

GOVERNMENT OF YUKON - ASSESSMENT & ABANDONED MINES BRANCH

WATER SAMPLING FIELD COMPLETION REPORT MOUNT NANSEN, YUKON



REPORT

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1.0 INTRODUCTION

At the request of Yukon Government Assessment and Abandoned Mines (AAM), EBA Engineering Consultants, Ltd., operating as EBA, A Tetra Tech Company (EBA), completed a groundwater sampling event at the Mount Nansen Mine site. EBA representatives Sarah Sternbergh and David Barrett completed the field work from June 1st to June 6th, 2012.

2.0 OBJECTIVE

The key objective of the work was to conduct the field investigation and analysis during spring freshet at Mount Nansen including monitoring, sampling, datalogger downloading, and hydraulic conductivity testing at each monitoring well, mini-piezometer and identified seep. Following the completion of the site investigation a field report was to be prepared that summarizes the sites that were sampled, the types of test completed and the conditions at each site. The field report would also identify any comments, concerns and recommendations arising during the field investigation.

3.0 MONITORING PROGRAM

The program consisted of monitoring 41 sampling points including 39 groundwater wells, 1 site at the seepage collection pond and one site at the seepage pond discharge as shown in Fig. 1. The sites visited are summarized in Table 1, attached. A total of 14 wells and both seepage pond sites were sampled. As indicated in Table 1, the following wells were not sampled due to the following site conditions:

- MW09-05, MW09-06, and MW09-07 were partially submerged by standing water in the tailings pond preventing safe access at the time of the site visit (see Photo 3);
- MW09-08, MW09-11, MW09-13, MW09-14, MW09-15, MW09-16, MW09-19, MW09-21, MP09-09, MP09-10, MP09-11, MP09-12, MP09-14, GLL07-01 and GLL07-03 were frozen at the time of the site visit;
- MW09-20, MP09-03, and GLL07-02 were dry at the time of the site visit;
- MP09-06 and MP09-13 were found to be destroyed. (See Photo 22 and 27);
- MP09-07 and TH09-01 were not found. MP09-07 is assumed destroyed as the location of the well (in Dome Creek) was found, and the well was not there. (See Photo 23). The exact location, description and history of TH09-01 was not provided. EBA personnel investigated the area that the well was indicated to be, but were not able to find it.

EBA found three groundwater wells in the vicinity of the seepage pond which were not included on the sampling program. These wells, labelled as Unknown 1, 2 and 3 for the purposes of this report, were all located down gradient of the seepage collection pond. Faded writing on the protective casings indicated these wells may have been drilled in 2001.

4.0 SAMPLING AND TESTING

The sampling and testing completed for this project is summarized in Table 2, attached. As part of the monitoring program, the following tasks were completed:

- The state of the well at each site was recorded both by observation and photograph. Site photos (including surface water sites) can be found in the Photographs section attached to this report.
- Water level or depth to ice was recorded in all wells, and depth to bottom was recorded in unfrozen wells using a Heron Instruments water level sounder.
- Hydraulic testing was completed in one (1) and two (2) inch wells that had standing water utilizing a Solinst Levellogger® to record water levels and bailers and/or solid slugs. A total of eleven (11) groundwater wells were hydraulically tested. The wells that were tested or attempted to be tested are identified in Table 2.
- Groundwater samples were collected utilising a Barnant Company peristaltic pump and a Geotech bladder pump. A total of 14 groundwater sites were sampled.
- Surface water samples were collected from standing water at the Seepage Pond and flowing water at the Seepage Discharge. Sample locations that could not be tested are identified in Table 1.
- A total of 22 samples were collected including samples from 14 groundwater wells, 2 surface water sites, 2 duplicate samples, 1 split sample, 1 field blank, 1 filter blank and 1 travel blank.
- Samples were collected for the parameters summarized in Table 3 below.
- Upon return to Whitehorse, samples were shipped to EXOVA for analysis (see record of sample receipt and Chain of Custody form in Appendix B).

Table 3: Sample Preservation

Testing Parameter	Bottle Size (mL)	Preservative
Routine	500	None
Nutrients	250	HSO4
Dissolved Organic Carbon	250	None
Sulphide	250	NaOH, Zn-acetate
Total Metals	250	HNO3
Dissolved Metals	125	HNO3
Cyanide	125	NaOH

4.1 Groundwater Sampling

Groundwater sampling was completed using a Barnant Company peristaltic pump in MW09-01, MW09-02, MW09-03, MW09-04, MW09-17, MW09-18, MW09-22, MP09-04, and MP09-05. Sampling in MW09-23 and MW09-24 was completed using a Geotech bladder pump, Geotech Geocontrol 2 Logic Unit and compressed nitrogen as, in these wells; the depth to water was greater than 9 m. The bladder pump is capable of pumping against greater hydrostatic head pressures than the peristaltic pump, which has been found to be capable of pumping to a maximum of approximately 9 m of hydrostatic head. Water levels in the wells were monitored during pumping to ensure that the water level was constant, and sampling was conducted when the field water quality parameters (specific conductance, pH and dissolved oxygen) had stabilized. Field parameters are summarized in Table 4, attached.

Drivepoints MP09-01, MP09-02, and MP09-08 were also sampled using the peristaltic pump. The well diameter was originally 1 inch diameter but with the permanent LDPE tubing installed within the wells (see Photo 24), the inside diameter is actually less than ½ inch so water levels could not be measured or maintained during pumping. To measure water levels in these wells, a narrow gauge water level sounder is required. These wells were submerged so an estimated water level was measured by measuring the height of water from the top of the pipe to the surrounding water level. These wells quickly ran dry using the peristaltic pump. Pumping was continued as the wells re-charged until field parameters were stable. At which point, water samples were collected.

4.2 Surface and Seep Sampling

Samples were collected from the Seepage Pond discharge (a flowing pipe which discharges below the seepage pond) and from the Seepage Pond near the pumphouse located in the pond. Photos 31 and 32 show these sampling points and the GPS coordinates are provided in Table 1. Samples were collected at the seepage discharge directly from the flow. Field parameters were taken by placing the YSI meter into the culvert below the discharge point (see Table 4). Samples were collected at the Seepage Pond directly from the standing water. Field parameters were taken by placing the YSI meter directly into the standing water.

4.3 Hydraulic Conductivity Testing

Hydraulic testing was completed in MW09-01, MW09-02, MW09-03, MW09-04, MW09-17, MW09-18, MW09-22, MW09-23, MW09-24, MP09-04 and MP09-05. These tests were completed by placing a Solinst Levellogger® near the bottom of the well and inducing an instantaneous change in water level by means of adding or removing a solid slug or removing a volume of water. Water levels were also recorded manually using a Heron Instruments water level sounder both prior to starting a test and after each test to ensure that complete recovery was achieved. Slug test data is included in Appendix C.

4.4 Instrumentation Downloads

Several Solinst Levellogger® instruments are installed in monitoring wells at the site. Levelloggers installed in MW09-03, MW09-04, MW09-23 and MW09-21 are installed on wireline cable. The levellogger installed in GLL07-01 is installed on a braided nylon cord. The levelloggers installed in MW09-15 and GLL07-03 are

installed attached to a direct read cable which allows access to the datalogger without removing it from the well. The baralogger installed at GLL07-03 is attached to the top of the well casing by a plastic zip tie.

The leveloggers in MW09-03, MW09-04, MW09-15, MW09-23 and GLL07-03 as well as the baralogger were accessible and data was downloaded during this trip. The data is included in Appendix C. The leveloggers in MW09-21 and GLL07-01 were frozen in place, and, as direct read cables are not attached to these dataloggers, data was not downloaded.

4.5 Well Condition

Well condition observations were recorded to assist with future planning for sampling programs. Observations included if the well was frozen, dry, flooded, missing cap, condition of instrumentation, and wells that had been destroyed or damaged. These observations are summarized below and in Table 1.

- Frozen wells included MW09-08, MW09-11, MW09-13, MW09-14, MW09-15, MW09-16, MW09-19, MW09-21, MP09-09, MP09-10, MP09-11, MP09-12, MP09-14, GLL07-01 and GLL07-03;
- Dry wells included MW09-20, MP09-03, and GLL07-02;
- Destroyed wells included MP09-06, MP09-07 and MP09-13;
- TH09-01 was not found, and may no longer exist; and,
- Wells MW09-01, MW09-02, MP09-05, MP09-01, MP09-02, MP09-03, MP09-08, MP09-14, are missing caps.

5.0 COMMENTS AND CONCERNS

During the background review and sampling of the Mount Nansen groundwater monitoring wells, EBA identified several concerns:

- Well installation details including well diameter, screened sections and lithology, which are important for interpreting testing data and determining testing methods, were not readily available prior to sampling;
- Well locations provided as UTMs in NAD83 projection, Zone 08V did not correspond to well locations on the ground. There may be a problem with zoning and/or projection;
- MP09-01, MP09-02, MP09-03, MP09-08, and MP09-14 are not standard monitoring wells or mini-piezometers, and are located in surface water;
- Leveloggers installed in GLL07-01 and MW09-21 were not downloaded at this time as they were frozen in place; and,
- Several wells located during this field program were found to be destroyed (MP09-06, MP09-07, MP09-13 and possibly TH09-01).

6.0 RECOMMENDATIONS FOR FURTHER SAMPLING EVENTS

EBA recommends that the following actions be taken to increase efficiency in future sampling events:

- A summary of well installation details compiled from completion reports including well logs and well completion diagrams should be included as a part of the field sampling package.
- Well locations taken with handheld GPS as UTM's in NAD83 projection and Zone 08V have been included in Table 1 of this report. These locations should be compared with the surveyed locations to determine the problem with the coordinates provided.
- MP09-01, MP09-02, MP09-03, MP09-08, and MP09-14 should be identified as "drive-points". Consideration should be given to sampling surface water concurrently with groundwater sampling as the groundwater quality in these locations may be relevant to surface water quality.
- Leveloggers installed in GLL07-01 and MW09-21 should be attached to direct read cables so that data can be downloaded at any time.
- Destroyed locations should be noted in the table of wells to be sampled and removed from the scope of work. AAM should assess the importance of samples from these locations and consider re-installing.
- Photos of all wells should be included with the sampling program to confirm the correct location and note any changes since the last sampling event.

7.0 LIMITATIONS OF REPORT

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8.0 CLOSURE

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

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TABLES

Table 1	Well Condition Summary
Table 2	Work Completed
Table 3	Sample Preservation (in report)
Table 4	Sampling Field Parameters & Sampling Method

Table 1: Well Condition Summary

Well ID	Location			Well Diameter (inches)	Date	Depth to Water (m bgs)	Depth to bottom (m bgs)	Reference Stick-up (m ags)	Relative Recharge Rate	Observed Well Condition
	Location Description	Coordinates ¹								
		Easting	Northing							
MW09-01	Tailings pond - southeast	6880557	389393	1	2-Jun-12	5.54	10.13	0.83	Slow	Missing well cap
MW09-02	Tailings pond - southeast	6880557	389394	1	2-Jun-12	2.01	4.99	0.68	Slow	Missing well cap
MW09-03	Tailings pond - southeast	6880555	389420	2	2-Jun-12	5.21	9.44	0.49	Slow	Good
MW09-04	Tailings pond - southeast	6880555	389420	2	2-Jun-12	2.905	7.16	0.51	Slow	Good
MW09-05	Tailings pond - southeast	- ²	-	-	-	-	-	-	-	Submerged
MW09-06	Tailings pond - southeast	-	-	-	-	-	-	-	-	Submerged
MW09-07	Tailings pond - southeast	-	-	-	-	-	-	-	-	Submerged
MW09-08	Below seepage pond	6880578	389616	2	3-Jun-12	FR ³ - 1.07	-	0.99	-	Well frozen
MW09-11	Sands above tailings pond	6880711	389040	2	4-Jun-12	DR ⁴ - 4.09	4.09	0.8	-	Well dry
MW09-13	Waste rock east of open pit	6881661	389005	2	4-Jun-12	FR - 8.23	-	0.77	-	Well frozen
MW09-14	Waste rock east of open pit	6881661	389006	2	4-Jun-12	FR - 4.41	-	0.75	-	Well frozen
MW09-15	Waste rock east of open pit	6881724	388917	2	4-Jun-12	FR - 13.22	-	0.87	-	Levellogger frozen in place on direct read cable. Cap off.
MW09-16	East of mill	6881090	387992	2	1-Jun-12	FR - 0.40	-	1.05	-	Well frozen
MW09-17	East of mill	6880970	388078	2	1-Jun-12	2.565	4.81	0.83	Fast	Good
MW09-18	East of mill	6880984	388050	2	1-Jun-12	2.475	6.875	0.905	Fast	Good
MW09-19	East of mill	6881016	388051	2	1-Jun-12	FR - 0.88	-	0.95	-	Well frozen
MW09-20	Seepage pond crest	6880588	389587	2	2-Jun-12	DR - 2.75	2.75	0.92	-	Well dry
MW09-21	Between tailings dam and seepage pond	6880573	389538	2	3-Jun-12	FR - 0.90	-	0.74	-	Levellogger frozen in place on cable
MW09-22	Tailings pond dam	6880549	389496	2	3-Jun-12	3.4	4.42	0.84	Slow	Good
MW09-23	Tailing dam crest	6880555	389459	2	2-Jun-12	11.25	14.89	0.92	Slow	Good
MW09-24	Sand north of seepage pond	6880621	389556	2	3-Jun-12	8.7	10.53	0.68	Fast	Good
MP09-01*	Pony Creek - upper creek north of Ketz shop	6881928	388706	0.4	5-Jun-12	-0.53	0.12	1.47	Slow	Good
MP09-02*	Pony Creek - middle creek west of u/s sampling point	6881810	388867	0.4	5-Jun-12	-0.41	0.2	1.37	Fast	Good
MP09-03*	Pony Creek - at u/s sampling point	6881736	388957	0.4	5-Jun-12	-0.1	0.87	0.7	V.Slow	Possibly damaged - no water recovered
MP09-04	North of seepage pond	6880608	389573	1	2-Jun-12	0.98	1.82	1.26	Fast	Good
MP09-05	West end of seepage pond	6880590	389546	1	3-Jun-12	0.25	0.75	1.09	Fast	Missing well cap
MP09-06	Diversion channel bridge	6880777	389466	0.4	-	-	-	-	-	Well destroyed
MP09-07	Diversion channel	-	-	0.4	-	-	-	-	-	Well destroyed
MP09-08*	Pony Creek - east of d/s sampling point	6881709	389156	0.4	5-Jun-12	-0.165	0.55	1.02	Slow	Strong sulphur odour to water
MP09-09	Tailings - west end	6880682	389239	1	4-Jun-12	FR - 0.45	-	1.73	-	Well frozen
MP09-10	Tailings - west end	6880683	389238	1	4-Jun-12	FR - 0.23	-	1.54	-	Well frozen
MP09-11	Tailings - west end	6880613	389221	1	4-Jun-12	FR - 0.83	-	1.3	-	Well frozen
MP09-12	Tailings - west end	6880613	389218	1	4-Jun-12	FR - 0.80	-	1.29	-	Well frozen
MP09-13	Diversion channel dome inlet	6880744	389075	0.4	4-Jun-12	-	-	-	-	Well destroyed
MP09-14	Tailings pond - northwest	6880719	389132	0.4	5-Jun-12	FR ~0.10	-	~0.90	-	Well frozen
GLL07-01	Waste rock east of open pit	6881778	388850	2	4-Jun-12	FR - 12.15	-	0.81	-	Levellogger frozen in place on cord
GLL07-02	Pony Creek addit	6881703	389070	2	4-Jun-12	DR - 5.75	5.75	1.37	-	Open - no cap
GLL07-03	Open pit	6881478	388952	2	1-Jun-12	FR - 1.52	-	1.07	-	Levellogger frozen in place on direct read cable
TH09-01	Tailings area?	-	-	?	-	-	-	-	-	Could not find
Seepage pond	Sampled near pumphouse	6880599	389559	-	3-Jun-12	-	-	-	-	Some ice on surface
Seepage outlet	Below seepage pond	6880593	389610	-	3-Jun-12	-	-	-	-	Flowing
Unknown 1	Below seepage pond	6880695	389602	2	2-Jun-12	3.68	3.87	0.45	-	No information on installation/purpose
Unknown 2	Below seepage pond	6880580	389606	2	3-Jun-12	FR - 0.97	-	0.43	-	Well frozen
Unknown 3	Below seepage pond	6880570	389613	2	3-Jun-12	-	-	-	-	Could not remove cap

NOTES

1. All coordinates given in NAD83, Zone 08V ±5 m
2. "-" indicates information not available/relevant
3. FR - indicates frozen at given depth at time of sampling event
4. DR - indicates dry at given depth at time of sampling event

Table 2: Work Completed

Well ID	Field Work Completed					Comments
	Water Sample Collection Date	Hydraulic Test	Instrumentation			
			Type	Suspension Type	Downloaded (Y/N)	
MW09-01	2-Jun-12	Slug/bail	-		-	Cap missing
MW09-02	2-Jun-12	Slug/bail	-		-	Cap missing
MW09-03	2-Jun-12	Slug/bail	Solinst Levellogger	Wireline cable	Y	
MW09-04	2-Jun-12	Slug/bail	Solinst Levellogger	Wireline cable	Y	
MW09-05	-	-	-		-	Wells inaccessible - submerged
MW09-06	-	-	-		-	Wells inaccessible - submerged
MW09-07	-	-	-		-	Wells inaccessible - submerged
MW09-08	-	-	-		-	Frozen
MW09-11	-	-	-		-	Frozen
MW09-13	-	-	-		-	Frozen
MW09-14	-	-	-		-	Frozen
MW09-15	-	-	Solinst Levellogger	Direct read cable	Y	Frozen
MW09-16	-	-	-		-	Frozen @ 2.59m
MW09-17	1-Jun-12	Bail	-		-	
MW09-18	1-Jun-12	Bail	-		-	
MW09-19	-	-	-		-	Frozen @ 2.40m
MW09-20	-	-	-		-	Dry
MW09-21	-	-	Solinst Levellogger	Wireline cable	N	Frozen
MW09-22	4-Jun-12	Slug/bail	-		-	
MW09-23	3-Jun-12	Slug/bail	Solinst Levellogger	Wireline cable	Y	
MW09-24	6-Jun-12	Bail	-		-	
MP09-01	5-Jun-12	-	-		-	Drive-point
MP09-02	6-Jun-12	-	-		-	Drive-point
MP09-03	-	-	-		-	Drive-point. Dry/frozen?
MP09-04	3-Jun-12	Bail	-		-	
MP09-05	3-Jun-12	Bail	-		-	Cap missing
MP09-06	-	-	-		-	Destroyed (see photo)
MP09-07	-	-	-		-	Well not found, assumed destroyed
MP09-08	5-Jun-12	-	-		-	Drive-point
MP09-09	-	-	-		-	Frozen @ 2.175m
MP09-10	-	-	-		-	Frozen
MP09-11	-	-	-		-	Frozen @ 2.125m
MP09-12	-	-	-		-	Frozen @ 2.09m
MP09-13	-	-	-		-	Destroyed (see photo)
MP09-14	-	-	-		-	Drive-point Frozen
GLL07-01	-	-	Solinst Levellogger	Nylon Cord ¹	N	Frozen
GLL07-02	-	-	-		-	Dry
GLL07-03	-	-	Solinst Levellogger and Barallogger	Direct read cable, and zip tie	Y	Frozen
TH09-01	-	-	-		-	Well not found
Seepage pond	3-Jun-12	-	-		-	See photo for location
Seepage outlet	3-Jun-12	-	-		-	

Table 4: Sampling Field Parameters and Sampling Method

Location	Date	Weather	Approximate Air Temperature (°C) ¹	Purging/Sampling Method	Approximate Volume Purged (L)	Water Temperature (°C)	pH	Specific Electrical Conductivity (us/cm)	Electical Conductivity (us/cm)	Turbidity	Dissolved Oxygen (mg/L)	Notes
MW09-01	3-Jun-12	Overcast	1	Peristaltic Pump	5	4	7.16	1994	1193	7.54	3.18	
MW09-02	2-Jun-12	Raining	10	Peristaltic Pump	10	12.2	7.12	2849	2155	8.21	4.21	
MW09-03	2-Jun-12	Overcast	8	Peristaltic Pump	4	12.8	9.04	2533	1937	0.36	3.36	
MW09-04	2-Jun-12	Raining	8	Peristaltic Pump	9	8.5	9.06	2533	1743	1.18	2.8	
MW09-17	1-Jun-12	Overcast	6	Peristaltic Pump	9	***	***	***	***	***	***	FIELD BLANK
MW09-18	1-Jun-12	Overcast	10	Peristaltic Pump	14	3	6.98	2160	1242	1.5	1.54	SPLIT1
MW09-22	4-Jun-12	Sunny	15	Peristaltic Pump	15	15.5	6.35	692	566	15.2	3.12	DUP1
MW09-23	2-Jun-12	Overcast, windy	7	Bladder Pump	6	7.7	7.07	1944	1303	181	0.8	
MW09-24	6-Jun-12	Overcast	7	Bladder Pump	7	1.4	7.18	1018	565	18.4	5.12	
MP09-01	5-Jun-12	Overcast	10	Peristaltic Pump	5	12.2	6.77	102	77	1.63	7.6	DUP2
MP09-02	6-Jun-12	Overcast, raining	5	Peristaltic Pump	4	6.9	7.15	277	182	1.37	2.85	
MP09-04	3-Jun-12	Overcast	4	Peristaltic Pump	16	4.9	6.97	1253	772	1.45	5.26	
MP09-05	3-Jun-12	Overcast	10	Peristaltic Pump	12	4.4	6.85	2155	1308	7.12	1.63	
MP09-08	5-Jun-12	Sun/Cloud	15	Peristaltic Pump	4	8.7	8.20	1005	692	2.33	10.1	
Seepage Discharge	3-Jun-12	Overcast	10	None - flowing	-	3.5	7.19	1367	807	55	9.3	Slight sulphur odour
Seepage Pond	3-Jun-12	Overcast	10	None - standing water	-	3.9	7.12	1767	1045	9.48	1	

NOTES

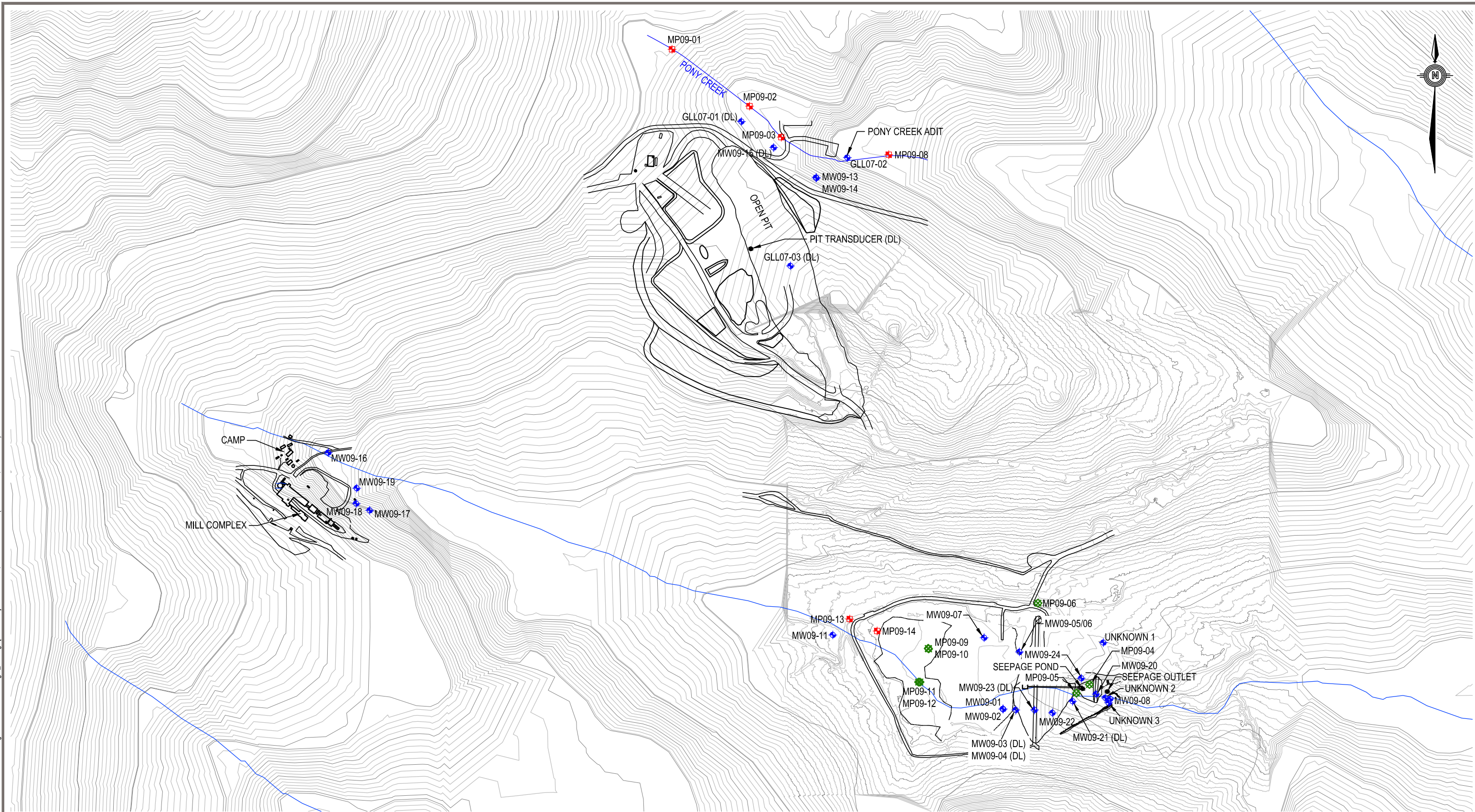
MW09-09, MW09-10, and MW09-12 do not exist

1. Sample temperature possibly affected by air temperature

FIGURES

Figure 1 Monitoring Point Locations

Q:\Whitehorse\Data\0201 Drawings\Mt Nansen\W23 101586 Groundwater Investigations\W23 101586 Fig_1_R1.dwg [FIGURE 1] November 07, 2012 - 9:49:28 am (BY: BUCHAN, CAMERON)



- LEGEND:**
- ◆ - MONITORING WELL LOCATION (2" DIAMETER)
 - - DRIVE POINT LOCATION (0.4" DIAMETER)
 - ◆ - MINI PIEZOMETER LOCATION (1" DIAMETER)
 - - TESTHOLE / SAMPLE LOCATION
 - (DL) - INDICATES DATALOGGER

CLIENT

Yukon
Government

eba
A TETRA TECH COMPANY

GROUNDWATER SAMPLING REPORT MOUNT NANSEN MINE SITE, YUKON				
MONITORING POINT LOCATIONS				
PROJECT NO. W23101586	DWN CB	CKD TJR	REV 1	Figure 1
OFFICE EBA-WHSE	DATE November 6, 2012			

PHOTOGRAPHS

- Photo 1 MW09-01 and MW09-02 in the Southeast Tailings. Also shown in this photograph are the Heron Instruments water level sounder and cable for the Solinst Levelogger used during the sampling event.
- Photo 2 MW09-03 and MW09-04 in the Southeast Tailings
- Photo 3 MW09-05, MW09-06 (right arrow) and MW09-07 (left arrow)
- Photo 4 MW09-08 East of Seepage pond
- Photo 5 MW09-11 in the Sands West of the Tailings Pond
- Photo 6 MW09-13 and MW09-14 along the Main Mount Nansen Access Road East of the Open Pit
- Photo 7 MW09-15 Located along the Main Mount Nansen Access Road East of the Open Pit
- Photo 8 MW09-16 Northeast and Downgradient of the Mill Complex
- Photo 9 MW09-17, East and Downgradient of Mill Complex
- Photo 10 MW09-18, East and Downgradient of the Mill Complex
- Photo 11 MW09-19 Located East of Mill Complex
- Photo 12 MW09-20, Seepage Pond Crest
- Photo 13 MW09-21, West and Upgradient of Seepage Pond
- Photo 14 MW09-22 at the Front of the Tailings Dam
- Photo 15 MW09-23 on the Tailings Dam Crest
- Photo 16 MW09-24 in Sand North of Seepage Pond
- Photo 17 MP09-01, Drive-Point Well (indicated by arrow)
- Photo 18 MP09-02 Drive-Point Well in Pony Creek
- Photo 19 MP09-03 in Pony Creek
- Photo 20 MP09-04 Located North of the Seepage Pond
- Photo 21 MP09-05 Located at the West Edge of the Seepage Pond
- Photo 22 MP09-06 Located under the Dome Creek Diversion Ditch Bridge (indicated by arrow)

- Photo 23 MP09-07 Should be Located in this Section of Dome Creek. It is not there, and EBA assumes it was destroyed during ditch cleaning efforts the previous winter
- Photo 24 MP09-08 Drive-Point Well Located about 50 M Downstream of the Downstream Surface Water Sampling Site on Pony Creek
- Photo 25 MP09-09 and MP09-10 Mini-Piezometers Located in the West End of the Tailings Pond
- Photo 26 MP09-11 and MP09-12 Located in the West End of the Tailings Pond
- Photo 27 MP09-13 Located in the Dome Creek Diversion at the Intersection of Dome Creek. Note that this Drive-point well is destroyed
- Photo 28 MP09-14 Located in the Northwest Corner of the Tailings Pond
- Photo 29 GLL07-01 Located East of the Open Pit
- Photo 30 GLL07-02 Located in Front of the Pony Creek Adit
- Photo 31 GLL07-03 Located in the Open Pit
- Photo 32 Seepage Pond Sampling Location
- Photo 33 Seepage Discharge Point
- Photo 34 Unknown 1 – Located East and Cross-Gradient of Seepage Pond
- Photo 35 Unknown 2 (right arrow) and Unknown 3 (left arrow) located east of Seepage Pond



Photo 1: MW09-01 and MW09-02 in the Southeast Tailings. Also shown in this photograph are the Heron Instruments water level sounder and cable for the Solinst Levelogger used during the sampling event. June 2, 2012



Photo 2: MW09-03 and MW09-04 in the Southeast Tailings. Note the cable in each well used to suspend Solinst Leveloggers. June 2, 2012



Photo 3: MW09-05, MW09-06 (right arrow) and MW09-07 (left arrow). Note that all three wells are partially submerged. June 2, 2012



Photo 4: MW09-08 East of Seepage pond. Note seepage discharge point in the background. June 3, 2012



Photo 5: MW09-11 in the Sands West of the Tailings Pond. June 4, 2012



Photo 6: MW09-13 and MW09-14 along the Main Mount Nansen Access Road East of the Open Pit. June 4, 2012



Photo 7: MW09-15 Located along the Main Mount Nansen Access Road East of the Open Pit. June 4, 2012



Photo 8: MW09-16 Northeast and Downgradient of the Mill Complex. Note the main mill building in the background. June 1, 2012



Photo 9: MW09-17, East and Downgradient of Mill Complex. June 1, 2012



Photo 10: MW09-18, East and Downgradient of the Mill Complex. Note peristaltic pump set-up. June 1, 2012



Photo 11: MW09-19 Located East of Mill Complex. June 2, 2012



Photo 12: MW09-20, Seepage Pond Crest. Note the thermistor casing in the foreground. June 2, 2012



Photo 13: MW09-21, West and Upgradient of Seepage Pond. Note seepage pond and pumphouse in background and levellogger cable wrapped around the top of the protective casing. June 3, 2012



Photo 14: MW09-22 at the Front of the Tailings Dam. June 3, 2012



Photo 15: MW09-23 on the Tailings Dam Crest. Note the two hose bladder pump set-up and the flow through cell for monitoring field parameters. June 2, 2012



Photo 16: MW09-24 in Sand North of Seepage Pond. June 3, 2012



Photo 17: MP09-01, Drive-Point Well (indicated by arrow). Note the Pony Creek weir in the background. June 5, 2012



Photo 18: MP09-02 Drive-Point Well in Pony Creek. June 4, 2012



Photo 19: MP09-03 in Pony Creek. Note that this Drive-point well is at the upstream Pony Creek surface water sampling point. June 4, 2012



Photo 20: MP09-04 Located North of the Seepage Pond. June 3, 2012



Photo 21: MP09-05 Located at the West Edge of the Seepage Pond. June 3, 2012



Photo 22: MP09-06 Located under the Dome Creek Diversion Ditch Bridge (indicated by arrow). Note that the mini-piezometer is destroyed. June 4, 2012



Photo 23: MP09-07 Should be Located in this Section of Dome Creek. It is not there, and EBA assumes it was destroyed during ditch cleaning efforts the previous winter. June 4, 2012



Photo 24: MP09-08 Drive-Point Well Located about 50 M Downstream of the Downstream Surface Water Sampling Site on Pony Creek. June 4, 2012



Photo 25: MP09-09 and MP09-10 Mini-Piezometers Located in the West End of the Tailings Pond. June 4, 2012



Photo 26: MP09-11 and MP09-12 Located in the West End of the Tailings Pond. June 4, 2012



Photo 27: MP09-13 Located in the Dome Creek Diversion at the Intersection of Dome Creek. Note that this Drive-point well is destroyed. June 4, 2012



Photo 28: MP09-14 Located in the Northwest Corner of the Tailings Pond. June 4, 2012



Photo 29: GLL07-01 Located East of the Open Pit. June 4, 2012



Photo 30: GLL07-02 Located in Front of the Pony Creek Adit. June 4, 2012



Photo 31: GLL07-03 Located in the Open Pit. Note the barologger attached to the casing lid.
June 27, 2012



Photo 32: Seepage Pond Sampling Location. June 3, 2012



Photo 33: Seepage Discharge Point. Note MW09-08 in background. June 3, 2012



Photo 34: Unknown 1 – Located East and Cross-Gradient of Seepage Pond. June 4, 2012



Photo 35: Unknown 2 (right arrow) and Unknown 3 (left arrow) located east of Seepage Pond.
June 4, 2012

APPENDIX A

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.

This report and the assessments and recommendations contained in it are intended for the sole use of EBA's client. EBA 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 EBA's Client unless otherwise authorized in writing by EBA. Any unauthorized use of the report is at the sole risk of the user.

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

2.0 ALTERNATE REPORT FORMAT

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

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.

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

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.

APPENDIX B

LABORATORY CHAIN OF CUSTODY FORMS



Confirmation of Service Request

Lot ID: **874987**
 Number of Samples: 22
 Printed Date: Jun 11, 2012

Please verify the following service request. If you have corrections or questions, please contact Client Services.

<u>Main Contact:</u>	<u>Primary Administrator:</u>	<u>Invoice Delivery To:</u>	<u>Bill Paid by:</u>
Attn: Tamra Reynolds	Attn: Tamra Reynolds	Attn: Ingrid Fuller	Attn: Accounts Payable
EBA Engineering Consultants Ltd	EBA Engineering Consultants Ltd	EBA Engineering Consultants Ltd	EBA Engineering Consultants Ltd
Calcite Business Centre	Calcite Business Centre	Calcite Business Centre	14940 - 123 Avenue
Unit 6, 151 Industrial Road	Unit 6, 151 Industrial Road	Unit 6, 151 Industrial Road	Edmonton, AB T5V 1B4
Whitehorse, YT Y1A 2V3	Whitehorse, YT Y1A 2V3	Whitehorse, YT Y1A 2V3	Phone: (780) 451-2121
Phone: (867) 668-2071	Phone: (867) 668-2071	Phone: (867) 668-2071	Fax: (780) 454-5688
Fax: (867) 668-4349	Fax: (867) 668-4349	Fax: (867) 668-4349	

Agreement Id	96063	Well Name	
Project Id	W23101586	Well Location	
Project Name	Mount Nansen GW Sampling	Field	
Project Location	Mount Nansen Mine. Yukon	Formation	
Project Legal		Elevation KB	
PO#		Elevation GR	
Proj. Acct. Code		Drilling License	
Control Id		Sampled By	Sarah Sternbergh
Report Due	Jun 14, 2012	Sampling Company	EBA
Received Date	Jun 08, 2012	Est. Disposal Date	Sep 12, 2012

Service Information

Sample Id	1	Service	Service Name
	4083093	W10	Routine Water Analysis
		NH4	Nitrogen - ammonium-N
		OPO4	Phosphorus - orthophosphate
		CN1	A Cyanide - total
		CN3	A Cyanide - weak acid dissociable
		CNO	A Cyanate - water
		F	Fluoride - water
		SUL	A Sulfide - water
		CNS	A Thiocyanate - water
		DOC	A Carbon - dissolved organic
		ICBR	Bromide - water
		DISP	Environmental Disposal Fee
		TW24EW	Trace Metals (Total) in environmental waters
		TW23EW-F	Trace Metals (Dissolved) in environmental water

Confirmation of Service Request

Lot ID: **874987**
 Number of Samples: 22
 Printed Date: Jun 11, 2012

Please verify the following service request. If you have corrections or questions, please contact Client Services.

Sample Id	2	Service	Service Name
	4083094	W10	Routine Water Analysis
		NH4	Nitrogen - ammonium-N
		OPO4	Phosphorus - orthophosphate
Date Sampled	06-02-2012	CN1	A Cyanide - total
Priority	Normal	CN3	A Cyanide - weak acid dissociable
Site I.D.	Tails	CNO	A Cyanate - water
Sample Description	MW09-02	F	Fluoride - water
		SUL	A Sulfide - water
		CNS	A Thiocyanate - water
		DOC	A Carbon - dissolved organic
		ICBR	Bromide - water
		DISP	Environmental Disposal Fee
		TW24EW	Trace Metals (Total) in environmental waters
		TW23EW-F	Trace Metals (Dissolved) in environmental water

Sample Id	3	Service	Service Name
	4083095	W10	Routine Water Analysis
		NH4	Nitrogen - ammonium-N
		OPO4	Phosphorus - orthophosphate
Date Sampled	06-02-2012	CN1	A Cyanide - total
Priority	Normal	CN3	A Cyanide - weak acid dissociable
Site I.D.	Tails	CNO	A Cyanate - water
Sample Description	MW09-03	F	Fluoride - water
		SUL	A Sulfide - water
		CNS	A Thiocyanate - water
		DOC	A Carbon - dissolved organic
		ICBR	Bromide - water
		DISP	Environmental Disposal Fee
		TW24EW	Trace Metals (Total) in environmental waters
		TW23EW-F	Trace Metals (Dissolved) in environmental water

Sample Id	4	Service	Service Name
	4083096	W10	Routine Water Analysis
		NH4	Nitrogen - ammonium-N
		OPO4	Phosphorus - orthophosphate
Date Sampled	06-02-2012	CN1	A Cyanide - total
Priority	Normal	CN3	A Cyanide - weak acid dissociable
Site I.D.	Tails	CNO	A Cyanate - water
Sample Description	MW09-04	F	Fluoride - water
		SUL	A Sulfide - water
		CNS	A Thiocyanate - water
		DOC	A Carbon - dissolved organic
		ICBR	Bromide - water
		DISP	Environmental Disposal Fee
		TW24EW	Trace Metals (Total) in environmental waters
		TW23EW-F	Trace Metals (Dissolved) in environmental water

Confirmation of Service Request

Lot ID: **874987**
 Number of Samples: 22
 Printed Date: Jun 11, 2012

Please verify the following service request. If you have corrections or questions, please contact Client Services.

Sample Id	5	Service	Service Name
	4083097	W10	Routine Water Analysis
		NH4	Nitrogen - ammonium-N
		OPO4	Phosphorus - orthophosphate
Date Sampled	06-01-2012	CN1	A Cyanide - total
Priority	Normal	CN3	A Cyanide - weak acid dissociable
Site I.D.	Mill	CNO	A Cyanate - water
Sample Description	MW09-17	F	Fluoride - water
		SUL	A Sulfide - water
		CNS	A Thiocyanate - water
		DOC	A Carbon - dissolved organic
		ICBR	Bromide - water
		DISP	Environmental Disposal Fee
		TW24EW	Trace Metals (Total) in environmental waters
		TW23EW-F	Trace Metals (Dissolved) in environmental water

Sample Id	6	Service	Service Name
	4083098	W10	Routine Water Analysis
		NH4	Nitrogen - ammonium-N
		OPO4	Phosphorus - orthophosphate
Date Sampled	06-01-2012	CN1	A Cyanide - total
Priority	Normal	CN3	A Cyanide - weak acid dissociable
Site I.D.	Mill	CNO	A Cyanate - water
Sample Description	MW09-18	F	Fluoride - water
		SUL	A Sulfide - water
		CNS	A Thiocyanate - water
		DOC	A Carbon - dissolved organic
		ICBR	Bromide - water
		DISP	Environmental Disposal Fee
		TW24EW	Trace Metals (Total) in environmental waters
		TW23EW-F	Trace Metals (Dissolved) in environmental water

Sample Id	7	Service	Service Name
	4083099	W10	Routine Water Analysis
		NH4	Nitrogen - ammonium-N
		OPO4	Phosphorus - orthophosphate
Date Sampled	06-04-2012	CN1	A Cyanide - total
Priority	Normal	CN3	A Cyanide - weak acid dissociable
Site I.D.	Tdam	CNO	A Cyanate - water
Sample Description	MW09-22	F	Fluoride - water
		SUL	A Sulfide - water
		CNS	A Thiocyanate - water
		DOC	A Carbon - dissolved organic
		ICBR	Bromide - water
		DISP	Environmental Disposal Fee
		TW24EW	Trace Metals (Total) in environmental waters
		TW23EW-F	Trace Metals (Dissolved) in environmental water

Confirmation of Service Request

Lot ID: **874987**
 Number of Samples: 22
 Printed Date: Jun 11, 2012

Please verify the following service request. If you have corrections or questions, please contact Client Services.

Sample Id	8	Service	Service Name
	4083100	W10	Routine Water Analysis
		NH4	Nitrogen - ammonium-N
		OPO4	Phosphorus - orthophosphate
Date Sampled	06-02-2012	CN1	A Cyanide - total
Priority	Normal	CN3	A Cyanide - weak acid dissociable
Site I.D.	Dam Crest	CNO	A Cyanate - water
Sample Description	MW09-23	F	Fluoride - water
		SUL	A Sulfide - water
		CNS	A Thiocyanate - water
		DOC	A Carbon - dissolved organic
		ICBR	Bromide - water
		DISP	Environmental Disposal Fee
		TW24EW	Trace Metals (Total) in environmental waters
		TW23EW-F	Trace Metals (Dissolved) in environmental water

Sample Id	9	Service	Service Name
	4083101	W10	Routine Water Analysis
		NH4	Nitrogen - ammonium-N
		OPO4	Phosphorus - orthophosphate
Date Sampled	06-06-2012	CN1	A Cyanide - total
Priority	Normal	CN3	A Cyanide - weak acid dissociable
Site I.D.	Seep Pond	CNO	A Cyanate - water
Sample Description	MW09-24	F	Fluoride - water
		SUL	A Sulfide - water
		CNS	A Thiocyanate - water
		DOC	A Carbon - dissolved organic
		ICBR	Bromide - water
		DISP	Environmental Disposal Fee
		TW24EW	Trace Metals (Total) in environmental waters
		TW23EW-F	Trace Metals (Dissolved) in environmental water

Sample Id	10	Service	Service Name
	4083102	W10	Routine Water Analysis
		NH4	Nitrogen - ammonium-N
		OPO4	Phosphorus - orthophosphate
Date Sampled	06-05-2012	CN1	A Cyanide - total
Priority	Normal	CN3	A Cyanide - weak acid dissociable
Site I.D.	Pony Creek	CNO	A Cyanate - water
Sample Description	MP09-01	F	Fluoride - water
		SUL	A Sulfide - water
		CNS	A Thiocyanate - water
		DOC	A Carbon - dissolved organic
		ICBR	Bromide - water
		DISP	Environmental Disposal Fee
		TW24EW	Trace Metals (Total) in environmental waters
		TW23EW-F	Trace Metals (Dissolved) in environmental water

Confirmation of Service Request

Lot ID: **874987**
 Number of Samples: 22
 Printed Date: Jun 11, 2012

Please verify the following service request. If you have corrections or questions, please contact Client Services.

Sample Id	11	Service	Service Name
	4083103	W10	Routine Water Analysis
		NH4	Nitrogen - ammonium-N
		OPO4	Phosphorus - orthophosphate
Date Sampled	06-06-2012	CN1	A Cyanide - total
Priority	Normal	CN3	A Cyanide - weak acid dissociable
Site I.D.	Pony Creek	CNO	A Cyanate - water
Sample Description	MP09-02	F	Fluoride - water
		SUL	A Sulfide - water
		CNS	A Thiocyanate - water
		DOC	A Carbon - dissolved organic
		ICBR	Bromide - water
		DISP	Environmental Disposal Fee
		TW24EW	Trace Metals (Total) in environmental waters
		TW23EW-F	Trace Metals (Dissolved) in environmental water

Sample Id	12	Service	Service Name
	4083104	W10	Routine Water Analysis
		NH4	Nitrogen - ammonium-N
		OPO4	Phosphorus - orthophosphate
Date Sampled	06-03-2012	CN1	A Cyanide - total
Priority	Normal	CN3	A Cyanide - weak acid dissociable
Site I.D.	Seep Pond	CNO	A Cyanate - water
Sample Description	MP09-04	F	Fluoride - water
		SUL	A Sulfide - water
		CNS	A Thiocyanate - water
		DOC	A Carbon - dissolved organic
		ICBR	Bromide - water
		DISP	Environmental Disposal Fee
		TW24EW	Trace Metals (Total) in environmental waters
		TW23EW-F	Trace Metals (Dissolved) in environmental water

Sample Id	13	Service	Service Name
	4083105	W10	Routine Water Analysis
		NH4	Nitrogen - ammonium-N
		OPO4	Phosphorus - orthophosphate
Date Sampled	06-03-2012	CN1	A Cyanide - total
Priority	Normal	CN3	A Cyanide - weak acid dissociable
Site I.D.	Seep Pond	CNO	A Cyanate - water
Sample Description	MP09-05	F	Fluoride - water
		SUL	A Sulfide - water
		CNS	A Thiocyanate - water
		DOC	A Carbon - dissolved organic
		ICBR	Bromide - water
		DISP	Environmental Disposal Fee
		TW24EW	Trace Metals (Total) in environmental waters
		TW23EW-F	Trace Metals (Dissolved) in environmental water

Confirmation of Service Request

Lot ID: **874987**
 Number of Samples: 22
 Printed Date: Jun 11, 2012

Please verify the following service request. If you have corrections or questions, please contact Client Services.

Sample Id	14	Service	Service Name
	4083106	W10	Routine Water Analysis
		NH4	Nitrogen - ammonium-N
		OPO4	Phosphorus - orthophosphate
Date Sampled	06-05-2012	CN1	A Cyanide - total
Priority	Normal	CN3	A Cyanide - weak acid dissociable
Site I.D.	Pony Creek	CNO	A Cyanate - water
Sample Description	MP09-08	F	Fluoride - water
		SUL	A Sulfide - water
		CNS	A Thiocyanate - water
		DOC	A Carbon - dissolved organic
		ICBR	Bromide - water
		DISP	Environmental Disposal Fee
		TW24EW	Trace Metals (Total) in environmental waters
		TW23EW-F	Trace Metals (Dissolved) in environmental water

Sample Id	15	Service	Service Name
	4083107	W10	Routine Water Analysis
		NH4	Nitrogen - ammonium-N
		OPO4	Phosphorus - orthophosphate
Date Sampled	06-03-2012	CN1	A Cyanide - total
Priority	Normal	CN3	A Cyanide - weak acid dissociable
Site I.D.	Seep Pond	CNO	A Cyanate - water
Sample Description	Seepage Pond	F	Fluoride - water
		SUL	A Sulfide - water
		CNS	A Thiocyanate - water
		DOC	A Carbon - dissolved organic
		ICBR	Bromide - water
		DISP	Environmental Disposal Fee
		TW24EW	Trace Metals (Total) in environmental waters
		TW23EW-F	Trace Metals (Dissolved) in environmental water

Sample Id	16	Service	Service Name
	4083108	W10	Routine Water Analysis
		NH4	Nitrogen - ammonium-N
		OPO4	Phosphorus - orthophosphate
Date Sampled	06-03-2012	CN1	A Cyanide - total
Priority	Normal	CN3	A Cyanide - weak acid dissociable
Site I.D.	Seep Outlet	CNO	A Cyanate - water
Sample Description	Seepage Discharge	F	Fluoride - water
		SUL	A Sulfide - water
		CNS	A Thiocyanate - water
		DOC	A Carbon - dissolved organic
		ICBR	Bromide - water
		DISP	Environmental Disposal Fee
		TW24EW	Trace Metals (Total) in environmental waters
		TW23EW-F	Trace Metals (Dissolved) in environmental water

Confirmation of Service Request

Lot ID: **874987**
 Number of Samples: 22
 Printed Date: Jun 11, 2012

Please verify the following service request. If you have corrections or questions, please contact Client Services.

Sample Id	17	Service	Service Name
	4083109	W10	Routine Water Analysis
		NH4	Nitrogen - ammonium-N
		OPO4	Phosphorus - orthophosphate
Date Sampled		CN1	A Cyanide - total
Priority	Normal	CN3	A Cyanide - weak acid dissociable
Site I.D.	Nansen	CNO	A Cyanate - water
Sample Description	Dup 1	F	Fluoride - water
		SUL	A Sulfide - water
		CNS	A Thiocyanate - water
		DOC	A Carbon - dissolved organic
		ICBR	Bromide - water
		DISP	Environmental Disposal Fee
		TW24EW	Trace Metals (Total) in environmental waters
		TW23EW-F	Trace Metals (Dissolved) in environmental water

Sample Id	18	Service	Service Name
	4083110	W10	Routine Water Analysis
		NH4	Nitrogen - ammonium-N
		OPO4	Phosphorus - orthophosphate
Date Sampled		CN1	A Cyanide - total
Priority	Normal	CN3	A Cyanide - weak acid dissociable
Site I.D.	Nansen	CNO	A Cyanate - water
Sample Description	Dup 2	F	Fluoride - water
		SUL	A Sulfide - water
		CNS	A Thiocyanate - water
		DOC	A Carbon - dissolved organic
		ICBR	Bromide - water
		DISP	Environmental Disposal Fee
		TW24EW	Trace Metals (Total) in environmental waters
		TW23EW-F	Trace Metals (Dissolved) in environmental water

Sample Id	19	Service	Service Name
	4083111	W10	Routine Water Analysis
		NH4	Nitrogen - ammonium-N
		OPO4	Phosphorus - orthophosphate
Date Sampled		CN1	A Cyanide - total
Priority	Normal	CN3	A Cyanide - weak acid dissociable
Site I.D.	Nansen	CNO	A Cyanate - water
Sample Description	SP1	F	Fluoride - water
		SUL	A Sulfide - water
		CNS	A Thiocyanate - water
		DOC	A Carbon - dissolved organic
		ICBR	Bromide - water
		DISP	Environmental Disposal Fee
		TW24EW	Trace Metals (Total) in environmental waters
		TW23EW-F	Trace Metals (Dissolved) in environmental water

Confirmation of Service Request

Lot ID: **874987**
 Number of Samples: 22
 Printed Date: Jun 11, 2012

Please verify the following service request. If you have corrections or questions, please contact Client Services.

Sample Id	20	Service	Service Name
	4083112	DISP	Environmental Disposal Fee
Date Sampled		TW24EW	Trace Metals (Total) in environmental waters
Priority	Normal		
Site I.D.	Nansen		
Sample	Field Blank		
Description			

Sample Id	21	Service	Service Name
	4083113	DISP	Environmental Disposal Fee
Date Sampled		TW24EW	Trace Metals (Total) in environmental waters
Priority	Normal		
Site I.D.	Nansen		
Sample	Travel Blank		
Description			

Sample Id	22	Service	Service Name
	4083114	DISP	Environmental Disposal Fee
Date Sampled		TW24EW	Trace Metals (Total) in environmental waters
Priority	Normal		
Site I.D.	Nansen		
Sample	Filter Blank		
Description			

Other Billable Services	Service	Service Name	Quantity
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Sample Service Count

Service Name	Service Code	Service Quantity
Bromide - water	ICBR	19
Carbon - dissolved organic	DOC	19
Cyanate - water	CNO	19
Cyanide - total	CN1	19
Cyanide - weak acid dissociable	CN3	19
Environmental Disposal Fee	DISP	22
Fluoride - water	F	19
Nitrogen - ammonium-N	NH4	19
Phosphorus - orthophosphate	OPO4	19
Routine Water Analysis	W10	19
Sulfide - water	SUL	19
Thiocyanate - water	CNS	19
Trace Metals (Dissolved) in environmental water	TW23EW-F	19
Trace Metals (Total) in environmental waters	TW24EW	22

Notes



Confirmation of Service Request

Lot ID: **874987**
Number of Samples: 22
Printed Date: Jun 11, 2012

Please verify the following service request. If you have corrections or questions, please contact Client Services.

If required for invoice approval, please sign and return to the address indicated at the top of the page.

(Signature) _____

Report Delivery Plan

Contact	Company	Address
Tamra Reynolds	EBA Engineering Consultants Ltd	Calcite Business Centre, Unit 6, 151 Industrial Whitehorse, YT Y1A 2V3 Phone: (867) 668-2071 Fax: (867) 668-4349 Email: tareynolds@eba.ca

<u>Copies</u>	<u>Delivery</u>	<u>Format</u>
1	Email - Merge Reports	PDF
1	Email - Single Report	EBA ESDAT Chemistry File
1	Email - Single Report	EBA ESDAT Sample File

APPENDIX C

SLUG TEST DATA

On excel spreadsheets provided separately on CD