# Assessment Work Report

## GEORGE CLAIM GROUP

**Tenures: 531574, 531575, 531576, 533550, 550171, 552308, 567800, 567806**

**on**

Map sheets: 092H066 & 076

Owner: Bryan Livgard
Operator: Bryan Livgard





Egil Livgard P.Eng.
Coquitlam B.C.
January 29th 2008

# INDEX

## Summary 1

The property consists of eight claims that cover 2210 hectares of favorable rock types and mineralization. The claims are owned by Bryan Livgard and they are in good standing till September 9th 2008. The property is about 70 kilometers of paved and dirt logging roads south of Merritt B.C. The rocks types on the claims have been mapped as the Triassic Nicola Group consisting of andesitic flows, tuff, argillite and limestone. Three mineral showings have received minor exploration work consisting of trenching, pitting, geology, sampling and a magnetic survey. A limited stream silt survey was carried last year (2006). The mapping and sampling revealed copper, gold and silver mineralization in altered layered rocks in the vicinity of and certainly related to intrusive activity. The mineralization has been classified as skarn deposition that can occur as disseminations in altered rock near the alteration front or as massive alteration and replacement of limestone or carbonatious rocks. The exploration in 2007 consisted of further stream silt sampling, two grids of soil sampling, rock sampling and geological examination. The soil and rock sampling on the north part of the claims outlined anomalous soil in copper and values of gold and copper in narrow stringers. Further exploration is warranted on the northern claim and will be recommended.

## Recommendations

**1.** It is recommended that the northern part of the property be geologically mapped in order to outline the extent of the contact metamorphic alteration southwest of the intrusive body.

**2a.** As soil development is poor and thin to the north and better and thicker to the south any large soil survey would give two different populations of samples and make proper evaluation difficult. Recent work by Geosciencebc suggests that biogeochemistry may give better results. (See references and appendix).

**2b.** It is recommended that four northwest-southeast striking lines be sampled starting 100 meters southwest of the intrusive contact and samples and lines be spaced at 100 meters. The samples will consist of dead bark from lodge pole pine. These four lines will each be about 1600 m long and two lines to the west striking north will each be 500m for a total of 7400 meters of line or 80 samples. More than half of this area has scattered vegetation and therefore sample location and spacing may be somewhat

irregular in order to find suitable trees for sampling and some may be missing.

**3.** The samples should be sent to Activation Laboratories at Ancaster in Ontario for analysis of Halogen element content.

**4.** The sample results, location maps and forest cover report (map) should be submitted to Colin Dunn, Biogeochemistry Consultant for evaluation

## Estimated costs of recommendations

**1.** 2008 estimated cost

| | | |
|---|---|---|
| Geologist and helper wages $600/day -4 days | $ 2400 | |
| Vehicle, accom, meals, etc. $ 300/day – 4 days | $ 1200 | |
| | | $ 3600 |

**2.** Sample collection:

| | | |
|---|---|---|
| Geological technician and helper 7 days at $ 450 | $3150 | |
| Vehicle, accom. Meals 7 days at $300 | $ 2100 | |
| | | $5250 |
| Assessment report, maps, filing fee | | $2000 |
| Cost of Analysis 80 samples @ $50 | | $4000 |
| | | $11250 |

**3.** Consultant $ 1200

| | |
|---|---|
| | $ 12450 |
| Contingency 10% | $ 1250 |
| Total | $ 13700 |

## Introduction

The writer examined the claim ground particularly the geology, on July 15th,16th, 26th and September 4th 2007 and collected rock samples. The writer was asked to describe and evaluate the work that had been carried out during the summer in a report to be submitted to the Department of Mines foe assessment work credit.

## Property -Tenures

The property consists of eight contiguous claims that cover favorable exploration ground. The Tenures:

| | | | | | |
|---|---|---|---|---|---|
| 531574 | 20 cells | good to | 2008/Sep/09 | 417.756 Ha | 100% B. Livgard |
| 531575 | " | | " | 417.901 Ha | " |
| 531576 | " | | " | 418.045 Ha | " |
| 533550 | 15 cells | | " | 313.629 Ha | " |
| 550171 | 3 cells | " | 2009/Jan/24 | 62.726 Ha | " |
| 552308 | 7 cells | " | 2009/Feb/19 | 146.233 Ha | " |
| 567800 | 10 cells | " | 2008/Oct/11 | 209.013 Ha | " |
| 567806 | 6 cells | " | " | 125.463 Ha | " |

Total 8 claims with 101 cells covering 2110.766 Hectares

## Location and Access

The centre of the property lies approximately at UTM 5507000N and 648000E on map sheets 092H066 and 076. The claims can be accessed by 13 to 18 km of logging road from the small village of Brookmere that lies about 7 km south of the Coaldstream river bridge on the Coquihalla Hwy about 50 km south of Merritt B.C. The logging road follows the western side of the claims and extends close to the southern boundary

## Topography and Climate

The property lies at elevations from about 1600 m to 2000 asl (above sea level). The terrain has been sculpted by Lawless Creek and its tributaries flowing south to a minimum elevation at the southern boundary of about 1400 m asl. Mount Tynne near the east boundary of the north claim is the highest point on the claims reaching just over 2000 m asl. Lawless Creek is a tributary to Tulameen River. At these elevations relatively close to the coast the snow fall will be heavy although the southern part of the claims is lower and close to a dryer interior type climate.

## History



Three mineral showings have been located on the property and written up as Minfiles 092HNE046 named B and R, 092HNE068 named Dawn and 092HNE 127 named B and R No 3. (Other names used are Mount Thynne and alternatively B and R and Dawn) The Dawn showing was located (07 exploration) about 150 meters west of its map location. These showings have received a minor amount of exploration. A few pits were excavated by hand and also apparently by a small bulldozer. A few samples are noted in the Minfiles. The geology at the pits was noted and a magnetic survey of about 15 sq. kilometers was done, about half of which was on the present northern claim and part outside the claim boundary to the east. The magnetic survey is related to mineral claims in good standing in 1964 and some very uncertain topography. The anomalous magnetic responses can, for that reason, not be correlated with the showings. The present owner carried out a 44 stream silt sample survey in 2006. The values were generally low but two creeks gave anomalous values.

## Geology

### Rock types

The mapped (map place) geology on the claim ground consists of undivided Upper Triassic volcanics of the Nicola Group and to the west, a fault separating it from the volcanic, is found metamorphic rocks of Lower amphibolitic/kyanite grade also of the Nicola Group. To the east and north is found undivided volcanic of the Lower Cretaceous Spences Bridge Group. In the northeast corner of the claims is found Late Triassic to Early Jurassic unnamed dioritic intrusion. The geology around the showings as described in the minfiles, notes that the mineralization is hosted in a sequence of northward trending steeply dipping andesitic flows, tuffs, argillites and limestone of the Nicola Group. The diorite stock has intruded these rocks, has altered the surrounding rocks and has given rise to contact metamorphic mineralization . Other occurrences of intrusive rocks are noted to the south. (Ref. 3) These are described as boulder granite, peridotite, pyroxenite, augite syenite and granodiorite.

### Alteration

Exploration during the summer of 2007 noted that a band of altered Nicola Group rocks extends from the intrusion and at least 400 meters to the southwest encompassing two of the showings. The alteration consists mainly

of epidote, chlorite, pyrite, minor chalcopyrite and extensive areas of silicification and numerous irregular quartz stringers . This area also has very poor forest cover with much space between short trees and little undergrowth.

## Structure

Little is known about structures in the area. A fault strikes north-south along the west boundary of the claims to an intersection with two other faults striking SE and SW. This three fault intersection area is of exploration interest. The layered rocks strike Northerly and dip steeply or to the west. The orthophoto shows northerly striking lineaments – probable expressions of faulting or bedding. A sharp gully near the Dawn showing may be the location of a fault. A northeasterly striking pattern may be expressions of fracturing and perhaps small faulting.

## Mineralization

Mineralization that has been located on the property consists of copper in chalcopyrite, gold and silver values together with pyrite and magnetite disseminated in volcanic rocks adjoining limestone. The showings have been identified as skarn deposition and therefore are found in the vicinity of intrusives that outcrop or occur below the showings. The minfile showings named B and R, Dawn and B and R No.3 are located respectively 300m, 350m and 1100m southwest of the contact to the intrusion.
Contact metamorphic or skarn deposits can be quite large and may by found some distance from the intrusive.
Lawless creek has been known as a placer creek for more than a hundred years. Placer claims cover the creek bed continuously for more than 16 kilometers from the southern George claims to the creeks confluence with the Tulameen River. The source of the creek gold has never been discovered.
GEOLOGY MAP:
Blue colour: Upper Triassic Nicola Group – Lower Amphibolite/Kyanite grade metamorphic rocks.
Light green: U Triassic NG – Undivided volcanic rock
Dark green: Lower Cretaceous Spences Bridge Group – Undivided Volcanic Rocks.
Red: Late Triassic to Early Jurassic – Un-named Dioritic intrusive.
Brown: L Triassic to E Jurassic – un-named Ultramafic

## Stream silt sampling 2006

The owner carried out a 44 sample stream silt sampling program in June of 2006. Two samples (1,1A- 2,2A ---) were collected nearby each other from each creek to increase repeatability. The values were very low. A bell curve indicates that the threshold value is about 28 ppm Cu and anomalous values may be about 36-38 ppm Cu. Samples 12, 13 gave low anomalous values. They were taken from creeks which may receive some drainage from showing # 046. Sample # 14 gave low anomalous values possibly by drainage from showing #068. The low values may be due to the alkaline nature of the rocks in the area.

**Exploration 2007**

This exploration consisted of prospecting, geological reconnaissance and rock sampling, soil sampling on two grids and minor silt sampling.

**Rock sampling:**

The **B and R showing** consists of a bulldozer (small) cut about 12 m long , 2-3 m wide and from 0 to 1.5 m deep. The cut exposed a 7 cm wide fracture striking 324° Az. and dipping 70° SW. A highly oxidized sample **(5132)** from the fracture graded 423.8 ppb gold, 1588 ppm copper, 1466 ppm nickel, 1040 ppm cobalt and 29.27 % iron. The trench had no other mineral showings. Another lightly stripped area perpendicular to the trench showed occasional malachite staining. The **Dawn showing** consists of two shallow trenches about 6 m and 30 m long, 2.5 m wide and from 0 to 1.5 m deep. The trenches follow after each other along a small gully which probably hides a fault striking roughly 20° Az. An old pit was also located east of the gully. Rocks collected from the Dawn showing consisted of: 1. phyllitic shale with iron oxide and occasional malachite on all partings. A few small quartz lenses with iron oxide cavities were noted. Pyrite was noted on a "fresh" surface, 2. black or dark green andesite with disseminated and patchy epidote, silicification and pyrite. The pyrite and chalcopyrite(?) is circular or slightly oval, has a strong tarnish obscuring any chalcopyrite, but minor bornite was noted as well as an unidentified grey metallic mineral. A minor stringer of oxidized carbonate (?) was noted, 3. argillite with iron oxide cavities and fine parallel stringers( ½ to 1 mm ) one to three per cm (in the bedding plane?). A hand specimen is heavier than expected? These samples have not as yet been analyzed. The **B and R #3** showing has not been located after excessive time was spent.

Three samples were collected by the writer in the area between B and R and Dawn showings. Sample **5133** consisted of grey-green highly epidotized volcanic rock. Some patchy colour changes indicates possible past brecciation. Minor disseminated pyrite was noted. Sample **5134** consisted of grey volcanic rock with 2 to 5 cm wide irregular quartz stringers comprising about 30 % of the rock mass. The quartz had some cavities and iron and manganese oxide. The sample gave 13.8 ppb gold and 300 ppm copper. Sample **5135** consisted of grey-green volcanic rock very high in epidote. It also exhibited streaks of pyrite and black manganese oxide (?). The sample gave 13.1 ppb gold and 234 ppm copper and only 658 ppm manganese – perhaps the black streaks were misidentified.

About 1.0 km to the southwest of the "three fault intersection" a road-cut exposed the southwest extension one of the faults. The fault zone was sampled over a width of 7.0 m. Each sample was 1.4 m wide. The NW side is not fully exposed.

Sampling started at the east side (hanging wall of a very steep dip) of the exposure in a highly siliceous white broken rock with disseminated pyrite **(5137).** The next three samples **(5138, 5139, 5140)** were from the same type rock with increasing disseminated and small lenses of pyrite. The last sample **(5141)** was from a green and dark grey volcanic rock with mariposite, disseminations and streaks of pyrite, some malachite and an unidentified grey metallic mineral. This sample gave 466 ppm copper. The previous samples gave just back ground values. Sample **5136** was a grab sample from the west side of the pit. It consisted of sponge like mass of siliceous iron oxide and minor pyrite. The sample gave 3.9 ppb gold and 387 ppm copper. A road cut immediately south of the north boundary of the claims exposed a highly shattered mixture of intrusive diorite and intruded country rock (Nicola Group andesite).The rock is silicified and epidote is prominent. Pyrite is scattered through out. An arbitrary sample of this **(5129)** gave 2.5 ppb gold and 10.84 % iron. A one meter channel sample **(5130)** from the metamorphic pyritiferrous gneiss laying on the west side of the claims at (5504132N 0645700E) gave no values of interest. A very rusty seep (water deposited) on the side of the road at (5504250N 0646077E) was sampled **(5131)** gave as expected high manganese and iron but nothing else of interest.

| Sample no. | Cu ppm | As ppm | Au ppb |
|---|---|---|---|
| **GC07-01** | **50.3** | **7.3** | **3.4** |
| **-02** | **28.7** | **2.4** | **2.7** |
| **-03** | **19.8** | **1.8** | **2.6** |
| **-04** | **28.4** | **1.3** | **<0.5** |
| **-05** | **24.5** | **<0.5** | **1.3** |
| **-06** | **29.7** | **2.7** | **1.7** |
| **GE07-01** | **24.6** | **2.4** | **1.3** |
| **-02** | **48.4** | **5.4** | **<0.5** |
| **-03** | **47.4** | **5.2** | **1.0** |
| **-04** | **58.2** | **4.5** | **1.4** |
| **-05** | **59.2** | **4.1** | **0.7** |

The sample locations have been plotted on the 2007 Survey map. All the results were quite low as were the 2006 survey results.
Sample # GC07-1 gave elevated values in copper, arsenic and gold as well as in zinc and nickel compared to the other sample values. This sample was from a creek running south and apparently draining the area around showing **R and B.** Samples # GC)07-02, 03 were low even though -03 drained an area close to the recorded location of showing **R and B #3.** Samples GC07 -04, -05, -06 were taken from creeks draining some swampy ponds in the area of the three fault intersection. These samples gave disappointingly low values. Sample GEO&-01 was collected from a creek on the west central part of the property. It did not show values of interest. Samples GEO7 -02, -03, -04, -05 were collected from an area in which an unknown independent party had acquired a placer claim. The samples were slightly elevated in copper and arsenic but not in gold.

**Soil sampling**

Two separate small grids were established and soil samples collected at 50 meter intervals along lines 100 meters apart. There was poor soil development on the northern grid and a poor looking thin "B" horizon soil was found at shallow depths at about 10 – 15 cm. In spite of this some good anomalous values were obtained and values over 50 PPM are considered to be elevated above background. An anomalous area appears to trend northwest and widening to the southeast.

On the southern grid the soil development was good and "rich" looking "B" horizon soil was found at approximately 20 cm depth but in the vicinity of swampy areas the overlaying organic material reached a thickness of 30 cm or more. The general background value was higher than that at the northern grid. There was no area of anomalous values but 3 – 5 single samples are considered to be slightly above background. These are mainly located in the vicinity of northeasterly trending swampy areas which may roughly align along the southwest-northeast fault. Two of six samples collected at an exposure of this fault to the southwest gave anomalous copper values (466PPM,386PPM) in rock samples.

## Evaluation and conclusions

The mineral showings on the George claims may perhaps be either large disseminated copper-gold deposits in rocks altered by an intrusive body, such as the QR GOLD Mine Deposits in the Cariboo region of B.C. that is found at the indurated alteration front of the intrusive body about 300 meters away from the contact, or as massive replacement mineralization in limestone such as at the Bowser Creek Deposits in Alaska (Ref. #4) where disseminated silver –zinc occurs in altered limestone or as massive replacement of limestone. The disseminations may extend over a few kilometers in length and up to 250 m in width.

The tree fault intersection on the southwestern George claims did not return notable soil values nor did silt samples in the vicinity. The only fault exposure that has been found lies about 1.0 km away from the fault junction on the southwest striking fault branch. The five channel samples across the exposed part of the fault and one grab sample gave low values but two were anomalous in copper, and soil samples near the three fault junction indicate that the southwest fault may carry some mineralization.

On the northern part of the claims the rocks have undergone contact metamorphic alteration with introduction (or production) of quartz, pyrite, chalcopyrite and gold values from near the intrusive contact and up to 400m to perhaps 500m southwest of the contact. At the B and R showing one narrow sample (7.0 cm) gave roughly ½ gram gold and 0.15 % copper per tonne and the soil grid outlined anomalous values. This area extending about 2.0 km northwest-southeast and about ½ km southwest. This area warrants exploration and the writer will outline a program.

**Geology and rock sampling**

| | | |
|---|---|---|
| **E. Livgard P.Eng.** | **4 days at $ 400/day** | **$ 1600.-** |
| **Assistant** | **4 days at $200/day** | **$ 800.-** |

| | | | |
|---|---|---|---|
| **Vehicle and gas** | **$ 70/day** | | |
| **Acomm** | **$ 76.30/day** | | |
| **Meals** | **$ 70/day** | | |
| | **$ 216.30** | **4 days** | **$ 865.20** |

**Grid, soil, silt sampling**

| | | | |
|---|---|---|---|
| **Bryan Livgard, geotech.** | **6 days at $ 225/day** | | |
| **Assistant** | **$175/day** | | |
| | **6 days at $ 400** | | **$ 2400** |
| **Vehicle and gas** | **$ 70** | | |
| **Accom** | **$76.30** | | |
| **Meals** | **$70** | | |
| | **6 days at $ 216.30** | | **$ 1297.80** |
| **Assaying** | | | **$ 989.28** |
| **Report and maps** | | | **$ 1500.00** |
| | | | **$9452.28** |

## References


(1) Minfiles 092H 046 (B and R)
092H068 (Dawn)
092H127 (B and R # 3)

Assessment reports

(2) # 0659 Geophysical Report
Magnetic Survey by D.W. Smellie P.Eng. Oct 2nd 1964
For Bardale Mining & Development Co.

(3) # 16505 Geophysical Report on the Lawless placer claims
By M.K. Lorimer P.Eng. Oct. 3rd 1987

(4) US geological Survey Circular 559 Bowser Creek Skarn Deposits

(5) B.C. Govt. Map place and MTO (mineral titles on line)

(6) CJES Vol. 24 pp 2521-2536

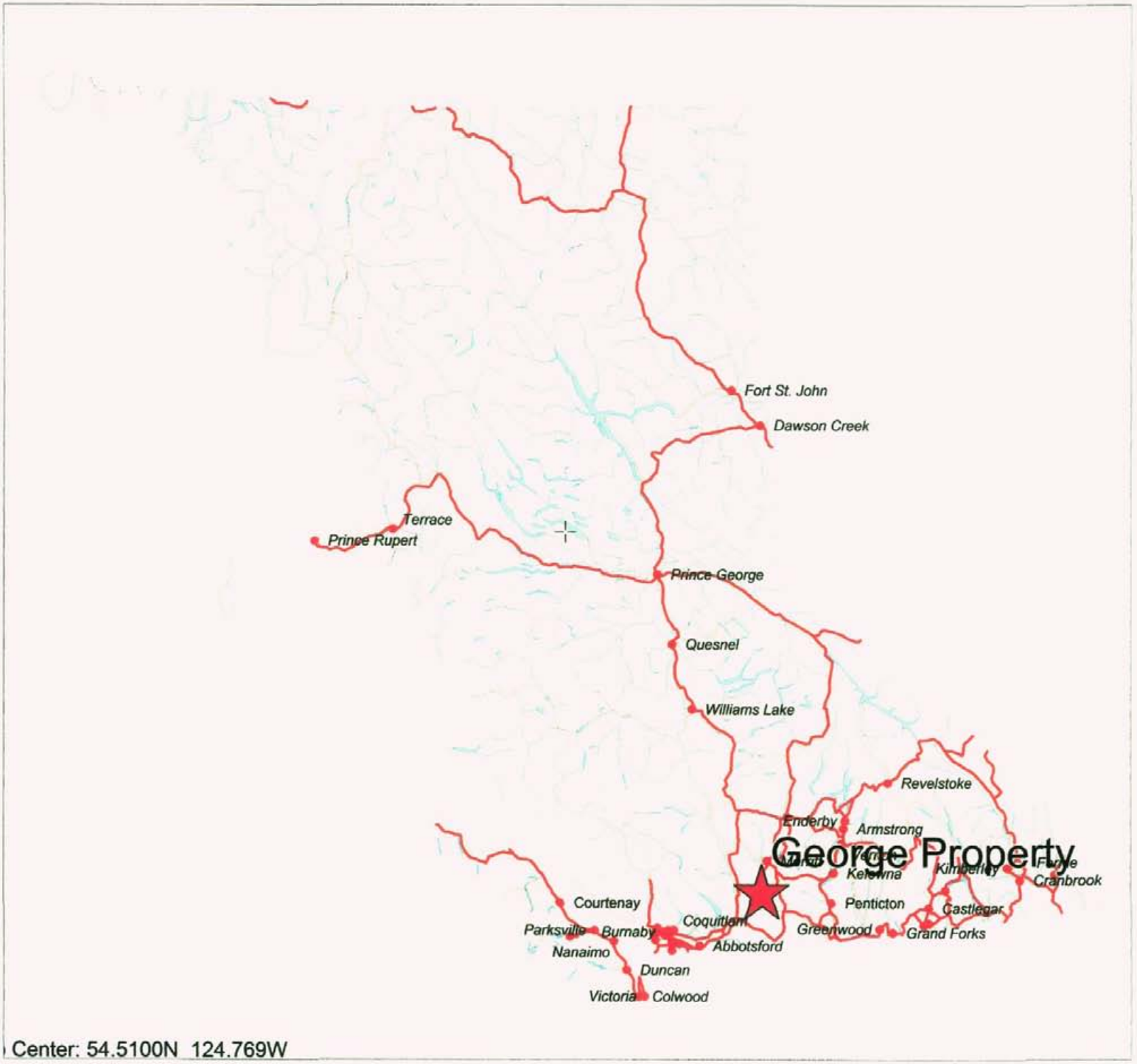
(7) Geoscience B.C. Report 2007 – 10 Halogen in surface Exploration Geochemistry: Evaluation and Development of Methods for Detecting buried Mineral deposits.
Colin E. Dunn, Stephen J. Cook and Gwendy E. M. Hall

(8) Biogeochemistry in Mineral Exploration
Colin E. Dunn

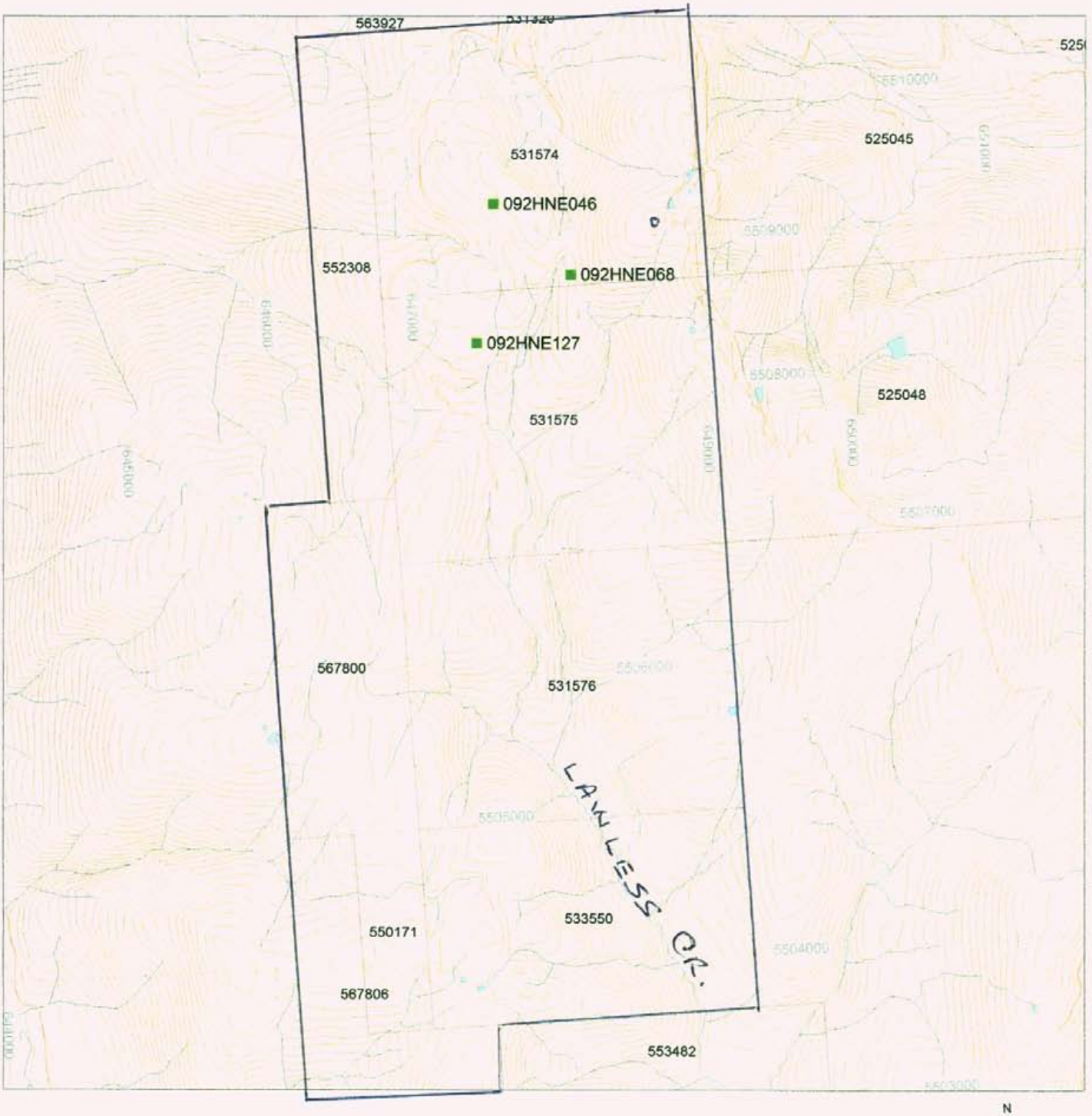


Egil Livgard P.Eng.
Coquitlam B.C.
February 29th 2008

# George Property Location Map



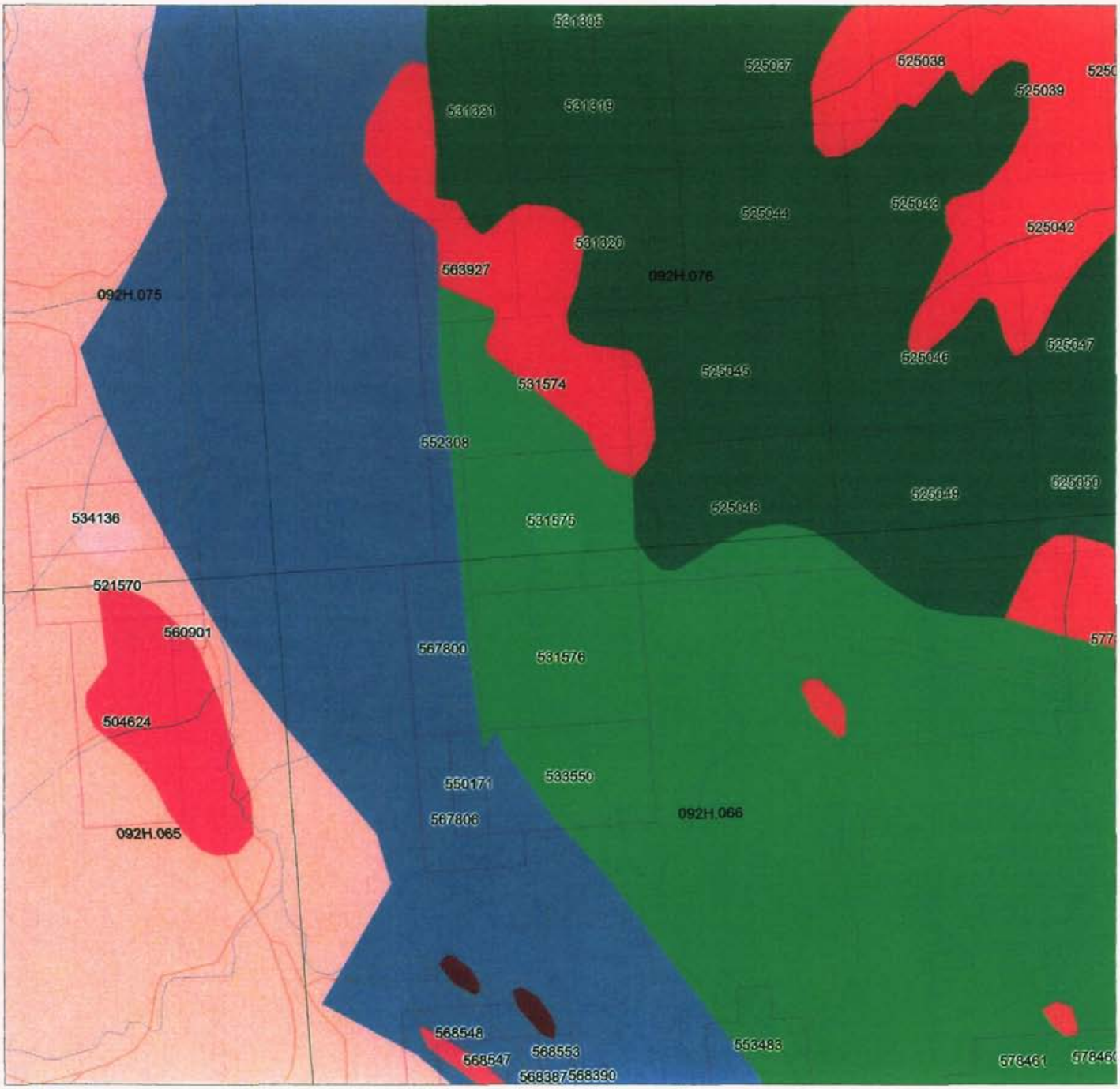
# George Property - Contours




http://webmap.em.gov.bc.ca/mapplace/maps/minpot/dep_find.MWF

February 21, 2008 2:09 PM

# George Property - Geology



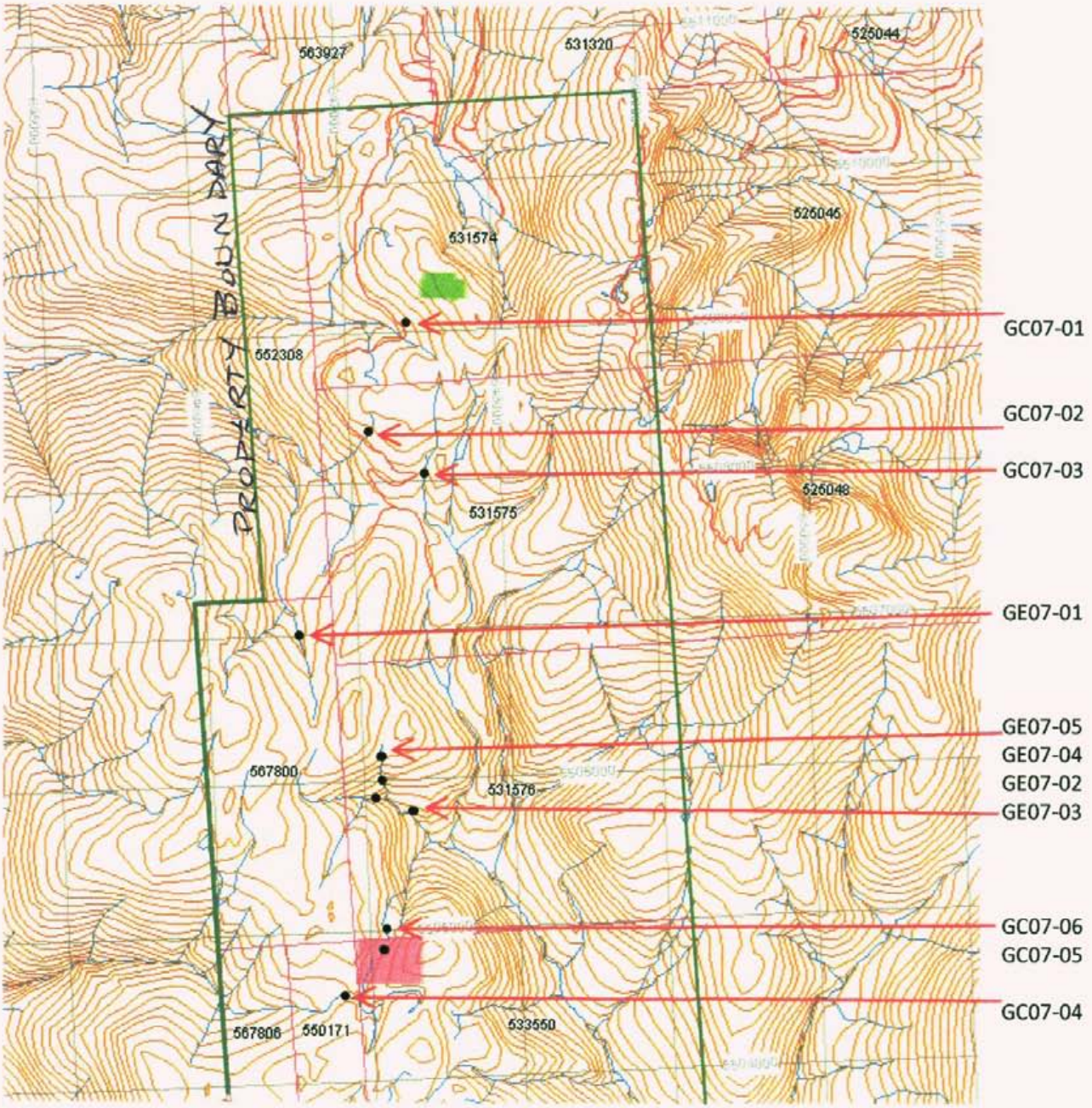

http://webmap.em.gov.bc.ca/mapplace/maps/minpot/dep_find.MWF

March 30, 2008 1:12 PM

# George Claims - 2007 Survey

- 29 soil samples labeled with the prefix GC07.
- 32 soil samples labeled with the prefix A07-01
- silt samples • GC07-01 to 06 & GE07-01 to 05, 11 samples
  Claim boundary

**Assay results on ACME Lab Report Dated October 08, 2007 to Egil Livgard.**

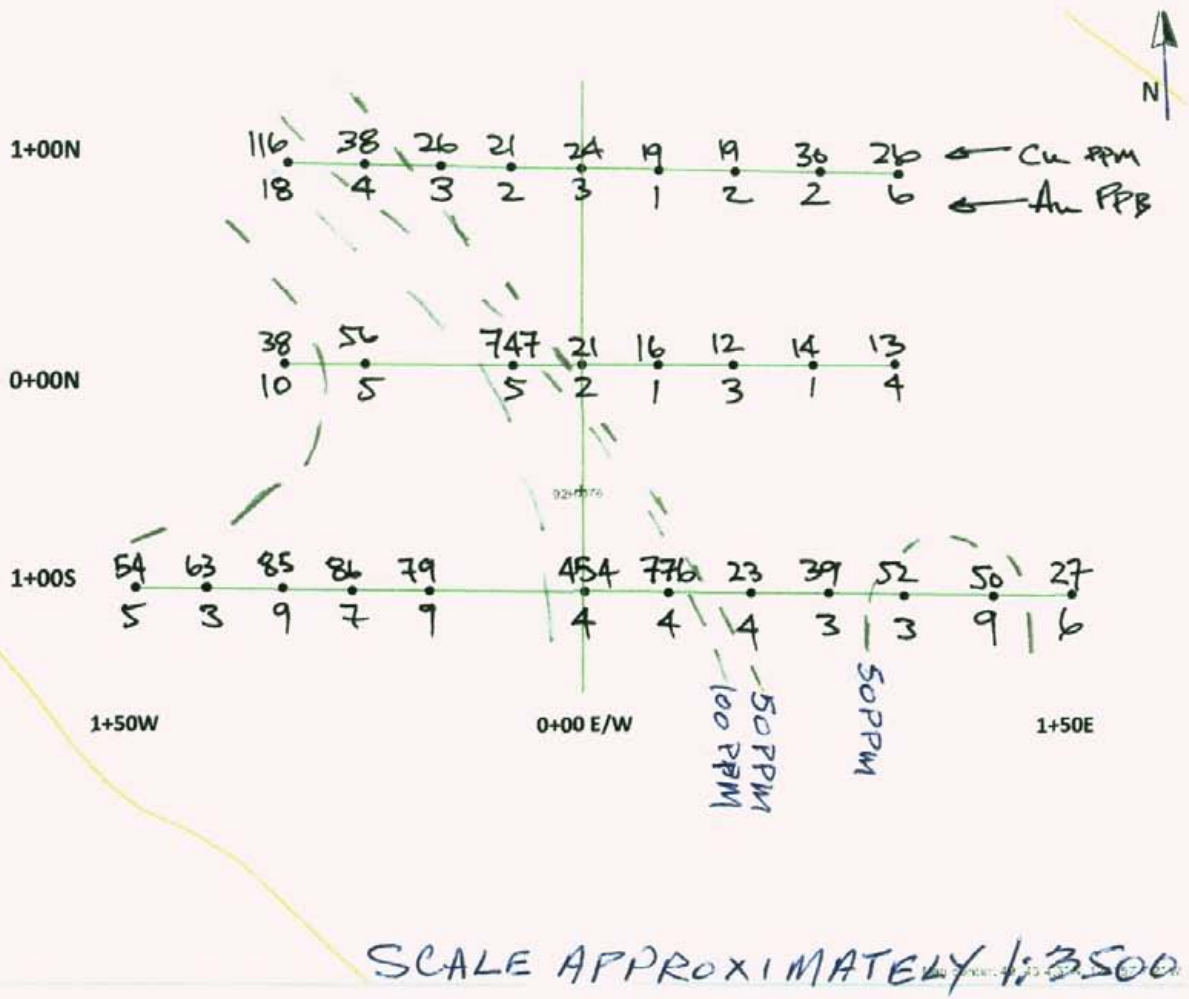



SCALE 1:~ 42500

# George Claims North - 2007 Soil Survey

**29 samples; prefix GC07. Assay results on ACME Lab Report Dated October 08, 2007 to Egil Livgard.**

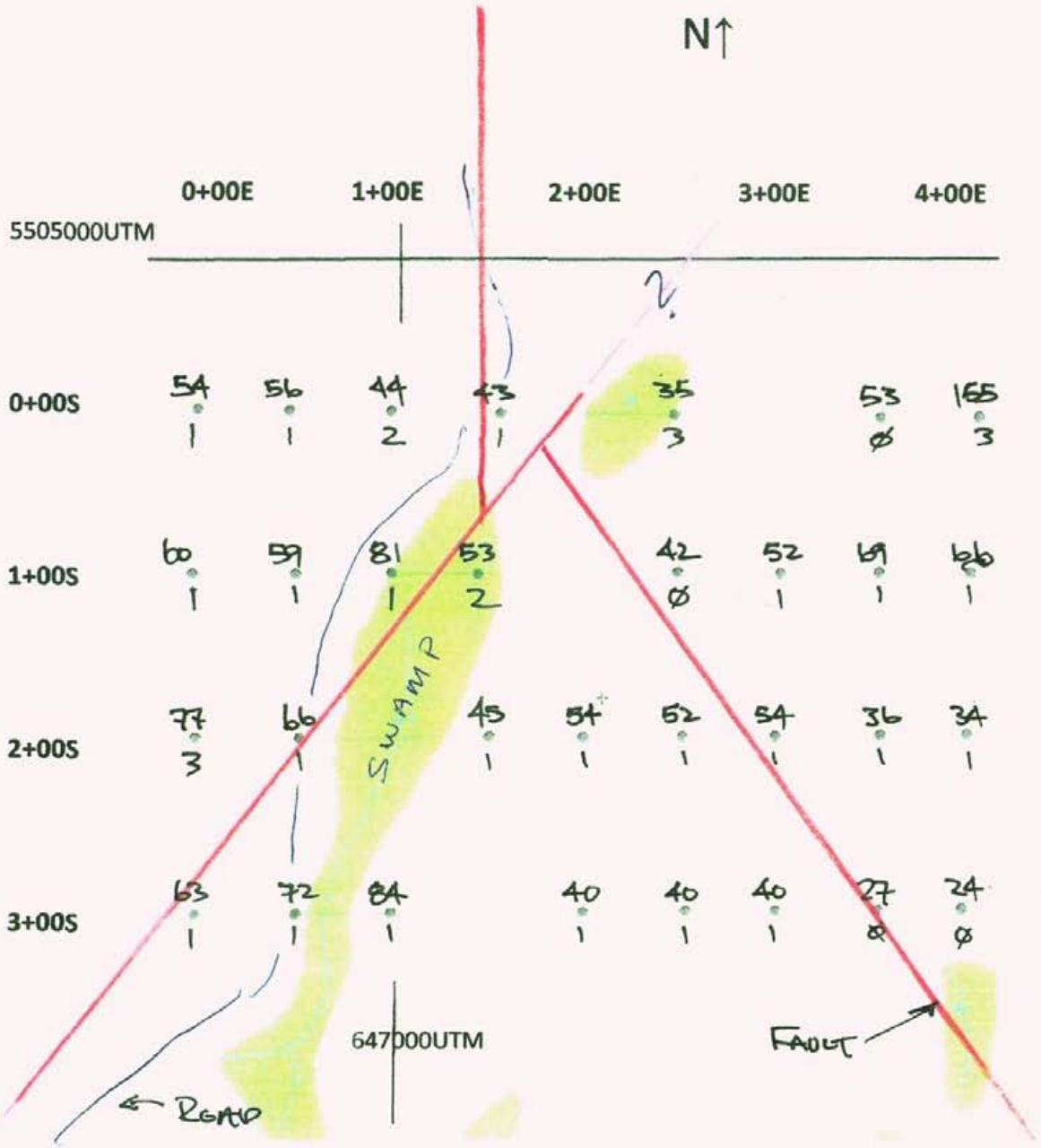
**Copper↑ and Gold↓ Values posted**
PPM PPB




SCALE APPROXIMATELY 1:3500

# George Claims South - 2007 Soil Survey

32 samples; prefix A07-01. Assay results on ACME Lab Report Dated October 08, 2007, to Egil Livgard.

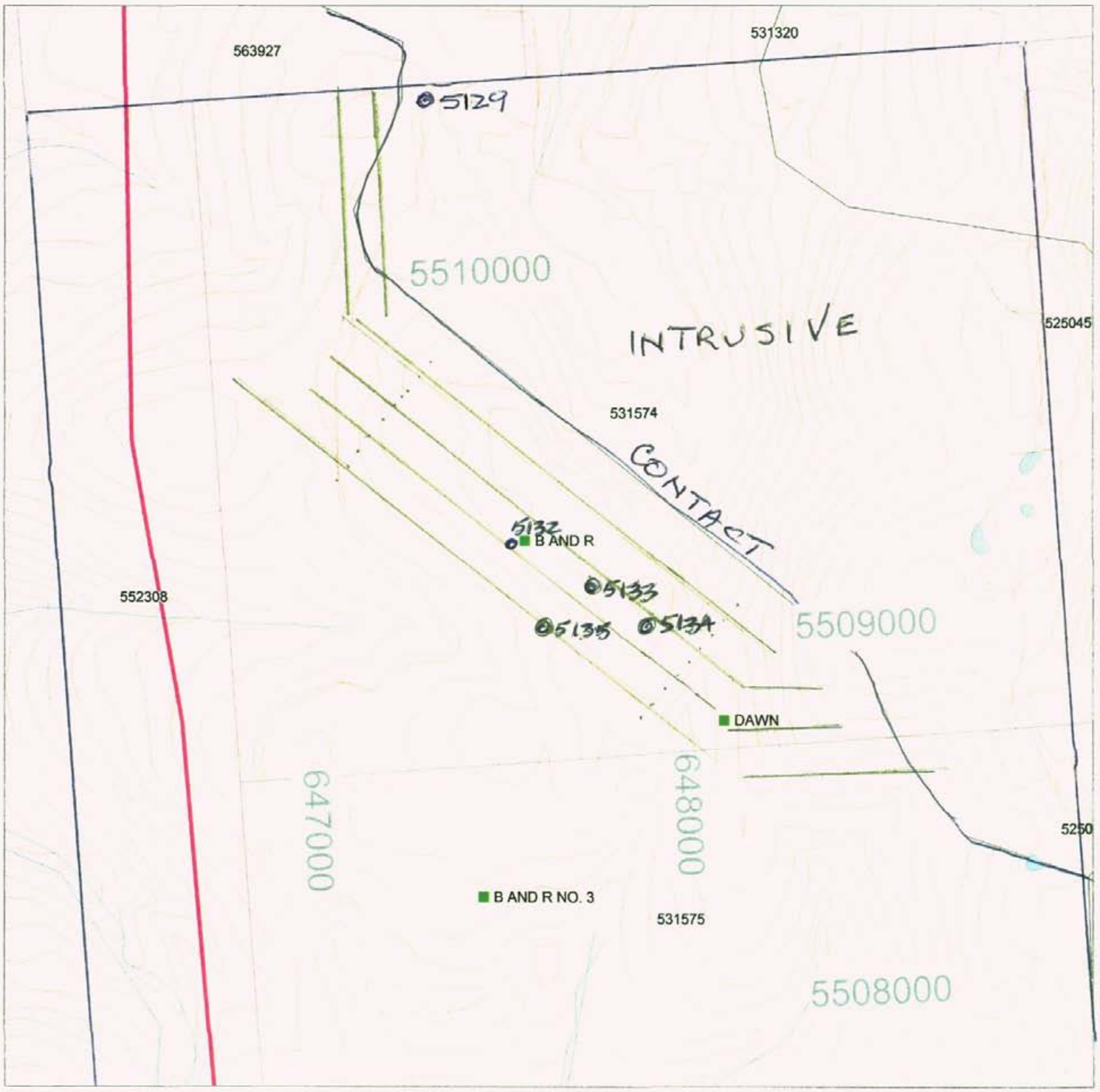



**Copper↑ and Gold↓ Values posted**

PPM PPB

SCALE 1:~4000

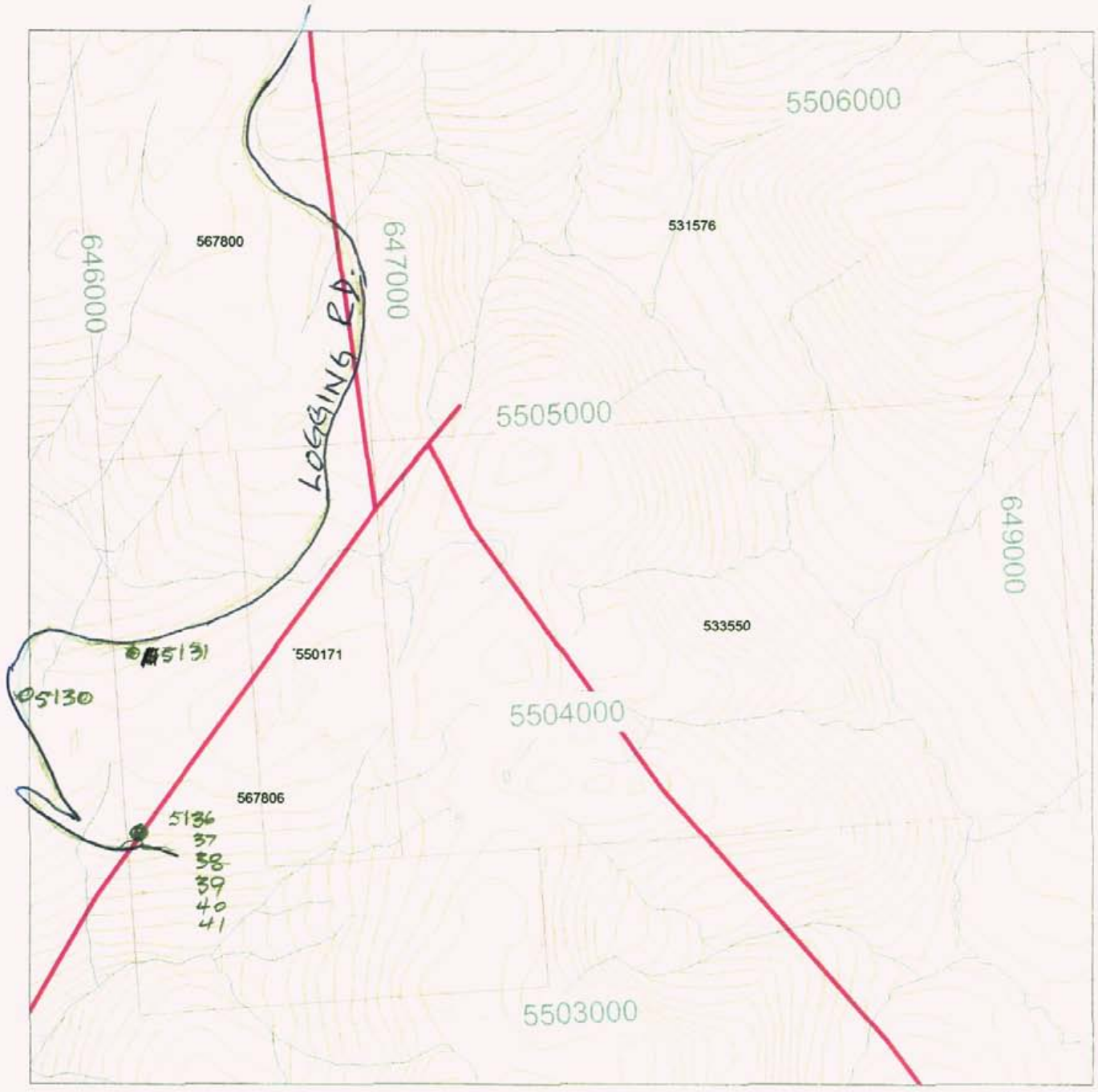
# GEORGE CLAIMS - NORTH




http://webmap.em.gov.bc.ca/mapplace/maps/minpot/dep_find.MWF

March 18, 2008 1:00 PM

# George south



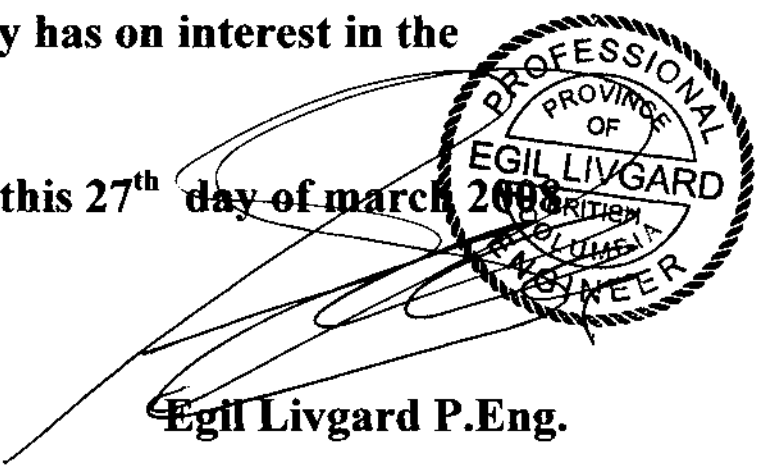

Rock SAMPLES

# Certificate

**I, Egil Livgard, of 1990 King Albert Ave., Coquitlam B.C. do hereby certify:**

**1. I am a geological engineer practicing from my home address.**
**2. I am a graduate of the University of B.C. with a B.Sc. degree (1960) in geological sciences and have regularly updated and expanded my geological knowledge through many short courses given by MDRU (Mineral Deposits Research Unit) U.B.C., GAC (Geological Assoc. of Canada), AME (B.C. Chamber of Mines) and at BCIT.**
**3. I am a registered member in good standing of the Association of Professional Engineers and Geoscientists of the Province of B.C., with registration number 7236.**
**4. I have practiced my profession for 46 years.**
**5. This report is based on the several days of work on the property in 2006 and this latest visit on July 15th, 16th , 26th and September 4th 2007 and the work described in this report.**
**6. I confirm that my family has on interest in the described property.**

**Dated at Coquitlam, B.C. this 27th day of march 2008**




**Egil Livgard P.Eng.**

# APPENDIX 1.

## 10 ANALYSIS SHEETS

ACME ANALYTICAL LABORATORIES LTD.
852 E. Hastings St. Vancouver BC V6A 1R6 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

**Client:** **Livgard, Egil**
1990 King Albert Ave
Coquitlam BC V3J 1Z1 Canada

Project:
Report Date: October 08, 2007



# CERTIFICATE OF ANALYSIS VAN07000841.1

| | Method | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Analyte | Mo | Cu | Pb | Zn | Ag | Ni | Co | Mn | Fe | As | U | Au | Th | Sr | Cd | Sb | Bi | V | Ca | P |
| | Unit | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | % | ppm | ppm | ppb | ppm | ppm | ppm | ppm | ppm | ppm | % | % |
| | MDL | 0.1 | 0.1 | 0.1 | 1 | 0.1 | 0.1 | 0.1 | 1 | 0.01 | 0.5 | 0.1 | 0.5 | 0.1 | 1 | 0.1 | 0.1 | 0.1 | 2 | 0.01 | 0.001 |
| GC07-01 | Silt | 1.5 | 50.3 | 8.6 | 114 | <0.1 | 58.8 | 26.0 | 985 | 4.76 | 7.3 | 0.6 | 3.4 | 0.8 | 26 | 0.4 | 0.4 | <0.1 | 118 | 0.58 | 0.056 |
| GC07-02 | Silt | 1.0 | 28.7 | 4.2 | 87 | <0.1 | 20.0 | 15.5 | 1078 | 4.01 | 2.4 | 0.4 | 2.7 | 0.5 | 27 | 0.2 | 0.2 | <0.1 | 91 | 0.32 | 0.058 |
| GC07-03 | Silt | 1.1 | 19.8 | 5.3 | 95 | <0.1 | 13.2 | 13.7 | 882 | 3.50 | 1.8 | 0.9 | 2.6 | 0.6 | 19 | 0.3 | 0.2 | <0.1 | 72 | 0.31 | 0.044 |
| GC07-04 | Silt | 0.6 | 28.4 | 2.4 | 59 | <0.1 | 14.1 | 15.3 | 493 | 3.08 | 1.3 | 0.3 | <0.5 | 1.0 | 42 | <0.1 | 0.2 | <0.1 | 68 | 0.54 | 0.103 |
| GC07-05 | Silt | 0.5 | 24.5 | 1.3 | 26 | 0.1 | 6.4 | 5.7 | 205 | 1.40 | <0.5 | 0.5 | 1.3 | 0.3 | 31 | <0.1 | 0.1 | <0.1 | 29 | 0.41 | 0.093 |
| GC07-06 | Silt | 1.0 | 29.7 | 7.4 | 67 | <0.1 | 8.2 | 15.1 | 740 | 4.00 | 2.7 | 0.5 | 1.7 | 0.6 | 28 | 0.1 | 0.5 | <0.1 | 93 | 0.29 | 0.042 |
| GE07-01 | Silt | 1.2 | 24.6 | 2.9 | 61 | <0.1 | 14.6 | 16.3 | 1178 | 3.59 | 2.4 | 0.5 | 1.3 | 0.6 | 47 | 0.1 | 0.2 | <0.1 | 74 | 0.61 | 0.081 |
| GE07-02 | Silt | 0.8 | 48.4 | 5.3 | 100 | <0.1 | 24.5 | 22.4 | 1010 | 4.59 | 5.4 | 0.4 | <0.5 | 0.9 | 49 | 0.2 | 0.3 | <0.1 | 89 | 0.60 | 0.079 |
| GE07-03 | Silt | 0.9 | 47.4 | 4.9 | 87 | <0.1 | 22.0 | 20.8 | 927 | 4.39 | 5.2 | 0.4 | 1.0 | 0.9 | 43 | 0.2 | 0.4 | <0.1 | 89 | 0.58 | 0.065 |
| GE07-04 | Silt | 0.7 | 58.2 | 6.6 | 86 | <0.1 | 18.9 | 20.6 | 1011 | 4.55 | 4.5 | 0.4 | 1.4 | 0.9 | 38 | 0.4 | 0.7 | <0.1 | 104 | 0.58 | 0.068 |
| GE07-05 | Silt | 0.6 | 59.2 | 6.4 | 85 | <0.1 | 21.4 | 22.5 | 1028 | 4.73 | 4.1 | 0.4 | 0.7 | 1.1 | 38 | 0.3 | 0.6 | <0.1 | 98 | 0.57 | 0.065 |
| M07-01 | Silt | 3.3 | 37.8 | 16.6 | 159 | 0.3 | 30.8 | 13.2 | 693 | 3.41 | 48.2 | 0.6 | 2.5 | 2.6 | 33 | 1.7 | 4.2 | 0.2 | 43 | 0.40 | 0.091 |
| M07-02 | Silt | 8.6 | 47.3 | 30.7 | 341 | 0.4 | 39.5 | 12.0 | 807 | 3.65 | 32.4 | 0.9 | 10.2 | 2.2 | 63 | 5.3 | 5.4 | 0.2 | 35 | 2.38 | 0.072 |
| M07-03 | Silt | 4.1 | 43.3 | 11.7 | 141 | 0.3 | 33.0 | 12.3 | 456 | 2.95 | 22.9 | 0.8 | 13.4 | 3.4 | 26 | 1.5 | 2.6 | 0.2 | 32 | 0.29 | 0.081 |
| M07-04 | Silt | 4.3 | 38.8 | 13.5 | 214 | 0.5 | 29.9 | 10.7 | 814 | 3.07 | 28.0 | 0.9 | 4.6 | 1.2 | 41 | 2.3 | 4.0 | 0.2 | 31 | 0.45 | 0.092 |
| M07-05 | Silt | 4.1 | 58.2 | 22.9 | 143 | 0.9 | 35.9 | 12.6 | 532 | 3.22 | 48.6 | 0.6 | 11.4 | 3.8 | 34 | 1.7 | 5.4 | 0.3 | 27 | 0.37 | 0.113 |
| M07-06 | Silt | 5.9 | 92.6 | 12.9 | 247 | 0.6 | 41.6 | 18.9 | 818 | 3.95 | 22.0 | 0.8 | 5.2 | 1.5 | 22 | 2.6 | 3.8 | 0.2 | 48 | 0.33 | 0.107 |
| M07-07 | Silt | 2.3 | 71.4 | 11.2 | 173 | 0.3 | 40.7 | 25.2 | 1122 | 5.03 | 17.4 | 0.7 | 5.3 | 1.3 | 43 | 1.5 | 1.7 | 0.2 | 95 | 0.58 | 0.105 |
| M07-08 | Silt | 3.3 | 109.6 | 16.0 | 244 | 0.6 | 63.1 | 36.1 | 1667 | 5.53 | 28.3 | 1.4 | 6.2 | 1.2 | 46 | 2.9 | 2.4 | 0.3 | 93 | 0.63 | 0.120 |
| M07-09 | Silt | 3.0 | 96.0 | 18.5 | 241 | 0.5 | 56.1 | 34.5 | 1649 | 5.24 | 29.3 | 1.2 | 5.6 | 1.0 | 50 | 2.6 | 2.2 | 0.3 | 88 | 0.75 | 0.109 |

AcmeLabs ACME ANALYTICAL LABORATORIES LTD.
852 E. Hastings St. Vancouver BC V6A 1R6 Canada
Phone (604) 253-3158 Fax (604) 253-1716 www.acmelab.com

Client: **Livgard, Egil**
1990 King Albert Ave
Coquitlam BC V3J 1Z1 Canada

Project:
Report Date: October 08, 2007

GEOCT SILT

Page: 2 of 2 Part 2

# CERTIFICATE OF ANALYSIS VAN07000841.1

| Method | | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Analyte | | La | Cr | Mg | Ba | Ti | B | Al | Na | K | W | Hg | Sc | Tl | S | Ga | Se |
| Unit | | ppm | ppm | % | ppm | % | ppm | % | % | % | ppm | ppm | ppm | ppm | % | ppm | ppm |
| MDL | | 1 | 1 | 0.01 | 1 | 0.001 | 1 | 0.01 | 0.001 | 0.01 | 0.1 | 0.01 | 0.1 | 0.1 | 0.05 | 1 | 0.5 |
| GC07-01 | Silt | 6 | 98 | 1.73 | 57 | 0.088 | <1 | 2.40 | 0.008 | 0.05 | <0.1 | 0.02 | 6.4 | <0.1 | <0.05 | 7 | 0.9 |
| GC07-02 | Silt | 15 | 49 | 0.65 | 84 | 0.021 | 2 | 1.81 | 0.011 | 0.06 | <0.1 | 0.03 | 6.4 | <0.1 | <0.05 | 5 | 1.0 |
| GC07-03 | Silt | 10 | 23 | 0.93 | 59 | 0.033 | <1 | 1.95 | 0.011 | 0.05 | <0.1 | 0.02 | 4.0 | <0.1 | <0.05 | 6 | 0.7 |
| GC07-04 | Silt | 7 | 18 | 1.11 | 43 | 0.092 | 1 | 1.65 | 0.010 | 0.06 | <0.1 | <0.01 | 3.6 | <0.1 | <0.05 | 4 | <0.5 |
| GC07-05 | Silt | 10 | 9 | 0.48 | 29 | 0.064 | <1 | 0.96 | 0.028 | 0.03 | <0.1 | 0.01 | 1.7 | <0.1 | <0.05 | 2 | <0.5 |
| GC07-06 | Silt | 12 | 10 | 0.91 | 68 | 0.049 | <1 | 1.99 | 0.009 | 0.08 | <0.1 | <0.01 | 4.3 | <0.1 | <0.05 | 7 | 0.9 |
| GE07-01 | Silt | 8 | 22 | 1.11 | 51 | 0.091 | <1 | 2.19 | 0.013 | 0.10 | <0.1 | 0.02 | 3.6 | <0.1 | <0.05 | 5 | 1.0 |
| GE07-02 | Silt | 7 | 32 | 1.50 | 74 | 0.074 | 2 | 2.32 | 0.009 | 0.08 | <0.1 | <0.01 | 5.1 | <0.1 | <0.05 | 6 | 1.4 |
| GE07-03 | Silt | 7 | 30 | 1.30 | 68 | 0.078 | 2 | 2.17 | 0.009 | 0.08 | <0.1 | <0.01 | 5.1 | <0.1 | <0.05 | 6 | 0.7 |
| GE07-04 | Silt | 9 | 27 | 1.27 | 71 | 0.060 | 2 | 2.09 | 0.009 | 0.08 | <0.1 | 0.03 | 6.1 | <0.1 | <0.05 | 5 | 1.1 |
| GE07-05 | Silt | 9 | 27 | 1.35 | 73 | 0.060 | <1 | 2.33 | 0.011 | 0.08 | <0.1 | 0.02 | 6.1 | <0.1 | <0.05 | 6 | 1.0 |
| M07-01 | Silt | 11 | 29 | 0.83 | 65 | 0.039 | 2 | 1.24 | 0.007 | 0.05 | <0.1 | 0.01 | 2.9 | <0.1 | <0.05 | 4 | 2.1 |
| M07-02 | Silt | 13 | 17 | 0.56 | 103 | 0.023 | <1 | 1.31 | 0.009 | 0.05 | <0.1 | 0.03 | 2.7 | 0.1 | <0.05 | 3 | 3.5 |
| M07-03 | Silt | 14 | 22 | 0.51 | 61 | 0.038 | <1 | 1.04 | 0.007 | 0.06 | <0.1 | 0.02 | 2.9 | <0.1 | <0.05 | 3 | 2.5 |
| M07-04 | Silt | 14 | 19 | 0.58 | 115 | 0.015 | <1 | 1.32 | 0.007 | 0.06 | 0.1 | 0.03 | 2.7 | 0.1 | <0.05 | 3 | 2.1 |
| M07-05 | Silt | 15 | 20 | 0.51 | 55 | 0.020 | <1 | 0.82 | 0.006 | 0.05 | <0.1 | 0.02 | 3.4 | 0.1 | <0.05 | 2 | 2.5 |
| M07-06 | Silt | 15 | 25 | 0.67 | 64 | 0.036 | 1 | 1.73 | 0.009 | 0.07 | <0.1 | 0.07 | 3.9 | 0.2 | <0.05 | 4 | 2.2 |
| M07-07 | Silt | 9 | 40 | 1.40 | 59 | 0.064 | 2 | 2.29 | 0.010 | 0.07 | <0.1 | 0.03 | 6.1 | <0.1 | <0.05 | 7 | 2.0 |
| M07-08 | Silt | 14 | 47 | 1.25 | 101 | 0.071 | 2 | 2.86 | 0.014 | 0.09 | 0.1 | 0.07 | 6.9 | 0.2 | <0.05 | 7 | 2.0 |
| M07-09 | Silt | 13 | 43 | 1.17 | 103 | 0.067 | 2 | 2.56 | 0.014 | 0.10 | 0.1 | 0.07 | 6.2 | 0.2 | <0.05 | 7 | 2.5 |

GEOCHEM REPORT

MONASHEE

GEORGE Rock

**AcmeLabs** ACME ANALYTICAL LABORATORIES LTD.
852 E. Hastings St. Vancouver BC V6A 1R6 Canada
Phone (604) 253-3158 Fax (604) 253-1716 www.acmelab.com

**Client:** **Livgard, Egil**
1990 King Albert Ave
Coquitlam BC V3J 1Z1 Canada

Project: None Given
Report Date: October 31, 2007



# CERTIFICATE OF ANALYSIS VAN07000839.1

| | Method | 3A | 1D | 1D | 1D | 1D | 1D | 1D | 1D | 1D | 1D | 1D | 1D | 1D | 1D | 1D | 1D | 1D | 1D | 1D | 1D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Analyte | Au | Mo | Cu | Pb | Zn | Ag | Ni | Co | Mn | Fe | As | U | Au | Th | Sr | Cd | Sb | Bi | V | Ca |
| | Unit | ppb | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | % | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | % |
| | MDL | 0.5 | 1 | 2 | 3 | 1 | 0.3 | 1 | 1 | 2 | 0.01 | 2 | 8 | 2 | 2 | 1 | 0.5 | 3 | 3 | 1 | 0.01 |
| 5129 | Rock | 2.5 | <1 | 9 | <3 | 24 | <0.3 | 78 | 52 | 466 | 10.84 | <2 | <8 | <2 | <2 | 52 | <0.5 | <3 | 5 | 96 | 0.79 |
| 5130 | Rock | <0.5 | <1 | 68 | <3 | 31 | <0.3 | 6 | 18 | 495 | 3.16 | <2 | <8 | <2 | <2 | 17 | <0.5 | 4 | <3 | 115 | 1.04 |
| 5131 | Rock | 3.3 | 9 | 56 | <3 | 65 | <0.3 | 43 | 25 | 1080 | 6.19 | 6 | <8 | <2 | <2 | 33 | <0.5 | <3 | <3 | 93 | 0.55 |
| 5132 | Rock | 423.8 | 10 | 1588 | <3 | 13 | 4.6 | 1466 | 1040 | 245 | 29.27 | 241 | <8 | <2 | <2 | 6 | <0.5 | 10 | <3 | 65 | 0.07 |
| 5133 | Rock | 2.0 | 5 | 33 | <3 | 12 | <0.3 | 157 | 35 | 490 | 21.37 | 2 | <8 | <2 | <2 | 63 | <0.5 | <3 | <3 | 257 | 2.78 |
| 5134 | Rock | 13.8 | 6 | 300 | <3 | 8 | 0.4 | 62 | 83 | 442 | 2.72 | 15 | <8 | <2 | 3 | 5 | <0.5 | <3 | <3 | 6 | 0.08 |
| 5135 | Rock | 13.1 | 1 | 234 | <3 | 26 | <0.3 | 89 | 71 | 658 | 17.19 | 7 | <8 | <2 | <2 | 34 | <0.5 | <3 | <3 | 127 | 1.01 |
| 5136 | Rock | 3.9 | 6 | 387 | <3 | 45 | 0.5 | 92 | 32 | 402 | 14.59 | 21 | <8 | <2 | <2 | 32 | <0.5 | <3 | <3 | 34 | 1.41 |
| 5137 | Rock | 1.5 | 1 | 48 | <3 | 84 | <0.3 | 76 | 15 | 844 | 3.27 | 8 | <8 | <2 | <2 | 61 | 0.6 | <3 | <3 | 45 | 2.14 |
| 5138 | Rock | <0.5 | <1 | 87 | <3 | 29 | <0.3 | 70 | 29 | 305 | 3.42 | 17 | <8 | <2 | <2 | 36 | <0.5 | <3 | <3 | 43 | 1.06 |
| 5139 | Rock | 1.0 | 6 | 94 | <3 | 35 | <0.3 | 57 | 17 | 287 | 4.08 | 5 | <8 | <2 | <2 | 39 | <0.5 | <3 | <3 | 38 | 0.90 |
| 5140 | Rock | 0.8 | <1 | 152 | <3 | 21 | <0.3 | 69 | 28 | 221 | 4.49 | 5 | <8 | <2 | <2 | 37 | <0.5 | <3 | <3 | 41 | 1.20 |
| 5141 | Rock | 2.3 | 2 | 466 | <3 | 14 | <0.3 | 49 | 33 | 444 | 3.48 | <2 | <8 | <2 | <2 | 87 | <0.5 | <3 | <3 | 48 | 1.94 |
| 5215 | Rock | 2.7 | <1 | 16 | 56 | 1083 | 2.1 | 5 | 4 | 6103 | 3.90 | 4 | <8 | <2 | <2 | 15 | 2.7 | <3 | <3 | 9 | 0.13 |
| 5216 | Rock | 1.3 | <1 | 44 | 20 | 90 | <0.3 | 36 | 14 | 549 | 4.59 | 18 | <8 | <2 | 3 | 26 | <0.5 | 6 | <3 | 16 | 0.72 |

ACME ANALYTICAL LABORATORIES LTD.
852 E. Hastings St. Vancouver BC V6A 1R6 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

**Client:** **Livgard, Egil**
1990 King Albert Ave
Coquitlam BC V3J 1Z1 Canada

Project: None Given
Report Date: October 31, 2007



# CERTIFICATE OF ANALYSIS VAN07000839.1

| | Method | 1D | 1D | 1D | 1D | 1D | 1D | 1D | 1D | 1D | 1D | 1D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Analyte | P | La | Cr | Mg | Ba | Ti | B | Al | Na | K | W |
| | Unit | % | ppm | ppm | % | ppm | % | ppm | % | % | % | ppm |
| | MDL | 0.001 | 1 | 1 | 0.01 | 1 | 0.01 | 20 | 0.01 | 0.01 | 0.01 | 2 |
| 5129 | Rock | 0.139 | 3 | 18 | 1.91 | 2 | 0.13 | <20 | 2.19 | 0.03 | 0.03 | <2 |
| 5130 | Rock | 0.061 | 1 | 7 | 1.01 | 43 | 0.09 | <20 | 1.74 | 0.26 | 0.20 | <2 |
| 5131 | Rock | 0.068 | 6 | 43 | 1.78 | 72 | 0.12 | <20 | 2.51 | 0.03 | 0.12 | <2 |
| 5132 | Rock | 0.028 | 5 | 50 | 0.54 | 9 | 0.02 | <20 | 0.88 | 0.01 | 0.03 | <2 |
| 5133 | Rock | 0.099 | 6 | 157 | 1.55 | 20 | 0.10 | <20 | 2.00 | <0.01 | 0.04 | <2 |
| 5134 | Rock | 0.048 | 9 | 6 | 0.07 | 37 | <0.01 | <20 | 0.31 | 0.04 | 0.15 | <2 |
| 5135 | Rock | 0.137 | 5 | 236 | 1.80 | 37 | 0.13 | <20 | 2.09 | 0.02 | 0.03 | <2 |
| 5136 | Rock | 0.531 | 5 | 25 | 0.35 | 23 | 0.12 | <20 | 0.74 | 0.04 | <0.01 | <2 |
| 5137 | Rock | 0.691 | 10 | 57 | 0.67 | 34 | 0.07 | <20 | 1.19 | 0.03 | 0.02 | <2 |
| 5138 | Rock | 0.223 | 3 | 42 | 0.58 | 61 | 0.16 | <20 | 1.01 | 0.04 | 0.05 | <2 |
| 5139 | Rock | 0.155 | 4 | 32 | 0.42 | 54 | 0.18 | <20 | 0.94 | 0.04 | 0.03 | <2 |
| 5140 | Rock | 0.290 | 3 | 41 | 0.31 | 31 | 0.17 | <20 | 0.89 | 0.05 | 0.02 | <2 |
| 5141 | Rock | 0.090 | 5 | 99 | 0.91 | 90 | 0.11 | <20 | 1.38 | 0.01 | 0.03 | 2 |
| ~~6215~~ | Rock | 0.073 | 11 | 3 | 0.03 | 42 | <0.01 | <20 | 0.44 | <0.01 | 0.34 | <2 |
| ~~6216~~ | Rock | 0.063 | 11 | 17 | 0.64 | 93 | 0.01 | <20 | 1.48 | 0.02 | 0.23 | <2 |

ACME ANALYTICAL LABORATORIES LTD.
852 E. Hastings St. Vancouver BC V6A 1R6 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

Client: **Livgard, Egil**
1990 King Albert Ave
Coquitlam BC V3J 1Z1 Canada

Project:
Report Date: October 08, 2007

Page: 2 of 4 Part 1

# CERTIFICATE OF ANALYSIS VAN07000842.1

| | Method | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Analyte | Mo | Cu | Pb | Zn | Ag | Ni | Co | Mn | Fe | As | U | Au | Th | Sr | Cd | Sb | Bi | V | Ca | P |
| | Unit | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | % | ppm | ppm | ppb | ppm | ppm | ppm | ppm | ppm | ppm | % | % |
| | MDL | 0.1 | 0.1 | 0.1 | 1 | 0.1 | 0.1 | 0.1 | 1 | 0.01 | 0.5 | 0.1 | 0.5 | 0.1 | 1 | 0.1 | 0.1 | 0.1 | 2 | 0.01 | 0.001 |
| GC07 1+00N 1+00W | Soil | 1.7 | 116.1 | 3.9 | 50 | 0.2 | 60.2 | 46.6 | 1180 | 5.44 | 4.2 | 0.5 | 17.9 | 0.6 | 14 | <0.1 | 0.3 | 0.3 | 100 | 0.24 | 0.062 |
| GC07 1+00N 0+75W | Soil | 0.8 | 38.1 | 5.6 | 58 | 0.1 | 22.7 | 14.7 | 599 | 3.37 | 4.0 | 0.5 | 4.2 | 1.0 | 12 | 0.1 | 0.3 | 0.1 | 69 | 0.13 | 0.083 |
| GC07 1+00N 0+50W | Soil | 1.0 | 26.2 | 6.7 | 72 | 0.1 | 17.5 | 12.6 | 599 | 3.13 | 5.4 | 0.5 | 3.3 | 0.4 | 17 | <0.1 | 0.3 | 0.1 | 66 | 0.16 | 0.106 |
| GC07 1+00N 0+25W | Soil | 1.3 | 21.3 | 5.9 | 65 | <0.1 | 15.7 | 11.4 | 515 | 2.96 | 4.1 | 0.7 | 1.5 | 0.4 | 18 | 0.2 | 0.2 | 0.1 | 65 | 0.27 | 0.054 |
| GC07 1+00N 0+00E/W | Soil | 1.0 | 24.4 | 5.0 | 50 | 0.2 | 12.1 | 7.4 | 374 | 2.29 | 2.3 | 1.4 | 2.5 | 0.2 | 34 | 0.3 | 0.2 | 0.1 | 51 | 1.01 | 0.134 |
| GC07 1+00N 0+25E | Soil | 1.1 | 19.4 | 6.2 | 63 | <0.1 | 12.5 | 12.8 | 1044 | 2.96 | 2.6 | 1.3 | 0.8 | 0.4 | 27 | 0.3 | 0.3 | 0.1 | 73 | 0.61 | 0.078 |
| GC07 1+00N 0+50E | Soil | 1.3 | 18.9 | 7.0 | 64 | 0.1 | 11.2 | 14.8 | 1054 | 3.10 | 2.4 | 1.7 | 1.8 | 0.7 | 30 | 0.5 | 0.3 | 0.1 | 68 | 0.80 | 0.081 |
| GC07 1+00N 0+75E | Soil | 1.8 | 29.5 | 6.9 | 97 | 0.2 | 15.0 | 10.8 | 1002 | 2.67 | 2.9 | 2.1 | 2.2 | 0.8 | 28 | 1.1 | 0.4 | 0.1 | 54 | 0.89 | 0.060 |
| GC07 1+00N 1+00E | Soil | 1.5 | 26.2 | 7.1 | 113 | <0.1 | 24.3 | 16.0 | 1011 | 3.00 | 3.7 | 0.7 | 5.9 | 0.8 | 21 | 0.4 | 0.3 | 0.1 | 61 | 0.62 | 0.052 |
| GC07 0+00N 1+00W | Soil | 2.2 | 37.6 | 8.4 | 85 | 0.2 | 25.7 | 14.8 | 625 | 3.49 | 9.9 | 0.6 | 9.5 | 0.3 | 26 | 0.1 | 0.3 | 0.1 | 75 | 0.29 | 0.046 |
| GC07 0+00N 0+75W | Soil | 2.3 | 55.8 | 7.0 | 67 | <0.1 | 21.7 | 15.5 | 449 | 3.70 | 4.8 | 0.8 | 4.7 | 1.0 | 24 | 0.1 | 0.2 | 0.1 | 80 | 0.29 | 0.049 |
| GC07 0+00N 0+25W | Soil | 2.4 | 746.6 | 6.4 | 66 | 0.4 | 45.5 | 45.9 | 1394 | 3.33 | 4.5 | 2.5 | 5.4 | 0.4 | 28 | 0.2 | 0.3 | 0.2 | 63 | 0.56 | 0.071 |
| GC07 0+00N 0+00 | Soil | 0.8 | 21.3 | 5.7 | 57 | <0.1 | 17.5 | 13.0 | 656 | 3.11 | 3.2 | 0.6 | 1.7 | 0.8 | 16 | <0.1 | 0.3 | 0.1 | 68 | 0.14 | 0.047 |
| GC07 0+00N 0+25E | Soil | 0.9 | 16.4 | 5.4 | 59 | <0.1 | 12.1 | 12.2 | 857 | 2.66 | 2.6 | 0.7 | 1.1 | 0.9 | 12 | 0.1 | 0.2 | 0.1 | 58 | 0.13 | 0.059 |
| GC07 0+00N 0+50E | Soil | 0.8 | 12.4 | 5.3 | 49 | <0.1 | 10.6 | 17.0 | 803 | 2.56 | 2.3 | 0.9 | 2.6 | 0.6 | 12 | <0.1 | 0.2 | 0.1 | 55 | 0.12 | 0.049 |
| GC07 0+00N 0+75E | Soil | 0.8 | 13.5 | 5.8 | 54 | <0.1 | 10.9 | 11.8 | 561 | 2.77 | 2.5 | 0.5 | 1.4 | 0.7 | 12 | <0.1 | 0.2 | 0.1 | 58 | 0.13 | 0.042 |
| GC07 0+00N 1+00E | Soil | 0.9 | 12.8 | 5.4 | 66 | <0.1 | 11.9 | 9.4 | 749 | 2.50 | 2.8 | 0.5 | 3.6 | 0.6 | 18 | 0.2 | 0.2 | 0.1 | 53 | 0.26 | 0.084 |
| GC07 1+00S 1+50W | Soil | 1.8 | 53.8 | 7.5 | 87 | 0.2 | 23.3 | 16.6 | 1345 | 3.13 | 4.1 | 0.9 | 5.0 | 0.2 | 34 | 0.4 | 0.2 | 0.1 | 69 | 0.68 | 0.094 |
| GC07 1+00S 1+25W | Soil | 1.2 | 63.0 | 8.1 | 70 | 0.2 | 26.5 | 17.5 | 823 | 3.35 | 5.0 | 1.4 | 3.3 | 0.4 | 34 | 0.3 | 0.3 | 0.1 | 72 | 0.66 | 0.066 |
| GC07 1+00S 1+00W | Soil | 1.6 | 85.4 | 7.6 | 73 | 0.2 | 26.1 | 16.8 | 710 | 3.47 | 5.3 | 2.1 | 9.1 | 0.9 | 36 | 0.2 | 0.2 | 0.1 | 77 | 0.69 | 0.053 |
| GC07 1+00S 0+75W | Soil | 3.1 | 86.2 | 6.7 | 78 | 0.2 | 27.8 | 18.4 | 862 | 3.33 | 6.0 | 1.9 | 7.2 | 0.2 | 32 | 0.4 | 0.2 | 0.1 | 73 | 0.76 | 0.068 |
| GC07 1+00S 0+50W | Soil | 2.2 | 78.8 | 8.0 | 77 | 0.2 | 37.2 | 21.0 | 1118 | 3.65 | 5.3 | 3.0 | 8.8 | 0.4 | 36 | 0.5 | 0.2 | 0.1 | 77 | 0.86 | 0.073 |
| GC07 1+00S 0+00E/W | Soil | 1.8 | 454.4 | 8.5 | 89 | 0.4 | 44.6 | 17.7 | 858 | 3.26 | 4.8 | 1.6 | 4.4 | 1.0 | 32 | 0.5 | 0.3 | 0.2 | 67 | 0.70 | 0.051 |
| GC07 1+00S 0+25E | Soil | 2.3 | 776.6 | 7.9 | 94 | 0.3 | 49.7 | 36.5 | 1205 | 3.10 | 6.0 | 1.9 | 4.3 | 0.5 | 30 | 0.3 | 0.3 | 0.1 | 62 | 0.80 | 0.070 |
| GC07 1+00S 0+50E | Soil | 1.0 | 23.2 | 7.6 | 83 | <0.1 | 17.3 | 14.0 | 969 | 3.12 | 3.9 | 0.5 | 4.4 | 0.4 | 24 | 0.3 | 0.2 | 0.1 | 69 | 0.29 | 0.065 |
| GC07 1+00S 0+75E | Soil | 1.8 | 38.6 | 7.9 | 87 | 0.2 | 16.9 | 12.8 | 910 | 2.91 | 4.6 | 0.6 | 2.9 | 0.2 | 24 | 0.3 | 0.2 | 0.1 | 67 | 0.45 | 0.072 |
| GC07 1+00S 1+00E | Soil | 1.1 | 51.5 | 6.7 | 76 | 0.1 | 17.7 | 14.8 | 737 | 3.05 | 4.5 | 0.5 | 2.6 | 0.5 | 16 | 0.2 | 0.2 | 0.1 | 67 | 0.24 | 0.081 |
| GC07 1+00S 1+25E | Soil | 1.2 | 49.9 | 6.4 | 236 | 0.2 | 19.2 | 15.8 | 1013 | 2.77 | 5.1 | 1.7 | 8.9 | 0.3 | 30 | 1.0 | 0.3 | 0.1 | 61 | 0.84 | 0.090 |
| GC07 1+00S 1+50E | Soil | 1.1 | 26.9 | 7.2 | 137 | 0.1 | 20.3 | 17.1 | 1417 | 3.14 | 5.3 | 1.3 | 6.0 | 0.4 | 28 | 1.0 | 0.3 | 0.1 | 65 | 0.61 | 0.085 |
| A07-01 0+00S 0+00E | Soil | 1.6 | 53.8 | 4.4 | 66 | 0.2 | 14.7 | 12.8 | 545 | 4.45 | 6.4 | 0.6 | 1.4 | 0.2 | 15 | 0.1 | 0.3 | <0.1 | 84 | 0.13 | 0.098 |

ACME ANALYTICAL LABORATORIES LTD.
852 E. Hastings St. Vancouver BC V6A 1R6 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

**Client:** **Livgard, Egil**
1990 King Albert Ave
Coquitlam BC V3J 1Z1 Canada

Project:
Report Date: October 08, 2007



# CERTIFICATE OF ANALYSIS VAN07000842.1

| | Method | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Analyte | La | Cr | Mg | Ba | Ti | B | Al | Na | K | W | Hg | Sc | Tl | S | Ga | Se |
| | Unit | ppm | ppm | % | ppm | % | ppm | % | % | % | ppm | ppm | ppm | ppm | % | ppm | ppm |
| | MDL | 1 | 1 | 0.01 | 1 | 0.001 | 1 | 0.01 | 0.001 | 0.01 | 0.1 | 0.01 | 0.1 | 0.1 | 0.05 | 1 | 0.5 |
| GC07 1+00N 1+00W | Soil | 5 | 85 | 1.16 | 121 | 0.034 | 1 | 2.65 | 0.009 | 0.05 | 0.2 | 0.04 | 4.9 | <0.1 | <0.05 | 9 | 1.1 |
| GC07 1+00N 0+75W | Soil | 6 | 27 | 0.78 | 104 | 0.035 | 1 | 2.91 | 0.009 | 0.06 | 0.1 | 0.06 | 3.2 | <0.1 | <0.05 | 9 | <0.5 |
| GC07 1+00N 0+50W | Soil | 6 | 22 | 0.63 | 117 | 0.038 | 1 | 2.75 | 0.011 | 0.07 | <0.1 | 0.05 | 2.8 | <0.1 | <0.05 | 8 | 0.5 |
| GC07 1+00N 0+25W | Soil | 9 | 20 | 0.61 | 116 | 0.052 | 1 | 2.41 | 0.012 | 0.05 | <0.1 | 0.04 | 3.0 | <0.1 | <0.05 | 8 | <0.5 |
| GC07 1+00N 0+00E/W | Soil | 12 | 16 | 0.61 | 142 | 0.028 | 1 | 2.24 | 0.015 | 0.04 | <0.1 | 0.05 | 1.9 | <0.1 | 0.08 | 7 | 1.9 |
| GC07 1+00N 0+25E | Soil | 18 | 17 | 0.74 | 134 | 0.047 | 2 | 2.36 | 0.015 | 0.06 | <0.1 | 0.04 | 4.2 | <0.1 | <0.05 | 8 | 1.0 |
| GC07 1+00N 0+50E | Soil | 14 | 15 | 0.75 | 151 | 0.030 | 1 | 2.48 | 0.015 | 0.05 | <0.1 | 0.04 | 3.9 | <0.1 | <0.05 | 8 | 1.5 |
| GC07 1+00N 0+75E | Soil | 14 | 21 | 0.54 | 108 | 0.047 | <1 | 2.65 | 0.016 | 0.05 | <0.1 | 0.08 | 3.6 | <0.1 | <0.05 | 8 | 1.7 |
| GC07 1+00N 1+00E | Soil | 9 | 28 | 0.64 | 112 | 0.046 | 1 | 2.44 | 0.012 | 0.05 | <0.1 | 0.05 | 3.5 | <0.1 | <0.05 | 8 | 0.6 |
| GC07 0+00N 1+00W | Soil | 8 | 39 | 0.77 | 107 | 0.060 | 1 | 2.60 | 0.012 | 0.06 | <0.1 | 0.05 | 3.5 | <0.1 | <0.05 | 9 | 0.6 |
| GC07 0+00N 0+75W | Soil | 11 | 35 | 0.72 | 118 | 0.049 | <1 | 2.71 | 0.012 | 0.06 | <0.1 | 0.02 | 4.8 | <0.1 | <0.05 | 10 | 0.7 |
| GC07 0+00N 0+25W | Soil | 15 | 26 | 0.63 | 197 | 0.049 | 1 | 2.63 | 0.015 | 0.05 | 0.1 | 0.05 | 5.0 | <0.1 | <0.05 | 9 | 0.9 |
| GC07 0+00N 0+00 | Soil | 8 | 23 | 0.66 | 144 | 0.063 | 1 | 2.61 | 0.012 | 0.05 | <0.1 | 0.05 | 3.5 | <0.1 | <0.05 | 9 | <0.5 |
| GC07 0+00N 0+25E | Soil | 8 | 16 | 0.58 | 137 | 0.051 | 1 | 2.38 | 0.011 | 0.05 | <0.1 | 0.05 | 2.7 | <0.1 | <0.05 | 8 | <0.5 |
| GC07 0+00N 0+50E | Soil | 12 | 14 | 0.51 | 191 | 0.040 | 1 | 2.31 | 0.012 | 0.06 | <0.1 | 0.04 | 2.5 | <0.1 | <0.05 | 8 | <0.5 |
| GC07 0+00N 0+75E | Soil | 8 | 15 | 0.51 | 179 | 0.046 | 1 | 2.36 | 0.010 | 0.06 | 0.1 | 0.04 | 2.6 | <0.1 | <0.05 | 9 | <0.5 |
| GC07 0+00N 1+00E | Soil | 8 | 18 | 0.54 | 188 | 0.033 | 2 | 2.19 | 0.010 | 0.12 | 0.1 | 0.03 | 2.3 | <0.1 | <0.05 | 7 | <0.5 |
| GC07 1+00S 1+50W | Soil | 18 | 37 | 0.77 | 104 | 0.041 | 1 | 2.56 | 0.013 | 0.05 | <0.1 | 0.04 | 2.6 | <0.1 | <0.05 | 9 | 1.1 |
| GC07 1+00S 1+25W | Soil | 13 | 40 | 0.85 | 158 | 0.046 | 1 | 2.66 | 0.013 | 0.05 | 0.1 | 0.06 | 4.3 | <0.1 | <0.05 | 8 | 1.0 |
| GC07 1+00S 1+00W | Soil | 13 | 40 | 0.84 | 165 | 0.054 | 1 | 2.78 | 0.014 | 0.05 | <0.1 | 0.05 | 5.8 | <0.1 | <0.05 | 9 | 1.0 |
| GC07 1+00S 0+75W | Soil | 11 | 43 | 0.86 | 112 | 0.048 | <1 | 2.74 | 0.014 | 0.05 | <0.1 | 0.05 | 3.6 | <0.1 | <0.05 | 9 | 1.3 |
| GC07 1+00S 0+50W | Soil | 9 | 65 | 1.06 | 168 | 0.052 | 1 | 2.94 | 0.014 | 0.05 | <0.1 | 0.07 | 4.4 | <0.1 | <0.05 | 8 | 1.2 |
| GC07 1+00S 0+00E/W | Soil | 13 | 30 | 0.71 | 164 | 0.065 | 2 | 2.92 | 0.016 | 0.06 | <0.1 | 0.07 | 5.9 | <0.1 | <0.05 | 8 | 0.9 |
| GC07 1+00S 0+25E | Soil | 18 | 27 | 0.70 | 125 | 0.046 | 1 | 2.90 | 0.014 | 0.06 | 0.1 | 0.08 | 6.2 | <0.1 | <0.05 | 9 | 1.1 |
| GC07 1+00S 0+50E | Soil | 9 | 23 | 0.71 | 127 | 0.049 | 1 | 2.40 | 0.011 | 0.07 | <0.1 | 0.03 | 3.1 | <0.1 | <0.05 | 8 | <0.5 |
| GC07 1+00S 0+75E | Soil | 10 | 21 | 0.65 | 121 | 0.053 | 1 | 2.58 | 0.013 | 0.07 | <0.1 | 0.03 | 2.8 | <0.1 | <0.05 | 9 | <0.5 |
| GC07 1+00S 1+00E | Soil | 7 | 21 | 0.67 | 135 | 0.054 | 1 | 2.56 | 0.011 | 0.07 | <0.1 | 0.04 | 3.0 | <0.1 | <0.05 | 8 | 0.6 |
| GC07 1+00S 1+25E | Soil | 15 | 24 | 0.56 | 106 | 0.036 | <1 | 2.29 | 0.014 | 0.05 | <0.1 | 0.06 | 2.9 | <0.1 | 0.07 | 7 | 1.4 |
| GC07 1+00S 1+50E | Soil | 13 | 26 | 0.57 | 125 | 0.044 | 2 | 2.47 | 0.013 | 0.05 | <0.1 | 0.06 | 3.3 | <0.1 | <0.05 | 8 | 0.7 |
| A07-01 0+00S 0+00E | Soil | 5 | 23 | 0.76 | 51 | 0.045 | <1 | 3.36 | 0.008 | 0.04 | 0.1 | 0.08 | 2.4 | <0.1 | <0.05 | 8 | 0.7 |

ACME ANALYTICAL LABORATORIES LTD.
852 E. Hastings St. Vancouver BC V6A 1R6 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

Client: **Livgard, Egil**
1990 King Albert Ave
Coquitlam BC V3J 1Z1 Canada

Project:
Report Date: October 08, 2007



# CERTIFICATE OF ANALYSIS VAN07000842.1

| | Method | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Analyte | Mo | Cu | Pb | Zn | Ag | Ni | Co | Mn | Fe | As | U | Au | Th | Sr | Cd | Sb | Bi | V | Ca | P |
| | Unit | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | % | ppm | ppm | ppb | ppm | ppm | ppm | ppm | ppm | ppm | % | % |
| | MDL | 0.1 | 0.1 | 0.1 | 1 | 0.1 | 0.1 | 0.1 | 1 | 0.01 | 0.5 | 0.1 | 0.5 | 0.1 | 1 | 0.1 | 0.1 | 0.1 | 2 | 0.01 | 0.001 |
| A07-01 3+00S 4+00E | Soil | 2.0 | 57.8 | 5.0 | 82 | 0.1 | 18.5 | 19.0 | 860 | 5.73 | 8.7 | 0.3 | <0.5 | 0.8 | 22 | 0.2 | 0.2 | <0.1 | 133 | 0.22 | 0.103 |

ACME ANALYTICAL LABORATORIES LTD.
852 E. Hastings St. Vancouver BC V6A 1R6 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

Client: **Livgard, Egil**
1990 King Albert Ave
Coquitlam BC V3J 1Z1 Canada

Project:
Report Date: October 08, 2007



# CERTIFICATE OF ANALYSIS VAN07000842.1

| | Method | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Analyte | La | Cr | Mg | Ba | Ti | B | Al | Na | K | W | Hg | Sc | Tl | S | Ga | Se |
| | Unit | ppm | ppm | % | ppm | % | ppm | % | % | % | ppm | ppm | ppm | ppm | % | ppm | ppm |
| | MDL | 1 | 1 | 0.01 | 1 | 0.001 | 1 | 0.01 | 0.001 | 0.01 | 0.1 | 0.01 | 0.1 | 0.1 | 0.05 | 1 | 0.5 |
| A07-01 3+00S 4+00E | Soil | 3 | 36 | 1.73 | 40 | 0.153 | <1 | 2.83 | 0.006 | 0.05 | <0.1 | 0.04 | 3.2 | <0.1 | <0.05 | 8 | <0.5 |

ACME ANALYTICAL LABORATORIES LTD.
852 E. Hastings St. Vancouver BC V6A 1R6 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

**Client:** **Livgard, Egil**
1990 King Albert Ave
Coquitlam BC V3J 1Z1 Canada

Project:
Report Date: October 08, 2007



# QUALITY CONTROL REPORT VAN07000842.1

| | Method | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Analyte | Mo | Cu | Pb | Zn | Ag | Ni | Co | Mn | Fe | As | U | Au | Th | Sr | Cd | Sb | Bi | V | Ca | P |
| | Unit | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | % | ppm | ppm | ppb | ppm | ppm | ppm | ppm | ppm | ppm | % | % |
| | MDL | 0.1 | 0.1 | 0.1 | 1 | 0.1 | 0.1 | 0.1 | 1 | 0.01 | 0.5 | 0.1 | 0.5 | 0.1 | 1 | 0.1 | 0.1 | 0.1 | 2 | 0.01 | 0.001 |
| Pulp Duplicates | | | | | | | | | | | | | | | | | | | | | |
| GC07 0+00N 1+00W | Soil | 2.2 | 37.6 | 8.4 | 85 | 0.2 | 25.7 | 14.8 | 625 | 3.49 | 9.9 | 0.6 | 9.5 | 0.3 | 26 | 0.1 | 0.3 | 0.1 | 75 | 0.29 | 0.046 |
| REP GC07 0+00N 1+00W | QC | 2.1 | 38.2 | 8.5 | 83 | 0.2 | 25.3 | 14.6 | 632 | 3.45 | 10.3 | 0.7 | 4.4 | 0.4 | 26 | 0.2 | 0.3 | 0.1 | 76 | 0.29 | 0.046 |
| A07-01 0+00S 0+00E | Soil | 1.6 | 53.8 | 4.4 | 66 | 0.2 | 14.7 | 12.8 | 545 | 4.45 | 6.4 | 0.6 | 1.4 | 0.2 | 15 | 0.1 | 0.3 | <0.1 | 84 | 0.13 | 0.098 |
| REP A07-01 0+00S 0+00E | QC | 1.6 | 53.0 | 4.3 | 66 | 0.2 | 15.4 | 12.6 | 559 | 4.44 | 6.5 | 0.6 | 1.1 | 0.2 | 16 | 0.2 | 0.3 | <0.1 | 87 | 0.14 | 0.098 |
| A07-01 1+00S 4+00E | Soil | 2.7 | 65.7 | 6.0 | 55 | 0.1 | 17.5 | 18.3 | 642 | 4.56 | 6.2 | 0.6 | 1.3 | 0.4 | 12 | 0.2 | 0.3 | 0.1 | 101 | 0.14 | 0.060 |
| REP A07-01 1+00S 4+00E | QC | 2.4 | 66.9 | 6.3 | 56 | 0.1 | 17.2 | 18.7 | 645 | 4.66 | 6.2 | 0.6 | 1.1 | 0.5 | 13 | 0.2 | 0.3 | 0.1 | 102 | 0.14 | 0.065 |
| A07-01 2+00S 2+00E | Soil | 1.3 | 54.1 | 7.3 | 81 | 0.2 | 18.3 | 21.1 | 1130 | 4.67 | 6.3 | 1.0 | 1.2 | 0.3 | 30 | 0.4 | 0.6 | 0.1 | 85 | 0.40 | 0.092 |
| REP A07-01 2+00S 2+00E | QC | 1.3 | 55.0 | 7.0 | 84 | 0.2 | 18.6 | 21.4 | 1086 | 4.54 | 6.1 | 1.0 | 1.5 | 0.4 | 29 | 0.4 | 0.6 | 0.1 | 83 | 0.40 | 0.087 |
| Reference Materials | | | | | | | | | | | | | | | | | | | | | |
| STD DS7 | Standard | 20.9 | 104.7 | 69.6 | 392 | 0.9 | 55.2 | 9.1 | 638 | 2.39 | 48.4 | 4.9 | 85.8 | 4.7 | 78 | 6.3 | 5.7 | 4.5 | 85 | 0.98 | 0.080 |
| STD DS7 | Standard | 20.0 | 105.5 | 59.3 | 410 | 0.8 | 55.8 | 9.3 | 610 | 2.36 | 48.2 | 4.4 | 69.5 | 3.9 | 70 | 6.4 | 5.7 | 4.0 | 85 | 0.93 | 0.073 |
| STD DS7 Expected | | 20.92 | 109 | 70.6 | 411 | 0.89 | 56 | 9.7 | 627 | 2.39 | 48.2 | 4.9 | 70 | 4.4 | 68.7 | 6.38 | 5.86 | 4.51 | 86 | 0.93 | 0.08 |
| BLK | Blank | <0.1 | <0.1 | <0.1 | <1 | <0.1 | <0.1 | <0.1 | <1 | <0.01 | <0.5 | <0.1 | <0.5 | <0.1 | <1 | <0.1 | <0.1 | <0.1 | <2 | <0.01 | <0.001 |
| BLK | Blank | <0.1 | <0.1 | <0.1 | <1 | <0.1 | <0.1 | <0.1 | <1 | <0.01 | <0.5 | <0.1 | <0.5 | <0.1 | <1 | <0.1 | <0.1 | <0.1 | <2 | <0.01 | <0.001 |

ACME ANALYTICAL LABORATORIES LTD.
852 E. Hastings St. Vancouver BC V6A 1R6 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

Client: **Livgard, Egil**
1990 King Albert Ave
Coquitlam BC V3J 1Z1 Canada

Project:
Report Date: October 08, 2007



# QUALITY CONTROL REPORT VAN07000841.1

| | Method | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 | 1DX15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Analyte | La | Cr | Mg | Ba | Ti | B | Al | Na | K | W | Hg | Sc | Tl | S | Ga | Se |
| | Unit | ppm | ppm | % | ppm | % | ppm | % | % | % | ppm | ppm | ppm | ppm | % | ppm | ppm |
| | MDL | 1 | 1 | 0.01 | 1 | 0.001 | 1 | 0.01 | 0.001 | 0.01 | 0.1 | 0.01 | 0.1 | 0.1 | 0.05 | 1 | 0.5 |
| Pulp Duplicates | | | | | | | | | | | | | | | | | |
| M07-05 | Silt | 15 | 20 | 0.51 | 55 | 0.020 | <1 | 0.82 | 0.006 | 0.05 | <0.1 | 0.02 | 3.4 | 0.1 | <0.05 | 2 | 2.5 |
| REP M07-05 | QC | 15 | 19 | 0.48 | 51 | 0.021 | <1 | 0.79 | 0.007 | 0.05 | <0.1 | 0.02 | 3.0 | <0.1 | <0.05 | 2 | 2.6 |
| Reference Materials | | | | | | | | | | | | | | | | | |
| STD DS7 | Standard | 14 | 226 | 1.04 | 398 | 0.137 | 37 | 1.08 | 0.110 | 0.47 | 3.6 | 0.21 | 2.7 | 4.1 | 0.19 | 5 | 4.2 |
| STD DS7 | Standard | 14 | 220 | 1.08 | 364 | 0.134 | 40 | 0.98 | 0.095 | 0.46 | 3.6 | 0.19 | 2.6 | 3.9 | 0.19 | 5 | 3.3 |
| STD DS7 Expected | | 12.7 | 163 | 1.05 | 370.3 | 0.124 | 38.6 | 0.959 | 0.073 | 0.44 | 3.8 | 0.2 | 2.5 | 4.19 | 0.21 | 4.6 | 3.5 |
| BLK | Blank | <1 | <1 | <0.01 | <1 | <0.001 | <1 | <0.01 | <0.001 | <0.01 | <0.1 | <0.01 | <0.1 | <0.1 | <0.05 | <1 | <0.5 |
| BLK | Blank | <1 | <1 | <0.01 | <1 | <0.001 | <1 | <0.01 | <0.001 | <0.01 | <0.1 | <0.01 | <0.1 | <0.1 | <0.05 | <1 | <0.5 |

# Depth exploration with Halogens

The halogen elements (F,Cl,Br,I) are commonly associated with the emplacement of mineral deposits, They are contained within the structure of many minerals and in saline fluid inclusions that are typical of a wide range of mineral deposits. Their volatility renders them good candidates to examine as "pathfinder elements" in surface geochemical media, where they may be captured on soil particles and taken up by vegetation. Russian workers have demonstrated the exceptional migrational abilities of I and Br in different geological settings, and found these elements to be highly effective in exploring for orebodies at depths of up to1000 m.

*From: Geoscience BC Report 2007-1*

Halogen in surface Exploration Geochemistry : Evaluation and development of methods for detecting Buried Mineral Deposits