

**SUMMARY OF ENVIRONMENTAL MONITORING
ACTIVITIES AT THE ABANDONED
CLINTON CREEK ASBESTOS MINE, 2011**



Looking to Hudson Lake from Upper Clinton Creek area, July 2011

FOR



ASSESSMENT AND ABANDONED MINES

ENERGY MINES AND RESOURCES

BY



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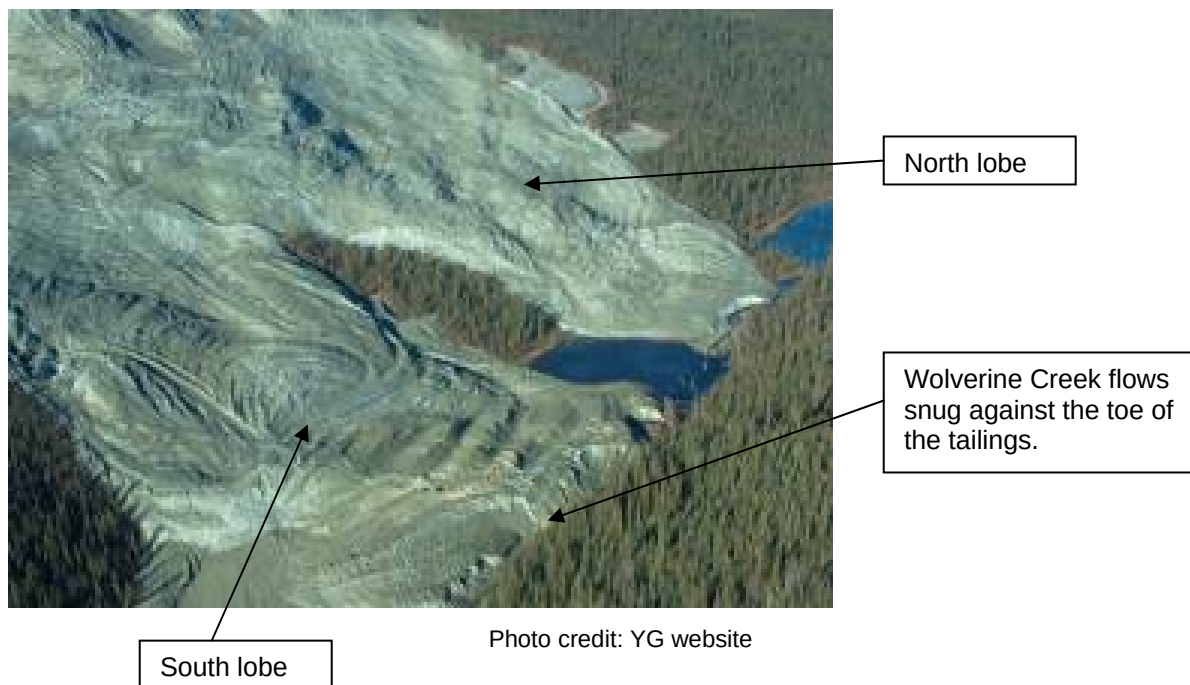
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1.0 BACKGROUND

The former Clinton Creek Asbestos Mine is located approximately 100 km northwest of Dawson City, Yukon, and nine km upstream of the confluence of Clinton Creek and the Forty Mile River. The mine operated from 1967 to 1978. The site encompasses three open pits (Porcupine, Snowshoe and Creek), two waste rock piles (Clinton Creek Dump and Porcupine Creek Dump), and a tailings pile.

In 1974, the original tailings deposit (the south lobe) slid down the Wolverine Creek Valley blocking the flow of Wolverine Creek. The blockage was almost immediately breached dispersing tailings as far as two kilometres downstream. Following the failure of the south lobe, tailings were placed further to the north. By 1986 the north lobe had reached the valley floor forming a second pond.



Also in 1974, 60 million tonnes of the Clinton Creek waste rock pile slumped across the Clinton Creek valley creating Hudgeon Lake. During the 1980s various weirs were constructed to reinforce the Clinton Creek channel in attempts to stabilize and control the outflow from Hudgeon Lake, with limited success. The structures were washed out during a high flow event in 1997. The Federal Government (DIAND) assumed responsibility for the site in 1999; following Devolution in 2003, the Government of Yukon

(YG) assumed responsibility for site management. In a series of stages from 2002 to 2004, gabion drop structures were constructed within the channel downstream of the Hudgeon Lake outlet. YG continues to monitor these structures and conducts repairs as necessary. Currently the site is in the remediation/risk management phase of closure planning under the Federal Contaminated Sites Action Plan (FCSAP) program.

During the summer of 2010, significant flooding occurred in Clinton Creek due to precipitation events coupled with a log jam at the outlet of Hudgeon Lake. This resulted in some damage to the gabion structures, road washouts and landslides in the immediate vicinity.

Road repairs were completed over the summer of 2010 and 2011 with the establishment of a new ford over Clinton Creek at sample site E1 in July 2011. The current access to the lake entails travelling over the waste rock dump since the road that existed adjacent to Clinton Creek downstream of the gabion structures is beyond repair. During September 2011, AECOM Canada Ltd. directed repairs of the damages to the gabion structures and the channel. Construction was undertaken by Copcan Contracting Ltd.

1.1 Scope of Work

In the early summer of 2009, Minnow Environmental Inc (Minnow) was contracted by YG to review all existing environmental data pertaining to the Clinton Creek site and make recommendations for any data gaps. This resulted in a monitoring program conducted in late summer 2009 by Laberge Environmental Services (Laberge Environmental Services, 2010).

Laberge Environmental Services (Laberge) was again contracted by the Assessment and Abandoned Mines branch (AAM) of YG to conduct various environmental monitoring surveys on Clinton Creek and several of its tributaries during the 2010 season (Laberge 2011). Further monitoring was undertaken by Laberge in 2011 to support the generation of a long term monitoring plan for the site. Water quality and stream sediment samples were collected during the open water season. Methods and the results of the 2011 work are summarized in this report.

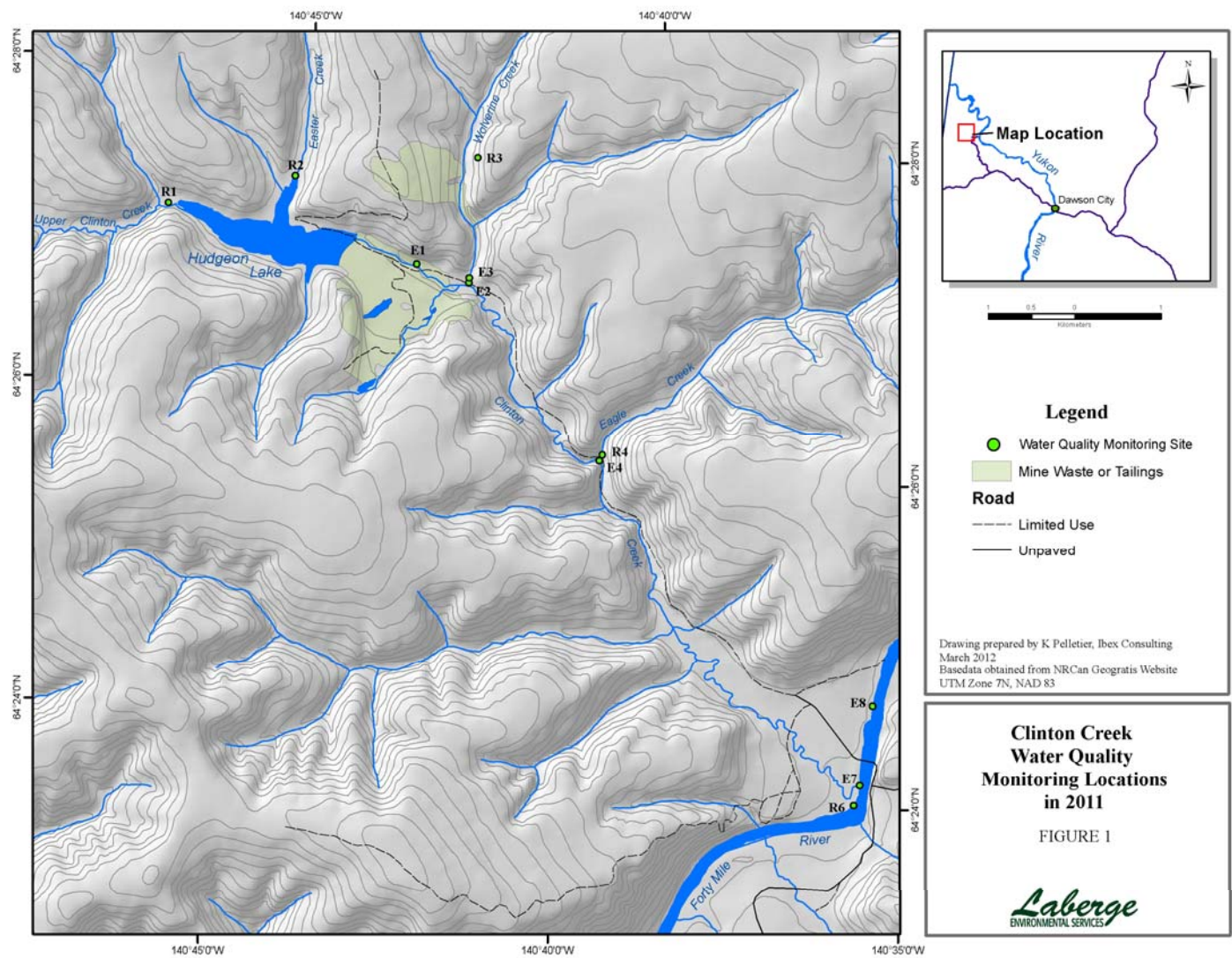
2.0 STUDY AREA

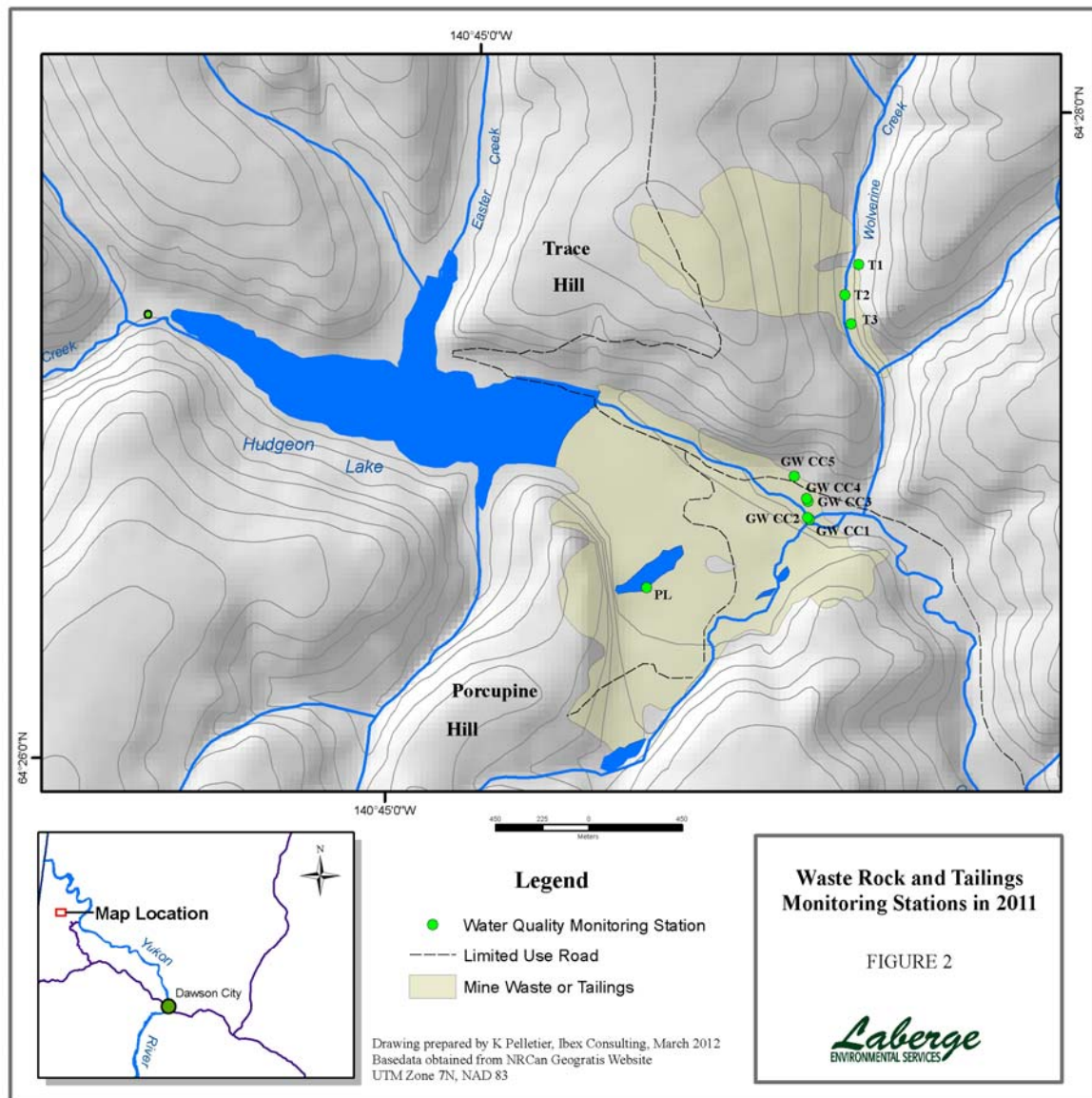
The former Clinton Creek Asbestos Mine is located approximately 100 km northwest of Dawson City, Yukon, and nine km upstream of the confluence of Clinton Creek and the Forty Mile River (Figure 1).

The study area lies in the north-west section of the Klondike Plateau Ecoregion. This ecoregion is part of Beringia and due to the lack of glaciation, V-shaped valleys and extensive upland boulder fields are characteristic. Permafrost is discontinuous but widespread. In the Clinton Creek valley, the south facing slopes are generally well drained and are vegetated with aspen, birch and white spruce. The north facing slopes tend to be underlain with permafrost and contain stands of black spruce.

The study area encompasses tributaries to Hudgeon Lake, Clinton Creek and some of its tributaries including groundwater seeps, and two sites on the Forty Mile River. Site descriptions and locations are presented in Table 1. Groundwater seeps and the tailings sample sites are depicted in Figure 2.

TABLE 1 SITE DESCRIPTION AND LOCATIONS					
Site Type	Site #	Site Description	NAD 83 Zone 7W		Sample Type
			Easting	Northing	
REFERENCE	R1	Clinton Creek u/s Hudgeon Lake	510600	7147506	WQ, S
	R2	Easter Creek u/s Hudgeon Lake	512006	7148015	WQ, S
	R3	Wolverine Cr u/s tailings	514079	7148502	WQ, S
	R4	Eagle Creek u/s culvert	516106	7145161	WQ, S
	R6	Forty Mile River u/s Clinton Cr	519436	7141962	WQ, S
EXPOSED	E1	Clinton Creek d/s gabions and u/s Porcupine Creek	513531	7147174	WQ, S
	PL	Porcupine Pit Lake from shore	513290	7146350	WQ
	GWCC-5	Groundwater flow in old (July 2010) Clinton Creek channel	513925	7146978	WQ
	GWCC-4	Groundwater at base of waste rock dump emerging below large rock, flows into side channel u/s ponded area	514000	7146880	WQ
	GWCC-3	Groundwater at base of waste rock dump, flows into side channel u/s of ponded area	514009	714685	WQ
	GWCC-2	Groundwater at base of waste rock dump, flows into ponded area northwest of GWCC-1	514018	7146790	WQ
	GWCC-1	Groundwater seep from base of waste rock dump to dammed and ponded area of Porcupine Creek	513850	7146853	WQ
	E2	Clinton Creek d/s Porcupine and u/s Wolverine Cr	514299	7146901	WQ, S
	T1	Tailings	513969	714199	S
	T2	Tailings	513923	7148047	S
	T3	Tailings	513972	7147914	S
	E3	Wolverine Cr u/s culvert	514315	7147023	WQ, S
	E4	Clinton Creek d/s Wolverine Cr and u/s Eagle Creek	516072	7145114	WQ, S
	E7	Clinton Creek near mouth	519517	7141871	WQ, S
	E8	Forty Mile River d/s Clinton Cr	519455	7142803	WQ, S
WQ = water quality S = sediment					





3.0 METHODS

Two field trips were made to the site in 2011; in July and in September. Two additional sample sites were included in July and then again in September; PL (Porcupine Pit Lake) and GW-CC1 (groundwater seep at the base of the waste rock dump at the beaver ponded area upstream of E2). In September, a further four groundwater seeps were sampled (GW-CC2 to GW-CC5). Sediment samples were also collected.

3.1 Water Quality Sampling

Exova, formerly Bodycote Analytical, supplied Laberge with the necessary sample kits prior to each field trip. Each sample bottle was rinsed three times with the sample waters and then filled and preserved as specified by the laboratory's protocols. Samples were kept cool then shipped as soon as possible to Exova in Surrey, BC. For these analyses Exova used methods as described in Standard Methods for the Examination of Water and Wastewater and from the US Environment Protection Agency test methods.

In situ measurements of pH, conductivity, water temperature and dissolved oxygen were made using hand held instruments that were calibrated daily.

Discharge measurements were also conducted where possible on each visit. Measurements were made using a Price velocity meter during July and September.

3.2 Sediment Geochemistry

Composite stream sediment samples were collected with a stainless steel trowel from the surface water sites during the mid summer field trip in July 2011. Fine grained material from recently deposited areas were chosen and placed into ziplock bags and kept cool. The samples were sent to Exova for metal analysis.

In September three sediment samples of the tailings were collected at various locations near the base to characterize the composition and the potential influence the tailings may have on Wolverine Creek.

At the Exova lab metals were determined using methods as described in the BC Ministry of Environment and McKeague's Manual on Soil Sampling and Methods of Analysis.

4.0 RESULTS

There were two sampling periods over the field season of 2011; July 25th to 29th and September 26th to 28th. Water quality samples were collected and discharge was measured on both occasions. While accessing GW-CC1, three additional groundwater seeps were identified daylighting from the base of the waste rock dump. These were sampled in September. Relevant pictures of some of the sites have been included in Appendix A.

The altered creek flow has exposed a groundwater source within the now dry Clinton Creek channel near E1. An orange coloured flow was followed from the ponded area upstream of E2 to its source (See Photos #1 and #2). Along this course bright green balls of algae were observed (Photo #3). This cold water algae was identified as *Hydrurus foetidus* (pers. comm. A. von Finster). Nearer to the source the thallus became filamentous. A ponded area had developed downstream of the source of the groundwater and included a school of immature Arctic grayling (Photo #4). Although not obvious in the photo there were two colour phases of fish. The darker grayling are speculated to be fish of clear but stained water (Forty Mile River or Clinton Creek) whereas the light coloured grayling probably recently migrated from an area of turbid water, likely the Yukon River (pers. comm. A. von Finster). The fish had outmigrated by September when samples were collected from the groundwater source, GW-CC5.

Stream sediments were collected during July and tailings sediments were collected in September.

Due to road washouts resulting from heavy rains and flooding in late summer of 2010, road construction was underway during the July field trip. Since the flooding had altered the flow path of Clinton Creek downstream of the gabions, the contractor created a ford across Clinton Creek near the base of the waste rock dump to meet up with the undamaged portion of the road. Access to Hudgeon Lake is now provided by traversing the waste rock dump as opposed to driving alongside Clinton Creek.

The upstream sites R1 and R2 were accessed by boat. Wolverine Creek upstream of the tailings, R3, is arrived at by foot and all the remaining sites are relatively near the road.

4.1 Surface Water Quality

The eleven monitoring sites established in 2009 were sampled in July and September 2011. Upon recommendation by AAM, water samples were also collected from the Porcupine Pit Lake and from a groundwater flow near the base of the waste rock dump at the beaver pond. It had been observed that the water levels in the pit lake had been decreasing since 2003 (Photo #5). During the July visit to the Porcupine Pit Lake a family unit of peregrine falcons was observed roosting, nesting and hunting along the cliffs here.

Although technically GWCC-1 is a groundwater seep, since it was sampled on both occasions in conjunction with Porcupine Pit Lake, its results are included in this section as well as in Section 4.2. The complete field results and the laboratory analytical reports can be viewed in Appendix B and C respectively.

The results for both field trips have been summarized in Table 2. Most of the sites had clear water. Flows were very turbid at R3, Wolverine Creek upstream of the tailings, on both occasions and notably in September. Although not confirmed, it is suspected that a landslide may exist upstream of R3. The suspended sediment had settled out in the slow moving pooled areas and Wolverine Creek was clear at E3 in September. The Forty Mile River was somewhat turbid in July.

Temperatures reflected the seasonal time of sampling. Waters were warm in the pit lake, Clinton Creek downstream of Hudgeon Lake and in the Forty Mile River. The temperatures in the tributaries in September were very cold and both R3 and R4 had the formation of ice along the stream edges as well as in the form of pan ice in the water column.

Discharge was higher in July than in September. Flows could not be measured on any occasion on the Forty Mile River due to its substantial size.

All sampled waters were slightly alkaline and the pH ranged from 7.28 at GW-CC1 to 8.67 at E3. Conductivity varied throughout the study area with high values reported in Porcupine Pit Lake and the groundwater site. The lowest conductivities were recorded in the Forty Mile River. Alkalinity, sulphate and hardness values followed the same trend as conductivity.

Summary of Environmental Monitoring Activities at the Abandoned Clinton Creek Asbestos Mine, 2011

TABLE 2			WATER QUALITY SUMMARY, SURFACE WATER SITES, 2011																											
	Site #	Date	TSS mg/L	Water Temp °C	Field pH	Field Conductivity uS/cm	Discharge cms	T-Alkalinity as CaCO3 mg/L	Sulfate Dissolved mg/L	Aluminum Dissolved mg/L	Aluminum Total mg/L	Arsenic Dissolved mg/L	Arsenic Total mg/L	Cadmium Dissolved mg/L	Cadmium Total mg/L	Cadmium Guideline mg/L	Chromium Dissolved mg/L	Chromium Total mg/L	Copper Dissolved mg/L	Copper Total mg/L	Iron Dissolved mg/L	Iron Total mg/L	Selenium Dissolved mg/L	Selenium Total mg/L	Silver Dissolved mg/L	Silver Total mg/L	Zinc Dissolved mg/L	Zinc Total mg/L	Hardness Total mg CaCO3/L	
REFERENCE	Detection Limit:			2				5	0.5	0.005	0.005	0.0002	0.0002	0.00001	0.00001		0.0004	0.0004	0.001	0.001	0.005	0.01	0.0006	0.0006	0.00001	0.00001	0.001	0.001	1	
	R-1	7/28/2011	44	9.2	8.35	461	0.275	155	187	0.024	0.728	0.001	0.002	0.00003	0.00015	0.00010	0.0005	0.0025	0.002	0.006	0.454	2.19	0.0016	0.0016	<0.00001	0.00005	0.002	0.011	352	
		9/27/2011	3	1.3	7.94	781	0.165	182	242	0.014	0.049	0.0008	0.001	0.00005	0.00007	0.00012	0.0005	0.0008	0.002	0.002	0.364	0.798	0.0012	0.0013	<0.00001	0.00001	0.003	0.003	426	
	R-2	7/28/2011	<2	6.2	8.12	389	0.058	174	139	0.014	0.101	0.0009	0.0009	<0.00001	<0.00001	0.00009	0.0006	0.0011	0.001	0.002	0.179	0.33	<0.0006	<0.0006	<0.00001	0.00001	0.001	0.002	316	
		9/27/2011	<2	1.9	8.07	691	0.055	198	177	0.008	0.014	0.001	0.001	0.00003	0.00002	0.00010	0.0005	0.0007	0.001	<0.001	0.157	0.185	<0.0006	<0.0006	<0.00001	<0.00001	0.001	0.001	378	
	R-3	7/27/2011	372	5.7	8.03	424	0.056	134	206	0.01	2.85	0.0012	0.0033	<0.00001	0.00017	0.00010	0.0027	0.0058	0.002	0.015	0.168	5.19	0.0006	<0.0006	<0.00001	0.00006	<0.001	0.032	366	
		9/28/2011	608	0.0	8.13	840	0.053	167	300	0.02	8.04	0.0008	0.0057	0.00001	0.00038	0.00013	0.0006	0.0161	0.001	0.02	0.105	12.4	<0.0006	0.0006	<0.00001	0.00013	0.002	0.064	485	
	R-4	7/26/2011	126	7.4	8.46	405	0.067	132	92	0.025	2.5	0.0014	0.0034	0.00002	0.0002	0.00007	0.0006	0.0064	0.002	0.009	0.184	4.05	0.0021	0.002	<0.00001	0.00006	0.001	0.015	236	
		9/27/2011	11	0.0	8.15	559	0.037	159	133	0.015	0.155	0.0044	0.0043	0.00007	0.0001	0.00009	<0.0004	0.0011	0.002	0.002	0.306	0.501	0.0024	0.0021	<0.00001	0.00001	0.005	0.004	300	
	R-6	7/27/2011	60	12.7	7.64	155	na	53	24	0.105	1.56	0.0006	0.0013	<0.00001	0.00003	0.00003	0.0006	0.0033	0.003	0.006	0.357	2.29	<0.0006	<0.0006	<0.00001	0.00001	0.002	0.008	80.5	
		9/26/2011	<2	4.4	8.21	206	na	64	38	0.099	0.293	0.0007	0.0007	0.00002	0.00002	0.00003	0.0006	0.001	0.003	0.003	0.425	0.606	<0.0006	<0.0006	<0.00001	<0.00001	0.005	0.004	101	
	EXPOSED	E-1	7/26/2011	<2	17.4	8.33	370	0.333	95	92	0.035	0.051	0.001	0.0015	0.00002	0.00005	0.00006	0.0006	0.001	0.004	0.003	0.186	0.35	0.0009	0.0007	<0.00001	<0.00001	0.002	0.003	212
9/28/2011			<2	5.9	8.28	558	0.242	140	151	0.018	0.044	0.001	0.0011	0.00003	0.00005	0.00009	0.002	0.0009	0.003	0.003	0.181	0.264	0.0014	0.0012	<0.00001	0.00001	0.006	0.002	310	
PL		7/27/2011	<2	18.0	8.50	2005	na	177	1170	<0.005	0.009	0.0078	0.0077	0.00008	0.00008	0.00034	0.0006	0.0009	<0.001	<0.001	0.012	0.019	0.0052	0.0046	<0.00001	<0.00001	0.002	0.003	1510	
		9/27/2011	<2	7.2	8.40	2800	na	214	1570	<0.005	0.009	0.0004	0.0082	<0.00001	0.00008	0.00044	0.0005	0.001	<0.001	<0.001	0.006	0.025	<0.0006	0.0052	<0.00001	<0.00001	0.002	0.002	2040	
GW-CC1		7/27/2011	<2	4.1	7.87	1506	na	324	1140	<0.005	0.038	0.0024	0.0023	0.00019	0.00018	0.00037	0.0025	0.0026	0.001	0.001	0.013	<0.01	0.0037	0.0037	<0.00001	<0.00001	0.009	0.009	1680	
		9/28/2011	<2	4.1	7.28	2540	na	323	1340	<0.005	<0.005	0.0022	0.0021	0.00019	0.0002	0.00038	0.0021	0.0019	0.002	0.001	0.02	0.027	0.0021	0.0024	<0.00001	<0.00001	0.011	0.013	1710	
E-2		7/26/2011	<2	14.4	8.14	540	0.389	134	157	0.021	0.052	0.0015	0.0016	0.00002	0.00004	0.00009	0.0006	0.001	0.003	0.003	0.304	0.487	0.0011	0.0011	<0.00001	<0.00001	0.002	0.003	306	
		9/27/2011	<2	6.5	7.97	642	0.267	161	181	0.021	0.033	0.0016	0.0017	0.00005	0.00005	0.00010	0.0008	0.0011	0.003	0.002	0.42	0.49	0.0007	0.0007	<0.00001	0.00001	0.004	0.002	346	
E-3		7/26/2011	30	9.9	8.67	530	0.097	132	155	0.033	0.565	0.0014	0.0016	<0.00001	0.00005	0.00009	0.0013	0.0029	0.002	0.004	0.128	1.19	0.0009	0.001	0.00002	0.00003	0.002	0.008	300	
		9/27/2011	<2	2.6	8.27	756	0.044	172	230	0.018	0.063	0.0014	0.0015	0.00001	0.00002	0.00011	0.0009	0.0012	0.002	0.002	0.066	0.282	0.0007	0.0008	<0.00001	0.00001	0.003	0.004	415	
E-4		7/26/2011	16	14.7	8.00	684	0.544	168	228	0.016	0.182	0.0015	0.0016	0.00004	0.00005	0.00011	0.0008	0.0022	0.002	0.003	0.301	0.817	0.0009	0.0007	<0.00001	0.00001	0.003	0.005	412	
		9/27/2011	<2	4.3	7.65	871	0.433	195	287	0.015	0.039	0.0015	0.0016	0.00004	0.00005	0.00013	0.0008	0.001	0.002	0.002	0.354	0.468	0.0007	0.0007	<0.00001	0.00002	0.006	0.004	474	
E-7		7/27/2011	35	10.6	8.22	666	0.778	169	209	0.024	0.601	0.0013	0.002	0.00002	0.00008	0.00011	0.0009	0.0032	0.002	0.004	0.322	1.43	0.0009	0.0007	<0.00001	0.00002	0.002	0.006	398	
		9/26/2011	4	3.7	8.06	841	0.652	199	272	0.014	0.047	0.0012	0.0014	0.00006	0.00006	0.00013	0.0008	0.0009	0.003	0.002	0.248	0.424	<0.0006	0.0006	<0.00001	0.00002	0.006	0.004	476	
E-8	7/27/2011	151	12.2	7.65	153	na	52	26	0.105	3.48	0.0007	0.0018	<0.00001	0.00006	0.00003	0.0006	0.006	0.003	0.012	0.366	4.3	<0.0006	<0.0006	<0.00001	0.00004	0.001	0.018	84.9		
	9/27/2011	4	3.4	8.02	213	na	65	39	0.093	0.289	0.0007	0.0007	0.00002	0.00002	0.00003	0.0007	0.0011	0.002	0.003	0.418	0.611	<0.0006	<0.0006	<0.00001	0.00001	0.015	0.004	103		
CCME Guideline for the protection of freshwater aquatic life									100*	0.1	0.1	0.005	0.005				0.001	0.001	0.004	0.004	0.3	0.3	0.001	0.001	0.0001	0.0001	0.030	0.030		
* BC guideline								Note that values that exceed guidelines are displayed in bold and highlighted.																						

Sulphate enters the aquatic environment through leaching of sedimentary rocks including shales, with natural concentrations ranging from 10 to 80 mg/L (CCREM, 1987). Dissolved sulphate concentrations in the Clinton Creek study area ranged from 24 mg/L at R6 to 1570 mg/L at PL. The associated rock in the study area is shale and a contributor of sulphate. There currently are no recommended national (CCME) guidelines for sulphate for the protection of aquatic life; however British Columbia has set 100 mg/L as a guideline for BC waters. This guideline was exceeded at all locations except at the Forty Mile River sites, R6 and E8. It also was not exceeded at R4 and E1 during July.

The CCME recommended metal guidelines for the protection of freshwater aquatic life were exceeded at several of the sites. Some of the metals have guidelines that depend upon the hardness of the water. The majority of the sites had hard to very hard water. The guideline for cadmium is very conservative but since the majority of the waterbodies had hard water, the calculation using the formula $10\{0.86[\log(\text{hardness})]-3.2\}$ was used to determine the site specific guideline for each location. The guideline for cadmium was met in all of the dissolved samples but exceeded at the reference sites R1, R3, R4 and at the exposed site E8 in the totals metals samples.

The guideline for copper also changes with hardness. For soft waters (0 to 120) the guideline is 0.002 mg/L, for hard waters (120 to 180) the guideline is 0.003 mg/L and for very hard waters (>180) the guideline is 0.004 mg/L. The applicable guideline was exceeded at the reference sites R1, R3, R4 and R6, and at the exposed site E8 in the total metals samples only. The highest concentrations of copper were documented at R3.

The recommended guideline for aluminium is 0.1 mg/L with concentrations greater than the guideline reported at most of the sites. The guideline was met at E1, E2, PL and GW-CC1. The greatest concentrations of aluminium were recorded in the total metals samples at R3 and E8.

The recommended guideline for chromium (0.001 mg/L) was exceeded at all of the sites except PL. The highest concentration in the study area occurred in the total metals sample at R3 on September 28th with a value of 0.0161 mg/L. The guideline was exceeded in the dissolved state at R3, E1, GW-CC1 and E3.

The recommended guideline for iron was exceeded at all of the sites with the exception of PL and GW-CC1. The greatest concentrations of iron were recorded at R3 (5.19 mg/L in July and 12.4 mg/L in September).

The guideline for selenium was slightly exceeded in samples collected from R1, R4, E1, PL, GW-CC1 and E2. The highest values were documented in PL.

The recommended guidelines for silver and zinc were exceeded at R3 only.

The recommended guidelines are applicable to total metals only, which includes concentrations contained within the mobilized sediment as well as within the water column. The highest suspended sediment concentrations documented during the study period coincided with the greatest concentrations of many of the metals in Table 2. High concentrations of aluminium, cadmium, chromium, copper and iron were documented in the very turbid waters of R3, yet concentrations in the dissolved samples from this site were very low. Most metals are more toxic to aquatic life in the dissolved phase.

4.2 Groundwater Seeps

Several additional seeps daylighting from the base of the waste rock dump into Clinton Creek downstream of E1 and upstream of E2 were identified during the July site visit and sampled during September. Another seep located in the now dry Clinton Creek channel downstream of the original location of E1 was also sampled in September 2011. The data is summarized in Table 3 and the complete analytical report can be found in Appendix C.

Considering the time of year sampled, the waters of the seeps were very warm and ranged from 4.1°C at GWCC-1 to 9.6 °C at GWCC-4. The flows were all clear and slightly alkaline. Conductivity was high and ranged from 697 uS/cm at GWCC-4 to 2540 uS/cm at GWCC-1.

The recommended CCME guidelines for the protection of freshwater aquatic life was exceeded for chromium and selenium in both the dissolved and total samples collected from GWCC-1 and GWCC-2. The guidelines for aluminium and arsenic were exceeded in the total metals samples at GWCC-5. The concentration of selenium was exceeded here as well. Cadmium, copper, iron, lead, nickel and zinc met the respective guidelines at all of the sites.

TABLE 3 WATER QUALITY SUMMARY OF THE GROUNDWATER SEEPS, SEPTEMBER 28TH, 2011									
Site Description		Units	Detection Limit	GW - CC1	GW - CC2	GW - CC3	GW - CC4	GW - CC5	CCME Guideline for the protection of freshwater aquatic life
Water Temperature		°C		4.1	6.7	8.9	9.6	5.2	
Total Suspended Solids		mg/L	2	<2	<2	<2	<2	<2	
pH - field				7.28	7.54	7.44	7.54	7.37	6.5 to 9.0
Conductivity - field	at 25 °C	µS/cm		2540	1654	856	697	1063	
T-Alkalinity	as CaCO ₃	mg/L	5	323	254	192	181	250	
Sulfate (SO ₄)	Dissolved	mg/L	0.5	1340	760	285	201	356	
Total Organic Carbon		mg/L	0.5	5.6	7.2	9.5	9.8	7.5	
Metals									
Aluminum	Dissolved	mg/L	0.005	<0.005	<0.005	0.005	<0.005	0.006	0.1
Aluminum	Total	mg/L	0.005	<0.005	0.01	0.006	<0.005	0.258	0.1
Arsenic	Dissolved	mg/L	0.0002	0.0022	0.0017	0.0012	0.0014	0.0011	0.005
Arsenic	Total	mg/L	0.0002	0.0021	0.0014	0.001	0.0014	0.0071	0.005
Cadmium	Dissolved	mg/L	0.00001	0.00019	0.00018	0.00007	0.00005	0.00006	*
Cadmium	Total	mg/L	0.00001	0.0002	0.00016	0.00008	0.00006	0.00002	*
Chromium	Dissolved	mg/L	0.0004	0.0021	0.0012	0.0005	<0.0004	0.0004	0.001
Chromium	Total	mg/L	0.0004	0.0019	0.0014	0.0007	0.0005	0.0007	0.001
Copper	Dissolved	mg/L	0.001	0.002	0.003	0.001	<0.001	0.001	0.004
Copper	Total	mg/L	0.001	0.001	0.002	<0.001	0.001	0.002	0.004
Iron	Dissolved	mg/L	0.005	0.02	<0.005	<0.005	0.008	<0.005	0.3
Iron	Total	mg/L	0.01	0.027	0.027	0.028	0.016	0.018	0.3
Lead	Dissolved	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.007
Lead	Total	mg/L	0.0001	<0.0001	0.0002	<0.0001	<0.0001	0.0002	0.007
Nickel	Dissolved	mg/L	0.001	0.073	0.04	0.031	0.033	0.038	0.15
Nickel	Total	mg/L	0.001	0.074	0.039	0.031	0.032	<0.001	0.15
Selenium	Dissolved	mg/L	0.0006	0.0021	0.0022	0.0006	<0.0006	0.0042	0.001
Selenium	Total	mg/L	0.0006	0.0024	0.0015	0.0007	<0.0006	<0.0006	0.001
Zinc	Dissolved	mg/L	0.001	0.011	0.009	0.004	0.004	0.007	0.030
Zinc	Total	mg/L	0.001	0.013	0.009	0.002	0.002	0.004	0.030
Hardness	Total	mg CaCO ₃ /	1	1710	1040	514	404	651	
* Cadmium guideline by calculation per site using the formula $10\{0.86[\log(\text{hardness})]-3.2\}$.				0.00038	0.00025	0.00014	0.00011	0.00017	
Note that values that exceed the CCME guidelines are bold and highlighted.									

Several parameters were much higher at the groundwater sites than in the surface water samples. With the exception of Porcupine Pit Lake (PL), concentrations of sulphate, hardness and its constituents calcium, magnesium and strontium, were much higher in the seeps. The chemistry of PL and GWCC-1 are fairly similar and it may be possible that they are hydraulically linked.

4.3 Sediment Geochemistry

4.3.1 Stream Sediments

Composite stream sediment samples were collected from each site during the July study period and analyzed for metal content by Exova. Table 4 shows the geochemistry data for selected parameters compared to the CCME sediment quality guidelines. The laboratory analytical reports containing results for all of the parameters can be examined in Appendix D.

TABLE 4 CONCENTRATIONS OF METALS (ug/g) IN STREAM SEDIMENTS, CLINTON CREEK, JULY 2011									
Site Type	Site Description	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Zinc	pH
Reference	R1 - Clinton Cr u/s Hudgeon Lake	4.5	0.54	28.7	133	11.2	0.126	87	7.8
	R2 - Easter Cr u/s Hudgeon Lake	5.2	0.5	39.3	82.1	9.4	0.069	75.2	7.8
	R3 - Wolverine Cr u/s tailings	3.4	0.3	24.7	35.9	8.6	0.053	82.8	7.5
	R4 - Eagle Cr u/s culverts	8.2	0.61	33.5	45.8	10.2	0.107	80.4	7.9
	R6 - Forty Mile River u/s Clinton Creek	1.5	0.1	20.8	26.4	6.7	0.024	54	7.6
Exposed	E1 - Clinton Cr d/s gabions and u/s Porcupine Cr	23.7	1.2	458	154	16.1	0.215	118	8.5
	E2 - Clinton Cr d/s Porcupine u/s Wolverine	22.9	1.1	337	92	15.2	0.19	106	8.2
	E3 - Wolverine Cr u/s culverts	4.2	0.55	72.5	49.2	12	0.085	89.4	8.1
	E4 - Clinton Cr d/s Wolverine u/s Eagle	3.6	0.64	34.8	50.7	8.3	0.078	81.5	7.9
	E7 - Clinton Cr near mouth	7.4	0.3	32.9	76	9.8	0.04	71.4	8
	E8 - Forty Mile River d/s Clinton Creek	2.1	0.1	23	68.9	7.1	0.03	52.7	8
	PL - Pit Lake	38.2	0.69	590	648	11.2	0.187	67.7	8.5
ISQG		5.9	0.6	37.3	35.7	35	0.17	123	
PEL		17	3.5	90.0	197	91.3	0.486	315	
Note: ISQG = Interim freshwater Sediment Quality Guidelines, in bold where exceeded. PEL = Probable Effects Level (>50% of adverse effects occur above this level), highlighted and in bold where exceeded.									

The concentration of arsenic exceeded the interim freshwater sediment quality guidelines (ISQG) at R4, E1, E2, E7 and PL, and the probable effects levels (PEL) at E1, E2 and PL. Generally, concentrations greater than the PEL have a 50% incidence of creating adverse biological effects. The ISQG for cadmium was exceeded at R4, E1, E2, E4 and PL.

Concentrations of chromium were very high at some of the sites and significantly exceeded the PEL of 90 ppm at E1, E2 and PL. The ISQG was exceeded at E3. Concentrations were considerably lower at E3 than in 2010 and 2009. It is suspected that the extreme flooding events during August 2010 flushed the fine sediment downstream. This is discussed further in the following section. Chromium concentrations at the reference sites ranged from 20 to 40 ug/g.

The ISQG for copper was exceeded in the sediments at all sites except for the Forty Mile River, R6, and Wolverine Creek upstream of the tailings, R3. Concentrations of lead were very low and were well below the ISQG. The ISQG for mercury was exceeded at E1, E2 and PL. All samples met the zinc guidelines.

4.3.2 Tailings Sediment

Three sediment samples at the toe of the tailings were collected during the September visit in attempts to characterize the potential chemistry that may enter Wolverine Creek through sloughing and/or leaching. The samples were analyzed for metals and the results are summarized for selected parameters in Table 5. The complete analytical report is presented in Appendix D.

TABLE 5 CONCENTRATIONS OF METALS IN TAILINGS, SEPT. 2011						
Metal	T-1	T-2	T-3	Mean	ISQG	PEL
Arsenic	8.7	6.8	21	12.2	5.9	17
Cadmium	<0.05	<0.05	<0.05	<0.05	0.6	3.5
Chromium	1470	1810	1670	1650	37.3	90.0
Copper	89.3	68.6	65.1	74.3	35.7	197
Lead	5	4.3	4.8	4.7	35	91.3
Mercury	0.019	0.054	0.012	0.028	0.17	0.486
Nickel	2110	3230	3050	2797		
Zinc	27.8	23.9	22.2	24.6	123	315
pH	9.2	9.2	9.3	9.2		

The tailings are quite alkaline with an average pH of 9.2. Concentrations of arsenic exceeded the ISQG in all samples and the PEL in T-3. Cadmium was not detected in any of the tailings samples. Chromium levels were far greater than the PEL in the tailings sediments. The remaining metals met the respective guidelines.

The chemistry of the tailings is considerably different from the stream sediment samples. Concentrations of chromium, nickel, silicon and magnesium were much higher in the tailings than in the stream sediments. This is not surprising as the chrysotile asbestos fibres that were mined at Clinton Creek contain high levels of nickel, chromium, cobalt and manganese (Schreier et al, 1987). Chrysotile asbestos is a magnesium silicate mineral whose chemical formula is $(\text{Mg}_3(\text{Si}_2\text{O}_5)(\text{OH})_4)$. The tailings would consist of fine grained material comprised of these elements.

Nickel concentrations ranged from 16 ug/g in the stream sediments from the Forty Mile River to 1400 ug/g in the sediments from Porcupine Pit Lake (Appendix C). The stream sediments at E1 had the next highest concentration of 844 ug/g. The levels of nickel in the tailings averaged 2800 ug/g. The concentrations of chromium and magnesium followed similar trends.

These three metals have been tabulated below for sites that were sampled in 2010 and 2011 (Table 6). Wolverine Creek downstream of the tailings, E3, was also sampled in

2009 although magnesium was not one of the metals analyzed. The only other stream sediment data that could be located was collected by Royal Roads in 1998 at sites corresponding to R3 and E3 and this data has also been included.

TABLE 6 COMPARISONS OF SELECTED METALS IN 1998, 2009, 2010 AND 2011								
METAL	YEAR	E2	R3	E3	R4	E4	E7	E8
Chromium	1998		62	1670				
	2009			1180				
	2010	283	40.1	1160	24	222	82.6	21.7
	2011	337	24.7	72.5	33.5	34.8	32.9	23
Magnesium	2010	29000	6400	139000	4730	27400	11000	5000
	2011	28800	5400	8660	5120	6320	5630	4910
Nickel	1998		70	1860				
	2009			1660				
	2010	715	50.6	2200	27.8	472	163	17.9
	2011	675	29.1	29.1	42.3	60.6	33.4	16.9
Note that only chromium has CCME guidelines. ISQG is 37.3 ug/g (bold) and PEL is 90.0 ug/g (shaded) where exceeded.								

All sites downstream of the tailings (E3, E4 and E7) showed high concentrations of each of these metals in the 2010 samples. These samples were collected in July 2010, prior to the historic rainfall events and flooding that occurred later in the season. The concentration of chromium and nickel in the 1998 data at E3 are similar to those documented here in 2009 and 2010.

The much lower concentrations documented at these sites in July 2011 indicate that the fines that had been deposited downstream over time were flushed out during the scouring action of the extreme flows during the flooding events in August 2010. The other sites upstream of the tailings (R3) and Wolverine Creek (E2) had similar concentrations in 1998, 2010 and 2011 indicating ambient levels of these metals at these sites. Likewise at R4, Eagle Creek upstream of Clinton Creek and E8, the Forty Mile River one km downstream of Clinton Creek. This data would strongly suggest that metals are entering the receiving environment from the tailings in the Wolverine Creek valley.

5.0 SUMMARY

The waterbodies sampled in 2011 were alkaline, generally clear and hard to very hard, with exceptions. Flows were very turbid in Wolverine Creek upstream of the tailings (R3) and fairly turbid in the Forty Mile River during July. Several CCME guidelines were exceeded throughout the study area at both the reference and the exposed sites.

The groundwater seeps had significantly greater concentrations of sulphate and the metals that contribute to hardness, than the sites located on Clinton Creek and its tributaries.

The data collected during 2011 show that chromium continues to be a metal of concern in the water and the sediments of the study area. Tailings continue to enter Wolverine Creek. The waterborne asbestos may not have any detrimental impact to fish (Mackenzie-Grieve, J. pers. comm), but the high levels of the input of some metals definitely has the potential to negatively impact freshwater aquatic life. Tailings will continue to be transported by Wolverine Creek and hence to Clinton Creek, the Forty Mile River and the Yukon River, due to the large source (10 to 12 million tons). The tailings are moving downslope, albeit slowly, and are eroding into Wolverine Creek (AECOM, 2011). The leading edge of the tailings is steep and material also frequently slumps into the creek channel. The south and north lobes cover approximately a 750 meter length of the creek to a depth of up to 14m above the original creek bed (AECOM, 2011). There is a rock lined channel providing a transition across the tailings downstream of the south lobe to the natural Wolverine Creek channel, whose purpose is to prevent the downcutting of Wolverine Creek into the tailings. Due to the instability of the tailings, the overall transportation of tailings to the receiving environment is a continual process.

6.0 RECOMMENDATIONS

There is a limited amount of water quality data for this site and a database should be set up to monitor and assess any trends over time. The established sites should continue to be monitored, at a minimum of twice a year. Once sufficient data has been acquired, it will then be easier to determine which sites to include in the long term monitoring program. The instability of the tailings and the waste rock dump dictate the need for on-going monitoring.

It is recommended that a sample site be established on Snowshoe Pit Lake to characterize its water in 2012. It is located upstream of the beaver pond and may be hydraulically linked to GW-CC1. Access is difficult to this site which may limit the regularity of sampling but at least one set should be collected and analyzed for the complete suite of parameters.

Stream sediment samples should be collected annually to track the mobilization of the tailings.

Since the instability of chrysotile asbestos minerals can release associated trace metals (chromium, cobalt, nickel and manganese), it may be beneficial to sample slimy sculpin in the Clinton Creek drainage for whole body metal analysis. Chromium has been documented in very high concentrations in the stream sediments at several of the sites within the drainage. Slimy sculpin, a benthic organism, live their life on stream bottoms and thus live in close proximity to the contaminated sediments. A fairly extensive database of metals in slimy sculpin tissues exists and it could be worthwhile to determine the range of concentrations found in the sculpins from the Clinton Creek drainage and compare them regionally. One of the components of the closure options include preserving and/or enhancing fish habitat to benefit several species (juvenile Chinook salmon and Arctic grayling) in Clinton Creek, and assessing the bioavailability of the common metals in this area would either support or undermine that goal.

It is recommended that a benthic invertebrate monitoring program also be conducted in 2012 to further characterize fish habitat, as well as to assess the health of the watershed. Unlike chemical measures, invertebrate assemblages reflect long-term exposure to varying water quality conditions and thus integrate effects of contaminants over time (Rosenberg and Resh, 1993). These organisms are useful in this respect as their abundance and taxonomic diversity respond to a wide range of impacts including sedimentation, organic loading and changes in chemical water quality. Using benthic invertebrates as biomonitoring tools offers many advantages for the following reasons; they are ubiquitous, they are abundant and easy to collect, there are a large number of species offering a spectrum of responses to environmental stress, they are generally sedentary and therefore are representative of local conditions, and they have long life cycles compared to other groups (i.e. periphyton). As such, benthic macroinvertebrates act as continuous monitors of the water they inhabit and therefore can serve as sentinels of change in local conditions. Since Clinton Creek is a very dynamic system, further benthos assessments should be done. Few benthic monitoring programs have been completed over the years; in 1975 (Landucci, 1978), in 2007 (White Mountain Environmental Consulting, 2009) and in 2009 (Laberge 2010).

7.0 REFERENCES

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APPENDIX A

CLINTON CREEK SITE PHOTOGRAPHS, 2011

(All photographs taken by Bonnie Burns unless otherwise indicated)



Photo #1; Orange coloured stream flowing in the dry Clinton Cr bed.



Photo #2: The groundwater source of this flow. (Photo credit: Al von Finster).



Photo #3; Algae (*Hydrurus foetidus*) growing on the substrate of the groundwater stream.
Photo credit: Al von Finster.



Photo #4; A school of immature Arctic grayling in a pool formed by the groundwater stream.
Photo credit: Al von Finster.



Photo #5; Porcupine Pit Lake showing evidence of gradual dewatering with exposed beach lines apparent on the left side of the pit. July 27th, 2012.



Photo #6; The new location of E1, downstream of the gabions, July 26th, 2012.



Photo #7; Hiking towards the tailings on route to R3, July 27th, 2012.



Photo #8; R3 looking upstream, September 28th, 2012.



Photo #9; GW-CC4 where the water temperature was 9.6°C on September 26th, 2012.



Photo #10; The stream created by flow from GW-CC3 and GW-CC4, Sept 26th, 2012.

APPENDIX B

COMPLETE FIELD DATA, JULY & SEPTEMBER, 2011

FIELD DATA FOR JULY 2011

Site #	Site Description	Date Sampled 2011	Time Sampled	NAD 83		Water Temp oC	pH	Conductivity uS/cm	Dissolved Oxygen mg/L	Dissolved Oxygen %	Average Velocity m/s	Discharge (cms)	Comments
				Easting	Northing								
R1	Clinton Creek u/s Hudgeon Lake	July 28	12:15	510600	7147506	9.2	8.35	461	10.44	95.8	0.29	0.275	Water very silty, grey/brown, frog sighted, mouth area has changed
R2	Easter Creek u/s Hudgeon Lake	July 28	10:35	512006	7148015	6.2	8.12	389	10.50	89.5	0.24	0.058	Water clear.
E1	Clinton Creek d/s gabions and u/s Porcupine Creek	July 26	14:30	513531	7147174	17.4	8.33	370	9.30	102.6	0.43	0.333	Sampled near new ford.
PL	Porcupine Pit Lake from shore	July 27	14:45			18.0	8.50	2005	6.07	67.8	na	na	Water colour a turquoise blue. Some green algae observed on substrate. Peregrine falcons roosting on cliff walls.
GWCC-1	Groundwater seep from base of waste rock dump to dammed and ponded area of Porcupine Creek	July 27	16:45	513850	7146853	4.1	7.87	1506	3.76	31.1	na	na	Difficult to estimate flow as it enters the pond below surface level. Frog sighted in area.
E2	Clinton Creek d/s Porcupine and u/s Wolverine Cr	July 26	14:15	514299	7146901	14.4	8.14	540	8.36	87.4	0.40	0.389	
R3	Wolverine Cr u/s tailings	July 27	10:30	514079	7148502	5.7	8.03	424	11.08	93.3	0.32	0.056	
E3	Wolverine Cr u/s culvert	July 26	15:30	514315	7147023	9.9	8.67	530	10.65	99.6	0.22	0.097	The flow pathway between the treed area and the road has altered due to flooded conditions last year.
E4	Clinton Creek d/s Wolverine Cr and u/s Eagle Creek	July 26	17:45	516072	7145114	14.7	8.00	684	9.31	96.7	0.39	0.544	
R4	Eagle Creek u/s culvert	July 26	17:15	516106	7145161	7.4	8.46	405	11.68	102.5	0.41	0.067	Water very turbid.
R6	Forty Mile River u/s Clinton Cr	July 27	9:00	519436	7141962	12.7	7.64	155	9.32	91.7	na	na	Water level higher than yesterday, water turbid, brown
E7	Clinton Creek near mouth	July 27	9:30	519517	7141871	10.6	8.22	666	10.18	95.3	0.43	0.778	Water turbid, brown
E8	Forty Mile River d/s Clinton Cr	July 27	10:30	519455	7142803	12.2	7.65	153	9.85	96.2	na	na	Water turbid, brown

FIELD DATA FOR SEPTEMBER 2011

Site #	Site Description	Date Sampled 2011	Time Sampled	NAD 83		Water Temp oC	pH	Conductivity uS/cm	Dissolved Oxygen mg/L	Dissolved Oxygen %	Average Velocity m/s	Discharge (cms)	Comments
				Easting	Northing								
R1	Clinton Creek u/s Hudgeon Lake	Sept 27	15:30	510600	7147506	1.3	7.94	781	11.26	86.1	0.24	0.165	Water quite silty, grey/brown, water shrews (we think) sighted in banks
R2	Easter Creek u/s Hudgeon Lake	Sept 27	14:30	512006	7148015	1.9	8.07	691	11.20	86.8	0.13	0.055	Water clear.
E1	Clinton Creek d/s gabions and u/s Porcupine Creek	Sept 28	9:30	513703	7146932	5.9	8.28	558	11.05	93.9	0.44	0.242	Sampled near new ford at same location as in July.
PL	Porcupine Pit Lake from shore	Sept 27	17:10	513290	7146350	7.2	8.40	2800	6.17	54.8	na	na	Water colour a turquoise blue. Some green algae observed on substrate.
GWCC-5	Groundwater flow in old (2010) Clinton Creek channel	Sept 28	12:30	513925	7146978	5.2	7.37	1063	na	na	na	na	Green filamentous algae present in the flow channel.
GWCC-4	Groundwater at base of waste rock dump emerging below large rock, flows into side channel u/s ponded area	Sept 28	11:42	514000	7146880	9.6	7.54	697	na	na	na	na	Very slow flow
GWCC-3	Groundwater at base of waste rock dump, flows into side channel u/s of ponded area	Sept 28	11:15	514009	714685	8.9	7.44	856	na	na	na	na	This could be the same as CCS-5 that was sampled in 2010, with a slight shift in flow path.
GWCC-2	Groundwater at base of waste rock dump, flows into ponded area northwest of GWCC-1	Sept 28	10:40	514018	7146790	6.7	7.54	1654	na	na	na	na	Asbestos laden area, several flows, sampled in a pool area under boulders
GWCC-1	Groundwater seep from base of waste rock dump to dammed and ponded area of Porcupine Creek	Sept 28	10:15	514026	7146781	4.1	7.28	2540	na	na	na	na	Same site as sampled in July.
E2	Clinton Creek d/s Porcupine and u/s Wolverine Cr	Sept 27	11:45	514299	7146901	6.5	7.97	642	9.28	80.8	0.34	0.267	Blind duplicate collected here. Slimy sculpin observed.
R3	Wolverine Cr u/s tailings	Sept 28	14:06	514079	7148502	0.0	8.13	840	---	---	0.27	0.053	Ice pans forming, high sediment load - turbid
E3	Wolverine Cr u/s culvert	Sept 27	11:15	514315	7147023	2.6	8.27	756	10.89	85.7	0.21	0.044	
E4	Clinton Creek d/s Wolverine Cr and u/s Eagle Creek	Sept 27	10:30	516072	7145114	4.3	7.65	871	10.71	87.8	0.31	0.433	
R4	Eagle Creek u/s culvert	Sept 27	9:55	516106	7145161	0.0	8.15	559	12.31	89.8	0.31	0.037	Ice forming along edge, water very clear
R6	Forty Mile River u/s Clinton Cr	Sept 26	19:10	519436	7141962	4.4	8.21	206	11.95	97.8	na	na	
E7	Clinton Creek near mouth	Sept 26	18:30	519517	7141871	3.7	8.06	841	11.12	89.1	0.65	0.652	
E8	Forty Mile River d/s Clinton Cr	Sept 27	9:10	519455	7142803	3.4	8.02	213	10.99	87.8	na	na	

APPENDIX C
WATER QUALITY ANALYTICAL REPORTS, 2011

Report Transmission Cover Page

Bill To: YTG Energy, Mines and	Project:	Lot ID: 817798
Report To: YTG Energy, Mines and	ID:	Control Number: A170499
Box 2703, K-419	Name: Clinton Creek	Date Received: Aug 2, 2011
Whitehorse, YT, Canada	Location: Former Clinton Cr. Minesite	Date Reported: Aug 8, 2011
Y1A 2C6	LSD:	Report Number: 1457257
Attn: Frank Patch	P.O.: P00017296	
Sampled By: Bonnie Burns/ Stu Withers	Acct code:	
Company:		

Contact & Affiliation	Address	Delivery Commitments
Bonnie Burns Laberge Environmental Services	1-405 Ogilvie Street, Box 21072 Whitehorse, Yukon Territory Y1A 6P7 Phone: (867) 668-6838 Fax: (867) 667-6956 Email: bonnieburns@northwestel.net	On [Report Approval] send (COC, Test Report) by Email - Merge Reports On [Report Approval] send (Test Report) by Email - Single Report
Frank Patch YTG Energy, Mines and Resources	, Box 2703, K-419 Whitehorse, Yukon Territory Y1A 2C6 Phone: (867) 393-7445 Fax: (867) 667-3861 Email: FRANK.PATCH@gov.yk.ca	On [Lot Verification] send (COA) by Email - Single Report On [Report Approval] send (COC, Test Report) by Email - Merge Reports On [Report Approval] send (Test Report) by Email - Single Report
Stephanie Pozzo YTG Energy, Mines and Resources	2C-4114 4th Avenue, K-419 Whitehorse, Yukon Territory Y1A 4N7 Phone: (867) 393-7098 Fax: (867) 456-6780 Email: Stephanie.Pozzo@gov.yk.ca	On [Lot Approval and Final Test Report Approval] send (Invoice) by Email - Single Report
David Barrett YTG Energy, Mines and Resources	, Box 2703, K-419 Whitehorse, Yukon Territory Y1A 4N7 Phone: (867) 667-3153 Fax: (867) 456-6780 Email: David.Barrett@gov.yk.ca	On [Report Approval] send (COC, Test Report) by Email - Merge Reports

Notes To Clients:

- Sampling time not provided.
- Some total metal results were less than dissolved metal results for lot 817798. The results were verified and are within expected measurement uncertainty.
- pH analysis was performed past the recommended holding time of 15 minutes from sample collection.

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Sample Custody

Bill To: YTG Energy, Mines and	Project:	Lot ID: 817798
Report To: YTG Energy, Mines and	ID:	Control Number: A170499
Box 2703, K-419	Name: Clinton Creek	Date Received: Aug 2, 2011
Whitehorse, YT, Canada	Location: Former Clinton Cr. Minesite	Date Reported: Aug 8, 2011
Y1A 2C6	LSD:	Report Number: 1457257
Attn: Frank Patch	P.O.: P00017296	
Sampled By: Bonnie Burns/ Stu Withers	Acct code:	
Company:		

Sample Disposal Date: September 07, 2011

All samples will be stored until this date unless other instructions are received. Please indicate other requirements below and return this form to the address or fax number on the top of this page.

☐ Extend Sample Storage Until _____ (MM/DD/YY)

The following charges apply to extended sample storage:

Storage for an additional 30 days	\$ 2.50 per sample
Storage for an additional 60 days	\$ 5.00 per sample
Storage for an additional 90 days	\$ 7.50 per sample

☐ Return Sample, collect, to the address below via:

☐ Greyhound

☐ DHL

☐ Purolator

☐ Other (specify) _____

Name	_____
Company	_____
Address	_____

Phone	_____
Fax	_____
Signature	_____

Analytical Report

Bill To: YTG Energy, Mines and
Report To: YTG Energy, Mines and
Box 2703, K-419
Whitehorse, YT, Canada
Y1A 2C6
Attn: Frank Patch
Sampled By: Bonnie Burns/ Stu Withers
Company:

Project:
ID:
Name: Clinton Creek
Location: Former Clinton Cr. Minesite
LSD:
P.O.: P00017296
Acct code:

Lot ID: **817798**
Control Number: A170499
Date Received: Aug 2, 2011
Date Reported: Aug 8, 2011
Report Number: 1457257

		Reference Number	817798-1	817798-2	817798-3	
		Sample Date	Jul 26, 2011	Jul 26, 2011	Jul 26, 2011	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	E-1 / Clinton Cr. d/s gabions	E-2 / Clinton Cr. u/s Wolverine	E-3 / Wolverine Cr.	
		Matrix	Water	Water	Water	
Analyte		Units	Results	Results	Results	Nominal Detection Limit
Inorganic Nonmetallic Parameters						
Organic Carbon	Total Nonpurgeable	mg/L	18.5	16.0	14.5	0.5
Orthophosphate-P	Dissolved	mg/L	0.007	0.004	0.008	0.002
Ammonia - N		mg/L	0.04	0.05	0.06	
Nitrate - N		mg/L	0.11	0.09	0.08	0.01
Nitrite - N		mg/L	<0.005	<0.005	<0.005	0.005
Metals Dissolved						
Aluminum	Dissolved	mg/L	0.035	0.021	0.033	0.005
Antimony	Dissolved	mg/L	0.0005	0.0006	0.001	0.0002
Arsenic	Dissolved	mg/L	0.0010	0.0015	0.0014	0.0002
Barium	Dissolved	mg/L	0.060	0.061	0.062	0.001
Beryllium	Dissolved	mg/L	<0.00004	<0.00004	<0.00004	0.00004
Bismuth	Dissolved	mg/L	<0.001	<0.001	<0.001	0.001
Boron	Dissolved	mg/L	0.01	0.043	0.064	0.004
Cadmium	Dissolved	mg/L	0.00002	0.00002	<0.00001	0.00001
Chromium	Dissolved	mg/L	0.0006	0.0006	0.0013	0.0004
Cobalt	Dissolved	mg/L	0.00027	0.00081	0.00033	0.00002
Copper	Dissolved	mg/L	0.004	0.003	0.002	0.001
Lead	Dissolved	mg/L	0.0002	<0.0001	0.0001	0.0001
Lithium	Dissolved	mg/L	0.002	0.007	0.004	0.001
Molybdenum	Dissolved	mg/L	0.0016	0.0021	0.0015	0.0001
Nickel	Dissolved	mg/L	0.006	0.016	0.01	0.001
Selenium	Dissolved	mg/L	0.0009	0.0011	0.0009	0.0006
Silver	Dissolved	mg/L	<0.00001	<0.00001	0.00002	0.00001
Strontium	Dissolved	mg/L	0.216	0.366	0.289	0.001
Sulfur	Dissolved	mg/L	30.4	52.8	52.0	0.2
Tellurium	Dissolved	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Thallium	Dissolved	mg/L	0.00001	0.00003	<0.00001	0.00001
Thorium	Dissolved	mg/L	<0.0004	<0.0004	<0.0004	0.0004
Tin	Dissolved	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Titanium	Dissolved	mg/L	<0.01	<0.01	<0.01	0.01
Uranium	Dissolved	mg/L	0.0013	0.0014	0.0029	0.0004
Vanadium	Dissolved	mg/L	0.0004	0.0003	0.0008	0.0001
Zinc	Dissolved	mg/L	0.002	0.002	0.002	0.001
Zirconium	Dissolved	mg/L	0.001	0.0009	0.0008	0.0001
Metals Total						
Aluminum	Total	mg/L	0.051	0.052	0.565	0.005

Analytical Report

Bill To: YTG Energy, Mines and
Report To: YTG Energy, Mines and
Box 2703, K-419
Whitehorse, YT, Canada
Y1A 2C6
Attn: Frank Patch
Sampled By: Bonnie Burns/ Stu Withers
Company:

Project:
ID:
Name: Clinton Creek
Location: Former Clinton Cr. Minesite
LSD:
P.O.: P00017296
Acct code:

Lot ID: **817798**
Control Number: A170499
Date Received: Aug 2, 2011
Date Reported: Aug 8, 2011
Report Number: 1457257

		Reference Number	817798-1	817798-2	817798-3	
		Sample Date	Jul 26, 2011	Jul 26, 2011	Jul 26, 2011	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	E-1 / Clinton Cr. d/s gabions	E-2 / Clinton Cr. u/s Wolverine	E-3 / Wolverine Cr.	
		Matrix	Water	Water	Water	
Analyte		Units	Results	Results	Results	Nominal Detection Limit
Metals Total - Continued						
Antimony	Total	mg/L	0.0006	0.0006	0.0009	0.0002
Arsenic	Total	mg/L	0.0015	0.0016	0.0016	0.0002
Barium	Total	mg/L	0.061	0.065	0.079	0.001
Beryllium	Total	mg/L	<0.00004	<0.00004	<0.00004	0.00004
Bismuth	Total	mg/L	<0.001	<0.001	<0.001	0.001
Boron	Total	mg/L	0.043	0.043	0.067	0.004
Cadmium	Total	mg/L	0.00005	0.00004	0.00005	0.00001
Calcium	Total	mg/L	46.8	62.2	52.7	0.05
Chromium	Total	mg/L	0.0010	0.0010	0.0029	0.0004
Cobalt	Total	mg/L	0.00092	0.00091	0.00074	0.00002
Copper	Total	mg/L	0.003	0.003	0.004	0.001
Iron	Total	mg/L	0.350	0.487	1.19	0.01
Lead	Total	mg/L	0.0002	0.0002	0.0011	0.0001
Lithium	Total	mg/L	0.007	0.007	0.005	0.001
Magnesium	Total	mg/L	23.2	36.7	40.9	0.05
Manganese	Total	mg/L	0.077	0.166	0.094	0.005
Molybdenum	Total	mg/L	0.0021	0.0022	0.0018	0.0001
Nickel	Total	mg/L	0.017	0.017	0.012	0.001
Phosphorus	Total	mg/L	0.011	<0.01	0.038	0.01
Potassium	Total	mg/L	0.6	0.7	0.6	0.1
Selenium	Total	mg/L	0.0007	0.0011	0.0010	0.0006
Silicon	Total	mg/L	3.98	4.12	5.47	0.05
Silver	Total	mg/L	<0.00001	<0.00001	0.00003	0.00001
Sodium	Total	mg/L	2.42	2.95	4.01	0.02
Strontium	Total	mg/L	0.363	0.381	0.307	0.001
Sulfur	Total	mg/L	32.5	53.6	52.0	0.1
Tellurium	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Thallium	Total	mg/L	0.00003	0.00003	0.00001	0.00001
Thorium	Total	mg/L	<0.0004	<0.0004	<0.0004	0.0004
Tin	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Titanium	Total	mg/L	0.002	0.004	0.011	0.001
Uranium	Total	mg/L	0.0015	0.0015	0.0029	0.0004
Vanadium	Total	mg/L	0.0006	0.0005	0.0022	0.0001
Zinc	Total	mg/L	0.003	0.003	0.008	0.001
Zirconium	Total	mg/L	0.0011	0.0011	0.001	0.0001

Analytical Report

Bill To: YTG Energy, Mines and
Report To: YTG Energy, Mines and
Box 2703, K-419
Whitehorse, YT, Canada
Y1A 2C6
Attn: Frank Patch
Sampled By: Bonnie Burns/ Stu Withers
Company:

Project:
ID:
Name: Clinton Creek
Location: Former Clinton Cr. Minesite
LSD:
P.O.: P00017296
Acct code:

Lot ID: **817798**
Control Number: A170499
Date Received: Aug 2, 2011
Date Reported: Aug 8, 2011
Report Number: 1457257

		Reference Number	817798-1	817798-2	817798-3	
		Sample Date	Jul 26, 2011	Jul 26, 2011	Jul 26, 2011	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	E-1 / Clinton Cr. d/s gabions Water	E-2 / Clinton Cr. u/s Wolverine Water	E-3 / Wolverine Cr. Water	
Analyte	Units	Matrix	Results	Results	Results	Nominal Detection Limit
Physical and Aggregate Properties						
Solids	Total Suspended	mg/L	<2	<2	30	2
Routine Water						
pH	at 25 °C		8.12	8.02	8.18	
Electrical Conductivity		µS/cm at 25 C	363	544	536	1
Calcium	Dissolved	mg/L	42.1	59.9	50.4	0.1
Iron	Dissolved	mg/L	0.186	0.304	0.128	0.005
Magnesium	Dissolved	mg/L	20.3	35.7	39.1	0.1
Manganese	Dissolved	mg/L	0.052	0.150	0.069	0.001
Phosphorus	Dissolved	mg/L	0.01	0.01	<0.01	0.01
Potassium	Dissolved	mg/L	0.5	0.7	0.6	0.1
Silicon	Dissolved	mg/L	3.47	3.85	4.58	0.05
Sodium	Dissolved	mg/L	2.0	2.8	3.7	0.1
Bicarbonate		mg/L	100	160	160	5
Carbonate		mg/L	<6	<6	<6	6
Hydroxide		mg/L	<5	<5	<5	5
T-Alkalinity	as CaCO ₃	mg/L	95	134	132	5
Sulfate (SO ₄)	Dissolved	mg/L	92	157	155	0.5
Hardness	as CaCO ₃	mg/L	189	297	287	5
Hardness	Total	mg CaCO ₃ /L	212	306	300	1

Analytical Report

Bill To: YTG Energy, Mines and	Project:	Lot ID: 817798
Report To: YTG Energy, Mines and	ID:	Control Number: A170499
Box 2703, K-419	Name: Clinton Creek	Date Received: Aug 2, 2011
Whitehorse, YT, Canada	Location: Former Clinton Cr. Minesite	Date Reported: Aug 8, 2011
Y1A 2C6	LSD:	Report Number: 1457257
Attn: Frank Patch	P.O.: P00017296	
Sampled By: Bonnie Burns/ Stu Withers	Acct code:	
Company:		

		Reference Number	817798-4	817798-5	817798-6	
		Sample Date	Jul 26, 2011	Jul 27, 2011	Jul 27, 2011	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	E-4 / Clinton Cr. u/s Eagle Cr.	E-7 / Clinton Cr. @ mouth	E-8 / 40 mile R. d/s Clinton Cr.	
		Matrix	Water	Water	Water	
Analyte		Units	Results	Results	Results	Nominal Detection Limit
Inorganic Nonmetallic Parameters						
Organic Carbon	Total Nonpurgeable	mg/L	14.2	15.8	17.1	0.5
Orthophosphate-P	Dissolved	mg/L	0.004	0.002	0.003	0.002
Ammonia - N		mg/L	<0.01	0.07	0.06	
Nitrate - N		mg/L	0.07	0.09	0.09	0.01
Nitrite - N		mg/L	<0.005	<0.005	<0.005	0.005
Metals Dissolved						
Aluminum	Dissolved	mg/L	0.016	0.024	0.105	0.005
Antimony	Dissolved	mg/L	0.0006	0.0005	<0.0002	0.0002
Arsenic	Dissolved	mg/L	0.0015	0.0013	0.0007	0.0002
Barium	Dissolved	mg/L	0.062	0.072	0.042	0.001
Beryllium	Dissolved	mg/L	<0.00004	<0.00004	<0.00004	0.00004
Bismuth	Dissolved	mg/L	<0.001	<0.001	<0.001	0.001
Boron	Dissolved	mg/L	0.080	0.062	<0.004	0.004
Cadmium	Dissolved	mg/L	0.00004	0.00002	<0.00001	0.00001
Chromium	Dissolved	mg/L	0.0008	0.0009	0.0006	0.0004
Cobalt	Dissolved	mg/L	0.00088	0.00082	0.00041	0.00002
Copper	Dissolved	mg/L	0.002	0.002	0.003	0.001
Lead	Dissolved	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Lithium	Dissolved	mg/L	0.016	0.014	0.002	0.001
Molybdenum	Dissolved	mg/L	0.0021	0.0018	0.0004	0.0001
Nickel	Dissolved	mg/L	0.020	0.017	0.002	0.001
Selenium	Dissolved	mg/L	0.0009	0.0009	<0.0006	0.0006
Silver	Dissolved	mg/L	<0.00001	<0.00001	<0.00001	0.00001
Strontium	Dissolved	mg/L	0.516	0.476	0.107	0.001
Sulfur	Dissolved	mg/L	73.9	68.0	8.6	0.2
Tellurium	Dissolved	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Thallium	Dissolved	mg/L	0.00002	0.00001	<0.00001	0.00001
Thorium	Dissolved	mg/L	<0.0004	<0.0004	<0.0004	0.0004
Tin	Dissolved	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Titanium	Dissolved	mg/L	<0.01	<0.01	<0.01	0.01
Uranium	Dissolved	mg/L	0.0020	0.0021	0.0006	0.0004
Vanadium	Dissolved	mg/L	0.0004	0.0006	0.0014	0.0001
Zinc	Dissolved	mg/L	0.003	0.002	0.001	0.001
Zirconium	Dissolved	mg/L	0.0013	0.0015	0.0009	0.0001
Metals Total						
Aluminum	Total	mg/L	0.182	0.601	3.48	0.005

Analytical Report

Bill To: YTG Energy, Mines and
Report To: YTG Energy, Mines and
Box 2703, K-419
Whitehorse, YT, Canada
Y1A 2C6
Attn: Frank Patch
Sampled By: Bonnie Burns/ Stu Withers
Company:

Project:
ID:
Name: Clinton Creek
Location: Former Clinton Cr. Minesite
LSD:
P.O.: P00017296
Acct code:

Lot ID: **817798**
Control Number: A170499
Date Received: Aug 2, 2011
Date Reported: Aug 8, 2011
Report Number: 1457257

		Reference Number	817798-4	817798-5	817798-6	
		Sample Date	Jul 26, 2011	Jul 27, 2011	Jul 27, 2011	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	E-4 / Clinton Cr. u/s Eagle Cr.	E-7 / Clinton Cr. @ mouth	E-8 / 40 mile R. d/s Clinton Cr.	
		Matrix	Water	Water	Water	
Analyte		Units	Results	Results	Results	Nominal Detection Limit
Metals Total - Continued						
Antimony	Total	mg/L	0.0006	0.0006	0.0002	0.0002
Arsenic	Total	mg/L	0.0016	0.0020	0.0018	0.0002
Barium	Total	mg/L	0.067	0.093	0.097	0.001
Beryllium	Total	mg/L	<0.00004	0.00005	0.00014	0.00004
Bismuth	Total	mg/L	<0.001	<0.001	<0.001	0.001
Boron	Total	mg/L	0.080	0.061	<0.005	0.004
Cadmium	Total	mg/L	0.00005	0.00008	0.00006	0.00001
Calcium	Total	mg/L	71.6	70.2	21.7	0.05
Chromium	Total	mg/L	0.0022	0.0032	0.0060	0.0004
Cobalt	Total	mg/L	0.00112	0.00136	0.00236	0.00002
Copper	Total	mg/L	0.003	0.004	0.012	0.001
Iron	Total	mg/L	0.817	1.43	4.30	0.01
Lead	Total	mg/L	0.0004	0.0007	0.0020	0.0001
Lithium	Total	mg/L	0.016	0.014	0.005	0.001
Magnesium	Total	mg/L	56.7	54.0	7.46	0.05
Manganese	Total	mg/L	0.204	0.321	0.096	0.005
Molybdenum	Total	mg/L	0.0023	0.0020	0.0004	0.0001
Nickel	Total	mg/L	0.022	0.019	0.007	0.001
Phosphorus	Total	mg/L	0.024	0.036	0.096	0.01
Potassium	Total	mg/L	1	1.1	1.1	0.1
Selenium	Total	mg/L	0.0007	0.0007	<0.0006	0.0006
Silicon	Total	mg/L	4.55	5.24	8.44	0.05
Silver	Total	mg/L	0.00001	0.00002	0.00004	0.00001
Sodium	Total	mg/L	5.03	4.73	3.24	0.02
Strontium	Total	mg/L	0.509	0.481	0.126	0.001
Sulfur	Total	mg/L	75.4	70.9	9.0	0.1
Tellurium	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Thallium	Total	mg/L	0.00002	0.00002	0.00004	0.00001
Thorium	Total	mg/L	<0.0004	<0.0004	<0.0004	0.0004
Tin	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Titanium	Total	mg/L	0.009	0.024	0.117	0.001
Uranium	Total	mg/L	0.0020	0.0023	0.0008	0.0004
Vanadium	Total	mg/L	0.0012	0.0023	0.0101	0.0001
Zinc	Total	mg/L	0.005	0.006	0.018	0.001
Zirconium	Total	mg/L	0.0012	0.0015	0.0009	0.0001

Analytical Report

Bill To: YTG Energy, Mines and
Report To: YTG Energy, Mines and
Box 2703, K-419
Whitehorse, YT, Canada
Y1A 2C6
Attn: Frank Patch
Sampled By: Bonnie Burns/ Stu Withers
Company:

Project:
ID:
Name: Clinton Creek
Location: Former Clinton Cr. Minesite
LSD:
P.O.: P00017296
Acct code:

Lot ID: **817798**
Control Number: A170499
Date Received: Aug 2, 2011
Date Reported: Aug 8, 2011
Report Number: 1457257

		Reference Number	817798-4	817798-5	817798-6	
		Sample Date	Jul 26, 2011	Jul 27, 2011	Jul 27, 2011	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	E-4 / Clinton Cr. u/s Eagle Cr.	E-7 / Clinton Cr. @ mouth	E-8 / 40 mile R. d/s Clinton Cr.	
		Matrix	Water	Water	Water	
Analyte		Units	Results	Results	Results	Nominal Detection Limit
Physical and Aggregate Properties						
Solids	Total Suspended	mg/L	16	35	151	2
Routine Water						
pH	at 25 °C		7.98	8.11	7.80	
Electrical Conductivity		µS/cm at 25 C	721	690	164	1
Calcium	Dissolved	mg/L	68.2	66.8	19.9	0.1
Iron	Dissolved	mg/L	0.301	0.322	0.366	0.005
Magnesium	Dissolved	mg/L	54.2	51.3	6.2	0.1
Manganese	Dissolved	mg/L	0.182	0.279	0.036	0.001
Phosphorus	Dissolved	mg/L	<0.01	0.02	0.02	0.01
Potassium	Dissolved	mg/L	0.9	0.9	0.7	0.1
Silicon	Dissolved	mg/L	4.05	4.21	4.35	0.05
Sodium	Dissolved	mg/L	4.6	4.4	2.9	0.1
Bicarbonate		mg/L	200	200	60	5
Carbonate		mg/L	<6	<6	<6	6
Hydroxide		mg/L	<5	<5	<5	5
T-Alkalinity	as CaCO3	mg/L	168	169	52	5
Sulfate (SO4)	Dissolved	mg/L	228	209	26	0.5
Hardness	as CaCO3	mg/L	394	378	75	5
Hardness	Total	mg CaCO3/L	412	398	84.9	1

Analytical Report

Bill To: YTG Energy, Mines and	Project:	Lot ID: 817798
Report To: YTG Energy, Mines and	ID:	Control Number: A170499
Box 2703, K-419	Name: Clinton Creek	Date Received: Aug 2, 2011
Whitehorse, YT, Canada	Location: Former Clinton Cr. Minesite	Date Reported: Aug 8, 2011
Y1A 2C6	LSD:	Report Number: 1457257
Attn: Frank Patch	P.O.: P00017296	
Sampled By: Bonnie Burns/ Stu Withers	Acct code:	
Company:		

		Reference Number	817798-7	817798-8	817798-9	
		Sample Date	Jul 27, 2011	Jul 27, 2011	Jul 28, 2011	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	PL	UW-CC1	R-1 / Clinton Cr. u/s Hudson L	
		Matrix	Water	Water	Water	
Analyte		Units	Results	Results	Results	Nominal Detection Limit
Inorganic Nonmetallic Parameters						
Organic Carbon	Total Nonpurgeable	mg/L	0.8	5.4	14.8	0.5
Orthophosphate-P	Dissolved	mg/L	<0.002	0.003	<0.002	0.002
Ammonia - N		mg/L	0.04	<0.01	0.07	
Nitrate - N		mg/L	0.40	0.35	0.12	0.01
Nitrite - N		mg/L	<0.005	<0.005	<0.005	0.005
Metals Dissolved						
Aluminum	Dissolved	mg/L	<0.005	<0.005	0.024	0.005
Antimony	Dissolved	mg/L	0.0169	0.0015	0.0004	0.0002
Arsenic	Dissolved	mg/L	0.0078	0.0024	0.0010	0.0002
Barium	Dissolved	mg/L	0.010	0.021	0.082	0.001
Beryllium	Dissolved	mg/L	<0.00004	<0.00004	<0.00004	0.00004
Bismuth	Dissolved	mg/L	<0.001	<0.001	<0.001	0.001
Boron	Dissolved	mg/L	4.050	0.388	0.029	0.004
Cadmium	Dissolved	mg/L	0.00008	0.00019	0.00003	0.00001
Chromium	Dissolved	mg/L	0.0006	0.0025	0.0005	0.0004
Cobalt	Dissolved	mg/L	0.00026	0.00023	0.0010	0.00002
Copper	Dissolved	mg/L	<0.001	0.001	0.002	0.001
Lead	Dissolved	mg/L	<0.0001	<0.0001	0.0002	0.0001
Lithium	Dissolved	mg/L	0.071	0.090	0.004	0.001
Molybdenum	Dissolved	mg/L	0.0077	0.0026	0.0023	0.0001
Nickel	Dissolved	mg/L	0.068	0.084	0.006	0.001
Selenium	Dissolved	mg/L	0.0052	0.0037	0.0016	0.0006
Silver	Dissolved	mg/L	<0.00001	<0.00001	<0.00001	0.00001
Strontium	Dissolved	mg/L	0.524	2.410	0.433	0.001
Sulfur	Dissolved	mg/L	395	407	60.0	0.2
Tellurium	Dissolved	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Thallium	Dissolved	mg/L	0.00022	0.00011	<0.00001	0.00001
Thorium	Dissolved	mg/L	<0.0004	<0.0004	<0.0004	0.0004
Tin	Dissolved	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Titanium	Dissolved	mg/L	<0.01	<0.01	<0.01	0.01
Uranium	Dissolved	mg/L	0.0066	0.0076	0.0029	0.0004
Vanadium	Dissolved	mg/L	0.0003	0.0002	0.0006	0.0001
Zinc	Dissolved	mg/L	0.002	0.009	0.002	0.001
Zirconium	Dissolved	mg/L	0.0001	0.0002	0.0009	0.0001
Metals Total						
Aluminum	Total	mg/L	0.009	0.038	0.728	0.005

Analytical Report

Bill To: YTG Energy, Mines and	Project:	Lot ID: 817798
Report To: YTG Energy, Mines and	ID:	Control Number: A170499
Box 2703, K-419	Name: Clinton Creek	Date Received: Aug 2, 2011
Whitehorse, YT, Canada	Location: Former Clinton Cr. Minesite	Date Reported: Aug 8, 2011
Y1A 2C6	LSD:	Report Number: 1457257
Attn: Frank Patch	P.O.: P00017296	
Sampled By: Bonnie Burns/ Stu Withers	Acct code:	
Company:		

		Reference Number	817798-7	817798-8	817798-9	
		Sample Date	Jul 27, 2011	Jul 27, 2011	Jul 28, 2011	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	PL	UW-CC1	R-1 / Clinton Cr. u/s Hudson L	
		Matrix	Water	Water	Water	
Analyte		Units	Results	Results	Results	Nominal Detection Limit
Metals Total - Continued						
Antimony	Total	mg/L	0.0168	0.0015	0.0004	0.0002
Arsenic	Total	mg/L	0.0077	0.0023	0.0020	0.0002
Barium	Total	mg/L	0.011	0.020	0.095	0.001
Beryllium	Total	mg/L	<0.00004	<0.00004	<0.00004	0.00004
Bismuth	Total	mg/L	<0.001	<0.001	<0.001	0.001
Boron	Total	mg/L	4.21	0.402	0.027	0.004
Cadmium	Total	mg/L	0.00008	0.00018	0.00015	0.00001
Calcium	Total	mg/L	67.4	195	79.4	0.05
Chromium	Total	mg/L	0.0009	0.0026	0.0025	0.0004
Cobalt	Total	mg/L	0.00029	0.00023	0.00174	0.00002
Copper	Total	mg/L	<0.001	0.001	0.006	0.001
Iron	Total	mg/L	0.019	<0.01	2.19	0.01
Lead	Total	mg/L	<0.0001	<0.0001	0.0019	0.0001
Lithium	Total	mg/L	0.076	0.097	0.004	0.001
Magnesium	Total	mg/L	326	289	37.3	0.05
Manganese	Total	mg/L	<0.005	<0.005	0.514	0.005
Molybdenum	Total	mg/L	0.0080	0.0026	0.0025	0.0001
Nickel	Total	mg/L	0.071	0.087	0.008	0.001
Phosphorus	Total	mg/L	<0.01	0.012	0.025	0.01
Potassium	Total	mg/L	3.0	3.2	0.6	0.1
Selenium	Total	mg/L	0.0046	0.0037	0.0016	0.0006
Silicon	Total	mg/L	1.18	5.89	5.04	0.05
Silver	Total	mg/L	<0.00001	<0.00001	0.00005	0.00001
Sodium	Total	mg/L	18.7	18.4	3.23	0.02
Strontium	Total	mg/L	0.537	2.46	0.425	0.001
Sulfur	Total	mg/L	392	446	62.7	0.1
Tellurium	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Thallium	Total	mg/L	0.00022	0.00010	0.00002	0.00001
Thorium	Total	mg/L	<0.0004	<0.0004	<0.0004	0.0004
Tin	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Titanium	Total	mg/L	<0.001	<0.001	0.016	0.001
Uranium	Total	mg/L	0.0068	0.0074	0.0028	0.0004
Vanadium	Total	mg/L	0.0003	0.0003	0.0025	0.0001
Zinc	Total	mg/L	0.003	0.009	0.011	0.001
Zirconium	Total	mg/L	0.0001	0.0003	0.0011	0.0001

Analytical Report

Bill To: YTG Energy, Mines and
Report To: YTG Energy, Mines and
Box 2703, K-419
Whitehorse, YT, Canada
Y1A 2C6
Attn: Frank Patch
Sampled By: Bonnie Burns/ Stu Withers
Company:

Project:
ID:
Name: Clinton Creek
Location: Former Clinton Cr. Minesite
LSD:
P.O.: P00017296
Acct code:

Lot ID: **817798**
Control Number: A170499
Date Received: Aug 2, 2011
Date Reported: Aug 8, 2011
Report Number: 1457257

		Reference Number	817798-7	817798-8	817798-9	
		Sample Date	Jul 27, 2011	Jul 27, 2011	Jul 28, 2011	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	PL	UW-CC1	R-1 / Clinton Cr. u/s Hudson L	
		Matrix	Water	Water	Water	
Analyte		Units	Results	Results	Results	Nominal Detection Limit
Physical and Aggregate Properties						
Solids	Total Suspended	mg/L	<2	<2	44	2
Routine Water						
pH	at 25 °C		8.46	7.75	8.09	
Electrical Conductivity		µS/cm at 25 C	2250	2410	636	1
Calcium	Dissolved	mg/L	66.4	189	77.7	0.1
Iron	Dissolved	mg/L	0.012	0.013	0.454	0.005
Magnesium	Dissolved	mg/L	312	273	36.1	0.1
Manganese	Dissolved	mg/L	<0.001	<0.001	0.471	0.001
Phosphorus	Dissolved	mg/L	<0.01	0.01	<0.01	0.01
Potassium	Dissolved	mg/L	2.9	3.0	0.6	0.1
Silicon	Dissolved	mg/L	1.14	5.63	4.06	0.05
Sodium	Dissolved	mg/L	17.9	17.8	3.0	0.1
Bicarbonate		mg/L	200	400	190	5
Carbonate		mg/L	7	<6	<6	6
Hydroxide		mg/L	<5	<5	<5	5
T-Alkalinity	as CaCO3	mg/L	177	324	155	5
Sulfate (SO4)	Dissolved	mg/L	1170	1140	187	0.5
Hardness	as CaCO3	mg/L	1450	1600	343	5
Hardness	Total	mg CaCO3/L	1510	1680	352	1

Analytical Report

Bill To: YTG Energy, Mines and
Report To: YTG Energy, Mines and
Box 2703, K-419
Whitehorse, YT, Canada
Y1A 2C6
Attn: Frank Patch
Sampled By: Bonnie Burns/ Stu Withers
Company:

Project:
ID:
Name: Clinton Creek
Location: Former Clinton Cr. Minesite
LSD:
P.O.: P00017296
Acct code:

Lot ID: **817798**
Control Number: A170499
Date Received: Aug 2, 2011
Date Reported: Aug 8, 2011
Report Number: 1457257

		Reference Number	817798-10	817798-11	817798-12	
		Sample Date	Jul 28, 2011	Jul 27, 2011	Jul 26, 2011	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	R-2 / Eastern Cr.	R-3 / Wolverine Cr. u/s Tailings	R-4 / Eagle Cr.	
		Matrix	Water	Water	Water	
Analyte		Units	Results	Results	Results	Nominal Detection Limit
Inorganic Nonmetallic Parameters						
Organic Carbon	Total Nonpurgeable	mg/L	9.1	14.6	14.8	0.5
Orthophosphate-P	Dissolved	mg/L	0.005	0.006	0.006	0.002
Ammonia - N		mg/L	<0.01	0.09	0.05	
Nitrate - N		mg/L	0.01	0.05	0.10	0.01
Nitrite - N		mg/L	<0.005	<0.005	<0.005	0.005
Metals Dissolved						
Aluminum	Dissolved	mg/L	0.014	0.010	0.025	0.005
Antimony	Dissolved	mg/L	0.0006	0.0003	0.0004	0.0002
Arsenic	Dissolved	mg/L	0.0009	0.0012	0.0014	0.0002
Barium	Dissolved	mg/L	0.057	0.069	0.089	0.001
Beryllium	Dissolved	mg/L	<0.00004	<0.00004	<0.00004	0.00004
Bismuth	Dissolved	mg/L	<0.001	<0.001	<0.001	0.001
Boron	Dissolved	mg/L	0.029	0.015	0.011	0.004
Cadmium	Dissolved	mg/L	<0.00001	<0.00001	0.00002	0.00001
Chromium	Dissolved	mg/L	0.0006	0.0027	0.0006	0.0004
Cobalt	Dissolved	mg/L	0.00028	0.00052	0.00050	0.00002
Copper	Dissolved	mg/L	0.001	0.002	0.002	0.001
Lead	Dissolved	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Lithium	Dissolved	mg/L	0.007	0.004	0.002	0.001
Molybdenum	Dissolved	mg/L	0.0011	0.0020	0.0015	0.0001
Nickel	Dissolved	mg/L	0.004	0.004	0.006	0.001
Selenium	Dissolved	mg/L	<0.0006	0.0006	0.0021	0.0006
Silver	Dissolved	mg/L	<0.00001	<0.00001	<0.00001	0.00001
Strontium	Dissolved	mg/L	0.367	0.387	0.300	0.001
Sulfur	Dissolved	mg/L	44.6	70.0	31.4	0.2
Tellurium	Dissolved	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Thallium	Dissolved	mg/L	<0.00001	<0.00001	<0.00001	0.00001
Thorium	Dissolved	mg/L	<0.0004	<0.0004	<0.0004	0.0004
Tin	Dissolved	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Titanium	Dissolved	mg/L	<0.01	<0.01	<0.01	0.01
Uranium	Dissolved	mg/L	0.0041	0.0065	0.0026	0.0004
Vanadium	Dissolved	mg/L	0.0004	0.0016	0.0006	0.0001
Zinc	Dissolved	mg/L	0.001	<0.001	0.001	0.001
Zirconium	Dissolved	mg/L	0.0004	0.0012	0.001	0.0001
Metals Total						
Aluminum	Total	mg/L	0.101	2.85	2.50	0.005

Analytical Report

Bill To: YTG Energy, Mines and
Report To: YTG Energy, Mines and
Box 2703, K-419
Whitehorse, YT, Canada
Y1A 2C6
Attn: Frank Patch
Sampled By: Bonnie Burns/ Stu Withers
Company:

Project:
ID:
Name: Clinton Creek
Location: Former Clinton Cr. Minesite
LSD:
P.O.: P00017296
Acct code:

Lot ID: **817798**
Control Number: A170499
Date Received: Aug 2, 2011
Date Reported: Aug 8, 2011
Report Number: 1457257

		Reference Number	817798-10	817798-11	817798-12	
		Sample Date	Jul 28, 2011	Jul 27, 2011	Jul 26, 2011	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	R-2 / Eastern Cr.	R-3 / Wolverine Cr. u/s Tailings	R-4 / Eagle Cr.	
		Matrix	Water	Water	Water	
Analyte		Units	Results	Results	Results	Nominal Detection Limit
Metals Total - Continued						
Antimony	Total	mg/L	0.0006	0.0004	0.0006	0.0002
Arsenic	Total	mg/L	0.0009	0.0033	0.0034	0.0002
Barium	Total	mg/L	0.060	0.163	0.178	0.001
Beryllium	Total	mg/L	<0.00004	0.00012	0.00013	0.00004
Bismuth	Total	mg/L	<0.001	<0.001	<0.001	0.001
Boron	Total	mg/L	0.027	0.014	0.01	0.004
Cadmium	Total	mg/L	<0.00001	0.00017	0.00020	0.00001
Calcium	Total	mg/L	57.9	71.1	56.1	0.05
Chromium	Total	mg/L	0.0011	0.0058	0.0064	0.0004
Cobalt	Total	mg/L	0.00035	0.00316	0.00213	0.00002
Copper	Total	mg/L	0.002	0.015	0.009	0.001
Iron	Total	mg/L	0.330	5.19	4.05	0.01
Lead	Total	mg/L	0.0001	0.0031	0.0026	0.0001
Lithium	Total	mg/L	0.007	0.006	0.004	0.001
Magnesium	Total	mg/L	41.6	45.9	23.2	0.05
Manganese	Total	mg/L	0.208	0.300	0.378	0.005
Molybdenum	Total	mg/L	0.0011	0.0017	0.0015	0.0001
Nickel	Total	mg/L	0.004	0.014	0.013	0.001
Phosphorus	Total	mg/L	0.013	0.133	0.101	0.01
Potassium	Total	mg/L	0.8	1	0.6	0.1
Selenium	Total	mg/L	<0.0006	<0.0006	0.0020	0.0006
Silicon	Total	mg/L	4.82	8.37	8.08	0.05
Silver	Total	mg/L	0.00001	0.00006	0.00006	0.00001
Sodium	Total	mg/L	3.23	4.11	3.94	0.02
Strontium	Total	mg/L	0.363	0.396	0.311	0.001
Sulfur	Total	mg/L	46.7	69.4	31.7	0.1
Tellurium	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Thallium	Total	mg/L	<0.00001	0.00003	0.00003	0.00001
Thorium	Total	mg/L	<0.0004	<0.0004	<0.0004	0.0004
Tin	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Titanium	Total	mg/L	0.002	0.048	0.054	0.001
Uranium	Total	mg/L	0.0040	0.0069	0.0028	0.0004
Vanadium	Total	mg/L	0.0006	0.0087	0.0076	0.0001
Zinc	Total	mg/L	0.002	0.032	0.015	0.001
Zirconium	Total	mg/L	0.0004	0.0012	0.0017	0.0001

Analytical Report

Bill To: YTG Energy, Mines and
Report To: YTG Energy, Mines and
Box 2703, K-419
Whitehorse, YT, Canada
Y1A 2C6
Attn: Frank Patch
Sampled By: Bonnie Burns/ Stu Withers
Company:

Project:
ID:
Name: Clinton Creek
Location: Former Clinton Cr. Minesite
LSD:
P.O.: P00017296
Acct code:

Lot ID: **817798**
Control Number: A170499
Date Received: Aug 2, 2011
Date Reported: Aug 8, 2011
Report Number: 1457257

		Reference Number	817798-10	817798-11	817798-12	
		Sample Date	Jul 28, 2011	Jul 27, 2011	Jul 26, 2011	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	R-2 / Eastern Cr.	R-3 / Wolverine Cr. u/s Tailings	R-4 / Eagle Cr.	
		Matrix	Water	Water	Water	
Analyte		Units	Results	Results	Results	Nominal Detection Limit
Physical and Aggregate Properties						
Solids	Total Suspended	mg/L	<2	372	126	2
Routine Water						
pH	at 25 °C		8.16	8.06	8.11	
Electrical Conductivity		µS/cm at 25 C	575	634	434	1
Calcium	Dissolved	mg/L	57.1	67.6	53.0	0.1
Iron	Dissolved	mg/L	0.179	0.168	0.184	0.005
Magnesium	Dissolved	mg/L	40.8	43.6	21.5	0.1
Manganese	Dissolved	mg/L	0.200	0.165	0.290	0.001
Phosphorus	Dissolved	mg/L	0.01	0.01	<0.01	0.01
Potassium	Dissolved	mg/L	0.7	0.7	0.4	0.1
Silicon	Dissolved	mg/L	4.54	5.02	4.41	0.05
Sodium	Dissolved	mg/L	3.0	3.6	3.5	0.1
Bicarbonate		mg/L	210	160	160	5
Carbonate		mg/L	<6	<6	<6	6
Hydroxide		mg/L	<5	<5	<5	5
T-Alkalinity	as CaCO3	mg/L	174	134	132	5
Sulfate (SO4)	Dissolved	mg/L	139	206	92	0.5
Hardness	as CaCO3	mg/L	310	348	221	5
Hardness	Total	mg CaCO3/L	316	366	236	1

Analytical Report

Bill To: YTG Energy, Mines and
 Report To: YTG Energy, Mines and
 Box 2703, K-419
 Whitehorse, YT, Canada
 Y1A 2C6
 Attn: Frank Patch
 Sampled By: Bonnie Burns/ Stu Withers
 Company:

Project:
 ID:
 Name: Clinton Creek
 Location: Former Clinton Cr. Minesite
 LSD:
 P.O.: P00017296
 Acct code:

Lot ID: **817798**
 Control Number: A170499
 Date Received: Aug 2, 2011
 Date Reported: Aug 8, 2011
 Report Number: 1457257

Reference Number 817798-13
 Sample Date Jul 27, 2011
 Sample Time NA
 Sample Location
 Sample Description R-6 / 40 mile R/U/S
 Clinton
 Water

Analyte	Units	Results	Results	Results	Nominal Detection Limit
Inorganic Nonmetallic Parameters					
Organic Carbon	Total Nonpurgeable	mg/L	16.0		0.5
Orthophosphate-P	Dissolved	mg/L	0.004		0.002
Ammonia - N		mg/L	<0.01		
Nitrate - N		mg/L	0.07		0.01
Nitrite - N		mg/L	<0.005		0.005
Metals Dissolved					
Aluminum	Dissolved	mg/L	0.105		0.005
Antimony	Dissolved	mg/L	<0.0002		0.0002
Arsenic	Dissolved	mg/L	0.0006		0.0002
Barium	Dissolved	mg/L	0.042		0.001
Beryllium	Dissolved	mg/L	<0.00004		0.00004
Bismuth	Dissolved	mg/L	<0.001		0.001
Boron	Dissolved	mg/L	0.010		0.004
Cadmium	Dissolved	mg/L	<0.00001		0.00001
Chromium	Dissolved	mg/L	0.0006		0.0004
Cobalt	Dissolved	mg/L	0.00039		0.00002
Copper	Dissolved	mg/L	0.003		0.001
Lead	Dissolved	mg/L	0.0001		0.0001
Lithium	Dissolved	mg/L	0.003		0.001
Molybdenum	Dissolved	mg/L	0.0004		0.0001
Nickel	Dissolved	mg/L	0.003		0.001
Selenium	Dissolved	mg/L	<0.0006		0.0006
Silver	Dissolved	mg/L	<0.00001		0.00001
Strontium	Dissolved	mg/L	0.115		0.001
Sulfur	Dissolved	mg/L	8.4		0.2
Tellurium	Dissolved	mg/L	<0.0001		0.0001
Thallium	Dissolved	mg/L	<0.00001		0.00001
Thorium	Dissolved	mg/L	<0.0004		0.0004
Tin	Dissolved	mg/L	<0.0001		0.0001
Titanium	Dissolved	mg/L	<0.01		0.01
Uranium	Dissolved	mg/L	0.0006		0.0004
Vanadium	Dissolved	mg/L	0.0014		0.0001
Zinc	Dissolved	mg/L	0.002		0.001
Zirconium	Dissolved	mg/L	0.001		0.0001
Metals Total					
Aluminum	Total	mg/L	1.56		0.005

Analytical Report

Bill To: YTG Energy, Mines and
Report To: YTG Energy, Mines and
Box 2703, K-419
Whitehorse, YT, Canada
Y1A 2C6
Attn: Frank Patch
Sampled By: Bonnie Burns/ Stu Withers
Company:

Project:
ID:
Name: Clinton Creek
Location: Former Clinton Cr. Minesite
LSD:
P.O.: P00017296
Acct code:

Lot ID: **817798**
Control Number: A170499
Date Received: Aug 2, 2011
Date Reported: Aug 8, 2011
Report Number: 1457257

Reference Number 817798-13
Sample Date Jul 27, 2011
Sample Time NA
Sample Location
Sample Description R-6 / 40 mile R/U/S
Clinton
Water

Analyte	Units	Results	Results	Results	Nominal Detection Limit
Metals Total - Continued					
Antimony	Total	mg/L	0.0002		0.0002
Arsenic	Total	mg/L	0.0013		0.0002
Barium	Total	mg/L	0.070		0.001
Beryllium	Total	mg/L	0.00007		0.00004
Bismuth	Total	mg/L	<0.001		0.001
Boron	Total	mg/L	0.008		0.004
Cadmium	Total	mg/L	0.00003		0.00001
Calcium	Total	mg/L	21.1		0.05
Chromium	Total	mg/L	0.0033		0.0004
Cobalt	Total	mg/L	0.00123		0.00002
Copper	Total	mg/L	0.006		0.001
Iron	Total	mg/L	2.29		0.01
Lead	Total	mg/L	0.001		0.0001
Lithium	Total	mg/L	0.004		0.001
Magnesium	Total	mg/L	6.75		0.05
Manganese	Total	mg/L	0.059		0.005
Molybdenum	Total	mg/L	0.0004		0.0001
Nickel	Total	mg/L	0.005		0.001
Phosphorus	Total	mg/L	0.037		0.01
Potassium	Total	mg/L	0.9		0.1
Selenium	Total	mg/L	<0.0006		0.0006
Silicon	Total	mg/L	6.38		0.05
Silver	Total	mg/L	0.00001		0.00001
Sodium	Total	mg/L	3.23		0.02
Strontium	Total	mg/L	0.119		0.001
Sulfur	Total	mg/L	8.6		0.1
Tellurium	Total	mg/L	<0.0001		0.0001
Thallium	Total	mg/L	0.00002		0.00001
Thorium	Total	mg/L	<0.0004		0.0004
Tin	Total	mg/L	<0.0001		0.0001
Titanium	Total	mg/L	0.054		0.001
Uranium	Total	mg/L	0.0007		0.0004
Vanadium	Total	mg/L	0.0053		0.0001
Zinc	Total	mg/L	0.008		0.001
Zirconium	Total	mg/L	0.0008		0.0001

Analytical Report

Bill To: YTG Energy, Mines and
Report To: YTG Energy, Mines and
Box 2703, K-419
Whitehorse, YT, Canada
Y1A 2C6
Attn: Frank Patch
Sampled By: Bonnie Burns/ Stu Withers
Company:

Project:
ID:
Name: Clinton Creek
Location: Former Clinton Cr. Minesite
LSD:
P.O.: P00017296
Acct code:

Lot ID: **817798**
Control Number: A170499
Date Received: Aug 2, 2011
Date Reported: Aug 8, 2011
Report Number: 1457257

Reference Number 817798-13
Sample Date Jul 27, 2011
Sample Time NA
Sample Location
Sample Description R-6 / 40 mile R/U/S
Clinton
Water
Matrix

Analyte	Units	Results	Results	Results	Nominal Detection Limit
Physical and Aggregate Properties					
Solids	Total Suspended	mg/L	60		2
Routine Water					
pH	at 25 °C		7.84		
Electrical Conductivity		µS/cm at 25 C	165		1
Calcium	Dissolved	mg/L	19.6		0.1
Iron	Dissolved	mg/L	0.357		0.005
Magnesium	Dissolved	mg/L	6.0		0.1
Manganese	Dissolved	mg/L	0.030		0.001
Phosphorus	Dissolved	mg/L	<0.01		0.01
Potassium	Dissolved	mg/L	0.7		0.1
Silicon	Dissolved	mg/L	4.28		0.05
Sodium	Dissolved	mg/L	2.8		0.1
Bicarbonate		mg/L	60		5
Carbonate		mg/L	<6		6
Hydroxide		mg/L	<5		5
T-Alkalinity	as CaCO ₃	mg/L	53		5
Sulfate (SO ₄)	Dissolved	mg/L	24		0.5
Hardness	as CaCO ₃	mg/L	74		5
Hardness	Total	mg CaCO ₃ /L	80.5		1

Quality Control

Bill To: YTG Energy, Mines and
Report To: YTG Energy, Mines and
Box 2703, K-419
Whitehorse, YT, Canada
Y1A 2C6
Attn: Frank Patch
Sampled By: Bonnie Burns/ Stu Withers
Company:

Project:
ID:
Name: Clinton Creek
Location: Former Clinton Cr. Minesite
LSD:
P.O.: P00017296
Acct code:

Lot ID: **817798**
Control Number: A170499
Date Received: Aug 2, 2011
Date Reported: Aug 8, 2011
Report Number: 1457257

Metals Total - Continued

Certified Reference Material	Units	Measured	Target	Lower Limit	Upper Limit	Passed QC
Cobalt	mg/L	0.318	0.31900	-9.67100	10.30900	yes
Copper	mg/L	0.23	0.228	-9.762	10.218	yes
Iron	mg/L	1.28	1.276	-8.714	11.266	yes
Lead	mg/L	0.670	0.6100	-9.3800	10.6000	yes
Magnesium	mg/L	5.70	5.43	-4.56	15.42	yes
Manganese	mg/L	1.51	1.4968	-8.4930	11.4870	yes
Molybdenum	mg/L	0.241	0.24000	-9.75000	10.23000	yes
Nickel	mg/L	0.884	0.880	-9.110	10.870	yes
Potassium	mg/L	3	3.00	-6.99	12.99	yes
Selenium	mg/L	0.434	0.4400	-9.5500	10.4300	yes
Silver	mg/L	0.0662	0.05996	-9.93000	10.05000	yes
Sodium	mg/L	5.09	4.89	-5.10	14.88	yes
Strontium	mg/L	0.20	0.200	-9.790	10.190	yes
Thallium	mg/L	0.276	0.26000	-9.73000	10.25000	yes
Vanadium	mg/L	2.93	3.00000	-6.99000	12.99000	yes
Zinc	mg/L	0.537	0.520	-9.470	10.510	yes

Date Acquired: August 03, 2011

Replicates	Units	Replicate 1	Replicate 2	% RSD Criteria	Absolute Criteria	Passed QC
Calcium	mg/L	37.4	38.0	20	0.05	yes
Iron	mg/L	3.94	3.88	20	0.050	yes
Magnesium	mg/L	11.2	11.4	20	0.05	yes
Manganese	mg/L	0.120	0.122	20	0.0050	yes
Phosphorus	mg/L	0.092	0.093	20	0.050	yes
Potassium	mg/L	1.0	1.0	20	0.10	yes
Silicon	mg/L	9.10	9.31	20	0.10	yes
Sodium	mg/L	7.03	7.22	20	0.10	yes
Sulfur	mg/L	4.2	4.2	20	0.0	yes

Date Acquired: August 03, 2011

Physical and Aggregate Properties

Control Sample	Units	Measured	Lower Limit	Upper Limit	Passed QC
Solids	mg/L	498	291	591	yes
Date Acquired:	August 03, 2011				
Solids	mg/L	24	16	31	yes
Date Acquired:	August 03, 2011				
Solids	mg/L	<2	-3	3	yes
Date Acquired:	August 03, 2011				

Routine Water

Blanks	Units	Measured	Lower Limit	Upper Limit	Passed QC
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Quality Control

Bill To: YTG Energy, Mines and	Project:	Lot ID: 817798
Report To: YTG Energy, Mines and	ID:	Control Number: A170499
Box 2703, K-419	Name: Clinton Creek	Date Received: Aug 2, 2011
Whitehorse, YT, Canada	Location: Former Clinton Cr. Minesite	Date Reported: Aug 8, 2011
Y1A 2C6	LSD:	Report Number: 1457257
Attn: Frank Patch	P.O.: P00017296	
Sampled By: Bonnie Burns/ Stu Withers	Acct code:	
Company:		

Routine Water - Continued

Blanks	Units	Measured	Lower Limit	Upper Limit	Passed QC
Calcium	mg/L	0	-0.05	0.05	yes
Iron	mg/L	-0.015	-0.031	0.029	yes
Magnesium	mg/L	0.0037	-0.05	0.07	yes
Manganese	mg/L	-0.0015	-0.007	0.001	yes
Phosphorus	mg/L	0.0009	-0.04	0.04	yes
Potassium	mg/L	-0.0163	-0.4	0.4	yes
Silicon	mg/L	0.0017	-0.20	0.25	yes
Sodium	mg/L	0	-0.2	0.2	yes
Date Acquired: August 03, 2011					
Calcium	mg/L	0.0225	-0.13	0.16	yes
Iron	mg/L	-0.016	-0.024	0.025	yes
Magnesium	mg/L	-0.0193	-0.07	0.08	yes
Manganese	mg/L	-0.0022	-0.009	0.002	yes
Phosphorus	mg/L	0.0018	-0.14	0.16	yes
Potassium	mg/L	-0.0103	-0.8	0.8	yes
Silicon	mg/L	-0.0006	-1.76	2.02	yes
Sodium	mg/L	0.0385	-0.3	0.4	yes
Date Acquired: August 03, 2011					
Sulfate (SO4)	mg/L	0.0145306	-1.0	1.0	yes
Date Acquired: August 03, 2011					

Calibration Check	Units	% Recovery	Lower Limit	Upper Limit	Passed QC
Calcium	mg/L	98.10	91	109	yes
Iron	mg/L	102.30	0	0	yes
Magnesium	mg/L	99.33	91	109	yes
Manganese	mg/L	95.90	90	110	yes
Phosphorus	mg/L	94.86	90	110	yes
Potassium	mg/L	93.80	85	115	yes
Silicon	mg/L	90.58	80	120	yes
Sodium	mg/L	96.66	90	110	yes
Date Acquired: August 03, 2011					
Sulfate (SO4)	mg/L	95.19	85	115	yes
Date Acquired: August 03, 2011					
Sulfate (SO4)	mg/L	98.29	90	110	yes
Date Acquired: August 03, 2011					

Certified Reference Material	Units	Measured	Target	Lower Limit	Upper Limit	Passed QC
T-Alkalinity	mg/L	10	10	8	11	yes
Date Acquired: August 02, 2011						
Calcium	mg/L	1	1.00	0.90	1.10	yes
Magnesium	mg/L	0.8	0.91	0.82	1.00	yes
Manganese	mg/L	0.346	0.374	0.336	0.412	yes

Quality Control

Bill To: YTG Energy, Mines and
Report To: YTG Energy, Mines and
Box 2703, K-419
Whitehorse, YT, Canada
Y1A 2C6
Attn: Frank Patch
Sampled By: Bonnie Burns/ Stu Withers
Company:

Project:
ID:
Name: Clinton Creek
Location: Former Clinton Cr. Minesite
LSD:
P.O.: P00017296
Acct code:

Lot ID: **817798**
Control Number: A170499
Date Received: Aug 2, 2011
Date Reported: Aug 8, 2011
Report Number: 1457257

Routine Water - Continued

Certified Reference Material	Units	Measured	Target	Lower Limit	Upper Limit	Passed QC
Potassium	mg/L	0.5	0.5	0.4	0.6	yes
Sodium	mg/L	0.8	0.8	0.7	0.9	yes
Date Acquired: August 03, 2011						

Replicates	Units	Replicate 1	Replicate 2	% RSD Criteria	Absolute Criteria	Passed QC
Calcium	mg/L	42.1	42.1	30	1.00	yes
Iron	mg/L	0.186	0.180	30	0.060	yes
Magnesium	mg/L	20.3	20.3	30	1.00	yes
Manganese	mg/L	0.052	0.051	30	0.015	yes
Phosphorus	mg/L	0.18	0.18	30	0.10	yes
Potassium	mg/L	0.5	0.5	30	1.0	yes
Silicon	mg/L	7.63	7.64	30	0.15	yes
Sodium	mg/L	8.8	8.8	30	1.0	yes
Date Acquired: August 03, 2011						
Hardness	mg CaCO ₃ /L	140	142	20	1.000	yes
Date Acquired: August 03, 2011						
pH		8.11	8.10	2		yes
Electrical Conductivity	dS/m at 25 C	0.496	0.495	10	0.005	yes
Bicarbonate	mg/L	160	160	10	10	yes
Carbonate	mg/L	<6	<6	10	10	yes
Hydroxide	mg/L	<5	<5	10	10	yes
P-Alkalinity	mg/L	<5	<5	10	5	yes
T-Alkalinity	mg/L	132	132	10	5	yes
Sulfate (SO ₄)	mg/L	92	93	15	0.5	yes
Date Acquired: August 03, 2011						

Replicates	Units	Replicate 1	Replicate 2	% RSD Criteria	Absolute Criteria	Passed QC
Sulfate (SO ₄)	mg/L	4.3	4.2	6	0.0	yes
Date Acquired: August 03, 2011						

Control Sample	Units	Measured	Lower Limit	Upper Limit	Passed QC
pH		9.52	9.17	10.81	yes
Electrical Conductivity	µS/cm at 25 C	207	165	243	yes
P-Alkalinity	mg/L	37	7	55	yes
T-Alkalinity	mg/L	99	90	101	yes
Date Acquired: August 02, 2011					
pH		7.99	7.88	8.12	yes
Date Acquired: August 02, 2011					
Electrical Conductivity	µS/cm at 25 C	39	0	2	yes
Date Acquired: August 02, 2011					
Electrical Conductivity	µS/cm at 25 C	1430	1323	1503	yes

Quality Control

Bill To: YTG Energy, Mines and	Project:	Lot ID: 817798
Report To: YTG Energy, Mines and	ID:	Control Number: A170499
Box 2703, K-419	Name: Clinton Creek	Date Received: Aug 2, 2011
Whitehorse, YT, Canada	Location: Former Clinton Cr. Minesite	Date Reported: Aug 8, 2011
Y1A 2C6	LSD:	Report Number: 1457257
Attn: Frank Patch	P.O.: P00017296	
Sampled By: Bonnie Burns/ Stu Withers	Acct code:	
Company:		

Routine Water - Continued

Control Sample	Units	Measured	Lower Limit	Upper Limit	Passed QC
Date Acquired:	August 02, 2011				
Electrical Conductivity	µS/cm at 25 C	3	-2	2	yes
Date Acquired:	August 02, 2011				

Soil Acidity

Replicates	Units	Replicate 1	Replicate 2	% RSD Criteria	Absolute Criteria	Passed QC
pH	pH	8.5	8.4	3		yes
Date Acquired:	August 04, 2011					

Control Sample	Units	Measured	Lower Limit	Upper Limit	Passed QC
pH	pH	8.0	7.9	8.1	yes
Date Acquired:	August 04, 2011				
pH	pH	7.3	6.7	7.5	yes
Date Acquired:	August 04, 2011				

Trace Metals Dissolved

Blanks	Units	Measured	Lower Limit	Upper Limit	Passed QC
Aluminum	µg/L	0.089	-10	10	yes
Antimony	µg/L	0.001	-0.4	0.2	yes
Arsenic	µg/L	0.023	-0.5	0.5	yes
Barium	µg/L	-0.013	-0	0	yes
Beryllium	µg/L	0.002	-0.10	0.10	yes
Bismuth	µg/L	-0.026	-1.0	1.0	yes
Boron	µg/L	1.827	-6	5	yes
Cadmium	µg/L	-0.012	-0.03	0.03	yes
Chromium	µg/L	0.009	-0.1	0.2	yes
Cobalt	µg/L	-0.023	-0.07	0.07	yes
Copper	µg/L	-0.142	-1	1	yes
Lead	µg/L	0.002	-0.1	0.1	yes
Lithium	µg/L	-0.018	-1	1	yes
Molybdenum	µg/L	-0.01	-0.31	0.29	yes
Nickel	µg/L	-0.028	-1	1	yes
Selenium	µg/L	0.1	-1.7	1.3	yes
Silver	µg/L	-0.007	-0.05	0.05	yes
Strontium	µg/L	0.007	-0	0	yes
Tellurium	µg/L	-0.05	-0.7	0.7	yes
Thallium	µg/L	-0.002	-0.03	0.03	yes
Thorium	µg/L	-0.045	-1.5	1.5	yes
Tin	µg/L	-0.098	-3.0	3.0	yes
Titanium	µg/L	0.006	-0.2	0.2	yes
Uranium	µg/L	-0.002	-0.03	0.03	yes

Quality Control

Bill To: YTG Energy, Mines and	Project:	Lot ID: 817798
Report To: YTG Energy, Mines and	ID:	Control Number: A170499
Box 2703, K-419	Name: Clinton Creek	Date Received: Aug 2, 2011
Whitehorse, YT, Canada	Location: Former Clinton Cr. Minesite	Date Reported: Aug 8, 2011
Y1A 2C6	LSD:	Report Number: 1457257
Attn: Frank Patch	P.O.: P00017296	
Sampled By: Bonnie Burns/ Stu Withers	Acct code:	
Company:		

Trace Metals Dissolved - Continued

Blanks	Units	Measured	Lower Limit	Upper Limit	Passed QC
Vanadium	µg/L	0.001	-0.35	0.35	yes
Zinc	µg/L	-0.034	-2	4	yes
Zirconium	µg/L	-0.007	-0.1	0.1	yes
Date Acquired: August 03, 2011					
Aluminum	µg/L	1.204	-6	6	yes
Antimony	µg/L	-0.01	-0.4	0.3	yes
Arsenic	µg/L	0.002	-0.4	0.3	yes
Barium	µg/L	-0.006	-0	1	yes
Beryllium	µg/L	-0.002	-0.10	0.10	yes
Bismuth	µg/L	-0.118	0.0	0.0	yes
Boron	µg/L	4.488	-18	19	yes
Cadmium	µg/L	-0.016	-0.03	0.03	yes
Chromium	µg/L	-0.004	-0.1	0.2	yes
Cobalt	µg/L	-0.012	-0.30	0.30	yes
Copper	µg/L	-0.158	-1	1	yes
Lead	µg/L	0.003	-0.3	0.4	yes
Lithium	µg/L	0.026	-0	0	yes
Molybdenum	µg/L	-0.005	-0.95	0.85	yes
Nickel	µg/L	0.006	-1	1	yes
Selenium	µg/L	0.208	-1.7	1.7	yes
Silver	µg/L	-0.01	-0.67	0.47	yes
Strontium	µg/L	0.046	-2	4	yes
Tellurium	µg/L	-0.066	-0.7	0.7	yes
Thallium	µg/L	-0.002	-0.06	0.06	yes
Thorium	µg/L	-0.223	-0.7	0.5	yes
Tin	µg/L	-0.211	-3.8	4.0	yes
Titanium	µg/L	0.057	-0.3	0.2	yes
Uranium	µg/L	0.002	-0.04	0.02	yes
Vanadium	µg/L	-0.005	-0.30	0.30	yes
Zinc	µg/L	0.261	-11	19	yes
Zirconium	µg/L	-0.012	-0.0	0.0	yes
Date Acquired: August 03, 2011					

Calibration Check	Units	% Recovery	Lower Limit	Upper Limit	Passed QC
Aluminum	µg/L	97.56	70	130	yes
Antimony	µg/L	99.60	85	115	yes
Arsenic	µg/L	101.20	90	110	yes
Barium	µg/L	97.82	90	110	yes
Beryllium	µg/L	102.56	90	110	yes
Bismuth	µg/L	96.16	90	110	yes
Boron	µg/L	96.08	70	130	yes
Cadmium	µg/L	103.20	90	110	yes
Chromium	µg/L	97.68	90	110	yes

Quality Control

Bill To: YTG Energy, Mines and	Project:	Lot ID: 817798
Report To: YTG Energy, Mines and	ID:	Control Number: A170499
Box 2703, K-419	Name: Clinton Creek	Date Received: Aug 2, 2011
Whitehorse, YT, Canada	Location: Former Clinton Cr. Minesite	Date Reported: Aug 8, 2011
Y1A 2C6	LSD:	Report Number: 1457257
Attn: Frank Patch	P.O.: P00017296	
Sampled By: Bonnie Burns/ Stu Withers	Acct code:	
Company:		

Trace Metals Dissolved - Continued

Calibration Check	Units	% Recovery	Lower Limit	Upper Limit	Passed QC
Cobalt	µg/L	100.80	90	110	yes
Copper	µg/L	102.84	90	110	yes
Lead	µg/L	100.76	90	110	yes
Lithium	µg/L	95.38	90	110	yes
Molybdenum	µg/L	96.88	90	110	yes
Nickel	µg/L	102.34	90	110	yes
Selenium	µg/L	101.60	90	110	yes
Silver	µg/L	0.18	0	0	yes
Strontium	µg/L	99.12	90	110	yes
Thallium	µg/L	98.92	90	110	yes
Tin	µg/L	98.88	90	110	yes
Titanium	µg/L	99.16	90	110	yes
Uranium	µg/L	100.68	85	115	yes
Vanadium	µg/L	95.76	90	110	yes
Zinc	µg/L	106.56	90	110	yes
Zirconium	µg/L	102.20	90	110	yes

Date Acquired: August 03, 2011

Replicates	Units	Replicate 1	Replicate 2	% RSD Criteria	Absolute Criteria	Passed QC
Aluminum	µg/L	35	33	20	20	yes
Antimony	µg/L	0.5	0.7	20	1.0	yes
Arsenic	µg/L	1.0	1.0	20	1.0	yes
Barium	µg/L	60	61	20	5	yes
Beryllium	µg/L	<0.04	<0.04	20	1.00	yes
Boron	µg/L	9	9	20	5	yes
Cadmium	µg/L	0.15	0.15	20	0.50	yes
Chromium	µg/L	2.7	2.9	20	5.0	yes
Cobalt	µg/L	0.27	0.29	20	0.50	yes
Copper	µg/L	4	4	20	5	yes
Lead	µg/L	0.2	<0.1	20	0.5	yes
Lithium	µg/L	3	4	20	5	yes
Molybdenum	µg/L	1.6	1.7	20	0.50	yes
Nickel	µg/L	6	6	20	5	yes
Selenium	µg/L	0.9	1.2	20	0.5	yes
Silver	µg/L	0.01	<0.01	20	0.50	yes
Strontium	µg/L	36	38	20	0	yes
Tellurium	µg/L	<0.1	<0.1	20	0.5	yes
Thallium	µg/L	0.01	0.01	20	0.10	yes
Thorium	µg/L	<0.4	<0.4	10	0.1	yes
Tin	µg/L	<0.1	<0.1	20	0.5	yes
Titanium	µg/L	2.1	2.2	20	0.5	yes
Uranium	µg/L	1.3	1.3	20	0.10	yes
Vanadium	µg/L	2.1	2.3	20	0.50	yes

Quality Control

Bill To: YTG Energy, Mines and	Project:	Lot ID: 817798
Report To: YTG Energy, Mines and	ID:	Control Number: A170499
Box 2703, K-419	Name: Clinton Creek	Date Received: Aug 2, 2011
Whitehorse, YT, Canada	Location: Former Clinton Cr. Minesite	Date Reported: Aug 8, 2011
Y1A 2C6	LSD:	Report Number: 1457257
Attn: Frank Patch	P.O.: P00017296	
Sampled By: Bonnie Burns/ Stu Withers	Acct code:	
Company:		

Trace Metals Dissolved - Continued

Replicates	Units	Replicate 1	Replicate 2	% RSD Criteria	Absolute Criteria	Passed QC
Zinc	µg/L	46	52	20	5	yes
Zirconium	µg/L	1	1.2	20	0.5	yes
Date Acquired: August 03, 2011						

Trace Metals Total

Blanks	Units	Measured	Lower Limit	Upper Limit	Passed QC
Aluminum	µg/L	1.122	-7	7	yes
Antimony	µg/L	0.003	-0.4	0.2	yes
Arsenic	µg/L	-0.03	0.0	0.0	yes
Barium	µg/L	-0.002	-0.1	0.2	yes
Beryllium	µg/L	0.005	-0.10	0.10	yes
Bismuth	µg/L	-0.013	-3.0	3.0	yes
Boron	µg/L	0.961	-6	5	yes
Cadmium	µg/L	-0.011	0.00	0.00	yes
Chromium	µg/L	0.017	0.0	0.0	yes
Cobalt	µg/L	0	-0.06600	0.06600	yes
Copper	µg/L	0.033	-0.830	0.790	yes
Lead	µg/L	0.006	0.000	0.000	yes
Lithium	µg/L	-0.006	-0	0	yes
Molybdenum	µg/L	0.006	-0.31	0.29	yes
Nickel	µg/L	-0.032	-1	1	yes
Selenium	µg/L	0.047	-1.7	1.3	yes
Silver	µg/L	-0.005	-0.07	0.05	yes
Strontium	µg/L	0.015	-0.3	0.3	yes
Tellurium	µg/L	-0.035	-0.7	0.7	yes
Thallium	µg/L	0.001	-0.03	0.03	yes
Thorium	µg/L	-0.031	-1.50	1.50	yes
Tin	µg/L	-0.099	-3.0	3.0	yes
Titanium	µg/L	0.018	-0.4	0.4	yes
Uranium	µg/L	-0.002	-0.0	0.0	yes
Vanadium	µg/L	-0.001	-0.30	0.30	yes
Zinc	µg/L	0.145	-2	4	yes
Zirconium	µg/L	0	-0.1	0.1	yes
Date Acquired: August 03, 2011					
Aluminum	µg/L	4.164	-4	8	yes
Antimony	µg/L	0.007	-0.6	0.4	yes
Arsenic	µg/L	0.053	-0.6	0.6	yes
Barium	µg/L	0.2	-0.1	0.1	yes
Beryllium	µg/L	0.002	-0.09	0.09	yes
Bismuth	µg/L	-0.123	0.0	0.0	yes
Boron	µg/L	4.032	-12	11	yes
Cadmium	µg/L	-0.019	-0.08	0.08	yes

Quality Control

Bill To: YTG Energy, Mines and	Project:	Lot ID: 817798
Report To: YTG Energy, Mines and	ID:	Control Number: A170499
Box 2703, K-419	Name: Clinton Creek	Date Received: Aug 2, 2011
Whitehorse, YT, Canada	Location: Former Clinton Cr. Minesite	Date Reported: Aug 8, 2011
Y1A 2C6	LSD:	Report Number: 1457257
Attn: Frank Patch	P.O.: P00017296	
Sampled By: Bonnie Burns/ Stu Withers	Acct code:	
Company:		

Trace Metals Total - Continued

Blanks	Units	Measured	Lower Limit	Upper Limit	Passed QC
Chromium	µg/L	0.03	-0.1	0.2	yes
Cobalt	µg/L	-0.026	-0.07500	0.08700	yes
Copper	µg/L	-0.127	-1.930	1.430	yes
Lead	µg/L	0.011	-0.150	0.210	yes
Lithium	µg/L	-0.005	-0	0	yes
Molybdenum	µg/L	-0.031	-1.67	1.81	yes
Nickel	µg/L	-0.026	-1	1	yes
Selenium	µg/L	0.109	-2.5	1.5	yes
Silver	µg/L	-0.008	-0.13	0.07	yes
Strontium	µg/L	0.017	-0.2	0.2	yes
Tellurium	µg/L	-0.08	-0.2	0.2	yes
Thallium	µg/L	-0.002	-0.32	0.34	yes
Thorium	µg/L	-0.223	-1.75	0.95	yes
Tin	µg/L	-0.201	-0.5	0.4	yes
Titanium	µg/L	0.135	-0.2	0.3	yes
Uranium	µg/L	-0.003	-0.5	0.5	yes
Vanadium	µg/L	0.011	-0.30	0.30	yes
Zinc	µg/L	0.365	-4	6	yes
Zirconium	µg/L	-0.013	-0.1	0.1	yes

Date Acquired: August 03, 2011

Calibration Check	Units	% Recovery	Lower Limit	Upper Limit	Passed QC
Aluminum	µg/L	100.68	70	130	yes
Antimony	µg/L	100.44	85	115	yes
Arsenic	µg/L	101.00	90	110	yes
Barium	µg/L	98.72	90	110	yes
Beryllium	µg/L	103.60	90	110	yes
Bismuth	µg/L	97.28	90	110	yes
Boron	µg/L	100.00	70	130	yes
Cadmium	µg/L	104.76	90	110	yes
Chromium	µg/L	100.42	90	110	yes
Cobalt	µg/L	100.14	90	110	yes
Copper	µg/L	100.68	90	110	yes
Lead	µg/L	102.92	90	110	yes
Lithium	µg/L	98.26	90	110	yes
Molybdenum	µg/L	97.04	90	110	yes
Nickel	µg/L	100.58	90	110	yes
Selenium	µg/L	102.12	90	110	yes
Silver	µg/L	0.18	0	0	yes
Strontium	µg/L	99.88	90	110	yes
Thallium	µg/L	100.20	90	110	yes
Tin	µg/L	100.84	85	115	yes
Titanium	µg/L	98.36	90	110	yes

Quality Control

Bill To: YTG Energy, Mines and	Project:	Lot ID: 817798
Report To: YTG Energy, Mines and	ID:	Control Number: A170499
Box 2703, K-419	Name: Clinton Creek	Date Received: Aug 2, 2011
Whitehorse, YT, Canada	Location: Former Clinton Cr. Minesite	Date Reported: Aug 8, 2011
Y1A 2C6	LSD:	Report Number: 1457257
Attn: Frank Patch	P.O.: P00017296	
Sampled By: Bonnie Burns/ Stu Withers	Acct code:	
Company:		

Trace Metals Total - Continued

Calibration Check	Units	% Recovery	Lower Limit	Upper Limit	Passed QC
Uranium	µg/L	105.08	85	115	yes
Vanadium	µg/L	98.54	90	110	yes
Zinc	µg/L	102.06	90	110	yes
Zirconium	µg/L	103.80	90	110	yes
Date Acquired: August 03, 2011					

Replicates	Units	Replicate 1	Replicate 2	% RSD Criteria	Absolute Criteria	Passed QC
Aluminum	µg/L	2220	2310	15	100	yes
Antimony	µg/L	<0.2	<0.2	15	2.0	yes
Arsenic	µg/L	1.8	1.8	15	2.0	yes
Barium	µg/L	109	105	15	10.0	yes
Beryllium	µg/L	0.07	0.1	15	0.40	yes
Boron	µg/L	11	9	15	40	yes
Cadmium	µg/L	0.02	0.03	15	0.10	yes
Chromium	µg/L	6.3	6.7	15	6.0	yes
Cobalt	µg/L	1.64	1.69	15	0.20000	yes
Copper	µg/L	14	7	15	5.000	yes
Lead	µg/L	1.3	1.0	15	1.000	yes
Lithium	µg/L	3	3	15	10	yes
Molybdenum	µg/L	1.3	1.3	15	0.20	yes
Nickel	µg/L	6	7	15	10	yes
Selenium	µg/L	<0.6	<0.6	15	5.0	yes
Silver	µg/L	0.01	0.01	15	0.10	yes
Strontium	µg/L	304	316	15	10.0	yes
Tellurium	µg/L	<0.1	<0.1	20	0.5	yes
Thallium	µg/L	0.02	0.02	15	0.10	yes
Thorium	µg/L	<0.4	<0.4	15	1.00	yes
Tin	µg/L	<0.1	<0.1	15	1.0	yes
Titanium	µg/L	66.0	67.3	15	1.0	yes
Uranium	µg/L	1.2	1.2	15	1.0	yes
Vanadium	µg/L	7.8	8.1	15	0.40	yes
Zinc	µg/L	14	10	15	10	yes
Zirconium	µg/L	0.7	0.6	15	1.0	yes
Date Acquired: August 03, 2011						

Methodology and Notes

Bill To: YTG Energy, Mines and	Project:	Lot ID: 817798
Report To: YTG Energy, Mines and	ID:	Control Number: A170499
Box 2703, K-419	Name: Clinton Creek	Date Received: Aug 2, 2011
Whitehorse, YT, Canada	Location: Former Clinton Cr. Minesite	Date Reported: Aug 8, 2011
Y1A 2C6	LSD:	Report Number: 1457257
Attn: Frank Patch	P.O.: P00017296	
Sampled By: Bonnie Burns/ Stu Withers	Acct code:	
Company:		

Method of Analysis

Method Name	Reference	Method	Date Analysis Started	Location
Alk, pH, EC, Turb in water	APHA	* Alkalinity - Titration Method, 2320 B	02-Aug-11	Exova Surrey
Alk, pH, EC, Turb in water	APHA	* Conductivity, 2510 B	02-Aug-11	Exova Surrey
Alk, pH, EC, Turb in water	APHA	* pH - Electrometric Method, 4500-H+ B	02-Aug-11	Exova Surrey
Ammonia-N in Water	APHA	* Titrametric, 4500-NH3 C	04-Aug-11	Exova Surrey
Anions by IEC in water (Surrey)	APHA	* Ion Chromatography with Chemical Suppression of Eluent Cond., 4110 B	03-Aug-11	Exova Surrey
Carbon Organic (Total) in water (TOC)	APHA	High-Temperature Combustion Method, 5310 B	04-Aug-11	Exova Edmonton
Metals (Strong Acid Leachable) in soils	B.C.M.O.E	* Strong Acid Leachable Metals (SALM) in Soil, V 1.0, SALM	04-Aug-11	Exova Surrey
Metals SemiTrace (Dissolved) in water	US EPA	* Metals & Trace Elements by ICP-AES, 6010C	03-Aug-11	Exova Surrey
Metals SemiTrace (Total) in Water	US EPA	* Metals & Trace Elements by ICP-AES, 6010C	03-Aug-11	Exova Surrey
Nitrogen - nitrite+nitrate-N	APHA	* Automated Cadmium Reduction Method, 4500-NO3- F	02-Aug-11	Exova Surrey
pH and EC - 1:2 (Surrey)	Carter	* Soil pH (1:2 Water), 16.2	04-Aug-11	Exova Surrey
Phosphorus - total reactive P (orthophosphate)	APHA	Ascorbic Acid Reduction Method, 4500 -P E	03-Aug-11	Exova Surrey
Solids Suspended (Total, Fixed and Volatile)	APHA	* Total Suspended Solids Dried at 103-105°C, 2540 D	03-Aug-11	Exova Surrey
Trace Metals (dissolved) in Water	US EPA	* Determination of Trace Elements in Waters and Wastes by ICP-MS, 200.8	03-Aug-11	Exova Surrey
Trace Metals (dissolved) in Water	US EPA	* Metals & Trace Elements by ICP-AES, 6010C	03-Aug-11	Exova Surrey
Trace Metals (Total) in Water	US EPA	* Determination of Trace Elements in Waters and Wastes by ICP-MS, 200.8	03-Aug-11	Exova Surrey
Trace Metals (Total) in Water	US EPA	* Metals & Trace Elements by ICP-AES, 6010C	03-Aug-11	Exova Surrey

* Reference Method Modified

References

McKeague	Manual on Soil Sampling and Methods of Analysis
B.C.M.O.E	B.C. Ministry of Environment
US EPA	US Environmental Protection Agency Test Methods
APHA	Standard Methods for the Examination of Water and Wastewater

Methodology and Notes

Bill To:	YTG Energy, Mines and	Project:		Lot ID:	817798
Report To:	YTG Energy, Mines and	ID:		Control Number:	A170499
	Box 2703, K-419	Name:	Clinton Creek	Date Received:	Aug 2, 2011
	Whitehorse, YT, Canada	Location:	Former Clinton Cr. Minesite	Date Reported:	Aug 8, 2011
	Y1A 2C6	LSD:		Report Number:	1457257
Attn:	Frank Patch	P.O.:	P00017296		
Sampled By:	Bonnie Burns/ Stu Withers	Acct code:			
Company:					

Comments:

- Sampling time not provided.
- Some total metal results were less than dissolved metal results for lot 817798. The results were verified and are within expected measurement uncertainty.
- pH analysis was performed past the recommended holding time of 15 minutes from sample collection.

Please direct any inquiries regarding this report to our Client Services group.

Results relate only to samples as submitted.

The test report shall not be reproduced except in full, without the written approval of the laboratory.



817798

Control Number A170499

Environmental Sample Information Sheet

Note: Proper completion of this form is required in order to proceed with analysis

See reverse for your nearest Exova location and proper sampling protocol

www.exova.com

Billing Address:		Copy of Report:	Copy of Report To:		Copy of invoice:
Company: <i>Energy Mines Resources</i>		QA/QC Report ☐	Company: <i>Lakeview Environmental Services</i>		Send invoice to this address for approval ☐
Address: <i>Assessment & Abandoned Mines</i>			Address: <i>PO Box 21072</i>		
<i>Box 2703</i>			<i>Whitehorse, YT</i>		
<i>Y1A 2C6</i>			<i>Y1A 6P7</i>		
Attention: <i>Frank Patch</i>		Report Result:	Attention:		Report Result:
Phone: <i>867-6393-7445</i>		e-mail ☒	Phone:		e-mail ☐
Fax:		Results Online ☐	Fax:		Results Online ☐
Cell:		Fax ☐	Cell:		Fax ☐
e-mail: <i>frank.patch@gov.yk.ca</i>		Mail ☒	e-mail:		Mail ☐

Information to be included on Report and Invoice

Project ID:
Project Name: *Clinton Creek*
Project Location: *Former Clinton Cr. Minesite*
Legal Location:
PO#:
Proj. Acct. Code:
Agreement ID:

PRIORITY
Please contact laboratory prior to submitting any RUSH samples.
Upon filling out this section, client accepts that surcharges will be applied to this analysis.
If not all samples require RUSH, please indicate in special instructions.
Date Required: _____
Signature: _____

Sample Custody (Please Print)
Sampled by: *Bonnie Burns & Stu Withers*
Company: *LESIVED* Signature: *B Burns*
I authorize EXOVA to proceed with the work indicated on this form:
Date: *AUG 02 2011* Initial: _____
Received by: _____ Sample Temp: _____
Waybill #: _____ Date: _____
Company: _____ Time: _____

Special Instructions / Comments

All samples preserved in the field.
Dissolved metals samples filtered in the field.

Please indicate which regulations you are required to meet:

☐ Health Canada Drinking Water Quality
☐ Alberta Tier 1
☒ Other: *CCME for aquatic life*

Sample Identification	Location	Depth			Date/Time Sampled	Matrix	Sampling Method	↓	Enter tests above (relevant samples below)											
		IN	CM	M																
E-1, Clinton Cr d/s gabions					July 26/11	H2O	Grab	5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
E-2, Clinton Cr u/s Wolverine					July 26/11	"	"	5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
E-3, Wolverine Cr					July 26/11	"	"	5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
E-4, Clinton Cr u/s Eagle Cr					July 26/11	"	"	5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
E-7, Clinton Cr @ mouth					July 27/11	"	"	5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
E-8, 40 Mile R. d/s Clinton Cr.					July 27/11	"	"	5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
PL					July 27/11	"	"	5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
GW-CC1					July 27/11	"	"	5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
R-1, Clinton Cr u/s Hodgson L					July 28/11	"	"	5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
R-2, Eastern Cr					July 28/11	"	"	5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
R-3, Wolverine Cr u/s tailings					July 27/11	"	"	5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
R-4, Eagle Cr					July 26/11	"	"	5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
R-6, 40 Mile R. u/s Clinton					July 27/11	"	"	5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

NOTE: All hazardous samples must be labeled according to WHMIS guidelines.

Page 1 of 2

Report Transmission Cover Page

Bill To: YTG Energy, Mines and	Project:	Lot ID: 829362
Report To: YTG Energy, Mines and	ID:	Control Number:
Box 2703, K-419	Name: Clinton Creek	Date Received: Sep 30, 2011
Whitehorse, YT, Canada	Location: Clinton Creek	Date Reported: Oct 13, 2011
Y1A 2C6	LSD: Clinton Creek	Report Number: 1475615
Attn: Frank Patch	P.O.: P00017296	
Sampled By:	Acct code:	
Company: LES		

Contact & Affiliation	Address	Delivery Commitments
Bonnie Burns Laberge Environmental Services	1-405 Ogilvie Street, Box 21072 Whitehorse, Yukon Territory Y1A 6P7 Phone: (867) 668-6838 Fax: (867) 667-6956 Email: bonnieburns@northwestel.net	On [Report Approval] send (COC, Test Report) by Email - Merge Reports On [Report Approval] send (Test Report) by Email - Single Report
Frank Patch YTG Energy, Mines and Resources	, Box 2703, K-419 Whitehorse, Yukon Territory Y1A 2C6 Phone: (867) 393-7445 Fax: (867) 667-3861 Email: FRANK.PATCH@gov.yk.ca	On [Lot Verification] send (COA) by Email - Single Report On [Report Approval] send (COC, Test Report) by Email - Merge Reports On [Report Approval] send (Test Report) by Email - Single Report
Stephanie Pozzo YTG Energy, Mines and Resources	2C-4114 4th Avenue, K-419 Whitehorse, Yukon Territory Y1A 4N7 Phone: (867) 393-7098 Fax: (867) 456-6780 Email: Stephanie.Pozzo@gov.yk.ca	On [Lot Approval and Final Test Report Approval] send (Invoice) by Email - Single Report
David Barrett YTG Energy, Mines and Resources	, Box 2703, K-419 Whitehorse, Yukon Territory Y1A 4N7 Phone: (867) 667-3153 Fax: (867) 456-6780 Email: David.Barrett@gov.yk.ca	On [Report Approval] send (COC, Test Report) by Email - Merge Reports

Notes To Clients:

- Analysis was performed on lot 829362 that exceeded the recommended holding time for Phosphorus - Ortho analysis.
- Analysis was performed on lot 829362 that exceeded the recommended holding time for Water Nitrate analysis.
- Some total metal results were less than dissolved metal results for lot 829362. The results were verified and are within expected measurement uncertainty.
- pH analysis was performed past the recommended holding time of 15 minutes from sample collection.
- Tellurium and Thorium could not be reported due to instrument failure.
- Tellurium and Thorium could not be reported due to instrument failure.

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Sample Custody

Bill To: YTG Energy, Mines and	Project:	Lot ID: 829362
Report To: YTG Energy, Mines and	ID:	Control Number:
Box 2703, K-419	Name: Clinton Creek	Date Received: Sep 30, 2011
Whitehorse, YT, Canada	Location: Clinton Creek	Date Reported: Oct 13, 2011
Y1A 2C6	LSD: Clinton Creek	Report Number: 1475615
Attn: Frank Patch	P.O.: P00017296	
Sampled By:	Acct code:	
Company: LES		

Sample Disposal Date: November 12, 2011

All samples will be stored until this date unless other instructions are received. Please indicate other requirements below and return this form to the address or fax number on the top of this page.

☐ Extend Sample Storage Until _____ (MM/DD/YY)

The following charges apply to extended sample storage:

Storage for an additional 30 days	\$ 2.50 per sample
Storage for an additional 60 days	\$ 5.00 per sample
Storage for an additional 90 days	\$ 7.50 per sample

☐ Return Sample, collect, to the address below via:

☐ Greyhound

☐ DHL

☐ Purolator

☐ Other (specify) _____

Name	_____
Company	_____
Address	_____

Phone	_____
Fax	_____
Signature	_____

Analytical Report

Bill To: YTG Energy, Mines and
Report To: YTG Energy, Mines and
Box 2703, K-419
Whitehorse, YT, Canada
Y1A 2C6
Attn: Frank Patch
Sampled By:
Company: LES

Project:
ID:
Name: Clinton Creek
Location: Clinton Creek
LSD: Clinton Creek
P.O.: P00017296
Acct code:

Lot ID: **829362**
Control Number:
Date Received: Sep 30, 2011
Date Reported: Oct 13, 2011
Report Number: 1475615

		Reference Number	829362-1	829362-2	829362-3	
		Sample Date	Sep 28, 2010	Sep 27, 2010	Sep 27, 2010	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	E1 - Clinton Cr d/s Gabions u/s Porcupine Water	E2 - Clinton Cr d/s Porcupine u/s Wolverine Water	E3 - Wolverine Cr u/s culverts Water	
		Matrix				
Analyte		Units	Results	Results	Results	Nominal Detection Limit
Inorganic Nonmetallic Parameters						
Organic Carbon	Total Nonpurgeable	mg/L	15.9	14.4	10.1	0.5
Orthophosphate-P	Dissolved	mg/L	0.011	0.002	<0.002	0.002
Ammonia - N		mg/L	0.13	0.07	0.06	
Nitrate - N		mg/L	0.14	0.11	0.15	0.01
Nitrite - N		mg/L	<0.005	<0.005	<0.005	0.005
Metals Dissolved						
Aluminum	Dissolved	mg/L	0.018	0.021	0.018	0.005
Antimony	Dissolved	mg/L	0.0004	0.0003	0.001	0.0002
Arsenic	Dissolved	mg/L	0.0010	0.0016	0.0014	0.0002
Barium	Dissolved	mg/L	0.071	0.072	0.063	0.001
Beryllium	Dissolved	mg/L	0.00008	0.00007	<0.00004	0.00004
Bismuth	Dissolved	mg/L	<0.001	<0.001	<0.001	0.001
Boron	Dissolved	mg/L	0.012	0.031	0.098	0.004
Cadmium	Dissolved	mg/L	0.00003	0.00005	0.00001	0.00001
Chromium	Dissolved	mg/L	0.0020	0.0008	0.0009	0.0004
Cobalt	Dissolved	mg/L	0.00044	0.00111	0.00029	0.00002
Copper	Dissolved	mg/L	0.003	0.003	0.002	0.001
Lead	Dissolved	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Lithium	Dissolved	mg/L	0.004	0.007	0.006	0.001
Molybdenum	Dissolved	mg/L	0.0024	0.0019	0.0014	0.0001
Nickel	Dissolved	mg/L	0.004	0.011	0.01	0.001
Selenium	Dissolved	mg/L	0.0014	0.0007	0.0007	0.0006
Silver	Dissolved	mg/L	<0.00001	<0.00001	<0.00001	0.00001
Strontium	Dissolved	mg/L	0.323	0.383	0.387	0.001
Sulfur	Dissolved	mg/L	47.9	54.5	72.3	0.2
Tellurium	Dissolved	mg/L	NA	NA	NA	0.0001
Thallium	Dissolved	mg/L	<0.00001	0.00002	<0.00001	0.00001
Thorium	Dissolved	mg/L	NA	NA	NA	0.0004
Tin	Dissolved	mg/L	<0.0001	0.0004	0.0003	0.0001
Titanium	Dissolved	mg/L	<0.01	<0.01	<0.01	0.01
Uranium	Dissolved	mg/L	0.0012	0.0019	0.0038	0.0004
Vanadium	Dissolved	mg/L	0.0045	0.0004	0.0006	0.0001
Zinc	Dissolved	mg/L	0.006	0.004	0.003	0.001
Zirconium	Dissolved	mg/L	0.0015	0.0009	0.0006	0.0001

Analytical Report

Bill To: YTG Energy, Mines and
Report To: YTG Energy, Mines and
Box 2703, K-419
Whitehorse, YT, Canada
Y1A 2C6
Attn: Frank Patch
Sampled By:
Company: LES

Project:
ID:
Name: Clinton Creek
Location: Clinton Creek
LSD: Clinton Creek
P.O.: P00017296
Acct code:

Lot ID: **829362**
Control Number:
Date Received: Sep 30, 2011
Date Reported: Oct 13, 2011
Report Number: 1475615

		Reference Number	829362-1	829362-2	829362-3	
		Sample Date	Sep 28, 2010	Sep 27, 2010	Sep 27, 2010	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	E1 - Clinton Cr d/s Gabions u/s Porcupine Water	E2 - Clinton Cr d/s Porcupine u/s Wolverine Water	E3 - Wolverine Cr u/s culverts Water	
		Matrix				
Analyte		Units	Results	Results	Results	Nominal Detection Limit
Metals Total						
Calcium	Total	mg/L	69.9	75.6	74.5	0.05
Iron	Total	mg/L	0.264	0.490	0.282	0.01
Magnesium	Total	mg/L	32.9	38.1	55.7	0.05
Manganese	Total	mg/L	0.343	0.359	0.136	0.005
Phosphorus	Total	mg/L	0.026	<0.01	<0.01	0.01
Potassium	Total	mg/L	0.7	0.8	0.8	0.1
Silicon	Total	mg/L	4.07	4.18	4.74	0.05
Sulfur	Total	mg/L	49.4	57.9	77.5	0.1
Sodium	Total	mg/L	3.19	3.41	5.10	0.02
Titanium	Total	mg/L	<0.001	<0.001	<0.001	0.001
Aluminum	Total	mg/L	0.044	0.033	0.063	0.005
Antimony	Total	mg/L	0.0004	0.0004	0.001	0.0002
Arsenic	Total	mg/L	0.0011	0.0017	0.0015	0.0002
Barium	Total	mg/L	0.083	0.077	0.069	0.001
Beryllium	Total	mg/L	<0.00004	<0.00004	<0.00004	0.00004
Bismuth	Total	mg/L	0.001	<0.001	<0.001	0.001
Boron	Total	mg/L	0.012	0.030	0.098	0.004
Cadmium	Total	mg/L	0.00005	0.00005	0.00002	0.00001
Chromium	Total	mg/L	0.0009	0.0011	0.0012	0.0004
Cobalt	Total	mg/L	0.00056	0.00114	0.00035	0.00002
Copper	Total	mg/L	0.003	0.002	0.002	0.001
Lead	Total	mg/L	0.0001	0.0001	0.0001	0.0001
Lithium	Total	mg/L	0.005	0.007	0.006	0.001
Molybdenum	Total	mg/L	0.0021	0.0022	0.0018	0.0001
Nickel	Total	mg/L	0.005	0.011	0.010	0.001
Selenium	Total	mg/L	0.0012	0.0007	0.0008	0.0006
Silver	Total	mg/L	0.00001	0.00001	0.00001	0.00001
Strontium	Total	mg/L	0.350	0.404	0.414	0.001
Tellurium	Total	mg/L	NA	NA	NA	0.0001
Thallium	Total	mg/L	<0.00001	0.00001	<0.00001	0.00001
Thorium	Total	mg/L	NA	NA	NA	0.0004
Tin	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Uranium	Total	mg/L	0.0022	0.0021	0.0040	0.0004
Vanadium	Total	mg/L	0.0006	0.0005	0.0008	0.0001
Zinc	Total	mg/L	0.002	0.002	0.004	0.001

Analytical Report

Bill To: YTG Energy, Mines and
Report To: YTG Energy, Mines and
Box 2703, K-419
Whitehorse, YT, Canada
Y1A 2C6
Attn: Frank Patch
Sampled By:
Company: LES

Project:
ID:
Name: Clinton Creek
Location: Clinton Creek
LSD: Clinton Creek
P.O.: P00017296
Acct code:

Lot ID: **829362**
Control Number:
Date Received: Sep 30, 2011
Date Reported: Oct 13, 2011
Report Number: 1475615

		Reference Number	829362-1	829362-2	829362-3	
		Sample Date	Sep 28, 2010	Sep 27, 2010	Sep 27, 2010	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	E1 - Clinton Cr d/s Gabions u/s Porcupine Water	E2 - Clinton Cr d/s Porcupine u/s Wolverine Water	E3 - Wolverine Cr u/s culverts	
		Matrix				
Analyte		Units	Results	Results	Results	Nominal Detection Limit
Metals Total - Continued						
Zirconium	Total	mg/L	0.0013	0.0011	0.0008	0.0001
Physical and Aggregate Properties						
Solids	Total Suspended	mg/L	<2	<2	<2	2
Routine Water						
pH	at 25 °C		8.00	7.99	8.15	
Electrical Conductivity		µS/cm at 25 C	533	617	719	1
Calcium	Dissolved	mg/L	69.8	76.9	74.1	0.1
Iron	Dissolved	mg/L	0.181	0.420	0.066	0.005
Magnesium	Dissolved	mg/L	33.2	38.4	55.3	0.1
Manganese	Dissolved	mg/L	0.301	0.359	0.128	0.001
Phosphorus	Dissolved	mg/L	0.01	<0.01	<0.01	0.01
Potassium	Dissolved	mg/L	0.6	0.7	0.8	0.1
Silicon	Dissolved	mg/L	3.97	4.04	4.51	0.05
Sodium	Dissolved	mg/L	3.0	3.2	4.8	0.1
Bicarbonate		mg/L	170	200	210	5
Carbonate		mg/L	<6	<6	<6	6
Hydroxide		mg/L	<5	<5	<5	5
T-Alkalinity	as CaCO3	mg/L	140	161	172	5
Sulfate (SO4)	Dissolved	mg/L	151	181	230	0.5
Hardness	as CaCO3	mg/L	311	350	413	5
Hardness	Total	mg CaCO3/L	310	346	415	1

Analytical Report

Bill To: YTG Energy, Mines and	Project:	Lot ID: 829362
Report To: YTG Energy, Mines and	ID:	Control Number:
Box 2703, K-419	Name: Clinton Creek	Date Received: Sep 30, 2011
Whitehorse, YT, Canada	Location: Clinton Creek	Date Reported: Oct 13, 2011
Y1A 2C6	LSD: Clinton Creek	Report Number: 1475615
Attn: Frank Patch	P.O.: P00017296	
Sampled By:	Acct code:	
Company: LES		

		Reference Number	829362-4	829362-5	829362-6	
		Sample Date	Sep 27, 2010	Sep 26, 2010	Sep 27, 2010	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	E4 - Clinton Cr d/s Wolverine u/s Eagle	E7 - Clinton Cr near mouth	E8 - Forty Mile River d/s Clinton Cr	
		Matrix	Water	Water	Water	
Analyte		Units	Results	Results	Results	Nominal Detection Limit
Inorganic Nonmetallic Parameters						
Organic Carbon	Total Nonpurgeable	mg/L	12.5	12.7	13.1	0.5
Orthophosphate-P	Dissolved	mg/L	<0.002	<0.002	<0.002	0.002
Ammonia - N		mg/L	0.07	0.07	<0.01	
Nitrate - N		mg/L	0.12	0.10	0.08	0.01
Nitrite - N		mg/L	<0.005	<0.005	<0.005	0.005
Metals Dissolved						
Aluminum	Dissolved	mg/L	0.015	0.014	0.093	0.005
Antimony	Dissolved	mg/L	0.0004	0.0004	<0.0002	0.0002
Arsenic	Dissolved	mg/L	0.0015	0.0012	0.0007	0.0002
Barium	Dissolved	mg/L	0.064	0.064	0.038	0.001
Beryllium	Dissolved	mg/L	<0.00004	<0.00004	<0.00004	0.00004
Bismuth	Dissolved	mg/L	<0.001	<0.001	<0.001	0.001
Boron	Dissolved	mg/L	0.077	0.066	<0.004	0.004
Cadmium	Dissolved	mg/L	0.00004	0.00006	0.00002	0.00001
Chromium	Dissolved	mg/L	0.0008	0.0008	0.0007	0.0004
Cobalt	Dissolved	mg/L	0.00103	0.00086	0.00068	0.00002
Copper	Dissolved	mg/L	0.002	0.003	0.002	0.001
Lead	Dissolved	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Lithium	Dissolved	mg/L	0.018	0.016	0.003	0.001
Molybdenum	Dissolved	mg/L	0.0019	0.0017	0.0005	0.0001
Nickel	Dissolved	mg/L	0.018	0.016	0.002	0.001
Selenium	Dissolved	mg/L	0.0007	<0.0006	<0.0006	0.0006
Silver	Dissolved	mg/L	<0.00001	<0.00001	<0.00001	0.00001
Strontium	Dissolved	mg/L	0.541	0.518	0.139	0.001
Sulfur	Dissolved	mg/L	87.3	85.9	12.4	0.2
Tellurium	Dissolved	mg/L	NA	NA	NA	0.0001
Thallium	Dissolved	mg/L	0.00002	<0.00001	<0.00001	0.00001
Thorium	Dissolved	mg/L	NA	NA	NA	0.0004
Tin	Dissolved	mg/L	0.0002	0.0017	0.0004	0.0001
Titanium	Dissolved	mg/L	<0.01	<0.01	<0.01	0.01
Uranium	Dissolved	mg/L	0.0025	0.0025	0.0009	0.0004
Vanadium	Dissolved	mg/L	0.0005	0.0004	0.0009	0.0001
Zinc	Dissolved	mg/L	0.006	0.006	0.015	0.001
Zirconium	Dissolved	mg/L	0.0014	0.0014	0.0008	0.0001
Metals Total						
Calcium	Total	mg/L	87.0	88.8	27.8	0.05

Analytical Report

Bill To: YTG Energy, Mines and
Report To: YTG Energy, Mines and
Box 2703, K-419
Whitehorse, YT, Canada
Y1A 2C6
Attn: Frank Patch
Sampled By:
Company: LES

Project:
ID:
Name: Clinton Creek
Location: Clinton Creek
LSD: Clinton Creek
P.O.: P00017296
Acct code:

Lot ID: **829362**
Control Number:
Date Received: Sep 30, 2011
Date Reported: Oct 13, 2011
Report Number: 1475615

		Reference Number	829362-4	829362-5	829362-6	
		Sample Date	Sep 27, 2010	Sep 26, 2010	Sep 27, 2010	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	E4 - Clinton Cr d/s Wolverine u/s Eagle	E7 - Clinton Cr near mouth	E8 - Forty Mile River d/s Clinton Cr	
		Matrix	Water	Water	Water	
Analyte		Units	Results	Results	Results	Nominal Detection Limit
Metals Total - Continued						
Iron	Total	mg/L	0.468	0.424	0.611	0.01
Magnesium	Total	mg/L	62.5	61.8	8.25	0.05
Manganese	Total	mg/L	0.328	0.385	0.055	0.005
Phosphorus	Total	mg/L	<0.01	<0.01	<0.01	0.01
Potassium	Total	mg/L	1.0	1.0	0.8	0.1
Silicon	Total	mg/L	4.41	4.43	4.72	0.05
Sulfur	Total	mg/L	91.1	88.8	12.8	0.1
Sodium	Total	mg/L	5.75	5.64	3.81	0.02
Titanium	Total	mg/L	<0.001	<0.001	0.003	0.001
Aluminum	Total	mg/L	0.039	0.047	0.289	0.005
Antimony	Total	mg/L	0.0005	0.0004	<0.0002	0.0002
Arsenic	Total	mg/L	0.0016	0.0014	0.0007	0.0002
Barium	Total	mg/L	0.068	0.070	0.041	0.001
Beryllium	Total	mg/L	<0.00004	<0.00004	<0.00004	0.00004
Bismuth	Total	mg/L	<0.001	<0.001	<0.001	0.001
Boron	Total	mg/L	0.083	0.071	<0.005	0.004
Cadmium	Total	mg/L	0.00005	0.00006	0.00002	0.00001
Chromium	Total	mg/L	0.0010	0.0009	0.0011	0.0004
Cobalt	Total	mg/L	0.00114	0.00096	0.00085	0.00002
Copper	Total	mg/L	0.002	0.002	0.003	0.001
Lead	Total	mg/L	0.0001	<0.0001	<0.0001	0.0001
Lithium	Total	mg/L	0.020	0.019	0.004	0.001
Molybdenum	Total	mg/L	0.0023	0.0021	0.0005	0.0001
Nickel	Total	mg/L	0.018	0.017	0.003	0.001
Selenium	Total	mg/L	0.0007	0.0006	<0.0006	0.0006
Silver	Total	mg/L	0.00002	0.00002	0.00001	0.00001
Strontium	Total	mg/L	0.596	0.579	0.158	0.001
Tellurium	Total	mg/L	NA	NA	NA	0.0001
Thallium	Total	mg/L	0.00002	<0.00001	<0.00001	0.00001
Thorium	Total	mg/L	NA	NA	NA	0.0004
Tin	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Uranium	Total	mg/L	0.0026	0.0027	0.0011	0.0004
Vanadium	Total	mg/L	0.0006	0.0006	0.0014	0.0001
Zinc	Total	mg/L	0.004	0.004	0.004	0.001
Zirconium	Total	mg/L	0.0016	0.0017	0.0011	0.0001

Analytical Report

Bill To: YTG Energy, Mines and	Project:	Lot ID: 829362
Report To: YTG Energy, Mines and	ID:	Control Number:
Box 2703, K-419	Name: Clinton Creek	Date Received: Sep 30, 2011
Whitehorse, YT, Canada	Location: Clinton Creek	Date Reported: Oct 13, 2011
Y1A 2C6	LSD: Clinton Creek	Report Number: 1475615
Attn: Frank Patch	P.O.: P00017296	
Sampled By:	Acct code:	
Company: LES		

		Reference Number	829362-4	829362-5	829362-6	
		Sample Date	Sep 27, 2010	Sep 26, 2010	Sep 27, 2010	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	E4 - Clinton Cr d/s Wolverine u/s Eagle	E7 - Clinton Cr near mouth	E8 - Forty Mile River d/s Clinton Cr	
		Matrix	Water	Water	Water	
Analyte		Units	Results	Results	Results	Nominal Detection Limit
Physical and Aggregate Properties						
Solids	Total Suspended	mg/L	<2	4	4	2
Routine Water						
pH	at 25 °C		7.90	8.04	7.71	
Electrical Conductivity		µS/cm at 25 C	824	809	205	1
Calcium	Dissolved	mg/L	88.8	88.5	28.4	0.1
Iron	Dissolved	mg/L	0.354	0.248	0.418	0.005
Magnesium	Dissolved	mg/L	63.1	61.4	8.4	0.1
Manganese	Dissolved	mg/L	0.326	0.374	0.051	0.001
Phosphorus	Dissolved	mg/L	0.01	<0.01	<0.01	0.01
Potassium	Dissolved	mg/L	1.0	1.1	0.7	0.1
Silicon	Dissolved	mg/L	4.26	4.24	4.48	0.05
Sodium	Dissolved	mg/L	5.6	5.5	3.7	0.1
Bicarbonate		mg/L	240	240	80	5
Carbonate		mg/L	<6	<6	<6	6
Hydroxide		mg/L	<5	<5	<5	5
T-Alkalinity	as CaCO3	mg/L	195	199	65	5
Sulfate (SO4)	Dissolved	mg/L	287	272	39	0.5
Hardness	as CaCO3	mg/L	482	474	100	5
Hardness	Total	mg CaCO3/L	474	476	103	1

Analytical Report

Bill To: YTG Energy, Mines and	Project:	Lot ID: 829362
Report To: YTG Energy, Mines and	ID:	Control Number:
Box 2703, K-419	Name: Clinton Creek	Date Received: Sep 30, 2011
Whitehorse, YT, Canada	Location: Clinton Creek	Date Reported: Oct 13, 2011
Y1A 2C6	LSD: Clinton Creek	Report Number: 1475615
Attn: Frank Patch	P.O.: P00017296	
Sampled By:	Acct code:	
Company: LES		

		Reference Number	829362-7	829362-8	829362-9	
		Sample Date	Sep 27, 2010	Sep 27, 2010	Sep 28, 2010	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	R1 - Clinton Cr u/s Hudgeon Lake	R2 - Easter Creek	R3 - Wolverine Cr u/s tailings	
		Matrix	Water	Water	Water	
Analyte		Units	Results	Results	Results	Nominal Detection Limit
Inorganic Nonmetallic Parameters						
Organic Carbon	Total Nonpurgeable	mg/L	12.3	6.6	12.6	0.5
Orthophosphate-P	Dissolved	mg/L	<0.002	0.004	0.005	0.002
Ammonia - N		mg/L	0.09	<0.01	<0.01	
Nitrate - N		mg/L	0.12	0.03	0.06	0.01
Nitrite - N		mg/L	<0.005	<0.005	<0.005	0.005
Metals Dissolved						
Aluminum	Dissolved	mg/L	0.014	0.008	0.020	0.005
Antimony	Dissolved	mg/L	<0.0002	0.0005	<0.0002	0.0002
Arsenic	Dissolved	mg/L	0.0008	0.001	0.0008	0.0002
Barium	Dissolved	mg/L	0.072	0.057	0.060	0.001
Beryllium	Dissolved	mg/L	0.00005	<0.00004	0.00007	0.00004
Bismuth	Dissolved	mg/L	<0.001	<0.001	<0.001	0.001
Boron	Dissolved	mg/L	0.009	0.015	<0.004	0.004
Cadmium	Dissolved	mg/L	0.00005	0.00003	0.00001	0.00001
Chromium	Dissolved	mg/L	0.0005	0.0005	0.0006	0.0004
Cobalt	Dissolved	mg/L	0.00111	0.00020	0.00057	0.00002
Copper	Dissolved	mg/L	0.002	0.001	0.001	0.001
Lead	Dissolved	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Lithium	Dissolved	mg/L	0.004	0.007	0.004	0.001
Molybdenum	Dissolved	mg/L	0.0019	0.001	0.0013	0.0001
Nickel	Dissolved	mg/L	0.004	0.002	0.002	0.001
Selenium	Dissolved	mg/L	0.0012	<0.0006	<0.0006	0.0006
Silver	Dissolved	mg/L	<0.00001	<0.00001	<0.00001	0.00001
Strontium	Dissolved	mg/L	0.447	0.386	0.431	0.001
Sulfur	Dissolved	mg/L	76.3	57.8	89.7	0.2
Tellurium	Dissolved	mg/L	NA	NA	NA	0.0001
Thallium	Dissolved	mg/L	<0.00001	<0.00001	<0.00001	0.00001
Thorium	Dissolved	mg/L	NA	NA	NA	0.0004
Tin	Dissolved	mg/L	0.0002	0.0002	<0.0001	0.0001
Titanium	Dissolved	mg/L	<0.01	<0.01	<0.01	0.01
Uranium	Dissolved	mg/L	0.0031	0.0050	0.0060	0.0004
Vanadium	Dissolved	mg/L	0.0004	0.0004	0.0008	0.0001
Zinc	Dissolved	mg/L	0.003	0.001	0.002	0.001
Zirconium	Dissolved	mg/L	0.0007	0.0003	0.0006	0.0001
Metals Total						
Calcium	Total	mg/L	97.3	71.8	99.3	0.05

Analytical Report

Bill To: YTG Energy, Mines and
Report To: YTG Energy, Mines and
Box 2703, K-419
Whitehorse, YT, Canada
Y1A 2C6
Attn: Frank Patch
Sampled By:
Company: LES

Project:
ID:
Name: Clinton Creek
Location: Clinton Creek
LSD: Clinton Creek
P.O.: P00017296
Acct code:

Lot ID: **829362**
Control Number:
Date Received: Sep 30, 2011
Date Reported: Oct 13, 2011
Report Number: 1475615

		Reference Number	829362-7	829362-8	829362-9	
		Sample Date	Sep 27, 2010	Sep 27, 2010	Sep 28, 2010	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	R1 - Clinton Cr u/s Hudgeon Lake	R2 - Easter Creek	R3 - Wolverine Cr u/s tailings	
		Matrix	Water	Water	Water	
Analyte		Units	Results	Results	Results	Nominal Detection Limit
Metals Total - Continued						
Iron	Total	mg/L	0.798	0.185	12.4	0.01
Magnesium	Total	mg/L	44.5	48.2	57.7	0.05
Manganese	Total	mg/L	0.740	0.236	0.663	0.005
Phosphorus	Total	mg/L	<0.01	<0.01	0.350	0.01
Potassium	Total	mg/L	0.7	0.8	1.6	0.1
Silicon	Total	mg/L	4.14	4.57	14.3	0.05
Sulfur	Total	mg/L	81.7	61.4	98.9	0.1
Sodium	Total	mg/L	3.79	3.65	5.04	0.02
Titanium	Total	mg/L	<0.001	<0.001	0.153	0.001
Aluminum	Total	mg/L	0.049	0.014	8.04	0.005
Antimony	Total	mg/L	<0.0002	0.0006	0.0004	0.0002
Arsenic	Total	mg/L	0.0010	0.0010	0.0057	0.0002
Barium	Total	mg/L	0.078	0.061	0.309	0.001
Beryllium	Total	mg/L	<0.00004	<0.00004	0.00035	0.00004
Bismuth	Total	mg/L	<0.001	0.003	0.002	0.001
Boron	Total	mg/L	0.011	0.017	0.007	0.004
Cadmium	Total	mg/L	0.00007	0.00002	0.00038	0.00001
Chromium	Total	mg/L	0.0008	0.0007	0.0161	0.0004
Cobalt	Total	mg/L	0.00128	0.00022	0.00822	0.00002
Copper	Total	mg/L	0.002	<0.001	0.020	0.001
Lead	Total	mg/L	0.0001	<0.0001	0.0059	0.0001
Lithium	Total	mg/L	0.005	0.008	0.012	0.001
Molybdenum	Total	mg/L	0.0022	0.0013	0.0018	0.0001
Nickel	Total	mg/L	0.004	0.002	0.027	0.001
Selenium	Total	mg/L	0.0013	<0.0006	0.0006	0.0006
Silver	Total	mg/L	0.00001	<0.00001	0.00013	0.00001
Strontium	Total	mg/L	0.503	0.430	0.503	0.001
Tellurium	Total	mg/L	NA	NA	NA	0.0001
Thallium	Total	mg/L	<0.00001	<0.00001	0.00008	0.00001
Thorium	Total	mg/L	NA	NA	NA	0.0004
Tin	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Uranium	Total	mg/L	0.0034	0.0054	0.0080	0.0004
Vanadium	Total	mg/L	0.0006	0.0004	0.0247	0.0001
Zinc	Total	mg/L	0.003	0.001	0.064	0.001
Zirconium	Total	mg/L	0.001	0.0004	0.0027	0.0001

Analytical Report

Bill To: YTG Energy, Mines and
Report To: YTG Energy, Mines and
Box 2703, K-419
Whitehorse, YT, Canada
Y1A 2C6
Attn: Frank Patch
Sampled By:
Company: LES

Project:
ID:
Name: Clinton Creek
Location: Clinton Creek
LSD: Clinton Creek
P.O.: P00017296
Acct code:

Lot ID: **829362**
Control Number:
Date Received: Sep 30, 2011
Date Reported: Oct 13, 2011
Report Number: 1475615

		Reference Number	829362-7	829362-8	829362-9	
		Sample Date	Sep 27, 2010	Sep 27, 2010	Sep 28, 2010	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	R1 - Clinton Cr u/s Hudgeon Lake	R2 - Easter Creek	R3 - Wolverine Cr u/s tailings	
		Matrix	Water	Water	Water	
Analyte		Units	Results	Results	Results	Nominal Detection Limit
Physical and Aggregate Properties						
Solids	Total Suspended	mg/L	3	<2	608	2
Routine Water						
pH	at 25 °C		8.00	8.10	8.08	
Electrical Conductivity		µS/cm at 25 C	738	661	809	1
Calcium	Dissolved	mg/L	98.4	72.0	95.9	0.1
Iron	Dissolved	mg/L	0.364	0.157	0.105	0.005
Magnesium	Dissolved	mg/L	44.9	48.0	56.2	0.1
Manganese	Dissolved	mg/L	0.742	0.237	0.341	0.001
Phosphorus	Dissolved	mg/L	<0.01	<0.01	<0.01	0.01
Potassium	Dissolved	mg/L	0.6	0.8	0.7	0.1
Silicon	Dissolved	mg/L	4.00	4.42	4.80	0.05
Sodium	Dissolved	mg/L	3.7	3.6	4.5	0.1
Bicarbonate		mg/L	220	240	200	5
Carbonate		mg/L	<6	<6	<6	6
Hydroxide		mg/L	<5	<5	<5	5
T-Alkalinity	as CaCO3	mg/L	182	198	167	5
Sulfate (SO4)	Dissolved	mg/L	242	177	300	0.5
Hardness	as CaCO3	mg/L	431	377	471	5
Hardness	Total	mg CaCO3/L	426	378	485	1

Analytical Report

Bill To: YTG Energy, Mines and	Project:	Lot ID: 829362
Report To: YTG Energy, Mines and	ID:	Control Number:
Box 2703, K-419	Name: Clinton Creek	Date Received: Sep 30, 2011
Whitehorse, YT, Canada	Location: Clinton Creek	Date Reported: Oct 13, 2011
Y1A 2C6	LSD: Clinton Creek	Report Number: 1475615
Attn: Frank Patch	P.O.: P00017296	
Sampled By:	Acct code:	
Company: LES		

		Reference Number	829362-10	829362-11	829362-12	
		Sample Date	Sep 27, 2010	Sep 26, 2010	Sep 27, 2010	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	R4 - Eagle Cr u/s culverts	R6 - Forty Mile River u/s Clinton Cr	Blind Duplicate	
		Matrix	Water	Water	Water	
Analyte		Units	Results	Results	Results	Nominal Detection Limit
Inorganic Nonmetallic Parameters						
Organic Carbon	Total Nonpurgeable	mg/L	11.0	13.2	14.4	0.5
Orthophosphate-P	Dissolved	mg/L	<0.002	<0.002	0.003	0.002
Ammonia - N		mg/L	0.08	<0.01	0.09	
Nitrate - N		mg/L	0.15	0.08	0.11	0.01
Nitrite - N		mg/L	<0.005	<0.005	<0.005	0.005
Metals Dissolved						
Aluminum	Dissolved	mg/L	0.015	0.099	0.020	0.005
Antimony	Dissolved	mg/L	0.0003	<0.0002	0.0003	0.0002
Arsenic	Dissolved	mg/L	0.0044	0.0007	0.0017	0.0002
Barium	Dissolved	mg/L	0.082	0.036	0.071	0.001
Beryllium	Dissolved	mg/L	<0.00004	0.00009	0.00004	0.00004
Bismuth	Dissolved	mg/L	<0.001	<0.001	<0.001	0.001
Boron	Dissolved	mg/L	<0.004	<0.004	0.029	0.004
Cadmium	Dissolved	mg/L	0.00007	0.00002	0.00006	0.00001
Chromium	Dissolved	mg/L	<0.0004	0.0006	0.0009	0.0004
Cobalt	Dissolved	mg/L	0.00053	0.00070	0.00114	0.00002
Copper	Dissolved	mg/L	0.002	0.003	0.004	0.001
Lead	Dissolved	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Lithium	Dissolved	mg/L	0.002	0.003	0.007	0.001
Molybdenum	Dissolved	mg/L	0.0013	0.0003	0.0019	0.0001
Nickel	Dissolved	mg/L	0.005	0.002	0.011	0.001
Selenium	Dissolved	mg/L	0.0024	<0.0006	<0.0006	0.0006
Silver	Dissolved	mg/L	<0.00001	<0.00001	<0.00001	0.00001
Strontium	Dissolved	mg/L	0.348	0.142	0.378	0.001
Sulfur	Dissolved	mg/L	43.7	11.8	56.8	0.2
Tellurium	Dissolved	mg/L	NA	NA	NA	0.0001
Thallium	Dissolved	mg/L	<0.00001	<0.00001	0.00001	0.00001
Thorium	Dissolved	mg/L	NA	NA	NA	0.0004
Tin	Dissolved	mg/L	0.0003	0.0001	0.0001	0.0001
Titanium	Dissolved	mg/L	<0.01	<0.01	<0.01	0.01
Uranium	Dissolved	mg/L	0.0029	0.0009	0.0019	0.0004
Vanadium	Dissolved	mg/L	0.0004	0.001	0.0005	0.0001
Zinc	Dissolved	mg/L	0.005	0.005	0.002	0.001
Zirconium	Dissolved	mg/L	0.0012	0.0009	0.0008	0.0001
Metals Total						
Calcium	Total	mg/L	74.0	27.5	76.4	0.05

Analytical Report

Bill To: YTG Energy, Mines and	Project:	Lot ID: 829362
Report To: YTG Energy, Mines and	ID:	Control Number:
Box 2703, K-419	Name: Clinton Creek	Date Received: Sep 30, 2011
Whitehorse, YT, Canada	Location: Clinton Creek	Date Reported: Oct 13, 2011
Y1A 2C6	LSD: Clinton Creek	Report Number: 1475615
Attn: Frank Patch	P.O.: P00017296	
Sampled By:	Acct code:	
Company: LES		

		Reference Number	829362-10	829362-11	829362-12	
		Sample Date	Sep 27, 2010	Sep 26, 2010	Sep 27, 2010	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	R4 - Eagle Cr u/s culverts	R6 - Forty Mile River u/s Clinton Cr	Blind Duplicate	
		Matrix	Water	Water	Water	
Analyte		Units	Results	Results	Results	Nominal Detection Limit
Metals Total - Continued						
Iron	Total	mg/L	0.501	0.606	0.491	0.01
Magnesium	Total	mg/L	28.0	7.88	38.3	0.05
Manganese	Total	mg/L	0.340	0.052	0.359	0.005
Phosphorus	Total	mg/L	0.012	<0.01	<0.01	0.01
Potassium	Total	mg/L	0.5	0.8	0.8	0.1
Silicon	Total	mg/L	4.70	4.67	4.16	0.05
Sulfur	Total	mg/L	45.5	12.2	59.1	0.1
Sodium	Total	mg/L	4.53	3.79	3.31	0.02
Titanium	Total	mg/L	0.003	0.003	<0.001	0.001
Aluminum	Total	mg/L	0.155	0.293	0.036	0.005
Antimony	Total	mg/L	0.0004	<0.0002	0.0003	0.0002
Arsenic	Total	mg/L	0.0043	0.0007	0.0015	0.0002
Barium	Total	mg/L	0.092	0.041	0.076	0.001
Beryllium	Total	mg/L	<0.00004	0.00005	<0.00004	0.00004
Bismuth	Total	mg/L	<0.001	<0.001	<0.001	0.001
Boron	Total	mg/L	<0.005	<0.005	0.032	0.004
Cadmium	Total	mg/L	0.00010	0.00002	0.00004	0.00001
Chromium	Total	mg/L	0.0011	0.0010	0.0011	0.0004
Cobalt	Total	mg/L	0.00064	0.00083	0.00119	0.00002
Copper	Total	mg/L	0.002	0.003	0.002	0.001
Lead	Total	mg/L	0.0001	0.0001	0.0001	0.0001
Lithium	Total	mg/L	0.003	0.004	0.007	0.001
Molybdenum	Total	mg/L	0.0016	0.0004	0.0021	0.0001
Nickel	Total	mg/L	0.005	0.002	0.011	0.001
Selenium	Total	mg/L	0.0021	<0.0006	<0.0006	0.0006
Silver	Total	mg/L	0.00001	<0.00001	<0.00001	0.00001
Strontium	Total	mg/L	0.376	0.152	0.411	0.001
Tellurium	Total	mg/L	NA	NA	NA	0.0001
Thallium	Total	mg/L	<0.00001	<0.00001	0.00002	0.00001
Thorium	Total	mg/L	NA	NA	NA	0.0004
Tin	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Uranium	Total	mg/L	0.0032	0.0010	0.0022	0.0004
Vanadium	Total	mg/L	0.0009	0.0015	0.0005	0.0001
Zinc	Total	mg/L	0.004	0.004	0.002	0.001
Zirconium	Total	mg/L	0.0013	0.001	0.001	0.0001

Analytical Report

Bill To: YTG Energy, Mines and	Project:	Lot ID: 829362
Report To: YTG Energy, Mines and	ID:	Control Number:
Box 2703, K-419	Name: Clinton Creek	Date Received: Sep 30, 2011
Whitehorse, YT, Canada	Location: Clinton Creek	Date Reported: Oct 13, 2011
Y1A 2C6	LSD: Clinton Creek	Report Number: 1475615
Attn: Frank Patch	P.O.: P00017296	
Sampled By:	Acct code:	
Company: LES		

		Reference Number	829362-10	829362-11	829362-12	
		Sample Date	Sep 27, 2010	Sep 26, 2010	Sep 27, 2010	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	R4 - Eagle Cr u/s culverts	R6 - Forty Mile River u/s Clinton Cr	Blind Duplicate	
		Matrix	Water	Water	Water	
Analyte		Units	Results	Results	Results	Nominal Detection Limit
Physical and Aggregate Properties						
Solids	Total Suspended	mg/L	11	<2	<2	2
Routine Water						
pH	at 25 °C		8.10	7.72	7.99	
Electrical Conductivity		µS/cm at 25 C	535	203	616	1
Calcium	Dissolved	mg/L	74.9	28.0	79.1	0.1
Iron	Dissolved	mg/L	0.306	0.425	0.424	0.005
Magnesium	Dissolved	mg/L	28.2	8.0	39.4	0.1
Manganese	Dissolved	mg/L	0.336	0.048	0.368	0.001
Phosphorus	Dissolved	mg/L	<0.01	0.01	0.01	0.01
Potassium	Dissolved	mg/L	0.4	0.8	0.8	0.1
Silicon	Dissolved	mg/L	4.50	4.51	4.16	0.05
Sodium	Dissolved	mg/L	4.5	3.7	3.4	0.1
Bicarbonate		mg/L	190	80	200	5
Carbonate		mg/L	<6	<6	<6	6
Hydroxide		mg/L	<5	<5	<5	5
T-Alkalinity	as CaCO3	mg/L	159	64	161	5
Sulfate (SO4)	Dissolved	mg/L	133	38	183	0.5
Hardness	as CaCO3	mg/L	303	100	360	5
Hardness	Total	mg CaCO3/L	300	101	348	1

Analytical Report

Bill To: YTG Energy, Mines and	Project:	Lot ID: 829362
Report To: YTG Energy, Mines and	ID:	Control Number:
Box 2703, K-419	Name: Clinton Creek	Date Received: Sep 30, 2011
Whitehorse, YT, Canada	Location: Clinton Creek	Date Reported: Oct 13, 2011
Y1A 2C6	LSD: Clinton Creek	Report Number: 1475615
Attn: Frank Patch	P.O.: P00017296	
Sampled By:	Acct code:	
Company: LES		

		Reference Number	829362-13	829362-14	829362-15	
		Sample Date	Sep 27, 2010	Sep 28, 2010	Sep 28, 2010	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	PPL - Porcupine Pit Lake	GW - CC1	GW - CC2	
		Matrix	Water	Water	Water	
Analyte		Units	Results	Results	Results	Nominal Detection Limit
Inorganic Nonmetallic Parameters						
Organic Carbon	Total Nonpurgeable	mg/L	1.4	5.6	7.2	0.5
Orthophosphate-P	Dissolved	mg/L	0.002	0.032	0.002	0.002
Ammonia - N		mg/L	0.05	0.06	<0.01	
Nitrate - N		mg/L	0.50	0.40	0.28	0.01
Nitrite - N		mg/L	<0.005	<0.005	<0.005	0.005
Metals Dissolved						
Aluminum	Dissolved	mg/L	<0.005	<0.005	<0.005	0.005
Antimony	Dissolved	mg/L	<0.0002	0.0012	0.0011	0.0002
Arsenic	Dissolved	mg/L	0.0004	0.0022	0.0017	0.0002
Barium	Dissolved	mg/L	0.076	0.020	0.023	0.001
Beryllium	Dissolved	mg/L	<0.00004	<0.00004	0.00016	0.00004
Bismuth	Dissolved	mg/L	<0.001	<0.001	<0.001	0.001
Boron	Dissolved	mg/L	<0.004	0.386	0.116	0.004
Cadmium	Dissolved	mg/L	<0.00001	0.00019	0.00018	0.00001
Chromium	Dissolved	mg/L	0.0005	0.0021	0.0012	0.0004
Cobalt	Dissolved	mg/L	<0.00002	<0.00002	<0.00002	0.00002
Copper	Dissolved	mg/L	<0.001	0.002	0.003	0.001
Lead	Dissolved	mg/L	0.0004	<0.0001	<0.0001	0.0001
Lithium	Dissolved	mg/L	0.003	0.087	0.014	0.001
Molybdenum	Dissolved	mg/L	0.0007	0.0029	0.0029	0.0001
Nickel	Dissolved	mg/L	<0.001	0.073	0.040	0.001
Selenium	Dissolved	mg/L	<0.0006	0.0021	0.0022	0.0006
Silver	Dissolved	mg/L	<0.00001	<0.00001	<0.00001	0.00001
Strontium	Dissolved	mg/L	0.602	1.880	0.802	0.001
Sulfur	Dissolved	mg/L	495	370	212	0.2
Tellurium	Dissolved	mg/L	<0.0001	NA	NA	0.0001
Thallium	Dissolved	mg/L	<0.00001	0.00009	0.00007	0.00001
Thorium	Dissolved	mg/L	<0.0004	NA	NA	0.0004
Tin	Dissolved	mg/L	0.0001	0.0002	0.0001	0.0001
Titanium	Dissolved	mg/L	<0.01	<0.01	<0.01	0.01
Uranium	Dissolved	mg/L	0.0017	0.0064	0.0027	0.0004
Vanadium	Dissolved	mg/L	0.0005	0.0004	0.0004	0.0001
Zinc	Dissolved	mg/L	0.002	0.011	0.009	0.001
Zirconium	Dissolved	mg/L	<0.0001	0.0003	0.0003	0.0001
Metals Total						
Calcium	Total	mg/L	93.5	204	161	0.05

Analytical Report

Bill To: YTG Energy, Mines and
Report To: YTG Energy, Mines and
Box 2703, K-419
Whitehorse, YT, Canada
Y1A 2C6
Attn: Frank Patch
Sampled By:
Company: LES

Project:
ID:
Name: Clinton Creek
Location: Clinton Creek
LSD: Clinton Creek
P.O.: P00017296
Acct code:

Lot ID: **829362**
Control Number:
Date Received: Sep 30, 2011
Date Reported: Oct 13, 2011
Report Number: 1475615

		Reference Number	829362-13	829362-14	829362-15	
		Sample Date	Sep 27, 2010	Sep 28, 2010	Sep 28, 2010	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	PPL - Porcupine Pit Lake	GW - CC1	GW - CC2	
		Matrix	Water	Water	Water	
Analyte		Units	Results	Results	Results	Nominal Detection Limit
Metals Total - Continued						
Iron	Total	mg/L	0.025	0.027	0.027	0.01
Magnesium	Total	mg/L	438	291	155	0.05
Manganese	Total	mg/L	<0.005	<0.005	<0.005	0.005
Phosphorus	Total	mg/L	<0.01	<0.01	<0.01	0.01
Potassium	Total	mg/L	4.3	3.3	1.8	0.1
Silicon	Total	mg/L	1.44	5.50	4.58	0.05
Sulfur	Total	mg/L	518	514	224	0.1
Sodium	Total	mg/L	27.2	19.5	6.01	0.02
Titanium	Total	mg/L	<0.001	<0.001	<0.001	0.001
Aluminum	Total	mg/L	0.009	<0.005	0.010	0.005
Antimony	Total	mg/L	0.0175	0.0012	0.0011	0.0002
Arsenic	Total	mg/L	0.0082	0.0021	0.0014	0.0002
Barium	Total	mg/L	0.01	0.022	0.025	0.001
Beryllium	Total	mg/L	<0.00004	<0.00004	<0.00004	0.00004
Bismuth	Total	mg/L	<0.001	<0.001	<0.001	0.001
Boron	Total	mg/L	5.13	0.391	0.104	0.004
Cadmium	Total	mg/L	0.00008	0.00020	0.00016	0.00001
Chromium	Total	mg/L	0.001	0.0019	0.0014	0.0004
Cobalt	Total	mg/L	0.00039	<0.00002	<0.00002	0.00002
Copper	Total	mg/L	<0.001	0.001	0.002	0.001
Lead	Total	mg/L	<0.0001	<0.0001	0.0002	0.0001
Lithium	Total	mg/L	0.090	0.098	0.014	0.001
Molybdenum	Total	mg/L	0.0093	0.0032	0.0032	0.0001
Nickel	Total	mg/L	0.097	0.074	0.039	0.001
Selenium	Total	mg/L	0.0052	0.0024	0.0015	0.0006
Silver	Total	mg/L	<0.00001	<0.00001	<0.00001	0.00001
Strontium	Total	mg/L	0.673	2.11	0.872	0.001
Tellurium	Total	mg/L	<0.0001	NA	NA	0.0001
Thallium	Total	mg/L	0.00024	0.00009	0.00007	0.00001
Thorium	Total	mg/L	<0.0004	NA	NA	0.0004
Tin	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Uranium	Total	mg/L	0.0101	0.0070	0.0028	0.0004
Vanadium	Total	mg/L	0.0003	0.0004	0.0003	0.0001
Zinc	Total	mg/L	0.002	0.013	0.009	0.001
Zirconium	Total	mg/L	0.0006	0.0003	0.0003	0.0001

Analytical Report

Bill To: YTG Energy, Mines and
Report To: YTG Energy, Mines and
Box 2703, K-419
Whitehorse, YT, Canada
Y1A 2C6
Attn: Frank Patch
Sampled By:
Company: LES

Project:
ID:
Name: Clinton Creek
Location: Clinton Creek
LSD: Clinton Creek
P.O.: P00017296
Acct code:

Lot ID: **829362**
Control Number:
Date Received: Sep 30, 2011
Date Reported: Oct 13, 2011
Report Number: 1475615

		Reference Number	829362-13	829362-14	829362-15	
		Sample Date	Sep 27, 2010	Sep 28, 2010	Sep 28, 2010	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	PPL - Porcupine Pit Lake	GW - CC1	GW - CC2	
		Matrix	Water	Water	Water	
Analyte		Units	Results	Results	Results	Nominal Detection Limit
Physical and Aggregate Properties						
Solids	Total Suspended	mg/L	<2	<2	<2	2
Routine Water						
pH	at 25 °C		8.35	7.67	7.83	
Electrical Conductivity		µS/cm at 25 C	2560	2340	1560	1
Calcium	Dissolved	mg/L	80.6	204	161	0.1
Iron	Dissolved	mg/L	0.006	0.020	<0.005	0.005
Magnesium	Dissolved	mg/L	429	282	159	0.1
Manganese	Dissolved	mg/L	<0.001	<0.001	<0.001	0.001
Phosphorus	Dissolved	mg/L	<0.01	<0.01	<0.01	0.01
Potassium	Dissolved	mg/L	3.7	3.2	1.7	0.1
Silicon	Dissolved	mg/L	1.24	5.41	4.46	0.05
Sodium	Dissolved	mg/L	23.6	19.1	6.1	0.1
Bicarbonate		mg/L	250	390	310	5
Carbonate		mg/L	6	<6	<6	6
Hydroxide		mg/L	<5	<5	<5	5
T-Alkalinity	as CaCO3	mg/L	214	323	254	5
Sulfate (SO4)	Dissolved	mg/L	1570	1340	760	0.5
Hardness	as CaCO3	mg/L	1970	1670	1060	5
Hardness	Total	mg CaCO3/L	2040	1710	1040	1

Analytical Report

Bill To: YTG Energy, Mines and	Project:	Lot ID: 829362
Report To: YTG Energy, Mines and	ID:	Control Number:
Box 2703, K-419	Name: Clinton Creek	Date Received: Sep 30, 2011
Whitehorse, YT, Canada	Location: Clinton Creek	Date Reported: Oct 13, 2011
Y1A 2C6	LSD: Clinton Creek	Report Number: 1475615
Attn: Frank Patch	P.O.: P00017296	
Sampled By:	Acct code:	
Company: LES		

		Reference Number	829362-16	829362-17	829362-18	
		Sample Date	Sep 28, 2010	Sep 28, 2010	Sep 28, 2010	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	GW - CC3	GW - CC4	GW - CC5	
		Matrix	Water	Water	Water	
Analyte		Units	Results	Results	Results	Nominal Detection Limit
Inorganic Nonmetallic Parameters						
Organic Carbon	Total Nonpurgeable	mg/L	9.5	9.8	7.5	0.5
Orthophosphate-P	Dissolved	mg/L	0.002	0.002	0.002	0.002
Ammonia - N		mg/L	0.08	0.04	0.08	
Nitrate - N		mg/L	0.08	0.03	0.03	0.01
Nitrite - N		mg/L	<0.005	<0.005	<0.005	0.005
Metals Dissolved						
Aluminum	Dissolved	mg/L	0.005	<0.005	0.006	0.005
Antimony	Dissolved	mg/L	0.0006	0.0006	0.0008	0.0002
Arsenic	Dissolved	mg/L	0.0012	0.0014	0.0011	0.0002
Barium	Dissolved	mg/L	0.036	0.039	0.058	0.001
Beryllium	Dissolved	mg/L	<0.00004	0.00008	0.00007	0.00004
Bismuth	Dissolved	mg/L	<0.001	<0.001	<0.001	0.001
Boron	Dissolved	mg/L	0.059	0.041	0.036	0.004
Cadmium	Dissolved	mg/L	0.00007	0.00005	0.00006	0.00001
Chromium	Dissolved	mg/L	0.0005	<0.0004	0.0004	0.0004
Cobalt	Dissolved	mg/L	<0.00002	0.00003	<0.00002	0.00002
Copper	Dissolved	mg/L	0.001	<0.001	0.001	0.001
Lead	Dissolved	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Lithium	Dissolved	mg/L	0.006	0.006	0.016	0.001
Molybdenum	Dissolved	mg/L	0.0026	0.0029	0.0016	0.0001
Nickel	Dissolved	mg/L	0.031	0.033	0.038	0.001
Selenium	Dissolved	mg/L	0.0006	<0.0006	0.0042	0.0006
Silver	Dissolved	mg/L	<0.00001	<0.00001	<0.00001	0.00001
Strontium	Dissolved	mg/L	0.440	0.366	0.853	0.001
Sulfur	Dissolved	mg/L	93.1	62.9	97.9	0.2
Tellurium	Dissolved	mg/L	NA	NA	NA	0.0001
Thallium	Dissolved	mg/L	0.00007	0.00007	0.00005	0.00001
Thorium	Dissolved	mg/L	NA	NA	NA	0.0004
Tin	Dissolved	mg/L	0.0005	0.0002	0.0004	0.0001
Titanium	Dissolved	mg/L	<0.01	<0.01	<0.01	0.01
Uranium	Dissolved	mg/L	0.0012	0.001	0.0031	0.0004
Vanadium	Dissolved	mg/L	0.0003	0.0003	0.0002	0.0001
Zinc	Dissolved	mg/L	0.004	0.004	0.007	0.001
Zirconium	Dissolved	mg/L	0.0008	0.0003	0.0003	0.0001
Metals Total						
Calcium	Total	mg/L	104	88.1	149	0.05

Analytical Report

Bill To: YTG Energy, Mines and	Project:	Lot ID: 829362
Report To: YTG Energy, Mines and	ID:	Control Number:
Box 2703, K-419	Name: Clinton Creek	Date Received: Sep 30, 2011
Whitehorse, YT, Canada	Location: Clinton Creek	Date Reported: Oct 13, 2011
Y1A 2C6	LSD: Clinton Creek	Report Number: 1475615
Attn: Frank Patch	P.O.: P00017296	
Sampled By:	Acct code:	
Company: LES		

		Reference Number	829362-16	829362-17	829362-18	
		Sample Date	Sep 28, 2010	Sep 28, 2010	Sep 28, 2010	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	GW - CC3	GW - CC4	GW - CC5	
		Matrix	Water	Water	Water	
Analyte		Units	Results	Results	Results	Nominal Detection Limit
Metals Total - Continued						
Iron	Total	mg/L	0.028	0.016	0.018	0.01
Magnesium	Total	mg/L	62.0	44.6	67.9	0.05
Manganese	Total	mg/L	<0.005	<0.005	0.01	0.005
Phosphorus	Total	mg/L	<0.01	<0.01	<0.01	0.01
Potassium	Total	mg/L	1.0	1	1.4	0.1
Silicon	Total	mg/L	4.46	4.91	4.50	0.05
Sulfur	Total	mg/L	105	73.1	111	0.1
Sodium	Total	mg/L	3.73	3.29	5.45	0.02
Titanium	Total	mg/L	<0.001	<0.001	0.001	0.001
Aluminum	Total	mg/L	0.006	<0.005	0.258	0.005
Antimony	Total	mg/L	0.0006	0.0006	0.0004	0.0002
Arsenic	Total	mg/L	0.001	0.0014	0.0071	0.0002
Barium	Total	mg/L	0.038	0.041	0.078	0.001
Beryllium	Total	mg/L	<0.00004	<0.00004	0.00006	0.00004
Bismuth	Total	mg/L	<0.001	<0.001	<0.001	0.001
Boron	Total	mg/L	0.056	0.048	<0.005	0.004
Cadmium	Total	mg/L	0.00008	0.00006	0.00002	0.00001
Chromium	Total	mg/L	0.0007	0.0005	0.0007	0.0004
Cobalt	Total	mg/L	<0.00002	0.00002	0.00044	0.00002
Copper	Total	mg/L	<0.001	0.001	0.002	0.001
Lead	Total	mg/L	<0.0001	<0.0001	0.0002	0.0001
Lithium	Total	mg/L	0.007	0.006	0.002	0.001
Molybdenum	Total	mg/L	0.0031	0.0032	<0.0001	0.0001
Nickel	Total	mg/L	0.031	0.032	<0.001	0.001
Selenium	Total	mg/L	0.0007	<0.0006	<0.0006	0.0006
Silver	Total	mg/L	<0.00001	<0.00001	0.00001	0.00001
Strontium	Total	mg/L	0.485	0.413	0.120	0.001
Tellurium	Total	mg/L	NA	NA	NA	0.0001
Thallium	Total	mg/L	0.00008	0.00007	<0.00001	0.00001
Thorium	Total	mg/L	NA	NA	NA	0.0004
Tin	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Uranium	Total	mg/L	0.0014	0.0011	<0.0004	0.0004
Vanadium	Total	mg/L	0.0002	0.0002	0.0022	0.0001
Zinc	Total	mg/L	0.002	0.002	0.004	0.001
Zirconium	Total	mg/L	0.0003	0.0003	<0.0001	0.0001

Analytical Report

Bill To: YTG Energy, Mines and
Report To: YTG Energy, Mines and
Box 2703, K-419
Whitehorse, YT, Canada
Y1A 2C6
Attn: Frank Patch
Sampled By:
Company: LES

Project:
ID:
Name: Clinton Creek
Location: Clinton Creek
LSD: Clinton Creek
P.O.: P00017296
Acct code:

Lot ID: **829362**
Control Number:
Date Received: Sep 30, 2011
Date Reported: Oct 13, 2011
Report Number: 1475615

		Reference Number	829362-16	829362-17	829362-18	
		Sample Date	Sep 28, 2010	Sep 28, 2010	Sep 28, 2010	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	GW - CC3	GW - CC4	GW - CC5	
		Matrix	Water	Water	Water	
Analyte		Units	Results	Results	Results	Nominal Detection Limit
Physical and Aggregate Properties						
Solids	Total Suspended	mg/L	<2	<2	<2	2
Routine Water						
pH	at 25 °C		7.77	7.86	7.71	
Electrical Conductivity		µS/cm at 25 C	825	669	1020	1
Calcium	Dissolved	mg/L	100	85.5	137	0.1
Iron	Dissolved	mg/L	<0.005	0.008	<0.005	0.005
Magnesium	Dissolved	mg/L	59.6	43.3	62.3	0.1
Manganese	Dissolved	mg/L	<0.001	<0.001	<0.001	0.001
Phosphorus	Dissolved	mg/L	<0.01	<0.01	<0.01	0.01
Potassium	Dissolved	mg/L	0.9	0.8	1.2	0.1
Silicon	Dissolved	mg/L	4.20	4.68	3.97	0.05
Sodium	Dissolved	mg/L	3.4	2.9	4.8	0.1
Bicarbonate		mg/L	230	220	300	5
Carbonate		mg/L	<6	<6	<6	6
Hydroxide		mg/L	<5	<5	<5	5
T-Alkalinity	as CaCO3	mg/L	192	181	250	5
Sulfate (SO4)	Dissolved	mg/L	285	201	356	0.5
Hardness	as CaCO3	mg/L	496	392	598	5
Hardness	Total	mg CaCO3/L	514	404	651	1

Approved by:



Aaron Zentner, B.Sc., P.Chem.
Team Leader - Organics

Quality Control

Bill To: YTG Energy, Mines and	Project:	Lot ID: 829362
Report To: YTG Energy, Mines and	ID:	Control Number:
Box 2703, K-419	Name: Clinton Creek	Date Received: Sep 30, 2011
Whitehorse, YT, Canada	Location: Clinton Creek	Date Reported: Oct 13, 2011
Y1A 2C6	LSD: Clinton Creek	Report Number: 1475615
Attn: Frank Patch	P.O.: P00017296	
Sampled By:	Acct code:	
Company: LES		

Inorganic Nonmetallic Parameters

Blanks	Units	Measured	Lower Limit	Upper Limit	Passed QC
Orthophosphate-P	mg/L	0	-0.002	0.002	yes
Ammonium - N	ug/L		-110.00	10.00	yes
Date Acquired:	October 03, 2011				
Organic Carbon	mg/L	-0.01668	-0.5	0.5	yes
Date Acquired:	October 03, 2011				

Calibration Check	Units	% Recovery	Lower Limit	Upper Limit	Passed QC
Orthophosphate-P	mg/L	104.84	90	110	yes
Ammonium - N	ug/L		85	115	yes
Date Acquired:	October 03, 2011				
Orthophosphate-P	mg/L	104.00	90	110	yes
Ammonium - N	ug/L		70	130	yes
Date Acquired:	October 03, 2011				
Nitrite - N	mg/L	100.00	90	110	yes
Nitrate and Nitrite - N	mg/L	98.28	90	110	yes
Date Acquired:	October 03, 2011				

Certified Reference Material	Units	Measured	Target	Lower Limit	Upper Limit	Passed QC
Nitrate - N	mg/L	1.41	1.40	1.13	1.67	yes
Nitrate and Nitrite - N	mg/L	1.41	1.40	1.13	1.67	yes
Date Acquired:	October 03, 2011					
Nitrate - N	mg/L	<0.01	0.00	-0.15	0.15	yes
Nitrite - N	mg/L	1.26	1.190	1.040	1.340	yes
Nitrate and Nitrite - N	mg/L	1.22	1.19	0.89	1.49	yes
Date Acquired:	October 03, 2011					
Orthophosphate-P	mg/L	3.83	3.780	3.234	4.326	yes
Date Acquired:	October 03, 2011					

Replicates	Units	Replicate 1	Replicate 2	% RSD Criteria	Absolute Criteria	Passed QC
Organic Carbon	mg/L	2.5	2.5	10	1.0	yes
Date Acquired:	October 03, 2011					
Orthophosphate-P	mg/L	0.011	0.010	20	0.050	yes
Ammonia - N	mg/L	15.1	15.4	20	0.50	yes
Nitrate - N	mg/L	22.3	23.1	15	0.05	yes
Nitrite - N	mg/L	0.005	0.005	10	0.030	yes
Nitrate and Nitrite - N	mg/L	22.3	23.1	10	0.05	yes
Date Acquired:	October 03, 2011					

Control Sample	Units	Measured	Lower Limit	Upper Limit	Passed QC
Nitrite - N	mg/L	<0.005	-0.004	0.006	yes
Nitrate and Nitrite - N	mg/L	<0.01	0.00	0.01	yes

Quality Control

Bill To: YTG Energy, Mines and
Report To: YTG Energy, Mines and
Box 2703, K-419
Whitehorse, YT, Canada
Y1A 2C6
Attn: Frank Patch
Sampled By:
Company: LES

Project:
ID:
Name: Clinton Creek
Location: Clinton Creek
LSD: Clinton Creek
P.O.: P00017296
Acct code:

Lot ID: **829362**
Control Number:
Date Received: Sep 30, 2011
Date Reported: Oct 13, 2011
Report Number: 1475615

Inorganic Nonmetallic Parameters -

Continued

Control Sample	Units	Measured	Lower Limit	Upper Limit	Passed QC
Date Acquired:	October 03, 2011				
Organic Carbon	mg/L	124	109.6	133.6	yes
Date Acquired:	October 03, 2011				
Organic Carbon	mg/L	15.7	12.8	17.2	yes
Date Acquired:	October 03, 2011				
Organic Carbon	mg/L	3.4	2.4	4.0	yes
Date Acquired:	October 03, 2011				

Metals Dissolved

Certified Reference Material	Units	Measured	Target	Lower Limit	Upper Limit	Passed QC
Aluminum	mg/L	0.295	0.300	0.270	0.330	yes
Antimony	mg/L	0.0779	0.0750	0.0675	0.0825	yes
Arsenic	mg/L	0.0653	0.0649	0.0583	0.0715	yes
Barium	mg/L	0.206	0.200	0.180	0.219	yes
Beryllium	mg/L	0.0678	0.07520	0.06770	0.08270	yes
Boron	mg/L	0.080	0.087	0.079	0.096	yes
Cadmium	mg/L	0.05770	0.05800	0.05230	0.06370	yes
Chromium	mg/L	0.0678	0.0675	0.0609	0.0741	yes
Cobalt	mg/L	0.0786	0.07980	0.07170	0.08790	yes
Copper	mg/L	0.056	0.057	0.051	0.063	yes
Lead	mg/L	0.145	0.1527	0.1374	0.1680	yes
Molybdenum	mg/L	0.0596	0.05999	0.05399	0.06599	yes
Nickel	mg/L	0.212	0.220	0.198	0.242	yes
Selenium	mg/L	0.1050	0.1099	0.0988	0.1210	yes
Silver	mg/L	0.01540	0.01499	0.01349	0.01649	yes
Strontium	mg/L	0.048	0.050	0.045	0.055	yes
Thallium	mg/L	0.06460	0.06508	0.05848	0.07168	yes
Vanadium	mg/L	0.8070	0.75000	0.67500	0.82500	yes
Zinc	mg/L	0.129	0.130	0.117	0.143	yes
Date Acquired:	October 03, 2011					

Replicates	Units	Replicate 1	Replicate 2	% RSD Criteria	Absolute Criteria	Passed QC
Sulfur	mg/L	11.8	11.5	30	3.0	yes
Titanium	mg/L	<0.01	<0.01	30	0.012	yes
Date Acquired:	October 03, 2011					

Metals Total

Blanks	Units	Measured	Lower Limit	Upper Limit	Passed QC
Calcium	mg/L	-0.0099	-0.08	0.10	yes
Iron	mg/L	0	-0.030	0.030	yes

Quality Control

Bill To: YTG Energy, Mines and	Project:	Lot ID: 829362
Report To: YTG Energy, Mines and	ID:	Control Number:
Box 2703, K-419	Name: Clinton Creek	Date Received: Sep 30, 2011
Whitehorse, YT, Canada	Location: Clinton Creek	Date Reported: Oct 13, 2011
Y1A 2C6	LSD: Clinton Creek	Report Number: 1475615
Attn: Frank Patch	P.O.: P00017296	
Sampled By:	Acct code:	
Company: LES		

Metals Total - Continued

Blanks	Units	Measured	Lower Limit	Upper Limit	Passed QC
Magnesium	mg/L	-0.0168	-0.06	0.06	yes
Manganese	mg/L	-0.0031	-0.0098	0.0022	yes
Phosphorus	mg/L	0.0018	-0.033	0.027	yes
Potassium	mg/L	0.0037	-0.30	0.30	yes
Silicon	mg/L	-0.0004	-2.55	3.15	yes
Sodium	mg/L	-0.0001	-0.23	0.19	yes

Date Acquired: October 03, 2011

Calcium	mg/L	-0.017	-0.13	0.17	yes
Iron	mg/L	0.0155	-0.029	0.031	yes
Magnesium	mg/L	-0.009	-0.09	0.09	yes
Manganese	mg/L	-0.0024	-0.0098	0.0022	yes
Phosphorus	mg/L	-0.0006	-0.033	0.027	yes
Potassium	mg/L	0	-3.83	4.09	yes
Silicon	mg/L	0.0005	-2.40	3.00	yes
Sodium	mg/L	0	-0.23	0.19	yes

Date Acquired: October 03, 2011

Calibration Check	Units	% Recovery	Lower Limit	Upper Limit	Passed QC
Calcium	mg/L	104.01	90	110	yes
Iron	mg/L	94.10	70	130	yes
Magnesium	mg/L	99.90	90	110	yes
Manganese	mg/L	106.90	90	110	yes
Phosphorus	mg/L	95.56	90	110	yes
Potassium	mg/L	99.88	85	115	yes
Silicon	mg/L	91.14	80	120	yes
Sodium	mg/L	102.79	90	110	yes

Date Acquired: October 03, 2011

Certified Reference Material	Units	Measured	Target	Lower Limit	Upper Limit	Passed QC
Calcium	mg/L	6.12	5.98	5.38	6.58	yes
Iron	mg/L	1.21	1.276	1.149	1.404	yes
Magnesium	mg/L	5.02	5.43	4.89	5.97	yes
Manganese	mg/L	1.50	1.4970	1.3473	1.6467	yes
Potassium	mg/L	3	3.00	2.70	3.30	yes
Sodium	mg/L	4.8	4.89	4.40	5.38	yes
Aluminum	mg/L	1.29	1.200	1.080	1.320	yes
Antimony	mg/L	0.310	0.3000	0.2700	0.3300	yes
Arsenic	mg/L	0.266	0.2590	0.2320	0.2860	yes
Barium	mg/L	0.825	0.798	0.717	0.879	yes
Beryllium	mg/L	0.307	0.30000	0.27000	0.33000	yes
Boron	mg/L	0.36	0.349	0.313	0.385	yes
Cadmium	mg/L	0.224	0.23200	0.20800	0.25600	yes
Chromium	mg/L	0.271	0.2700	0.2430	0.2970	yes

Quality Control

Bill To: YTG Energy, Mines and	Project:	Lot ID: 829362
Report To: YTG Energy, Mines and	ID:	Control Number:
Box 2703, K-419	Name: Clinton Creek	Date Received: Sep 30, 2011
Whitehorse, YT, Canada	Location: Clinton Creek	Date Reported: Oct 13, 2011
Y1A 2C6	LSD: Clinton Creek	Report Number: 1475615
Attn: Frank Patch	P.O.: P00017296	
Sampled By:	Acct code:	
Company: LES		

Metals Total - Continued

Certified Reference Material	Units	Measured	Target	Lower Limit	Upper Limit	Passed QC
Cobalt	mg/L	0.324	0.31900	0.28720	0.35080	yes
Copper	mg/L	0.23	0.228	0.207	0.249	yes
Lead	mg/L	0.630	0.6100	0.5500	0.6700	yes
Molybdenum	mg/L	0.252	0.24000	0.21600	0.26400	yes
Nickel	mg/L	0.860	0.880	0.793	0.967	yes
Selenium	mg/L	0.429	0.4400	0.3950	0.4850	yes
Silver	mg/L	0.0614	0.06000	0.05400	0.06600	yes
Strontium	mg/L	0.22	0.200	0.179	0.221	yes
Thallium	mg/L	0.276	0.26000	0.23390	0.28610	yes
Vanadium	mg/L	3.17	3.00000	2.70000	3.30000	yes
Zinc	mg/L	0.521	0.520	0.469	0.571	yes

Date Acquired: October 03, 2011

Replicates	Units	Replicate 1	Replicate 2	% RSD Criteria	Absolute Criteria	Passed QC
Calcium	mg/L	149	150	20	0.05	yes
Iron	mg/L	0.018	0.022	20	0.050	yes
Magnesium	mg/L	67.9	67.3	20	0.05	yes
Manganese	mg/L	0.01	0.006	20	0.0050	yes
Phosphorus	mg/L	<0.01	<0.01	20	0.050	yes
Potassium	mg/L	1.4	1.4	20	0.10	yes
Silicon	mg/L	4.50	4.49	20	0.10	yes
Sulfur	mg/L	111	108	20	0.0	yes
Sodium	mg/L	5.45	5.39	20	0.10	yes

Date Acquired: October 11, 2011

Physical and Aggregate Properties

Replicates	Units	Replicate 1	Replicate 2	% RSD Criteria	Absolute Criteria	Passed QC
Solids	mg/L	31	30	30	20	yes

Date Acquired: October 03, 2011

Control Sample	Units	Measured	Lower Limit	Upper Limit	Passed QC
Solids	mg/L	450	291	591	yes
Solids	mg/L	28	16	31	yes
Solids	mg/L	<2	-3	3	yes

Date Acquired: October 03, 2011

Routine Water

Blanks	Units	Measured	Lower Limit	Upper Limit	Passed QC
Calcium	mg/L	-0.013	-0.05	0.05	yes

Quality Control

Bill To: YTG Energy, Mines and	Project:	Lot ID: 829362
Report To: YTG Energy, Mines and	ID:	Control Number:
Box 2703, K-419	Name: Clinton Creek	Date Received: Sep 30, 2011
Whitehorse, YT, Canada	Location: Clinton Creek	Date Reported: Oct 13, 2011
Y1A 2C6	LSD: Clinton Creek	Report Number: 1475615
Attn: Frank Patch	P.O.: P00017296	
Sampled By:	Acct code:	
Company: LES		

Routine Water - Continued

Blanks	Units	Measured	Lower Limit	Upper Limit	Passed QC
Iron	mg/L	0.0139	-0.031	0.029	yes
Magnesium	mg/L	-0.0202	-0.05	0.07	yes
Manganese	mg/L	-0.0023	-0.007	0.001	yes
Phosphorus	mg/L	-0.0062	-0.04	0.04	yes
Potassium	mg/L	0	-0.4	0.4	yes
Silicon	mg/L	0.0029	-0.20	0.25	yes
Sodium	mg/L	-0.0145	-0.2	0.2	yes
Date Acquired: October 03, 2011					
Calcium	mg/L	0.0033	-0.13	0.16	yes
Iron	mg/L	0	-0.024	0.025	yes
Magnesium	mg/L	-0.0142	-0.07	0.08	yes
Manganese	mg/L	-0.0046	-0.009	0.002	yes
Phosphorus	mg/L	0.0073	-0.14	0.16	yes
Potassium	mg/L	0.006	-0.8	0.8	yes
Silicon	mg/L	0	-1.76	2.02	yes
Sodium	mg/L	-0.0079	-0.3	0.4	yes
Date Acquired: October 03, 2011					
Sulfate (SO4)	mg/L	0	-1.0	1.0	yes
Date Acquired: October 03, 2011					

Calibration Check	Units	% Recovery	Lower Limit	Upper Limit	Passed QC
Calcium	mg/L	103.38	91	109	yes
Iron	mg/L	100.30	0	0	yes
Magnesium	mg/L	95.55	91	109	yes
Manganese	mg/L	102.90	90	110	yes
Phosphorus	mg/L	90.28	90	110	yes
Potassium	mg/L	95.88	85	115	yes
Silicon	mg/L	90.76	80	120	yes
Sodium	mg/L	97.06	90	110	yes
Date Acquired: October 03, 2011					
Sulfate (SO4)	mg/L	91.12	85	115	yes
Date Acquired: October 03, 2011					
Sulfate (SO4)	mg/L	96.29	90	110	yes
Date Acquired: October 03, 2011					

Certified Reference Material	Units	Measured	Target	Lower Limit	Upper Limit	Passed QC
T-Alkalinity	mg/L	11	10	8	11	yes
Date Acquired: September 30, 2011						
Calcium	mg/L	1.1	1.00	0.90	1.10	yes
Magnesium	mg/L	0.9	0.91	0.82	1.00	yes
Manganese	mg/L	0.376	0.374	0.336	0.412	yes
Potassium	mg/L	0.5	0.5	0.4	0.6	yes

Quality Control

Bill To: YTG Energy, Mines and	Project:	Lot ID: 829362
Report To: YTG Energy, Mines and	ID:	Control Number:
Box 2703, K-419	Name: Clinton Creek	Date Received: Sep 30, 2011
Whitehorse, YT, Canada	Location: Clinton Creek	Date Reported: Oct 13, 2011
Y1A 2C6	LSD: Clinton Creek	Report Number: 1475615
Attn: Frank Patch	P.O.: P00017296	
Sampled By:	Acct code:	
Company: LES		

Routine Water - Continued

Certified Reference Material	Units	Measured	Target	Lower Limit	Upper Limit	Passed QC
Sodium	mg/L	0.8	0.8	0.7	0.9	yes

Date Acquired: October 03, 2011

Replicates	Units	Replicate 1	Replicate 2	% RSD Criteria	Absolute Criteria	Passed QC
Calcium	mg/L	135	132	30	1.00	yes
Iron	mg/L	0.077	0.082	30	0.060	yes
Magnesium	mg/L	29.5	29.1	30	1.00	yes
Manganese	mg/L	1.61	1.58	30	0.015	yes
Phosphorus	mg/L	0.01	<0.01	30	0.10	yes
Potassium	mg/L	5.9	5.9	30	1.0	yes
Silicon	mg/L	8.88	9.24	30	0.15	yes
Sodium	mg/L	40.5	40.2	30	1.0	yes

Date Acquired: October 03, 2011

Hardness	mg CaCO ₃ /L	651	652	20	1.000	yes
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Date Acquired: October 11, 2011

pH		8.23	8.27	2		yes
Electrical Conductivity	dS/m at 25 C	0.273	0.272	10	0.005	yes
Bicarbonate	mg/L	190	190	10	10	yes
Carbonate	mg/L	<6	<6	10	10	yes
Hydroxide	mg/L	<5	<5	10	10	yes
P-Alkalinity	mg/L	<5	<5	10	5	yes
T-Alkalinity	mg/L	154	155	10	5	yes
Sulfate (SO ₄)	mg/L	18.6	19.0	15	0.5	yes

Date Acquired: October 03, 2011

Replicates	Units	Replicate 1	Replicate 2	% RSD Criteria	Absolute Criteria	Passed QC
Sulfate (SO ₄)	mg/L	4.7	4.4	6	0.0	yes

Date Acquired: October 03, 2011

Control Sample	Units	Measured	Lower Limit	Upper Limit	Passed QC
pH		10.1	9.17	10.81	yes
Electrical Conductivity	µS/cm at 25 C	205	165	243	yes
P-Alkalinity	mg/L	34	7	55	yes
T-Alkalinity	mg/L	93	90	101	yes

Date Acquired: September 30, 2011

pH		7.99	7.88	8.12	yes
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Date Acquired: September 30, 2011

Electrical Conductivity	µS/cm at 25 C	3	0	2	yes
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Date Acquired: September 30, 2011

Electrical Conductivity	µS/cm at 25 C	1450	1323	1503	yes
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Date Acquired: September 30, 2011

Quality Control

Bill To: YTG Energy, Mines and	Project:	Lot ID: 829362
Report To: YTG Energy, Mines and	ID:	Control Number:
Box 2703, K-419	Name: Clinton Creek	Date Received: Sep 30, 2011
Whitehorse, YT, Canada	Location: Clinton Creek	Date Reported: Oct 13, 2011
Y1A 2C6	LSD: Clinton Creek	Report Number: 1475615
Attn: Frank Patch	P.O.: P00017296	
Sampled By:	Acct code:	
Company: LES		

Routine Water - Continued

Control Sample	Units	Measured	Lower Limit	Upper Limit	Passed QC
Electrical Conductivity	µS/cm at 25 C	<1	-2	2	yes
Date Acquired: September 30, 2011					

Trace Metals Dissolved

Blanks	Units	Measured	Lower Limit	Upper Limit	Passed QC
Aluminum	µg/L	1.338	-10	10	yes
Antimony	µg/L	0.008	-0.4	0.2	yes
Arsenic	µg/L	0.033	-0.5	0.5	yes
Barium	µg/L	0.015	-0	0	yes
Beryllium	µg/L	-0.013	-0.10	0.10	yes
Bismuth	µg/L	0.274	-1.0	1.0	yes
Boron	µg/L	0.784	-6	5	yes
Cadmium	µg/L	-0.012	-0.03	0.03	yes
Chromium	µg/L	0.015	-0.1	0.2	yes
Cobalt	µg/L	0.004	-0.07	0.07	yes
Copper	µg/L	-0.165	-1	1	yes
Lead	µg/L	-0.001	-0.1	0.1	yes
Lithium	µg/L	0.089	-1	1	yes
Molybdenum	µg/L	0.012	-0.31	0.29	yes
Nickel	µg/L	0.028	-1	1	yes
Selenium	µg/L	-0.028	-1.7	1.3	yes
Silver	µg/L	0.001	-0.05	0.05	yes
Strontium	µg/L	0.017	-0	0	yes
Tellurium	µg/L		-0.7	0.7	yes
Thallium	µg/L	0.001	-0.03	0.03	yes
Thorium	µg/L		-1.5	1.5	yes
Tin	µg/L	0.007	-3.0	3.0	yes
Titanium	µg/L	0.05	-0.2	0.2	yes
Uranium	µg/L	0.011	-0.03	0.03	yes
Vanadium	µg/L	-0.0044	-0.35	0.35	yes
Zinc	µg/L	-0.111	-2	4	yes
Zirconium	µg/L	0.016	-0.1	0.1	yes
Date Acquired: October 03, 2011					
Aluminum	µg/L	1.09	-6	6	yes
Antimony	µg/L	-0.062	-0.4	0.3	yes
Arsenic	µg/L	-0.015	-0.4	0.3	yes
Barium	µg/L	0.003	-0	1	yes
Beryllium	µg/L	0.034	-0.10	0.10	yes
Bismuth	µg/L	-0.326	0.0	0.0	yes
Boron	µg/L	0.085	-18	19	yes
Cadmium	µg/L	-0.002	-0.03	0.03	yes
Chromium	µg/L	-0.012	-0.1	0.2	yes

Quality Control

Bill To: YTG Energy, Mines and	Project:	Lot ID: 829362
Report To: YTG Energy, Mines and	ID:	Control Number:
Box 2703, K-419	Name: Clinton Creek	Date Received: Sep 30, 2011
Whitehorse, YT, Canada	Location: Clinton Creek	Date Reported: Oct 13, 2011
Y1A 2C6	LSD: Clinton Creek	Report Number: 1475615
Attn: Frank Patch	P.O.: P00017296	
Sampled By:	Acct code:	
Company: LES		

Trace Metals Dissolved - Continued

Blanks	Units	Measured	Lower Limit	Upper Limit	Passed QC
Cobalt	µg/L	0.002	-0.30	0.30	yes
Copper	µg/L	-0.124	-1	1	yes
Lead	µg/L	0.003	-0.3	0.4	yes
Lithium	µg/L	0.026	-0	0	yes
Molybdenum	µg/L	-0.095	-0.95	0.85	yes
Nickel	µg/L	0.112	-1	1	yes
Selenium	µg/L	-0.149	-1.7	1.7	yes
Silver	µg/L	-0.002	-0.67	0.47	yes
Strontium	µg/L	0.081	-2	4	yes
Tellurium	µg/L	-0.164	-0.7	0.7	yes
Thallium	µg/L	-0.001	-0.06	0.06	yes
Thorium	µg/L		-0.7	0.5	yes
Tin	µg/L	-0.039	-3.8	4.0	yes
Titanium	µg/L	0.095	-0.3	0.2	yes
Uranium	µg/L	-0.011	-0.04	0.02	yes
Vanadium	µg/L	-0.0352	-0.30	0.30	yes
Zinc	µg/L	0.664	-11	19	yes
Zirconium	µg/L	-0.01	-0.0	0.0	yes

Date Acquired: October 03, 2011

Calibration Check	Units	% Recovery	Lower Limit	Upper Limit	Passed QC
Aluminum	µg/L	97.90	70	130	yes
Antimony	µg/L	91.21	85	115	yes
Arsenic	µg/L	105.92	90	110	yes
Barium	µg/L	99.32	90	110	yes
Beryllium	µg/L	99.60	90	110	yes
Bismuth	µg/L	102.21	90	110	yes
Boron	µg/L	97.36	70	130	yes
Cadmium	µg/L	96.46	90	110	yes
Chromium	µg/L	98.95	90	110	yes
Cobalt	µg/L	99.09	90	110	yes
Copper	µg/L	103.27	90	110	yes
Lead	µg/L	94.99	90	110	yes
Lithium	µg/L	97.26	90	110	yes
Molybdenum	µg/L	96.66	90	110	yes
Nickel	µg/L	96.60	90	110	yes
Selenium	µg/L	94.86	90	110	yes
Silver	µg/L	1.96	0	0	yes
Strontium	µg/L	101.19	90	110	yes
Thallium	µg/L	98.02	90	110	yes
Tin	µg/L	100.81	90	110	yes
Titanium	µg/L	99.93	90	110	yes
Uranium	µg/L	95.83	85	115	yes

Quality Control

Bill To: YTG Energy, Mines and	Project:	Lot ID: 829362
Report To: YTG Energy, Mines and	ID:	Control Number:
Box 2703, K-419	Name: Clinton Creek	Date Received: Sep 30, 2011
Whitehorse, YT, Canada	Location: Clinton Creek	Date Reported: Oct 13, 2011
Y1A 2C6	LSD: Clinton Creek	Report Number: 1475615
Attn: Frank Patch	P.O.: P00017296	
Sampled By:	Acct code:	
Company: LES		

Trace Metals Dissolved - Continued

Calibration Check	Units	% Recovery	Lower Limit	Upper Limit	Passed QC
Vanadium	µg/L	100.76	90	110	yes
Zinc	µg/L	103.02	90	110	yes
Zirconium	µg/L	80.87	90	110	yes

Date Acquired: October 03, 2011

Replicates	Units	Replicate 1	Replicate 2	% RSD Criteria	Absolute Criteria	Passed QC
Aluminum	µg/L	<5	6	20	20	yes
Antimony	µg/L	<0.2	0.3	20	1.0	yes
Arsenic	µg/L	3.4	3.4	20	1.0	yes
Barium	µg/L	146	145	20	5	yes
Beryllium	µg/L	0.08	<0.04	20	1.00	yes
Boron	µg/L	237	238	20	5	yes
Cadmium	µg/L	0.05	0.05	20	0.50	yes
Chromium	µg/L	<0.4	<0.4	20	5.0	yes
Cobalt	µg/L	1.75	1.78	20	0.50	yes
Copper	µg/L	2	1	20	5	yes
Lead	µg/L	<0.1	<0.1	20	0.5	yes
Lithium	µg/L	3	3	20	5	yes
Molybdenum	µg/L	1.1	1.2	20	0.50	yes
Nickel	µg/L	6	5	20	5	yes
Selenium	µg/L	<0.6	<0.6	20	0.5	yes
Silver	µg/L	<0.01	<0.01	20	0.50	yes
Strontium	µg/L	880	874	20	0	yes
Tellurium	µg/L	<0.1	<0.1	20	0.5	yes
Thallium	µg/L	<0.01	0.04	20	0.10	yes
Thorium	µg/L	<0.4	<0.4	10	0.1	yes
Tin	µg/L	0.2	0.3	20	0.5	yes
Titanium	µg/L	1.2	1.0	20	0.5	yes
Uranium	µg/L	4.3	4.3	20	0.10	yes
Vanadium	µg/L	0.3	0.4	20	0.50	yes
Zinc	µg/L	7	6	20	5	yes
Zirconium	µg/L	<0.1	<0.1	20	0.5	yes

Date Acquired: October 03, 2011

Trace Metals Total

Blanks	Units	Measured	Lower Limit	Upper Limit	Passed QC
Aluminum	µg/L	1.907	-7	7	yes
Antimony	µg/L	0.007	-0.4	0.2	yes
Arsenic	µg/L	0.023	0.0	0.0	yes
Barium	µg/L	0.004	-0.1	0.2	yes
Beryllium	µg/L	-0.07	-0.10	0.10	yes
Bismuth	µg/L	0.15	-3.0	3.0	yes

Quality Control

Bill To: YTG Energy, Mines and
Report To: YTG Energy, Mines and
Box 2703, K-419
Whitehorse, YT, Canada
Y1A 2C6
Attn: Frank Patch
Sampled By:
Company: LES

Project:
ID:
Name: Clinton Creek
Location: Clinton Creek
LSD: Clinton Creek
P.O.: P00017296
Acct code:

Lot ID: **829362**
Control Number:
Date Received: Sep 30, 2011
Date Reported: Oct 13, 2011
Report Number: 1475615

Trace Metals Total - Continued

Blanks	Units	Measured	Lower Limit	Upper Limit	Passed QC
Boron	µg/L	0.506	-6	5	yes
Cadmium	µg/L	-0.001	0.00	0.00	yes
Chromium	µg/L	-0.065	0.0	0.0	yes
Cobalt	µg/L	0.002	-0.06600	0.06600	yes
Copper	µg/L	-0.139	-0.830	0.790	yes
Lead	µg/L	-0.002	0.000	0.000	yes
Lithium	µg/L	-0.001	-0	0	yes
Molybdenum	µg/L	-0.008	-0.31	0.29	yes
Nickel	µg/L	0.008	-1	1	yes
Selenium	µg/L	-0.141	-1.7	1.3	yes
Silver	µg/L	0.001	-0.07	0.05	yes
Strontium	µg/L	0.013	-0.3	0.3	yes
Tellurium	µg/L		-0.7	0.7	yes
Thallium	µg/L	0.001	-0.03	0.03	yes
Thorium	µg/L		-1.50	1.50	yes
Tin	µg/L	-0.009	-3.0	3.0	yes
Titanium	µg/L	-0.017	-0.4	0.4	yes
Uranium	µg/L	0.003	-0.0	0.0	yes
Vanadium	µg/L	-0.044	-0.30	0.30	yes
Zinc	µg/L	0.071	-2	4	yes
Zirconium	µg/L	-0.001	-0.1	0.1	yes
Date Acquired: October 03, 2011					
Aluminum	µg/L	2.221	-4	8	yes
Antimony	µg/L	-0.073	-0.6	0.4	yes
Arsenic	µg/L	0.027	-0.6	0.6	yes
Barium	µg/L	0.104	-0.1	0.1	yes
Beryllium	µg/L	-0.038	-0.09	0.09	yes
Bismuth	µg/L	-0.365	0.0	0.0	yes
Boron	µg/L	9.139	-12	11	yes
Cadmium	µg/L	-0.006	-0.08	0.08	yes
Chromium	µg/L	0.144	-0.1	0.2	yes
Cobalt	µg/L	-0.002	-0.07500	0.08700	yes
Copper	µg/L	-0.156	-1.930	1.430	yes
Lead	µg/L	0.006	-0.150	0.210	yes
Lithium	µg/L	0.046	-0	0	yes
Molybdenum	µg/L	-0.089	-1.67	1.81	yes
Nickel	µg/L	0.002	-1	1	yes
Selenium	µg/L	-0.155	-2.5	1.5	yes
Silver	µg/L	-0.002	-0.13	0.07	yes
Strontium	µg/L	0.118	-0.2	0.2	yes
Tellurium	µg/L		-0.2	0.2	yes
Thallium	µg/L	-0.002	-0.32	0.34	yes

Quality Control

Bill To: YTG Energy, Mines and	Project:	Lot ID: 829362
Report To: YTG Energy, Mines and	ID:	Control Number:
Box 2703, K-419	Name: Clinton Creek	Date Received: Sep 30, 2011
Whitehorse, YT, Canada	Location: Clinton Creek	Date Reported: Oct 13, 2011
Y1A 2C6	LSD: Clinton Creek	Report Number: 1475615
Attn: Frank Patch	P.O.: P00017296	
Sampled By:	Acct code:	
Company: LES		

Trace Metals Total - Continued

Blanks	Units	Measured	Lower Limit	Upper Limit	Passed QC
Thorium	µg/L		-1.75	0.95	yes
Tin	µg/L	-0.04	-0.5	0.4	yes
Titanium	µg/L	0.004	-0.2	0.3	yes
Uranium	µg/L	-0.013	-0.5	0.5	yes
Vanadium	µg/L	0.0374	-0.30	0.30	yes
Zinc	µg/L	0.052	-4	6	yes
Zirconium	µg/L	-0.019	-0.1	0.1	yes

Date Acquired: October 03, 2011

Calibration Check	Units	% Recovery	Lower Limit	Upper Limit	Passed QC
Aluminum	µg/L	95.54	70	130	yes
Antimony	µg/L	94.14	85	115	yes
Arsenic	µg/L	107.47	90	110	yes
Barium	µg/L	102.68	90	110	yes
Beryllium	µg/L	94.76	90	110	yes
Bismuth	µg/L	88.17	90	110	yes
Boron	µg/L	93.60	70	130	yes
Cadmium	µg/L	97.79	90	110	yes
Chromium	µg/L	97.55	90	110	yes
Cobalt	µg/L	99.48	90	110	yes
Copper	µg/L	96.99	90	110	yes
Lead	µg/L	97.66	90	110	yes
Lithium	µg/L	94.52	90	110	yes
Molybdenum	µg/L	98.98	90	110	yes
Nickel	µg/L	97.25	90	110	yes
Selenium	µg/L	99.00	90	110	yes
Silver	µg/L	2.08	0	0	yes
Strontium	µg/L	104.60	90	110	yes
Thallium	µg/L	97.94	90	110	yes
Tin	µg/L	103.57	85	115	yes
Titanium	µg/L	100.52	90	110	yes
Uranium	µg/L	95.27	85	115	yes
Vanadium	µg/L	110.13	90	110	yes
Zinc	µg/L	103.38	90	110	yes
Zirconium	µg/L	87.63	90	110	yes

Date Acquired: October 03, 2011

Replicates	Units	Replicate 1	Replicate 2	% RSD Criteria	Absolute Criteria	Passed QC
Aluminum	µg/L	1100	1120	15	100	yes
Antimony	µg/L	1.8	2.2	15	2.0	yes
Arsenic	µg/L	1.9	1.8	15	2.0	yes
Barium	µg/L	1200	1210	15	10.0	yes
Beryllium	µg/L	<0.04	<0.04	15	0.40	yes

Quality Control

Bill To: YTG Energy, Mines and	Project:	Lot ID: 829362
Report To: YTG Energy, Mines and	ID:	Control Number:
Box 2703, K-419	Name: Clinton Creek	Date Received: Sep 30, 2011
Whitehorse, YT, Canada	Location: Clinton Creek	Date Reported: Oct 13, 2011
Y1A 2C6	LSD: Clinton Creek	Report Number: 1475615
Attn: Frank Patch	P.O.: P00017296	
Sampled By:	Acct code:	
Company: LES		

Trace Metals Total - Continued

Replicates	Units	Replicate 1	Replicate 2	% RSD Criteria	Absolute Criteria	Passed QC
Boron	µg/L	17	18	15	40	yes
Cadmium	µg/L	0.05	0.04	15	0.10	yes
Chromium	µg/L	41.3	41.0	15	6.0	yes
Cobalt	µg/L	1.24	1.25	15	0.20000	yes
Copper	µg/L	10	11	15	5.000	yes
Lead	µg/L	1.2	1.2	15	1.000	yes
Lithium	µg/L	16	17	15	10	yes
Molybdenum	µg/L	16.7	17.0	15	0.20	yes
Nickel	µg/L	<1	<1	15	10	yes
Selenium	µg/L	<0.6	<0.6	15	5.0	yes
Silver	µg/L	0.05	0.04	15	0.10	yes
Strontium	µg/L	2670	2700	15	10.0	yes
Tellurium	µg/L	<0.1	<0.1	20	0.5	yes
Thallium	µg/L	0.02	0.03	15	0.10	yes
Thorium	µg/L	<0.4	<0.4	15	1.00	yes
Tin	µg/L	0.5	0.5	15	1.0	yes
Titanium	µg/L	34.8	34.1	15	1.0	yes
Uranium	µg/L	<0.4	<0.4	15	1.0	yes
Vanadium	µg/L	6.0	6.4	15	0.40	yes
Zinc	µg/L	21	24	15	10	yes
Zirconium	µg/L	1.8	1.8	15	1.0	yes

Date Acquired: October 03, 2011

Methodology and Notes

Bill To: YTG Energy, Mines and	Project:	Lot ID: 829362
Report To: YTG Energy, Mines and	ID:	Control Number:
Box 2703, K-419	Name: Clinton Creek	Date Received: Sep 30, 2011
Whitehorse, YT, Canada	Location: Clinton Creek	Date Reported: Oct 13, 2011
Y1A 2C6	LSD: Clinton Creek	Report Number: 1475615
Attn: Frank Patch	P.O.: P00017296	
Sampled By:	Acct code:	
Company: LES		

Method of Analysis

Method Name	Reference	Method	Date Analysis Started	Location
Alk, pH, EC, Turb in water	APHA	* Alkalinity - Titration Method, 2320 B	30-Sep-11	Exova Surrey
Alk, pH, EC, Turb in water	APHA	* Conductivity, 2510 B	30-Sep-11	Exova Surrey
Alk, pH, EC, Turb in water	APHA	* pH - Electrometric Method, 4500-H+ B	30-Sep-11	Exova Surrey
Ammonia-N in Water	APHA	* Titrametric, 4500-NH3 C	03-Oct-11	Exova Surrey
Anions by IEC in water (Surrey)	APHA	* Ion Chromatography with Chemical Suppression of Eluent Cond., 4110 B	03-Oct-11	Exova Surrey
Carbon Organic (Total) in water (TOC)	APHA	High-Temperature Combustion Method, 5310 B	03-Oct-11	Exova Edmonton
Metals SemiTrace (Dissolved) in water	US EPA	* Metals & Trace Elements by ICP-AES, 6010C	03-Oct-11	Exova Surrey
Metals SemiTrace (Dissolved) in water	US EPA	* Metals & Trace Elements by ICP-AES, 6010C	11-Oct-11	Exova Surrey
Metals SemiTrace (Total) in Water	US EPA	* Metals & Trace Elements by ICP-AES, 6010C	03-Oct-11	Exova Surrey
Metals SemiTrace (Total) in Water	US EPA	* Metals & Trace Elements by ICP-AES, 6010C	11-Oct-11	Exova Surrey
Nitrogen - nitrite+nitrate-N	APHA	* Automated Cadmium Reduction Method, 4500-NO3- F	03-Oct-11	Exova Surrey
Phosphorus - total reactive P (orthophosphate)	APHA	Ascorbic Acid Reduction Method, 4500 -P E	03-Oct-11	Exova Surrey
Solids Suspended (Total, Fixed and Volatile)	APHA	* Total Suspended Solids Dried at 103-105°C, 2540 D	03-Oct-11	Exova Surrey
Trace Metals (dissolved) in Water	US EPA	* Determination of Trace Elements in Waters and Wastes by ICP-MS, 200.8	03-Oct-11	Exova Surrey
Trace Metals (dissolved) in Water	US EPA	* Determination of Trace Elements in Waters and Wastes by ICP-MS, 200.8	11-Oct-11	Exova Surrey
Trace Metals (dissolved) in Water	US EPA	* Metals & Trace Elements by ICP-AES, 6010C	03-Oct-11	Exova Surrey
Trace Metals (dissolved) in Water	US EPA	* Metals & Trace Elements by ICP-AES, 6010C	11-Oct-11	Exova Surrey
Trace Metals (Total) in Water	US EPA	* Determination of Trace Elements in Waters and Wastes by ICP-MS, 200.8	03-Oct-11	Exova Surrey
Trace Metals (Total) in Water	US EPA	* Determination of Trace Elements in Waters and Wastes by ICP-MS, 200.8	11-Oct-11	Exova Surrey
Trace Metals (Total) in Water	US EPA	* Metals & Trace Elements by ICP-AES, 6010C	03-Oct-11	Exova Surrey
Trace Metals (Total) in Water	US EPA	* Metals & Trace Elements by ICP-AES, 6010C	11-Oct-11	Exova Surrey

* Reference Method Modified

References

APHA	Standard Methods for the Examination of Water and Wastewater
US EPA	US Environmental Protection Agency Test Methods

Methodology and Notes

Bill To:	YTG Energy, Mines and	Project:		Lot ID:	829362
Report To:	YTG Energy, Mines and	ID:		Control Number:	
	Box 2703, K-419	Name:	Clinton Creek	Date Received:	Sep 30, 2011
	Whitehorse, YT, Canada	Location:	Clinton Creek	Date Reported:	Oct 13, 2011
	Y1A 2C6	LSD:	Clinton Creek	Report Number:	1475615
Attn:	Frank Patch	P.O.:	P00017296		
Sampled By:		Acct code:			
Company:	LES				

References

APHA	Standard Methods for the Examination of Water and Wastewater
US EPA	US Environmental Protection Agency Test Methods

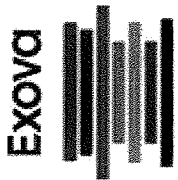
Comments:

- Analysis was performed on lot 829362 that exceeded the recommended holding time for Phosphorus - Ortho analysis.
- Analysis was performed on lot 829362 that exceeded the recommended holding time for Water Nitrate analysis.
- Some total metal results were less than dissolved metal results for lot 829362. The results were verified and are within expected measurement uncertainty.
- pH analysis was performed past the recommended holding time of 15 minutes from sample collection.
- Tellurium and Thorium could not be reported due to instrument failure.
- Tellurium and Thorium could not be reported due to instrument failure.

Please direct any inquiries regarding this report to our Client Services group.

Results relate only to samples as submitted.

The test report shall not be reproduced except in full, without the written approval of the laboratory.

LOT: Control Number

Environmental Sample Information Sheet

Note: Proper completion of this form is required in order to proceed with analysis

Lot# 829362

Billing Address:		Copy of Report To:		Copy of invoice:	
Company: Abandoned Mines and Assessment		Company: Laberge Environmental Services		Mail invoice to this	
Address: P.O. Box 2703		Address: P.O. Box 21072		address for approval ☐	
Whitehorse, Yukon		Whitehorse Yukon			
Y1A 2C6		Y1A 6P7			
Attention: Frank Patch		Attention: Bonnie Burns		Report Result:	
Phone: 867-393-7445		Phone: 867-668-6838		Fax ☐	
Fax:		Fax:		Mail ☒	
Cell:		Cell:		Courier ☐	
e-mail: frank.patch@gov.yk.ca		e-mail: bonnieburns@northwestel.net		e-mail ☒	
				e-Service ☐	

Information to be included on Report and Invoice

Project ID: Clinton Creek
Project Name: Clinton Creek
Project Location: Clinton Creek
Legal Location:
PO#:
Proj. Acct. Code:
Agreement ID:

RUSH Please contact the laboratory to confirm rush dates and times before submitting samples.

Upon filling out this section, client accepts that surcharges will be attached to this analysis

RUSH All Analysis As indicated
required on: ☐ or ☐
Date Required: _____
Signature: _____
Exova Authorization: _____

Sample Custody (Please Print)

Sampled by:

Company

Signature

I authorize Exova to proceed with the work
work indicated on this form:

Date:

Initial:

Received by:

Sample

Temp.

Waybill #:

Date

Company

Time

Special Instructions / Comments**FOR LAB USE ONLY**

Condition of containers/coolers
upon arrival at lab

Lowest detection limits to
meet CCME aquatic guidelines

Please indicate which regulations you are required to meet: _____

	Sample Identification	Location	Depth			Date/Time Sampled	Matrix	Sampling Method	↓	Enter tests above (✓ relevant samples below)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
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NOTE: All hazardous samples must be labelled according to WHIMIS guidelines.

Page 1 of 2

LOT: Control Number **Environmental Sample Information Sheet**

Note: Proper completion of this form is required in order to proceed with analysis

Billing Address: Company: Abandoned Mines and Assessment Address: P.O. Box 2703 Whitehorse, Yukon Y1A 2C6 Attention: Frank Patch Phone: 867-393-7445 Fax: Cell: e-mail: frank.patch@gov.yk.ca				Copy of Report To: Company: Laberge Environmental Services Address: P.O. Box 21072 Whitehorse Yukon Y1A 6P7 Attention: Bonnie Burns Phone: 867-668-6838 Fax: Cell: e-mail: bonnieburns@northwestel.net				Copy of invoice: Mail invoice to this address for approval ☐ Report Result: Fax ☐ Mail ☒ Courier ☐ e-mail ☒ e-Service ☐																																																																																																																																																																																																																																																																																																																																																																																																			
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Special Instructions / Comments Please indicate which regulations you are required to meet: _____				FOR LAB USE ONLY Condition of containers/coolers upon arrival at lab				Check here if Exova is required to report results directly to a regulatory body (Please include contact information) ☐ Check here if you are testing <u>POTABLE</u> WATER for HUMAN CONSUMPTION ☐																																																																																																																																																																																																																																																																																																																																																																																																			
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<table border="1" style="width:100%"><thead><tr><th rowspan="2"></th><th rowspan="2">Sample Identification</th><th rowspan="2">Location</th><th colspan="3">Depth</th><th rowspan="2">Date/Time Sampled</th><th rowspan="2">Matrix</th><th rowspan="2">Sampling Method</th><th rowspan="2">↓</th><th colspan="11">Enter tests above (✓ relevant samples below)</th></tr><tr><th>IN</th><th>CM</th><th>M</th><th>1</th><th>2</th><th>3</th><th>4</th><th>5</th><th>6</th><th>7</th><th>8</th><th>9</th><th>10</th><th>11</th><th>12</th><th>13</th><th>14</th><th>15</th></tr></thead><tbody><tr><td>16</td><td>GW-CC3</td><td></td><td></td><td></td><td></td><td>Sept 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APPENDIX D
SEDIMENT ANALYTICAL REPORTS, 2011

Analytical Report

Bill To: YTG Energy, Mines and	Project:	Lot ID: 817798
Report To: YTG Energy, Mines and	ID:	Control Number: A170499
Box 2703, K-419	Name: Clinton Creek	Date Received: Aug 2, 2011
Whitehorse, YT, Canada	Location: Former Clinton Cr. Minesite	Date Reported: Aug 8, 2011
Y1A 2C6	LSD:	Report Number: 1457257
Attn: Frank Patch	P.O.: P00017296	
Sampled By: Bonnie Burns/ Stu Withers	Acct code:	
Company:		

		Reference Number	817798-14	817798-15	817798-16	
		Sample Date	Jul 28, 2011	Jul 28, 2011	Jul 28, 2011	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	E-1	E-2	E-3	
		Matrix	Soil	Soil	Soil	
Analyte		Units	Results	Results	Results	Nominal Detection Limit
Metals Strong Acid Digestion						
Aluminum	Strong Acid Extractable	ug/g	8390	8080	11100	1
Antimony	Strong Acid Extractable	ug/g	8.6	6.9	2.0	0.5
Arsenic	Strong Acid Extractable	ug/g	23.7	22.9	4.2	0.2
Barium	Strong Acid Extractable	ug/g	663	682	305	0.03
Beryllium	Strong Acid Extractable	ug/g	0.52	0.44	0.35	0.01
Bismuth	Strong Acid Extractable	ug/g	1.6	1.2	<0.5	0.5
Cadmium	Strong Acid Extractable	ug/g	1.2	1.1	0.55	0.05
Calcium	Strong Acid Extractable	ug/g	20300	22300	5710	2
Chromium	Strong Acid Extractable	ug/g	458	337	72.5	0.04
Cobalt	Strong Acid Extractable	ug/g	47.6	41.3	11.8	0.05
Copper	Strong Acid Extractable	ug/g	154	92.0	49.2	0.05
Iron	Strong Acid Extractable	ug/g	56100	56600	25700	1
Lead	Strong Acid Extractable	ug/g	16.1	15.2	12.0	0.3
Lithium	Strong Acid Extractable	ug/g	11.1	10.5	9.8	0.1
Magnesium	Strong Acid Extractable	ug/g	32800	28800	8660	1
Manganese	Strong Acid Extractable	ug/g	1330	1060	376	0.3
Mercury	Strong Acid Extractable	ug/g	0.215	0.190	0.085	0.003
Molybdenum	Strong Acid Extractable	ug/g	5.02	4.3	3.1	0.05
Nickel	Strong Acid Extractable	ug/g	844	675	109	0.1
Phosphorus	Strong Acid Extractable	ug/g	1070	1300	748	0.5
Potassium	Strong Acid Extractable	ug/g	787	736	902	5
Selenium	Strong Acid Extractable	ug/g	1.3	1.9	<0.3	0.3
Silicon	Strong Acid Extractable	ug/g	671	728	588	1
Silver	Strong Acid Extractable	ug/g	<0.2	<0.2	<0.2	0.2
Sodium	Strong Acid Extractable	ug/g	161	176	173	1
Strontium	Strong Acid Extractable	ug/g	112	126	46.7	0.02
Thallium	Strong Acid Extractable	ug/g	<0.3	<0.3	<0.3	0.3
Tin	Strong Acid Extractable	ug/g	5.7	2.6	1.5	0.2
Titanium	Strong Acid Extractable	ug/g	274	393	396	0.05
Vanadium	Strong Acid Extractable	ug/g	40.3	44.8	35.8	0.1
Zinc	Strong Acid Extractable	ug/g	118	106	89.4	0.1
Zirconium	Strong Acid Extractable	ug/g	5.86	6.64	3.2	0.05
Soil Acidity						
pH	1:2 sample to water	pH	8.5	8.2	8.1	0.5

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Attn: Frank Patch	P.O.: P00017296	
Sampled By: Bonnie Burns/ Stu Withers	Acct code:	
Company:		

		Reference Number	817798-17	817798-18	817798-19	
		Sample Date	Jul 28, 2011	Jul 28, 2011	Jul 28, 2011	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	E-4	E-7	E-8	
		Matrix	Soil	Soil	Soil	
Analyte		Units	Results	Results	Results	Nominal Detection Limit
Metals Strong Acid Digestion						
Aluminum	Strong Acid Extractable	ug/g	10200	10600	11500	1
Antimony	Strong Acid Extractable	ug/g	1.7	1.6	1.2	0.5
Arsenic	Strong Acid Extractable	ug/g	3.6	7.4	2.1	0.2
Barium	Strong Acid Extractable	ug/g	258	262	237	0.03
Beryllium	Strong Acid Extractable	ug/g	0.35	0.33	0.32	0.01
Bismuth	Strong Acid Extractable	ug/g	<0.5	<0.5	<0.5	0.5
Cadmium	Strong Acid Extractable	ug/g	0.64	0.3	0.1	0.05
Calcium	Strong Acid Extractable	ug/g	8880	7770	7670	2
Chromium	Strong Acid Extractable	ug/g	34.8	32.9	23.0	0.04
Cobalt	Strong Acid Extractable	ug/g	9.67	8.49	7.27	0.05
Copper	Strong Acid Extractable	ug/g	50.7	76.0	68.9	0.05
Iron	Strong Acid Extractable	ug/g	23300	24000	23500	1
Lead	Strong Acid Extractable	ug/g	8.3	9.8	7.1	0.3
Lithium	Strong Acid Extractable	ug/g	10.2	9.9	9.5	0.1
Magnesium	Strong Acid Extractable	ug/g	6320	5630	4910	1
Manganese	Strong Acid Extractable	ug/g	471	321	323	0.3
Mercury	Strong Acid Extractable	ug/g	0.078	0.040	0.030	0.003
Molybdenum	Strong Acid Extractable	ug/g	1.5	1.3	0.2	0.05
Nickel	Strong Acid Extractable	ug/g	60.6	33.4	16.9	0.1
Phosphorus	Strong Acid Extractable	ug/g	807	833	1230	0.5
Potassium	Strong Acid Extractable	ug/g	774	794	892	5
Selenium	Strong Acid Extractable	ug/g	<0.3	<0.3	<0.3	0.3
Silicon	Strong Acid Extractable	ug/g	502	492	430	1
Silver	Strong Acid Extractable	ug/g	<0.2	<0.2	<0.2	0.2
Sodium	Strong Acid Extractable	ug/g	223	232	288	1
Strontium	Strong Acid Extractable	ug/g	59.9	49.2	41.4	0.02
Thallium	Strong Acid Extractable	ug/g	<0.3	<0.3	<0.3	0.3
Tin	Strong Acid Extractable	ug/g	1.2	0.7	1.8	0.2
Titanium	Strong Acid Extractable	ug/g	496	658	784	0.05
Vanadium	Strong Acid Extractable	ug/g	37.2	41.3	47.8	0.1
Zinc	Strong Acid Extractable	ug/g	81.5	71.4	52.7	0.1
Zirconium	Strong Acid Extractable	ug/g	3.1	3.3	2.1	0.05
Soil Acidity						
pH	1:2 sample to water	pH	7.9	8.0	8.0	0.5

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Attn: Frank Patch	P.O.: P00017296	
Sampled By: Bonnie Burns/ Stu Withers	Acct code:	
Company:		

		Reference Number	817798-20	817798-21	817798-22	
		Sample Date	Jul 28, 2011	Jul 28, 2011	Jul 28, 2011	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	PL	R-1	R-2	
		Matrix	Soil	Soil	Soil	
Analyte		Units	Results	Results	Results	Nominal Detection Limit
Metals Strong Acid Digestion						
Aluminum	Strong Acid Extractable	ug/g	5420	10600	12400	1
Antimony	Strong Acid Extractable	ug/g	13.7	1.6	3.2	0.5
Arsenic	Strong Acid Extractable	ug/g	38.2	4.5	5.2	0.2
Barium	Strong Acid Extractable	ug/g	1200	205	272	0.03
Beryllium	Strong Acid Extractable	ug/g	0.26	0.33	0.37	0.01
Bismuth	Strong Acid Extractable	ug/g	2.1	<0.5	<0.5	0.5
Cadmium	Strong Acid Extractable	ug/g	0.69	0.54	0.50	0.05
Calcium	Strong Acid Extractable	ug/g	30100	7400	6830	2
Chromium	Strong Acid Extractable	ug/g	590	28.7	39.3	0.04
Cobalt	Strong Acid Extractable	ug/g	62.6	8.74	10.1	0.05
Copper	Strong Acid Extractable	ug/g	648	133	82.1	0.05
Iron	Strong Acid Extractable	ug/g	58000	24500	24600	1
Lead	Strong Acid Extractable	ug/g	11.2	11.2	9.4	0.3
Lithium	Strong Acid Extractable	ug/g	8.4	10.1	12.6	0.1
Magnesium	Strong Acid Extractable	ug/g	112000	5550	5840	1
Manganese	Strong Acid Extractable	ug/g	718	345	451	0.3
Mercury	Strong Acid Extractable	ug/g	0.187	0.126	0.069	0.003
Molybdenum	Strong Acid Extractable	ug/g	1.7	2.8	1.5	0.05
Nickel	Strong Acid Extractable	ug/g	1400	29.0	50.8	0.1
Phosphorus	Strong Acid Extractable	ug/g	485	872	737	0.5
Potassium	Strong Acid Extractable	ug/g	536	832	774	5
Selenium	Strong Acid Extractable	ug/g	<0.3	<0.3	<0.3	0.3
Silicon	Strong Acid Extractable	ug/g	483	456	466	1
Silver	Strong Acid Extractable	ug/g	<0.2	<0.2	<0.2	0.2
Sodium	Strong Acid Extractable	ug/g	196	233	206	1
Strontium	Strong Acid Extractable	ug/g	219	49.6	50.2	0.02
Thallium	Strong Acid Extractable	ug/g	<0.3	<0.3	<0.3	0.3
Tin	Strong Acid Extractable	ug/g	3.4	1.2	1.4	0.2
Titanium	Strong Acid Extractable	ug/g	97.0	524	551	0.05
Vanadium	Strong Acid Extractable	ug/g	26.1	38.3	41.4	0.1
Zinc	Strong Acid Extractable	ug/g	67.7	87.0	75.2	0.1
Zirconium	Strong Acid Extractable	ug/g	4.6	3.3	2.4	0.05
Soil Acidity						
pH	1:2 sample to water	pH	8.5	7.8	7.8	0.5

Analytical Report

Bill To: YTG Energy, Mines and	Project:	Lot ID: 817798
Report To: YTG Energy, Mines and	ID:	Control Number: A170499
Box 2703, K-419	Name: Clinton Creek	Date Received: Aug 2, 2011
Whitehorse, YT, Canada	Location: Former Clinton Cr. Minesite	Date Reported: Aug 8, 2011
Y1A 2C6	LSD:	Report Number: 1457257
Attn: Frank Patch	P.O.: P00017296	
Sampled By: Bonnie Burns/ Stu Withers	Acct code:	
Company:		

		Reference Number	817798-23	817798-24	817798-25	
		Sample Date	Jul 28, 2011	Jul 28, 2011	Jul 28, 2011	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	R-3	R-4	R-6	
		Matrix	Soil	Soil	Soil	
Analyte		Units	Results	Results	Results	Nominal Detection Limit
Metals Strong Acid Digestion						
Aluminum	Strong Acid Extractable	ug/g	12100	10300	13100	1
Antimony	Strong Acid Extractable	ug/g	1.7	2.0	1.2	0.5
Arsenic	Strong Acid Extractable	ug/g	3.4	8.2	1.5	0.2
Barium	Strong Acid Extractable	ug/g	345	270	155	0.03
Beryllium	Strong Acid Extractable	ug/g	0.41	0.32	0.34	0.01
Bismuth	Strong Acid Extractable	ug/g	<0.5	<0.5	<0.5	0.5
Cadmium	Strong Acid Extractable	ug/g	0.3	0.61	0.1	0.05
Calcium	Strong Acid Extractable	ug/g	8300	7580	6150	2
Chromium	Strong Acid Extractable	ug/g	24.7	33.5	20.8	0.04
Cobalt	Strong Acid Extractable	ug/g	8.75	8.77	7.14	0.05
Copper	Strong Acid Extractable	ug/g	35.9	45.8	26.4	0.05
Iron	Strong Acid Extractable	ug/g	23800	24100	21600	1
Lead	Strong Acid Extractable	ug/g	8.6	10.2	6.7	0.3
Lithium	Strong Acid Extractable	ug/g	12.2	10.9	10.8	0.1
Magnesium	Strong Acid Extractable	ug/g	5400	5120	5170	1
Manganese	Strong Acid Extractable	ug/g	355	426	309	0.3
Mercury	Strong Acid Extractable	ug/g	0.053	0.107	0.024	0.003
Molybdenum	Strong Acid Extractable	ug/g	0.82	1.1	0.2	0.05
Nickel	Strong Acid Extractable	ug/g	29.1	42.3	16.0	0.1
Phosphorus	Strong Acid Extractable	ug/g	769	1010	697	0.5
Potassium	Strong Acid Extractable	ug/g	977	637	912	5
Selenium	Strong Acid Extractable	ug/g	<0.3	<0.3	<0.3	0.3
Silicon	Strong Acid Extractable	ug/g	436	489	543	1
Silver	Strong Acid Extractable	ug/g	<0.2	<0.2	<0.2	0.2
Sodium	Strong Acid Extractable	ug/g	256	185	312	1
Strontium	Strong Acid Extractable	ug/g	49.6	50.2	39.0	0.02
Thallium	Strong Acid Extractable	ug/g	<0.3	<0.3	<0.3	0.3
Tin	Strong Acid Extractable	ug/g	0.6	1.0	0.5	0.2
Titanium	Strong Acid Extractable	ug/g	593	448	720	0.05
Vanadium	Strong Acid Extractable	ug/g	43.6	37.0	41.0	0.1
Zinc	Strong Acid Extractable	ug/g	82.8	80.4	54.0	0.1
Zirconium	Strong Acid Extractable	ug/g	3.3	2.9	1.7	0.05
Soil Acidity						
pH	1:2 sample to water	pH	7.5	7.9	7.6	0.5



Analytical Report

Bill To: YTG Energy, Mines and
Report To: YTG Energy, Mines and
Box 2703, K-419
Whitehorse, YT, Canada
Y1A 2C6
Attn: Frank Patch
Sampled By: Bonnie Burns/ Stu Withers
Company:

Project:
ID:
Name: Clinton Creek
Location: Former Clinton Cr. Minesite
LSD:
P.O.: P00017296
Acct code:

Lot ID: **817798**
Control Number: A170499
Date Received: Aug 2, 2011
Date Reported: Aug 8, 2011
Report Number: 1457257

Approved by:

Mathieu Simoneau
Laboratory Operations Manager

Quality Control

Bill To: YTG Energy, Mines and
Report To: YTG Energy, Mines and
Box 2703, K-419
Whitehorse, YT, Canada
Y1A 2C6
Attn: Frank Patch
Sampled By: Bonnie Burns/ Stu Withers
Company:

Project:
ID:
Name: Clinton Creek
Location: Former Clinton Cr. Minesite
LSD:
P.O.: P00017296
Acct code:

Lot ID: **817798**
Control Number: A170499
Date Received: Aug 2, 2011
Date Reported: Aug 8, 2011
Report Number: 1457257

Inorganic Nonmetallic Parameters

Blanks	Units	Measured	Lower Limit	Upper Limit	Passed QC
Orthophosphate-P	mg/L	0	-0.002	0.002	yes
Ammonium - N	ug/L	-85.61	-110.00	10.00	yes
Date Acquired:	August 04, 2011				
Organic Carbon	mg/L	-0.1176	-0.5	0.5	yes
Date Acquired:	August 04, 2011				

Calibration Check	Units	% Recovery	Lower Limit	Upper Limit	Passed QC
Orthophosphate-P	mg/L	105.46	90	110	yes
Ammonium - N	ug/L	100.93	85	115	yes
Date Acquired:	August 04, 2011				
Orthophosphate-P	mg/L	108.00	90	110	yes
Ammonium - N	ug/L	124.98	70	130	yes
Date Acquired:	August 04, 2011				
Nitrite - N	mg/L	96.67	90	110	yes
Nitrate and Nitrite - N	mg/L	103.02	90	110	yes
Date Acquired:	August 02, 2011				

Certified Reference Material	Units	Measured	Target	Lower Limit	Upper Limit	Passed QC
Ammonium - N	mg/L	0.74	0.73	0.58	0.87	yes
Nitrate - N	mg/L	1.33	1.40	1.13	1.67	yes
Nitrate and Nitrite - N	mg/L	1.33	1.40	1.13	1.67	yes
Date Acquired:	August 02, 2011					
Nitrate - N	mg/L	<0.01	0.00	-0.15	0.15	yes
Nitrite - N	mg/L	1.19	1.192	1.040	1.340	yes
Nitrate and Nitrite - N	mg/L	1.10	1.19	0.89	1.49	yes
Date Acquired:	August 02, 2011					
Orthophosphate-P	mg/L	3.95	3.779	3.234	4.326	yes
Date Acquired:	August 03, 2011					

Replicates	Units	Replicate 1	Replicate 2	% RSD Criteria	Absolute Criteria	Passed QC
Organic Carbon	mg/L	0.8	0.8	10	1.0	yes
Date Acquired:	August 04, 2011					
Orthophosphate-P	mg/L	0.007	0.003	20	0.050	yes
Ammonia - N	mg/L	0.04	0.04	20	0.50	yes
Nitrate - N	mg/L	0.11	0.11	15	0.05	yes
Nitrite - N	mg/L	<0.005	<0.005	10	0.030	yes
Nitrate and Nitrite - N	mg/L	0.11	0.11	10	0.05	yes
Date Acquired:	August 02, 2011					

Control Sample	Units	Measured	Lower Limit	Upper Limit	Passed QC
Nitrite - N	mg/L	<0.005	-0.004	0.006	yes
Nitrate and Nitrite - N	mg/L	<0.01	0.00	0.01	yes

Quality Control

Bill To: YTG Energy, Mines and	Project:	Lot ID: 817798
Report To: YTG Energy, Mines and	ID:	Control Number: A170499
Box 2703, K-419	Name: Clinton Creek	Date Received: Aug 2, 2011
Whitehorse, YT, Canada	Location: Former Clinton Cr. Minesite	Date Reported: Aug 8, 2011
Y1A 2C6	LSD:	Report Number: 1457257
Attn: Frank Patch	P.O.: P00017296	
Sampled By: Bonnie Burns/ Stu Withers	Acct code:	
Company:		

Inorganic Nonmetallic Parameters -

Continued

Control Sample	Units	Measured	Lower Limit	Upper Limit	Passed QC
Date Acquired: August 02, 2011					
Organic Carbon	mg/L	122	109.6	133.6	yes
Date Acquired: August 04, 2011					
Organic Carbon	mg/L	15.2	12.8	17.2	yes
Date Acquired: August 04, 2011					
Organic Carbon	mg/L	3.4	2.4	4.0	yes
Date Acquired: August 04, 2011					

Metals Dissolved

Certified Reference Material	Units	Measured	Target	Lower Limit	Upper Limit	Passed QC
Aluminum	mg/L	0.294	0.300	-9.690	10.290	yes
Antimony	mg/L	0.0802	0.0750	-9.9150	10.0650	yes
Arsenic	mg/L	0.0628	0.0649	-9.9251	10.0549	yes
Barium	mg/L	0.209	0.200	-9.791	10.190	yes
Beryllium	mg/L	0.0768	0.07520	-9.91480	10.06520	yes
Boron	mg/L	0.087	0.087	-9.903	10.077	yes
Cadmium	mg/L	0.06090	0.05800	-9.93200	10.04800	yes
Chromium	mg/L	0.0661	0.0675	-9.9225	10.0575	yes
Cobalt	mg/L	0.0808	0.07980	-9.91020	10.06980	yes
Copper	mg/L	0.059	0.057	-9.933	10.047	yes
Lead	mg/L	0.175	0.1527	-9.8373	10.1427	yes
Molybdenum	mg/L	0.0616	0.05999	-9.93001	10.04999	yes
Nickel	mg/L	0.226	0.220	-9.770	10.210	yes
Selenium	mg/L	0.1150	0.1099	-9.8801	10.0999	yes
Silver	mg/L	0.01710	0.01499	-9.97501	10.00499	yes
Strontium	mg/L	0.051	0.050	-9.940	10.040	yes
Thallium	mg/L	0.07180	0.06508	-9.92492	10.05508	yes
Vanadium	mg/L	0.7350	0.75000	-9.24000	10.74000	yes
Zinc	mg/L	0.140	0.130	-9.860	10.120	yes
Date Acquired: August 03, 2011						

Replicates	Units	Replicate 1	Replicate 2	% RSD Criteria	Absolute Criteria	Passed QC
Sulfur	mg/L	30.4	30.3	30	3.0	yes
Titanium	mg/L	<0.01	<0.01	30	0.012	yes
Date Acquired: August 03, 2011						

Metals Strong Acid Digestion

Blanks	Units	Measured	Lower Limit	Upper Limit	Passed QC
Aluminum	ug/g	<1	-0	1	yes
Antimony	mg/L	0.0066	-0.0	0.0	yes

Quality Control

Bill To: YTG Energy, Mines and	Project:	Lot ID: 817798
Report To: YTG Energy, Mines and	ID:	Control Number: A170499
Box 2703, K-419	Name: Clinton Creek	Date Received: Aug 2, 2011
Whitehorse, YT, Canada	Location: Former Clinton Cr. Minesite	Date Reported: Aug 8, 2011
Y1A 2C6	LSD:	Report Number: 1457257
Attn: Frank Patch	P.O.: P00017296	
Sampled By: Bonnie Burns/ Stu Withers	Acct code:	
Company:		

Metals Strong Acid Digestion - Continued

Blanks	Units	Measured	Lower Limit	Upper Limit	Passed QC
Arsenic	mg/L	-0.0007	-0.0	0.0	yes
Barium	mg/L	0.0002	-0.00	0.00	yes
Beryllium	mg/L	0	-0.00	0.00	yes
Bismuth	ug/g	<0.5	-0.4	0.4	yes
Cadmium	mg/L	0.0001	-0.00	0.00	yes
Calcium	ug/g	<2	-0	0	yes
Chromium	mg/L	0.0005	-0.00	0.00	yes
Cobalt	mg/L	-0.0002	-0.00	0.00	yes
Copper	mg/L	0.0017	-0.01	0.01	yes
Iron	ug/g	1	-0	1	yes
Lead	mg/L	-0.0048	-0.0	0.0	yes
Lithium	mg/L	0.0007	-0.1	0.2	yes
Magnesium	ug/g	<1	-0	0	yes
Manganese	mg/L	0.0007	-0.0	0.0	yes
Mercury	ug/L		-0.045	0.067	yes
Molybdenum	mg/L	0.0004	-0.00	0.00	yes
Nickel	mg/L	0.0014	-0.0	0.0	yes
Phosphorus	ug/g	1.0	-0.0	0.0	yes
Potassium	ug/g	<5	-3	3	yes
Selenium	mg/L	-0.0115	-0.0	0.0	yes
Silicon	ug/g	<1	-0	0	yes
Silver	mg/L	0.0001	-0.0	0.0	yes
Sodium	ug/g	<1	-6	6	yes
Strontium	mg/L	-0.0029	-0.01	-0.00	yes
Thallium	mg/L	-0.0026	-0.0	0.0	yes
Tin	mg/L	-0.0005	-0.0	0.0	yes
Titanium	ug/g	<0.05	-0.00	0.01	yes
Vanadium	mg/L	0.0026	-0.0	0.0	yes
Zinc	mg/L	0.0011	-0.0	0.0	yes
Zirconium	ug/g	0.06	-0.00	0.00	yes

Date Acquired: August 04, 2011

Calibration Check	Units	% Recovery	Lower Limit	Upper Limit	Passed QC
Aluminum	mg/L	146.60	80	120	yes
Antimony	mg/L	86.45	65	95	yes
Arsenic	mg/L	95.30	85	115	yes
Barium	mg/L	99.30	80	120	yes
Beryllium	mg/L	100.80	80	120	yes
Cadmium	mg/L	97.30	80	120	yes
Calcium	mg/L	97.31	-50	250	yes
Chromium	mg/L	95.80	80	120	yes
Cobalt	mg/L	98.80	80	120	yes
Copper	mg/L	100.50	80	120	yes

Quality Control

Bill To: YTG Energy, Mines and	Project:	Lot ID: 817798
Report To: YTG Energy, Mines and	ID:	Control Number: A170499
Box 2703, K-419	Name: Clinton Creek	Date Received: Aug 2, 2011
Whitehorse, YT, Canada	Location: Former Clinton Cr. Minesite	Date Reported: Aug 8, 2011
Y1A 2C6	LSD:	Report Number: 1457257
Attn: Frank Patch	P.O.: P00017296	
Sampled By: Bonnie Burns/ Stu Withers	Acct code:	
Company:		

Metals Strong Acid Digestion - Continued

Calibration Check	Units	% Recovery	Lower Limit	Upper Limit	Passed QC
Iron	mg/L	97.90	80	120	yes
Lead	mg/L	98.35	85	115	yes
Lithium	mg/L	102.10	80	120	yes
Magnesium	mg/L	96.52	-50	250	yes
Manganese	mg/L	100.60	80	120	yes
Mercury	ug/L		85	115	yes
Molybdenum	mg/L	93.80	80	120	yes
Nickel	mg/L	98.40	80	120	yes
Phosphorus	mg/L	95.64	85	115	yes
Potassium	mg/L	103.28	85	115	yes
Selenium	mg/L	93.60	80	120	yes
Silicon	mg/L	100.20	0	0	yes
Silver	mg/L	93.60	85	115	yes
Sodium	mg/L	98.81	-50	250	yes
Strontium	mg/L	99.40	80	120	yes
Tin	mg/L	96.56	85	115	yes
Titanium	mg/L	99.10	80	120	yes
Vanadium	mg/L	103.60	80	120	yes
Zinc	mg/L	98.50	80	120	yes

Date Acquired: August 04, 2011

Replicates	Units	Replicate 1	Replicate 2	% RSD Criteria	Absolute Criteria	Passed QC
Aluminum	ug/g	11500	11000	30	10	yes
Antimony	ug/g	2.0	1.9	30	3.0	yes
Arsenic	ug/g	2.4	2.4	30	1.0	yes
Barium	ug/g	64.8	60.0	30	1.00	yes
Beryllium	ug/g	0.32	0.31	30	0.50	yes
Cadmium	ug/g	0.1	0.1	30	0.50	yes
Calcium	ug/g	7670	7310	30	10	yes
Chromium	ug/g	23.0	22.1	30	1.00	yes
Cobalt	ug/g	7.27	7.20	30	0.50	yes
Copper	ug/g	68.9	65.7	30	1.00	yes
Iron	ug/g	23500	22800	30	10	yes
Lead	ug/g	7.1	6.3	30	0.5	yes
Lithium	ug/g	9.5	9.2	30	1.0	yes
Magnesium	ug/g	4910	4730	30	10	yes
Manganese	ug/g	323	313	30	1.0	yes
Mercury	ug/g	0.030	0.027	30	0.500	yes
Molybdenum	ug/g	0.4	0.4	30	0.50	yes
Nickel	ug/g	16.9	16.4	30	0.5	yes
Phosphorus	ug/g	1230	1200	30	10.0	yes
Potassium	ug/g	892	856	30	10	yes
Selenium	ug/g	<0.3	<0.3	30	0.5	yes

Quality Control

Bill To: YTG Energy, Mines and	Project:	Lot ID: 817798
Report To: YTG Energy, Mines and	ID:	Control Number: A170499
Box 2703, K-419	Name: Clinton Creek	Date Received: Aug 2, 2011
Whitehorse, YT, Canada	Location: Former Clinton Cr. Minesite	Date Reported: Aug 8, 2011
Y1A 2C6	LSD:	Report Number: 1457257
Attn: Frank Patch	P.O.: P00017296	
Sampled By: Bonnie Burns/ Stu Withers	Acct code:	
Company:		

Metals Strong Acid Digestion - Continued

Replicates	Units	Replicate 1	Replicate 2	% RSD Criteria	Absolute Criteria	Passed QC
Silver	ug/g	<0.2	<0.2	30	0.5	yes
Sodium	ug/g	288	272	30	1	yes
Strontium	ug/g	41.4	39.6	30	1.00	yes
Thallium	ug/g	<0.3	<0.3	30	1.0	yes
Tin	ug/g	1.8	1.8	30	1.0	yes
Vanadium	ug/g	51.3	48.8	30	1.0	yes
Zinc	ug/g	66.9	71.5	30	1.0	yes
Zirconium	ug/g	2.1	2.0	30	0.50	yes
Date Acquired: August 04, 2011						

Control Sample	Units	Measured	Lower Limit	Upper Limit	Passed QC
Aluminum	ug/g	13600	0	0	yes
Antimony	ug/g	1.4	0.0	0.0	yes
Arsenic	ug/g	2.6	0.0	0.0	yes
Barium	ug/g	184	0.00	0.00	yes
Beryllium	ug/g	0.63	0.00	0.00	yes
Bismuth	ug/g	<0.5	0.0	0.0	yes
Cadmium	ug/g	0.2	0.00	0.00	yes
Calcium	ug/g	13200	0	0	yes
Chromium	ug/g	18.0	0.00	0.00	yes
Cobalt	ug/g	7.31	0.00	0.00	yes
Copper	ug/g	14.7	0.00	0.00	yes
Iron	ug/g	20600	0	0	yes
Lead	ug/g	10.0	0.0	0.0	yes
Lithium	ug/g	13.6	0.0	0.0	yes
Magnesium	ug/g	4560	0	0	yes
Manganese	ug/g	456	0.0	0.0	yes
Molybdenum	ug/g	0.4	0.00	0.00	yes
Nickel	ug/g	19.8	0.0	0.0	yes
Phosphorus	ug/g	616	0.0	0.0	yes
Potassium	ug/g	1980	0	0	yes
Selenium	ug/g	<0.3	0.0	0.0	yes
Silicon	ug/g	606	0	0	yes
Silver	ug/g	<0.2	0.0	0.0	yes
Sodium	ug/g	143	0	0	yes
Strontium	ug/g	43.5	0.00	0.00	yes
Thallium	ug/g	<0.3	0.0	0.0	yes
Tin	ug/g	0.4	0.0	0.0	yes
Titanium	ug/g	108	0.00	0.00	yes
Vanadium	ug/g	33.4	0.0	0.0	yes
Zinc	ug/g	65.5	0.0	0.0	yes
Zirconium	ug/g	3.6	0.00	0.00	yes
Date Acquired: August 04, 2011					

Quality Control

Bill To: YTG Energy, Mines and	Project:	Lot ID: 817798
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Box 2703, K-419	Name: Clinton Creek	Date Received: Aug 2, 2011
Whitehorse, YT, Canada	Location: Former Clinton Cr. Minesite	Date Reported: Aug 8, 2011
Y1A 2C6	LSD:	Report Number: 1457257
Attn: Frank Patch	P.O.: P00017296	
Sampled By: Bonnie Burns/ Stu Withers	Acct code:	
Company:		

Metals Strong Acid Digestion - Continued

Metals Total

Blanks	Units	Measured	Lower Limit	Upper Limit	Passed QC
Calcium	mg/L	-0.019	-0.08	0.10	yes
Iron	mg/L	-0.0159	-0.030	0.030	yes
Magnesium	mg/L	0.016	-0.06	0.06	yes
Manganese	mg/L	-0.0017	-0.0098	0.0022	yes
Phosphorus	mg/L	-0.0009	-0.033	0.027	yes
Potassium	mg/L	-0.0206	-0.30	0.30	yes
Silicon	mg/L	0	-2.55	3.15	yes
Sodium	mg/L	-0.0033	-0.23	0.19	yes

Date Acquired: August 03, 2011

Calcium	mg/L	-0.0187	-0.13	0.17	yes
Iron	mg/L	-0.0051	-0.029	0.031	yes
Magnesium	mg/L	-0.013	-0.09	0.09	yes
Manganese	mg/L	-0.0021	-0.0098	0.0022	yes
Phosphorus	mg/L	-0.0073	-0.033	0.027	yes
Potassium	mg/L	-0.012	-3.83	4.09	yes
Silicon	mg/L	0.0054	-2.40	3.00	yes
Sodium	mg/L	0.0465	-0.23	0.19	yes

Date Acquired: August 03, 2011

Calibration Check	Units	% Recovery	Lower Limit	Upper Limit	Passed QC
Calcium	mg/L	98.91	90	110	yes
Iron	mg/L	107.30	70	130	yes
Magnesium	mg/L	98.62	90	110	yes
Manganese	mg/L	97.90	90	110	yes
Phosphorus	mg/L	98.52	90	110	yes
Potassium	mg/L	95.52	85	115	yes
Silicon	mg/L	92.10	80	120	yes
Sodium	mg/L	96.42	90	110	yes

Date Acquired: August 03, 2011

Certified Reference Material	Units	Measured	Target	Lower Limit	Upper Limit	Passed QC
Aluminum	mg/L	1.20	1.200	-8.790	11.190	yes
Antimony	mg/L	0.316	0.3000	-9.6900	10.2900	yes
Arsenic	mg/L	0.243	0.2590	-9.7310	10.2490	yes
Barium	mg/L	0.822	0.798	-9.192	10.788	yes
Beryllium	mg/L	0.299	0.30000	-9.69000	10.29000	yes
Boron	mg/L	0.35	0.349	-9.641	10.339	yes
Cadmium	mg/L	0.234	0.23200	-9.75800	10.22200	yes
Calcium	mg/L	5.98	5.98	-4.01	15.97	yes
Chromium	mg/L	0.263	0.2700	-9.7200	10.2600	yes

Note: Proper completion of this form is required in order to proceed with analysis
See reverse for your nearest Exova location and proper sampling protocol

www.exova.com

Billing Address:		Copy of Report:		Copy of Report To:		Copy of Invoice:	
Company:				Company:		Send invoice to this	
Address:		QA/QC Report ☐		Address:		address for approval ☐	
<i>Same</i>				<i>Same</i>			
Attention:		Report Result:		Attention:		Report Result:	
Phone:		e-mail ☐		Phone:		e-mail ☐	
Fax:		Results Online ☐		Fax:		Results Online ☐	
Cell:		Fax ☐		Cell:		Fax ☐	
e-mail:		Mail ☐		e-mail:		Mail ☐	

Information to be included on Report and Invoice	PRIORITY	Sample Custody (Please Print)
Project ID: _____	Please contact laboratory prior to submitting any RUSH samples. Upon filling out this section, client accepts that surcharges will be applied to this analysis. If not all samples require RUSH, please indicate in special instructions.	Sampled by: _____ Company: _____
Project Name: _____		RECEIVED AUG 02 2011 I authorize ERM to proceed with the work indicated on this form.
Project Location: _____		Date: _____ Initial: _____
Legal Location: _____		Received by: _____ Sample Temp. _____
PO#: _____		Waybill #: _____ Date _____
Proj. Acct. Code: _____		Company _____ Time _____
Agreement ID: _____	Date Required: _____ Signature: _____	

Special Instructions / Comments		Number of Containers	
Please dry all stream sediments samples then sieve through a 0.053 mm mesh screen. Analyze for low metals on the portion that passes the sieve.		low level metals	
Please indicate which regulations you are required to meet:			
☐	Health Canada Drinking Water Quality		
☐	Alberta Tier 1		
☐	Other:		

[illegible]

NOTE: All hazardous samples must be labeled according to WHMIS guidelines.

Page 2 of 2

Report Transmission Cover Page

Bill To: YTG Energy, Mines and	Project:	Lot ID: 829605
Report To: YTG Energy, Mines and	ID: Clinton Creek	Control Number:
Box 2703, K-419	Name: Clinton Creek	Date Received: Sep 30, 2011
Whitehorse, YT, Canada	Location: Clinton Creek	Date Reported: Oct 6, 2011
Y1A 2C6	LSD:	Report Number: 1476015
Attn: Frank Patch	P.O.: P00017296	
Sampled By:	Acct code:	
Company:		

Contact & Affiliation	Address	Delivery Commitments
Bonnie Burns Laberge Environmental Services	1-405 Ogilvie Street, Box 21072 Whitehorse, Yukon Territory Y1A 6P7 Phone: (867) 668-6838 Fax: (867) 667-6956 Email: bonnieburns@northwestel.net	On [Report Approval] send (COC, Test Report) by Email - Merge Reports On [Report Approval] send (Test Report) by Email - Single Report
Frank Patch YTG Energy, Mines and Resources	, Box 2703, K-419 Whitehorse, Yukon Territory Y1A 2C6 Phone: (867) 393-7445 Fax: (867) 667-3861 Email: FRANK.PATCH@gov.yk.ca	On [Lot Verification] send (COA) by Email - Single Report On [Report Approval] send (COC, Test Report) by Email - Merge Reports On [Report Approval] send (Test Report) by Email - Single Report
Stephanie Pozzo YTG Energy, Mines and Resources	2C-4114 4th Avenue, K-419 Whitehorse, Yukon Territory Y1A 4N7 Phone: (867) 393-7098 Fax: (867) 456-6780 Email: Stephanie.Pozzo@gov.yk.ca	On [Lot Approval and Final Test Report Approval] send (Invoice) by Email - Single Report
David Barrett YTG Energy, Mines and Resources	, Box 2703, K-419 Whitehorse, Yukon Territory Y1A 4N7 Phone: (867) 667-3153 Fax: (867) 456-6780 Email: David.Barrett@gov.yk.ca	On [Report Approval] send (COC, Test Report) by Email - Merge Reports

Notes To Clients:

The information contained on this and all other pages transmitted, is intended for the addressee only and is considered confidential. If the reader is not the intended recipient, you are hereby notified that any use, dissemination, distribution or copy of this transmission is strictly prohibited. If you receive this transmission by error, or if this transmission is not satisfactory, please notify us by telephone.

Sample Custody

Bill To: YTG Energy, Mines and	Project:	Lot ID: 829605
Report To: YTG Energy, Mines and	ID: Clinton Creek	Control Number:
Box 2703, K-419	Name: Clinton Creek	Date Received: Sep 30, 2011
Whitehorse, YT, Canada	Location: Clinton Creek	Date Reported: Oct 6, 2011
Y1A 2C6	LSD:	Report Number: 1476015
Attn: Frank Patch	P.O.: P00017296	
Sampled By:	Acct code:	
Company:		

Sample Disposal Date: November 05, 2011

All samples will be stored until this date unless other instructions are received. Please indicate other requirements below and return this form to the address or fax number on the top of this page.

☐ Extend Sample Storage Until _____ (MM/DD/YY)

The following charges apply to extended sample storage:

Storage for an additional 30 days	\$ 2.50 per sample
Storage for an additional 60 days	\$ 5.00 per sample
Storage for an additional 90 days	\$ 7.50 per sample

☐ Return Sample, collect, to the address below via:

☐ Greyhound

☐ DHL

☐ Purolator

☐ Other (specify) _____

Name	_____
Company	_____
Address	_____

Phone	_____
Fax	_____
Signature	_____

Analytical Report

Bill To: YTG Energy, Mines and	Project:	Lot ID: 829605
Report To: YTG Energy, Mines and	ID: Clinton Creek	Control Number:
Box 2703, K-419	Name: Clinton Creek	Date Received: Sep 30, 2011
Whitehorse, YT, Canada	Location: Clinton Creek	Date Reported: Oct 6, 2011
Y1A 2C6	LSD:	Report Number: 1476015
Attn: Frank Patch	P.O.: P00017296	
Sampled By:	Acct code:	
Company:		

		Reference Number	829605-1	829605-2	829605-3	
		Sample Date	Sep 28, 2011	Sep 28, 2011	Sep 28, 2011	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	T-1	T-2	T-3	
		Matrix	Soil	Soil	Soil	
Analyte		Units	Results	Results	Results	Nominal Detection Limit
Metals Strong Acid Digestion						
Aluminum	Strong Acid Extractable	ug/g	4310	2850	3320	1
Antimony	Strong Acid Extractable	ug/g	1.0	0.9	0.8	0.5
Arsenic	Strong Acid Extractable	ug/g	8.7	6.8	21.0	0.2
Barium	Strong Acid Extractable	ug/g	137	622	43.5	0.03
Beryllium	Strong Acid Extractable	ug/g	0.06	0.09	<0.01	0.01
Bismuth	Strong Acid Extractable	ug/g	5.8	7.1	6.4	0.5
Cadmium	Strong Acid Extractable	ug/g	<0.05	<0.05	<0.05	0.05
Calcium	Strong Acid Extractable	ug/g	3000	9460	1420	2
Chromium	Strong Acid Extractable	ug/g	1470	1810	1670	0.04
Cobalt	Strong Acid Extractable	ug/g	88.1	97.8	95.6	0.05
Copper	Strong Acid Extractable	ug/g	89.3	68.6	65.1	0.05
Iron	Strong Acid Extractable	ug/g	71700	81600	75800	1
Lead	Strong Acid Extractable	ug/g	5.0	4.3	4.8	0.3
Lithium	Strong Acid Extractable	ug/g	3.4	4.1	1.3	0.1
Magnesium	Strong Acid Extractable	ug/g	185000	191000	208000	1
Manganese	Strong Acid Extractable	ug/g	563	671	576	0.3
Mercury	Strong Acid Extractable	ug/g	0.019	0.054	0.012	0.003
Molybdenum	Strong Acid Extractable	ug/g	<0.05	<0.05	<0.05	0.05
Nickel	Strong Acid Extractable	ug/g	2110	3230	3050	0.1
Phosphorus	Strong Acid Extractable	ug/g	103	35.1	41.0	0.5
Potassium	Strong Acid Extractable	ug/g	190	100	92	5
Selenium	Strong Acid Extractable	ug/g	<0.3	<0.3	<0.3	0.3
Silicon	Strong Acid Extractable	ug/g	1280	990	1380	1
Silver	Strong Acid Extractable	ug/g	<0.2	<0.2	<0.2	0.2
Sodium	Strong Acid Extractable	ug/g	90	39	38	1
Strontium	Strong Acid Extractable	ug/g	20.8	64.6	9.51	0.02
Thallium	Strong Acid Extractable	ug/g	<0.3	<0.3	<0.3	0.3
Tin	Strong Acid Extractable	ug/g	3.0	2.6	2.9	0.2
Titanium	Strong Acid Extractable	ug/g	74.5	25.3	45.0	0.05
Vanadium	Strong Acid Extractable	ug/g	19.3	15.5	17.8	0.1
Zinc	Strong Acid Extractable	ug/g	27.8	23.9	22.2	0.1
Zirconium	Strong Acid Extractable	ug/g	0.5	0.5	0.08	0.05
Soil Acidity						
pH	1:2 sample to water	pH	9.2	9.2	9.3	0.5

Analytical Report

Bill To: YTG Energy, Mines and
Report To: YTG Energy, Mines and
Box 2703, K-419
Whitehorse, YT, Canada
Y1A 2C6
Attn: Frank Patch
Sampled By:
Company:

Project:
ID: Clinton Creek
Name: Clinton Creek
Location: Clinton Creek
LSD:
P.O.: P00017296
Acct code:

Lot ID: **829605**
Control Number:
Date Received: Sep 30, 2011
Date Reported: Oct 6, 2011
Report Number: 1476015

Approved by:



Carol Nam, Dipl. T.
Quality Officer

Quality Control

Bill To: YTG Energy, Mines and	Project:	Lot ID: 829605
Report To: YTG Energy, Mines and	ID: Clinton Creek	Control Number:
Box 2703, K-419	Name: Clinton Creek	Date Received: Sep 30, 2011
Whitehorse, YT, Canada	Location: Clinton Creek	Date Reported: Oct 6, 2011
Y1A 2C6	LSD:	Report Number: 1476015
Attn: Frank Patch	P.O.: P00017296	
Sampled By:	Acct code:	
Company:		

Metals Strong Acid Digestion

Blanks	Units	Measured	Lower Limit	Upper Limit	Passed QC
Aluminum	ug/g	<1	-0	1	yes
Antimony	mg/L	-0.0088	-0.0	0.0	yes
Arsenic	mg/L	0.0021	-0.0	0.0	yes
Barium	mg/L	-0.0003	-0.00	0.00	yes
Beryllium	mg/L	0.0001	-0.00	0.00	yes
Bismuth	ug/g	<0.5	-0.4	0.4	yes
Cadmium	mg/L	0.0002	-0.00	0.00	yes
Calcium	ug/g	<2	-0	0	yes
Chromium	mg/L	-0.0007	-0.00	0.00	yes
Cobalt	mg/L	-0.0011	-0.00	0.00	yes
Copper	mg/L	0.0012	-0.01	0.01	yes
Iron	ug/g	<1	-0	1	yes
Lead	mg/L	0.0028	-0.0	0.0	yes
Lithium	ug/g	<0.1	-0.1	0.2	yes
Magnesium	ug/g	<1	-0	0	yes
Manganese	ug/g	<0.3	-0.0	0.0	yes
Mercury	ug/L	0	-0.045	0.067	yes
Molybdenum	mg/L	-0.0003	-0.00	0.00	yes
Nickel	mg/L	0.0001	-0.0	0.0	yes
Phosphorus	ug/g	<0.5	-0.0	0.0	yes
Potassium	ug/g	<5	-3	3	yes
Selenium	mg/L	0.0004	-0.0	0.0	yes
Silicon	ug/g	10	-0	0	yes
Silver	mg/L	-0.0002	-0.0	0.0	yes
Sodium	ug/g	7	-6	6	yes
Strontium	ug/g	<0.02	-0.01	-0.00	yes
Thallium	ug/g	<0.3	-0.0	0.0	yes
Tin	mg/L	-0.0005	-0.0	0.0	yes
Titanium	ug/g	0.1	-0.00	0.01	yes
Vanadium	mg/L	0.0002	-0.0	0.0	yes
Zinc	mg/L	0.0002	-0.0	0.0	yes
Zirconium	ug/g	<0.05	-0.00	0.00	yes

Date Acquired: October 05, 2011

Calibration Check	Units	% Recovery	Lower Limit	Upper Limit	Passed QC
Aluminum	mg/L	138.90	80	120	yes
Antimony	mg/L	91.65	65	95	yes
Arsenic	mg/L	91.00	85	115	yes
Barium	mg/L	97.20	80	120	yes
Beryllium	mg/L	99.00	80	120	yes
Cadmium	mg/L	95.70	80	120	yes
Calcium	mg/L	96.37	-50	250	yes
Chromium	mg/L	94.10	80	120	yes

Quality Control

Bill To: YTG Energy, Mines and	Project:	Lot ID: 829605
Report To: YTG Energy, Mines and	ID: Clinton Creek	Control Number:
Box 2703, K-419	Name: Clinton Creek	Date Received: Sep 30, 2011
Whitehorse, YT, Canada	Location: Clinton Creek	Date Reported: Oct 6, 2011
Y1A 2C6	LSD:	Report Number: 1476015
Attn: Frank Patch	P.O.: P00017296	
Sampled By:	Acct code:	
Company:		

Metals Strong Acid Digestion - Continued

Calibration Check	Units	% Recovery	Lower Limit	Upper Limit	Passed QC
Cobalt	mg/L	95.40	80	120	yes
Copper	mg/L	99.90	80	120	yes
Iron	mg/L	100.50	80	120	yes
Lead	mg/L	95.40	85	115	yes
Lithium	mg/L	100.70	80	120	yes
Magnesium	mg/L	101.90	-50	250	yes
Manganese	mg/L	101.50	80	120	yes
Mercury	ug/L	90.00	85	115	yes
Molybdenum	mg/L	94.50	80	120	yes
Nickel	mg/L	96.40	80	120	yes
Phosphorus	mg/L	94.78	85	115	yes
Potassium	mg/L	93.00	85	115	yes
Selenium	mg/L	96.60	80	120	yes
Silicon	mg/L	92.04	0	0	yes
Silver	mg/L	104.80	85	115	yes
Sodium	mg/L	97.81	-50	250	yes
Strontium	mg/L	97.50	80	120	yes
Tin	mg/L	93.12	85	115	yes
Titanium	mg/L	96.70	80	120	yes
Vanadium	mg/L	97.50	80	120	yes
Zinc	mg/L	104.20	80	120	yes

Date Acquired: October 05, 2011

Replicates	Units	Replicate 1	Replicate 2	% RSD Criteria	Absolute Criteria	Passed QC
Antimony	ug/g	1.4	1.1	30	3.0	yes
Arsenic	ug/g	4.5	4.3	30	1.0	yes
Barium	ug/g	573	604	30	1.00	yes
Beryllium	ug/g	0.79	0.82	30	0.50	yes
Cadmium	ug/g	0.3	0.4	30	0.50	yes
Chromium	ug/g	20.6	21.0	30	1.00	yes
Cobalt	ug/g	9.09	7.89	30	0.50	yes
Copper	ug/g	19.6	20.5	30	1.00	yes
Lead	ug/g	10.8	11.7	30	0.5	yes
Lithium	ug/g	23.6	24.5	30	1.0	yes
Manganese	ug/g	285	295	30	1.0	yes
Mercury	ug/g	0.066	0.070	30	0.500	yes
Molybdenum	ug/g	0.91	1.0	30	0.50	yes
Nickel	ug/g	29.3	37.8	30	0.5	yes
Selenium	ug/g	<0.3	<0.3	30	0.5	yes
Silver	ug/g	<0.2	<0.2	30	0.5	yes
Strontium	ug/g	271	280	30	1.00	yes
Thallium	ug/g	<0.3	<0.3	30	1.0	yes
Tin	ug/g	0.6	0.5	30	1.0	yes

Quality Control

Bill To: YTG Energy, Mines and	Project:	Lot ID: 829605
Report To: YTG Energy, Mines and	ID: Clinton Creek	Control Number:
Box 2703, K-419	Name: Clinton Creek	Date Received: Sep 30, 2011
Whitehorse, YT, Canada	Location: Clinton Creek	Date Reported: Oct 6, 2011
Y1A 2C6	LSD:	Report Number: 1476015
Attn: Frank Patch	P.O.: P00017296	
Sampled By:	Acct code:	
Company:		

Metals Strong Acid Digestion - Continued

Replicates	Units	Replicate 1	Replicate 2	% RSD Criteria	Absolute Criteria	Passed QC
Vanadium	ug/g	42.0	43.1	30	1.0	yes
Zinc	ug/g	95.7	98.6	30	1.0	yes
Date Acquired: October 05, 2011						

Control Sample	Units	Measured	Lower Limit	Upper Limit	Passed QC
Aluminum	ug/g	15500	0	0	yes
Antimony	ug/g	1.4	0.0	0.0	yes
Arsenic	ug/g	3.4	0.0	0.0	yes
Barium	ug/g	180	0.00	0.00	yes
Beryllium	ug/g	0.64	0.00	0.00	yes
Bismuth	ug/g	<0.5	0.0	0.0	yes
Cadmium	ug/g	0.2	0.00	0.00	yes
Calcium	ug/g	13100	0	0	yes
Chromium	ug/g	19.3	0.00	0.00	yes
Cobalt	ug/g	7.09	0.00	0.00	yes
Copper	ug/g	13.3	0.00	0.00	yes
Iron	ug/g	20300	0	0	yes
Lead	ug/g	11.6	0.0	0.0	yes
Lithium	ug/g	13.5	0.0	0.0	yes
Magnesium	ug/g	4570	0	0	yes
Manganese	ug/g	447	0.0	0.0	yes
Mercury	ug/g	0.039	0.000	0.000	yes
Molybdenum	ug/g	0.67	0.00	0.00	yes
Nickel	ug/g	19.4	0.0	0.0	yes
Phosphorus	ug/g	554	0.0	0.0	yes
Potassium	ug/g	1850	0	0	yes
Selenium	ug/g	<0.3	0.0	0.0	yes
Silicon	ug/g	993	0	0	yes
Silver	ug/g	<0.2	0.0	0.0	yes
Sodium	ug/g	143	0	0	yes
Strontium	ug/g	43.6	0.00	0.00	yes
Thallium	ug/g	<0.3	0.0	0.0	yes
Tin	ug/g	0.4	0.0	0.0	yes
Titanium	ug/g	117	0.00	0.00	yes
Vanadium	ug/g	34.6	0.0	0.0	yes
Zinc	ug/g	61.9	0.0	0.0	yes
Zirconium	ug/g	2.7	0.00	0.00	yes
Date Acquired: October 05, 2011					

Soil Acidity

Replicates	Units	Replicate 1	Replicate 2	% RSD Criteria	Absolute Criteria	Passed QC
pH	pH	9.2	9.1	3		yes

Quality Control

Bill To:	YTG Energy, Mines and	Project:		Lot ID:	829605
Report To:	YTG Energy, Mines and	ID:	Clinton Creek	Control Number:	
	Box 2703, K-419	Name:	Clinton Creek	Date Received:	Sep 30, 2011
	Whitehorse, YT, Canada	Location:	Clinton Creek	Date Reported:	Oct 6, 2011
	Y1A 2C6	LSD:		Report Number:	1476015
Attn:	Frank Patch	P.O.:	P00017296		
Sampled By:		Acct code:			
Company:					

Soil Acidity - Continued

Replicates	Units	Replicate 1	Replicate 2	% RSD Criteria	Absolute Criteria	Passed QC
Date Acquired:	October 06, 2011					
Control Sample	Units	Measured	Lower Limit	Upper Limit		Passed QC
pH	pH	8.0	7.9	8.1		yes
Date Acquired:	October 06, 2011					
pH	pH	7.4	6.7	7.5		yes
Date Acquired:	October 06, 2011					

Methodology and Notes

Bill To:	YTG Energy, Mines and	Project:		Lot ID:	829605
Report To:	YTG Energy, Mines and	ID:	Clinton Creek	Control Number:	
	Box 2703, K-419	Name:	Clinton Creek	Date Received:	Sep 30, 2011
	Whitehorse, YT, Canada	Location:	Clinton Creek	Date Reported:	Oct 6, 2011
	Y1A 2C6	LSD:		Report Number:	1476015
Attn:	Frank Patch	P.O.:	P00017296		
Sampled By:		Acct code:			
Company:					

Method of Analysis

Method Name	Reference	Method	Date Analysis Started	Location
Metals (Strong Acid Leachable) in soils	B.C.M.O.E	* Strong Acid Leachable Metals (SALM) in Soil, V 1.0, SALM	05-Oct-11	Exova Surrey
pH and EC - 1:2 (Surrey)	Carter	* Soil pH (1:2 Water), 16.2	06-Oct-11	Exova Surrey
* Reference Method Modified				

References

B.C.M.O.E	B.C. Ministry of Environment
McKeague	Manual on Soil Sampling and Methods of Analysis

Comments:

Please direct any inquiries regarding this report to our Client Services group.

Results relate only to samples as submitted.

The test report shall not be reproduced except in full, without the written approval of the laboratory.

LOT: Control Number

Lot# 829605

Environmental Sample Information Sheet

Note: Proper completion of this form is required in order to proceed with analysis

Billing Address: Company: Abandoned Mines and Assessment Address: P.O. Box 2703 Whitehorse, Yukon Y1A 2C6 Attention: Frank Patch Phone: 867-393-7445 Fax: Cell: e-mail: frank.patch@gov.yk.ca				Copy of Report To: Company: Laberge Environmental Services Address: P.O. Box 21072 Whitehorse Yukon Y1A 6P7 Attention: Bonnie Burns Phone: 867-668-6838 Fax: Cell: e-mail: bonnieburns@northwestel.net				Copy of invoice: Mail invoice to this address for approval ☐ Report Result: Fax ☐ Mail ☐ Courier ☐ e-mail ☒ e-Service ☐																																																																																																																																																																																																																																																																																																																																								
Information to be included on Report and Invoice Project ID: Clinton Creek Project Name: Clinton Creek Project Location: Clinton Creek Legal Location: PO#: Proj. Acct. Code: 90974 Agreement ID: Special Instructions / Comments 				RUSH Please contact the laboratory to confirm rush dates and times before submitting samples. Upon filling out this section, client accepts that surcharges will be attached to this analysis RUSH required on: ☐ All Analysis ☐ As indicated ☐ Date Required: Signature: Exova Authorization: FOR LAB USE ONLY Condition of containers/coolers upon arrival at lab				Sample Custody (Please Print) Sampled by: Company: Signature: I authorize Exova to proceed with the work indicated on this form: Date: Initial: Received by: Sample Temp: Waybill #: Date: Company: Time: Check here if Exova is required to report results directly to a regulatory body (Please include contact information) Check here if you are testing POTABLE WATER for HUMAN CONSUMPTION <table border="1" style="width: 100%; border-collapse: collapse;"><tr><th style="width: 10%;">Number of Containers</th><th style="width: 10%;">dry whole sample</th><th style="width: 10%;">thoroughly mix</th><th style="width: 10%;">seal thru 0.05</th><th style="width: 10%;">analyze portion</th><th style="width: 10%;"> </th><th style="width: 10%;"> </th><th style="width: 10%;"> </th><th style="width: 10%;"> </th><th style="width: 10%;"> </th></tr><tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr></table>				Number of Containers	dry whole sample	thoroughly mix	seal thru 0.05	analyze portion																																																																																																																																																																																																																																																																																																																																
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Please indicate which regulations you are required to meet: 																																																																																																																																																																																																																																																																																																																																																
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