

November 2, 2016

Peregrine Diamonds Ltd.  
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Vancouver, BC V6C 3E1

ISSUED FOR USE  
FILE: ENV.EENV03123-01  
Via Email: dave@pdiam.com

**Attention:** David Willis  
Manager, Lands and Community

**Subject:** Chidliak Exploration Site CH-07 Cuttings,  
August 2016 Water Quality Sampling Results

## 1.0 INTRODUCTION

Peregrine Diamonds Ltd.'s (Peregrine's) Type B Water Licence (#2BE-CHI1218) (the Water Licence) specifies effluent quality criteria for water discharged and waste deposited from exploration sites on the Chidliak property, Nunavut (Map 1). On August 17, 2016, Tetra Tech EBA Inc. (Tetra Tech) collected water quality samples to determine if water at Peregrine's CH-07 exploration drill cuttings area meets the Water Licence criteria<sup>1</sup>.

This letter report provides water quality sampling results for two water quality samples collected at the CH-07 cuttings disposal area. This is the first sampling event at this location, and samples were collected in response to a request by the Indigenous and Northern Affairs Canada (INAC) Land Inspector.

Exploration drill cuttings from CH-07 were deposited at an engineer selected natural rock basin located 1.95 kilometers northeast of the CH-07 kimberlite in March and April 2015 (Map 1; for reference purposes the rock basin is referred to as CD002). The rock basin approved for use in 2012 is a natural depression in bedrock that is characterized as sloping, with a gentle gradient to the north northwest. The cuttings deposit measures approximately 65 m in length and 3 m wide. Snow covered the entire basin at the time of the field event and may have concealed a small portion of cuttings deposit (Photo 1). Meltwater was observed running along the exposed edges of the basin.

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<sup>1</sup> The CH-07 water quality sampling program was conducted in conjunction with water quality sampling at the CH-06 exploration trench.



**Photo 1: Looking north at the cuttings disposal rock basin.**

The nearest sensitive receiving environment is a drainage channel, with seasonal flow, located approximately 550 m downslope (i.e., north) from the cuttings area (Figure 1).

## 2.0 SAMPLING METHODS

Mr. Michael Vilimek (M.Sc., P.Biol.) of Tetra Tech EBA conducted the sampling program. This was the first sampling event at the rock basin, and sampling followed standard grab-sampling methods consistent with those employed during previous water licence monitoring programs on the Chidliak property since 2013. Grab samples were collected and submitted for laboratory analysis of routine parameters, nutrients, total metals, and oil and grease. A calibrated handheld YSI®-59 multi-parameter meter was used to record in-situ pH, electrical conductivity (EC), and water temperature.

## 3.0 EXPLORATION CH-07 CUTTINGS SAMPLING RESULTS

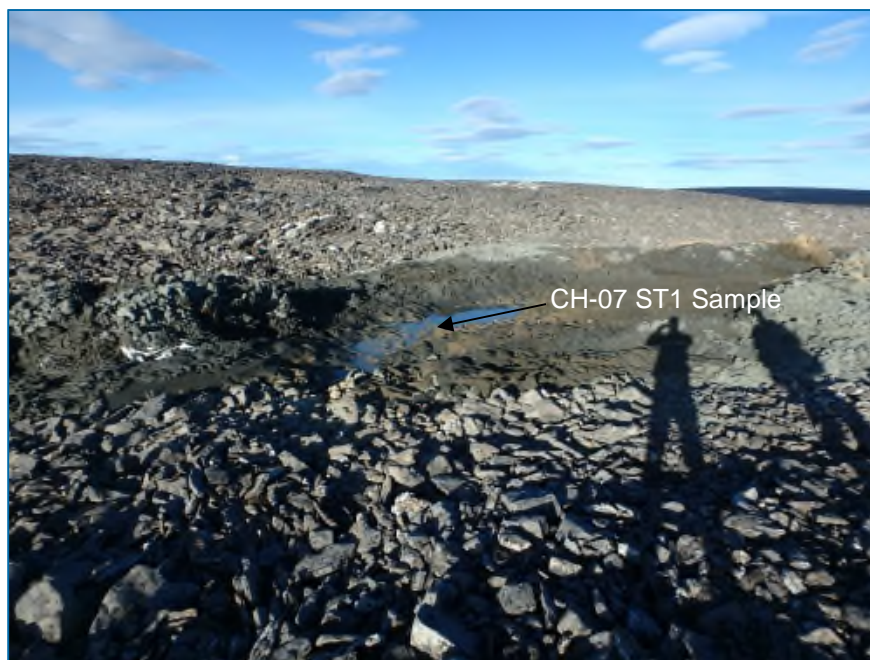
Two water quality samples were collected during the sampling event (Table 3-1).

**Table 3-1. Sample Locations**

#	Sample Name	Sample Date (yyyy-mm-dd)	Datum	Latitude (y) (deg,dddd)	Longitude (x) (deg,dddd)	Latitude (y) (deg, min, sec)	Longitude (x) (deg, min, sec)
1	CH-07 ST1	2016-08-17	WGS84	64.26395°	-66.32816°	64°15'50.22"	66°19'41.40"
2	CH-07 S1	2016-08-17	WGS84	64.26456°	-66.32936°	64°15'52.44"	66°19'45.72"

### **Sample 1: CH-07 ST1**

Sample CH-07-ST1 was collected from a stagnant surface water pool within the cuttings area (Photo 2). No evidence of water discharge from this stagnant pool was observed at the time of the field event. Surface water in the stagnant cuttings pool was approximately 10 centimetres (cm) deep, clear, with no evidence of odour or surface sheen. In-situ water chemistry measurements indicated the water was slightly basic (pH 8.87), with low EC (66.2 microsiemens per centimetre ( $\mu\text{S}/\text{cm}$ ), and 6.9 degrees Celsius ( $^{\circ}\text{C}$ ).



**Photo 2: Sample 1, CH-07 ST1, stagnant pool within the cuttings deposit area**

### **Sample 2: CH-07 S1**

Sample CH-07 S1 was collected from meltwater down-gradient from the cuttings at the edge of the rock basin (Photo 3). The surface water at the second sample site (CH-07 S1) was shallow (approximately 5 cm deep), running, with no observable connecting flow from the stagnant pool present in the cuttings. Water appeared turbid with no evidence of odour or surface sheen. In-situ water chemistry measurements indicated the water was slightly basic (pH 8.17), with low EC (27.4  $\mu\text{S}/\text{cm}$ ), and much colder at 0.2  $^{\circ}\text{C}$ .



**Photo 3: Sample 2, CH-07 S1, water quality sampling location down-gradient from the cuttings deposit**

### 3.1 Analysis

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Water quality samples were submitted to ALS Laboratory Group (ALS) in Yellowknife on August 23, 2016, and analyzed for the full suite of parameters required under the Water Licence.

The Water Licence provides effluent quality criteria for water discharged from exploration sources as the Maximum Concentration of Any Grab Sample (MCAGS) for eight water quality parameters (arsenic, copper, lead, nickel, zinc, total suspended solids, oil and grease, and pH). Analytical results for the water samples collected from the cuttings area indicate that all parameters were well below the Water Licence effluent quality criteria, except for total suspended solids immediately down-gradient from the cuttings deposit (Table 3-2). The laboratory analytical results are provided in Appendix A.

**Table 3-2: Water Quality Analytical Results Compared to Water Licence #2BE-CHI1218 Criteria**

Parameter	CH-07 ST1 (Sample 1)	CH-07 S1 (Sample 2)	Units	Detection Limit	Water Licence MCAGS* Criteria
Total Arsenic	0.00018	0.00143	mg/L	0.0001	0.50
Total Copper	0.00246	0.0337	mg/L	0.0005	0.30
Total Lead	0.000541	0.0127	mg/L	0.00005	0.20
Total Nickel	0.0641	0.409	mg/L	0.0005	0.50
Total Zinc	0.0041	0.0922	mg/L	0.003	0.50
Total Suspended Solids	10.7	<b>647</b>	mg/L	3	25.0
Oil and Grease	<1.0 (no visible sheen)	<1.0 (no visible sheen)	mg/L	1	No visible sheen
pH	7.64	7.24	-	-	6 - 9.5

\* MCAGS criteria = Maximum Concentration of Any Grab Sample

**Bold** = Analytical results above the Water Licence MCAGS criteria

Quality control samples were included as part of the standardized sampling protocol, and included field and trip blanks and one duplicate sample. Laboratory analysis of these quality control samples indicate that no contaminants were introduced to the trip and field blanks (i.e., analytical results all below the laboratory detection limit; Table 3-3) and the field samples were collected in a consistent manner (i.e., analytical results of the duplicate samples are similar to their field samples; Table 3-4). Thus, the sample methods employed during the collection, transportation, and analyses of the samples are considered satisfactory and did not lead to the introduction of potential contaminants for parameters specified under the Water Licence (Tables 3-3 and 3-4).

**Table 3-3: Trip and Field Blank Analytical Results**

Parameter	Trip Blank	Field Blank	Units	Detection Limit
Total Arsenic	<0.00010	<0.00010	mg/L	0.0001
Total Copper	<0.00050	<0.00050	mg/L	0.0005
Total Lead	<0.000050	<0.000050	mg/L	0.00005
Total Nickel	<0.00050	<0.00050	mg/L	0.0005
Total Zinc	<0.0030	<0.0030	mg/L	0.003
Total Suspended Solids	<3.0	<3.0	mg/L	3
Oil and Grease	<2.0*	<1.0	mg/L	1 and 2*
pH	5.01	5.13	-	-

\* Laboratory detection limit adjusted due to insufficient sample volume (e.g., sample bottle breakage in transport).



Similarly, using a relative percent difference assessment between the duplicate sample and the original field samples, the duplicate sample is considered reliable (Table 3-4). The duplicate sample was collected at Peregrine's Exploration CH-06 trench outflow field sample (sampled during the same field event as the CH-07 water quality samples).

**Table 3-4: Duplicate Sample Assessment**

Parameter	Laboratory Results		Units	Detection Limit	RPD*	Reliable Duplicate? Yes or No**
	Field Sample	Duplicate 1				
Total Arsenic	<0.00010	<0.00010	mg/L	0.0001	NA	Yes
Total Copper	0.00079	0.00080	mg/L	0.0005	1.26	Yes
Total Lead	0.000122	0.000113	mg/L	0.00005	NA	Yes
Total Nickel	0.00094	0.00073	mg/L	0.0005	NA	Yes
Total Zinc	<0.0030	<0.0030	mg/L	0.003	NA	Yes
Total Suspended Solids	<3.0	4.2	mg/L	3	NA	Yes
Oil and Grease	<1.0	<1.0	mg/L	1	NA	Yes
pH	6.36	6.33	-	0.1	0.47	Yes

\* RPD = Relative Percent Difference where  $RPD (\%) = 200 \times ABS(x - y) / (x + y)$ , where ABS = Absolute difference, x = the analytical result of the original sample, y = the analytical result of the blind field duplicate sample.

NA = Not Applicable. Analytical results must be at least 5 x the detection limit for the RPD assessment since analytical error increases near the detection limit. Analytical results not applicable to the RPD assessment do not imply an unreliable duplicate.

\*\* Duplicate samples are considered reliable when their RPD is less than 20%, or both samples are below the laboratory detection limit.

## 4.0 CONCLUSION

The sampling methods employed were reliable and represent existing water quality conditions at and downstream from the CH-07 cuttings at the time of the 2016 field event. Both samples met all the water quality parameters with one exception. Total Suspended Solids in Sample 2 (CH-07 S1) were above authorized criterion. This is likely temporary in nature occurring at a time of melt. At the time of the site visit, water flow within the rock basin was a small volume and did not reach a down-gradient watercourse.

## 5.0 LIMITATIONS OF REPORT

This report and its contents are intended for the sole use of Peregrine Diamonds Ltd. and their agents. Tetra Tech EBA Inc. (operating as Tetra Tech) does not accept any responsibility for the accuracy of any of the data, the analysis, or the recommendations contained or referenced in the report when the report is used or relied upon by any Party other than Peregrine Diamonds Ltd., or for any Project other than the proposed development at the subject site. Any such unauthorized use of this report is at the sole risk of the user. Use of this report is subject to the terms and conditions stated in Tetra Tech EBA Inc.'s Services Agreement. Tetra Tech's General Conditions are provided in Appendix B of this report.

## 6.0 CLOSURE

We trust this letter report meets your present requirements. If you have any questions or comments, please contact the undersigned.

Respectfully submitted,  
Tetra Tech EBA Inc.



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/kla

Attachments: Map (1)  
Appendix A – Laboratory Analytical Results  
Appendix B – Tetra Tech's General Conditions



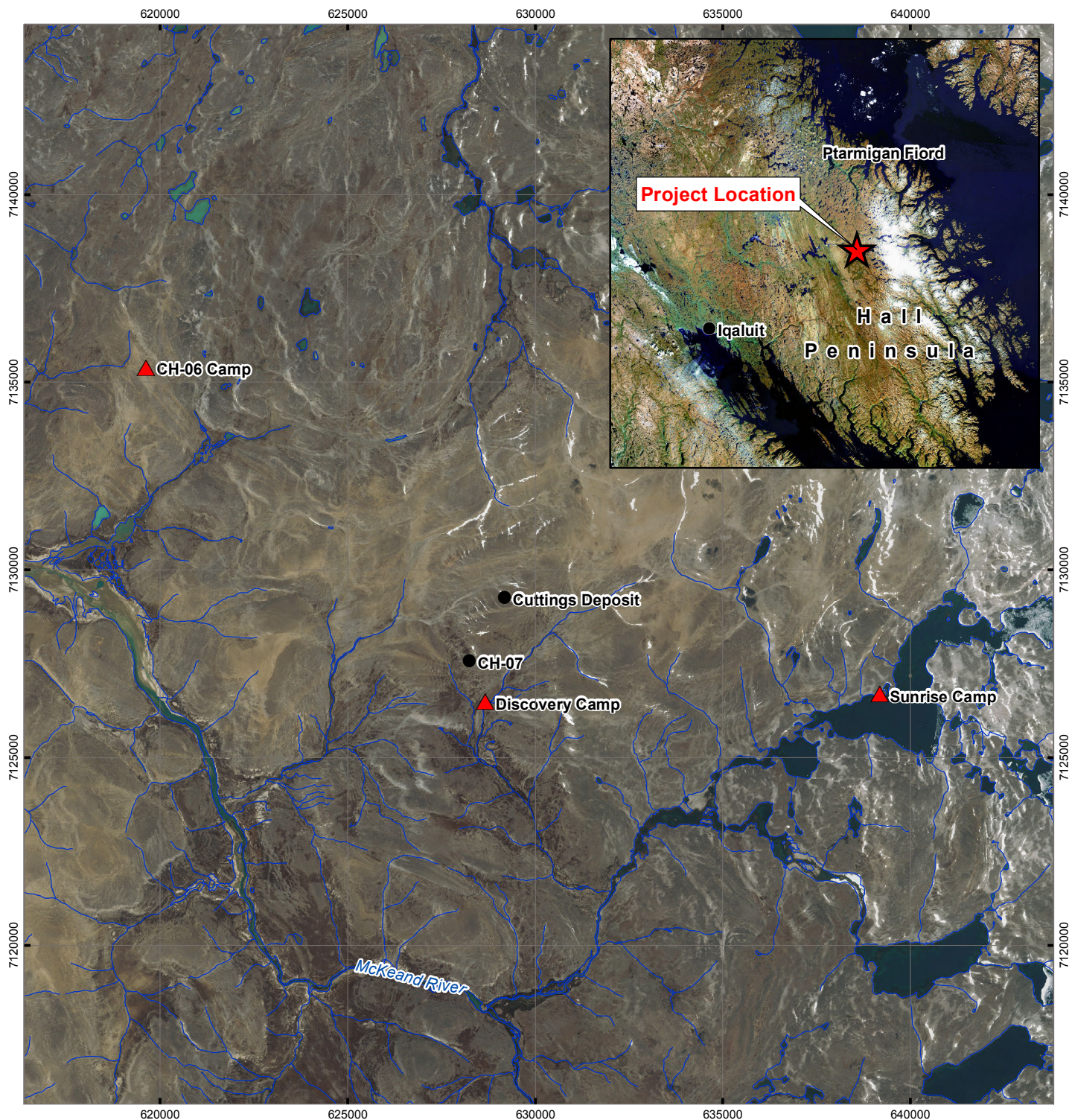


# MAPS





Map 1      Chidliak CH-07 Exploration Site Location



Q:\Vancouver\GIS\ENVIRONMENTAL\EENV\03123-01\Maps\EENV03123-01\_Map01\_CH7SiteLocation.mxd modified 11/2/2016 by matthew.stephenson

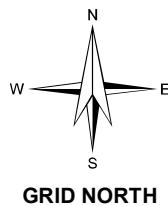


## LEGEND

-  Camp Location
-  Important Kimberlite Site
-  Watercourse
-  Waterbody

## NOTES

Base data sources:  
Water features from CanVec.  
Imagery provided by Peregrine Diamonds.



**STATUS**  
ISSUED FOR USE

## CHIDLIAK AUGUST 2016 WATER QUALITY SAMPLING

### Chidliak CH-07 Exploration Site Location

#### PROJECTION

UTM Zone 19

#### DATUM

NAD83

#### CLIENT



Scale: 1:150,000



#### FILE NO.

EENV03123-01\_Map01\_CH7SiteLocation.mxd

#### OFFICE

Ti-VANC

#### DWN

SL

#### CKD

MEZ

#### APVD

KL

#### REV

0

#### DATE

November 2, 2016

#### PROJECT NO.

ENV.EENV03123-01



**Map 1**



## APPENDIX A

### LABORATORY ANALYTICAL RESULTS





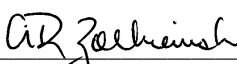
Tetra Tech EBA Inc.  
ATTN: Karla Langlois  
201 - 4916 49 Street  
Yellowknife NT X1A 3X4

Date Received: 23-AUG-16  
Report Date: 30-AUG-16 15:36 (MT)  
Version: FINAL

Client Phone: 867-920-2287

## Certificate of Analysis

Lab Work Order #: L1817738  
Project P.O. #: EENV03123  
Job Reference: PEREGRINE 18017  
C of C Numbers: 10-366486  
Legal Site Desc:

  
Rick Zolkiewski  
General Manager

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# ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1817738-1 CH6 TRENCH (CH-T)							
Sampled By: CLIENT on 20-AUG-16							
Matrix: water							
<b>Miscellaneous Parameters</b>							
Oil and Grease	<1.0		1.0	mg/L		25-AUG-16	R3534233
Total Suspended Solids	<3.0		3.0	mg/L		25-AUG-16	R3534260
pH	6.51		0.10	pH		26-AUG-16	R3534544
<b>Total Metals in Water by CRC ICPMS</b>							
Aluminum (Al)-Total	0.321		0.0030	mg/L		28-AUG-16	R3535567
Antimony (Sb)-Total	<0.00010		0.00010	mg/L		28-AUG-16	R3535567
Arsenic (As)-Total	<0.00010		0.00010	mg/L		29-AUG-16	R3536366
Barium (Ba)-Total	0.00532		0.000050	mg/L		28-AUG-16	R3535567
Beryllium (Be)-Total	<0.00010		0.00010	mg/L		28-AUG-16	R3535567
Bismuth (Bi)-Total	<0.000050		0.000050	mg/L		28-AUG-16	R3535567
Boron (B)-Total	<0.010		0.010	mg/L		28-AUG-16	R3535567
Cadmium (Cd)-Total	0.0000050		0.0000050	mg/L		28-AUG-16	R3535567
Calcium (Ca)-Total	0.444		0.050	mg/L		28-AUG-16	R3535567
Cesium (Cs)-Total	0.000032		0.000010	mg/L		28-AUG-16	R3535567
Chromium (Cr)-Total	0.00068		0.00010	mg/L		28-AUG-16	R3535567
Cobalt (Co)-Total	0.00016		0.00010	mg/L		28-AUG-16	R3535567
Copper (Cu)-Total	0.00076		0.00050	mg/L		28-AUG-16	R3535567
Iron (Fe)-Total	0.260		0.010	mg/L		28-AUG-16	R3535567
Lead (Pb)-Total	0.000124		0.000050	mg/L		28-AUG-16	R3535567
Lithium (Li)-Total	<0.0010		0.0010	mg/L		28-AUG-16	R3535567
Magnesium (Mg)-Total	0.401		0.0050	mg/L		28-AUG-16	R3535567
Manganese (Mn)-Total	0.00399		0.00010	mg/L		28-AUG-16	R3535567
Molybdenum (Mo)-Total	<0.000050		0.000050	mg/L		28-AUG-16	R3535567
Nickel (Ni)-Total	0.00072		0.00050	mg/L		28-AUG-16	R3535567
Phosphorus (P)-Total	<0.050		0.050	mg/L		28-AUG-16	R3535567
Potassium (K)-Total	0.462		0.050	mg/L		28-AUG-16	R3535567
Rubidium (Rb)-Total	0.00160		0.00020	mg/L		28-AUG-16	R3535567
Selenium (Se)-Total	<0.000050		0.000050	mg/L		28-AUG-16	R3535567
Silicon (Si)-Total	2.13		0.050	mg/L		28-AUG-16	R3535567
Silver (Ag)-Total	<0.000010		0.000010	mg/L		28-AUG-16	R3535567
Sodium (Na)-Total	0.873		0.050	mg/L		28-AUG-16	R3535567
Strontium (Sr)-Total	0.00486		0.00020	mg/L		28-AUG-16	R3535567
Sulfur (S)-Total	<0.50		0.50	mg/L		28-AUG-16	R3535567
Tellurium (Te)-Total	<0.00020		0.00020	mg/L		28-AUG-16	R3535567
Thallium (Tl)-Total	<0.000010		0.000010	mg/L		28-AUG-16	R3535567
Thorium (Th)-Total	<0.00010		0.00010	mg/L		28-AUG-16	R3535567
Tin (Sn)-Total	<0.00010		0.00010	mg/L		28-AUG-16	R3535567
Titanium (Ti)-Total	0.0163		0.00030	mg/L		28-AUG-16	R3535567
Tungsten (W)-Total	<0.00010		0.00010	mg/L		28-AUG-16	R3535567
Uranium (U)-Total	0.000011		0.000010	mg/L		28-AUG-16	R3535567
Vanadium (V)-Total	0.00072		0.00050	mg/L		28-AUG-16	R3535567
Zinc (Zn)-Total	<0.0030		0.0030	mg/L		28-AUG-16	R3535567
Zirconium (Zr)-Total	<0.00030		0.00030	mg/L		28-AUG-16	R3535567
L1817738-2 CH6 OUTFLOW (CH-O)							
Sampled By: CLIENT on 20-AUG-16							
Matrix: water							
<b>Miscellaneous Parameters</b>							
Oil and Grease	<1.0		1.0	mg/L		25-AUG-16	R3534233
Total Suspended Solids	<3.0		3.0	mg/L		25-AUG-16	R3534260
pH	6.36		0.10	pH		26-AUG-16	R3534544
<b>Total Metals in Water by CRC ICPMS</b>							

\* Refer to Referenced Information for Qualifiers (if any) and Methodology.



## ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1817738-2 CH6 OUTFLOW (CH-O)							
Sampled By: CLIENT on 20-AUG-16							
Matrix: water							
<b>Total Metals in Water by CRC ICPMS</b>							
Aluminum (Al)-Total	0.368		0.0030	mg/L		28-AUG-16	R3535567
Antimony (Sb)-Total	<0.00010		0.00010	mg/L		28-AUG-16	R3535567
Arsenic (As)-Total	<0.00010		0.00010	mg/L		29-AUG-16	R3536366
Barium (Ba)-Total	0.00520		0.000050	mg/L		28-AUG-16	R3535567
Beryllium (Be)-Total	<0.00010		0.00010	mg/L		28-AUG-16	R3535567
Bismuth (Bi)-Total	<0.000050		0.000050	mg/L		28-AUG-16	R3535567
Boron (B)-Total	<0.010		0.010	mg/L		28-AUG-16	R3535567
Cadmium (Cd)-Total	<0.0000050		0.0000050	mg/L		28-AUG-16	R3535567
Calcium (Ca)-Total	0.585		0.050	mg/L		28-AUG-16	R3535567
Cesium (Cs)-Total	0.000033		0.000010	mg/L		28-AUG-16	R3535567
Chromium (Cr)-Total	0.00066		0.00010	mg/L		28-AUG-16	R3535567
Cobalt (Co)-Total	0.00015		0.00010	mg/L		28-AUG-16	R3535567
Copper (Cu)-Total	0.00079		0.00050	mg/L		28-AUG-16	R3535567
Iron (Fe)-Total	0.273		0.010	mg/L		28-AUG-16	R3535567
Lead (Pb)-Total	0.000122		0.000050	mg/L		28-AUG-16	R3535567
Lithium (Li)-Total	<0.0010		0.0010	mg/L		28-AUG-16	R3535567
Magnesium (Mg)-Total	0.476		0.0050	mg/L		28-AUG-16	R3535567
Manganese (Mn)-Total	0.00370		0.00010	mg/L		28-AUG-16	R3535567
Molybdenum (Mo)-Total	0.000089		0.000050	mg/L		28-AUG-16	R3535567
Nickel (Ni)-Total	0.00094		0.00050	mg/L		28-AUG-16	R3535567
Phosphorus (P)-Total	<0.050		0.050	mg/L		28-AUG-16	R3535567
Potassium (K)-Total	0.487		0.050	mg/L		28-AUG-16	R3535567
Rubidium (Rb)-Total	0.00146		0.00020	mg/L		28-AUG-16	R3535567
Selenium (Se)-Total	<0.000050		0.000050	mg/L		28-AUG-16	R3535567
Silicon (Si)-Total	2.28		0.050	mg/L		28-AUG-16	R3535567
Silver (Ag)-Total	<0.000010		0.000010	mg/L		28-AUG-16	R3535567
Sodium (Na)-Total	0.860		0.050	mg/L		28-AUG-16	R3535567
Strontium (Sr)-Total	0.00612		0.00020	mg/L		28-AUG-16	R3535567
Sulfur (S)-Total	<0.50		0.50	mg/L		28-AUG-16	R3535567
Tellurium (Te)-Total	<0.00020		0.00020	mg/L		28-AUG-16	R3535567
Thallium (Tl)-Total	<0.000010		0.000010	mg/L		28-AUG-16	R3535567
Thorium (Th)-Total	<0.00010		0.00010	mg/L		28-AUG-16	R3535567
Tin (Sn)-Total	<0.00010		0.00010	mg/L		28-AUG-16	R3535567
Titanium (Ti)-Total	0.0178		0.00030	mg/L		28-AUG-16	R3535567
Tungsten (W)-Total	<0.00010		0.00010	mg/L		28-AUG-16	R3535567
Uranium (U)-Total	0.000010		0.000010	mg/L		28-AUG-16	R3535567
Vanadium (V)-Total	0.00073		0.00050	mg/L		28-AUG-16	R3535567
Zinc (Zn)-Total	<0.0030		0.0030	mg/L		28-AUG-16	R3535567
Zirconium (Zr)-Total	<0.00030		0.00030	mg/L		28-AUG-16	R3535567
L1817738-3 CH7-S1							
Sampled By: CLIENT on 17-AUG-16							
Matrix: water							
<b>Miscellaneous Parameters</b>							
Oil and Grease	<1.0		1.0	mg/L		25-AUG-16	R3534233
Total Suspended Solids	647		3.0	mg/L		25-AUG-16	R3534260
pH	7.24		0.10	pH		26-AUG-16	R3534544
<b>Total Metals in Water by CRC ICPMS</b>							
Aluminum (Al)-Total	21.1		0.0030	mg/L		28-AUG-16	R3535567
Antimony (Sb)-Total	0.00016		0.00010	mg/L		28-AUG-16	R3535567
Arsenic (As)-Total	0.00143		0.00010	mg/L		28-AUG-16	R3535567
Barium (Ba)-Total	0.349		0.000050	mg/L		28-AUG-16	R3535567

\* Refer to Referenced Information for Qualifiers (if any) and Methodology.

## ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1817738-3 CH7-S1 Sampled By: CLIENT on 17-AUG-16 Matrix: water <b>Total Metals in Water by CRC ICPMS</b>							
Beryllium (Be)-Total	0.00102		0.00010	mg/L		28-AUG-16	R3535567
Bismuth (Bi)-Total	0.000119		0.000050	mg/L		28-AUG-16	R3535567
Boron (B)-Total	<0.010		0.010	mg/L		28-AUG-16	R3535567
Cadmium (Cd)-Total	0.00110		0.0000050	mg/L		28-AUG-16	R3535567
Calcium (Ca)-Total	9.28		0.050	mg/L		28-AUG-16	R3535567
Cesium (Cs)-Total	0.00419		0.000010	mg/L		28-AUG-16	R3535567
Chromium (Cr)-Total	0.206		0.00010	mg/L		28-AUG-16	R3535567
Cobalt (Co)-Total	0.0575		0.00010	mg/L		28-AUG-16	R3535567
Copper (Cu)-Total	0.0337		0.00050	mg/L		28-AUG-16	R3535567
Iron (Fe)-Total	35.1		0.010	mg/L		28-AUG-16	R3535567
Lead (Pb)-Total	0.0127		0.000050	mg/L		28-AUG-16	R3535567
Lithium (Li)-Total	0.0123		0.0010	mg/L		28-AUG-16	R3535567
Magnesium (Mg)-Total	28.6		0.0050	mg/L		28-AUG-16	R3535567
Manganese (Mn)-Total	0.993		0.00010	mg/L		28-AUG-16	R3535567
Molybdenum (Mo)-Total	0.000453		0.000050	mg/L		28-AUG-16	R3535567
Nickel (Ni)-Total	0.409		0.00050	mg/L		28-AUG-16	R3535567
Phosphorus (P)-Total	0.444		0.050	mg/L		28-AUG-16	R3535567
Potassium (K)-Total	10.7		0.050	mg/L		28-AUG-16	R3535567
Rubidium (Rb)-Total	0.0941		0.00020	mg/L		28-AUG-16	R3535567
Selenium (Se)-Total	<0.000050		0.000050	mg/L		28-AUG-16	R3535567
Silicon (Si)-Total	42.3		0.050	mg/L		28-AUG-16	R3535567
Silver (Ag)-Total	0.000141		0.000010	mg/L		28-AUG-16	R3535567
Sodium (Na)-Total	0.690		0.050	mg/L		28-AUG-16	R3535567
Strontium (Sr)-Total	0.101		0.00020	mg/L		28-AUG-16	R3535567
Sulfur (S)-Total	<0.50		0.50	mg/L		28-AUG-16	R3535567
Tellurium (Te)-Total	<0.00020		0.00020	mg/L		28-AUG-16	R3535567
Thallium (Tl)-Total	0.000597		0.000010	mg/L		28-AUG-16	R3535567
Thorium (Th)-Total	0.00413		0.00010	mg/L		28-AUG-16	R3535567
Tin (Sn)-Total	0.00060		0.00010	mg/L		28-AUG-16	R3535567
Titanium (Ti)-Total	2.56		0.00030	mg/L		28-AUG-16	R3535567
Tungsten (W)-Total	0.00100		0.00010	mg/L		28-AUG-16	R3535567
Uranium (U)-Total	0.00104		0.000010	mg/L		28-AUG-16	R3535567
Vanadium (V)-Total	0.0739		0.00050	mg/L		28-AUG-16	R3535567
Zinc (Zn)-Total	0.0922		0.0030	mg/L		28-AUG-16	R3535567
Zirconium (Zr)-Total	0.00337		0.00030	mg/L		28-AUG-16	R3535567
L1817738-4 CH7-ST1 Sampled By: CLIENT on 17-AUG-16 Matrix: water <b>Miscellaneous Parameters</b>							
Oil and Grease	<1.0		1.0	mg/L		25-AUG-16	R3534233
Total Suspended Solids	10.7		3.0	mg/L		25-AUG-16	R3534260
pH	7.64		0.10	pH		26-AUG-16	R3534544
<b>Total Metals in Water by CRC ICPMS</b>							
Aluminum (Al)-Total	0.775		0.0030	mg/L		28-AUG-16	R3535567
Antimony (Sb)-Total	0.00027		0.00010	mg/L		28-AUG-16	R3535567
Arsenic (As)-Total	0.00018		0.00010	mg/L		28-AUG-16	R3535567
Barium (Ba)-Total	0.0887		0.000050	mg/L		28-AUG-16	R3535567
Beryllium (Be)-Total	<0.00010		0.00010	mg/L		28-AUG-16	R3535567
Bismuth (Bi)-Total	<0.000050		0.000050	mg/L		28-AUG-16	R3535567
Boron (B)-Total	<0.010		0.010	mg/L		28-AUG-16	R3535567
Cadmium (Cd)-Total	0.0000184		0.0000050	mg/L		28-AUG-16	R3535567

\* Refer to Referenced Information for Qualifiers (if any) and Methodology.

## ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1817738-4 CH7-ST1							
Sampled By: CLIENT on 17-AUG-16							
Matrix: water							
<b>Total Metals in Water by CRC ICPMS</b>							
Calcium (Ca)-Total	9.54		0.050	mg/L		28-AUG-16	R3535567
Cesium (Cs)-Total	0.000127		0.000010	mg/L		28-AUG-16	R3535567
Chromium (Cr)-Total	0.0196		0.00010	mg/L		28-AUG-16	R3535567
Cobalt (Co)-Total	0.00357		0.00010	mg/L		28-AUG-16	R3535567
Copper (Cu)-Total	0.00246		0.00050	mg/L		28-AUG-16	R3535567
Iron (Fe)-Total	2.22		0.010	mg/L		28-AUG-16	R3535567
Lead (Pb)-Total	0.000541		0.000050	mg/L		28-AUG-16	R3535567
Lithium (Li)-Total	<0.0010		0.0010	mg/L		28-AUG-16	R3535567
Magnesium (Mg)-Total	13.6		0.0050	mg/L		28-AUG-16	R3535567
Manganese (Mn)-Total	0.0419		0.00010	mg/L		28-AUG-16	R3535567
Molybdenum (Mo)-Total	0.00242		0.000050	mg/L		28-AUG-16	R3535567
Nickel (Ni)-Total	0.0641		0.00050	mg/L		28-AUG-16	R3535567
Phosphorus (P)-Total	0.095		0.050	mg/L		28-AUG-16	R3535567
Potassium (K)-Total	3.74		0.050	mg/L		28-AUG-16	R3535567
Rubidium (Rb)-Total	0.0105		0.00020	mg/L		28-AUG-16	R3535567
Selenium (Se)-Total	0.000085		0.000050	mg/L		28-AUG-16	R3535567
Silicon (Si)-Total	6.19		0.050	mg/L		28-AUG-16	R3535567
Silver (Ag)-Total	<0.000010		0.000010	mg/L		28-AUG-16	R3535567
Sodium (Na)-Total	0.933		0.050	mg/L		28-AUG-16	R3535567
Strontium (Sr)-Total	0.118		0.00020	mg/L		28-AUG-16	R3535567
Sulfur (S)-Total	1.33		0.50	mg/L		28-AUG-16	R3535567
Tellurium (Te)-Total	<0.00020		0.00020	mg/L		28-AUG-16	R3535567
Thallium (Tl)-Total	0.000029		0.000010	mg/L		28-AUG-16	R3535567
Thorium (Th)-Total	0.00030		0.00010	mg/L		28-AUG-16	R3535567
Tin (Sn)-Total	<0.00010		0.00010	mg/L		28-AUG-16	R3535567
Titanium (Ti)-Total	0.0912		0.00030	mg/L		28-AUG-16	R3535567
Tungsten (W)-Total	0.00076		0.00010	mg/L		28-AUG-16	R3535567
Uranium (U)-Total	0.000078		0.000010	mg/L		28-AUG-16	R3535567
Vanadium (V)-Total	0.00370		0.00050	mg/L		28-AUG-16	R3535567
Zinc (Zn)-Total	0.0041		0.0030	mg/L		28-AUG-16	R3535567
Zirconium (Zr)-Total	0.00134		0.00030	mg/L		28-AUG-16	R3535567
L1817738-5 DUP1							
Sampled By: CLIENT on 20-AUG-16							
Matrix: water							
<b>Miscellaneous Parameters</b>							
Oil and Grease	<1.0		1.0	mg/L		25-AUG-16	R3534233
Total Suspended Solids	4.2		3.0	mg/L		25-AUG-16	R3534260
pH	6.33		0.10	pH		26-AUG-16	R3534544
<b>Total Metals in Water by CRC ICPMS</b>							
Aluminum (Al)-Total	0.327		0.0030	mg/L		28-AUG-16	R3535567
Antimony (Sb)-Total	<0.00010		0.00010	mg/L		28-AUG-16	R3535567
Arsenic (As)-Total	<0.00010		0.00010	mg/L		28-AUG-16	R3535567
Barium (Ba)-Total	0.00559		0.000050	mg/L		28-AUG-16	R3535567
Beryllium (Be)-Total	<0.00010		0.00010	mg/L		28-AUG-16	R3535567
Bismuth (Bi)-Total	<0.000050		0.000050	mg/L		28-AUG-16	R3535567
Boron (B)-Total	<0.010		0.010	mg/L		28-AUG-16	R3535567
Cadmium (Cd)-Total	<0.0000050		0.0000050	mg/L		28-AUG-16	R3535567
Calcium (Ca)-Total	0.514		0.050	mg/L		28-AUG-16	R3535567
Cesium (Cs)-Total	0.000038		0.000010	mg/L		28-AUG-16	R3535567
Chromium (Cr)-Total	0.00063		0.00010	mg/L		28-AUG-16	R3535567
Cobalt (Co)-Total	0.00018		0.00010	mg/L		28-AUG-16	R3535567

\* Refer to Referenced Information for Qualifiers (if any) and Methodology.

## ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1817738-5 DUP1							
Sampled By: CLIENT on 20-AUG-16							
Matrix: water							
<b>Total Metals in Water by CRC ICPMS</b>							
Copper (Cu)-Total	0.00080		0.00050	mg/L		28-AUG-16	R3535567
Iron (Fe)-Total	0.270		0.010	mg/L		28-AUG-16	R3535567
Lead (Pb)-Total	0.000113		0.000050	mg/L		28-AUG-16	R3535567
Lithium (Li)-Total	<0.0010		0.0010	mg/L		28-AUG-16	R3535567
Magnesium (Mg)-Total	0.420		0.0050	mg/L		28-AUG-16	R3535567
Manganese (Mn)-Total	0.00406		0.00010	mg/L		28-AUG-16	R3535567
Molybdenum (Mo)-Total	<0.000050		0.000050	mg/L		28-AUG-16	R3535567
Nickel (Ni)-Total	0.00073		0.00050	mg/L		28-AUG-16	R3535567
Phosphorus (P)-Total	<0.050		0.050	mg/L		28-AUG-16	R3535567
Potassium (K)-Total	0.476		0.050	mg/L		28-AUG-16	R3535567
Rubidium (Rb)-Total	0.00164		0.00020	mg/L		28-AUG-16	R3535567
Selenium (Se)-Total	<0.000050		0.000050	mg/L		28-AUG-16	R3535567
Silicon (Si)-Total	2.13		0.050	mg/L		28-AUG-16	R3535567
Silver (Ag)-Total	<0.000010		0.000010	mg/L		28-AUG-16	R3535567
Sodium (Na)-Total	0.881		0.050	mg/L		28-AUG-16	R3535567
Strontium (Sr)-Total	0.00529		0.00020	mg/L		28-AUG-16	R3535567
Sulfur (S)-Total	<0.50		0.50	mg/L		28-AUG-16	R3535567
Tellurium (Te)-Total	<0.00020		0.00020	mg/L		28-AUG-16	R3535567
Thallium (Tl)-Total	<0.000010		0.000010	mg/L		28-AUG-16	R3535567
Thorium (Th)-Total	<0.00010		0.00010	mg/L		28-AUG-16	R3535567
Tin (Sn)-Total	<0.00010		0.00010	mg/L		28-AUG-16	R3535567
Titanium (Ti)-Total	0.0174		0.00030	mg/L		28-AUG-16	R3535567
Tungsten (W)-Total	<0.00010		0.00010	mg/L		28-AUG-16	R3535567
Uranium (U)-Total	0.000011		0.000010	mg/L		28-AUG-16	R3535567
Vanadium (V)-Total	0.00067		0.00050	mg/L		28-AUG-16	R3535567
Zinc (Zn)-Total	<0.0030		0.0030	mg/L		28-AUG-16	R3535567
Zirconium (Zr)-Total	<0.00030		0.00030	mg/L		28-AUG-16	R3535567
L1817738-6 FIELD BLANK							
Sampled By: CLIENT on 20-AUG-16							
Matrix: water							
<b>Miscellaneous Parameters</b>							
Oil and Grease	<1.0		1.0	mg/L		25-AUG-16	R3534233
Total Suspended Solids	<3.0		3.0	mg/L		25-AUG-16	R3534260
pH	5.13		0.10	pH		26-AUG-16	R3534544
<b>Total Metals in Water by CRC ICPMS</b>							
Aluminum (Al)-Total	<0.0030		0.0030	mg/L		30-AUG-16	R3537199
Antimony (Sb)-Total	<0.00010		0.00010	mg/L		30-AUG-16	R3537199
Arsenic (As)-Total	<0.00010		0.00010	mg/L		30-AUG-16	R3537199
Barium (Ba)-Total	<0.000050		0.000050	mg/L		30-AUG-16	R3537199
Beryllium (Be)-Total	<0.00010		0.00010	mg/L		30-AUG-16	R3537199
Bismuth (Bi)-Total	<0.000050		0.000050	mg/L		30-AUG-16	R3537199
Boron (B)-Total	<0.010		0.010	mg/L		30-AUG-16	R3537199
Cadmium (Cd)-Total	<0.0000050		0.0000050	mg/L		30-AUG-16	R3537199
Calcium (Ca)-Total	<0.050		0.050	mg/L		30-AUG-16	R3537199
Cesium (Cs)-Total	<0.000010		0.000010	mg/L		30-AUG-16	R3537199
Chromium (Cr)-Total	<0.00010		0.00010	mg/L		30-AUG-16	R3537199
Cobalt (Co)-Total	<0.00010		0.00010	mg/L		30-AUG-16	R3537199
Copper (Cu)-Total	<0.00050		0.00050	mg/L		30-AUG-16	R3537199
Iron (Fe)-Total	<0.010		0.010	mg/L		30-AUG-16	R3537199
Lead (Pb)-Total	<0.000050		0.000050	mg/L		30-AUG-16	R3537199
Lithium (Li)-Total	<0.0010		0.0010	mg/L		30-AUG-16	R3537199

\* Refer to Referenced Information for Qualifiers (if any) and Methodology.

## ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1817738-6 FIELD BLANK							
Sampled By: CLIENT on 20-AUG-16							
Matrix: water							
<b>Total Metals in Water by CRC ICPMS</b>							
Magnesium (Mg)-Total	<0.0050		0.0050	mg/L		30-AUG-16	R3537199
Manganese (Mn)-Total	<0.00010		0.00010	mg/L		30-AUG-16	R3537199
Molybdenum (Mo)-Total	<0.000050		0.000050	mg/L		30-AUG-16	R3537199
Nickel (Ni)-Total	<0.00050		0.00050	mg/L		30-AUG-16	R3537199
Phosphorus (P)-Total	<0.050		0.050	mg/L		30-AUG-16	R3537199
Potassium (K)-Total	<0.050		0.050	mg/L		30-AUG-16	R3537199
Rubidium (Rb)-Total	<0.00020		0.00020	mg/L		30-AUG-16	R3537199
Selenium (Se)-Total	<0.000050		0.000050	mg/L		30-AUG-16	R3537199
Silicon (Si)-Total	<0.050		0.050	mg/L		30-AUG-16	R3537199
Silver (Ag)-Total	<0.000010		0.000010	mg/L		30-AUG-16	R3537199
Sodium (Na)-Total	<0.050		0.050	mg/L		30-AUG-16	R3537199
Strontium (Sr)-Total	<0.00020		0.00020	mg/L		30-AUG-16	R3537199
Sulfur (S)-Total	<0.50		0.50	mg/L		30-AUG-16	R3537199
Tellurium (Te)-Total	<0.00020		0.00020	mg/L		30-AUG-16	R3537199
Thallium (Tl)-Total	<0.000010		0.000010	mg/L		30-AUG-16	R3537199
Thorium (Th)-Total	<0.00010		0.00010	mg/L		30-AUG-16	R3537199
Tin (Sn)-Total	<0.00010		0.00010	mg/L		30-AUG-16	R3537199
Titanium (Ti)-Total	<0.00030		0.00030	mg/L		30-AUG-16	R3537199
Tungsten (W)-Total	<0.00010		0.00010	mg/L		30-AUG-16	R3537199
Uranium (U)-Total	<0.000010		0.000010	mg/L		30-AUG-16	R3537199
Vanadium (V)-Total	<0.00050		0.00050	mg/L		30-AUG-16	R3537199
Zinc (Zn)-Total	<0.0030		0.0030	mg/L		30-AUG-16	R3537199
Zirconium (Zr)-Total	<0.00030		0.00030	mg/L		30-AUG-16	R3537199
L1817738-7 TRIP BLANK							
Sampled By: CLIENT on 20-AUG-16							
Matrix: water							
<b>Miscellaneous Parameters</b>							
Oil and Grease	<2.0	DLIS	2.0	mg/L		25-AUG-16	R3534233
Total Suspended Solids	<3.0		3.0	mg/L		25-AUG-16	R3534260
pH	5.01		0.10	pH		26-AUG-16	R3534544
<b>Total Metals in Water by CRC ICPMS</b>							
Aluminum (Al)-Total	<0.0030		0.0030	mg/L		30-AUG-16	R3537199
Antimony (Sb)-Total	<0.00010		0.00010	mg/L		30-AUG-16	R3537199
Arsenic (As)-Total	<0.00010		0.00010	mg/L		30-AUG-16	R3537199
Barium (Ba)-Total	<0.000050		0.000050	mg/L		30-AUG-16	R3537199
Beryllium (Be)-Total	<0.00010		0.00010	mg/L		30-AUG-16	R3537199
Bismuth (Bi)-Total	<0.000050		0.000050	mg/L		30-AUG-16	R3537199
Boron (B)-Total	<0.010		0.010	mg/L		30-AUG-16	R3537199
Cadmium (Cd)-Total	<0.0000050		0.0000050	mg/L		30-AUG-16	R3537199
Calcium (Ca)-Total	<0.050		0.050	mg/L		30-AUG-16	R3537199
Cesium (Cs)-Total	<0.000010		0.000010	mg/L		30-AUG-16	R3537199
Chromium (Cr)-Total	<0.00010		0.00010	mg/L		30-AUG-16	R3537199
Cobalt (Co)-Total	<0.00010		0.00010	mg/L		30-AUG-16	R3537199
Copper (Cu)-Total	<0.00050		0.00050	mg/L		30-AUG-16	R3537199
Iron (Fe)-Total	<0.010		0.010	mg/L		30-AUG-16	R3537199
Lead (Pb)-Total	<0.000050		0.000050	mg/L		30-AUG-16	R3537199
Lithium (Li)-Total	<0.0010		0.0010	mg/L		30-AUG-16	R3537199
Magnesium (Mg)-Total	<0.0050		0.0050	mg/L		30-AUG-16	R3537199
Manganese (Mn)-Total	<0.00010		0.00010	mg/L		30-AUG-16	R3537199
Molybdenum (Mo)-Total	<0.000050		0.000050	mg/L		30-AUG-16	R3537199
Nickel (Ni)-Total	<0.00050		0.00050	mg/L		30-AUG-16	R3537199

\* Refer to Referenced Information for Qualifiers (if any) and Methodology.

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1817738-7	TRIP BLANK							
Sampled By:	CLIENT on 20-AUG-16							
Matrix:	water							
Total Metals in Water by CRC ICPMS								
Phosphorus (P)-Total		<0.050		0.050	mg/L		30-AUG-16	R3537199
Potassium (K)-Total		<0.050		0.050	mg/L		30-AUG-16	R3537199
Rubidium (Rb)-Total		<0.00020		0.00020	mg/L		30-AUG-16	R3537199
Selenium (Se)-Total		<0.000050		0.000050	mg/L		30-AUG-16	R3537199
Silicon (Si)-Total		<0.050		0.050	mg/L		30-AUG-16	R3537199
Silver (Ag)-Total		<0.000010		0.000010	mg/L		30-AUG-16	R3537199
Sodium (Na)-Total		<0.050		0.050	mg/L		30-AUG-16	R3537199
Strontium (Sr)-Total		<0.00020		0.00020	mg/L		30-AUG-16	R3537199
Sulfur (S)-Total		<0.50		0.50	mg/L		30-AUG-16	R3537199
Tellurium (Te)-Total		<0.00020		0.00020	mg/L		30-AUG-16	R3537199
Thallium (Tl)-Total		<0.000010		0.000010	mg/L		30-AUG-16	R3537199
Thorium (Th)-Total		<0.00010		0.00010	mg/L		30-AUG-16	R3537199
Tin (Sn)-Total		<0.00010		0.00010	mg/L		30-AUG-16	R3537199
Titanium (Ti)-Total		<0.00030		0.00030	mg/L		30-AUG-16	R3537199
Tungsten (W)-Total		<0.00010		0.00010	mg/L		30-AUG-16	R3537199
Uranium (U)-Total		<0.000010		0.000010	mg/L		30-AUG-16	R3537199
Vanadium (V)-Total		<0.00050		0.00050	mg/L		30-AUG-16	R3537199
Zinc (Zn)-Total		<0.0030		0.0030	mg/L		30-AUG-16	R3537199
Zirconium (Zr)-Total		<0.00030		0.00030	mg/L		30-AUG-16	R3537199

\* Refer to Referenced Information for Qualifiers (if any) and Methodology.

## Reference Information

### Sample Parameter Qualifier Key:

Qualifier	Description
DLIS	Detection Limit Adjusted: Insufficient Sample

### Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
MET-T-CCMS-ED	Water	Total Metals in Water by CRC ICPMS	EPA 200.2/6020A (mod)
Water samples are digested with nitric and hydrochloric acids, and analyzed by CRC ICPMS.			
Method Limitation (re: Sulfur): Sulfide and volatile sulfur species may not be recovered by this method.			
OGG-LLE-GRAV-ED	Water	O&G by Hex/MTBE extraction, gravimetric	APHA 5520 B HEXANE MTBE EXT. GRAVIME
This technique employs a hexane/methyl-tert-butyl ether extraction of water, followed by filtration of the solvent into an evaporation container. The solvent is evaporated in a pre-weighed dish and the oil and grease content is calculated from the weight of material remaining.			
PH-ED	Water	pH	APHA 4500 H-Electrode
All samples analyzed by this method for pH will have exceeded the 15 minute recommended hold time from time of sampling (field analysis is recommended for pH where highly accurate results are needed)			
SOLIDS-TOTSUS-ED	Water	Total Suspended Solids	APHA 2540 D-Gravimetric
Gravimetric determination of solids in waters by filtration and drying filter at 104 degrees Celsius.			

\*\* ALS test methods may incorporate modifications from specified reference methods to improve performance.

*The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:*

Laboratory Definition Code	Laboratory Location
ED	ALS ENVIRONMENTAL - EDMONTON, ALBERTA, CANADA

### Chain of Custody Numbers:

10-366486

### GLOSSARY OF REPORT TERMS

*Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.*

*mg/kg - milligrams per kilogram based on dry weight of sample*

*mg/kg ww - milligrams per kilogram based on wet weight of sample*

*mg/kg lwt - milligrams per kilogram based on lipid-adjusted weight*

*mg/L - unit of concentration based on volume, parts per million.*

*< - Less than.*

*D.L. - The reporting limit.*

*N/A - Result not available. Refer to qualifier code and definition for explanation.*

*Test results reported relate only to the samples as received by the laboratory.*

*UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.*

*Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.*





<b>Report To</b>			<b>Report Format / Distribution</b>			<b>Service Request:</b> (Rush subject to availability - Contact ALS to confirm TAT)												
Company: Tetra Tech EPA Inc.			Standard: Other (specify):			Regular (Standard Turnaround Times - Business Days)												
Contact: Korta Longlois			Select: PDF <input checked="" type="checkbox"/> Excel <input checked="" type="checkbox"/> Digital <input type="checkbox"/> Fax			Priority (2-4 Business Days)-50% surcharge - Contact ALS to confirm TAT												
Address: PO Box 2244 - 4916 49 St. Yellowknife, NT, X1A 3X4			Email 1: korta.longlois@tetratech.com			Emergency (1-2 Business Days)-100% Surcharge - Contact ALS to confirm TAT												
Phone: 867.920. Fax: 2287			Email 2:			Same Day or Weekend Emergency - Contact ALS to confirm TAT												
<b>Invoice To</b> Same as Report? (circle) <input checked="" type="checkbox"/> Yes or No (if No, provide details)			<b>Client / Project Information</b>			<b>Analysis Request</b>												
Copy of Invoice with Report? (circle) <input checked="" type="checkbox"/> Yes or No			Job #: E			(Indicate Filtered or Preserved, F/P)												
Company: Peregrine Diamonds Ltd.			PO / AFE: EBNV03123			<div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Total N</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Routine</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Oil and grease</div> </div>												
Contact: David Willis			LSD:															
Address: Suite 654-999 Canada Place, Vancouver			Quote #: Q57750															
Phone: 604.408.8880 Fax: BL, v6c 3E1			ALS Contact:															
Lab Work Order # (lab use only)			Sampler:			Number of Containers												
Sample #	Sample Identification (This description will appear on the report)	Date (dd-mm-yy)	Time (hh:mm)	Sample Type														
	CH6 Trench (CH-T)	20-08-16		Surface Water	X	X	X											3
	CH6 Outflow (CH-O)	"			X	X	X											3
	CH7-S1	17-08-16			X	X	X											3
	CH7-S11	17-08-16			X	X	X											3
	Dupl	20-08-16			X	X	X											3
	Field Blank	"		Water	X	X	X											3
	Trp Blank	"		Water	X	X	X											3
Special Instructions / Regulation with water or land use (CCME- Freshwater Aquatic Life/BC CSR-Commercial/AB Tier 1-Natural/ETC) / H																		
Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY.																		
By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.																		
SHIPMENT RELEASE (client use)						SHIPMENT RECEPTION (lab use only)						SHIPMENT VERIFICATION (lab use only)						
Released by:	Date:	Time:	Received by:	Date:	Time:	Temperature:	Verified by:	Date:	Time:	Observations:								
Michael V. Vimek	Aug 21, 2016		Wdy	Aug 23/16	1130	3.4 °C				Yes / No ? If Yes add SIF								

## GENERAL TERMS AND CONDITIONS:

These terms and conditions are incorporated in and form part of the Agreement between ALS Laboratory Group – Environmental Division ("ALS") and the party named in the Offer (the "Client").

1. Definitions. Capitalized Terms not defined in these Terms and Conditions have the definitions set out in the other Agreement documents.
2. The Services. ALS will provide the Services to the Client as described in the Offer and in any change of custody form provided with any sample.
3. Prices. ALS may review and change all prices, fees, surcharges or other charges set out in the Agreement if there are changes to ALS's cost beyond ALS's control, including changes in legislative requirements, Client variations of sample numbers and Client requests for changes to standard reporting requirements. Notwithstanding Condition 3, all quotations are reviewed and updated on a yearly basis.
4. Payment Terms. The Client shall pay ALS within 30 days of the invoice date OAC. ALS may, for reasonable business reasons, require the Client to arrange for payment in advance.
5. Quotation Numbers. The Client shall provide the quotation number to ALS (where applicable) to ensure correct pricing.
6. Taxes. Applicable taxes are not included in prices, surcharges and additional fees and will be added at the time of invoicing.
7. Quality Control. ALS has an extensive QA/QC program and all analytical data reported is analyzed using approved, referenced procedures followed by checks and reviews of senior managers and quality assurance personnel.
8. No Guarantee of Results. Results are obtained from chemical measurements. The Client is responsible for informing itself on the limitation of the results and acknowledges that the results are not guaranteed.
9. Standard of Care. ALS will use reasonable care and diligence as required by the laws of the province or territory where the sample is tested.
10. Storage. Where possible, ALS will store samples for 30 days from the date a final report is issued to the Client, after which ALS may discard the sample.
11. Holds. If the Client requests a sample be placed on hold, ALS will store the sample for 60 days for the quoted price, after which ALS will invoice the Client and discard the sample.
12. Archives. If the Client requests a sample be archived, ALS will store the sample for 6 months for the quoted price, after which ALS will invoice the Client and discard the sample.
13. Handling Protocol. Legal sample handling protocol must be arranged before samples are collected. ALS may charge a 20% surcharge on the list price plus the hourly technologist or chemist rates for legal sample protocol. Samples processed under legal protocol are stored indefinitely (storage charges may apply).
14. Samples. The quality, condition, content and source of samples stored and tested are not known to ALS except as declared and described on the chain of custody form completed and submitted by the Client and accompanying the sample.
15. Risk of Loss. ALS will use reasonable care to protect samples during storage, however all samples are stored at the Client's risk and the Client is responsible for obtaining appropriate insurance, if desired. The Client acknowledges that during the performance of the Services samples may be altered, lost, damaged or destroyed and the Client releases ALS from any claim the Client may have for any loss or damage to the sample.
16. Environmental. The Client must comply with all applicable environment legislation, including labeling all hazardous samples to comply with WHMIS and TDG regulations, and must provide appropriate material safety data sheets that include the nature of the hazard and a contact name and phone number to call for information. The Client will indemnify ALS for all loss or damages, including any fine or cost of complying with an order of any government authority, resulting from the Client's breach of this paragraph.
17. Hazardous Materials Disposal. ALS may return, at the Client's cost, hazardous material to the Client for disposal.
18. Hazardous Materials Surcharge. ALS may apply an additional surcharge for handling of hazardous samples or samples with Naturally Occurring Radioactive Materials (NORM), H2S, CN, etc.
19. Sample Containers. ALS may ship sample containers to the Client's location by the most cost effective means using ALS preferred courier suppliers, within the specified project timeline.
20. Additional Charges. ALS may charge the Client (a) its cost for emergency bottle shipments and shipments to and from a remote site, and (b) where pick up and delivery services are provided, subject in each instance to a minimum charge of \$25.00.
21. Large Bottle Orders. The Client shall provide ALS with 24 hours notice for large bottle orders.
22. Re-Tests. ALS reserves the right to re-test any samples that remains in its possession. Re-tests requested by the Client may be charged.
23. Waiver. The Client is responsible for making any assessment regarding the suitability of the Services and the intended results for the Client's purposes and waives any claims against ALS it may have as a result of the interpretation of the results. The Client shall indemnify ALS for all claims made by any third party against ALS in respect of all losses however arising from the performance of the Services or the use of any report provided in the performance of the Services.
24. Limitation of Liability. In no event shall ALS be liable for any consequential, indirect, incidental, special, exemplary or punitive damages, whether foreseeable or unforeseeable, (including claims for loss of profits or revenue or losses caused by stoppage of other work or impairment of other assets) incurred by the Client arising out of breach or failure of express or implied warranty, breach of contract, breach of warranty, misrepresentation, negligence, strict liability in tort or otherwise. In any event, the liability of ALS to the Client shall be limited to the cost of testing the sample as requested in the chain of custody form under which the sample was originally deposited. For the purposes of this paragraph and paragraphs 8, 15, 16, 23 and 25, as the applicable, "ALS" includes without limitations its directors, officers, employees and affiliates and the "Client" includes without limitation any third party that may have a claim against ALS through the Client.
25. Notice of Liability. Notwithstanding paragraph 24, ALS shall not be liable to the Client unless the Client provides notice in writing to ALS of such loss or damage, together with full particulars thereof, within 30 days of the Client's receipt of the report of the analysis of the sample giving rise to such liability. The provisions of this paragraph allocate the risk under the Agreement between the Client and ALS, and the fees to be paid by the Client to ALS reflect this allocation of risks and the limitations of liability in this Agreement.
26. Entire Agreement. The Agreement is the entire agreement between the parties and supercedes and takes precedence over any terms and conditions contained in any documentation provided by the Client. ALS's execution of any subsequent documentation from the Client only acknowledges receipt and not acceptance of any terms or conditions therein. If there is a conflict between these terms and conditions and any other Agreement document, these terms and conditions prevail.

GENF 19.00 Terms

## APPENDIX B

### TETRA TECH'S GENERAL CONDITIONS



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# GENERAL CONDITIONS

## GEO-ENVIRONMENTAL REPORT

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This report incorporates and is subject to these "General Conditions".

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### 1.1 USE OF REPORT AND OWNERSHIP

This report pertains to a specific site, a specific development, and a specific scope of work. It is not applicable to any other sites, nor should it be relied upon for types of development other than those to which it refers. Any variation from the site or proposed development would necessitate a supplementary investigation and assessment.

This report and the assessments and recommendations contained in it are intended for the sole use of TETRA TECH's client. TETRA TECH does not accept any responsibility for the accuracy of any of the data, the analysis or the recommendations contained or referenced in the report when the report is used or relied upon by any party other than TETRA TECH's Client unless otherwise authorized in writing by TETRA TECH. Any unauthorized use of the report is at the sole risk of the user.

This report is subject to copyright and shall not be reproduced either wholly or in part without the prior, written permission of TETRA TECH. Additional copies of the report, if required, may be obtained upon request.

### 1.2 ALTERNATE REPORT FORMAT

Where TETRA TECH submits both electronic file and hard copy versions of reports, drawings and other project-related documents and deliverables (collectively termed TETRA TECH's instruments of professional service); only the signed and/or sealed versions shall be considered final and legally binding. The original signed and/or sealed version archived by TETRA TECH shall be deemed to be the original for the Project.

Both electronic file and hard copy versions of TETRA TECH's instruments of professional service shall not, under any circumstances, no matter who owns or uses them, be altered by any party except TETRA TECH. The Client warrants that TETRA TECH's instruments of professional service will be used only and exactly as submitted by TETRA TECH.

Electronic files submitted by TETRA TECH have been prepared and submitted using specific software and hardware systems. TETRA TECH makes no representation about the compatibility of these files with the Client's current or future software and hardware systems.

### 1.3 NOTIFICATION OF AUTHORITIES

In certain instances, the discovery of hazardous substances or conditions and materials may require that regulatory agencies and other persons be informed and the client agrees that notification to such bodies or persons as required may be done by TETRA TECH in its reasonably exercised discretion.

### 1.4 INFORMATION PROVIDED TO TETRA TECH BY OTHERS

During the performance of the work and the preparation of the report, TETRA TECH may rely on information provided by persons other than the Client. While TETRA TECH endeavours to verify the accuracy of such information when instructed to do so by the Client, TETRA TECH accepts no responsibility for the accuracy or the reliability of such information which may affect the report.