#### GEOCHEMICAL / GEOLOGICAL REPORT

#### on the

#### **RUM RUN PROPERTY**

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

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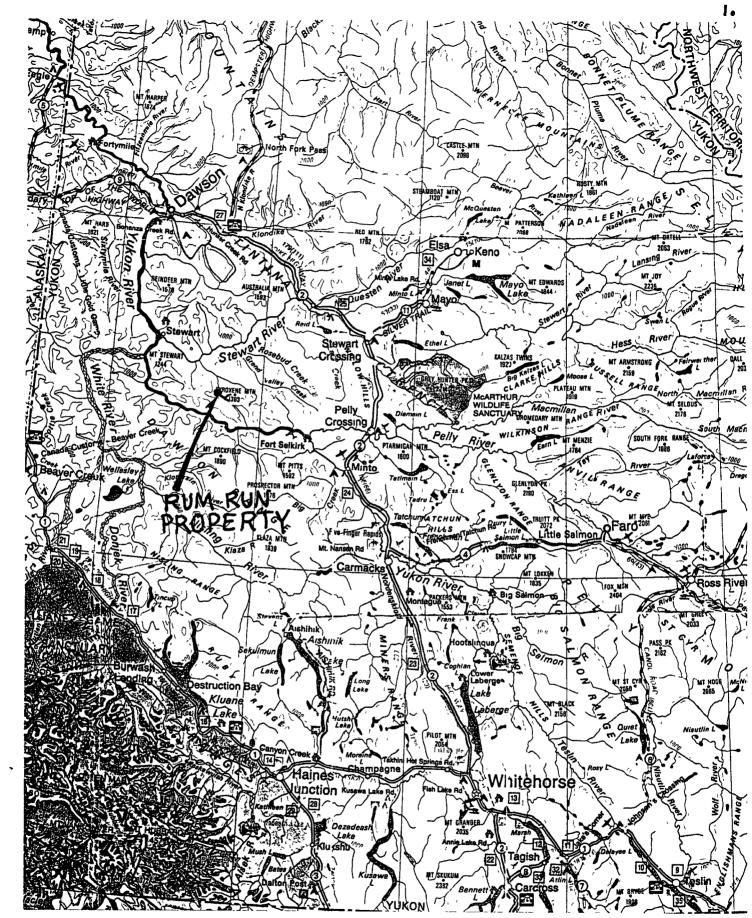
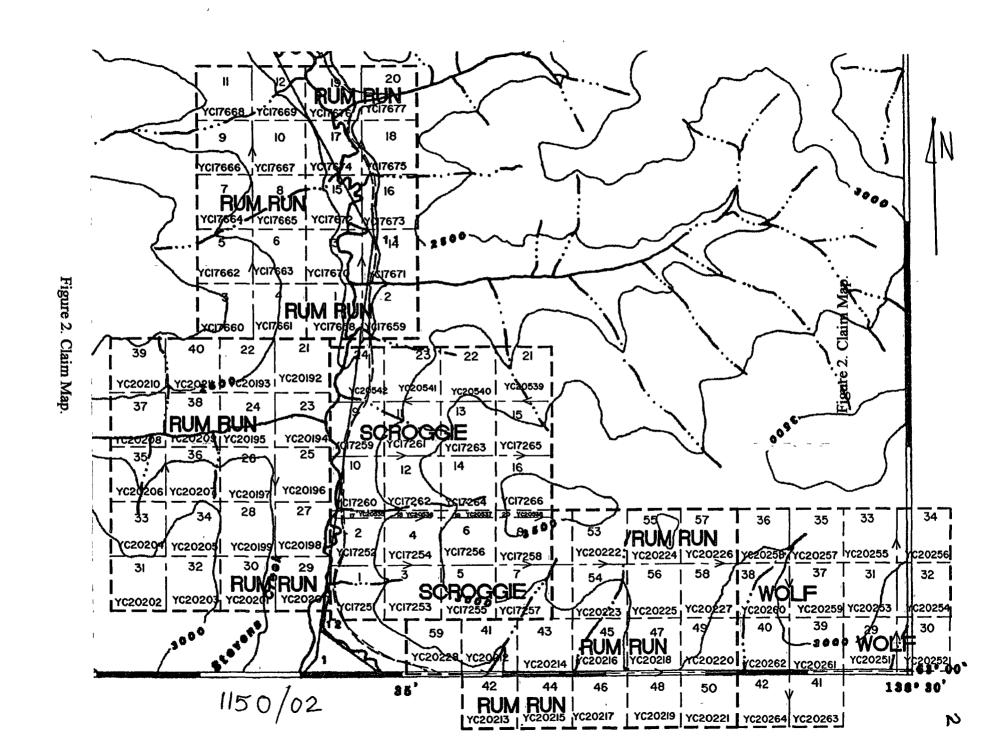


Figure 1. Property Location



#### LOCATION AND ACCESS.

The claims are located 70 km south of the Dawson City airport along Scroggie Creek on map sheets 1150/1 & 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 1150/02 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
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#### 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 ±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 quartzofeldspathic 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. Angular 1/2 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

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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.

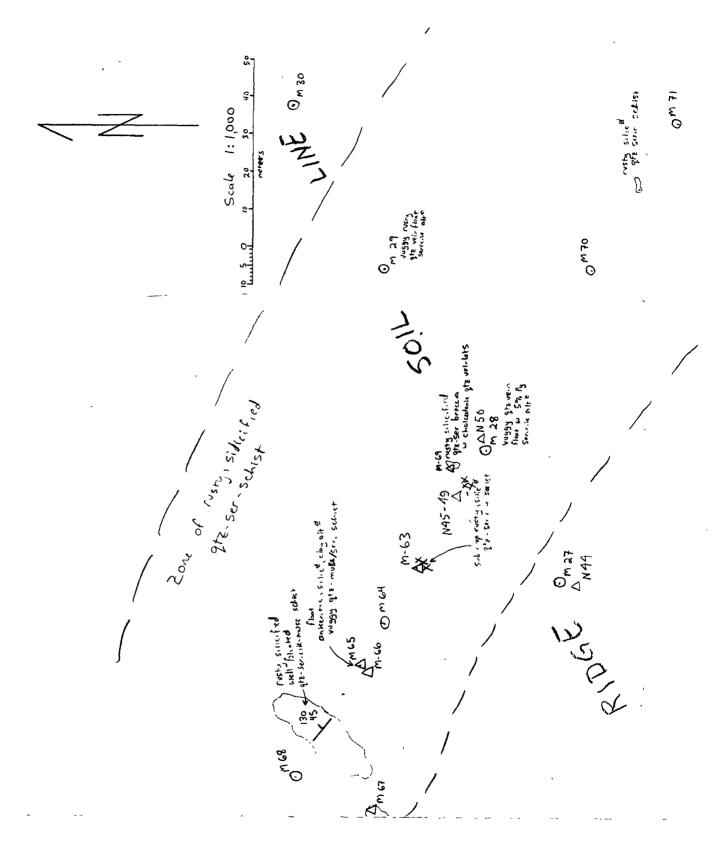


Figure 4. Detail of Ridgeline Sampling near M28.

#### OMS 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 ≥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,

Mith

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

Official Mark Canadian Olympic Association



# SIFTON AI

P.O. BOX 5419 HAINES JUNCTION, YUKO PH: (867) 634-2916 FAX: (86 GST #102 779 360

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GST PAYABLE:		28.9
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## **SIFTON AIR**

P.O. BOX 5419 HAINES JUNCTION, YUKON YOB 1L0 PH: (867) 634-2916 FAX: (867) 634-2034 GST #102779 360

DATE: Aug 2	7/01	_ AIRCRAFT TY	/PE: <b>CESSN/</b>	A C-206
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RICHARDS, GORDON

6170 Tisdall St. Vancouver, BC V5Z 3N4

Inv.#: A102165 Date: Jul 26 2001

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

Project: RUM RUN

Samples submitted by Gordon Richards FILE # A102165, A102166 & A102167 - UNIT PRICE REFLECTS 10% DISCOUNT

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RICHARDS, GORDON

6170 Tisdall St. Vancouver, BC V5Z 3N4 Inv.#: **A103381** Date: Oct 10 2001

Run Run

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

Samples submitted by Gordon Richards FILE # A103381 TO A103384 - UNIT PRICE REFLECTS 10% DISCOUNT

COPIES 1

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

#### 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.

#### **APPENDIX**

## **GEOCHEM RESULTS**



#### GEOCHEMICAL ANAL SIS CERTIFICATE

Richards, Gordon PROJECT RUM RUN File # A102165 Page 1 6170 Tisdati St., Vancouver BC V5Z 3N4 Submitted by: Gordon Richards

 SAMPLE#	Ma.	Cu	Dh	70	Δn	Mi	٠	140	Fe	Ac		A.,	Th	Se.	Cd	Ch.	04	u	٠	D		~~ <u>~~</u>	Ma		T:	B Al	Na	r			TI	•	Life.	٠	To	Ca S	mole	
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GROUP 1F30 - 30.00 GM SAMPLE, 180 ML 2-2-2 HCL-HN03-H20 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.



### Richards, Gordon PROJECT RUM RUN FILE # A102165

Page 2



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	M-53	2 28 16	73 40 99	76 6	357 7 9 4	0 163	2 78 15 (	6 2 9 5	3 793	1 17	28	1 22	33	16	050 23 9	18 4	33 15	77 04	9 112	2 036	09	< 2 2 0	11	22	22	1 4	67 3 9	;	30		
1	M~54	12 43 22	40 129 64	569 6	155 79 8	7 788	4 05 23 9	9 2 4 4	2 22 5 30	2 1 04	41	56	9	16	061 47 3	8 1	19 24	7 8 01	3 <1 5	9 008	12	< 2 18	07	12	18	10	94 1 6	;	30		
	H-55	14 77 52	88 406 20	533 0	612 7 8 16	2 478	5 87 47 3	3306	3 15 4	0 80	33 1	0 13	16	12	080 25 7	7 98	29 10	2 5 01	9 1 9	6 005	08	< 2 2 2	2 09	05	26	302	14 2 5	i :	30		
J	M-57	87 14	52 8 26	61 7	46 12 4 10	0 361	2635	4 13 5	9 8 1 2	2 9 07	19	10	48	47	061 25	1 26 9	72 20	3 1 10	1 <114	5 008	19	< 2 2 6	14	< 01	22	2	04 4 8	3	30		
	M-58	51 16	51 4 26	612	33 10 6 14	5 339	308 3	2 4 8	3 1 1 6 2	21 06	12	07	80	60	125 6 5	5 19 8	1 32 23	0 4 16	0 <119	7 013	41	< 2 2 9	12	< 01	15	1	02 6 5	i ;	30		
	M-59				258 13 1 10																								30 -	-	
1	M-60	1 07 11	28 11 17	57 3	22 10 9 9	0 218	2 62 13	765	8 6 6 14	1 06	25	19	39	18	041 15 7	7 20 7	53 15	1 7 06	6 115	2 008	10	< 2 1 7	11	< 01	9	3	04 4 2	? ;	30		
	H-64	4 16 14	48 30 18	57 1	77 8 1 3	9 141 :	2 70 11 9	9 1 2 3	39513	35 09	24	1 47	42	10	060 19 6	5 20 4	29 20	2 3 02	7 <112	5 018	80	< 2 1 9	09	08	16	10	08 4 5	;	30		
ĺ	M-68	3 22 14	90 34 51	57 0	207 9 3 4	4 106	4 14 17 2	2 13 3	3 13 8 4	1 09	38	9 45	42	04	060 25 3	3 19 5	13 12	4 0 02	7 <121	7 064	05	< 2 18	06	27	41	7	09 5 2	: :	30		
	H-70				424 12 4 5																								30		
	H-71				367 8 5 5																								30		
	M-72				46 16 6 7						•																		30		
	STANDARD DS3	9 17 124	81 133 51	153 1	270 34 7 11	2 785	3 08 29 2	2 5 9 16	3 3 6 20	1 5 19	5 05	5 20	75	52	095 15 8	193 7	57 14	3 2 08	216	4 029	17	37 30	1 04	02	222	111	04 6 0		30		

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



m ilnm

Data A FA



### Richards, Gordon PROJECT RUM RUN FILE # A102165

Page 3



SAMPLE#	Мо	Cu	Pb	Zn	Ag	Ni	Co	Mn F	e As	IJ	Au	Th	Sr I	Cd SI	) Bi	٧	Ca	P L	a Cr	· Mg	Ba	Ti	B Al	Na	K	w Sc	m	S Hig	Se	Te	Ga Sa	mple	
	ppm	ppa	ppm	ppm	ppb	ppm	ppm	ppm	% ppm	ppm	ppb p	ipm j	ppm p	pm pp	n ppm	ppm	¥	% pp	а ррп	n %	ppm	¥ ;	ppm %	3	X pp	a ppa	ppm	% ppb	ppm	ppm	ppm	gna	
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M-73	1 42	17 69	15 39	44 4	76	15 8	63	188 2 5	7 10 3	1.4	317	1 2	90	02 2	9 21	48	20	037 22 1	8 42 8	8 45 2	287 5 (	038	<1 1 28	017	13 <	223	07	05 14	4	20	5 3	30	
M-74	1 32	21 98	19 63	109 7	39	12 1 2	1 3	691 4 5	5 14 7	24	3 0 14	0 2	46	05 4	5 22	23	20	049 21	1 25 1	64 1	175 0 (	059	<1 1 76	012	07 <	2 2 3	07	05 9	9	14	4 5	30	
M-75										1													<1 1 55										1
M-76																							1 2 28										
M-77	2 60	25 73	83 74	50 4	171	23 3	6 1	207 3 7	6 9 6	25	80 8 24	7 9	79	08 3	1 1 5 57	26	24	058 59	B 53 6	6 33 4	455 1 (	034	1 85	078	16 <	2 38	09	28 23	2 2	11	4 0	30	
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																							<1 2 17										· ·
M-82	1 08	24 72	11 15	41 2	3/0	8 5	58	381 2 3	94 4 7	5 :	32 4	1 2	1 4	11 2	) 21	45	39	034 1/	2 21 2	2 3/ t	69/4 (	011	1 1 15	007	22 <	2 2 4	09 <	01 21	. 2	02	4 2	30	
M-83	£E.	20 EC	104 74	204 4	767	10.0	9.6	775 A 1	0 40		25 4		7 1	55 2	5 EA	65	24	060 19	n 20 3	3 83 3	266 1 4	017	<1 1 93	005	17 -	2 6 7	04 ~	01 20		ΩF	0.4	20	
M-84			-																				<1 1 70										
																							1 2 21										
n-05 M-86																							1 3 08										į
																							1 1 92										Î
11-07	1 44	30 31	10 /	UL 1	•	20 ) 1		72, 0	~ , ,									ULJ 10			JOE 7 1	VJ1	1 1 72	011			0/ -	01 10	,	٧Z	0 7	30	
H-88	55	26 18	9 70	62 2	57	58 9 1	4 9	638 3 2	4 5 3	8	566	8 6	1 4	01 2	3 15	79	89	143 28	B 115 1	1 1 61 7	708 8	152	1 1 76	020	43 <	2 6 3	19 <	01 15	5	< 02	7 5	30	
RE M-88																							2 1.75										1
N-1	1 48	17 58	6 37	72 7	54	14 7 1	1 0	520 2 7	2 3 9	7 :	61 3	1 3	2 5	11 2	6 09	60	80	108 13	7 28 9	9 69 4	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 (	2 3 6	5	95 2	2 5 3	2 2	07 2	5 07	70	76	122 12	4 27 6	66.3	381 7	077	1 1 38	020	23 <	2 4 7	80	01 21	. 6	< 02	61	30	ļ
N-3	2 41	12 66	5 72	58 6	27	10 5	68	327 2 8	2 4 3	4	912	3 20	6 2	05 2	4 08	72	57	066 9	2 24 5	5 68 3	198 7	097	1 1 35	014	27 <	2 3 0	10 <	01 12	7	02	73	30	
N-4	2 27	16 36	7 92	57 2	30	13 9	8 4	284 2 8	0 53	4	422	7 28	B 0	05 2	3 12	71	48	063 10	2 32 9	9 62 2	246 7 (	880	1 1 43	014	14 <	2 2 9	07	02 14	5	< 02	74	30	
N-5	1 78	29 25	7 66	56 7	79	13 9 1	0 1	610 2 8	2 5 1	1 3	7 1 3	6 3	20	06 3	2 10	66	72	078 22	7 29 1	1 57 5	528 1 (	066	1 1 54	014	10 <	262	06 <	01 40	6	02	60	30	
N-6	2 10	15 30	7 74	59 8	18	12 3	88	384 2 7	5 5 4	5	702	7 2	7 4	05 2	7 10	68	43	067 11	2 27 4	4 60 3	349 4 (	085	1 1 41	015	14 <	2 3 3	07 <	01 13	2	< 02	6 5	30	
																							1 1 60										
N-8	1 59	14 02	7 29	50 9	34	10 9	63	282 2 2	8 4 6	5	622	2 4 2	71	08 2	7 11	58	58	042 10	3 27 3	3 48 3	335 7	068	6 1 20	018	08 <	225	06	02 15	2	02	5 6	30	l
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N-11																							1 1 51										
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N-13	83	16 86	6 50	52 2	28	13 9	9 0	334 2	2 5 1	. 6	24 3	0 2	8 2	U6 2	9 10	50	46	U66 11	1 26 5	5 47 2	232 0 (	070	1 1 07	014	08	2 2 7	06 <	01 14	2	02	4 7	30	
W 14	20	46 40	1 20	04.0	16	16 2 2	)	025 5 7	ıc 7		2	E 2	7 6	na v	1 - 02	115	00	210 10	c 17 9	2 2 2 2 2	ED2 N -	222	-1 2 11	011 1	20 -	2 1 6	20 -	م ،			٠,	20	
N-14																							<1 3 16 <1 1 49										
N-15																							<1 2 47										İ
N-16 Standard DS3	_																																
 31ANDARD 033	7 Z3 .	150 50	33 22	100 0	213	33 0 1		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	. 21 0			, o 2:	, - 3	-J J 0		- 10	JE.	30E 1)	100 4	. 31 1	1701	001	1 1 03	030	15 3		1 1/4	UZ ZZV	13	1 02	0 2	30	

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

 $\omega_{r}$ 

Data\_\_\_\_\_FA \_



#### Richards, Gordon PROJECT RUM RUN FILE # A102165

Page 4



SAMPLE# Mo Cu Pb Zn Ag Ni Co Mn Fe As U Au Th Sr Cd Sb Bi V Ca P La Cr Mg Ba Ti B Al Na K W Sc Tl S Hg ppm	Se Te	e Ga Sample
I have been blank been blanken blanken blanken blanken blanken blanken and blanken a blanken about a blanken b	ppm ppn	n ppn 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 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		7 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		1 4 6 30
		4 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	155 30
N 00	2 0-	, , , , , , , , , , , , , , , , , , , ,
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		7 5 5 30
REN-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		3 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		
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	15105	
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	5 4 8 30
		13830
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	3 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	3 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	2 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	3 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	2 1 8 30
REN-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	2 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	

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



#### 12 Accredited Co.)

#### GEOCHEMICAL ANALYSIS CERTIFICATE

44

Richards, Gordon PROJECT RUM RUN File # A102166
6170 Tisdati St., Vancouver BC V5Z 3N4 Submitted by: Gordon Richards

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.

Data\_FA\_

#### GEOCHEMICAL ANALISIS CERTIFICATE

#### Richards, Gordon PROJECT RUM RUN File # A102167 6170 Tisdail St., Vancouver BC V5Z 3N4 Submitted by: Gordon Richards

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	SAMPLE#	Мо	Cu	70	Zn	Ag	N1	Co		91	A5			Th		Cd			. V C	_	P La		•		Ti					Sc			Ť			Ga Sa	•		
		bbu	bba	ppn	- bbu	ppo	bba	bbm	bbm		ppm	- mdd	ppo	haban	- pps	bba t		Dix	ppm	*	* hha	- bhs	•	bbm	\$ p				- ppii	bhu	pb#	- A D	<del></del>	Dhm	hhu	bbu			
			00.40	05.04		7100			~	77	20.4		00.4		2 2	44.2	e2 2	M 67	2 - 0			£0.7	A1	ca 2	000		00 01				- 00	20 1			22		20		
	••		20 42				-																																
			6 23																					178 3			25 07												
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			14 49	•••				-													-			87 0		-	36 01	-			**	11	-			1 4			
	M 67	2 73	4 57	13 49	44 1	22	28	9	31 1	20	78	10	3	6 4	63	03	09	2 18	3 < 0	1 00	7 9	46 5	01	61 2	009	1	68 00	12	? 7	4	02 <	01	⋖5	4 <	02	17	30		
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	M 69	6 31	27 30 3	3525 73	88	24822	4 3	3	25 9	30	71 2	5	47 9	68	18 0	04	39 9	5 59	2 < 0	1 04	1 6 1	80 4	< 01	67 8	020	<1	05 16	1 59	20	l	77 3	80	49 79	853	07	8 6	30		
	N 32	3 36	2 82	12 52	9 4	71	19	5	117	53	8	1	3	3	44 2	03	07	22	4 (	5 00	7	633	02	491 8	003	1	19 06	5 10	14	5 4	< 02 <	01	<5	1 7	02	8	30		
	N-33	12 19	3 87	7 12	19	57	4 3	8	26	35	7	< 1 1	155 6	2	17 3	04	14	14	2 (	1 00	2 9	82 5 •	< 01	128 8<	001	1	10 05	0 0	2 2	1 •	< 02	14	27	11	02	3	30		
	N 34 not received	-	-	-	•	-	-	-	-	-		-		-	-	•	•	-	-	-		-	•	-	•	-	-			-	-	•	-	٠	•	•	-		
	N-35	2 03	1 46	3 46	52 8	18	26	61	634 1	95	10	3	39 3	4 6	68 1	17	80	03	23 1 6	5 12	1 17 6	21 7	48	823 9	002	2	20 03	11	. 8	49	< 02	01	⋖	2 <	02	7	30		
	N-36	2 24	3 32	2 88	9 1	12	4 5	14	268	60	2	< 1	33	5	63 9	04	09	03	6 5	6 00	5 20	85 3	18 1	1517 5	001	1	16 08	3 11	18	13	< 02	04	<5	2 <	02	5	30		
	N-37	13 87	148 49	3 57	74 4	319	8 0	28 8 3	1214 5	01	2 4	3 18	308 O	5 :	147 9	11	72	02	53 4 4	2 04	6 17	17 9 2	2 05	279 3	003	7	30 01	28	3	13 0	07	59 4	40	7	63	17	30		
	N-38	57 70	7 66	15 32	34 1	79	5 7	4 3	650 1	66	2 4	1 1	127 9	26	96 8	01	61	03	16 2 0	0 08	1 11 8	63 9	56	389 7	001	4	22 02	20	15	33	02	03	<5	2	03	10	30		
	N-39	1 75	5 78	2 70	56 O	11	19 5	34 1	1490 5	03	18	2	4 5	15	89 7	12	37	< 02	159 4 (	2 05	1 68	86 7 3	3 28	532 3	101	8 1	05 02	3 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 6	4 00	3 8	83 1	36	645 1<	001	3	13 04	11	1 1 9	9 -	< 02	03	<5	< 1	02	5	30		
	RE N-40	2 40	3 45	2 98	22 0	17	4 7	23	337	76	3	< 1	4 0	2 :	133 7	04	09	< 02	13 1 6	6 00	3 8	84 9	36	654 1<	001	2	13 04	11	18	7 <	< 02	06	<5	1	02	5	30		
	N-41	10 54	2 00	14 19	21 6	17	27	3 0	430 1	17	11	1	15 5	16	69 4	06	32	< 02	814	2 04	1 7 7	51 1	39	530 3<	001	6	18 02	7 17	7 1 0	24	< 02	11	49	1	03	6	30		
	N-42	1 55	1 75	7 03	53 3	15	4 8	61	971 2	41	7	1	76 3	4 1	176 8	06	16	< 02	17 2 7	0 10	8 15 7	41 2	77	991 2	001	12	29 01	2 24	1 2	38	03	09	17	< 1	02	10	30		
	N-43	1 98	60 73	4 07	106 8	34	93	33 9	1745 6	92	3 0	3	76	10	116 1	13	95	< 02	127 5 7	9 06	9 38	27 3 2	2 88	331 9	004	9	39 00	5 34	1 2	26 6	09	05 1	01	2	02	19	30		
-	Ñ 44	1 71	5 37	23 20	96	44	5 3	3	39	79	29	3 6	23	14 4	19 3	03	06	1 33	4 1	2 04	0 25 6	55 1	04	113 6	032	1	64 01	16	5 1 1	15	06	10	⋖5	1	05	15	30		
	N-45	2 79	2 61	65 15	16	452	17	3	28	51	3 2	1	2 0	19	26	< 01	05	99	5 (	1 00	4 15 5	52 7	01	191 2	003	1	05 00	3 09	20	3 •	< 02	06 1	08 2	9 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 < (	1 00	9 12 3	101 2	01	531 8	006	1	11 01:	3 15	3 4	2	04	34	21 7	7 3	31	23	30		
	N-47	6 39	16 09 7	2333 02	5 7	6939	2 5	3	25 5	80	42 1	4	24 6	63	17 5	03	26 11	13 87	5 < 0	1 04	3 13 0	108 7	< 01	109 3	016	1	08 16	87	7 2 0	1	45 2	15 1	27 36	2 2 2	85	8 8	30		
			20 54				_																				08 02	_		_	-	70 2							
	N 49		4 59																								12 00	-			04	17 1	50 €	3 6	44	3 3			
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	N-50	3 92	9 17	232 43	2 3	1005	6 9	9	36 1	26	13 4	2	12 6	28	3 6	01	19	5 61	5 < 0	1 00	6 17 5	131 2	< 01	266 7	004	1	06 00	5 06	3 7	3	02	46 5	24 10	4 9	28	15	30		
	STANDARD DS3		124 19																							-				_									
							2- 7																																

GROUP 1F30 - 30.00 GM SAMPLE, 180 ML 2-2-2 HCL-HN03-H20 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. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns. - SAMPLE TYPE: ROCK R150

#### GEOCHEMICAL ANALYSIS CERTIFICATE



Richards, Gordon File # A103381 6170 Tisdall St., Vancouver BC V5Z 3N4 Submitted by: Gordon Richards

SAMPLE#	Мо	Cu	Pb	Zn	Ag	Ni	Co	Hn	Fe	As	U	Au	Th	Sr	Cd :	Sb	Bi	ν	Ca	Р	La	Cr	Hg		a 1	'n	B #	1	Na	K	W	Sc	п	s	Hg	Se	Te	Ga	Samp1	e	
	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	1 1	pp <b>a</b>	ppn	ppb	ppm p	opm p	pa p	pen p	pm 1	mqc	8	8	ppm	ppm	8	pp	Ø	<b>8</b> p	pm	¥	ž	8	ppm	ppm	ppm	ž	ppb	ppa	ppa	ppm	ç	m	
											. ,																				_										
M13A		15 83																																							
M13B		12 94																																						0	
M13C		12 77 }																																						0	
M58	68	9 19 '	8 50	43 8	51 1	4 5	12 9	770 2	65	3 2	2 '	15	1 7 25	4	05 2	23	08	64	32	045	66	24 7	59	485	6 09	1	115	4 0	10	10	< 2	26	08 -	< 01	9	1	< 02	5 6	3	0	
M59	30	37 08	8 02 1	29 8	23 5	5 2 3	32 9 1	086 6	49	58	10	30	5 9 49	3	04	19	80	146	77	242 3	35 S	68 8	3 07	622	1 14	6	<134	6 0	16	39	< 2 !	10 0	12 -	< 01	14	1	02	16 7	3	0	
																																								•	
M60	65	10 53	8 28	84 8	29 1	9 1 1	13 0	754 3	79	64	4	4 6	3 7 30	0	04 ;	33	11	79	37	064 1	10 6	33 1	1 03	415	9 21	0	123	3 (	08	35	< 2	62	10 •	< 01	12	1	< 02	10 1	3	0	
M61	40	4 78	4 94 1	29 9	10 1	61	19 2 1	008 5	84	4 0	7,	4	4838	3 5	04	13	04	143	66	197 1	18 1	29 5	2 30	929	6 47	3	132	8 (	16 1	42	< 2	10 2	37	02	8	1	< 02	17 0	3	0	
M62	50	38 90	4 77 1	08 1	46 1	4 2 1	14 9	800 4	85	38	3 ;	16	3 1 32	2 2	04	19	05	99	68 •	119	91	27 0	1 68	529	7 31	9	127	6 0	13	92	< 2	49	24	03	11	1	02	12 2	3	0	
RE M62	48	37 03	4 86 1	11 1	48 1	4 2 1	15 2	816 4	94	4 2	3 '	5	3 3 33	3 3	05 ;	21	05	101	68	108	93	27 2	1 78	533	5 32	7	128	2 0	10 1	00	< 2	5 4	26	01	12	1	< 02	12 5	1	5	
M63	80	95 25 1	2 79	96 B	65 1	871	14 2 1	186 3	48	6 2	6	23	2 0 52	21	09 :	23	80	78	55	060	7 5	29 4	81	357	9 08	2	118	2 0	12	12	< 2	58	06	02	11	2	06	90	3	0	
M64	29	9 15	4 07 1	70 4	18 2	703	39 8 1	076 7	88	3 1	5	7	2 6 39	9 6	02	11	03	284	79	100 1	14 7	66 0	4 94	923	6 48	16	<147	0 0	17 2	29	< 2 :	14 9	52	02	7	2	< 02	20 4	3	0	
M65	69	16 87	7 37	55 <b>6</b>	52 2	3 2 1	12 7	461 3	19	69	75	62	4 6 25	0	05 4	44	12	80	37	032 2	20 8	42 7	88	591	3 13	15	117	6 0	09	31	< 2	5 6	11 •	< 01	22	2	02	6 3	3	0	
Y76A	2 50	61 99 9	7 91	85 O	136 2	0 0 1	178	710 3	92	3 3	5 <b>j</b> l	13	2 8 24	3	08 :	33:	180	97	55	128	8 7	38 8	97	537	0 09	9	117	4 0	15	33	< 2	5 7	11	01	25	4	05	8 2	3	0	
Y76B	2 07	24 18	6 31	57 6	34 1	5 8 3	13 1	490 2	84	5 1	5/1·	4 7	3 0 23	3 4	06 :	31(	08	66	42	072	8 7	29 3	69	401	5 09	8	114	3 (	11	11	< 2	38	06	02	29	2	03	5 3	3	0	
STANDARD DS3	•															•																								0	
 STANDARD G-1	1 10	1 70	2 08	41 2	9	4 3	4 1	515 1	63	2	27	< 2	5 7 67	8 <	01 < 1	02	17	35	47	098	68	12 4	50	224	3 11	3	1_7	9 0	47	48	2 6	15	32	01	<5	< 1	02	4 9	3	0	

GROUP 1F30 - 30.00 GM SAMPLE LEACHED WITH 180 ML 2-2-2 HCL-HNO3-H20 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: Of 9/01

Kmkon

852 E. HASTINGS ST.

COUVER BC V6A 1R6

PHONE (604) 253-3158 FAX (604

3-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

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

SAMPLE#	Mo	Cu	Pb ppm	Zn ppm		N1 ppm		Mn ppm	Fe %	As ppm p	-	Au ppb r						V	Ca %	P	La ppm	Cr ppm	Mg %	Ba ppm	Ti % p	B #	11 %	Na %	K W	Sc				Te Ga ppm ppm	
-	56	123 79	5.16 35 27	47 0 149 6	51 1 284 3	11 9 34 2	8 7 11 9	420 2 754 3	2 19 3 02	4 4 29 5 5	5 2	20 6 2	2 3 2	5 9 5 1 5	11 47	.25 4 57	.34 5.34	56 76	. 51	091	1681	183.1	57	163.4 .	.082	3 1.6	56 (	032 .	15 3 6	2.5	1 03	01 26 02 248	.1	.02 3.9 1 06 6 1	30 30
STANDARD G-1	92	1 46	1 82	38 9	10	4 0	3 5	478	57	5 2	3	< 2 4	9 50	56<	.01 •	<.02	.16	35	47	092	68	12 1	47	223 8	118	2 7	75 (	)47	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

ACME ANA TICAL LABORATORIES LTD. (ISC 02 Accredited Co.)

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GEOCHEMICAL ANALISIS CERTIFICATE

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

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	diam track by a by tably 10 one ab	
SAMPLE#	Au* ppb	
M53 M54 M55 M56 RE M56	1.8 3.9 9.3 3.4 3.3	
STANDARD DS3 STANDARD G-1	22.3	

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

M RE GOU! PO Box 270 Whitehorse, Yu.

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852 E. HASTINGS ST.

COUVER BC V6A 1R6

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-1716

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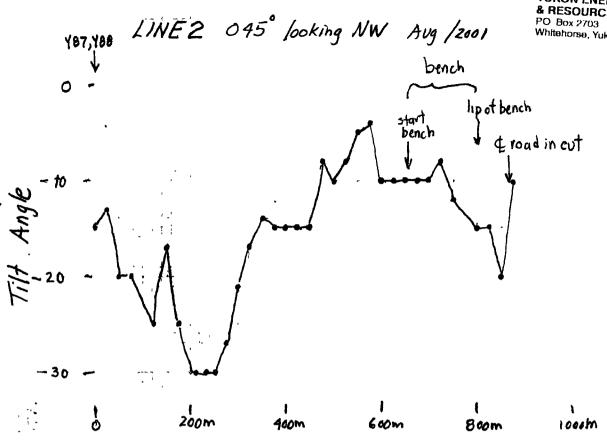
#### GEOCHEMICAL ANALYSIS CERTIFICATE

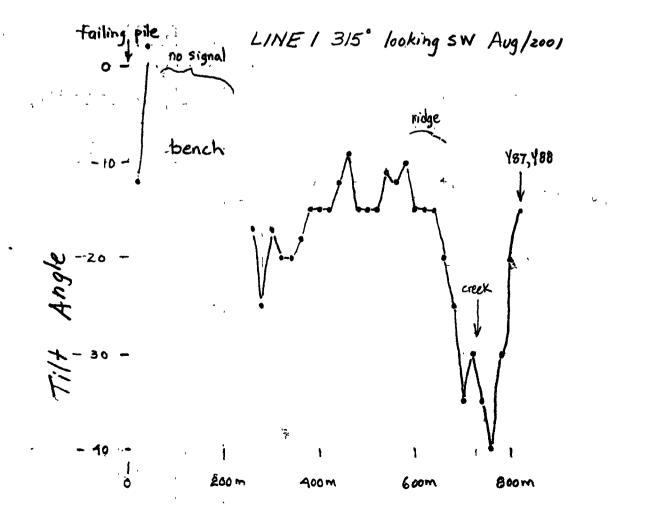
Richards, Gordon File # A103384 6170 Tisdall St., Vancouver BC V5Z 3N4 Submitted by: Gordon Richards

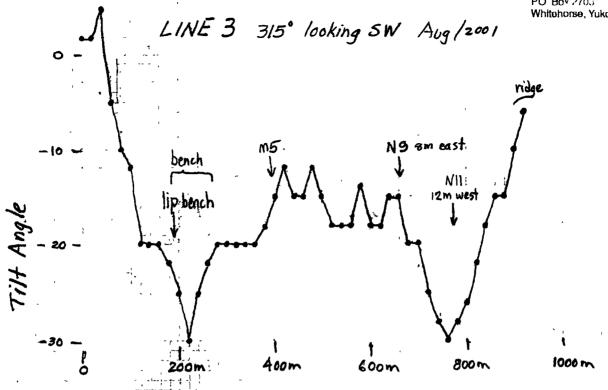
SAMPLE#	Au* ppb
SI	<.2
M50	15.9
M51	12.5
M52	23.4
M66	.7
M67	<.2
M68	.3
RE M68	<.2
STANDARD DS3	22.3

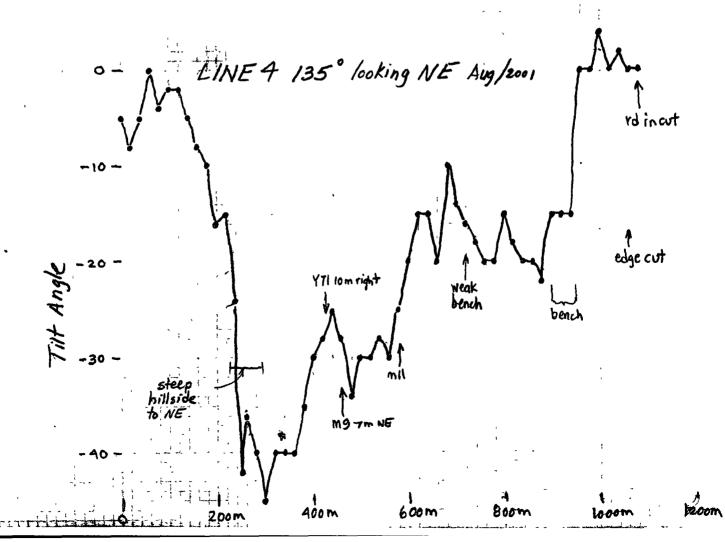
AU\* BY ACID LEACHED, ANALYSIS BY ICP-MS. (30 gm)
ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB
- SAMPLE TYPE: ROCK R150 60C
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

km enn

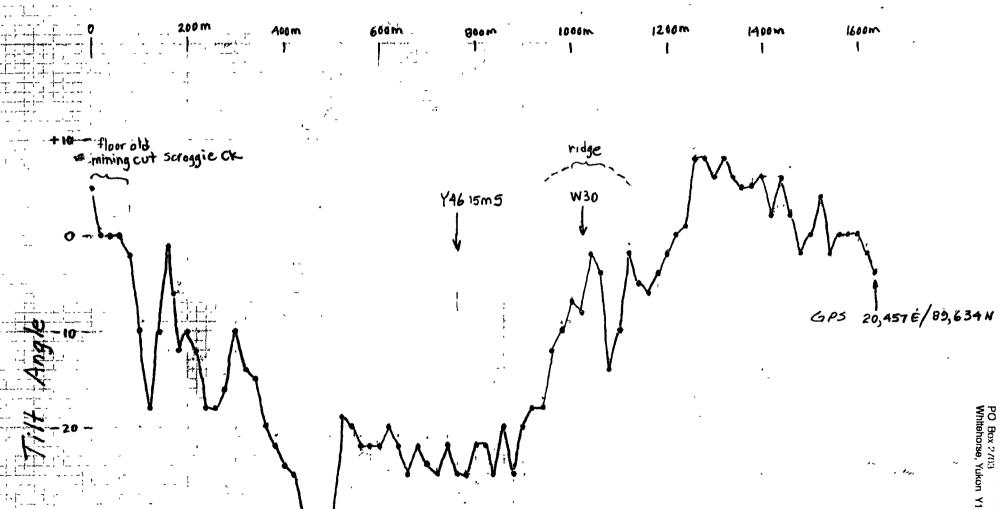




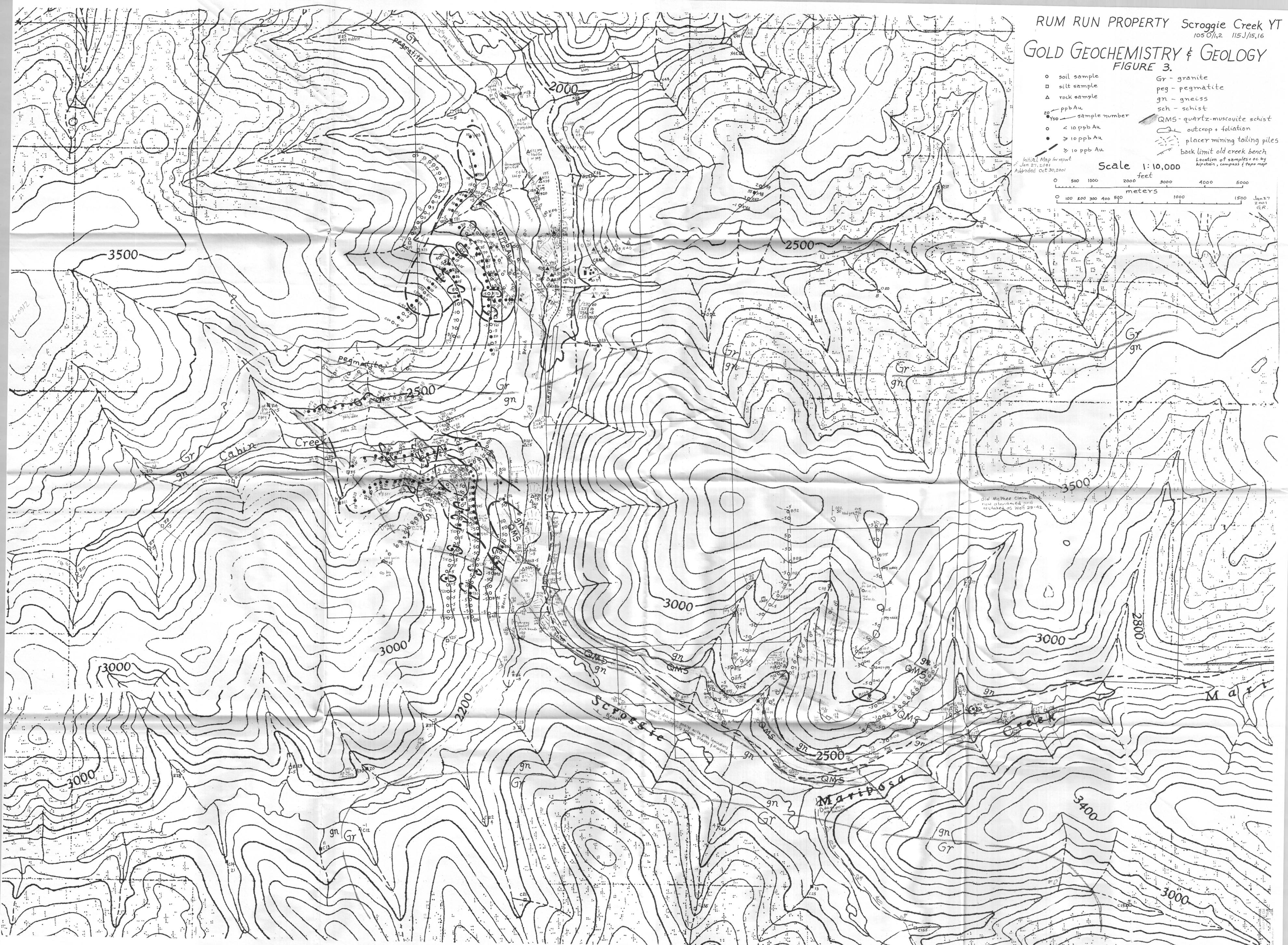




# LINE 5 3150 looking SW Aug /2001 -



O Box 2703



# SCROGGIE CK 2001



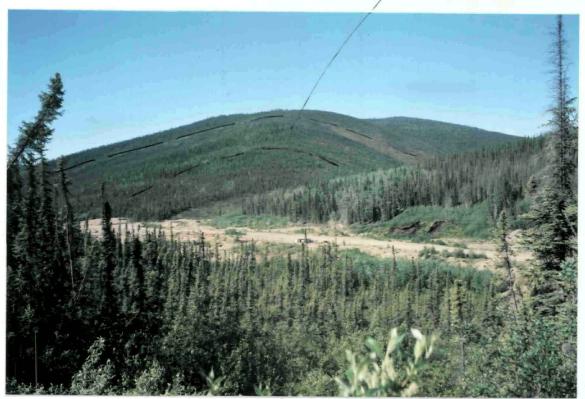
Pit@M13. Distint loessy layer



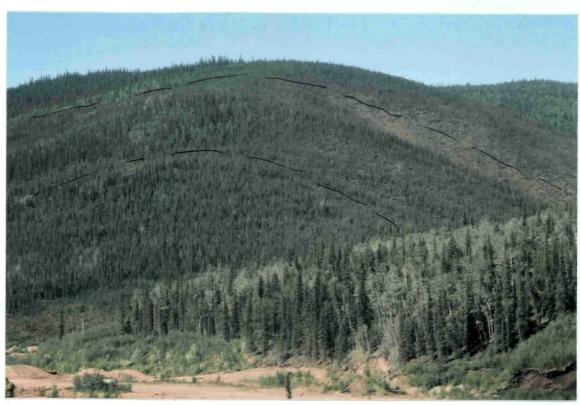
Pito 1764

# SCROGGIE CK 2001

ans zone with Au, As, Bi, Pb,



View looking southwest from camp, op Scraggie Ck. Airstrip visible along Scraggie Ck. Cabin Ck enters from west in middle distance



Close up et above. Airstrip @ bottom photo. Cabin Ck enters scrozgie tram west @ lawer left et photo.