

Memo

To:	Katsky Venter	Client:	TMAC Resources Inc.
From:	Eduardo Marquez Lisa Barazzuol	Project No:	1CT022.009
Cc:	Oliver Curran, TMAC John Roberts, TMAC	Date:	April 28, 2016
Subject:	2015 Doris Waste Rock and Ore Seep Monitoring		

1 Introduction

As part of the verification, monitoring and management plans for Hope Bay Project (the Project), TMAC Resources (TMAC) monitors seepage downstream of the Doris North infrastructure pads and roads, waste rock and quarries. The last reported seep survey included Doris North infrastructure, quarries, and waste rock, with results discussed in the *2014 Hope Bay Seepage Monitoring Program* (SRK 2015).

This memo presents the results of the 2015 freshet seep survey. The 2014 seep survey satisfied the water licence requirements for the seep monitoring associated with quarry construction rock. Accordingly, the scope of the 2015 survey included the waste rock stockpile and downstream areas only, which is referred to as “Waste Rock Influenced Area” in previous seepage monitoring programs, i.e. SRK (2015). The 2015 seepage program was completed in accordance with conditions outlined in Part D “Conditions applying to Construction and Operations” Item 20 of Water Licence 2AM-DOH1323 (Nunavut Water Board 2013) and the *Doris North Waste Rock and Ore Management Plan* (SRK 2010).

2 Methods

2.1 Seep Survey and Sample Collection

The seep survey was carried out on June 7 and June 8, 2015 by TMAC. Seep survey locations were established opportunistically by walking the down-gradient toe of the waste rock stockpile and below the Pollution Control Pond and access roads (Figure 1).

Field measurements were taken at all locations where water was observed flowing out of construction rock material including true seeps where precipitation runoff and snowmelt came into contact with rock along the roadways, building pads and berms. Electrical conductivity (EC), pH, temperature, oxidation-reduction potential (ORP) and flow rates (where possible) were measured at each of these locations at the time of monitoring.

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Legend

2015 Seepage

- Sampled
- Not Sampled

Previous Surveys

- 2014 Seepage
- 2013 Seepage
- 2012 Seepage
- 2011 Seepage
- 2010 Seepage

	pH 6.0 to 6.9	pH 7.0 to 7.9	pH 8.0 to 8.9
EC < 500 µS/cm			
500µS/cm<EC<2000µS/cm			
EC>2000µS/cm			



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2015 Seepage Monitoring

Hope Bay Gold Project

Seep Survey Locations
Waste Rock Influenced Area

Date:
April 2016

Approved:
JEM

Figure:
1

A total of eight seepage sites were monitored opportunistically. As much as possible, the site locations coincided with the 2014 sites. Four samples were collected at these sites and submitted for laboratory analysis. In addition, one duplicate sample, a travel blank and field blank were collected and submitted for analysis, as part of SRK's quality assurance/quality control (QA/QC) program. No reference sites were sampled in 2015.

2.2 Laboratory Analysis

A total of seven samples, including QA/QC samples, were collected and submitted by TMAC Resources to ALS Environmental Labs in Vancouver, BC where they were analyzed for pH, conductivity, sulphate, acidity, alkalinity, chloride, fluoride, nitrate, nitrite, phosphorus, ammonia, total dissolved solids (TDS), total suspended solids (TSS) and low level dissolved metals including mercury and selenium. Filtration and/or preservation of the samples was conducted in the field.

2.3 Quality Assurance and Quality Control

QA/QC review of all data was conducted by SRK and deemed acceptable. One duplicate, one field blank and one travel blank were collected as part of SRK's QA/QC program.

The majority of the field blank parameters were below detection limits, indicating appropriate field filtration and sampling methods were employed. Only dissolved iron was measured at a concentration high enough to be flagged as possible contamination in the field. However, the remaining samples contained iron in concentrations an order of magnitude lower than in the field blank, indicating these samples were properly filtered and not contaminated. The travel blank parameters were below detection limits, indicating appropriate transportation of the samples was carried out.

The field duplicate results were within $\pm 14\%$ relative percent difference (RPD) for all parameters measured at concentrations higher than ten times the detection limit. The RPD of concentrations near the detection limit is expected to be frequently greater than $\pm 30\%$ due to reduced analytical accuracy at very low concentrations.

Laboratory and field values of pH and conductivity were compared. Conductivity values were near parity for all samples. Values of pH were slightly higher in the field than in the lab for all samples. For all samples, TDS demonstrated a strong positive correlation with lab conductivity, with values of conductivity exceeding TDS.

3 Results and Discussion

3.1 Field Data

Figure 1 presents a map of the seepage sample locations in the waste rock influenced area. A complete set of field observations and measurements is provided in Appendix A.

3.2 Field Measurements

Appendix A includes field measurements for electric conductivity and pH from the eight samples collected. The field data are summarized as follows:

- The pH at all sites was neutral to alkaline.
- The mean for conductivity was 570 $\mu\text{S}/\text{cm}$. The sample with the highest level of conductivity was the sample collected at the base of the waste rock pile 15-WR-003 (1,138 $\mu\text{S}/\text{cm}$). All other samples had conductivities of less than 600 $\mu\text{S}/\text{cm}$.

3.3 Laboratory Data

A summary of the water quality analyses for the samples is presented in Table 1. Complete results are presented in Appendix B. Key parameters were compared to five times the CCME water quality guidelines for the protection of aquatic life to screen for elevated parameters. Comparisons to these criteria were used solely for screening purposes and are not directly applicable because the seep locations do not support aquatic life.

Laboratory pH levels were slightly lower than those measured in the field, but were still neutral to alkaline (between 7.9 and 8.2). All parameter concentrations were below five times the guidelines values. For comparisons, the average hardness (150 mg CaCO_3/L) was used to determine the hardness-dependent guidelines. Consistent with previous years, conductivity, ammonia, nitrate and chloride levels are indicative of flushing of drilling salts and explosives residues from the waste rock stockpile. Sulphate levels, which are an indicator of sulphide oxidation are low. The results indicate that there are no issues related to metal leaching and/or acid rock drainage (ML/ARD) in seepage from the waste rock influenced area at Doris but that there is leaching of explosives residues and drilling brines.

Table 1: Summary of Water Quality Results

Sample ID	Field pH	Lab pH	Field EC	Lab EC	Estimated Flow Velocity	Alkalinity, Total	Sulfate (SO4)	Ammonia, Total (as N)	Nitrate (as N)	Chloride (Cl)	Aluminum-Dissolved	Arsenic - Dissolved	Cadmium - Dissolved	Copper - Dissolved	Lead - Dissolved	Nickel - Dissolved	Zinc - Dissolved
Units	s.u.	s.u.	(µS/cm)	(µS/cm)	(m/s)	(mg CaCO3/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
CCME guideline*	6.5 - 9	6.5 - 9	-	-	-	-	-	1.9**	3.0	120	0.1	0.005	0.00022***	0.0033***	0.0053***	0.13***	0.03
15-WR-003	8.2	8.1	1100	1100	~1 L/s	57	33	6.4	14	210	0.02	0.0016	0.0000055	0.0028	<0.00005	<0.0005	0.0013
15-DC-17	8.3	8	430	380	Little to no flow	36	9	0.95	2.5	71	0.04	0.0011	0.000014	0.0071	0.000067	0.00062	0.0012
15-DC-21	8.3	8.2	530	460	~2 L/s	83	14	0.013	0.17	68	0.012	0.0017	0.000015	0.012	<0.00005	0.002	0.0013
15-DC-08	8.4	7.9	550	510	~1 L/s	37	12	1.3	3.6	110	0.032	0.0011	0.0000072	0.0066	<0.00005	0.00062	0.0012

Notes:

*Comparisons to CCME water quality guidelines for the protection of aquatic life are intended for screening purposes and are not directly applicable because the seepage sites do not support aquatic life.

Values in **bold** indicate value exceeds respective water quality guideline for the parameter.

**Guideline for ammonia is pH and temperature dependent. Seepage waters had an average temperature of 2.6°C at time of sampling. This guideline value is approximate.

***The average hardness for the samples (150 mg CaCO3 mg/L) was used to determine hardness-dependent guidelines.

3.4 Comparison to Previous Seep Surveys

A comparison of 2015 samples collected at locations close to the 2014 seepage sites was carried out in order to assess the geochemical evolution of seepage in the waste rock influenced area at Hope Bay. The data is presented in Table 2 for seepage sites samples in 2015.

The primary concern identified with the waste rock stockpile is the leaching of constituents related to explosives residues and drilling salts (SRK 2013). Conductivity, chloride, ammonia and nitrate levels were lower in 2015 than previous years indicating continued flushing of drilling salts and explosive residues from the waste rock pile. Sulphate levels in the 2015 seep samples were lower than in 2014. Sulphate levels are an indicator of sulphide oxidation within the pile. Trace metal levels were roughly equivalent to 2014.

Table 2: Comparison of Water Quality Results from Samples Taken at the Same Location in 2014 and 2015

Seepage Site	Year	Sample ID	pH	Temp.	EC	Total Ammonia	Chloride	Nitrate	Sulfate	Aluminum	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Molybdenum	Nickel	Selenium	Zinc
			s.u.	°C	µS/cm	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
WR-003	2014	14-WR-003	8.1	4.5	3000	21	880	55	88	0.011	0.00031	0.0018	0.000046	0.0051	<0.010	<0.00010	0.1	0.0034	0.0013	0.0015	<0.0020
	2015	15-WR-003	8.2	3.3	1100	6.4	210	14	33	0.02	0.00024	0.0016	0.0000055	0.0028	<0.01	<0.00005	0.034	0.0016	<0.0005	0.00063	0.0013
DC-17	2014	14-DC-17	8.3	2	700	2	160	5.2	24	0.012	0.00027	0.00084	0.000012	0.0058	<0.010	<0.000050	0.024	0.0014	0.00074	0.00036	0.0011
	2015	15-DC-17	8.3	1.4	430	0.95	71	2.5	9	0.04	0.00022	0.0011	0.000014	0.0071	0.038	0.000067	0.019	0.0006	0.00062	0.00026	0.0012
DC-21	2014	14-DC-21	7.9	11	590	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	15-DC-21	8.3	2.4	530	0.013	68	0.17	14	0.012	<0.0001	0.0017	0.000015	0.012	0.016	<0.00005	0.0045	0.00067	0.002	0.00016	0.0013
DC-08	2014	14-DC-08	8.2	2.6	2000	2.5	490	5.1	43	0.017	0.00029	0.0014	0.000022	0.0049	0.084	<0.000050	0.056	0.0038	0.0011	0.00054	0.0012
	2015	15-DC-08	8.4	1.3	550	1.3	110	3.6	12	0.032	0.00018	0.0011	0.0000072	0.0066	0.025	<0.00005	0.064	0.00077	0.00062	0.00027	0.0012

Source: P:\01_SITES\Hope.Bay\1CH008.023_Geochem_Monitoring\C_Seep_Surveys\June2015 Seepage Survey\Working File\2015 June Doris Seep Compiled Data_rev00_rtc_JEM.xlsx]

Notes:

Concentrations for metals are dissolved concentrations.

4 Conclusions and Recommendations

The scope of the 2015 Hope Bay seepage monitoring survey included the waste rock stockpile and downstream area, also referred to as the waste rock influenced area. There was no mining after 2011, and no construction or quarry development after 2012, therefore the 2014 seepage survey fulfilled the permit requirements for quarry and construction rock.

The results of the 2015 sampling program are consistent with previous years and indicate that there are no issues with respect to ML/ARD in seepage from the waste rock influenced area at Doris but that there is leaching of explosive residues and drilling brines. Levels of conductivity, ammonia, nitrate and chloride have continuously decreased compared to previous years indicating that active flushing of drilling brines and blasting residues from the waste rock pile is ongoing. The majority of this seepage is captured in the water management system implemented at Doris and directed to the TIA. Continued management of seepage from the waste rock pile is recommended, as is a 2016 seepage survey of the waste rock stockpile and areas downstream of the pollution control pond.

5 References

Nunavut Water Board (2013) NWB Type “A” Water Licence No: 2AM-DOH0713 – Doris North Project, Nunavut; TMAC Resources Inc. August 16, 2013.

SRK (2010). Hope Bay Project, Doris North Waste Rock and Ore Management Plan. Prepared for Hope Bay Mining Ltd. SRK Project 1CH008.029. December 2010.

SRK (2013). 2012 Hope Bay Seepage Monitoring Program. Prepared for Hope Bay Mining Ltd. SRK Project No. 1CH008.057. January 2013.

SRK (2015). 2014 Hope Bay Seepage Monitoring Program. Prepared for TMAC Resources. SRK Project No. 1CT022.001. March 2015.

Appendix A: Field Measurements

Date	Station Code	Coordinates (UTM Zone 13W)		Location Description	Field Measurements								Observations	Laboratory Samples			Sample Notes
		Easting	Northing		pH	Temp. (°C)	EC (µS/cm)	ORP* (RmV)	Flow Description	Depth (cm)	Width (cm)	ESTIMATED Flow Velocity (m/s)		Lab Sample (Y/N)	Sample Code	Duplicate/Blanks (Y/N)	
8-Jun-15	15-WR-003	433192	7558991	Toe of waste rock pile. Only seepage point of appreciable volume. SRK Coordinate.	8.2	3.3	1138	178.00	Slow	1.0	150	~1 L/s	Trickle from base of waste rock slope ~middle of north side of PCP. Clear, no precipitates observed or obvious suspended sediments. In clear contact with waste rock. Two additional smaller flows to the east. Closest flow is a small trickle draining into crack seeping into PCP(~0.5 L/s). Furthest flow ~0.75 L/s trickling into PCP. Both consistent in appearance and field measurements with 15-WR-003.	Y	15-WR-003-08JUN15	N	
8-Jun-15	15-DC-15	433313	7558885	Shallow water at toe of road. Opposite pad below portal. SRK Coordinate	8.0	1.5	543	182.00	Slow	Shallow, surrounding tussocks.		~0.25 L/s	Shallow flow at toe of roadway. Visible flow, though dispersed and shallow. Trace fines and brown particulate deposition on vegetation.	N	-	-	
7-Jun-15	15-DC-17	433348	7558862	E-SE downstream of Sump 1. Approximately 5m from crush pad. SRK Coordinate.	8.3	1.4	430	183.00	Slow/Pooling	Shallow, surrounding tussocks.		Little to no flow	Trickle of flow seeping from toe of road, immediately east of Sump 1. Large volume of water surrounding the sump, though little flow. Saline water spill upstream last fall; pumping activities ongoing.	Y	15-DC-17-07JUN15	N	Station 15-DC-17 too far from toe of road. Moved closer to seepage point.
7-Jun-15	15-DC-21	433523	7558699	Seepage coming directly out of face of road that enters Doris Lake. SRK Coordinate.	8.3	2.4	525	195.00	Fast	Very shallow, and irregular.		~2 L/s	Trickle of flow coming through road materials to Doris Lake. Two separate seepage points. Flow emerges at melting shoreline ice. Sample Staion 15-DC-21 sampled earlier in year, but on Tundra to south (changed this to 15-DC-21B)	Y	15-DC-21-07JUN15	N	
8-Jun-15	15-DC-08	433293	7558889	Shallow flow at toe of road. SRK Coordinate.	8.4	1.3	548	185.00	Moderate	3.0	500	~1 L/s	Shallow flow at toe of roadway. Visible flow, though dispersed and shallow. Trace fines and brown deposition on vegetation.	Y	15-DC-08-08JUN15	Y	Duplicate 15-DC-DUP1-08JUN15
8-Jun-15	15-DC-14	433304	7558884	Shallow flow at toe of road. SRK Coordinate.	7.8	1.2	585	187.00	Slow	Shallow, surrounding tussocks.		only trace flow ~0.25 L/s	Shallow flow at toe of roadway. Visible flow, though dispersed and shallow. Trace fines and brown deposition on vegetation.	N	-	-	
7-Jun-15	15-DC-21B	433522	7558678	Fast flowing stream. Flows from Snow Berm 2 over road near Doris pumphouse and into Doris Lake (under gravel road)	8.1	7.0	322	182.00	Fast			~5 L/s	Semi-channelized flow on vegetation. No precipitates observed and vegetation appears healthy. *Previously 15-DC-21 (south of road)	N	-	-	
8-Jun-15	MLL-17	433253	7558891	Shallow water at toe of road. West of Sump 1.	7.8	3.0	511	179.00	Pooling		200	n/a	Shallow. Water at toe of road, well west of sump 1	N	-	-	

Appendix B:
Water Quality Analysis

ALS Sample ID	ALS WO#	Conductivity	Hardness (as CaCO3)	pH	Total Suspended Solids	Total Dissolved Solids	Acidity (as CaCO3)	Alkalinity, Total (as CaCO3)	Ammonia, Total (as N)	Bromide (Br)	Chloride (Cl)	Fluoride (F)	Nitrate (as N)	Nitrite (as N)	Phosphorus (P)-Total	Sulfate (SO4)	Cyanide, Total	Aluminum (Al)-Total	Antimony (Sb)-Total	Arsenic (As)-Total	Barium (Ba)-Total
	Units	uS/cm	mg/L	pH	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
	LOR	2	0.5	0.1	3	10	1	1	0.005	0.05	0.5	0.02	0.005	0.001	0.002	0.3	0.005	0.003	0.0001	0.0001	0.00005
15-WR-003-08JUN15	L1624351-1	1050	196	8.08	43.1	600	2	57.4	6.4	0.33	213	<0.1	13.5	0.0478	0.0058	33.2	-	0.2	0.00025	0.00155	0.0097
15-DC-17-07JUN15	L1624351-3	377	107	7.95	5.1	236	2.1	36.1	0.952	0.107	70.5	0.027	2.49	0.0155	0.0094	9.01	-	0.561	0.00023	0.0012	0.00851
15-DC-21-07JUN15	L1624351-4	462	176	8.19	21.8	285	1.8	83	0.0126	<0.05	68.3	0.076	0.171	0.0026	0.0294	14.3	-	0.92	0.00012	0.00182	0.0079
15-DC-08-08JUN15	L1624351-2	513	140	7.94	20.2	334	2	36.9	1.29	0.157	105	0.029	3.59	0.0159	0.0095	11.6	-	0.424	0.00019	0.00112	0.0144

ALS Sample ID	ALS WO#	Beryllium (Be)-Total	Bismuth (Bi)-Total	Boron (B)-Total	Cadmium (Cd)-Total	Calcium (Ca)-Total	Chromium (Cr)-Total	Cobalt (Co)-Total	Copper (Cu)-Total	Iron (Fe)-Total	Lead (Pb)-Total	Lithium (Li)-Total	Magnesium (Mg)-Total	Manganese (Mn)-Total	Mercury (Hg)-Total	Molybdenum (Mo)-Total	Nickel (Ni)-Total	Phosphorus (P)-Total	Potassium (K)-Total	Selenium (Se)-Total	Silicon (Si)-Total
	Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
	LOR	0.00002	0.00005	0.01	0.000005	0.05	0.0001	0.0001	0.0005	0.01	0.00005	0.001	0.1	0.0001	0.000005	0.00005	0.0005	0.05	0.1	0.00005	0.05
15-WR-003-08JUN15	L1624351-1	<0.00002	<0.00005	0.158	0.000007	62.1	0.00078	0.00059	0.00406	0.259	0.000375	0.0121	9.76	0.0363	<0.000005	0.00186	0.00079	0.0058	7.44	0.000573	1.92
15-DC-17-07JUN15	L1624351-3	<0.00002	<0.00005	0.044	0.0000167	34.1	0.00235	0.00081	0.01	0.968	0.000356	0.0028	4.86	0.0375	<0.000005	0.000622	0.00174	0.0094	2.6	0.000231	1.78
15-DC-21-07JUN15	L1624351-4	<0.00002	<0.00005	0.048	0.0000234	56.2	0.0045	0.00141	0.0155	1.69	0.000439	0.0051	8.75	0.0431	<0.000005	0.00076	0.00446	0.0294	2.92	0.000162	3.23
15-DC-08-08JUN15	L1624351-2	<0.00002	<0.00005	0.052	0.0000085	44.3	0.00327	0.00065	0.00889	0.628	0.000312	0.0031	5.94	0.0828	<0.000005	0.000863	0.00251	0.0095	2.92	0.000273	1.6

ALS Sample ID	ALS WO#	Silver (Ag)-Total	Sodium (Na)-Total	Strontium (Sr)-Total	Sulfur (S)-Total	Thallium (Tl)-Total	Tin (Sn)-Total	Titanium (Ti)-Total	Uranium (U)-Total	Vanadium (V)-Total	Zinc (Zn)-Total	Zirconium (Zr)-Total	Aluminum (Al)-Dissolved	Antimony (Sb)-Dissolved	Arsenic (As)-Dissolved	Barium (Ba)-Dissolved	Beryllium (Be)-Dissolved	Bismuth (Bi)-Dissolved	Boron (B)-Dissolved	Cadmium (Cd)-Dissolved	Calcium (Ca)-Dissolved
	Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
	LOR	0.00001	0.05	0.0002	0.5	0.00001	0.0001	0.0003	0.00001	0.0005	0.003	0.0003	0.001	0.0001	0.0001	0.00005	0.00002	0.00005	0.01	0.000005	0.05
15-WR-003-08JUN15	L1624351-1	<0.00001	99.9	0.171	11.4	<0.00001	<0.0001	0.00483	0.000259	0.002	<0.003	<0.0003	0.02	0.00024	0.00162	0.0108	<0.00002	<0.00005	0.154	0.0000055	62.2
15-DC-17-07JUN15	L1624351-3	<0.00001	23	0.0637	3.02	<0.00001	<0.0001	0.02	0.000246	0.00297	0.003	<0.0003	0.0402	0.00022	0.00112	0.00823	<0.00002	<0.00005	0.041	0.0000135	35
15-DC-21-07JUN15	L1624351-4	0.000014	20.3	0.145	4.89	<0.00001	<0.0001	0.0332	0.00013	0.00441	0.0043	<0.0003	0.0123	<0.0001	0.00167	0.00779	<0.00002	<0.00005	0.045	0.000015	56.8
15-DC-08-08JUN15	L1624351-2	<0.00001	29.5	0.0926	3.76	0.00001	<0.0001	0.0107	0.00029	0.00201	<0.003	<0.0003	0.0318	0.00018	0.00105	0.0139	<0.00002	<0.00005	0.047	0.0000072	46.3

ALS Sample ID	ALS WO#	Chromium (Cr)-Dissolved	Cobalt (Co)-Dissolved	Copper (Cu)-Dissolved	Iron (Fe)-Dissolved	Lead (Pb)-Dissolved	Lithium (Li)-Dissolved	Magnesium (Mg)-Dissolved	Manganese (Mn)-Dissolved	Mercury (Hg)-Dissolved	Molybdenum (Mo)-Dissolved	Nickel (Ni)-Dissolved	Phosphorus (P)-Dissolved	Potassium (K)-Dissolved	Selenium (Se)-Dissolved	Silicon (Si)-Dissolved	Silver (Ag)-Dissolved	Sodium (Na)-Dissolved	Strontium (Sr)-Dissolved	Sulfur (S)-Dissolved	Thallium (Tl)-Dissolved
	Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
	LOR	0.0001	0.0001	0.0002	0.01	0.00005	0.001	0.1	0.0001	0.000005	0.00005	0.0005	0.05	0.1	0.00005	0.05	0.00001	0.05	0.0002	0.5	0.00001
15-WR-003-08JUN15	L1624351-1	<0.0001	0.00044	0.00283	<0.01	<0.00005	0.0124	9.87	0.0339	<0.000005	0.00164	<0.0005	<0.05	7.56	0.000634	1.65	<0.00001	100	0.167	11.3	<0.00001
15-DC-17-07JUN15	L1624351-3	0.00014	0.00017	0.00712	0.038	0.000067	0.0024	4.73	0.0188	<0.000005	0.000604	0.00062	<0.05	2.58	0.000256	0.993	<0.00001	24.1	0.0634	3.22	0.000013
15-DC-21-07JUN15	L1624351-4	0.00015	0.00032	0.0115	0.016	<0.00005	0.0046	8.27	0.00452	<0.000005	0.000673	0.00201	<0.05	2.98	0.000161	2.06	<0.00001	21.2	0.142	5.13	<0.00001
15-DC-08-08JUN15	L1624351-2	0.00011	0.00021	0.00658	0.025	<0.00005	0.0029	5.84	0.0636	<0.000005	0.000773	0.00062	<0.05	2.96	0.000268	1.02	<0.00001	30.4	0.0906	3.91	<0.00001

ALS Sample ID	ALS WO#	Tin (Sn)-Dissolved	Titanium (Ti)-Dissolved	Uranium (U)-Dissolved	Vanadium (V)-Dissolved	Zinc (Zn)-Dissolved	Zirconium (Zr)-Dissolved
	Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
	LOR	0.0001	0.0003	0.00001	0.0005	0.001	0.0003
15-WR-003-08JUN15	L1624351-1	<0.0001	<0.0003	0.000244	0.00132	0.0013	<0.0003
15-DC-17-07JUN15	L1624351-3	<0.0001	0.00086	0.000222	0.00082	0.0012	<0.0003
15-DC-21-07JUN15	L1624351-4	<0.0001	<0.0003	0.000113	0.00073	0.0013	<0.0003
15-DC-08-08JUN15	L1624351-2	<0.0001	<0.00090 *	0.000253	0.00076	0.0012	<0.0003