#### Roger Hulstein 106 Wilson Dr., Whitehorse, Yukon, Y1A 0C9 Phone (867) 668-2549 Email: Hulstein@northwestel.net

December 28, 2009

DEC 3 0 2000

Re: YMIP 09-112, Sixty Mile Project

Dear Ms. Daniele Heon;

Included with this package are two reports, one on the Rod property and the other on the Toni claims, together they form part of the Sixty Mile project. As per the YMIP contract, a financial summary report, copy of expenses and a completed final submission form are also enclosed.

The two reports were written as assessment reports and document work carried out in the last claim year, which extends approximately from mid year to mid year, and so includes work from the summer of 2008. Some of this work was previously reported in a YMIP report for contract 08-012.

All the work and expenses that qualify for the 2009 YMIP contract are described in the reports but to help break out the 2009 work the following notes may be helpful.

#### 2009 work on the Rod 1-8 claims (Rod property)

I spent the day of July 8<sup>th</sup> on the property, mapped geology, prospected and collected 9 soil samples, 2 rock samples and 1 stream sediment sample. All 2009 samples are numbered; RH09xxxx. Full samples descriptions, results and maps are included with the Rod property report.

#### 2009 work on the Toni 9-32 claims

I spent the day of July 9<sup>th</sup> on the property, supervised the excavation of a trench by K-1 Mining and collected 4 rock samples from the trench. All 2009 samples are numbered; RH09Rxxx. Full samples descriptions, results and maps are included with the Toni property report.

I drove to the Sixty Mile site on July 7<sup>th</sup> from Whitehorse and returned on the evening/night of July 9<sup>th</sup>.

If you require further details of the 2009 activities please give me a call.

Yours truly,

Roger Hulstein, P.Geo. Hulstein Geological Services

DEC 3 6 2000

# 2009 GEOLOGICAL, GEOCHEMICAL and TRENCHING REPORT ON THE TONI 9-32 CLAIMS

٩,

(Work Performed: July 29 & August 28, 2008 And July 9, 2009)

#### Claim Names: Grant No's

Toni 9-14	YC36199-YC36204
Toni 15-28	YC44641-YC44654
Toni 29 -32	YC76463-YC76466

#### DAWSON MINING DISTRICT, YUKON TERRITORY NTS: 116C/02 & 115N/15

Latitude 64° 01' N Longitude 140° 43' W

### Owner & Operator: Roger Hulstein 106 Wilson Drive Whitehorse, Yukon Territory Y1A 0C9

Prepared by: Roger Hulstein, B.Sc., P.Geo.

December 8, 2009

Toni 9-32Claims

#### SUMMARY

The Sixty Mile Project includes the Toni 9-32 claims which cover two epithermal gold – silver prospects. They are located in the Sixty Mile placer gold district approximately 75 km west of Dawson City, Yukon. In 2008 and 2009 both prospects were explored with geological mapping, excavator trenching and rock and soil geochemistry.

The Toni 9-32 claims are located in west-central Yukon, collectively cover an area of approximately 500 hectares and are comprised of 24 Yukon two-post Quartz claims owned one hundred percent by Roger Hulstein. The placer district has produced approximately 435,000 crude ounces since 1892 (Labarge, 2006). The bedrock sources for most of the placer gold is unknown although both mesothermal and epithermal types of veining have been found within the district. Access can be easily gained to the area in the summer by two wheel drive vehicles.

Most of the property is underlain by argillic and propylitic altered andesitic volcanics of the Cretaceous Carmacks Group. Rocks on southeast side of the property are cut by the Sixty Mile fault, a regional fault between the transcurrent Tintina and Denali Fault systems. It juxtaposes the Carmacks Group volcanics to the northwest against the Devonian to Mississippian metamorphic siliciclastic rocks of the Nasina Assemblage to the southeast. The Carmacks Group volcanic rocks are preserved in a graben or half graben structure in the Sixty Mile River valley and extend for a distance of approximately five kilometers.

The Glasmacher epithermal vein occurrence, located in the Sixty Mile River valley is currently covered by placer mined gravels. In 2009 a portion of the ground magnetic low identified in 2007, over the approximate occurrence location, was trenched by excavator. Four rock samples from the trench returned low gold values.

A second epithermal occurrence was defined by soil samples collected in 2007 over the trace of the Sixty Mile fault. Eight soil samples returned anomalous gold values (>0.28 ppm to <0.821 ppm) over a distance of approximately 500 m. Work in 2008, focused on following up on these anomalous samples, resulted in the highly anomalous soil sample results being confirmed although rock samples in the area contained <60 ppb gold. Also in 2008 the Toni 29-32 claims were staked, a river ford and access route to the site was selected and a MLUR Class III was applied for and received.

The geological setting and anomalous geochemical values are consistent with that found in epithermal vein type deposits. Proposed work consists of additional geochemical soil surveys, geological mapping, prospecting, ground magnetic and electromagnetic surveys. Anomalous areas should be tested by trenching, if possible, followed by diamond drilling if results are encouraging.

# **TABLE OF CONTENTS**

SUMMARYi	Í
TABLE OF CONTENTS ii	ļ
1.0 INTRODUCTION	
1.1 Location and Access	
1.2 Topography, Vegetation and Climate	•
1.3 History	ļ
1.4 2008 – 2009 Work Program 6	j
1.5 Claim Status	*
2.0 REGIONAL GEOLOGY 9	)
2.1 Surficial Geology 14	ł
3.0 PROPERTY GEOLOGY 15	)
3.2 Alteration and Mineralization 19	)
4.0 2009 TRENCHING PROGRAM 21	į
5.0 GEOCHEMISTRY 23	,
6.0 CONCLUSIONS and RECCOMMENDATIONS	ļ
7.0 STATEMENT of COSTS 25	į
8.0 STATEMENT OF QUALIFICATIONS	ĵ
9.0 REFERENCES	,

### **LIST OF FIGURES**

8
-
0
6
7
21
2
2
2
2

# LIST OF TABLES

Table 1. List of Claims	7
-------------------------	---

# LIST OF APPENDICES

ł

Appendix A: Analytical Certificates Appendix B: Rock Sample Descriptions and Analytical Results Appendix C: Soil Sample Descriptions and Analytical Results

# **1.0 INTRODUCTION**

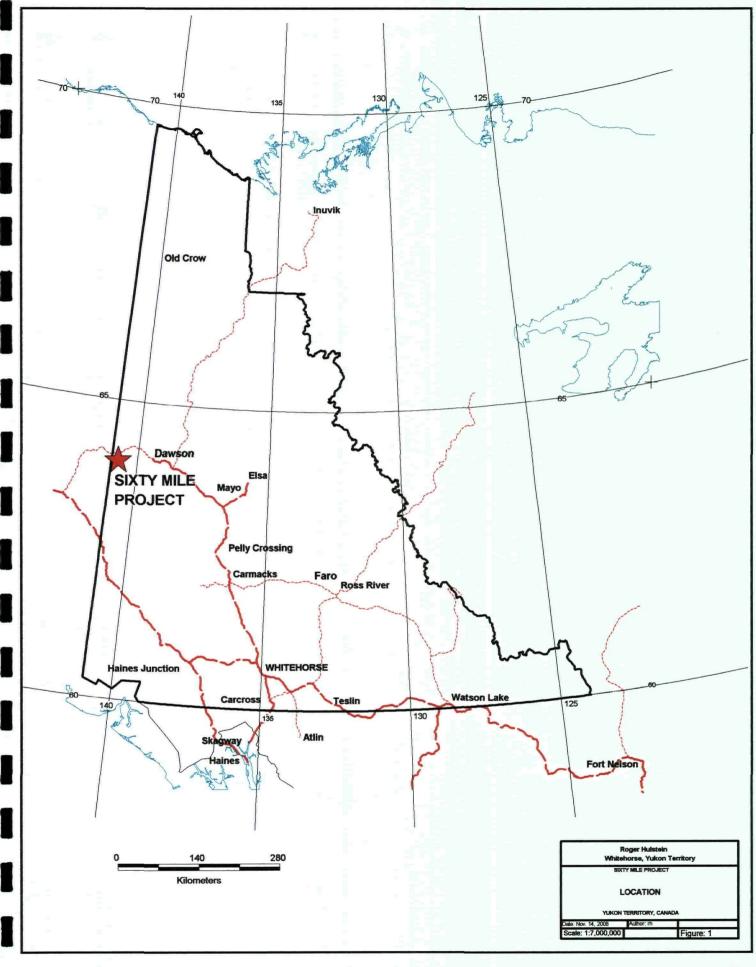
The purpose of this report is to describe the 2008 and 2009 work program and results to fulfill assessment requirements on the Toni 9-32 claims. Work in 2008 consisted of reconnaissance rock sampling and soil sampling within the broad gold (>28 ppb) in soil anomaly reported in 2007 (Hulstein, 2007), claim staking and heavy equipment access route selection. Work in 2009 consisted of excavator trenching over or in the area of the reported Glasmacher mineral occurrence. The report also describes the location, access, history, geological setting, known mineralization of the property and outlines a proposed exploration program to further explore the property for gold-silver bearing epithermal vein type mineralization.

# **1.1 Location and Access**

The Toni 9-32 claims are located in the Sixty Mile placer district and cover a portion of the valley bottom occupied by the northeast flowing Sixty Mile River at the mouth of tributary Big Gold Creek. The property is located on map sheet NTS 116C/02 and 115N/15 (Figure 1).

The property is located approximately 75 km due west of Dawson. Access to the project area is via the posted Sixty Mile Road that turns south off the Top of the World Highway (Hwy 11) at approximately kilometer 87. The claims are located at the bottom of the valley about 12 km from the turn off. Numerous roads built, maintained and changed, as needed by the local placer miners, access the northwest side of the claim group. The southeast side of the claim group is accessed by foot from roads in the valley bottom; this includes fording the Sixty Mile River. The roads are generally usable by 2WD truck from early June to late September. The Top of the World Highway is not maintained during winter months.

Daily plane service can be gained in Dawson City to Whitehorse, where there is daily jet airplane service to Vancouver, British Columbia and other points south.



### **1.2 Topography, Vegetation and Climate**

Topography in the region is typical of an incised peneplain with steep hillsides and rounded crests. The area was beyond the limits of the last two continental glacial events and minor evidence of glaciations in the region is a result of localized alpine glaciers. Alluvium in the valleys is mostly locally derived. Hillsides are covered with a veneer of colluvium also locally derived. Elevation ranges from 2,100 feet in the Sixty Mile valley to approximately 3,800 feet on nearby ridges. In the valley bottom permafrost is not a consideration except near the well vegetated hillsides. On the hillsides and ridge spurs, particularly northerly facing slopes and poorly drained areas, permafrost (often as frozen black muck) is a serious hindrance to exploration.

Rock outcrop in the area is restricted to ridges, small cliffs, creek bottoms and along road and trench cuts. The Glasmacher occurrence, located in the Sixty Mile River valley, has been exposed in the past by placer miners but is now covered by placer mined gravel tailings and waste piles. These placer tailings are estimated to be <5m-8m thick. Often bedrock type can be determined by angular boulders, of consistent type, piled (by placer miner activity) on top of the more typical rounded mixed lithologies of river gravel and boulders.

Vegetation in the valley bottoms consists of alder, dwarf birch, balsam fir, white and black spruce. Ground cover in areas of thin tree cover consists of alpine plants, 'buckbrush' (alder), dwarf willow and moss. Beavers dams in the numerous side channels and placer drainages result in many ponds that restrict and hinder access. Hillsides and ridges are covered with pine, spruce, birch and poplar on well drained slopes and stunted black spruce in areas of permafrost. Treeline is at approximately 4,000 feet. Vegetation is generally more abundant on east and south facing slopes. Grizzly and black bears as well as moose frequent the valley bottom, attracted by young vegetation on the placer tailings.

Climate is characterized by low precipitation and a wide temperature range. Winters are cold and temperatures of -30°C to -45°C are common. Summers are moderately cool with daily highs of 10°C to 25°C. Thunders showers are a common occurrence. Smoke from forest fires can be thick at certain times. The seasonal window for prospecting is from June to mid September.

### 1.3 History

The Sixty Mile district has been worked for placer gold since the discovery of gold on Miller Creek in 1892. Placer gold production likely exceeds the recorded figure of 435,109 ounces won from the creeks during the period 1892-2005 (LeBarge, 2006). The bulk of the placer gold was mined from Miller, Glacier, Bedrock, Little Gold, Big Gold Creeks and the Sixty Mile River.

Along with the placer activity, lode prospecting of the district has occurred since the first hard rock claims were staked over the nearby Miller galena occurrence in 1896 (Yukon MINFILE 116C 119).

Ulrich Glasmacher reported on the paragenesis and characterization of mineralization found in the Sixty Mile area in his 1984 Master's dissertation (Glasmacher, 1984). He was also responsible for other studies in the Sixty Mile River area (Glasmacher and Freidrich, 1992) including overseeing the diamond drilling on the Per auriferous vein occurrence (Yukon MINFILE 115N 041) for Klondike Gold Mining Corporation in 1988.

Kennecott Canada Exploration Inc. staked and optioned most of the ground beween Miller and Glacier Creeks and Sixty Mile River in 1998 (Hulstein and Zuran, 1999). Kennecott compiled the previous data and carried out a property mapping, property stream and soil geochemisty program, a gravity survey and a helicopter airborne magnetic survey.

In 2003 Roger Hulstein staked the Paul 1-10 and Toni 1-8 claims and vended them to North American Gold Inc. (now Northland Resources Inc.). North American Gold Inc. carried out a small trenching program in 2003 in an effort to locate the vein structure intersected in 1988 by Klondike Gold Mining Corporation (Hulstein, 2004). In 2005 and 2006 Hulstein staked the Toni 9-28 claims and in 2008 the Toni 29-32 claims.

The following is a summary from Yukon Minfile (2003), in chronological order, of significant work and events carried out in Sixty Mile valley and nearby area since 1892.

- 1892: Placer gold discovered in the Sixty Mile River area by C. Miller.
- 1896: Claims staked over the Miller galena occurrence located near the headwaters of Miller Creek.
- Early 1900's: Placer miners found coal in Tertiary sediments located north of the property
- 1915-1916: North American Trading and Transportation Co. dredged near the mouth of Miller Creek.
- 1920: (or prior), placer miners find galena, sphalerite and arsenopyrite veining discovered in Sixty Mile valley (Per occurrence Yukon Minfile).

- 1929-1941: The dredge was refurbished by the Holbrook Dredging Co. which mined in the Sixty Mile Valley.
- 1947-1959: A new dredge was constructed by Yukon Exploration and Yukon Placer Mining Co. which mined the lower reaches of Glacier and Big Gold Creeks and part of Sixty Mile River.
- 1965: Per occurrence in Sixty Mile Valley, near mouth of Miller Creek, trenched and tested by 2 short drill holes. Northern Exploration Limited trenched by buildozer in WY gulch area.
- 1981: W. Yaremico staked WY claims. Fred Chudy (Chumar Placers Ltd., later Klondike Sand and Gravel Co. Ltd. and Klondike Underground Mining Ltd.) commenced underground placer operations on Miller Creek (upper adit). Lower adit completed later and U/G mining ended 1990.
- 1984: The Glasmacher occurrence (Minfile No. 116C 153) was staked by Noranda.
- 1985: Erwin Kreft restaked Per occurrence and area. Jon Millhouse trenched Vance claims. Noranda soil, stream sediment and rock sampled their claims.
- 1986: Erwin Kreft trenched Per occurrence and near the Garea, Esso Minerals Canada Limited tied onto Erwin Kreft ground in Sixty Mile Valley.
- 1987: Esso mapped and sampled, Erwin Kreft trenched.
- 1988: Klondike Gold Mining Corporation optioned Per occurrence from Erwin Kreft and drilled 7 holes (765m) and intersected 8.76 gpt Au over 10.5 m in DDD D4/88-02. The option was subsequently dropped and no follow-up was carried out.
- 1989: Homestake Mineral Development Co. Ltd. optioned Esso's ground, then mapped and sampled it.
- 1990: Sixty Mile Placers Ltd. (G. Hakonson) auger drilled 205 holes from mouth of Big Gold Creek to 1.2km below Five Mile Creek.
- 1998: Kennecott Canada Exploration Inc. staked and optioned most of the ground beween Miller and Glacier Creeks and Sixty Mile River. Kennecott carried out a property mapping, property stream and soil geochemisty program, a gravity survey and a helicopter airborne magnetic survey. Trenching was carried out on the ridge southwest of Miller Creek and a few test pits in the Sixty Mile River valley.
- 2003: Roger Hulstein restaked the ground previously held by Kennecott and others as the Paul 1-10 and Toni 1-8 claims and vended them to North American Gold Inc. (now Northland Resources Inc.). North American Gold Inc. carried out a small trenching program in 2003 in an effort to locate the vein structure intersected in 1988 by Klondike Gold Mining Corporation (Hulstein, 2004). In 2004 North American Gold Inc. optioned the Vance 1-5 claims from the estate of prospector Jon Millhouse.
- 2005 2008: Roger Hulstein staked the Toni 9-14 claims and carried out a reconnaissance program in 2006. In 2006 he staked the Toni 15-28 claims and in 2008 the Toni 29-32 claims.

# 1.4 2008 - 2009 Work Program

The 2008 exploration program was carried out by R. Hulstein on July 27<sup>th</sup> and August 28<sup>th</sup> of 2008 (not including travel time). Work on July 27<sup>th</sup> consisted of scouting for a ford across the Sixty Mile River and an access route for heavy equipment to the 2007 gold in soil anomaly, on the east side of the Sixty Mile River. However access to the work site was thwarted by high water levels in the river that prevented fording the river on foot.

On August 28<sup>th</sup>, four additional claims (Toni 29-32) were staked on the NE side of the Toni claims covering the likely strike extent of the Sixty Mile Fault. Seven reconnaissance rock samples and two soil samples were collected within the 2007 soil anomaly and a river ford and a cross country access route for heavy equipment to the 2007 soil anomaly were located.

Subsequent to the above work a 3 year Class 3 Mining Land Use permit was approved in late 2008. The permit includes approvals for fording the river with heavy equipment, cross country travel, road upgrade and trenching by heavy equipment on the 2007 soil anomaly.

In 2009 K-1 Mining and Services, local placer miner Mike McDougall, was contracted to excavate a trench (Trench 09-01) over the reported location of the Glasmacher mineral occurrence. A 60m long by 2m wide and average 3 m deep trench was excavated on July 9, 2009.

A hand-held GPS receiver (Garmin GPSmap 60CSx) was used to plot locations of rock and soil samples, access route, claim posts and other features (approximate +/-5m accuracy). Soil samples were shipped to ALS Chemex in North Vancouver, B.C for gold analysis plus 34 other elements while rock samples were submitted to Eco Tech Laboratory in Whitehorse for sample preparation and analysis for gold and 28 other elements in Kamloops, B.C.

# 1.5 Claim Status

The Toni 9-32 claims cover an area of approximately 500 hectares and consist of 24 unsurveyed contiguous two-post Yukon 'Quartz' claims (Figure 2). The claims were staked according to the Yukon Quartz Mining Act and are located in the Dawson Mining District. They are shown on claim sheet 115N/15 and 116C/2 and are available for viewing at the Dawson Mining Recorders Office. The claims listed below (Table 1) are registered in the name of Roger Hulstein and are owned one hundred percent by him.

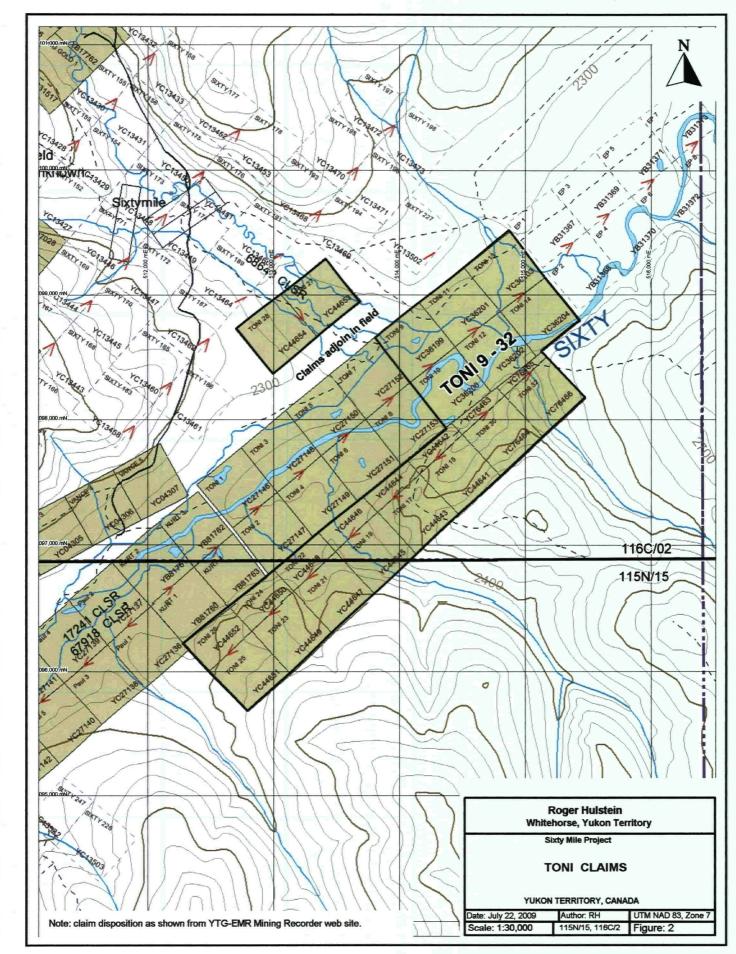
The Toni 9-14 were staked in June 2005, the Toni 15-28 in June 2006 and the Toni 29-32 in 2008.

Claim Name	Grant Number	Expiry Date*
Toni 9 - 10	YC36199-YC36200	January 10, 2012
Toni 11	YC36201	January 10, 2012
Toni 12	YC36202	January 10, 2012
Toni 13, Toni 14	YC36203, YC36204	January 10, 2012
Toni 15-28	YC44641-YC44653	January 10, 2012
Toni 29-32	YC76463-YC76466	January 10, 2012

#### Table 1. List of Claims

\*Subject to acceptance of this report.

The Toni 9-14 and all other claims shown on Figure 2, with the exception of the Toni 15-32 claims, are drawn on a best fit basis with respect to topography and preexisting claims. The Toni 15-32 claims are plotted as per coordinates obtained by a GPS receiver (Garmin GPSmap 60CSx). The earlier claims on the map (Figure 2), drawn when the claims were recorded, locally show claim overlaps and gaps between claims where there are actually none. Figures 3 to 5 show the approximate claim group outlines based on a later GPS claim survey of all the claims.



# 2.0 REGIONAL GEOLOGY

The first geological investigation of the Sixty Mile River area was by J. E. Spurr in 1896-97 (Spurr and Goodrich, 1898), followed by Cockfield in 1917 (Cockfield, 1921). More recently the area was mapped at 1:250,000 scale by Tempelman-Kluit in 1970-1972 (Tempelman-Kluit, 1973), Green in 1961 (Green, 1972) and Mortenson (1988, 1996).

The property lies between the Tintina and Denali Faults within the Ominica Belt (Wheeler and McFeely, 1991, Gordy and Makepeace, 2001). The area is underlain by two distinct lithotectonic (pre-accretion) assemblages: 1) medium to high grade, polydeformed metasedimentary and meta-igneous rocks of the Yukon-Tanana Terrane (YTNA and YTKS); and 2), deformed and metamorphosed rocks of the Slide Mountain Terrane (YTa) (Mortenson, 1988, 1996) (Figure 3). Both are mainly Paleozoic in age and were juxtaposed by regional scale thrust faults in early Mesozoic time, a period of terrane accretion that affected much of the northern Cordillera.

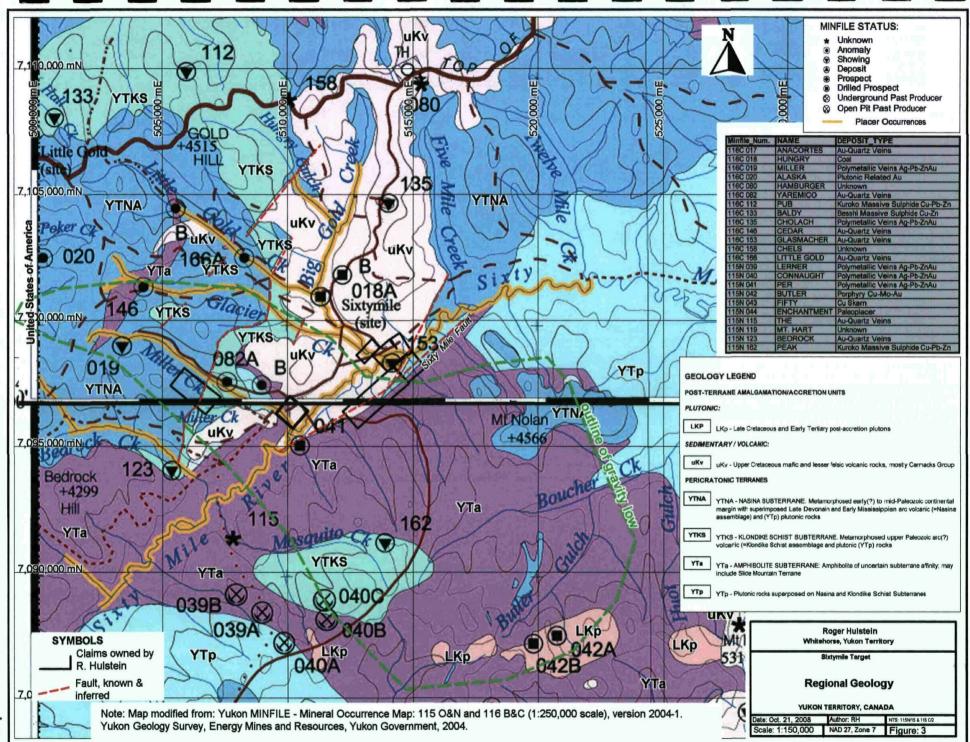
Locally, the Yukon Tanana Terrane consists of two main assemblages of supracrustal rocks, the Late Devonian (?) to mid-Mississippian Nasina assemblage (YTNA) and the mid-Permian Klondike Schist assemblage (YTKS) (Mortenson, 1996) and three distinct suites of metaplutonic rocks (YTp). The Nasina consists of metamorphosed psammites, mainly quartz-muscovite-chlorite schist and quartzite, +/- carbonaceous material, interlayered mafic schist and amphibolite and volumetrically minor amounts of marble, conglomerate and felsic schist. The Klondike Schist assemblage is comprised mainly of a variety of felsic schists interlayered with non-carbonaceous fine grained micaceous quartzite and quartz-feldspar-muscovite-biotite (+/- chlorite) schist. Local layers of chlorite schist, metagabbro, and rare bands of marble and carbonaceous quartz-muscovite schist are found within the felsic schists.

The Klondike placer camp, with approximately 20,000,000 million ounces of placer gold produced (Government of Yukon, 2007), is underlain predominantly by units of the Klondike Schist assemblage.

According to Mortenson (1996) three distinct suites of metaplutonic rocks (unit YTp) found within the Yukon Tanana Terrane are:

- 1) Devonian Mississippian feldspar and quartz-feldspar augen schist interpreted to be meta-porphyry sills and/or transposed dykes
- 2) Early Mississippian granitic orthogneiss, e.g. the Fiftymile batholith located in the Sixty Mile River area.
- mid-Permian quartz monzonite gneiss and quartz (+/-feldspar) augen schist (Sulphur Creek orthogneiss).

Rocks of the Paleozoic Slide Mountain Terrane (YTa) include massive greenstone and



ō

a variety of altered ultramafic rocks. The ultramafic rocks commonly denote thrust (and normal?) faults, are partially to wholly serpentinized and locally exhibit quartz-carbonate alteration. The mined out Clinton Creek asbestos deposit, located approximately 40 km to the north of the project area, is hosted by units of Slide Mountain Terrane.

Jurassic quartz monzonite bodies intrude the Yukon Tanana Terrane and Mortenson (1996) noted that field relationships indicate that they intruded prior to both Early (?) Jurassic regional thrust imbrication and Early Cretaceous normal faulting.

Post accretion units uncomformably overly rocks of the Tanana Terrane and Slide Mountain Terrane. These units consist of a sequence of unmetamorphosed sedimentary and volcanic rocks of middle (?) and Late Cretaceous age (unit uKv) (Mortenson, 1996). The lower part of the unit typically consists of sandstone and pebble to cobble conglomerate that is overlain by massive andestic flows and breccias that are correlated with the (68-76Ma) Carmacks Group.

Rare outcrops exposed in the Sixty Mile River valley and granitoid bodies (LKP) exposed to the southeast of the valley of fine to medium grained, equigranular biotitehornblende quartz monzonite and granodiorite are thought to be comagmatic with the Late Cretaceous Carmacks group volcanics.

Volumetrically minor amounts of Miocene aged quartz pebble conglomerate, sandstone, shale minor tuffs and olivine basalt are preserved in the Sixty Mile valley.

Units of the Nasina and Klondike Schist assemblage and the three associated orthogneiss units show the effects of penetrative ductile deformation and metamorphism at middle greenschist to lower amphibolite facies (Mortenson, 1996). Rocks of the Slide Mountain Terrane generally only display evidence of brittle shearing and open folding. Units of the Slide Mountain and Yukon Tanana terranes are juxtaposed along mainly shallowly to moderately dipping fault zones that are interpreted as thrust faults. Low angle normal faults are also interpreted between the Fiftymile Batholith and overlying rocks.

Middle and Late Cretaceous sedimentary and volcanic rocks are generally undeformed although they have been at least locally folded (Mortenson, 1996). The Tintina and Denali faults found to the northeast and southwest of the property respectfully, trend northwest and are major crustal-scale transcurrent dextral faults of Tertiary (?) age.

The Sixty Mile fault, a major northeast trending fault structure lying on a lineament that extends to Tok, Alaska, underlies the east side of the Sixty Mile River valley. In the Sixty Mile placer district, the valley follows a graben structure that down drops Cretaceous Carmacks Group rocks, on the northwest side, against Nasina and Klondike Schist Assemblage rock to the southeast. Other north to northeast trending fault structures are suspected to underlie prominent lineaments and locally form the contacts of the Carmacks Group volcanic rocks. The labeled Sixty Mile fault (Figure 3)

locally juxtaposes the Carmacks Group against metamorphic rocks of the Nasina Assemblage.

#### **Regional Metallogeny**

Regionally the shoshonitic Carmacks volcanic group (70 Ma), is a widespread igneous event with spatially and temporally related mineralization found throughout the west central Yukon (Smuk, 1999). Mineralization and mineral deposits associated with this event includes the Casino copper porphyry deposit (Selby and Nesbitt, 1998). There are a number of mineral occurrences along the trace of the Sixty Mile fault which extends to the southwest and can be traced to near Tok, Alaska.

The Caramcks Group, composed primarily of andesites, occupies the Sixty Mile Valley and is preserved due to down dropping in a block faulting environment. The region SE of the Sixty Mile fault has been uplifted with vertical movement possibly in the order of kilometers (Mortenson, pers. comm. 2007). This block faulting may be due to the intrusion of a granitoid body and subsequent uplift of over lying rocks.

A gravity low underlying the Sixty Mile placer gold district may indicate the presence of a large buried granitoid body. Small granitoid (LKP) bodies south of Mosiquito and Boucher Creeks, within the uplifted fault block, may be exposed apophasis of the larger buried granitoid body. Numerous polymetallic veins (Connaught, Yukon MINFILE 115N 040, etc.) are spatially associated with these granitoid bodies. These polymetallic veins may be the 'roots' of now eroded epithermal vein systems. An intriguing outcrop of granite found near the junction of Miller Creek and Sixty Mile River is possible additional evidence of a district wide underlying granitoid body.

The polymetallic vein occurrences, granitoid bodies, and the main placer gold creeks; Miller, Glacier, lower Little Gold and Sixty Mile River, between the mouth of Little Gold and Miller Creek, are encompassed by or on the margins of the gravity low anomaly. The nearby Per Minfile occurrence (Yukon MINFILE 115N 041), located approximately 4 km to the SW of the Glasmacher occurrence Figure 3), is described as a northeast trending, 8 cm to 60 cm wide, galena-sphalerite-arsenopyrite vein with a strike length of 61 m. Drilling on the Per intersected mineralized quartz veining that contained 11.522 g/t gold over 4.5 m (including 42.167 g/t over 1.5m) within a larger interval of 7.1 g/t gold over 12 m.

Silver-gold bearing quartz veins are found on the Mos property 5km to the southeast of the Sixty Mile property (Yukon MINFILE 115N 039 & 115N 040). These veins and others located even further east (~20km ESE of the project area), along with magnetite skarns and minor porphyry copper style mineralization are related to Cretaceous (?) (Carmacks ?) age granodiorite intrusions aligned in an approximate E-W direction.

Madrona Mining Limited acquired its ground in the Sixty Mile area at the head of Glacier Creek for potential volcanic massive sulphide deposits similar to those found in the Yukon Tanana Terrane in the Finlayson Lake area (Marchand, 1997). To date only minor showings of sphalerite and galena (Yukon MINFILE 116C 112 & 116C 133) have been found in the Sixty Mile area.

Placer gold, with an estimated production of 435,109 crude ounces, has been mined extensively in the Sixty Mile River valley, Miller, Glacier, Poker (US side), Little Gold and Bedrock Creeks in the vicinity of the Toni 9-32 claims (LeBarge, 2006). The source of most of this gold is unknown but according to Mortenson et al. (2006) is likely derived from metamorphogenic rather than epithermal veins. While a possible metamorphogenic source occurrence has been identified on the Rod claims, bedrock epithermal veins, such as the Per and Glasmacher occurrences, in the Sixty Mile valley have also been identified. Although they themselves may not be a significant source of placer gold they hint at possible undiscovered gold bearing resources. The epithermal type veining is hosted by pyrite-carbonate altered andesites, analogous to that of weak or distal porphyry style alteration and mineralization.

# 2.1 Surficial Geology

The Sixty Mile placer district lies within the Klondike Plateau (Duk-Rodkin, 1996). Dendritic 'V' shaped valleys dissect the plateau reflecting its largely unglaciated state. An exception is the Sixty Mile River valley which has been glaciated as shown by the presence of small lateral moraines.

The surficial geology is best summarized by Hughes, et al, (1986) as follows.

Quatemary deposits of the Sixty Mile river drainage basin include valley bottom alluvial plains and terraces, gulch alluvium, colluvial veneers and blankets, and scattered debris flows. The youngest Quatemary deposits include active colluvium, valley bottom gulch alluvium and the broad alluvial plain in the Sixty Mile River valley. Older alluvial deposits include the higher terrace levels in the upper reaches of Miller and Glacier Creeks, the second terrace in the lower reaches of Miller Creek, and the broad terrace found on the north side of the Sixty Mile River valley, both upstream and downstream from Miller Creek.

Colluvium veneer is the most common cover on the hillsides, averages 1-2m thick while colluvium blanket material, averages >3m thick. Colluvium conforms to bedrock topography and is composed of diamicton, rubble, and organic-rich silt and sand derived from bedrock sources by a variety of slope processes.

Valleys are filled with alluvium and locally form terraces up to 20m thick. The alluvium plain in the Sixty Mile Valley averages only <5m – 8m thick and forms a uniform sheet across the valley. Most of the Toni 9-14, 27, 28 claims are underlain by the above alluvium that has mostly been processed by placer miners.

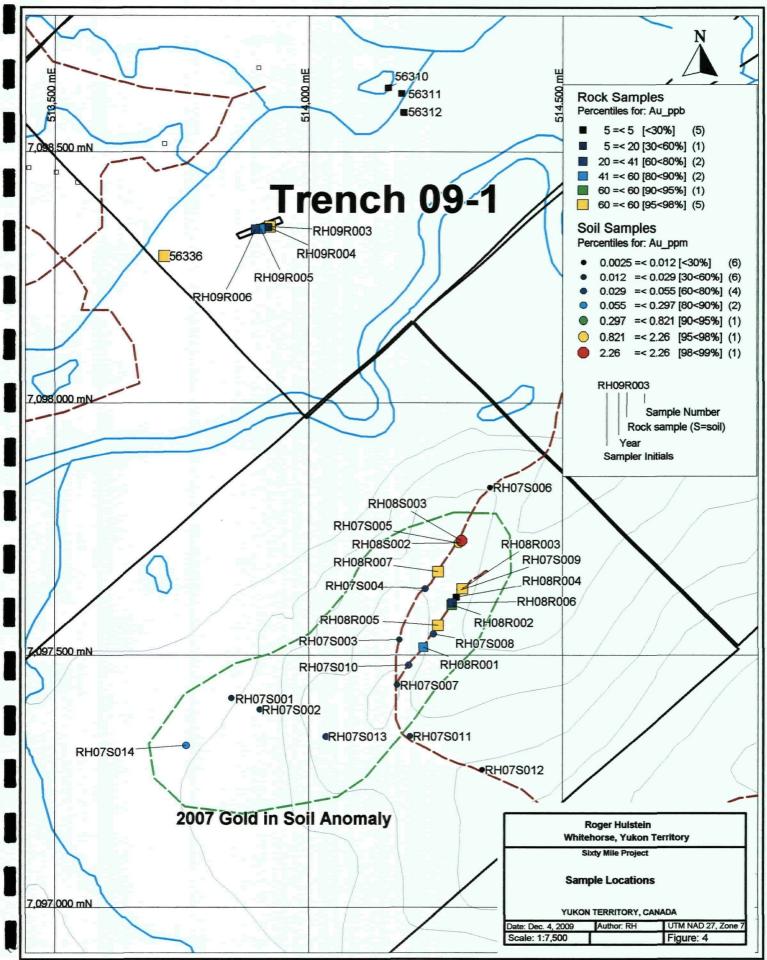
# 3.0 PROPERTY GEOLOGY

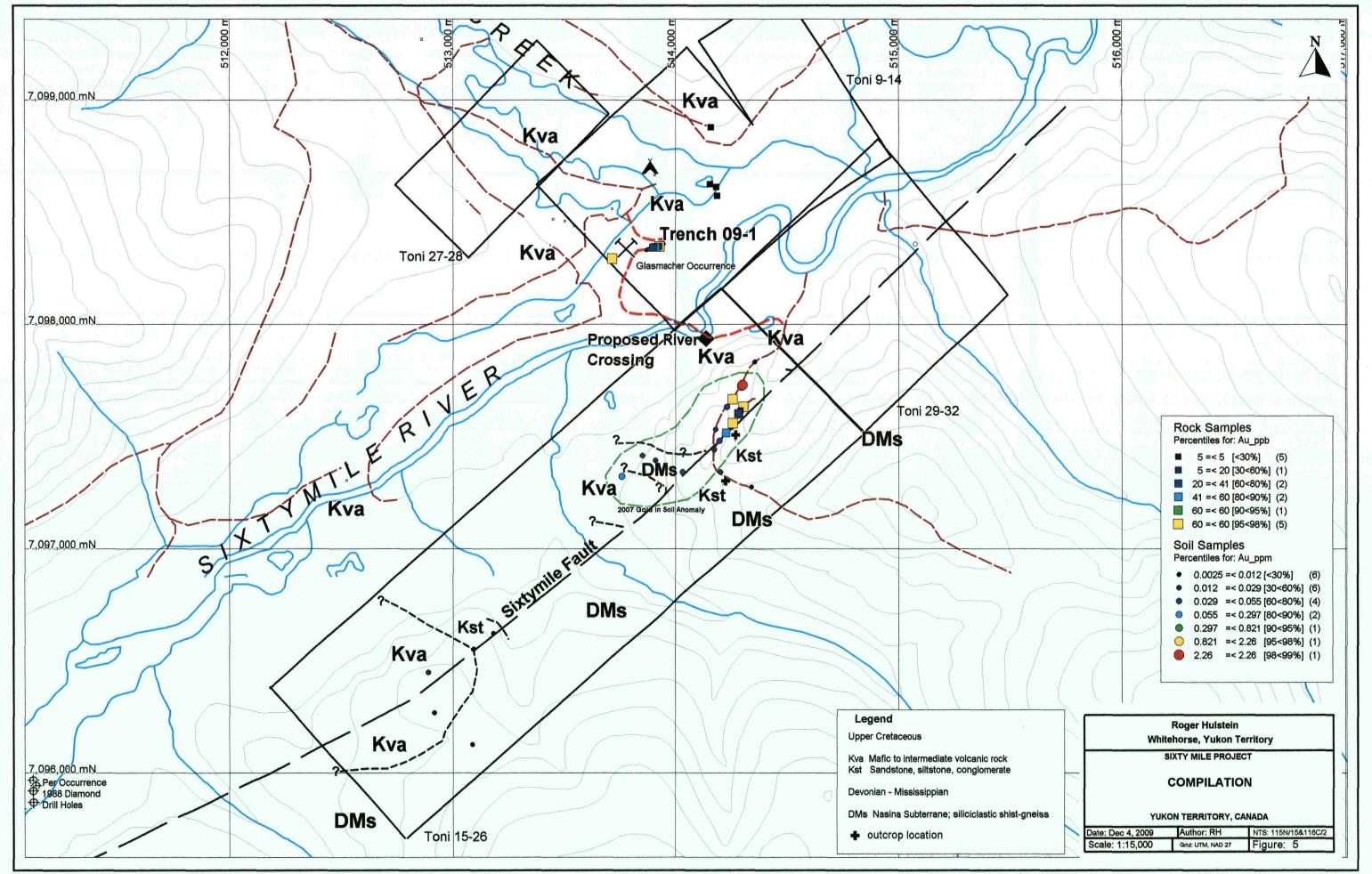
Where it can be determined various units of the Carmacks Group volcanics, predominantly of andesite composition, underlie the Sixty Mile River valley (Figures 4 and 5). Much of the geology shown on Figure 5 is derived from the geological data collected at field stations (Hulstein, 2007) with most contacts being extrapolated from aeromagnetic data collected by Kennecott Exploration Inc. (Hulstein and Zuran, 1999).

Where exposed on the hillsides to the northeast of the claims the Late Cretaceous Carmacks Group volcanic rocks are comprised of: blocky to sub-blocky, grey, rusty brown and purplish weathering porphyritic andesite and rare dacite (?); massive irregular, rusty brown weathering, pyroclastic monolithic block flow porphyritic andesite; and irregular grey brown weathering andesitic crystal tuff (?). Mineralogy consists of medium to coarse-grained phenocrysts of plagioclase, lesser hornblende, in a fine-grained groundmass. Andesite blocks within the pyroclastic andesites are sub-angular and average 20cm across in size. Unaltered andesitic crystal tuff is very magnetic.

Altered and faulted volcanic flow andesites and rarer breccias are exposed sporadically within abandoned and active placer pits in the Sixty Mile River valley. Geological contacts with other units have not been observed in outcrop; nevertheless, the Carmacks volcanic rocks are interpreted as resting non-conformably over fluvial quartz-pebble conglomerate, Nasina and/or Klondike Assemblages.

The bounding Sixty Mile fault juxtaposes the down dropped and preserved Carmacks volcanics on the northeast side against the metamorphic rocks of the Nasina Assemblage to the southeast (Figures 5). These quartz-feldspar gneissic rocks and similar gneissic to schistose rocks found adjacent to the projected Sixty Mile fault differ from the more biotite-muscovite rich schists found further to the southeast. Small outcroppings and float of quartz pebble conglomerate and white sandstone (unit Kst) found on or very near the projected trace of the Sixty Mile Fault are believed to be preserved basal remnants of the Carmacks Group. Complications to this simplified scenario are indicated by outcropping siliciclastic gneissic rocks on the northeast side of the fault and aeromagnetic patterns that cross the projected trace of the fault.





# 3.1 Structure

The prominent structural element in the area of the Toni property is the Sixty Mile fault, or lineament, in the Sixty Mile River valley (Figures 5). Paralleling structures to the northwest of the Sixty Mile fault are interpreted to be a series of normal faults. These normal faults in turn are believed to have been displaced by Tintina related (?) northwest trending faults and associated Reidel (?) faults (Hulstein and Zuran, 1999). They describe a disjointed 'Miller Structural Corridor' that may be a more prominent Tintina related structure cutting through relatively more brittle siliceous metasedimentary rocks. The NE trending Sixty Mile fault, shown on figures 3 and 5, is derived from Mortenson (1996), field mapping and interpretation from the Kennecott aeromagnetic survey (Hulstein and Zuran, 1999).

The NE trending faults that comprise the Sixty Mile lineament are believed to be related to stress transfer between the NW striking Denali and Tintina transcurrent fault systems (Lowe and Cassidy, 1995). The extensional tectonics that formed the graben, allowing the preservation of the Carmacks Group in the Sixty Mile Valley, is likely due to right-handed step-overs across dextral strike-slip fault systems (Lowe and Cassidy, 1995).

Glasmacher (1992) describes how both the Per and Glasmacher occurrences are structurally controlled and are found at the junction of three major fault systems: the ENE-WSW trending Sixty Mile River fault zone, a NW-SE trending fault zone and a NE – SW trending fault zone. He states that between these two occurrences, small NE-SW trending quartz-(carbonate)-sulphide veinlets crosscut the Carmacks volcanic rocks that underlie the Sixty Mile River valley.

Significant vertical displacement on the Sixty Mile fault, in the order of 100's of m, is indicated by thin sedimentary units of basal Carmacks Group preserved on the projected trace of the fault.

### **3.2 Alteration and Mineralization**

Alteration and mineralization have been found in two areas on the property; 1) in the Sixty Mile River valley and, 2) on the ridge on the southeast side on the property along the trace of the Sixty Mile fault within the 2007 soil anomaly.

#### Sixty Mile River Valley

Alteration and mineralization in the Sixty Mile River valley is poorly understood due to alluvial cover, now consisting mostly of placer tailings. Argillic-altered andesite is found locally in the Sixty Mile River valley and the placer miners have noted 'extensive' clay rich bedrock areas that hindered placer mining (Frank Hawker and Mike McDougall, pers. comm., 2003). Disseminated and thin veinlet type mineralization in propylitic and argillic altered andesite includes up to 5% disseminated pyrite cubes associated with chalcedony, ankerite, dolomite, calcite veinlets +/- trace galena, sphalerite and molybdendite.

Glasmacher and Freidrich (1992) note that the mineralization drilled by Klondike Gold Corporation on the Per occurrence (Yukon MINFILE 115N 041) and the Glasmacher occurrence located on the Toni 9-14 claims (Yukon MINFILE 116C 153), was formed in the upper parts of the same fossil geothermal system, likely associated with the Late Cretaceous magmatism. They also postulated that the differences between the two occurrences (Per has more sulfides) is due to different mixing environments of two fluid types; a near surface low temperature groundwater (150<sup>o</sup>C) fluid and a high temperature alkaline-chloride (260<sup>o</sup>C) fluid. Glasmacher and Freidrich (1992) noted four stages of mineral enrichment, due in part, to the mixing of the two fluid types, boiling of the fluids (boiling more important at the Glasmacher occurrence) and fluid wall rock interactions. Glasmacher and Freidrich (1992) classify both occurrences as gold-bearing epithermal volcanic-hosted occurrences of the quartz-adularia type, typical of areas with calc-alkaline volcanic rocks of andesitic to dacitic composition.

The alteration of the Carmacks Group andesitic volcanics in the valley, associated with hydrothermal activity and mineralization, is assumed to have taken place during the 70 Ma Cretaceous intrusive event. Hydrothermal alteration is comprised of two styles: 1), silicification (includes both quartz-carbonate-kaolinite and quartz-phengite-adularia zones of Glasmacher and Freidrich (1992) and 2), carbonate-pyrite altered volcanic rocks. Mineralogy of silification type is commonly manifested by clay minerals, sericite, bleaching, and silica flooding (quartz). Alteration appears to be more intense where the andesites have been brecciated, although it has not been determined at present if brecciation is due to hydrothermal or volcanic processes or both. Angular bleached clasts of psammites – quartzites have been noted within silicified vein-breccia material. The carbonate alteration consists of Ca-Mg-Fe carbonate minerals (calcite, ankerite and dolomite) +/- quartz and up to 5% coarse grained pyrite. Propylitic alteration (increased chlorite, rare epidote) is often coincident with the iron carbonate alteration.

The Glasmacher occurrence has been described as a gold bearing pyrite-arsenopyrite occurrence with quartz – sulphide grading up to 12 gpt gold (Glasmacher and Freidrich, 1992). Mineralization is described as gold and silver bearing sulphides found disseminatied, in stockwork and as vein type sulphides, all hosted by Carmacks Group volcanic rocks. At present the occurrence is covered by placer mined alluvium.

# 2007 Soil Anomaly

Along the projected trace of the Sixty Mile fault the andesites are fine grained, feldspar phyric and variably propylitic to phyllic altered and bleached. Locally the andesites are altered to a light grey gouge material. In the same area small outcrops of quartz pebble conglomerates have a yellow coloured - limonite matrix, weather the same colour and have trace pyrite on fractures.

The siliclastic gneisses with the 2007 soil anomaly weather a light (bleached?) tan – limonite colour, are weakly altered with minor clay – sericite and have trace pyrite on fractures. Rare quartz veinlets of mm scale were observed cutting the gneiss. At other locations near the projected trace of the bounding Sixty Mile fault (soil sample sites RH07S007 and RH07S011) the gneissic rocks weather with a prominent limonite – hematite coating.

Significant alteration and mineralization was not observed in the southeast corner of the property in 2007. The projected trace of the Sixty Mile fault is believed to be covered by black muck and permafrost where it crosses the northwest trending ridge spur.

Seven rock float samples of variably mineralized and altered rocks were collected along the trace of the Sixty Mile fault within the 2007 soil anomaly in 2008. The most visibly significant mineralization was sample RH08R002 of bleached, light grey siliceous andesite that contained minor galena on a hairline fracture. This type of altered rock float was abundant in the immediate area. Samples of yellow coloured, limonite stained conglomerate and sandstone appeared altered but were not visibly mineralized.

Soil samples RH08S002 and RH08S003 collected on an old bulldozer road, within 7m of each other and in the same area as RH07S005 that returned 0.821 ppm in 2007 (Hulstein, 2007), consisted of poorly developed brown soil with rounded fragments of fine grained grey pyritized andesite. There was no evidence of veining beyond (5%) limonite blebs. Essentially unaltered 'fresh' andesite is found approximately 3 m from sample RH08S002 suggesting a discrete 'altered' zone.

### 4.0 2009 TRENCHING PROGRAM

One day (10 hours) of excavator trenching was carried out utilizing a Hitachi ZX270 Excavator with an approximate 1 cubic yard bucket (Figure 6). The excavator time included mobilization and demobilization of the excavator from the nearby placer mine, excavating and backfilling the trench. The trench was over the approximate location (from Yukon MINFILE) of the Glasmacher mineral occurrence and within the magnetic low outlined in 2007 (Hulstein, 2007). The trench was oriented approximately east – west, some 60m long, 2m wide and averaged 2.5-3.0 m deep.

Inflowing water through the placer tailings hindered excavation. The influx of water was such that the trench was excavated in segments so that excavation could be done in dryer conditions as work progressed. Bedrock consisted of andesite, the east end at 0+02m W consisted of feldspar phyric purple andesite giving way to grey gougy brecciated and crushed andesite at 0+05m W (Figures 7 and 8). This was the most interesting rock type intersected as it contained fine grained pyrite, minor siliceous clasts and rare bands of clay cross cutting the crushed andesite breccia. At 0+20m W bedrock consisted of clay altered feldspar phyric andesite with trace pyrite. From 0+30m W to 0+60m W bedrock consisted of weak to moderately clay altered purple andesite breccia. Disseminated pyrite varied from nil to trace with <1% of the feldspar phenocrysts altered to fuchsite. Found on the surface at 0+60m are angular boulders of andesite breccia with white clay altered clasts in fresher matrix, representing possible hydrothermal alteration. The highest gold value returned from 4 rock grab samples was 40 ppb.

Following sampling the trench was back filled and the surface reclaimed (Figures 9 and 10).



Figure 6. Mike McDougall excavating Trench 09-01.



I

I

Figure 7. Above. Trench 09-01 at 0+01m showing placer gravels overlying altered (yellow -tan collar) altered andesite. Bucket just under 1m wide.

Figure 8. Above right. Gougy brecciated and crushed andesite from Trench 09-01 at 0+05m (rock sample RH09R004).

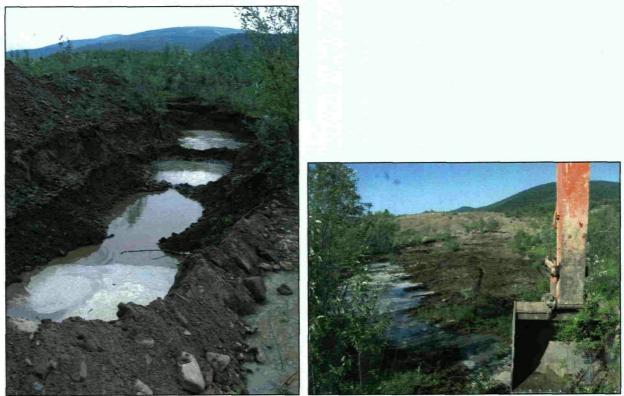


Figure 9. Above. Trench 09-01 prior to back filling.

Figure 10. Above right. Trench 09-01 following reclamation

Toni 9-32 Claims

# **5.0 GEOCHEMISTRY**

Seven rock float samples collected in 2008 and four collected in 2009 from Trench 09-01 were analyzed by EcoTech Laboratory Ltd. of Kamloops, B.C. Rock samples were pulverized, a 50 gram sub sample fire assayed and a gold determination made by atomic absorption. An additional 28 elements were analyzed by aqua regia ICP-AES. The analytical certificates are presented in Appendix A and sample descriptions and analytical results in Appendix B. Rock sample locations are shown on Figures 4 and 5.

The rock samples returned less than 60 ppb Au. Sample RH08R002, which had galena on a fracture, contained 3.3 ppm Ag and 1494 ppm Pb. Arsenic values for all eleven samples is less than 160 ppm and Bi is <15 ppm and except for RH09R003, Cu <60 ppm, Sb < 5 ppm and Zn <92 ppm. Sample RH09R003 returned 3.2 ppm Ag, 135 ppm As, 336 ppm Cu, 6504 ppm Mn, 3188 ppm Pb, 55 ppm Sb and 895 ppm Zn, all weak to highly anomalous values for the area.

A total of 2 soil samples and one stream sediment sample collected in 2008 from the property were submitted to Chemex of North Vancouver, B.C. for geochemical analysis. Samples were screened to -100 mesh, a 50 gram sub sample fire assayed and a gold determination made by atomic absorption. An additional 34 elements were analyzed by aqua regia ICP-AES. The analytical certificate is presented in Appendix A and sample descriptions and analytical results in Appendix C. Sample locations are shown on Figure 4.

The two soil samples were collected by grub hoe (Geo-Tul) from the middle of a bulldozer road at a depth of about 0.25m, below the disturbed ground. Samples were collected within 1 to 3 meters of sample RH07S005 that returned was 0.821 ppm Au in 2007. Sample RH08S002 returned 0.214 ppm Au and sample RH08S003 returned 2.26 gpt Au. Sample RH08S003 also contained 5 ppm Ag, 12 ppm Bi, 312 ppm Cu, 206 ppm Pb and 398 ppm Zn indicating polymetallic sulfide mineralization.

The one stream sediment sample was collected from a small creek on the northeast side of the property and contained insufficient fines for Au analysis and the other elements analyzed for were not anomalous.

#### 6.0 CONCLUSIONS AND RECOMMENDATIONS

Within the 2007 gold in soil anomaly the 2008 work program confirmed the anomalous gold in soil value of 0.821 ppm. Two similar soil samples collected from the vicinity in 2008 returned 0.214 ppm and 2.26 ppm Au along with anomalous values for Ag, Bi, Cu, Pb and Zn. Seven rock float samples collected along an old bulldozer road within the 2007 soil anomaly returned <60 ppb Au. One rock float sample of bleached siliceous andesite with minor galena on a fracture contained 3.3 ppm Ag and 1494 ppm Pb. The remainder of the samples, of variably altered andesite and siliceous sedimentary rocks contained low values for most elements analyzed for.

In spite of the low geochemical values from the rock samples, the extent of the 2007 soil anomaly, confirmation of the high gold in soil value by a 2.26 ppm gold in soil sample in 2008, the altered and weakly mineralized rock samples, taken together are encouraging evidence of possible epithermal gold mineralization. The Sixty Mile fault, a regional structure, trends northeasterly between the Denali and Tintina Fault systems, is locally dilatant, likely has significant vertical movement (in the 100's of meters) and appears to be a major control on the distribution of gold in the Sixty Mile placer camp.

Trenching in 2009 located brecciated clay rich andesite anomalous in a suite of elements (Ag, As, Cu, Mn, Pb, Sb, Zn) possibly indicating nearby epithermal gold mineralization (Glasmacher occurrence) in the Sixty Mile River valley. Based on these results and mineralization located by previous workers (Glasmacher and nearby Per occurrence) additional work is warranted and recommended.

As the Glasmacher occurrence is covered by placer mined gravels, geophysical methods such as electromagnetics, induced polarization and VLF in addition to more magnetic surveys are recommended. Anomalous areas (magnetic lows, conductors) should then be trenched or tested by pits as the mined alluvial cover is not very deep (often <3m). A geophysicist should be consulted in the planning stages of the next geophysical program to determine the optimum technique and approach.

Additional mapping, prospecting and soil sampling is recommended in the area of the 2007 gold in soil anomaly which were confirmed in 2008. The 2007 and 2008 results along indicate the presence of a significant precious metal bearing epithermal system along the Sixty Mile fault and at the Glasmacher occurrence. A Class III MLUR permit for trenching is now in hand and an access route for heavy equipment to the 2007 soil anomaly has been established. The 2007 ground magnetic survey should be extended to cover the area of anomalous soil samples and the suspected trace of the Sixty Mile fault. A magnetic susceptibility meter should be used to correlate the degree of magnetism observed in outcrop with the airborne and ground magnetic surveys.

All of the above work should be directed towards defining epithermal gold targets for a diamond drill program.

# 7.0 STATEMENT OF COSTS

The following costs were incurred on the Toni 9-32 claims in 2008 and 2009.

TONI 9-32 CLAIMS, NTS: 115N/15, 116C/2				
Geochemistry		··········	-	
	<u>No.</u>	<u>\$/Sample</u>	<u>\$Subtotal</u>	
Soil and stream sediment samples	3	33.67	101.01	
Rock Samples	11	31.08	341.88	
				\$442.89
Personnel (2006)				
	Deve	Daily	Outstatel	
R Unistain R Co R Coo (moderint)	Days	Rate	Subtotal	
R.Hulstein, B.Sc,P.Geo. (geologist)	2	500	1000	
Aug. 28, 2008 & July 9, 2009 1/2 July 10, 2009	∠ 0.5	500	250	
Total Labour Costs	0.5	500	250	\$1,250.00
				φ1,200.00
Field Expenses				
		Rate/item		
Freight and postage			21.5	
Meals and Accommodation			156.62	
Vehicle Rental (days)	4	100	400	
Fuel (for vehicle) and propane			376.54	
Communications (sat phone rental)	4	10	40	
Phone call charges	-	10	30	
Trenching (K-1 Mining and Services)			1942.5	
Total Field Costs			1342.5	\$2,967.10
				<b>~</b> _,~~
Report and Project Management				
Person				
R. Hulstein	1.5	500	750	
Drafting & Reproduction			100	
Total Report Costs				\$850.00
Total Project Cost				\$5,510.0

Respectfully submitted,

Roger Hulstein, B.Sc., P.Geo.

٠,

,

.

### **8.0 STATEMENT OF QUALIFICATIONS**

I, Roger W. Hulstein, of:

106 Wilson Drive
 Whitehorse, Yukon Territory
 Y1A 0C9,

do hereby certify that:

- 1. I am a mineral exploration geologist with over 20 years of experience working in the Yukon.
- 2. I am a graduate of Saint Mary's University, Halifax, with a degree in geology (B.Sc., 1981) and have been involved in geology and mineral exploration continuously since 1978.
- 3. I am a fellow of the Geological Association of Canada (F3572).
- 4. I am registered as a professional geoscientist (No. 19127) with the Association of Professional Engineers and Geoscientists of the Province of British Columbia.
- 5. I am the author of this report on the Toni 9-32 claims in the Dawson Mining District, Yukon. The report is based on personal examination of the ground on various dates, with the last work carried out on July 27<sup>th</sup>, August 28<sup>th</sup>, 2008, July 9, 2009 and on referenced sources.

Roger Hulstein, B.Sc., FGAC, P.Geo.

December 8, 2009

Toni 9-32 Claims

#### 9.0 REFERENCES

- Cockfield, W.E., 1921. Sixty Mile and Ladue Rivers Area, Yukon. Geological Survey of Canada, Mem. 123.
- Duk-Rodkin, A., 1996. Surficial Geology, Dawson, Yukon Territory; Geological Survey of Canada. Open File 3288, scale 1:250,000.
- Glasmacher, U., 1984. Geology, Petrology and Mineralization in the Sixty Mile River area, Yukon Territory. Unpublished Diploma Thesis, Technical University of Aachen, Germany. Available at Yukon Energy, Mines and Resources library, Whitehorse, Yukon.
- Glasmacher, U., and Freidrich, G., 1992. Volcanic-hosted epithermal gold-sulphide mineralization enrichment processes, Sixty Mile River area, Yukon Territory, Canada: in Yukon Geology Vol. 3; Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, p.271-291.
- Government of Yukon, 2007. Gold. Commodity Brochure Series, Yukon Geological Survey, Department of Energy, Mines and Resources, 8 p.
- Green, L.H., 1972. Geology of Nash Creek, Larsen, and Dawson Map Areas, Yukon Territory. Geological Survey of Canada Memoir 364.
- Hornbrook, E. H. W., P. W. B. Friske, 1986. Regional Stream Sediment and Water Geochemical Reconnaissance Data, Yukon 1986. Open File 1364.
- Hulstein, R. and Zuran, R., 1999. Report on the Geological, Geochemical and Geophysical Work on the the Sixty Mile Project. Yukon Energy, Mines & Resources. Assessment Report No. 094055.
- Hulstein, R., 2007. Geophysical, Geological and Geochemical Report on the Toni 9-28 Claims. Yukon Energy, Mines & Resources. Assessment Report No. 094857.
- Hughes, R.L., Morrison, S.R. and Hein, F.J., 1986. Placer Gravels of Miller Creek, Sixty Mile River Area, in Yukon Geology, Vol. 1; Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, p.50-55.
- Keyser, H.J., 1989. Report on the 1988 Geological and Geochemical Assessment Work on the Headwaters Project. Yukon Energy, Mines & Resources. Assessment Report No.092692.
- Labarge, W., 2006. Placer Geology and Prospective Exploration Targets of Sixty Mile River Area, West-Central Yukon. In: Yukon Exploration and Geology 2005, D.S.

Emond, G.D. Bradshaw, L.L. Lewis and L.H. Weston (eds.), Yukon Geological Survey, p. 155-174.

- Lowe, C. and Cassidy, J.F., 1995. Geophysical Evidence for Crustal Thickness Variations between the Denali and TIntina Fault Systems in West-Central Yukon. Tectonics, Vol. 14, No. 4, pp 909-917.
- Marchand, M., 1997. Summary Report, Poker Creek Exploration 1997, Geochemical Survey. Unpublished report for the Yukon Territorial Government to fulfill obligations for Yukon Mining Incentive Program project #97-036.
- Mortenson, J.K., 1988. Geology, Southwestern Dawson Map Area, Yukon, 1:250,000 scale map. Geological Survey of Canada, Open File 1927.
- Mortenson, J.K., 1996. Geological Compilation Maps of the Northern Stewart River Map Area, Klondike and Sixty Mile Districts, 1:50,000 scale. Indian and Northern Affairs Canada, Northern Affairs: Yukon Region, Open File 1996-1G.
- Mortenson. J.K., Chapman, R., LeBarge, W. and Crawford, E., 2006. Compositional Studies of Placer Gold and Lode Gold from Western Yukon: Implications for Lode Sources. *In:* Yukon Exploration and Geology 2005, D.S. Emond, G.D. Bradshaw, L.L. Lewis and L.H. Weston (eds.), Yukon Geological Survey, p. 247-255.
- Selby, D., and Nesbitt, B.E., 1998. Biotite Geochemistry of the Casino Porphyry Cu-Mo-Au Occurrence, Dawson Range, Yukon. *In:* Yukon Exploration and Geology 1997, Yukon Geological Survey, p. 83-88.
- Smuk, K., 1999. Metallogeny of Epithermal Gold and base Metal Veins of the Southern Dawson Range, Yukon. Unpublished Thesis, McGill University, Montreal. Available at; Yukon Energy, Mines and Resources library, Whitehorse, Yukon.
- Spurr, J.E., and Goodrich, H.B., 1898. Geology of the Yukon Gold District, Alaska. U.S. Geological Survey, Eighteenth Annual Report, 1896-97, Pt. III.
- Tempelman-Kluit, 1973. Reconnaissance Geology of Aishihik Lake, Snag and Part of Stewart River Map-Areas, West Central Yukon. Geological Survey of Canada, Paper 73-41.
- Wheeler, J.O. and McFeely, P. 1991. Tectonic assemblage map of the Canadian Cordillera and adjacent parts of the United States of America; Geological Survey of Canada, Map 1712A, scale 1:20,000,000.
- Yukon MINFILE A database of mineral occurrences. Available digitally: www.geology.gov.yk.ca/databases/download/html

Appendix A

**Analytical Certificates** 

Sixty Mile Project

21-00-00

Alex Stewart Geochemical ECO TECH LABORATORY LTD. 10041 Dallas Drive KAMLOOPS, B.C. V2C 6T4

www.alexstewart.com

Phone: 250-573-5700 Fax : 250-573-4557

JJ/nw

df/8202s

XLS/08

ICP CERTIFICATE OF ANALYSIS AK 2008- 8325

Hulstein Geological Services 106 Wilson Drive Whitehorse, Yukon Postal CodeY1A 5R2

No. of samples received<sup>.</sup> 15 Sample Type<sup>.</sup>Rock **Project: 60 Mile** Submitted by.Roger Hulstein

Values in ppm unless otherwise reported

		Au											-																
<u> </u>	Tag #	ppb	Ag Al %	As	Ba	Bl	<u>Ca %</u>	Cd	Co	<u>Cr</u>	Cu	Fe %	La	<u>Mg %</u>	Mn		<u>Na %</u>	Ni	<u>P</u>	Pb	Sb	<u>Sn</u>	<u>Sr</u>	<u></u>	<u> </u>	<u>v</u>	<u></u>	<u> </u>	Zn
1	RH08R001	20	2.1 0.35	35	225	15	0 01	1	1	103	71	1.89	10	0 01	35	136	0.01	5		522	<5	<20	4	0 06	<10	6	<10	1	92
2	RH08R002	25	3.3 0 54	90	215	<5 ·	<0.01	<1	<1	74	60	1 23	20	0 04	30	5	0.01	3	290	1494	<5	<20	<1	0.02	<10	5	<10	<1	66
3	RH08R003	60	0.6 0.61	45	195	15	0.02	<1	1	76	39	1.62	20	0 10	53	10	0.02	3	310	70	<5	<20	15	0 05	<10	8	<10	<1	90
4	RH08R004	5	<0.2 0 51	20	90	15	1.04	<1	5	204	7	1.56	10	0 42	532	3	0.06	13	260	12	<5	<20	27	0.05	<10	17	<10	5	64
5	RH08R005	45	14 0.52	30	245	10	0.01	<1	<1	86	22	0.94	20	0 05	26	10	0.01	4	140	74	5	<20	7	0.01	<10	4	<10	2	35
6	RH08R006	15	0:6 0 26	20	195	5 -	<0.01	<1	<1	138	12	0.72	<10	0 01	26	2	<0.01	4	80	152	<5	<20	5	0.01	<10	2	<10	<1	38
7	RH08R007	60	<0.2 0.36	160	100	10 •	<0:01	<1	<1	80	9	0.69	20	<0 01	26	<1	<0.01	<1	110	24	<5	<20	4	0 05	<10	3	<10	2	52
8	RH08R008	30	<0.2 0 84	<5	60	25	2.82	3	39	87	153	7.86	10	1.46	1087	29	<0.01	27	1410	58	<5	<20	54	0.13	<10	82	<10	11	157
9	RH08R009	330	19 0.55	1880	60	45	4.70	34	27	78	305	7 00	<10	1 98	5389	23	0.01	43	1120	144	15	<20	95	0.11	<10	56	<10	17	469
10	RH08R010	30	0.4 0 50	135	50	<5	7 15	6	21	92	130	7.04	<10	2.96	6889	4	0.01	21	910	16	30	<20	140	0 13	<10	60	<10	6	150
11	RH08R011	100	08211	45	65	10	1.01	6	27	169	47	4 60	10	1 25	1486	27	0.03	54	1270	104	15	<20	76	0.05	<10	109	<10	8	265
12	RH08R012	25	<02009	275	105	10	0.01	<1	<1	181	6	0 39	<10	<0 01	29	<1	<0 01	<1	130	26	<5	<20	10	0.02	<10	4	<10	<1	1
13	RH08R013	10	<0 2 0.44	10	55	15	0.07	<1	10	143	43	2.15	10	0 03	92	1	0.02	15	300	16	<5	<20	2	0.03	<10	19	<10	7	50
14	RH08R014	5	<0.2 078	10	260	15	0.15	1	3	122	6	1 78	10	0 13	136	4	0 02	7	530	24	<5	<20	20	0 02	<10	26	<10	7	51
15	RH08R015	5	<0.2 0.25	30	330	10	0.03	<1	1	123	8	1 20	<10	<0 01	436	<1	<0 01	<1	130	12	<5	<20	32	0.08	<10	12	<10	2	25
<u>QC DAT</u> Repeat:	<b>A:</b>																												
1	RH08R001	15	22 0.34	25	210	10	0 01	<1	1	98	66	1 86	10	<0 01	34	125	0.01	3	220	520	<5	<20	5	0.08	<10	4	<10	1	88
9	RH08R009	325	22 0.04	20	2.0			••	•					-001	•		0.01	Ŭ		010			Ŭ	0.00		-		•	
10	RH08R010	25	03047	150	50	<5	7 05	8	21	89	128	7.01	<10	2 <del>9</del> 2	6839	16	0.01	27	910	14	40	<20	136	0 10	<10	61	<10	5	148
11	RH08R011	90		100				-									0.01		0.0	••				• .•		•••		•	
Resplit:																													
1	RH08R001	10	22 0.34	35	200	10	0.01	<1	1	86	63	1.95	10	<0.01	35	127	0.01	3	230	536	<5	<20	3	0.06	<10	5	<10	<1	87
<b>Standare</b> Pb129a SF30	d:	835	11.4 0.88	15	65	<5	0.45	63	7	11	1421	1.57	<10	0.71	367	3	0.03	9	460	6174	15	<20	30	0.03	<10	19	<10	<1 :	9916

Stewart Group

ECO TECH LABORATORY LTD. 10041 Dallas Drive KAMLOOPS, B.C. V2C 6T4 www.stewartgroupglobal.com

Phone<sup>.</sup> 250-573-5700 Fax : 250-573-4557 ICP CERTIFICATE OF ANALYSIS AW 2009-8085

Roger Huistein 1106 Wilson Dr Whitehorse, YT Y1A 0C9

No. of samples received. 6 Sample Type: Rocks **Project: 60 Mile** Submitted by: Roger Hulstein

#### Values in ppm unless otherwise reported

Et #.	Tag #	Au(ppb)	Ag	AI %	As	Ba	BI	Ca %	Cd	Co	Cr	Cu	Fe %	La	Mg %	Mn	Mo	Na %	Nł	P	Pb	Sb	Sn	Sr	TI %	U	V	W	Y	Zn
1	RH09R001	255	1.5	0.10	3995	285	<5	<0.01	<1	1	170	15	2.26	<10	<0.01	26	2	0.01	5	480	473	65	<20	28	<0.01	<10	17	<10	<1	4
2	RH09R002	145	53	0.53	7215	1005	<5	0.05	2	3	188	92	4 11	60	<0.01	28	5	0.01	6	3620	2820	80	<20	735	<0.01	<10	102	<10	18	48
3	RH09R003	40	3.2	0.24	135	45	<5	2 19	10	13	101	336	3 43	10	0.63	6504	15	0 01	17	460	3188	55	<20	34	<0.01	<10	18	<10	10	895
4	RH09R004	10	<0 2	0 38	15	705	<5	0.80	2	6	84	7	1.39	10	0.23	593	<1	0.01	11	690	57	<5	<20	36	<0 01	<10	28	<10	7	203
5	RH09R005	20	<0.2	0.49	<5	120	<5	3.58	1	11	60	2	2 42	20	1.15	2154	<1	0.02	13	910	18	<5	<20	934	<0 01	<10	30	<10	11	233
6	RH09R006	15	<0.2	0.32	<5	285	<5	2.73	1	7	75	2	1.85	<10	0.71	1621	<1	0.01	8	760	13	<5	<20	61	<0 01	<10	17	<10	8	232
<u>QC D</u> Repe	ATA:																													
1	RH09R001	255	1.5	0.10	4035	280	<5	<0.01	<1	1	165	15	2.23	<10	<0.01	26	2	0.01	5	490	471	65	<20	28	<0.01	<10	17	<10	<1	3
2	RH09R002	125		••••			•		·								-		-										•	-
Resp	lit:																													
1	RH09R001	195	1.7	0 10	4105	265	<5	<0.01	<1	1	176	15	2.23	<10	<0.01	26	2	0.01	5	490	480	65	<20	27	<0 01	<10	16	<10	<1	3
Stan	dard:																													
Pb12	<b>9a</b>		11.0	0 83	5	60	<5	0 44	58	6	11	1411	1.56	<10	0.68	346	2	0.03	5	410	6235	15	<20	25	0 03	<10	16	<10	2	9904
OXE	74	615																												
<b>Ag</b> : /	Aqua Regia   Aqua Regia   Og Fire Assa	Digest / A	A Fini		lish.																									

NM/nw df/2\_8078S XLS/09

ECO TECH LABORATORY LTD. Norman Monteith B.C. Certified Assayer



# ALS CHEMEX EXCELLENCE IN ANALYTICAL CHEMISTRY

10 HULSTEIN, ROGER 106 WILSON DR. WHITEHORSE YT Y1A 5R2 Page: 1 Finalized Date: 2-OCT-2008 This copy reported on 21-JAN-2009 Account: HULROG

ALO Callada Liu		
212 Brooksbank Avenu North Vancouver BC V		
Phone: 604 984 0221	Fax. 604 984 0218	www.alschemex.com

Project: 60 Mile P.O No. <sup>-</sup> This report is for 15 Soil samples submitted to our lab in Vancouver, BC, Canada on 11-SEP-2008. The following have access to data associated with this certificate: ROGER HULSTEIN R. HULSTEIN ROGER HULSTEIN	CE	RTIFICATE VA0812875	7
The following have access to data associated with this certificate:	P.O No. <sup>1</sup> This report is for 15 Soil samp	les submitted to our lab in Vancou	iver, BC, Canada on
	The following have access	_	

	SAMPLE PREPARATION	1
ALS CODE	DESCRIPTION	
WEI-21	Received Sample Weight	
LOG-22	Sample login - Rcd w/o BarCode	
SCR-41d	Screen to -100um, save both	
	ANALYTICAL PROCEDUR	ES
ALS CODE	DESCRIPTION	INSTRUMENT
Au-AA24	Au 50g FA AA finish	AAS
ME-ICP41	35 Element Aqua Regia ICP-AES	ICP-AES

To: HULSTEIN, ROGER ATTN: R. HULSTEIN 106 WILSON DR. WHITEHORSE YT Y1A 5R2

Signature:

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

Colin Ramshaw, Vancouver Laboratory Manager





ALS Canada Ltd 212 Brooksbank Avenue North Vancouver BC V7J 2C1 Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com O: HULSTEIN, ROGER 106 WILSON DR. WHITEHORSE YT Y1A 5R2 Page: 2 - A Total # Pages: 2 (A - C) Plus Appendix Pages Finalized Date: 2-OCT-2008 Account: HULROG

#### Project 60 Mile

CERTIFICATE OF ANALYSIS VA08128757

mple Description	Method Analyte Unite LOR	WEI-21 Recvd Wt. kg 0 02	ME-ICP41 Ag ppm 0 2	ME-ICP41 AI % 0 01	ME-ICP41 As ppm 2	ME-ICP41 B ppm 10	ME-ICP41 Ba ppm 10	ME-ICP41 Be ppm 0 5	ME-ICP41 Bi ppm 2	ME-iCP41 Ca % 0 01	ME-ICP41 Cd ppm 0 5	ME-ICP41 Co ppm 1	ME-ICP41 Cr ppm 1	ME-ICP41 Cu ppm 1	ME-ICP41 Fe % 0 01	ME-ICP41 Ga ppm 10
D08S001		0.52	02	1 39	29	<10	540	05	<2	0.62	06	17	42	31	3 62	<10
D089002		0 30	20	2 59	46	<10	260	23	3	0 32	4.1	16	17	58	9 90	10
D08S003		0.16	50	3 74	130	<10	190	2.4	12	0.42	1.0	18	13	312	14 25	10
D089004		0.70	09	1 35	1720	<10	260	<0.5	<2	0.63	0.5	10	27	23	3 48	<10
D089005		0 30	0 2	1.42	122	<10	200	<0.5	<2	0.23	<0 5	6	23	11	2 31	<10
D085006		0.66	0.2	1 18	181	<10	350	0.6	<2	0.38	05	7	23	23	2.47	<10
D08S007		0.50	0.3	1 50	174	<10	360	0.6	<2	0.28	<0 5	9	26	20	2 54	10
D08S008		0.48	0.3	1 42	171	<10	380	06	<2	0 45	<0 5	14	41	32	3 47	<10
D08S009		0.36	0.3	1 24	216	<10	360	0.6	<2	0.56	<0 5	8	34	27	3 38	<10
D08S010		0 64	0.3	0 94	105	<10	260	0.5	<2	0.25	05	7	28	23	2 41	<10
D08S011		0.60	0.2	1 23	34	<10	310	05	<2	0 32	05	5	25	26	2 30	<10
D08S012		0.62	0.3	0 98	620	<10	180	<0 5	<2	0 31	<0.5	7	29	10	2 29	<10
D08S013		0.56	1.2	0.59	1410	<10	300	<0.5	<2	0 27	<0 5	9	22	39	4 58	<10
D08S014		0.62	0.6	1.23	619	<10	230	<0.5	<2	0 32	<0.5	10	34	22	3 08	<10
D08S015		0.54	<0.2	2 81	32	<10	160	0.9	<2	3 74	0.7	81	421	154	7 74	10

nments: Additional Au-AA24 result for sample RD085003 is 1 86 ppm gold



**EXCELLENCE IN ANALYTICAL CHEMISTRY** ALS Canada Ltd 212 Brooksbank Avenue North Vancouver BC V7J 2C1

Phone: 604 984 0221 Fax: 604 984 0218 www alschemex.com

To: HULSTEIN, ROGER 106 WILSON DR. WHITEHORSE YT Y1A 5R2

Page: 2 - B Total # Pages: 2 (A - C) Plus Appendix Pages Finalized Date: 2-OCT-2008 Account: HULROG

Project 60 Mile

CERTIFICATE OF ANALYSIS VA08128757

mple Description	Mothod Analyto Units LOR	ME-ICP41 Hg ppm 1	ME-ICP41 K % 0 01	ME-ICP41 La ppm 10	ME-ICP41 Mg % 0 01	ME-ICP41 Mn ppm 5	ME-ICP41 Mo ppm 1	ME-ICP41 Na % 0 01	ME-ICP41 Ni ppm 1	ME-ICP41 P ppm 10	ME-ICP41 Pb ppm 2	ME-ICP41 S % 0 01	ME-ICP41 Sb ppm 2	ME-ICP41 Sc ppm 1	ME-ICP41 Sr ppm 1	ME-ICP41 Th ppm 20
D085001 D085002 D085003 D085004 D085005		<1 <1 1 <1 <1	0 08 0 53 0 48 0 09 0.05	10 30 10 10 10	0 80 0.72 1.09 0.35 0.34	1165 1915 709 801 240	<1 5 6 1 <1	0.01 0.08 0.07 0 02 0 01	31 5 2 19 12	900 2370 3980 1000 500	29 475 206 27 33	0.05 0.82 0.75 0 12 0.03	3 4 <2 7 <2	6 12 12 4 3	39 302 359 43 20	<20 <20 <20 <20 <20 <20
D085006 D085007 D085008 D085009 D085009 D085010		<1 <1 <1 <1 <1 <1	0.08 0.06 0.09 0.08 0.09	50 20 20 30 50	0 38 0 35 0.45 0 36 0 38	340 411 458 180 297	<1 <1 <1 <1 <1 <1	0.01 0.01 0.01 0.01 0.01 0.01	17 18 35 35 15	440 470 540 460 290	32 24 15 29 36	0.03 0 02 0 03 0.03 0.02	3 2 3 5 3	6 4 9 6 6	34 25 34 36 30	20 <20 <20 <20 20
D08S011 D08S012 D08S013 D08S014 D08S015		বা বা বা বা 1	0.08 0 09 0 31 0 09 0.07	40 20 20 20 10	0.48 0.40 0.15 0.46 3.22	546 510 245 794 1385	<1 <1 1 <1 20	0 01 0.02 0 01 0 01 0 07	15 13 33 20 425	380 510 850 650 1220	32 44 27 31 20	0.03 0 07 0.76 0.09 2.03	2 3 8 4 3	6 3 4 4 21	29 33 92 32 132	20 <20 <20 <20 <20

nments: Additional Au-AA24 result for sample RD085003 is 1 86 ppm gold



ALS Canada Ltd

### ALS Chemex EXCELLENCE IN ANALYTICAL CHEMISTRY

To: HULSTEIN, ROGER 106 WILSON DR. WHITEHORSE YT Y1A 5R2

Page: 2 - C Total # Pages: 2 (A - C) Plus Appendix Pages Finalized Date: 2-OCT-2008 Account: HULROG

212 Brooksbank Avenue North Vancouver BC V7J 2C1 Phone: 604 984 0221 Fax 604 984 0218 www alschemex com

Project 60 Mile

CERTIFICATE OF ANALYSIS VA08128757

npie Description	Metbod Analyte Units LOR	ME-ICP41 Ti % 0 01	ME-ICP41 Ti ppm 10	ME-ICP41 U ppm 10	ME-ICP41 V ppm 1	ME-ICP41 W ppm 10	ME-ICP41 Zn ppm 2	Au-AA24 Au ppm 0 005	
0085001		0.04	<10	<10	66	<10	154	NSS	
085002		0.04	<10	<10	120	<10	1845	0.214	
085003		0.07	<10	<10	169 47	<10	398 91	2.26 0.087	
088004 088005		0.04 0.04	<10 <10	10 <10	47 43	10 <10	62	0.079	
· · · · · · · · · · · · · · · · · · ·									······································
0085006		0.05	<10	<10	38	<10	99	0 071	
089007		0.04	<10	<10	43	<10	73	0 045	
085008		0.03	<10	<10	52	<10	87	0 035	
0085009		0.02	<10	<10	40	<10	69	0.047	
0085010		0 03	<10	<10	28	<10	91	0 080	
0085011		0.03	<10	<10	33	<10	101	0.038	
085012		0 05	⊲10	<10	35	20	82	0.135	
085013		0.01	<10	<10	27	<10	90	0.622	
085014		0.04	<10	<10	42	<10	83	0.100	
089015		0.23	<10	<10	171	<10	172	0.010	

nments: Additional Au-AA24 result for sample RD085003 is 1.86 ppm gold





212 Brooksbank Avenue North Vancouver BC V7J 2C1 Phone 604 984 0221 Fax' 604 984 0218 www.alschemex.com To: HOLSTEIN, ROGER 106 WILSON DR. WHITEHORSE YT Y1A 5R2 Page: Appendix 1 Total # Appendix Pages: 1 Finalized Date: 2-OCT-2008 Account: HULROG

Project: 60 Mile

CERTIFICATE OF ANALYSIS VA08128757

sthod	
_L METHODS	NSS is non-sufficient sample
-	
<u></u>	

## Appendix B

# **Rock Sample Descriptions and Analytical Results**

Appendix B

	Toni 9-32 0	laims;	Roo	:k sam	ples	colle	ected 200	08 and 2	009.			
Sample_No.	Sample_Type	Claims	Grid	Datum	Zone	Z_ltr	Date	Time	East	North	Elev_ft	Ft_M
RH08R001	Float_rock	Toni	UTM	NAD27	7	w	29-Aug-08	1.06:22AM	514226	7097516	2573	-
RH08R002	Float_rock	Toni	UTM	NAD27	7	w	29-Aug-08	1 39:24AM	514282	7097600	2525	ļ
RH08R003	Float_rock	Toni	UTM	NAD27	7	w	29-Aug-08	2:05:20AM	514303	7097632	2501	
RH08R004	Float_rock	Toni	UTM	NAD27	7	w	29-Aug-08	2:13:08AM	514291	7097615	2501	
RH08R005	Float_rock	Toni	UTM	NAD27	7	w	29-Aug-08	2:26:41AM	514255	7097559	2540	ft
RH08R006	Float_rock	Toni	υтм	NAD27	7	w	29-Aug-08	2:18.47AM	514283	7097604	2510	ft
RHOBROO7	Float_rock	Toni	UTM	NAD27	7	W	29-Aug-08	2.53:04AM	514255	7097666	2523	ft
RH09R003	Trench grab	Toni	UTM	NAD27	7	w	08-Jul-09	2:16:37PM	513923	7098348	668	m
RH09R004	Trench grab	Toni	UTM	NAD27	7	w	08-Jul-09	2 01:30PM	513920	7098347	668	m
RH09R005	Trench grab	Toni	υтм	NAD27	7	w	08-Jui-09	3:42:49PM	513905	7098344	668	m
RH09R006	Trench grab	Toni	UTM	NAD27	7	w	08-Jul-09	4:21:48PM	513995	7098343	668	m

ļ

1

1

Sample_No.	Description	Au_ppb	Ag_ppm	Al%	As_ppm	B_ppm	Ba_ppm	Be_ppm	Bl_ppn
RH08R001	Toni claims; Float of glassy quartz veining and hairline to mm qtz veins cross cutting bleached sugary white 'andesite'. Trace pyrite. Pieces of possibly brecciated massive glassy qtz. Minor limonite an FeOx as hairline veinlets and blebs in qtz.	20	21	0 35	35		225		1
RH08R002	Toni claims; Fine grained light grey silicified andesite Limonite and yellow stained Crosscut by hairline fracture with one containing bleb of galena. Abundant similar rock on road.	25	33	0.54	90		215		
RH08R003	Toni claims, Float of sillcified grey to clear glassy quartz with minor pyrite and limonite specks and altered white andesite with disseminated pyrite. Similar to sample R001.	60	0.6	0.61	45		195		15
RH08R004	Toni claims, Float of light grey quartz veining, limonite and yellow stained. Quartz likely recrystallized silicified bleached andesite. <=1% diss pyrite.	5	-0.2	0.51	20		90		1
RH08R005	Toni claims; Float, grey quartz - likely silicified sandstone of chert pebble conglomerate unit Yellow and limonite stained. Similar to R004, piece of quartz rich schist-quartzite	45	1.4	0.52	30		245		10
RH08R006	Toni claims; float of chert - quartz pebble conglomerate and medium grained sandstone, rounded pebbles up to 5cm. Weak limonite and yellow stain.	15	0.6	0 26	20		195		Ę
RH08R007	Toni claims; float of schist/gneiss, quartz rich.	60	-0.2	0.36	160		100		10
RH09R003	Trench 09-1, 0+02m, grab from bottom; purple andesite breccia, feld phyric, minor bleaching, tr py, almost fresh.	40	3.2	0.24	135		45		-f
RH09R004	Trench 09-1, 0+05m, grab from bottom; Grey gougy brx -crushed andesite, minor dis fine gr py in more siliceous andesite clasts, rare clay bands cutting gouge-brx.	10	-0.2	0.38	15		705		
RH09R005	Trench 09-1, 0+20m, grab from bottom; grey decomposed clay alt fled phyric andesite, tr py, minor green fuchsite alteration.	20	-0.2	0.49	-5		120		-{
RH09R006	Trench 09-1, 0+30m, grab from bottom; clay altered purple feldspar andesite brx, no vis py, minor fuchsite alteration.	15	-0.2	0.32	-5		285		

Appendix B

\_\_\_\_

Sample_No.	Ca%	Cd_ppm	Co_ppm	Cr_ppm	Cu_ppm	Fe%	Ga_ppm	Hg_ppm	K%	La_ppm	Mg%	Mn_ppm	Mo_ppm	Na%	NI_ppm	P_ppm	Pb_ppm	S_%
RH08R001	0.01	1	1	103	71	1.89				10	0.01	35	136	0.01	<u>. 5</u>	220	522	
RH08R002	-0.01	-1	-1	74	60	1.23				20	0 04	30	5	0.01	3	290	1494	
RH08R003	0.02	-1	1	76	39	1 62				20	0 10	53	10	0 02	3	310	70	
RH08R004	1.04	-1	5	204	7	1.56				10	0.42	532	3	0.06	13	260	12	
RH08R005	0.01	-1	-1	86	22	0.94				20	0.05	26	10	0 01	4	140	74	
RH08R006	-0.01	-1	-1	138	12	0.72				-10	0.01	26	2	-0.01	4	80	152	
RH08R007	-0.01	-1	-1	80	9	0.69				20	-0.01	26	-1	-0.01	-1	110	24	
RH09R003	2.19	10	13	101	336	3.43				10	0 63	6504	15	0.01	17	460	3188	
RH09R004	0.80	2	6	84	7	1.39				10	0 23	593	-1	0.01	11	690	57	
RH09R005	3.58	1	11	60	2	2.42		 	Ĺ	20	1 15	2154	-1	0.02	13	910	18	
RH09R006	2.73	1	7	75	2	1.85				-10	0.71	1621	-1	0.01	8	760	13	

I.

•

Sample_No.	Sb_ppm	Sc onm	Se_ppm	Sn_ppm	Sr_ppm	TI%	Th ppm	TI ppm	U pom	V ppm	W ppm	Y ppm	Zn ppm	Certificate
oumpio_no.	oo_ppm		ee_ppm	on_ppm	<u>pp</u>		.u_ppm	- ppm	<u> </u>	•_pp://	u_ppm	pp	an_ppm	
RH08R001	-5			-20	4	0.06			-10	6	-10	1	92	Ecotech AK08-8325
RH08R002	-5			-20	-1	0.02			-10	5	-10	-1	68	Ecotech AK08-8325i
RH08R003	-5			-20	15	0.05			-10	8	-10	-1	90	Ecotech AK08-8325
RH08R004	-5			-20	27	0.05			-10	17	-10	5	64	Ecotech AK08-8325i
RH08R005	5			-20	7	0.01			-10	4	-10	2	35	Ecotech AK08-8325i
RH08R006	-5			-20	5	0 01			-10	2	-10	-1	38	Ecotech AK08-8325i
RH08R007	-5			-20	4	0 05			-10	3	-10	2	52	Ecotech AK08-8325i
RH09R003	55			-20	34	-0 01			-10	18	-10	10	895	AW 2009- 8085
RH09R004	-5	.   		-20	36	-0.01			-10	28	-10	7	203	AW 2009- 8085
RH09R005	-5			-20	934	-0.01			-10	30	-10	11	233	AW 2009- 8085
RH09R006	-5			-20	61	-0 01			-10	17	-10	8	232	AW 2009- 8085

: [

`

~

## Appendix C

## **Soil Sample Descriptions and Analytical Results**

,

.

	Toni	9-32 CI	aims; Soi	I samples	colle	cted 2	)08.		-						
Sample_Number	Туре	Property	Date	Time	Grid	Datum	Zone	W	East	North	elev	ft	Туре	Depth	Quality
RH08S001	Silt	Toni	28-Aug-08	11:04:18PM	UTM	NAD27	7	w	515077	7098359	2216	ft	silt	0 1	Good
RH08S002	soil	Toni	29-Aug-08	12:10:56AM	UTM	NAD27	7	w	514300	7097725	2535	ft	soil	0.3	good
RH08S003	soil	Toni	29-Aug-08	12:14.24AM	UTM	NAD27	7	w	514301	7097729	2516	ft	soil	0.3	good

4 T

.

-

ल

								-
Note	Number	Au_ppm	Ag_ppm	Al_%	As_ppm	B_ppm	Ba_ppm	Be_ppm
1X0.2m creek, Float of mic sch with minor calcite veinlets, -20% fine								
grained grey and green rocks including some andesite.	RD08S001	0	0.2	1.39	29	10	540	0.5
very close to RH07S005. Brown soil with rounded grains of fine								
grained grey pyritized andesite, -5% lim in soil	RD08S002	0 2 1 4	2	2.59	46	10	260	2.3
very close to RH07S005 and 7m from RH08S002. Similar to								
RH08S002, brown soil with rounded grains of fine grained grey								
pyritized andesite, -2% lim in soil	RD08S003	2.26	5	3.74	130	10	190	2.4

Appendix C

		1	<u> </u>			[									<u> </u>		1
Bi_ppm	Ca_%	Cd_	ppm	Co_ppm	Cr_ppm	Cu_ppm	Fe_%	Ga_ppm	Hg_ppm	K_%	La_ppm	Mg_%	Mn_ppm	Mo_ppm	Na_%	NI_ppm	P_%
2	0.62		0.6	17	42	31	3.62	10	1.	0.08	10	0.8	1165	1	0.01	31	900
3	0.32		4.1	16	17	58	9.9	10	1	0.53	30	0.72	1915	5	0.08	5	2370
12	0.42		1	18	13	312	14.25	10	1	0.48	10	1.09	709	6	0.07	2	3980

,

,

Appendix C

													1
Pb_ppm	<b>S_%</b>	Sb_ppm	Sc_ppm	Sr_ppm	Th_ppm	TI_%	Tl_ppm	U_ppm	V_ppm	W_ppm	Zn_ppm	Method	Certificate
29	0.05	3	6	39	20	0.04	10	10	66	10	154	ME-ICP41	VA08128757
475	0.82	4	12	302	20	0.04	10	10	120	10	1845	ME-ICP41	VA08128757
206	0.75	2	12	359	20	0.07	10	10	169	10	398	ME-ICP41	VA08128757

-----

#### Roger Hulstein 106 Wilson Dr., Whitehorse, Yukon, Y1A 0C9 Phone (867) 668-2549 Email: Hulstein@northwestel.net

December 28, 2009

DEC 3 0 2000

Re: YMIP 09-112, Sixty Mile Project

Dear Ms. Daniele Heon;

Included with this package are two reports, one on the Rod property and the other on the Toni claims, together they form part of the Sixty Mile project. As per the YMIP contract, a financial summary report, copy of expenses and a completed final submission form are also enclosed.

The two reports were written as assessment reports and document work carried out in the last claim year, which extends approximately from mid year to mid year, and so includes work from the summer of 2008. Some of this work was previously reported in a YMIP report for contract 08-012.

All the work and expenses that qualify for the 2009 YMIP contract are described in the reports but to help break out the 2009 work the following notes may be helpful.

#### 2009 work on the Rod 1-8 claims (Rod property)

I spent the day of July 8<sup>th</sup> on the property, mapped geology, prospected and collected 9 soil samples, 2 rock samples and 1 stream sediment sample. All 2009 samples are numbered; RH09xxxx. Full samples descriptions, results and maps are included with the Rod property report.

#### 2009 work on the Toni 9-32 claims

I spent the day of July 9<sup>th</sup> on the property, supervised the excavation of a trench by K-1 Mining and collected 4 rock samples from the trench. All 2009 samples are numbered; RH09Rxxx. Full samples descriptions, results and maps are included with the Toni property report.

I drove to the Sixty Mile site on July 7<sup>th</sup> from Whitehorse and returned on the evening/night of July 9<sup>th</sup>.

If you require further details of the 2009 activities please give me a call.

Yours truly,

Roger Hulstein, P.Geo. Hulstein Geological Services

DEC 3 0 2009

### REPORT ON THE 2008 AND 2009 GEOCHEMICAL AND GEOLOGICAL WORK ON THE ROD PROPERTY

Claim Names: Grant No's

Rod 1-8 YC36191-YC36198

### DAWSON MINING DISTRICT, YUKON TERRITORY NTS: 116C/02 & 115N/15

Latitude 64° 00' N Longitude 140° 52' W

Work conducted: August 29, 2008 & July 8, 2009

Owner: **Roger Hulstein** 106 Wilson Dr. Whitehorse, Yukon Territory Y1A 0C9

Prepared by: Roger Hulstein, B.Sc., P.Geo.

December 18, 2009

2009 Rod Property

#### SUMMARY

The Rod property located in west-central Yukon, covers an area of approximately 160 hectares and is comprised of 8 Yukon two-post Quartz claims held by Roger Hulstein. They are located in the Sixty Mile River area, approximately 75 km west of Dawson City, Yukon. The area is an active placer gold mining district having produced approximately 435,000 crude ounces since 1892 (Labarge, 2006. The bedrock source for most of the placer gold is largely unknown. Access can easily be gained in the summer by four wheel drive vehicles.

The purpose of the 2008 and 2009 program was to fulfill assessment requirements and to define and follow up on mineralization exposed in Trench 99-6. Work in 2008 and 2009 consisted of soil and rock sampling and limited geological mapping.

Trench 99-6 is located within a >40 ppb gold in soil anomaly identified by Kennecott Exploration in 1999 that covers an area of approximately 1 km x 1 km, the Miller Creek soil anomaly (Hulstein and Zuran, 1999). The property is underlain by Paleozoic siliciclastic schists and quartzites commonly striking northeast and dipping southeast. A northeast thrust fault bisects the property and other northeast trending faults are suspected to underlie creek beds and lineaments.

Mineralization in Trench 99-6 is confined to narrow arsenopyrite bearing siliceous bands conformable to foliation and in cross cutting fractures, within a quartzite unit below the contact with an overlying micaceous schist unit. Previous rock sampling over this mineralized quartzite in the trench averaged 1.6 g/t gold over 13 m. Soil samples collected in the vicinity of the trench defined an anomalous trend (>71 ppb Au) trending northeast over a minimum distance of 400 m. Additional auriferous source areas are indicated as anomalous (>71 ppm Au) soil samples were found to the north and northwest of Trench 99-6 within the Miller Creek soil anomaly.

Results from the geochemical sampling show that while samples may be anomalous in arsenic they may not be anomalous in gold and vice versa. West of Salsa Gulch gold seems to be related to arsenopyrite bearing quartz veins cutting quartzite. East of Salsa Gulch the source of gold and arsenic is more ambiguous and likely hosted in northeast trending shear zones, faults and veins cutting schistose rocks (as in Trench 99-6). A mineralized structure may underlie Salsa Gulch, as two out of four soil samples collected closest to Salsa Gulch returned 460 ppb and 622 ppb gold.

Based on the anomalous geochemical results from the 2008 and 2009 work program and previous work, the presence of a significant gold bearing mineralized system is indicated, therefore additional work is warranted and recommended.

### **TABLE OF CONTENTS**

SUMMARY	. i
TABLE OF CONTENTS	ii
1.0 INTRODUCTION	1
1.1 Location and Access	1
1.2 Topography, Vegetation and Climate	3
1.3 History	4
	6
1.5 Claim Status	7
2.0 REGIONAL GEOLOGY	
2.1 Surficial Geology 1	4
3.0 PROPERTY GEOLOGY and MINERALIZATION 1	5
4.0 GEOCHEMISTRY 1	9
5.0 CONCLUSIONS and RECOMMENDATIONS 2	3
6.0 STATEMENT OF COSTS	4
	5
8.0 REFERENCES 2	26

## **LIST OF FIGURES**

Figure 1. Location	
Figure 2. Claim Map	
Figure 3. Regional Geology	
Figure 4. Rod Claims Geology	
Figure 5. Gold Geochemistry & Geology	
Figure 6. Arsenic Geochemistry and Geology	

### LIST OF TABLES

Table 1.	List of	Claims:	7
Table 1.	LIST OF	Claims:	

### LIST OF APPENDICES

Appendix A:	Analytical Certificates
Appendix B:	Rock Sample Descriptions and Analytical Results
Appendix C:	Soil Sample Descriptions and Analytical Results
Appendix D:	Stream Sediment Sample Descriptions and Analytical Results

### **1.0 INTRODUCTION**

The purpose of this report is to describe the 2008 and 2009 work program and results to fulfill assessment requirements on the Rod 1-8 claims. The Rod property consist of eight two post mineral, Yukon 'Quartz', claims staked in 2005 and owned 100% by Roger Hulstein, the author of this report.

Work in 2008 consisted of reconnaissance rock, soil and stream sediment sampling within the broad gold in soil anomaly (>40 ppb) identified by Kennecott Exploration in 1999, the Miller Creek soil anomaly (Hulstein and Zuran, 1999). Excavator Trench 99-06, located within the Miller Creek soil anomaly contained highly anomalous gold values averaging 1.6 g/t over 13 m. Additional soil sampling in 2008 enhanced the size and coherence of the gold in soil anomaly around Trench 99-6.

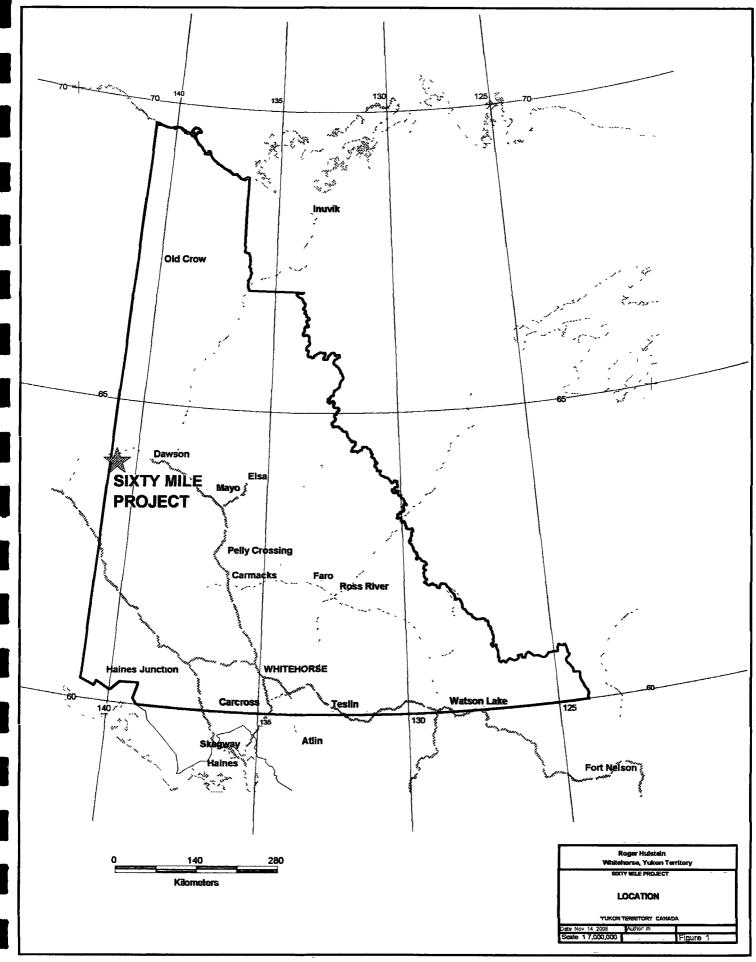
The report also describes the location, access, history, geological setting, known mineralization of the property and outlines a proposed exploration program to further explore the property for gold deposits.

### **1.1 Location and Access**

The Rod property is located in the Sixty Mile placer district and covers a portion of the ridge between Miller and Bedrock Creeks west of the northeast flowing Sixty Mile River. The property is located on map sheets NTS 115N/15 and 116C/02 (Figure 1).

The property is located approximately 75km due west of Dawson. Access to the project area is via the posted Sixty Mile Road that turns south off the Top of the World Highway (Hwy 11) at approximately kilometer 87. This road leads to the valley bottom and by keeping to the main road going southwesterly just past Miller Creek a small side road going west leads to the ridge top and beyond to Bedrock creek. The property can be accessed by ATV or by foot following an ATV trail going northwest on the ridge top for approximately a kilometer. In the Sixty Mile River valley and its main tributaries placer miners build, maintain and change, as needed, the access roads. The roads are generally usable by 2WD truck from early June to late September. The Top of the World Highway is not maintained during winter months.

Daily plane service can be gained in Dawson City to Whitehorse, where there is daily jet airplane service to Vancouver, British Columbia and other points south.



### 1.2 Topography, Vegetation and Climate

Topography in the region is typical of an incised peneplain with steep hillsides and rounded crests. The area was beyond the limits of the last two continental glacial events and evidence of glaciation in the region is a result of localized alpine glaciers. Alluvium in the valleys is locally derived. Hill slopes are covered with a veneer of colluvium also locally derived. Elevation ranges from 2,100 feet in the Sixty Mile valley to approximately 4,000 feet on nearby ridges. As the property is located on a northeast facing hillside permafrost is a consideration and locally a problem for sampling, trenching, etc.

Rock outcrop in the area is restricted to ridges, small cliffs and creek bottoms along with road and trench cuts. Outcrop on the property is found on the ridge top on the southwest side of the property, on ridge spurs, and in incised creeks. Bedrock geology can often be determined by examining rock float or felsenmeer, spoil from soil sampling, although significant movement downhill is common. Solifluction is common in permafrost areas. As much of the Rod property is on a north facing slope permafrost is a hindrance and frequent consideration when carrying out exploration activities.

Vegetation in the valley bottoms consists of alder, dwarf birch, balsam fir, white and black spruce. Ground cover in areas of thin tree cover consists of alpine plants, 'buckbrush' (alder), dwarf willow and moss. Treeline is at approximately 4,000 feet. Vegetation is generally more abundant on east and south facing slopes. Grizzly and black bears as well as moose frequent the area but are most common in valley bottoms where they are attracted by young vegetation on the placer tailings.

Climate is characterized by low precipitation and a wide temperature range. Winters are cold and temperatures of -30°C to -45°C are common. Summers are moderately cool with daily highs of 10°C to 25°C. Thunders showers are a common occurrence. Smoke from forest fires can be thick at certain times. The seasonal window for prospecting is from June to mid September.

### 1.3 History

The Sixty Mile district has been worked for placer gold since the discovery of gold on Miller Creek in 1892. Placer gold production likely exceeds the recorded figure of 435,109 ounces won from the creeks during the period 1892-2005 (LeBarge, 2006). The bulk of the placer gold was mined from Miller, Glacier, Bedrock, Little Gold, Big Gold Creeks and the Sixty Mile River.

Along with the placer activity, lode prospecting of the district has occurred since the first hard rock claims were staked over the Miller galena occurrence in 1896 (Yukon MINFILE, 2008).

The author of this report carried out exploration work in the Miller Creek and Sixty Mile River area on behalf of Kennecott Canada Exploration Inc. in 1998 and 1999. The Rod claims were staked to cover the bulk of the 1999 Miller Creek gold in soil anomaly (approximately 1.0 km X 0.5 km with >40ppb Au) that includes six trenches excavated the same year (Hulstein and Zuran, 1999). Trench 1999-6 contained a 13m interval averaging 1.6 g/t Au.

The following is a summary from Yukon MINFILE (2008), in chronological order, of significant work and events carried out in Sixty Mile valley and nearby area since 1892.

- 1892: Placer gold discovered in the Sixty Mile River area by C. Miller
- 1896: Claims staked over the Miller galena occurrence located near the headwaters of Miller Creek.
- Early 1900's: Placer miners found coal in Tertiary sediments located north of the property
- 1915-1916: North American Trading and Transportation Co. dredged near the mouth of Miller Creek.
- 1920: (or prior), placer miners find galena, sphalerite and arsenopyrite veining discovered in Sixty Mile valley (Per showing –Yukon Minfile occurrence).
- 1929-1941: The dredge was refurbished by the Holbrook Dredging Co. which mined in the Sixty Mile Valley.
- 1947-1959: A new dredge was constructed by Yukon Exploration and Yukon Placer Mining Co. which mined the lower reaches of Glacier and Big Gold Creeks and part of Sixty Mile River.
- 1953: First claims staked in WY Gulch to cover possible source of cinnibar veinlet fragments found in placer concentrates, hand trenching done.
- 1965: Per occurrence in Sixty Mile Valley, near mouth of Miller Creek, trenched and tested by 2 short drill holes. Northern Exploration Limited trenched by bulldozer in WY gulch area.

- 1970: Dawson range Joint Venture staked and explored upper Poker Creek following the release of anomalous stream geochemical results by the Alaska Department on Natural Resources.
- 1974: W. Yaremico staked first of Mary claims.
- 1975-1977: W. Yaremico trenched in WY Gulch.
- 1981: W. Yaremico staked WY claims. Fred Chudy (Chumar Placers Ltd., later Klondike Sand and Gravel Co. Ltd. and Klondike Underground Mining Ltd.) commenced underground placer operations on Miller Creek (upper adit). Lower adit completed later and U/G mining ended 1990.
- 1982: Territorial Gold Placers Limited trenched in WY Gulch. Hornestake Mines Ltd. staked ridge (Glac claims) between Miller and Glacier Creeks. Claims staked by placer miners at head of Glacier Creek (Fluorite vein occurrence?).
- 1984: The Glasmacher showing (Minfile No. 116C 153) was staked by Noranda.
- 1985: Erwin Kreft restaked Per showing and area. Jon Millhouse trenched Vance claims. Noranda soil, stream sediment and rock sampled their claims.
- 1986: Erwin Kreft trenched Per showing and near the Garea, Esso Minerals Canada Limited tied onto Erwin Kreft ground in Sixty Mile Valley.
- 1987: Esso mapped and sampled, Erwin Kreft trenched.
- 1988: Erwin Kreft optioned ground (Per showing) to Klondike Gold Mining Corp. Jon Bergvinson had the Rod and Ney claims staked north and south of Miller Creek, then did mapping, trenching and sampling. Dawson Eldorado Mines Ltd. staked Gla claims (west side of present property) and mapped and soil sampled in same year.
- 1989: Klondike Gold drilled 4 holes (192.0m) testing Per showing area. Homestake Mineral Development Co. Ltd. optioned Esso's ground, then mapped and sampled it.
- 1996: Madrona Mining Limited acquired the Cici, Uni and Creek claims from Yukon prospector Mr. John Peter and contracted Aerodat Inc. to fly an airborne electromagnetic and magnetic survey over their property searching for massive sulphide deposits.
- 1997: Madrona carried out a soil geochemical survey (1700 samples) over their property.
- 1998: Mike McDougall (K-1 Mining and Services) staked the Bud claims and Teck Corp. staked the Glacier claims (between Miller and Glacier Creeks.
- 1998: Kennecott Canada Exploration Inc. staked and optioned most of the ground between Miller and Glacier Creeks and Sixty Mile River (including Madrona property). Reconnaissance stream and soil sampling was carried out.

- 1998: Kennecott Canada Exploration Inc. staked and optioned most of the ground between Miller and Glacier Creeks and Sixty Mile River. Kennecott carried out a property mapping, property stream and soil geochemisty program, a gravity survey and a helicopter airborne magnetic and radiometric survey. Trenching was carried out on the ridge southwest of Miller Creek (now the Rod property) and a few test pits in the Sixty Mile River valley.
- 2003: Roger Hulstein restaked the ground previously held by Kennecott and others as, Paul 1-10 and Toni 1-8 claims and vended them to North American Gold Inc. (now Northland Resources Inc.). North American Gold Inc. carried out a small trenching program in 2003 in an effort to locate the vein structure intersected in 1988 by Klondike Gold Mining Corporation (Hulstein, 2004). In 2004 North American Gold Inc. optioned the Vance 1-5 claims from the estate of prospector Jon Millhouse.
- 2005 2008: Roger Hulstein staked the Rod 1-8, Toni 9-14 claims and carried out a reconnaissance program in 2006. In 2006 he staked the Toni 15-28 claims and in 2008 the Toni 29-32 claims.

#### 1.4 2008 - 2009 Work Program

The 2008 and 2009 exploration program was carried out by R. Hulstein, P.Gec. on August 29, 2008 and July 8, 2009. Work consisted of prospecting, reconnaissance soil, stream sediment and rock sampling and geological mapping. Sampling was carried out down slope of Trench 1999-6 and continued to the northwest on the north side of the property. The purpose the soil sampling was to confirm and infill the 1999 gold in soil Miller Creek anomaly and along with rock sampling and geological mapping, to explain it.

A hand-held GPS receiver (Garmin GPSmap 60CSx) was used to plot locations of rock and soil samples, access route, claim posts and other features (approximate +/-5m accuracy). Soil and stream sediment samples were shipped to ALS Chemex in North Vancouver, B.C for gold analysis plus 34 other elements while rock samples were submitted to Eco Tech Laboratory in Whitehorse for sample preparation and analysis for gold and 28 other elements in Kamloops, B.C.

In 2009 a Class 3 Land Use permit was applied for and received. This permit allows for excavator trenching and road building over the next five years (2009-2014).

### 1.5 Claim Status

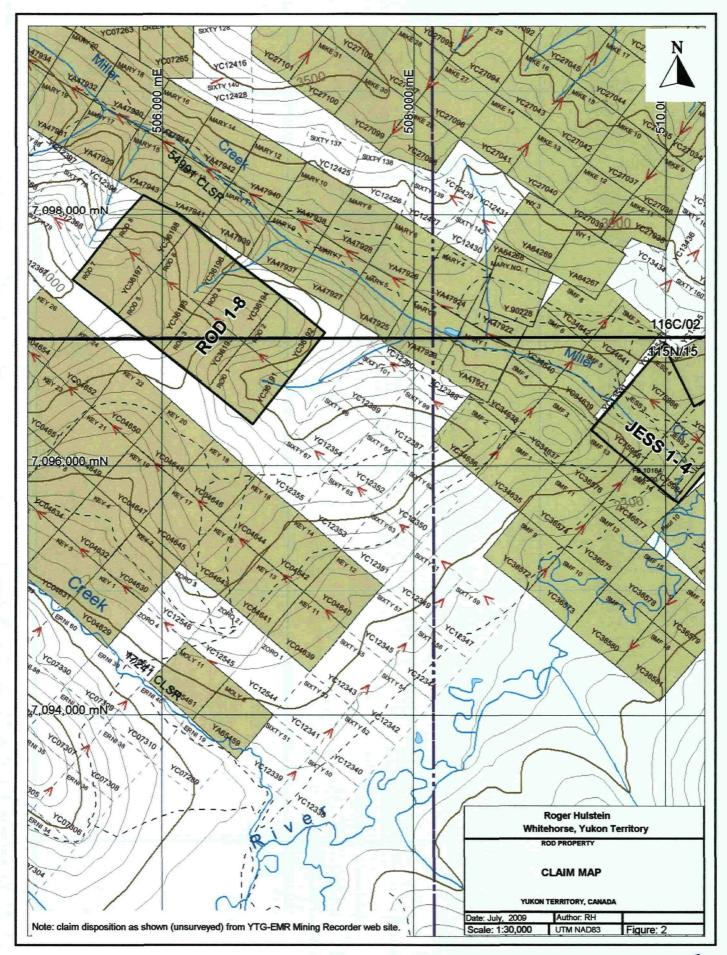
The Rod property covers an area of approximately 130 hectares and consists of 8 unsurveyed contiguous two-post Yukon 'Quartz' claims (Figure 2). The claims were staked according to the Yukon Quartz Mining Act and are located in the Dawson Mining District. They are shown on claim sheets 115N-15 and 116C-2 and are available for viewing at the Dawson Mining Recorders Office. The claims listed below (Table 1) are registered in the name of Roger Hulstein and are owned one hundred percent by him. The Rod 1-8 claims were staked on June 28<sup>th</sup> 2005.

Claim Name	Grant Number	Expiry Date*
Rod 1-8	YC36191-YC36198	July 11, 2012

### Table 1. List of Claims

\*Subject to this report being accepted as fulfilling assessment requirements.

As can be seen on Figure 2 there is apparently open ground between the Rod property and adjacent Mary claims to the north and the Key claims to the south. In actuality at least some of the Key claims are located further to the north so that the Rod property is thought to overlap some of the Key claims. The Mary claims have not been located in the field.



### 2.0 REGIONAL GEOLOGY

The first geological investigation of the Sixty Mile River area was by J. E Spurr in 1896-97 (Spurr and Goodrich, 1898), followed by Cockfield in 1917 (Cockfield, 1921). More recently the area was mapped at 1:250,000 scale by Tempelman-Kluit in 1970-1972 (Tempelman-Kluit, 1973), Green in 1961 (Green, 1972) and Mortenson (1988, 1996).

The property lies between the Tintina and Denali Faults within the Ominica Belt (Wheeler and McFeely, 1991, Gordy and Makepeace, 2001). The area is underlain by two distinct lithotectonic (pre-accretion) assemblages: 1) medium to high grade, polydeformed metasedimentary and meta-igneous rocks of the Yukon-Tanana Terrane (YTNA and YTKS); and 2), deformed and metamorphosed rocks of the Slide Mountain Terrane (YTa) (Mortenson, 1988, 1996) (Figure 3). Both are mainly Paleozoic in age and were juxtaposed by regional scale thrust faults in early Mesozoic time, a period of terrane accretion that affected much of the northern Cordillera

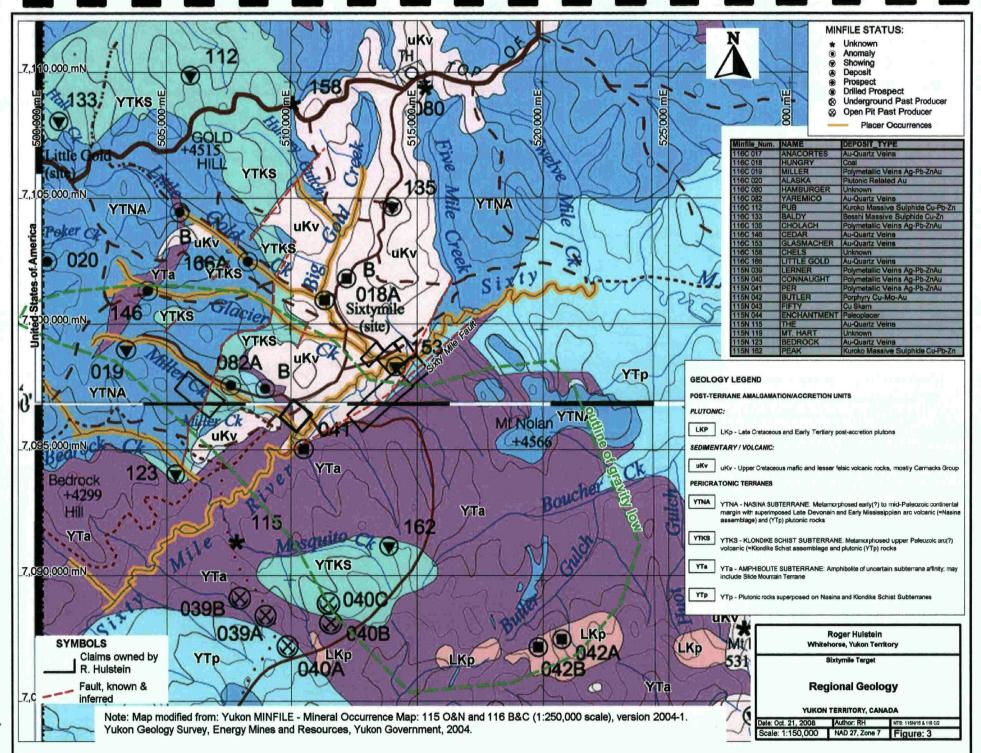
Locally, the Yukon Tanana Terrane consists of two main assemblages of supracrustal rocks, the Late Devonian (?) to mid-Mississippian Nasina assemblage (YTNA) and the mid-Permian Klondike Schist assemblage (YTKS) (Mortenson, 1996) and three distinct suites of metaplutonic rocks (YTp). The Nasina consists of metamorphosed psammites, mainly quartz-muscovite-chlorite schist and quartzite, +/- carbonaceous material, interlayered mafic schist and amphibolite and volumetrically minor amounts of marble, conglomerate and felsic schist. The Klondike Schist assemblage is comprised mainly of a variety of felsic schists interlayered with non-carbonaceous fine grained micaceous quartzite and quartz-feldspar-muscovite-biotite (+/- chlorite) schist. Local layers of chlorite schist, metagabbro, and rare bands of marble and carbonaceous quartz-muscovite schist are found within the felsic schists.

The Klondike placer camp, with approximately 20,000,000 million ounces of placer gold produced (Government of Yukon, 2007), is underlain predominantly by units of the Klondike Schist assemblage.

According to Mortenson (1996) three distinct suites of metaplutonic rocks (unit YTp) found within the Yukon Tanana Terrane are:

- 1) Devonian Mississippian feldspar and quartz-feldspar augen schist interpreted to be meta-porphyry sills and/or transposed dykes
- 2) Early Mississippian granitic orthogneiss, e.g. the Fiftymile batholith.
- 3) mid-Permian quartz monzonite gneiss and quartz (+/-feldspar) augen schist (Sulphur Creek orthogneiss).

Rocks of the Paleozoic Slide Mountain Terrane (YTa) include massive greenstone and a variety of altered ultramafic rocks. The ultramafic rocks



commonly denote thrust (and normal?) faults, are partially to wholly serpentinized and locally exhibit quartz-carbonate alteration. The mined out Clinton Creek asbestos deposit, located approximately 40km to the north of the property, is hosted by units of Slide Mountain Terrane.

Jurassic quartz monzonite bodies intrude the YTT and Mortenson (1996) noted that field relationships indicate that they intruded prior to both Early (?) Jurassic regional thrust imbrication and Early Cretaceous normal faulting.

Post accretion units uncomformably overly rocks of the YTT and Slide Mountain terrane. These units consist of a sequence of unmetamorphosed sedimentary and volcanic rocks of middle (?) and Late Cretaceous age (uKv)(Mortenson, 1996). The lower part of the unit typically consists of sandstone and pebble to cobble conglomerate that is overlain by massive andestic flows and breccias that are correlated with the (68-76Ma) Carmacks Group.

Locally, bodies of Late Cretaceous fine to medium grained, equigranular biotitehornblende quartz monzonite and granodiorite are thought to be comagmatic with the Carmacks group volcanics.

Volumetrically minor amounts of Miocene aged quartz pebble conglomerate, sandstone, shale minor tuffs and olivine basalt are preserved in the Sixty Mile valley – graben.

Units of the Nasina and Klondike Schist Assemblage and the three associated orthogneiss units show the effects of penetrative ductile deformation and metamorphism at middle greenschist to lower amphibolite facies (Mortenson, 1996). Rocks of the Slide Mountain Terrane generally only display evidence of brittle shearing and open folding. Units of the Slide Mountain and Yukon Tanana terranes are juxtaposed along mainly shallowly to moderately dipping fault zones that are interpreted as thrust faults (Mortenson, 1996). One such fault zone mapped to the south of the Rod property by Mortenson (1996) is projected north and bisects the Rod property following Salsa Gulch. To the north northeast of the property dismembered slices of Slide Mountain mafic and ultramafic rocks indicate possible fault zones. To the east, low angle normal faults are also interpreted between the Fiftymile Batholith and overlying rocks.

Middle and Late Cretaceous sedimentary and volcanic rocks are generally undeformed although they have been at least locally folded (Mortenson, 1996). The Tintina and Denali faults found to the northeast and southwest of the property respectfully, trend northwest and are major crustal-scale transcurrent dextral faults of Tertiary (?) age.

The Sixty Mile fault, a major northeast trending fault structure that extends to Tok, Alaska, underlies the east side of the Sixty Mile River valley. In the Sixty Mile placer district, the valley follows a graben structure that downdrops Cretaceous Carmacks Group rocks against Nasina and Klondike Schist

Assemblage rocks. Other north to northeast trending fault structures are suspected to underlie prominent lineaments and locally form the contacts of the down dropped Carmacks Group volcanic rocks.

### **Regional Metallogeny**

Regionally the shoshonitic Carmacks volcanic group (70 Ma), is a widespread igneous event with spatially and temporally related mineralization found throughout the west central Yukon (Smuk, 1999). Mineralization and mineral deposits associated with this event includes the Casino copper porphyry deposit (Selby and Nesbitt, 1998). There are a number of mineral occurrences along the trace of the Sixty Mile fault which extends to the southwest and can be traced to near Tok, Alaska.

The Caramcks Group, composed primarily of andesites, occupies the Sixty Mile Valley and is preserved due to down dropping in a block faulting environment. The region SE of the Sixty Mile fault has been uplifted with vertical movement possibly in the order of kilometers (Mortenson, pers. comm. 2007). This block faulting may be due to the intrusion of a granitoid body and subsequent uplift of over lying rocks.

A gravity low underlying the Sixty Mile placer gold district may indicate the presence of a large buried granitoid body. Small granitoid (LKP) bodies south of Mosiquito and Boucher Creeks, within the uplifted fault block, may be exposed apophasis of the larger buried granitoid body. Numerous polymetallic veins (Connaught, Yukon MINFILE 115N 040, etc.) are spatially associated with these granitoid bodies. These polymetallic veins may be the 'roots' of now eroded epithermal vein systems. An intriguing outcrop of granite found near the junction of Miller Creek and Sixty Mile River is possible additional evidence of a district wide underlying granitoid body.

The polymetallic vein occurrences, granitoid bodies, and the main placer gold creeks; Miller, Glacier, lower Little Gold and Sixty Mile River, between the mouth of Little Gold and Miller Creek, are encompassed by or on the margins of the gravity low anomaly (Figure 3). The nearby Per Minfile occurrence (Yukon MINFILE 115N 041), located approximately 4 km to the SW of the Glasmacher occurrence (Yukon MINFILE 115N 153), is described as a northeast trending, 8 cm to 60 cm wide, galena-sphalerite-arsenopyrite vein with a strike length of 61 m. Drilling on the Per intersected mineralized quartz veining that contained 11.52 g/t gold over 4.5 m (including 42.16 g/t over 1.5m) within a larger interval of 7.1 g/t gold over 12 m.

Silver-gold bearing quartz veins are found on the Mos property 5km to the southeast of the Sixty Mile property (Yukon MINFILE 115N 039 & 115N 040). These veins and others located even further east (~20km ESE of the project area), along with magnetite skarns and minor porphyry copper style

mineralization are related to Cretaceous (?) (Carmacks ?) age granodiorite intrusions aligned in an approximate E-W direction.

Madrona Mining Limited acquired its ground in the Sixty Mile area at the head of Glacier Creek for potential volcanic massive sulphide deposits similar to those found in the Yukon Tanana Terrane in the Finlayson Lake area (Marchand, 1997). To date only minor showings of sphalerite and galena (Yukon MINFILE 116C 112 & 116C 133) have been found in the Sixty Mile area.

Placer gold, with an estimated production of 435,109 crude ounces, has been mined extensively in the Sixty Mile River valley, Miller, Glacier, Poker (US side), Little Gold and Bedrock Creeks in the vicinity of the Toni 9-32 claims (LeBarge, 2006). The source of most of this gold is unknown but according to Mortenson et al. (2006) is likely derived from metamorphogenic rather than epithermal veins. While a possible metamorphogenic source occurrence has been identified on the Rod claims, bedrock epithermal veins, such as the Per and Glasmacher occurrences, in the Sixty Mile valley have also been identified. Although they themselves may not be a significant source of placer gold they hint at possible undiscovered gold bearing resources. The epithermal type veining is hosted by pyrite-carbonate altered andesites, analogous to that of weak or distal porphyry style alteration and mineralization.

### 2.1 Surficial Geology

The Sixty Mile placer district lies within the Klondike Plateau (Duk-Rodkin, 1996). Dendritic 'V' shaped valleys dissect the plateau reflecting its largely unglaciated state. An exception is the Sixty Mile River valley which has been glaciated as shown by the presence of local small lateral moraines.

The surficial geology is best summarized by Hughes, et al, (1986) as follows.

Quaternary deposits of the Sixty Mile river drainage basin include valley bottom alluvial plains and terraces, gulch alluvium, colluvial veneers and blankets, and scattered debris flows. The youngest Quaternary deposits include active colluvium, valley bottom gulch alluvium and the broad alluvial plain in the Sixty Mile River valley. Older alluvial deposits include the higher terrace levels in the upper reaches of Miller and Glacier Creeks, the second terrace in the lower reaches of Miller Creek, and the broad terrace found on the north side of the Sixty Mile River valley, both upstream and downstream from Miller Creek.

Colluvium veneer is the most common cover on the hillsides, averages 1-2m thick while colluvium blanket material, averages >3m thick. Colluvium conforms to bedrock topography and is composed of diamicton, rubble, and organic-rich silt and sand derived from bedrock sources by a variety of slope processes. Solifluction is common on the north east facing slopes, on the Rod property, above Miller Creek

Valleys are filled with alluvium and locally form terraces up to 20m thick. The alluvium plain in the Sixty Mile Valley averages only <5m - 8m thick and forms a uniform sheet filling the valley. The gravels in the Sixty Mile River valley above and below its confluence with Miller Creek for a considerable distance have been processed by placer miners.

### 3.0 PROPERTY GEOLOGY AND MINERALIZATION

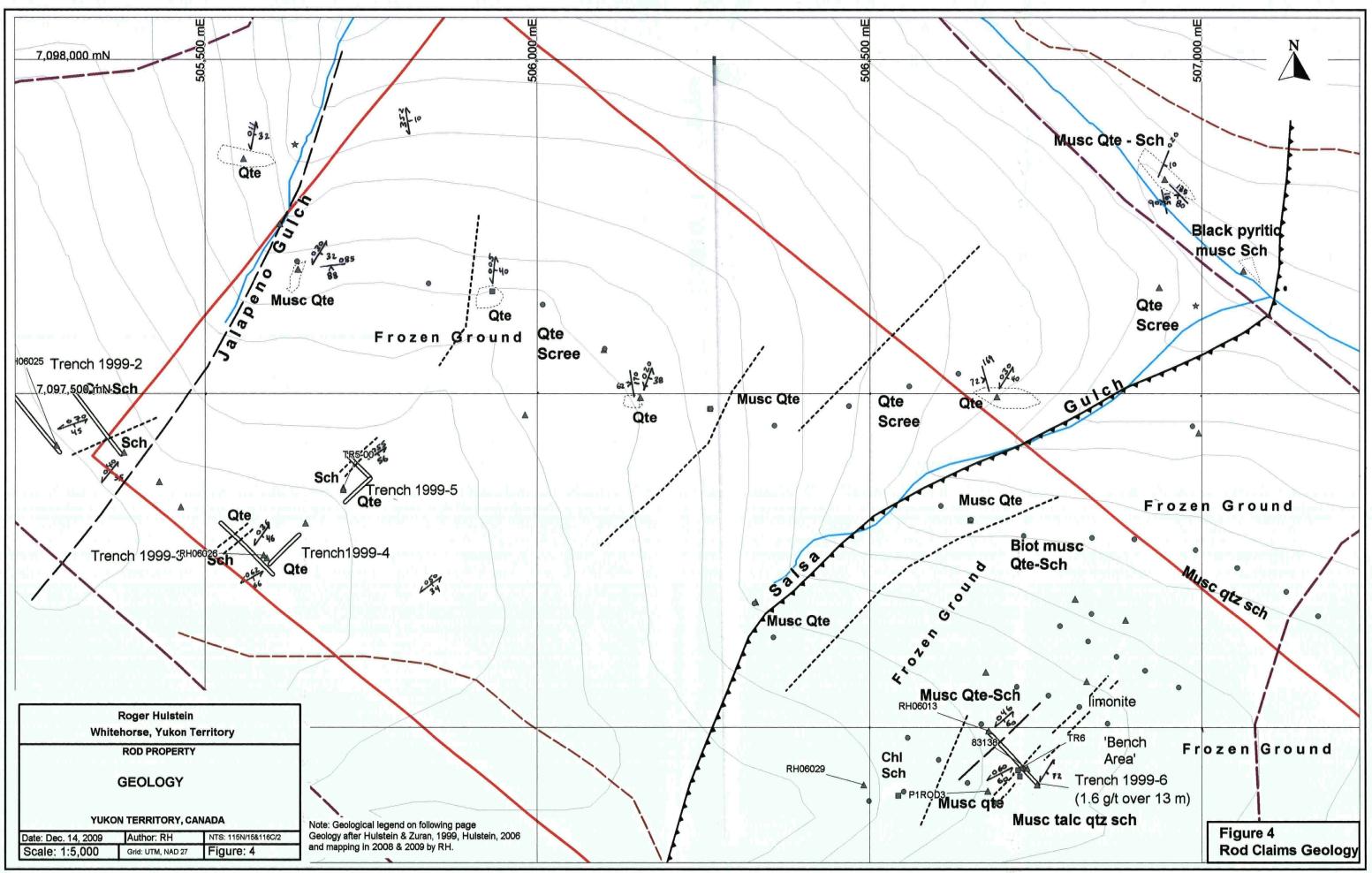
The Rod property is underlain by siliclastic units of the Nasina Assemblage (YTNA) and siliclastic units of the Klondike Schist (YTKS) (Figures 3 and 4). A north-westerly directed thrust fault, with the Klondike Schist in the upper plate, is believed to underlie Salsa Gulch. Evidence of a lithological change is borne out by geological mapping although outcrops are sparse. The Nasina Assemblage is composed predominantly of resistant quartzite with schist interbeds while the Klondike Schist contains only minor quartzite. Definitive evidence is also provided by differing radiometric signatures between the two units, noted in the 1999 airborne survey (Hulstein and Zuran, 1999). Minor slivers of altered untramafic rocks, trending northeast and dipping steeply, were noted in Trench 99-6 indicating additional fault zones.

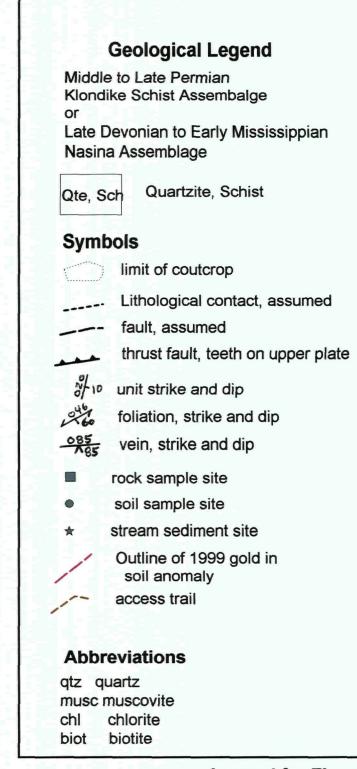
The west side of the Rod property, underlain by Nasina Assemblage rocks, is dominated by outcroppings, felsenmeer and float of quartzite with micaceous partings. The foliation and presumed bedding strikes NE on average and dips moderately SE. This competent and resistant unit hosts crosscutting arsenopyrite bearing quartz veins that have variable strike and dips. Trenches 99-1 to 99-5 were excavated over these veins, suspected veins and As +/- Au soil anomalies. Values obtained included 0.765 g/t Au and 492 ppm As, in Trench 99-05, across 3.5 m of graphitic phyllite that strikes NE and dips moderately SE (Hulstein and Zuran, 1999). This graphitic phyllite unit along with other less resistant units such as more micaceous shists are not exposed outside of the trenches.

Rock samples from Trench 99-1, designed to test suspected fault structures in Jalapeno Gulch, contains minor gold (up to 140 ppm) and highly anomalous arsenic (up to 7150 ppm) over its entire 140 m length (Hulstein and Zuran, 1999). There was also abundant evidence of faulting, quartz veining and recessive phyllite units that are aligned parallel with Jalapeno Gulch. Trenches 99-2 to 5, in 1999, also exposed numerous NE trending steeply dipping fault structures.

Downslope of the area tested by Trenches 99-1 to 5 the placer miners in Miller Creek mined the colluvium for approximately 100m upslope of the creek, towards the trenches.

The east side of the Rod property is underlain by schists of the Klondike Schist Assemblage. Micaceous schists are the dominant lithology in the area of Trench 99-6 (Figure 4) based primarily on mapping rock float. Bedrock mapping in Trench 99-6 (Hulstein and Zuran, 1999) showed the 118 m long exposure to be dominated by muscovite schist and quartzite with micaceous partings. Both rock types strike northeast and dip moderately to steeply east. A narrow, <0.5 m wide, sliver of listwanite ultramafic rock was found near the middle of the trench in a northeast trending steeply dipping fault zone. The east portion of the trench exposes quartzite with micaeous partings. The contact and between the schist and quartzite appears to be gradational although a number of northeast fault





### Legend for Figure 4

zones were also noted in the contact area. A 13 m section of the quartzite at this contact contained an average of 1.6 g/t Au, and up to 2380 ppm As and 164 ppm Pb. Mineralization within this interval consisted of trace to locally 3% euhedral bipyramidal pseudo – orthorhombic arsenopyrite crystals disseminated within more siliceous bands within the quartzite. A nine centimetre wide massive light grey quartz vein striking NNW and dipping steeply east, cuts the foliated quartzite and contained 340 ppm Au. It is thought that the schist – quartzite contact is a major structural control on mineralization. Structural measurements taken from Trench 99-6 indicate an average foliation of NE and moderate to steep SE dip (Hulstein and Zuran, 1999).

Along Salsa Gulch the quartzite outcrop and scree on the west side commonly has limonite – jarosite coated fractures and folia and is crosscut by white quartz veins. The rock float on the east side of Salsa Gulch is dominated by biotite-muscovite-quartz (quartzite)-schist.

In 2006 lithologies noted during soil sampling from the 'C' horizon indicate a chlorite schist trending NNE less than 100m upslope of Trench 99-6. This unit was not exposed in Trench 99-6.

#### 4.0 GEOCHEMISTRY

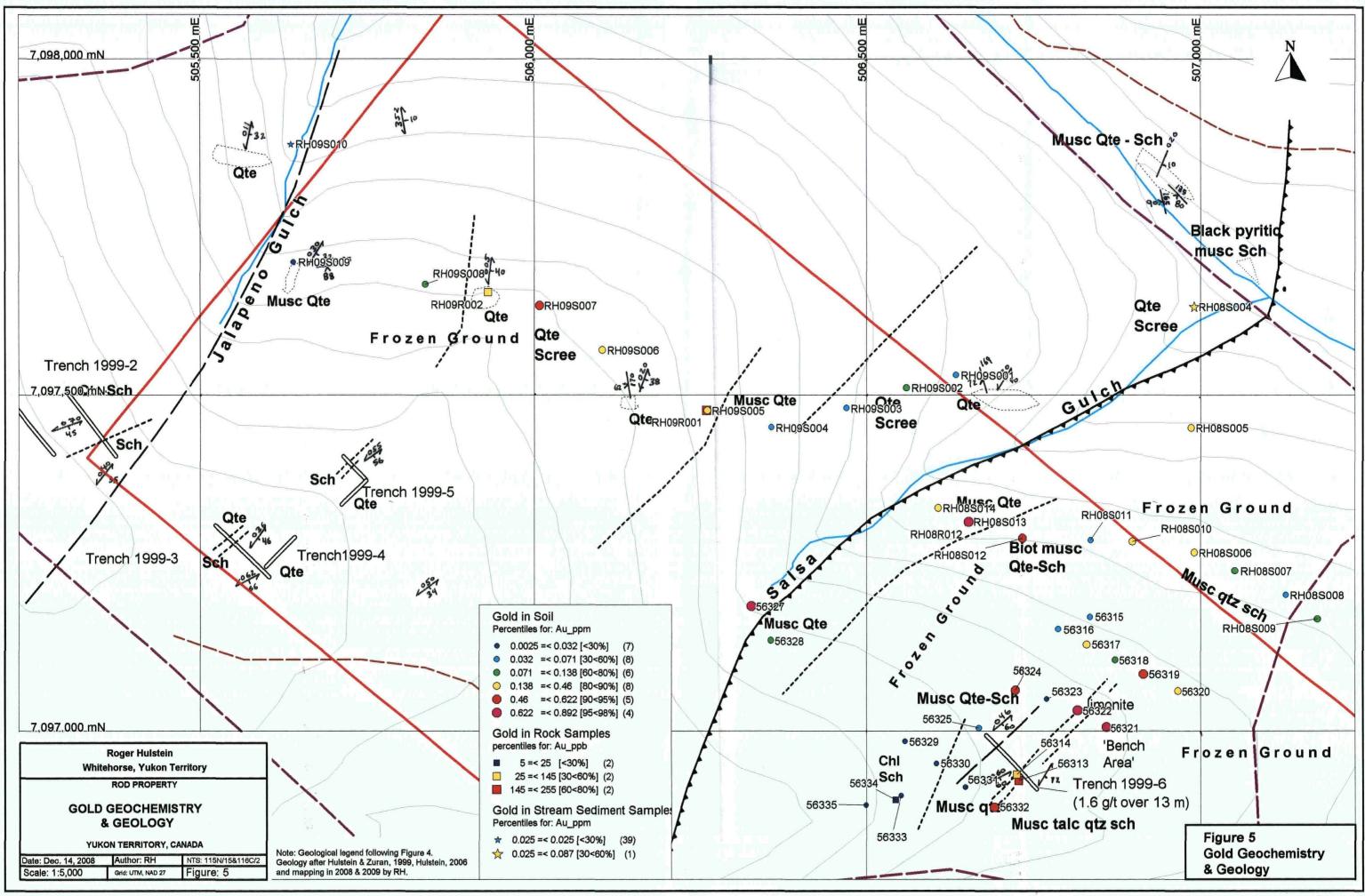
One rock float sample collected in 2008 and two collected in 2009 from the northeast side of the property were analyzed by EcoTech Laboratory Ltd. of Kamloops, B.C. Rock samples were pulverized, a 50 gram sub sample fire assayed and a gold determination made by atomic absorption. An additional 28 elements were analyzed by aqua regia ICP-AES. The analytical certificates are presented in Appendix A and sample descriptions and analytical results in Appendix B. Rock sample locations are shown on Figures 5 and 6.

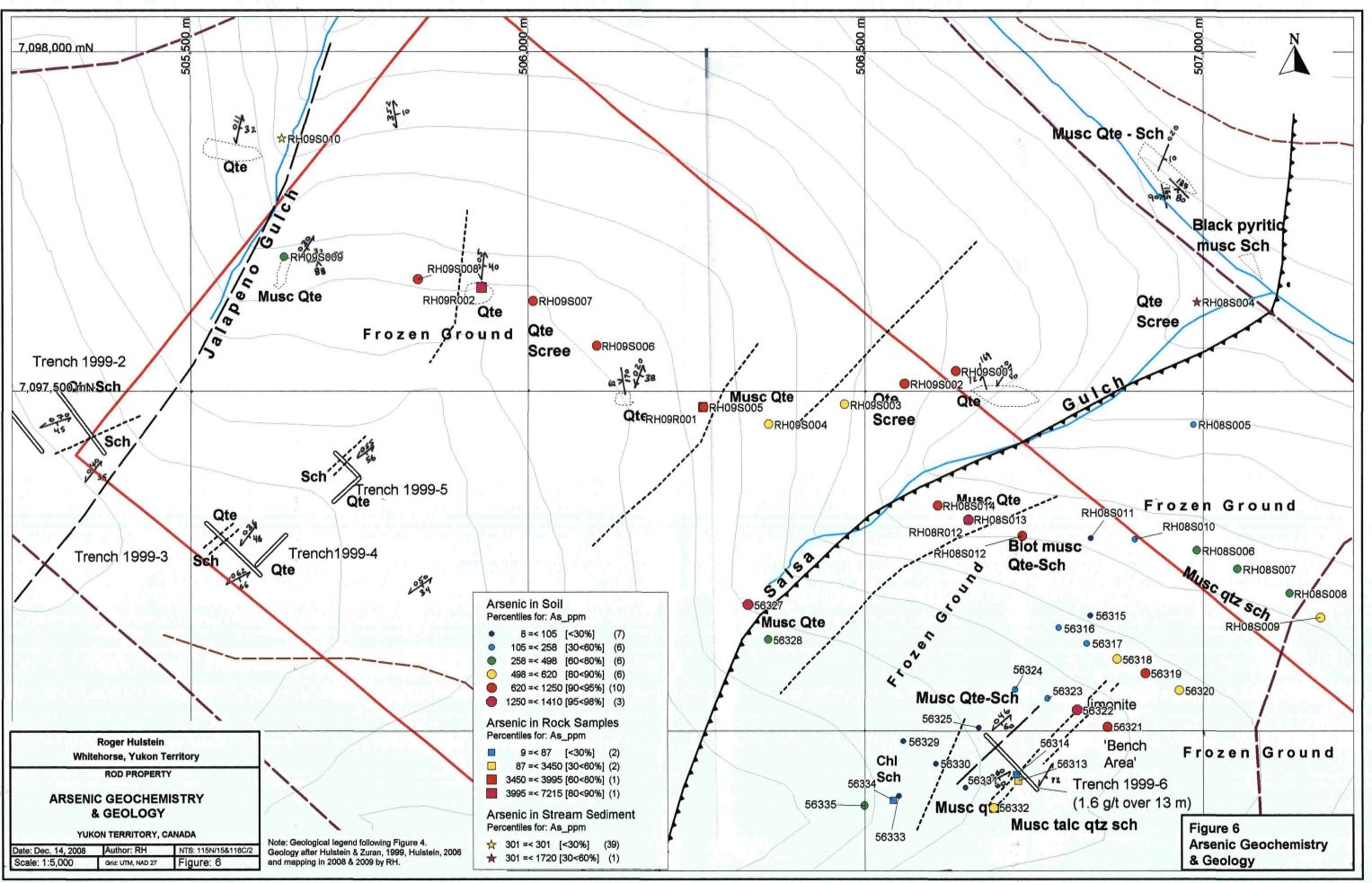
Samples were collected where the presence of alteration, veining or mineralization was observed. The rock samples returned up to 255 ppb Au from a rock float sample of brecciated schist – quartzite (Figure 7). The same sample contained 3995 ppm As, 473 ppm Pb, 65 ppm Sb. Sample RH09R002, of quartzite cross cut by quartz veins with coarse arsenopyrite contained 145 ppm Au, 5.3 ppm Ag, 2820 ppm Pb and 80 ppm Sb. Although these samples are anomalous they are not thought to be the source of the anomalous gold in soil samples given the discrepancy in values, high values in soil and relatively low in rock.



Figure 7. Rock sample RH09R001, brecciated schist – quartzite with quartz, iron oxide stain and boxwork texture.

A total of 19 soil samples were collected, 10 in 2008 and 9 soil in 2009 with the purpose to try and define the extent and trend of the mineralization reported in Trench 99-6 and follow up on the previous soil anomaly reported in 1999 (Hulstein and Zuran, 1999). Analytical certificates are presented in Appendix A and sample descriptions and analytical results in Appendix C. Soil sample locations are shown on Figure 5.





Trench 99-6 was excavated over a soil sample (Kennecott sample VA83138A) that contained 52 ppb Au and 249 ppm As (Hulstein and Zuran, 1999). Soil sampling during this program was wide spaced and consisted of ridge, spur and contour lines with a nominal spacing of 100 m or 200 m sample spacing. This sampling defined a >40 ppb gold in soil anomaly, the Miller Creek anomaly with dimensions of approximately 1.0 km x 1.0 km, bounded approximately by Jalapeno Gulch, Cayenne Gulch, Miller Creek and the ridge top west of Miller Creek.

Results from the 2008 soil sampling returned a number of obviously anomalous gold values (>0.071 ppm or >71 ppb) that define an approximate NE trend, down slope, extending approximately 400 m from Trench 99-6. The area underlain by the chlorite schist returned low gold values. Frozen ground hampered both soil collection and lowered sample quality on occasion. Of particular interest is the high values reported near Salsa Gulch with two out of four samples returning 0.460 ppm gold (460 ppb, sample 56327; Hulstein, 2006) and 0.622 ppm gold (460 ppb; sample RH08S013, this report). These samples indicate a possible mineralized structure in Salsa Gulch. Other unexplained anomalous values east of Salsa Gulch indicate possible additional zones of mineralized bedrock.

Numerous soil samples anomalous in gold returned in 2009 from the west side of the property between Salsa and Jalapeno Gulch likely reflect mineralization weathering out of quartz veins cutting quartzite and minor breccia zones. Numerous asenopyrite mineralized veins were noted in scree slopes of quartzite boulders below Trenches 99-3, 4 and 5. As rock samples from these trenches returned low gold and high arsenic values additional gold mineralization is indicated by the soil samples. Samples anomalous in gold often have corresponding high values in arsenic, lead and antimony, similar to the suite of anomalous elements from rock samples collected in the area.

Two stream sediment samples were collected, sample RH08S004 from the mouth of Salsa Gulch contained 0.87 ppm gold (87ppb) and 1720 ppm arsenic. Sample RH09S010 from Jalapeno Gulch contained 0.25 ppm gold (25 ppb) and 301 ppm arsenic.

#### **5.0 CONCLUSIONS AND RECOMMENDATIONS**

Geological mapping indicates that schist over quartzite predominates east of Salsa Gulch. West of the gulch quartzite predominates over schist. Units on both sides of the gulch strike approximately northeast and dip moderately to steeply southeast. A northeast trending, southeast dipping, thrust fault is suspected to underlie Salsa Gulch. Quartz veins, usually cutting quartzite do not have a consistent trend.

Previous work identified the Miller Creek gold is soil anomaly (>40 ppb) over an approximate area of 1.0 km x 1.0 km. Within the anomaly mineralization in Trench 99-6 (1.6 g/t gold over 13 m; Hulstein and Zuran, 1999) is mapped as being confined to narrow arsenopyrite bearing siliceous bands, conformable to foliation and in cross cutting fractures, within a quartzite unit below the contact with an overlying micaceous schist unit. Anomalous soil samples (>71 ppb gold), collected in 2008, in the vicinity of the trench extend northeast, down slope, over a distance of approximately 400 m.

A mineralized structure may underlie Salsa Gulch, located on the west side of the Miller Creek anomaly, as two out of four soil samples collected closest to Salsa Gulch returned 0.460 ppm (460 ppb) gold and 0.622 ppm (622 ppb) gold. A stream sediment sample at the mouth of the Gulch returned 87 ppm gold and 1720 ppm arsenic. Additional auriferous source areas are indicated both east and west of Salsa Gulch as numerous soil samples anomalous in gold cannot be explained by known mineralization.

Based on the anomalous geochemical results from previous work and the 2008 and 2009 work program within the Miller Creek gold in soil anomaly, the presence of a significant gold bearing mineralized system is indicated, therefore additional work is warranted and recommended.

Additional soil sampling, rock sampling and detailed geological mapping is required within the Miller Creek soil anomaly. Special attention should be given to northeast trending structural controls and the area surrounding Trench 99-6. Due to permafrost on northerly facing slopes, soil sampling should be carried out late in the summer season. Mechanical trenching by a tracked excavator is required to test possible strike extensions of mineralization previously located in Trench 99-6 and possible bedrock mineralization indicated by anomalous (>71 ppb gold) soil samples.

Geophysical methods (magnetics, VLF, EM) are recommended over suspected mineralized structures to see if they can be traced in overburden or permafrost areas. If geophysical, geochemical anomalies and trenching results are encouraging a drill program would be warranted to test indicated mineralized structures.

### 6.0 STATEMENT OF COSTS

The following expenditures were incurred on the Rod property in 2008 and 2009.

Geochemistry		,,		
	<u>No.</u>	<u>\$/Sample</u>	\$Subtotal	
Soil and stream sediment samples	19	33.67	639.73	
Rock Samples	3	31.08	93.24	
				\$732.97
Personnel (2006)				
	Davis	Daily	0	
	Days	Rate	Subtotal	
R.Hulstein, B.Sc,P.Geo. (geologist)	~	500	4000	
July 29, 2008 & July 8, 2009	2	500	1000	
1/2 July 10, 2009	0.5	500	250	
Total Labour Costs				\$1,250.00
Field Exponen				
Field Expenses		Rate/item		
Encipht and postage		Ratement	21.5	
Freight and postage Meals and Accommodation			156.62	
Vehicle Rental	4	100	400	
Fuel (for vehicle) and propane	-	100	376.54	
, , , ,				
Communications (sat phone rental)	4	10	40	
Phone call charges			30	
Total Field Costs				\$1,024.66
Report and Project Management				
report and Project management				
Person				
R. Hulstein	1.5	500	750	
Drafting & Reproduction			100	
Total Report Costs				\$850.00
Total Project Cost				\$3,857.63

Respectfully submitted,

Roger Hulstein, B Sc., P.Geo.

December 18, 2009

#### 7.0 STATEMENT OF QUALIFICATIONS

I, Roger W. Hulstein, of:

106 Wilson Drive Whitehorse, Yukon Territory Y1A 0C9,

do hereby certify that:

- 1. I am a mineral exploration geologist with over 25 years of experience working in the Yukon.
- 2. I am a graduate of Saint Mary's University, Halifax, with a degree in geology (B.Sc., 1981) and have been involved in geology and mineral exploration continuously since 1978.
- 3. I am a fellow of the Geological Association of Canada (F3572).
- 4. I am registered as a professional geoscientist (No. 19127) with the Association of Professional Engineers and Geoscientists of the Province of British Columbia.
- 5. I am the author of this report on the Rod property in the Dawson Mining District, Yukon. The report is based on personal examination of the ground on various dates, with the last work carried out on August 29, 2008 and July 8, 2009 and on referenced sources.

Roger Hulstein, B.Sc., FGAC, P Geo

December 18, 2009

#### **8.0 REFERENCES**

- Cockfield, W.E., 1921. Sixty Mile and Ladue Rivers Area, Yukon. Geological Survey of Canada, Mem. 123.
- Duk-Rodkin, A., 1996. Surficial Geology, Dawson, Yukon Territory; Geological Survey of Canada. Open File 3288, scale 1:250,000.
- Glasmacher, U., 1984. Geology, Petrology and Mineralization in the Sixty Mile River area, Yukon Territory. Unpublished Diploma Thesis, Technical University of Aachen, Germany. Available at Yukon Energy, Mines and Resources library, Whitehorse, Yukon.
- Glasmacher, U., and Freidrich, G., 1992. Volcanic-hosted epithermal goldsulphide mineralization enrichment processes, Sixty Mile River area, Yukon Territory, Canada: in Yukon Geology Vol. 3; Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, p.271-291.
- Green, L.H., 1972. Geology of Nash Creek, Larsen, and Dawson Map Areas, Yukon Territory. Geological Survey of Canada Memoir 364.
- Hornbrook, E. H. W., P. W. B. Friske, 1986. Regional Stream Sediment and Water Geochemical Reconnaissance Data, Yukon 1986 Open File 1364.
- Hulstein, R. and Zuran, R., 1999. Report on the Geological, Geochemical and Geophysical Work on the the Sixty Mile Project. Yukon Energy, Mines & Resources. Assessment Report No. 094055.
- Hughes, R.L., Morrison, S.R. and Hein, F.J., 1986. Placer Gravels of Miller Creek, Sixty Mile River Area, in Yukon Geology, Vol. 1; Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, p.50-55.
- Keyser, H.J., 1989. Report on the 1988 Geological and Geochemical Assessment Work on the Headwaters Project. Yukon Energy, Mines & Resources. Assessment Report No.092692.
- Marchand, M., 1997. Summary Report, Poker Creek Exploration 1997, Geochemical Survey. Unpublished report for the Yukon Territorial Government to fulfill obligations for Yukon Mining Incentive Program project #97-036.
- Mortenson, J.K., 1988. Geology, Southwestern Dawson Map Area, Yukon, 1:250,000 scale map. Geological Survey of Canada, Open File 1927.

- Mortenson, J.K., 1996. Geological Compilation Maps of the Northern Stewart River Map Area, Klondike and Sixty Mile Districts, 1:50,000 scale. Indian and Northern Affairs Canada, Northern Affairs: Yukon Region, Open File 1996-1G
- Placer Mining Section, 1991. Yukon Placer Industry 1989 to 1990. Mineral Resources Directorate, Yukon, Indian and Northern Affairs Canada.
- Placer Mining Section, 1998. Yukon Placer Industry 1995, 96, 97. Mineral Resources Directorate, Yukon, Indian and Northern Affairs Canada.
- Spurr, J.E., and Goodrich, H.B., 1898. Geology of the Yukon Gold District, Alaska. U.S. Geological Survey, Eighteenth Annual Report, 1896-97, Pt. III.
- Tempelman-Kluit, 1973. Reconnaissance Geology of Aishihik Lake, Snag and Part of Stewart River Map-Areas, West Central Yukon. Geological Survey of Canada, Paper 73-41.
- Wheeler, J.O. and McFeely, P. 1991. Tectonic assemblage map of the Cañadian Cordillera and adjacent parts of the United States of America; Geological Survey of Canada, Map 1712A, scale 1:20,000,000.
- Yukon MINFILE A database of mineral occurrences. Available digitally: www.geology.gov.yk.ca/databases/download/html

# Appendix A

# **Analytical Certificates**

t

- ---

21-Oct-08 Alex Stewart Geochemical

ECO TECH LABORATORY LTD. 10041 Dallas Drive KAMLOOPS, B.C. V2C 6T4 www.alexstewart.com

Phone: 250-573-5700 Fax : 250-573-4557 ICP CERTIFICATE OF ANALYSIS AK 2008- 8325

Hulstein Geological Services 106 Wilson Drive Whitehorse, Yukon Postal CodeY1A 5R2

No. of samples received: 15 Sample Type:Rock **Project: 60 Mile** Submitted by:Roger Hulstein

Values in ppm unless otherwise reported

		Au																											
Et #.	Tag #	ppb	Ag A	1% A	i Ba	Bi	<u>Ca %</u>	Cd	Co	Cr	Cu	Fe %	La	Mg %	Mn	Mo	Na %	NI	<u> </u>	Pb	Sb	Sn	Sr	Ti %	U	V	W	Y	Zn
1	RH08R001	20	2.1 0	.35 3	5 225	15	0.01	1	1	103	71	1.89	10	0.01	35	136	0.01	5	220	522	<5	<20	4	0.06	<10	6	<10	1	92
2	RH08R002	25	3.3 0	.54 90	) 215	<5	<0.01	<1	<1	74	60	1.23	20	0 04	30	5	0.01	3	290	1494	<5	<20	<1	0.02	<10	5	<10	<1	66
3	RH08R003	60	0.6 0	.61 44	5 195	15	0.02	<1	1	76	39	1.62	20	0.10	53	10	0.02	3	310	70	<5	<20	15	0.05	<10	8	<10	<1	90
4	RH08R004	5	<0.2 0	.51 20	) 90	15	1.04	<1	5	204	7	1.56	10	0.42	532	3	0.06	13	260	12	<5	<20	27	0.05	<10	17	<10	5	64
5	RH08R005	45	1.4 0	.52 34	) 245	10	0.01	<1	<1	86	22	0. <del>9</del> 4	20	0.05	26	10	0.01	4	140	74	5	<20	7	0.01	<10	4	<10	2	35
6	RH08R006	15	060			-	<0.01	<1	<1	138		0.72	<10	0.01	26		<0.01	4	80	152	<5	<20	5	0.01	<10	2	<10	<1	38
7	RH08R007	60	<0.2 0				<0.01	<1	<1	80	9	0.69	20	<0.01	26	-	<0.01	•	110	24	<5	<20	4	0.05	<10	3	<10	2	52
8	RH08R008	30	<020			25	2.82	3	39	87	153	7.86	10		1087		<0.01		1410	58	<5	<20	54	0.13	<10	82	<10	11	157
9	RH08R009	330		.55 188		45	4.70	34	27	78	305	7.00	<10		5389				1120	144	15	<20	95	0.11	<10	56	<10	17	469
10	RH08R010	30	040	.50 13	5 50	<5	7.15	6	21	92	130	7.04	<10	2.96	6889	4	0.01	21	910	16	30	<20	140	0.13	<10	60	<10	6	150
11	RH08R011	100	0.8 2	.11 4	5 65	10	1 01	6	27	169	47	4.60	10	1.25	1486	27	0 03	54	1270	104	15	<20	76	0.05	<10	109	<10	8	265
12	RH08R012	25	<0.2 0	.09 27	5 105	10	0.01	<1	<1	181	6	0.39	<10	<0.01	29	<1	<0 01	<1	130	26	<5	<20	10	0.02	<10	4	<10	<1	1
13	RH08R013	10	<0.2 0	.44 10	) 55	15	0 07	<1	10	143	43	2.15	10	0 03	92	1	0.02	15	300	16	<5	<20	2	0.03	<10	19	<10	7	50
14	RH08R014	5	<0.2 0	.78 10	) 260	15	0.15	1	3	122	6	1.78	10	0.13	136	4	0.02	7	530	24	<5	<20	20	0 02	<10	26	<10	7	51
15	RH08R015	5	<0.2 0	.25 3	) 330	10	0 03	<1	1	123	8	1.20	<10	<0.01	436	<1	<0 01	<1	130	12	<5	<20	32	0.08	<10	12	<10	2	25
<u>QC DAT/</u> Repeat:	<u>A:</u>																												
1	RH08R001	15	2.2 0	.34 2	5 210	10	0.01	<1	1	<del>98</del>	66	1 86	10	<0.01	34	125	0 01	3	220	520	<5	<20	5	0.08	<10	4	<10	1	88
9	RH08R009	325																											
10	RH08R010	25	030	.47 15	) 50	<5	7.05	8	21	89	128	7.01	<10	2.92	6839	16	0.01	27	910	14	40	<20	136	0.10	<10	61	<10	5	148
11	RH08R011	90																											
Resplit: 1	RH08R001	10	2.2 0	.34 3	5 200	10	0.01	<1	1	86	63	1.95	10	<0.01	35	127	0.01	3	230	536	<5	<20	3	0.06	<10	5	<10	<1	87
SF30	1:	835	11.4 0	.88 1	5 65	<5	0.45	63	7	11	1421	1.57	<10	0.71	367	3	0.03	9	460	6174	15	<20	30	0 03	<10	19	<sup>-</sup> <10	<1	9916

JJ/nw df/6202s XLS/08 ECO TECH LABORATORY LTD. Jutta Jealouse B.C. Certified Assayer ZZ-Jul-09 Stewart Group

ECO TECH LABORATORY LTD. 10041 Dallas Drive KAMLOOPS, B.C. V2C 6T4 www.stewartgroupglobal.com

Phone: 250-573-5700 Fax : 250-573-4557 ICP CERTIFICATE OF ANALYSIS AW 2009-8085

Roger Hulstein 1106 Wilson Dr Whitehorse, YT Y1A 0C9

No. of semples received<sup>.</sup> 6 Semple Type: Rocks **Project: 60 Mile** Submitted by: Roger Hulstein

#### Values in ppm unless otherwise reported

<u>Et #.</u>	Tag #	Au(ppb)	Ag	<u>AI %</u>	As	Ba	Bi	<u>Ca %</u>	Cd	Co	Çr	Cu	Fe %	La	<u>Mg %</u>	Mn	Mo	Na %	NI	P	Pb	Sb	Sn	Sr	TI %	U	<u>v</u>	W	Y	Zn
1	RH09R001	255	1.5	0.10	3995	285	<5	<0.01	<1	1	170	15	2.26	<10	< 0.01	26	2	0.01	5	480	473	65	<20	28	<0.01	<10	17	<10	<1	4
2	RH09R002	145	5.3	0.53	7215	1005	<5	0.05	2	3	188	92	4 11	60	<0.01	28	5	0 01	6	3620	2820	80	<20	735	<0.01	<10	102	<10	18	48
3	RH09R003	40		0 24		45	<5	2.19	10	13	101	336	3 43	10		6504	15	0.01	17		3188	55	<20	34	<0.01	<10	18	<10	10	895
4	RH09R004	10		0 38		705	<5	0.80	2	6	84	7	1 39	10	0.23		<1	0.01	11	690	57	<5	<20	36		<10	28	<10		203
5	RH09R005	20	<0.2	0.49	<5	120	<5	3 58	1	11	60	2	2 42	20	1.15	2154	<1	0.02	13	910	18	<5	<20	934	<0.01	<10	30	<10	11	233
6	RH09R006	15	<0.2	0 32	<5	285	<5	2 73	1	7	75	2	1 85	<10	0.71	1621	<1	0.01	8	760	13	<5	<20	61	<0.01	<10	17	<10	8	232
<u>QC I</u> Repe	at:						_		_								-		_											_
1 2	RH09R001 RH09R002	255 125	1.5	0.10	4035	280	<5	<0.01	<1	1	165	15	2.23	<10	<0.01	26	2	0.01	5	490	471	65	<20	28	<0.01	<10	17	<10	<1	3
<b>Resp</b> 1	<b>///:</b> RH09R001	195	1.7	0.10	4105	265	<5	<0.01	<1	1	176	15	2.23	<10	<0.01	26	2	0.01	5	490	480	65	<20	27	<0 01	<10	16	<10	<1	3
<b>Stan</b> Pb12 OXE	9a	615	11 0	0.83	5	60	<5	0.44	58	6	11	1411	1.56	<10	0.68	346	2	0.03	5	410	6235	15	<20	25	0.03	<10	16	<10	2	9904
ICD.	Agua Dogia I	Diaget / K	-0- 41		Joh																									

ICP: Aqua Regia Digest / ICP- AES Finish. Ag : Aqua Regia Digest / AA Finish. Au: 30g Fire Assay/ AA Finish.

NM/nw df/2\_8078S XLS/09

ECO TECH LABORATORY LTD. Norman Monteith B.C. Certified Assayer

÷



#### ALS Chemex EXCELLENCE IN ANALYTICAL CHEMISTRY

ALS Canada Ltd 212 Brooksbank Avenue North Vancouver BC V7J 2C1 Phone 604 984 0221 Fax 604 984 0218 www.alschemex.com To. HULSTEIN, ROGER 106 WILSON DR. WHITEHORSE YT Y1A 5R2

Page: 1 Finalized Date: 2-OCT-2008 This copy reported on 21-JAN-2009 Account: HULROG

### CERTIFICATE VA08128757

Project. 60 Mile

P.O. No :

This report is for 15 Soil samples submitted to our lab in Vancouver, BC, Canada on 11-SEP-2008. The following have access to data associated with this certificate:

ROGER HULSTEIN R HULSTEIN

ROGER HULSTEI	N

	SAMPLE PREPARATION	}
ALS CODE	DESCRIPTION	
WEI-21	Received Sample Weight	
LOG-22	Sample login - Rcd w/o BarCode	
SCR-41d	Screen to -100um, save both	
	ANALYTICAL PROCEDUR	ES
ALS CODE	DESCRIPTION	INSTRUMENT
Au-AA24	Au 50g FA AA finish	AAS
ME-ICP41	35 Element Aqua Regia ICP-AES	ICP-AES

To HULSTEIN, ROGER ATTN: R. HULSTEIN 106 WILSON DR. WHITEHORSE YT Y1A 5R2

> Signature: Colin Ramshaw, Vancouver Laboratory Manager

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



**EXCELLENCE IN ANALYTICAL CHEMISTRY** ALS Canada Ltd

212 Brooksbank Avenue North Vancouver BC V7J 2C1 Phone 604 984 0221 Fax 604 984 0218 www alschemex com To: HULSTEIN, ROGER 106 WILSON DR. WHITEHORSE YT Y1A 5R2

Page: 2 - A Total # Pages: 2 (A - C) **Plus Appendix Pages** Finalized Date: 2-OCT-2008 Account: HULROG

Project 60 Mile

#### CERTIFICATE OF ANALYSIS VA08128757

Sample Description	Method Analyte Units LOR	WEI-21 Recvd Wt. kg 0 02	ME-ICP41 Ag ppm 0 2	ME-ICP41 Al % 0 01	ME-ICP41 As ppm 2	ME-ICP41 B ppm 10	ME-ICP41 Ba ppm 10	ME-ICP41 Be ppm 05	ME-ICP41 Bi ppm 2	ME-ICP41 Ca % 0 01	ME-ICP41 Cd ppm 0 5	ME-ICP41 Co ppm 1	ME-ICP41 Cr ppm 1	ME-ICP41 Cu ppm 1	ME-ICP41 Fe % 0 01	ME-ICP41 Ga ppm 10
RD08S001 RD08S002 RD08S003		0 52 0 30 0 16	02 20 50	1 39 2 59 3 74	29 46 130	<10 <10 <10	540 260 190	05 23 24	<2 3 12	0 62 0 32 0 42	08 41 10	17 16 18	42 17 13	31 58 312	3 62 9 90 14 25	<10 10 10
RD08S004 RD08S005		0 70 0 30	09 02	1 35 1 42	1720 122	<10 <10	260 200	<0 5 <0 5	<2 <2	0 63 0 23	05 <05	10 6	27 23	23 11	3 48 2 31	<10 <10
RD08S006 RD08S007 RD08S008		0 66 0 50 0 48	02 03 03	1 18 1 50 1 42	181 174 171	<10 <10 <10	350 360 380	06 06 06	8 9 9 9 9 9 9 9	0 38 0 28 0 45	05 <05 <05	7 9 14	23 26 41	23 20 32	2.47 2.54 3.47	<10 10 <10
RD08S009 RD08S010		0 36 0 64	03	1 24 0 94	216 105	<10 <10	360 260	06	<2 <2	0 56 0 25	<05 05	8 7	34 28	27 23	3 38	<10 <10
RD08S011 RD08S012 RD08S013 RD08S014		0 60 0 62 0 56 0 62	02 03 12 06	1 23 0 98 0 59 1 23	34 620 1410 619	<10 <10 <10 <10	310 180 300 230	05 <05 <05 <05	<2 <2 <2 <2 <2 <2	0 32 0 31 0 27 0 32	05 <05 <05 <05	5 7 9 10	25 29 22 34	26 10 39 22	2 30 2 29 4 58 3 08	<10 <10 <10 <10
RD08S015		0 54	<02	2.81	32	<10	160	09	<2	374	07	81	421	154	7 74	10
omments. Additional A																



**EXCELLENCE IN ANALYTICAL CHEMISTRY** ALS Canada Ltd

212 Brooksbank Avenue North Vancouver BC V7J 2C1 Phone 604 984 0221 Fax 604 984 0218 www.alschemex.com To. HULSTEIN, ROGER 106 WILSON DR. WHITEHORSE YT Y1A 5R2

Page: 2 - B Total # Pages: 2 (A - C) Plus Appendix Pages Finalized Date: 2-OCT-2008 Account: HULROG

Project: 60 Mile

CERTIFICATE OF ANALYSIS VA08128757

Sample Description	Method	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
	Analyte	Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc	Sr	Th
	Units	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
	LOR	1	0 01	10	0 01	5	1	0 01	1	10	2	0 01	2	1	1	20
RD08S001 RD08S002		<1 <1	0 08 0 53	10 30	0 80 0 72	1165 1915	<1 5	0 01 0 08	31 5	900 2370	29 475	0 05 0 82	3 4		39 302	<20 <20
RD08S003		1	0 48	10	1 09	709	6	0 07	2	3980	206	0 75	<2	12	359	<20
RD08S004		<1	0 09	10	0 35	801	1	0 02	19	1000	27	0 12	7	4	43	<20
RD08S005		<1	0 05	10	0 34	240	<1	0 01	12	500	33	0 03	<2	3	20	<20
RD08S006		ব	0 08	50	0 38	340	ব	0 01	17	440	32	0 03	3	6	34	20
RD08S007		ব	0 06	20	0 35	411	ব	0 01	18	470	24	0 02	2	4	25	<20
RD08S008		ব	0 09	20	0 45	458	ব	0 01	35	540	15	0 03	3	9	34	<20
RD088009		ণ	0 08	30	0.36	180	<1	0 01	35	460	29	0 03	5	6	36	<20
RD088010		ব	0 09	50	0.38	297	<1	0 01	15	290	36	0 02	3	6	30	20
RD08S011		ব	0 08	40	0 46	546	<1	0 01	15	380	32	0 03	2	6	29	20
RD08S012		ব	0 09	20	0 40	510	<1	0 02	13	510	44	0 07	3	3	33	<20
RD08S013		ব	0 31	20	0 15	245	1	0 01	33	850	27	0 76	8	4	92	<20
RD08S014		ব	0 09	20	0 46	794	<1	0 01	20	650	31	0 09	4	4	32	<20
RD08S015		1	0 07	10	3 22	1385	20	0 07	425	1220	20	2 03	3	21	132	<20
omments, Additional A																



EXCELLENCE IN ANALYTICAL CHEMISTRY ALS Canada Ltd.

212 Brooksbank Avenue North Vancouver BC V7J 2C1 Phone 604 984 0221 Fax 604 984 0218 www.alschemex.com To: HULSTEIN, ROGER 106 WILSON DR. WHITEHORSE YT Y1A 5R2 Page: 2 - C Total # Pages: 2 (A - C) Plus Appendix Pages Finalized Date: 2-OCT-2008 Account: HULROG

Project<sup>.</sup> 60 Mile

CERTIFICATE OF ANALYSIS VA08128757

Sample Description	Method Analyte Units LOR	ME-ICP41 Ti % 0 01	ME-ICP41 Ti ppm 10	ME-ICP41 U ppm 10	ME-ICP41 V ppm 1	ME-ICP41 W ppm 10	ME-ICP41 Zn ppm 2	Au-AA24 Au ppm 0 005	
RD08S001 RD08S002 RD08S003 RD08S004		0 04 0 04 0 07 0 04	<10 <10 <10 <10	<10 <10 <10 10	66 120 169 47	<10 <10 <10 10	154 1845 398 91	NSS 0 214 2 26 0 087	
RD08S005 RD08S006 RD08S007 RD08S008		0 04 0 05 0 04 0 03	<10 <10 <10 <10	<10 <10 <10 <10	43 38 43 52	<10 <10 <10 <10	62 99 73 87	0 079 0 071 0 045 0 035	
RD08S009 RD08S010 RD08S011 RD08S012		0 02 0 03 0 03 0 05	<10 <10 <10 <10	<10 <10 <10 <10 <10	40 28 33 35	<10 <10 <10 20	69 91 101 82	0 047 0 080 0 038 0 135	
RD085013 RD085014 RD085015		0 01 0 04 0 23	<10 <10 <10	<10 <10 <10 <10	27 42 171	<10 <10 <10 <10	90 83 172	0 622 0 100 0 010	
omments: Additional A									

•----

Comments: Additional Au-AA24 result for sample RD085003 is 1.86 ppm gold



T.

Т

#### ALS Chemex EXCELLENCE IN ANALYTICAL CHEMISTRY

ALS Cenade Ltd 212 Brooksbank Avenue North Vancouver BC V7J 2C1 Phone 604 984 0221 Fax 604 984 0218 www.alschemex.com To: HULSTEIN, ROGER 106 WILSON DR. WHITEHORSE YT Y1A 5R2 Page: Appendix 1 Total # Appendix Pages: 1 Finalized Date: 2-OCT-2008 Account: HULROG

Project: 60 Mile

#### CERTIFICATE OF ANALYSIS VA08128757

Method	CERTIFICATE COMMENTS
ALL METHODS	NSS is non-sufficient sample.
-	
1	



**EXCELLENCE IN ANALYTICAL CHEMISTRY** ALS Canada Ltd 2103 Dollarton Hwy North Vancouver BC V7H 0A7 Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com To: HULSTEIN, ROGER 106 WILSON DR. WHITEHORSE YT Y1A 5R2

Page: 1 Finalized Date: 10-AUG-2009 This copy reported on 11-AUG-2009 Account: HULROG

CERTIFICATE VA09073223			SAMPLE PREPARATION	
		ALS CODE	DESCRIPTION	
Project: 60 MILE P.O. No.: This report is for 10 Sediment samples submitted to our lab in Vancouver, BC, Canada		WEI-21 LOG-22 SCR-41d	Received Sample Weight Sample login - Rod w/o BarCode Screen to -100um, save both	
17-JUL-2009. The following have access to data associated with this certificate:			ANALYTICAL PROCEDURE	S
R. HULSTEIN	1 [	ALS CODE	DESCRIPTION	INSTRUMENT
		Au-AA24 ME-ICP41	Au 50g FA AA finish 35 Element Aqua Regia ICP-AES	AAS ICP-AES

1

To: HULSTEIN, ROGER **ATTN: R. HULSTEIN** 106 WILSON DR. WHITEHORSE YT Y1A 5R2

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

Signature:

Colin Ramshaw, Vancouver Laboratory Manager



#### ALS Chemex EXCELLENCE IN ANALYTICAL CHEMISTRY

ALS Canada Ltd.

2103 Dollarton Hwy North Vancouver BC V7H 0A7 To: HULSTEIN, ROGER 106 WILSON DR. WHITEHORSE YT Y1A 5R2

Page: 2 - A Total # Pages: 2 (A - C) Finalized Date: 10-AUG-2009 Account: HULROG

North Vancouver.BC V7H 0A7 Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

#### Project: 60 MILE

### CERTIFICATE OF ANALYSIS VA09073223

uple Description	Method Analyto Units LOR	WEI-21 Recvd Wi kg 0 02	Au-AA24 Au ppm 0.005	ME-ICP41 Ag ppm 0 2	ME-ICP41 AJ % 0.01	ME-ICP41 As ppm 2	ME-ICP41 B ppm 10	ME-ICP41 Be ppm 10	ME-ICP41 Be ppm 0 5	ME-ICP41 Bi ppm 2	ME-ICP41 Ca % 0.01	ME-ICP41 Cd ppm 0.6	ME-ICP41 Co ppm 1	ME-ICP41 Cr ppm 1	ME-ICP41 Cu ppm 1	ME-ICP41 Fe % 0.01
095001		0.40	0.039	02	1.38	387	<10	220	<0.5	2	0.21	<0.5	8	27	25	2.76
095002		0.44	0 043	04	1.65	384	<10	210	<0.5	<2	0.17	<0.5	7	28	24	2.80
098003		0.48	0.021	<0.2	1.53	219	<10	230	<0.5	<2	0.27	<0.5	8	29	21	2.70
095004		0.48	0 030	0.2	1.21	258	<10	210	<0.5	2	0.28	<0.5	7	27	22 🕔	2.40
095005		0.48	0.062	0.2	1.56	498	<10	190	<0.5	<2	0.24	<0,5	7	28	19	2.87
095006		0.50	0.105	0.4	0.78	394	<10	160	<0.5	<2	0.08	<0.5	3	17	13	2.17
098007		0.54	0.143	1.2	1.00	460	<10	200	<0 5	<2	0.14	<0.5	4	23	29	2.47
095008		0 54	0.050	13	1 11	512	<10	250	<0.5	<2	0.15	<0.5	5	27	47	2.89
095009		0.38	0 015	0.2	1.46	161	<10	140	<0 5	<2	0.18	<0.6	7	26	18	2 80
098010	_	1.08	0.025	0.4	1.41	301	<10	180	<0.5	<2	0.15	<0.6	7	29	32	2.84



#### ALS Chemex EXCELLENCE IN ANALYTICAL CHEMISTRY

ALB Canada Ltd. 2103 Dollarton Hwy North Vancouver BC V7H 0A7 Phone: 604 984 0221 Fax: 604 984 0218 www.alschamex.com To: HULSTEIN, ROGER 106 WILSON DR. WHITEHORSE YT Y1A 5R2 Page: 2 - B Total # Pages: 2 (A - C) Finalized Date: 10-AUG-2009 Account: HULROG

Project: 60 MILE

### CERTIFICATE OF ANALYSIS VA09073223

Bample Description	tiethod Analyte Unite LOR	ME-ICP41 Ga ppm 10	ME-ICP41 Hg ppm 1	ME-ICP41 K % 0.01	МЕ-ICP41 La ррт 10	ME-ICP41 Mg % 0 01	ME-ICP41 Mn ppm 5	ME-ICP41 Mo ppm 1	ME-ICP41 Na % 0.01	ME-ICP41 Ni ppm 1	ME-ICP41 P ppm 10	ME-ICP41 Pb ppm 2	ME-ICP41 8 % 0.01	ME-ICP41 Sb ppm 2	ME-ICP41 Sc ppm 1	ME-ICP41 Sr ppm 1
RH095001	T	<10	<1	0.05	10	0.39	282	2	0.01	17	530	20	0.04	2	3	23
RH098002		10	<1	0.05	10	0.38	228	2	0 01	16	720	22	0 02	<2	3	21
RH09S003		10	<1	0.05	10	0.44	358	1	0.01	19	630	19	0.01	2	4	25
RH098004		<10	<1	0.05	10	0.39	265	1	0.01	18	660	39	0.01	4	4	26
RH09S005		<10	<1	0.08	10	0.41	293	1	0.01	19	750	47	0.02	5	3	24
RH095006		<10	<1	0.07	20	0.19	142	2	0.01	8	380	24	0.07	4	1	17
RH09\$007	1	<10	<1	0.07	10	0.24	176	3	0.01	12	550	147	0.07	13	3	20
RH095008	1	<10	<1	0.05	10	0.30	207	2	0.01	14	1070	54	0.02	7	4	31
RH095009	1	<10	<1	0.05	10	0.36	316	2	0 01	14	640	18	0.02	2	2	17
RH098010		<10	<1	0.05	10	0.30	272	3	0 01	20	810	26	0.04	~2	2	22



EXCELLENCE IN ANALYTICAL CHEMISTRY ALS Canada Ltd.

2103 Dollarton Hwy North Vancouver BC V7H 0A7 Phone 604 984 0221 Fax: 604 984 0218 www.alschemex.com To: HULSTEIN, ROGER 106 WILSON DR. WHITEHORSE YT Y1A 5R2

Page: 2 - C Total # Pages: 2 (A - C) Finalized Date: 10-AUG-2009 Account: HULROG

Project: 60 MILE

CERTIFICATE OF ANALYSIS VA09073223

mple Description	Method Analyto Unito LOR	ME-ICP41 Th ppm 20	ME-ICP41 Ti % 0 01	ME-ICP41 Ti ppm 10	ME-ICP41 U ppm 10	ME-ICP41 V ppm 1	ME-ICP41 W ppm 10	ME-ICP41 Zn ppm 2	
H095001		<20	0.06	<10	<10	49	<10	69	
H09S002		<20	0.05	<10	<10	48	<10	60	
H09S003		<20	0.07	<10	<10	55	<10	59	
H09S004		<20	0.08	<10	<10	50	<10	51	
H09\$005		<20	0.08	<10	<10	59	<10	61	
H095006		<20	0.03	<10	<10	33	<10	29	
H09S007		<20	0 05	<10	<10	44	<10	42	
H095008		<20	0.05	<10	<10	47	<10	48	
H09S009		<20	0.05	<10	<10	52	<10	53	
H09S010		<20	0.04	<10	<10	53	<10	69	

## **Rock Sample Descriptions and Analytical Results**

Sixty Mile Project

-

	Rod 1-8	Claim	s: Al	I Rock	Sam	ples					[	
Sample_No.	Sample_Typ							Time	East	North	Elev_ft	Ft_N
56313	Rock Float	Rod	UTM	NAD 27	7	w	24-Jun-06		506728	7096927		
56314	Rock Float	Rod	UTM	NAD 27	7	w	24-Jun-06		506723	7096936		
56334	Rock Float	Rod	UTM	NAD 27	7	w	25-Jun-06		506543	7096898		
RH08R012	Float_rock	Rod	UTM	NAD27	7	w	30-Aug-08	2·09:29AM	506652	7097310	3031	ft
RH09R001	Rock_Float	Rod	UTM	NAD27	7	w	8-Jul-09	2:14:42PM	506261	7097477	1030	m
RH09R002	Rock_Float	Rod	UTM	NAD27	7	w	8-Jul-09	3·36:43PM	505931	7097653	1076	m

1

4

Sample No	Description	Au pph	Ag_ppm	A 19/	Ae nom	Boom	Ba_ppm	Be nom	Bi nom	Ca%	Cd nom
	Grab of float from spoil of backfilled trench TR99-06. Several pieces of foliated quartzite with muscovite partings. Weathers light rusty brown and tan, fresh surface is medium grey - green. Foliation croscut by joints - fractures +/- limonite +/- rusty oxides and thin +/-rarer stubby arsenopyrite crystals, arsenopyrite also found in thin mm qtz veintets and in siliceous layers parrallel to foliation. =1% arsenopyrite overall Photos of sample<br and sit	2170	<u>- дррн</u> 0 7	0 32	3450	-10	160				-0 5
	Grab of float from spoil of backfilled trench TR99-06. Several (2-4"thick X 6") pieces of milky white, locally crudely ribbon banded quatz veining cutting (at mod to steep angle) foliated quartzite with muscovite partings. Rare (<0 1%) disseminated pyrite, 1 speck arsenopyrite Quartz veining is crosscut by fractures +/- limonite and MnOx. No selvege in quartzite on vein contact. Photos of sample and site.	85	02	0 09	87	-10	50	-0.5	-2	0.01	-0.5
	Float of quartz chlorite muscovite quartzite-shist. Some pleces very contorted. Crosscut by fractures with vuggy limonite coatings. Photo	5	54	1	9	-10	480	1	2	0 29	-0.5
	Rod claim: at RH08S013, 2 pieces float, grey quartzite with micaceous partings Limonite-scorodite stainon fracture and on foliation 1 piece cross cut by 2cm vuggy, weathered out, qtz-sulfide vein (aspy?), veinlet x-cuts foliation at 90 degrees. Rock similar to qtz veined quartzite in trenches TR99-2 to 5.	25	-0.2	0.09	275		105		10	0.01	-1
RH09R001	at soll RH09S005, clast supported brx musc qtzite, 2ndary musc?, sch, qtzite, argiitite?clasts, angular, brittle frac, Minor voids with Fe oxi, some boxwork. Photo of Hand sample.	255	1.5	0.10	3995		285		-5	-0.01	-1
RH09R002	Rock float from scree slope, pieces of white qtz with coarse aspy (<1%), brx qtz-Fe oxide and qtzite-sch cutting qtzite.	145	5.3				1005	<u> </u>	-5		2

.

Sample_No.	Co_ppm	Cr_ppm	Cu_ppm	Fe%	Ga_ppm	Hg_ppm	K%	La_ppm	Mg%	Mn_ppm	Mo_ppm	Na%	Ni_ppm	P_ppm	Pb_ppm	S_%	Sb_ppm
				-													
56313	-1	6	6	0.74	-10	0.02	0.25	30	0.01	26	-1	0.02	-1	40	27	0.3	2
										į							
56314	-1	24	3	0.33	-10	0.01	0.03	10	-0.01	70	-1	0 02	-1	20	31	0.02	2
56334	1	21	22	2.25	-10	0.19	0 21	20	0 06	61	1	0.02	12	930	128	0.34	4
RH08R012	-1	181	6	0.39				-10	-0.01	29	-1	-0.01	-1	130	26		-5
RH09R001	1	170		2.26				-10		26	2	į	5		473		65
RH09R002	3	188	92	4.11				60	-0.01	28	5	0.01	6	3620	2820		80

.

-

Sample_No.	Sc_ppm	Se_ppm	Sn_ppm	Sr_ppm	Ti%	Th_ppm	TI_ppm	U_ppm	V_ppm	W_ppm	Y_ppm	Zn_ppm	Certificate
56313	1			6	-0.01		-10	-10	-1	-10		18	VA06064063
56314	-1			3	-0 01		-10	-10	1	-10		21	VA06064063
56334	4			225	0.01		-10	-10	24	-10		15	VA06064063
RH08R012			-20	10	0 02			-10	4	-10	-1	1	Ecotech AK08-8325
RH09R001			-20	28	-0.01			-10	17	-10	-1	4	AW 2009- 8085
RH09R002			-20	735	-0.01			-10	102	-10	18	48	AW 2009- 8085

\_

# Appendix C

## **Soil Sample Descriptions and Analytical Results**

~

[	Rod 1	8 Claim	s: All Soll	Samples			Í													T
Number	Туре	Property	Date	Time	Grid	Datum	Zone V	/ East	North	elev f	t Type	Depth	Quality	Note	Au_ppm	Ag_ppm	AI_%	As_ppm	B_ppm	Ba_ppm
56315	soli	Rođ	24-Jun-06	2 01 53PM	UTM	NAD27	7 V	/ 50683	7097170	955 r	n soil	05	mod	Brown-tan soll, minor loess, abundant mic qte frags	0 03	04	1 37	48	-10	560
56316	soli	Rod	24-Jun-08	2 29 30PM	UTM	NAD27	7 V	/ 50678	7097152	972 r	n soil	07	good	Brown-tan soil, some rusty brown minor loess, abundant mic qte frags (- some 'c' horizon?), minor qtz, .	0 032	04	1 29	61	-10	400
600 4 <b>7</b>		<b>D</b> : 4	04 h- 00			NADOT		50000	7007400	000	-			ten haven tel hadren, abundant mis sta finan	0.004				1 10	
56317	soil	Rod	24-Jun-08	2 03 00PM	UTM	NAD27	7 V	/ 50682	7097129	906 1	n soil	05	good	tan-brown 'c' horizon, abundant mic qte frags float of fine grained felsic rock (meta aplite?) with minor dis py & lim on fracture 1 piece qtz	0 084	02	0 82	75	-10	330
56318	soil	Rod	24-Jun-08	3 15 13PM	UTM	NAD27	7 V	/ 50687	2 7097106	972 r	n soil	05	good	veining	0 044	-0 2	0 94	236	-10	360
56319	soil	Rod	24-Jun-08	3.29 38PM	UTM	NAD27	7 V	50691	5 7097085	972 1	n soil	0.5	good	tan-brown 'c' horizon, abundant mic qte frags	0 138	0.8	09	495	-10	270
56320	soit	Rod	24-Jun-08	3 49 13PM	UTM	NAD27	7 V	/ 50896	7097060	964 (	n soil	05	mod	brown - muddy sample with qtz mic shist pebbles Not 'c' horizon	0 071	0 2	1 38	287	-10	420
56321	soil	Rod	24-Jun-08	3 59 41PM	UTM	NAD27	7 V	/ 50685	3 7097006	994	n soli	04	good	brown - tan rocky - pebble sample, mic quartzite, 'c' hortzon	0 601	-0 2	1 46	568	-10	180
56322	soil	Rod		4·34 01PM	UTM	NAD27	7 V	/ 50681	5 7097031	997	n soil	04	good	brown-tan-limonitic rocky-pebble sample Limonite musc-qtz schist, qtz and qtzite pebbles	0 892	05	0 87	1250	-10	
56323	soil	Rod	24-Jun-08	4 49 00PM	υтм	NAD27	7 V	/ 50677	7097048	996 1	n soli	0.8	good	tan-light grey 'c' of qtz-mlc schist (no lim or vning) similar to 56317-319	0 007	-0 2	0 56	80		
56324	soli	Rod	24-Jun-08	5 08 07PM	итм	NAD27	7 V	/ 50872	7097061	1000	n soil	05	good	light brown - near 'c' if not 'c' horizon qtz-mic schist minor limonite, piece of qtz vein noted	0 144	0 2	0 87	78		
56325	soil	Rod	24-Jun-06	5.33 31PM	UTM	NAD27	7 V	/ 50666	3 7097005	1016	n soil		good	brown- muddy (ground to west is frozen), float pebbles of same musc qtzite schist as at north end of TR99-06	0 031	03	1 37	· 10	-10	) 300
56327	soll	Rod	25-Jun-06	1 45 45PM	UTM	NAD27	7 V	/ 50632	7097186	1015	n soli	08	good	in guily, abundant float of musc -quartzite schist rich in musc Extreme solifluction	0 48	0.6	0 73	1205	-10	440
56328	soil	Rod	25-Jun-08	1 54 05PM	υтм	NAD27	7 V	/ 50635	3 7097135	1017	n soil	05	good	muddy sample, similar to 56327, with same float except some x/c by white qtz veins -2cm wide (-5% qtz overall) extreme solifluction	0 042	08	1 11	152	-10	270
56329	soil	Rod	25-Jun-08	2 20 17PM	UTM	NAD27	7 V	/ 50655	7096985	1042	n soit	0.5	good	Grey-green chlorite shist frags (first appearance)	-0.005	06	2 62	48	-10	300
56330	soil	Rod		2 32 46PM	итм	NAD27	7 V	/ 50660	7096952			07	good	c' horizon of grey gren chl schist (as 56329)	-0 005	1			-10	
56331	soil	Rod		2 43 30PM	UTM	NAD27	7 V					0.6	good	b'-'c' horizon sample of same fissile tan - bm musc-gtzite schist as at west end of TR99-06	-0 005				-10	
56332	soli	Rod		2 56 48PM	UTM	NAD27	7 V						mod	musc-quartzite - similar to east end TR99-08 Blocks of white qtz vetning in area.	0 185					
56333	soil	Rod	25-Jun-08	3 11 35PM	υтм	NAD27	7 V	/ 50855	7096904	1043	n soil		good	b'-'c' horizon sample of musc schist, some grey green shist but mostly brown	-0.005	02	2 78	28	-10	300
56335	lioa	Rod	25- Jun 04	3·35 56PM	UTM	NAD27	7 V	/ 50649	7096890	1059	n soil		good	sandy 'b'-'d' horizon sample of grey - green chlorite musc schist, very fissile frags minor lin specks.	0 008	-0 2	3 37	191	-10	510
RH08S005		Rod		11 13·29PM	<u> </u>	NAD27	7 V					0.5	poor	poor soil, organics and loess present, frost at 0 4-0 6m. At site of VR58622. 30m upslope of boulder of slicken sided grey qizite-qiz breccie	0.079					

																		-	-							
	Be_ppm							_						Mn_ppm	Mo_ppm						sp_ppm				T1_%	
56315	06	-2	0 41	-0.5	7	25	18	2 47	-10	0 05	0 07	50	0 31	438	1	0 01	18	360	31	0 03	2	5	41		0 03	-10
56316	06	2	0 37	-05	7	34	25	3 12	-10	0 06	0 11	60	0 57	487	1	0 01	18	400	31	0.03	3	7	37		0 03	-10
56317	05				3	14			-10	· · · · · · · · ·		60			-1	1		1			-2		19	[	0 02	
00317		-4	012	-05	3	14		_ 21	-10	0.03	007	00	0.10	280		-001	1	170	28	0.02	-2	•	18		0.02	-10
56318	05	2	0 11	-0 5	3	10	10	2 97	-10	0.02	0 07	40	0 22	517	-1	-0 01	5	160	53	0 02	2	5	17		0 02	-10
56319	06	2	0 15	15	7	16	24	3 08	-10	0 03	01	50	0.22	447	-1	-0 01	20	330	125	0 01	2	4	23		0 03	-10
56320	06	-2	03	-05	6	24	20	2 61	-10	0 03	0 07	30	0.39	337	-1	0 01	20	360	22	0 02	-2	4	26		0 05	-10
56321	08											30			1		1			0 02	3		18		0 04	-10
00021			0.00					200		0.01	0.00	0	010		•		<u>'</u>	200		0.02					_ 004	
56322	07	2	0 07	12	4	10	14	2 62	-10	0 03	0 13	50	0 15	555	-1	-0 01	5	350	144	0 04	3	2	19		0 02	-10
56323	05	-2	0 05	-0.5	2	6	8	1 78	-10	0.02	0 09	40	0 08	467	-1	-0 01	5	150	29	0.01	2	3	18	ł	0 01	-10
											ļ								(				[			
56324	06	-2	0 17	-05	6	26	18	2 64	-10	0 04	0 06	40	0 21	331	1	-0 01	15	210	26	0.01	2	5	22		0 02	-10
56325	05	-2	0 32	-05	7	37	26	2.94	-10	0 04	0 09	50	0 49	343	-1	0 01	25	330	20	0 02	2	6	30		0 05	
			1								-					1										
56327	05	-2	0 35	06	5	9	20	2 62	-10	0.06	01	40	0 17	659	2	0 01	7	540		0 08	4	3	39	·	0 01	-10
56328	05	-2	0 36	09	10	20	28	3 14	-10	0 07	01	40	0 41	1070	1	0 01	14	670	104	0.05	3	4	30		0 04	-10
56329	08	-2	0 71	-05	26	239	63	4 09	10	0 02	0 62	20	24	659	-1	0 01	102	1980	22	0 02	2	10	33	i 	0 13	-10
56330	0.9	-2	0 77	-05	33	234	73	5	10	0 03	0 49	30	2 18	965	-1	0 01	118	2200	68	0.02	2	19	39		0 11	-10
58331	-05	-2	0 03	-05	2	5	6	2 02	-10	0.01	0 12	20	0.07	394	-1	-0 01	-1	160	16	0 01	2	3	6		0 01	-10
56332	06	-2	0 15	-0.5	7	26	21	2 71	-10	0,06	0 08	50	04	449	-1	0 01	18	290	32	0 04	4	4	17	·	0 05	-10
58333	11	-2	0 67	-05	29	269	82	5 32	10	0 02	0 49	20	2.19	755	1	-0 01	112	2150	16	0 02	3	17	27	·	0 11	-10
Enere		_						E 00			0.04			4040		0.01		0440	400	0.04						
58335	12	-2	0 83	-05	30	303	51	5 36	10	0 02	0.94	40	3 13	1215	-1	-0 01	114	2440	100	0.01	3	22	44		0 16	-10
																						1				
RHOBSOOL	05	2	0 23	05	6	23	11	2 31	10	1	0 05	10	0 34	240	1	0 01	12	500	33	0 03	2	3	20	20	0 04	10

U_ppm	V_ppm	W_ppm	Zn_ppm	Method	Certificate
-10	32	-10	75	ME-ICP41	VA06064064
-10	33	-10	112	ME-ICP41	VA06064064
-10	18	-10	94	ME-ICP41	VA06084064
-10	17	-10	100	ME-ICP41	VA06064064
-10	26	-10	226	ME-ICP41	VA06064064
-10	42	-10	72	ME-ICP41	VA08064064
-10	35	-10	112	ME-ICP41	VA06064064
-10	19	-10	202	ME-ICP41	VA06064064
-10	9	-10	58	ME-ICP41	VA06064064
-10	22	-10	78	ME-ICP41	VA06064064
-10	40	-10	60	ME-ICP41	VA06064064
-10	17	370	102	ME-ICP41	VA06064064
10			404		
-10	30	20	164	ME-ICP41	VA06064064
-10	96	-10	71	ME-ICP41	VA06064064
-10	97	-10	115	ME-ICP41	VA06064064
-10	10	-10	56	ME-ICP41	VA06064064
-10	40	-10	79	ME-ICP41	VA06064064
-10	114	-10	93	ME-ICP41	VA06064064
10	139	-10	136	ME-ICP41	VA06064064
10	43	10	62	ME-ICP41	VA08128757
	-10 -10 -10 -10 -10 -10 -10 -10 -10 -10	-10 32 -10 33 -10 18 -10 17 -10 28 -10 42 -10 35 -10 42 -10 35 -10 99 -10 99 -10 22 -10 40 -10 17 -10 30 -10 96 -10 97 -10 97 -10 10 -10 40 -10 114 -10 139	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	-10       32       -10       75       ME-ICP41         -10       33       -10       112       ME-ICP41         -10       18       -10       94       ME-ICP41         -10       17       -10       100       ME-ICP41         -10       28       -10       228       ME-ICP41         -10       28       -10       72       ME-ICP41         -10       42       -10       72       ME-ICP41         -10       35       -10       112       ME-ICP41         -10       9       -10       202       ME-ICP41         -10       9       -10       58       ME-ICP41         -10       22       -10       78       ME-ICP41         -10       40       -10       60       ME-ICP41         -10       30       20       164       ME-ICP41         -10       30       20       164       ME-ICP41         -10       30       20       164       ME-ICP41         -10       97       -10       115       ME-ICP41         -10       97       -10       79       ME-ICP41         -10       10<

Number	Туре	Property	Date	Time	Grid	Datum	Zone	W	East	North	elev f	t Typ	e Dep	h Quality	Note	Au_ppm	Ag_ppm	AI_%	As_ppm	B_ppm	Ba_ppm
RH085006	soil	Rod	29-Aug-08	11.57 08PM	UTM	NAD27	7	w	506990	7097266	2983 1	t soil	0	7 Moderate	In bog hole, wet, grey sticky clay, minor losss with schist pebbles and 30% brown mic shist Float of light grey crenulated mic quartzite- schist, tr py	0 071	02	1 18	181	10	350
																		ŀ			
RH08S007	soil	Bad	20 Aug 00	12 18 35AM	11794	NAD27	<b>_</b>	w	507051	7097239	2997 1	1		5 Moderate	Tan-brown loess rich soil with minor organics, tan schist frags Frozen at 0 5m	0 045		4.6	474	40	200
RH085007	soli	Rod Rod	1	12 10 30AM	-	NAD27		W	507051					6 poor	similar to RH08S007 but more organics	0 045			174	10	
				12 20 02 11.	0.111		<u> ' </u>		001.121									1.46			
RH085009	soil	Rod	30-Aug-08	12.44 49AM	UTM	NAD27	7	w	507173	7097167	3011 1	t soil	0	6 poor	similar to RH08S007, solifiucted losss nch soli, tan mic schist frags and minor organics	0 047	03	1 24	216	10	360
RH085010	soil	Rod	30-440-08	1 13 24AM	UTM	NAD27	7	w	506899	7097282	3027			.3 good	In small creek-proto guily Grey clay rich (loess?) and minor tan soil Abundant float of tan mic quartzite, 5% white bull qtz float up to 20X25cm	0.08	03	0 94	105	10	260
1000010	9011	NUU	30-Aug-00	1 13 24/11	UTIM	INAUZ1	'		000000	1001202	3021			.5 9000	No organics, minor loess, grey with light tan mi		03	0.84	105	10	200
RH08S011	soli	Rod	30-Aug-08	1 28.54AM	UTM	NAD27	7	w	506834	7097284	3034 1	t soil	0	4 Moderate	quartzite schist frags. Soliflucted.	0.038	02	1 23	34	10	310
															Medium brown, minor loess, abundant pebbles and float of grey-brown, blot-musc-quartzite-						
RH08S012	soil	Rod	30-Aug-08	1 43 41AM	UTM	NAD27	7	W	506732	7097287	3063 1	t soli	0	.5 good	schist	0 135	03	0 98	620	10	180
RH08S013	soil	Rod	30-Aug-08	2 07 28AM	UTM	NAD27	7	w	506853	7097311	3043 1	t soil	0	7 good	Similar to RH08S012 Grey schist pebbles Large float pieces of grey quartzite Site of roci float sample RH08R012, 2 pieces angular grey quartzite, mic partings, yellow-limonite (scorodite?) stainling on frac and on follation, I piece cross cut by 2 cm.vuggy, quartz vein, weathered out suffdes (aspy?), vein X/C's follation at 90 degrees Rock similar to rock in Tr99-2 to 5		12	0 59	1410	10	300
RH08S014	soil	Rod	30-400-08	2.22.57AM	UTM	NAD27	7	w	506607	7097332	3003 1	t soil	0	5 Moderate	Brown soil, some losss, strong solifluction	01	06	1.23	619	10	230
RH095001	soll	Rod		1 02 32PM	NAD27	UTM		w	506634	7097530		n soil		5 good	brown - green, some loess, musc schist, qizite pebbles				367	-10	
RH09S002	soli	Rod	8-Jul-09	1 16 41PM	NAD27	UTM	7	W	506559	7097511	953 r	n soil	0	5 good	brown - green, some loess, qtzite pebbles	0 043	04	1 65	384	-10	210
												- T			brown - green, some loess, qtzite pebbles,						
RH09S003	soll	Rod		1.29 57PM	NAD27			W	506468			n soll		5 good	blocky qtzite float	0 021	-02		219	-10	
RH09S004	soll	Rod	8-Jul-09	1:45 00PM	NAD27	UTM	1	W	506357	7097452	1003 r	n sol	- 02	5 good	brown, blocky gizite float, some loess	0 03	0 2	1 21	258	-10	210
RH095005	soli	Rod	8-Jul-09	2 01 19PM	NAD27	UTM	7	w	506262	7097477	1030 r	n <b>soi</b> l	0	4 good	brown, qtzite scree slope, rounded pebbles, some loess	0 062	0 2	1 56	498	-10	190
RH095006	soil	Rod	8-Jul-09	3 04 24PM	NAD27	UTM	7	w	506101	7097567	1079 r	n soil	0	4 good	brown, shale-schist pebbles, qte-musc schist float, minor loess	0 105	04	0 78	394	-10	160
RH095007	soli	Rod	8-Jul-09	3 17 18PM	NAD27	UTM	7	w	506008	7097633	1085 1	n <b>soi</b> l	0	4 good	brown soll, minor loess, shale and quartzite pebbles, quartzite scree slope	0 143	1 2	1	450	-10	200
RH095008	soli	Rod	8-Jul-09	3-54-48PM	NAD27	UTM	7	w	505838	7097665	1076 1	n soli	0	3 good	base of scree slope, qizite, schist, and qiz veining+/- aspy and minor iim specks	0 05	13	1 11	512	-10	250
RH095005	soll	Rod		4.24 05PM	NAD27		7	w	505638					5 poor	wet, loess, some organics, on steep slope, qte with musc partings	0 015	1	1 46	161	-10	

,

Number	Be_ppm	Bi_ppm	Ca_%	Cd_ppm	Co_ppm	Cr_ppm	Cu_ppm	Fe_%	Ga_ppm	Hg_ppm	K_%	La_ppm	Mg_%	Mn_ppm	Mo_ppm	Na_%	Ni_ppm	P_%	Pb_ppm	S_%	Sb_ppm	Sc_ppm	Sr_ppm	Th_ppm	TI_%	TI_ppm
																							-			
RH085006	06	2	0 38	05	7	23	23	2 47	10	1	0 08	50	0 38	340	1	0 01	17	440	32	0 03	3	6	34	20	0 05	10
		_																			-					
RH085007	06	2				26			<u>10</u> 10	1	0.08	20		411 458						0 02	2		25			10 10
RH088008	0	2	040	00	14	41	32	3.41	10	1	0.09	20	040	400			30	- 340	10	0 03	3		34	20	0.03	10
RH08500£	06	2	0 56	05	8	34	27	3 38	10	. 1	0 08	30	0 36	180	1	0 01	35	460	29	0 03	5	6	36	20	0 02	10
RH08S010	05	2	0 25	05	7	28	23	2 41	10	1	0 09	50	0 38	297	· 1	0 01	15	290	36	0 02	3	6	30	20	0 03	10
RH085011	05	2	0 32	05	5	25	26	23	10	1	0 08	40	0 46	546	1	0 01	15	380	32	0.03	2	6	29	20	0 03	10
										<u> </u>																
RH08S012	05	2	0 31	05	7	29	10	2 29	10	1	0 09	20	04	510	1	0 02	2 13	510	44	0 07	3	3	33	20	0 05	10
RH08S013	05	2	0 27	05	9	22	39	4 58	10	1	0 31	20	0 15	245	. 1	0.01	33	850	27	0 76	8	4	92	20	0 01	10
RH085014	05	2	0 32	05	10	34	22	3 08	10	1	0 09	20	0 46	794	1	0 01	20	650	31	0 09	4	4	32	20	0 04	10
RH095001	-0.5	2	0 21	-05	8	27	25	2 76	-10	-1	0.05	10	0 39	282	2	0 01	17	530	20	0.04	2	3	23	-20	0.06	-10
RH095002		-2		+					10	-1		10		228						0 02	-2					-
																					-					
RH095003 RH095004	-0,5 -0 5	-2 2				29 27			10 -10	-1 -1	0.05	10		358				4		0 01	2		25			-10 -10
THUBOUL	-0 0	6	0 20	-00		21		4	-10	-1	0.00		0.38	200	1	001	10	000	38	001		4	20	-20	0.00	-10
RH095005	-0 5	-2	0 24	-05	7	28	19	2 87	-10	-1	0 06	10	0 41	293	1	0 01	19	750	47	0 02	5	3	24	-20	0 08	-10
RH095006	-0 5	-2	0 08	-05	3	17	13	2 17	-10	-1	0 07	20	0.19	142	2	0 01	8	380	24	0.07	4	1	17	-20	0 03	-10
RH098007	-0 5	-2	0 14	-05	4	23	29	2.47	-10	-1	0.07	10	0 24	176	3	0 01	12	550	147	0 07	13	3	20	-20	0 05	-10
RH095008	-0 5	-2	0 15	-05	5	27	47	2 89	-10	-1	0 05	10	03	207	2	0 01	14	1070	54	0.02	7	4	31	-20	0 05	-10
RH095002	-0 5	-2	0 16	-05	7	28	18	28	-10	-1	0 05	10	0 36	318	2	0 01	14	640	16	0 02	2	2	17	-20	0 05	-10

ŧ

5

,

Number	U_ppm	V_ppm	W_ppm	Zn_ppm	Method	Certificate
1						
				į		[
RH085006	10	38	10	00	MELCOAL	VA08128757
11000000	- 10				NIE-10F41	VA00120101
			[			
RH085007	10	43	10	73	ME-ICP41	VA08128757
RH088008	10	52	10	87	ME-ICP41	VA08128757
RH088006	10	40	10	69	ME-ICP41	VA08128757
RH08S010	10	28	10	91	ME-ICP41	VA08128757
RH08S011	10	33	10	101	ME-ICP41	VA08128757
RH08S012	10	35	20	82	ME-ICP41	VA08128757
						}
				:		
RH085013	10	27	10			VA08128757
	10	21	10		WIE-10F41	VA06120151
RH085014	10	42	10	83	ME-ICP41	VA08128757
RH098001		49	-10			VA09073223
RH09S002	-10	48	-10	60	ME-ICP41	VA09073223
RH095003	-10	55	-10	59	ME-ICP41	VA09073223
RH095004		50	-10	51		VA09073223
RH098005	-10	59	-10	61	ME-ICP41	VA09073223
				-		
RH095006	-10	33	-10	29	ME-ICP41	VA09073223
RH095007	-10	44	-10	42	ME-ICP41	VA09073223
				-76		
RH098008	-10	47	-10	48	ME-ICP41	VA09073223
						5
RH095009	-10	52	-10	53	ME-ICP41	VA09073223

## Appendix D

## Stream Sediment Sample Descriptions and Analytical Results

ţ

۲

ς.

,

Appendix C

	Rod	1-8 Cia	ims: Silt	t Sample	8											
Sample_Number	Туре	Property	Date	Time	Grid	Datum	Zone	W	East	North	elev	ft	Туре	Depth	Quality	Note
																overflow, mouth of Salsa Gulch at break in slope. Abundant float of FeOx stained quartzite +/-py with minor qtz veining with aspy Bleached
RH08S004	Silt	Rod	29-Aug-08	10 29 24PM	UTM	NAD27	7	W	506990	7097632	2617	ft	silt		good	selveges on fractures and schist partings
RH09S010	Silt	Rod	8-Jul-09	5 02 03PM	NAD27	UTM	7	W	505635	7097873	983	m	Silt	01	good	Plunge pool, float of musc quartzite, qtzite, schist, white qv float

~

Appendix C

.

Nur	nber	Au_ppm	Ag_ppm	Al_%	As_ppm	B_ppm	Ba_ppm	Be_ppm	Bi_ppm	Ca_%	Cd_ppm.	Co_ppm	Cr_ppm	Cu_ppm	Fe_%	Ga_ppm	Hg_ppm	K_%	La_ppm	Mg_%	Mn_ppm	Mo_ppm	Na_%
-RD	085004-	0-087	09	-1-35				0.5	2	0 63	-0 5		27	23	3-48	10	1	0.08	10	0 35	801	1	0.02
RH	095010	0.025	0.4	1.41	301	-10	180	-0.5	-2	0 15	-05	7	29	32	2 84	-10	-1	0 05	10	03	272	3	0 01

.

.

Ni com	P %	Ph. opm	S %	Sh nom	Sc_ppm	Sr. nom	Th opm	T1 %	Ti nom		Voom	W pom	Zn pom	Method	Certificate
, pp.,,	~	<u></u>	0_/	oo_ppin	00_pp	0	III_ppIII		n_ppm	o_ppm	•PP:			mooriou	Continento
19	1000	27	0 12	7	4	43	20	0 04	10	10	A7	10	01	ME-ICP41	VA08128757
20	· · ·		0 04		2	22	-20		4		53	-10			VA09073223

.

-