



November 29, 2013

BY ELECTRONIC MAIL

Ms. Phyllis Beaulieu, Manager of Licensing

Nunavut Water Board

P.O. Box 119

Gjoa Haven, Nunavut, X0A 0H0

Dear Ms. Beaulieu:

RE: 2BE-CHI-1218

Peregrine Diamonds Ltd. ("Peregrine") holds Nunavut Water Board water licence 2BE-CHI1218 as one of its field authorizations for the Chidliak Project located on the Hall Peninsula of Baffin Island. The permit was issued December 24, 2013 and expires June 1, 2018. Peregrine is required to file an annual report as part of the terms and conditions of the licence and annual water usage fees are not due until December 24, 2014. The following two items are included to fulfill the reporting requirements:

- NWB Annual Report Form for 2013 (Includes table for domestic water usage and spill reports for six minor spills)
- Summary of Activities and Trench Monitoring Plan (Appendix "B: contains water analysis report and laboratory certificates)

If you have any questions on these items or require additional information please do not hesitate to contact me at (604) 608-4524.

Yours truly,

PEREGRINE DIAMONDS LTD.

David Willis – Land Administrator

NWB Annual Report

Year being reported: 2013

License No: 2BE-CH1218 Issued Date: Dec. 29, 2013
 Expiry Date: Jun. 1, 2018

Project Name: CHILIMAK

Licensee: PEREGRINE DIAMONDS LTD.

Mailing Address: SUITE 201 - 1250 NUMBER 56.
 VANCOUVER, B.C.
 V6B 1C6

Name of Company filing Annual Report (if different from Name of Licensee please clarify relationship between the two entities, if applicable):

PEREGRINE DIAMONDS LTD.

General Background Information on the Project (*optional):

PROJECT INITIATED IN 2008. PREVIOUS PERMIT IS: 2BE-CH10813.

Licence Requirements: the licensee must provide the following information in accordance with

Part B Item 2

A summary report of water use and waste disposal activities, including, but not limited to: methods of obtaining water; sewage and greywater management; drill waste management; solid and hazardous waste management.

Water Source(s):	<u>DRAINAGE @ DISCOVERY CAMP, LAKE @ SUNRISE CAMP, CHILIMAK CAMP</u>	
Water Quantity:	<u>25 / DAY</u>	Quantity Allowable Domestic (cu.m)
	<u>SEE TABLE</u>	Actual Quantity Used Domestic (cu.m)
	<u>70 / DAY</u>	Quantity Allowable Drilling (cu.m)
	<u>SEE TABLE</u>	Total Quantity Used Drilling (cu.m)

MCKENNA RIVER.

TABLE ATTACHED ENTITLED "DOMESTIC WATER USAGE FOR NWB WATER LICENCE 2BE-CH1218"

Waste Management and/or Disposal

- Solid Waste Disposal
- Sewage
- Drill Waste
- Greywater
- Hazardous
- Other:

Additional Details:

SOLID WASTE & SEWAGE INCINERATED, ASHES FLOWN TO ICAHUIT FOR DISPOSAL. GREYWATER PASSES THROUGH BOXED EARTH FILTER.

A list of unauthorized discharges and a summary of follow-up actions taken.

Spill No.: (as reported to the Spill Hot-line)

Date of Spill:

Date of Notification to an Inspector:

Additional Details: (impacts to water, mitigation measures, short/long term monitoring, etc)

6 SPILLS IN 2013. ALL SPILLS BETWEEN 0.5 LITRES AND 8 LITRES. ALL BELOW REPORT THRESHOLD. DOCUMENTATION ATTACHED.

Revisions to the Spill Contingency Plan

SCP submitted and approved - no revision required or proposed ▼

Additional Details:

No REVISIONS

Revisions to the Abandonment and Restoration Plan

AR plan submitted and approved - no revision required or proposed ▼

Additional Details:

No REVISIONS TO MAIN PLAN, TRENCH MONITORING PLAN DEVELOPED. SEE ATTACHED "SUMMARY OF ACTIVITIES" TRENCH MONITORING PLAN.

Progressive Reclamation Work Undertaken

Additional Details (i.e., work completed and future works proposed)

CH-6 TRENCH BACKFILLED AND CONTOURED.

Results of the Monitoring Program including:

The GPS Co-ordinates (in degrees, minutes and seconds of latitude and longitude) of each location where sources of water are utilized;

Details described below ▼

Additional Details:

DISCOVERY CAMP	-	64° 14' 25" N	66° 20' 45" W
SUNRISE CAMP	-	64° 14' 17" N	66° 7' 45" W
CH-6 CAMP	-	64° 19' 29" N	66° 31' 30" W.

The GPS Co-ordinates (in degrees, minutes and seconds of latitude and longitude) of each location where wastes associated with the licence are deposited;

Details described below ▼

Additional Details:

GREYWATER & INCINERATOR - SAME AS ABOVE ASHES, SOLID WASTE & HAZARDOUS WASTE FLOWN TO IONLU17.

Results of any additional sampling and/or analysis that was requested by an Inspector

Select ▼

Additional Details: (date of request, analysis of results, data attached, etc)

TESTING OF CH-6 TRENCH WATER IN TRENCH HOLLOW. SEE APPENDIX "B" IN ATTACHED REPORT ENTITLED "SUMMARY OF ACTIVITIES & TRENCH MONITORING PLAN."

Any other details on water use or waste disposal requested by the Board by November 1 of the year being reported.

Select ▼

Additional Details: (Attached or provided below)

NONE.

Any responses or follow-up actions on inspection/compliance reports

Select - INSPECTION & COMPLIANCE REPORT RECEIVED. ▼

Additional Details: (Dates of Report, Follow-up by the Licensee)

"SUMMARY OF ACTIVITIES & TRENCH MONITORING PLAN" DEVELOPED & SUBMITTED TO INSPECTOR - ATTACHED.

Any additional comments or information for the Board to consider

WATER USAGE WAS WELL BELOW AUTHORIZED THRESHOLDS. NO SIGNIFICANT SPILLS. TRENCH WATER IS ACCUMULATION FROM FRESHET AND PASSED ALL TESTS EASILY.

Date Submitted:

Nov. 28, 2013

Submitted/Prepared by:

David Willis

Contact Information:

Tel: 604-608-4524

Fax: 604-~~881~~ 408-0881

email: dove@pdcom.com.

Domestic Water Usage for NWB Water Use Licence 2BE-CH1218

- Camp Occupied

Day	Date	CH-6 Camp (Litres)	Discovery Camp (Litres)	Sunrise Camp (Litres)	Aurora Camp (litres)	Daily Usage Total (Litres)	Daily Usage Total (Cubic Metres)	Daily Authorized Total (Cubic Metres)
1	February 1, 2013	0	0	0	0	0	0	25
2	February 2, 2013	0	0	0	0	0	0	25
3	February 3, 2013	0	0	0	0	0	0	25
4	February 4, 2013	0	0	0	0	0	0	25
5	February 5, 2013	0	0	0	0	0	0	25
6	February 6, 2013	0	0	0	0	0	0	25
7	February 7, 2013	0	0	0	0	0	0	25
8	February 8, 2013	0	0	0	0	0	0	25
9	February 9, 2013	0	0	0	0	0	0	25
10	February 10, 2013	0	0	0	0	0	0	25
11	February 11, 2013	0	0	0	0	0	0	25
12	February 12, 2013	0	0	0	0	0	0	25
13	February 13, 2013	0	0	0	0	0	0	25
14	February 14, 2013	0	0	0	0	0	0	25
15	February 15, 2013	0	0	0	0	0	0	25
16	February 16, 2013	0	0	0	0	0	0	25
17	February 17, 2013	0	0	0	0	0	0	25
18	February 18, 2013	0	0	0	0	0	0	25
19	February 19, 2013	0	0	0	0	0	0	25
20	February 20, 2013	0	0	0	0	0	0	25
21	February 21, 2013	0	0	0	0	0	0	25
22	February 22, 2013	0	0	0	0	0	0	25
23	February 23, 2013	0	0	0	0	0	0	25
24	February 24, 2013	0	0	0	0	0	0	25
25	February 25, 2013	0	0	0	0	0	0	25
26	February 26, 2013	0	0	0	0	0	0	25
27	February 27, 2013	0	0	0	0	0	0	25
28	February 28, 2013	0	0	0	0	0	0	25
29	March 1, 2013	0	0	0	0	0	0	25
30	March 2, 2013	0	0	0	0	0	0	25
31	March 3, 2013	0	0	0	0	0	0	25
32	March 4, 2013	1100	0	0	0	1100	1.1	25
33	March 5, 2013	0	0	0	0	0	0	25
34	March 6, 2013	2200	0	0	0	2200	2.2	25
35	March 7, 2013	0	0	0	0	0	0	25
36	March 8, 2013	3300	0	0	0	3300	3.3	25
37	March 9, 2013	0	0	0	0	0	0	25
38	March 10, 2013	0	0	0	0	0	0	25
39	March 11, 2013	0	0	0	0	0	0	25
40	March 12, 2013	2200	0	0	0	2200	2.2	25
41	March 13, 2013	0	0	0	0	0	0	25
42	March 14, 2013	0	0	0	0	0	0	25
43	March 15, 2013	2200	0	0	0	2200	2.2	25
44	March 16, 2013	0	0	0	0	0	0	25
45	March 17, 2013	0	0	0	0	0	0	25

Domestic Water Usage for N/WB Water Use Licence 2BE-CH1218

- Camp Occupied

Day	Date	CH-6 Camp (Litres)	Discovery Camp (Litres)	Sunrise Camp (Litres)	Aurora Camp (litres)	Daily Usage Total (Litres)	Daily Usage Total (Cubic Metres)	Daily Authorized Total (Cubic Metres)
46	March 18, 2013	0	0	0	0	0	0	25
47	March 19, 2013	0	0	0	0	0	0	25
48	March 20, 2013	2200	0	0	0	2200	2.2	25
49	March 21, 2013	0	0	0	0	0	0	25
50	March 22, 2013	2200	0	0	0	2200	2.2	25
51	March 23, 2013	0	0	0	0	0	0	25
52	March 24, 2013	2200	0	0	0	2200	2.2	25
53	March 25, 2013	0	0	0	0	0	0	25
54	March 26, 2013	2200	0	0	0	2200	2.2	25
55	March 27, 2013	0	0	0	0	0	0	25
56	March 28, 2013	2200	0	0	0	2200	2.2	25
57	March 29, 2013	0	0	0	0	0	0	25
58	March 30, 2013	2200	0	0	0	2200	2.2	25
59	March 31, 2013	0	0	0	0	0	0	25
60	April 1, 2013	0	0	0	0	0	0	25
61	April 2, 2013	2200	0	0	0	2200	2.2	25
62	April 3, 2013	2200	0	0	0	2200	2.2	25
63	April 4, 2013	0	0	0	0	0	0	25
64	April 5, 2013	0	0	0	0	0	0	25
65	April 6, 2013	0	0	0	0	0	0	25
66	April 7, 2013	2200	0	0	0	2200	2.2	25
67	April 8, 2013	0	0	0	0	0	0	25
68	April 9, 2013	2200	0	0	0	2200	2.2	25
69	April 10, 2013	0	0	0	0	0	0	25
70	April 11, 2013	2200	0	0	0	2200	2.2	25
71	April 12, 2013	0	0	0	0	0	0	25
72	April 13, 2013	2200	0	0	0	2200	2.2	25
73	April 14, 2013	0	0	0	0	0	0	25
74	April 15, 2013	2200	0	0	0	2200	2.2	25
75	April 16, 2013	0	0	0	0	0	0	25
76	April 17, 2013	2200	0	0	0	2200	2.2	25
77	April 18, 2013	0	0	0	0	0	0	25
78	April 19, 2013	2200	0	0	0	2200	2.2	25
79	April 20, 2013	0	0	0	0	0	0	25
80	April 21, 2013	2200	0	0	0	2200	2.2	25
81	April 22, 2013	0	0	0	0	0	0	25
82	April 23, 2013	2200	0	0	0	2200	2.2	25
83	April 24, 2013	0	0	0	0	0	0	25
84	April 25, 2013	2200	0	0	0	2200	2.2	25
85	April 26, 2013	0	0	0	0	0	0	25
86	April 27, 2013	2200	0	0	0	2200	2.2	25
87	April 28, 2013	0	0	0	0	0	0	25
88	April 29, 2013	2200	0	0	0	2200	2.2	25
89	April 30, 2013	0	0	0	0	0	0	25
90	May 1, 2013	0	0	0	0	0	0	25

Domestic Water Usage for NWB Water Use Licence ZBE-CH11218

- Camp Occupied

Day	Date	CH-6 Camp (Litres)	Discovery Camp (Litres)	Sunrise Camp (Litres)	Aurora Camp (litres)	Daily Usage Total (Litres)	Daily Usage Total (Cubic Metres)	Daily Authorized Total (Cubic Metres)
91	May 2, 2013	0	0	0	0	0	0	25
92	May 3, 2013	0	0	0	0	0	0	25
93	May 4, 2013	0	0	0	0	0	0	25
94	May 5, 2013	0	0	0	0	0	0	25
95	May 6, 2013	0	0	0	0	0	0	25
96	May 7, 2013	0	0	0	0	0	0	25
97	May 8, 2013	0	0	0	0	0	0	25
98	May 9, 2013	0	0	0	0	0	0	25
99	May 10, 2013	0	0	0	0	0	0	25
100	May 11, 2013	0	0	0	0	0	0	25
101	May 12, 2013	0	0	0	0	0	0	25
102	May 13, 2013	0	0	0	0	0	0	25
103	May 14, 2013	0	0	0	0	0	0	25
104	May 15, 2013	0	0	0	0	0	0	25
105	May 16, 2013	0	0	0	0	0	0	25
106	May 17, 2013	0	0	0	0	0	0	25
107	May 18, 2013	0	0	0	0	0	0	25
108	May 19, 2013	0	0	0	0	0	0	25
109	May 20, 2013	0	0	0	0	0	0	25
110	May 21, 2013	0	0	0	0	0	0	25
111	May 22, 2013	0	0	0	0	0	0	25
112	May 23, 2013	0	0	0	0	0	0	25
113	May 24, 2013	0	0	0	0	0	0	25
114	May 25, 2013	0	0	0	0	0	0	25
115	May 26, 2013	0	0	0	0	0	0	25
116	May 27, 2013	0	0	0	0	0	0	25
117	May 28, 2013	0	0	0	0	0	0	25
118	May 29, 2013	0	0	0	0	0	0	25
119	May 30, 2013	0	0	0	0	0	0	25
120	May 31, 2013	0	0	0	0	0	0	25
121	June 1, 2013	0	0	0	0	0	0	25
122	June 2, 2013	0	0	0	0	0	0	25
123	June 3, 2013	0	0	0	0	0	0	25
124	June 4, 2013	0	0	0	0	0	0	25
125	June 5, 2013	0	0	0	0	0	0	25
126	June 6, 2013	0	0	0	0	0	0	25
127	June 7, 2013	0	0	0	0	0	0	25
128	June 8, 2013	0	0	0	0	0	0	25
129	June 9, 2013	0	0	0	0	0	0	25
130	June 10, 2013	0	0	0	0	0	0	25
131	June 11, 2013	0	0	0	0	0	0	25
132	June 12, 2013	0	0	0	0	0	0	25
133	June 13, 2013	0	0	0	0	0	0	25
134	June 14, 2013	0	0	0	0	0	0	25
135	June 15, 2013	0	0	0	0	0	0	25

Domestic Water Usage for NWB Water Use Licence 2BE-CH1218

- Camp Occupied

Day	Date	CH-6 Camp (Litres)	Discovery Camp (Litres)	Sunrise Camp (Litres)	Aurora Camp (litres)	Daily Usage Total (Litres)	Daily Usage Total (Cubic Metres)	Daily Authorized Total (Cubic Metres)
136	June 16, 2013	0	0	0	0	0	0	25
137	June 17, 2013	0	0	0	0	0	0	25
138	June 18, 2013	0	0	0	0	0	0	25
139	June 19, 2013	0	0	0	0	0	0	25
140	June 20, 2013	0	0	0	0	0	0	25
141	June 21, 2013	0	0	0	0	0	0	25
142	June 22, 2013	0	0	0	0	0	0	25
143	June 23, 2013	0	0	0	0	0	0	25
144	June 24, 2013	0	0	0	0	0	0	25
145	June 25, 2013	0	0	0	0	0	0	25
146	June 26, 2013	0	0	0	0	0	0	25
147	June 27, 2013	0	0	0	0	0	0	25
148	June 28, 2013	0	0	0	0	0	0	25
149	June 29, 2013	0	0	0	0	0	0	25
150	June 30, 2013	0	1100	0	0	1100	1.1	25
151	July 1, 2013	0	3300	0	0	3300	3.3	25
152	July 2, 2013	0	0	0	0	0	0	25
153	July 3, 2013	0	0	0	0	0	0	25
154	July 4, 2013	0	730	0	0	730	0.73	25
155	July 5, 2013	0	0	0	0	0	0	25
156	July 6, 2013	0	2200	0	0	2200	2.2	25
157	July 7, 2013	0	0	0	0	0	0	25
158	July 8, 2013	0	0	0	0	0	0	25
159	July 9, 2013	0	2930	0	0	2930	2.93	25
160	July 10, 2013	0	0	1125	0	1125	1.125	25
161	July 11, 2013	0	0	840	0	840	0.84	25
162	July 12, 2013	0	1100	560	0	1660	1.66	25
163	July 13, 2013	0	2930	1680	0	4610	4.61	25
164	July 14, 2013	0	2930	1680	0	4610	4.61	25
165	July 15, 2013	0	2930	1680	0	4610	4.61	25
166	July 16, 2013	0	2930	560	0	3490	3.49	25
167	July 17, 2013	0	2560	1680	0	4240	4.24	25
168	July 18, 2013	0	2930	1400	0	4330	4.33	25
169	July 19, 2013	0	2930	840	0	3770	3.77	25
170	July 20, 2013	0	2560	1680	0	4240	4.24	25
171	July 21, 2013	0	2560	1120	0	3680	3.68	25
172	July 22, 2013	0	2930	1680	0	4610	4.61	25
173	July 23, 2013	0	2930	1120	0	4050	4.05	25
174	July 24, 2013	0	2930	1120	0	4050	4.05	25
175	July 25, 2013	0	2930	560	0	3490	3.49	25
176	July 26, 2013	0	2200	1680	0	3880	3.88	25
177	July 27, 2013	0	2930	1400	0	4330	4.33	25
178	July 28, 2013	0	2560	1120	0	3680	3.68	25
179	July 29, 2013	0	2200	1400	0	3600	3.6	25
180	July 30, 2013	0	2200	1680	0	3880	3.88	25

Domestic Water Usage for NWB Water Use Licence 2BE-CH11218

- Camp Occupied

Day	Date	CH-6 Camp (Litres)	Discovery Camp (Litres)	Sunrise Camp (Litres)	Aurora Camp (litres)	Daily Usage Total (Litres)	Daily Usage Total (Cubic Metres)	Daily Authorized Total (Cubic Metres)
181	July 31, 2013	0	2930	1680	0	4610	4.61	25
182	August 1, 2013	0	1100	1680	0	2780	2.78	25
183	August 2, 2013	0	2930	1680	0	4610	4.61	25
184	August 3, 2013	0	2200	840	0	3040	3.04	25
185	August 4, 2013	0	730	1680	0	2410	2.41	25
186	August 5, 2013	0	2200	1680	0	3880	3.88	25
187	August 6, 2013	0	2930	1400	0	4330	4.33	25
188	August 7, 2013	0	2560	840	0	3400	3.4	25
189	August 8, 2013	0	1460	560	0	2020	2.02	25
190	August 9, 2013	0	1460	840	0	2300	2.3	25
191	August 10, 2013	0	2560	0	0	2560	2.56	25
192	August 11, 2013	0	2200	0	0	2200	2.2	25
193	August 12, 2013	0	2560	0	0	2560	2.56	25
194	August 13, 2013	0	2560	0	0	2560	2.56	25
195	August 14, 2013	0	2560	0	0	2560	2.56	25
196	August 15, 2013	0	2560	0	0	2560	2.56	25
197	August 16, 2013	0	1100	0	0	1100	1.1	25
198	August 17, 2013	0	0	0	0	0	0	25
199	August 18, 2013	0	0	0	0	0	0	25
200	August 19, 2013	0	0	0	0	0	0	25
201	August 20, 2013	0	0	0	0	0	0	25
	Total Litres:	55000	97030	39485	0	191515		
	Total Cubic Metres:	55	97.03	39.485	0	191.515	191.515	



INCIDENT/ACCIDENT REPORT FORM – PEREGRINE DIAMONDS

1. INCIDENT DETAILS	Person Reporting	Person Injured				
Name:	Dave Pickston	None				
Position:	Geological Technician					
Employment Status:	<i>PGD Employee</i>					
Company (If Contractor):						
Date:	March 29	Time: 12:00				
Location:	Peregrine Diamonds CH-6 Camp, Baffin Island					
2. CLASSIFICATION (More than one box may be ticked):						
<input type="checkbox"/> Hazard	<input type="checkbox"/> Near Miss	<input type="checkbox"/> First Aid	<input type="checkbox"/> Medical treatment			
<input type="checkbox"/> Lost time/Restricted work*(classified injury)	<input type="checkbox"/> Fatality *(classified injury)	<input type="checkbox"/> Property damage	<input checked="" type="checkbox"/> Environmental / Community			
<input type="checkbox"/> Off The Job						
3. Exploration Activity Being Undertaken At The Time Of The Incident:						
<input type="checkbox"/> Vehicle	<input type="checkbox"/> Traversing	<input type="checkbox"/> Aviation	<input checked="" type="checkbox"/> Drilling Activity	<input type="checkbox"/> Camp Activity	<input type="checkbox"/> Office	<input type="checkbox"/> Other
4. Environmental / Community Incident (More than one box may be ticked):						
<input type="checkbox"/> Fire (indicate area)	<input checked="" type="checkbox"/> Chemical/Fuel spill (approx 3 litres)					
<input type="checkbox"/> Interference with activities/community complaints	<input type="checkbox"/> Contamination of water supply, potentially					
<input type="checkbox"/> Damage to cultural/sensitive site	<input type="checkbox"/> Community health or welfare issues.					
Other (give details):						
5. Describe The Incident (Include events leading up to, during and afterwards):						
<p>The air compressor used by the drill released small amounts of hydraulic oil from underneath. It was noticed when the compressor was moved for a blast at the pit. The spill was limited to only one location and the total spilled was about 2 to 3 litres. It appears to be a problem with a pressure release valve in extreme cold weather and only when the machine is started cold (once a day). Pressure would build up and the valve would open prematurely, releasing fluid into a pipe that directed the fluid down under the machine. It is not a continuous leak.</p> <p>After the spill was noticed, all snow, dirt and rocks affected by the spill were shovelled into 2 - 5 gallon buckets. The buckets were sealed and shipped Nunavut Environmental in Iqaluit for proper disposal. A berm was placed beneath the compressor to prevent similar incidents in the future. The compressor is owned by Nunavut Excavating and was being operated by driller/booter Daniel Ruman and driller Sean Praetzel (of McCaw's North of Yellowknife).</p>						
6. Recommended Follow-Up Or Action Required:			By Whom:	By When:		
Place a berm under compressor for the duration of its operation until a mechanic can fix the problem back in Iqaluit.			Dave Sherlock Daniel Ruman	Immediate		
Dig up the contaminated soil, place in 5 gallon white buckets and send to Iqaluit for proper disposal.			Robert Joamie Daniel Akpalialuk	Immediate		
7. Manager's/Supervisor's Comments:						
Clean-up was satisfactory						
Signature:	Dave Pickston	Date:	April 1, 2013			
8. Mechanism/s Of Injury Or Damage (More than one box may be ticked):						



<input type="checkbox"/> Fall	<input type="checkbox"/> Struck By	<input type="checkbox"/> Chemical	<input type="checkbox"/> Electricity	<input type="checkbox"/> Lifting/Carrying
<input type="checkbox"/> Trip/Slip	<input type="checkbox"/> Caught In/On	<input type="checkbox"/> Dust	<input type="checkbox"/> Noise	<input type="checkbox"/> Overexertion
<input type="checkbox"/> Temperature	<input type="checkbox"/> Flora/Fauna	<input type="checkbox"/> Repetitiveness	<input type="checkbox"/> Foreign Object	<input type="checkbox"/> Fire
<input type="checkbox"/> Other (give details):				
9. Body Part Injured (More than one box may be ticked; indicate left or right where appropriate):				
<input type="checkbox"/> Eye	<input type="checkbox"/> Head (Other)	<input type="checkbox"/> Trunk	<input type="checkbox"/> Hands/Fingers	<input type="checkbox"/> Feet/Toes
<input type="checkbox"/> Ear	<input type="checkbox"/> Neck	<input type="checkbox"/> Shoulders/Arms	<input type="checkbox"/> Hips/Legs	<input type="checkbox"/> Internal
<input type="checkbox"/> Face	<input type="checkbox"/> Back	<input type="checkbox"/> Multiple	<input type="checkbox"/> General	<input type="checkbox"/> None
<input type="checkbox"/> Other (give details):				
10. Nature Of Injury (More than one box may be ticked):				
<input type="checkbox"/> Fracture	<input type="checkbox"/> Dislocation	<input type="checkbox"/> Sprain/Strain	<input type="checkbox"/> Poisoning	
<input type="checkbox"/> Burns	<input type="checkbox"/> Internal Injury	<input type="checkbox"/> Open Wound (Laceration)	<input type="checkbox"/> Multiple Injuries	
<input type="checkbox"/> Amputation	<input type="checkbox"/> Superficial Injury	<input type="checkbox"/> Contusion (Bruise) With Skin Intact	<input type="checkbox"/> Illness Or Disease	
<input type="checkbox"/> Concussion	<input type="checkbox"/> Foreign Body	<input type="checkbox"/> Nerves/Spinal Cord	<input type="checkbox"/> Other	
<input type="checkbox"/> Effects of Weather, Exposure, Pressure & Other External Causes (eg: Heat Stress, Drowning, Electrocution)				
Details:				
11. If Property Was Damaged, Give Details Of Equipment And Describe The Damage:				
no				
12. In Relation To The Task Being Undertaken At The Time Of The Incident/Accident:				
Was Correct Personal Protective Equipment (PPE) Being Used?			yes	
Describe the PPE: Hard hat, eye protection, hearing protection, reflective vest				
13. In Your Opinion, What Were The Contributing Factors Resulting In This Incident:				
A malfunctioning pressure release valve....				
14. Witnesses				
Print Name:	Sean Praetzel	Signature:		
Print Name:	Daniel Ruman	Signature:		
Print Name:		Signature:		
15. Comments By Persons Affected:				
An incident report is being completed by Peregrine Diamonds				
Signed:	Dave Pickston	Date:	April 1, 2013	



INCIDENT/ACCIDENT REPORT FORM – PEREGRINE DIAMONDS

1. INCIDENT DETAILS	Person Reporting	Person Injured
Name:	Dave Pickston	None
Position:	Geological Technician	
Employment Status:	<i>PGD Employee</i>	
Company (If Contractor):		
Date:	March 30	Time: 8:00
Location:	Peregrine Diamonds CH-6 Camp, Baffin Island	
2. CLASSIFICATION (More than one box may be ticked):		
<input type="checkbox"/> Hazard	<input type="checkbox"/> Near Miss	<input type="checkbox"/> First Aid
<input type="checkbox"/> Lost time/Restricted work*(classified injury)	<input type="checkbox"/> Fatality *(classified injury)	<input type="checkbox"/> Medical treatment
<input type="checkbox"/> Off The Job	<input type="checkbox"/> Property damage	X Environmental / Community
3. Exploration Activity Being Undertaken At The Time Of The Incident:		
<input type="checkbox"/> Vehicle	<input type="checkbox"/> Traversing	<input type="checkbox"/> Aviation
<input type="checkbox"/> X Drilling Activity	<input type="checkbox"/> Camp Activity	<input type="checkbox"/> Office
<input type="checkbox"/> Other		
4. Environmental / Community Incident (More than one box may be ticked):		
<input type="checkbox"/> Fire (indicate area)	X Chemical/Fuel spill (approx 3 litres)	
<input type="checkbox"/> Interference with activities/community complaints	<input type="checkbox"/> Contamination of water supply, potentially	
<input type="checkbox"/> Damage to cultural/sensitive site	<input type="checkbox"/> Community health or welfare issues.	
Other (give details):		
5. Describe The Incident (Include events leading up to, during and afterwards):		
<p>The air compressor used by the drill released small amounts of hydraulic oil from underneath. The spill was limited to only one location, on snow, and the total spilled was about 2 to 3 litres. It appears to be a problem with a pressure release valve in extreme cold weather and only when the machine is started cold (once a day). Pressure would build up and the valve would open prematurely, releasing fluid into a pipe that directed the fluid down under the machine. It is not a continuous leak.</p> <p>After the spill was noticed, all snow, dirt and rocks affected by the spill were shovelled into 2 - 5 gallon buckets. The buckets were sealed and shipped Nunavut Environmental in Iqaluit for proper disposal. A berm was placed beneath the compressor to prevent similar incidents in the future. The compressor is owned by Nunavut Excavating and was being operated by driller/booter Daniel Ruman and driller Sean Praetzel (of McCaw's North of Yellowknife).</p> <p>This is the second spill from the same compressor Report 2013-002). After the original spill was noticed, a berm was placed under the machine to prevent similar incidents, but it appears that the pressure from the hose was enough to move the berm out of position.</p> <p>The affect snow was shovelled into 4 – 5 gallon buckets and incinerated.</p>		
6. Recommended Follow-Up Or Action Required:		By Whom:
Fix a newer, bigger berm in place so that it cannot easily be moved out of place.		Sean Praetzel Daniel Ruman
Dig up the contaminated snow and dispose of properly.		David Pickston Richard Best
7. Manager's/Supervisor's Comments:		



A larger berm will have to be fixed in place to prevent shifting during start up.			
Signature:	Dave Pickston	Date:	March 30
8. Mechanism/s Of Injury Or Damage (More than one box may be ticked):			
<input type="checkbox"/> Fall	<input type="checkbox"/> Struck By	<input type="checkbox"/> Chemical	<input type="checkbox"/> Electricity
<input type="checkbox"/> Trip/Slip	<input type="checkbox"/> Caught In/On	<input type="checkbox"/> Dust	<input type="checkbox"/> Noise
<input type="checkbox"/> Temperature	<input type="checkbox"/> Flora/Fauna	<input type="checkbox"/> Repetitiveness	<input type="checkbox"/> Foreign Object
<input type="checkbox"/> Other (give details):			
9. Body Part Injured (More than one box may be ticked; indicate left or right where appropriate):			
<input type="checkbox"/> Eye	<input type="checkbox"/> Head (Other)	<input type="checkbox"/> Trunk	<input type="checkbox"/> Hands/Fingers
<input type="checkbox"/> Ear	<input type="checkbox"/> Neck	<input type="checkbox"/> Shoulders/Arms	<input type="checkbox"/> Hips/Legs
<input type="checkbox"/> Face	<input type="checkbox"/> Back	<input type="checkbox"/> Multiple	<input type="checkbox"/> General
<input type="checkbox"/> Other (give details):			
10. Nature Of Injury (More than one box may be ticked):			
<input type="checkbox"/> Fracture	<input type="checkbox"/> Dislocation	<input type="checkbox"/> Sprain/Strain	<input type="checkbox"/> Poisoning
<input type="checkbox"/> Burns	<input type="checkbox"/> Internal Injury	<input type="checkbox"/> Open Wound (Laceration)	<input type="checkbox"/> Multiple Injuries
<input type="checkbox"/> Amputation	<input type="checkbox"/> Superficial Injury	<input type="checkbox"/> Contusion (Bruise) With Skin Intact	<input type="checkbox"/> Illness Or Disease
<input type="checkbox"/> Concussion	<input type="checkbox"/> Foreign Body	<input type="checkbox"/> Nerves/Spinal Cord	<input type="checkbox"/> Other
<input type="checkbox"/> Effects of Weather, Exposure, Pressure & Other External Causes (eg: Heat Stress, Drowning, Electrocutation)			
Details:			
11. If Property Was Damaged, Give Details Of Equipment And Describe The Damage:			
no			
12. In Relation To The Task Being Undertaken At The Time Of The Incident/Accident:			
Was Correct Personal Protective Equipment (PPE) Being Used?	yes		
Describe the PPE: Hard hat, eye protection, hearing protection, reflective vest			
13. In Your Opinion, What Were The Contributing Factors Resulting In This Incident:			
A malfunctioning pressure release valve....			
14. Witnesses			
Print Name:	Sean Praetzel	Signature:	
Print Name:	Daniel Ruman	Signature:	
Print Name:		Signature:	
15. Comments By Persons Affected:			
An incident report is being completed by Peregrine Diamonds			
Signed:	Dave Pickton	Date:	April 1, 2013

#2013-004



PEREGRINE
DIAMONDS LTD.

INCIDENT/ACCIDENT REPORT FORM – PEREGRINE DIAMONDS

1. INCIDENT DETAILS	Person Reporting	Person Injured
Name:	Alan O'Connor	NA
Position:	Project Manager	NA
Employment Status:	<i>PGD Employee / Seasonal / Contractor</i>	<i>PGD Employee / Seasonal / Contractor</i>
Company (If Contractor):		
Date:	April 12, 2013	Time: 10:00 am
Location:	Chidliak Property – CH-6 Camp	
2. CLASSIFICATION (More than one box may be ticked):		
<input type="checkbox"/> Hazard	<input type="checkbox"/> Near Miss	<input type="checkbox"/> First Aid
<input type="checkbox"/> Lost time/Restricted work*(classified injury)	<input type="checkbox"/> Fatality *(classified injury)	<input type="checkbox"/> Property damage
<input type="checkbox"/> Off The Job		<input checked="" type="checkbox"/> Medical treatment
		<input checked="" type="checkbox"/> Environmental / Community
3. Exploration Activity Being Undertaken At The Time Of The Incident:		
<input checked="" type="checkbox"/> Vehicle	<input type="checkbox"/> Traversing	<input type="checkbox"/> Aviation
<input type="checkbox"/> Drilling Activity	<input checked="" type="checkbox"/> Camp Activity	<input type="checkbox"/> Office
		<input type="checkbox"/> Other
4. Environmental / Community Incident (More than one box may be ticked):		
<input type="checkbox"/> Fire (indicate area)	<input checked="" type="checkbox"/> Chemical/Fuel spill (indicate quantity) 8 litres diesel	
<input type="checkbox"/> Interference with activities/community complaints	<input type="checkbox"/> Contamination of water supply, potentially	
<input type="checkbox"/> Damage to cultural/sensitive site	<input type="checkbox"/> Community health or welfare issues.	
Other (give details):		
5. Describe The Incident (Include events leading up to, during and afterwards):		
<p>Dave Clarke of Nuna Logistics was using the Sno-Cat to clear snow away from the north berm at CH-6 camp as the berms had drifted in with snow during the recent blizzard. Dave had been told by someone that there was only a metre space between the south berm (which had already been shovelled out) and the north berm and that there was only one row of drums. He started clearing snow at what he thought was a point past the north end of the berm, but was actually on top of the drums. The Sno-Cat partially crushed two diesel drums and the metal points on the tracks pierced three diesel drums. Diesel leaked from one drum only. Approximately eight litres of fuel leaked from the one drum. The fuel leaked into the snow inside the berm and no fuel reached the ground. The contaminated snow was shovelled into pails and burned in the incinerator. The diesel from the damaged drums was pumped into the Morooka's fuel tank. The drums will be de-headed and placed inside another drum for transport to Iqaluit and eventual disposal at QE's facility.</p>		
6. Recommended Follow-Up Or Action Required:		By Whom:
Place pickets at all corners of the berms to ensure they are well located.		Ron Corey
GPS corners of both berms		Alan O'Connor
Dispose of damaged drums		Ron Corey
		By When:
		Immediately
		Immediately
		As soon as practical
7. Manager's/Supervisor's Comments:		
Although this incident could have been worse, the fuel berm served its purpose to contain the leak. Clarke's response to the incident was appropriate and quick.		
Signature:		Date: April 12, 2013



PEREGRINE
DIAMONDS LTD.

**INCIDENT/ACCIDENT REPORT FORM – PEREGRINE
DIAMONDS**

1. INCIDENT DETAILS	Person Reporting	Person Injured
Name:	Ron Corey	None
Position:	Operations Manager	
Employment Status:	PGD Employee	PGD Employee / Seasonal / Contractor
Company (If Contractor):		
Date: April 12, 2013		Time: 8:30 am
Location:		
2. CLASSIFICATION (More than one box may be ticked):		
<input type="checkbox"/> Hazard	<input type="checkbox"/> Near Miss	<input type="checkbox"/> First Aid
<input type="checkbox"/> Lost time/Restricted work*(classified injury)	<input type="checkbox"/> Fatality *(classified injury)	<input type="checkbox"/> Property damage
<input type="checkbox"/> Off The Job		<input checked="" type="checkbox"/> Medical treatment
		<input checked="" type="checkbox"/> Environmental / Community
3. Exploration Activity Being Undertaken At The Time Of The Incident:		
<input type="checkbox"/> Vehicle	<input type="checkbox"/> Traversing	<input type="checkbox"/> Aviation
<input checked="" type="checkbox"/> Bulk Sample	<input type="checkbox"/> Camp Activity	<input type="checkbox"/> Office
<input type="checkbox"/> Other		
4. Environmental / Community Incident (More than one box may be ticked):		
<input type="checkbox"/> Fire (indicate area)	<input checked="" type="checkbox"/> Fuel spill (indicate quantity) ½ L	
<input type="checkbox"/> Interference with activities/community complaints	<input type="checkbox"/> Contamination of water supply, potentially	
<input type="checkbox"/> Damage to cultural/sensitive site	<input type="checkbox"/> Community health or welfare issues.	
Other (give details):		
5. Describe The Incident (Include events leading up to, during and afterwards):		
<p>We have an 8'x8' storage/warm up tent located at the CH-6 bulk sample site. At about 8:30 Jennifer Pell went in to warm up and discovered the tent heater carburettor was over flowing onto the plywood floor. Jennifer called out for assistance and Alan O'Connor who was nearby shut the tank valve off. Ron Corey who was also nearby put some oil absorbents on the oil spill.</p>		
<p>Ron Corey opened the carburettor to see why the float stuck. The arm on the float had a small bend and was binding on the case. So it was adjusted.</p>		
<p>About ¼ L of oil drip through the seam in the plywood onto the snow below. This was shovelled up and incinerated.</p>		
6. Recommended Follow-Up Or Action Required:		
Have a drip tray under the stove.	By Whom: Ron Corey	By When: April 12/13
7. Manager's/Supervisor's Comments:		



Canada

NT-NU SPILL REPORT

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

NT-NU 24-HOUR SPILL REPORT LINE

TEL: (867) 920-8130

FAX: (867) 873-6924

EMAIL: spills@gov.nt.ca

REPORT LINE USE ONLY

A	REPORT DATE: MONTH – DAY – YEAR		REPORT TIME		<input type="checkbox"/> ORIGINAL SPILL REPORT, OR <input type="checkbox"/> UPDATE # _____ TO THE ORIGINAL SPILL REPORT	REPORT NUMBER _____
	B		OCCURRENCE DATE: MONTH – DAY – YEAR			
C	LAND USE PERMIT NUMBER (IF APPLICABLE)			WATER LICENCE NUMBER (IF APPLICABLE)		
D	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOCATION				REGION <input type="checkbox"/> NWT <input type="checkbox"/> NUNAVUT <input type="checkbox"/> ADJACENT JURISDICTION OR OCEAN	
E	LATITUDE			LONGITUDE		
	DEGREES	MINUTES	SECONDS	DEGREES	MINUTES	SECONDS
F	RESPONSIBLE PARTY OR VESSEL NAME		RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION			
G	ANY CONTRACTOR INVOLVED		CONTRACTOR ADDRESS OR OFFICE LOCATION			
H	PRODUCT SPILLED		QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES	U.N. NUMBER		
	SECOND PRODUCT SPILLED (IF APPLICABLE)		QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES	U.N. NUMBER		
I	SPILL SOURCE		SPILL CAUSE	AREA OF CONTAMINATION IN SQUARE METRES		
J	FACTORS AFFECTING SPILL OR RECOVERY		DESCRIBE ANY ASSISTANCE REQUIRED	HAZARDS TO PERSONS, PROPERTY OR ENVIRONMENT		
K	ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS					
L	REPORTED TO SPILL LINE BY	POSITION	EMPLOYER	LOCATION CALLING FROM	TELEPHONE	
	M	ANY ALTERNATE CONTACT	POSITION	EMPLOYER	ALTERNATE CONTACT LOCATION	ALTERNATE TELEPHONE
REPORT LINE USE ONLY						
N	RECEIVED AT SPILL LINE BY	POSITION	EMPLOYER	LOCATION CALLED	REPORT LINE NUMBER	
		STATION OPERATOR		YELLOWKNIFE, NT	(867) 920-8130	
LEAD AGENCY <input type="checkbox"/> EC <input type="checkbox"/> CCG <input type="checkbox"/> GNWT <input type="checkbox"/> GN <input type="checkbox"/> ILA <input type="checkbox"/> INAC <input type="checkbox"/> NEB <input type="checkbox"/> TC			SIGNIFICANCE <input type="checkbox"/> MINOR <input type="checkbox"/> MAJOR <input type="checkbox"/> UNKNOWN		FILE STATUS <input type="checkbox"/> OPEN <input type="checkbox"/> CLOSED	
AGENCY		CONTACT NAME	CONTACT TIME	REMARKS		
LEAD AGENCY						
FIRST SUPPORT AGENCY						
SECOND SUPPORT AGENCY						
THIRD SUPPORT AGENCY						

PEREGRINE DIAMONDS LTD.
March-April 2013 CH-6 Kimberlite Trenching Program
Summary of Activities and Trench Monitoring Plan
October 4, 2013

Background

Peregrine Diamonds Ltd. (“Peregrine”) is a mineral exploration company specializing in diamond exploration. Peregrine’s Chidliak project is located on the Hall Peninsula of Baffin Island approximately 130 kilometres northeast of Iqaluit, Nunavut. Peregrine’s land use activities are authorized under Aboriginal Affairs and Northern Development Land Use Permit N2012C0024 and Nunavut Water Board Water Use Licence 2BE-CHI1218.

Trenching is an authorized activity under both permits. In December 2012 a trench plan for Peregrine’s CH-6 kimberlite was submitted to the Nunavut Water Board for approval. A technical review of the trenching plan was conducted by the NWB and the plan was approved in January 2013. A copy of the trench plan is attached as Appendix “A”.

Winter 2013 CH-6 Trench

The CH-6 trenching program was undertaken in March and April of 2013. All activities were conducted out of Peregrine’s CH-6 Camp located approximately 250 metres northeast of the CH-6 kimberlite. Pertinent coordinates are listed in Table 1.

Table 1: Camp and Trench Coordinates

Sample #	Description	Projection	Datum	Zone	Easting (mE)	Northing (mN)
1.	CH-6 Camp	UTM	NAD83	19	619,627	7,135,393
2.	CH-6 Trench	UTM	NAD83	19	619,440	7,135,220

At the conclusion of kimberlite sampling, the trench was backfilled with native overburden that had been excavated from the trench and set aside in a spill pile for reclamation at the end of the trenching program. The angularity of the backfilled material resulted in a small mound measuring approximately 45 centimeters above ground level. Figure 1 illustrates the trench at the completion of the winter 2013 reclamation.



Figure 1: Reclaimed CH-6 trench looking north (April 2013)

Summer 2013 Site Visit

The CH-6 trench was inspected in late July following the late snowmelt. At this time it was noted that a depression had formed in a portion of the backfilled trench area. Melt water had accumulated into the hollow and a small pool had formed. The depression measures 0.033 hectares and is approximately one meter deep at the centre. Some outflow was noted from the pool and, although the water flowing from the trench was clear, a silt fence was set up at the overflow point to capture silt particles that potentially could be entrained in the ephemeral water flowing from the melting snow pack. Figure 2 illustrates the water-filled depression and silt fence.



Figure 2: Trench depression, pooled water and silt fence

On August 15th, EBA Engineering Consultants Ltd. collected two water samples in the trench area. The first sample was taken from water contained within the hollow and the second sample was collected from the overflow. Sample coordinates are listed in Table 2.

Table 2: Water Sample Coordinates

Sample #	Description	Projection	Datum	Zone	Easting (mE)	Northing (mN)
L1349303-1	Inside Trench	UTM	NAD83	19	619,444	7,135,232
L1349303-2	Overflow	UTM	NAD83	19	619,422	7,135,245

Figure 3 illustrates the backfilled trench in relation to the trench excavation and the two water sample locations.

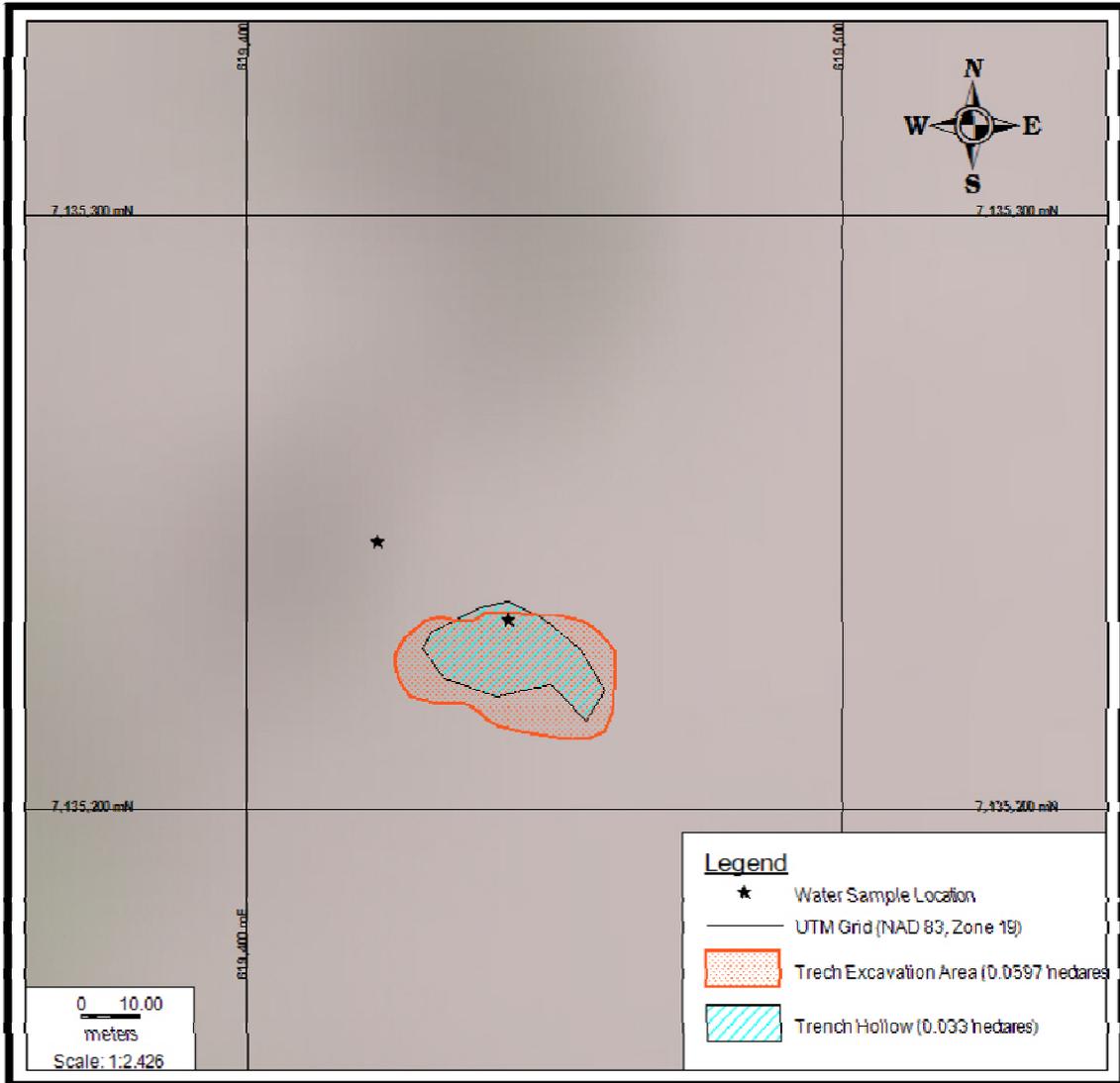


Figure 3: Trench excavation, backfilled trench and water sample locations.

Article 15 of NWB water use licence 2BE-CHI-1218 establishes standards for trench water quality. These standards are set out in Table 3.

Table 3: Maximum Concentration for Trench Water

Parameter	Maximum Concentration of any Grab Sample (mg/L)	L1349303-1 (within trench) (mg/L)	L1349303-2 (trench outflow) (mg/L)
Total Arsenic	0.50	<0.00040	<0.00040
Total Copper	0.30	0.0102	0.0079
Total Lead	0.20	0.00196	0.00151
Total Nickel	0.50	0.0143	0.0106
Total Zinc	0.50	0.0258	0.0211
Total Suspended Solids	25.0	13.0	12.0
Oil and Grease	no visible sheen	<1.0 (no sheen)	<1.0 (no sheen)
pH	Between 6 and 9.5	6.60	6.62

Samples were processed at ALS Analytical Laboratories in Edmonton, Alberta. Each sample was well within the maximum concentration limits. Laboratory certificates are included in Appendix “B” as well as a water analysis by EBA Biologist, Karla Langlois.

Further Monitoring and Remediation

As a volume of rock was removed from the CH6 trench, subsidence was anticipated and noted in the “Proposed Monitoring Program” section of the trench plan filed with the Nunavut Water Board.

The trench was backfilled and contoured with all available native material at the conclusion of sampling activities in April of 2013. Peregrine will continue to monitor both the size of the depression and the quality of the water contained within. The site will be re-visited again following the snow melt in 2014. All observations will be detailed in a subsequent monitoring report in 2014.

Appendix “A”

- CH-6 Trench Plan

TRENCHING PLAN – CH-6 KIMBERLITE

December 11, 2012

The proposed trench location is at the CH-6 Kimberlite. This kimberlite is an approved bulk sample location (Amendment 4).

Location of Trench

- 1:250,000 NTS = 26B
- 1:50,000 NTS = 26B-07
- Latitude (y) = 64.321845, Longitude(x) = -66.529304
- UTM, NAD83, Zone 19, Easting (x) = 619,432.1mE, Northing (y) = 7,135,200.3mN

Approximate Dimensions

The trench will measure approximately 20 metres long by 15 metres wide. Most of the trench will be three to four meters deep. The sample will be collected from a smaller area to a maximum depth of 10 metres.

Approximate Mass

The estimated sample mass is 200 tonnes.

Proposed Mitigation Measures for the prevention of the transport of sediments, blasting residues, fly rock and other materials from the trench area to nearby water bodies.

- 1) The nearest water-body and/or watercourse is a small stream 500 metres southwest of the trenching activity.
- 2) The potential for direct flow into the watercourse noted above is limited.
- 3) The terrain is flat, thus the natural topography is favourable for preventing the transport of sediments, blasting residues, fly-rock and other materials.
- 4) All activities will take place in the winter under sub-zero conditions where water is frozen.
- 5) No water discharge from the trench is anticipated.
- 6) This is a small operation and bulk explosives are not required.
- 7) Blast shots will be small and thoroughly burnt at ignition.
- 8) A limited number of blast events will occur (two or three).
- 9) The blast radius will be small due to the small shot size.
- 10) Best work practices will be applied. Cover rock/sediments will be piled neatly and stockpiled for reclamation.
- 11) The trench will be reclaimed immediately after the sample is excavated. The trench area, once re-filled with reserved native material, will be contoured to match the surrounding landscape and prevent erosion.

Projected Volume and Quality of Water Discharge

- 1) Water is not being utilized for this activity.
- 2) No waste water will be generated from this activity.
- 3) No water discharge is anticipated.
- 4) Trenching activities will take place under frozen winter conditions.

Proposed Monitoring Program

The trench will be reclaimed after the sample is excavated. As a volume of rock has been removed, some subsidence is anticipated. This may result in a small depression in the centre of the trench where water can pool. The site will be monitored during subsequent field programs. If water is present during the summer of 2013 a water sample will be collected and sent for analysis.

Appendix “B”

- Laboratory Certificates
- EBA Analysis Letter



A TETRA TECH COMPANY

September 30, 2013

Peregrine Diamonds Ltd.
201 - 1250 Homer Street
Vancouver, BC
V6B1C6

ISSUED FOR REVIEW
EBA FILE: Y22103023
Via Email: dave@pdiam.com

Attention: David Willis, Land Administrator

Subject: Chidliak Exploration Site CH6,
August 2013 Water Quality Sampling Program

This "Issued for Review" report is provided solely for the purpose of client review and presents our findings and recommendations to date. Our findings and recommendations are provided only through an "Issued for Use" report, which will be issued subsequent to this review. You should not rely on the interim recommendations made herein. Once our report is issued for use, the "Issued for Review" document should be either returned to EBA or destroyed.

1.0 INTRODUCTION

On August 15, 2013 EBA Engineering Consultants Ltd. operating as EBA, A Tetra Tech Company (EBA) collected water quality samples at Peregrine Diamonds Ltd.'s (Peregrine's) Chidliak CH6 exploration site (CH6 trench), Nunavut (Figure 1). This sampling program was conducted in conjunction with the 2013 baseline environmental studies that included surface water quality sampling at twelve annual monitoring lakes, rivers, and streams in the regional study area.

Water quality samples were collected from the CH6 trench to satisfy Peregrines' Nunavut Water Board Type 2 Water Licence requirements (#2BE-CHI0813) for all effluent discharged from the trench. A small trench (approximately 450 square metres (m²)) exists at the CH6 Exploration site. The surrounding landscape at the trench site is characterized by a mid-slope barren rock habitat, dominated by cobble and exposed bedrock, with a gentle gradient to the north northwest. The nearest sensitive receiving environment is a creek at least 450 m to the northwest of the CH6 trench. At the time of the August 15 survey event, no water draining from the trench reached as far as the creek (Photo 1).

Ms. Karla Langlois of EBA conducted the sampling program following standardized sampling procedures and laboratory parameters that meet the water licence requirements. During this time, site weather conditions were overcast, approximately 8 degrees Celsius (°C), and moderate winds (approximately 20 kilometres per hour (km/hr)).

2.0 EXPLORATION TRENCH SAMPLING

A single water quality sample was collected along the shoreline of the trench (inside the trench) (Photo 2), as well as immediately down-gradient within a small trench overflow area (trench outflow) (Photo 3). This

EBA Engineering Consultants Ltd. operating as EBA, A Tetra Tech Company
PO Box 2244, 201, 4916 - 49 Street
Yellowknife, NT X1A 2P7 CANADA
p. 867.920.2287 f. 867.873.3324

trench overflow had a braided overland channel with shallow water (maximum depth measured was 8 cm) at the time of the site visit. The trench overflow channel did not drain into any natural receiving waters.

At each station, the general site conditions including floating particles, water colour, surface sheen, water depth, field pH, electrical conductivity (EC), and water temperature were recorded. A calibrated handheld Oakton® multi-parameter meter was used to record the field parameters. The water inside the CH6 trench appeared to be turbid likely due to wind action across the trench; however, no odour or surface hydrocarbon sheen were detected. Table 1 summarizes the site conditions reported at each sampling station.

Table 1. Summary of the Water Quality Station Field Conditions, August 15, 2013

Station	pH	Electrical Conductivity (µS/cm)	Surface Water Temperature (°C)	General Water Description
Inside Trench (CH6)	8.64	21.2	8.8	Water approx. 27 cm deep along the shoreline, turbid water likely due to wind action, no observable surface sheen, and no odour.
Outside Trench (CH6 outflow)	8.20	20.1	9.2	Water approx. 8 cm deep, low flow, slightly turbid water, no observable surface sheen, and no odour.

As outlined in the water licence, both water sampling locations were sampled for select parameters including five total metals, pH, total suspended solids (TSS), and oil and grease. Additional parameters were also sampled including routine and nutrient parameters, total organic carbon, and the full total metal package.

Water quality samples were submitted to ALS Laboratory Group (ALS) in Yellowknife on August 17, 2013, and analyzed for the full suite of parameters required under the water licence.

The laboratory detection limits are appropriate for the Canadian Council of the Ministers of the Environment (CCME) Freshwater Aquatic Life (FAL) guidelines and the water licence effluent quality criteria.

2.1 Quality Assurance and Quality Control (QA/QC)

Duplicate water quality samples and a field blank were collected on site, and a trip blank accompanied the sample bottles to the site, left intact, and returned to the laboratory with the water quality samples. These QA/QC samples were collected in conjunction with the baseline water quality sampling program across the regional study area.

Laboratory analysis indicated that the trip and field blank results were all below their respective laboratory detection limit, except for a single detection of turbidity in the field blank (Table 2). However, the level of turbidity reported in the field blank was near the laboratory detection limit (approximately 1 times the detection limit), which represents a level with greatest probability of laboratory equipment error.

Consequently, the sample methods employed during the collection, transportation, and analyses of the samples were considered satisfactory and did not lead to the introduction of potential contaminants.

Two duplicate samples were collected during the regional baseline water quality program. The duplicate samples represent the sampling and analytical methods employed during collection of the field samples, including at the CH6 exploration site. To determine the reliability of the duplicates, and therefore, the precision of the sampling and analytical methods, a relative percent difference (RPD) assessment was conducted between the duplicates and the field samples collected (Tables 3a and 3b). Since analytical error increases near the detection limit, only the results five times greater than the detection limit were considered applicable to the RPD assessment (results that were not applicable to the RPD assessment do not imply an unreliable duplicate). Based on the RPD assessment, all the duplicate sample parameters were considered reliable and the field sampling and analytical methods employed were acceptable.

Detailed laboratory analysis results are provided in Appendix A.

2.2 Sample Results

The water licence provides effluent quality criteria for water discharged from the trench 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 from the water samples collected from the Inside Trench (sample CH6) station and immediately down-gradient at the Trench Outflow (sample CH6-2) station indicate that all parameters met the water licence effluent quality criteria (Table 4).

Detailed laboratory analysis results are provided in Appendix A.

3.0 LIMITATIONS OF REPORT

This report and its contents are intended for the sole use of Peregrine Diamonds Ltd. and their agents. EBA Engineering Consultants Ltd. 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 EBA's Services Agreement. EBA's General Conditions are provided in Appendix B of this report.

4.0 CLOSURE

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

Sincerely,
EBA Engineering Consultants Ltd.

Prepared by:

Reviewed by:

ISSUED FOR REVIEW

ISSUED FOR REVIEW

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TABLES

Table 1	Summary of the Water Quality Station Field Conditions, August 15, 2013
Table 2	QA/QC Results
Table 3a	August Field Event Duplicate 1 Assessment (Relative Per Cent Difference), 2013
Table 3b	August Field Event Duplicate 2 Assessment (Relative Per Cent Difference), 2013
Table 4	August CH6 Exploration Site Water Quality Results, 2013

Table 2. QA/QC Results, August 2013

Parameter	August 15 - 16, 2013		Units	Detection Limit
	Trip Blank	Field Blank		
Major Ions, Nutrients, and Inorganics				
Calcium (Ca)-Total	<0.50	<0.50	mg/L	0.5
Magnesium (Mg)-Total	<0.10	<0.10	mg/L	0.1
Phosphorus (P), Total	<0.020	<0.020	mg/L	0.02
Potassium (K)-Total	<0.50	<0.50	mg/L	0.5
Sodium (Na)-Total	<1.0	<1.0	mg/L	1
Hardness (as CaCO ₃), calcul	<1.3	<1.3	mg/L	1.3
Nitrate and Nitrite as N	<0.071	<0.071	mg/L	0.071
Nitrate (as N)	<0.050	<0.050	mg/L	0.05
Nitrite (as N)	<0.050	<0.050	mg/L	0.05
Nitrogen, Total	<0.21	<0.21	mg/L	0.21
Total Kjeldahl Nitrogen	<0.20	<0.20	mg/L	0.2
pH	5.07	5.18	pH	0.1
Electrical Conductivity (EC)	0.62	0.61	uS/cm	0.2
Alkalinity, Total	<2.0	<2.0	mg/L	2.0
Ammonia-N	<0.0050	<0.0050	mg/L	0.005
Total Organic Carbon	<1.0	<1.0	mg/L	1
Total Suspended Solids	<3.0	<3.0	mg/L	3
Turbidity	<0.10	0.11	NTU	0.1
Organics				
Oil and Grease	<1.0	<1.0	mg/L	1.0
Total Metals				
Aluminum (Al)	<0.0050	<0.0050	mg/L	0.0050
Antimony (Sb)	<0.00040	<0.00040	mg/L	0.00040
Arsenic (As)	<0.00040	<0.00040	mg/L	0.00040
Barium (Ba)	<0.0030	<0.0030	mg/L	0.0030
Beryllium (Be)	<0.0010	<0.0010	mg/L	0.0010
Boron (B)	<0.050	<0.050	mg/L	0.050
Cadmium (Cd)	<0.000010	<0.000010	mg/L	0.000010
Chromium (Cr)	<0.0010	<0.0010	mg/L	0.0010
Cobalt (Co)	<0.0020	<0.0020	mg/L	0.0020
Copper (Cu)	<0.0010	<0.0010	mg/L	0.0010
Iron (Fe)	<0.010	<0.010	mg/L	0.010
Lead (Pb)	<0.00010	<0.00010	mg/L	0.00010
Lithium (Li)	<0.010	<0.010	mg/L	0.010
Manganese (Mn)	<0.0020	<0.0020	mg/L	0.0020
Mercury (Hg)	<0.000020	<0.000020	mg/L	0.000020
Molybdenum (Mo)	<0.0050	<0.0050	mg/L	0.0050
Nickel (Ni)	<0.0020	<0.0020	mg/L	0.0020
Selenium (Se)	<0.00040	<0.00040	mg/L	0.00040
Silver (Ag)	<0.000020	<0.000020	mg/L	0.000020
Strontium (Sr)	<0.00010	<0.00010	mg/L	0.00010
Thallium (Tl)	<0.00010	<0.00010	mg/L	0.00010
Tin (Sn)	<0.050	<0.050	mg/L	0.050
Titanium (Ti)	<0.0010	<0.0010	mg/L	0.0010
Uranium (U)	<0.00010	<0.00010	mg/L	0.00010
Vanadium (V)	<0.0010	<0.0010	mg/L	0.0010
Zinc (Zn)	<0.0040	<0.0040	mg/L	0.0040
Legend				
Detectable Levels				
< = below the detection limit				

Table 3a. August Field Event Duplicate 1 Assessment (Relative Per Cent Difference), 2013

Parameter	August Field Event Results		Units	Detection Limit	Duplicate Assessment				
	Hydro10	Duplicate 1			Hydro10	Duplicate 1	Applicable? Yes or No ¹	RPD ²	Duplicate Reliable? Yes or No ³
Major Ions, Nutrients, and Inorganics									
Calcium (Ca)-Total	<0.50	<0.50	mg/L	0.50	-	-	No	-	Yes
Phosphorus (P), Total	0.13	0.13	mg/L	0.10	1.3	1.3	No	-	Yes
Potassium (K)-Total	<0.020	<0.020	mg/L	0.020	-	-	No	-	Yes
Magnesium (Mg)-Total	<0.50	<0.50	mg/L	0.50	-	-	No	-	Yes
Sodium (Na)-Total	<1.0	<1.0	mg/L	1.0	-	-	No	-	Yes
Hardness (as CaCO3)	<1.3	<1.3	mg/L	1.3	-	-	No	-	Yes
Nitrate and Nitrite as N	0.173	0.169	mg/L	0.071	2.44	2.38	No	-	Yes
Nitrate (as N)	0.173	0.169	mg/L	0.050	3.46	3.38	No	-	Yes
Nitrite (as N)	<0.050	<0.050	mg/L	0.050	-	-	No	-	Yes
Nitrogen, Total	<0.21	<0.21	mg/L	0.21	-	-	No	-	Yes
Total Kjeldahl Nitrogen	<0.20	<0.20	mg/L	0.20	-	-	No	-	Yes
pH	5.81	5.73	pH	0.10	58.1	57.3	Yes	1.39	Yes
Electrical Conductivity (EC)	6.69	6.59	uS/cm	0.20	33.5	33.0	Yes	1.51	Yes
Alkalinity, Total	<2.0	<2.0	mg/L	2.0	-	-	No	-	Yes
Ammonia-N	0.0101	0.0130	mg/L	0.0050	2.02	2.60	No	-	Yes
Total Organic Carbon	1.3	1.3	mg/L	1.0	1.3	1.30	No	-	Yes
Total Suspended Solids	<3.0	<3.0	mg/L	3.0	-	-	No	-	Yes
Turbidity	0.53	0.51	NTU	0.10	5.3	5.1	Yes	3.8	Yes
Organics									
Oil and Grease	<1.0	<1.0	mg/L	1.0	-	-	-	-	Yes
Total Metals									
Aluminum (Al)	0.0214	0.0185	mg/L	0.0050	4.28	3.70	No	-	Yes
Antimony (Sb)	<0.00040	<0.00040	mg/L	0.00040	-	-	No	-	Yes
Arsenic (As)	<0.00040	<0.00040	mg/L	0.00040	-	-	No	-	Yes
Barium (Ba)	0.0030	<0.0030	mg/L	0.0030	-	-	No	-	Yes
Beryllium (Be)	<0.0010	<0.0010	mg/L	0.0010	-	-	No	-	Yes
Boron (B)	<0.050	<0.050	mg/L	0.050	-	-	No	-	Yes
Cadmium (Cd)	<0.000010	<0.000010	mg/L	0.000010	-	-	No	-	Yes
Chromium (Cr)	<0.0010	<0.0010	mg/L	0.0010	-	-	No	-	Yes
Cobalt (Co)	<0.0020	<0.0020	mg/L	0.0020	-	-	No	-	Yes
Copper (Cu)	<0.0010	<0.0010	mg/L	0.0010	-	-	No	-	Yes
Iron (Fe)	0.013	0.011	mg/L	0.010	1.3	1.1	No	-	Yes
Lead (Pb)	<0.00010	<0.00010	mg/L	0.00010	-	-	No	-	Yes
Lithium (Li)	<0.010	<0.010	mg/L	0.010	-	-	No	-	Yes
Manganese (Mn)	<0.0020	<0.0020	mg/L	0.0020	-	-	No	-	Yes
Mercury (Hg)	<0.000020	<0.000020	mg/L	0.000020	-	-	No	-	Yes
Molybdenum (Mo)	<0.0050	<0.0050	mg/L	0.0050	-	-	No	-	Yes
Nickel (Ni)	<0.0020	<0.0020	mg/L	0.0020	-	-	No	-	Yes
Selenium (Se)	<0.00040	<0.00040	mg/L	0.00040	-	-	No	-	Yes
Silver (Ag)	<0.000020	<0.000020	mg/L	0.000020	-	-	No	-	Yes
Strontium (Sr)	0.00205	0.00202	mg/L	0.00010	20.5	20.2	Yes	1.47	Yes
Thallium (Tl)	<0.00010	<0.00010	mg/L	0.00010	-	-	No	-	Yes
Tin (Sn)	<0.050	<0.050	mg/L	0.050	-	-	No	-	Yes
Titanium (Ti)	0.0015	<0.0010	mg/L	0.0010	1.5	-	No	-	Yes
Uranium (U)	<0.00010	<0.00010	mg/L	0.00010	-	-	No	-	Yes
Vanadium (V)	<0.0010	<0.0010	mg/L	0.0010	-	-	No	-	Yes
Zinc (Zn)	<0.0040	<0.0040	mg/L	0.0040	-	-	No	-	Yes
Legend									
< = below the detection limit.									
¹ Applicability to the Relative Per Cent Difference (RPD) Assessment requires that results be at least 5 x the detection limit since analytical error increases									
² Relative Per Cent Difference. $RPD(\%) = 200 \times \frac{ABS(x - y)}{(x + y)}$, where ABS = Absolute difference, x = the analytical result of the original sample, y =									
³ Duplicate samples are reliable when their RPD is less than 20%.									
- = not applicable to the RPD Assessment.									

Table 3b. August Field Event Duplicate 2 Assessment (Relative Per Cent Difference), 2013

Parameter	August Field Event Results		Units	Detection Limit	Duplicate Assessment				
	Hydro9	Duplicate 2			Hydro9	Duplicate 2	Applicable? Yes or No ¹	RPD ²	Duplicate Reliable? Yes or No ³
Major Ions, Nutrients, and Inorganics									
Calcium (Ca)-Total	<0.50	<0.50	mg/L	0.50	-	-	No	-	Yes
Magnesium (Mg)-Total	0.12	0.12	mg/L	0.10	1.2	1.2	Yes	0.00	Yes
Phosphorus (P), Total	<0.020	<0.020	mg/L	0.020	-	-	No	-	Yes
Potassium (K)-Total	<0.50	<0.50	mg/L	0.50	-	-	No	-	Yes
Sodium (Na)-Total	<1.0	<1.0	mg/L	1.0	-	-	No	-	Yes
Hardness (as CaCO3)	<1.3	<1.3	mg/L	1.3	-	-	No	-	Yes
Nitrate and Nitrite as N	0.233	0.233	mg/L	0.071	3.28	3.28	No	-	Yes
Nitrate (as N)	0.233	0.233	mg/L	0.050	4.66	4.66	No	-	Yes
Nitrite (as N)	<0.050	<0.050	mg/L	0.050	-	-	No	-	Yes
Nitrogen, Total	0.23	0.23	mg/L	0.21	1.1	1.1	No	-	Yes
Total Kjeldahl Nitrogen	<0.20	<0.20	mg/L	0.20	-	-	No	-	Yes
pH	5.65	5.56	pH	0.10	56.5	55.6	Yes	1.61	Yes
Electrical Conductivity (EC)	6.62	6.53	uS/cm	0.20	33.1	32.65	Yes	1.37	Yes
Alkalinity, Total	<2.0	<2.0	mg/L	2.0	-	-	No	-	Yes
Ammonia-N	0.0123	0.0128	mg/L	0.0050	2.46	2.56	No	-	Yes
Total Organic Carbon	<1.0	1.1	mg/L	1.0	-	1.1	No	-	Yes
Total Suspended Solids	<3.0	<3.0	mg/L	3.0	-	-	No	-	Yes
Turbidity	1.85	1.79	NTU	0.10	18.5	17.9	Yes	3.30	Yes
Organics									
Oil and Grease	<1.0	<1.0	mg/L	1	-	-	-	-	Yes
Total Metals									
Aluminum (Al)	0.0687	0.0665	mg/L	0.0050	13.74	13.30	Yes	3.25	Yes
Antimony (Sb)	<0.00040	<0.00040	mg/L	0.00040	-	-	No	-	Yes
Arsenic (As)	<0.00040	<0.00040	mg/L	0.00040	-	-	No	-	Yes
Barium (Ba)	<0.0030	<0.0030	mg/L	0.0030	-	-	No	-	Yes
Beryllium (Be)	<0.0010	<0.0010	mg/L	0.0010	-	-	No	-	Yes
Boron (B)	<0.050	<0.050	mg/L	0.050	-	-	No	-	Yes
Cadmium (Cd)	<0.000010	<0.000010	mg/L	0.000010	-	-	No	-	Yes
Chromium (Cr)	<0.0010	<0.0010	mg/L	0.0010	-	-	No	-	Yes
Cobalt (Co)	<0.0020	<0.0020	mg/L	0.0020	-	-	No	-	Yes
Copper (Cu)	<0.0010	<0.0010	mg/L	0.0010	-	-	No	-	Yes
Iron (Fe)	0.050	0.048	mg/L	0.010	5.0	4.8	Yes	4.1	Yes
Lead (Pb)	<0.00010	<0.00010	mg/L	0.00010	-	-	No	-	Yes
Lithium (Li)	<0.010	<0.010	mg/L	0.010	-	-	No	-	Yes
Manganese (Mn)	<0.0020	<0.0020	mg/L	0.0020	-	-	No	-	Yes
Mercury (Hg)	<0.000020	<0.000020	mg/L	0.000020	-	-	No	-	Yes
Molybdenum (Mo)	<0.0050	<0.0050	mg/L	0.0050	-	-	No	-	Yes
Nickel (Ni)	<0.0020	<0.0020	mg/L	0.0020	-	-	No	-	Yes
Selenium (Se)	<0.00040	<0.00040	mg/L	0.00040	-	-	No	-	Yes
Silver (Ag)	<0.000020	<0.000020	mg/L	0.000020	-	-	No	-	Yes
Strontium (Sr)	0.00184	0.00187	mg/L	0.00010	18.4	18.7	Yes	1.62	Yes
Thallium (Tl)	<0.00010	<0.00010	mg/L	0.00010	-	-	No	-	Yes
Tin (Sn)	<0.050	<0.050	mg/L	0.050	-	-	No	-	Yes
Titanium (Ti)	0.0039	0.0036	mg/L	0.0010	3.9	3.6	No	-	Yes
Uranium (U)	<0.00010	<0.00010	mg/L	0.00010	-	-	No	-	Yes
Vanadium (V)	<0.0010	<0.0010	mg/L	0.0010	-	-	No	-	Yes
Zinc (Zn)	<0.0040	<0.0040	mg/L	0.0040	-	-	No	-	Yes
Legend									
< = below the detection limit.									
¹ Applicability to the Relative Per Cent Difference (RPD) Assessment requires that results be at least 5 x the detection limit since analytical error increases									
² Relative Per Cent Difference. RPD(%) = 200 x ABS(x - y)/(x + y), where ABS = Absolute difference, x = the analytical result of the original sample, y =									
³ Duplicate samples are reliable when their RPD is less than 20%.									
- = not applicable to the RPD Assessment.									

Table 4. August CH6 Exploration Site Water Quality Results, 2013

Parameter	Sampling Station Results		Units	Detection Limit	Water Licence MCAGS*
	CH6 Inside Trench	CH6-2 Trench Outflow			
Major Ions, Nutrients, and Inorganics					
Calcium (Ca)	1.09	1.03	mg/L	0.50	n/a
Magnesium (Mg)	3.35	2.68	mg/L	0.10	n/a
Phosphorus (P), Total	0.066	0.055	mg/L	0.020	n/a
Potassium (K)-Total	2.28	1.77	mg/L	0.50	n/a
Sodium (Na)-Total	1.3	1.2	mg/L	1.0	n/a
Hardness (as CaCO ₃)	16.5	13.6	mg/L	1.3	n/a
Nitrate and Nitrite as N	0.746	0.681	mg/L	0.071	n/a
Nitrate (as N)	0.746	0.681	mg/L	0.050	n/a
Nitrite (as N)	<0.050	<0.050	mg/L	0.050	n/a
Nitrogen, Total	0.75	0.68	mg/L	0.21	n/a
Total Kjeldahl Nitrogen	<0.20	<0.20	mg/L	0.20	n/a
pH	6.60	6.62	pH	0.10	6.0 - 9.5
Electrical Conductivity (EC)	19.2	18.3	uS/cm	0.20	n/a
Alkalinity, Total	4.2	0.0424	mg/L	2.0	n/a
Ammonia-N	0.0554	4.1	mg/L	0.0050	n/a
Total Organic Carbon	2.1	1.9	mg/L	1.0	n/a
Total Suspended Solids	13.0	12.0	mg/L	3.0	25.0
Turbidity	125	96.4	NTU	0.10	n/a
Organics					
Oil and Grease	<1.0**	<1.0**	mg/L	1.0	No visible sheen
Total Metals					
Aluminum (Al)	4.25	3.35	mg/L	0.0050	n/a
Antimony (Sb)	<0.00040	<0.00040	mg/L	0.00040	n/a
Arsenic (As)	<0.00040	<0.00040	mg/L	0.00040	0.50
Barium (Ba)	0.0378	0.0301	mg/L	0.0030	n/a
Beryllium (Be)	<0.0010	<0.0010	mg/L	0.0010	n/a
Boron (B)	<0.050	<0.050	mg/L	0.050	n/a
Cadmium (Cd)	0.000022	0.000018	mg/L	0.000010	n/a
Chromium (Cr)	0.0147	0.0115	mg/L	0.0010	n/a
Cobalt (Co)	0.0031	0.0024	mg/L	0.0020	n/a
Copper (Cu)	0.0102	0.0079	mg/L	0.0010	0.30
Iron (Fe)	5.19	4.00	mg/L	0.010	n/a
Lead (Pb)	0.00196	0.00151	mg/L	0.00010	0.20
Lithium (Li)	<0.010	<0.010	mg/L	0.010	n/a
Manganese (Mn)	0.0395	0.0289	mg/L	0.0020	n/a
Mercury (Hg)	<0.000020	<0.000020	mg/L	0.000020	n/a
Molybdenum (Mo)	<0.0050	<0.0050	mg/L	0.0050	n/a
Nickel (Ni)	0.0143	0.0106	mg/L	0.0020	0.50
Selenium (Se)	<0.00040	<0.00040	mg/L	0.00040	n/a
Silver (Ag)	0.000029	0.000022	mg/L	0.000020	n/a
Strontium (Sr)	0.0120	0.0114	mg/L	0.00010	n/a
Thallium (Tl)	0.00011	<0.00010	mg/L	0.00010	n/a
Tin (Sn)	<0.050	<0.050	mg/L	0.050	n/a
Titanium (Ti)	0.450	0.345	mg/L	0.0010	n/a
Uranium (U)	0.00014	0.00011	mg/L	0.00010	n/a
Vanadium (V)	0.0143	0.0112	mg/L	0.0010	n/a
Zinc (Zn)	0.0258	0.0211	mg/L	0.0040	0.50

Legend

*Nunavut Water Board Type 2 Water Licence effluent quality criteria (#2BE-CHI0813)

**No observable surface sheen was noted at the time of the field sampling event

MCAGS = Maximum Concentration of Any Grab Sample as set out in the water licence

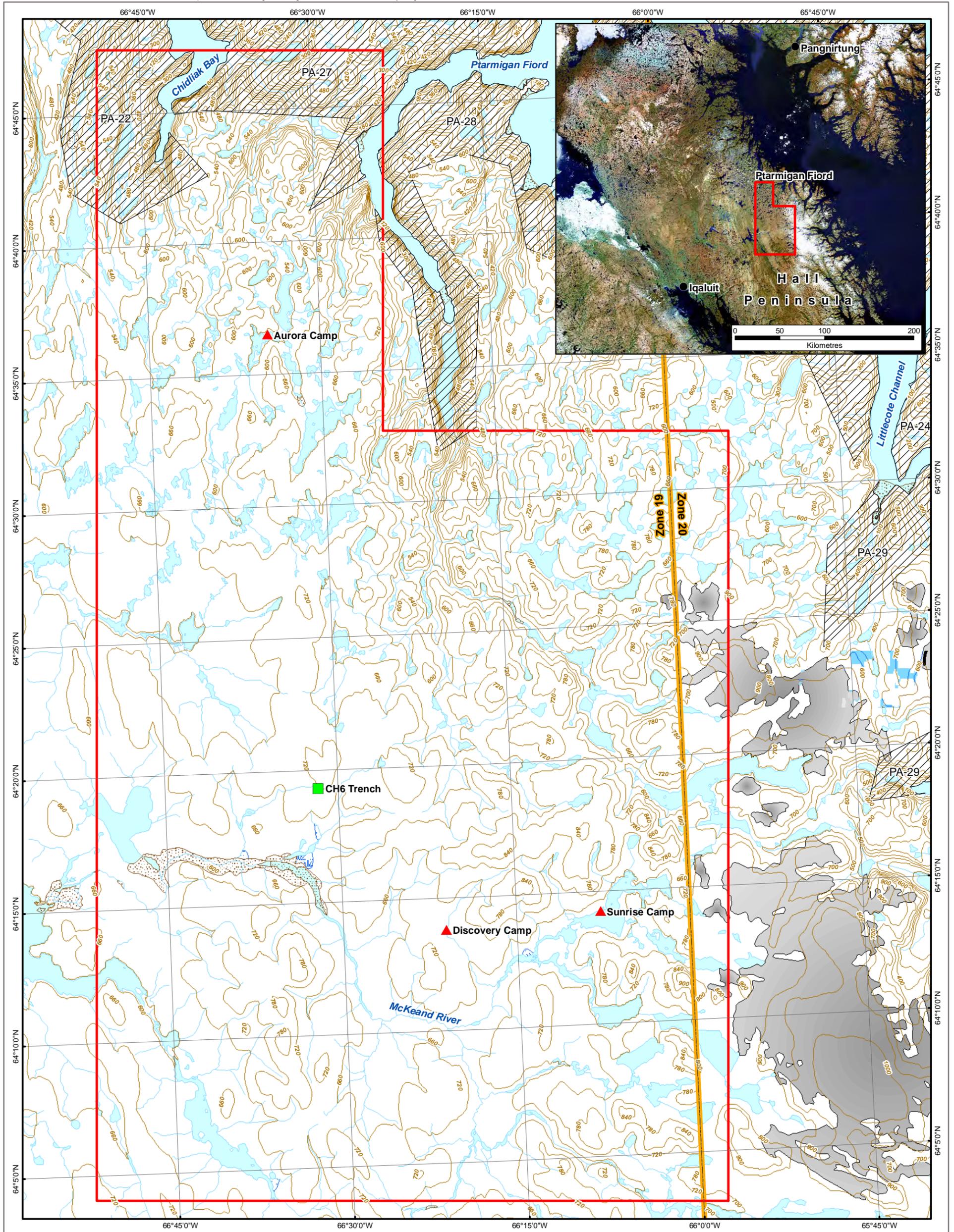
< denotes result below the laboratory detection level

n/a denotes not applicable under the water licence

Outside the Water Licence Effluent Quality Criteria

FIGURE

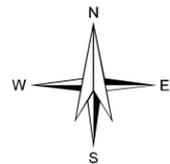
Figure 1 Chidliak CH6 Exploration Site Location



LEGEND

- ▲ Camp Location
- CH6 Trench
- 2013 Study Area
- Inuit-Owned Lands (IOLs)
- UTM Zone Boundary
- Contour (60 m)
- Watercourse
- Sand
- Permanent Snow and Ice
- Waterbody
- Wetland

NOTES
Base data source: 1:250,000 NTS



CHIDIK BASELINE STUDIES 2013

**Chidiak CH6
Exploration Site Location**

PROJECTION UTM Zone 19	DATUM NAD83	CLIENT
Scale: 1:250,000		 A TETRA TECH COMPANY

FILE NO.
Y22103023-01_Figure01_Regional.mxd

PROJECT NO. Y22103023-01	DWN MEZ	CKD SL	APVD KL	REV 0
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OFFICE EBA-VANC	DATE September 27, 2013
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STATUS
ISSUED FOR REVIEW

Figure 1

PHOTOGRAPHS

-
- Photo 1 At the time of the August 2013 field event, no water from inside the CH6 trench (indicated by an arrow) drained into the creek (seen in the background).
- Photo 2 The sampling station at the CH6 exploration trench appeared turbid at the time of the August field event likely due to wind action.
- Photo 3 The CH6 trench outflow sampling station (as indicated by an arrow) was shallow at the time of the August field event.



Photo 1: At the time of the August 2013 field event, no water from inside the CH6 trench (indicated by an arrow) drained into the creek (seen in the background).



Photo 2: The sampling station at the CH6 exploration trench appeared turbid at the time of the August field event likely due to wind action.

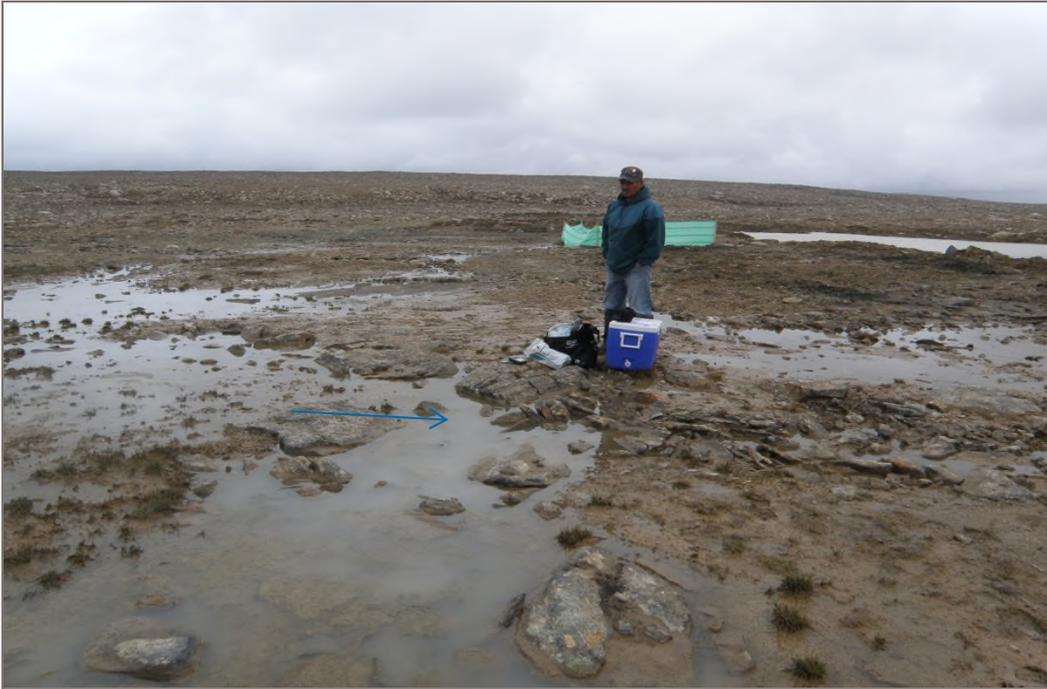


Photo 3: The CH6 trench outflow sampling station (as indicated by an arrow) was shallow at the time of the August field event.

APPENDIX A

LABORATORY ANALYSIS

ALS LABORATORY GROUP CHEMICAL ANALYSIS REPORT

Lab ID	Sample ID	Test Description	Result	Qualifier	D.L.	Units	Extracted	Analyzed	By
L1349303-1	CH6								
		Sample Date: K.L. on 15-AUG-13 @ 12:00							
		Matrix: Water							
		Routine Water Analysis							
		Sulfate by IC							
		Sulfate (SO4)	<0.50		0.5	mg/L		17-AUG-13	AMY
		Ion Balance Calculation							
		Ion Balance	Low EC			%		29-AUG-13	
		TDS (Calculated)	9.2			mg/L		29-AUG-13	
		Hardness (as CaCO3)	5.9			mg/L		29-AUG-13	
		Dissolved Metals in Water by CRC ICPMS							
		Calcium (Ca)-Dissolved	0.85		0.5	mg/L		28-AUG-13	MX
		Magnesium (Mg)-Dissolved	0.92		0.1	mg/L		28-AUG-13	MX
		Potassium (K)-Dissolved	<0.50		0.5	mg/L		28-AUG-13	MX
		Sodium (Na)-Dissolved	1.1		1	mg/L		28-AUG-13	MX
		Chloride by IC							
		Chloride (Cl)	0.51		0.5	mg/L		17-AUG-13	AMY
		TOT Metals CCME Fresh Water Aquatic Life							
		Total Metals in Water by CRC ICPMS							
		Aluminum (Al)-Total	4.25		0.005	mg/L		28-AUG-13	MSP
		Antimony (Sb)-Total	<0.00040		0.0004	mg/L		28-AUG-13	MSP
		Arsenic (As)-Total	<0.00040		0.0004	mg/L		28-AUG-13	MSP
		Barium (Ba)-Total	0.0378		0.003	mg/L		28-AUG-13	MSP
		Beryllium (Be)-Total	<0.0010		0.001	mg/L		28-AUG-13	MSP
		Boron (B)-Total	<0.050		0.05	mg/L		28-AUG-13	MSP
		Calcium (Ca)-Total	1.09		0.5	mg/L		28-AUG-13	MSP
		Chromium (Cr)-Total	0.0147		0.001	mg/L		28-AUG-13	MSP
		Cobalt (Co)-Total	0.0031		0.002	mg/L		28-AUG-13	MSP
		Copper (Cu)-Total	0.0102		0.001	mg/L		28-AUG-13	MSP
		Iron (Fe)-Total	5.19		0.01	mg/L		28-AUG-13	MSP
		Lead (Pb)-Total	0.00196		0.0001	mg/L		28-AUG-13	MSP
		Lithium (Li)-Total	<0.010		0.01	mg/L		28-AUG-13	MSP
		Magnesium (Mg)-Total	3.35		0.1	mg/L		28-AUG-13	MSP
		Manganese (Mn)-Total	0.0395		0.002	mg/L		28-AUG-13	MSP
		Molybdenum (Mo)-Total	<0.0050		0.005	mg/L		28-AUG-13	MSP
		Nickel (Ni)-Total	0.0143		0.002	mg/L		28-AUG-13	MSP
		Potassium (K)-Total	2.28		0.5	mg/L		28-AUG-13	MSP
		Selenium (Se)-Total	<0.00040		0.0004	mg/L		28-AUG-13	MSP
		Silver (Ag)-Total	0.000029		0.00002	mg/L		28-AUG-13	MSP
		Sodium (Na)-Total	1.3		1	mg/L		28-AUG-13	MSP
		Strontium (Sr)-Total	0.0120		0.0001	mg/L		28-AUG-13	MSP
		Thallium (Tl)-Total	0.00011		0.0001	mg/L		28-AUG-13	MSP
		Tin (Sn)-Total	<0.050		0.05	mg/L		28-AUG-13	MSP
		Titanium (Ti)-Total	0.450		0.001	mg/L		28-AUG-13	MSP
		Uranium (U)-Total	0.00014		0.0001	mg/L		28-AUG-13	MSP
		Vanadium (V)-Total	0.0143		0.001	mg/L		28-AUG-13	MSP
		Zinc (Zn)-Total	0.0258		0.004	mg/L		28-AUG-13	MSP
		Total Cd in Water by CCMS (CCME - FAL)							
		Cadmium (Cd)-Total	0.000022		0.00001	mg/L		28-AUG-13	MSP
		Mercury (Hg)							
		Mercury (Hg)-Total	<0.000020		0.00002	mg/L		27-AUG-13	SS7
		Hardness (from Total Ca and Mg)							
		Hardness (as CaCO3)	16.5			mg/L		29-AUG-13	

ALS LABORATORY GROUP CHEMICAL ANALYSIS REPORT

Lab ID	Sample ID	Test Description	Result	Qualifier	D.L.	Units	Extracted	Analyzed	By
L1349303-1	CH6								
Sample Date: K.L. on 15-AUG-13 @ 12:00									
Matrix: Water									
		Total Organic Carbon	2.1		1	mg/L		29-AUG-13	ZOW
		Oil and Grease	<1.0		1	mg/L	05-SEP-13	05-SEP-13	NGT
		Phosphorus (P)-Total	0.066		0.02	mg/L	26-AUG-13	26-AUG-13	CLTT
		Turbidity	125		0.1	NTU		18-AUG-13	BLW
		Total Suspended Solids	13.0		3	mg/L		19-AUG-13	SVG
		Ammonia, Total (as N)	0.0554		0.005	mg/L		29-AUG-13	LMK
		pH, Conductivity and Total Alkalinity							
		pH	6.60		0.1	pH		26-AUG-13	CLTT
		Conductivity (EC)	19.2		0.2	uS/cm		26-AUG-13	CLTT
		Bicarbonate (HCO3)	5.1		5	mg/L		26-AUG-13	CLTT
		Carbonate (CO3)	<5.0		5	mg/L		26-AUG-13	CLTT
		Hydroxide (OH)	<5.0		5	mg/L		26-AUG-13	CLTT
		Alkalinity, Total (as CaCO3)	4.2		2	mg/L		26-AUG-13	CLTT
		Total Nitrogen							
		Nitrate and Nitrite (as N)	0.746		0.071	mg/L		25-AUG-13	
		Total Nitrogen (Calculation)							
		Total Nitrogen	0.75		0.21	mg/L		29-AUG-13	
		TKN in Water by Colour							
		Total Kjeldahl Nitrogen	<0.20		0.2	mg/L	29-AUG-13	29-AUG-13	LMK
		Nitrite as N by IC							
		Nitrite (as N)	<0.050		0.05	mg/L		17-AUG-13	AMY
		Nitrate as N by IC							
		Nitrate (as N)	0.746		0.05	mg/L		17-AUG-13	AMY
L1349303-2	CH6-2								
Sample Date: K.L. on 15-AUG-13 @ 12:00									
Matrix: Water									
		Turbidity	96.4		0.1	NTU		18-AUG-13	BLW
		Total Organic Carbon	1.9		1	mg/L		29-AUG-13	ZOW
		Ammonia, Total (as N)	0.0424		0.005	mg/L		29-AUG-13	LMK
		Oil and Grease	<1.0		1	mg/L	05-SEP-13	05-SEP-13	NGT
		Total Suspended Solids	12.0		3	mg/L		19-AUG-13	SVG
		Phosphorus (P)-Total	0.055		0.02	mg/L	26-AUG-13	26-AUG-13	CLTT
		pH, Conductivity and Total Alkalinity							
		pH	6.62		0.1	pH		26-AUG-13	CLTT
		Conductivity (EC)	18.3		0.2	uS/cm		26-AUG-13	CLTT
		Bicarbonate (HCO3)	<5.0		5	mg/L		26-AUG-13	CLTT
		Carbonate (CO3)	<5.0		5	mg/L		26-AUG-13	CLTT
		Hydroxide (OH)	<5.0		5	mg/L		26-AUG-13	CLTT
		Alkalinity, Total (as CaCO3)	4.1		2	mg/L		26-AUG-13	CLTT
		TOT Metals CCME Fresh Water Aquatic Life							
		Total Metals in Water by CRC ICPMS							
		Aluminum (Al)-Total	3.35		0.005	mg/L		28-AUG-13	MSP
		Antimony (Sb)-Total	<0.00040		0.0004	mg/L		28-AUG-13	MSP
		Arsenic (As)-Total	<0.00040		0.0004	mg/L		28-AUG-13	MSP
		Barium (Ba)-Total	0.0301		0.003	mg/L		28-AUG-13	MSP
		Beryllium (Be)-Total	<0.0010		0.001	mg/L		28-AUG-13	MSP

ALS LABORATORY GROUP CHEMICAL ANALYSIS REPORT

Lab ID	Sample ID	Test Description	Result	Qualifier	D.L.	Units	Extracted	Analyzed	By
L1349303-2	CH6-2								
		Sample Date: K.L. on 15-AUG-13 @ 12:00							
		Matrix: Water							
		TOT Metals CCME Fresh Water Aquatic Life							
		Total Metals in Water by CRC ICPMS							
		Boron (B)-Total	<0.050		0.05	mg/L		28-AUG-13	MSP
		Calcium (Ca)-Total	1.03		0.5	mg/L		28-AUG-13	MSP
		Chromium (Cr)-Total	0.0115		0.001	mg/L		28-AUG-13	MSP
		Cobalt (Co)-Total	0.0024		0.002	mg/L		28-AUG-13	MSP
		Copper (Cu)-Total	0.0079		0.001	mg/L		28-AUG-13	MSP
		Iron (Fe)-Total	4.00		0.01	mg/L		28-AUG-13	MSP
		Lead (Pb)-Total	0.00151		0.0001	mg/L		28-AUG-13	MSP
		Lithium (Li)-Total	<0.010		0.01	mg/L		28-AUG-13	MSP
		Magnesium (Mg)-Total	2.68		0.1	mg/L		28-AUG-13	MSP
		Manganese (Mn)-Total	0.0289		0.002	mg/L		28-AUG-13	MSP
		Molybdenum (Mo)-Total	<0.0050		0.005	mg/L		28-AUG-13	MSP
		Nickel (Ni)-Total	0.0106		0.002	mg/L		28-AUG-13	MSP
		Potassium (K)-Total	1.77		0.5	mg/L		28-AUG-13	MSP
		Selenium (Se)-Total	<0.00040		0.0004	mg/L		28-AUG-13	MSP
		Silver (Ag)-Total	0.000022		0.00002	mg/L		28-AUG-13	MSP
		Sodium (Na)-Total	1.2		1	mg/L		28-AUG-13	MSP
		Strontium (Sr)-Total	0.0114		0.0001	mg/L		28-AUG-13	MSP
		Thallium (Tl)-Total	<0.00010		0.0001	mg/L		28-AUG-13	MSP
		Tin (Sn)-Total	<0.050		0.05	mg/L		28-AUG-13	MSP
		Titanium (Ti)-Total	0.345		0.001	mg/L		28-AUG-13	MSP
		Uranium (U)-Total	0.00011		0.0001	mg/L		28-AUG-13	MSP
		Vanadium (V)-Total	0.0112		0.001	mg/L		28-AUG-13	MSP
		Zinc (Zn)-Total	0.0211		0.004	mg/L		28-AUG-13	MSP
		Total Cd in Water by CCMS (CCME - FAL)							
		Cadmium (Cd)-Total	0.000018		0.00001	mg/L		28-AUG-13	MSP
		Mercury (Hg)							
		Mercury (Hg)-Total	<0.000020		0.00002	mg/L		27-AUG-13	SS7
		Hardness (from Total Ca and Mg)							
		Hardness (as CaCO3)	13.6			mg/L		29-AUG-13	
		Routine Water Analysis							
		Sulfate by IC							
		Sulfate (SO4)	<0.50		0.5	mg/L		17-AUG-13	AMY
		Ion Balance Calculation							
		Ion Balance	Low EC			%		29-AUG-13	
		TDS (Calculated)	8.8			mg/L		29-AUG-13	
		Hardness (as CaCO3)	5.5			mg/L		29-AUG-13	
		Dissolved Metals in Water by CRC ICPMS							
		Calcium (Ca)-Dissolved	0.83		0.5	mg/L		28-AUG-13	MX
		Magnesium (Mg)-Dissolved	0.83		0.1	mg/L		28-AUG-13	MX
		Potassium (K)-Dissolved	<0.50		0.5	mg/L		28-AUG-13	MX
		Sodium (Na)-Dissolved	1.1		1	mg/L		28-AUG-13	MX
		Chloride by IC							
		Chloride (Cl)	0.52		0.5	mg/L		17-AUG-13	AMY
		Total Nitrogen							
		Nitrate and Nitrite (as N)	0.681		0.071	mg/L		25-AUG-13	
		Total Nitrogen (Calculation)							
		Total Nitrogen	0.68		0.21	mg/L		29-AUG-13	
		TKN in Water by Colour							

ALS LABORATORY GROUP CHEMICAL ANALYSIS REPORT

Lab ID	Sample ID	Test Description	Result	Qualifier	D.L.	Units	Extracted	Analyzed	By
L1349303-2	CH6-2								
Sample Date: K.L. on 15-AUG-13 @ 12:00									
Matrix: Water									
Total Nitrogen									
TKN in Water by Colour									
Total Kjeldahl Nitrogen			<0.20		0.2	mg/L	29-AUG-13	29-AUG-13	LMK
Nitrite as N by IC									
Nitrite (as N)			<0.050		0.05	mg/L		17-AUG-13	AMY
Nitrate as N by IC									
Nitrate (as N)			0.681		0.05	mg/L		17-AUG-13	AMY
L1349303-10	HYDRO9								
Sample Date: K.L. on 16-AUG-13 @ 12:00									
Matrix: Water									
Total Nitrogen									
Nitrate and Nitrite (as N)			0.233		0.071	mg/L		25-AUG-13	
Total Nitrogen (Calculation)									
Total Nitrogen			0.23		0.21	mg/L		29-AUG-13	
TKN in Water by Colour									
Total Kjeldahl Nitrogen			<0.20		0.2	mg/L	29-AUG-13	29-AUG-13	LMK
Nitrite as N by IC									
Nitrite (as N)			<0.050		0.05	mg/L		17-AUG-13	AMY
Nitrate as N by IC									
Nitrate (as N)			0.233		0.05	mg/L		17-AUG-13	AMY
TOT Metals CCME Fresh Water Aquatic Life									
Total Metals in Water by CRC ICPMS									
Aluminum (Al)-Total			0.0687		0.005	mg/L		28-AUG-13	MSP
Antimony (Sb)-Total			<0.00040		0.0004	mg/L		28-AUG-13	MSP
Arsenic (As)-Total			<0.00040		0.0004	mg/L		28-AUG-13	MSP
Barium (Ba)-Total			<0.0030		0.003	mg/L		28-AUG-13	MSP
Beryllium (Be)-Total			<0.0010		0.001	mg/L		28-AUG-13	MSP
Boron (B)-Total			<0.050		0.05	mg/L		28-AUG-13	MSP
Calcium (Ca)-Total			<0.50		0.5	mg/L		28-AUG-13	MSP
Chromium (Cr)-Total			<0.0010		0.001	mg/L		28-AUG-13	MSP
Cobalt (Co)-Total			<0.0020		0.002	mg/L		28-AUG-13	MSP
Copper (Cu)-Total			<0.0010		0.001	mg/L		28-AUG-13	MSP
Iron (Fe)-Total			0.050		0.01	mg/L		28-AUG-13	MSP
Lead (Pb)-Total			<0.00010		0.0001	mg/L		28-AUG-13	MSP
Lithium (Li)-Total			<0.010		0.01	mg/L		28-AUG-13	MSP
Magnesium (Mg)-Total			0.12		0.1	mg/L		28-AUG-13	MSP
Manganese (Mn)-Total			<0.0020		0.002	mg/L		28-AUG-13	MSP
Molybdenum (Mo)-Total			<0.0050		0.005	mg/L		28-AUG-13	MSP
Nickel (Ni)-Total			<0.0020		0.002	mg/L		28-AUG-13	MSP
Potassium (K)-Total			<0.50		0.5	mg/L		28-AUG-13	MSP
Selenium (Se)-Total			<0.00040		0.0004	mg/L		28-AUG-13	MSP
Silver (Ag)-Total			<0.000020		0.00002	mg/L		28-AUG-13	MSP
Sodium (Na)-Total			<1.0		1	mg/L		28-AUG-13	MSP
Strontium (Sr)-Total			0.00184		0.0001	mg/L		28-AUG-13	MSP
Thallium (Tl)-Total			<0.00010		0.0001	mg/L		28-AUG-13	MSP
Tin (Sn)-Total			<0.050		0.05	mg/L		28-AUG-13	MSP
Titanium (Ti)-Total			0.0039		0.001	mg/L		28-AUG-13	MSP
Uranium (U)-Total			<0.00010		0.0001	mg/L		28-AUG-13	MSP
Vanadium (V)-Total			<0.0010		0.001	mg/L		28-AUG-13	MSP
Zinc (Zn)-Total			<0.0040		0.004	mg/L		28-AUG-13	MSP

ALS LABORATORY GROUP CHEMICAL ANALYSIS REPORT

Lab ID	Sample ID	Test Description	Result	Qualifier	D.L.	Units	Extracted	Analyzed	By
L1349303-10	HYDRO9								
		Sample Date: K.L. on 16-AUG-13 @ 12:00							
		Matrix: Water							
		TOT Metals CCME Fresh Water Aquatic Life							
		Total Cd in Water by CCMS (CCME - FAL)							
		Cadmium (Cd)-Total	<0.000010		0.00001	mg/L		28-AUG-13	MSP
		Mercury (Hg)							
		Mercury (Hg)-Total	<0.000020		0.00002	mg/L		27-AUG-13	SS7
		Hardness (from Total Ca and Mg)							
		Hardness (as CaCO3)	<1.3			mg/L		29-AUG-13	
		Routine Water Analysis							
		Sulfate by IC							
		Sulfate (SO4)	<0.50		0.5	mg/L		17-AUG-13	AMY
		Ion Balance Calculation							
		Ion Balance	Low EC			%		29-AUG-13	
		TDS (Calculated)	1.1			mg/L		29-AUG-13	
		Hardness (as CaCO3)	<1.0			mg/L		29-AUG-13	
		Dissolved Metals in Water by CRC ICPMS							
		Calcium (Ca)-Dissolved	<0.50		0.5	mg/L		28-AUG-13	MX
		Magnesium (Mg)-Dissolved	0.11		0.1	mg/L		28-AUG-13	MX
		Potassium (K)-Dissolved	<0.50		0.5	mg/L		28-AUG-13	MX
		Sodium (Na)-Dissolved	<1.0		1	mg/L		28-AUG-13	MX
		Chloride by IC							
		Chloride (Cl)	<0.50		0.5	mg/L		17-AUG-13	AMY
		Phosphorus (P)-Total	<0.020		0.02	mg/L	26-AUG-13	26-AUG-13	CLTT
		Turbidity	1.85		0.1	NTU		18-AUG-13	BLW
		Total Organic Carbon	<1.0		1	mg/L		29-AUG-13	ZOW
		Ammonia, Total (as N)	0.0123		0.005	mg/L		29-AUG-13	LMK
		Oil and Grease	<1.0		1	mg/L	05-SEP-13	05-SEP-13	NGT
		Total Suspended Solids	<3.0		3	mg/L		19-AUG-13	SVG
		pH, Conductivity and Total Alkalinity							
		pH	5.65		0.1	pH		26-AUG-13	CLTT
		Conductivity (EC)	6.62		0.2	uS/cm		26-AUG-13	CLTT
		Bicarbonate (HCO3)	<5.0		5	mg/L		26-AUG-13	CLTT
		Carbonate (CO3)	<5.0		5	mg/L		26-AUG-13	CLTT
		Hydroxide (OH)	<5.0		5	mg/L		26-AUG-13	CLTT
		Alkalinity, Total (as CaCO3)	<2.0		2	mg/L		26-AUG-13	CLTT
L1349303-11	HYDRO10								
		Sample Date: K.L. on 16-AUG-13 @ 12:00							
		Matrix: Water							
		Ammonia, Total (as N)	0.0101		0.005	mg/L		29-AUG-13	LMK
		Turbidity	0.53		0.1	NTU		18-AUG-13	BLW
		Phosphorus (P)-Total	<0.020		0.02	mg/L	26-AUG-13	26-AUG-13	CLTT
		Oil and Grease	<1.0		1	mg/L	05-SEP-13	05-SEP-13	NGT
		Total Suspended Solids	<3.0		3	mg/L		19-AUG-13	SVG
		Total Organic Carbon	1.3		1	mg/L		29-AUG-13	ZOW
		pH, Conductivity and Total Alkalinity							
		pH	5.81		0.1	pH		26-AUG-13	CLTT
		Conductivity (EC)	6.69		0.2	uS/cm		26-AUG-13	CLTT

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Lab ID	Sample ID	Test Description	Result	Qualifier	D.L.	Units	Extracted	Analyzed	By
L1349303-11	HYDRO10								
		Sample Date: K.L. on 16-AUG-13 @ 12:00							
		Matrix: Water							
		pH, Conductivity and Total Alkalinity							
		Bicarbonate (HCO ₃)	<5.0		5	mg/L		26-AUG-13	CLTT
		Carbonate (CO ₃)	<5.0		5	mg/L		26-AUG-13	CLTT
		Hydroxide (OH)	<5.0		5	mg/L		26-AUG-13	CLTT
		Alkalinity, Total (as CaCO ₃)	<2.0		2	mg/L		26-AUG-13	CLTT
		Total Nitrogen							
		Nitrate and Nitrite (as N)	0.173		0.071	mg/L		25-AUG-13	
		Total Nitrogen (Calculation)							
		Total Nitrogen	<0.21		0.21	mg/L		29-AUG-13	
		TKN in Water by Colour							
		Total Kjeldahl Nitrogen	<0.20		0.2	mg/L	29-AUG-13	29-AUG-13	LMK
		Nitrite as N by IC							
		Nitrite (as N)	<0.050		0.05	mg/L		17-AUG-13	AMY
		Nitrate as N by IC							
		Nitrate (as N)	0.173		0.05	mg/L		17-AUG-13	AMY
		TOT Metals CCME Fresh Water Aquatic Life							
		Total Metals in Water by CRC ICPMS							
		Aluminum (Al)-Total	0.0214		0.005	mg/L		28-AUG-13	MSP
		Antimony (Sb)-Total	<0.00040		0.0004	mg/L		28-AUG-13	MSP
		Arsenic (As)-Total	<0.00040		0.0004	mg/L		28-AUG-13	MSP
		Barium (Ba)-Total	0.0030		0.003	mg/L		28-AUG-13	MSP
		Beryllium (Be)-Total	<0.0010		0.001	mg/L		28-AUG-13	MSP
		Boron (B)-Total	<0.050		0.05	mg/L		28-AUG-13	MSP
		Calcium (Ca)-Total	<0.50		0.5	mg/L		28-AUG-13	MSP
		Chromium (Cr)-Total	<0.0010		0.001	mg/L		28-AUG-13	MSP
		Cobalt (Co)-Total	<0.0020		0.002	mg/L		28-AUG-13	MSP
		Copper (Cu)-Total	<0.0010		0.001	mg/L		28-AUG-13	MSP
		Iron (Fe)-Total	0.013		0.01	mg/L		28-AUG-13	MSP
		Lead (Pb)-Total	<0.00010		0.0001	mg/L		28-AUG-13	MSP
		Lithium (Li)-Total	<0.010		0.01	mg/L		28-AUG-13	MSP
		Magnesium (Mg)-Total	0.13		0.1	mg/L		28-AUG-13	MSP
		Manganese (Mn)-Total	<0.0020		0.002	mg/L		28-AUG-13	MSP
		Molybdenum (Mo)-Total	<0.0050		0.005	mg/L		28-AUG-13	MSP
		Nickel (Ni)-Total	<0.0020		0.002	mg/L		28-AUG-13	MSP
		Potassium (K)-Total	<0.50		0.5	mg/L		28-AUG-13	MSP
		Selenium (Se)-Total	<0.00040		0.0004	mg/L		28-AUG-13	MSP
		Silver (Ag)-Total	<0.000020		0.00002	mg/L		28-AUG-13	MSP
		Sodium (Na)-Total	<1.0		1	mg/L		28-AUG-13	MSP
		Strontium (Sr)-Total	0.00205		0.0001	mg/L		28-AUG-13	MSP
		Thallium (Tl)-Total	<0.00010		0.0001	mg/L		28-AUG-13	MSP
		Tin (Sn)-Total	<0.050		0.05	mg/L		28-AUG-13	MSP
		Titanium (Ti)-Total	0.0015		0.001	mg/L		28-AUG-13	MSP
		Uranium (U)-Total	<0.00010		0.0001	mg/L		28-AUG-13	MSP
		Vanadium (V)-Total	<0.0010		0.001	mg/L		28-AUG-13	MSP
		Zinc (Zn)-Total	<0.0040		0.004	mg/L		28-AUG-13	MSP
		Total Cd in Water by CCMS (CCME - FAL)							
		Cadmium (Cd)-Total	<0.000010		0.00001	mg/L		28-AUG-13	MSP
		Mercury (Hg)							
		Mercury (Hg)-Total	<0.000020		0.00002	mg/L		27-AUG-13	SS7
		Hardness (from Total Ca and Mg)							

ALS LABORATORY GROUP CHEMICAL ANALYSIS REPORT

Lab ID	Sample ID	Test Description	Result	Qualifier	D.L.	Units	Extracted	Analyzed	By
L1349303-11	HYDRO10								
Sample Date: K.L. on 16-AUG-13 @ 12:00									
Matrix: Water									
TOT Metals CCME Fresh Water Aquatic Life									
Hardness (from Total Ca and Mg)									
Hardness (as CaCO ₃)									
			<1.3			mg/L		29-AUG-13	
L1349303-15	FIELD BLANK								
Sample Date: K.L. on 16-AUG-13 @ 12:00									
Matrix: Water									
Total Nitrogen									
Nitrate and Nitrite (as N)									
			<0.071		0.071	mg/L		25-AUG-13	
Total Nitrogen (Calculation)									
Total Nitrogen									
			<0.21		0.21	mg/L		29-AUG-13	
TKN in Water by Colour									
Total Kjeldahl Nitrogen									
			<0.20		0.2	mg/L	29-AUG-13	29-AUG-13	LMK
Nitrite as N by IC									
Nitrite (as N)									
			<0.050		0.05	mg/L		17-AUG-13	AMY
Nitrate as N by IC									
Nitrate (as N)									
			<0.050		0.05	mg/L		17-AUG-13	AMY
Total Organic Carbon									
			<1.0		1	mg/L		29-AUG-13	ZOW
Oil and Grease									
			<1.0		1	mg/L	05-SEP-13	05-SEP-13	NGT
Total Suspended Solids									
			<3.0		3	mg/L		19-AUG-13	SVG
Ammonia, Total (as N)									
			<0.0050		0.005	mg/L		29-AUG-13	LMK
Turbidity									
			0.11		0.1	NTU		18-AUG-13	BLW
Phosphorus (P)-Total									
			<0.020		0.02	mg/L	26-AUG-13	26-AUG-13	CLTT
pH, Conductivity and Total Alkalinity									
pH									
			5.18		0.1	pH		26-AUG-13	CLTT
Conductivity (EC)									
			0.61		0.2	uS/cm		26-AUG-13	CLTT
Bicarbonate (HCO ₃)									
			<5.0		5	mg/L		26-AUG-13	CLTT
Carbonate (CO ₃)									
			<5.0		5	mg/L		26-AUG-13	CLTT
Hydroxide (OH)									
			<5.0		5	mg/L		26-AUG-13	CLTT
Alkalinity, Total (as CaCO ₃)									
			<2.0		2	mg/L		26-AUG-13	CLTT
Routine Water Analysis									
Sulfate by IC									
Sulfate (SO ₄)									
			<0.50		0.5	mg/L		17-AUG-13	AMY
Ion Balance Calculation									
Ion Balance									
			Low TDS			%		29-AUG-13	
TDS (Calculated)									
			<1.0			mg/L		29-AUG-13	
Hardness (as CaCO ₃)									
			<1.0			mg/L		29-AUG-13	
Dissolved Metals in Water by CRC ICPMS									
Calcium (Ca)-Dissolved									
			<0.50		0.5	mg/L		28-AUG-13	MX
Magnesium (Mg)-Dissolved									
			<0.10		0.1	mg/L		28-AUG-13	MX
Potassium (K)-Dissolved									
			<0.50		0.5	mg/L		28-AUG-13	MX
Sodium (Na)-Dissolved									
			<1.0		1	mg/L		28-AUG-13	MX
Chloride by IC									
Chloride (Cl)									
			<0.50		0.5	mg/L		17-AUG-13	AMY
TOT Metals CCME Fresh Water Aquatic Life									
Total Metals in Water by CRC ICPMS									
Aluminum (Al)-Total									
			<0.0050		0.005	mg/L		28-AUG-13	MSP
Antimony (Sb)-Total									
			<0.00040		0.0004	mg/L		28-AUG-13	MSP
Arsenic (As)-Total									
			<0.00040		0.0004	mg/L		28-AUG-13	MSP

ALS LABORATORY GROUP CHEMICAL ANALYSIS REPORT

Lab ID	Sample ID	Test Description	Result	Qualifier	D.L.	Units	Extracted	Analyzed	By
L1349303-15	FIELD BLANK								
	Sample Date: K.L. on 16-AUG-13 @ 12:00								
	Matrix: Water								
	TOT Metals CCME Fresh Water Aquatic Life								
	Total Metals in Water by CRC ICPMS								
	Barium (Ba)-Total		<0.0030		0.003	mg/L		28-AUG-13	MSP
	Beryllium (Be)-Total		<0.0010		0.001	mg/L		28-AUG-13	MSP
	Boron (B)-Total		<0.050		0.05	mg/L		28-AUG-13	MSP
	Calcium (Ca)-Total		<0.50		0.5	mg/L		28-AUG-13	MSP
	Chromium (Cr)-Total		<0.0010		0.001	mg/L		28-AUG-13	MSP
	Cobalt (Co)-Total		<0.0020		0.002	mg/L		28-AUG-13	MSP
	Copper (Cu)-Total		<0.0010		0.001	mg/L		28-AUG-13	MSP
	Iron (Fe)-Total		<0.010		0.01	mg/L		28-AUG-13	MSP
	Lead (Pb)-Total		<0.00010		0.0001	mg/L		28-AUG-13	MSP
	Lithium (Li)-Total		<0.010		0.01	mg/L		28-AUG-13	MSP
	Magnesium (Mg)-Total		<0.10		0.1	mg/L		28-AUG-13	MSP
	Manganese (Mn)-Total		<0.0020		0.002	mg/L		28-AUG-13	MSP
	Molybdenum (Mo)-Total		<0.0050		0.005	mg/L		28-AUG-13	MSP
	Nickel (Ni)-Total		<0.0020		0.002	mg/L		28-AUG-13	MSP
	Potassium (K)-Total		<0.50		0.5	mg/L		28-AUG-13	MSP
	Selenium (Se)-Total		<0.00040		0.0004	mg/L		28-AUG-13	MSP
	Silver (Ag)-Total		<0.000020		0.00002	mg/L		28-AUG-13	MSP
	Sodium (Na)-Total		<1.0		1	mg/L		28-AUG-13	MSP
	Strontium (Sr)-Total		<0.00010		0.0001	mg/L		28-AUG-13	MSP
	Thallium (Tl)-Total		<0.00010		0.0001	mg/L		28-AUG-13	MSP
	Tin (Sn)-Total		<0.050		0.05	mg/L		28-AUG-13	MSP
	Titanium (Ti)-Total		<0.0010		0.001	mg/L		28-AUG-13	MSP
	Uranium (U)-Total		<0.00010		0.0001	mg/L		28-AUG-13	MSP
	Vanadium (V)-Total		<0.0010		0.001	mg/L		28-AUG-13	MSP
	Zinc (Zn)-Total		<0.0040		0.004	mg/L		28-AUG-13	MSP
	Total Cd in Water by CCMS (CCME - FAL)								
	Cadmium (Cd)-Total		<0.000010		0.00001	mg/L		28-AUG-13	MSP
	Mercury (Hg)								
	Mercury (Hg)-Total		<0.000020		0.00002	mg/L		27-AUG-13	SS7
	Hardness (from Total Ca and Mg)								
	Hardness (as CaCO3)		<1.3			mg/L		29-AUG-13	
L1349303-16	TRIP BLANK								
	Sample Date: K.L. on 16-AUG-13 @ 12:00								
	Matrix: Water								
	TOT Metals CCME Fresh Water Aquatic Life								
	Total Metals in Water by CRC ICPMS								
	Aluminum (Al)-Total		<0.0050		0.005	mg/L		28-AUG-13	MSP
	Antimony (Sb)-Total		<0.00040		0.0004	mg/L		28-AUG-13	MSP
	Arsenic (As)-Total		<0.00040		0.0004	mg/L		28-AUG-13	MSP
	Barium (Ba)-Total		<0.0030		0.003	mg/L		28-AUG-13	MSP
	Beryllium (Be)-Total		<0.0010		0.001	mg/L		28-AUG-13	MSP
	Boron (B)-Total		<0.050		0.05	mg/L		28-AUG-13	MSP
	Calcium (Ca)-Total		<0.50		0.5	mg/L		28-AUG-13	MSP
	Chromium (Cr)-Total		<0.0010		0.001	mg/L		28-AUG-13	MSP
	Cobalt (Co)-Total		<0.0020		0.002	mg/L		28-AUG-13	MSP
	Copper (Cu)-Total		<0.0010		0.001	mg/L		28-AUG-13	MSP
	Iron (Fe)-Total		<0.010		0.01	mg/L		28-AUG-13	MSP
	Lead (Pb)-Total		<0.00010		0.0001	mg/L		28-AUG-13	MSP
	Lithium (Li)-Total		<0.010		0.01	mg/L		28-AUG-13	MSP

ALS LABORATORY GROUP CHEMICAL ANALYSIS REPORT

Lab ID	Sample ID	Test Description	Result	Qualifier	D.L.	Units	Extracted	Analyzed	By
L1349303-16	TRIP BLANK								
		Sample Date: K.L. on 16-AUG-13 @ 12:00							
		Matrix: Water							
		TOT Metals CCME Fresh Water Aquatic Life							
		Total Metals in Water by CRC ICPMS							
		Magnesium (Mg)-Total	<0.10		0.1	mg/L		28-AUG-13	MSP
		Manganese (Mn)-Total	<0.0020		0.002	mg/L		28-AUG-13	MSP
		Molybdenum (Mo)-Total	<0.0050		0.005	mg/L		28-AUG-13	MSP
		Nickel (Ni)-Total	<0.0020		0.002	mg/L		28-AUG-13	MSP
		Potassium (K)-Total	<0.50		0.5	mg/L		28-AUG-13	MSP
		Selenium (Se)-Total	<0.00040		0.0004	mg/L		28-AUG-13	MSP
		Silver (Ag)-Total	<0.000020		0.00002	mg/L		28-AUG-13	MSP
		Sodium (Na)-Total	<1.0		1	mg/L		28-AUG-13	MSP
		Strontium (Sr)-Total	<0.00010		0.0001	mg/L		28-AUG-13	MSP
		Thallium (Tl)-Total	<0.00010		0.0001	mg/L		28-AUG-13	MSP
		Tin (Sn)-Total	<0.050		0.05	mg/L		28-AUG-13	MSP
		Titanium (Ti)-Total	<0.0010		0.001	mg/L		28-AUG-13	MSP
		Uranium (U)-Total	<0.00010		0.0001	mg/L		28-AUG-13	MSP
		Vanadium (V)-Total	<0.0010		0.001	mg/L		28-AUG-13	MSP
		Zinc (Zn)-Total	<0.0040		0.004	mg/L		28-AUG-13	MSP
		Total Cd in Water by CCMS (CCME - FAL)							
		Cadmium (Cd)-Total	<0.000010		0.00001	mg/L		28-AUG-13	MSP
		Mercury (Hg)							
		Mercury (Hg)-Total	<0.000020		0.00002	mg/L		27-AUG-13	SS7
		Hardness (from Total Ca and Mg)							
		Hardness (as CaCO3)	<1.3			mg/L		29-AUG-13	
		Routine Water Analysis							
		Sulfate by IC							
		Sulfate (SO4)	<0.50		0.5	mg/L		17-AUG-13	AMY
		Ion Balance Calculation							
		Ion Balance	Low TDS			%		29-AUG-13	
		TDS (Calculated)	<1.0			mg/L		29-AUG-13	
		Hardness (as CaCO3)	<1.0			mg/L		29-AUG-13	
		Dissolved Metals in Water by CRC ICPMS							
		Calcium (Ca)-Dissolved	<0.50		0.5	mg/L		28-AUG-13	MX
		Magnesium (Mg)-Dissolved	<0.10		0.1	mg/L		28-AUG-13	MX
		Potassium (K)-Dissolved	<0.50		0.5	mg/L		28-AUG-13	MX
		Sodium (Na)-Dissolved	<1.0		1	mg/L		28-AUG-13	MX
		Chloride by IC							
		Chloride (Cl)	<0.50		0.5	mg/L		17-AUG-13	AMY
		Oil and Grease	<1.0		1	mg/L	05-SEP-13	05-SEP-13	NGT
		Phosphorus (P)-Total	<0.020		0.02	mg/L	26-AUG-13	26-AUG-13	CLTT
		Total Organic Carbon	<1.0		1	mg/L		29-AUG-13	ZOW
		Turbidity	<0.10		0.1	NTU		18-AUG-13	BLW
		Ammonia, Total (as N)	<0.0050		0.005	mg/L		29-AUG-13	LMK
		Total Suspended Solids	<3.0		3	mg/L		19-AUG-13	SVG
		pH, Conductivity and Total Alkalinity							
		pH	5.07		0.1	pH		26-AUG-13	CLTT
		Conductivity (EC)	0.62		0.2	uS/cm		26-AUG-13	CLTT
		Bicarbonate (HCO3)	<5.0		5	mg/L		26-AUG-13	CLTT
		Carbonate (CO3)	<5.0		5	mg/L		26-AUG-13	CLTT
		Hydroxide (OH)	<5.0		5	mg/L		26-AUG-13	CLTT

ALS LABORATORY GROUP CHEMICAL ANALYSIS REPORT

Lab ID	Sample ID	Test Description	Result	Qualifier	D.L.	Units	Extracted	Analyzed	By
L1349303-16	TRIP BLANK								
	Sample Date: K.L. on 16-AUG-13 @ 12:00								
	Matrix: Water								
		pH, Conductivity and Total Alkalinity							
		Alkalinity, Total (as CaCO3)	<2.0		2	mg/L		26-AUG-13	CLTT
		Total Nitrogen							
		Nitrate and Nitrite (as N)	<0.071		0.071	mg/L		25-AUG-13	
		Total Nitrogen (Calculation)							
		Total Nitrogen	<0.21		0.21	mg/L		29-AUG-13	
		TKN in Water by Colour							
		Total Kjeldahl Nitrogen	<0.20		0.2	mg/L	29-AUG-13	29-AUG-13	LMK
		Nitrite as N by IC							
		Nitrite (as N)	<0.050		0.05	mg/L		17-AUG-13	AMY
		Nitrate as N by IC							
		Nitrate (as N)	<0.050		0.05	mg/L		17-AUG-13	AMY
L1349303-17	DUP 1								
	Sample Date: K.L. on 16-AUG-13 @ 12:00								
	Matrix: Water								
		Total Organic Carbon	1.3		1	mg/L		29-AUG-13	ZOW
		Total Suspended Solids	<3.0		3	mg/L		19-AUG-13	SVG
		Turbidity	0.51		0.1	NTU		18-AUG-13	BLW
		Ammonia, Total (as N)	0.0130		0.005	mg/L		29-AUG-13	LMK
		Phosphorus (P)-Total	<0.020		0.02	mg/L	26-AUG-13	26-AUG-13	CLTT
		Oil and Grease	<1.0		1	mg/L	05-SEP-13	05-SEP-13	NGT
		pH, Conductivity and Total Alkalinity							
		pH	5.73		0.1	pH		26-AUG-13	CLTT
		Conductivity (EC)	6.59		0.2	uS/cm		26-AUG-13	CLTT
		Bicarbonate (HCO3)	<5.0		5	mg/L		26-AUG-13	CLTT
		Carbonate (CO3)	<5.0		5	mg/L		26-AUG-13	CLTT
		Hydroxide (OH)	<5.0		5	mg/L		26-AUG-13	CLTT
		Alkalinity, Total (as CaCO3)	<2.0		2	mg/L		26-AUG-13	CLTT
		TOT Metals CCME Fresh Water Aquatic Life							
		Total Metals in Water by CRC ICPMS							
		Aluminum (Al)-Total	0.0185		0.005	mg/L		28-AUG-13	MSP
		Antimony (Sb)-Total	<0.00040		0.0004	mg/L		28-AUG-13	MSP
		Arsenic (As)-Total	<0.00040		0.0004	mg/L		28-AUG-13	MSP
		Barium (Ba)-Total	<0.0030		0.003	mg/L		28-AUG-13	MSP
		Beryllium (Be)-Total	<0.0010		0.001	mg/L		28-AUG-13	MSP
		Boron (B)-Total	<0.050		0.05	mg/L		28-AUG-13	MSP
		Calcium (Ca)-Total	<0.50		0.5	mg/L		28-AUG-13	MSP
		Chromium (Cr)-Total	<0.0010		0.001	mg/L		28-AUG-13	MSP
		Cobalt (Co)-Total	<0.0020		0.002	mg/L		28-AUG-13	MSP
		Copper (Cu)-Total	<0.0010		0.001	mg/L		28-AUG-13	MSP
		Iron (Fe)-Total	0.011		0.01	mg/L		28-AUG-13	MSP
		Lead (Pb)-Total	<0.00010		0.0001	mg/L		28-AUG-13	MSP
		Lithium (Li)-Total	<0.010		0.01	mg/L		28-AUG-13	MSP
		Magnesium (Mg)-Total	0.13		0.1	mg/L		28-AUG-13	MSP
		Manganese (Mn)-Total	<0.0020		0.002	mg/L		28-AUG-13	MSP
		Molybdenum (Mo)-Total	<0.0050		0.005	mg/L		28-AUG-13	MSP
		Nickel (Ni)-Total	<0.0020		0.002	mg/L		28-AUG-13	MSP

ALS LABORATORY GROUP CHEMICAL ANALYSIS REPORT

Lab ID	Sample ID	Test Description	Result	Qualifier	D.L.	Units	Extracted	Analyzed	By
L1349303-17	DUP 1								
		Sample Date: K.L. on 16-AUG-13 @ 12:00							
		Matrix: Water							
		TOT Metals CCME Fresh Water Aquatic Life							
		Total Metals in Water by CRC ICPMS							
		Potassium (K)-Total	<0.50		0.5	mg/L		28-AUG-13	MSP
		Selenium (Se)-Total	<0.00040		0.0004	mg/L		28-AUG-13	MSP
		Silver (Ag)-Total	<0.000020		0.00002	mg/L		28-AUG-13	MSP
		Sodium (Na)-Total	<1.0		1	mg/L		28-AUG-13	MSP
		Strontium (Sr)-Total	0.00202		0.0001	mg/L		28-AUG-13	MSP
		Thallium (Tl)-Total	<0.00010		0.0001	mg/L		28-AUG-13	MSP
		Tin (Sn)-Total	<0.050		0.05	mg/L		28-AUG-13	MSP
		Titanium (Ti)-Total	<0.0010		0.001	mg/L		28-AUG-13	MSP
		Uranium (U)-Total	<0.00010		0.0001	mg/L		28-AUG-13	MSP
		Vanadium (V)-Total	<0.0010		0.001	mg/L		28-AUG-13	MSP
		Zinc (Zn)-Total	<0.0040		0.004	mg/L		28-AUG-13	MSP
		Total Cd in Water by CCMS (CCME - FAL)							
		Cadmium (Cd)-Total	<0.000010		0.00001	mg/L		28-AUG-13	MSP
		Mercury (Hg)							
		Mercury (Hg)-Total	<0.000020		0.00002	mg/L		27-AUG-13	SS7
		Hardness (from Total Ca and Mg)							
		Hardness (as CaCO3)	<1.3			mg/L		29-AUG-13	
		Total Nitrogen							
		Nitrate and Nitrite (as N)	0.169		0.071	mg/L		25-AUG-13	
		Total Nitrogen (Calculation)							
		Total Nitrogen	<0.21		0.21	mg/L		29-AUG-13	
		TKN in Water by Colour							
		Total Kjeldahl Nitrogen	<0.20		0.2	mg/L	29-AUG-13	29-AUG-13	LMK
		Nitrite as N by IC							
		Nitrite (as N)	<0.050		0.05	mg/L		17-AUG-13	AMY
		Nitrate as N by IC							
		Nitrate (as N)	0.169		0.05	mg/L		17-AUG-13	AMY
		Routine Water Analysis							
		Sulfate by IC							
		Sulfate (SO4)	<0.50		0.5	mg/L		17-AUG-13	AMY
		Ion Balance Calculation							
		Ion Balance	Low TDS			%		29-AUG-13	
		TDS (Calculated)	<1.0			mg/L		29-AUG-13	
		Hardness (as CaCO3)	<1.0			mg/L		29-AUG-13	
		Dissolved Metals in Water by CRC ICPMS							
		Calcium (Ca)-Dissolved	<0.50		0.5	mg/L		28-AUG-13	MX
		Magnesium (Mg)-Dissolved	0.13		0.1	mg/L		28-AUG-13	MX
		Potassium (K)-Dissolved	<0.50		0.5	mg/L		28-AUG-13	MX
		Sodium (Na)-Dissolved	<1.0		1	mg/L		28-AUG-13	MX
		Chloride by IC							
		Chloride (Cl)	<0.50		0.5	mg/L		17-AUG-13	AMY
L1349303-18	DUP 2								
		Sample Date: K.L. on 16-AUG-13 @ 12:00							
		Matrix: Water							
		Total Nitrogen							
		Nitrate and Nitrite (as N)	0.233		0.071	mg/L		25-AUG-13	
		Total Nitrogen (Calculation)							

ALS LABORATORY GROUP CHEMICAL ANALYSIS REPORT

Lab ID	Sample ID	Test Description	Result	Qualifier	D.L.	Units	Extracted	Analyzed	By
L1349303-18	DUP 2								
		Sample Date: K.L. on 16-AUG-13 @ 12:00							
		Matrix: Water							
		Total Nitrogen							
		Total Nitrogen (Calculation)							
		Total Nitrogen	0.23		0.21	mg/L		29-AUG-13	
		TKN in Water by Colour							
		Total Kjeldahl Nitrogen	<0.20		0.2	mg/L	29-AUG-13	29-AUG-13	LMK
		Nitrite as N by IC							
		Nitrite (as N)	<0.050		0.05	mg/L		17-AUG-13	AMY
		Nitrate as N by IC							
		Nitrate (as N)	0.233		0.05	mg/L		17-AUG-13	AMY
		Routine Water Analysis							
		Sulfate by IC							
		Sulfate (SO4)	<0.50		0.5	mg/L		17-AUG-13	AMY
		Ion Balance Calculation							
		Ion Balance	Low EC			%		29-AUG-13	
		TDS (Calculated)	1.1			mg/L		29-AUG-13	
		Hardness (as CaCO3)	<1.0			mg/L		29-AUG-13	
		Dissolved Metals in Water by CRC ICPMS							
		Calcium (Ca)-Dissolved	<0.50		0.5	mg/L		28-AUG-13	MX
		Magnesium (Mg)-Dissolved	0.11		0.1	mg/L		28-AUG-13	MX
		Potassium (K)-Dissolved	<0.50		0.5	mg/L		28-AUG-13	MX
		Sodium (Na)-Dissolved	<1.0		1	mg/L		28-AUG-13	MX
		Chloride by IC							
		Chloride (Cl)	<0.50		0.5	mg/L		17-AUG-13	AMY
		TOT Metals CCME Fresh Water Aquatic Life							
		Total Metals in Water by CRC ICPMS							
		Aluminum (Al)-Total	0.0665		0.005	mg/L		28-AUG-13	MSP
		Antimony (Sb)-Total	<0.00040		0.0004	mg/L		28-AUG-13	MSP
		Arsenic (As)-Total	<0.00040		0.0004	mg/L		28-AUG-13	MSP
		Barium (Ba)-Total	<0.0030		0.003	mg/L		28-AUG-13	MSP
		Beryllium (Be)-Total	<0.0010		0.001	mg/L		28-AUG-13	MSP
		Boron (B)-Total	<0.050		0.05	mg/L		28-AUG-13	MSP
		Calcium (Ca)-Total	<0.50		0.5	mg/L		28-AUG-13	MSP
		Chromium (Cr)-Total	<0.0010		0.001	mg/L		28-AUG-13	MSP
		Cobalt (Co)-Total	<0.0020		0.002	mg/L		28-AUG-13	MSP
		Copper (Cu)-Total	<0.0010		0.001	mg/L		28-AUG-13	MSP
		Iron (Fe)-Total	0.048		0.01	mg/L		28-AUG-13	MSP
		Lead (Pb)-Total	<0.00010		0.0001	mg/L		28-AUG-13	MSP
		Lithium (Li)-Total	<0.010		0.01	mg/L		28-AUG-13	MSP
		Magnesium (Mg)-Total	0.12		0.1	mg/L		28-AUG-13	MSP
		Manganese (Mn)-Total	<0.0020		0.002	mg/L		28-AUG-13	MSP
		Molybdenum (Mo)-Total	<0.0050		0.005	mg/L		28-AUG-13	MSP
		Nickel (Ni)-Total	<0.0020		0.002	mg/L		28-AUG-13	MSP
		Potassium (K)-Total	<0.50		0.5	mg/L		28-AUG-13	MSP
		Selenium (Se)-Total	<0.00040		0.0004	mg/L		28-AUG-13	MSP
		Silver (Ag)-Total	<0.000020		0.00002	mg/L		28-AUG-13	MSP
		Sodium (Na)-Total	<1.0		1	mg/L		28-AUG-13	MSP
		Strontium (Sr)-Total	0.00187		0.0001	mg/L		28-AUG-13	MSP
		Thallium (Tl)-Total	<0.00010		0.0001	mg/L		28-AUG-13	MSP
		Tin (Sn)-Total	<0.050		0.05	mg/L		28-AUG-13	MSP
		Titanium (Ti)-Total	0.0036		0.001	mg/L		28-AUG-13	MSP
		Uranium (U)-Total	<0.00010		0.0001	mg/L		28-AUG-13	MSP

ALS LABORATORY GROUP CHEMICAL ANALYSIS REPORT

Lab ID	Sample ID	Test Description	Result	Qualifier	D.L.	Units	Extracted	Analyzed	By
L1349303-18	DUP 2								
		Sample Date: K.L. on 16-AUG-13 @ 12:00							
		Matrix: Water							
		TOT Metals CCME Fresh Water Aquatic Life							
		Total Metals in Water by CRC ICPMS							
		Vanadium (V)-Total	<0.0010		0.001	mg/L		28-AUG-13	MSP
		Zinc (Zn)-Total	<0.0040		0.004	mg/L		28-AUG-13	MSP
		Total Cd in Water by CCMS (CCME - FAL)							
		Cadmium (Cd)-Total	<0.000010		0.00001	mg/L		28-AUG-13	MSP
		Mercury (Hg)							
		Mercury (Hg)-Total	<0.000020		0.00002	mg/L		27-AUG-13	SS7
		Hardness (from Total Ca and Mg)							
		Hardness (as CaCO3)	<1.3			mg/L		29-AUG-13	
		Oil and Grease	<1.0		1	mg/L	05-SEP-13	05-SEP-13	NGT
		Phosphorus (P)-Total	<0.020		0.02	mg/L	26-AUG-13	26-AUG-13	CLTT
		Ammonia, Total (as N)	0.0128		0.005	mg/L		29-AUG-13	LMK
		Total Organic Carbon	1.1		1	mg/L		29-AUG-13	ZOW
		Turbidity	1.79		0.1	NTU		18-AUG-13	BLW
		Total Suspended Solids	<3.0		3	mg/L		19-AUG-13	SVG
		pH, Conductivity and Total Alkalinity							
		pH	5.56		0.1	pH		26-AUG-13	CLTT
		Conductivity (EC)	6.53		0.2	uS/cm		26-AUG-13	CLTT
		Bicarbonate (HCO3)	<5.0		5	mg/L		26-AUG-13	CLTT
		Carbonate (CO3)	<5.0		5	mg/L		26-AUG-13	CLTT
		Hydroxide (OH)	<5.0		5	mg/L		26-AUG-13	CLTT
		Alkalinity, Total (as CaCO3)	<2.0		2	mg/L		26-AUG-13	CLTT

Methodology Reference

ALS Test Code	Test Description	Methodology Reference (In-House Standard Operating Procedures which Generally Follow:)
C-TOT-ORG-ED	Total Organic Carbon	APHA 5310 B-Instrumental
CL-IC-ED	Chloride by IC	APHA 4110 B-ION CHROMATOGRAPHY
N-T-CALC-ED	Total Nitrogen (Calculation)	APHA 4500 N-Calculated
NO2+NO3-CALC-ED	Nitrate+Nitrite	CALCULATION
SOLIDS-TOTSUS-ED	Total Suspended Solids	APHA 2540 D-Gravimetric
IONBALANCE-ED	Ion Balance Calculation	APHA 1030E
TURBIDITY-ED	Turbidity	APHA 2130 B-Nephelometer
ETL-HARDNESS-TOT-ED	Hardness (from Total Ca and Mg)	APHA 2340 B-Calculatoin
HG-T-L-CVAA-ED	Mercury (Hg)	EPA 245.7 / EPA 245.1
MET-D-CCMS-ED	Dissolved Metals in Water by CRC ICPMS	APHA 3030 B&E / EPA SW-846 6020A
NH3-L-CFA-ED	Ammonia in Water by Colour	APHA 4500 NH3-NITROGEN (AMMONIA)
NO3-IC-ED	Nitrate as N by IC	APHA 4110 B-ION CHROMATOGRAPHY
MET-T-CCMS-ED	Total Metals in Water by CRC ICPMS	APHA 3030 B&E / EPA SW-846 6020A
NO2-IC-ED	Nitrite as N by IC	APHA 4110 B-ION CHROMATOGRAPHY
OGG-LLE-ED	Oil and Grease-Gra	APHA 5520 B HEXANE MTBE EXT. GRAVIME
P-T-COL-ED	Total P in Water by Colour	APHA 4500-P PHOSPHORUS
PH/EC/ALK-ED	pH, Conductivity and Total Alkalinity	APHA 4500-H, 2510, 2320
SO4-IC-ED	Sulfate by IC	APHA 4110 B-ION CHROMATOGRAPHY
CD-T-CCMS-FAL-ED	Total Cd in Water by CCMS (CCME - FAL)	APHA 3030 B&E / EPA SW-846 6020A
TKN-CFA-ED	TKN in Water by Colour	APHA 4500-NORG (TKN)

Sample Parameter Qualifier key listed:

Qualifier	Description
RRV	Reported Result Verified By Repeat Analysis

APPENDIX B

EBA'S GENERAL CONDITIONS

GENERAL CONDITIONS

GEO-ENVIRONMENTAL REPORT

This report incorporates and is subject to these “General Conditions”.

1.0 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.

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

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3.0 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 EBA in its reasonably exercised discretion.

4.0 INFORMATION PROVIDED TO EBA BY OTHERS

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