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**ASSESSMENT REPORT**

describing

**EXCAVATOR TRENCHING**

at the

**GREEN GULCH PROPERTY**

GG 1-66 YC76232-YC76297

NTS 1150/03

Latitude 63°05'N; Longitude 139°15'W

located in the

Dawson Mining District  
Yukon Territory

prepared by

Archer, Cathro & Associates (1981) Limited

for

**ATAC RESOURCES LTD.**  
and  
**ARCUS DEVELOPMENT GROUP INC.**

by

H. Smith, B.Sc., P.Geo.  
April 2011

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## INTRODUCTION

The Green Gulch property is a gold prospect located immediately south of Kinross Gold Corporation's White Gold property in western Yukon. It is owned 100% by ATAC Resources Ltd. subject to an option agreement with Arcus Development Group Inc.

This report describes an excavator trenching program that was conducted by a three person crew between July 11 and 21, 2010. The work was done by Archer, Cathro & Associates (1981) Limited on behalf of Arcus. The author directed and participated in the program, and her Statement of Qualifications is in Appendix I.

## PROPERTY LOCATION, CLAIM DATA AND ACCESS

The Green Gulch property comprises 66 contiguous mineral claims in the Thistle Creek area. The claims lie at latitude 63°05'N and longitude 139°15'W on NTS map sheet 115O/03 as shown on Figure 1. They are registered with the Dawson Mining Recorder in the name of Archer Cathro, which holds them in trust for ATAC. Claim data are listed below while the locations of individual claims are illustrated on Figure 2.

<u>Claim Name</u>	<u>Grant Number</u>	<u>Expiry Date*</u>
GG 1-66	YC76232-YC76297	April 29, 2014

\*Expiry date includes 2010 work which has been filed for assessment credit but not yet accepted.

The initial mobilization of crew and gear into the Green Gulch area was via a small fixed wing aeroplanes operated by Great River Aviation from its base at the Dawson City Airport. Mobilization was from Dawson to Kirkman Creek where the crew stayed at the FellHawk placer operation while working on Arcus's Touleary property. Once work on Touleary was complete, the crew transported its gear via four-by-four Kawasaki 610 Mule to the Gasbutt placer operation on Thistle Creek. From the Gasbutt camp the crew travelled to and from the trenching area (Figure 2) via the Thistle Creek and White Gold roads using the Mule. A Volvo 225 excavator owned and operated by Gasbutt was used to perform the excavator trenching.

## HISTORY

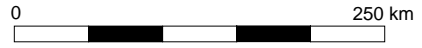
There is no public record of previous mineral exploration in the areas covered by the Dan Man property; however, reconnaissance-scale exploration has been done by various parties. ATAC staked the property in September 2008 after reviewing a non-public domain database owned by Archer Cathro.

In 1980, Archer Cathro performed regional exploration in the Dawson Range district for the NAT Joint Venture (NAT JV), which comprised Chevron Canada Limited and Armco Mineral Exploration Ltd. The NAT JV program involved reanalyses of splits from over 5000 previously collected samples for gold, silver, arsenic and lead, plus follow up geochemical sampling (Archer and Onasick, 1980). A number of samples were collected from the current Green Gulch property. These samples returned background to strongly anomalous values for gold-in-silt (up

**ARCUS DEVELOPMENT GROUP  
ATAC RESOURCES LTD.**

FIGURE 1  
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

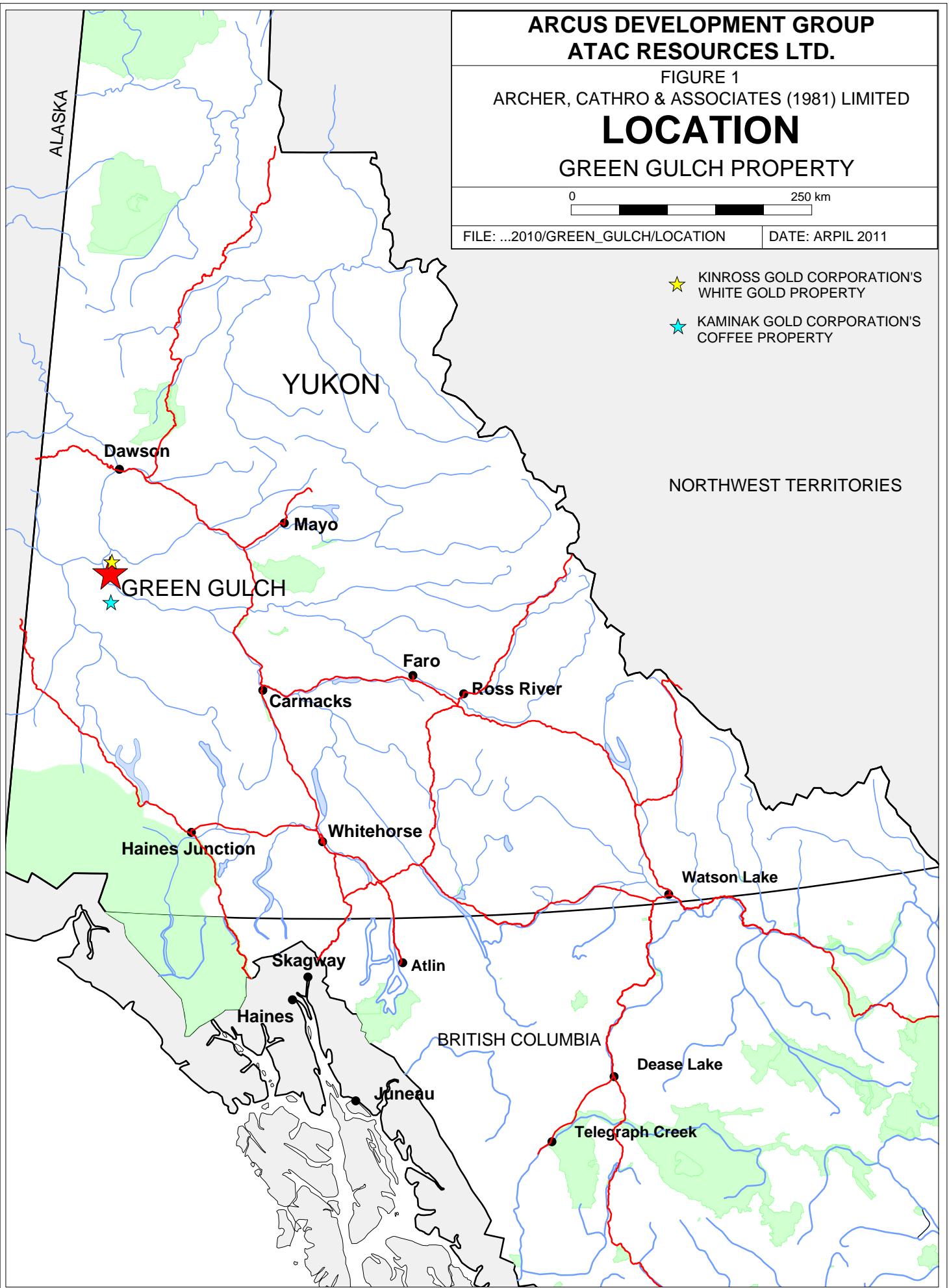
**LOCATION  
GREEN GULCH PROPERTY**

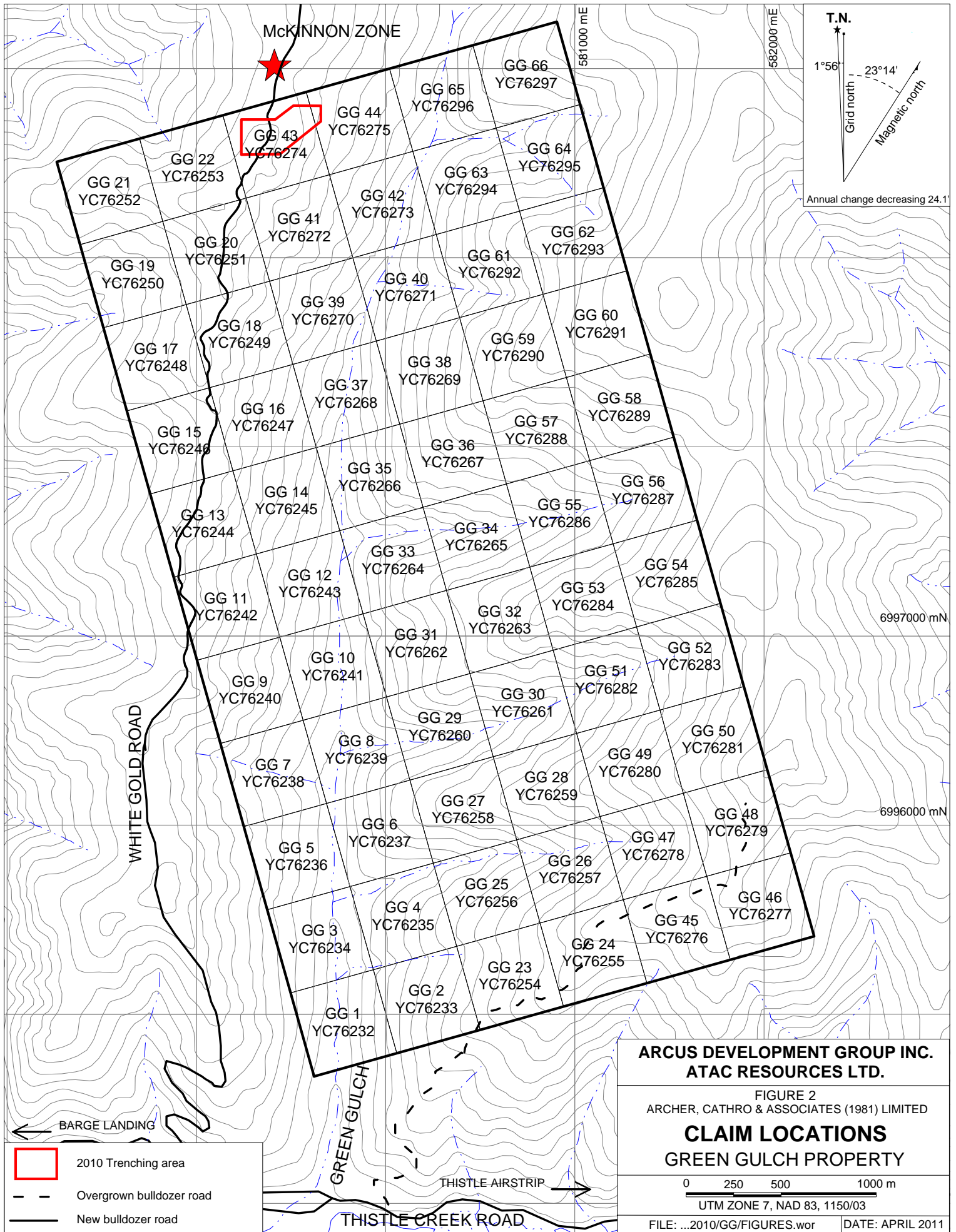


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DATE: APRIL 2011

- ★ KINROSS GOLD CORPORATION'S WHITE GOLD PROPERTY
- ★ KAMINAK GOLD CORPORATION'S COFFEE PROPERTY





to 80 ppb) and background to moderately anomalous values for gold-in-soil (up to 30 ppb) and arsenic-in-soil (up to 30 ppm).

In early summer 2009, Arcus optioned the Dan Man property from ATAC. Work performed in 2009 included geochemical sampling and prospecting (Smith, 2009). A total of 29 rock and 2370 soil samples were collected for analysis. Results from this work were moderately encouraging. The highest values from rock sampling were 53 ppb gold and 405 ppm arsenic. Soil sampling identified a few strongly anomalous isolated anomalies with peak values of 251 ppb gold and 50 ppm arsenic. A relatively permissive layer of thick, permanently frozen soil limited the effectiveness of both prospecting and soil sampling.

No evidence of placer mining was observed on the property, but three active placer claims overlap the southwest corner of the claims. Green Gulch Creek drains into the lower reaches of the 29 km long Thistle Creek, which is a major gold producing creek. Reported placer gold production from Thistle Creek between 1949 and 2006 totalled 81,540 ounces gold (LeBarge, 2007). Fineness of gold is 848 to 895, and coarse jewellery-grade gold is common.

### **GEOMORPHOLOGY**

The property is in an area of gentle to moderate relief two kilometres east of the Yukon River. Local elevations range from 425 to 1030 m above sea level. The higher parts of the property are vegetated with stunted, deciduous and evergreen trees, scrub brush and thin moss cover. Lower elevations support a mixture of deciduous and evergreen forest with thick buckbrush-, willows- and moss-covered slopes. No part of the property is above treeline.

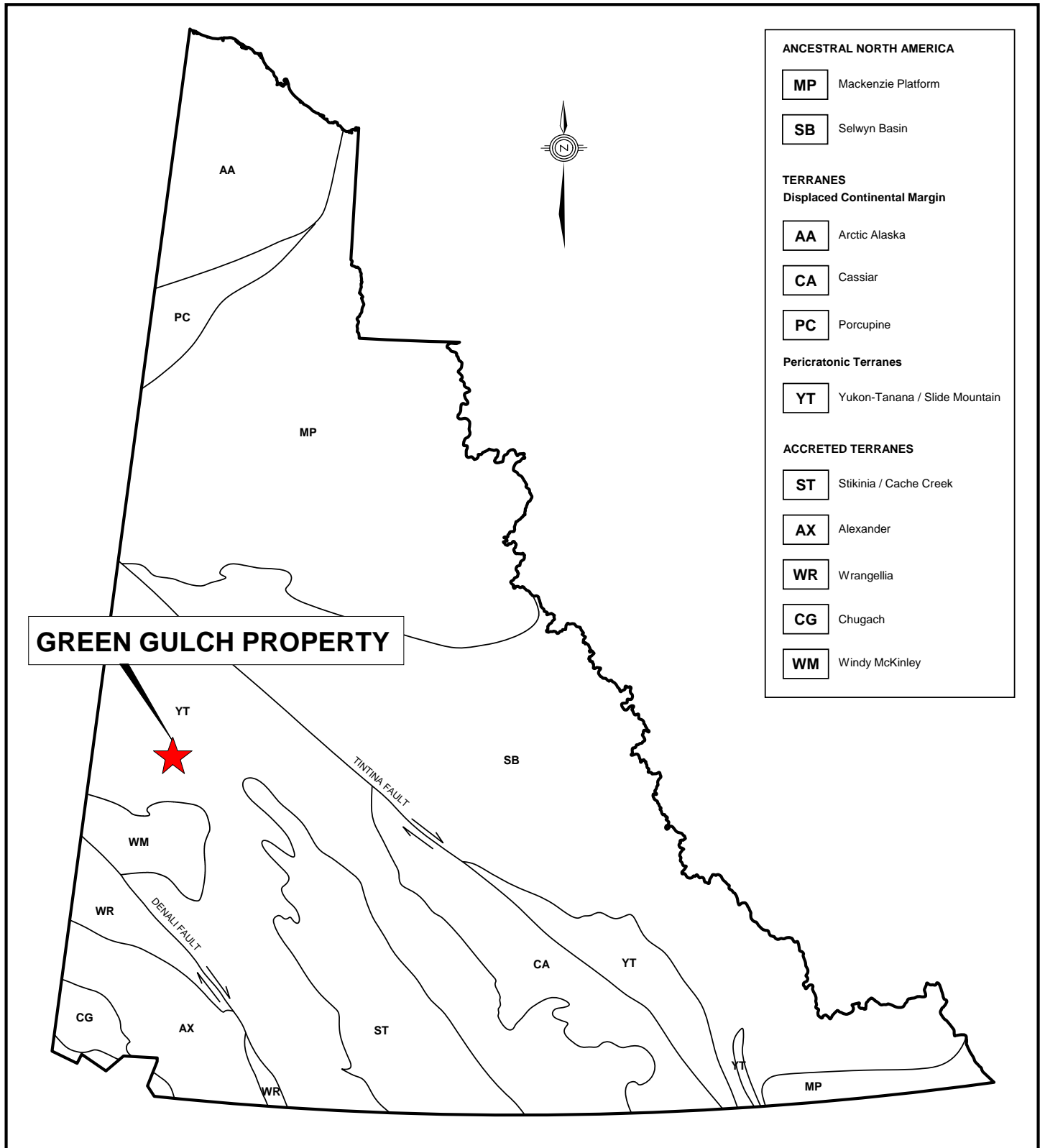
Outcrops are rare and are mostly found along a sparsely vegetated ridge in the northwest corner of the property and on the north side of drainages in its eastern half. Some bedrock is also exposed along road cuts.

Soil profiles in the Dawson Range are complex compared to most other places in Yukon. Due to the absence of glaciation, ridges and spines are deeply weathered and often leached. On hillsides and valley bottoms, the soil profile from surface to bedrock typically consists of the following: a layer of organic matter, which ranges from 10 to 50 cm thick; a layer of volcanic ash from the Mount Churchill eruption, which varies from 0 to 20 cm thick; a layer comprised of loess mixed with soliflucted B and C-horizon residual soil, which ranges from 0 to more than 100 cm thick; and a layer of C-horizon residual soil (Bond, 2007).

The property is drained by Green Gulch Creek, which flows into Thistle Creek and then into the Yukon River.

### **REGIONAL GEOLOGY**

The Green Gulch property lies within the Yukon-Tanana Terrane approximately 80 km southwest of the Tintina Fault (Figure 3). Table I contains a brief summary of the main lithologies in the area. Figure 4 illustrates the distribution of those lithologies.



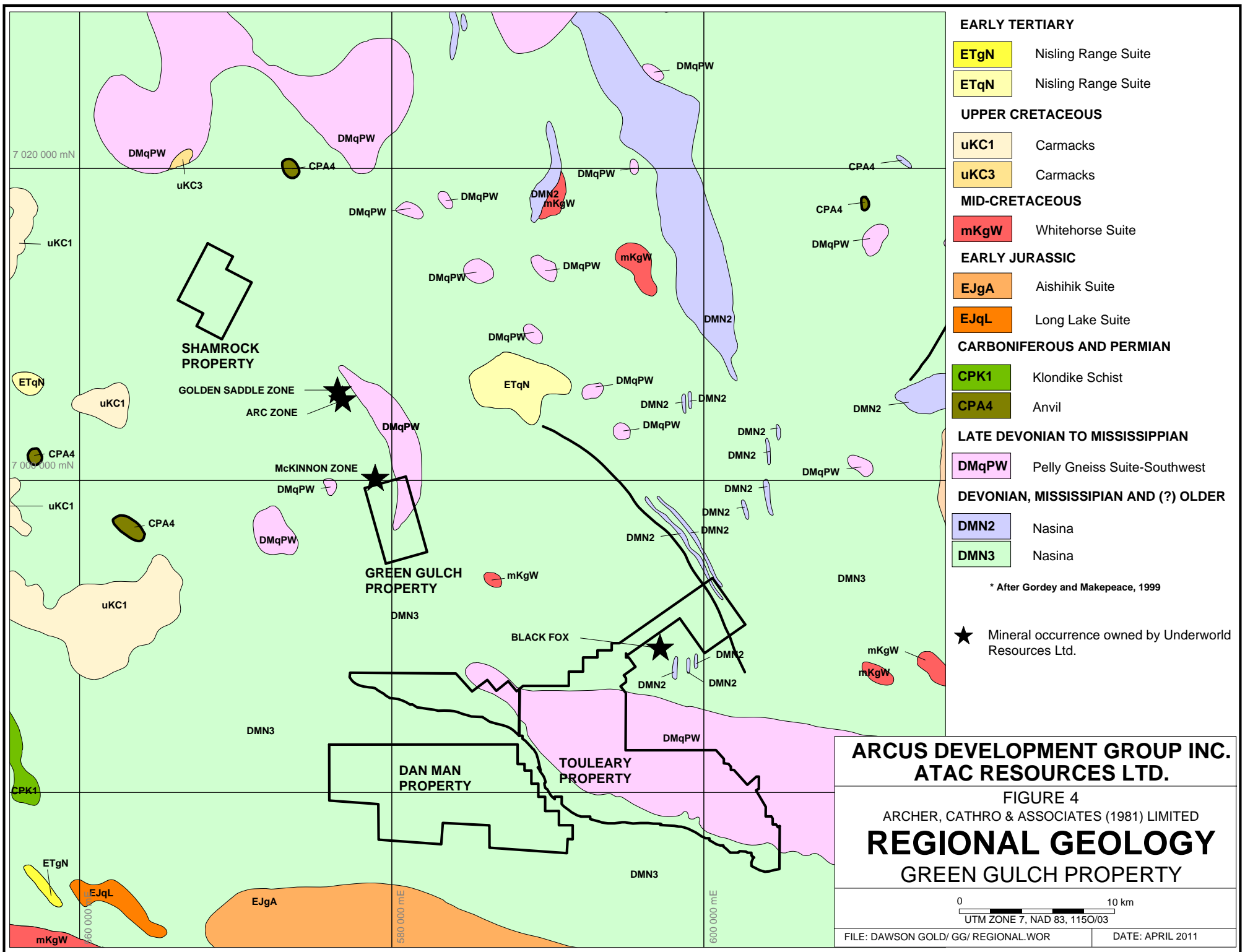
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ATAC RESOURCES LTD.**

FIGURE 3  
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

**TECTONIC SETTING  
GREEN GULCH PROPERTY**

0 200 km

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**Table I - Regional Lithologies (After Gordey and Makepeace, 2003)**

<b>Unit</b>	<b>Period</b>	<b>Description</b>
ETqN	Early Tertiary	<b>Nisling Range Suite:</b> Series of felsic intrusives ranging in composition from granodiorite to mafic-poor granite.
uKC1	Upper Cretaceous	<b>Carmacks Group (1):</b> Volcanic succession dominantly olivine basalt and breccia; hornblende-feldspar porphyry and andesite and dacite flows with minor sandy tuff, granite boulder conglomerate, agglomerate and associated epiclastic rocks.
uKC3	Upper Cretaceous	<b>Carmacks Group (3):</b> Medium bedded, poorly sorted, coarse- to fine-grained sandstone, pebble conglomerate, shale, tuff and coal; massive to thick bedded locally derived granite or quartzite pebble to boulder conglomerate.
mKgW	Mid-Cretaceous	<b>Whitehorse Suite:</b> Felsic intrusives ranging in composition from quartz monzonite to leucogranite.
EJgA	Early Jurassic	<b>Aishihik Suite:</b> Medium to coarse grained, foliated biotite-hornblende granodiorite; biotite rich gneiss; foliated hornblende diorite to monzodiorite with local potassium-feldspar megacrysts.
EJqL	Early Jurassic	<b>Long Lake Suite:</b> Felsic, massive to weakly foliated, fine to coarse grained biotite, biotite-muscovite and biotite-hornblende quartz monzonite to granite. Commonly hosts potassium feldspar megacrysts.
CPK1	Carboniferous to Permian	<b>Klondike Schist (1):</b> Tan to rusty and black weathering muscovite and/or chloritic quartzite and quartz-muscovite-chlorite schist; quartz and/or feldspar augen-bearing quartz-muscovite (+/-chlorite) schist; includes augen gneiss and amphibolite.
CPA4	Carboniferous to Permian	<b>Anvil Range Group (4):</b> Dunite, peridotite, gabbro, pyroxenite, harzburgite with minor diorite, hornblendite and diabase; serpentinite, orange weathering quartz-carbonate rock with minor green chromian muscovite, talc-carbonate schist and carbonatized ultramafic rocks.
DMqPW	Late Devonian to Mississippian	<b>Pelly Gneiss Suite:</b> Foliated equigranular, medium grained muscovite quartz monzonite, moderately to strongly foliated K-feldspar augen quartz monzonitic to granitic gneiss.
DMgPW	Late Devonian to Mississippian	<b>Pelly Gneiss Suite:</b> Foliated medium grained, homogenous biotite granite gneiss to biotite or hornblende granodiorite gneiss; includes interfoliated amphibolite, quartz-mica schist and phyllites.
DMN2	Devonian, Mississippian and older (?)	<b>Nasina Assemblage (2):</b> Marble.

DMN3	Devonian, Mississippian and older (?)	<b>Nasina Assemblage (3):</b> Quartzite, micaceous quartzite, quartz-muscovite schist, and minor metaconglomerate and metagrit. May locally include significant Nisling Assemblage.
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### **PROPERTY GEOLOGY**

In 2009, a five day orientation-scale geological mapping program was done during prospecting traverses by the author. Mapping was confined to the White Gold road, an overgrown bulldozer road in the southeast corner of the claims and steep drainages on the eastern half of the property. Observed bedrock on the property belongs to the Pelly Gneiss Suite (DMqPW) or the highly strained Nasina Assemblage (DMN3).

DMN3 is the main unit mapped on the property and is typically well foliated, fine grained biotite-chlorite-quartz schist. Foliation measurements consistently strike between 020° and 040° and dip from 22° to 44° toward the east. Muscovite schist locally forms 3 to 20 m thick layers within the mafic schist. Fine grained pyrite occasionally occurs along foliation planes in both types of schist.

Three subunits of DMqPW have been identified on the property. The first subunit is a fine grained, biotite-chlorite amphibolite; the second subunit is highly baked and bleached, potassium feldspar rich gneiss; and, the final subunit is a well foliated, brown to tan quartz-mica schist. Abundant limonitic patches and fine grained grey to black sulphides occur in the altered gneiss subunit. No reliable structural orientations were observed in any of the subunits. The contact between DMqPW and DMN3 appears to strike northwesterly where it crosses the Underworld road, but on the eastern side of the property it veers easterly, paralleling a steep drainage.

Fine to medium grained ultramafic (unit DMum) was observed in talus near the White Gold road. This unit is poorly defined but is thought to be equivalent to similar intrusives that forms sills in the Finlayson district of southeastern Yukon.

In 2010, mapping was restricted to trenches that were excavated in the northern-most part of the property alongside the White Gold road.

### **REGIONAL MINERALIZATION**

Although a number of historical mineral occurrences are located in the vicinity of the Green Gulch property, published descriptions provide few insights regarding the current gold exploration activities. The following paragraph describes recent discoveries on the adjacent White Gold property, which have direct bearing on exploration at Green Gulch and which are not yet documented in Yukon Minfile.

All mineral occurrences and showings on the White Gold property are hosted within units DMN3 and DMqPW. The two most noteworthy occurrences in respect to work at the Green Gulch property are the Golden Saddle Zone and the McKinnon Zone.

Golden Saddle Zone lies three kilometres northwest of the Green Gulch property. Although Underworld reports multiple styles of mineralization at Golden Saddle, most of the gold is hosted in quartz-albite-carbonate breccias with minor disseminated pyrite. The following table lists highlights from Underworld's 2009 drill program at Golden Saddle.

**Table II - 2009 Drilling Highlights from Golden Saddle Zone, White Gold Property (Underworld, 2009)**

Location	Length (m)	Grade (g/t Au)
WD09-29	60.5	3.89
WD09-31	104.0	3.39
WD09-47	31.1	9.20
WD09-64	100.4	3.13
WD09-69	76.9	3.40
WD09-72	49.5	3.49
WD09-91	91.28	3.69
WD09-101	48.75	3.67
WD09-102	41.72	4.36
WD09-103	25.38	4.48
WD09-106	25.50	2.97

McKinnon Zone lies 100 m northwest of the Green Gulch property. This zone reportedly hosts visible gold within altered and quartz veined meta-intrusive rocks of the Pelly Gneiss Suite (Underworld, 2009).

In 2009, a trenching program was undertaken by Underworld at the McKinnon Zone. The best chip sample results graded 1.40 g/t gold over 1.50 m and 1.63 g/t gold over 1.51 m. Assays from three rock samples of well mineralized quartz-breccia material averaged 60.2 g/t gold and 354 g/t silver (Underworld, 2009).

The McKinnon Zone was visited by the author during a property tour in August 2009 and the following observations were made. The zone strikes northwest and has been traced by trenching for a length of 100 m. It is composed of sucrosic multi-episodal quartz with abundant ankerite and quartz-breccia stockwork, which both host visible gold and pyrite. The pyrite is primarily present on foliation planes where it has replaced biotite. The siliceous zones are hosted in completely altered, potassium feldspar-rich gneiss (DMqPW). The McKinnon Zone was drilled by Kinross in 2010, but results from this drilling were not released.

### **SOIL GEOCHEMISTRY**

In 2009, 2370 soil samples were collected for assay. Sample sites are at 50 m intervals along lines spaced 100 m apart. In the northwestern corner of the property two small grids were sampled at 25 by 25 m spacings. Permafrost restricted sample collection in some areas.

In general, soil sampling results yielded somewhat erratic distribution of high values and there is poor correlation between gold and arsenic anomalies. Most gold results are less than 10 ppb, and there is little clustering of moderately to strongly anomalous values (Figure 5). The two highest values, 176 and 251 ppb gold, lie about 800 m along strike to the southeast of the McKinnon Zone (Smith, 2009).

Ninety-nine percent of the soil samples returned background to weak arsenic values (Figure 6). Most of the higher values lie in the northwestern corner of the property where a consecutive string of four samples yielded between 31 and 50 ppm arsenic.

### **EXCAVATOR TRENCHING AND ROCK GEOCHEMISTRY**

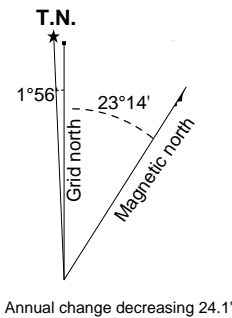
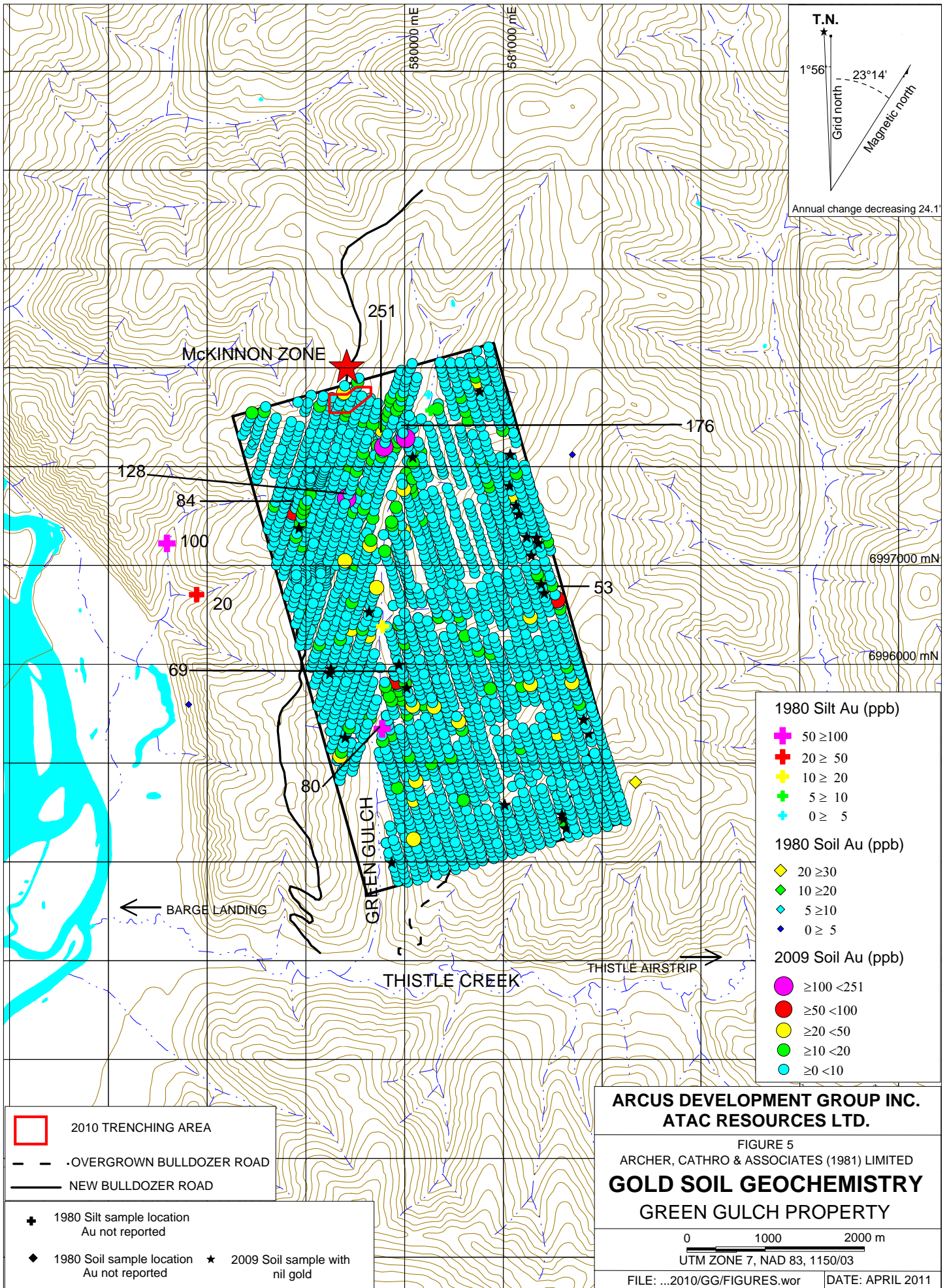
Four trenches totalling 628 m in length were excavated during the 2010 work program (Figure 7). Trench sections appear in Appendix II. The trenches were dug in an area of background to weak gold- and arsenic-in-soil values. None of the strongly anomalous gold-in-soil values from 2009 sampling were trenched because they are located on steep frozen hillsides that could not be accessed during the relatively short work program. All trenches reached bedrock and chip samples were taken from the upslope rib of each trench. Table II lists trench specifications.

**Table III – Excavator Trenching**

Trench	Length (m)	North End (easting, northing)	South End (easting, northing)	Samples (#)
GG-10-01	175	579411, 6999672	579550, 6999788	35
GG-10-02	193	579457, 6999642	579629, 6999766	40
GG-10-03	120	579317, 6999588	579360, 6999715	24
GG-10-04	140	579314, 6999709	579267, 6999570	29

One hundred and twenty-eight rock samples were taken during the 2010 trenching program (Figure 8). Multi-element analyses (Au-AA24 and ME-ICP61) for rock samples were carried out at ALS Chemex in North Vancouver, B.C. Each sample was dried, fine crushed to better than 70% passing -2 mm and then a 250 g split was pulverized to better than 85% passing 75 micron. The fine fraction was then analyzed for gold using fire assay followed by atomic absorption (AA) finish and for 48 other elements using a nitric acid-aqua regia digestion and ICP analysis. Certificates of Analysis are provided in Appendix III.

Results from the chip sampling were generally low. GG-TR-10-02 returned the best response from chip samples taken across a zone of highly silicified biotite-chlorite-quartz gneiss with rusty fracture surfaces and trace earthy hematite. These samples yielded a weighted average of 0.294 g/t gold and 1.28 g/t silver over 20 m. A localized knoll caused by the increase in silicification and the steep slope angle on the hillside combined to make excavation tricky, and consequently, the interval remains open along strike towards the south.



- 1980 Silt Au (ppb)**
- ✚ 50 ≥ 100
  - ✚ 20 ≥ 50
  - ✚ 10 ≥ 20
  - ✚ 5 ≥ 10
  - ✚ 0 ≥ 5
- 1980 Soil Au (ppb)**
- ◆ 20 ≥ 30
  - ◆ 10 ≥ 20
  - ◆ 5 ≥ 10
  - ◆ 0 ≥ 5
- 2009 Soil Au (ppb)**
- ≥ 100 < 251
  - ≥ 50 < 100
  - ≥ 20 < 50
  - ≥ 10 < 20
  - ≥ 0 < 10

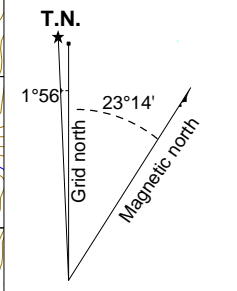
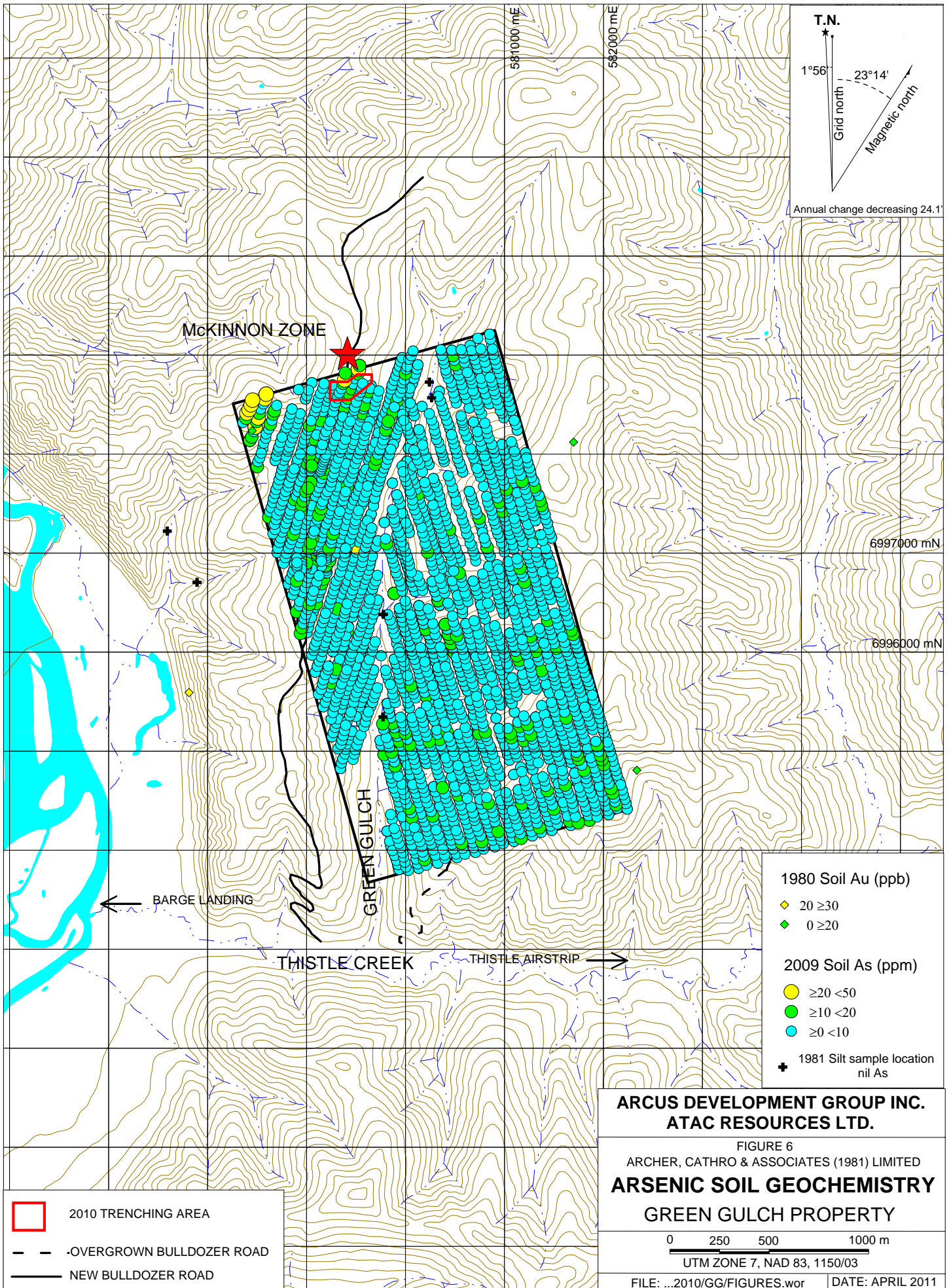
- ▭ 2010 TRENCHING AREA
- - - OVERGROWN BULLDOZER ROAD
- NEW BULLDOZER ROAD

- ✚ 1980 Silt sample location Au not reported
- ◆ 1980 Soil sample location Au not reported
- ★ 2009 Soil sample with nil gold

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FIGURE 5  
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED  
**GOLD SOIL GEOCHEMISTRY**  
**GREEN GULCH PROPERTY**

0 1000 2000 m  
UTM ZONE 7, NAD 83, 1150/03



- 2010 TRENCHING AREA
- - - OVERGROWN BULLDOZER ROAD
- NEW BULLDOZER ROAD

1980 Soil Au (ppb)

- ◆ 20 ≥ 30
- ◆ 0 ≥ 20

2009 Soil As (ppm)

- ≥ 20 < 50
- ≥ 10 < 20
- ≥ 0 < 10

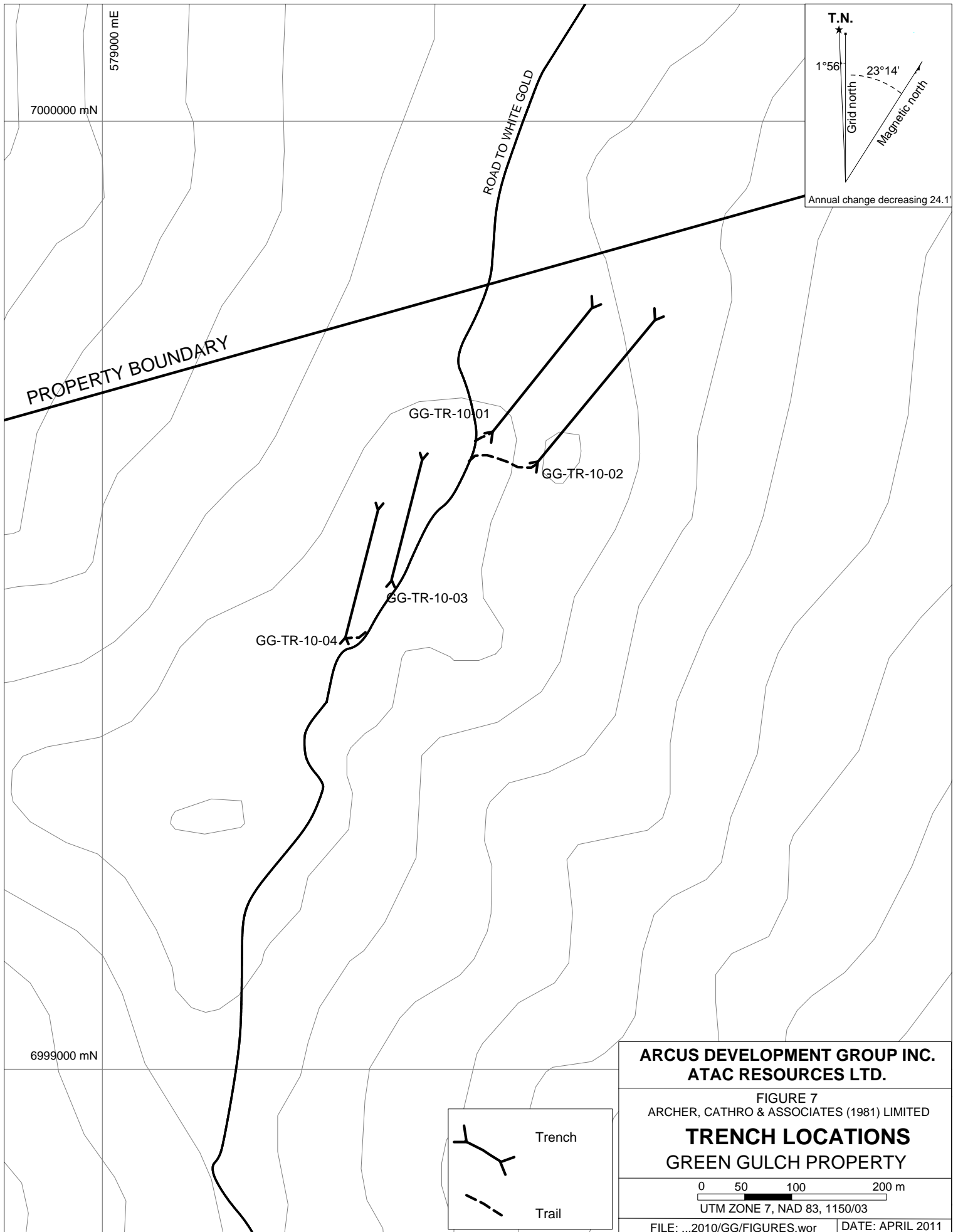
✚ 1981 Silt sample location  
nil As

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FIGURE 6  
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED  
**ARSENIC SOIL GEOCHEMISTRY**  
**GREEN GULCH PROPERTY**

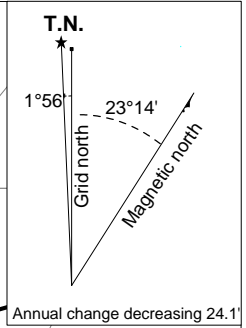
0 250 500 1000 m  
UTM ZONE 7, NAD 83, 1150/03

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7000000 mN

579000 mE



PROPERTY BOUNDARY

ROAD TO WHITE GOLD

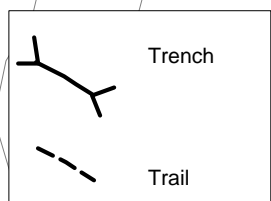
GG-TR-10-01

GG-TR-10-02

GG-TR-10-03

GG-TR-10-04

6999000 mN



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FIGURE 7  
 ARCHER, CATHRO & ASSOCIATES (1981) LIMITED


**TRENCH LOCATIONS  
 GREEN GULCH PROPERTY**

0 50 100 200 m  
 UTM ZONE 7, NAD 83, 1150/03

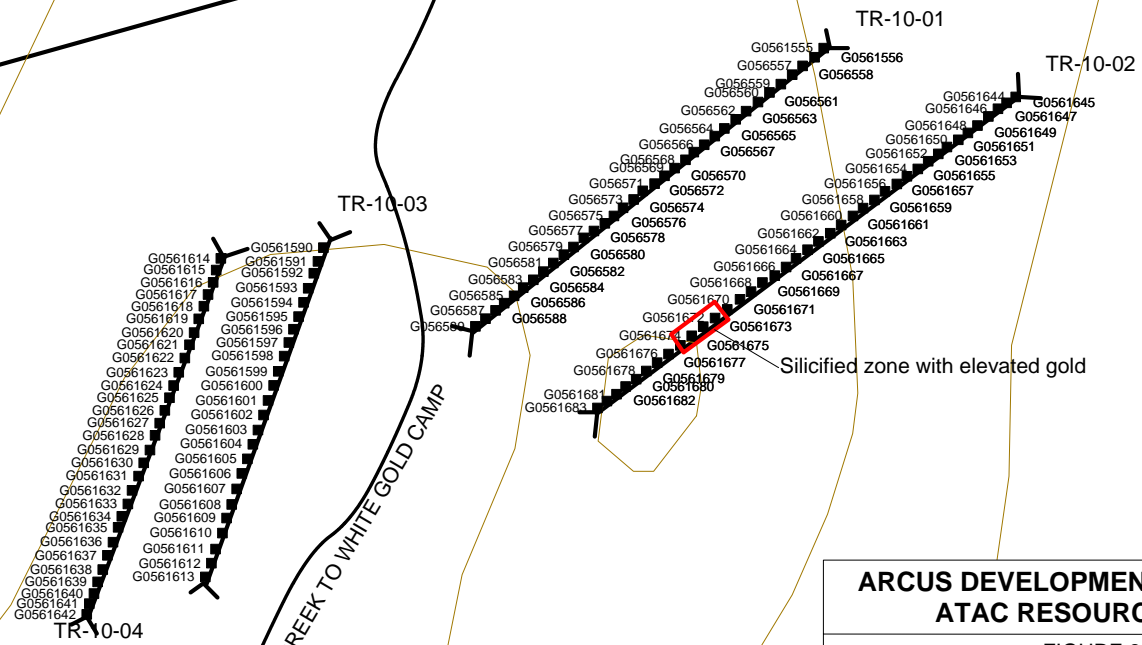
FILE: ...2010/GG/FIGURES.wor DATE: APRIL 2011

7000000 mN

579000 mE

McKinnon Zone 

PROPERTY BOUNDARY



**ARCUS DEVELOPMENT GROUP INC.  
ATAC RESOURCES LTD.**

FIGURE 8  
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

**ROCK SAMPLE LOCATIONS  
GREEN GULCH PROPERTY**

0 50 100 150 m

UTM ZONE 7, NAD 83, 115J/14

FILE: ...2010/GG/FIGURES.wor DATE: APR 2011

## **DISCUSSION AND CONCLUSIONS**

The 2010 exploration program at the Green Gulch searched for gold along the projected strike extension of the McKinnon Zone on the adjacent White Gold property. Although most trench samples returned low values, zones with increased silica content returned elevated but sub-economic gold results. Trenching did not fully evaluate the silicified zones and did not reach the most anomalous soil geochemical sites.

An airborne magnetic survey should be flown over the Green Gulch property before the next field season. If magnetic high features correlate to the known gold-in-soil anomalies, a more comprehensive trenching program should be undertaken or a diamond drill should be mobilized to the property to test the target.

Respectfully submitted,

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

Heather Smith B.Sc., P.Geol.

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2009 News Release (October 19, 28 and November 24);  
<http://www.underworldresources.com>.

**APPENDIX I**  
**STATEMENT OF QUALIFICATIONS**

## STATEMENT OF QUALIFICATIONS

I, Heather Smith, geologist, with business addresses in Vancouver, British Columbia and Whitehorse, Yukon Territory and residential address at #604-175 West 1 Street, North Vancouver, British Columbia, V7M 3N9 do hereby certify that:

1. I graduated from the University of British Columbia in 2006 with a B. Sc in Geological Sciences.
2. From 2004 to present, I have been actively engaged in mineral exploration in the Yukon Territory, British Columbia and Northwest Territories.
3. I am a Professional Geoscientist (P.Ge.) with the Association of Professional Engineers and Geoscientists of British Columbia (Member Number 150000).
4. I have personally directed the fieldwork reported herein and have interpreted all data resulting from this work.

Heather Smith, B.Sc., P.Ge.

**APPENDIX II**

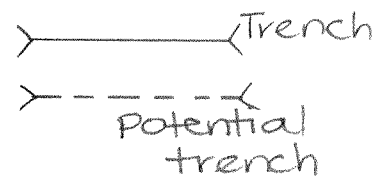
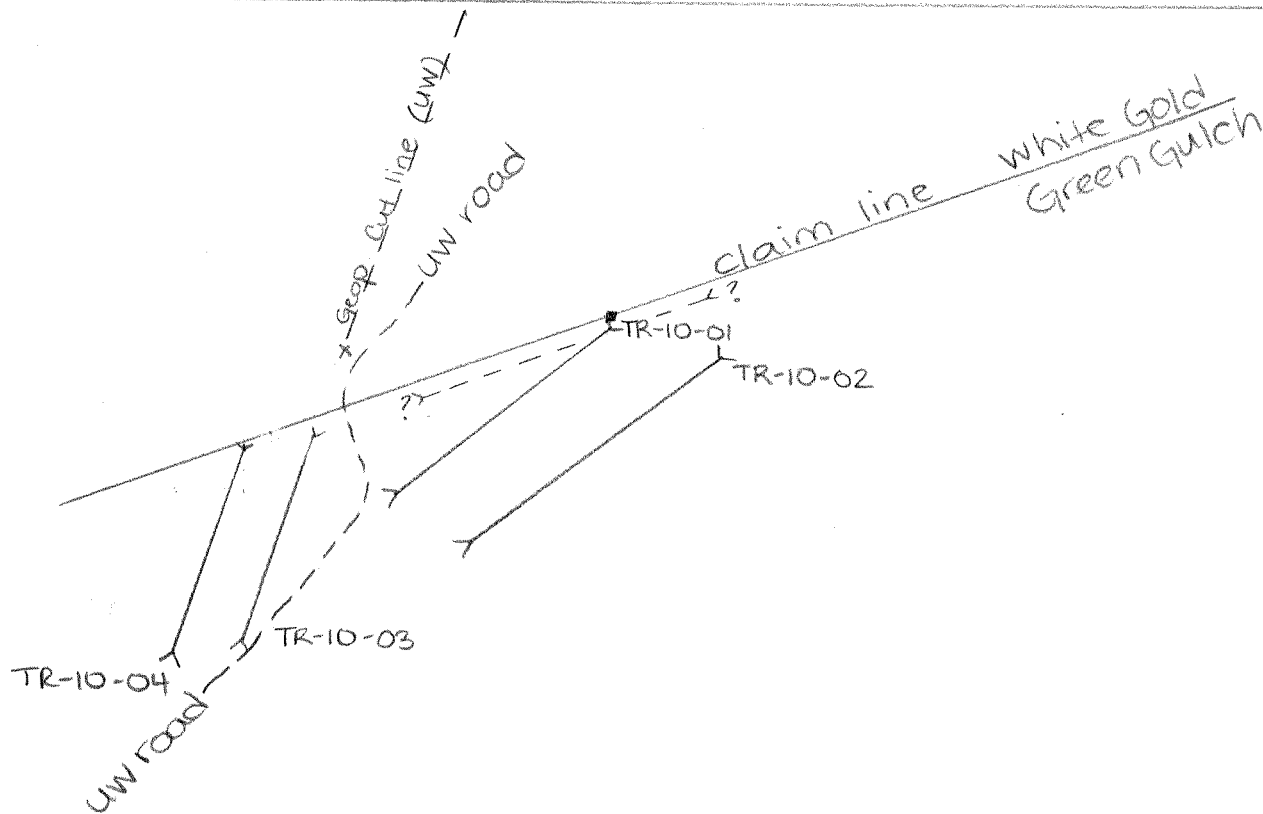
**TRENCHES GG-10-01 TO GG-10-04**

# GREEN GULCH 2010

579000

580000

700000



TR-10-01

GREEN GULCH PROPERTY

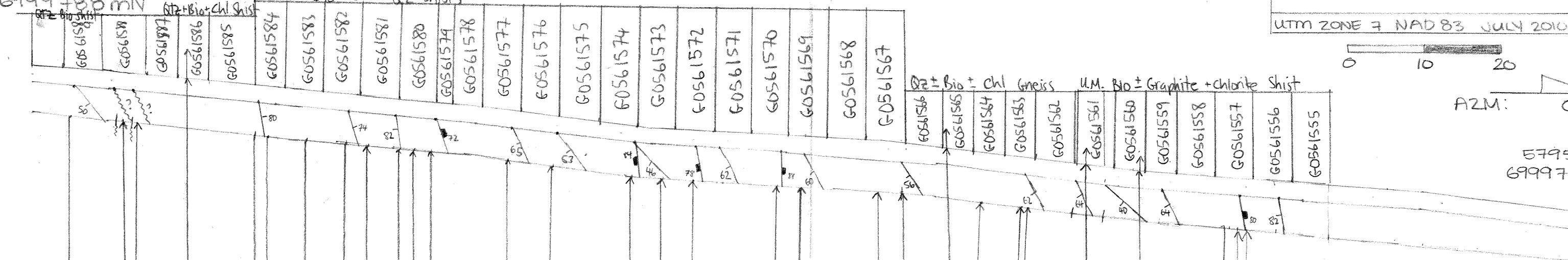
UTM ZONE 7 NAD 83 JULY 2010



AZM: 050°

579550mE  
6999788mN

579411mE  
6999788mN



fol: 008/50E

Qtz-Bio ± Chl  
shist  
inter-mafic  
minerals

fol: 290/74N  
Fx: 010/53E  
ultramafic  
contains  
Qtz vein

fol: 016/46E  
Fx: 062/84S  
with Qtz vein  
ortho to fol  
Fx: 086/78S

Fx: 012/62E

4cm Qtz  
vein # to  
fol  
garnet augens  
≤ 3mm in sch

Qtz-Bio-muscovite  
shist  
no contact angle

Fx: 292/72N  
fol: 304/65E  
more Qtz alteration

dominant  
fracture # to  
fol, # Qtz vein  
Fx: 246/88N  
Fol change  
slightly  
0.5m fol ||  
to ultramafic

Contact  
016/56E

altered plagioclase  
phenos  
with Qtz vein in gneiss,  
max 10cm thick  
5cm void, minor lim stain  
oblique to Fx

Fx: 240/80N  
dominant fracture  
# to fol.

ultramafic  
Bio ± Horn + graphite

7cm Qtz vein  
cut || to fol  
inter-mica on  
fracture

Qtz-Bio ± Chl  
gneiss  
no contact  
contains 5cm  
wide Qtz vein

limonite and  
rusty patches

Bio + Graphite + Chlorite shist  
containing ≤ 2mm wide Qtz lenses (grey to clear)  
and ≤ 7cm Qtz lenses/floods. Fol ||

Qtz + Bio + Chlorite shist  
shiny / fol appearance  
mafic minerals @ high abundance

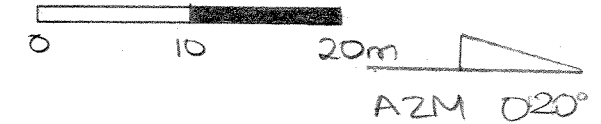
Qtz + Bio ± Chl Gneiss  
sugary appearance. NDT fol  
rusty pits (altered) Qtz eyes  
present ≤ 1mm garnet crystals



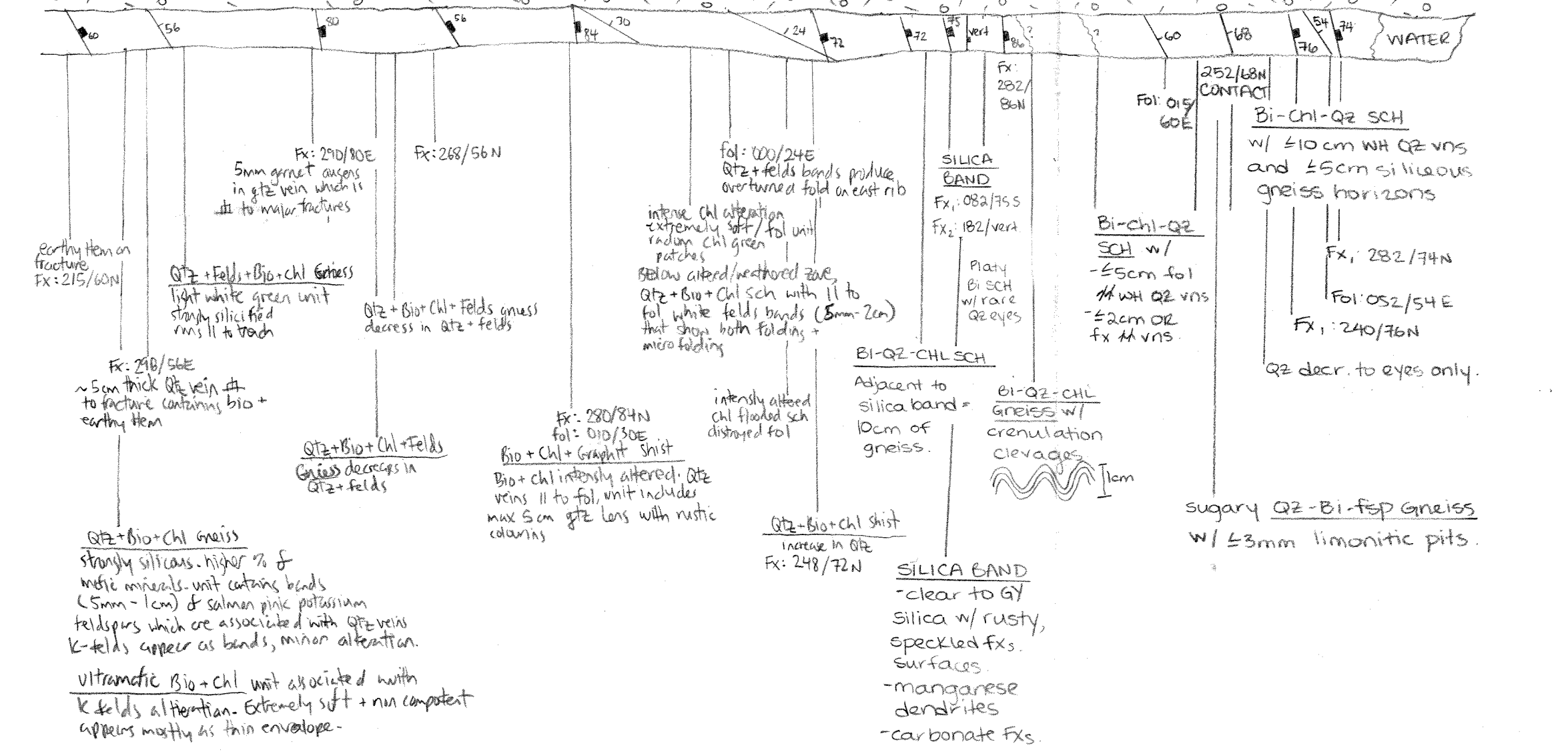
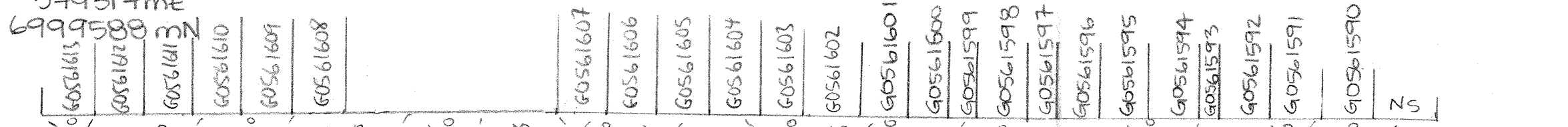
# TR-10-03

GREEN GULCH PROPERTY

UTM ZONE 7 NAD 83 JULY 2010



579317mE 6999589mN  
579360mE 6999715mN



earthy Hem on fracture  
Fx: 215/60N

Fx: 290/80E  
5mm garnet augers in gtz vein which is #1 to major fractures

Fx: 268/56N

Qtz + Felds + Bio + chl Gneiss  
light white green unit strongly silicified rms || to touch

Qtz + Bio + chl + Felds gneiss  
decrease in Qtz + Felds

fol: 000/24E  
intense chl alteration extremely soft / fol unit radium chl green patches  
below altered / weathered zone, Qtz + Bio + chl sch with || to fol, white felds bands (5mm-2cm) that show both folding + micro folding

SILICA BAND  
Fx: 082/75S  
Fx: 182/vert

Platy Bi sch w/ rare Qz eyes

Bi-chl-Qz SCH w/ -5cm fol // w/ Qz vns -2cm Qz fx // vns

252/68N CONTACT  
Bi-chl-Qz SCH w/ <= 10cm WH Qz vns and <= 5cm siliceous gneiss horizons

Fx: 282/74N

Fol: 052/54E

Fx: 240/76N

Qz decr. to eyes only.

Fx: 290/56E  
~5cm thick Qtz vein # to fracture contains bio + earthy Hem

Qtz + Bio + chl + Felds  
Gneiss decreases in Qtz + Felds

Fx: 280/84N  
fol: 010/30E  
Bio + chl + Graphite schist  
Bio + chl intensely altered. Qtz veins || to fol, unit includes max 5cm Qtz lens with rusted columns

intensely altered chl flooded sch destroyed fol

BI-QZ-CHL SCH  
Adjacent to silica band = 10cm of gneiss.

BI-QZ-CHL Gneiss w/ crenulation cleavages  
1cm

Qtz + Bio + chl schist  
increase in Qtz  
Fx: 248/72N

SILICA BAND  
-clear to GY silica w/ rusty, speckled Fxs. surfaces.  
-manganese dendrites  
-carbonate Fxs.

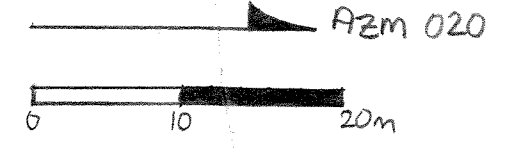
Qtz + Bio + chl gneiss  
strongly siliceous. higher % of mafic minerals. unit contains bands (5mm - 1cm) of salmon pink potassium feldspars which are associated with Qtz veins  
K-felds appear as bands, minor alteration.

Ultramafic Bio + chl unit associated with K felds alteration. Extremely soft + non competent appears mostly as thin envelope.

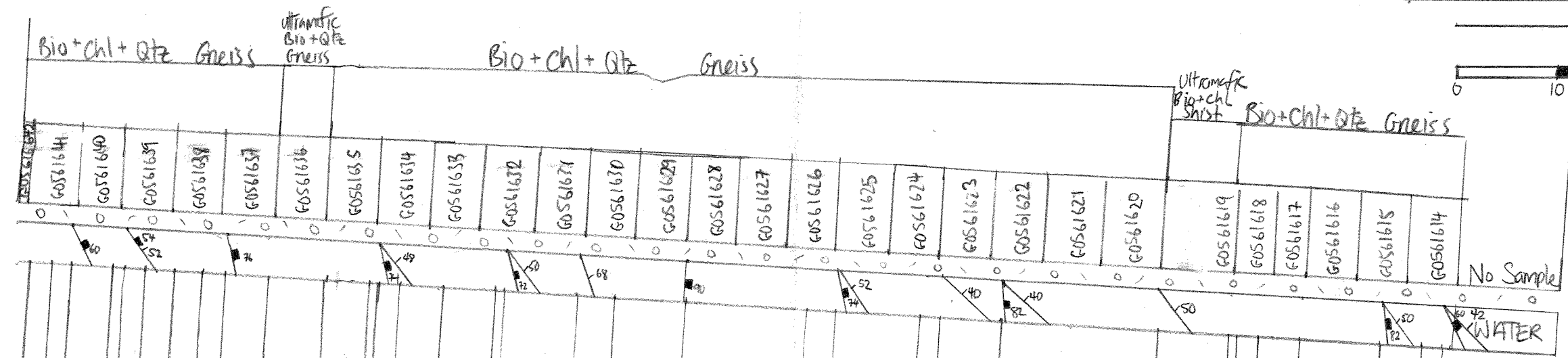
sugary Qz-Bi-fsp Gneiss w/ <= 3mm limonitic pits.

ARCUS DEVELOPMENT GROUP  
 TR-10-04  
 GREEN GULCH PROPERTY  
 UTM ZONE 7 NAD 83 JULY 2010

579267mE  
 6999570mN



579314mE  
 6999709mN



unit becomes more silicified and more rustic

Bio+chl+Qtz Gneiss. increase in chl+lim and K-felds alter.

increase in K-felds alt. in gtz

increase in silicification and K-felds Fx: 054/60s

increase of gtz+minusc decrease chl

unit increase with silica, chl+lim alter. and patches of Qtz+Bio+Chl sch

reluct fol: 008/50E Fx: 088/72s

reluct fol: 002/52E Fx: 096/54s

competent unit on east rib

5cm thick rustic Qtz vein vertical on east rib. minor K-felds alteration. vugs present

reluct fol: 023/68E increase in gtz by KfK+veins

increase in gtz rustics. minor K-felds alteration

reluct fol: 070/90s

patchy earthy hem staining on W. rib

gtz flooding + minor K-felds

Qtz+Bio+chl Gneiss increase of gtz lenses

reluct fol: 029/40E

reluct fol: 010/40E Fx: 092/82s

gtz alteration increases minor K-felds envelope alteration

reluct fol: 024/52E Fx: 077/74s

gtz alteration/flood increases. rustic appearance.

reluct fol: 014/50E

patches of soft chl alteration. increase of gtz bands (5mm-1cm width)

east: Bio+chl+Qtz rib

west: extreme gtz alteration. Qtz+Bio Gneiss

Fx: 072/80s

extreme gtz flooding

reluct fol: 250/60N

reluct fol: 008/42E

area of increased silicification

Bio+Qtz+chl Gneiss more evident 5mm-1cm gtz lenses

Fx: 074/82s

fol: 020/50E

west: non competent unit, highly breakable rib Bio+chl shist. gneiss with vert. gtz veins. undefined contact

middle trench: Bio+chl+Qtz gneiss

east: Bio+chl+Qtz gneiss

**APPENDIX III**  
**CERTIFICATES OF ANALYSIS**



ALS Canada Ltd.  
 2103 Dollarton Hwy  
 North Vancouver BC V7H 0A7  
 Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: ARCHER, CATHRO AND ASSOCIATES (1981)  
 LIMITED  
 1016-510 W HASTINGS ST  
 VANCOUVER BC V6B 1L8

Page: 1  
 Finalized Date: 1-AUG-2010  
 Account: F

**CERTIFICATE WH10096773**

Project: Green Gulch TR-10-03  
 P.O. No.:  
 This report is for 25 Rock samples submitted to our lab in Whitehorse, YT, Canada on 22-JUL-2010.  
 The following have access to data associated with this certificate:  
 JOAN MARIACHER                      BILL WENGZYNOWSKI

SAMPLE PREPARATION	
ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
CRU-QC	Crushing QC Test
PUL-QC	Pulverizing QC Test
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um

ANALYTICAL PROCEDURES		
ALS CODE	DESCRIPTION	INSTRUMENT
Au-AA24	Au 50g FA AA finish	AAS
ME-ICP61	33 element four acid ICP-AES	ICP-AES

To: ARCHER, CATHRO AND ASSOCIATES (1981) LIMITED  
 ATTN: JOAN MARIACHER  
 1016-510 W HASTINGS ST  
 VANCOUVER BC V6B 1L8

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.

Signature:   
 Colin Ramshaw, Vancouver Laboratory Manager



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 Total # Pages: 2 (A - C)  
 Finalized Date: 1-AUG-2010  
 Account: F

Project: Green Gulch TR-10-03

**CERTIFICATE OF ANALYSIS WH10096773**

Sample Description	Method Analyte Units LOR	WEI-21 Recvd Wt. kg	Au-AA24 Au ppm	ME-ICP61 Ag ppm	ME-ICP61 Al %	ME-ICP61 As ppm	ME-ICP61 Ba ppm	ME-ICP61 Be ppm	ME-ICP61 Bi ppm	ME-ICP61 Ca %	ME-ICP61 Cd ppm	ME-ICP61 Co ppm	ME-ICP61 Cr ppm	ME-ICP61 Cu ppm	ME-ICP61 Fe %	ME-ICP61 Ga ppm
G0561590		2.51	<0.005	<0.5	7.25	<5	1610	2.1	<2	1.50	<0.5	12	52	17	3.62	20
G0561591		3.77	<0.005	<0.5	7.57	10	1420	2.1	<2	1.52	<0.5	13	49	21	3.75	20
G0561592		3.96	<0.005	<0.5	8.58	<5	1220	2.3	<2	0.84	<0.5	14	68	27	4.20	20
G0561593		2.28	0.006	<0.5	7.99	<5	3000	2.2	<2	1.10	<0.5	11	49	33	3.33	20
G0561594		2.65	<0.005	<0.5	8.50	<5	1110	2.1	<2	0.56	<0.5	16	61	32	3.94	20
G0561595		3.20	<0.005	<0.5	7.67	6	1290	2.0	<2	0.58	<0.5	13	54	21	3.03	20
G0561596		3.09	<0.005	<0.5	6.01	<5	800	1.6	<2	0.55	<0.5	11	43	13	2.71	10
G0561597		2.65	<0.005	<0.5	7.29	5	1190	1.6	<2	0.52	<0.5	11	53	18	3.33	20
G0561598		2.58	<0.005	<0.5	6.80	<5	1000	1.7	<2	0.42	<0.5	16	51	39	3.64	20
G0561599		2.44	<0.005	<0.5	4.31	<5	880	1.1	<2	0.42	<0.5	9	39	25	2.32	10
G0561600		3.51	<0.005	<0.5	5.68	<5	1060	1.5	<2	0.36	<0.5	14	47	34	3.37	10
G0561601		4.21	<0.005	<0.5	6.77	<5	1160	1.6	<2	0.50	<0.5	13	52	19	3.41	10
G0561602		3.67	<0.005	<0.5	6.35	<5	3780	1.7	3	1.03	<0.5	13	77	37	3.33	10
G0561603		2.26	<0.005	<0.5	4.49	<5	2310	1.2	2	2.26	0.5	18	287	15	3.14	<10
G0561604		3.50	<0.005	<0.5	5.84	<5	1890	1.7	<2	1.58	<0.5	9	85	20	2.71	20
G0561605		2.84	<0.005	<0.5	6.10	<5	2260	1.7	<2	1.71	<0.5	9	66	19	2.86	10
G0561606		3.18	<0.005	<0.5	4.93	6	1740	1.5	<2	1.88	<0.5	17	273	29	3.32	10
G0561607		3.64	<0.005	<0.5	4.22	<5	1420	1.4	<2	1.34	<0.5	10	79	34	2.82	<10
G0561608		2.95	<0.005	<0.5	5.42	<5	2210	1.4	<2	1.61	<0.5	8	51	28	3.21	10
G0561609		2.72	<0.005	<0.5	6.82	<5	2320	2.4	<2	1.01	<0.5	3	7	7	1.84	10
G0561610		2.78	<0.005	<0.5	7.28	5	2310	2.8	<2	1.55	<0.5	3	6	3	2.00	20
G0561611		3.71	0.006	<0.5	7.10	<5	1620	2.3	<2	1.29	<0.5	3	17	12	2.08	10
G0561612		2.69	0.007	<0.5	6.81	<5	1950	2.4	<2	1.00	<0.5	2	7	5	1.86	20
G0561613		3.28	<0.005	<0.5	6.97	<5	2020	2.7	<2	1.59	<0.5	3	12	6	1.56	20
C491350		2.43	<0.005	<0.5	5.39	<5	1470	1.1	<2	0.96	<0.5	2	11	4	0.72	10



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 Total # Pages: 2 (A - C)  
 Finalized Date: 1-AUG-2010  
 Account: F

Project: Green Gulch TR-10-03

**CERTIFICATE OF ANALYSIS WH10096773**

Sample Description	Method Analyte Units LOR	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	
		K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Th ppm	Ti %
		0.01	10	0.01	5	1	0.01	1	10	2	0.01	5	1	1	20	0.01
G0561590		2.27	40	1.26	531	<1	1.33	23	220	20	0.01	<5	12	241	20	0.30
G0561591		2.56	30	1.34	504	1	1.23	21	430	19	0.01	6	12	163	20	0.33
G0561592		3.55	50	1.14	462	<1	1.21	26	520	21	<0.01	<5	15	160	20	0.42
G0561593		2.67	40	0.84	478	1	1.58	16	470	16	<0.01	6	13	380	20	0.36
G0561594		3.71	50	0.94	396	<1	0.92	28	400	22	<0.01	5	14	139	20	0.41
G0561595		2.80	50	0.64	369	1	1.22	23	430	26	<0.01	5	13	149	20	0.36
G0561596		2.06	40	0.54	480	1	0.94	17	340	20	<0.01	<5	10	122	20	0.29
G0561597		2.75	40	0.64	506	<1	0.79	22	390	21	<0.01	5	13	131	20	0.37
G0561598		2.75	30	0.88	1155	<1	1.19	30	350	17	<0.01	<5	13	116	<20	0.33
G0561599		1.65	30	0.56	495	<1	0.87	18	250	12	<0.01	<5	9	119	<20	0.23
G0561600		2.36	40	0.86	843	<1	0.58	29	300	17	<0.01	<5	12	70	<20	0.29
G0561601		2.57	30	0.77	718	<1	0.96	28	380	17	<0.01	5	12	159	20	0.33
G0561602		2.43	50	1.13	612	1	0.98	39	1060	17	0.01	<5	11	259	20	0.32
G0561603		0.85	20	3.53	586	<1	2.44	224	540	12	0.02	7	10	415	<20	0.25
G0561604		1.31	30	1.16	447	1	1.39	75	600	14	<0.01	7	10	321	<20	0.23
G0561605		1.32	30	0.95	493	<1	1.49	54	700	14	<0.01	<5	10	353	<20	0.25
G0561606		1.20	20	2.71	543	1	0.96	164	720	8	<0.01	<5	12	207	<20	0.23
G0561607		1.19	30	1.00	601	1	0.73	45	650	11	<0.01	<5	10	213	<20	0.29
G0561608		1.58	30	0.74	1830	1	1.02	24	2930	11	0.02	<5	11	209	<20	0.26
G0561609		2.85	40	0.19	478	<1	2.82	3	320	20	<0.01	<5	3	367	20	0.13
G0561610		2.59	30	0.26	402	<1	2.79	3	390	15	<0.01	<5	4	347	20	0.16
G0561611		1.54	40	0.24	436	<1	3.64	<1	460	36	<0.01	<5	5	315	20	0.17
G0561612		2.05	40	0.21	387	<1	3.30	1	410	14	<0.01	<5	4	279	20	0.14
G0561613		1.46	30	0.20	336	<1	3.40	2	380	16	0.01	<5	4	358	20	0.15
C491350		1.28	20	0.09	134	<1	3.12	2	390	6	<0.01	<5	4	465	<20	0.15



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 Finalized Date: 1-AUG-2010  
 Account: F

Project: Green Gulch TR-10-03

**CERTIFICATE OF ANALYSIS WH10096773**

Sample Description	Method Analyte Units LOR	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61
		Tl	U	V	W	Zn
		ppm	ppm	ppm	ppm	ppm
		10	10	1	10	2
G0561590		<10	<10	61	<10	72
G0561591		<10	<10	59	<10	73
G0561592		<10	<10	71	<10	71
G0561593		<10	<10	63	<10	52
G0561594		<10	<10	88	<10	66
G0561595		<10	<10	66	<10	53
G0561596		<10	<10	48	<10	52
G0561597		<10	<10	66	<10	54
G0561598		<10	<10	67	<10	63
G0561599		<10	<10	45	<10	36
G0561600		<10	<10	63	<10	52
G0561601		<10	<10	62	<10	57
G0561602		<10	<10	114	<10	85
G0561603		<10	<10	106	<10	101
G0561604		<10	<10	82	<10	51
G0561605		<10	<10	93	<10	55
G0561606		<10	<10	121	<10	77
G0561607		<10	<10	121	<10	79
G0561608		<10	<10	95	<10	58
G0561609		<10	10	16	<10	34
G0561610		<10	10	15	<10	30
G0561611		<10	10	44	<10	32
G0561612		<10	10	23	<10	28
G0561613		<10	10	18	<10	23
C491350		<10	10	13	<10	11



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 Finalized Date: 1-AUG-2010  
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**CERTIFICATE WH10101060**

Project: Green Gulch TR-10-01  
 P.O. No.:  
 This report is for 35 Rock samples submitted to our lab in Whitehorse, YT, Canada on 22-JUL-2010.  
 The following have access to data associated with this certificate:  
 JOAN MARIACHER                      BILL WENGZYNOWSKI

SAMPLE PREPARATION	
ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
CRU-QC	Crushing QC Test
PUL-QC	Pulverizing QC Test
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um

ANALYTICAL PROCEDURES		
ALS CODE	DESCRIPTION	INSTRUMENT
Au-AA24	Au 50g FA AA finish	AAS
ME-ICP61	33 element four acid ICP-AES	ICP-AES

To: ARCHER, CATHRO AND ASSOCIATES (1981) LIMITED  
 ATTN: JOAN MARIACHER  
 1016-510 W HASTINGS ST  
 VANCOUVER BC V6B 1L8

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.

Signature:   
 Colin Ramshaw, Vancouver Laboratory Manager



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 Finalized Date: 1-AUG-2010  
 Account: F

Project: Green Gulch TR-10-01

**CERTIFICATE OF ANALYSIS WH10101060**

Sample Description	Method Analyte Units LOR	WEI-21	Au-AA24	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61
		Recvd Wt. kg	Au ppm	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm
		0.02	0.005	0.5	0.01	5	10	0.5	2	0.01	0.5	1	1	1	0.01	10
G0561555		3.73	<0.005	<0.5	5.99	6	6410	1.9	<2	1.64	0.7	14	65	45	3.33	10
G0561556		5.65	<0.005	<0.5	6.39	<5	2520	2.1	2	2.21	<0.5	16	95	36	3.81	10
G0561557		5.70	<0.005	<0.5	6.43	<5	5380	1.8	<2	1.19	<0.5	11	61	40	3.23	10
G0561558		4.24	<0.005	<0.5	6.13	<5	2340	1.8	<2	1.56	<0.5	11	85	33	3.34	10
G0561559		4.40	<0.005	<0.5	6.88	<5	1540	2.0	<2	2.28	<0.5	12	51	26	3.27	20
G0561560		3.93	<0.005	<0.5	5.81	5	1540	2.1	2	3.51	<0.5	14	70	33	3.77	20
G0561561		3.40	<0.005	<0.5	3.79	5	2960	1.4	<2	3.05	<0.5	13	70	21	2.92	10
G0561562		3.76	<0.005	<0.5	5.11	<5	4090	1.6	<2	1.48	<0.5	12	84	30	2.95	10
G0561563		3.74	<0.005	<0.5	6.23	5	1410	2.5	<2	4.34	<0.5	26	183	48	5.82	20
G0561564		2.98	<0.005	<0.5	5.29	<5	2700	1.6	<2	1.47	<0.5	12	80	24	2.74	20
G0561565		2.55	<0.005	<0.5	6.17	<5	2450	1.8	<2	2.44	<0.5	11	50	25	2.86	10
G0561566		2.98	<0.005	<0.5	6.79	<5	2770	2.3	<2	1.60	<0.5	13	84	32	3.45	20
G0561567		3.84	<0.005	<0.5	7.20	<5	1070	2.0	<2	1.05	<0.5	12	59	25	3.50	10
G0561568		3.32	<0.005	<0.5	7.30	<5	880	2.1	<2	0.52	<0.5	13	78	24	3.41	20
G0561569		3.78	<0.005	<0.5	7.91	5	1410	2.2	2	1.03	<0.5	14	68	34	3.72	20
G0561570		3.77	<0.005	<0.5	7.56	<5	730	2.0	<2	1.43	<0.5	13	70	37	3.45	20
G0561571		3.34	<0.005	<0.5	7.95	<5	990	1.9	<2	2.20	<0.5	14	56	26	3.65	20
G0561572		3.76	<0.005	<0.5	8.02	<5	1280	2.3	<2	1.49	<0.5	12	77	30	3.84	10
G0561573		2.59	<0.005	<0.5	7.82	<5	1000	1.9	<2	0.60	<0.5	15	58	22	3.76	20
G0561574		3.51	<0.005	<0.5	8.34	5	1050	2.3	<2	0.60	<0.5	15	78	26	4.36	20
G0561575		3.45	<0.005	<0.5	8.11	<5	1010	2.1	<2	0.58	<0.5	13	56	18	3.84	20
G0561576		3.58	<0.005	<0.5	7.48	<5	1030	1.9	<2	0.67	<0.5	11	50	20	3.32	20
G0561577		3.99	<0.005	<0.5	8.02	5	3290	2.1	2	0.90	<0.5	11	70	15	3.55	20
G0561578		3.19	<0.005	<0.5	6.19	6	2610	1.6	<2	1.44	<0.5	11	57	25	3.28	20
G0561579		2.93	<0.005	<0.5	6.64	<5	560	1.5	<2	3.50	<0.5	19	147	11	3.73	10
G0561580		3.61	<0.005	<0.5	7.50	8	1420	1.3	<2	4.81	<0.5	27	208	35	4.39	10
G0561581		3.35	<0.005	<0.5	6.68	5	820	1.9	4	2.00	<0.5	17	94	22	3.88	10
G0561582		3.04	<0.005	<0.5	7.64	<5	1570	2.6	<2	1.16	<0.5	10	45	22	2.98	20
G0561583		3.61	<0.005	<0.5	7.48	5	1450	2.0	3	0.97	<0.5	12	68	17	3.38	20
G0561584		2.77	<0.005	<0.5	6.34	<5	750	1.7	<2	0.79	<0.5	11	38	10	2.75	10
G0561585		2.23	<0.005	<0.5	6.15	<5	860	1.6	<2	0.79	<0.5	9	57	11	2.59	10
G0561586		2.77	<0.005	<0.5	6.87	<5	760	1.8	2	0.95	<0.5	10	48	20	3.10	10
G0561587		2.27	<0.005	<0.5	7.72	5	770	1.8	<2	0.68	<0.5	12	70	20	3.56	20
G0561588		3.26	<0.005	<0.5	7.49	<5	710	1.7	<2	2.78	<0.5	22	119	28	4.67	20
G0561589		1.62	<0.005	<0.5	7.29	<5	1210	1.9	<2	1.48	<0.5	16	73	18	3.48	10



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Project: Green Gulch TR-10-01

**CERTIFICATE OF ANALYSIS WH10101060**

Sample Description	Method Analyte Units LOR	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61
		K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Th ppm	Ti %
G0561555		1.83	50	1.30	583	2	1.55	38	1750	15	0.04	5	11	301	20	0.38
G0561556		1.74	40	1.67	715	1	2.39	41	1080	16	0.02	<5	12	378	20	0.51
G0561557		2.21	40	1.12	550	3	1.55	35	740	28	0.06	<5	11	370	20	0.34
G0561558		2.16	40	1.20	548	1	1.05	29	590	18	0.05	8	11	226	20	0.35
G0561559		2.11	40	1.11	721	<1	2.28	24	900	22	0.05	5	11	362	20	0.36
G0561560		1.84	50	1.73	921	1	1.77	36	1860	13	0.13	<5	11	339	20	0.44
G0561561		1.20	40	1.84	718	<1	1.98	35	1990	11	0.04	<5	8	498	<20	0.44
G0561562		1.49	30	1.17	581	1	2.01	31	880	16	0.05	<5	9	424	<20	0.35
G0561563		1.82	60	3.62	1090	1	1.24	81	2600	18	0.01	<5	18	333	<20	1.17
G0561564		1.70	30	1.02	507	1	1.38	23	500	18	0.02	<5	10	555	20	0.30
G0561565		1.82	40	0.93	497	1	1.35	22	810	22	0.03	<5	10	629	20	0.33
G0561566		2.22	50	1.02	549	1	1.51	28	970	18	<0.01	7	11	725	20	0.37
G0561567		2.55	40	1.03	517	<1	1.30	25	640	16	<0.01	<5	12	198	20	0.38
G0561568		2.79	50	0.90	385	<1	1.16	30	600	16	<0.01	<5	11	104	20	0.32
G0561569		3.04	60	1.14	496	1	1.25	30	670	19	<0.01	<5	12	185	20	0.37
G0561570		2.62	50	0.95	492	1	1.24	24	530	25	<0.01	<5	12	227	20	0.34
G0561571		2.48	50	0.92	499	1	1.10	27	500	25	<0.01	<5	12	306	20	0.36
G0561572		2.29	50	0.93	645	1	1.67	23	500	25	0.01	<5	13	450	20	0.35
G0561573		2.79	40	0.89	574	<1	0.81	26	440	24	<0.01	<5	14	280	20	0.36
G0561574		3.13	40	1.13	631	1	1.12	24	440	27	<0.01	<5	15	134	20	0.41
G0561575		3.27	40	0.90	461	<1	1.07	22	410	21	<0.01	7	14	136	20	0.39
G0561576		2.82	30	0.82	452	<1	1.37	17	400	21	<0.01	6	13	158	20	0.36
G0561577		2.74	50	0.90	455	1	2.04	22	480	23	<0.01	<5	13	698	20	0.36
G0561578		1.60	40	0.94	505	<1	1.16	33	880	12	<0.01	<5	11	233	20	0.26
G0561579		1.17	30	2.34	508	<1	1.38	54	590	8	<0.01	<5	17	273	20	0.35
G0561580		1.07	30	3.58	758	<1	1.94	86	790	13	0.01	<5	21	522	<20	0.47
G0561581		1.66	50	1.30	893	1	1.63	38	540	15	<0.01	5	14	287	20	0.39
G0561582		2.39	40	0.79	420	<1	1.68	18	400	20	<0.01	<5	12	271	20	0.30
G0561583		2.55	50	0.96	479	<1	1.66	21	490	20	<0.01	<5	12	288	20	0.34
G0561584		2.00	30	0.78	420	<1	1.70	15	360	18	<0.01	<5	9	128	20	0.28
G0561585		1.97	30	0.67	327	<1	1.60	16	400	14	<0.01	<5	9	168	20	0.26
G0561586		2.30	40	0.81	409	<1	1.33	18	500	17	<0.01	5	11	143	20	0.31
G0561587		2.92	40	0.89	423	1	1.41	22	620	18	<0.01	<5	12	134	20	0.35
G0561588		1.94	30	2.37	783	1	1.65	62	1200	16	0.01	<5	16	246	<20	0.53
G0561589		2.20	50	0.90	537	<1	1.32	23	420	17	0.01	6	12	221	20	0.33



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Project: Green Gulch TR-10-01

**CERTIFICATE OF ANALYSIS WH10101060**

Sample Description	Method Analyte Units LOR	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61
		Tl	U	V	W	Zn
		ppm	ppm	ppm	ppm	ppm
		10	10	1	10	2
G0561555		<10	<10	122	<10	111
G0561556		<10	<10	96	<10	80
G0561557		<10	<10	111	<10	95
G0561558		<10	<10	86	<10	73
G0561559		<10	<10	67	<10	55
G0561560		<10	<10	81	<10	76
G0561561		<10	<10	71	<10	64
G0561562		<10	<10	65	<10	51
G0561563		<10	<10	168	<10	105
G0561564		<10	<10	66	<10	47
G0561565		<10	<10	64	<10	56
G0561566		<10	<10	70	<10	59
G0561567		<10	<10	67	<10	63
G0561568		<10	<10	67	<10	64
G0561569		<10	<10	76	<10	70
G0561570		<10	<10	62	<10	62
G0561571		<10	<10	69	<10	66
G0561572		<10	<10	65	<10	69
G0561573		<10	<10	71	<10	74
G0561574		<10	<10	78	<10	83
G0561575		<10	<10	70	<10	73
G0561576		<10	<10	61	<10	56
G0561577		<10	<10	62	<10	55
G0561578		<10	<10	84	<10	46
G0561579		<10	<10	98	<10	48
G0561580		<10	<10	137	<10	54
G0561581		<10	<10	68	<10	65
G0561582		<10	<10	50	<10	45
G0561583		<10	<10	56	<10	60
G0561584		<10	<10	45	<10	43
G0561585		<10	<10	42	<10	40
G0561586		<10	<10	57	<10	55
G0561587		<10	<10	64	<10	61
G0561588		<10	<10	128	<10	66
G0561589		<10	<10	59	<10	69



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**CERTIFICATE WH10102123**

Project: Green Gulch TR-10-04  
 P.O. No.:  
 This report is for 29 Rock samples submitted to our lab in Whitehorse, YT, Canada on 26-JUL-2010.  
 The following have access to data associated with this certificate:  
 JOAN MARIACHER                      BILL WENGZYNOWSKI

SAMPLE PREPARATION	
ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
CRU-QC	Crushing QC Test
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um

ANALYTICAL PROCEDURES		
ALS CODE	DESCRIPTION	INSTRUMENT
Au-AA24	Au 50g FA AA finish	AAS
ME-ICP61	33 element four acid ICP-AES	ICP-AES

To: ARCHER, CATHRO AND ASSOCIATES (1981) LIMITED  
 ATTN: JOAN MARIACHER  
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 VANCOUVER BC V6B 1L8

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.

**Signature:**   
 Colin Ramshaw, Vancouver Laboratory Manager



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Project: Green Gulch TR-10-04

**CERTIFICATE OF ANALYSIS WH10102123**

Sample Description	Method Analyte Units LOR	WEI-21	Au-AA24	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	
		Recvd Wt. kg	Au ppm	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm
		0.02	0.005	0.5	0.01	5	10	0.5	2	0.01	0.5	1	1	1	0.01	10
G0561614		3.65	<0.005	<0.5	7.36	<5	2430	2.8	<2	1.20	<0.5	4	13	10	2.17	20
G0561615		3.50	<0.005	<0.5	7.49	<5	2470	2.7	2	1.52	<0.5	3	13	11	2.30	20
G0561616		3.88	<0.005	<0.5	7.42	<5	2660	2.6	2	1.72	<0.5	5	22	5	2.72	20
G0561617		2.31	<0.005	<0.5	7.28	<5	2390	2.6	<2	1.82	<0.5	5	19	9	2.57	20
G0561618		2.98	<0.005	<0.5	7.75	<5	2200	2.5	<2	2.61	<0.5	8	34	19	3.29	20
G0561619		2.38	<0.005	<0.5	7.74	<5	2450	2.4	<2	2.90	<0.5	14	90	19	3.79	20
G0561620		6.42	<0.005	0.5	7.70	<5	2090	2.2	3	3.99	<0.5	21	122	14	4.63	20
G0561621		5.80	<0.005	<0.5	7.53	<5	2180	2.7	<2	1.39	<0.5	4	18	17	2.32	20
G0561622		6.03	<0.005	0.5	7.55	<5	2210	2.9	3	1.98	<0.5	6	29	10	2.38	20
G0561623		5.90	<0.005	<0.5	7.12	<5	2380	2.8	<2	1.71	<0.5	3	12	10	1.93	20
G0561624		5.64	<0.005	<0.5	7.28	<5	2420	2.7	4	1.11	<0.5	4	9	7	2.27	20
G0561625		5.79	<0.005	<0.5	7.46	<5	2670	2.6	<2	1.86	<0.5	4	13	9	2.57	20
G0561626		5.58	<0.005	<0.5	7.42	<5	1940	2.8	<2	2.19	<0.5	6	16	10	3.08	20
G0561627		6.40	<0.005	<0.5	6.69	<5	1850	2.4	3	1.59	<0.5	5	16	14	2.80	20
G0561628		6.32	<0.005	<0.5	7.41	<5	1890	2.5	<2	2.15	<0.5	5	17	11	2.75	20
G0561629		6.71	<0.005	0.5	7.33	<5	2570	2.6	3	1.67	<0.5	4	12	12	2.40	20
G0561630		5.71	<0.005	<0.5	7.05	<5	2390	2.4	2	1.85	<0.5	4	12	13	2.32	20
G0561631		5.23	<0.005	<0.5	7.15	<5	2030	2.7	<2	1.78	<0.5	4	22	6	2.44	20
G0561632		6.25	<0.005	<0.5	6.80	<5	2310	2.4	2	1.65	<0.5	4	12	8	2.14	20
G0561633		6.17	<0.005	<0.5	6.69	<5	2640	1.9	<2	3.01	<0.5	9	55	21	3.24	20
G0561634		6.53	0.005	<0.5	6.70	<5	1430	1.6	<2	3.39	<0.5	16	61	29	4.13	10
G0561635		6.27	<0.005	0.5	7.27	<5	960	1.1	<2	4.30	<0.5	20	70	52	4.94	20
G0561636		7.45	<0.005	<0.5	7.77	<5	490	0.8	3	5.36	<0.5	25	69	44	6.36	20
G0561637		5.45	<0.005	<0.5	7.41	<5	640	0.7	<2	4.74	<0.5	25	10	57	6.49	20
G0561638		5.52	0.005	<0.5	7.58	<5	760	0.8	<2	4.36	<0.5	26	53	76	6.64	20
G0561639		5.61	<0.005	0.6	8.09	<5	570	0.7	<2	5.04	<0.5	35	109	67	7.47	20
G0561640		5.84	<0.005	<0.5	8.03	<5	490	0.7	2	4.77	<0.5	37	91	65	8.54	20
G0561641		6.11	<0.005	<0.5	7.86	<5	610	0.6	<2	5.14	<0.5	22	47	65	6.57	20
G0561642		5.24	<0.005	<0.5	7.91	<5	1030	0.7	4	4.44	<0.5	21	46	57	6.19	20



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Project: Green Gulch TR-10-04

**CERTIFICATE OF ANALYSIS WH10102123**

Sample Description	Method Analyte Units LOR	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61
		K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Th ppm	Ti %
		0.01	10	0.01	5	1	0.01	1	10	2	0.01	5	1	1	20	0.01
G0561614		2.87	30	0.27	610	<1	2.86	8	330	22	<0.01	<5	3	345	20	0.14
G0561615		2.78	40	0.30	552	<1	2.90	8	360	23	<0.01	<5	4	383	20	0.16
G0561616		2.72	40	0.54	642	<1	2.28	10	450	20	<0.01	<5	7	365	20	0.22
G0561617		2.40	40	0.47	697	<1	2.49	11	520	23	<0.01	<5	5	441	20	0.21
G0561618		2.20	30	0.69	874	<1	2.51	16	520	19	<0.01	<5	7	456	20	0.27
G0561619		2.42	30	1.46	920	<1	2.47	35	530	23	<0.01	<5	11	429	<20	0.42
G0561620		2.28	30	2.26	1020	<1	2.15	48	930	22	<0.01	<5	17	467	<20	0.57
G0561621		2.47	40	0.38	541	<1	3.30	7	410	36	0.01	<5	4	327	20	0.16
G0561622		2.17	40	0.52	581	<1	3.08	12	450	23	0.01	<5	5	404	20	0.20
G0561623		1.95	30	0.27	456	<1	3.09	5	350	23	0.01	<5	3	397	20	0.14
G0561624		2.72	40	0.30	554	<1	3.21	4	470	18	<0.01	<5	5	291	20	0.18
G0561625		2.42	30	0.42	555	<1	2.72	5	550	13	<0.01	<5	8	502	20	0.24
G0561626		1.98	30	0.61	657	<1	2.85	9	800	19	<0.01	<5	9	405	20	0.33
G0561627		2.02	30	0.51	648	<1	3.15	7	720	20	<0.01	<5	7	365	20	0.28
G0561628		1.88	40	0.47	574	<1	2.90	7	550	22	<0.01	<5	9	515	20	0.28
G0561629		2.47	30	0.36	584	<1	2.70	5	520	19	<0.01	<5	6	542	20	0.22
G0561630		2.07	40	0.34	543	1	2.78	11	460	21	<0.01	<5	6	660	<20	0.20
G0561631		2.33	40	0.44	524	1	2.41	8	390	17	<0.01	<5	8	369	20	0.22
G0561632		2.41	30	0.30	460	1	2.35	5	310	20	<0.01	<5	7	418	20	0.17
G0561633		1.57	30	0.93	678	1	1.62	17	720	17	0.02	<5	13	423	<20	0.37
G0561634		1.26	30	1.61	804	1	2.01	25	640	10	<0.01	<5	17	394	<20	0.45
G0561635		0.91	20	1.95	916	<1	2.38	35	540	14	<0.01	<5	21	368	<20	0.43
G0561636		0.57	20	2.61	1095	1	2.67	31	650	9	<0.01	<5	27	359	<20	0.64
G0561637		0.62	10	2.31	1080	1	2.71	17	690	8	<0.01	<5	26	328	<20	0.70
G0561638		0.76	10	2.15	1105	1	2.41	29	660	3	<0.01	<5	28	295	<20	0.57
G0561639		0.75	10	3.44	1350	1	2.83	48	660	6	<0.01	<5	36	337	<20	0.62
G0561640		0.61	10	3.65	1565	1	2.83	45	800	8	<0.01	<5	39	213	<20	0.62
G0561641		0.60	10	2.46	1245	1	2.87	29	700	3	0.01	<5	27	387	<20	0.58
G0561642		0.76	10	2.00	1185	<1	2.83	28	570	7	0.01	<5	24	394	<20	0.47



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Project: Green Gulch TR-10-04

**CERTIFICATE OF ANALYSIS WH10102123**

Sample Description	Method Analyte Units LOR	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61
		Tl	U	V	W	Zn
		ppm	ppm	ppm	ppm	ppm
		10	10	1	10	2
G0561614		<10	10	14	<10	49
G0561615		<10	<10	19	<10	48
G0561616		<10	<10	35	<10	62
G0561617		<10	<10	36	<10	57
G0561618		<10	10	58	<10	72
G0561619		<10	<10	81	<10	67
G0561620		<10	<10	119	<10	80
G0561621		<10	10	30	<10	46
G0561622		<10	10	33	<10	52
G0561623		<10	10	17	<10	32
G0561624		<10	10	23	<10	47
G0561625		<10	10	33	<10	50
G0561626		<10	<10	45	<10	62
G0561627		<10	<10	40	<10	61
G0561628		<10	<10	49	<10	54
G0561629		<10	<10	35	<10	49
G0561630		10	10	31	<10	48
G0561631		<10	10	33	<10	53
G0561632		<10	10	24	<10	46
G0561633		<10	10	83	<10	64
G0561634		<10	10	128	<10	70
G0561635		<10	10	169	<10	69
G0561636		<10	10	236	<10	72
G0561637		<10	10	240	<10	84
G0561638		<10	10	245	<10	85
G0561639		<10	10	278	<10	98
G0561640		<10	10	330	<10	128
G0561641		<10	10	239	<10	90
G0561642		<10	10	219	<10	83



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**CERTIFICATE WH10102124**

Project: Green Gulch TR-10-02  
 P.O. No.:  
 This report is for 40 Rock samples submitted to our lab in Whitehorse, YT, Canada on 26-JUL-2010.  
 The following have access to data associated with this certificate:  
 JOAN MARIACHER                      BILL WENGZYNOWSKI

SAMPLE PREPARATION	
ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
CRU-QC	Crushing QC Test
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um

ANALYTICAL PROCEDURES		
ALS CODE	DESCRIPTION	INSTRUMENT
Au-AA24	Au 50g FA AA finish	AAS
ME-ICP61	33 element four acid ICP-AES	ICP-AES

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 ATTN: JOAN MARIACHER  
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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.

Signature:   
 Colin Ramshaw, Vancouver Laboratory Manager



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Project: Green Gulch TR-10-02

**CERTIFICATE OF ANALYSIS WH10102124**

Sample Description	Method Analyte Units LOR	WEI-21	Au-AA24	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	
		Recvd Wt. kg	Au ppm	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm
		0.02	0.005	0.5	0.01	5	10	0.5	2	0.01	0.5	1	1	1	0.01	10
G0561644		5.55	<0.005	0.5	6.60	<5	1070	1.3	<2	3.44	<0.5	22	102	76	5.81	10
G0561645		6.41	0.006	<0.5	6.19	<5	2490	1.4	<2	2.63	<0.5	16	126	60	4.82	10
G0561646		5.73	<0.005	0.5	4.46	<5	4100	1.2	2	3.78	<0.5	26	544	78	5.04	10
G0561647		4.34	<0.005	<0.5	4.60	<5	>10000	1.1	<2	3.12	0.8	24	454	70	4.64	10
G0561648		5.90	<0.005	0.9	5.48	<5	>10000	1.7	<2	1.05	0.5	12	91	58	2.97	20
G0561649		3.85	<0.005	<0.5	4.88	<5	>10000	1.5	<2	2.23	<0.5	20	372	65	3.46	10
G0561650		5.24	<0.005	<0.5	4.50	<5	>10000	1.5	<2	2.18	0.6	18	370	79	3.49	10
G0561651		4.22	<0.005	0.7	4.54	<5	>10000	1.9	<2	1.23	0.9	17	168	87	2.91	10
G0561652		3.03	<0.005	0.5	4.07	<5	>10000	1.5	<2	1.07	1.5	12	96	83	2.37	10
G0561653		4.55	<0.005	<0.5	5.80	<5	>10000	1.7	<2	0.81	0.6	11	77	50	3.13	10
G0561654		4.71	<0.005	<0.5	6.22	<5	2710	2.0	<2	0.93	<0.5	11	59	31	3.24	10
G0561655		5.22	<0.005	<0.5	4.86	<5	2360	1.9	2	2.92	<0.5	22	132	44	5.09	10
G0561656		4.51	0.008	<0.5	7.04	<5	2280	2.3	5	1.47	<0.5	12	64	32	3.70	20
G0561657		4.74	<0.005	<0.5	7.32	<5	990	2.1	4	0.73	<0.5	13	63	28	3.79	20
G0561658		4.00	<0.005	<0.5	6.44	<5	730	1.8	2	0.53	<0.5	11	54	16	3.27	20
G0561659		4.64	<0.005	<0.5	6.98	<5	840	1.9	2	0.55	<0.5	16	63	21	3.44	20
G0561660		5.42	<0.005	0.5	7.86	<5	880	2.3	2	0.75	<0.5	9	65	42	4.37	20
G0561661		5.01	<0.005	<0.5	7.18	<5	960	2.1	<2	1.12	<0.5	12	55	26	3.73	20
G0561662		5.60	<0.005	<0.5	7.55	<5	820	2.1	<2	1.10	<0.5	11	55	25	3.65	20
G0561663		4.87	<0.005	<0.5	8.71	<5	940	2.3	2	0.75	<0.5	14	64	34	4.25	20
G0561664		3.81	<0.005	<0.5	9.04	<5	1120	2.4	5	2.09	<0.5	18	68	31	4.67	20
G0561665		3.87	<0.005	<0.5	7.53	<5	840	2.1	<2	0.49	<0.5	13	57	16	3.69	20
G0561666		4.53	0.006	<0.5	7.25	<5	690	2.1	2	0.44	<0.5	13	56	18	3.65	20
G0561667		4.75	0.029	<0.5	7.65	<5	850	2.2	<2	0.42	<0.5	12	64	27	3.91	20
G0561668		3.80	0.006	<0.5	7.45	<5	860	2.0	<2	0.56	<0.5	11	59	27	3.48	20
G0561669		3.97	0.034	<0.5	7.64	<5	810	2.3	<2	0.58	<0.5	12	61	26	3.38	20
G0561670		5.19	0.009	<0.5	8.17	<5	1110	2.2	<2	0.74	<0.5	14	64	23	3.77	10
G0561671		4.72	0.047	<0.5	7.81	<5	1030	2.1	<2	0.31	<0.5	11	56	18	3.53	20
G0561672		4.93	0.278	1.3	7.30	<5	990	2.1	<2	0.32	<0.5	11	47	20	3.16	20
G0561673		5.36	0.326	0.9	7.06	<5	1050	2.1	<2	0.26	<0.5	10	46	25	3.17	20
G0561674		3.98	0.198	0.8	7.00	<5	790	2.1	<2	0.24	<0.5	10	45	23	2.99	10
G0561675		5.64	0.375	2.1	7.16	<5	940	2.2	<2	0.24	<0.5	10	46	33	3.02	10
G0561676		4.21	0.080	<0.5	7.47	<5	1030	2.3	<2	0.56	<0.5	11	45	14	2.92	20
G0561677		2.27	0.038	<0.5	7.17	<5	830	2.1	<2	0.57	<0.5	8	47	17	3.30	20
G0561678		2.05	0.037	0.5	6.93	<5	1780	2.1	<2	1.07	<0.5	10	49	17	3.60	20
G0561679		2.61	0.042	<0.5	5.11	<5	680	1.4	<2	1.78	<0.5	9	54	13	3.03	10
G0561680		2.74	0.034	<0.5	6.15	<5	730	1.5	<2	1.82	<0.5	10	56	26	3.48	20
G0561681		3.61	0.022	<0.5	5.78	<5	790	1.8	2	1.38	<0.5	12	66	21	3.41	10
G0561682		2.59	0.028	<0.5	6.78	<5	1240	2.1	<2	1.92	<0.5	18	73	31	4.18	20
G0561683		2.40	0.006	<0.5	6.73	<5	1060	1.9	<2	0.73	<0.5	10	49	20	3.21	20



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Project: Green Gulch TR-10-02

**CERTIFICATE OF ANALYSIS WH10102124**

Sample Description	Method Analyte Units LOR	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61
		K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Th ppm	Ti %
G0561644		1.24	40	1.89	850	2	1.93	64	840	12	0.01	<5	20	393	20	0.62
G0561645		1.45	40	1.57	720	2	1.33	97	890	8	0.02	<5	14	323	<20	0.46
G0561646		1.39	20	5.75	1040	3	0.91	248	680	6	0.01	<5	16	139	<20	0.28
G0561647		1.44	30	4.58	916	4	0.79	223	1030	8	0.01	<5	14	174	<20	0.32
G0561648		1.79	30	1.10	454	4	1.04	51	2070	13	0.04	<5	10	203	<20	0.27
G0561649		1.68	30	3.18	583	5	0.89	116	1830	6	0.05	<5	13	180	<20	0.27
G0561650		1.45	30	3.22	585	5	1.06	138	1710	9	0.01	<5	12	216	<20	0.31
G0561651		1.24	30	1.49	491	6	1.20	97	1860	8	0.03	<5	9	223	<20	0.26
G0561652		1.04	20	0.92	371	6	0.96	63	2990	6	0.05	<5	8	214	<20	0.23
G0561653		2.00	30	1.06	428	4	1.06	46	1760	12	0.03	<5	10	192	<20	0.30
G0561654		1.87	30	1.10	578	1	1.80	31	660	16	0.01	<5	10	261	<20	0.33
G0561655		1.60	70	2.58	1080	1	0.76	70	3290	12	0.01	<5	13	207	20	0.92
G0561656		2.27	50	1.11	611	2	1.41	28	680	17	0.03	<5	11	270	20	0.39
G0561657		2.66	30	0.98	497	1	1.45	31	490	22	0.01	<5	11	152	20	0.32
G0561658		2.39	30	0.88	408	1	1.08	31	490	15	<0.01	<5	9	101	<20	0.28
G0561659		2.74	30	0.89	525	2	1.03	33	490	16	0.01	<5	10	139	20	0.31
G0561660		2.73	50	0.84	488	2	1.38	20	420	20	0.08	<5	12	203	20	0.33
G0561661		2.41	40	0.99	595	2	1.60	29	540	18	0.01	<5	11	250	20	0.35
G0561662		2.72	40	1.05	549	2	1.23	30	470	13	<0.01	<5	11	180	20	0.33
G0561663		3.30	50	1.00	584	2	1.28	28	500	24	0.12	<5	13	231	20	0.36
G0561664		3.03	60	1.02	781	1	1.11	37	480	34	0.01	<5	14	355	20	0.41
G0561665		3.02	30	1.01	434	1	1.23	31	530	18	<0.01	<5	11	106	20	0.31
G0561666		2.66	40	0.85	404	2	1.26	32	560	17	<0.01	<5	10	104	20	0.29
G0561667		2.95	60	0.93	526	<1	1.16	29	510	21	<0.01	5	12	93	20	0.32
G0561668		2.72	40	0.91	412	<1	1.17	27	490	19	<0.01	<5	11	117	20	0.31
G0561669		2.63	40	0.84	379	<1	2.01	27	550	21	0.01	<5	11	139	20	0.30
G0561670		2.98	30	0.95	524	<1	1.41	26	440	24	0.01	<5	13	176	20	0.35
G0561671		3.37	40	0.80	422	<1	1.85	20	420	22	<0.01	<5	12	102	20	0.27
G0561672		2.73	40	0.62	353	<1	2.42	21	360	22	0.03	6	11	99	20	0.25
G0561673		3.20	50	0.58	359	<1	2.00	20	330	20	0.03	6	10	90	20	0.25
G0561674		3.10	50	0.56	380	<1	2.19	16	330	20	0.01	<5	10	98	20	0.24
G0561675		3.12	50	0.56	326	<1	2.08	18	370	55	0.01	5	10	93	20	0.25
G0561676		2.38	40	0.67	319	<1	2.39	17	490	22	<0.01	<5	10	131	<20	0.29
G0561677		2.65	40	0.77	413	<1	2.18	16	340	20	<0.01	7	10	136	20	0.29
G0561678		2.43	110	0.97	470	<1	1.32	21	1050	18	<0.01	<5	12	180	40	0.27
G0561679		1.07	30	0.95	427	<1	1.34	24	650	11	<0.01	6	9	262	<20	0.23
G0561680		1.30	30	0.90	536	<1	1.60	26	600	12	<0.01	<5	11	270	<20	0.27
G0561681		1.27	40	1.07	517	<1	1.76	28	490	11	0.01	<5	11	223	<20	0.26
G0561682		1.47	40	1.22	813	<1	2.11	36	600	14	0.01	<5	12	508	<20	0.38
G0561683		2.01	30	0.86	456	<1	2.10	18	400	18	<0.01	<5	10	241	20	0.31



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Project: Green Gulch TR-10-02

**CERTIFICATE OF ANALYSIS WH10102124**

Sample Description	Method Analyte Units LOR	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61
		Tl	U	V	W	Zn
		ppm	ppm	ppm	ppm	ppm
		10	10	1	10	2
G0561644		<10	<10	184	<10	92
G0561645		<10	<10	139	<10	75
G0561646		<10	<10	159	<10	125
G0561647		<10	<10	200	<10	168
G0561648		<10	<10	205	<10	125
G0561649		<10	<10	236	<10	102
G0561650		<10	<10	176	<10	108
G0561651		<10	<10	199	<10	112
G0561652		<10	<10	268	<10	159
G0561653		<10	<10	174	<10	124
G0561654		<10	<10	72	<10	62
G0561655		<10	<10	135	<10	99
G0561656		<10	<10	76	<10	67
G0561657		<10	<10	65	<10	72
G0561658		10	<10	54	<10	57
G0561659		<10	<10	61	10	71
G0561660		<10	<10	67	<10	78
G0561661		<10	10	69	<10	63
G0561662		<10	<10	71	10	67
G0561663		<10	<10	77	<10	77
G0561664		<10	<10	83	<10	96
G0561665		<10	<10	62	<10	70
G0561666		<10	<10	55	<10	64
G0561667		<10	<10	70	<10	76
G0561668		<10	<10	68	<10	64
G0561669		<10	<10	76	<10	69
G0561670		10	<10	73	<10	71
G0561671		<10	<10	78	<10	66
G0561672		<10	<10	63	<10	50
G0561673		<10	<10	70	<10	53
G0561674		<10	<10	72	<10	53
G0561675		<10	<10	63	<10	51
G0561676		<10	<10	60	<10	46
G0561677		<10	<10	60	<10	51
G0561678		<10	<10	60	<10	63
G0561679		<10	<10	59	<10	34
G0561680		<10	<10	63	<10	37
G0561681		<10	<10	60	<10	43
G0561682		<10	<10	75	<10	57
G0561683		<10	<10	59	<10	55



9D01363

I, M. J. MARIACHER

of 1016-510 WEST HASTINGS ST.

Phone VANCOUVER BC V6B 1L8

make oath and say that:



- I am the owner, or agent of the owner, of the mineral claim(s) to which reference is made herein.
- I have done, or caused to be done, work, on the following mineral claim(s): (Here list claims on which work was actually done by number and name)

66 1-66 YC76232-YC76297 2 TEM GEOPHYSICAL  
SURVEY - 408.97/CL

situated at NORTH OF THISTLE CREEK Claim sheet No. 115013

in the DAWSON Mining District, to the value of at least \$26,400 dollars,

since the 29TH day of APRIL 20 10

to represent the following mineral claims under the authority of Grouping Certificate No. H1003059.  
(Here list claims to be renewed in numerical order, by grant number and claim name, showing renewal period requested).

66 1-66 YC76232-YC76297 x 4 yrs = 264 CL YRS TO APRIL 29, 2018

- The following is a detailed statement of such work commenced and ended in the twelve months immediately preceding the date of this application (Section 56).  
Work:  
01 Jan - 26 Apr 2011

2 TEM GEOPHYSICAL  
FOLLOW

work done indicating dates to be done as shown by  
? REPORT TO

Sworn before me at VANCOUVER, B.C. this 11th day of MAY 20 11.  
ARCHER, CATHRO ASSOCIATES (1981) LIMITED  
[Signature]  
Owner or Authorized Agent

Q1001363

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED  
1016 – 510 West Hastings Street  
Vancouver, B.C. V6B 1L8

Telephone: 604-688-2568

Fax: 604-688-2578

AFFIDAVIT

I, Joan Mariacher, of Vancouver, B.C. make oath and say:

That to the best of my knowledge the attached Statement of  
Expenditures for exploration work on the GG 1-66 mineral claims  
on Claim Sheet 1150/3 is accurate.

  
Joan Mariacher

Sworn before me at Vancouver, B.C.

this 11th day of May 2011.

  
Barrister & Solicitor

**IAN J. TALBOT**  
Barrister & Solicitor  
281 East 5th Street  
North Vancouver  
British Columbia  
Canada V7L 1L8



01001363

Statement of Expenditures  
Dawson Gold Mineral Claims  
April 29, 2011

Labour

H. Smith (geologist) January to April 2011 – 118 1/2 hrs @ \$90/hr \$ 11,944.80

Expenses

Precision GeoSurveys Inc.	452,836.91
Precision – Jet A supplied	10,712.17
North 60 – Jet A	67,799.43
Great River Air – Jet A delivery	<u>2,275.77</u>
	533,624.28

Total \$545,569.08

Cost Breakdown for DM, GG, SH and TL Claim Assessment

Cost per claim – \$545,569.08/1,334 = \$408.97/claim

Claim Name	Mining District	Number of claims	Cost
DM 1-6	Whitehorse	413	\$ 168,905.57
DM 21 - 427	Whitehorse		
DM 428-578	Dawson	151	61,754.82
<b>GG 1-66</b>	<b>Dawson</b>	<b>66</b>	<b>26,992.17</b>
SH 1-72	Dawson	72	29,446.01
TL 1-632	Dawson	632	258,470.51
		<b>1,334</b>	<b>\$ 545,569.08</b>



01001363



**Precision GeoSurveys Inc.**  
520-355 Burrard Street  
Vancouver, BC Canada V6C 2G8  
Tel: 604 484 9402  
Fax: 604 669 5715  
www.precisiongeosurveys.com

**INVOICE**

No. 1111  
27 April, 2011

In Account With: **Arcus Development Group**  
1016 - 510 West Hastings Street  
Vancouver, BC  
V6B 1L8

Re: Aeromagnetic surveys at Kirkman, Thistle, and Shamrock grids, Yukon

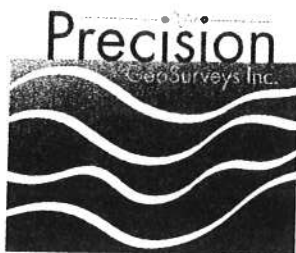
Kirkman block; 6903 km @ \$54.61/km:	\$ 376,972.83
Thistle block; 563 km @ \$54.61/km:	30,745.43
Shamrock block; 359 km @ \$54.61/km:	19,604.99
Stand-by time; 3.58 days – 2 free = 1.58 days @ \$2500:	3,950.00
Set-up, processing, and reporting fee:	<u>0.00</u>
<b>Subtotal:</b>	<b>\$ 431,273.25</b>
GST @ 5% (840398010RT):	<u>21,563.66</u>
<b>Total Invoice:</b>	<b><u>\$ 452,836.91</u></b>
Less advances:	- 150,000.00
<b>Balance Owing:</b>	<b>\$ 302,836.91</b>

Please note – invoice for fuel purchases in Dawson to follow.

*Thank you for your business!*



01001363



**Precision GeoSurveys Inc.**

520-355 Burrard Street  
Vancouver, BC Canada V6C 2G8  
Tel: 604 484 9402  
Fax: 604 669 5715  
www.precisiongeosurveys.com

**INVOICE**

No. 1112  
11 May, 2011

In Account With: **Arcus Development Group Inc.**  
1016 – 510 West Hastings Street  
Vancouver, BC  
V6B 1L8

Re: Fuel Expenses for Geophysical Survey in Dawson, Yukon; May 15 – April 26, 2011

Fuel expenses (please see attached documentation): \$10,202.08

**Subtotal:** **10,202.08**

GST @ 5% (840398010RT): 510.10

**Total Invoice:** **CDN \$10,712.17**



*Thank you for your business!*

Q1001363



North 60° Petro Ltd.  
North 60° Petro Ltd.  
146 Industrial Road  
Whitehorse YT Y1A-2V1  
Telephone# (867) 633-8820

Invoice 1750595  
Date 3/10/11

Station: DA1 DAWSON BULK PLANT

Bill To: 04718  
ARCHER CATHRO & ASSOCIATES  
(1981) LIMITED  
STE 1016-510 WEST HASTINGS ST.  
VANCOUVER BC V6B 1L8

Ship To: 04718  
Fob: 007 ARCHER CATHRO & ASSOCIATES  
DAWSON BULK PLANT

Dawson City YT

Ticket	Date	Description	Quantity	Rate	Amount
38010	3/07/11	JET A - DRUM YTG AVIATION FUEL	6000.00	1.75780 .01100	10,546.80 66.00
38010	3/07/11	DRUM DEPOSITS	30.00	120.00000	3,600.00
38010	3/07/11	DELIVERY CHARGE	4.00	50.00000	200.00

POSTED

✓A

DM -  
GG -  
SH -  
TL -

DB-

14412.80  
NA02

GST # RT 89779-5985

720.64

THIS IS YOUR INVOICE - Interest at 24% per annum  
(2% per month) will be charged on overdue invoices.

Please Pay This Amount: \$15,133.44  
Page: 1 of 1

Keep Safe - No smoking or cell phone use at cardlocks.



QD01360, QD01362, QD01363

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED  
1016 - 510 West Hastings Street  
Vancouver, B.C. V6B 1L8

Telephone: 604-688-2568

Fax: 604-688-2578

October 18, 2011

Kathryn Perry, Mining Recorder  
Dawson Mining District  
Box 249  
Dawson City, Yukon Y0B 1G0

Dear Kathryn:

Enclosed please find copies of the Touleary, Dan Man and Green Gulch assessment reports and CD's containing a digital copy for each.

Yours truly,

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED



Scott Newman  
Encl.

