FINAL REPORT ON TRAIL AND GEOCHEMICAL WORK BRAEBURN PROJECT, YUKON

NTS 105 E 05 and 12

Latitude 61° 19' N to 61° 33' N Longitude 135° 29' W to 135° 53' W

Submitted to: Yukon Mining Incentives Program

Focused Regional Project 09-054

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Introduction

This report describes work completed during the 2009 field season in the Braeburn area following up on Au-As-Sb-Hg Regional Geochemical Survey (RGS) stream sediment geochemical anomalies suggestive of response from epithermal or other types of gold mineralized systems.

The work was supported by a contribution from the Yukon Mining Incentives Program, Focused Regional Module project 09-054.

The work program described in the proposal for this project (Jilson, 2009) was not completed due to the author's unexpected eye surgery in the middle of the field season which prevented a return to the Yukon for nearly a month and made further field work during the recovery period unwise.

Despite the shortened program, sufficient sampling and analysis was completed to raise questions of the anomalies that sparked interest in the area or of the analytical procedures chosen for this project. Access to the eastern part of the project area is now sufficiently improved to allow an interested party to further study the anomalies at relatively low cost.

Location and Access

The center of the project area is 85 km. N of Whitehorse near km. 275 on the North Klondike Highway; west central part of NTS sheet 105 E (Laberge map sheet); Latitude 61° 19' N to 61° 33' N; Longitude 135° 29' W to 135° 53' W. Figure 1 shows the location of the project area. The project area straddles the border of NTS sheets 105E05 and 105E12. The project area is in the Whitehorse Mining District.

Access to the work area is readily gained by all weather roads from Whitehorse. Within the project area road access is limited to major valleys several km. east and west of the highway. Trails suitable for ATV use depart toward the east from the Klondike Highway at km. post 280 (figure 2) and follow the north border of the project area northeast about 8 km. to the vicinity of the First Nation heritage trail (also the old Dawson wagon road). An ATV trail roughly following the heritage trail is in good shape and is currently used to access a stocked lake north of the project area supporting a small commercial arctic char fishery. The area east of that trail is open bush easily traversed by ATV. Several kilometres of trail was cut in 2009 to traverse the forested areas further east and allow access to the target area. West of the highway, logging roads and the old Division Mountain property access road depart the highway near km. 275 and provide ATV access to the lower parts of most creeks and higher parts of some creeks. The western few kilometres of the old Division Mountain access road have been completely reclaimed but a rough ATV trail has been pushed through the bush just north of it. North of the old Division Mountain coal property access road is the Trans-Canada Trail and new Division Mountain property access road which is suitable for ATV use. At approximately km. 265 on the North Klondike Highway road to a Northwestel communication tower on Anticline Mountain provides access to the middle part of the drainage basin there.

Previous Work

The project area has been an important transportation corridor throughout Yukon history, consequently prospecting began early and has been renewed intermittently in the ensuing decades. RGS geochemical data was released by the Geological Survey of Canada in1989 for 105E. This release stimulated some staking but there is no record of any resulting work.

A coal deposit at Division Mountain west of the project area awaits development and several other coal showings have been investigated nearby (Deklerk and Traynor, 2004). Immediately north of the project area there has been some exploration of limestone for lime production (ibid.).

There is no public record, such as assessment reports, of previous work in the area although the extreme eastern part of the area has been staked previously in 1989 to 1992 (ibid.). Limited evidence of earlier work was noted in the field there including two old camp sites, old claim posts, some pickets probably related to soil lines and flagging on outcrops suggestive of rock or soil sample sites. All of this evidence appeared old enough to be part of work done during the time the area was staked.

The areas west of the Klondike Highway and the Anticline Mountain area show no record of previous staking or assessment reports but relatively recent as well as old flagging was noted along streams suggesting the area has been sampled frequently.

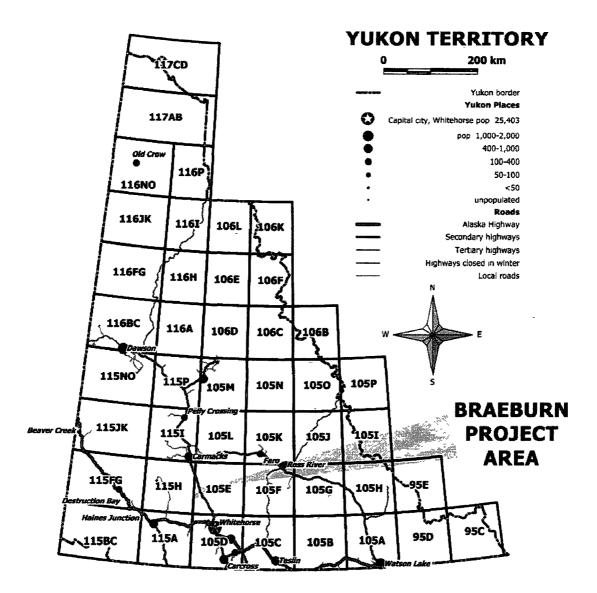


Figure 1 Braeburn Project location, the project area, highlighted in yellow, is located approximately mid way between Carmacks and Whitehorse in west central Lake Laberge Map Area (NTS 105E05 and 12)

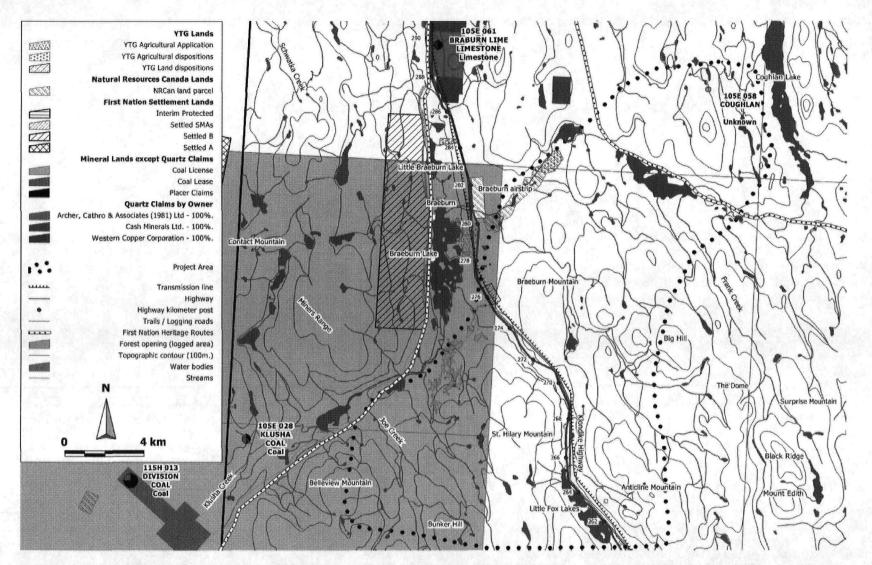


Figure 2. Summary Land status map for the Braeburn Project area. Topography, highway and federal lands from NR Can's websites. First Nation lands, heritage routes, logging roads, logged areas and km. posts derived from YTG Geomatics website. Claims form Mining Recorder's website as of March 6, 2009. YTG lands from YTG EMR's Land Branch website also March 2009.

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Regional Setting

The project area is located in the west central Whitehorse Trough (Figure 3).

In the area the Whitehorse Trough is mainly represented by the upper Triassic Lewes River Group and lower to middle Jurassic Laberge group.

The oldest unit of the Lewes River Group is the Povoas Formation consisting of andesite and basalt flows and pyroclastics of Carnian age (Colpron et. al., 2007b). The Povoas Formation volcanic sequence is overlain by the Aksala Formation, which is divided into three members, described in the project area (Tempelman-Kluit, 1984) as:

- 1. <u>Casca member</u>: Carnian to Norian, brown or rusty weathering, brown and greenish, calcareous greywacke and sandstone, limestone, argillaceous limestone, minor conglomerate and agglomerate (unit uTrAK1 on figure 4).
- 2. <u>Hancock member</u>: Norian to Rhaetian (Colpron et. al., 2007b, white weathering massive to thick bedded limestone and minor thin bedded argillaceous limestone (unit uTrAK2 on figure 4).
- 3. <u>Mandanna member</u>: Rhaetian (ibid), red weathering, green and red greywacke and pebble conglomerate, red shale and siltstone (unit uTrAK3 on figure 4).

The Lewes River Group is only exposed in the extreme east part of the project area. Only the Hancock member crops out in that area.

The majority of the project area is underlain largely by Jurassic Laberge Group shallow marine to fluvial sandstone, argillite and conglomerate (Tanglefoot and Conglomerate formations of Tempelman-Kluit, 1984, although Lowey, 2007, now considers the Conglomerate formation obsolete and assigns rocks either to the Tanglefoot or Richthofen formations). In the western part of the target area, dacite tuffs and related clastic sediments of the Jurassic Nordenskiold formation are widespread. The transition from shallow marine Tanglefoot strata to deeper water turbidites of the Richthofen Formation, to the south, occurs in or just southeast of the target area (Lowey, 2007).

A few small remnants of younger volcanic rocks are scattered in the project area. These probably include the upper Cretaceous Carmacks Group basalt and andesite as well as possibly the younger basalts of the Selkirk volcanics.

Intrusive rocks are very minor in the project area and appear limited to a few small sub-volcanic feeders of the Carmacks volcanics.

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A north trending fault, the Braeburn Fault, extends into the area from the north. Colpron et al. (2007a) describe the Braeburn Fault as "cryptic". The fault is reported to be a strike slip structure with 8 km. of right lateral displacement (White et al., 2006).

The overall fault pattern in the vicinity of the project area is reminiscent of pullapart basins developed along strike slip faults but this would imply post Carmacks Group displacement since the Carmacks Group is down dropped in one to the postulated basins. White et. al. (2006), however, state the Braeburn Fault passes beneath Carmacks strata.

The structural style of the Whitehorse Trough just north of the project area has recently been reinterpreted to be a southwest directed, fold and thrust belt (Colpron et al, 2007a) rather that the folded and block faulted style interpreted by Tempelman-Kluit (1984).

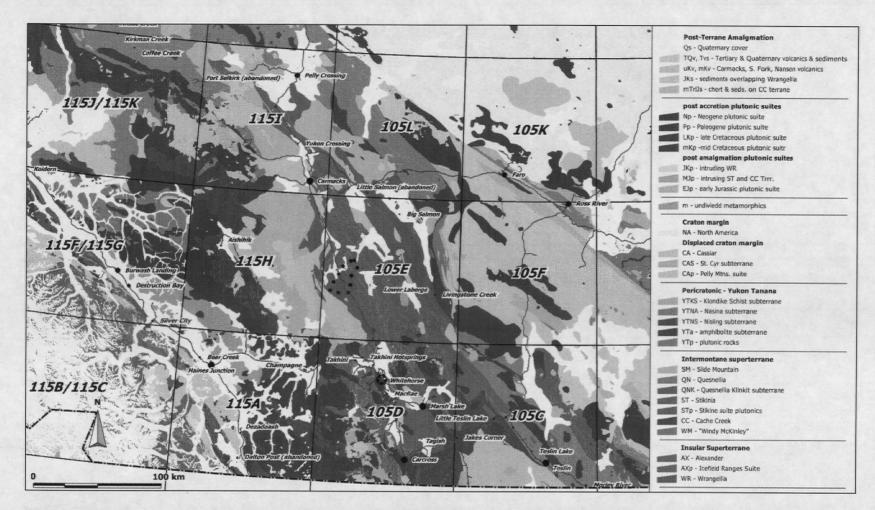


Figure 3. Terrane map of southern Yukon showing location of the project area (dotted outline) near the map center in NTS sheet 105E. From Gordey and Makepeace (1999). Most of the dark greenish brown unit passing diagonally through map sheet 105E represents the Whitehorse Trough.

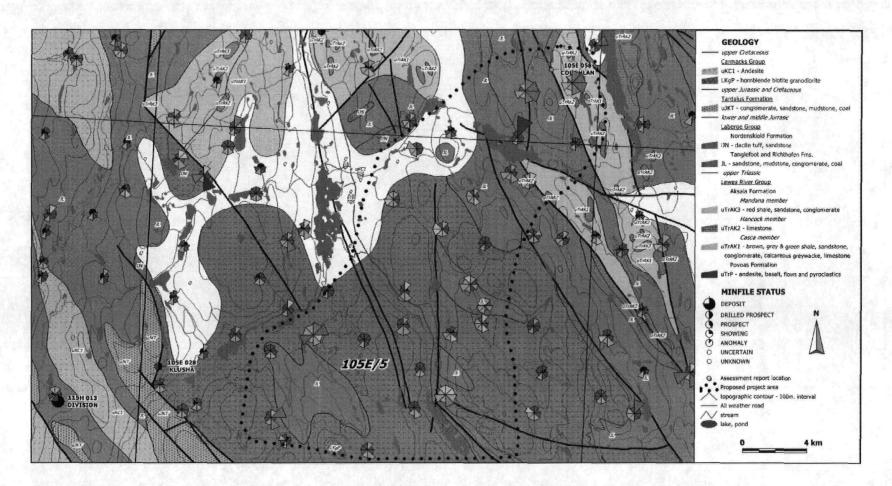


Figure 4. Geology (Gordey and Makepeace, 1999), Minfile number and name (Deklerk and Traynor, 2004) and Au, As, Sb, Hg, Ag, Cu, Pb, Zn RGS geochemistry (Heon, 2003) of the project area. Key to multi-element geochemical symbols is shown in figure 5. The Braeburn Fault is the fault roughly parallel to and west of the highway, Coghlan fault (Tempelman-Kluit, 1984) is the north northwest trending fault separating the Laberge and Lewes River Groups at the Coughlan Minfile occurrence. Belleview Mountain is approximately 4 km. east southeast of the Klusha Minfile occurrence. Braeburn Lake is the large north trending lake near the center of the map.

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Figure 5. Legend for the multi-element symbols RGS results in figure 4. The suite of elements is based on the sub-aqueous hot spring deposit geochemical response from Alldrick (1995). The percentiles are for all the terranes between the Denali and Tintina Faults. The concept behind these symbols is that if a sample site fits the anticipated geochemical response then the symbol will be a relatively large hot coloured symbol similar to a flower. A non responsive sample will be a small blue symbol. The gold pathfinders are on the right and the base metal component of the suite is on the left side of the symbol. A partial fit to the search model will appear as a misshaped flower or one with missing petals.

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Work Program

The original plan was to access the area by ATV and traverse to sampling sites accessible from existing ATV trails and areas suitable for off trail ATV travel. As far as access to the area this plan was practical. The approach also appears to be practical in the western areas near the Klondike Highway. In the eastern part of the area the ground is heavily covered by deadfall from the large 1958 Whitehorse – Braeburn fire in forested areas making for slow travel and long traverses.

Helicopter access to the eastern area was considered but from study of air photos it did not appear likely that suitable camp sites would be found without time consuming site preparation. Once the area was reconnoitred it was also clear that apart from fetid ponds and stagnant swamps there is no surface water in most of the eastern area. As the amount of helicopter support likely needed would be far in excess of the budget it was decided to push a small trail to the east to get within striking distance of the target of interest.

Methods and Procedure

Field Methods

Silt Sample Collection

Samples of stream sediment were collected from the active stream bed with a flat bottomed plastic scoop or in some cases by hand. To maximize silt sized material coarse sediment was picked from the sample by hand but no sieving was done. Approximately 250 gm of material were placed in a labeled Kraft paper bag or in a few cases where a larger sample was required in a plastic bag. If a plastic bag was used it was opened as soon as possible and thoroughly air dried to avoid anaerobic conditions developing in the bag. In a few cases a small folding stainless steel shovel was used to assist in digging into the streambed but generally this was not necessary. In some cases the stream was nearly dry and the sediment collected was not in the active bed but was from a location that obviously had been active that season.

At most sites in the eastern area there is no stream bed and no sign of active or formerly active sediment. These areas are simply wet soil and vegetation covered valley bottoms with no evidence of flowing water except perhaps during spring snowmelt. In these areas samples of organic rich fines were collected from 1 to 2 feet deep. These samples were only collected if there was standing or slowly percolating surface water present and the fines were interstitial to obvious rounded boulders. These samples are not typical stream sediments and are probably more accurately characterized as wet soil samples derived from stabilized former stream sediments. These samples were taken since there was no other media available other than soil and it was reasoned that the material

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likely was originally sediment and furthermore there was a chance of detecting a hydromorphic anomaly as water currently is percolating through the material.

In the western part of the area silt sampling was more typical of Yukon terrain and well defined streams generally with good active sediment or obviously recently active sediment were typically found. A few sites had only coarse shale chips as the active sediment; in these situations recently active sediment caught in stream bank moss was collected.

Notes were made of sample site conditions including: stream width, depth, anecdotal flow velocity and temperature, water and sediment colour, sediment grain size, presence of staining and/or precipitates and any sources of contamination.

Sample site locations were recorded by GPS and are considered accurate to within 5 to 10 metres. All coordinates quoted in this report are expressed as UTM coordinates in Zone 8 and are referenced to NAD83. All sample sites were flagged in the field.

Samples were air-dried in camp and more completely air dried in Whitehorse then shipped via Greyhound bus to the North Vancouver laboratory of ALS – Chemex.

Soil Sample Collection

Soil samples were collected from what appears to be the "B" horizon but in some cases the sample might be better characterized as "C" horizon. Samples were dug with a mattock and approximately 250 gm. of soil was placed in a labelled Kraft paper bag. Sample spacing was approximately 50 to 100 m. along irregular lines oriented across the prevailing structural trends. Sample location was recorded by GPS and is considered accurate to 5 to 10 m.. Plastic flagging with the sample number was placed at each sample site.

The B horizon consists of medium to dark brown, locally yellowish brown, silty, loamy and rarely clayey soil with abundant rock fragments and sparse rootlets. The B horizon is typically at 6 to 8 inches depth and overlain by very dark brown to black, mixed partially decomposed organic and mineral matter. A moss layer several inches thick typically overlies the soil.

Notes were recorded at each sample site of: slope, slope aspect, drainage, soil colour, soil moistness, soil texture and depth of sample.

Unlike stream sediment sampling no unusual soil sampling issues were encountered in the area.

Samples were air-dried in camp and more completely air dried back in Whitehorse then shipped via Greyhound bus to the North Vancouver laboratory of ALS-Chemex.

Analytical Methods

Samples were analyzed at ALS-Chemex in North Vancouver.

Both silt and soil samples were prepared by ALS routine PREP-41; oven drying at 60° C, disaggregating and sieving to –80 mesh (-180 microns).

Digestion was by aqua regia for all samples.

Silt samples were analyzed using ICM mass spectrometry following Chemex's ME-MS41 and AuTL44 methodology with a 0.5 g split for most metals [ME-MS41] and a 50g split for gold Au-TL44].

Soil samples were analyzed using Chemex's ME-MS41 methodology with a 0.5 g split and GEO-AR01 aqua regia extraction with sample preparation PREP-41 (-180 micron [-80 mesh] dry sieve).

A more detailed description of these analytical methods along with limits of detection for each element is provided in Appendix III courtesy of ALS-Chemex.

Aqua Regia extraction is a strong acid digestion capable of decomposing carbonates and sulphides, most sulphates but only some oxides and silicates. The digestion is nearly total for most elements of interest but only partial for some elements reported such as AI, B, Ba, Ca, Cr, Fe, Ga, K, Mg, Mn, P, Sr, Th, Ti, U, V, W depending on the mineral species present. Hg and TI may suffer some volatilization during extraction. If an aqua regia extraction is evaporated to dryness As and Sb may be volatilized. Aqua Regia is not a total extraction for gold but is reported to average about 80% if encapsulation is not a problem.

Due to the small number of samples submitted for the truncated field program there was no QA/QC done. This was planned for the larger program.

Project Results

Trail Work

To provide better access to the eastern target area within range of reasonable sampling traverses approximately 4 km. of ATV trail were cut through areas of heavy deadfall. The trail was aligned to minimize cutting of live trees and maximize use of natural open areas. No earth movement was involved and vegetative cover was generally not disturbed; there are no stream crossings. The trail was flagged and blazed but most flagging was removed after the trail was used for several trips. The trail was cut to a nominal width of roughly 4 feet to allow passage of smaller ATVs. Such a trail is below the threshold of land use permitting. The alignment of the trail is shown on figure 6.

Geological Observations

Figure 6 shows a compilation of the limited geological observations made while sampling. Outcrop in the area is very limited except on the prominent ridge in the eastern part of the area (Coughlan ridge) where there is abundant outcrop. East of Coughlan ridge there is little outcrop but large light grey outcrops of limestone are widespread. West of the ridge outcrop is nearly non-existant.

West of the Coughlan Fault the area is underlain by conglomerate, sandstone and siltstone of the aptly named Tanglefoot formation. Coughlan ridge is underlain by thick bedded, massive, conglomerate interbedded with very minor sandstone, locally graded. West of the ridge Tanglefoot strata are finer grained quartz sandstone and siltstone and recessive.

East of the Coughlan fault few outcrops were visited. All outcrops there were massive light grey to brownish grey weathering medium grey limestone, locally heavily brecciated and cut by white calcite veinlets. These strata are typical of the upper Triassic Hancock member of the Aksala formation.

In a few outcrops at the north end of Coughlan ridge conglomerate near the Coughlan Fault is heavily sheared, chloritized and carbonated and weathers with a strong coating of calcareous druse. The fault appears on air photographs (figure 6) to cut the Jurassic Tanglefoot strata and those rocks are altered adjacent to the fault. In the north part of Coughlan ridge in Tanglefoot conglomerates, limestone clasts similar to the limestone of the Hancock member increase in abundance as the Coughlan fault is approached from the west suggesting the contact may not be displaced far from its stratigraphic position by the fault.

West of the fault at the north end of Coughlan ridge Tanglefoot conglomerates are reddish brown weathering and cut by many fractures in several orientations, particularly prominent with north to north northeast strikes and steeply easterly dips. Many of the fractures are filled by thin calcite veinlets. No sulphides were seen in that area except for traces of pyrite disseminated in prophyritic clasts in the conglomerates.

No other signs of alteration or mineralization were noted and no intrusive rocks were seen but it must be noted traverses were not extensive and outcrop is generally very poor.

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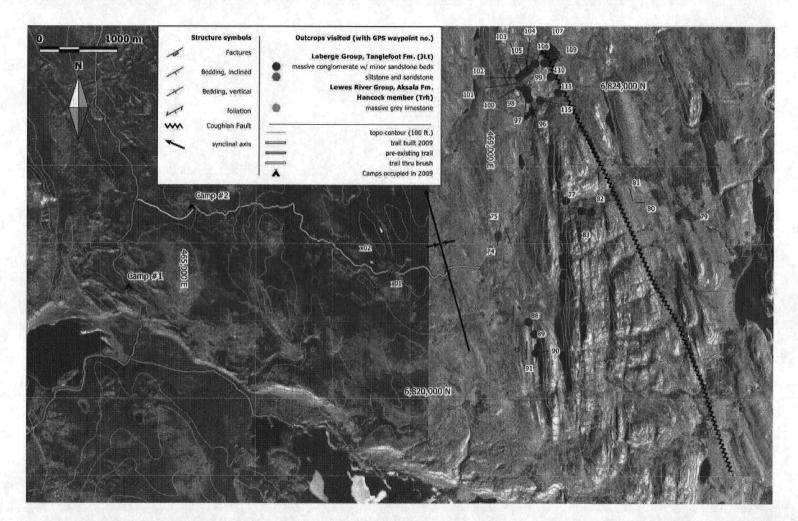


Figure 6 Compilation of geological observations in the Coughlan ridge area. No outcrop was seen on the low ridge just east of camp #2 but GSC mapping shows that the ridge id underlain by east dipping Laberge Group strata. The thick bedded nature of the conglomerates on Coughlan ridge is apparent, possibly large scale cross-bedding can also be discerned. There is obvious angular truncation of Laberge strata by Coughlan fault. Base map is air photo A25577-75 in the east a NRCan panchromatic 15 m. pixel Spot image in the west both overlain by NRCan 1:50,000 scale NTDB contours.

Geochemical Results

Certified analytical results for silt and soil geochemical samples are provided in Appendix II. Symbolic maps of drainage sediment (silt) sampling results are provided in figures 7 and 9 for the eastern area including Coughlan ridge and figures 8 and 10 for the creek draining north from Anticline Mountain (Anticline creek). Figures 7 and 8 show As results symbolically and As, Au, Hg and Sb results numerically for each area. Figure 9 shows Cu (9A) and Mo (9B) symbolically and Cu, Mo, Li and Bi numerically for the Coughlan ridge area. Similarly figure 10 shows the same information for Anticline Creek.

Figures 11 and 12 show As, Au, Hg and Sb soil sampling results for the northern Coughlan ridge and Anticline creek areas respectively.

Due to the shortened program and small number of samples there is no information to assess either sampling or analytical reproducibility. The small number of samples geochemically analysed precludes statistical analysis and threshold values are best estimated visually.

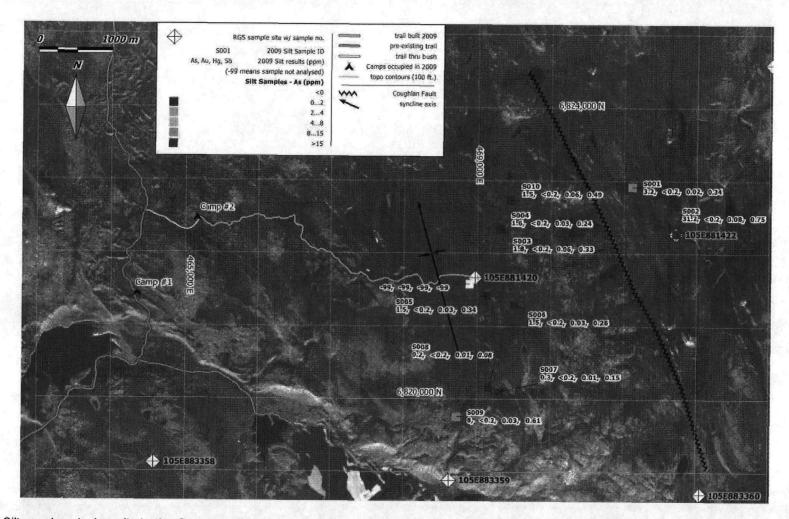


Figure 7 Silt geochemical results in the Coughlan ridge area. Base image is a 15 m. panchromatic Spot image downloaded from the NRCan website. The white square just south of RGS sample 105E881420 represents a 5 liter sludge sample collected from lake sediments in a small pond. After 2 months of settling the only mineral matter that settled out appeared to be pieces of gastropod shells; the sample was discarded.

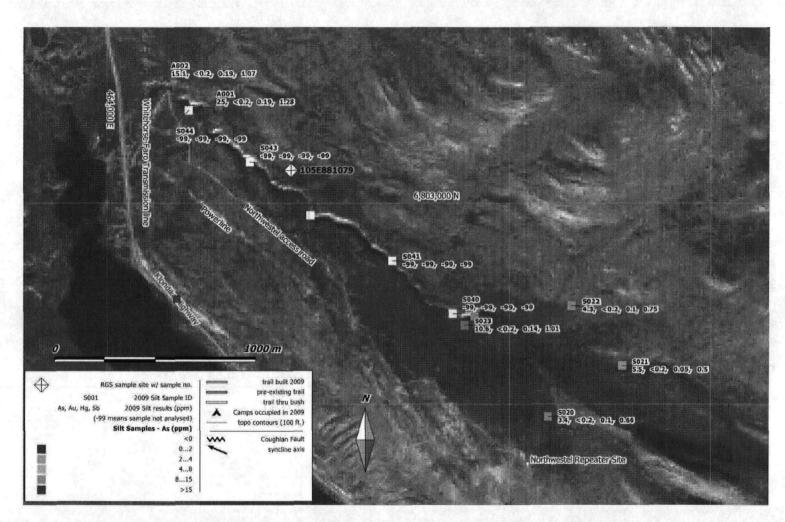
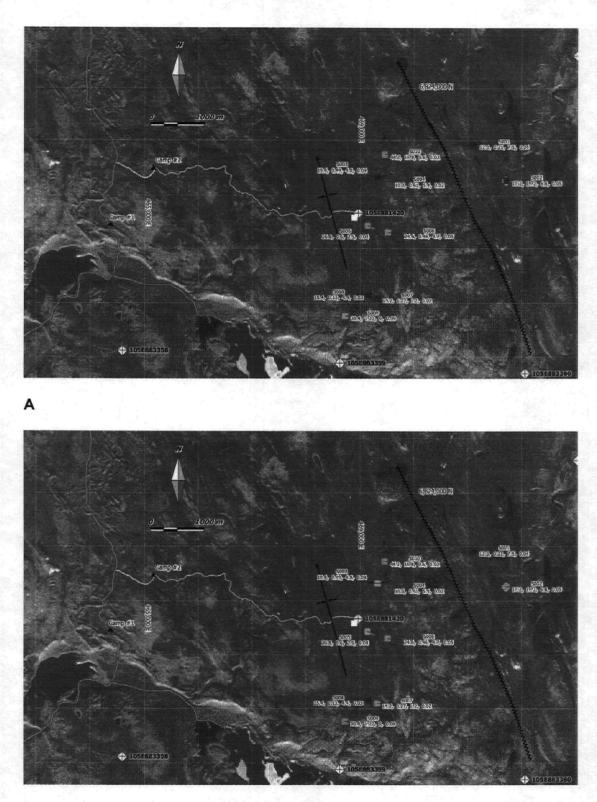


Figure 8 Silt geochemical results in the Anticline Creek drainage basin on a base image from a NRCan panchromatic 15 m. pixel Spot image. Samples represented by white squares were collected but not analysed as described in the text. The lake in the lower left is Little Fox Lake.

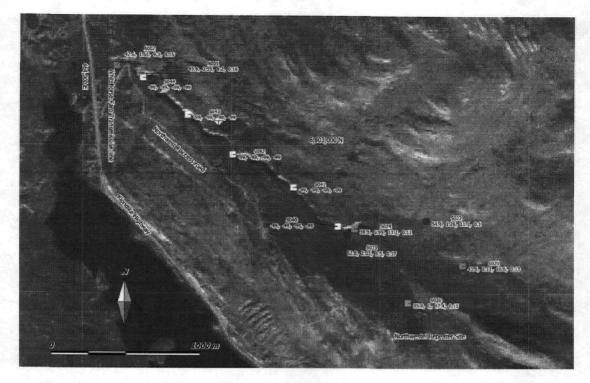
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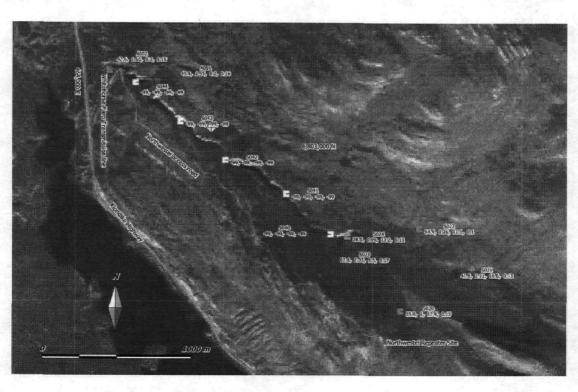
Figure 9 Copper (A) and Molybdenum (B) silt sample results for the Coughlan Ridge area. The values plotted balow the sample numbers show Cu, Mo, Li and Bi values in ppm.

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Figure 10 Copper (A) and Molybdenum (B) silt sample results for the Anticline Creek area. The values plotted balow the sample numbers show Cu, Mo, Li and Bi values in ppm.

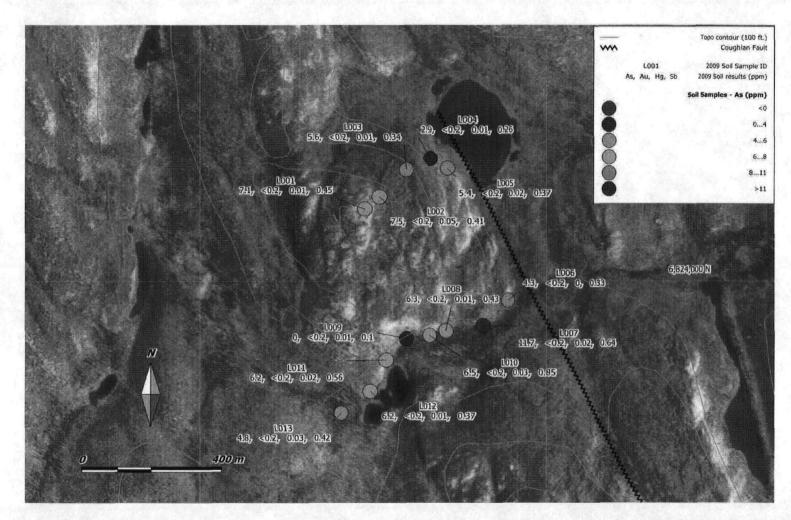


Figure 11 Soil geochemical results in the northern part of Coughlan ridge. The base image is a part of air photo A25577-75 obtained from the Whitehorse EMR library.

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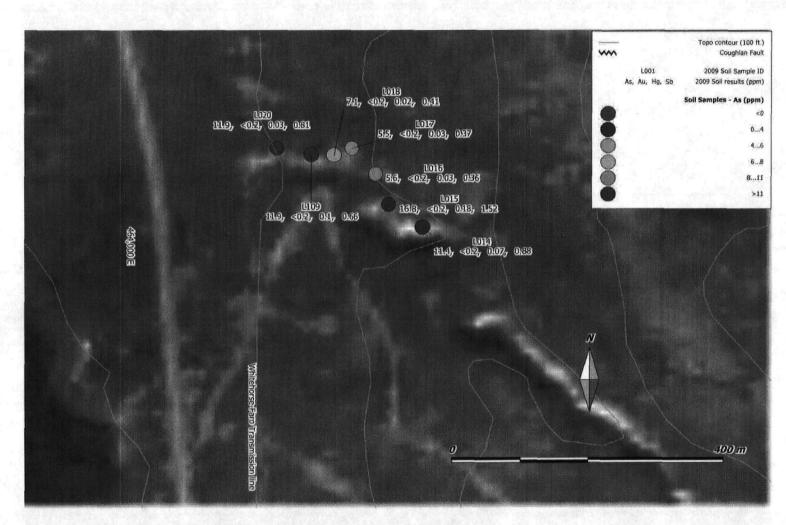


Figure 12 Soil geochemical results in the lower reaches of Anticline Creek on the same base as figure 8.

Interpretation

Stream Sediment Geochemistry

This project was predicated on following up RGS multi-element geochemical anomalies involving response at the 90th percentile or higher in Au, As, Sb and Hg (figures 4 and 5). More detailed silt sampling has not confirmed these anomalies although As is elevated in a few samples but not to the level detected in the RGS samples. Au, Sb and Hg are not elevated in the samples collected during this project. Specifically, the two anomalous RGS samples on either side of Coughlan ridge (105E881420 and 1422) show As in the 76 to 81 ppm range, Au in the 29-30 ppb range, Hg in the 173 to 176 ppb range and Sb in the 4.9 -6.0 ppm range. These values are 5 to 10 times local background, 20 times in the case of As. In the 2009 samples Au, Hg and Sb are barely distinguishable from local background. At the site of RGS sample 105E881422 As is at 31.2 ppm and while 10 to 20 times local background this is only half the magnitude of the RGS samples. The samples from Anticline Creek show similar trends.

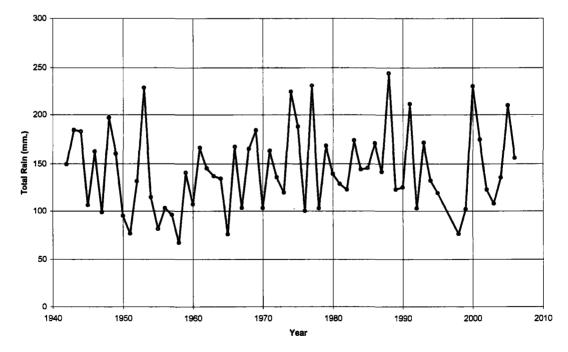
Sediment sampling was very difficult in the Coughlan ridge area since in much of the area there is no running surface water in streams, no stream beds and no stream sediment in the conventional sense. As noted previously, in these situations a deep organic rich sample was collected as it was thought to represent fines from stabilised soil covered former sediments exposed to currently percolating shallow groundwater. These samples are readily recognized on figure 7 as all of them are represented by the darker blue symbols indicating As values in the 0 to 2 ppm range; no other sample type falls within this range. Samples of more conventional nature (coarser grained and less organic rich active sediment) all have higher As values. Other elements, for example, Cu and Mo (figure 9), do not necessarily show the same effect of depressed metal values. This type of sample was always suspect and the results suggest that little reliance should be placed on them

Particularly curious is the site of RGS sample 105E881420 the anomalous RGS sample west of Coughlan ridge. At this location not only the results but also the sample collection itself could not be replicated. The description of this RGS sample site (Hornbrook and Friske, 1989) suggests this was not a particularly unusual sample site but notes that the water was brown and stagnant; this is in accord with 2009 observations. The RGS sample was described as brown and rich in organics which also makes sense considering the conditions at the sample site in 2009. However, no reasonable sample could be collected here in 2009 as no stream sediment could be found, only organic rich, fetid sludge with very little mineral matter. It has been 21 years since the RGS samples were collected and

drainage may have changed since then. It is common in areas of large forest fires for post fire surface drainage to go underground in lower country above base level. In this area the fire was 30 years before the RGS sampling and 51 years before the current programme; this effect may be a possible explanation for drainage changes and the lack of surface sediment bit does not seem a viable explanation because of the 30 year period between the fire and RGS sampling.

RGS sample site 105E881422 did not present these same problems and a reasonable though fairly clay and organic rich sample of active sediment could be collected. Despite obtaining a good sample there the chemistry of the sample appears different from the RGS sample results there in that it is only weakly anomalous in As and not at all in Au, Hg or Sb. Interestingly the description of the RGS sample suggests it was not rich in fines or organics unlike the 2009 sample collected there. This adds to the impression of a trend in time toward more sluggish and fine sediment and organic rich streams in the Coughlan ridge area.

Perhaps the most likely explanation of these observations would be variation in rainfall. 2009 experienced a very hot and dry summer. Figure 13 shows May through September rain fall for the years 1942 to 2007 from Environment Canada. These data show 1988 was the wettest year for the entire period of record at 244 mm. compared to an average of 143 mm for those months.



Whitehorse Airport - May to Sept Total Rainfall, 1942-2007

Figure 13 May to September rainfall for Whitehorse.

The heavy 1988 rains may have flushed sediment that was trapped in vegetation during less rainy years into the active streams.

The likely cause of the failure to replicate these RGS anomalies in the 2009 work may be the choice of analytical techniques. The entire anomalous RGS suite is a collection of elements that cause difficulties for geochemical analysis. For Au, an attempt to mitigate the nugget effect was made by using a larger (50 gm.) sample split for analysis. The other elements may have suffered volatilization during digestion as the hydride elements As and Sb as well as Hg are susceptible to such losses. Although aqua regia digestion is generally considered suitable for As and Sb if evaporated to dryness during digestion volatilization is known to occur (Hall, 2000). The analytical methods used for the RGS samples by the Geological Survey are probably more appropriate for these elements and include hydride evolution AAS for As and Sb and the Hatch and Ott procedure for Hg (Hornbrook and Friske, 1989). Unfortunately by the time the severity of this potential problem was realized there was no sample left for reanalysis.

Several additional larger samples were collected late in the 2009 field season in the Anticline and Fossil Creek areas in the west part of the project area but as it became apparent during these trips that I would not be likely to follow up on this work because of my vision I chose not spend the money to analyse the samples. The samples are dried and archived in Whitehorse and would be made available to a person interested in pursuing this project on request. The samples are indicated on figure 8 by the white squares and values of -99 and several additional sample locations west of the Klondike Highway are provided in Appendix IV.

Soil Geochemistry

Soil geochemical sample results are generally at low values and suggest no targets for follow-up. One sample in the north Coughlan ridge area is slightly elevated in As (figure 7) but none are high in Au, Sb or Hg. Although this is not encouraging the lines sampled were only a start and more sampling including several more lines to the south of the current lines and extending east across the Coughlan fault would be needed to properly evaluate the area, especially since there are no available stream sediments.

In the lower Anticline Creek area a line of soil samples was run over a rusty weathering rock unit thought to be an extension of an altered felsic dyke also exposed in highway road cuts to the northwest (near km. 266, figure 2). These samples are slightly elevated in As but not to levels of interest.

Cost Summary

A detailed tabulation of project costs and copies of invoices are provided in Appendix I. A summary is provided in the table below.

	Amount
Daily Living Expenses	2,500.00
Truck	212.40
Geochemical Analyses	1,020.02
Sample Shipping	46.06
ATV and Trailer Rental	2,400.00
Chain Saw, GPS, Sat phone 2 nd ATV +	1,100.00
tub trailer & transport trailer rental	
Contractors	14,625.00
Report Preparation	1,500.00
total	\$23,403.48

Personnel involved included:

Gregg Jilson 38 Dawson Road Whitehorse, Yukon Y1A 5T6,

and

Doug Brownlee 47 12th Avenue Whitehorse, Yukon Y1A 4J7

The work was carried out at the following times:

Area reconnaissance and trail cutting: June 18-25, July 6-14. Traversing and sampling: July 15, July 27-31, Sept 15, Sept 22.

Conclusions and Recommendations

The results of stream sediment and soil sampling in the project area are very disappointing and on face value do not provide encouragement for additional work.

The difficulty in sampling and particularly in analysis of the As, Sb and Hg suite that was key to targeting the area do not allow the target to be dismissed

completely. Drainage sampling is not effective in much of the project area and the only practical approach in these areas would appear to be additional soil sampling. Water sampling might be useful as there is much standing surface water in the eastern area but it would be difficult to carry out an orientation survey to help interpret the results.

In the western area drainage sampling with an improved analytical protocol would likely be effective.

I have no plans to do additional work on this program since currently field work does not seem practical, however some recommendations can be made. Recommended follow-up of the 2009 work would be to use the archived samples (or new samples as the western area is readily accessible early in the field season) to develop a better analytical approach in consultation with a geochemist knowledgeable in hydride element and Hg analysis. In the eastern area soil sampling should be expanded to the south with about 6 additional lines spaced 200 m apart and long enough to extend east across the Coughlan fault. In the western area more sediment sampling would likely be effective if the analytical issues are resolved successfully.

Respectfully submitted,

nfih

Gregg Jilson

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Appendix I Cost Summary and Invoices

December 1st, 2009

To: Gregg Jilson 38 Dawson Rd. Whitehorse, YT Y1A 5T6

Doug Brownlee 47 12th Ave Whitehorse, YT Y1A 4J7 867-335-3563

Re: Receipt for payment of services rendered, June, July and August 2009

Receipt for payment of Services:

June, July and August 2009; 25 days @ \$200 00 per day \$5,000.00

Services as a geologist and field technician.

have

Doug Brownlee



ALS Chemex excellence in Analytical Chemistry ALS Canada Lid

2103 Defation Hwy North Vancouver BC V7H 0A7 Phone 604 984 0221 Fax 604 984 0218 WWW alsohemex.com To JILSON, GREGG 38 DAWSON ROAD WHITEHORSE YT Y1A 5T6 Page 1 of 1

		QUANTITY	ANALY	SED FOR DESCRIPTION	UNIT PRICE TOT		
Certificate: Sample Type [,] Account: Date.	VA09088726 Sediment JILGRE 4-SEP-2009		17 17 6.02	PREP-41 TL44-PKG PREP-41	Dry, Sieve (180 um) Soil Au-TL44 + ME-MS41 (50 g) Weight Charge (kg) - Dry, Sieve (180 um) Soil	1.40 28.90 2.25	23 80 491.30 13.55
Project: P.O. No.: Quote:	СР						
Terms: Comments:	Due on Receipt	C3					

- SUBTOTAL (CAD) \$ 528.65
- R100938885 GST \$ 26.43

TOTAL PAYABLE (CAD) \$ 555.08

INVOICE NUMBER 1950318

To" JILSON, GREGG 38 DAWSON ROAD WHITEHORSE YT Y1A 5T6

Payment may be made by. Cheque or Bank Transfer

Beneficiary Name	ALS Canada Ltd.
Bank	Royal Bank of Canada
SWIFT:	ROYCCAT2
Address:	Vancouver, BC, CAN
Account:	003-00010-1001098

Please Remit Payments To : ALS Chemex

2103 Dollarton Hwy North Vancouver BC V7H 0A7



ALS Chemex EXCELLENCE IN ANALYTICAL CHEMISTRY ALS Canada Usd

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Page 1 of 1

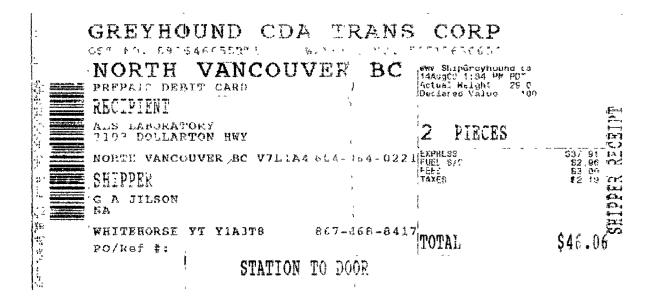
							R 1950315	
***************************************	BILLING INFORMATION		QUANTITY		SED FOR DESCRI	IDTION	UNIT PRICE	TOTAL
Certificate Sample Type Account: Date: Project: P.O. No.: Quote: Terms: Comments:	VA09088725 Soli JILGRE 4-SEP-2009 CP Due on Receipt	C3	1 20 5.94 20 20	BAT-01 PREP-41 PREP-41 ME-MS41 GEO-AR01	Administr Dry, Siev Weight C 51 anal.	ration Fee re (180 um) Soil Charge (kg) - Dry, Sieve (180 um) Soil aqua regia ICPMS jia digestion	30.00 1.40 2.25 17.65 3.35	30 00 28 00 13.37 353.00 67.00
To.	JILSON, GREGG 38 DAWSON ROAD WHITEHORSE YT Y1A 5T6						AL (CAD) \$ 385 GST \$.E (CAD) \$	491.37 24.57 515.9 4

Payment may be made by. Cheque or Bank Transfer

ALS Canada Ltd. Royal Bank of Canada ROYCCAT2 Vancouver, BC, CAN 003-00010-1001098
000-00010-1001000

Please Remit Payments To : ALS Chemex

2103 Dollarton Hwy North Vancouver BC V7H 0A7



Fred Soukoroff

139 Rainbow Rd, Whitehorse, Yukon, Canada Phone: 867-667-4406

Mr G. A. Jilson 38 Dawson Rd Whitehorse Yukon 867-668-3417 July 20, 2009

Invoice: Rental of 4X4 Polaris ATV and Trailer

Rental:

Polaris 4X4 ATV and Trailer:

June 18 th to 25 th and July 6 th & 7 th , 2009	
10 days @ 100.00 per day	\$1,000.00

Invoice Total: \$1,000.00

Total payable upon receipt

Note: This is a interim invoice for the current rental contract.

Sincerely Yours Fred Soukoroff

4 Dealey

Paid # 691 chq.

Fred Soukoroff

139 Rainbow Rd, Whitehorse, Yukon, Canada Phone: 867-667-4406

July 20, 2009

Mr G. A. Jilson 38 Dawson Rd Whitehorse Yukon 867-668-3417

Invoice: Rental of 4X4 Polaris ATV and Trailer

Rental:

Polaris 4X4 ATV and Trailer:

July 9 th to 16 th , 27 th to 31 st and Sept 9 th , 2009 14 days @ 100.00 per day	\$1,400.00
Invoice Total:	\$1,400.00

Total payable upon receipt

Note: This is a interim invoice for the current rental contract.

Sincerely Yours Fred Soukoroff

Pul Chy ~63 209 Synt 10 209

Self owned equipment used Gragg Jilson YMIP Rogert 09-054 in all cases 25 actual days charged at monthly rate x 25% 25% . (\$220) 550.00 **

ATV RTV tub trailer ATV tomsport tracker chain saw Sadellite phone 595

25% 25 \$ 450 5 112.50 252~1 \$ 800 200.00 25% 1 \$ 450 = 112.50 25% 08\$400 = 100.00 253 0+ \$ 1000 25 00

\$1100.00

Appendix II Certified Analytical Results



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To: JILSON, GREGG 38 DAWSON ROAD WHITEHORSE YT Y1A 5T6

Page: 1 Finalized Date: 4-SEP-2009 This copy reported on 8-SEP-2009 Account: JILGRE

CERTIFICATE VA09088725	SAMPLE PREPARATION						
	ALS CODE	DESCRIPTION					
Project: CP	WEI-21	Received Sample Weight					
P.O. No :	LOG-22	Sample login - Rod w/o BarCode					
This report is for 20 Soil samples submitted to our lab in Vancouver, BC, Canada on 17-AUG-2009.	SCR-41	Screen to -180um and save both					
The following have access to data associated with this certificate:		ANALYTICAL PROCEDURES					
GREGG JILSON	ALS CODE	DESCRIPTION					
	ME-MS41	51 anal, aqua regia ICPMS					

To. JILSON, GREGG 38 DAWSON ROAD WHITEHORSE YT Y1A 5T6

Signature:

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release

Colin Ramshaw, Vancouver Laboratory Manager



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Page: 2 - A Total # Pages: 2 (A - D) Plus Appendix Pages Finalized Date: 4-SEP-2009 Account: JILGRE

Project: CP

									1	CERTIF	ICATE	OF ANA	LYSIS	VA090	88725	
Sample Description	Method Analyte Units LOR	WEI-21 Recvd Wi kg 0.02	ME-MS41 Ag ppm 0 01	ME-MS41 AJ % 0.01	ME-MS41 As ppm 0 1	ME-MS41 Au ppm 0.2	ME-MS41 8 ppm 10	ME-MS41 Be ppm 10	ME-MS41 Bo ppm 0.05	ME-MS41 Bi ppm 0.01	ME-MS41 Ca % 0.01	ME-M\$41 Cd ppm 0 01	ME-MS41 Ce ppm 0.02	ME-M\$41 Co ppm 0 1	ME-MS41 Cr ppm 1	ME-MS41 Ca ppm 0.05
L001 L002 L003 L004 L005		0 32 0 16 0 32 0 16 0 24	0 04 0.46 0 03 0.04 0.08	2 15 3 48 1 23 0 78 1 15	7.1 7.5 5.6 2 9 5.4	<0.2 <0.2 <0.2 <0.2 <0.2 <0.2	<10 <10 <10 <10 <10 <10	130 470 130 120 170	0 51 1 59 0.26 0 26 0 36	0 14 0 16 0 10 0 05 0 08	0 28 1 19 0 53 1 11 1,31	0.08 0.31 0.05 0.10 0.09	12 45 83 4 12.50 11 35 15 90	8.0 23 5 8.9 5.0 8.3	31 40 22 14 22	1 07 1 26 0.40 0.39 0 49
L008 L007 L008 L009 L009		0 30 0,30 0 22 0,18 0,34	0 02 0 02 0.03 0.04 0.05	1 30 1,65 1 59 0,24 0 87	4.3 11.7 6.3 <0.1 6.5	<0.2 <0.2 <0.2 <0.2 <0.2 <0.2 <0.2	<10 <10 <10 <10 <10 <10	60 120 240 100 610	0.28 0.58 0.58 0.07 0.60	0 09 0,13 0 14 0 03 0,06	0.37 0.58 0.59 1 12 3.12	0 06 0 06 0 27 0 04 0 09	9,39 27 5 28 0 4,85 16,00	4,9 8 8 10 2 1 7 14,6	18 33 27 3 12	0.58 0.68 0.52 0.10 0.50
L011 L012 L013 L014 L015		0.26 0.28 0.16 0.34 0.44	0.11 0.03 0.18 0.08 0.47	1 68 1 45 1 62 1,60 1 41	6.2 6.2 4.8 11.4 16.8	<0.2 <0.2 <0.2 <0.2 <0.2 <0.2 <0.2	<10 <10 <10 <10 <10 <10	200 80 170 110 100	0.43 0.38 0.59 0.66 0.64	0 16 0,11 0 14 0,16 0 27	0.85 0 84 1 43 0.33 0.52	0 30 0.08 0 29 0.08 0 24	17 25 21.6 21 2 26.9 24 3	10.0 8.6 10.6 10.5 13 2	28 23 27 26 26	0 91 0.60 0 77 0.79 0 85
L018 L017 L018 L019 L020		0.38 0 34 0 32 0 38 0 50	0 08 0.06 0 06 0.06 0.06	2.01 1.45 1 24 1.39 2 58	56 5.5 7 1 11.9 11 8	≪0 2 ≪0 2 ≪0 2 ≪0 2 ≪0 2 ≪0 2	<10 <10 <10 <10 <10 <10	150 80 80 90 189	0 85 0,41 0 32 0 75 0 86	0 12 0.11 0 10 0.12 0.17	0 52 0,35 0 23 0,24 0 52	0 09 0 04 0 05 0 05 0 12	29.6 14.40 11.50 27.7 25.8	10.7 7.3 5 3 7 0 15 1	26 28 20 20 43	2,37 0,83 0 77 1,08 1 57





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Page: 2 - B Total # Pages: 2 (A - D) Plus Appendix Pages Finalized Date: 4-SEP-2009 Account: JILGRE

Project: CP

CERTIFICATE OF ANALYSIS VA09088725 ME-MS41 ME-M841 ME-MS41 ME-MS41 ME-MS41 ME-MS41 ME-MS41 ME-M841 ME-MS41 ME-MS41 ME-MS41 ME-MS41 ME-44541 ME-M841 ME-MS41 Mothod Cu Fø Ga Ģe H Hg ln. к La Lı Mg Mn Mo Na Nõ Analyte % % Units % ppm ppm 5% pom ppm ppm ppm ppm ppm ppm ppm **pp**₈₃ **Sample Description** LOR 0.005 001 02 0.01 0.05 0 01 0.2 0.01 0.05 0.05 0.02 001 0,1 5 0.05 67 2 95 0.07 0.01 0.022 0 04 118 0 42 281 1 00 0 01 179 20.4 8 20 0 07 L001 0 05 0 05 0.059 284 88 0.45 2600 0.85 0.02 95.5 3,74 9 52 0 16 0.08 1,70 L002 0 0 1 9 0.05 6.2 8.8 0 42 287 0 66 0 02 L003 154 1 89 4 43 0 07 0 04 0.01 1 13 0 01 0.012 0.04 56 49 0 24 216 0 24 0 03 0.63 L004 19,1 1.22 2 69 0.06 0.03 0.06 75 0.52 0,03 1.005 39.8 1,87 4 12 0 09 0 05 0.02 0.019 96 0.41 450 0.91 1.88 <0.01 0 016 0.03 4.8 0 27 114 0 69 0.03 1 19 L006 188 4.65 0.06 0.05 54 32.7 279 0.11 0 12 0.02 0 028 0.12 12.0 101 0 42 275 1.05 0.02 1,44 L007 5.40 0.06 0.01 0.027 0 15 10.5 89 0 35 846 0.98 0.01 1 23 L008 24.0 2.80 5.49 0.10 0 18 141 0.13 0.07 1.009 194 0 39 0.98 <0.05 0 02 0.01 0011 0.06 22 0.6 0.18 0 08 0.03 0.027 0.14 77 37 0 27 1060 0.90 0.02 031 L010 51.7 3 14 2.35 0.09 66 1 2.81 6,30 0.09 0 05 0.02 0.032 0 09 83 17 5 0 60 466 1.62 0.02 1,43 L011 0 08 0 0 2 0 0 08 10.2 76 0 35 150 0.87 0.02 146 L012 21.0 2.14 4 91 0 09 0,01 91 0 2 13 5,58 0.09 0.03 0 03 0 0 2 5 0.04 12.9 78 0 38 771 0.74 0.02 1.25 L013 47.7 3 16 5.80 0 14 0 15 0.07 0 033 0.09 17.6 134 0.49 279 1.44 0 02 0.90 L014 L015 103 5 3.48 5.43 0.14 0.13 0.18 0.040 0.16 16.0 137 0.52 445 2 76 0.01 0 82 0 88 L016 169 3 23 7 88 0 12 0.16 0.03 0 033 0.14 14 6 144 0.55 448 001 1.21 0 09 74 98 177 073 0 02 1017 16.7 2.25 5.06 0.09 0.09 0.03 0 0 2 0 044 1.77 0 05 6.2 0.33 129 0 81 0.01 L018 99 2.00 4 49 0 07 0 04 0.02 0 015 72 121 190 85 0 33 169 1,45 0.01 L019 38.5 2.92 5 01 011 0.06 0 10 0.030 0,04 0 49 419 3.69 8 10 0 14 012 0 03 0 039 0 14 11.9 18.4 0 66 439 1 15 0 02 144 L020



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Project CP

Sample Description	Hethod Analyto Units LOR	ME-M841 Ni ppm 0.2	ME-MS41 P ppm 10	ME-M641 Pb ppm 0.2	ME-MS41 Rb ppm 0.1	ME-MS41 Ro ppm 0.001	ME-MS41 S % 0.01	ME-MS41 Sb ppm 0:05	ME-MS41 Sc ppm Q.1	ME-MS41 Se ppm 02	ME-MS41 Sn ppm 0 2	ME-MS41 Sr ppm 0.2	ME-MS41 Ta ppm 0.01	ME-MS41 Te ppm 0 01	ME-MS41 Th ppm 0.2	ME-MS41 Ti % 0 005
L001		20 9	220	7.5	83	<0 001	0.02	0 45	36	0 5	06	24 6	<0.01	0 03	1.6	0.067
L002		478	710	10.7	7.0	0 001	0.04	0 41	10.7	2.0	06	72 5	0 01	0 04	20	0 055
L003		14.9	260	5.6	5,8	<0 001	0 02	0 34	4.1	05	Ő 4	416	<0 01	0.02	15	0 054
L004		10.7	380	32	42	<0 001	0.04	0 26	27	08	0.3	54.4	<0,01	0 02	06	0 031
L005		16 2	440	52	5.6	<0.001	0.04	0 37	47	10	04	72 2	<0.01	0 02	07	0 049
L006		11.2	130	\$.2	42	<0 001	0 01	0 33	28	0,4	04	24 8	<0.01	0 02	1,1	0.055
L007		226	150	78	14.3	<0,001	0.02	0.64	8.1	09	05	40 5	<0 01	0 03	35	0 073
L008		22 0	250	80	10.7	<0 001	0 02	0 43	6.7	07	05	35 0	<0.01	0 03	21	0 059
L009		33	300	06	24	<0.001	0 05	0,10	05	06	<0 2	61,5	<0,01	<0 01	<0.2	0 022
L010		137	610	43	60	<0 001	0 06	0 85	10 9	1.4	02	179 0	<0 01	0 02	08	0 006
L011		21,3	390	11.8	11.2	<0 001	0 02	0 56	6 1	1.0	0.5	\$4.8	<0.01	0 04	15	0 077
L012		16.1	110	62	9.2	<0.001	0 02	0 37	46	07	04	38.7	<0 01	0 02	20	0 066
L013		22.1	490	74	6.7	<0 001	0 04	0 42	44	15	0.5	70,2	<0 01	0 03	06	0 057
L014		22.2	250	10 7	8,8	<0 001	0 02	0 88	10.6	14	04	29.7	<0 01	0 03	43	0 056
L015		26.0	270	16.2	96	<0 001	0 02	1 52	12.1	20	0.4	50.3	<0 01	0 06	30	0 042
L016		14 9	180	92	22.8	<0 001	0 02	0 36	77	8 0	0.6	39 6	<0 01	0 02	4.8	0 063
L017		16 8	110	61	13.4	<0 001	0.01	0 37	4.2	05	0.5	25 8	<0 01	0 02	27	0 090
L018		110	150	6.2	80	<0 001	0 01	0.41	2.8	03	0.4	19 3	<0.01	0 03	17	0 049
L019		13.4	140	8.1	5.3	<0 001	0.01	0 66	7.8	0.9	03	20.2	<0 01	0 02	2.9	0 014
L020		336	340	12.3	14.6	<0 001	0 02	0 81	8,5	10	06	56 9	<0.01	0 03	5,6	0 095



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									CERTIFICATE OF ANALYSIS VA09088725	
	Method	ME-MS41	ME-MS41	ME-M841	ME-14841	ME-MS41	ME-44841	NCE-MS41		
	Analyte	۳I	U	¥	w	Y	Zn	Zr		
ample Description	Units LOR	ppm	ppm	ppm	ppin	ppm	ppm	ppm		
ampro moaccipitori	LUR	0 02	0 05	1	0.05	0.05	2	05		
.001		0 10	0 35	74	0.26	2.20	63	26		
.002		0.14	2.39	66	0 30	20.8	47	20		
.003		0,06	0.48	42	0 16	2 97	34	17		
.004		0 04	0 29	25	0.10	4 21	18	1.0		
.005		0.05	0.43	40	0.30	6 31	31	15		
006		0 Q6	0 38	46	0.15	2.30	26	23		
.007		0 11	0 46	57	0 21	8.07	36	40		
.008		0.10	040	54	0.27	7.14	44	1.7		
.009 .010		0.02	0.17 0.45	10 37	≪0 05 0 05	0.89 12.20	12 42	06 28		
	······									
.011		0.15	0 53	61	0.36	5 60	86	1.7		
.012		0.08	0.39	47	018	6 69	24	3.2		
013		0.08	0 97	47 55	0.21	10 05	37	0.7 5.4		
.014 .015		0.13 0.24	1.00 0 94	55 55	0.24 0.37	15 55 21,9	50 81	5.4 4.5		
.016		0.10	0 59	61	0.15	8.91	49	50		
.017 .018		0 09 0 09	047 032	48 43	0.15 0 13	3.42 2 20	34 32	34 15		
L019		011	0 32	45 51	0 13	10.55	32 47	2.1		
L020		0 21	0 86	76	0 27	6 88	68	50		
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Mathod	CERTIFICATE COMMENTS
ME-MS41	Gold determinations by this method are semi-quantitative due to the small sample weight used (0.5g).
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CERTIFICATE VA09088726 SAMPLE PREPARATION DESCRIPTION ALS CODE WEI-21 **Received Sample Weight** Project: CP LOG-22 Sample login - Rcd w/o BarCode P.O. No.: SCR-41 Screen to -180um and save both This report is for 17 Sediment samples submitted to our lab in Vancouver, BC, Canada on 17-AUG-2009. ANALYTICAL PROCEDURES The following have access to data associated with this certificate GREGG JILSON ALS CODE DESCRIPTION INSTRUMENT Au-TL44 Trace Level Au - 50 g AR ICP-MS ME-MS41 51 anal agua regia ICPMS

To: JILSON, GREGG 38 DAWSON ROAD WHITEHORSE YT Y1A 5T6

Signature:

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Colin Ramshaw, Vancouver Laboratory Manager



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	Method	WEI-21	Au-TL44	ME-MS41	ME-M541	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-M541	ME-MS41	ME-MS41	ME-MS41
	Analyte	Recvd WL	Au	Ag	A	As	Au	B	Ba	80	81	Ca	Cd	Ce	Co	C/
A	Units	kg	épm	ppm	۴.	ppm	ppm	pp m	ppm	ppm	ppm	*	ppm	ppm	ppm	ppm
Sample Description	LOR	0 02	0 001	0.01	0.01	01	02	10	10	0 05	0.01	0 01	0.01	0.05	01	1
A001		0 46	0.014	0,12	0,87	25.0	<0.2	<10	130	0 82	0.16	1.76	0 35	22 3	12.7	19
A002		0,42	0 004	0 14	0 95	15 1	<0 2	<10	140	0 56	0 15	2 28	0.45	22 1	129	16
S001		036	0.002	0.03	0.69	3.2	<02	<10	60	0 20	0 04	0.89	0 10	13 25	50	15
S002		0 32	0.007	0 05	0 68	31 2	<0.2	<10	340	0.23	0.05	1.53	0 67	12 40	11.7	15
S003		0 18	0.004	0 07	0 63	18	<0 2	<10	80	0 19	0 04	2 33	0 19	9.85	40	11
S004		0,08	0.001	0.03	0.56	1.6	<02	<10	100	0.13	0.02	1.20	0.10	10 40	47	11
S005		0.08	0 001	0.04	0 51	15	<02	<10	80	016	0 04	1,76	0,15	7 37	31	6
S006		0,16	0.002	0.08	0.69	15	<02	<10	60	0.18	0 05	1 49	0 16	9 02	33	10
S007		0 12	0 001	0 04	0.25	03	<02	<10	40	0.06	0 02	0 93	0 09	6 09	17	4
S008		0.22	0 001	0 03	0.66	02	⊲02	<10	70	0 14	0 03	0 77	0 02	8 47	15	5
\$009		0 58	NSS	0 08	1 01	80	<02	<10	100	0 31	0.09	1.00	0 23	19 70	10 2	27
5010	i	0.08	NSS	0 04	0 23	15	<0 2	10	270	011	0 02	3 66	81 0	1,93	2.2	6
S020		0.24	0 005	0.22	1.28	3.4	<0 2	<10	110	0 37	0.15	1.34	0 43	14 10	82	24
S021		0.58	NSS	0 09	1 38	55	<02	<10	90	0 43	0 13	0 95	0 35	17 85	10 0	31
S022		0.68	0 003	0.13	1.13	43	<02	<10	70	0 41	0 10	1,94	0 65	14 30	68	19
S023		0 18	0 006	0 20	1 02	10 6	<02	<10	460	0 34	0 17	1 95	1.24	15.70	19.7	19
S024		1.28	0 003	0 12	1 20	3.9	<0.2	<10	90	0,43	011	1,22	0.76	18.90	82	20
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Sample Description	Nethod Analyle Units LOR	ME-M841 Cs ppm 0.05	ME-MS41 Cu ppm 0.2	ME-MS41 Fe % 0.01	ME-MS41 Ga ppm 0.06	ME-MS41 Ge ppm 0.05	ME-MS41 H/ ppm 0.02	ME-MS41 Hg ppm 0 01	ME-MS41 In ppm 0.005	ME-MS41 K 16 0.01	ME-MS41 La ppm 0 2	ME-MS41 Li ppm 01	ME-MS41 Mg % 0.01	ME-MS41 Ma ppm 5	ME-MS41 Mo ppm 0.05	ME-MS41 No % 0,01
A001	1	1 89	45 8	3 08	3 34	0 11	0 08	0 19	0 029	0.07	11,9	82	0.47	579	2.55	0,01
A002		2.24	42.6	2 66	3 58	0.10	0.06	0 19	0 025	0 08	12 0	93	0.48	545	1.65	0 02
S001		0 38	12.3	1.23	2.89	0 07	0.06	0.02	0.010	0.04	6.9	75	0.36	160	0.21	0 02
S002		0 43	17 2	2 13	3 21	0.09	0.04	0.08	0 012	0 05	6.4	68	0 43	6350	1 72	0.02
\$003		0.45	19.4	0.83	2.30	0 06	0.06	0.08	0 009	0 04	51	48	0 32	812	0.49	0 03
\$004		0.35	10 3	1.07	2.74	0 06	0.05	0 03	0 008	0.03	54	5.4	0.29	1750	0.61	0 02
\$005		0.23	26 8	0 75	1.93	0 05	0 03	0.03	0,006	0 02	36	25	0 21	563	0 60	0.04
S006		0.35	24 6	0 77	2 15	<0 05	0.04	0.03	0 008	0 03	48	47	0.26	422	0 46	0 04
8007		0 13	14.2	0 44	1 24	<0 05	0 02	0 01	<0,005	0 02	29	12	0 13	55	0.27	0,05
S008		0.29	15.4	0 53	2 21	0.05	0 05	0.01	0.005	0 02	42	44	0 13	34	0 13	0.04
S009	- 1	0.79	30.4	2 51	4 43	0.12	0 04	0 03	0.021	0.09	10 1	90	0.48	1140	1 22	0 02
S010		0 10	44.2	1 02	0 66	<0 06	0 05	0 06	<0 605	0.01	12	06	0.29	465	1.78	0 02
S020		1.00	35 8	1 89	4 86	0 09	0.07	0 10	0.025	0.09	78	17.4	0.61	462	1 00	0 02
\$021		072	41.6	274	5.78	0.13	0 10	0,05	0 023	0.06	94	18 6	0.64	826	2.11	0 02
8022		1.42	54,4	1 74	4.60	0 11	0.07	0.10	0.018	0 09	9.0	11 1	0.49	396	1.26	0.02
5023		0 96	62 8	3.26	4.66	0.10	0 06	0 14	0 021	0.07	87	96	0 45	14100	2 05	0.03
\$024		1 01	38 5	2 01	4 30	0 11	0.06	0.09	0 020	0 07	93	13.2	0.54	723	0 99	0 02



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Sample Description	Method Analyte Units	ME-MS41 ND ppm	ME-MS41 Ni ppri	ME-MS41 P ppm	ME-MS41 Pb ppm	ME-MS41 Rb ppm	ME-MS41 Ra ppm	ME-MS41 8 %	ME-MS41 Sb opm	ME-MS41 Sc ppm	ME-M841 Sə ppm	ME-MS41 Sn ppm	ME MS41 Sr øpm	ME-MS41 Ta ppm	ME-MS41 To ppm	ME-MS41 Th ppm
Sample Description	LOR	0.05	02	10	0.2	01	0 001	0.01	0.05	01	02	Q2	0.2	0.01	0.01	02
A001		0 39	20 4	690	12 4	55	0 001	0.11	1 28	7.1	1.3	06	125 0	<0.01	0 03	2.5
A002		0.69	16.8	720	115	7.0	0 002	0 10	1,07	71	16	0.3	151 0	<0.01	0 03	20
S001		0.69	118	500	28	52	0 001	0 04	034	3.0	07	0.2	58.4	<0.01	0.01	12
S002		0.55	19,1	840	38	61	0 005	0 13	0.75	2.8	1,7	06	197.5	<0.01	0.04	0.7
\$003		0.60	84	870	25	5.2	0 005	0 34	0,33	2.1	2.5	03	186 5	<0.01	0 03	04
S004		0 55	73	730	18	4.4	0 003	0.15	0 24	2.1	13	0.4	101 0	<0.01	0.01	05
S005		0 36	75	880	16	20	0 003	0.21	0 34	09	2.1	0.2	147 5	<0.01	0 02	≪0 2
S006		0.51	89	640	23	39	0 006	0.18	0 26	1.8	26	0.2	140 5	<0.01	0,01	03
S007 S008		0 23 0 48	26 31	560 790	08 15	1.0 2.7	0.002	0.21 0.12	0 15 0 08	08	1.5 0.8	<02	76 3	<0.01	<0 01	02
										1.0		<0.2	63 8	<0,01	<0.01	03
S009		0.83	190	1130	69	13 3	<0 001	0.07	0,61	4.5	12	0.4	73.5	<0.01	0 03	1.0
S010		0.20	85	770	07	8.0	0 004	0 81	0 49	0.8	2.0	0.3	394	0 01	0.02	<02
S020 S021		1.15 1.29	17.6 22.3	970 680	81 97	12.7 8.1	0 004 0 004	0,11 0,06	0.66 0.50	5.2 5.8	24 1.5	0.3 0.6	176 5 105 5	<0.01	0.04	10
S022		1.17	18,4	880	68	120	0 001	0.14	0.50	5.0	45	00	148.0	<0.01 <0.01	0 03 0 02	17 0,8
S023		0.83	24 3		89	8 1										
8024		1 12	24 3 16 9	900 650	89 81	81 9.8	0 005 0 002	0.25	1 01 0 52	50 50	3.7 2 5	03	233 120 6	0 01 <0.01	0 06 0 03	12

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		ME-MS41	ME-MŞ41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-M841	ME-MS41	
	Method	nemos	ncangari	U	V	W	¥	Zn	Zr	
	Analyte									
Sample Description	Units LOR	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
	FOU	0 005	0.02	0.05	1	0.05	0.05	2	05	
A001		0.022	0 18	0.68	39	0.18	9 65	89	2.7	
A002		0 030	0 16	0 59	38	0.17	9.64	86	2.1	1
S001		0.048	0.05	0.38	29	0 09	4 13	36	1.7	
8002		0 037	0.23	0.66	33	0.09	4 81	51	1.1	
S003		0 031	0.05	1.72	16	<0.05	3 94	30	2.1	
S004		0 048	0.04	0.78	26	0 09	3.37	38	1,4	
8005		0 023	0 03	1.69	15	0 07	2 36	30	12	
8006		0 029	0.04	1.65	16	<0 05	3.83	23	17	
S007		0 031	0 02	1.23	16	<0 05	1 58	15	10	
5008		0 034	0.03	1.19	12	<0.05	1.81	12	1.8	
S009	<u></u>	0 064	0.09	0 85	58	0 20	7 32	58	1.4	
S010		0.009	0.05	0.48	7	<0.05	1 51	20	2.0	
\$020		0.058	0.13	0.40	35	0 31	7 16	127	20	
S021		0 086	0.08	0.77	55	0,34	7.05	111	33	
S022		0 059	0.00	0.65	35	0.25	7 76	91	23	
S023		0.039	0.21	0,88	37	0 18	8 58	137	1,8	
S024		0 065	0 12	1.00	41	0.26	8.17	94	2.0	
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Method	CERTIFICATE COMMENTS
ALL METHODS ME-MS41	NSS is non-sufficient sample. Gold determinations by this method are semi-quantitative due to the small sample weight used (0 5g)

Appendix III Description of ALS Analytical Proceedures

<u>Geochemical Procedure</u> – ME-MS41 Ultra-Trace Level Methods Using ICP-MS and ICP-AES

Sample De	ecomposition:
Analytical	Method:

Aqua Regia Digestion (GEO-AR01) Inductively Coupled Plasma-Atomic Emission Spectroscopy (ICP-AES) Inductively Coupled Plasma - Mass Spectrometry (ICP-MS)

A prepared sample (0.50 g) is digested with aqua regia in a graphite heating block. After cooling, the resulting solution is diluted to with deionized water, mixed and analyzed by inductively coupled plasma-atomic emission spectrometry. Following this analysis, the results are reviewed for high concentrations of bismuth, mercury, molybdenum, silver and tungsten and diluted accordingly. Samples are then analysed by iCP-MS for the remaining suite of elements. The analytical results are corrected for inter-element spectral interferences.

Element	Symbol	Units	Lower Limit	Upper Limit
Silver	Ag	ppm	0 01	100
Aluminum	Al	%	0 01	25
Arsenic	As	ppm	01	10 000
Gold	Au	ppm	02	25
Boron	B	ppm	10	10 000
Barium	Ba	ppm	10	10 000
Beryllium	Be	ppm	0.05	1 000
Bismuth	Ві	ppm	0 01	10 000
Calcium	Ca	%	0 01	25
Cadmium	Cd	ppm	0 01	1 000
Cerium	Се	ppm	0 02	500
Cobalt	Со	ppm	01	10 000
Chromium	Cr	ppm	1	10 000
Cesium	Cs	ppm	0 05	500
Copper	Cu	ppm	02	10 000
Iron	Fe	%	0 01	50
Gallium	Ga	ppm	0.05	10 000
Germanium	Ge	ppm	0 05	500
Hafnium	Hf	ppm	0 02	500
Mercury	Hg	ppm	0 01	10 000
Indium	In	ppm	0 005	500
Potassium	Γ.K	%	0 01	10
Lanthanum	La	ppm	02	10 000
Lithium	Lı	ppm	01	10 000
Magnesium	Mg	%	0.01	25
Manganese	Mn	ppm	5	50 000
Molybdenum	Мо	ppm	0 05	10 000
Sodium	Na	%	0 01	10
Niobium	Nb	ppm	0 05	500
Nickel	Ni	ppm	02	10 000
Phosphorus	Р	ppm	10	10 000

Element	Symbol	Units	Lower Limit	Upper Limit
Lead	Pb	ppm	0.2	10 000
Rubidium	Rb	ppm	01	10 000
Rhenium	Re	ppm	0 001	50
Sulphur	S	%	0 01	10
Antimony	Sb	ppm	0 05	10 000
Scandium	Sc	ppm	01	10 000
Selenium	Se	ppm	02	1 000
Tin	Sn	ppm	02	500
Strontium	Sr	ppm	0.2	10 000
Tantalum	Та	ppm	0.01	500
Tellurium	Те	ppm	0.01	500
Thorium	Th	ppm	02	10000
Titanium	Tı	%	0 005	10
Thallium	TI	ppm	0 02	10 000
Uranium	U	ppm	0 05	10 000
Vanadium	V	ppm	1	10 000
Tungsten	w	ppm	0 05	10 000
Yttrium	Y	ppm	0.05	500
Zinc	Zn	ppm	_2	10 000
Zirconium	Zr	ppm	05	500

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NOTE In the majority of geological matrices, data reported from an aqua regia leach should be considered as representing only the leachable portion of the particular analyte

<u>Geochemical Procedure</u> – Au-TL43, Au-TL44 Determination of Trace Level Gold by Solvent Extraction – Graphite furnace AAS or ICPMS finish

Sample Decomposition: Analytical Method: Aqua regia gold digestion (GEO-AuAR01/02) Inductively coupled mass spectrometry (ICPMS) or Atomic absorption spectrometry (AAS)

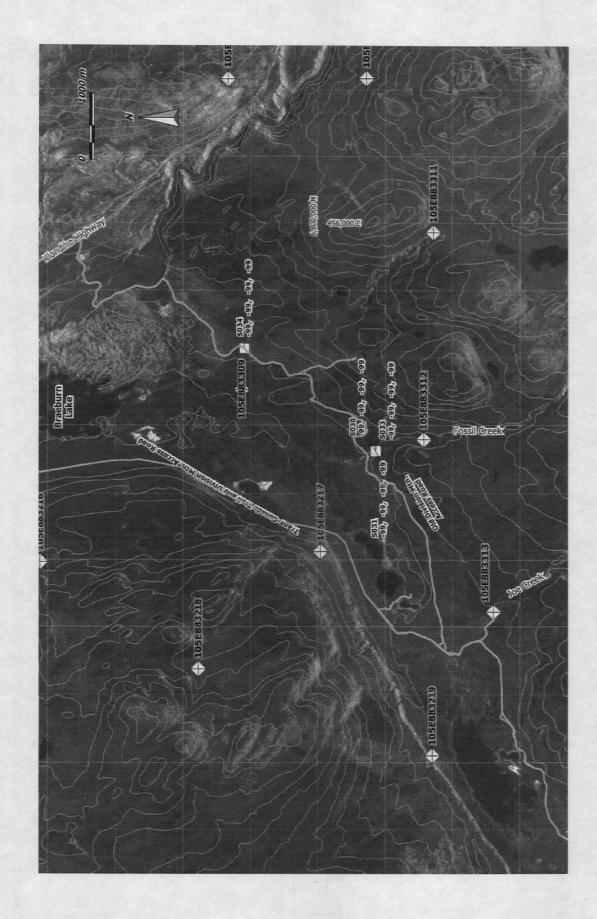
A finely pulverised sample (25 - 50 g) is digested in a mixture of 3 parts hydrochloric acid and 1 part nitric acid (aqua regia) This acid mixture generates nascent chlorine and nitrosyl chloride, which will dissolve free gold and gold compounds such as calaverite, AuTe₂

The dissolved gold is complexed and extracted with Kerosene/DBS and determined by graphite furnace AAS Alternatively gold is determined by ICPMS directly from the digestion liquor. This method allows for the simple and economical addition of extra elements by running the digestion liquor through the ICPAES or ICPMS

Note Samples high in sulphide or carbon content may lead to low gold recoveries unless they are roasted prior to digestion

Method	Element	Sample Mass	Units	Lower Limit	Upper Limit	Default Overlimit Method
Au-TL43	Gold	25 g	ppm	0 001	1	Au-OG43
Au-TL44	Gold	50 g	ppm	0 001	1	Au-OG44

Appendix IV Fossil Creek area sample locations



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Appendix V YMIP Final Submission Form

	YUKON MINING I	INCENTIVES PROGRAM (YMIP)
TURON Energy, Mines and Resources		FINAL SUBMISSION FORM
Submit completed form by March 31 st to:		
Yukon Mining Incentives Program Energy, Mines and Resources Government of the Yukon	YMIP # 09-05	54
102 - 300 Main Street Box 2703 (K102), Whitehorse, Yukon, Y1A 20 E-mail: <u>ymip@gov.yk.ca</u>		AME: Braeburn
NAME AND ADDRESS	Please indicate an	y changes or omissions
Mr. Gregg Jilson 38 Dawson Road Whitehorse, Yukon Y1A 5T6		
Phone: (867)668-3417	Correct phone #	
E-mail: gjilson@klondiker.com Correct	e-mail if it has changed:	
O Please check the appropriate section.O MUST be completed and submitted with	• •	
 O Please check the appropriate section. O MUST be completed and submitted with O Ensure all required information is attached to INFORMATION Description/implementation of work 	h your final report.	
 O Please check the appropriate section. O MUST be completed and submitted with O Ensure all required information is attached to INFORMATION I. Description/implementation of work 2. Location map(s) of completed work 3. Colored maps at adequate scale showing 	h your final report. prevent delays in processing y	your claim
 O Please check the appropriate section. O MUST be completed and submitted with O Ensure all required information is attached to INFORMATION I. Description/implementation of work 2. Location map(s) of completed work 	h your final report. prevent delays in processing y	your claim
 O Please check the appropriate section. O MUST be completed and submitted with O Ensure all required information is attached to INFORMATION I. Description/implementation of work 2. Location map(s) of completed work 3. Colored maps at adequate scale showing Geology Geophysics Geochemistry 	h your final report. prevent delays in processing y	your claim
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Access to Information and Protection of Privacy Act

The information requested on this form is collected under the authority of and used for the purpose of administering the Yukon Mining Incentives Program. Questions about the collection and use of this information can be directed to the Mineral Development Geologist, Department of Energy, Mines and Resources, Yukon Government, Box 2703 (K102), Whitehorse, Yukon Territory, Y1A 2C6 (867) 456-3828.

certify that;					
. I am the person, or the representative of the co	moany or partners	hip, named	in the Annlic	ation	
for Funding and in the Contribution Agreement					
I am a person who is nineteen years of age or o of the said program.	ider, and I have o	omplied with	n all the requ	irements	
I hereby apply for the final payment of a contribution (YMIP) and declare the information contained we Summary Report to be true and accurate.					ancial
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