GEOCHEMICAL / GEOLOGICAL REPORT

on the

RUM RUN PROPERTY

094250

Quartz Claims RUM RUN 1- 20, 21 – 40,
Grant Nos. YC17658-677, YC20192-221
Dawson Mining District
Owner: Gordon G Richards

Claim Sheet No 115O/1,2, 115J/15,16
Latitude 63 01'
Longitude 138 40'

written by
Gordon G Richards

work performed

July 1- 7, and Aug 20 - 27
on RUM RUN 1-20, YC17658-677
& RUM RUN 21 – 40, YC20192-221
By D Bennett & G Richards

October 30, 2001

This report has been examined by the Geological Evaluation Unit under Section 53 (4) Yukon Quartz Mining Act and is allowed as representation work in the amount of $ 9000.

M. Burn

for Regional Manager, Exploration and Geological Services for Commissioner of Yukon Territory.

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Figure 1. Property Location

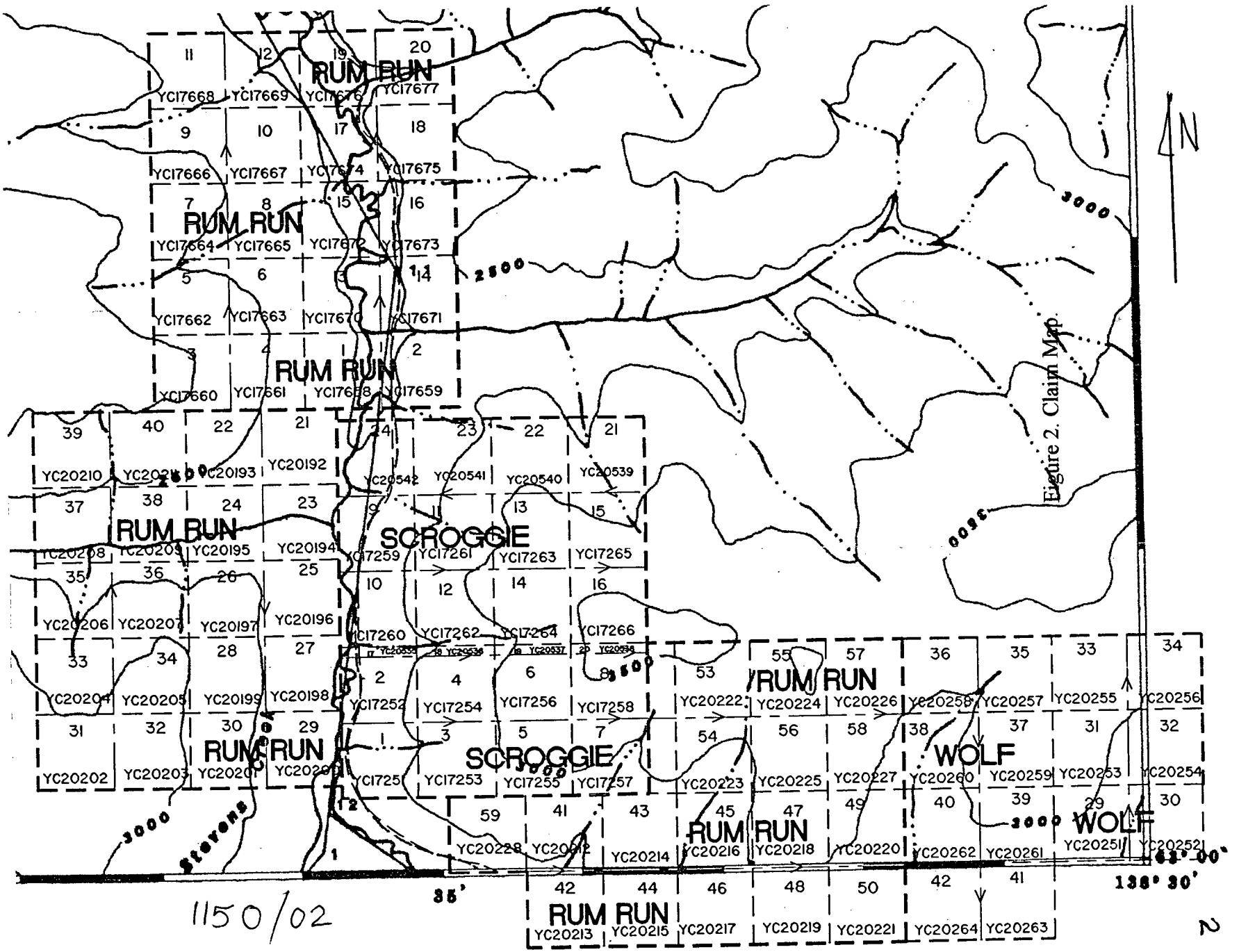


Figure 2. Claim Map.

Figure 2. Claim Map.

LOCATION AND ACCESS.

The claims are located 70 km south of the Dawson City airport along Scroggie Creek on map sheets 115O/1 & 2. See Figure 1. The property is accessible by fixed-wing aircraft from Dawson City to a 750-meter long north-south airstrip along Scroggie Creek in the center of the claims. The property is also accessible by ATV from Pelly Farm on the north side of Pelly River, 40 km west of Pelly Crossing. This is a four hour trip over 90 km of the old Dawson Trail to the mouth of Walhalla Creek and then over a 14 km dirt road along the ridge tops east of Scroggie Creek arriving at Scroggie Creek on RUM RUN 13. From here access by ATV over existing roads is possible along Scroggie and Mariposa Creeks.

CLAIMS.

The following claims, owned by Gordon Richards occur on NTS sheet 115O/02 within the Dawson Mining District. Some of the work described in this report has been applied as representation work, which, if accepted, will bring expiry dates to those shown in column four. Because of the recommendation to allow the RUM RUN 41-50,53-59 to expire, these claims are not shown on the table. RUM RUN 41, 42, 44, 46, 48, and 50 will expire June 29, 2002. RUM RUN 59 has already expired. RUM RUN 43, 45, 47, 49, and 53 to 58 will expire June 29, 2004. See Figure 2.

Claim Name	Grant Number	Record Date	Expiry Date
RUM RUN 1	YC17658	September 16, 1999	September 16, 2005
RUM RUN 2	YC17659	September 16, 1999	September 16, 2004
RUM RUN 3	YC17660	September 16, 1999	September 16, 2005
RUM RUN 4	YC17661	September 16, 1999	September 16, 2005
RUM RUN 5	YC17662	September 16, 1999	September 16, 2005
RUM RUN 6	YC17663	September 16, 1999	September 16, 2005
RUM RUN 7	YC17664	September 16, 1999	September 16, 2005
RUM RUN 8	YC17665	September 16, 1999	September 16, 2005
RUM RUN 9	YC17666	September 16, 1999	September 16, 2005
RUM RUN 10	YC17667	September 16, 1999	September 16, 2005

RUM RUN 11	YC17668	September 16, 1999	September 16, 2004
RUM RUN 12	YC17669	September 16, 1999	September 16, 2004
RUM RUN 13	YC17670	September 16, 1999	September 16, 2004
RUM RUN 14	YC17671	September 16, 1999	September 16, 2004
RUM RUN 15	YC17672	September 16, 1999	September 16, 2005
RUM RUN 16	YC17673	September 16, 1999	September 16, 2004
RUM RUN 17	YC17674	September 16, 1999	September 16, 2004
RUM RUN 18	YC17675	September 16, 1999	September 16, 2004
RUM RUN 19	YC17676	September 16, 1999	September 16, 2004
RUM RUN 20	YC17677	September 16, 1999	September 16, 2004
RUM RUN 21	YC20192	June 29, 2000	June 29, 2006
RUM RUN 22	YC20193	June 29, 2000	June 29, 2006
RUM RUN 23	YC20194	June 29, 2000	June 29, 2006
RUM RUN 24	YC20195	June 29, 2000	June 29, 2006
RUM RUN 25	YC20196	June 29, 2000	June 29, 2006
RUM RUN 26	YC20197	June 29, 2000	June 29, 2006
RUM RUN 27	YC20198	June 29, 2000	June 29, 2006
RUM RUN 28	YC20199	June 29, 2000	June 29, 2006
RUM RUN 29	YC20200	June 29, 2000	June 29, 2005
RUM RUN 30	YC20201	June 29, 2000	June 29, 2005
RUM RUN 31	YC20202	June 29, 2000	June 29, 2005
RUM RUN 32	YC20203	June 29, 2000	June 29, 2005
RUM RUN 33	YC20204	June 29, 2000	June 29, 2005
RUM RUN 34	YC20205	June 29, 2000	June 29, 2006
RUM RUN 35	YC20206	June 29, 2000	June 29, 2005
RUM RUN 36	YC20207	June 29, 2000	June 29, 2006
RUM RUN 37	YC20208	June 29, 2000	June 29, 2006
RUM RUN 38	YC20209	June 29, 2000	June 29, 2006
RUM RUN 39	YC20210	June 29, 2000	June 29, 2006
RUM RUN 40	YC20211	June 29, 2000	June 29, 2006

HISTORY.

Scroggie and Mariposa Creeks are old placer gold creeks first discovered in 1898 and extensively mined by hand with the aid of steam boilers and points in the early 1900's. Refer to GSC Memoir 97. Two small cuts were mined by tractor, equipped with cable dozer blade in the mid-1950's. Cat mining began in earnest about 1980 as a result of the then high gold prices and has continued uninterrupted until today. The writer mined with partners along Scroggie Creek from two km below the airstrip to a point along Mariposa Creek about four km above it's mouth. Although early records have not been thoroughly researched, something like 100,000 ounces raw gold with a fineness of 905 has likely been produced from Mariposa and Scroggie Creeks between the top of Mariposa Creek and a point four-km below the airstrip on Scroggie Creek. This area coincides with the bulk of cabins, shafts and diggings associated with pre dozer-tractor mining.

A granite batholith mapped by H S Bostock in 1935-37 and shown on GSC Map 711A, Ogilvie, occurs north of the area of placer mining. Schists and gneisses of the Yukon Group underlie the placer mining area. A large body of pyroxenite underlies Pyroxene Mountain to the northeast.

During 1988, mining cuts along Scroggie Creek just downstream from Stevens Creek yielded abundant arsenopyrite crystals in the sluice-concentrates over about 300 meters. Although bedrock was examined closely, no source for the arsenopyrite could be found in the mining cuts. In 1990 a black-sand sluice-concentrate, with coarse gold recovered, was sent to Chemex Labs for multi-element analyses to determine other significant metals that might be present in the Scroggie drainage. This concentrate was highly anomalous for several elements including Au, Pd, Pt, Ag, Bi, Pb, W and Sn, which, except for the Pd-Pt are indicative of intrusion-related gold deposit. Common minerals found in sluice concentrates include gold, magnetite, garnet and kyanite.

Over 100 WINE and FISH Quartz Claims were staked in 1987 over the area encompassing the significant placer gold production area described above. Only minor representation work was recorded with a modest gold anomaly described in soils north of upper Mariposa Creek and now covered by the WOLF 29-41 claims, which are a recent restaking of the MCPHEE claims which lapsed in 2000. Quartz veins staked in 1917 are

described along Mariposa Creek in this same area (Minfile O-075). Other minfile occurrences, well removed from all the recently staked claims include a Cu-Mo occurrence in upper Scroggie Creek, a U occurrence in upper Stevens Creek and a PGM-Au occurrence over Pyroxenite Mt.

The writer began prospecting the area assisted by Mr. Dave Bennett, in 1999 and staked the RUM RUN 1-20 quartz claims in Sept 1999. The writer returned in June 2000 with Mr. Dave Bennett to continue prospecting the general area, conduct representation work on the RUM RUN 1-20 and to stake the RUM RUN 21-50 and 53-59. The writer returned again in late Aug 2000 to evaluate the RUM RUN 21-50 and 53-59.

In early July 2001, Mr. Dave Bennett and the writer returned to conduct additional geochemical sampling and mapping on the claims. In late August 2001, the writer returned to do additional sampling and mapping as well as conduct a VLF – EM geophysical survey over some of the claims. All work has been done with the aid of YMIP grubstake and target evaluation grants.

GEOLOGY.

"The large granitic body exposed on either side of Scroggie and Walhalla Creeks is a coarse white granite near the junction of these creeks but, farther south and east, is more nearly a granodiorite and carries large pink feldspar crystals. Along its southern contact is a zone composed mainly of hornblende and pink feldspar. The body contains numerous xenoliths of the Yukon Group and innumerable pegmatitic intrusions that, in places, make up fully 30 percent of the volume of the rock." H.S. Bostock, 1942, Map 711A, OGILVIE. The batholith and selected areas throughout the Stewart Map Sheet are currently being remapped by the Geological Survey of Canada Mr. Jim Ryan and others. Based on initial mapping of part of the batholith, Mr. Ryan describes the batholith as a composite intrusive complex with many phases often with diffuse contacts with country rock. (personal communication). The area described in this report lies along the southern contact of this batholith, Figure 3. "Granite" in this area contains pink feldspar phenocrysts up to two cm long, is often foliated and contains hornblende and lesser biotite of 10 to 20 percent. This fits with Bostock's description of the granodiorite which term is used throughout this report.

A stock of granite, separated from the main batholith by three to five km of metamorphic rocks is a coarse-grained, moderately foliated granite composed of one-half cm long quartz grains set in coarse to medium-grained pink feldspar with five to ten percent variably chloritized hornblende and biotite. About 20 percent of the feldspars are white. Mafic biotite-hornblende rich xenoliths are common locally

A large poorly defined body of pegmatite occurs as shown on Figure 3 northwest of the airstrip within the granite batholith described by Bostock. This may be a single large body or more likely an area of intense dyking (see below). It measures three by four km as defined by chips in soil pits, float in creeks, boulders on hillsides and a few outcrops. Dykes of pegmatite can be seen cutting granodiorite outcrop near camp and along adjacent Scroggie Creek. Pegmatite is typically 20 – 30 percent quartz, 50 percent Kspar, 20 percent plagioclase and <5 percent biotite plus muscovite. Miarolytic cavities are present but rare. Pegmatite can also be seen as narrow dykes within the country rocks at numerous locations. Pale buff-colored aplite is occasionally seen within the batholith as outcrop and float.

Country rock to the batholith includes schists and gneisses of the Yukon Group. Float and outcrop of metamorphic rocks along Scroggie and Mariposa Creeks display a wide variety of textures. Most common by far are quartz-feldspar-hornblende gneisses of highly variable grain size and texture containing garnet of quite variable size and content. Kyanite, common in placer gold concentrates, is seen in float along most of Scroggie Creek as subround disc-shaped boulders of kyanite-muscovite $\pm$ garnet, $\pm$ magnetite $\pm$ staurolite (?) gneiss. Float of pegmatite, granite and chlorite and biotite rich gneisses is also common.

A quartz-muscovite $\pm$garnet schist unit, QMS, up to a few hundred meters thick has been mapped across the area from Mariposa Creek to Cabin Creek. Figure 3. The unit is not massive as intercalations of other schists and gneisses do occur within it as can best be seen on the placer-mined bench opposite the mouth of Stevens Creek. Its muscovite content, generally five to twenty percent but locally over 90 percent, characterize it. Weathering of pyrite, usually forming less than one percent has produced a distinctive orange surface. The unit strikes northwest and dips about 45 degrees northeast except near Scroggie Creek. Nearing Scroggie Creek from the east, strikes become progressively

more northerly and dips steepen to near vertical. This change could be caused by drag along an unexposed north-south fault with right lateral sense of movement. In 1986 during placer mining, the unit along Lower Mariposa Creek was seen by the writer to terminate against a sharp fault as shown on Figure 3. The similar rock type mapped further north of this point may be a faulted offset of the same unit and not a repetition. The unit continues east along Mariposa Creek drainage for several km.

South of the QMS unit along Scroggie Creek, from Mariposa Creek to north of Stevens Creek, a dark green to grey chlorite-biotite gneiss with fine laminations and augen of pink feldspar makes a distinctive unit at least several hundred meters thick. It outcrops across the floor of Scroggie Creek as seen during the coarse of placer mining in the late 1980's and now evidenced by the abundance of angular pieces of this rock type on the placer tailing piles. A typical specimen shown to Mr. J Ryan of the G.S.C. was identical to rocks mapped as diorite orthogneiss further west along Barker Creek and elsewhere in the general area. North of the quartz-muscovite schist, outcrops of quartzo-feldspathic gneiss containing variable amounts of hornblende and garnet make up the bulk of the country rock.

The Scroggie Creek drainage in the area of this report is described as unglaciated (Duk-Rodkin 1999, G.S.C. O.F.3694). Mr. Lionel Jackson of the G.S.C. suggested that older glacial periods of greater than one my bp could have affected the area. During a placer test in the late 1980s of a bench immediately above the southwest corner of RUM RUN 59, the writer examined material that looked like till. It is curious that oxidation of sulfides is absent or only shallowly developed at best on the property whereas elsewhere in unglaciated terrain it is deeply developed. The Casino porphyry Cu-Mo deposit, 25 km south is deeply leached, in places to over 100 meters. Loess is certainly present on hillsides as can be seen in two pits dug this year.

GEOCHEMISTRY & MINERALIZATION.

Previous Work.

Previous work, described in an assessment report dated January 27, 2001 subdivided the property into three areas hereafter named the Pegmatite Zone, the QMS Zone and the East Zone.

The Pegmatite Zone occurs on the RUM RUN 1-20. Gold mineralization occurs associated with pegmatite dykes along Scroggie Creek. Gold values up to 3020 ppb Au occur associated with very fine sulfide in quartz breccias within dykes of pegmatite cutting the foliated medium-grained hornblende granodiorite. Immediately to the west, on a moderate sloping hillside devoid of outcrop, soil samples are geochemically anomalous for gold over a one-km diameter area. The rocks and some soils are moderately anomalous for Mo, Pb and Sb. Rock chips in soils and float in creeks indicate this area occurs within a large pegmatite body or intense dyke swarm about three km in diameter. A north trending fault is believed to occur along Scroggie Creek, from evidence collected further south, and may form the east boundary of the large pegmatite body.

This fault and associated splays are targets for gold mineralization. The quartz-breccia sulfide mineralization within pegmatite dykes would have to be more continuous and higher grade if similar mineralization exists under the gold soil anomaly west of Scroggie Creek to be of interest.

The QMS Zone occurs on the RUM RUN 21-40. A quartz muscovite schist unit (QMS) was crudely mapped from chips in soil pits across these claims over a strike length of 1500 m open to the northwest. The unit is eventually terminated against the granite-pegmatite intrusive complex in this direction, but extends over ten-km east along Mariposa Creek. Soil results indicated strong geochemically anomalous patterns for Au, As, Bi, Pb, Te, S and Zn over the zone. Outcrops are very rare on the hillside within the anomalous patterns but a 45-degree northeasterly dip to foliation within the QMS and adjacent units nearby has been well documented. Attitudes steepen to near vertical with a northerly strike along Scroggie Creek, which is believed to be related to a north-south fault along Scroggie Creek. Well-formed arsenopyrite crystals were abundant within gold placer concentrates along the portion of Scroggie Creek underlain by the QMS unit as seen by the writer in the late 1980's. The placer gold collected from this area of Scroggie Creek was also unique in being coated by a fine, deep-blood-red powder. Scroggie Creek gold is well known to be very coarse.

In the QMS target, the occurrence of anomalous Au-Bi-As-Pb in soils with Sn-W in Au placer concentrates within high-grade metamorphics in association with granite and

pegmatite is indicative of intrusion related gold mineralization. The anomalous geochem patterns are obviously large enough to contain a sizeable gold deposit.

The East Zone occurs on the RUM RUN 41-50, 53-59. The claims cover part of the easterly extension of the QMS unit but only a few spotty gold anomalies in low-density sampling were indicated.

Current Work

General

G Richards and D Bennett traveled to the claims by ATV from Pelly Farm on July 1. At this time they performed two man-days grid soil sampling on the RUM RUN 6 and 8, four man-days soil sampling on the RUM RUN 26, 28, 34, 36-40 and four man-days soil sampling on the RUM RUN 43-50, 54-58. They traveled back to Pelly Farm and Whitehorse on July 7.

G Richards returned to the property by air from Dawson City on Aug 20. He spent four days running a VLF-EM survey and three days collecting soil samples, mapping and sampling angular float and bedrock along Scroggie Creek, and digging and sampling two test pits. Most of this work, five days, was on the RUM RUN 1, 3-10, 13, 15, 17. Two days were spent on the RUM RUN 27-29, 36-40.

Work in 2001 was designed to limit the extent and intensity of geochemically anomalous soil patterns. A VLF-EM survey was done to search for conductive structures. Two test pits were dug to bedrock to examine soil profiles and depth to bedrock. Outcrops were mapped and sampled where deemed appropriate.

Soil samples were collected by auger typically from depths of one-half to one meter except for the ridge soil samples on the QMS Zone, numbers M15-40, where a mattock was used to better display rock chips and float. About one kg of soil was collected and placed in numbered gusseted kraft sample bags. Stream sediments were collected from active silt in creeks by scoop and placed in similar kraft bags. Rock samples were made up from 3 to 7 rock chips and placed in numbered gusseted kraft sample bags. A hand specimen was collected and numbered by felt pen from each rock sample site for future examination. All samples were sent to Acme Analytical Laboratories in Vancouver for analysis. Results are in an Appendix.

Pegmatite Zone. RUM RUN 1-20

Twenty-seven soils were collected along six grid lines downslope from the one km diameter anomalous gold zone previously described and shown on Figure 3 in the hopes of sampling effects of a high- grade mineralized fault structure that could be forming the eastern boundary of the large pegmatite body. The east-west soil lines ran onto a left limit bench of Scroggie Creek and could not be continued further east than shown on Figure 3. Values up to 56 ppb Au were obtained which helps define the extent of anomalous gold in the previous soil survey.

Soil pits dug at soil sample sites M13 and Y76 were mapped and had soil profile samples collected. At M13, M13A was collected at a depth of 100 cm immediately above decomposed angular fragments of pegmatite mixed with soil. M13B was collected at a depth of 70 cm from gritty soil containing <one-cm fragments of pegmatite and a few angular cobbles of pegmatite. M13C was collected at a depth of 45 cm from similar material as M13B about 5 cm below an upper layer of loess, which included a gritty basal loess layer. How much of a loess component exists in the soil below the 45-cm level is unknown. The gritty soil sampled by all three samples contained few angular pegmatite cobbles, one subangular foliated biotite granodiorite cobble and one aplite cobble. One of the pegmatite cobbles contained fracture and disseminated carbonate (?) alteration and limonite boxwork after carbonate (?). Results given in the appendix were all less than 3 ppb Au and low for all other elements. This is in sharp contrast to the original soil sample M13 which ran 55-ppb gold although it too was low for all other elements.

At Y76, Y76A was collected at a depth of 70 cm, 15 cm above decomposed fine-grained biotite quartz diorite (?) bedrock. Both this sample and Y76B, collected at 45-cm depth, were taken from rocky bouldery soil with abundant slabs of mostly pegmatite but also including minor biotite hornblende granodiorite and one piece of aplite. Humus formed the top 15-cm and silt-loess the next 15-cm in this pit. Results were weakly anomalous for gold and molybdenum, Y76A–11.3ppb Au, 2.5ppm Mo, Y76B–14.7ppb Au, 2.1ppm Mo.

Fifteen rock chips of variably altered and mineralized float and bedrock exposures were sampled along Scroggie Creek. From north to south these rocks are as follows:

M50 pale green sheared (?) with trace sulfide

M51 weakly pegmatitic, white on fresh surface weathering dungy brown with weak sulfide-quartz breccia texture like breccias across from camp.
M52 carbonate altered pegmatite (?) with minor very fine-grained sulfide.
400 m interval to next sample

N32 pegmatite with very fine grained oxide and sulfide. Much low Fe-stained pegmatite rubble in whole area. Bedrock is foliated hornblende granodiorite with pegmatite dykes.
300 m interval to next samples.
Granodiorite outcrop at mouth next creek from west.
N33 & N34 20 m above this outcrop begins a 20-m by 20-m exposure in floor of placer cut of yellow Fe-oxide stained pegmatite with local sulfide-silica zones. Granodiorite is exposed at south end of this outcrop.
400 m interval to next samples
N 35. Angular pegmatite rip-up in mining cut 100 m above bridge. Pegmatite with 1-5% non-magnetic fine-grained oxide and minor sulfide along fractures, weak clay alteration of plagioclase.
N36. Fresh pegmatite with fracture non-magnetic oxide. No sulfide.
300 m interval to next samples.
N37. Angular silicified and quartz veined metamorphic with 2% pyrite.
N38. Angular granodiorite with low clay alteration and laced with quartz veins and breccia fillings with fine oxide and minor pyrite. Much carbonate (ankerite?) alteration of pegmatite and granodiorite in area.
N39. Ankeritic surface on angular fine-grained biotite quartz diorite with clay altered plagioclase.
N40. Angular ankeritic (?) veined pegmatite with fine-grained fracture and disseminated grey oxide.
N41. Angular1/2 m boulder of pegmatite laced with sub-parallel quartz veinlets <5 mm wide with fine-grained grey oxide and 1% pyrite overall. Clay altered plagioclase.
N42. Angular clay altered ankeritic (?) stained (fractures and disseminated) hornblende granodiorite. Some plagioclase gone to clays. Much of this in tailings rubble, all angular.
N43. Subcrop? Ankeritic stained clay altered gneiss. Mica gone to phlogipite. Plagioclase gone to clays. Much of this along creek.

Four soils and a silt were collected at the north end of the anomalous gold soil anomaly along the north side of a creek to search for the limit of the gold soil anomaly and possibly higher grade soils that might be associated with the north trending fault along Scroggie Creek. Soil results were low.

During June, the placer operator, Mr. Zdenuk Bidrman, showed the writer two gold-quartz pebbles measuring about two cm in maximum dimension and described the collection of about fifty other smaller gold-quartz pieces together with the two larger

pieces from a small area of placer mining west of C184 tight against the bank. About one-quarter of the volume of the gold-quartz pieces is gold. Such pieces, though not common, were occasionally seen by the writer in placer concentrates during his mining of Scroggie and Mariposa Creeks from 1985 to 1992. The occurrence of numerous pieces of gold-quartz pebbles in one restricted area could come from several possible sources. They could be caused by gold-quartz weathered from nearby bedrock or from disintegration of a single or few pieces of gold-quartz weathered from a source previously several thousand feet above the present land surface. The first possibility offers a target worthy of pursuing as small volume high-grade veins. A VLF-EM survey was undertaken in late August to search for conductive structures one or more of which might be mineralized with similar high-grade gold.

Four VLF-EM lines as shown on Figure 3 were run over the Pegmatite Zone to search for conducting structures. A Geonics EM-16 unit was used equipped with four stations as follows: NSS at Cutler, Maine; NAA at Maryland, Delaware; NPG at Seattle, Washington; and NPM in Hawaii. The NSS station was the only signal with sufficient strength to conduct a survey. NPG, Seattle, which gave the preferred orientation, was weak and unusable. The other two stations were not received during the weeklong survey. Others on Scroggie Creek have used the Seattle station successfully (S Ryan personal communication). The NSS station, which was used; was in the direction of 032 to 035 degrees or its reciprocal, which is markedly different from its actual location southeast of the survey area. No explanation can be given for this discrepancy or lack of receiving the Seattle station.

Four lines as shown on Figure 3 were completed with 20 m flagged stations. Lines were placed at an azimuth of 135 degrees, perpendicular to the direction of the NSS station. Readings at each station were obtained by facing the direction of the transmitting station and turning 90 degrees to the southeast.

No conductors were encountered on any of the lines, a very unusual finding, as VLF surveys are well known for finding numerous conductors on most surveys. The response crudely mimics topography a common feature with VLF surveys. The instrument used could have been faulty and another instrument should be used to evaluate this possibility.

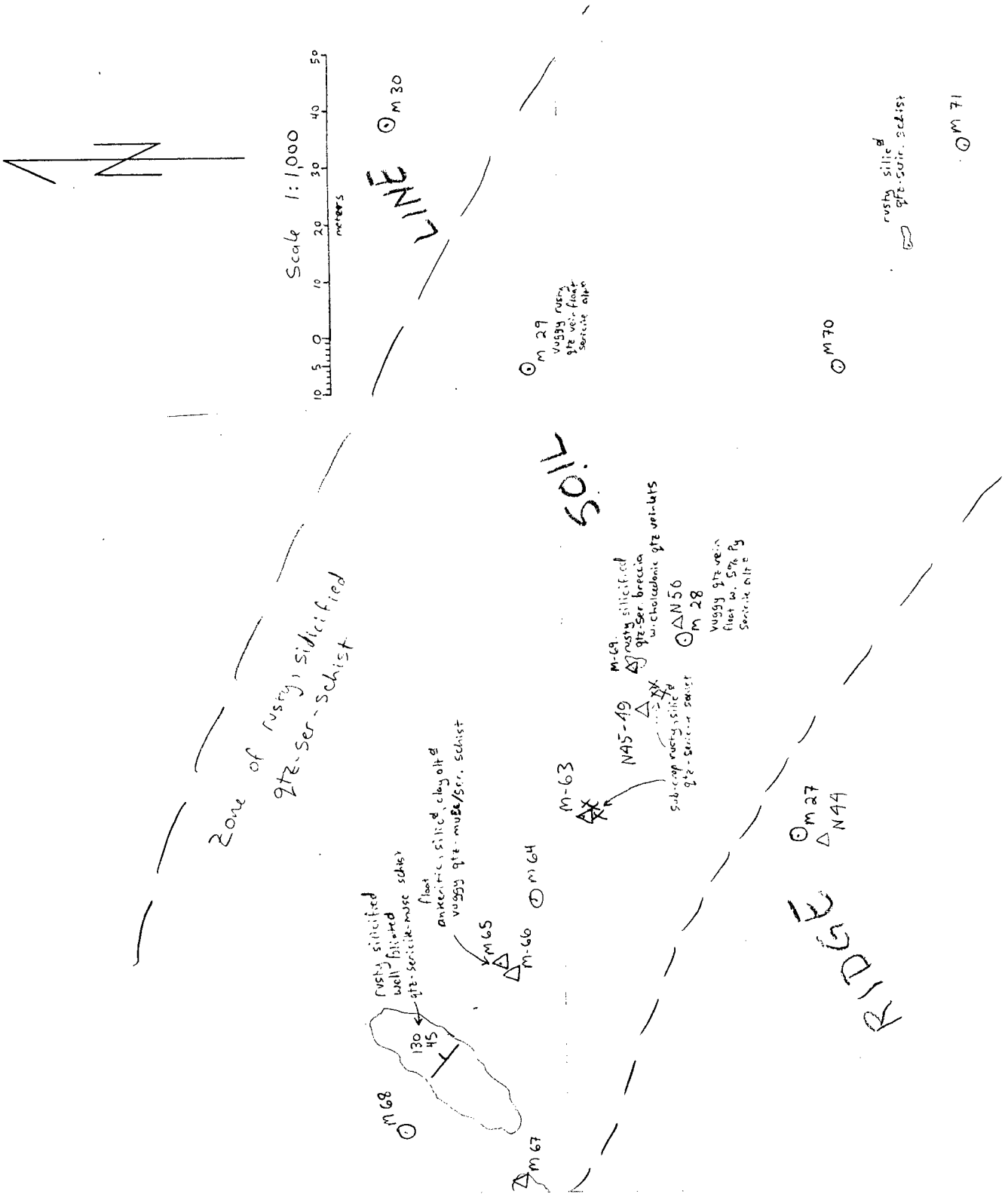


Figure 4. Detail of Ridgeline Sampling near M28.

QMS Zone. RUM RUN 21-40.

Twenty-five soils were collected along the south-facing slope along Cabin Creek in the north boundary area of the zone. These soils were collected to limit the extent of multi-element geochemically anomalous soils coincident with QMS (quartz muscovite schist) that was defined the previous year over an area of 1500 m by 400 m. The lower of two soil lines collected in this area added another 500 m of strike length to the anomalous zone. The upper line helped to map the limit of pegmatite and granodiorite but left the anomalous zone still open to the northwest. Figure 3.

Thirty soils were collected along the northeast trending ridge in the center of the zone to better define the outcrop patterns of QMS and anomalous geochem values. Figure 3 has been modified to reflect these refinements. Subcrop in the area of soils M27 and M28 included a variety of leached sulfide-bearing silica-rich gneisses and schists that were only weakly anomalous for gold with a high of 37 ppb Au in N48. Some high Pb up to 5336 ppm, high Bi up to 560 ppm, and high Ag up to 24.8 ppm occur in these rocks. Refer to Figure 4 and the geochemical results given in the appendix for samples N44-50 and M63, M65-67, and M69. Three hundred fifty meters southeast, M62 sampled subcrop of light-grey finely-crystalline quartz with minor sericite and 5% fine-grained disseminated pyrite that ran 88 ppb Au, 7130 ppb Ag, and 20.5 ppm Bi.

A single VLF-EM line was run over the hill with no conductors found. As only one station was available for use, the line had to be run parallel with foliation, a poor direction in this zone.

East Zone. RUM RUN 41-50,53-59

Thirty-five soil samples, one stream sediment and one rock chip were collected along two lines across the QMS unit to test for anomalous gold and pathfinder elements. Results were generally negative. The highest gold value was 12 ppb in N24 which also ran 1.73 ppm Bi, 85 ppm Pb, 330 ppb Ag and 21 ppm As. The adjacent sample, N23, was also anomalous in Pb, 78 ppm, and Bi, 3.22 ppm.

CONCLUSIONS

General.

As a general statement, intrusion related gold deposits occurring within intrusions tend to be low-grade high-tonnage targets that are rarely of economic grade. Deep leaching, absent at Scroggie Creek, is usually considered essential to make an occurrence economic. Within country rock adjacent to granites, these deposit types are highly variable in nature and include much higher grade and smaller, though significant, tonnages. Because of this, the QMS target is considered to be the most favorable for discovery of a gold orebody of a size that would interest a major mining company. The Pegmatite Zone is considered of less interest to a major mining company, but does have the potential to host bonanza-grade gold (>1oz/t Au) in narrow structures that are of interest to individuals and junior resource companies. The East Zone has only a few widely spaced geochemical anomalies and is of no interest at present for any further work.

Pegmatite Zone.

Anomalous gold is associated with fine-grained pyrite and a fine-grained grey oxide in quartz veinlets within pegmatite dykes cutting Kspar-porphyritic foliated hornblende granodiorite along Scroggie Creek near the southern contact of a complex granite batholith intruding Yukon Group metamorphic rocks. Density of such mineralized dykes is low. Gold values in rocks range up to 3020 ppb Au. This mineralization is also anomalous for Mo, Pb, Ag, and Sb, which could aid in the evaluation of gold soil anomalies immediately west.

To the west, a 3 km by 4 km stock or intense dyke swarm of pegmatite has been defined by rock chips in soil pits and float in creeks. Soils collected over this pegmatite, beginning 400 meters west of the anomalous Au in pegmatite dykes along Scroggie Creek, are anomalous for gold over an area roughly 700 meters by 1000 meters, open to the east and west. Anomalous gold values range from 10 to 70 ppb Au. Higher Au values, all $\geq$25 ppb Au in samples Y71 to Y77, occur over a 400 meter length and could be a center of mineralization. A north-south fault proposed further south on RUM RUN 21 – 40, may exist along the eastern contact of the pegmatite and could even be related to

mineralization. Higher-grade mineralization could exist along such a fault or related faults and splays.

Work in 2001 helped define the limits given above but did not appreciably alter the size or intensity of the anomalous zone. Soil sampling failed to locate higher values that might be associated with a mineralized north trending fault. However the 300 m wide left limit bench lying along Scroggie Creek could obscure the locus of such a fault.

Two trenches dug by hand in 2001 showed several points of interest. Depth of soils was measured as 110 cm and 90 cm. Loess and silt were encountered in the top one-half meter indicating that loess may be a significant component of soils and thereby cause appreciable dilution of geochemical response. Samples from one trench, M13, failed to repeat anomalous gold values from all three soils collected. The other trench, Y76, produced moderate Au and Mo anomalies from each of two soils collected. Underlying bedrock in both trenches was unaltered and unmineralized indicating the soil anomalies have been transported, probably some distance downslope. Occurrence of granodiorite bedrock in one trench, Y76, and some angular float of granitic intrusions in both trenches indicates that pegmatite is probably not a stock as shown on Figure 3 but an intense dyke swarm.

A VLF-EM survey failed to locate any conductors over four lines placed across the anomalous gold in soil zone. This failure may be due to a faulty EM unit as others have used this technique successfully in the area. Location of such conductors could be important as the possibility exists of narrow bonanza-grade Au structures underlying the anomalous gold zone.

QMS Zone.

A zone of soil samples, anomalous for Au, Bi, Pb, S, Te, As, and Zn is underlain by QMS of amphibolite grade metamorphism over a width of 400meters and strike length of 2000 meters, open to the northwest. This geochemical-geological pattern exists adjacent to a composite granite batholith that includes pegmatite and aplite. Placer mining has produced something in the order of one hundred thousand ounces gold over the past century. Placer concentrates are highly anomalous for W and Sn. The potential for significant intrusion related gold mineralization in such a setting is excellent.

The north-south fault suspected to lie along Scroggie Creek could be gold mineralized. Coarse, clean well-formed arsenopyrite crystals found in placer concentrates from Scroggie Creek north of Stevens Creek are still unexplained. It is possible they come from just such a north-south gold-mineralized fault.

East Zone.

The claims cover a 3-km strike length of the QMS unit offset into two sections by a northwest trending fault. Little anomalous geochemistry has been found on the claims.

RECOMMENDATIONS.

A VLF-EM survey should be conducted over the Pegmatite Zone to locate conductors that might be mineralized with narrow bonanza-grade gold mineralization. A program of test pitting on whatever conductors are found should then be initiated.

On the QMS Zone, soil sampling north of Cabin Creek and west of M61 should be conducted to limit the extent of this zone. A VLF-EM survey should be conducted over the southeast portion of the zone to see if a north-south conductive fault can be located. A VLF and magnetometer survey should also be initiated over the rest of the zone to search for conductors and magnetic units as an aid to mapping. Some selective test pits to bedrock should then be dug.

No work is recommended on the East Zone. The RUM RUN 41-50, 53-59 claims should be allowed to lapse.

Respectfully submitted,

Gordon G Richards P.Eng.

STATEMENT OF COSTS

Wages	
D Bennett July 1-7, 7 days @ $500/day	$ 3500.00
G Richards July 1-7, Aug 20-27, 15 days @ $600/day	9000.00
Expenses	
ATV Rental: J Bidrman July and Aug	400.00
Sifton Air: No 0468,0469 Dawson – Scroggie return	883.82
Truck Use: Whs-Pelly Farm-Watson Lake, July 1079 km Watson L-Dawson-Watson L, Aug 1982 km 3061 km @ $.42/km	1285.62
Food: 22 man days @ $35/day	770.00
Acme Labs A1002165 and A103381	3381.98
Supplies: string, flagging, and sample bags, etc	100.00
Geonics EM 16 rental P Christopher	400.00
Report	
Drafting, writing, typing, reprod, collating	2500.00
TOTAL	**$ 22,221.42**

STATEMENT OF QUALIFICATIONS

I, Gordon G Richards, of 6170 Tisdall Street, Vancouver, B.C., Canada do hereby certify that:

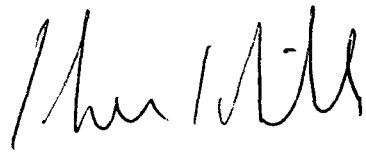
1. I am a graduate of The University of British Columbia (B.A.Sc in Geology 1968, M.A.Sc in Geology 1974)

2. I am registered as a Professional Engineer in the Province of British Columbia.

3. I have practiced my profession since 1968.

4. This report is based on my fieldwork and supervision of Mr. D Bennett's fieldwork during June 24, Aug 26-31, Sep 1, 2000 and literature cited.

Respectfully submitted,



Gordon G Richards, P.Eng.

G. Richards expenses Yukon ATV rental Sept /01

J. BIRDMAN
Box 5396
Whitehorse, Y.T.

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5613

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				Aug 27, 2001

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		$ 400.00
(paid in full)		
	Total:	$ 400.00

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09/05 V

GORDON G RICHARDS

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DATE M D-J Y-A

TAKEN EMPORTÉ

CLERK COMMIS

DEPT. RAYON

DELIVERED LIVRÉ

EXPIRY DATE CHECKED

DATE D'EXPIRATION VERIFIÉE

5 993

...ION, YT

DESCRIPTION	AMOUNT-MONTANT
	826.00
SALES DRAFT CHARGEX FACTURE	57.82
CDN CAN $	883.82

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GST #102 779 360

DATE: Aug 20/01 AIRCR

REGISTRATION: **C-FRKA** YTG C

ROUTING: Scrogsie

PASSENGERS: 1. Gordon Ri
2. Petra Rich
3.
4.

140 HOURS @ 2.95

AMOUNT DUE: 413.00

GST PAYABLE: 28.9

AMOUNT OF INVOICE: 441.9

PILOT IN COMMAND: G Lav

NAME OF CUSTOMER: Gordon

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PH: (867) 634-2916 FAX: (867) 634-2034
GST #102 779 360

DATE: Aug 27/01 AIRCRAFT TYPE: **CESSNA C-206**

REGISTRATION: **C-FRKA** YTG CONTRACT #:

ROUTING: Scrogsie

PASSENGERS: 1. Gordon Richards
2. Petra Richards
3.
4.

140 ~~HOURS~~ @ 2.95 PER ~~HOUR~~

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AMOUNT OF INVOICE: 441.91

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NAME OF CUSTOMER: Gordon Richards

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137	GROUP 1F-MS (30 gm) @	18.45	2527.65
2	ADDITIONAL OS PD PT @	3.51	7.02
111	SS80 - SOIL @	1.26	139.86
2	SS80 - SILT @	1.26	2.52
24	R150 - ROCK @	4.28	102.72
			2779.77
	GST Taxable		
	7.00% GST		194.58
	CAD $		**2974.35**

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Inv.#: **A103381**
Date: Oct 10 2001

RUSH RUN

QTY	ASSAY	PRICE	AMOUNT
14	GROUP 1F-MS (30 gm) @	18.45	258.30
10	GROUP 3A - AU (30 gm) @	7.43	74.30
17	SS80 - SOIL @	1.26	21.42
1	SS80 - SILT @	1.26	1.26
6	R150 - ROCK @	4.28	25.68
	GST Taxable		380.96
	7.00% GST		26.67
	CAD $		**407.63**

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Peter A. Christopher
3707 W. 34th Ave
Vancouver, B.C. V6N 2K9

September 15, 2001

To: Gordon Richards
6170 Tisdall St.
Vancouver, B.C. V5Z 3N4

Invoice 2001-10

For: VLF-EM Geophysical Instrument Rental for Yukon Project.

August 2001 1mo. @ $400/mo.	$ 400.00
Invoice Total	$ 400.00

Peter A. Christopher

APPENDIX

GEOCHEM RESULTS

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GEOCHEMICAL ANALYSIS CERTIFICATE

Richards, Gordon PROJECT RUM RUN File # A102165 Page 1

6170 Tisdall St., Vancouver BC V5Z 3N4 Submitted by: Gordon Richards

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Sample gm
M-1	4.02	22.71	6.78	64.7	57	16.6	12.6	559	2.87	5.4	1.0	38.2	3.8	27.0	.10	.40	.08	66	.53	.113	20.5	33.5	.69	743.5	.091	1	1.44	.016	.17	<.2	5.6	.08	.05	62	.3	.02	6.1	30
M-2	2.52	22.02	5.97	59.1	30	13.3	11.6	553	2.86	4.3	.4	10.3	2.6	24.3	.06	.31	.08	73	.53	.104	11.5	26.7	.75	551.5	.103	1	1.52	.013	.31	<.2	3.7	.10	<.01	20	.2	<.02	7.1	30
M-3	2.70	21.78	7.14	55.4	43	15.6	12.5	463	2.88	5.8	.7	9.2	2.8	28.2	.09	.38	.10	72	.56	.085	15.2	32.8	.59	746.1	.082	1	1.47	.014	.16	<.2	4.2	.07	.03	33	.3	.03	6.3	30
M-4	2.31	39.13	8.50	56.6	104	18.2	14.5	837	2.86	5.4	1.2	5.4	2.1	39.1	.18	.36	.12	67	.85	.074	22.6	30.5	.54	903.5	.067	1	1.66	.012	.19	<.2	6.0	.07	.02	45	.5	.02	7.5	30
M-5	.85	11.55	4.73	67.3	16	7.7	10.6	507	2.82	1.8	.5	7.1	3.1	25.5	.06	.35	.04	64	.80	.255	12.3	12.2	.50	284.4	.063	1	1.07	.017	.23	<.2	3.9	.06	<.01	11	.2	<.02	5.7	30
M-6	1.00	15.60	8.26	63.7	28	20.0	13.7	450	3.11	7.2	.6	9.2	3.7	26.2	.05	.37	.12	77	.50	.059	12.4	37.0	.73	417.1	.105	1	1.84	.016	.11	<.2	3.2	.07	.01	13	.3	.02	8.4	30
M-7	.97	18.02	7.58	51.1	53	16.9	10.7	366	2.56	5.9	.7	7.1	3.1	23.7	.07	.34	.12	65	.44	.044	16.0	34.1	.62	565.2	.085	1	1.51	.012	.08	<.2	3.9	.07	.01	24	.3	<.02	5.9	30
M-8	.98	20.15	7.09	53.4	41	19.0	12.7	362	2.82	5.9	.6	24.6	3.3	20.9	.05	.38	.10	66	.39	.062	14.5	32.9	.65	469.6	.078	1	1.49	.012	.14	<.2	3.2	.07	<.01	17	.2	<.02	6.7	30
M-9	1.02	15.59	6.63	58.6	30	16.8	11.1	347	2.86	6.1	.4	16.0	2.5	21.9	.05	.29	.09	68	.42	.099	10.1	31.8	.74	342.9	.097	1	1.57	.013	.24	<.2	3.0	.09	<.01	14	.1	.02	7.1	30
M-10	.99	25.92	7.61	60.0	73	19.6	14.0	748	2.82	6.6	1.0	12.5	2.9	30.4	.11	.38	.11	66	.71	.070	16.6	31.0	.69	571.5	.089	1	1.50	.014	.16	<.2	4.6	.07	.03	39	.4	.02	6.1	30
M-11	1.00	32.14	7.62	56.0	91	22.3	13.4	590	2.69	6.1	1.1	14.8	3.3	28.7	.14	.37	.12	64	.62	.060	21.8	35.1	.66	568.4	.083	1	1.51	.017	.12	.3	4.1	.06	.04	33	.4	.02	6.2	30
M-12	.97	17.19	7.01	56.2	53	15.9	11.7	445	2.67	6.3	.5	19.9	2.9	24.2	.07	.36	.10	63	.55	.080	12.6	27.2	.63	369.9	.081	1	1.39	.016	.13	.6	3.3	.06	<.01	16	.2	<.02	6.5	30
M-13	.97	22.19	6.68	58.3	56	17.9	12.4	569	2.67	6.1	.8	55.0	3.7	27.1	.07	.41	.10	61	.59	.095	16.8	27.8	.60	409.4	.077	1	1.39	.020	.12	.5	4.0	.06	<.01	38	.4	.02	5.9	30
M-14	1.15	13.14	7.01	59.6	24	16.1	11.8	377	2.85	5.8	.3	56.2	2.3	18.7	.07	.33	.10	72	.37	.065	10.4	28.6	.61	229.4	.102	1	1.52	.014	.24	.2	2.9	.08	<.01	14	.2	<.02	7.2	30
M-15	.34	23.12	4.45	65.7	13	15.5	21.9	309	3.52	4.5	.3	1.4	1.6	26.4	.05	.16	.06	112	.66	.090	7.5	26.6	1.67	254.2	.174	1	2.41	.014	.11	<.2	3.4	.09	<.01	9	.2	.02	8.9	30
M-16	1.47	28.45	8.72	51.5	70	19.6	12.4	240	3.31	10.3	.3	4.3	2.2	16.4	.12	.44	.17	89	.20	.059	7.7	43.5	.65	202.7	.090	<1	1.94	.013	.06	<.2	2.0	.08	.01	14	.2	.03	7.0	30
M-17	1.30	17.65	9.72	53.4	106	20.4	15.8	458	2.72	7.8	1.0	2.8	6.6	14.4	.12	.38	.12	44	.17	.052	12.2	26.2	.61	174.8	.086	1	1.82	.006	.17	<.2	1.7	.13	<.01	22	.3	.03	5.5	30
M-18	1.23	18.26	11.86	67.9	80	20.9	12.6	428	3.45	9.2	1.3	3.3	7.2	17.8	.06	.40	.16	50	.15	.046	13.7	30.5	.60	247.4	.076	1	2.16	.010	.12	<.2	2.0	.14	<.01	13	.4	.12	6.4	30
M-19	1.07	29.57	33.27	70.3	59	3.9	6.7	175	3.80	15.1	2.5	1.9	8.0	57.3	.07	.26	.29	38	.12	.087	48.5	8.4	.28	337.5	.035	<1	1.50	.018	.16	<.2	.7	.10	.16	9	.7	.37	5.2	30
M-20	1.41	14.55	16.93	77.6	21	14.8	12.2	346	4.01	10.7	.9	2.7	4.7	9.4	.08	.41	.19	74	.08	.045	9.5	34.5	.77	304.9	.070	1	2.61	.008	.20	<.2	3.3	.23	.03	15	.9	.17	7.5	30
RE M-16	1.34	27.84	8.42	52.6	69	20.6	12.1	232	3.20	9.8	.3	3.5	2.2	16.1	.13	.43	.16	86	.19	.053	7.5	40.6	.63	195.7	.089	<1	1.88	.013	.07	<.2	2.0	.08	<.01	13	.4	.03	7.2	30
M-21	1.15	8.07	14.31	133.5	18	2.5	5.3	238	3.22	9.3	.6	4.7	.5	12.0	.05	.26	.34	56	.08	.110	4.3	9.1	.21	119.4	.016	<1	1.18	.006	.10	<.2	.7	.09	<.01	12	.2	.18	10.9	30
M-22	1.82	22.84	20.43	43.7	146	17.5	11.5	194	3.06	10.2	2.2	6.7	13.9	24.1	.07	.41	.20	43	.10	.029	34.3	27.9	.33	226.7	.038	1	1.63	.016	.06	<.2	2.3	.09	.05	32	.7	.32	4.6	30
M-23	1.42	16.64	25.44	70.4	55	19.4	11.5	319	3.05	10.3	1.3	7.6	6.8	16.2	.12	.43	.17	55	.13	.031	13.5	34.9	.58	172.3	.081	1	1.92	.007	.09	<.2	2.0	.19	<.01	13	.5	.34	6.0	30
M-24	1.44	10.14	46.78	282.9	46	11.4	12.4	629	2.81	7.1	2.0	3.4	6.9	16.6	.42	.28	.21	44	.19	.053	16.7	18.4	.54	127.9	.100	<1	1.78	.006	.18	<.2	1.6	.24	<.01	12	.4	.29	7.0	30
M-25	1.10	12.34	42.92	59.4	91	12.5	6.8	239	2.75	15.9	1.0	7.0	7.5	20.9	.13	.37	2.87	45	.10	.035	18.1	25.5	.32	163.2	.038	2	1.30	.007	.06	<.2	1.7	.08	.03	18	1.0	.25	5.8	30
M-26	1.98	13.59	54.48	90.9	87	12.0	2.8	158	2.57	10.2	2.5	1.6	5.9	66.1	.10	.24	2.41	39	.10	.063	46.8	40.0	.43	207.7	.036	<1	1.53	.013	.09	<.2	1.6	.13	.08	16	.9	.08	6.2	30
M-27	1.97	10.72	30.76	51.7	76	9.4	4.6	137	3.01	12.3	.9	2.4	5.8	26.6	.08	.29	1.33	44	.08	.040	19.9	24.4	.28	200.4	.030	<1	1.51	.022	.09	<.2	1.6	.09	.15	18	1.1	.07	5.7	30
M-28	1.46	17.15	128.80	47.4	347	10.1	4.6	151	2.52	17.1	1.3	7.1	7.4	29.0	.07	.35	9.00	44	.08	.024	19.7	25.3	.36	202.1	.053	1	1.29	.018	.07	<.2	1.8	.09	.12	33	10.0	.60	4.9	30
M-29	1.55	58.80	256.53	56.5	3092	3.0	2.0	122	3.06	53.3	2.1	9.8	16.3	44.8	.08	.23	10.25	13	.07	.028	29.3	7.7	.11	367.9	.008	1	.82	.098	.24	<.2	1.9	.19	.68	48	8.6	.99	3.1	30
M-30	3.63	108.71	285.03	170.3	2711	11.9	5.2	169	4.23	29.8	2.8	96.5	13.7	27.5	.24	.47	30.17	34	.08	.050	33.7	31.6	.36	182.5	.040	1	1.78	.008	.16	<.2	2.5	.24	.07	40	3.0	.98	5.9	30
M-31	2.52	15.95	50.42	104.7	222	10.7	6.6	169	2.96	12.9	1.9	6.2	14.7	44.5	.23	.30	.46	28	.06	.040	38.4	19.4	.31	153.2	.038	<1	1.19	.049	.11	<.2	1.1	.12	.23	11	1.5	.37	3.6	30
M-32	1.62	13.56	21.12	106.8	160	19.4	10.0	369	2.94	178.1	1.2	1.8	10.4	14.6	.20	.51	.31	63	.13	.081	14.9	33.8	.40	170.3	.057	1	1.61	.007	.09	<.2	1.7	.09	.01	25	.4	.04	7.1	30
STANDARD DS3	9.19	124.83	33.11	152.0	274	35.4	12.6	782	3.06	29.5	5.8	21.1	3.6	27.2	5.13	4.98	5.28	74	.47	.090	17.7	182.6	.57	162.4	.083	2	1.63	.028	.18	3.5	2.9	1.01	.04	223	1.2	1.00	6.2	30

GROUP 1F30 - 30.00 GM SAMPLE, 180 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 600 ML, ANALYSIS BY ICP/ES & MS.
UPPER LIMITS - AG, AU, HG, W, SE, TE, TL, GA, SN = 100 PPM; MO, CO, CD, SB, BI, TH, U, B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
- SAMPLE TYPE: SOIL SS80 60C Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JUL 10 2001 DATE REPORT MAILED: July 24/01 SIGNED BY ..... D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data ___ FA ___

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Sample gm
M-33	3.31	39.44	10.62	239.4	60	22.1	19.8	559	4.30	62.6	.7	9.0	4.4	15.0	.10	.29	.18	80	.27	.070	11.1	38.5	1.65	130.4	.175	1	2.85	.011	.70	<.2	2.8	.52	.01	10	.5	.13	7.2	30
M-34	1.25	13.40	8.73	61.9	53	11.4	8.5	270	2.56	9.8	.5	3.1	2.6	16.4	.06	.22	.13	53	.20	.038	9.3	21.8	.69	232.5	.102	1	1.67	.007	.15	<.2	1.7	.13	.01	14	.2	.06	5.5	30
M-35	2.81	11.88	6.57	127.9	43	8.5	16.1	582	4.18	4.6	.6	1.3	3.3	22.3	.05	.12	.09	102	.44	.112	10.3	16.3	1.52	391.3	.192	<1	2.86	.013	.81	<.2	3.6	.46	.02	13	.2	.03	8.9	30
M-36	1.50	21.28	11.18	56.9	53	18.7	9.2	235	2.60	25.4	.7	9.9	5.3	20.1	.06	.57	.19	52	.26	.040	13.7	33.2	.58	212.8	.082	1	1.49	.010	.12	<.2	2.9	.10	<.01	22	.3	.05	4.5	30
M-37	2.30	11.89	11.39	36.1	97	10.5	3.8	108	2.14	76.5	.6	3.0	3.7	18.3	.06	1.55	.20	48	.19	.038	16.2	18.3	.24	157.7	.030	1	1.07	.009	.08	<.2	1.8	.14	<.01	19	.2	.06	5.1	30
M-38	1.02	21.79	9.23	51.8	43	18.6	9.1	215	2.49	12.5	.9	2.3	5.4	19.2	.03	.48	.16	50	.26	.025	20.4	32.6	.54	227.8	.074	<1	1.52	.009	.07	<.2	2.6	.08	.02	27	.3	.02	4.5	30
M-39	.99	11.96	5.38	75.4	15	10.1	21.6	633	3.99	4.0	.3	1.1	1.9	16.9	.06	.14	.07	74	.42	.104	8.4	11.9	1.98	263.3	.259	1	2.86	.012	1.12	.2	1.2	.29	.02	6	.1	.02	6.1	30
M-40	.98	20.56	7.91	60.5	39	11.9	11.2	387	2.90	7.3	.7	4.1	3.3	21.0	.07	.22	.13	68	.38	.048	13.4	22.6	.98	248.6	.132	1	1.98	.014	.20	<.2	2.7	.12	.04	20	.2	.02	6.0	30
M-41	.80	13.58	7.05	67.4	61	13.0	11.3	457	3.17	4.7	.3	.9	2.1	17.7	.07	.26	.11	76	.28	.041	7.8	29.5	.86	195.6	.105	1	1.77	.013	.07	<.2	4.2	.06	.01	18	.2	.03	7.2	30
M-42	.70	13.54	6.74	68.4	58	14.7	9.1	310	2.92	5.4	.4	2.0	2.4	20.0	.11	.24	.11	73	.45	.045	9.4	35.7	.79	185.9	.106	1	1.74	.015	.06	<.2	3.3	.07	.04	15	.2	.03	6.5	30
M-43	.58	6.68	6.26	106.6	28	14.0	19.3	790	4.20	3.1	.4	1.5	2.9	41.5	.11	.15	.05	63	.81	.133	12.0	25.6	1.96	507.3	.208	1	2.70	.014	.37	<.2	6.3	.16	.03	9	.2	.02	10.2	30
M-44	.76	9.46	5.83	57.4	58	11.2	7.3	235	2.31	3.9	.5	1.9	2.7	17.1	.10	.21	.10	47	.33	.057	12.1	22.9	.54	303.8	.090	1	1.35	.011	.09	<.2	2.1	.08	<.01	16	.2	.02	5.8	30
M-45	1.69	11.20	6.91	65.9	62	11.2	7.4	330	2.40	4.2	.8	7.0	5.8	21.5	.11	.22	.17	34	.42	.068	15.7	19.7	.58	264.9	.091	1	1.25	.012	.15	<.2	2.0	.10	.01	21	.3	.03	4.7	30
M-46	1.29	12.24	7.72	57.1	79	15.3	8.4	296	2.37	6.0	.6	4.8	4.2	24.5	.10	.25	.11	49	.41	.054	12.1	26.4	.55	285.7	.090	1	1.24	.012	.09	<.2	1.9	.08	.01	13	.2	.05	4.4	30
M-47	1.84	10.86	8.24	51.0	239	14.2	7.5	231	2.45	11.9	.6	2.5	4.4	19.1	.08	.24	.13	54	.25	.041	12.0	29.4	.51	217.4	.079	1	1.49	.010	.06	<.2	2.0	.09	<.01	16	.2	.05	4.8	30
M-48	1.39	9.56	30.68	35.3	295	6.1	4.0	160	2.65	15.4	1.8	6.1	18.3	51.0	.04	.76	.34	20	.22	.060	56.9	11.4	.33	249.8	.043	2	.96	.059	.16	<.2	1.5	.11	.31	12	.6	.09	2.8	30
M-49	1.67	15.36	11.35	50.6	140	12.0	7.4	281	2.49	8.3	1.4	5.4	6.7	30.9	.09	.25	.15	47	.36	.045	18.4	24.6	.47	172.2	.078	1	1.29	.019	.09	<.2	2.1	.10	.03	19	.5	.11	4.8	30
M-50	1.68	11.41	30.17	93.3	232	11.3	9.8	391	2.58	8.8	1.9	4.2	7.0	27.2	.20	.28	.22	43	.26	.059	18.0	20.9	.47	128.6	.080	1	1.32	.019	.09	<.2	2.0	.11	.07	26	.9	.29	5.1	30
RE M-50	1.61	10.85	30.48	93.6	232	10.2	8.8	394	2.60	8.8	1.9	3.6	7.1	28.3	.19	.27	.24	43	.26	.055	16.8	22.5	.48	129.0	.083	1	1.34	.017	.09	<.2	2.0	.11	.04	24	1.2	.28	4.8	30
M-51	1.94	12.49	38.65	69.9	213	9.2	6.7	245	2.66	13.9	2.7	3.9	9.6	32.8	.14	.32	.45	37	.20	.055	23.0	19.1	.34	172.7	.052	1	1.27	.020	.10	<.2	2.1	.13	.06	24	1.1	.38	4.6	30
M-52	2.52	22.52	31.71	100.2	188	9.0	6.7	317	3.03	12.9	3.0	3.2	11.3	40.6	.13	.32	.51	38	.17	.045	27.4	19.1	.48	185.3	.068	1	1.47	.045	.17	<.2	2.2	.18	.20	17	1.0	.43	4.9	30
M-53	2.28	16.73	40.99	76.6	357	7.9	4.0	163	2.78	15.6	2.9	5.3	7.9	35.1	.17	.28	1.22	33	.16	.050	23.9	18.4	.33	157.7	.049	1	1.22	.036	.09	<.2	2.0	.11	.22	22	1.4	.67	3.9	30
M-54	12.43	22.40	129.64	569.6	155	7.9	8.7	788	4.05	23.9	2.4	4.2	22.5	30.2	1.04	.41	.56	9	.16	.061	47.3	8.1	.19	247.8	.013	<1	.59	.008	.12	<.2	1.8	.07	.12	18	1.0	.94	1.6	30
M-55	14.77	52.88	406.20	533.0	612	7.8	16.2	478	5.87	47.3	3.0	6.3	15.4	9.0	.80	.33	10.13	16	.12	.080	25.7	9.8	.29	102.5	.019	1	.96	.005	.08	<.2	2.2	.09	.05	26	3.0	2.14	2.5	30
M-57	.87	14.52	8.26	61.7	46	12.4	10.0	361	2.63	5.4	1.3	5.9	8.1	22.9	.07	.19	.10	48	.47	.061	25.1	26.9	.72	203.1	.101	<1	1.45	.008	.19	<.2	2.6	.14	<.01	22	.2	.04	4.8	30
M-58	.51	16.51	4.26	61.2	33	10.6	14.5	339	3.08	3.2	.4	8.1	1.6	22.1	.06	.12	.07	80	.60	.125	6.5	19.8	1.32	230.4	.160	<1	1.97	.013	.41	<.2	2.9	.12	<.01	15	.1	.02	6.5	30
M-59	2.95	20.20	7.64	63.0	258	13.1	10.7	458	2.63	6.7	1.5	12.9	2.8	31.0	.08	.26	.15	51	.65	.060	15.5	21.9	.53	353.9	.079	<1	1.46	.011	.10	<.2	3.5	.10	.02	38	.6	.05	4.9	30
M-60	1.07	11.28	11.17	57.3	22	10.9	9.0	218	2.62	13.7	.6	5.8	6.6	14.1	.06	.25	.19	39	.18	.041	15.7	20.7	.53	151.7	.066	1	1.52	.008	.10	<.2	1.7	.11	<.01	9	.3	.04	4.2	30
M-64	4.16	14.48	30.18	57.1	77	8.1	3.9	141	2.70	11.9	1.2	3.9	5.1	33.5	.09	.24	1.47	42	.10	.060	19.6	20.4	.29	202.3	.027	<1	1.25	.018	.08	<.2	1.9	.09	.08	16	1.0	.08	4.5	30
M-68	3.22	14.90	34.51	57.0	207	9.3	4.4	106	4.14	17.2	1.3	3.3	13.8	41.1	.09	.38	9.45	42	.04	.060	25.3	19.5	.13	124.0	.027	<1	2.17	.064	.05	<.2	1.8	.06	.27	41	.7	.09	5.2	30
M-70	.85	22.59	104.49	55.9	424	12.4	5.9	175	2.27	9.6	1.2	6.7	6.9	24.1	.08	.33	3.56	42	.13	.021	19.3	28.6	.39	157.1	.051	<1	1.18	.013	.05	<.2	2.2	.09	.04	138	8.7	.40	4.7	30
M-71	1.44	17.40	58.30	199.0	367	8.5	5.8	333	3.26	8.8	2.7	23.3	10.4	43.8	.22	.26	1.94	41	.10	.070	26.9	25.2	.48	168.0	.075	1	1.95	.026	.17	<.2	1.8	.30	.14	25	3.0	.38	5.9	30
M-72	.85	13.09	10.26	57.9	46	16.6	7.8	253	2.77	6.8	1.0	11.6	5.9	25.5	.04	.23	.23	52	.33	.068	19.3	35.8	.68	353.6	.044	1	1.33	.015	.13	<.2	3.3	.06	.04	9	.3	.24	4.7	30
STANDARD DS3	9.17	124.81	33.51	153.1	270	34.7	11.2	785	3.08	29.2	5.9	16.3	3.6	26.1	5.19	5.05	5.20	75	.52	.095	15.8	193.7	.57	143.2	.081	2	1.64	.029	.17	3.7	3.0	1.04	.02	222	1.1	1.04	6.0	30

Sample type: SOIL SS80 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data FA

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Sample gm
M-73	1.42	17.69	15.39	44.4	76	15.8	6.3	188	2.57	10.3	1.4	23.1	7.1	29.0	.02	.29	.21	48	.20	.037	22.8	42.8	.45	287.5	.038	<1	1.28	.017	.13	<.2	2.3	.07	.05	14	.4	.20	5.3	30
M-74	1.32	21.98	19.63	109.7	39	12.1	21.3	691	4.55	14.7	2.4	23.0	14.0	24.6	.05	.45	.22	23	.20	.049	21.1	25.1	.64	175.0	.059	<1	1.76	.012	.07	<.2	2.3	.07	.05	9	.9	.14	4.5	30
M-75	1.63	21.82	17.91	86.2	26	11.2	12.1	384	3.61	8.1	1.8	8.9	11.8	17.9	.14	.29	.37	50	.17	.044	16.9	25.1	.45	212.5	.043	<1	1.55	.008	.40	<.2	3.5	.11	.03	<5	.1	.19	6.1	30
M-76	.86	23.15	6.54	79.4	61	11.7	12.6	708	4.19	3.9	.7	54.2	4.4	28.1	.08	.21	.22	107	.39	.064	13.5	43.1	1.35	364.0	.053	1	2.28	.011	.12	<.2	9.6	.04	<.01	6	<.1	.04	9.8	30
M-77	2.60	25.73	83.74	50.4	171	23.3	6.1	207	3.76	9.6	2.5	30.8	24.7	97.9	.08	.31	5.57	26	.24	.058	59.8	53.6	.33	455.1	.034	1	.85	.078	.16	<.2	3.8	.09	.28	23	2.2	.11	4.0	30
M-78	1.03	38.03	24.18	107.1	145	142.9	22.4	733	3.83	5.6	1.9	9.7	16.8	163.3	.12	.25	1.17	85	1.36	.316	64.3	214.6	2.35	688.9	.168	1	2.19	.019	.22	.3	6.4	.15	.01	20	.4	.05	9.7	30
M-79	1.01	30.62	8.97	87.0	172	19.9	14.9	750	4.64	3.9	1.5	8.4	5.7	42.5	.11	.32	.37	113	.53	.062	18.6	69.1	1.54	406.1	.042	1	2.65	.010	.24	<.2	12.6	.08	<.01	18	.6	.03	12.4	30
M-80	4.05	69.09	205.27	189.8	705	13.8	7.5	202	4.12	13.7	3.3	47.7	23.3	89.1	.24	.38	156.76	35	.18	.040	55.9	37.2	.38	344.5	.061	<1	1.08	.046	.15	<.2	3.3	.07	.25	48	4.8	.19	4.0	30
M-81	1.17	22.52	6.72	88.3	128	13.8	11.6	771	3.89	2.9	.7	3.1	4.8	24.0	.15	.21	.21	78	.37	.047	14.6	30.7	1.11	444.1	.027	<1	2.17	.010	.14	<.2	5.3	.08	<.01	9	<.1	.02	8.3	30
M-82	1.08	24.72	11.15	41.2	370	8.5	5.8	381	2.34	4.7	.5	53.2	4.1	21.4	.11	.20	.21	45	.39	.034	17.2	21.2	.37	697.4	.011	1	1.15	.007	.22	<.2	2.4	.09	<.01	21	.2	.02	4.2	30
M-83	.65	28.59	34.74	284.4	767	10.0	8.6	775	4.10	4.0	.8	2.5	6.9	17.1	.55	.23	.54	65	.34	.060	18.0	20.3	.83	256.1	.017	<1	1.93	.005	.17	<.2	6.7	.04	<.01	26	.3	.05	9.4	30
M-84	.75	23.36	17.85	85.0	156	26.7	11.2	549	3.08	6.7	.8	3.6	4.7	31.8	.12	.42	.18	67	.44	.036	19.0	53.6	.80	622.0	.088	<1	1.70	.010	.16	<.2	4.5	.08	.02	15	.4	.02	6.4	30
M-85	1.22	23.05	32.97	92.6	193	23.4	14.7	1225	3.74	5.9	.5	4.0	3.5	35.4	.43	.37	.28	85	.44	.048	12.7	55.7	.91	682.9	.057	1	2.21	.011	.22	<.2	7.5	.08	<.01	14	.3	.02	8.0	30
M-86	.37	18.17	7.98	98.2	57	49.7	23.8	897	5.11	3.5	.7	3.1	4.7	41.5	<.01	.17	.11	155	.59	.110	14.7	90.7	2.86	882.2	.279	1	3.08	.019	1.37	<.2	7.9	.28	<.01	8	.2	<.02	12.5	30
M-87	1.14	38.51	10.92	62.1	64	20.9	10.0	429	3.33	7.9	.4	12.2	4.9	20.3	.07	.38	.13	66	.23	.029	16.7	44.9	.82	932.9	.051	1	1.92	.011	.21	<.2	4.7	.07	<.01	10	.3	.02	6.4	30
M-88	.55	26.18	9.70	62.2	57	58.9	14.9	638	3.24	5.3	.8	5.6	6.8	61.4	.01	.28	.15	79	.89	.143	28.8	115.1	1.61	708.8	.152	1	1.76	.020	.43	<.2	6.3	.19	<.01	15	.5	<.02	7.5	30
RE M-88	.56	26.10	9.69	63.0	55	65.8	16.0	643	3.25	5.0	.8	4.3	7.1	61.4	.02	.32	.15	80	.89	.147	30.2	124.3	1.62	712.0	.149	2	1.75	.019	.41	<.2	6.1	.19	.01	14	.6	.02	7.6	30
N-1	1.48	17.58	6.37	72.7	54	14.7	11.0	520	2.72	3.9	.7	16.1	3.1	32.5	.11	.26	.09	60	.80	.108	13.7	28.9	.69	486.7	.075	1	1.34	.015	.15	<.2	4.2	.08	<.01	27	.3	<.02	5.7	30
N-2	1.98	15.49	6.56	69.7	35	12.1	8.6	566	3.02	3.6	.5	9.5	2.5	32.2	.07	.25	.07	70	.76	.122	12.4	27.6	.66	381.7	.077	1	1.38	.020	.23	<.2	4.7	.08	.01	21	.6	<.02	6.1	30
N-3	2.41	12.66	5.72	58.6	27	10.5	6.8	327	2.82	4.3	.4	9.1	2.3	26.2	.05	.24	.08	72	.57	.066	9.2	24.5	.68	198.7	.097	1	1.35	.014	.27	<.2	3.0	.10	<.01	12	.7	.02	7.3	30
N-4	2.27	16.36	7.92	57.2	30	13.9	8.4	284	2.80	5.3	.4	4.2	2.7	28.0	.05	.28	.12	71	.48	.063	10.2	32.9	.62	246.7	.088	1	1.43	.014	.14	<.2	2.9	.07	.02	14	.5	<.02	7.4	30
N-5	1.78	29.25	7.66	56.7	79	13.9	10.1	610	2.82	5.1	1.3	7.1	3.6	32.0	.06	.32	.10	66	.72	.078	22.7	29.1	.57	528.1	.066	1	1.54	.014	.10	<.2	6.2	.06	<.01	40	.6	.02	6.0	30
N-6	2.10	15.30	7.74	59.8	18	12.3	8.8	384	2.75	5.4	.5	7.0	2.7	27.4	.05	.27	.10	68	.43	.067	11.2	27.4	.60	349.4	.085	1	1.41	.015	.14	<.2	3.3	.07	<.01	13	.2	<.02	6.5	30
N-7	1.96	40.85	8.06	64.6	60	15.8	13.6	1057	2.98	5.0	.8	6.1	2.6	35.7	.15	.29	.11	74	.67	.078	19.9	32.6	.70	489.6	.067	1	1.60	.018	.12	<.2	4.2	.07	<.01	22	.2	.03	7.1	30
N-8	1.59	14.02	7.29	50.9	34	10.9	6.3	282	2.28	4.6	.5	6.2	2.4	27.1	.08	.27	.11	58	.58	.042	10.3	27.3	.48	335.7	.068	6	1.20	.018	.08	<.2	2.5	.06	.02	15	.2	.02	5.6	30
N-9	1.57	11.80	7.52	59.9	24	12.0	9.8	474	2.74	5.6	.4	9.9	2.8	24.9	.06	.29	.10	63	.50	.063	9.1	28.8	.61	289.9	.079	<1	1.38	.012	.10	<.2	3.1	.06	<.01	15	.3	.02	5.3	30
N-10	1.52	19.58	7.82	57.1	49	14.2	8.5	551	2.39	4.5	.8	28.5	2.8	29.0	.12	.34	.11	57	.66	.056	10.3	26.9	.58	355.2	.078	1	1.25	.014	.10	.2	4.0	.07	.01	35	.7	.02	5.0	30
N-11	.96	16.57	8.69	58.5	40	12.9	9.5	477	2.63	5.1	.7	6.9	3.5	26.4	.06	.32	.13	64	.48	.054	11.8	30.7	.65	357.4	.104	1	1.51	.014	.10	<.2	4.2	.08	<.01	22	.3	.02	5.6	30
N-12	1.02	14.82	7.73	53.2	26	14.1	9.0	512	2.44	5.3	.6	6.3	3.1	27.7	.06	.28	.11	60	.52	.057	10.9	27.2	.55	343.7	.080	1	1.32	.017	.07	.2	3.3	.06	<.01	50	.2	<.02	4.8	30
N-13	.83	16.86	6.50	52.2	28	13.9	9.0	334	2.12	5.1	.6	2.4	3.0	28.2	.06	.29	.10	50	.46	.066	11.1	26.5	.47	232.0	.070	1	1.07	.014	.08	.2	2.7	.06	<.01	14	.2	.02	4.7	30
N-14	.38	46.42	1.20	84.9	16	16.2	26.3	935	5.05	.7	.1	.2	.5	27.5	.03	.04	<.02	115	.98	.218	10.6	17.3	2.52	592.0	.323	<1	3.16	.011	1.30	<.2	1.5	.32	<.01	<5	.5	.02	8.1	30
N-15	.73	24.91	6.02	63.4	42	18.8	10.5	408	2.76	6.0	.5	2.6	3.4	25.3	.02	.31	.10	58	.51	.056	11.8	27.8	.80	313.0	.102	<1	1.49	.019	.18	<.2	3.7	.09	<.01	7	.9	.02	5.3	30
N-16	.59	50.43	4.57	125.0	17	13.1	14.4	809	4.93	2.3	.5	.7	3.3	18.5	.03	.15	.03	94	.49	.107	9.2	21.2	1.53	615.0	.184	<1	2.47	.008	1.00	<.2	4.2	.25	<.01	5	.6	.02	9.5	30
STANDARD DS3	9.23	126.20	33.22	153.8	275	35.8	12.0	790	3.08	27.6	6.0	21.3	3.8	29.4	5.49	5.06	5.35	76	.52	.082	17.0	186.4	.57	143.1	.081	1	1.63	.030	.15	3.8	2.8	1.04	.02	220	1.3	1.02	6.2	30

Sample type: SOIL SS80 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data FA

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Sample gm
N-17	3.39	39.24	12.10	34.4	97	32.7	7.2	161	2.99	76.3	.8	2.3	4.9	20.3	.04	2.42	.19	32	.12	.040	24.2	12.0	.18	206.5	.010	<1	.77	.005	.10	<.2	2.2	.14	.03	<5	.8	.22	2.7	30
N-18	1.60	13.08	16.69	35.9	25	10.8	6.2	211	2.16	6.7	.6	1.6	2.3	12.4	.04	.36	.14	37	.18	.025	7.7	20.9	.41	418.4	.046	<1	1.12	.006	.17	<.2	1.4	.08	.05	<5	.2	.07	3.2	30
N-19	1.69	23.37	11.30	55.6	74	15.4	9.0	335	2.99	8.7	.4	1.7	2.5	21.9	.04	.32	.12	54	.34	.024	7.5	23.8	.82	343.7	.085	<1	1.75	.008	.19	<.2	2.2	.10	.04	9	.3	.11	4.6	30
N-20	2.09	33.78	14.07	101.1	32	39.3	14.6	376	3.36	8.0	1.7	2.8	16.5	29.5	.04	.43	.14	56	.60	.158	31.1	67.6	1.11	491.3	.127	1	1.92	.009	.46	<.2	3.4	.35	.02	<5	.3	.14	6.4	30
N-21	4.16	47.15	10.59	71.4	49	30.9	11.5	371	3.42	8.3	2.0	2.9	22.7	37.0	.04	.47	.18	51	.40	.098	38.0	44.8	.70	326.8	.069	1	1.54	.010	.15	<.2	3.4	.12	.06	<5	.4	.51	5.5	30
N-22	3.10	26.38	16.26	76.4	174	15.3	8.7	291	3.35	15.2	2.8	7.7	10.8	41.1	.06	.27	.23	47	.26	.050	31.1	24.4	.60	306.0	.075	<1	1.72	.017	.16	<.2	3.0	.12	.13	12	.3	.27	5.5	30
RE N-22	3.44	26.01	16.34	75.3	170	15.5	9.4	289	3.36	14.6	2.8	3.9	11.3	40.3	.06	.25	.23	47	.26	.052	31.0	27.2	.59	305.2	.075	<1	1.72	.020	.13	<.2	3.0	.12	.09	11	.4	.28	5.3	30
N-23	2.52	36.23	78.06	304.6	93	7.2	8.4	239	3.99	5.5	5.1	6.1	12.0	68.0	.16	.19	3.22	24	.15	.063	33.9	7.5	.50	192.2	.081	<1	1.70	.026	.13	<.2	2.6	.10	.20	<5	.9	1.13	4.6	30
N-24	4.70	15.50	85.04	53.8	331	7.6	3.5	108	2.81	20.9	2.1	11.8	13.4	29.7	.07	.24	1.73	29	.08	.056	29.1	14.2	.21	138.1	.032	<1	1.04	.034	.11	<.2	1.6	.07	.21	13	1.5	1.05	4.3	30
N-25	1.66	16.43	17.54	66.4	126	15.0	8.8	334	2.81	7.7	1.2	5.6	6.8	30.7	.10	.33	.32	52	.19	.027	17.4	26.4	.50	310.9	.068	1	1.43	.015	.10	<.2	2.6	.09	.06	8	.3	.16	4.8	30
N-26	2.07	14.52	36.84	66.6	109	8.2	6.6	325	3.03	18.4	3.2	5.6	15.5	51.0	.06	.37	.20	19	.17	.051	45.2	12.2	.31	207.0	.048	<1	1.02	.032	.15	<.2	2.3	.09	.22	5	1.2	.81	3.8	30
N-27	1.04	9.55	10.72	72.2	28	5.4	6.0	315	3.05	3.5	1.4	3.4	10.8	18.3	.03	.37	.13	30	.32	.051	21.3	12.1	.56	127.0	.050	<1	1.49	.004	.12	<.2	1.6	.06	.02	<5	.3	.03	4.8	30
N-28	1.27	11.46	8.38	59.5	23	7.8	8.5	338	2.42	2.6	1.8	2.4	20.6	24.5	.06	.12	.06	17	.38	.070	31.4	9.5	.62	133.3	.060	<1	1.26	.004	.23	<.2	1.3	.14	<.01	<5	.2	.03	4.1	30
N-29	.54	36.39	6.75	84.8	53	12.7	13.8	277	3.53	3.0	.8	2.5	3.6	21.2	.06	.15	.07	73	.57	.150	10.6	38.9	1.81	317.3	.182	<1	2.44	.018	.76	<.2	4.0	.10	.01	<5	.1	.02	10.4	30
N-30	.64	79.51	6.05	50.6	21	28.5	23.4	751	3.92	5.9	1.0	4.1	5.2	16.9	.04	.30	.12	121	.47	.128	13.9	42.2	1.51	394.5	.199	1	2.46	.016	.68	<.2	6.4	.18	<.01	5	.3	.03	7.6	30
N-31	.07	.62	4.08	11.3	10	.4	.9	230	.61	.2	.1	.2	.5	39.5	.01	<.02	<.02	5	.89	.013	2.1	.6	.21	97.4	.002	<1	.48	.004	.05	<.2	.6	<.02	<.01	<5	.1	<.02	1.8	30
RE N-31	.05	.50	4.01	9.7	11	.3	.6	233	.57	.3	<.1	<.2	.5	40.1	.01	<.02	<.02	6	.92	.010	1.8	.5	.20	95.9	.001	<1	.47	.005	.05	<.2	.6	<.02	<.01	<5	<.1	<.02	1.6	30
STANDARD	9.26	125.93	34.08	152.6	285	34.0	11.1	784	3.06	28.3	5.8	22.7	3.9	28.6	5.51	5.14	5.39	74	.52	.096	17.8	178.4	.57	142.3	.081	1	1.61	.026	.16	3.6	2.5	1.03	.02	233	1.1	1.05	5.9	30

Standard is STANDARD DS3. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

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GEOCHEMICAL ANALYSIS CERTIFICATE

Richards, Gordon PROJECT RUM RUN File # A102166

6170 Tisdall St., Vancouver BC V5Z 3N4 Submitted by: Gordon Richards

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Os ppb	Pd ppb	Pt ppb	Sample gm
M-56	1.46	9.54	35.26	65.8	129	6.6	8.3	620	2.09	8.9	1.1	6.2	4.9	31.8	.17	.20	.97	33	.38	.074	14.8	9.2	.31	163.7	.061	<1	.72	.018	.09	.2	1.8	.05	.08	14	.5	.60	3.4	<5	<10	<2	30
M-61	1.35	13.40	38.66	74.9	163	17.1	11.5	645	2.51	14.7	2.0	9.5	9.5	34.1	.22	.25	.77	31	.42	.135	29.4	21.7	.44	235.3	.060	<1	1.02	.009	.14	<.2	2.1	.09	.03	17	.5	.40	3.6	<5	<10	<2	15
RE M-61	1.31	13.04	37.40	72.9	156	16.2	11.0	628	2.44	14.2	1.9	4.9	9.3	32.0	.21	.23	.74	29	.40	.126	28.1	23.6	.43	229.1	.055	1	.97	.009	.13	<.2	2.0	.09	.02	19	.4	.35	3.5	<5	<10	<2	15
STANDARD DS3	9.11	128.35	32.95	158.2	289	37.0	12.5	805	3.14	29.3	5.7	22.0	3.7	29.3	5.21	4.85	5.16	77	.53	.090	16.9	186.8	.58	147.2	.086	2	1.66	.027	.17	3.8	2.6	.96	.01	227	1.1	1.01	6.3	<5	<10	<2	30

GROUP 1F30 - 30.00 GM SAMPLE, 180 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 600 ML, ANALYSIS BY ICP/ES & MS.
UPPER LIMITS - AG, AU, HG, W, SE, TE, TL, GA, SN = 100 PPM; MO, CO, CD, SB, BI, TH, U, B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
- SAMPLE TYPE: SILT SS80 60C Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JUL 10 2001 **DATE REPORT MAILED:** July 24/01 **SIGNED BY.** C. L .D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

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(ISO 02 Accredited Co.)

GEOCHEMICAL ANALYSIS CERTIFICATE

Richards, Gordon PROJECT RUM RUN File # A102167

6170 Tisdall St., Vancouver BC V5Z 3N4 Submitted by: Gordon Richards

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Sample gm
M-62	5.30	20.42	25.06	1.7	7130	3.4	1.4	29	.77	29.4	.1	88.4	1.0	3.3	.04	2.63	20.57	2	<.01	.005	1.8	68.7	.01	60.3	.002	<1	.02	.016	.03	3.8	.1	<.02	.30	119	81.6	1.33	.2	30
M-63	2.32	6.23	12.35	1.9	116	4.2	.3	27	1.07	11.5	.1	2.5	1.4	12.0	.01	.11	.68	4	<.01	.002	1.6	73.9	.02	178.3	.002	1	.25	.072	.22	2.1	.4	.07	.41	<5	3.6	.03	.7	30
M-65	2.77	4.73	12.97	5.4	40	1.7	.2	20	.63	1.9	.5	1.0	1.6	22.4	.02	.27	.09	<2	.01	.011	5.2	34.3	.01	389.8	.005	<1	.29	.045	.10	1.1	.3	.02	.05	<5	.7	.02	1.4	30
M-66	3.11	14.49	38.77	13.5	97	4.6	.3	31	1.91	15.2	.3	1.4	9.6	8.3	.02	.11	.81	3	<.01	.014	4.3	68.5	.02	87.0	.001	1	.36	.016	.21	2.8	.7	.06	.11	<5	8.5	.07	1.4	30
M-67	2.73	4.57	13.49	44.1	22	2.8	.9	31	1.20	7.8	1.0	.3	6.4	6.3	.03	.09	2.18	3	<.01	.007	.9	46.5	.01	61.2	.009	1	.68	.007	.12	.7	.4	.02	<.01	<5	.4	<.02	1.7	30
M-69	6.31	27.30	3525.73	8.8	24822	4.3	.3	25	9.30	71.2	.5	47.9	6.8	18.0	.04	.39	95.59	2	<.01	.041	6.1	80.4	<.01	67.8	.020	<1	.05	.166	1.59	2.0	.1	.77	3.80	49	798.5	3.07	8.6	30
N-32	3.36	2.82	12.52	9.4	71	1.9	.5	117	.53	.8	.1	.3	.3	44.2	.03	.07	.22	4	.05	.007	.7	63.3	.02	491.8	.003	1	.19	.066	.10	1.4	.5	<.02	<.01	<5	1.7	.02	.8	30
N-33	12.19	3.87	7.12	1.9	57	4.3	.8	26	.35	.7	<.1	155.6	.2	17.3	.04	.14	.14	2	.01	.002	.9	82.5	<.01	128.8	<.001	1	.10	.050	.06	2.2	.1	<.02	.14	27	1.1	.02	.3	30
N-34 not received	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-35	2.03	1.46	3.46	52.8	18	2.6	6.1	634	1.95	1.0	.3	39.3	4.6	68.1	.17	.08	.03	23	1.65	.121	17.6	21.7	.48	823.9	.002	2	.20	.039	.11	.8	4.9	<.02	.01	<5	.2	<.02	.7	30
N-36	2.24	3.32	2.88	9.1	12	4.5	1.4	268	.60	.2	<.1	3.3	.5	63.9	.04	.09	.03	6	.56	.005	2.0	85.3	.18	1517.5	.001	1	.16	.083	.11	1.8	1.3	<.02	.04	<5	.2	<.02	.5	30
N-37	13.87	148.49	3.57	74.4	319	8.0	28.8	1214	5.01	2.4	.3	1808.0	.5	147.9	.11	.72	.02	53	4.42	.046	1.7	17.9	2.05	279.3	.003	7	.30	.015	.28	.3	13.0	.07	.59	440	.7	.03	1.7	30
N-38	57.70	7.66	15.32	34.1	79	5.7	4.3	650	1.66	2.4	.1	127.9	2.6	96.8	.01	.61	.03	16	2.00	.081	11.8	63.9	.56	389.7	.001	4	.22	.027	.20	1.5	3.3	.02	.03	<5	.2	.03	1.0	30
N-39	1.75	5.78	2.70	56.0	11	19.5	34.1	1490	5.03	1.8	.2	4.5	1.5	89.7	.12	.37	<.02	159	4.02	.051	6.8	86.7	3.28	532.3	.101	8	1.05	.023	1.00	<.2	28.9	.23	.03	18	.1	<.02	4.3	30
N-40	2.41	3.44	3.04	22.5	17	4.8	2.4	333	.75	.4	<.1	3.6	.2	132.0	.03	.08	<.02	13	1.64	.003	.8	83.1	.36	645.1	<.001	3	.13	.044	.11	1.9	.9	<.02	.03	<5	<.1	.02	.5	30
RE N-40	2.40	3.45	2.98	22.0	17	4.7	2.3	337	.76	.3	<.1	4.0	.2	133.7	.04	.09	<.02	13	1.66	.003	.8	84.9	.36	654.1	<.001	2	.13	.040	.11	1.8	.7	<.02	.06	<5	.1	.02	.5	30
N-41	10.54	2.00	14.19	21.6	17	2.7	3.0	430	1.17	1.1	.1	15.5	1.6	69.4	.06	.32	<.02	8	1.42	.041	7.7	51.1	.39	530.3	<.001	6	.18	.027	.17	1.0	2.4	<.02	.11	49	.1	.03	.6	30
N-42	1.55	1.75	7.03	53.3	15	4.8	6.1	971	2.41	.7	.1	76.3	4.1	176.8	.06	.16	<.02	17	2.70	.108	15.7	41.2	.77	991.2	.001	12	.29	.012	.24	1.2	3.8	.03	.09	17	<.1	.02	1.0	30
N-43	1.98	60.73	4.07	106.8	34	9.3	33.9	1745	6.92	3.0	.3	7.6	1.0	116.1	.13	.95	<.02	127	5.79	.069	3.8	27.3	2.88	331.9	.004	9	.39	.006	.34	.2	26.6	.09	.05	101	.2	.02	1.9	30
N-44	1.71	5.37	23.20	9.6	44	5.3	.3	39	.79	2.9	3.6	2.3	14.4	19.3	.03	.06	1.33	4	.12	.040	25.6	55.1	.04	113.6	.032	1	.64	.019	.16	1.1	1.5	.06	.10	<5	.1	.05	1.5	30
N-45	2.79	2.61	65.15	1.6	452	1.7	.3	28	.51	3.2	.1	2.0	1.9	2.6	<.01	.05	.99	5	.01	.004	15.5	52.7	.01	191.2	.003	1	.05	.003	.05	2.0	.3	<.02	.06	108	29.4	.08	.8	30
N-46	3.52	8.00	342.24	2.4	1730	5.3	.5	31	1.27	14.0	.2	2.2	4.1	6.7	.02	.11	3.21	4	<.01	.009	12.3	101.2	.01	531.8	.006	1	.11	.013	.15	3.4	.2	.04	.34	21	77.3	.31	2.3	30
N-47	6.39	16.09	2333.02	5.7	6939	2.5	.3	25	5.80	42.1	.4	24.6	6.3	17.5	.03	.26	113.87	5	<.01	.043	13.0	108.7	<.01	109.3	.016	1	.08	.167	.87	2.0	.1	.45	2.15	127	362.2	2.85	8.8	30
N-48	13.59	20.54	5336.31	6.7	11290	10.7	.7	49	6.65	206.1	.4	37.5	73.5	23.2	.06	1.07	560.12	6	<.01	.118	31.6	178.2	<.01	105.3	.062	1	.08	.029	1.38	5.3	.3	.24	2.70	206	388.2	8.02	12.6	30
N-49	3.76	4.59	446.51	2.4	2279	1.8	.1	18	.62	7.3	1.9	5.1	3.6	3.3	.02	.10	20.80	<2	<.01	.010	14.7	50.3	<.01	267.8	.006	1	.12	.008	.15	2.3	.2	.04	.17	150	63.6	.44	3.3	30
N-50	3.92	9.17	232.43	2.3	1005	6.9	.9	36	1.26	13.4	.2	12.6	2.8	3.6	.01	.19	5.61	5	<.01	.006	17.5	131.2	<.01	266.7	.004	1	.06	.006	.06	3.7	.3	.02	.46	524	104.9	.28	1.5	30
STANDARD DS3	9.31	124.19	36.09	152.7	269	35.9	12.6	776	3.04	29.9	6.2	21.9	3.8	28.8	5.63	5.01	5.72	74	.56	.092	17.0	170.0	.56	141.9	.082	2	1.62	.026	.16	3.6	2.5	1.04	.02	224	1.3	1.01	6.4	30

GROUP 1F30 - 30.00 GM SAMPLE, 180 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 600 ML, ANALYSIS BY ICP/ES & MS.
UPPER LIMITS - AG, AU, HG, W, SE, TE, TL, GA, SN = 100 PPM; MO, CO, CD, SB, BI, TH, U, B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
- SAMPLE TYPE: ROCK R150 Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JUL 10 2001 **DATE REPORT MAILED:** July 24/01 **SIGNED BY** ..... D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data ✓ FA ___

(ISO 02 Accredited Co.)

GEOCHEMICAL ANALYSIS CERTIFICATE

Richards, Gordon File # A103381

6170 Tisdall St., Vancouver BC V5Z 3N4 Submitted by: Gordon Richards

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Sample gm
M13A	66	15.83	7.64	128.3	10	8.6	14.0	866	4.55	2.7	.6	2.4	4.7	41.2	.04	.25	.03	110	1.58	.483	12.9	11.0	.99	375.9	.113	<1	2.14	.028	.48	<.2	5.7	.12	.01	5	.1	<.02	11.1	30
M13B	57	12.94	6.01	70.4	12	9.1	8.1	448	3.09	2.6	.4	2.0	3.3	24.4	.03	.26	.04	73	.63	.151	8.7	13.5	.65	271.2	.098	<1	1.34	.022	.25	.3	3.5	.08	.02	11	.2	.02	6.5	30
M13C	61	12.77	4.94	47.4	22	11.3	8.1	301	2.29	4.0	.4	2.8	3.3	22.4	.02	.28	.08	54	.48	.092	9.3	21.1	.52	226.9	.078	<1	1.18	.018	.09	.4	2.6	.05	<.01	10	.1	<.02	4.5	30
M58	68	9.19	8.50	43.8	51	14.5	12.9	770	2.65	3.2	.2	1.5	1.7	25.4	.05	.23	.08	64	.32	.045	6.6	24.7	.59	485.6	.091	1	1.54	.010	.10	<.2	2.6	.08	<.01	9	.1	<.02	5.6	30
M59	30	37.08	8.02	129.8	23	55.2	32.9	1086	6.49	5.8	1.0	3.0	5.9	49.3	.04	.19	.08	146	.77	.242	35.5	68.8	3.07	622.1	.146	<1	3.46	.016	.39	<.2	10.0	.12	<.01	14	.1	.02	16.7	30
M60	65	10.53	8.28	84.8	29	19.1	13.0	754	3.79	6.4	.4	4.6	3.7	30.0	.04	.33	.11	79	.37	.064	10.6	33.1	1.03	415.9	.210	1	2.33	.008	.35	<.2	6.2	.10	<.01	12	.1	<.02	10.1	30
M61	40	4.78	4.94	129.9	10	16.1	19.2	1008	5.84	4.0	.7	.4	4.8	38.5	.04	.13	.04	143	.66	.197	18.1	29.5	2.30	929.6	.473	1	3.28	.016	1.42	<.2	10.2	.37	.02	8	.1	<.02	17.0	30
M62	50	38.90	4.77	108.1	46	14.2	14.9	800	4.85	3.8	.3	1.6	3.1	32.2	.04	.19	.05	99	.68	.119	9.1	27.0	1.68	529.7	.319	1	2.76	.013	.92	<.2	4.9	.24	.03	11	.1	.02	12.2	30
RE M62	48	37.03	4.86	111.1	48	14.2	15.2	816	4.94	4.2	.3	.5	3.3	33.3	.05	.21	.05	101	.68	.108	9.3	27.2	1.78	533.5	.327	1	2.82	.010	1.00	<.2	5.4	.26	.01	12	.1	<.02	12.5	15
M63	80	95.25	12.79	96.8	65	18.7	14.2	1186	3.48	6.2	.6	2.3	2.0	52.1	.09	.23	.08	78	.55	.060	7.5	29.4	.81	357.9	.082	1	1.82	.012	.12	<.2	5.8	.06	.02	11	.2	.06	9.0	30
M64	29	9.15	4.07	170.4	18	27.0	39.8	1076	7.88	3.1	.5	.7	2.6	39.6	.02	.11	.03	284	.79	.100	14.7	66.0	4.94	923.6	.486	<1	4.70	.017	2.29	<.2	14.9	.52	.02	7	.2	<.02	20.4	30
M65	69	16.87	7.37	55.6	52	23.2	12.7	461	3.19	6.9	.7	6.2	4.6	25.0	.05	.44	.12	80	.37	.032	20.8	42.7	.88	591.3	.135	1	1.76	.009	.31	<.2	5.6	.11	<.01	22	.2	.02	6.3	30
Y76A	2.50	61.99	7.91	85.0	36	20.0	17.8	710	3.92	3.3	.5	11.3	2.8	24.3	.08	.33	.08	97	.55	.128	8.7	38.8	.97	537.0	.099	1	1.74	.015	.33	<.2	5.7	.11	.01	25	.4	.05	8.2	30
Y76B	2.07	24.18	6.31	57.6	34	15.8	13.1	490	2.84	5.1	.5	14.7	3.0	23.4	.06	.31	.08	66	.42	.072	8.7	29.3	.69	401.5	.098	1	1.43	.011	.11	<.2	3.8	.06	.02	29	.2	.03	5.3	30
STANDARD DS3	9.50	124.74	35.23	153.6	287	35.5	12.4	792	3.11	31.5	6.3	22.4	3.8	25.6	5.72	4.88	5.62	75	.50	.095	16.5	181.2	.58	159.0	.083	1	1.66	.028	.17	3.9	2.6	1.11	.02	241	1.3	1.04	6.0	30
STANDARD G-1	1.10	1.70	2.08	41.2	9	4.3	4.1	515	1.63	.2	2.7	<.2	5.7	67.8	<.01	<.02	.17	35	.47	.098	6.8	12.4	.50	224.3	.113	1	.79	.047	.48	2.6	1.5	.32	.01	<5	<.1	.02	4.9	30

GROUP 1F30 - 30.00 GM SAMPLE LEACHED WITH 180 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 600 ML, ANALYSED BY ICP/ES & MS.
UPPER LIMITS - AG, AU, HG, W, SE, TE, TL, GA, SN = 100 PPM; MO, CO, CD, SB, BI, TH, U, B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
- SAMPLE TYPE: SOIL SS80 60C Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: SEP 26 2001 **DATE REPORT MAILED:** Oct 9/01 **SIGNED BY** C. ..... D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

RUN RUN

Data ✓ FA ___

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716
(ISO 9002 Accredited Co.)

GEOCHEMICAL ANALYSIS CERTIFICATE

Richards, Gordon File # A103383
6170 Tisdall St., Vancouver BC V5Z 3N4 Submitted by: Gordon Richards

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Sample gm
M57	.56	11.77	5.16	47.0	51	11.9	8.7	420	2.19	4.4	.5	20.6	2.3	25.9	.11	.25	.34	56	.51	.112	9.6	21.3	.45	275.3	.081	1	1.01	.013	.09	2.4	2.5	.06	<.01	26	.1	.02	3.9	30
STANDARD DS3	8.87	123.79	35.27	149.6	284	34.2	11.9	754	3.02	29.5	5.6	19.7	3.8	25.1	5.47	4.57	5.34	76	.51	.091	16.8	183.1	.57	163.4	.082	3	1.66	.032	.15	3.6	2.5	1.03	.02	248	1.1	1.06	6.1	30
STANDARD G-1	.92	1.46	1.82	38.9	10	4.0	3.5	478	1.57	.5	2.3	<.2	4.9	56.6	<.01	<.02	.16	35	.47	.092	6.8	12.1	.47	223.8	.118	2	.75	.047	.42	2.1	1.3	.30	<.01	<5	<.1	<.02	4.4	30

GROUP 1F30 - 30.00 GM SAMPLE LEACHED WITH 180 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 600 ML, ANALYSED BY ICP/ES & MS.
UPPER LIMITS - AG, AU, HG, W, SE, TE, TL, GA, SN = 100 PPM; MO, CO, CD, SB, BI, TH, U, B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
- SAMPLE TYPE: SILT SS80 60C

DATE RECEIVED: SEP 26 2001 DATE REPORT MAILED: Oct 9/01 SIGNED BY..... D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716
(ISO 9002 Accredited Co.)

GEOCHEMICAL ANALYSIS CERTIFICATE

Richards, Gordon File # A103382
6170 Tisdall St., Vancouver BC V5Z 3N4 Submitted by: Gordon Richards

SAMPLE#	Au* ppb
M53	1.8
M54	3.9
M55	9.3
M56	3.4
RE M56	3.3
STANDARD DS3	22.3
STANDARD G-1	1.2

AU* BY ACID LEACHED, ANALYSIS BY ICP-MS. (30 gm)
- SAMPLE TYPE: SOIL SS80 60C
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: SEP 26 2001 DATE REPORT MAILED: Oct 5/01 SIGNED BY..... D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716
(ISO 9002 Accredited Co.)

GEOCHEMICAL ANALYSIS CERTIFICATE

Richards, Gordon File # A103384

6170 Tisdall St., Vancouver BC V5Z 3N4 Submitted by: Gordon Richards

SAMPLE#	Au* ppb
SI	<.2
M50	15.9
M51	12.5
M52	23.4
M66	.7
M67	<.2
M68	.3
RE M68	<.2
STANDARD DS3	22.3

AU* BY ACID LEACHED, ANALYSIS BY ICP-MS. (30 gm)
ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB
- SAMPLE TYPE: ROCK R150 60C
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

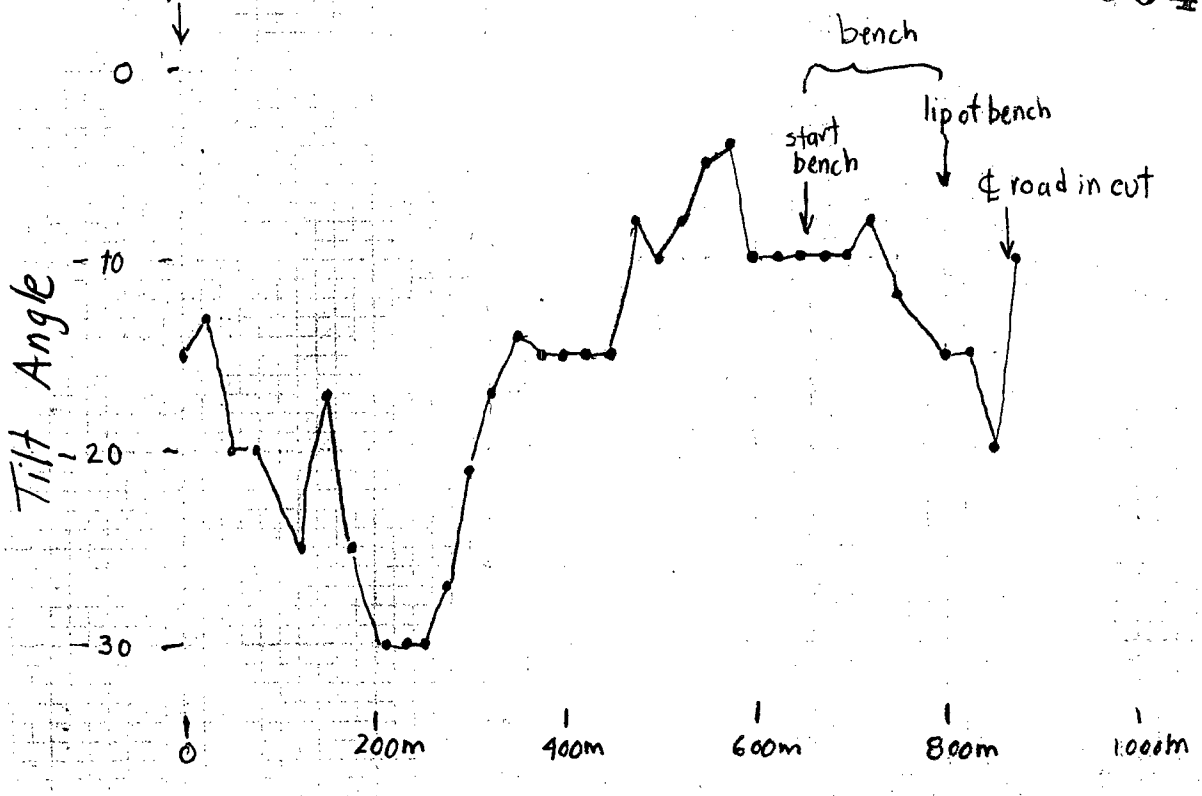
DATE RECEIVED: SEP 26 2001 DATE REPORT MAILED: Oct 5/01 SIGNED BY..... D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

RUN RUN

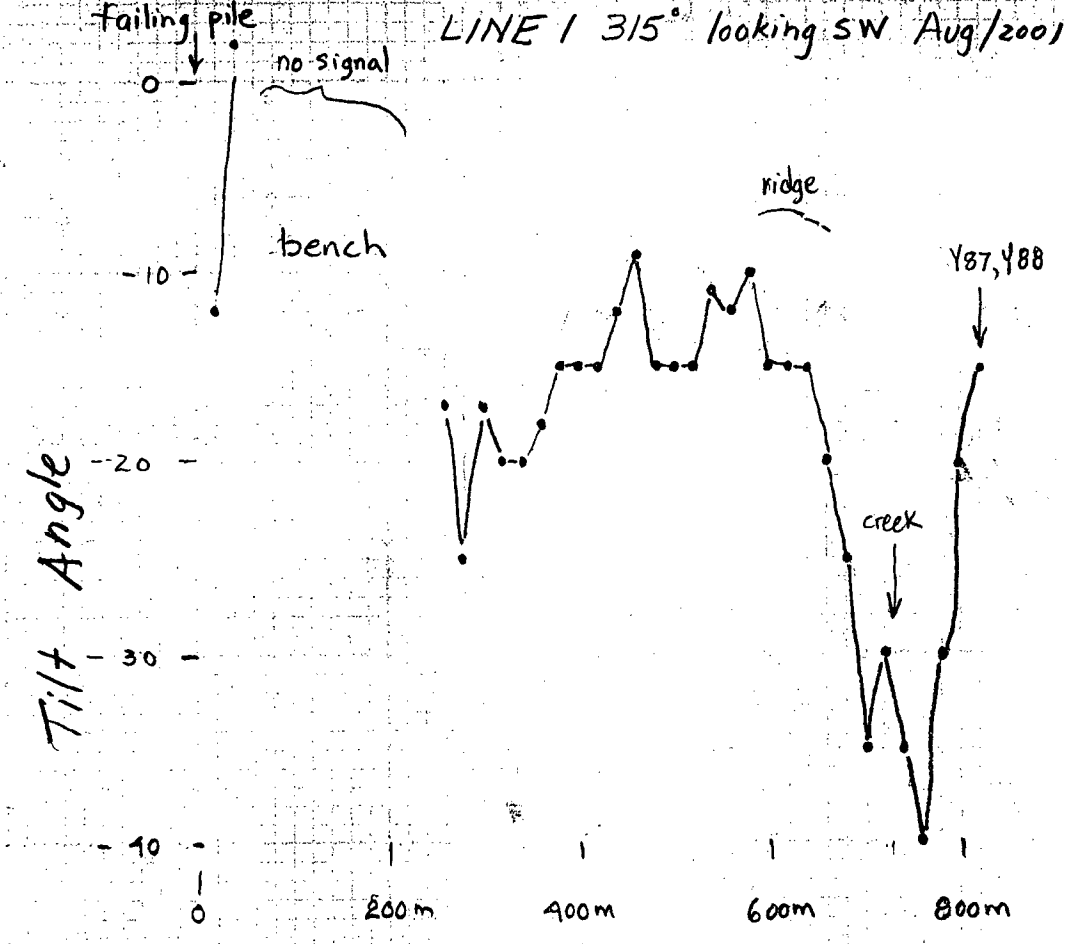
Data FA

RUM RUN PROPERTY Scroggie Creek YT
105 O/1,2 115J/15,16
GOLD GEOCHEMISTRY & GEOLOGY
FIGURE 3.
soil sample
silt sample
rock sample
20 ppb Au
Y50 sample number
< 10 ppb Au
≥ 10 ppb Au
≥ 10 ppb Au
Gr - granite
peg - pegmatite
gn - gneiss
sch - schist
QMS - quartz-muscovite schist
outcrop + foliation
placer mining tailing piles
back limit old creek bench
094250
Initial Map for report of Jan 27, 2001
Addended Oct 30, 2001
Scale 1:10,000
Location of samples + oc by hipchain, compass & topo map
feet
0 500 1000 2000 3000 4000 5000
meters
0 100 200 300 400 500 1000 1500
Jan 27 2001 G.R.
pegmatite
Cabin Creek
Scroggie Creek
Mariposa Creek
Gr
gn
QMS
3500
3000
2500
2000
2200
2800
3400

LINE 2 045° looking NW Aug/2001

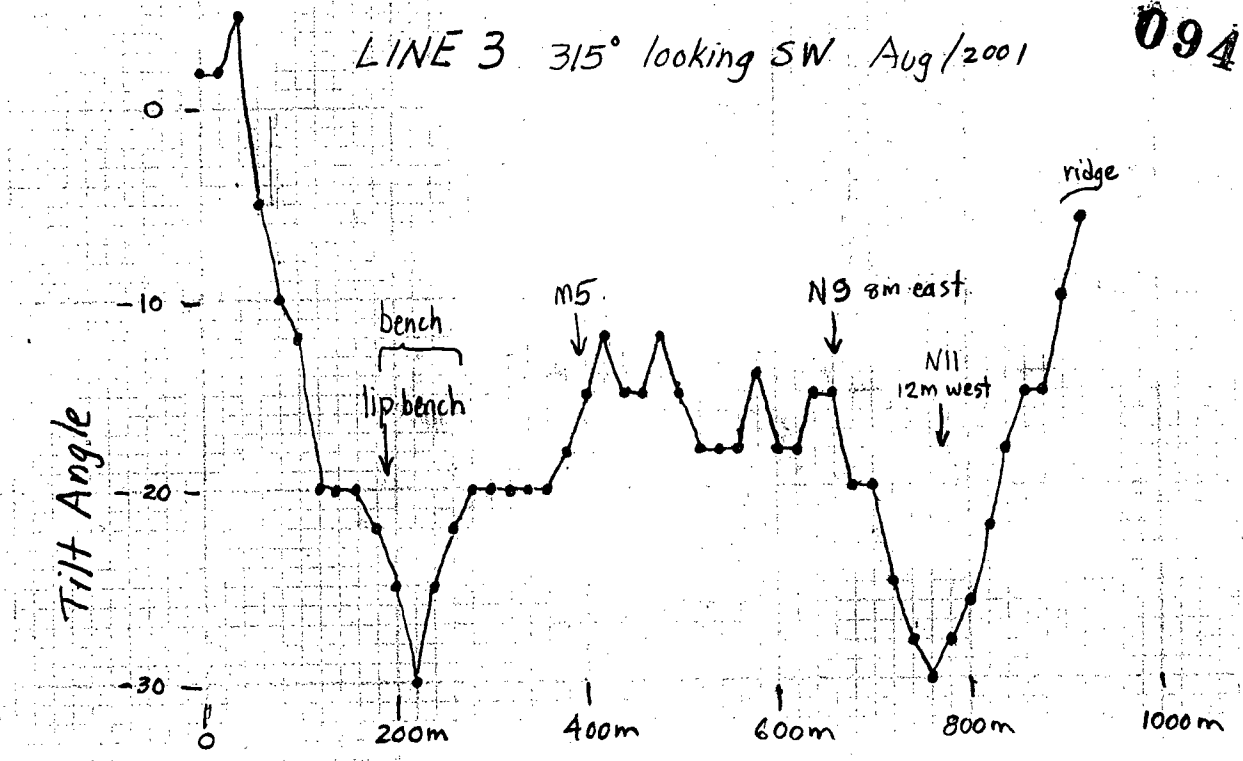


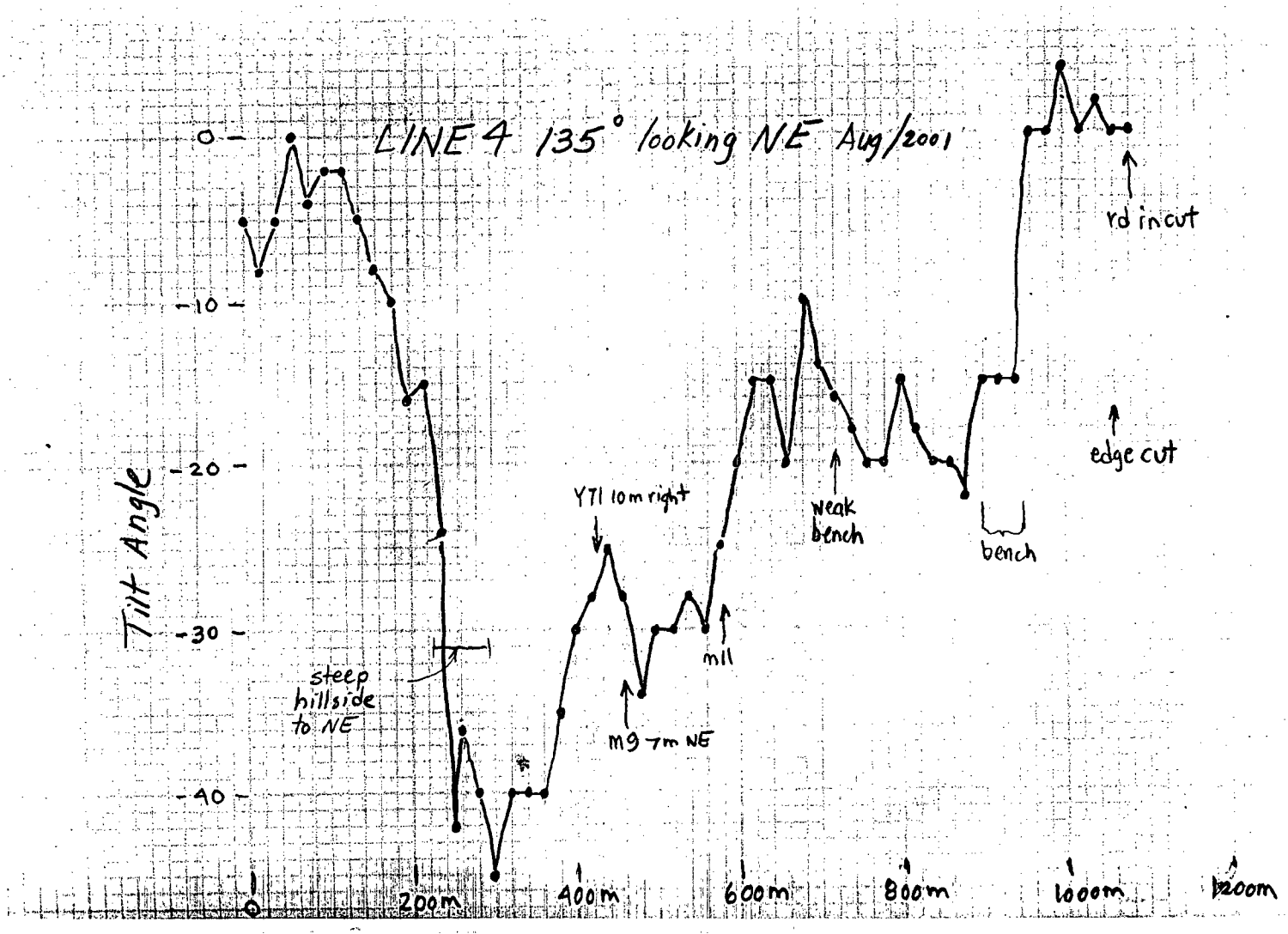
LINE 1 315° looking SW Aug/2001



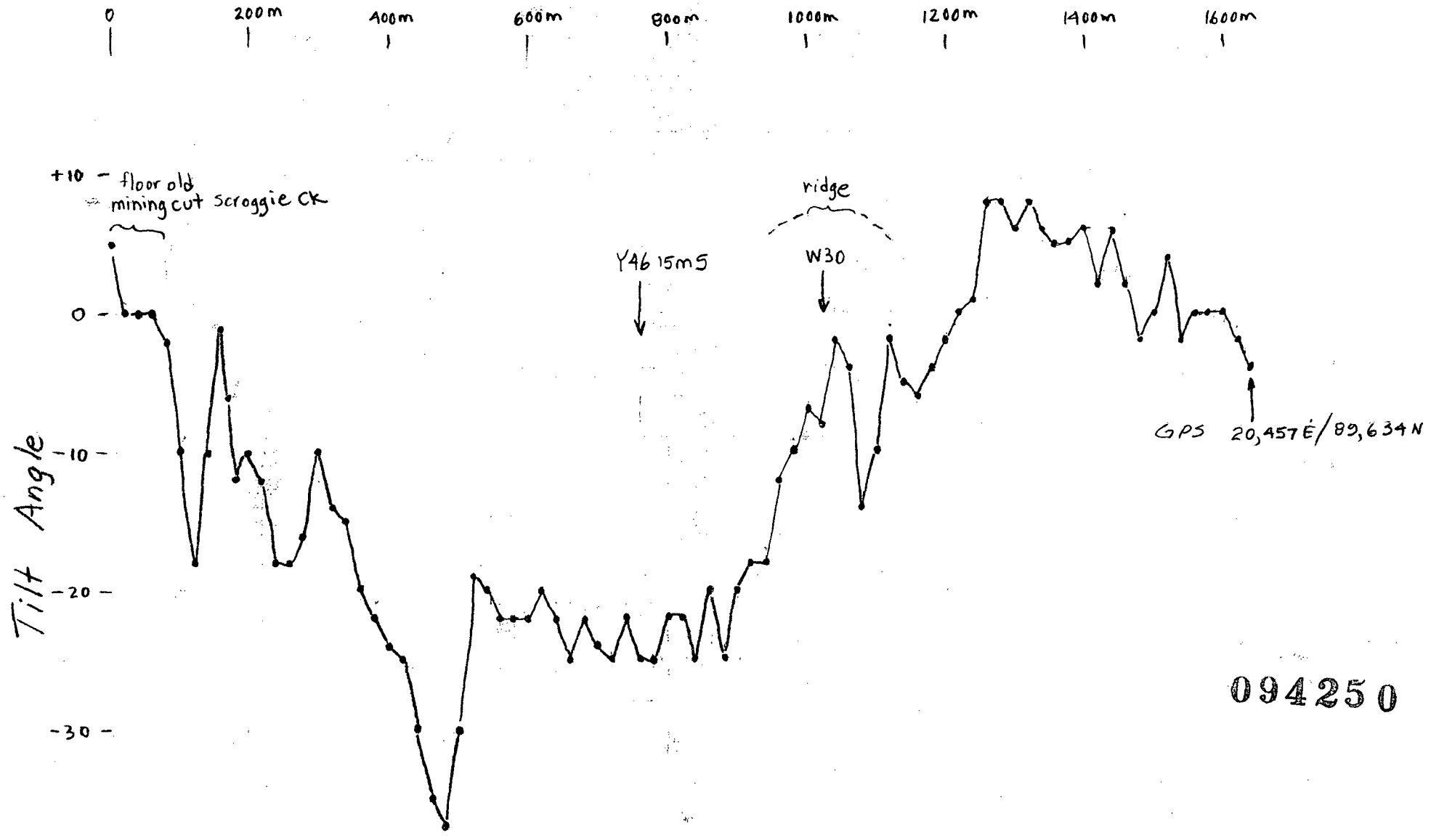
094250

09425





LINE 5 315° looking SW Aug/2001



094250