)	Hardness	Cation/Anion Charge	Balance Measured TDS	Uranium	Gross a	Corrected Gross a	Radium 226	Radium 228	Calcium	Chloride Fluoride	an Lion L	Magnesium	Potassium	Sodium Suffiste (SO.)		Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Copper	Iron	Lead	Manganese	Mercury	Molybdenum	Nickel	Selenium	Thallium	Uranium	Zinc
		°C	SIL	µS/cm	mg/I	L mg	/L m	g/L n	ng/L mạ	g/L %	mg/I	. mg/L	nCi/I	pCi/L p	Ci/L n(сіл тұ	g/L m	ng/L mg	g/L m	ng/L n	ng/L m	g/L mg	g/L mạ	g/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
		C	5.0.	ць/сш	total	l tot	al to	tal t	otal to	tal tot	al tota	total	pci/L	pene p	CI/L PC	to	tal to	otal tot	tal to		total to		tal diss	olved d	issolved	dissolved	dissolved	dissolved	dissolved	dissolved	l dissolve										
AWQS		NS	NS	NS	NS	N	S N	NS I	NS 1	0 N	S NS	NS	NS	15*	5**	N	NS I	NS 4	4 1	NS	NS N	NS N	IS N	NS	0.006	0.05	2	0.004	0.005	0.1	NS	NS	0.05	NS	0.002	NS	0.1	0.05	0.002	NS	NS
Settling Ponds 1 and 2 Alert Wel	6/21/2007	7 25.8	7.63	698	268	<	1 2	68	115 3.	01 -4.	3 382	0.0136	5 24.0	14.9 (0.16 0).76 13	3.5 1	6.0 0.5	58 1	19.7 2	2.62 1	00 64	.2 <0.	.011 <	0.00019	0.0045	0.0146	< 0.0002	< 0.0003	< 0.0004	< 0.0021	< 0.0072	< 0.0024	< 0.0212	< 0.0001	0.0073	< 0.0016	0.0021	< 0.00002	0.0136	< 0.000
Smelter Pond POC Well	6/21/2007	7 22	7.05	2500	227	<	1 2	27 1	320 1.	69 -3.	6 2,07	0.0078	8 29	23.8	.57 1	1.4 33	30 7	7.8 0.7	74 1	120 5	5.81 6	3.4 1,1	.67 <0.	.011 <	0.00022	0.0033	0.0322	< 0.0002	< 0.0003	0.00059	< 0.0021	< 0.0072	< 0.0024	< 0.007	< 0.0001	0.0024	< 0.0018	0.0021	< 0.00002	0.0078	< 0.00
Tailings Pond 5 POC Well	6/21/2007	7 28.6	7.66	410	221	<	1 2	21	109 0.3	314 -1.7	4 240	0.0051	1 6.4	3.0 0	0.11 0).67 19	9.4 1	4.1 0.8	82 1	4.8 2	2.49 5	7.9 4.0	65 <0.	.011 <	0.00069	0.0021	0.0357	< 0.0002	< 0.0003	< 0.0004	< 0.0021	< 0.0072	< 0.0024	0.203	< 0.0001	0.0198	< 0.0018	< 0.0006	< 0.00002	0.0051	< 0.00
Votes: Arizona Aquifer Water Qua Exceeds AWQS J.U Standard Units IS/Cm - microSiemens per centimete ng/L - milligrams per lite Ci/L - picoCuries per lite S - No Standard TDS - Total Dissolved Solids The maximum concentration for gr * The maximum concentration for cor	oss alpha part	ticle activ						1 and ur	anium, sha	ıll not exc	eed 15 pC	i/L.																													

X:/Tucsori/Projects/07proj/073-62522/POC TMAttachments/Table 6 xls

FIGURES





ATTACHMENT 1

WELL DRILLER REPORTS AND WELL LOGS



CHILDREN CONTRACTOR

Arizona Department of Water Resources Information Management Unit P.O. Box 458 • Phoenix, Arizona 85001-0458 (602) 771-8627 • (800) 352-8488 www.water.az.gov

THIS REPORT MUST BE FILED WITHIN 30 DAYS OF COMPLETING THE WELL.

PLEASE PRINT CLEARLY USING BLACK OR BLUE INK

D(1-12)35 DAB WELL REGISTRATION NUMBER <u> 55 - 907035</u>

FILE NUMBER

PERMIT NUMBER (IF ISSUED)

Dilling Firm	CRIZATION						
NAME	The second s	DWR LICENSE NU	MBER				
	LLING SERVICES L L C	78					
ADDRESS P.O. BOX 801		TELEPHONE NUME 602-453-3252	BER				
CITY/STATE/ZIP		FAX					
GILBERT, AZ, 85299-0		602-45	3-3258				
CASEGNIONAL PRECISITRAVINED	RMATION						
Well Owner			ell				(BERTSCHIEF)
FULL NAME OF COMPANY, ORGANIZATIO Resolution Copper Company		WELL LOCATION AD	• •				
MAILING ADDRESS			MA HEIGHTS	20. 9	Sepurior		
102 Magma Heights		TOWNSHIP (N/S)	RANGE (E/W)	SECTION	160 ACRE	40 ACRE	10 ACRE
CITY/STATE/ZIP			12 E	35	SE 114	NE 14	NW 1/4
Superior, AZ, 85273		33	17 '	-969 "	LONGITUDE	05 '	760 W
CONTACT PERSON NAME AND TITLE			E/LONGITUDE (CHEC				<u>1.</u>
CASEY MCKEON		USGS Quad Map		entional Survey		*GPS: Hand-	
TELEPHONE NUMBER	FAX	LAND SURFACE ELEV				GPS: SUIVE	-61806
520 689-9374	520 - 689 - 9304			192		Feet Above	Sea Level
WELL NAME (e.g., MW-1, PZ-3, lot 25 Well, Sm	ith Well, etc.)	METHOD OF ELEVATI				GPS: Hand-	
Secul	المع ال	USGS Quad Map		ntional Survey	ľ	GPS: Survey	
500 yd.	<u>AJE (I</u>	"IF GPS WAS USED, G					
		1		INTE DATUM (C	HEUR UNE)		
			er (please specify)				
		COUNTY			ARCEL ID NUMB	ER (MOST REC	ENT)
		TINAL	1	BOOK		PAR	Cel
SECTION AND LOONS FROM	THONIDE MIKS STAR & STAR						
Check One	Methostof Well	Development			aling at Re	duction P	oin ts
			1	ECK ONE			
Bored or Augered		1 e		None Packed			
	Surge Block		. —	Swedged			
Dual Rotary				Welded			
Mud Rotary	Other (please s	pecify)		Other (pleas	se specify)		
Reverse Circulation	📕 A3072 C						
Driven	Condition of We				Dates		
	CHECK ONE		DAT	E WELL CONST	RUCTION STAR		
Air Percussion / Odex Tubing	Capped				6/1/0		
	Pump Installed		DAT	E WELL CONST	RUCTION COMP		
					6/4/07		
I state that this notice is filed in com	pliance with A.R.S. § 45-596 and is	complete and corre	ct to the best of n	ny knowledg	e and belief.].
SIGNATURE OF QUALIFYING PARTY	`		DATE			<u></u> •	
	` • •				.1.07	1	1

DWR 55-55 (REVISED 03/07/06) PAGE 1 OF 4

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DEPT	H OF BOR	41 WEULCO ING レチロ Vel/Informati		Fee	at Below Land Surface	DEP	的原始和选择	ACICIERO MPLETED V							Feet Bekow Li	and Surface
STATIC	WATER LE	VEL				IME MEAS			iG WELL, METHOD		REGULATI	ON				
D6 FF	EDTH ROM FACE		DI FI	EPTH ROM RFACE		<u> </u>	MATE	RIAL TY	nstalled Cas PE (T) I	ing	PER	FORAT		<u>РЕ (</u>	n D	
FROM (feet)	TO (feet)	BOREHOLE DIAMETER (inches)	FROM (feet)	TO (feet)	OUTER (inches)	STEEL	PVC	ABS	IF OTHER TYPE, DESCRIBE	BLANK OR NONE	WIRE WRAP	SHUTTER SCREEN	MILLS KNIFE	SLOTTED	IF OTHER TYPE, DESCRIBE	SLOT SIZE (inches)
8	150	10	0	95	4.5		1			¥						
			95 135	B5 140	4.5		×							×		.040
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							1915年		Installed Annular Material			
	H FROM	 		·····			•••••••	ANN	ULAR MATERIAL TYPE (T)	20000	FII '	TER PACK
FROM (feet)	TO (fest)	NONE	CONCRETE	NEAT CEMENT OR CEMENT GROUT	CEMENT-BENTONITE GROUT	GROUT	CHIPS	SUITE	IF OTHER TYPE OF ANNULAR MATERIAL, DESCRIBE	SAND	GRAVEL	SIZE
0	20			x								
70	70				X		-7	(
70	3						x					
80	140											
								+		<u>*</u>		10-20
	·	{				-+						
										ľ		
										-+		
										+		

DWR 55-55 (REVISED 03/07/06) PAGE 2 OF 4

WELL REGISTRAT	ION NUMBER	-
55 - 907035		

DEFINE	KOM SURFACE		
FROM (feet)	TO (feet)	Description Describe material, grain size, color, etc.	Check (T) every interval where water was encountered (if known)
0	32	Brown Smoth + Gravel	
32	140	Brown Smith & Gravel Boorock - Gila Concytomerate	
	<u> </u>		
a 111	<u> </u>		
M-11		Tt>- 140	
		7 - Dry - NOT ENCOUNTERED	
			<u></u>
			······································
			· · · ·
			·
	-		

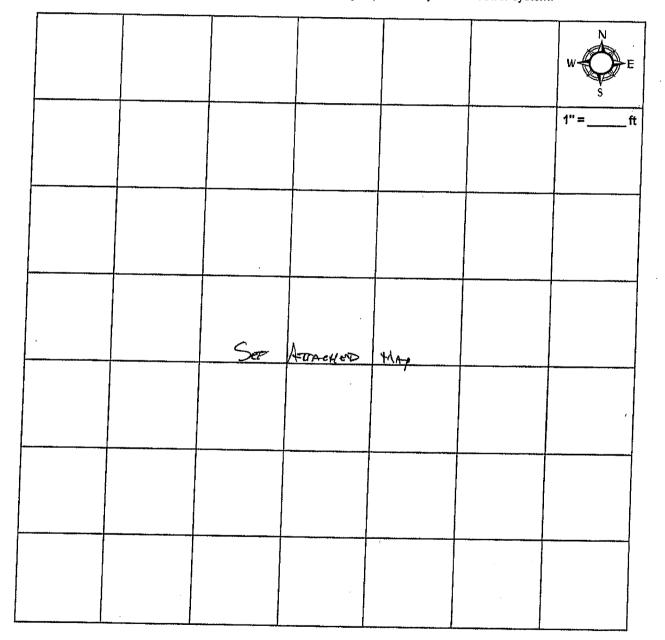
DWR 55-55 (REVISED 03/07/06) PAGE 3 OF 4

WELL REGISTRATION NUMBER 55 - 907035

NAME OF WELL DWNER			
NAME OF WELL OWNER	COUNTY ASSESSOR'S PARCE	L ID NUMBER (MOST RECENT	>
Resolution Copper Company	BOOK	МАР	PARCEL
		<u> </u>	

Please draw the following: (1) the boundaries of property on which the well was located; (2) the well location; (3) the locations of all septic tank systems and sewer systems on the property or within 100 feet of the well location, even if on neighboring properties; and (4) any permanent structures on the property that may aid in locating the well.

Please indicate the distance between the well location and any septic tank system or sewer system.



Water Manage P.O. Box 458 •	rtment of Water Resource ment Support Section Phoenix, Arizona 85001 • (800) 352-8488 ov		Notice of Intent to FEE Drill, Deepen, or Modify a Monitor / Piezometer / Environmental Well							
 You <u>must</u> include with your N \$150 check or money order f Well construction diagram, la Section 6. Authority for fee: A.R.S. § 45- ** PLEASE PRINT CLEARL 	or the filing fee. beling all specifications listed in -596. .Y **		AMA / II RECEIN	/EI DATE	B SB WS WQAR CERCL	FILE NUMBER WELL REGISTRATIO	N NUMBER			
SECTION 1. REGISTRY	And the second									
Well Type CHECK ONE	Proposed Action CHECK ONE			tion of W	ORESS (IF ANY)					
Monitor Piezometer Vadose Zone Air Sparging Soil Vapor Extraction Other (<i>please specify</i>):	Drill New Well Deepen Modify If Deepening or Modify WELL REGISTRATION NUMBER 55 -		102 TOWNSH 1 COUN BOOK				-, AZ 10 ACRE NW 1/4			
SECTION 2. OWNER INFO	DUATION	an an ear sealth								
Well Owner		ante vezzezzez	Land	owner (if	different from W	fell Owner)				
FULL NAME OF COMPANY, ORGANIZ RESOLUTION COF MAILING ADDRESS	oper compan	-1	FULL N	IAME OF CON	IPANY, GOVERNMI	ENT AGENCY, OR INDIVIDUA				
102 MAGMA HE CITY/STATE/ZIP CODE	IGHTS									
	06772		CITY /	STATE / ZIP C	ODE					
SUPERION AZ			CONTA	CT PERSON	NAME AND TITLE					
CASEY MCKEC TELEPHONE NUMBER 520-689-9374	FAX	<u></u>	TELEPI	HONE NUMBE	R	FAX				
SECTION 3. DRILLING AU			05003000	CHARTER CONTRACTOR						
Drilling Firm			Cons	ultant (if a	innlicable)		a na sana ana ana ana ana ana ana ana an			
NAME			CONSL	ILTING FIRM						
			GO	LDER	<u>ASSOC</u>	-IATES				
DWR LICENSE NUMBER	ROC LICENSE CATEGORY			CT PERSON I		C A				
TELEPHONE NUMBER	FAX				J. MALL					
				- 888- 9	3818	520-888-8	817			
E-MAIL ADDRESS	,		E-MAIL	ADDRESS		520-888-8 golder.com				
				jma	usa a	golder.com	~			
SECTION 4.		aitaiti araa ka		45752XXX						
Questions		Yes	No	Explana	tion:					
1. Are all annular spaces betwee borehole for the placement of	en the casing(s) and the grout at least 2 inches?	\checkmark		located in a CERCLA.	and near groundw NQARF, DOD, Ll	pecial standards required fo rater contamination sites (su JST).	ich as			
Is the screened or perforated than 100 feet in length?	interval of casing greater		\checkmark	wells locate	ed in and near gro A. WQARF, DOD	tervals are a special standa bundwater contamination sit , LUST).	es (such			
Are you requesting a variance in lieu of steel casing in the su	rface seal?		\checkmark	The wells must be constructed in a vault as defined in A.A.C. R12-15-801(27).						
 Is there another well name or associated with this well? (e.g 				IF YES, PLE	ASE STATE					
 5. Have construction plans been Arizona Department of Environ 	coordinated with the	\checkmark		IF YES, PLE	ASE STATE AGEN	NODIVISION 602-	BER 771-4632			
 For monitor wells, is dedicated installed? 		\checkmark			MP CAPACITY	1.5 Gallions pe				
7. Is this well a new well located Area AND intended to pump w remediating groundwater?	vater for the purpose of		\checkmark	TOTAL NUM	IBER OF OPERABL 3, YOU MUST ALS 454(C) & (F) (See	A REPLACEMENT WELL AND E WELLS ON THE SITE IS NO O FILE A SUPPLEMENTAL FO Instructions) ISTRATION NUMBER BE PLAC	RM			
 Will the well registration numb cover or on the upper part of the 	er be stamped on the vault ne casing?		\checkmark	ETCHER	NO WILL THE REGI	LENT PAD PRIOR T	TO DRYING			

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Notice of Intent to Drill, Deepen, or Modify a Monitor / Piezometer / Environmental Well

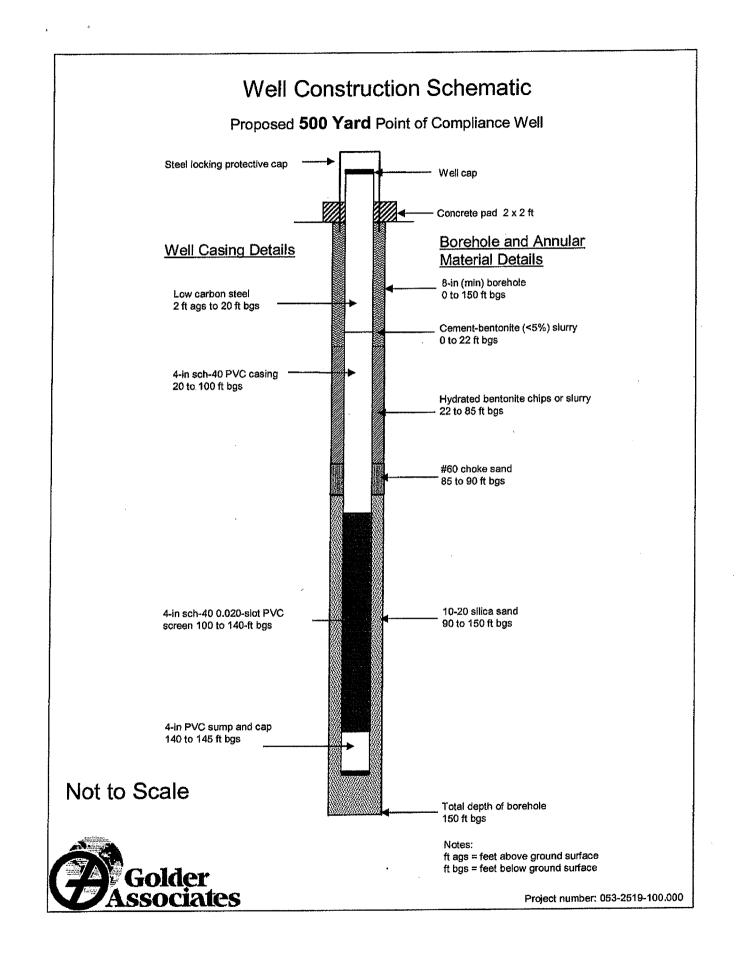
WELL REGISTRATION NUMBER

SECTION 5. WELL CONSTRUCTION	DETAILS	
Drill Method	Method of Well Development	Grout Emplacement Method
CHECK ONE	CHECK ONE	CHECK ONE
 Air Rotary Bored or Augered Cable Tool Dual Rotary Mud Rotary Reverse Circulation Driven 	 ☐ Airlift ☑ Bail ☐ Surge Block ☐ Surge Pump ☐ Other (<i>please specify</i>): 	☐ Gravity ☐ Pressure Grout ☑ Tremie ☐ Other (please specify):
Jetted	Method of Sealing at Reduction Points	Surface or Conductor Casing
Air Percussion / Odex Tubing	CHECK ONE	CHECK ONE
Other (please specify): MAY 18, 2007 DATE CONSTRUCTION TO BEGIN	 ✓ None Welded Swedged Packed Other (<i>please specify</i>): 	Extend 1' above grade

SECTION 6. PROPOSED WELL CONSTRUCTION PLAN (attach additional page if needed) Attach a well construction diagram labeling all specifications below.

	Boreho	e		-	62.55	<u> 889</u>						e k	Casing	0 								
	H FROM RFACE				[DEPTH	H FRC				MAT	ERI	AL TYPE (T)		PE	RFO	RAT	ION .	TYPE	<u>(T)</u>		
FROM (feet)	TO (feet)	DIA	REHC	ER	FR((fee	ом		TO (feet)	OUTER DIAMETER (inches)	STEEL	PVC	ABS	IF OTHER TYPE, DESCRIBE	BLANK OR NONE	WIRE WRAP	SHUTTER SCREEN	MILLS KNIFE	SLOTTED	IF OTHER TYPE, DESCRIBE			SLOT SIZE IF ANY (inches)
0	150		9		C	>	10	20	ч													
					2	0	Γι	00	Ч		\checkmark			\checkmark								
	1				10		1	40			\checkmark							\checkmark				0.020
			gal ja	38 5 5					Annular	Me	iter	lal				24 2						
	I FROM	L							NNULAR MATER	IAL 1	TYPE	(T)						\square	ļ	FI	LTER	PACK
FROM (feet)	FACE TO (feet)	NONE	CONCRETE	NEAT CEMENT OR CEMENT GROUT	CEMENT-BENTONITE	GROUT	CHIPS	PELLETS	IF C	IF OTHER TYPE OF ANNULAR MATERIAL, OF ANNULAR MATER								SIZE				
0	22				\checkmark																	
22	85						\checkmark															
85	90								#60	С	HC	>ĸ	e sani	2								
90	150									_									\checkmark			0-20
IF THIS WELL HAS NESTED CASINGS, SPECIFY NUMBER OF CASING STRINGS EXPECTED DEPTH TO WATER Feet Below Ground Sur										round Surface												
I state tha	at this notice	ə is fi	iled i	n cor	nolia	nce	Nith	A.R.S	S. § 45-596 and	d is	con	nole	te and correct	to t	he t	oost	of r	ny l	know	ledg	e an	d belief.
	RINT NAME A								<u> </u>	SI	GNA	ŢUR	E OF WELL OWN	EF								DATE

ase Mckeon: Envivonmental Supervise	Case Mc Loon 5-1	1-07-
TYPE OR PRINT NAME AND TITLE	SIGNATURE OF LANDOWNER, IF APPLICABLE (SEE INSTRUCTION	ONS) DATE





Arizona Department of Water Resources Information Management Unit P.O. Box 458 • Phoenix, Arizona 85001-0458 (602) 771-8627 • (800) 352-8488 www.water.az.gov

Well Driller Re	port
and Well Log	C

THIS REPORT MUST BE FILED WITHIN 30 DAYS OF COMPLETING THE WELL.

PLEASE PRINT CLEARLY USING BLACK OR BLUE INK

NEWSKUN D(2-12)4 ADD WELL REGISTRATION NUMBER <u> 55 - 907037</u> PERMIT NUMBER (IF ISSUED)

SECTIONNEMDRILLENCAUTT													
Drilling Firm													
	LLING SERVICES L L C	DWR LICENSE NU	MBER										
多级4000 ··································		78											
ADDRESS P.O. BOX 801		1	TELEPHONE NUMBER 602-453-3252										
CITY/STATE/ZIP													
GILBERT, AZ, 85299-0)801		FAX 602 - 453-3258										
SEGIONAL REGISTRYAN FO	DUATON												
WallOwner		Location of W	7.00.00										
FULL NAME OF COMPANY, ORGANIZATIO	N, OR INDIVIDUAL	WELL LOCATION AD	A STREAM AND AN	的现在分词的分词的现在分词									
resolution Copper Company		LOZ MAG	MA HEIGHT	Ro Son	ena.								
MAILING ADDRESS		TOWNSHIP (N/S)	RANGE (E/W)	SECTION	160 ACRE	40 ACRE	10 ACRE						
102 Magma Heights		25	IZE	4	UE 14	SE 14	SE 1/4						
CITY/STATE/ZIP		LATITUDE			LONGITUDE								
Superior, AZ, 85273	·····	33	17	,260 "N	14	90	™ ۳۶۲۰						
CONTACT PERSON NAME AND TITLE		METHOD OF LATITUE	METHOD OF LATITUDE/LONGITUDE (CHECK ONE)										
CASEY MEREON	T	USGS Quad Map											
TELEPHONE NUMBER	520 - 689 - 930N	LAND SURFACE ELEV	LAND SURFACE ELEVATION AT WELL										
520 689-9374			270	8		Feet Above	Sea Level						
WELL NAME (e.g., MW-1, PZ-3, lot 25 Well, Sm	ith Well, etc.)	METHOD OF ELEVATI	ION (CHECK ONE)		4	"GPS: Hand-I	fekd						
INDIANS POWD	Rac	USGS Quad Map	Conv	entional Survey	Ľ	- GPS: Survey	Grade						
		*IF GPS WAS USED, G	EOGRAPHIC COORDI	NATE DATUM (CHE	CK ONE)		,						
			er (please specity)										
		COUNTY		400500000 BA									
		PINAL		ASSESSOR'S PAR BOOK			•						
		T CNAL		*	-	- PAR							
SECTIONSI SWELLCONSTIRUC	THONID = TAYASARA												
Drilling Method		Vell Development	W. L	ethodiof Sec	ilingiatiRe	duction	olintes						
	CHECK ONE			IECK ONE									
Air Rotary	Airlift Bail			None									
Cable Tool	Surge Block	ć		Packed Swedged									
Dual Rotary	Surge Pum			Welded									
Mud Rotary	Other (plea			Other (please	snecify)								
Reverse Circulation													
Driven		Weller	Co	nstruction	Dates								
	CHECK ONE		DAT	E WELL CONSTRU		red							
Air Percussion / Odex Tubing	Capped		`		31/07								
	Pump Installe	ed	DAT				f						
	l		/	~	13167								
I state that this notice is filed in com	pliance with A.R.S. § 45-596 an	d is complete and corre	ct to the best of r	ny knowledae	and belief.		Ī						
SIGNATUBE OF QUALIFYING PARTY			DATE				——/						
				-1.	1.0	7	ľ						

DWR 55-55 (REVISED 03/07/06) PAGE 1 OF 4

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DEPTH	U) I OF BORIN	1G 60	2	Fee	t Below Land Surface		TH OF COM	IPLETED W	ELL SS						Feet Below La	nd Surface
STATIC V	NATER LEV	Zell Informatic EL Feet Bolow Las		DATE	AEASURED TI	ME MEASL		IF FLOWING	3 WELL, METHOD	OF FLOW	REGULATIO					
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FROM (feet)	TO (feet)	BOREHOLE DIAMETER (Inches)	FROM (feel)	TO (feet)	OUTER (inches)	STEEL	PVC	ABS	if other Type, Describe	BLANK OR NONE	WIRE WRAP	SHUTTER SCREEN	WILLS KNIFE	SLOTTED	IF OTHER TYPE, DESCRIBE	SLOT SIZE (inches)
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									Installed Annular Material			
	H FROM		T		- <u>r</u>				ULAR MATERIAL TYPE (T)		FIL	TER PACK
FROM (feet)	TO (feet)	NONE	CONCRETE	NEAT CEMENT OR CEMENT GROUT	CEMENT-BENTONITE GROUT	GROUT	BENTC Self	BELLETS	IF OTHER TYPE OF ANNULAR MATERIAL, DESCRIBE	SAND	GRAVEL	SIZE
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3	4						×					
4	19									x		10-20
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The second s	
WELL REGISTRATION NUMBE	R
55 - 907037	

SEC	ETION 5		
DEPTH FR FROM (feet)	ROM SURFAC	Description Describe material, grain size, color, etc.	Check (T) every interval where water was encountered (if known)
0	30	Tailway	
30	60	Tailings BEDRock - highy weathed so (Clay	×
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			<u> </u>
. <u></u> ,		TD-60	
	<u> </u>	TD-LO 7 - ~55'	

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SECTIONS WELLSMERCAN			
NAME OF WELL OWNER	COUNTY ASSESSOR'S PARCE		
resolution Copper Company	воок	MAP	PARCEL

Please draw the following: (1) the boundaries of property on which the well was located; (2) the well location; (3) the locations of all septic tank systems and sewer systems on the property or within 100 feet of the well location, even if on neighboring properties; and (4) any permanent structures on the property that may aid in locating the well.

Please indicate the distance between the well location and any septic tank system or sewer system.

				W S E
				1" =ft
	SFR	ATTACHED	Map	
			· · · · · · · · · · · · · · · · · · ·	

Water Manage P:O. Box 458 (602) 771-850 www.azwater.		-0458	Notice of Intent to FEE Drill, Deepen, or Modify a Monitor / Piezometer / Environmental Well
 You <u>must</u> include with your I \$150 check or money order Well construction diagram, la Section 6. Authority for fee: A.R.S. § 45 ** PLEASE PRINT CLEAR 	for the filing fee, abeling all specifications listed in 5-596. _Y **	nk.	AMA / INA B SB RECEIVEI DATE WS ISSUED DATE WOAR
SECTION 1. REGISTRY I			T
Well Type CHECK ONE	Proposed Action		Location of Well WELL LOCATION ADDRESS (IF ANY)
Monitor Piezometer Vadose Zone Air Sparging Soil Vapor Extraction	Drill New Well Deepen Modify If Deepening or Modifyi well REGISTRATION NUMBER	ng:	102 MAGMA HEIGHTS, SUPERIOR, A TOWNSHIP (NG) RANGE (EMV) SECTION 160 ACRE 40 ACRE 10 ACRE 25 12E 4 NE 1/2 SE 1/2 SE 1/2 COUNTY ASSESSOR'S PARCEL ID NUMBER BOOK MAP PARCEL
Other (please specify):	55 -		COUNTY WHERE WELL IS LOCATED
SECTION 2. OWNER INF	ORMATION	The second	<u> </u>
Well Owner		*******	Landowner (if different from Well Owner)
FULL NAME OF COMPANY, ORGANI			FULL NAME OF COMPANY, GOVERNMENT AGENCY, OR INDIVIDUAL
RESOLUTION (54	MAILING ADDRESS
102 MAGMA HE	IGHTS		CITY / STATE / ZIP CODE
SUPERIOR AZ CONTACT PERSON NAME AND TITL	- 85273		CONTACT PERSON NAME AND TITLE
CASEY MCKE			
TELEPHONE NUMBER 520 - 689 - 9374	FAX	304	TELEPHONE NUMBER FAX
SECTION 3 DRILLING AL			
Drilling Firm			Consultant (if applicable)
NAME			CONSULTING FIRM
DWR LICENSE NUMBER	ROC LICENSE CATEGORY		GOLDER ASSOCIATES INC.
			JOHN J. MALUSA
TELEPHONE NUMBER	FAX		TELEPHONE NUMBER 520-888-8818 E-MAIL ADDRESS junal USA @ Golder.com
E-MAIL ADDRESS			E-MAIL ADDRESS juna lusa @ aplder.com
SECTION 4.			
Questions		Yes	No Explanation:
 Are all annular spaces between borehole for the placement of 	en the casing(s) and the grout at least 2 inches?	\checkmark	2-inch annular spaces are special standards required for wells located in and near groundwater contamination sites (such as CERCLA, WQARF, DOD, LUST).
 Is the screened or perforated than 100 feet in length? 	interval of casing greater		100-foot maximum screen intervals are a special standard for wells located in and near groundwater contamination sites (such as CERCLA, WQARF, DOD, LUST).
 Are you requesting a variance in lieu of steel casing in the st 	Inface seal?	· ·	The wells must be constructed in a vault as defined in A.A.C. R12-15-801(27).
 Is there another well name or associated with this well? (e.g) 			IF YES, PLEASE STATE
 Have construction plans been Arizona Department of Enviro 	coordinated with the	$\overline{}$	IF YES, PLEASE STATE AGENCY CONTACT & PHONE NUMBER KRISTIE KILGORE - WQ DIVISION 602-771-4632
 For monitor wells, is dedicated installed? 		\checkmark	IF YES, PLEASE STATE DESIGN PUMP CAPACITY 15 Gallons per Minute
 Is this well a new well located Area AND intended to pump v remediating groundwater? 			IF YES, UNLESS THE WELL IS A REPLACEMENT WELL AND THE TOTAL NUMBER OF OPERABLE WELLS ON THE SITE IS NOT INCREASING, YOU MUST ALSO FILE A SUPPLEMENTAL FORM A.R.S. § 45-454(C) & (F). (See instructions)
 Will the well registration numb cover or on the upper part of the upper			FIGURED INTO CEMENT PAD PRIOR TO DRYING

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Notice of Intent to Drill, Deepen, or Modify a Monitor / Piezometer / Environmental Well

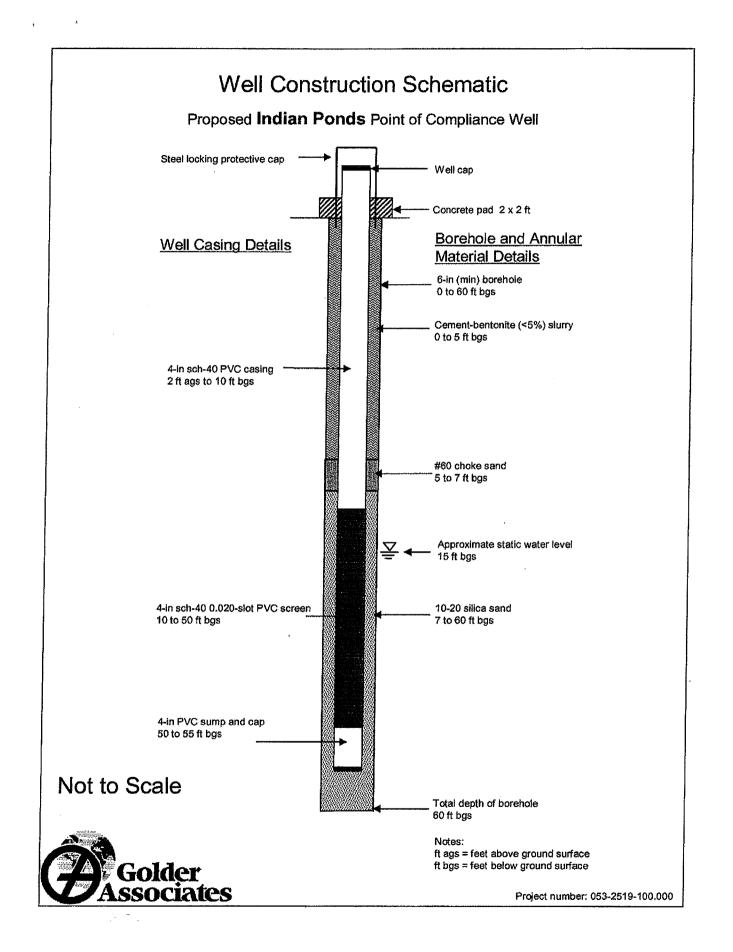
WELL REGISTRATION NUMBER

SECTION 5. WELL CONSTRUCTION	DETAILS	
Drill Method	Method of Well Development	Grout Emplacement Method
CHECK ONE	CHECK ONE	CHECK ONE
 Air Rotary Bored or Augered Cable Tool Dual Rotary Mud Rotary Reverse Circulation Driven 	Airlift Bail Surge Block Surge Pump Other (<i>please specify</i>):	☐ Gravity ☐ Préssure Grout ☑ Tremie ☐ Other (<i>please specify</i>):
etted الحالي 🛄	Method of Sealing at Reduction Points	Surface or Conductor Casing
Air Percussion / Odex Tubing	CHECKONE	CHECK ONE
Other (please specify):	V None Welded Swedged	☐ Flush Mount in a vault ☑ Extend 1' above grade
MAY 18, 2007	Packed	
DATE CONSTRUCTION TO BEGIN	Other (please specify):	

SECTION 6. PROPOSED WELL CONSTRUCTION PLAN (attach additional page if needed) Attach a well construction diagram labeling all specifications below.

	Boreho	e	2012					$C \geq 1$					9 (d)	Casing	e de la constante a general de la constante de la								
	H FROM RFACE				C		H FRO				—	MA'	TER	AL TYPE (T)		PE	RFO	RAT	NOI	TYPE	(T)		
FROM (feet)	TO (feet)	DIA	REHC METI nches	ER	FR((fe	DM		TO feet)	OUTER DIAMETER (inches)		STEEL	PVC	ABS	IF OTHER TYPE, DESCRIBE	BLANK OR NONE	WIRE WRAP	SHUTTER SCREEN	MILLS KNIFE	SLOTTED		OTHE IYPE, SCRII		SLOT SIZE IF ANY (inches)
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FROM (feet)	TO (feet)	NONE	CONCRETE	NEAT CEMENT OR CEMENT GROUT	CEMENT-BENTONITE GROUT	GROUT	CHIPS	PELLETS		IF	OTHE	RT		OF ANNULAR MA DESCRIBE	TER	AL,				SAND	GRAVEL		SIZE
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7	60													· · · · ·								1	0-20
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IF THIS WE	LL HAS NEST	ED CA ASING	SING	is, Ings								~r"E		D DEFINITO WA	I GR		15	Ī		Fρ	ol Ro	tow G	Fround Surface

I state that this notice is filed in compliance with A.R.S. § 45-596 an	d is complete and correct to the best of my knowledge and belief.
TYPE OR PRINT NAME AND TITLE	SIGNATURE OF MELL OWNER DATE
Casey McKecn, Environmental Supervisor	Caref Mch 5.11-07
TYPE OR PRINT NAME AND TITLE	SIGNATURE OF LANDOWNER, IF APPLICABLE (SEE INSTRUCTIONS) DATE





Print State of State

DWR 55-55 (REVISED 03/07/06) PAGE 1 OF 4

Arizona Department of Water Resources Information Management Unit P.O. Box 458 * Phoenix, Arizona 85001-0458 (602) 771-8627 * (800) 352-8488 www.water.az.gov

THIS REPORT MUST BE FILED WITHIN **30 DAYS** OF COMPLETING THE WELL.

PLEASE PRINT CLEARLY USING BLACK OR BLUE INK

ELE NUMBER D(1-12)35/ADD WELL REGISTRATION NUMBER 55 - 907034 PERMIT NUMBER (IF ISSUED)

NAME DWE LOCAL CAREET DRILLING SERVICES L.L.C. DWE LOCARSE MURRER YALLOW LACKET DRILLING SERVICES L.L.C. 78 78 YARDERS P.O. BOX 801 BOZ 453-3222 P.O. BOX 801 BOZ 1-453-3228 GLEERT, AZ, 8529-0801 BOZ 1-453-3225 Wall CONTROL BODERKY, CRAAZZATOR OR INDUCUAL Recolution Copper Company LOZ MARCINE (F. S. P. D. C. C. A. T. MUNIC ADDRESS ISDERIKY, CRAAZZATOR OR INDUCUAL Recolution Copper Company LOZ MARCINE (F. S. P. D. C. C. A. T. MUNIC ADDRESS ISDERIKY, CRAAZZATOR OR INDUCUAL Recolution Copper Company LOZ MARCINE (F. S. P. D. C. C. A. T. MUNIC ADDRESS ISDERKY, CRAAZZATOR OR INDUCUAL Supprior, AZ, 85273 UTTUDE COMTACT PERSON NAME AND TITLE NOTION (F. C. C. N.) CACC M METHOD OF LATTURER/CORNER Summer Supprior, AZ, 85273 OX COMTACT PERSON NAME AND TITLE NOT SUPPRIOR NAME BUD TITLE CACC M METHOD OF LATTURERCORNER SUMMER SetTring Tows II + 2/ALVT WE/I USSS GuaMMp COMMARCE COMPROX CORNERS SUMER MELL MARE GE, MWN, P23, NESS WER, Smarer MARE BUD MO	Drilling Firm												
YELLOW_MCKET DRILLING SERVICES LLC 78 MORRES TELEPHORE NUMBER P.O. BOX 601 602-453-3252 DT/YSAREZAP BOX MOLIDERT, AZ, 86030-0001 LOCATON ASSES MOLIDERT, AZ, 86030-0001 LOCATON ASSES MULINICA COMPANIES LOCATON ASSES MULINICA ADRESS LOCATON ASSES TOWNSHIP NON RANCE LEW Superior, AZ, 86273 LATITUDE Superior, AZ, 86273 LATITUDE Superior, AZ, 86273 LATITUDE CONTYSTREZP LATITUDE Superior, AZ, 86273 SZO - & BQ - 930 d CONTYSTREZP SZO - & BQ - 930 d METHOD OF LEVATION (DECONTR) LOCE CONTRACTON (DECONTR) Superior, AZ, 86373 SZO - & BQ - 930 d METHOD OF LEVATION (CHECK CHE) CHECK CHE METHOD OF LEVATION (CHECK CHE) CHECK CHE MELLINME (G., MWL PCA, MAR, 460) MARCE ELEVATION (CHECK C						Para and an and a second s	國際國際制度						
Accress P.O. BOX 801 TELEPHONE NUMBER 602.453-3252 GLEERT, AZ, 8529-0801 Kort - 453 - 32 CS GLEERT, AZ, 8529-0801 Kort - 453 - 32 CS Mail Converse Lobation en/Mell Resolution Company Loz MAREING ILS Name Mail Converse Mail Converse Mail Converse Location en/Mell Resolution Company Loz MAREING ILS Name En/M Name Accress Mail Converse Mail Converse Name Christian En/M Name Name Accress Name Christian En/M Name Mail Converse Name	YELLOW JACKET DRILLING SERVIC	ESLLC	78 TELEPHONE NUMBER 602-453-3252										
P.O. BOX 801 602-453-3252 PAX FAX GUIDERT, AZ, 86290-0801 PAX PAX Control (1450) Strike MARCHEMANTON Mailtoward Strike Lobatton of MAII PAX Lobatton of MAII Mailtoward Lobatton of MAII PAX Lobatton of MAII Mailtoward Lobatton of MAII Mailtoward Section Section Section Mailtoward Section Section Section Mailtoward Section Section Section Section Section	ADDRESS												
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GLLERT, AZ, 8529-0801 (a02 - 453 - 3258) CONTACT PERSON MARCESS Control of MARINE PULL MARE OF COMPARITOR OF INSTITUTE Control of MARINE Resolution Copper Company IO2 - 453 - 3258 IO2 Magner Heights IO2 - 455 - 4000000000000000000000000000000	CITY / STATE / ZIP												
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FULL NAME OF COMPANY, ORGANIZZATION, OR INDIVIDUAL. WELL LOCATION ADDRESS (IF ANY) LD 2 MALENA 4/ESLOCK (75, 5 g µ 1 0 A 7 Resolution Copper Company LD 2 MALENA 4/ESLOCK (75, 5 g µ 1 0 A 7 MALENA 4/ESLOCK (75, 5 g µ 1 0 A 7 MALINA ADDRESS TOWBREP (NR) Resolution Copper Company ID 2 Magma Heights IS Control Not Company SECTION	WolliOwner		Location of W	G M									
MALING ADDRESS IDEX IDEX<	FULL NAME OF COMPANY, ORGANIZATION, OR INDIVIDUAL		WELL LOCATION AD	DRESS (IF ANY)		Internetionen and base		AND					
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Superior, AZ, 85273 DKINDE US ILS IL		· · · · · · · · · · · · · · · · · · ·	ls	12 E	35	Nu 1/4	SE 14	SE 1/4					
CONTACT PERSON NAME AND TITLE Interventional Survey Intervent						LONGITUDE							
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I state that this nation is filed in compliance with A.D.D.D.45 500 and i	I state that this notice is filed in compliance with A	D.O. 0.45 500					······································						
I state that this notice is filed in compliance with A.R.S. § 45-596 and is complete and correct to the best of my knowledge and belief.	SIGNATURE OF OUNLEYING DADAY	к.S. § 45-596 and is	complete and correc		ny knowledg	e and belief.							
DATE DATE				DATE									
-K. L. Dare 7.1.07	K. L. Darc				7.1	. 07							

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DWR 55-55 (REVISED 03/07/06) PAGE 2 OF 4

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Well Driller Report and Well Log

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WELL REGISTRATION NUMBER
55 - 907034

DEPTH FR	OM SURFACE	EOLOGICLOGIOFWELL	
FROM (feet)	TO (feet)	Description Describe material, grain size, color, etc.	Check (T) every interval where water was encountered (if known)
0	100	Tailings	×
100	190	Tailings BED Rock- Gilly Conglomorale - Very Hand	
		d	
		TO- 190'	
		TO- 190' V = - 60'	

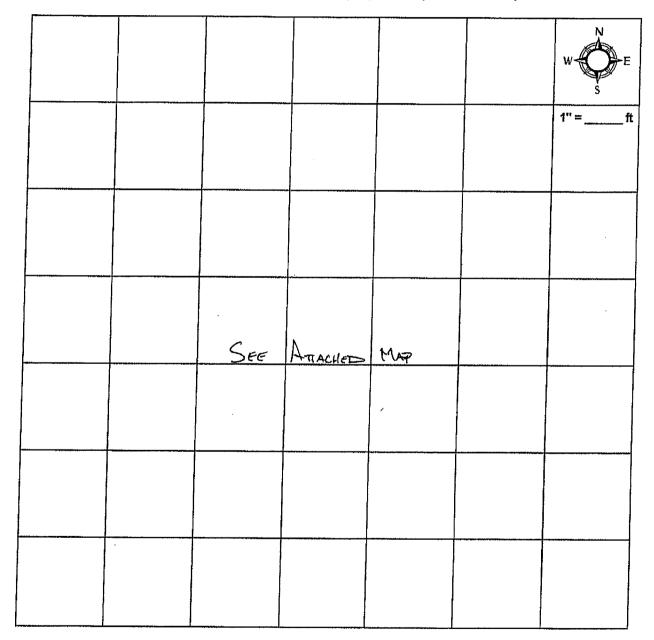
DWR 55-55 (REVISED 03/07/06) PAGE 3 OF 4

Well Driller Report and Well Log

SECTIONIS WELL SITE PLAN			
NAME OF WELL OWNER	COUNTY ASSESSOR'S PARCE	LID NUMBER (MOST RECENT))
Resolution Copper Company	воок	MAP	PARCEL
	,		

Please draw the following: (1) the boundaries of property on which the well was located; (2) the well location; (3) the locations of all septic tank systems and sewer systems on the property or within 100 feet of the well location, even if on neighboring properties; and (4) any permanent structures on the property that may aid in locating the well.

Please indicate the distance between the well location and any septic tank system or sewer system.



Water Manager P.O. Box 458 •	tment of Water Resour ment Support Section Phoenix, Arizona 85001 • (800) 352-8488 ov		٨	E /ionitor /	rill, De	epen	Intent f , or Moo / Enviro	dify a	FEE / Well
 You <u>must</u> include with your N \$150 check or money order for Well construction diagram, lat Section 6. Authority for fee: A.R.S. § 45- ** PLEASE PRINT CLEARL 	or the filing fee. beling all specifications listed in 596. Y **		AMA /	VEI DATE	B WS WQAR	SB	_	UMBER	ON NUMBER
SECTION 1. REGISTRY IN							SWING STATES		
Well Type CHECK ONE	Proposed Action			LOCATION AD			·		· · ·
Monitor Piezometer Vadose Zone Air Sparging Soil Vapor Extraction Other (<i>please specify</i>):	Drill New Well Deepen Modify If Deepening or Modify WELL REGISTRATION NUMBER 55 -			2 MAG IP (N/S) FRANCE 0 12 TY ASSESSOF	MA HE (Env) SE E R'S PARCEI		5 SUPE 160 ACRE NW 1/4 BER	40 ACRE 5E 1/4 PARCEL	AZ 10 ACRE SE 1/4
SECTION 2. OWNER INFO		and a second	CONTRACTOR OF	しろし	-14.780-865-27		an lean shirt an	2.443.01.76.5(?)	(electrone entered and
Well Owner FULL NAME OF COMPANY, ORGANIZ	ATION, OR INDIVIDUAL			IOWNER (IF C				OR INDIVIDU,	AL
RESOLUTION COPP MAILING ADDRESS 102 MAGMA HEL CITY/STATE/ZIP CODE	GHTS			IG ADDRESS	ODE				
SUPERIOR AZ CONTACT PERSON NAME AND TITLE			CONT	ACT PERSON N	NAME AND	TITLE			
CASEY MCKEON TELEPHONE NUMBER 520 - 689 - 9374	FAX 520-689-93	04	TELEP	HONE NUMBE	R		FAX		
SECTION 3. DRILLING AU	THORIZATION				NSS ZEE				
Drilling Firm				ultant (if a	pplicable)			
NAME					stee				
DWR LICENSE NUMBER	ROC LICENSE CATEGORY		CONTA	LDER ICT PERSON N OHN	$\frac{M>3}{1AME}$	<u>acia</u> VALI		NC.	
	FAX		520	HONE NUMBER	8819	8	FAX 520-4	898-8	
E-MAIL ADDRESS				ADDRESS	rale	sa	<u>e 3</u>	older	.com
Questions		Yes	No	Explanat	tion:	eren ren and	an she an	n eller en son son son son son son son son son so	and the antipage of the first of the
1. Are all annular spaces betwee borehole for the placement of		\checkmark		2-inch annu located in a CERCLA, V	ilar spaces nd near gi VQARF, D	roundwal	ter contamin ST).	ds required f ation sites (s	such as
2. Is the screened or perforated i than 100 feet in length?	nterval of casing greater		\checkmark	wells locate as CERCLA	d in and n	ear grou	ndwater con .UST).	special stand Itamination s	ites (such
 Are you requesting a variance in lieu of steel casing in the sur Is there another well name or i 	rface seal?		$\overline{}$	The wells n R12-15-80 IF YES, PLE	1(27).		ed in a vaul	t as defined	in A.A.C.
 associated with this well? (e.g 5. Have construction plans been Arizona Department of Environ 	., MW-1, PZ2, 06-04, etc.) coordinated with the mental Quality?	\checkmark		KRISTIE K	ILGORE.	-mad	CONTACT &	4 PHONE NUM	^{ABER} 1-4632
 For monitor wells, is dedicated installed? Is this well a new well located in the second second		\checkmark		IF YES, PLEA DESIGN PUN IF YES, UNLE	IP CAPACI	TY		Galions p	DTHE
 Area AND intended to pump w remediating groundwater? Will the well registration number 	ater for the purpose of		\ 	TOTAL NUME INCREASING A.R.S. § 45-4	BER OF OF	PERABLE	WELLS ON T FILE A SUPP	HE SITE IS NO	OT DRM
cover or on the upper part of th			V						TO DRYING

DWR 55-44A (REV 02/06/06) Page 1 of 2

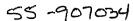
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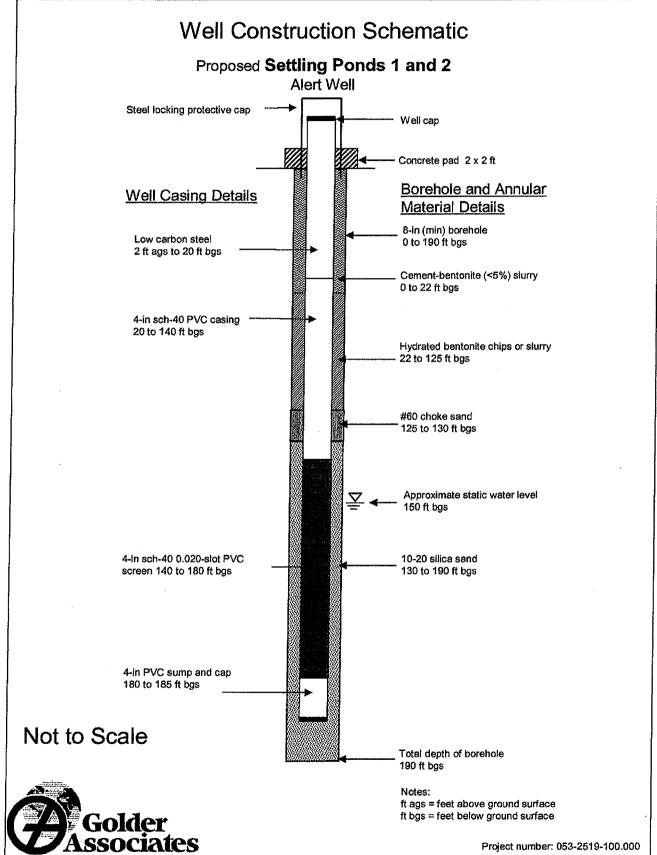
WELL REGISTRATION NUMBER

SECTION 5. WELL CONSTRUCTION	DETAILS	
Drill Method	Method of Well Development	Grout Emplacement Method
CHECK ONE	CHECK ONE	CHECK ONE
 Air Rotary Bored or Augered Cable Tool Dual Rotary Mud Rotary Reverse Circulation Driven 	 Airlift Bail Surge Block Surge Pump Other (<i>please specify</i>): 	Gravity Pressure Grout Tremie Other (<i>please specify</i>):
□ _Jetted	Method of Sealing at Reduction Points	Surface or Conductor Casing
Air Percussion / Odex Tubing	CHECK ONE	CHECK ONE
Other (please specify): MAY 18 2007 DATE CONSTRUCTION TO BEGIN	 ☑ None □ Welded □ Swedged □ Packed □ Other (<i>please specify</i>): 	☐ Flush Mount in a vault ☑ Extend 1' above grade

SECTION 6. PROPOSED WELL CONSTRUCTION PLAN (attach additional page if needed) Attach a well construction diagram labeling all specifications below.

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Casey	RINT NAME A	no	3,	<u>AVI</u>	٢٥٢	men	<u>Lal</u> 2	مىرك	EVUISOV	\int_{a}^{b}	ດດ	ent		<u> </u>		-		1	<u>5-</u>	<u>/[-</u>	57	7	
TYPE OR P	RINT NAME A	ND TI	TLE					- 1	1	SI	GNA"	TUR	E OF LANDOWNE	ER, IF	- API	PLIC	ABLE	Ξ(SF	ee in	STRU	ICTIO	NS) D	DATE





Arizona Department of Water Resources Well Driller Report Information Management Unit and P.O. Box 458 • Phoenix, Arizona 85001-0458 Well Log (602) 771-8627 * (800) 352-8488 www.water.az.gov 30 DAYS OF COMPLETING THE WELL. THIS REPORT MUST BE FILED WITHIN PLEASE PRINT CLEARLY USING BLACK OR BLUE INK SECTION 1 DRILLING AUTHORIZATION Drilling Firm DWR LICENSE NUMBER NAME 78 YELLOW JACKET DRILLING SERVICES LLC Mail To: TELEPHONE NUMBER ADDRESS 602-453-3252 P.O. BOX 801 CITY / STATE / ZIP FAX. 602 453 3258 GILBERT, AZ, 85299-0801 SECTIONIT: RECISTIRY INFORMATION Location of Well WellOwner WELL LOCATION ADDRESS (IF ANY) FULL NAME OF COMPANY, ORGANIZATION, OR INDIVIDUAL 102 Magma Helphits Sugartion Resolution Copper Mining, LLC 160 ACRE SECTION MAILING ADDRESS TOWNSHIP (N/S) RANGE (EM) 3 NW 25 102 Magma Heights 20 LONGITUDE LATITUDE CITY / STATE / ZIP 7 30,0 " 33 Itf Superlor, AZ, 85273 METHOD OF LATITUDE/LONGITUDE (CHECK ONE) CONTACT PERSON NAME AND TITLE Conventional Survey MC ENV Advisor USGS Quad Map Ser LAND SURFACE ELEVATION AT WELL FAX TELEPHONE NUMBER 20-930 2715 520 689-9374 METHOD OF ELEVATION (CHECK ONE) WELL NAME (e.g., MW-1, PZ-3, Iol 25 Well, Smith Well, etc.) USGS Quad Map Conventional Survey *IF GPS WAS USED, GEOGRAPHIC COORDINATE DATUM (CHECK ONE) A-NAD-83 Other (please specify) COUNTY BOOK

FILE NUMBER D(2-12)3 BAA

55 - 906300

WELL REGISTRATION NUMBER

PERMIT NUMBER (IF ISSUED)

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A) F 1/4

25.5W

40 ACRE

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GPS: Hand-Held

1.2GPS: Hand-Held

GPS: Survey-Grade

GPS: Survey-Grade

Feet Above Sea Level

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ASSESSOR'S PARCEL ID NUMBER (MOST RECENT) MAP PARCEL SECTION/2 WELLCONSTRUCTION/DETAIL Method of Sealing at Reduction Points Method of Well Development Drilling Method CHECK ONE CHECK ONE CHECK ONE None Airlift Air Rotary Packed Bored or Augered Bail Swedged Surge Block Cable Tool Welded Dual Rotary Surge Pump DOther (please specify) Dether (please specify) Mud Rotary Reverse Circulation Construction Dates Condition of Well Driven DATE WELL CONSTRUCTION STARTED CHECK ONE Jetted 1-31-07 Capped Air Percussion / Odex Tubing DATE WELL CONSTRUCTION COMPLETED Other (please specify) Pump Installed 1.31-07 I state that this notice is filed in compliance with A.R.S. § 45-596 and is complete and correct to the best of my knowledge and belief. DATE SIGNATURE OF QUALIFYING PARTY 2.26.07

DWR 55-55 (REVISED 03/07/06) PAGE 1 OF 4

Well Driller Report and Well Log

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WELL	REGISTRA	TION	NUMBER

55 - 906300

Dep	th		STRUC	ilon:Di	SIGN (AS BL					ded)						
DEPTH	OF BORING	17.5		Feet	Below Land Surface	DEPTI	4 OF COM	PLETED W	<u> </u>						Feet Below La	nd Surface
	Water Level Information Date Measured Time Measured IF FLOWING WELL, METHOD OF FLOW REGULATION Static Water Level															
	Boreh	ole	DE	РТН				RIAL TY		ng I	PERI	ORATI	ON TY	96414 PE (1		
	OM FACE TO (fest)	BOREHOLE DIAMETER (Inches)		OM FACE TO (feet)	OUTER (Inches)	STEEL	PVC	ABS	IF OTHER TYPE, DESCRIBE	BLANK OR NONE	WIRE WRAP	SHUTTER SOREEN	WILLS KNIFE	SLOTTED	if other Type, Describe	SLOT SIZE (inches)
C	17.5	8	+3	7	2.375		~			5						
			7.	17	2.375		-1/							arepsilon		0.620
[<u>.</u>									
<u> </u>	·															

							SHIM		ULAR MATERIAL TYPE (T)			TER PACK
	I FROM FACE		<u> </u>		w		BENTO					
FROM (feet)	TO (feet)	NONE	CONCRETE	NEAT CEMENT OR CEMENT GROUT	CEMENT-BENTONITE GROUT	GROUT	CHIPS	PELLETS	IF OTHER TYPE OF ANNULAR MATERIAL, DESCRIBE	CINAS	GRAVEL	SIZE
C)	3			~		1						
3	5						1					
5	17									1/	·	10-20
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Well Driller Report and Well Log

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WELL	REGISTRATION N	UMBER
55 - 9	06300	

	TON 5 G	- Description	Check (T) everv interval where water
(feet)	(feet)	Describe material, grain size, color, etc.	was encountered (if known)
0	2	Sandy Silt	
2	12.5	Sand will trace gravel	
12.5	17.5	Sand w frace gravel Sand w fin to course gravel (weathered bila Cong.).	
		TD17.5	
		7 4	
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			<u></u>

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Well Driller Re	port and	Well	Log
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SECTION 6 WELLSITE RLAN			
NAME OF WELL OWNER	COUNTY ASSESSOR'S PARCE	LID NUMBER (MOST RECENT))
Resolution Copper Mining, LLC	воок	мар	PARCEL

Please draw the following: (1) the boundaries of property on which the well was located; (2) the well location; (3) the locations of all septic tank systems and sewer systems on the property or within 100 feet of the well location, even if on neighboring properties; and (4) any permanent structures on the property that may aid in locating the well.

* Please indicate the distance between the well location and any septic tank system or sewer system.

	See a	Hached	site map	W S E
			Į V	1" = ft

Х 1 . •					
Water Manag	artment of Water Resour ement Support Section • Phoenix, Arizona 85001			Notice of Intent to Drill, Deepen, or Modify a	FEE
	0 • (800) 352-8488		h h	Ionitor / Piezometer / Environmen	tal Well
 Review instructions prior to You <u>must</u> include with your 	completing form in black or blue Notice:	ink.	AMA /	INA SB SB FILE NUMBER	
 \$150 check or money order 		'n	RECEI	WELL REGISTRA	114 HOLE 201 HELE AND
Section 6. Authority for fee: A.R.S. § 4	U	•	ISSUE		
** PLEASE PRINT CLEAR			20.86.02	<u>LS</u>	P-8
SECTION 1. REGISTRY					
Well Type	Proposed Action			LOCATION ADDRESS (IF ANY)	
Monitor	Drill New Well			02 Magma Heights, Superi	
Piezometer	Deepen		TOWNSH 2	IP (NS) RANGE (EW) SECTION 160 ACRE 40 ACRE S 12 E 3 NW 1/4 NE 1	10 ACRE 14 NE 14
Vadose Zone	Modify <i>If Deepening or Modify</i>	ving:		TY ASSESSOR'S PARCEL ID NUMBER	14 11 C 14
Soll Vapor Extraction	WELL REGISTRATION NUMBER		воок		
Other (please specify):	55 -			TY WHERE WELL IS LOCATED	
SECTION 2. OWNER INF	ORMATION			<u></u>	
Well Owner				lowner (if different from Well Owner)	
FULL NAME OF COMPANY, ORGAN	IZATION, OR INDIVIDUAL	/	FULL	VAME OF COMPANY, GOVERNMENT AGENCY, OR INDIVID	JUAL
Resolution Copp MAILING ADDRESS	per mining ch	<u> </u>	MAILIN	IG ADDRESS	
	eights			· · · · · · · · · · · · · · · · · · ·	
Superior, AZ	85273		CITY /	STATE / ZIP CODE	
CONTACT PERSON NAME AND TIT	Ε/		CONT	ACT PERSON NAME AND TITLE	
	Environmental Ada	130r			
TELEPHONE NUMBER 520.689.9374	FAX 520.689.930	4	TELEP	HONE NUMBER FAX	
SECTION 3. DRILLING A					
Drilling Firm				ultant (If applicable)	
NAME				older Associates	
DWR LICENSE NUMBER	ROC LICENSE CATEGORY		CONTA	CT PERSON NAME	
TELEPHONE NUMBER	FAX			ohn Malusa HONE NUMBER FAX	
LELEPHONE NUMBER	FAX		1 .	0.888,8818 520.888.8	817
E-MAIL ADDRESS			-	ADDRESS Valusa@golder.com	
		15.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.		ausie yraus. com	
SECTION:4. Questions		Yes	No	Explanation:	200300000000000000000000000000000000000
 Are all annular spaces betwee borehole for the placement of 		~		2-inch annular spaces are special standards required located in and near groundwater contamination sites CERCLA, WQARF, DOD, LUST).	(such as
2. Is the screened or perforated than 100 feet in length?	l interval of casing greater		1	100-foot maximum screen intervals are a special stan wells located in and near groundwater contamination as CERCLA, WQARF, DOD, LUST).	sites (such
Are you requesting a variance in lieu of steel casing in the s		/		The wells must be constructed in a vault as define R12-15-801(27).	d in A.A.C.
4. Is there another well name of	r identification number		\checkmark	IF YES, PLEASE STATE	
 associated with this well? (e 5. Have construction plans been Arizona Department of Enviro 	n coordinated with the		V V	IF YES, PLEASE STATE AGENCY CONTACT & PHONE N	JMBER
For monitor wells, is dedicate installed?	d pump equipment to be		/		s per Minute
 Is this well a new well located Area AND intended to pump remediating groundwater? 			~	IF YES, UNLESS THE WELL IS A REPLACEMENT WELL A TOTAL NUMBER OF OPERABLE WELLS ON THE SITE IS INCREASING, YOU MUST ALSO FILE A SUPPLEMENTAL A.R.S. § 45-454(C) & (F). (See instructions)	FORM
 Will the well registration numl cover or on the upper part of 			\checkmark	IF NO, WHERE WILL THE REGISTRATION NUMBER BE P Etched into cement pad prior to ceme	

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WELL REGISTRATION NUMBER

SECTION 5. WELL CONSTRUCTION	DETAILS	
Drill Method	Method of Well Development	Grout Emplacement Method
CHECK ONE	CHECK ONE	CHECK ONE
Air Rotary Bored or Augered Cable Tool Dual Rotary Mud Rotary Reverse Circulation Driven	Airlift Bail Surge Block Surge Pump Other (<i>please specify</i>):	Gravity Pressure Grout Tremie Other (<i>please specify</i>):
Jetted	Method of Sealing at Reduction Points	Surface or Conductor Casing
Air Percussion / Odex Tubing	CHECK ONE	CHECK ONE
Der (please specify):	✓ None ☐ Welded ☐ Swedged ☐ Packed ☐ Other (please specify):	☐ Flush Mount in a vault ᠂ Extend 1' above grade

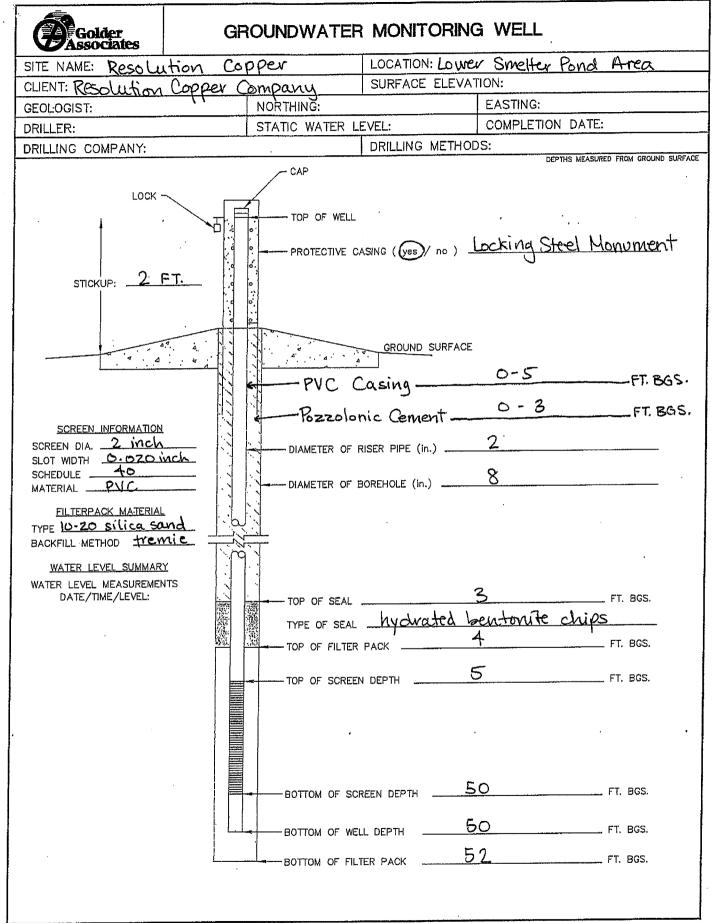
SECTION 6. PROPOSED WELL CONSTRUCTION PLAN (attach additional page if needed)

Attach a	well constr	uctio	n dia	agrar	n lab	eling	all s	pecif	ications below.										_			
	Boreho	le 👘	315/2	2.0%	5255446	3.68	ing ye	ante,	$m \in \{0, 0, 0, 0\}$	25	1	993 S	Casing	1.53		e di j	(del Sk	erre.				MARAN MAR
	H FROM	1			I		HFR				MA'	TERI	AL TYPE (T)	Ī	PE	RFO	RAT	ION	TYPE	(T)		
SUF	RFACE	_				SUF	RFACE	<u> </u>								z	ļ					
FROM (feet)	TO (feet)	DI/	REHC MET	ER	FR((fe			TO (feet)	OUTER DIAMETER (inches)	STEEL	PVC	ABS	IF OTHER TYPE, DESCRIBE	BLANK OR NONE	WIRE WRAP	SHUTTER SCREEN	WILLS KNIFE	SLOTTED		IF OTHER TYPE, DESCRIBE		SLOT SIZE IF ANY (inches)
0	52	4	8		C)		5	2		1			1								
					5		5	2	2		\checkmark							1				0.020
NES MAN		4.94	1. 112		10/14		WP.	6428	Annular	Ma	iter	ial	an an the state of the second seco		Sint.							
	H FROM							/	ANNULAR MATER	IAL	TYPE	: <u>(</u> T)							Fl	LTEF	PACK
SUR	FACE				l _m	BE	NTON	IITE														
FROM (feet)	TO (feet)	NONE	CONCRETE	NEAT CEMENT OR CEMENT GROUT	CEMENT-BENTONIT GROUT	GROUT	CHIPS	PELLETS	IF O	THE	R T		DF ANNULAR MA ESCRIBE	TERI	AL,				SAND	GRAVEL		SIZE
٥	3								Pozzol	0	ni	c	Cemer	vt								
3.	4						\checkmark					,										
4	52																		\checkmark		10	>-20
IF THIS WELL HAS NESTED CASINGS, SPECIFY NUMBER OF CASING STRINGS EXPECTED DEPTH TO WATER 6 Feet Below Ground Si											Fround Surface											

I state that this notice is filed in compliance with A.R.S. § 45-596 and	d is complete and correct to the best o	of my knowledge and bel	ief.
TYPE OR PRINT NAME AND TITLE Casen Mcleon-Environmental Advisor	SIGNATURE OF WELL OWNER	19-07	DATE
TYPE OR PRINT NAME AND TITLE	SIGNATURE OF LANDOWNER, IF APPLICAE	BLE (SEE INSTRUCTIONS)	DATE

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Arizona Department of Water Resources Information Management Unit P.O. Box 458 • Phoenix, Arizona 85001-0458 (602) 771-8627 • (800) 352-8488 www.water.az.gov

Well Driller Rep and Well Log	ort
	LEUCENE MAREN

THIS REPORT MUST BE FILED WITHIN 30 DAYS OF COMPLETING THE WELL.

PLEASE PRINT CLEARLY USING BLACK OR BLUE INK

D((112)35 CBA WELL REGISTRATION NUMBER 55 - 907036 PERMIT NUMBER (IF ISSUED)

SECTION/A ORIELING AUTH										
			DWR LICENSE NU							
YELLOW JACKET DRIL	LING SERVIC	ESLLC	78							
ADDRESS P.O. BOX 801			TELEPHONE NUME	3ER						
P.O. BOX 801	····		602-453-3252							
CITY/STATE/ZIP GILBERT, AZ, 85299-0	1801		FAX	453- 3	3200	2				
SECTION ANREGISTRY INFO										
Well Owner			Location of W	7411				lainn an sealaiste Bhan an sealaiste		
FULL NAME OF COMPANY, ORGANIZATION	I, OR INDIVIDUAL		WELL LOCATION AD	DRESS (IF ANY)	destrong the state of the state	U-SAUTTERSECTION OF	Disent set the set of the set		
Resolution Copper Company			102 MAG	MA UE	IGHR	5 20. °	Superior			
MAILING ADDRESS 102 Magma Heights			TOWNSHIP (N/S)	RANGE (E	EAVA)	SECTION	160 ACRE	40 ACRE	10 ACRE	
CITY/STATE/ZIP			15	12 E		35	SW 1/4	とい 1/4	NE 114	
Superior, AZ, 85273			LATITUDE 33	17	•	.¥78 ™		do '	.377 ~	
CONTACT PERSON NAME AND TITLE			METHOD OF LATITUE		(CHECK	····				
CASEY MCKEON			USGS Quad Map			ntional Survey	1	*GPS: Hand-		
TELEPHONE NUMBER	FAX		LAND SURFACE ELEV					*GPS: Survey	-Grade	
520 689-9374		-89 - 9304			2	2915		Feet Above	Sea Level	
WELL NAME (e.g., MW-1, PZ-3, lot 25 Well, Smith	th Well, etc.)		METHOD OF ELEVAT	ION (CHECK OF	IE)		ļ	*GPS: Hand-F	teld	
Tailing Pord	5		USGS Quad Map	Ľ	Conve	ntional Survey		*GPS: Survey	Grade	
1			*IF GPS WAS USED, G	EOGRAPHIC C	DORDIN	ATE DATUM (CI	HECK ONE)			
			NAD-83 0th	er (please specif	v)					
			COUNTY		7	ASSESSOR'S P	ARCEL ID NUMB	ER (MOST RECI	ENT)	
			Push		1	BOOK	MAP	PAR	-	
					[77 10 10 10 10 10 10 10 10 10 10 10 10 10			
SECTION BRIMEDIC ONSTRUCT	HOMDERA	Method of Wall	lov Boomer	an trainin a	ile Henry i	81.948-978-S				
CHECK ONE		CHECK ONE	accordpanentalis			ECK ONE	anneparas	eucronie(JIRES	
Air Rotary		Airlift				None				
Bored or Augered		📕 Bail				Packed				
Cable Tool		Surge Block				Swedged				
Dual Rotary		Surge Pump				Velded				
Mud Rotary		Other (please sp	ecify)			Other (pleas	e specify)			
Reverse Circulation		Condition of Well	BAUMERSTRAD				Dates		TANKE DESIGNATION	
☐ Jetted		CHECK ONE		COSHAND TO NOTE			RUCTION STAR		III SANAGARAN	
Air Percussion / Odex Tubing		Capped				5	25/07			
Other (please specify)		Pump Installed			DATI		RUCTION COMP	LETED		
				l		2	29/07			
I state that this notice is filed in com	pliance with A	.R.S. § 45-596 and is a	complete and corre	ect to the be	st of n	v knowleda	e and belief.			
SIGNATURE OF QUALIFYING PARTY	$\overline{}$	· · · · · · · · · · · · · · · · · · ·			DATE					
) G 1 6			[-1	1.07	,		

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Well Driller Report and Well Log

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DEPTH	I OF BORIN	13	<u>2</u>		ESIGN (ASI	DEP		APLETED V		eded)					Feet Below Li	
STATIC V	VATER LEV	Zel informati EL Feet Below La			MEASURED T.	IME MEASI		IF FLOWIN	IG WELL, METHOD		REGULATI	ON				
FR	Boreh PTH OM FACE	ole estatutat	F	ROM			MATE	RIAL TY	nstalled Cas PE (T)	ing L		FORAT	ION TY	<u>РЕ (</u>	<u>г)</u>	
FROM (feet)	TO (feet)	BOREHOLE DIAMETER (Inches)	FROM (feet)	TO (feet)	OUTER (Inches)	STEEL	PVC	ABS	IF OTHER Type, Describe	BLANK OR NONE	WIRE WRAP	SHUTTER SCREEN	MILLS KNIFE	SLOTTED	IF OTHER TYPE, DESCRIBE	SLOT SIZE (inches)
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			80	120	4.5		×							x		.040
			170	12.5	<i>4. इ</i>		*			×						
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	1994 IV									Installed Annular Material			
'	SURF	FROM	h	<u> </u>	7	J	7	BENTO		ULAR MATERIAL TYPE (T)	ļ	FIL	TER PACK
(te	OM eet)	TO (feet)	NONE	CONCRETE	NEAT CEMENT OR CEMENT GROUT	CEMENT-BENTONITE GROUT		CHIPS	SIETEL	IF OTHER TYPE OF ANNULAR MATERIAL, DESCRIBE	SAND	GRAVEL	SIZE
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REPAIR AND THE AREA AND AND A DESCRIPTION OF THE AREA

Well Driller Report and Well Log

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908P**

WELL	REGISTRATION NUMBER
55 - 9	07036

DEPTH F	FROM SURFACE	EOLOGICILOGOFWELL	
FROM (feel)	л то	Description Describe material, grain size, color, etc.	Check (T) every interval where water was encountered (if known)
0		Fill - Rosbergy AB	
1	130	Fill - Roobway AB BEDRock - Grila Conglomerate	×
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		$\frac{TO - BO'}{V - 170'}$	
		- 178'	
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Well Driller Repo	ort and Well Log
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SECTION & WELLSITE PLAN: CE			
NAME OF WELL OWNER	COUNTY ASSESSOR'S PARCE		
Resolution Copper Company	воок	MAP	PARCEL

Please draw the following: (1) the boundaries of property on which the well was located; (2) the well location; (3) the locations of all septic tank systems and sewer systems on the property or within 100 feet of the well location, even if on neighboring properties; and (4) any permanent structures on the property that may aid in locating the well.

Please indicate the distance between the well location and any septic tank system or sewer system.

	N
	W E
	1" = ft
SEE ATTACHED MA	-P

Water Manage P.O. Box 458	ertment of Water Resourd ement Support Section • Phoenix, Arizona 85001 0 • (800) 352-8488 gov		M		Drill, Deepe	of Intent to FEE en, or Modify a er / Environmental Well
 You <u>must</u> include with your \$150 check or money order Well construction diagram, I Section 6. Authority for fee: A.R.S. § 4 * PLEASE PRINT CLEAR 	for the filing fee, abeling all specifications listed in 5-596. LY **		AMA / II RECEIV ISSUED	EI DATE	B SB WS WOAR CERCL	FILE NUMBER WELL REGISTRATION NUMBE 55 -
SECTION 1. REGISTRY						
Well Type CHECK ONE	Proposed Action CHECK ONE			tion of W	ODRESS (IF ANY)	·
Monitor Piezometer Vadose Zone Air Sparging Soil Vapor Extraction Other (please specify):	Drill New Well Deepen Modify If Deepening or Modify WELL REGISTRATION NUMBER 55 -	ing:	LO 6 TOWNSHI COUNT BOOK COUNT	$\begin{array}{c c} MAG \\ \hline P (N/S) RANGE \\ \hline S & 1 \\ \hline 7 ASSESSOF \\ \hline \end{array}$	MA HEIGH	175, SUPERIOR, AZ 1 160 ACRE 40 ACRE 10 ACRE 5W 1/2 NW 1/2 NE 1 10 MBER 10 ACRE 10 ACRE 10 ACRE 10 ACRE 10 ACRE 1
SECTION 2. OWNER INF		2.2.1.2.2.2.0.C	District States	<u>-~~</u>		
Well Owner	CINIMADON		Land	owner (if /	different from W	Veli Owner)
FULL NAME OF COMPANY, ORGAN	ZATION, OR INDIVIDUAL		FULL N	AME OF COM	PANY, GOVERNM	MENT AGENCY, OR INDIVIDUAL
RESOLUTION COP					·	
MAILING ADDRESS	TELE COMMANY		MAILIN	G ADDRESS		
	ANTS					
102 MAGMA HEL CITY/STATE/ZIP CODE	41112		CITY / S	STATE / ZIP C	ODE	
SUPERIOR AZ	.E		CONTA	CT PERSON I	NAME AND TITLE	
CASEY MCKE	FAX		TELEPH	IONE NUMBE	R	FAX
520-689-9374	520-689-93	04				
SECTION 3. DRILLING A			(usupris)			
Drilling Firm		an a	Cons	ultant (if a	nolicable)	
NAME	<u></u>			LTING FIRM	(ppilousic)	
			601	DER	ASSOC	LATES INC.
DWR LICENSE NUMBER	ROC LICENSE CATEGORY		CONTA	T PERSON N	NAME	
			د ا	OHN	J. MAL	USA
TELEPHONE NUMBER	FAX		TELEPH	ONE NUMBE	R	FAX
·			520	-888-	-8818	520-888-8817
E-MAIL ADDRESS				ADDRESS		520-888-8817 @ golder.com
				<u>^ر`</u>	maiusa	Le Joider . com
SECTION 4.		kano ny ho	NAN DE C		in the state of the	
Questions		Yes	No	Explana	A CONTRACTOR OF A CONTRACTOR O	
1. Are all annular spaces betwe borehole for the placement o		\checkmark		located in a		pecial standards required for wells vater contamination sites (such as UST).
 Is the screened or perforated than 100 feet in length? 	interval of casing greater		\checkmark	100-foot ma wells locate	aximum screen ir	ntervals are a special standard for oundwater contamination sites (such
3. Are you requesting a varianc	e to use thermoplastic casing	······	. /	The wells r	must be constru	cted in a vault as defined in A.A.C.
in lieu of steel casing in the s	urface seal?	I		R12-15-80		
4. Is there another well name or				IF YES, PLE	ASESTATE	
 associated with this well? (e. Have construction plans been 						ICY CONTACT & PHONE NUMBER
Arizona Department of Enviro		\checkmark		KRISTIE	KILGORE	- WQ DIVISION 602-771-
6. For monitor wells, is dedicate installed?		\checkmark	.	IF YES, PLE/ DESIGN PUM	ASE STATE MP CAPACITY	15 Gallons per Minute
				IF YES UN	ESSTREWELLS	A REPLACEMENT WELL AND THE
7. Is this well a new well located Area AND intended to pump	in an Active Management water for the purpose of		\checkmark	TOTAL NUM	BER OF OPERABL 3, YOU MUST ALS	LE WELLS ON THE SITE IS NOT
7. Is this well a new well located	water for the purpose of		-/	TOTAL NUM INCREASING A.R.S. § 45- IF NO, WHEE	BER OF OPERABL 3, YOU MUST ALS 454(C) & (F). (See RE WILL THE REG	LE WELLS ON THE SITE IS NOT

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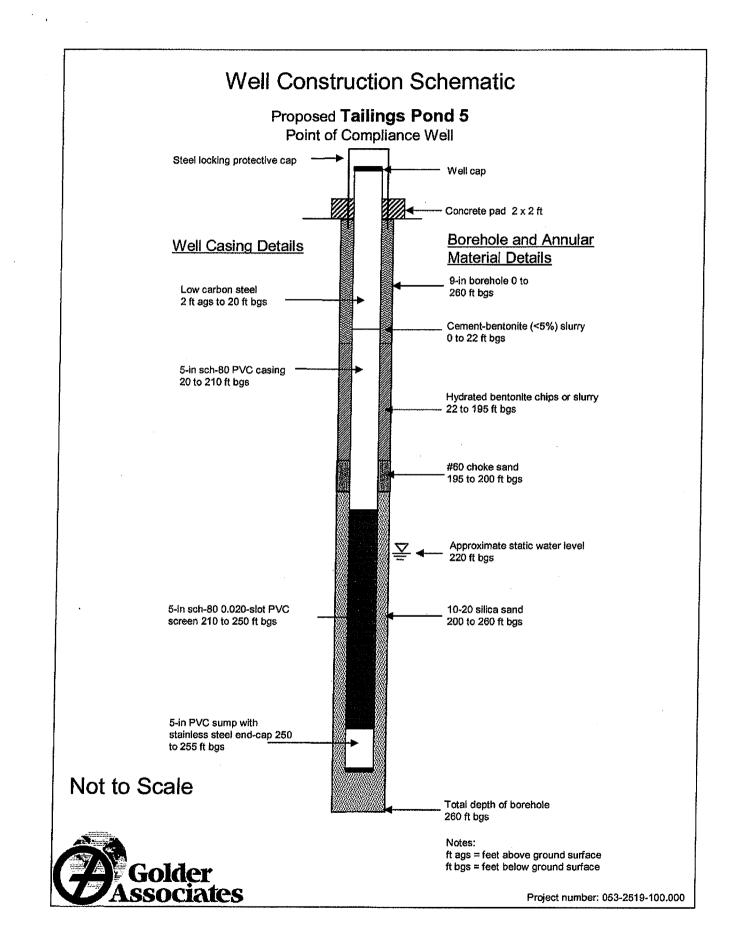
WELL REGISTRATION NUMBER

SECTION 5. WELL CONSTRUCTION	DETAILS	
Drill Method	Method of Well Development	Grout Emplacement Method
CHECK ONE	CHECK ONE	CHECK ONE
 Air Rotary Bored or Augered Cable Tool Dual Rotary Mud Rotary Reverse Circulation Driven 	 Airlift Bail Surge Block Surge Pump Other (<i>please specify</i>): 	Gravity Préssure Grout Tremie Other (<i>please specify</i>):
etted الر	Method of Sealing at Reduction Points	Surface or Conductor Casing
▲ Air Percussion / Odex Tubing Other (please specify): MAY_18、2007	CHECK ONE None Welded Swedged Packed	CHECK ONE Flush Mount in a vault Extend 1' above grade
DATE CONSTRUCTION TO BEGIN	Other (please specify):	

SECTION 6. PROPOSED WELL CONSTRUCTION PLAN (attach additional page if needed) Attach a well construction diagram labeling all specifications below.

		ie	가장			et hais f					26.55		Casing	<u> 240</u> 5		1999	38	232	94.395 		1997	
	TH FROM RFACE	T			, r	DEPTH	H FRO			F	MAT	<u>reri</u>	IAL TYPE (T)	<u> </u>	PE	RFO	RAT	ION	TYPE	<u>(T)</u>	······································	ι ·
FROM (feet)	TO (feet)	DIA	REHO AMETE inches	ER	FRC (fee	ОМ		⊤O (feet)	OUTER DIAMETER (inches)	STEEL	PVC	ABS	IF OTHER TYPE, DESCRIBE	BLANK OR NONE	WIRE WRAP	SHUTTER SCREEN	MILLS KNIFE	SLOTTED	1	OTHE TYPE, ESCRI	.	SLOT SIZE IF ANY (inches)
0	260		ą		C	>	2	20	5	\checkmark												
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FROM (feet)	TÖ (feet)	BNON	CONCRETE	NEAT CEMENT OR CEMENT GROUT	CEMENT-BENTONITE	GROUT	CHIPS	PELLETS	iF (OTHE	:R TY		OF ANNULAR MA DESCRIBE	JERI	IAL,				SAND	GRAVEL		SIZE
0	22	<u> </u> _'	_ '					<u>k</u>	<u> </u>												 	
22	195		<u> </u>		<u> </u>		\square														ļ	
195	200		\square'						#60 (-He	<u> 9K</u>	Ē.	SAND								L	
200	260	1																	\checkmark		<u> </u>	0-20
	ELL HAS NESTI									E	XPE0		D DEPTH TO WAT		<u> 2</u> 2	20	2		Fe	et Be	low (Ground Surface
I state the	at this notic	e is fi	iled i	in coi	mplia	nce	with .	A.R.S	3. § 45-596 ar	nd is	con	nple	ete and correct	to t	he I	best	t of i	my l	knov	vledg	ie ar	nd belief.
TYPE OR P	RINT NAME A	AND TI	ITLE						$\overline{\mathcal{O}}$				RE OF WELL OWN					مرد بیش				DATE
\cap	NA11			\sim	•			. 1		1	1			·						6	/	11. 50

Casely Mckeon, Environmental	Jupervisor	Carel	McKer	5-11-07
TYPE OR PRINT NAME AND TITLE		SIGNATURE O	LANDOWNER, IF APPLICABLE	E (SEE INSTRUCTIONS) DATE



ATTACHMENT 2

BOREHOLE LOGS AND AS-BUILT DRAWINGS

200 YAKD POC WE	AZ STATE PLANE CENTRAL NAD 83			e.	SIZE	E TO HCI
NORTHING: 837352 EASTING: 950758	837352 ELEVATION (TOC):2998.67 950758	3.67 LITHOLOGY		AS-BUILT	мері∩м €іиег	MOD WEAK NONE
		DEVELOPMENT ROCK - GRAVEL AND FINES: (GM) Silty gravel with sand. Gravels are fine, up to 2.5 cm, angular. Sand is predominately medium-grained, angular. Fines are silt, low plasticity. Color 5YR 4/4 and 5YR 3/2. Firm consistency. Development rock.			bgs) 4- 40 LCS	
		 	avels are fine, up to 2 cm, 3. Soft consistency. Moderal		(0 - 23 ft bgs) Neat cement (20 - 95) 4-inch	<u></u>
	CHE LEAP DACITE TUFF: Pinkish grey to brov goundmass. Colors: 7.5YR 6/2, 4/3, 4/3.	APACHE LEAP DACITE TUFF: Pinkish grey to brown welded dacite tuff with phenocrysts of plagioclase quartz and biotite in a glassy goundmass. Colors: 7.5YR 6/2, 4/3, 4/3.	se quartz and biotite in a	1		
				(55 - 78)	(55 - 78) Bentonite seal	
				(CS - 62)	(78 - 83) #50 choke sand	
				(83 - 145) (83 - 145)	(83 - 145) 10x20 mesh Colorado silica sand	
				(95 - 135) (95 - 135) schedule screen wi	(95 - 135) 4-inch schedule 40 PVC screen with 0.020" slots	
				(135 - 14) schedule <u>x x x x x x 1</u> (145 - 15)	(135 - 140) 4-inch schedule 40 PVC sump (145 - 150) Slough from native formation	
BOREHOLE No.	500 YARD POC WELL	TOTAL DEPTH DRILLED 150 ft bgs	SCALE AS	AS SHOWN	тисе	
ADWR REG No.	55-907035	BIT DIAMETER 8.75"	DATE 06/0	06/07/07		
LOCATION	SUPERIOR, AZ	DRILLING FLUID AIR	DESIGN JCR	~	DOREIO	
CLIENT	RESOLUTION COPPER MINE	госсер ву ккн	CHECK JJM			AS-BUILT DRAWING
DRILLING CO	YELLOW JACKET DRILLING	DATE STARTED 06/01/07	REVIEW KJ			
DRILLING EQUIPMENT	IENT SPEEDSTAR 50K-CH	DATE FINISHED 06/04/07	REV 1 FILE	500 YARD POC WELL LDF		FIGURE

INDIAN AZ STATE PLA	AZ STATE PLANE CENTRAL NAD 83				CUTTINGS	REACTION TO HCI
NORTHING: 832934 EASTING: 945033	832934 ELEVATION (TOC):2674.25 945033	.25 LITHOLOGY		AS-BUILT	Coarse Hedium Fines	MOD WEAK NONE
	UVIUM - SANDY SILT WITH GRAVEL: (ML) Br dominantly medium-grained, rounded. Fines pre lerate plasticity. Surface alluvium.	ALLUVIUM - SANDY SILT WITH GRAVEL: (ML) Brown, sandy silt with gravel. Gravels fine, angular, up to 3 cm. Sand predominantly medium-grained, rounded. Fines predominately silt. Color 10YR 5/3. Soft consistency. Moderate cementation. Moderate plasticity. Surface alluvium.	Sand ementation.	(0 - 2 ft bgs) Neat cement (2 - 4) #Bentonite seal (4 - 5) #50 Choke sand (2 ft ags - 7 ft bgs) 4- inch schedule 40 PVC blank	esal seal sead 14- PVC	
Precession of the second secon		ALLUVIUM - SANDY SILT: (ML) Brown, sandy silt with trace gravels. Sand predominately medium-grained, rounded. Fines predominantly silt, although some clay balls present (10%). Color 10YR 5/3. Soft consistency. Moderate cementation. Moderate plasticity.	ded. Fines tion. Moderate	(5 - 60) 10x20 mesh		
	ALLUVIUM/GILA CONGLOMERATE - SANDY CLAY: (CL) Light and rounded. Fines predominantly clay and silt. Color 7.5 YR 6/4	brown sandy clay. Sand predominantly fine brown sandy clay. Sand predominantly fine Firm consistency. Moderate cementation. M	grained, heterolithic Adderate plasticity.	(7 - 47) 4-inch schedule 40 PVC screen with 0.020° slots	the due	
GIL Schrönig	A CONGLOMERATE - CLAY WITH SAND: (CL A CONGLOMERATE - CLAY WITH SAND: (CL n Gila Conglomerate at 40 ft bgs). Sand predomi n. Color 7.5 YR 5/3. Hard consistency. Moderate	GILA CONGLOMERATE - CLAY WITH SAND: (CL) Brown sandy clay. Cemented lenses of sand, slit and clay (possible contact with Gila Conglomerate at 40 ft bgs). Sand predominantly fine grained. Fines predominantly clay and slit cemented nodules up to 2cm. Color 7.5 YR 5/3. Hard consistency. Moderate cementation. High plasticity.				
GIL CIT	A CONGLOMERATE - SANDY CLAY: (CL) Bro cemented nodules up to 2cm in diameter. Some sistency. Moderate cementation. High plasticity.	GILA CONGLOMERATE - SANDY CLAY: (CL) Brown sandy clay. Sand predominantly fine grained. Fines predominantly clay and silt cemented nodules up to 2cm in diameter. Some lenses of cemented silt and clay also present. Color 7.5 YR 5/3. Hard consistency. Moderate cementation. High plasticity.	5/3. Hard	(47 - 52) 4-inch schedule 40 PVC sump	dunns (
BOREHOLE No.	INDIAN PONDS POC WELL	TOTAL DEPTH DRILLED 60 ft bgs	SCALE AS SHOWN	5	דודנב	
ADWR REG No.	55-907037	BIT DIAMETER 8.75"	DATE 06/07/07			V 20
LOCATION	SUPERIOR, AZ	DRILLING FLUID AIR	DESIGN JCR			
CLIENT	RESOLUTION COPPER MINE	LOGGED BY KKH	CHECK JJM		AS-BUILT DRAWING	RAWING
DRILLING CO	YELLOW JACKET DRILLING	DATE STARTED 05/31/07	REVIEW KJ			
DRILLING EQUIPMENT	MENT SPEEDSTAR 50K-CH	DATE FINISHED 05/31/07	REV 1 FILE INDIAN PO	INDIAN PONDS POC WELL.LDF	and the second se	E

SETTLIN	SETTLING PONDS 1 & 2 ALERT	ERT WELL					CUTTINGS SIZE	REACTION TO HCI
NORTHING: 837767 EASTING: 948296	837767 ELEVATION (TOC):2976.2 948296	.2 LITHOLOGY			. 10	AS-BUILT	EINES FINES COFKSE	NONE WEAK WONE STRONG
	TAILINGS - SAND: (SP) Poorly-graded sand. Very fine, round TAILINGS - SAND: (SP) Poorly-graded sand. Very fine, round 5K #/1, and 7.5YR #/1. Soft consistency. Weak cementation bls. Mine tailings.	fine, rounded, dark gray sa fine, rounded, dark gray sa smentation. No plasticity. In	ed, dark gray sand, maximum particle size 0.5 mm. Color 5YR 4/3, led, dark gray sand, maximum particle size 0.5 mm. Color 5YR 4/3, . No plasticity. Interval is dry until 55-60 ft; cuttings are wet from 60 ft	n. Color 5YR 4/3 are wet from 60		B-inch locking monument monument (2 ft ags - 20 ft bgs) 4- inch schedule 40 LCS blank (0 - 23 ft bgs) Neat cement cement cement (20 - 140) 4-inch schedule 40 PVC blank		
60	TAILINGS - SANDY SILT: (ML) Sandy silt. Very fine, rounded, dark gray to charcoal sand. Silt has low plasticity, 7.5YR 4/1. Vsoft to soft consistency. Weak to moderate cementation. Low plasticity in silt, firm plasticity for fat clay. Trace amount of fat claocurs in balls up to 2 cm between 80-85ft. Mine tailings.	e, rounded, dark gray to chi ation. Low plasticity in silt, fi ilings. CP) Poorly-graded gravel a .5YR 6/3. Hard consistency.	. dark gray to charcoal sand. Silt has low plasticity. 7.5YR 4/1. Very plasticity in silt, firm plasticity for fat clay. Trace amount of fat clay plasticity in silt, firm plasticity for fat clay. Trace amount of fat clay plasticity in silt, firm plasticity for fat clay. Trace amount of fat clay blasticity of the second stratement of the second	r, 7.5YR 4/1. Ver mount of fat clay d gravel size ty. Gila		measured 6/19/2007		
	Conglomerate contact at 91 ft bgs.			r		(32 - 123) Neat cement		
						(123 - 129) Benconte choke sand choke sand (130 - 190) 10x20 mesh Colorado silica sand (140 - 180) 4-inch scredu a 0 PVC screen 0 0020* islos		
10						(185) 4-inch PVC sump with bottom end cap		
BOREHOLE No.	SETTLING PONDS 1 & 2 ALERT WELL	TOTAL DEPTH DRILLED	0 190	SCALE A	AS SHOWN	ТЛТЕ		
ADWR REG No.	55-907034	BIT DIAMETER	8.75"	DATE 06	06/07/2007	BOB	RORFHOLF LOG AND	OG AN
LOCATION	SUPERIOR, AZ	DRILLING FLUID	AIR	DESIGN JO	JCR			
CLIENT	RESOLUTION COPPER MINE	LOGGED BY	ККН	CHECK JJM	Ø	AS-	AS-BUILI DRAWING	AWING
DRILLING CO	YELLOW JACKET DRILLING	DATE STARTED	05/22/07	REVIEW KJ				
DRILLING EQUIPMENT	TNT	ш	05/23/07	REV 1 FILE	E ALERT WELL.LDF		Golder	FIGURE
DRILLING METHOD	DD AIR ROTARY CASING HAMMER	COMMENTS USCS SC	USCS SCALE, MUNSELL COLOR CHART	PROJECT NO.	0/3-92522	5	Associates	

																FIGURE 2-4
		G	SC	lde	r \t(<u>'s</u>				SME	ELTE	ER	PO	ND P	OC WEL	-L
P	LIENT: ROJEC DCATIO ROJEC	CT: ON:	10.:	Low Sup	ver S eric	Smelt or, Ar	er F		CENTRAL NAD	ANE N: 834587 0 83 E: 947379. 2743.149 FT AN -90	.3			DRILL F	: 1 of 1 Rig/Method: D: Jac Ed: Jac	BK-81/4.25" HSA DATE: 2/13/07 DATE: 4/25/07
P	LIENT: ROJEC		2 3 4 SAMPLE NUMBER	Res Low Sup		Cogeneration Contract	er F	Pond na consistency or	CENTRAL NAU ELEVATION: 2 INCLINATION: 2 density, color, MAJ imponents, moisture , SANDY SILT, cohe reaction with HCl, litt wn, fine to coarse S/ to little fines, compl HCl, wet, (alluvium) al at 4 ft.	on OR COMPONENT, other notes. Sive, some organic le to some tails, mo AND, trace fine to tely weathered cla	.3 ISL	(NS) Hd 321E bH (SN) 7.97 7.28 7.56	1.61	DRILL F	RIG/METHOD: D: JAC ED: JAC Monito	DATE: 2/13/07
-2596 063-2596 RCC L								Report of borehole n						2	×	

TAILINC AZ STATE PLA	TAILINGS POND 5 POC WEL	ELL			U	CUTTINGS R SIZE	REACTION TO HCI
NORTHING: 837338 EASTING: 947439	837338 ELEVATION (TOC):2965.32 947439	.32 LITHOLOGY		AS-BUILT	5	RINES COARSE COARSE	MOD MEAK NONE
	GILA CONGLOMERATE - CLAYEY SAND WITH GRAVEL: well-graded; fines predominately clay with some slit. Color	SRAVEL: (SC) Yellowish-brown, gravel poorly graded, smashed by drill bit; sand th. Color 10YR 5/4. Moderate cementation. No plasticity.	nashed by drill bit; sand	B-inch locking monument (2 ft ags - 20 ft ti ic 2 ft ags - 20 ft hank casing blank casing (0 - 20 ft bgs) N cement (20 - 80) 4-inch	8-inch locking monument monument inch schedule 40 LCS blank casing (0 - 20 ft bgs) Neat cement (20 - 80) 4-inch cement (20 - 80) 4-inch schedule 40 PVC blank		
	A CONGLOMERATE - SILTY SAND: (SM) Sity. A CONGLOMERATE - SILTY SAND: (SM) Sity. Is to drill bit; sand well-graded; fines predominately to gravel and coarse sand bouncing off sample is to gravel and coarse sand bouncing off sample	GILA CONGLOMERATE - SILTY SAND: (SM) Silty sand with gravel; yellowish brown; gravel, poorly graded; predominately fine due to drill bit; sand well-graded; fines predominately silt with half of fines being clay; sample collected are biased towards fines due to gravel and coarse sand bouncing off sample shovel. Color 10YR 5/4.	d: predominately fine biased towards fines		casing (20 - 53) Bentonite grout (53 - 65) Bentonite seal		
	 CONGLOMERATE - CLAYEY SAND WITH GILA CONGLOMERATE - CLAYEY SAND WITH Giveriable lithologies including granite, tuff, quartzite, plasticity. 			(65 - 70 sand (99,77) measur	(65 - 70) #60 choke sand (69.77) Water level measured 6/20/2007		
20000000000000000000000000000000000000	A CONGLOMERATE - CLAYEY GRALWTH A CONGLOMERALWTH ashed by drill bit, suggests cobles to boulders. I nentation. Low plasticity. Clast compositions: dial	GILA CONGLOMERATE - CLAYEY GRAVEL WITH SAND: (GC) Clayey gravel with sand. Yellowish brown. Gravel fine, angular, smashed by drill bit, suggests cobbles to boulders; Sand well-graded; Fines predominately clay. Color 10YR 5/4. Moderate cementation. Low plasticity. Clast compositions: diabase, quartzite, limestone, tuff, and more.	n. Gravel fine, angular, R 5/4. Moderate	(70 - 13 Colorado Colorado (80 - 12 schedul schedul	(70 - 130) 10x20 mesh Colorado silica sand (80 - 120) 4-inch schedule 40 PVC screen, 0.020" slots		
	GILA CONGLOMERATE - CLAYEY SAND: (SC) Gravels fin clay. Color 7.5YR 5/3. Moderate cementation. Low plasticity.	plasticity. Outlings are wet.	ines predominately	(120 - 1 scredu with bo	(120 - 125) 4-inch schedule 40 PVC blank with bottom end cap		
BOREHOLE No.	TAILINGS POND 5 POC WELL	TOTAL DEPTH DRILLED 130 ft bgs	SCALE AS SHOWN	MN	TITLE		
ADWR REG No.	55-907036	BIT DIAMETER 8.75"	DATE 06/07/07				
LOCATION	SUPERIOR, AZ	DRILLING FLUID AIR	DESIGN JCR				č,
CLIENT	RESOLUTION COPPER MINE	LOGGED BY JJM AND KKH	CHECK JJM		AS-BU	AS-BUILT DRAWING	NIM
DRILLING CO	YELLOW JACKET DRILLING	DATE STARTED 5/24/07	REVIEW KJ				
DRILLING EQUIPMENT	MENT SPEEDSTAR 50K-CH	DATE FINISHED 05/29/07	REV 1 FILE TPS	TP5 POC Well.Idf			FIGURE
DRILLING METHOD	OD HAMMER, AIR ROTARY	COMMENTS USCS SCALE, MUNSELL COLOR CHART	PROJECT NO	073-92522		A contrated	2-5

ATTACHMENT 3

ITSI DATA VALIDATION REPORTS



August 23, 2007

Dr. Casey McKeon Resolution Copper Company 47206 North Magma Shaft #9 Road Superior, Arizona 85273

RE: ITSI DATA VALIDATION REPORT RESOLUTION COPPER PROJECT NO. 073-92522

Dear Dr. McKeon:

Innovative Technical Solutions, Inc. (ITSI) has completed the data review for Resolution Copper Company (RCC) for its Ambient Alert – APP Wells. ITSI performed data review as described in the U.S. Environmental Protection Agency's (EPA) U.S. Environmental Protection Agency (EPA) National Functional Guidelines for Superfund Organic Data Review, 2005; the Quality Assurance Plan Surface Water Baseline Resource Investigation for Resolution Copper Company, January 23, 2006; and using criteria in the referenced method.

The acronym listing is included as Appendix A. Data review qualifiers have been marked in red directly on the analytical reports provided by the laboratory and are attached as Appendix B. A summary of all qualified data is provided in a qualified results table (QRT) as Appendix C. The ITSI standard legal notice is provided as Appendix D.

1.0 CROSS REFERENCE OF SAMPLES VERIFIED

The analytical data in the laboratory Sample Delivery Group (SDG) indicated below were reviewed. This SDG contained data for benzene, toluene, ethlylbenzene and total xylenes (BTEX) by EPA Method 8021B

The samples were analyzed by Test America (TA) of Phoenix, Arizona. The table below provides an analytical summary and cross reference for the samples. All samples underwent a level 3 data verification.

Field Sample ID_	TA SDG	Sample Matrix	BTEX
EB-1	PQF0865-01	Water	Х
Trip Blank	PQF0865-02	Water	Х
SP ½ Alert Well	PQF0865-03	Water	Х
DS-1	PQF0865-04	Water	Х

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(480) 706-6488 fax (480) 704-2952 www.itsi.com

2.0 LABORATORY REPORT

The laboratory report was reviewed for completeness. There were no anomalies observed.

3.0 SAMPLE INTEGRITY/PRESERVATION

The chain-of-custody (COC) and sample receipt temperature were reviewed. The following temperature anomaly was observed.

• The samples were received at the laboratory at 14.4°C which is out of the criteria of 4±2°C. The associated results, which were all non-detect have been flagged "R" for rejected.

4.0 HOLDING TIME

The samples were analyzed within the method-recommended holding time of 14 days.

5.0 INITIAL AND CONTINUING CALIBRATION

Initial and continuing calibration criteria were not reviewed for this level of data verification.

6.0 BLANK EVALUATION

A method blank was analyzed to assess laboratory contamination. A trip blank was provided with the samples to measure contamination due to travel and storage. No target compounds were reported above the reporting limits (RL) in any of the blanks.

7.0 LABORATORY CONTROL SAMPLES (LCS) AND LABORATORY CONTROL SAMPLE DUPLICATES (LCSD)

An LCS/LCSD pair was reported for the analysis. All recoveries and relative percent differences (RPDs) were within laboratory limits.

8.0 MATRIX SPIKE (MS) AND MATRIX SPIKE DUPLICATE (MSD)

An MS/MSD pair was reported for the analysis. All recoveries and RPDs were within laboratory limits.

9.0 SURROGATES

Surrogate spike recoveries were reviewed against the established control limits. All recoveries were within limits.



10.0 COMPOUND QUANTITATION AND IDENTIFICATION

The laboratory RLs and results were reviewed. There were no quantitation anomalies that required qualification of the data.

11.0 FIELD DUPLICATE SAMPLES

DS-1 is a field duplicate of SP $\frac{1}{2}$ Alert Well. There were no compounds detected in the field duplicate samples

12.0 RECOMMENDATIONS

ITSI recommends that the laboratory contact the client if samples are received at the laboratory at temperatures exceeding 6°C. The sampler should check the receipt temperature before leaving the laboratory to verify the accuracy of the temperature reading. Also, a temperature blank should be included in every sample cooler.

13.0 OVERALL ASSESSMENT

All BTEX results were rejected. Based on the available information, the data are considered unusable for their intended purposes.

We thank you for the opportunity to serve you and look forward to supporting RCC with data verification in the future.

Sincerely,

Innovative Technical Solutions, Inc.

Evelyn H. Dawson Senior Chemist

Appendix A – List of Acronyms and Abbreviations Appendix B – Qualified Report Pages Appendix C – Qualified Results Table Appendix D – ITSI Standard Legal Notice

cc: John Malusa
Golder Associates, Inc.
4730 North Oracle Road, Suite 210
Tucson, Arizona, 85705

APPENDIX A

LIST OF ACRONYMS AND ABBREVIATIONS

ITSI Data Review Report Ambient Alert Project No.073-92522 July 19, 2007

ITSI

LIST OF ACRONYMS AND ABBREVIATIONS

BTEX	benzene, toluene, ethylbenzene, total xylenes
COC	chain-of-custody
EPA	U.S. Environmental Protection Agency
ITSI	Innovative Technical Solutions, Inc.
LCS/LCSD	laboratory control spike/laboratory control spike duplicate
MS/MSD	matrix spike/matrix spike duplicate
QAPP	Quality Assurance Project Plan
RCC	Resolution Copper Company
RL	reporting limit
RPD	relative percent difference
SDG	Sample Delivery Group
ТА	Test America

RCC SDG PQF0865 DVR r.0

APPENDIX B

QUALIFIED REPORT PAGES

Test America

9830 South 51st Street, Suite B-120, Phoenix, AZ 85044 (480) 785-0043 Fex: (480) 785-0851 ANALYTICAL TESTING CORPORATION Golder Associates - Tucson Project ID: [none] 4730 N. Oracle Sampled: 06/20/07 Tucson, AZ 85705 Report Number: PQF0865 Received: 06/22/07 Attention: John Malusa BTEX (EPA 5030B/8021B) Reporting Sample Dilution Date Date Data Analyte Method Limit Batch Result Factor Extracted Analyzed Qualifiers Sample ID: PQF0865-01 (EB-1 - Water) -Reporting Units: ug/l EPA 8021B P7F2215 0.50 UR Benzene ND 1 6/22/2007 6/23/2007 Toluene EPA 8021B P7F2215 1.0 ND 1 6/22/2007 6/23/2007 Ethylbenzene EPA 8021B P7F2215 1.0 ND 1 6/22/2007 6/23/2007 Total Xylenes EPA 8021B P7F2215 1.5 ND J 1 6/22/2007 6/23/2007 Surrogate: 4-BFB (PID) (80-120%) 108 % Sample ID: PQF0865-02 (Trip Blank - Water) Reporting Units: ug/l 0.50 UR Benzene EPA 8021B P7F2215 ND 6/22/2007 6/23/2007 1 Toluene EPA 8021B P7F2215 1.0 ND 1 6/22/2007 6/23/2007 Ethylbenzene EPA 8021B 1.0 P7F2215 ND 1 6/22/2007 6/23/2007 Total Xylenes EPA 8021B P7F2215 1.5 ND J 1 6/22/2007 6/23/2007 Surrogate: 4-BFB (PID) (80-120%) 106 % Sample ID: PQF0865-03 (SP 1/2 Alert Well - Water) Reporting Units: ug/l 0.50 UR Benzene EPA 8021B P7F2215 ND 6/22/2007 6/23/2007 1 Toluene EPA 8021B P7F2215 1.0 ND 1 6/22/2007 6/23/2007 Ethylbenzene EPA 8021B P7F2215 1.0 ND 1 6/22/2007 6/23/2007 **Total Xylenes** EPA 8021B ND P7F2215 1.5 1 6/22/2007 6/23/2007 J Surrogate: 4-BFB (PID) (80-120%) 104% Sample ID: PQF0865-04 (DS-1 - Water) Reporting Units: ug/l Benzene EPA 8021B P7F2215 0.50 UR ND 1 6/22/2007 6/23/2007 Toluene EPA 8021B P7F2215 1.0 ND 6/22/2007 1 6/23/2007

PC ITJ)

6/23/2007

6/23/2007

6/22/2007

6/22/2007

7/16/07

TestAmerica - Phoenix, AZ Ken Baker Project Manager

Ethylbenzene

Total Xylenes

Surrogate: 4-BFB (PID) (80-120%)

EPA 8021B

EPA 8021B

P7F2215

P7F2215

1.0

1.5

ND

ND

106 %

1

1

APPENDIX C

QUALIFIED RESULTS TABLE

Qualified Results Table for Resolution Copper SDG PQF0865 June 2007 Sampling

.

Sample	Lab ID	Type	Parameter	Original Value	Original Added	Added	New Value	Units	Reason	Method	Validator
EB-1	PQF0865-01	EB	Benzene	< 0.50		TIR	0 50 1 10	1/~	Tamantin Direct		Caroan
EB-1	POF0865-01	цц	Telucio			5	NO OCO	エピエ	I emperature exceedence	EFA 8021B	DANSII
1 0.0	10-000-04		Tolucine	< 1.0		UR	1.0 UR	hg/L	Temperature Exceedence	EPA 8021B	ITSIPC
1-02	PQFU865-01	EB	Ethylbenzene	< 1.0		UR	1.0 UR	nø/L	Tennerature Exceedence	FPA 8071B	Ud/ISTI
EB-1	PQF0865-01	EB	Total Xvlencs	<15		aut	ar s r	10-1		01700 · 44	0 1/1011
Trin Blank	DOENeks OF	ar				10	ND C'I	T/RH	I ciliperature exceedence	EFA 8021B	IISUPC
And the state	70-000.10.1	ar	Benzene	< 0.50		Ъ	0.50 UR	J/8H	Temperature Exceedence	EPA 8021B	ITSI/PC
I TIP DIATK	FQFU865-02	IB	Toluene	< 1.0		Я	1.0 UR	T/an	Tennerature Exceedence	FPA 8071B	Ud/ISTT
Trip Blank	PQF0865-02	æ	Ethylbenzene	< 1.0		au	1010	1/211	Temperature Busedone	01200 V UL	D JADAT
Trip Blank	POF0865-02	at	Total V.J.			5	10 0.1	7/81	I crither arm c Exceedence	EFA 8021B	LISUPC
	20.000 22 2	-	I Utal Aylches	C.1 >		Ë	1.5 UR	hg/L	Temperature Exceedence	EPA 8021B	ITSI/PC
SF 1/2 Alert Well	PQFU865-03	Water	Benzene	< 0.50		UR	0.50 UR	. Vou	Tennerature Exceedance	EDA 0011D	L'UCLOU
SP 1/2 Alert Well	PQF0865-03	Water	Toluene	012		Ę	. 0.1	201		A1700 11 17	O JACTI
SP 1/2 Alert Well	D'D'D'OKE US	Wieter		0.17		AD	1.U UK	Hg/L	I emperature Exceedence	EPA 8021B	ITSIVPC
	CD-CDODJA	walcr	Ethylbenzene	< 1.0		ß	1.0 UR	HR/L	Temperature Exceedence	EPA 8021B	Ud/IS11
SF 1/2 Alert Well	PQF0865-03	Water	Total Xylenes	< 1.5		UR	1.5 UR -	. Van	Tennerature Exceedence	EPA 8071D	Javasti
DS-1	PQF0865-04	Water	Benzene	< 0.50		er,	0 SO TID	201		G1700 V 17	DJACT1
DS-1	POFORKS_04	Water	Televis				NO OCO	TRH	I emperature Exceedence	EFA 8021B	LISUPC
		1 4141	1 olucine	< 1.0		æ	1.0 UR	T/BH	Temperature Exceedence EPA 8021B	EPA 8021B	ITSI/PC
1-07	PQFU865-04	Water	Ethylbenzene	< 1.0		al 1	10170	1/20	Tommanding During	C1000 1 01	Con Your
DS-I	PQF0865-04	Water	Total Xylenes	<1.5		1 B	15178	1/21	Temperature Exceedence EPA 8021B	EPA 8021B	DAVISI

Abbreviations μg/L = micrograms per liter EB = equipment blank SDG = sample delivery group TB = trip blank

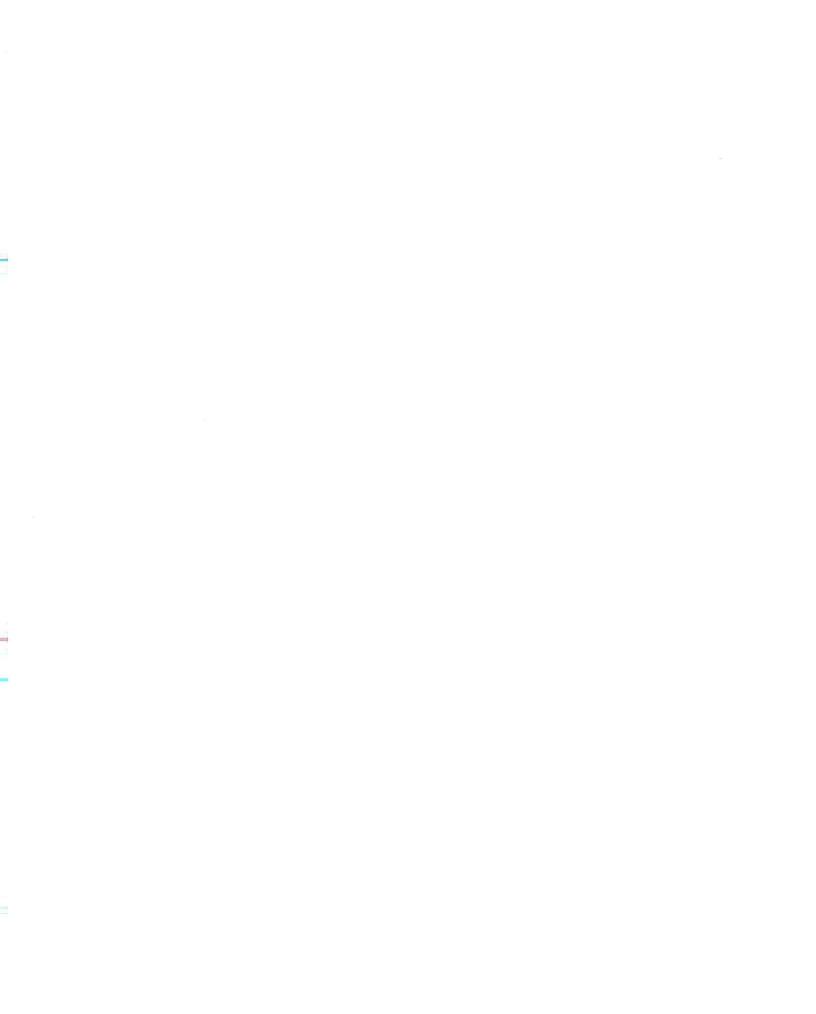
Data Qualifier Flags R = rejected U = not detected

APPENDIX D

ITSI STANDARD LEGAL NOTICE

ITSI STANDARD LEGAL NOTICE

ITSI is issuing this report at the request of the Client and based upon information furnished by Client. Further, the presence of environmental contamination can be influenced by many factors, including unknown and changing underground conditions. Therefore: 1. This report may not be relied upon by anyone for financial decision-making. 2. No one other than Client is authorized to use this report for any purpose. 3. Any conclusions or opinions included in this report are subject to reasonable revision based upon any new environmental or other data which is later developed. 4. Any results or conclusions stated are to be considered limited by the quality of the underlying sample or other data on which they are based, the budget established by the Client or otherwise for gathering and analyzing data, and by any assumptions and qualifications contained within this report.





August 22, 2007

Dr. Casey McKeon Resolution Copper Company 47206 North Magma Shaft #9 Road Superior, Arizona 85273

RE: ITSI DATA VALIDATION REPORT RESOLUTION COPPER PURCHASE ORDER NO. 073-92522 SDG 130103

Dear Dr. McKeon:

Innovative Technical Solutions, Inc. (ITSI) has completed the data review for Resolution Copper Company (RCC) for its Ambient Alert – APP Wells. ITSI performed data review as described in the U.S. Environmental Protection Agency's (EPA) *Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*, October 2004; the *Quality Assurance Plan Surface Water Baseline Resource Investigation for Resolution Copper Company*, January 23, 2006; and using criteria in the referenced methods.

The list of acronyms and abbreviations is included as Appendix A. Data review qualifiers have been marked in red directly on the analytical reports provided by the laboratory and are attached as Appendix B. A summary of all qualified data is provided in a qualified results table (QRT) as Appendix C. The ITSI standard legal notice is provided as Appendix D.

1.0 CROSS REFERENCE OF SAMPLES VERIFIED

The analytical data in the laboratory Sample Delivery Group (SDG) indicated below were reviewed. This SDG contained data for the following methods and compounds.

- Metals
 - Inductively coupled plasma/atomic emission spectroscopy (ICP/AES) metals by EPA Method 200.7
 - ICP/mass spectrometry (MS) metals by EPA Method 200.8
 - Cold vapor atomic absorption (CVAA) mercury by EPA Method 245.1

Providing Turnkey Civil/Environmental Engineering and Construction

- General Chemistry Methods
 - Alkalinity, CaCO₃ by Standard Method (SM) 2320B
 - Anions (chloride, fluoride and sulfate) by ion chromatography (IC) by EPA Method 300.0
 - Nitrite/Nitrate as N by EPA Method 353.2
 - Total dissolved solids (TDS) by EPA Method 160.1

The samples were analyzed by SVL Analytical (SVL) of Kellogg, Idaho. The table below provides an analytical summary and cross reference for the samples. All samples underwent a level 3 data verification.

Field Sample ID	Sample Matrix	Collection Date	SVL SDG	Туре	Metals	General Chemistry
EB-1	EB	6/20/07	W583716	Total	X	X
ED-1		0/20/07	W583723	Dissolved	X	
DS-1	Water	6/21/07	W583717	Total	Х	X
	water	0/21/07	W583724	Dissolved	Х	
Tailings Pond 5 POC Well	Water	6/21/07	W583718	Total	Х	X
rannigs rolid 5 roe well			W583725	Dissolved	Х	
SP ½ Alert Well	Water	6/21/07	W583719	Total	Х	X
SF 72 Alert Well		0/21/07	W583726	Dissolved	Х	
Smelter Pond POC Well	Water	6/21/07	W583720	Total	Х	Х
	w diel	0/21/07	W583727	Dissolved	Х	

2.0 LABORATORY REPORT

The laboratory report was reviewed for completeness. There were no anomalies observed.

3.0 SAMPLE INTEGRITY

The chains-of-custody (COCs) were available for review. There were no anomalies that required qualification of the data.

4.0 DATA EVALUATION

4.1 METALS BY EPA METHODS 200.7, 200.8 AND 245.1

4.1.1 Sample Receipt and Holding Times

The samples were extracted and analyzed within the method-recommended holding time. There were no anomalies concerning the receipt of the samples that required qualification of the data.

4.1.2 Blank Evaluation

Preparation blanks were analyzed to assess laboratory contamination. Equipment blanks were provided to assess contamination that could occur during the collection of the samples. There were no anomalies in the preparation or equipment blanks that required qualification of the data except as noted below.

• Several metals were detected in the preparation and equipment blanks associated with the ICP metal analyses. The sample results that were less than ten times (10X) the highest blank contamination have been flagged "U" and changed to non-detect at the observed value. No data qualifiers are required for the results that are greater than 10X the highest blank contamination or are non-detect.

4.1.3 Initial and Continuing Calibration

Initial and continuing calibration criteria were not reviewed for this level of data verification.

4.1.4 Laboratory Control Samples (LCS)/Laboratory Control Samples Duplicate (LCSD)

A single LCS was analyzed for all metal analyses. There were no anomalies that required qualification of the data.

4.1.5 Matrix Spike (MS)/Matrix Spike Duplicate (MSD) and Duplicate Samples

An MS, laboratory sample duplicate and field duplicate samples were analyzed to measure precision and accuracy. There were no anomalies that required qualification of the data except as noted below.

- The percent recovery for selenium was out of the QAPP criteria of 85 to 115 percent at 125.7 percent in the MS. Since the LCS recovery was acceptable and the MS recovery was biased high, only the associated result in spiked sample DS-1 and its duplicate sample SP ½ Alert Well have been flagged "J" for an estimated value.
- The RPD for antimony was out of the QAPP criteria of less than 20 percent at 70.3 percent in the sample duplicate pair due to sample results being close to the reporting limit. Since there was no other measurement of precision available, the associated positive result in sample EB-1 has been flagged "J" for an estimated value.
- Several of the metals were non-detect in both the laboratory duplicate and field duplicate samples. Since there was no other measurement of precision available, the associated positive metal results in the samples have been flagged "J" for an estimated value. No data qualifiers are required for the non-detect results.

4.1.6 Practical Quantitation Limits (PQLs) and Compound Quantitation

The laboratory PQLs and sample results were reviewed. There were no anomalies that required qualification of the data.

4.1.7 Field Duplicate Samples

DS-1 is a field duplicate of SP ½ Alert Well. The RPDs for the positive results that were greater than five times (5X) the reporting limit were evaluated in the table below.

Primary (PO) and Duplicate Samples (D1)	Lab ID	Analyte	Primary Sample Result µg/L	Duplicate Sample Result µg/L	RPD
SP ½ Alert Well DS-1	W583719 W583717	Calcium, Total	13500	12800	5.3
SP ½ Alert Well DS-1	W583719 W583717	Magnesium, Total	19700	19600	0.5
SP ½ Alert Well DS-1	W583719 W583717	Potassium, Total	2620	2550	2.7
SP ½ Alert Well DS-1	W583719 W583717	Sodium, Total	100000	101000	1.0
SP ½ Alert Well DS-1	W583726 W583724	Arsenic, Dissolved	4.5	4.4	2.2
SP ½ Alert Well DS-1	W583726 W583724	Barium, Dissolved	14.6	14.8	1.4
SP ½ Alert Well DS-1	W583726 W583724	Lead, Dissolved	<rl< td=""><td>2.6</td><td>NC</td></rl<>	2.6	NC
SP ½ Alert Well DS-1	W583726 W583724	Selenium, Dissolved	2.1	2	4.9
SP ½ Alert Well DS-1	W583726 W583724	Molybdenum, Dissolved	7.3	5.4	30

NC = Not calculable

RL = Reporting Limit

All RPDs were within the QAPP criteria of less than 20 percent, except for lead and molybdenum. Since the associated results for these metals in the field duplicate set were less than five (5X) the reporting limit, no data qualifiers are required.

4.1.8 Assessment for Metals

There were no rejected metal analytical results. Based on the available information, the data as qualified are considered useable for their intended purposes.

ITSI Data Validation Report Ambient Alert Project No. 073-92522 August 22, 2007

4.2 GENERAL CHEMISTRY METHODS

4.2.1 Sample Receipt and Holding Times

The samples were extracted and analyzed within the method-recommended holding time. There were no anomalies concerning the receipt of the samples that required qualification of the data.

4.2.2 Blank Evaluation

Method blanks were analyzed to assess laboratory contamination. Equipment blanks were provided to assess contamination that could occur during the collection of the samples. There were no anomalies in the method or equipment blanks that required qualification of the data.

4.2.3 Initial and Continuing Calibration Evaluation

Initial and continuing calibration criteria were not reviewed for this level of data verification.

4.2.4 LCS/LCSD

A single LCS was reported for each analysis. There were no anomalies that required qualification of the data.

4.2.5 MS/MSD and Duplicate Samples

An MS, laboratory sample duplicate and field duplicate samples were analyzed to measure precision and accuracy. There were no anomalies that required qualification of the data.

4.2.6 PQLs and Compound Quantitation

The laboratory PQLs and results were reviewed. There were no quantitation anomalies that required qualification of the data.

4.2.7 Field Duplicate Samples

DS-1 is a field duplicate of SP ½ Alert Well. The RPD for the positive results were evaluated in the table below. All RPDs were within the QAPP criteria of less than 20 percent.

ITSI Data Validation Report Ambient Alert Project No. 073-92522 August 22, 2007

Primary (PO) and Duplicate Samples (D1)	Lab ID	Analyte	Primary Sample Result mg/L	Duplicate Sample Result mg/L	RPD
SP ½ Alert Well DS-1	W583719 W583717	Alkalinity	- 268	271	1.1
SP ½ Alert Well DS-1	W583719 W583717	TDS	382	382	0.0
SP ½ Alert Well DS-1	W583719 W583717	Chloride	16	16.2	1.2
SP ½ Alert Well DS-1	W583719 W583717	Fluoride	0.58	0.56	3.5
SP ½ Alert Well DS-1	W583719 W583717	Nitrate/Nitrite as N	3.01	2.63	13
SP ½ Alert Well DS-1	W583719 W583717	Sulfate	64.2	57.7	11

4.2.8 Assessment for General Chemistry

There were no rejected or estimated general chemistry analytical results. Based on the available information, the data are considered useable for their intended purposes.

5.0 OVERALL ASSESSMENT FOR SDG

There were no rejected analytical results in this SDG. Based on the available information, the data as qualified are considered useable for their intended purposes.

6.0 **RECOMMENDATIONS**

ITSI has the following recommendations.

- The laboratory should analyze an MSD or LCSD with each method to ensure that the analytical batch has precision in the event that the sample duplicate fails or the results of the original sample and the sample duplicate are non-detect.
- The equipment blank (EB) should not be used as the matrix spike or sample duplicate. Since the EB is not a project sample, it does not provide meaningful measurements of precision or accuracy for the matrix of interest.

RCC SDG 130103 DVR r.0

We thank you for the opportunity to serve you and look forward to supporting RCC with data review in the future.

Sincerely, Innovative Technical Solutions, Inc.

Evelyn H. Dawson Senior Chemist

Enclosures:

Appendix A – List of Acronyms and Abbreviations Appendix B – Qualified Report Pages Appendix C – Qualified Results Table Appendix D – ITSI Standard Legal Notice

cc: John Malusa
Golder Associates, Inc.
4730 North Oracle Road, Suite 210
Tucson, Arizona, 85705



APPENDIX A

LIST OF ACRONYMS AND ABBREVIATIONS

LIST OF ACRONYMS AND ABBREVIATIONS

COC AA AES	chain-of-custody atomic absorption atomic emission spectroscopy
CVAA	cold vapor atomic absorption
EB	equipment blank
EPA	U.S. Environmental Protection Agency
IC	ion chromatography
ICP	inductively coupled plasma
ITSI	Innovative Technical Solutions, Inc.
LCS/LCSD	laboratory control samples/laboratory control samples duplicate
mg/L	milligrams per liter
MS	mass spectrometry
MS/MSD	matrix spike/matrix spike duplicate
PQL	practical quantitation limit
QAPP	Quality Assurance Project Plan
QRT	qualified results table
RCC	Resolution Copper Company
RL	reporting limit
RPD	relative percent difference
SDG	Sample Delivery Group
SM	Standard Method
SVL	SVL Analytical
TDS	Total Dissolved Solids

LIST OF VALUE FLAGS

J	estimated value
J-	estimated value, low bias
J+	estimated value, high bias
R	rejected, not useable
U	not detected
UJ	estimated reporting limit
UR	rejected, unusable RL

CLIENT SAMPLE NO.

1

1 INORGANIC ANALYSES DATA SHEET

	W583716
Lab Name: SVL ANALYTICAL INC.	Contract:
Lab Code: SILVER Case No:	SAS No: SDG No: 130103
Matrix (soil/water): WATER	Lab Sample ID: W583716
Level (low/med): LOW	Date Received: 07/28/07
% Solids: 0.0	

Concentration Units (ug/L or mg/kg dry weight): UG/L_

	1	1		1-1	-	1	
	CAS No.	Analyte	Concentration	С	Q	М	21
	7429-90-5	Aluminum		-		NR	
and the state of the state of the	7440-36-0	Antimony			- 11 - 12 - 12 - 12 - 12 - 12 - 12 - 12	-NR-	101 110 11 12
	7440-38-2	Arsenic				NR	
	7440-39-3	Barium	5	-		NR	
	7440-41-7	Beryllium		-		NR	
	7440-43-9	Cadmium -		-	•••••••••••••••••••••••••••••••••••••••	NR	
	7440-70-2	Calcium	130	-	N	P	
	7440-47-3	Chromium			······	NR	
an ×	7440-50-8	Copper		-		NR	
	7439-89-6	Iron		-		NR	· ·
	7439-92-1	Lead		-		NR	
	7439-95-4	Magnesium	21.6	R		P	
	7439-96-5	Manganese	21.0	D		NR	
	7439-97-6	Mercury		-		NR	
	7440-02-0	Nickel				NR	
	7440-02-0_	Potassium	21.0	Ū		P	
e 00	7782-49-2		21.0	U	<u></u>		27
		Selenium	411	-	<u></u>	NR	
	7440-23-5	Sodium	411	-		P_	7
-	7440-28-0	Thallium		_		NR	
2	7440-66-6	Zinc		_		NR	
	7439-98-7	Molybdenum		_		NR	51
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CLIENT ID: EB-1

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SVL ANALYTICAL, INC. One Government Gulch P.O.	. Box 929 🛛	Kellogg, Idaho	83837-0929	Phone: (208)784		icate: AZ AZ0538 ×: (208)783-0891
CLIENT : GOLDER AS PROJECT: CLIENT SAMPLE ID: Sample Collected: Sample Receipt : Date of Report :	EB-1	12:15			SAMPLE	: 130103 : 583716 : TOT/DIS : WATERG
Determination	Result	Units	Dilution	Method	Analyzed	
T ALKALINITY T CO3, CaCO3 T HCO3, CaCO3 T TDS T Chloride T Fluoride T NO2+NO3-N T Sulfate, SO4	<1.0 <1.0 <1.0 <10 0.41 <0.10 0.0230 <0.30	mg CaCO3/L mg CaCO3/L mg/L mg/L mg/L mg/L mg/L	8	2320B 2320B 2320B 2540C 300.0 300.0 353.2 300.0	6/28/07 6/28/07 6/28/07 6/27/07 7/09/07 7/09/07 7/09/07 7/09/07	J.
CalcTDS:<10 TDS/CalcTDS:	TDS/Con CalcTDS/Con		CATION SUM: ANION SUM:	0.00meg/L 0.01meg/L	BALANCE N/A %	
Filtered fraction: 583 Reviewed By:	723	Birby	Gian	Date 6	7/29/07	
AZ: AZ0538 GA: CERT NO. 2080	CO: CERT NO. IDO	00019 ID: ID0001	19 MT: CERT. 0027	······································	7/28/07 14:05	na heine an

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8/11/07

1 INORGANIC ANALYSES DATA SHEET

	W583723(DIS
Lab Name: SVL_ANALYTICAL_INC	Contract:
Lab Code: SILVER Case No:	SAS No: SDG No: 130103
Matrix (soil/water): WATER	Lab Sample ID: W583723
Level (low/med): LOW	Date Received: 07/28/07
% Solids:0.0	

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Concentration	С	Q	M	
Aluminum	11.0	$\overline{\mathbf{U}}$		$-\left \frac{\pi}{P}\right $	
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The second s	0.40	Ū	1.49		
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Magnesium				NR	
	2.4	B		- P	ŝ
	0.10	U			
Nickel	2.6	B		- P	
Potassium			0 0000 24	NR	
Selenium -	0.12	B	N	PM	
Sodium				NR	
Thallium				PM	
Zinc	0.70	U		- P	
Molybdenum	2.2	U			
Hardness		_		NR	
		_			
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	Aluminum Antimony_ Arsenic_ Barium Beryllium Cadmium Calcium Chromium_ Copper_ Iron Lead Magnesium Manganese Mercury_ Nickel Potassium Selenium Sodium Thallium Zinc Molybdenum	Aluminum 11.0 Antimony 0.12 Arsenic 0.30 Barium 0.50 Beryllium 0.20 Cadmium 0.30 Calcium 0.30 Calcium 0.30 Calcium 0.40 Copper 2.6 Iron 7.2 Lead 2.4 Magnesium 0.10 Nickel 2.6 Potassium 0.10 Selenium 0.12 Sodium 0.12 Thallium 0.02 Zinc 0.70 Molybdenum 2.2	Aluminum 11.0 U Antimony 0.12 B Arsenic 0.30 U Barium 0.50 U Beryllium 0.20 U Cadmium 0.30 U Cadmium 0.30 U Cadmium 0.30 U Cadmium 0.40 U Copper 2.6 B Iron 7.2 U Lead 2.4 U Magnesium	Aluminum 11.0 U Antimony 0.12 B Arsenic 0.30 U Barium 0.50 U Beryllium 0.20 U Cadmium 0.30 U Cadmium 0.30 U Cadmium 0.30 U Calcium 0.30 U Chromium 0.40 U Copper 2.6 B Iron 7.2 U Lead 2.4 U Magnesium	Aluminum 11.0 U P Antimony 0.12 B PM Arsenic 0.30 U PM Barium 0.50 U P Beryllium 0.20 U P Cadmium 0.30 U P Calcium NR NR Chromium 0.40 U P Copper 2.6 B P Iron 7.2 U P Magnesium NR NR Magnesium NR NR Magnesium NR NR Selenium 0.12 B N Sodium NR NR Thallium 0.02 U PM Zinc 0.70 U P Molybdenum 2.2 U P <

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8/11/07

Comments:

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CLIENT SAMPLE NO.

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Lab Code: S Matrix (soi Level (low/	<pre>l/water): WAT med): LOW</pre>	_INC No: ER	1 ANALYSES DATA Contract: _ SAS No:	Lá	SDG	W No le	LIENT SAMPLE NO. 583724(DIS : 130103 ID: W583724 ed: 07/28/07
% Solids:		.0	/Ĺ or mg/kg dr				
6 	CAS No. 7429-90-5 7440-36-0 7440-38-2	Analyte Aluminum Antimony Arsenic	Concentration	C U B	Q	M P PM PM	0.164
5	$\begin{array}{r} 7440 - 39 - 3 \\ 7440 - 41 - 7 \\ 7440 - 43 - 9 \\ 7440 - 70 - 2 \\ 7440 - 47 - 3 \\ 7440 - 50 - 8 \end{array}$	Barium Beryllium Cadmium Calcium Chromium Copper	14.8 0.20 0.30 0.30			P_ P_ NR P_ P_	
	7439-89-6 7439-92-1 7439-95-4 7439-96-5 7439-97-6 7440-02-0 7440-09-7	Iron Lead Magnesium Manganese Mercury Nickel Potassium	7.2 2.6 <u>22.4</u> 0.10 <u>1.6</u>	B — Ū B		P P NR P C V P NR	J 22.4 U 1.6 U
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ab Name: SVL	λΝΑΙΥΨΙΟλΙ	8	ANALYSES DATA	ып		W	583725(DIS
Lab Code: SIL Lab Code: SIL Matrix (soil/ Level (low/med	VER Case water): WAT	No: ER	Contract: SAS No:	La	ab Samp	le	: 130103 ID: W583725 ed: 07/28/07
Solids:	0	.0				CIV	ca. 07720707
C	oncentratio	n Units (ug	/L or mg/kg dry	УW	weight)	: U	G/L_
λ	CAS No.	Analyte	Concentration	С	Q	М	
×	7429-90-5	Aluminum	11.0	Ū		P_	
and the company of the	7440-36-0 7440-38-2	Antimony Arsenic	0.69 2.1			PM PM	
	7440-39-3	Barium	35.7			P	
	7440-41-7	Beryllium_	0.20	Ū	-	Р Р_	
\$	7440-43-9	Cadmium	0.30	U		P	
	7440-70-2 7440-47-3	Calcium Chromium	0.40	TT		NR P	
	7440-50-8	Copper	2.1			P	
	7439-89-6	Iron	7.2	U		P ⁻	
	7439-92-1	Lead	2.4	U		P	
	7439-95-4	Magnesium_		_		NR	(/2/) E3/
R N 8	7439-96-5 7439-97-6	Manganese_ Mercury	203 0.10	TT		$P \\ C\overline{V}$	
	7440-02-0	Nickel				P	1.84
8	7440-09-7	Potassium				NR	
	7782-49-2	Selenium_	0.60	B	N	PM	0.64
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CLIENT SAMPLE NO.

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1 INORGANIC ANALYSES DATA SHEET

Lab Name: SVL ANALY		Contract:		W583726(DIS	
Lab Code: SILVER Matrix (soil/water)		SAS No:		No: 130103 E ID: W583726	1
Level (low/med):	LOW	5		ived: 07/28/07	
<pre>% Solids:</pre>	0.0		#1 1.1	1(5)	

Concentration Units (ug/L or mg/kg dry weight): UG/L_

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	CAS No.	Analyte	Concentration	С	Q	М	e 2 2
	7429-90-5	Aluminum	11.0	Ū		$-\frac{1}{P}$	
	7440-36-0 -		-0.19			PM	0.194
	7440-38-2	Arsenic	4.5			- PM	0.19 4
	7440-39-3	Barium	14.6				8 V
	7440-41-7	Beryllium		Ū		P_	
8	7440-43-9		0.20			P_	
12		Cadmium Calcium	0.30	U		P_	
	7440-70-2			=		NR	
8 1.356 B	7440-47-3	Chromium	0.40	Ū		.P	(# 16 D
	7440-50-8	Copper	2.1	U		P_	
	7439-89-6	Iron	7.2	U		P	
	7439-92-1	Lead	2.4	U		P	
	7439-95-4	Magnesium	a . 5a			NR	
	7439-96-5	Manganese	21.2			P	21.24
	7439-97-6	Mercury -	0.10	Ū		CV	10 A
	7440-02-0	Nickel	1.6	B	0	P	1.6 U
	7440-09-7	Potassium	1		2 X 3	NR	•••
	7782-49-2	Selenium -	2.1	B	N	PM	J
	7440-23-5	Sodium —	······		···	NR	
	7440-28-0	Thallium	0.02	Ū		PM	
	7440-66-6	Zinc —	0.70	U		P	
	7439-98-7	Molybdenum		B	1.1	P	Г
		Hardness	/.5	- L		NR	J
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1 INORGANIC ANALYSES DATA SHEET

Lab Name: SVL ANALYTICAL INC.	Contract:	W583727 (DIS
Lab Code: SILVER Case No: Matrix (soil/water): WATER Level (low/med): LOW % Solids: 0.0	SAS No:	SDG No: 130103 Lab Sample ID: W583727 Date Received: 07/28/07

Concentration Units (ug/L or mg/kg dry weight): UG/L_

	1		1			12	
	CAS No.	Analyte	Concentration	С	Q	М	
2	7429-90-5	Aluminum	11.0		<u></u>	-	
	7440-36-0	Antimony	11.0	Ū		P	
11 15 17 15 17 17 17 17 17 17 17 17 17 17 17 17 17	7440-38-2	Arsenic	0.22	-B-		PM	
	7440-39-3	Barium	3.3			PM	
a	7440-41-7		32.2	-		P_	
	7440-43-9	Beryllium Cadmium	0.20	Ū		P_	
đ.	7440-70-2		0.30	U		P_	
	7440-47-3	Calcium		_		NR	
÷.	7440-47-5	Chromium	0.59	B		P P	J
		Copper	2.1	U		P_	
	7439-89-6	Iron	7.2	U		P_	
	7439-92-1	Lead	2.4	U		P_	ω.
	7439-95-4	Magnesium_				NR	
	7439-96-5	Manganese_	7.0			P	7.04
	7439-97-6	Mercury		Ū		CV	
ž.	7440-02-0	Nickel	1.8	B		P	1.84
	7440-09-7	Potassium_			1.000	NR	
	7782-49-2	Selenium _	2.1	B	N	PM	2
	7440-23-5	Sodium	2	1		NR	
	7440-28-0	Thallium	0.02	Ū		PM	
	7440-66-6	Zinc	4.7	B		P	1.14
	7439-98-7	Molybdenum	2.4	B		P^{-}	J
		Hardness		1		NR	9
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Color After:		Clarit	After:	-			ifacts:
G.)		-			×	ML C.	
Comments:							
CLIENT ID:	SMELTER PON	D POC WELL	(DISSOLVED META	AT.S	0		
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CLIENT SAMPLE NO.

APPENDIX C

QUALIFIED RESULTS TABLE

Qualified Results Table for Resolution Copper	APP Wells	SDG 130103	June 2007 Sampling
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W 583724GWAntimory, Dissolved0.16BU0.16 U $\mu g/L$ PB/EB ContaminationW 583724GWMarguesc, Dissolved22.4U0.16 U $\mu g/L$ EB ContaminationW 583725GWMarguesc, Dissolved0.16BU0.16 U $\mu g/L$ PB/EB ContaminationBS Pool 5 POC WellW 583725GW-Antimony, Dissolved0.19BU0.16 U $\mu g/L$ PB/EB ContaminationBS Pool 5 POC WellW 583725GW-Antimony, Dissolved0.19BU0.19 U $\mu g/L$ PB/EB ContaminationBS Pool 5 POC WellW 583726GW-Antimony, Dissolved0.19BU0.19 U $\mu g/L$ PB/EB ContaminationAlert WellW 583726GW-Antimony, Dissolved1.16BU1.16 U $\mu g/L$ PB/EB ContaminationAlert WellW 583726GW-Antimony, Dissolved2.1BNJ1.10 U $\mu g/L$ PB/EB ContaminationAlert WellW 583726GWAlert WellW 583727GWAlert WellJJJ <td< th=""><th>Sample</th><th>Lab ID</th><th>Type</th><th>Parameter</th><th>Original Value</th><th>Original Oualifier</th><th>Added</th><th>New Value</th><th>Units</th><th>Reason</th><th>Method</th><th>Validator</th></td<>	Sample	Lab ID	Type	Parameter	Original Value	Original Oualifier	Added	New Value	Units	Reason	Method	Validator
W583724GWManganese, Dissolved $2.2.4$ U $2.2.4$ U 1.6 BU 1.6 U 1.6 D 1.6 DD 1.6 DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD<	DS-I	W583724	GW	Antimony, Dissolved	0.16	В	n	0.16 U	J/an	PB/EB Contamination	EPA 200.8	TTST/PC
	DS-1	W583724	GW	Manganese, Dissolved	22.4		D	22.4 U	T/an	EB Contamination	FPA 2007	Ud/ISTI
$ \begin{array}{l c c c c c c c c c c c c c c c c c c c$	DS-1	W583724	GW	Nickel, Dissolved	_ 1.6	В	n	1.6 U	T/an	PB/EB Contamination	EPA 2007	TS1/PC
POC WellW583725GW-Nicket, Pissolved1.8BU1.8 U $\mu g/L$ PB/EB ContaminationPOC WellW583725GWSelenium, Dissolved0.60BU0.60 U $\mu g/L$ PB/EB ContaminationW583726GW- Antimony, Dissolved0.19BU0.19 U $\mu g/L$ PB/EB ContaminationW583726GWNickel, Dissolved1.16BU1.60 U $\mu g/L$ PB/EB ContaminationW583726GWNickel, Dissolved1.16BU1.60 U $\mu g/L$ PB/EB ContaminationW583726GWAntimony, Dissolved2.11BNU0.222 U $\mu g/L$ PB/EB ContaminationDC WellW583727GWAntimony, Dissolved7.0U7.00 U $\mu g/L$ PB/EB ContaminationDC WellW583727GWManganese, Dissolved1.1BU1.10 U $\mu g/L$ PB/EB ContaminationDC WellW583727GWAntimony, Dissolved1.1BU1.10 U $\mu g/L$ PB/EB ContaminationDC WellW583727GWAntimony, Dissolved1.1BU0.12 U $\mu g/L$ PB/EB ContaminationDC WellW583727GWManganese, Dissolved1.1BU0.12 U $\mu g/L$ PB/EB ContaminationDC WellW583727GWMolybeenum, Dissolved1.1BU0.12 U $\mu g/L$ PB/EB ContaminationDC WellW583724GW <td< td=""><td>Tailings Pond 5 POC Well</td><td>W583725</td><td>GW</td><td>-Antimony, Dissolved</td><td>0.69</td><td>В</td><td>n</td><td>0.69 U</td><td>J/an</td><td>PB/EB Contamination</td><td>EPA 200.8</td><td>TTSI/PC</td></td<>	Tailings Pond 5 POC Well	W583725	GW	-Antimony, Dissolved	0.69	В	n	0.69 U	J/an	PB/EB Contamination	EPA 200.8	TTSI/PC
POC WellW583725GWSelenium, Dissolved0.60BU0.60 U $\mu g/L$ PB/EB ContaminationW583726GWAntimony, Dissolved0.19BU0.19 U $\mu g/L$ PB/EB ContaminationW583726GWMargarese, Dissolved21.2U0.19 U $\mu g/L$ PB/EB ContaminationW583726GWNickel, Dissolved21.2U0.19 U $\mu g/L$ PB/EB ContaminationW583726GWNickel, Dissolved2.1BNJ2.11 U $\mu g/L$ PB/EB ContaminationW583727GWAntimony, Dissolved2.1BNJ2.11 U $\mu g/L$ PB/EB ContaminationDC WellW583727GWAntimony, Dissolved1.6BU0.22 U $\mu g/L$ PB/EB ContaminationDC WellW583727GWAntimony, Dissolved1.11 BU0.12 U $\mu g/L$ PB/EB ContaminationDC WellW583727GWZinc, Dissolved1.11 BU0.12 J $\mu g/L$ PB/EB ContaminationDC WellW583727GWNagarese, Dissolved1.11 BU0.12 J $\mu g/L$ PB/EB ContaminationDC WellW583727GWNagarese, Dissolved1.11 BU1.11 U $\mu g/L$ PB/EB ContaminationDC WellW583724GWSelenium, Dissolved2.12 BJJ0.12 J $\mu g/L$ NOP/EB/ED/EBDC WellW583724GWSelenium, Dissolved2.10 BJ2.01 M <t< td=""><td>Tailings Pond 5 POC Well</td><td>W583725</td><td>GW</td><td>-Nickel, Dissolved</td><td>1.8</td><td>В</td><td>D</td><td>1.8 U</td><td>J/an</td><td>PB/EB Contamination</td><td>EPA 2007</td><td>TTSI/PC</td></t<>	Tailings Pond 5 POC Well	W583725	GW	-Nickel, Dissolved	1.8	В	D	1.8 U	J/an	PB/EB Contamination	EPA 2007	TTSI/PC
W583726GWAntimony, Dissolved0.19BU0.19 $\mu g/L$ PB/EB ContaminationW583726GWManganese, Dissolved V21.2U21.2 U $\mu g/L$ EB ContaminationW583726GWYritekei, Dissolved V21.2U21.1 U $\mu g/L$ PB/EB ContaminationW583726GWYritekei, Dissolved V21.1 BNJ2.1 J $\mu g/L$ PB/EB ContaminationW583726GWSelenium, Dissolved V2.1 BNJ2.1 J $\mu g/L$ PB/EB ContaminationW583727GWAntimony, Dissolved V0.22 BU0.22 U $\mu g/L$ PB/EB ContaminationDC WellW583727GWAntimony, Dissolved V1.8 BU1.1 U $\mu g/L$ PB/EB ContaminationDC WellW583727GWZinc, Dissolved V1.1 BU1.1 U $\mu g/L$ PB/EB ContaminationDC WellW583724GWZinc, Dissolved V2.0 BJJ0.12 J $\mu g/L$ PB/EB ContaminationDC WellW583724GWZinc, Dissolved V2.1 BNJ0.1 LUJD/LB/LDC WellW583724GWNolybdenum, Dissolved V2.1 BNJ0.1 LD/LMS %RDC WellW583724GWMolybdenum, Dissolved V2.6 JJJ/LNO PrecisionDC WellW583725GWMolybdenum, Dissolved V2.6 JJJ/LNO PrecisionDC WellW583726GWMo	Tailings Pond 5 POC Well	W583725	GW	Selenium, Dissolved	0.60	В	n	0.60 U	J/an	PB/EB Contamination	EPA 200.8	TTSI/PC
W583726GWMargarese, Dissolved V21.2U21.2 U $\mu g/L$ EB ContaminationW583726GWYritekel, Dissolved1.6BU1.6 U $\mu g/L$ PB/EB ContaminationW583726GWSelenium, Dissolved2.1BNJ2.1 J $\mu g/L$ PB/EB ContaminationW583727GWSelenium, Dissolved2.1BNJ2.1 J $\mu g/L$ PB/EB ContaminationDC WellW583727GWAntimony, Dissolved1.8BU0.22 U $\mu g/L$ PB/EB ContaminationDC WellW583727GWAntimony, Dissolved1.1BU1.1.U $\mu g/L$ PB/EB ContaminationDC WellW583727GWZine, Dissolved1.1BU1.1.U $\mu g/L$ PB/EB ContaminationDC WellW583724GWZine, Dissolved1.1BU1.1.U $\mu g/L$ PB/EB ContaminationDC WellW583724GWZine, Dissolved2.0BJ0.12.J $\mu g/L$ PB/EB ContaminationDC WellW583724GWMolybdenum, Dissolved2.6J2.6.J $\mu g/L$ No PrecisionDC WellW583725GWMolybdenum, Dissolved7.3JJ2.6.J $\mu g/L$ No PrecisionDC WellW583724GWMolybdenum, Dissolved7.3JJJJNo PrecisionDC WellW583725GWMolybdenum, Dissolved7.3JJ <td< td=""><td>SP ½ Alert Well</td><td>W583726</td><td>GW</td><td>- Antimony, Dissolved</td><td>0.19</td><td>в</td><td>n</td><td>0.19 U</td><td>ue/L</td><td>PB/EB Contamination</td><td>EPA 200.8</td><td>TSI/PC</td></td<>	SP ½ Alert Well	W583726	GW	- Antimony, Dissolved	0.19	в	n	0.19 U	ue/L	PB/EB Contamination	EPA 200.8	TSI/PC
W583726GW"Yticket, Dissolved1.6BU1.6 $\mu g/L$ PB/EB ContaminationW583726GWSelenium, Dissolved2.1BNJ2.1.1 $\mu g/L$ PB/EB ContaminationDC WellW583727GWAntimony, Dissolved2.1BNJ2.1.1 $\mu g/L$ PB/EB ContaminationDC WellW583727GWAntimony, Dissolved2.1BNJ2.1.1 $\mu g/L$ PB/EB ContaminationDC WellW583727GWAntimony, Dissolved1.1.8BU1.1.0 $\mu g/L$ PB/EB ContaminationDC WellW583724GWZine, Dissolved1.1.1BU1.1.1 $\mu g/L$ PB/EB ContaminationDC WellW583723GWZine, Dissolved1.1.1BU1.1.1 $\mu g/L$ PB/EB ContaminationDC WellW583724GWZine, Dissolved2.0BJ0.12.1BU1.1.1DC WellW583724GWMolybdenum, Dissolved2.6J2.6.1MS %RPOC WellW583725GWMolybdenum, Dissolved7.3J1.0.12M/LNo PrecisionPOC WellW583726GWMolybdenum, Dissolved7.3J1.0.12M/LNo PrecisionPOC WellW583725GWMolybdenum, Dissolved7.3JM/LNo PrecisionPOC WellW583726GWMolybdenum, Dissolved7.3JM/LNo PrecisionP	SP ½ Alert Well	W583726	GW	Manganese, Dissolved M			D	21.2 U	ue/L	EB Contamination	EPA 2007	TSI/PC
W S33726GWSelenium, Dissolved2.1BNJ2.1 $\mu g/L$ $MS \%R$ DC WellW583727GW $-Antimony, Dissolved$ 0.22BU0.22U $\mu g/L$ $PB/EB Contamination$ DC WellW583727GW $-Antimony, Dissolved$ 7.0U 0.22 U $\mu g/L$ $PB/EB Contamination$ DC WellW583727GW $-\Delta ticket, Dissolved$ 1.1BU $1.1.0$ $\mu g/L$ $PB/EB Contamination$ DC WellW583727GW $-\Delta ticket, Dissolved$ 1.1BU $1.1.0$ $\mu g/L$ $PB/EB Contamination$ DC WellW583724GW $\Delta tinmony, Dissolved$ 1.1BU $1.1.0$ $\mu g/L$ $RB Contamination$ DC WellW583724GWSelenium, Dissolved2.16BJ2.0.1 $\mu g/L$ $RP/EB Contamination$ DC WellW583724GWMolybdenum, Dissolved0.12BJ0.12.1 $\mu g/L$ $RP/ED Contamination$ DC WellW583724GWMolybdenum, Dissolved0.12BJ0.12.1 $\mu g/L$ $NO Precision$ POC WellW583726GWMolybdenum, Dissolved7.3J J J J J L $NO Precision$ DC WellW583726GWMolybdenum, Dissolved7.3J J J J J $NO Precision$ DC WellW583726GWMolybdenum, Dissolved7.3J J J	SP 1/2 Alert Well	W583726	GW	Nickel, Dissofved	1.6	B	D	1.6 U	ne/L	PB/EB Contamination	EPA 2007	TTSI/PC
DC WellW583727GWAntimory, Dissolved0.22BU0.22U $\mu g/L$ PB/EB ContaminationDC WellW583727GWManganese, Dissolved7.0U $\eta g/L$ EB ContaminationDC WellW583727GW $\neg Nicket, Dissolved$ 1.8BU $\eta g/L$ PB/EB ContaminationDC WellW583727GW $\neg Nicket, Dissolved$ 1.1BU $\eta g/L$ PB/EB ContaminationDC WellW583724GWZine, Dissolved1.1BU $\eta g/L$ PB/EB ContaminationDC WellW583724GWZine, Dissolved2.0BJ $\eta g/L$ PB/EB ContaminationN583724GWNolybdenum, Dissolved0.12BJ $\eta g/L$ No PrecisionPOC WellW583724GWMolybdenum, Dissolved5.4J $g g/L$ No PrecisionPOC WellW583726GWMolybdenum, Dissolved7.3J $g g/L$ No PrecisionPOC WellW583726GWMolybdenum, Dissolved7.3J $g g/L$ No PrecisionPOC WellW583727GWMolybdenum, Dissolved7.3J $g g/L$ No PrecisionPOC WellW583726GWMolybdenum, Dissolved7.3J $g g/L$ No PrecisionPOC WellW583727GWMolybdenum, Dissolved7.3J $g g/L$ No PrecisionPOC WellW583726GWMolybdenum, Dissolved7.3J	SP ½ Alert Well	W583726	GW	Selenium, Dissolved	2.1	BN	2	2.1 J	ue/L	MS %R	EPA 200.8	Diagra
DC WellW583727GWManganese, Dissolved7.0U7.0 U $\mu g/L$ EB ContaminationDC WellW583727GW $\rightarrow Vickel, Dissolved$ 1.8BU1.8 U $\mu g/L$ PB/EB ContaminationDC WellW583727GWZine, Dissolved1.1BU1.1 U $\mu g/L$ PB/EB ContaminationDC WellW583724GWZine, Dissolved1.1BU1.1 U $\mu g/L$ PB/EB ContaminationDC WellW583724GWSclenium, Dissolved2.0BJ0.12 J $\mu g/L$ RPD>20W583724GWLead, Dissolved2.6J2.6 JJ $\mu g/L$ No PrecisionW583724GWMolybdenum, Dissolved2.6J5.4 J $\mu g/L$ No PrecisionPOC WellW583726GWMolybdenum, Dissolved7.3J7.3 J $\mu g/L$ No PrecisionDC WellW583727GWMolybdenum, Dissolved7.3J J J J J J $N_0 PrecisionDC WellW583726GWMolybdenum, Dissolved7.3JJJJJN_0 PrecisionDC WellW583727GWMolybdenum, Dissolved7.3JJJJJJNPrecisionDC WellW583726GWMolybdenum, Dissolved7.3JJJJJJJJJJJ$	Smelter Pond POC Well	W583727	GW	Antimony, Dissolved	0.22	B	n	0.22 U	ue/L	PB/EB Contamination	FPA 200.8	Jan'istr
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Smelter Pond POC Well	W583727	GW	Manganese, Dissolved	7.0		D	7.0 U	J/an	EB Contamination	EPA 2007	D 17C11
DC Well WS83727 GW Zinc, Dissolved 1.1 B U 1.1 U μgL PB Contamination WS83724 GW Selenium, Dissolved 2.0 B J 2.0 J μgL MS %R WS83723 EB Antimony, Dissolved 2.0 B J 2.0 J μgL NS %R WS83724 GW Lead, Dissolved 2.6 J 2.6 J μgL No Precision WS83724 GW Molybdenum, Dissolved 5.4 J μgL No Precision POC Well WS83725 GW Molybdenum, Dissolved 5.4 J μgL No Precision WS83726 GW Molybdenum, Dissolved 7.3 J 7.3 J μgL No Precision WS83727 GW Molybdenum, Dissolved 0.59 J 0.61 noT No Precision	Smelter Pond POC Well	W583727	GW	-Nickel, Dissolved	1.8	В	D	1.8 U	ne/L	PB//EB Contamination	FPA 2007	Jd/ISTI
W583724 GW Selenium, Dissolved 2.0 B J 2.0 J µg/L MS %R W583723 EB Antimony, Dissolved 0.12 B J 0.12 J µg/L NS %R W583724 GW Lead, Dissolved 0.12 B J 0.12 J µg/L No Precision W583724 GW Molybdenum, Dissolved 5.4 J 2.6 J µg/L No Precision POC Well W583725 GW Molybdenum, Dissolved 5.4 J 19.8 J µg/L No Precision VC Well W583726 GW Molybdenum, Dissolved 7.3 J 7.3 J µg/L No Precision	Smelter Pond POC Well	W583727	GW	Zinc, Dissolved	1.1	в	D	ויז ט	ne/L	PB Contamination	EPA 2007	Da/ISTI
W583723 EB Antimony, Dissolved 0.12 B J 0.12 μg/L RPD>20 W583724 GW Lead, Dissolved 2.6 J 2.6 J μg/L No Precision W583724 GW Molybdenum, Dissolved 5.4 J 2.6 J μg/L No Precision POC Well W583725 GW Molybdenum, Dissolved 5.4 J 19.8 J μg/L No Precision VS83726 GW Molybdenum, Dissolved 7.3 J 19.8 J μg/L No Precision OC Well W583726 GW Molybdenum, Dissolved 7.3 J μg/L No Precision	DS-1	W583724	GW	Sclenium, Dissolved	2.0	в	ſ	2.0 J	μg/L	MS %R	EPA 200.8	ITSI/PC
W583724 GW Lead, Dissolved 2.6 J 2.6.J µg/L No Precision W583724 GW Molybdenum, Dissolved 5.4 J 5.4.J µg/L No Precision POC Well W583725 GW Molybdenum, Dissolved 19.8 J 19.8.J µg/L No Precision Voc Well W583726 GW Molybdenum, Dissolved 7.3 J µg/L No Precision OC Well W583727 GW Molybdenum, Dissolved 0.59 J 0.61 No Precision	EB-1	W583723	EB	Antimony, Dissolved	0.12	В	1	0.12 J	μg/L	RPD>20	EPA 200.7	ITSI/PC
W S83724 GW Molybdenum, Dissolved 5.4 J 5.4.3 µg/L No Precision POC Well W S83725 GW Molybdenum, Dissolved 19.8 J 19.8.1 µg/L No Precision W S83726 GW Molybdenum, Dissolved 7.3 J µg/L No Precision OC Well W S83727 GW Chromium, Dissolved 0.59 J 0.61 No	DS-1	W583724	GW	Lead, Dissolved	2.6		J	2.6 J	μg/L	No Precision	EPA 200.7	ITSI/PC
POC Well W583725 GW Molybdenum, Dissolved 19.8 J 19.8 J Hg/L No Precision Well W583726 GW Molybdenum, Dissolved 7.3 J Hg/L No Precision DC Well W583727 GW Chromium, Dissolved 0.59 J 0.60 1 No Precision	DS-1	W583724	GW	Molybdenum, Dissolved	5.4		J	5.4 J	_1/gμ	No Precision	EPA 200.7	ITSI/PC
W583726 GW Molybdenum, Dissolved 7.3 J 7.3 J Hg/L No Precision DC Well W583727 GW Chromium, Dissolved 0.59 J 0.60 1 0.61 No Precision	Tailings Pond 5 POC Well	W583725	GW	Molybdenum, Dissolved	19.8		ľ	19.8 J	ue/L	No Precision	EPA 200.7	TTSI/PC
W583727 GW Chromium, Dissolved 0.59 I 0.59 I 1.07 No President	SP ½ Alert Well	W583726	GW	Molybdenum, Dissolved	7.3		J	7.3 J	1/an	No Precision	EPA 2007	Ud/1ST1
	Smelter Pond POC Well	W583727	GW	Chromium, Dissolved	0.59		L	0.59 J	µg/L	No. Precision	EPA 200.7	ITSI/PC

Abbreviations µg/L = micrograms per liter mg/L = milligrams per liter EB = equipment blank MS = matrix spike PB = preparation blank %R = percent recovery SDG = sample delivery group

Data Qualifier Flags. J = estimated value U = not detected

RCC SDG 130103 QRT r.0

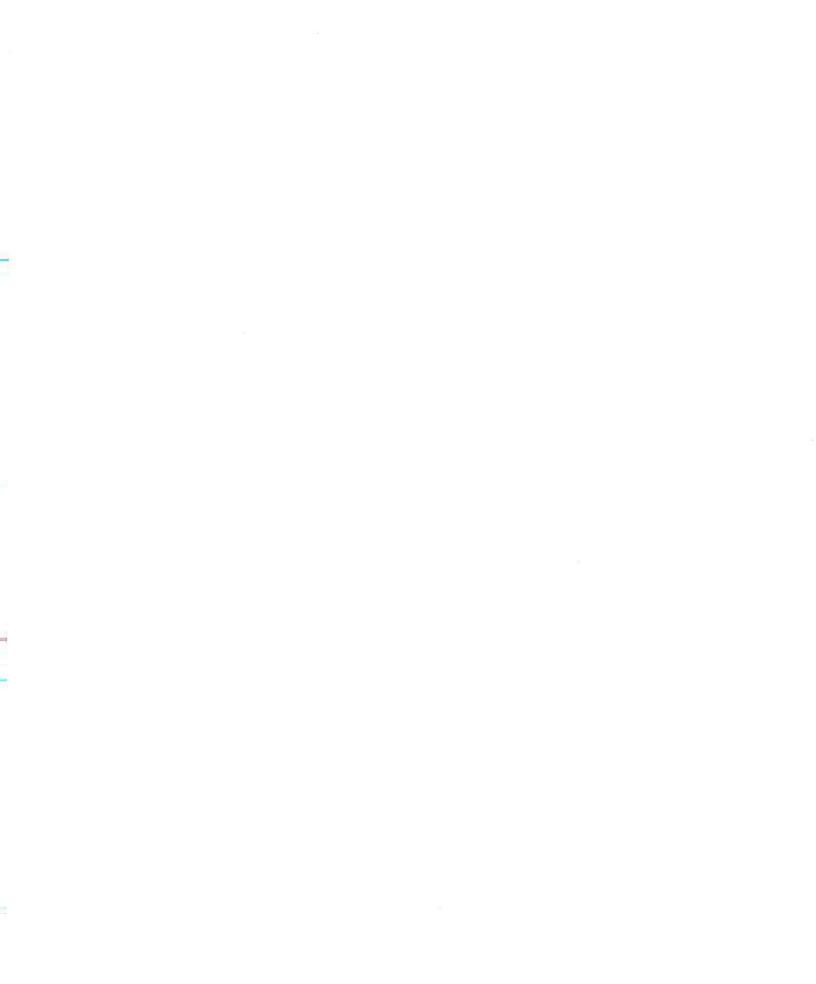
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APPENDIX D

ITSI STANDARD LEGAL NOTICE

ITSI STANDARD LEGAL NOTICE

ITSI is issuing this report at the request of the Client and based upon information furnished by Client. Further, the presence of environmental contamination can be influenced by many factors, including unknown and changing underground conditions. Therefore: 1. This report may not be relied upon by anyone for financial decision-making. 2. No one other than Client is authorized to use this report for any purpose. 3. Any conclusions or opinions included in this report are subject to reasonable revision based upon any new environmental or other data which is later developed. 4. Any results or conclusions stated are to be considered limited by the quality of the underlying sample or other data on which they are based, the budget established by the Client or otherwise for gathering and analyzing data, and by any assumptions and qualifications contained within this report.





September 17, 2007

Dr. Casey McKeon Resolution Copper Company 47206 North Magma Shaft #9 Road Superior, Arizona 85273

RE: ITSI DATA VALIDATION REPORT RESOLUTION COPPER PURCHASE ORDER NO. RCJVH00414 SDG 130423

Dear Dr. McKeon:

Innovative Technical Solutions, Inc. (ITSI) has completed the data review for Resolution Copper Company (RCC) for its Ambient Alert – APP Wells. ITSI performed data review as described in the U.S. Environmental Protection Agency's (EPA) *Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*, October 2004; the *Quality Assurance Plan Surface Water Baseline Resource Investigation for Resolution Copper Company*, January 23, 2006; and using criteria in the referenced methods.

The list of acronyms and abbreviations is included as Appendix A. Data review qualifiers have been marked in red directly on the analytical reports provided by the laboratory and are attached as Appendix B. A summary of all qualified data is provided in a qualified results table (QRT) as Appendix C. The ITSI standard legal notice is provided as Appendix D.

1.0 CROSS REFERENCE OF SAMPLES VERIFIED

The analytical data in the laboratory Sample Delivery Group (SDG) 130423 were reviewed. This SDG contained data for the following methods and metals.

- Inductively coupled plasma/atomic emission spectroscopy (ICP/AES) metals by EPA Method 6010B
- Cold vapor atomic absorption (CVAA) mercury (Hg) by EPA Method 7471A

The samples were analyzed by SVL Analytical (SVL) of Kellogg, Idaho. The table below provides an analytical summary and cross reference for the samples. All samples underwent a level 3 data verification.

Providing Turnkey Civil/Environmental Engineering and Construction

Field Sample ID	SVL Number	Sample Matrix	Collection Date	ICP Metals & Hg
500 Yard 15-20	587449	Soil	6/01/2007	Х
500 Yard 20-25	587450	Soil	6/01/2007	Х
500 Yard 25-30	587451	Soil	6/01/2007	Х
500 Yard 35-40	587452	Soil	6/01/2007	Х
500 Yard 40-45	587453	Soil	6/01/2007	Х
500 Yard 50-55	587454	Soil	6/01/2007	Х
500 Yard 60-65	587455	Soil	6/01/2007	Х
500 Yard 120-125	587456	Soil	6/04/2007	Х
500 Yard 145-150	587457	Soil	6/04/2007	Х
S. POND 1&2 100-110	587458	Soil	5/23/2007	Х
S. POND 1&2 140-150	587459	Soil	5/23/2007	Х
INDIAN POND 10-15	587460	Soil	5/31/2007	Х
INDIAN POND 55-60	587461	Soil	5/31/2007	Х
T. POND 5 90-100	587462	Soil	5/25/2007	Х
T. POND 5 120-130	587463	Soil	5/28/2007	Х

2.0 LABORATORY REPORT

The laboratory report was reviewed for completeness. There were no anomalies observed.

3.0 SAMPLE INTEGRITY

The chains-of-custody (COCs) were available for review. There were no anomalies that required qualification of the data except as noted below.

• The temperatures of the samples upon receipt at the laboratory were 11.7°C and 15.6°C which are out of the criteria of 4±2°C for mercury. The associated positive results have been flagged "J-" for an estimated value with a low bias. The non-detect result for sample 500 YARD 40-45 has been previously flagged "R" for rejected. No further data qualifier flags are required.

4.0 SAMPLE RECEIPT AND HOLDING TIMES

The samples were extracted and analyzed within the method-recommended holding time except as noted below.

• The samples were analyzed for mercury at least 25 days past the method recommended holding time of 28 days. The associated positive results have been flagged "J-" for an estimated value with a low bias and the non-detect result has been flagged "R" for rejected.

5.0 BLANK EVALUATION

Preparation blanks were analyzed to assess laboratory contamination. No qualification of the data was required due to compounds detected in the preparation blank except as noted below.

• Molybdenum was detected in the preparation blank. The associated sample results which were all less than ten times (10X) the blank contamination, have been flagged "U" and changed to non-detect at the observed value.

6.0 INITIAL AND CONTINUING CALIBRATION

Initial and continuing calibration criteria were not reviewed for this level of data verification.

7.0 LABORATORY CONTROL SAMPLES (LCS)/LABORATORY CONTROL SAMPLES DUPLICATE (LCSD)

A single LCS was analyzed for each analysis. There were no anomalies that required qualification of the data.

8.0 MATRIX SPIKE (MS)/MATRIX SPIKE DUPLICATE (MSD)

MS/MSD pairs were analyzed for each analysis. There were no anomalies that required qualification of the data except as noted below.

• The percent recoveries for antimony were out of the laboratory criteria of 75 to 125 percent at 74.4 and 73.4 percent in the MS/MSD. Since the LCS recovery was acceptable and the MS/MSD recoveries were biased low, only the associated result in spiked sample S. POND 1&2 100-110 has been flagged "J" for an estimated value with a low bias.

9.0 PRACTICAL QUANTITATION LIMITS (PQLS) AND COMPOUND QUANTITATION

The laboratory PQLs and sample results were reviewed. There were no anomalies that required qualification of the data.

10.0 FIELD DUPLICATE SAMPLES

Field duplicate samples were not provided.

11.0 RECOMMENDATIONS

There are no recommendations.



ITSI Data Validation Report Ambient Alert Purchase Order No.RCJVH0014 September 17, 2007

12.0 OVERALL ASSESSMENT FOR SDG

There was one rejected mercury result. Based on the available information, the other data as qualified are considered useable for their intended purposes.

We thank you for the opportunity to serve you and look forward to supporting RCC with data review in the future.

Sincerely, Innovative Technical Solutions, Inc.

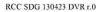
vn H. Dawson

Senior Chemist

Enclosures:

Appendix A – List of Acronyms and Abbreviations Appendix B – Qualified Report Pages Appendix C – Qualified Results Table Appendix D – ITSI Standard Legal Notice

cc: John Malusa
Golder Associates, Inc.
4730 North Oracle Road, Suite 210
Tucson, Arizona 85705



APPENDIX A

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LIST OF ACRONYMS AND ABBREVIATIONS

LIST OF ACRONYMS AND ABBREVIATIONS

COC	chain-of-custody
AES	atomic emission spectroscopy
CVAA	cold vapor atomic absorption
EPA	U.S. Environmental Protection Agency
ICP	inductively coupled plasma
ITSI	Innovative Technical Solutions, Inc.
LCS/LCSD	laboratory control samples/laboratory control samples duplicate
MS/MSD	matrix spike/matrix spike duplicate
PQL	practical quantitation limit
QAPP	Quality Assurance Project Plan
QRT	qualified results table
RCC	Resolution Copper Company
RL	reporting limit
RPD	relative percent difference
SDG	Sample Delivery Group
SVL	SVL Analytical

LIST OF VALUE FLAGS

J	estimated value
J-	estimated value, low bias
J+	estimated value, high bias
R	rejected, not useable
U	not detected
UJ	estimated reporting limit
UR	rejected, unusable RL

APPENDIX B

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QUALIFIED REPORT PAGES

		INORGANIC .	1 ANALYSES DATA	SHI	EET	1-	LIENT SAMPLE NO
ab Name: SVL AN ab Code: SILVER Matrix (soil/wat evel (low/med): Solids: Conc	Case (er): SOII LOW 100	No: .0	Contract: SAS No: /L or mg/kg dr	Da	ab Samp ate Rec	No le eiv	587449 : 130423 ID: S587449 ed: 07/12/07 G/KG
74 74 74 74	AS No. 29-90-5 40-36-0 40-38-2	Analyte Aluminum Antimony Arsenic	Concentration148004.1166	C 	Q N	M P P P	
74 74 74 74 74 74 74 74 74	40-41-7 40-43-9 40-47-3 40-50-8 39-89-6 39-92-1 39-96-5	Barium Beryllium Cadmium Chromium Copper Iron Lead Manganese	$ \begin{array}{r} 55.0 \\ 1.2 \\ 7.2 \\ 19.6 \\ 7490 \\ 68000 \\ 513 \\ 2380 \\ 0.50 \\ 0.50 \\ \end{array} $				J-
74 77 74 74	39-97-6 40-02-0 82-49-2 40-28-0 40-66-6 39-98-7	Mercury Nickel Selenium Thallium Zinc Molybdenum	0.50 13.1 0.43 0.23 1790 1.6			P P P P P	1.64
olor Before: B olor After: Y omments: CLIENT_ID:_50 SAMPLE WAS DR PERCENT_SOLID	ELLOW 0_TARD_15 IED_AND_P	Clarit -20 DULVERIZED.	zy Before:				ture: FINE

CLIENT SAMPLE NO.

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1 INORGANIC ANALYSES DATA SHEET

\$587450

			55074	450
Lab Name: SVL ANALYTI	CAL INC.	Contract:		
Lab Code: SIL $\overline{V}ER$ C		SAS No:	SDG No:	
Matrix (soil/water):	SOIL	97	Lab Sample ID:	S587450
Level (low/med):	LOW		Date Received:	07/12/07
% Solids:	100.0			

Concentration Units (ug/L or mg/kg dry weight): MG/KG

	CAS No.	Analyte	Concentration	С	Q	М
	7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-50-8 7439-89-6	Aluminum Antimony Arsenic Barium Beryllium Cadmium Chromium Copper Iron	5820 1.1 27.0 81.0 0.85 1.3 5.0 1130 12200		<u>N</u>	- P - P - P - P - P - P - P - P - P - P
	7439-92-1 7439-96-5 7439-97-6 7440-02-0 7782-49-2 7440-28-0 7440-66-6 7439-98-7	Lead Manganese Mercury Nickel Selenium Thallium Zinc Molybdenum	$ \begin{array}{c} $			$ \begin{array}{c} $
Color Before: Color After:	BROWN YELLOW	Clarit Clarit	y Before: y After:			Texture: FINE_ Artifacts:
SAMPLE DRIE	500 YARD 20 D AND PULVI DS_NOT_APPI	ERIZED.				

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1 INORGANIC ANALYSES DATA SHEET

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- 1

The state descention is within the state and a state of		S587451
Lab Name: SVL_ANALYTICAL_INC	Contract:	
Lab Code: SILVER Case No:		No: 130423
Matrix (soil/water): SOIL	Lab Sample	e ID: S587451
Level (low/med): LOW	Date Rece	ived: 07/12/07
% Solids: 100.0		

Concentration Units (ug/L or mg/kg dry weight): MG/KG

	CAS No.	Analyte	Concentration	С	Q	М		
	7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-50-8 7439-89-6 7439-92-1 7439-96-5 7439-97-6 7439-97-6 7440-02-0 7782-49-2 7440-28-0 7440-66-6 7439-98-7 	Aluminum Antimony Arsenic Barium Beryllium Cadmium Chromium Chromium Copper Iron Lead Manganese Mercury Nickel Selenium Thallium Zinc Molybdenum	8870 0.64 3.8 116 0.86 0.66 3.0 253 5640 23.4 740 0.02 3.2 0.43 0.23 150 -0.38 -0.38 -0.38 -0.38 -0.38 -0.38				J~ 0.98 U	
Color Before: Color After:	BROWN YELLOW	Clarit Clarit	y Before: y After:		_		ture: tifacts:	FINE
SAMPLE DRI	500_YARD_25 ED_AND_PULVI LIDS_NOT_API	ERIZED PLICABLE	DRM I - IN					

CLIENT SAMPLE NO.

1 INORGANIC ANALYSES DATA SHEET

S587452 Lab Name: SVL ANALYTICAL_INC.____ Contract: _____ Lab Code: SILVER Case No: _____ SAS No: _____ SDG No: 130423 Lab Sample ID: S587452 Matrix (soil/water): SOIL_ Level (low/med): LOW___ Date Received: 07/12/07 % Solids: 100.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

	1		p		and the second sec		1	
	CAS No.	Analyte	Concentration	С	Q	М		
	7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-50-8 7439-92-1 7439-96-5 7439-97-6 7439-97-6 7440-28-0 7440-28-0 7440-66-6 7439-98-7 	Aluminum Antimony Arsenic Barium Beryllium Cadmium Chromium Copper Iron Lead Manganese Mercury Nickel Selenium Thallium Zinc Molybdenum	12500 0.36 2.7 152 1.2 0.41 2.7 90.1 5150 11.8 660 0.02 3.5 0.43 0.23 130 -0.98			P P P P P P P P P P	J-	
Color Before: Color After:	BROWN YELLOW	Clarit Clarit	y Before:		-		xture: tifacts:	FINE
SAMPLE DRIE	500_YARD_39 ED_AND_PULVI LIDS_NOT_API	ERIZED. PLICABLE						
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CLIENT SAMPLE NO.

1 INORGANIC ANALYSES DATA SHEET



Concentration Units (ug/L or mg/kg dry weight): MG/KG

		the second s	-			
CAS No.	Analyte	Concentration	С	Q	М	
7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-50-8 7439-92-1 7439-96-5 7439-97-6 7439-97-6 7440-02-0 7782-49-2 7440-28-0 7440-66-6 7439-98-7 	Aluminum Antimony Arsenic Barium Beryllium Cadmium Chromium Copper Iron Lead Manganese Mercury Nickel Selenium Thallium Zinc Molybdenum		B 			R O.974
BROWN YELLOW	Clari Clari	ty Before: ty After:				xture: FINE tifacts:
D AND PULV	ERIZED. PLICABLE					
	7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-50-8 7439-92-1 7439-96-5 7439-97-6 7440-02-0 7782-49-2 7440-28-0 7440-66-6 7439-98-7 7440-66-6 7439-98-7 	7429-90-5 Aluminum 7440-36-0 Antimony 7440-38-2 Arsenic 7440-39-3 Barium 7440-41-7 Beryllium 7440-43-9 Cadmium 7440-43-9 Cadmium 7440-47-3 Chromium 7440-47-3 Chromium 7440-50-8 Copper 7439-92-1 Lead 7439-92-1 Lead 7439-92-1 Lead 7440-02-0 Nickel 7782-49-2 Selenium 7440-66-6 Zinc 7439-98-7 Molybdenum — — 7440-66-6 Zinc 7439-98-7 Molybdenum	7429-90-5 Aluminum 12400 7440-36-0 Antimony 0.63 7440-38-2 Arsenic 2.4 7440-39-3 Barium 183 7440-41-7 Beryllium 1.2 7440-43-9 Cadmium 0.46 7440-47-3 Chromium 2.2 7440-50-8 Copper 121 7439-89-6 Iron 4870 7439-92-1 Lead 9.1 7439-92-6 Manganese 557 7439-97-6 Mercury 0.02 7440-02-0 Nickel 2.8 7782-49-2 Selenium 0.43 7440-28-0 Thallium 0.23 7440-66-6 Zinc 130 7439-98-7 Molybdenum -0.97	7429-90-5 Aluminum 12400 7440-36-0 Antimony 0.63 B 7440-38-2 Arsenic 2.4 B 7440-39-3 Barium 183 7440-41-7 Beryllium 1.2 7440-43-9 Cadmium 0.46 7440-43-9 Cadmium 0.46 7440-50-8 Copper 121 7439-89-6 Iron 4870 7439-92-1 Lead 9.1 7439-96-5 Manganese 557 7439-97-6 Mercury 0.02 0 7440-28-0 Nickel 2.8 7440-28-0 Thallium 0.43 0 7440-28-0 Thallium 0.23 0 7440-66-6 Zinc 130 0 7440-88-7 Molybdenum -0.97 -	7429-90-5 Aluminum 12400 - 7440-36-0 Antimony 0.63 B N 7440-38-2 Arsenic 2.4 B - 7440-39-3 Barium 183 - - 7440-43-9 Cadmium 0.46 - - 7440-47-3 Chromium 2.2 - - 7440-73-3 Chromium 2.2 - - 7440-73-3 Chromium 2.2 - - 7440-73-3 Chromium 2.2 - - 7440-50-8 Copper 121 - - 7439-92-1 Lead 9.1 - - 7439-97-6 Mercury 0.02 0 0 7440-02-0 Nickel 2.8 - - 7440-28-0 Thallium 0.23 0 - 7440-28-0 Thallium - - - - 7440-28-0 Thallium - - - - - 7440-66-6 Zinc -	7429-90-5 Aluminum 12400 P 7440-36-0 Antimony 0.63 B N P 7440-38-2 Arsenic 2.4 B P P 7440-39-3 Barium 183 P P 7440-41-7 Beryllium 1.2 P P 7440-47-3 Chromium 2.2 P P 7440-50-8 Copper 121 P P 7439-89-6 Iron 4870 P P 7439-92-1 Lead 9.1 P P 7439-97-6 Mercury 0.02 U U P 7440-28-0 Nickel 2.8 P P 7440-28-0 Thallium 0.23 U P P 7440-66-6 Zinc 130 P P 7439-98-7 Molybdenum -0.97 P P 7440-66-6 Zinc 130 P P 7440-66-6 Zinc 130 P P 7439-98-7 Molybdenum -0.97 P P

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CLIENT SAMPLE NO.

INORGANIC ANALYSES DATA SHEET

Lab Name: SVL ANALYTICAL INC.Contract:S587454Lab Code: SILVER Case No:SAS No:SDG No: 130423Matrix (soil/water): SOILLab Sample ID: S587454Level (low/med):LOWDate Received: 07/12/07% Solids:100.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

	1			1 1			1
	CAS No.	Analyte	Concentration	С	Q	М	
	7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-50-8 7439-92-1 7439-96-5 7439-97-6 7439-97-6 7440-28-0 7440-28-0 7440-66-6 7439-98-7 	Aluminum Antimony Arsenic Barium Beryllium Cadmium Chromium Copper Iron Lead Manganese Mercury Nickel Selenium Thallium Zinc Molybdenum	$ \begin{array}{c} 13800 \\ 0.60 \\ 3.8 \\ 181 \\ 1.2 \\ 0.49 \\ 3.0 \\ 140 \\ 6380 \\ 15.4 \\ 547 \\ 0.03 \\ 3.3 \\ 0.43 \\ 0.23 \\ 0.43 \\ 0.23 \\ 108 \\ -0.90 \\$				J- 0.90 U
Color Before: Color After:	BROWN YELLOW	Clari Clari	ty Before: ty After:		-		xture: FINE
SAMPLE DRI	500_YARD_50 ED_AND_PULVI LIDS_NOT_API	ERIZED.					

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25 CLIENT SAMPLE NO.

1 INORGANIC ANALYSES DATA SHEET

Lab Name: SVL ANALYTICAL INC.	Contract:	S587455
Lab Code: SILVER Case No: Matrix (soil/water): SOIL Level (low/med): LOW % Solids: 100.0		SDG No: 130423 Sample ID: S587455 e Received: 07/12/07

Concentration Units (ug/L or mg/kg dry weight): MG/KG

	r	1	I	r i			I
	CAS No.	Analyte	Concentration	С	Q	M	
	$\begin{array}{c} 7429-90-5\\ 7440-36-0\\ 7440-38-2\\ 7440-39-3\\ 7440-41-7\\ 7440-43-9\\ 7440-47-3\\ 7440-50-8\\ 7439-92-1\\ 7439-96-5\\ 7439-92-1\\ 7439-96-5\\ 7439-97-6\\ 7440-02-0\\ 7782-49-2\\ 7440-28-0\\ 7440-66-6\\ 7439-98-7\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ $	Selenium Thallium Zinc	12300 0.43 1.8 144 1.3 0.22 2.2 37.4 4550 8.0 424 0.02 2.3 0.43 0.23 35.0 -0.87 -0.87 -0.87 -0.87	B .	<u>N</u>		J. 0.87 U
Color Before: Color After:	BROWN YELLOW	Clarit Clarit	y Before: y After:				cture: FINE
SAMPLE DRI	500_YARD_6(ED_AND_PULVI LIDS_NOT_API	ERIZED.					
		FC	DRM I - IN				

26 CLIENT SAMPLE NO.

1 INORGANIC ANALYSES DATA SHEET

\$587456

Lab Name: SVL ANALYTICAL INC.	Contract:	57150
Lab Code: SILVER Case No:	SAS No: SDG No:	
Matrix (soil/water): SOIL	Lab Sample II	
Level (low/med): LOW	Date Received	l: 07/12/07
% Solids: 100.0		

Concentration Units (ug/L or mg/kg dry weight): MG/KG

		1		<u> </u>		<u> </u>
	CAS No.	Analyte	Concentration	C	Q	М
	7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-50-8 7439-89-6 7439-92-1 7439-96-5 7439-97-6 7439-97-6 7440-28-0 7440-28-0 7440-66-6 7439-98-7 	Aluminum Antimony Arsenic Barium Beryllium Cadmium Chromium Copper Iron Lead Manganese Mercury Nickel Selenium Thallium Zinc Molybdenum	$ \begin{array}{c} 11200 \\ 0.33 \\ 1.6 \\ 106 \\ 0.90 \\ 0.22 \\ 3.1 \\ 12.2 \\ 4780 \\ 5.3 \\ 311 \\ 0.02 \\ 3.2 \\ 0.43 \\ 0.23 \\ 16.8 \\ 0.99 \\$		<u>N</u>	$ \begin{array}{c} $
Color Before: Color After:	BROWN YELLOW	Clari Clari	ty Before: ty After:	. 		Texture: FINE Artifacts:
SAMPLE DRI	500 YARD 12 ED AND PULVI LIDS_NOT_API	ERIZED.				
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9/12/07

27 CLIENT SAMPLE NO.

1 INORGANIC ANALYSES DATA SHEET

S587457

Lab Name: SVL ANALYTI	CAL INC.	Contract:		
Lab Code: SILVER C	Case No:	SAS No:	SDG No:	the second se
Matrix (soil/water):	SOIL		Lab Sample ID	
Level (low/med):	LOW		Date Received	: 07/12/07
% Solids:	100.0			

Concentration Units (ug/L or mg/kg dry weight): MG/KG

	1	pin	I	1 1		- -	Ī	
	CAS No.	Analyte	Concentration	С	Q	М		
	7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-47-3 7440-50-8 7439-89-6 7439-92-1 7439-96-5 7439-97-6 7440-02-0	Aluminum Antimony Arsenic Barium Beryllium Cadmium Chromium Copper Iron Lead Manganese Mercury Nickel	$\begin{array}{c} & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & 1.2 \\ & & & & & 1.2 \\ & & & & & 1.2 \\ & & & & & 1.2 \\ & & & & & 1.2 \\ & & & & & 1.2 \\ & & & & & 1.2 \\ & & & & & & 1.2 \\ & & & & & & 1.2 \\ & & & & & & 1.2 \\ & & & & & & 1.2 \\ & & & & & & 1.2 \\ & & & & & & & & 1.2 \\ & & & & & & & & 1.2 \\ & & & & & & & & & 1.2 \\ & & & & & & & & & & 1.2 \\ & & & & & & & & & & 1.2 \\ & & & & & & & & & & & & 1.2 \\ & & & & & & & & & & & & & & \\ & & & & & & & & & & & & & \\ & & & & & & & & & & & & & \\ & & & & & & & & & & & & & \\ & & & & & & & & & & & & \\ & & & & & & & & & & & & \\ & & & & & & & & & & & \\ & & & & & & & & & & & \\ & & & & & & & & & & \\ & & & & & & & & & & & \\ & & & & & & & & & & & \\ & & & & & & & & & & & \\ & & & & & & & & & & & \\ & & & & & & & & & & & \\ & & & & & & & & & & & \\ & & & & & & & & & & \\ & & & & & & & & & & \\ & & & & & & & & & & \\ & & & & & & & & & & \\ & & & & & & & & & & \\ & & & & & & & & & & \\ & & & & & & & & & & \\ & & & & & & & & & & \\ & & & & & & & & & & \\ & & & & & & & & & & \\ & & & & & & & & & & \\ & & & & & & & & & & \\ & & & & & & & & & & & \\ & & & & & & & & & & \\ & & & & & & & & & & \\ & & & & & & & & & & \\ & & & & & & & & & & \\ & & & & & & & & & & & \\ & & & & & & & & & & & \\ & & & & & & & & & & & \\ & & & & & & & & & & \\ & & & & & & & & & & \\ & & & & & & & & & & & \\ & & & & & & & & & & & \\ & & & & & & & & & & \\ & & & & & & & & & & \\ & & & & & & & & & & \\ & & & & & & & & & & \\ & & & & & & & & & & \\ & & & & & & & & & & \\ & & & & & & & & & & \\ & & & & & & & & & & \\ & & & & & & & & & & & \\ & & & & & & & & & & & \\ & & & & & & & & & & & & \\ & & & & & & & & & & & & & \\ & & & & & & & & & & & & & \\ & & & & & & & & & & & & & \\ & & &$		Q 		J-	
	7782-49-2 ⁻ 7440-28-0 7440-66-6 7439-98-7_ 	Selenium	0.43 0.23 16.4 				1.0 U	
Color Before: Color After:	BROWN YELLOW	Clarit Clarit	ty Before:				kture: tifacts:	FINE
SAMPLE DRIE	500_YARD_14 D_AND_PULVI LIDS_NOT_API	ERIZED PLICABLE						
		F'(DRM I - IN					

CLIENT SAMPLE NO.

28

1 INORGANIC ANALYSES DATA SHEET



Concentration Units (ug/L or mg/kg dry weight): MG/KG

				-	1		1	
	CAS No.	Analyte	Concentration	С	Q	М		
	7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-50-8	Aluminum Antimony Arsenic Barium Beryllium Cadmium Chromium Copper	6600 0.51 2.7 91.2 0.60 0.40 4.9 92.7	B 	N		J	
	7439-89-6 7439-92-1 7439-96-5 7439-97-6 7440-02-0 7782-49-2 7440-28-0	Iron Lead Manganese Mercury Nickel Selenium Thallium	7260 9.9 398 0.03 3.2 0.43 0.23	Ū		P P P P P P P P P P P P P P P P P P P	J-	
	7440-66-6	Zinc Molybdenum	43.3 <u>1.0</u>			P P 	1.0 U	
Color Before: Color After:	BROWN YELLOW	Clari Clari	ty Before: ty After:		_		xture: tifacts:	FINE
SAMPLE DRI	S. PONDS 1 ED AND PULV LIDS_NOT_AP	ERIZED. PLICABLE	ODM T TN					

CLIENT SAMPLE NO.

1 INORGANIC ANALYSES DATA SHEET

\$587459

Lab Name: SVL ANALYTICAL INC.	Contract:	
Lab Code: SILVER Case No:	SAS No: SDG No: 130423	I
Matrix (soil/water): SOIL	Lab Sample ID: S58745	
Level (low/med): LOW	Date Received: 07/12/	'07
% Solids: 100.0		

Concentration Units (ug/L or mg/kg dry weight): MG/KG

	1					1	1	
	CAS No.	Analyte	Concentration	С	Q	М		
	$\begin{array}{c} 7429-90-5\\ 7440-36-0\\ 7440-38-2\\ 7440-39-3\\ 7440-41-7\\ 7440-43-9\\ 7440-47-3\\ 7440-47-3\\ 7440-50-8\\ 7439-89-6\\ 7439-92-1\\ 7439-96-5\\ 7439-96-5\\ 7439-97-6\\ 7439-97-6\\ 7440-02-0\\ 7782-49-2\\ 7440-28-0\\ 7440-66-6\\ \end{array}$	Aluminum Antimony Arsenic Barium Beryllium Cadmium Chromium Copper Iron Lead Manganese Mercury Nickel Selenium	$ \begin{array}{c} 5140 \\ 0.52 \\ 3.4 \\ 78.0 \\ 0.47 \\ 0.40 \\ 3.6 \\ 98.0 \\ 7740 \\ 17.7 \\ 532 \\ 0.03 \\ 2.3 \\ 0.43 \\ 0.23 \\ 71.0 \\ \end{array} $			$\mathbb{M} = \begin{bmatrix} \mathbf{P}_{1} & \mathbf{P}_{2} & \mathbf{P}_{1} & \mathbf{P}_{2} & \mathbf{P}_{1} & \mathbf{P}_{2} & $	J- 1.2 4	
Color Before:		Clarit	ty Before: ty After:				 xture: tifacts:	FINE
Color After:	YELLOW	CIATI	LY AILEI:			ALU	LIIACUS	
SAMPLE DRI	S. PONDS 18 ED AND PULVI LIDS_NOT_API	ERIZED.						
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CLIENT SAMPLE NO.

1 INORGANIC ANALYSES DATA SHEET

S587460 Lab Name: SVL ANALYTICAL INC. ____ Contract: ____ Lab Code: SILVER Case No: ____ SAS No: ____ SDG No: 130423 Lab Sample ID: S587460 Matrix (soil/water): SOIL Level (low/med): LOW % Solids: 100.0 Date Received: 07/12/07

Concentration Units (ug/L or mg/kg dry weight): MG/KG

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	CAS No.	Analyte	Concentration	С	Q	М	
	CAS No. 7429-90-5 7440-36-0 7440-38-2 7440-41-7 7440-43-9 7440-47-3 7440-47-3 7440-50-8 7439-89-6 7439-92-1 7439-96-5 7439-97-6 7440-02-0 7782-49-2	Analyte Aluminum Antimony Arsenic Barium Beryllium Cadmium Chromium Copper Iron Lead Manganese Mercury Nickel Selenium	Concentration 15500 0.35 5.9 181 1.1 0.98 10.2 34.9 16100 15.7 627 0.06 20.2 0.43	_	Q N 		J~
	7782-49-2 7440-28-0 7440-66-6 7439-98-7 	Selenium Thallium Zinc Molybdenum 	0.43 0.23 52.0 0.58	U			0.5P U
				-			
Color Before: Color After:	BROWN YELLOW	Clarit Clarit	ty Before: ty After:				ture: FINE
Comments: CLIENT_ID: SAMPLE_DRIE PERCENT_SOI	INDIAN PONI D AND PULVI LIDS_NOT_API	ERTZED PLICABLE					
		FC	DRM I - IN				

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31 CLIENT SAMPLE NO.

1 INORGANIC ANALYSES DATA SHEET

S587461

 Lab Name: SVL ANALYTICAL INC.
 Contract:

 Lab Code: SILVER
 Case No:

 SAS No:
 SDG No: 130423

 Lab Sample ID: S587461

 Level (low/med): LOW Date Received: 07/12/07 % Solids: 100.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No. Analyte Concentration C 0 M 16600 7429-90-5 Aluminum P 7440-36-0 Antimony ___0.43 |B| P N 7440-38-2 Arsenic____ ____8.6 P 247 P Barium 7440-39-3 7440-41-7 Beryllium ____1.2 ____1.1 P 7440-43-9 Cadmium____ P 7440-47-3 Chromium 12.0 P 38.2 7440-50-8 Copper____ P 7439-89-6 Iron P 19400 7439-92-1 \mathbf{P}^{-} Lead 20.2 736 \mathbf{P}^{-} 7439-96-5 Manganese 7439-97-6 CV J-Mercury____ ____23.4 P_ P 7440-02-0 Nickel 7782-49-2 Selenium 0.43 Ū 7440-28-0 \mathbf{P}^{-} Thallium 0.23 U P 65.8 7440-66-6 Zinc 1.3 4 P 7439-98-7 Molybdenum -1-3 Clarity Before: _____ Texture: FINE___ Clarity After: _____ Artifacts: _____ Color Before: BROWN Color After: YELLOW Comments: CLIENT ID: INDIAN PONDS_55-60_ SAMPLE DRIED AND PULVERIZED. PERCENT SOLIDS NOT APPLICABLE FORM I - IN

> PC ITSI 9/12/07



32 CLIENT SAMPLE NO.

1 INORGANIC ANALYSES DATA SHEET

S587462 Lab Name: SVL ANALYTICAL INC. ____ Contract: _____ Lab Code: SILVER Case No: _____ SAS No: _____ SDG No: 130423_ Matrix (soil/water): SOIL Level (low/med): LOW % Solids: 100.0 Lab Sample ID: S587462 Date Received: 07/12/07

Concentration Units (ug/L or mg/kg dry weight): MG/KG

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	CAS No.	Analyte	Concentration	С	Q	М	
	7429-90-5	Aluminum	12200	-		P	
	7429-90-5		0.63	T	N	P P	
		Antimony	0.03	в	IN	$ _{D}^{P}$	
	7440-38-2	Arsenic	6.8			[P_	
	7440-39-3	Barium	133	-		P_	
	7440-41-7	Beryllium_	0.55	÷		P_	
	7440-43-9	Cadmium	0.71			P_	
	7440-47-3	Chromium	5.4	_		P_	
	7440-50-8	Copper	17.8	_	-	P_	
	7439-89-6_	Iron	11300			P_	
	7439-92-1	Lead	14.5			P	
	7439-96-5	Manganese	368			P	
	7439-97-6	Mercury	0.04			CV	J-
	7440-02-0	Nickel	6.1			P	
	7782-49-2	Selenium	0.43	Ū		P_	
	7440-28-0	Thallium	0.23	U		P	
	7440-66-6	Zinc	55.4			P	
	7439-98-7	Molybdenum	0.70	B		P	0.70 4
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lor Before:	BROWN	Clarit	ty Before:			Τρ	xture: FINE
lor After:	YELLOW	Clarit	ty After:				tifacts:
TOT ALLEL.	10010 <u></u>	UT UT T			-06	TTT	
omments:							
CLIENT ID:	T POND 5 90	0-100					
SAMPLE DRIE	D AND DIT.VI	ERIZED	and the second				
PERCENT SOL	וסג ייסאא פחד.	DI.ICARLE					
	TDO MOT VEI		Sector States				
T DICCHILL_DOT							
		F(DRM I - IN				

33 CLIENT SAMPLE NO.

1 INORGANIC ANALYSES DATA SHEET

S587463 Lab Name: SVL ANALYTICAL INC. _____ Contract: _____ Lab Code: SILVER Case No: _____ SAS No: _____ SDG No: 130423 Matrix (soil/water): SOIL Level (low/med): LOW Lab Sample ID: S587463 Date Received: 07/12/07 100.0 % Solids:

Concentration Units (ug/L or mg/kg dry weight): MG/KG

	1	1 martine and the second se	1	-			1	
	CAS No.	Analyte	Concentration	С	Q	М		
	7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-50-8 7439-89-6 7439-92-1 7439-96-5 7439-97-6 7439-97-6 7440-28-0 7440-28-0 7440-66-6 7439-98-7 	Aluminum Antimony Arsenic Barium Beryllium Cadmium Chromium Copper Iron Lead Manganese Mercury Nickel Selenium Thallium Zinc Molybdenum	$ \begin{array}{c} 12000 \\ 0.36 \\ 5.0 \\ 130 \\ 0.54 \\ 0.66 \\ 4.9 \\ 18.0 \\ 10400 \\ 17.8 \\ 368 \\ 0.04 \\ 5.8 \\ 0.04 \\ 5.8 \\ 0.43 \\ 0.23 \\ 63.2 \\ 0.53 $	aal			J- 0.53	ч
Color Before: Color After:	BROWN YELLOW	Clari Clari	ty Before: ty After:		-		xture: tifacts	FINE
SAMPLE DRI	T.POND_5_1 ED_AND_PULV LIDS_NOT_AP	ERIZED. PLICABLE	DRM T - TN					

APPENDIX C

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QUALIFIED RESULTS TABLE

Qualified Results Table for	Resolution Copper	APP Wells	SDG 130423	June-May 2007 Sampling
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Sample	Lab ID	Type	Parameter	Original Value	Original Qualifier	Added Qualifier	New Value	Units	Reason	Method	Validator
500 Yard 15-20	587449	Soil	Mercury	0.50		<u>-</u> -(0.50 J-	mg/Kg	Temperature; HT	EPA 7471A	ITSI/PC
500 Yard 20-25	587450	Soil	Mercury	0.22		Ŀ.	0.22 J-	mg/Kg	Temperature; HT	EPA 7471A	ITSI/PC
500 Yard 25-30	587451	Soil	Mercury	0.02	В	Ŀ	0.02 J-	mg/Kg	Temperature; HT	EPA 7471A	ITSI/PC
500 Yard 35-40	587452	Soil	Mercury	0.02	В	Ŧ	0.02 J-	mg/Kg	Temperature; HT	EPA 7471A	ITSI/PC
500 Yard 40-45	587453	Soil	Mercury	<0.02	n	R	<0.02 UR	mg/Kg	Temperature; HT	EPA 7471A	ITSI/PC
500 Yard 50-55	587454	Soil	Mercury	0.03	В	7	0.03 J-	mg/Kg	Temperature; HT	EPA 7471A	ITSI/PC
500 Yard 60-65	587455	Soil	Mercury	0.02	В	J.	0.02 J-	mg/Kg	Temperature; HT	EPA 7471A	ITSI/PC
500 Yard 120-125	587456	Soil	Mercury	0.02	В	Ŀ,	0.02 J-	mg/Kg	Temperature; HT	EPA 7471A	ITSI/PC
500 Yard 145-150	587457	Soil	Mercury	0.02	В	-ſ	0.02 J-	mg/Kg	Temperature; HT	EPA 7471A	ITSI/PC
S. POND 1&2 100-110	587458	Soil	Mercury	0.03	В	J.	0.03 J-	mg/Kg	Temperature; HT	EPA 7471A	ITSI/PC
S. POND 1&2 140-150	587459	Soil	Mercury	0.03	В	J.	0.03 J-	mg/Kg	Temperature; HT	EPA 7471A	ITSI/PC
INDIAN POND 10-15	587460	Soil	Mercury	0.06		4	0.06 J-	mg/Kg	Temperature; HT	EPA 7471A	ITSI/PC
INDIAN POND 55-60	587461	Soil	Mercury	0.55		J-	0.55 J-	mg/Kg	Temperature; HT	EPA 7471A	ITSI/PC
T. POND 5 90-100	587462	Soil	Mercury	0.04		J-	0.04 J-	mg/Kg	Temperature; HT	EPA 7471A	ITSI/PC
T. POND 5 120-130	587463	Soil	Mercury	0.04		J.	0.04 J-	mg/Kg	Temperature; HT	EPA 7471A	ITSI/PC
500 Yard 15-20	587449	Soil	Molybdenum	1.6		U	1.6 U	mg/Kg	PB Contamination	EPA 6010B	ITSI/PC
500 Yard 20-25	587450	Soil	Molybdenum	1.3		U	1.3 U	mg/Kg	PB Contamination	EPA 6010B	ITSI/PC
500 Yard 25-30	587451	Soil	Molybdenum	0.38	В	Ŋ	0.38 U	mg/Kg	PB Contamination	EPA 6010B	ITSI/PC
500 Yard 35-40	587452	Soil	Molybdenum	0.98		n	0.98 U	mg/Kg	PB Contamination	EPA 6010B	ITSI/PC
500 Yard 40-45	587453	Soil	Molybdenum	0.97		U	0.97 U	mg/Kg	PB Contamination	EPA 6010B	ITSI/PC
500 Yard 50-55	587454	Soil	Molybdenum	06.0		U	0.90 U	mg/Kg	PB Contamination	EPA 6010B	ITSI/PC
500 Yard 60-65	587455	Soil	Molybdenum	0.87		U	0.87 U	mg/Kg	PB Contamination	EPA 6010B	ITSI/PC
500 Yard 120-125	587456	Soil	Molybdenum	0.99		n	U 66.0	mg/Kg	PB Contamination	EPA 6010B	ITSI/PC
500 Yard 145-150	587457	Soil	Molybdenum	1.0		U	1.0 U	mg/Kg	PB Contamination	EPA 6010B	ITSI/PC
S. POND 1&2 100-110	587458	Soil	Molybdenum	1.0		n	1.0 U	mg/Kg	PB Contamination	EPA 6010B	ITSI/PC
S. POND 1&2 140-150	587459	Soil	Molybdenum	1.2		U	1.2 U	mg/Kg	PB Contamination	EPA 6010B	ITSI/PC
INDIAN POND 10-15	587460	Soil	Molybdenum	0.58	В	U	0.58 U	mg/Kg	PB Contamination	EPA 6010B	ITSI/PC
INDIAN POND 55-60	587461	Soil	Molybdenum	1.3		n	1.3 U	mg/Kg	PB Contamination	EPA 6010B	ITSI/PC
T. POND 5 90-100	587462	Soil	Molybdenum	0.70	В	U	0.70 U	mg/Kg	PB Contamination	EPA 6010B	ITSI/PC
T. POND 5 120-130	587463	Soil	Molybdenum	0.53	В	U	0.53 U	mg/Kg	PB Contamination	EPA 6010B	ITSI/PC
S. POND 1&2 100-110	587458	Soil	Antimony	0.51	z	J-	0.51 J-	mg/Kg	MS/MSD %R	EPA 6010B	ITSI/PC

HT = holding time MS/MSD = matrix spike/matrix spike duplicate mg/Kg = milligrams per kilograms %6R = percent recovery PB = preparation blank SDG = sample delivery group Abbreviations

Data Qualifier Flags J- = estimated value with low bias U = not detected R = rejected result

RCC SDG 130423 QRT r.0

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APPENDIX D

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ITSI STANDARD LEGAL NOTICE

ITSI STANDARD LEGAL NOTICE

ITSI is issuing this report at the request of the Client and based upon information furnished by Client. Further, the presence of environmental contamination can be influenced by many factors, including unknown and changing underground conditions. Therefore: 1. This report may not be relied upon by anyone for financial decision-making. 2. No one other than Client is authorized to use this report for any purpose. 3. Any conclusions or opinions included in this report are subject to reasonable revision based upon any new environmental or other data which is later developed. 4. Any results or conclusions stated are to be considered limited by the quality of the underlying sample or other data on which they are based, the budget established by the Client or otherwise for gathering and analyzing data, and by any assumptions and qualifications contained within this report.