1989 GEOLOGICAL AND GEOCHEMICAL REPORT ON THE BAR 1-11 CLAIMS

Located in the Telegraph Creek Area
Liard Mining Division
NTS 104G/13W
57° 49' 30" ~~57° 51'~~ North Latitude
131° 54' 30" ~~131° 51'~~ West Longitude

-prepared for-
PASS LAKE RESOURCES LTD.
GOLDEN SITKA RESOURCES INC.

-prepared by-
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March 1990

1989 GEOLOGICAL AND GEOCHEMICAL REPORT ON THE BAR 1-11 CLAIMS

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1.0 INTRODUCTION

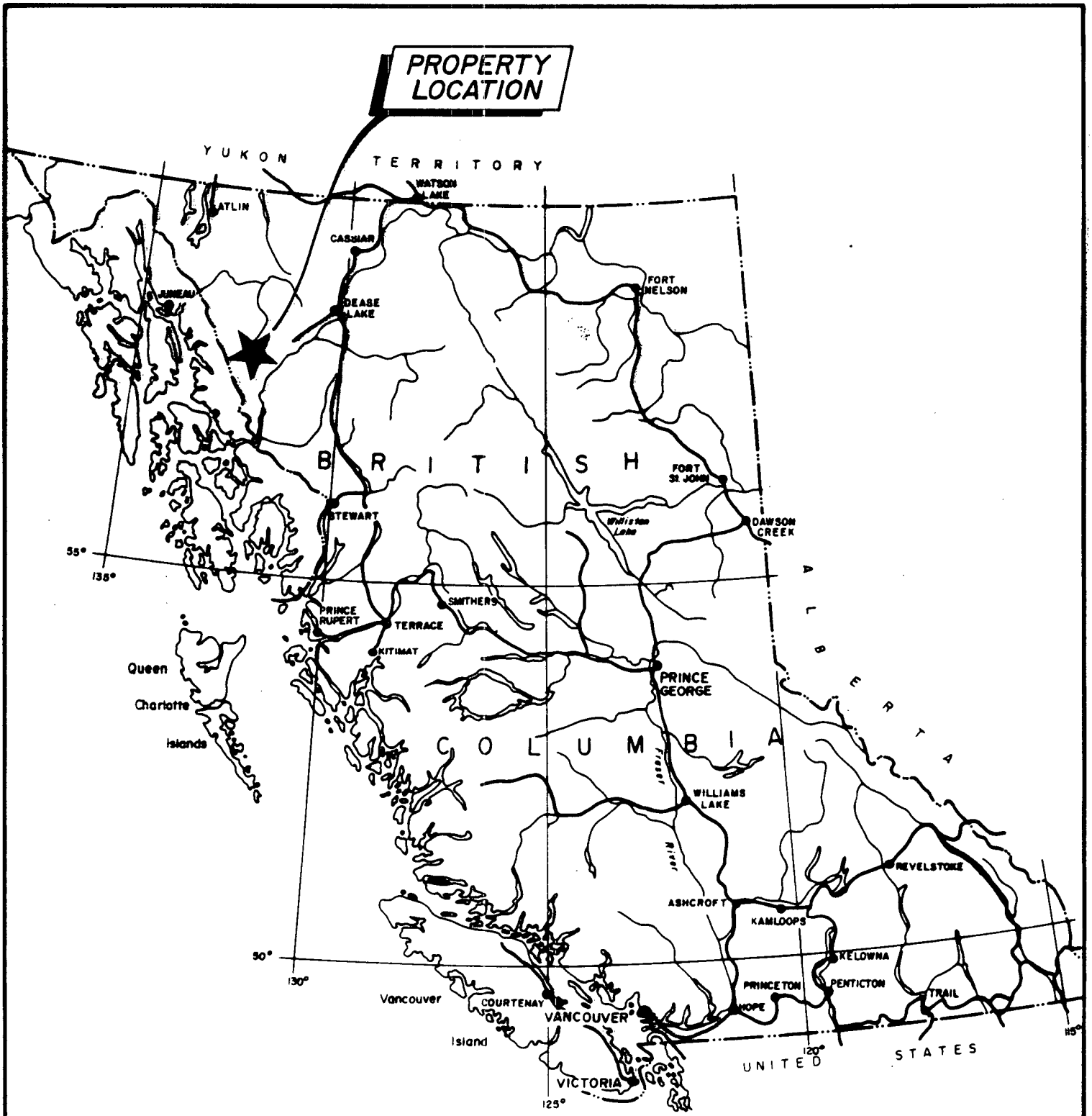
The Bar 1-11 claims were staked in 1989 to cover favourable geology and geochemical anomalies from the National Regional Reconnaissance Survey of the Telegraph Creek - Sumdum map sheets (GSC, 1988).

The claims are located south and west of the Barrington River at a location where the river changes course from an east to south flow direction. The center of the claim block is situated approximately 44 kilometers west-southwest of Telegraph Creek in northwestern British Columbia (Figure 1). The geological similarity to the Galore Creek, Iskut River, Sulphurets and Stewart mining camps to the south and the area's potential for precious metal mineralization have sparked renewed exploration interest throughout the district.

Reconnaissance exploration, consisting of geological mapping, prospecting and silt and rock geochemical sampling, was carried out over the Bar 1-8 claims in August of 1989. Three additional claims, Bar 9-11 were staked at this time. Equity Engineering Ltd. conducted this program for Pass Lake Resources Ltd. and Golden Sitka Resources Inc. and has been retained to report on the results of the fieldwork.

2.0 LIST OF CLAIMS

Records of the British Columbia Ministry of Energy, Mines and Petroleum Resources indicate that the following claims, located in the Liard Mining Division (Figure 2), are owned by Pass Lake Resources Ltd. Separate documents indicate that the claims are held in trust jointly for Pass Lake Resources Ltd. (50%) and Golden Sitka Resources Inc. (50%).



Km 0 100 200 300 400 500 Km

MILES 0 50 100 200 300 MILES

PASS LAKE RESOURCES LTD.

TELEGRAPH CREEK PROPERTIES

LOCATION MAP

BRITISH COLUMBIA

EQUITY ENGINEERING LTD.

DRAWN: J.J.E.	MINING DIV.: LIARD	FIGURE
N.T.S.: 104G/13, 14W	SCALE: AS SHOWN	1
DATE: JAN., 1990	REVISED:	

TABLE 2.0.1

CLAIM DATA

South Bar Group

Claim Name	Record Number	No. of Units	Record Date	Expiry Year
Bar 1	5934	20	Mar.27, 1989	1990
Bar 2	5935	20	Mar.27, 1989	1990
Bar 3	5936	15	Mar.27, 1989	1990
Bar 4	5937	20	Mar.27, 1989	1990
Bar 7	5940	12	Mar.26, 1989	1990
Bar 8	5941	12	Mar.26, 1989	1990
		99		

North Bar Group

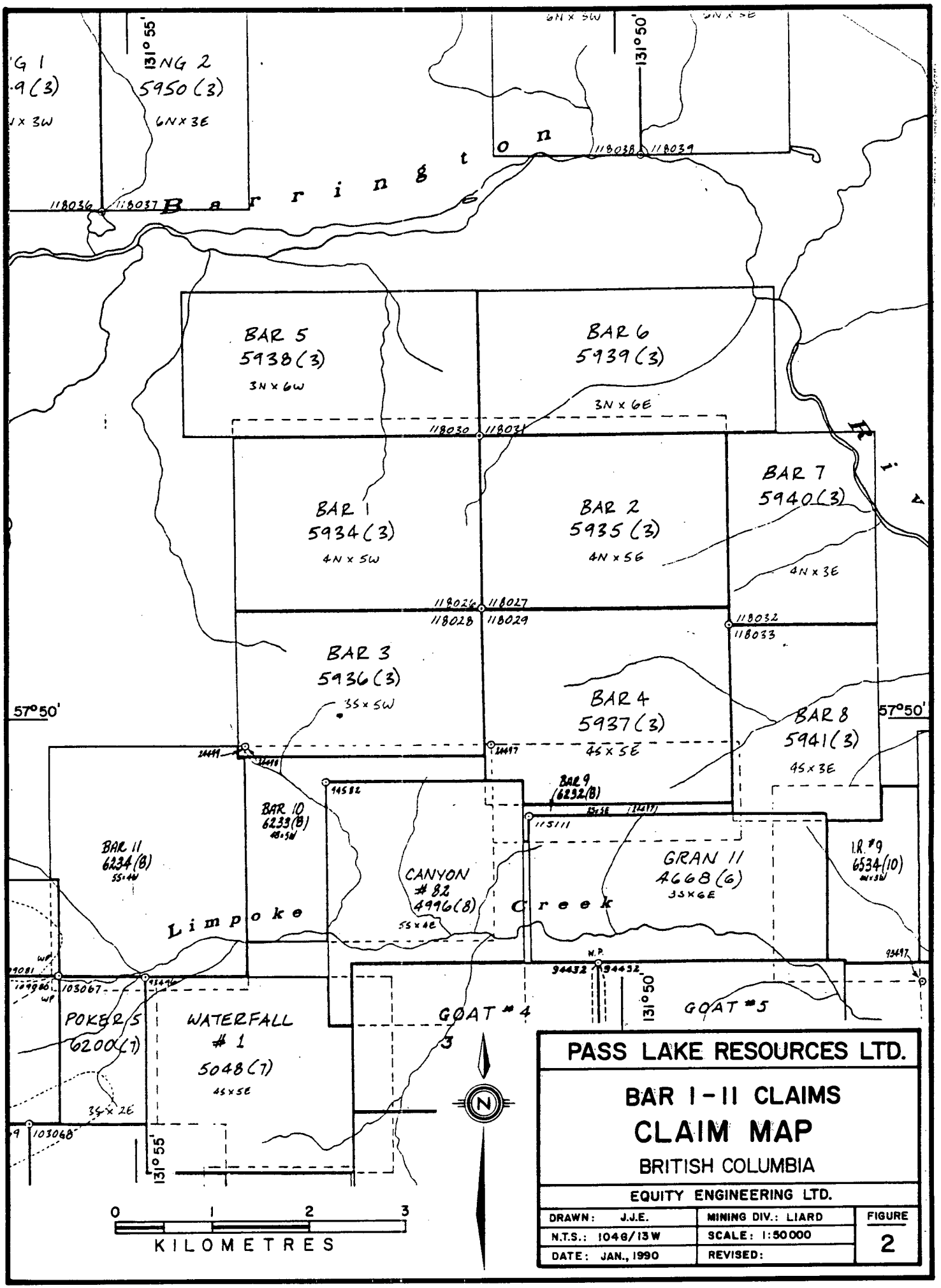
Claim Name	Record Number	No. of Units	Record Date	Expiry Year
Bar 5	5938	18	Mar.26, 1989	1990
Bar 6	5939	18	Mar.26, 1989	1990
		36		

Claims Not Grouped

Claim Name	Record Number	No. of Units	Record Date	Expiry Year
Bar 9	6232	10	Aug.23, 1989	1990
Bar 10	6233	20	Aug.23, 1989	1990
Bar 11	6234	20	Aug.23, 1989	1990
		50		

The positions of the legal corner posts for the Bar 1 to 4 and the Bar 9 to 11 claims were verified by field crews of Equity Engineering Ltd. The legal corner posts for the Bar 5 to 8 claims were not observed during the course of the 1989 exploration program. The southwest corner of the Bar 4 claim overlaps the previously staked Canyon 82 claim.

On August 23, 1989 the Bar 9, Bar 10 and Bar 11 claims were staked to cover open ground on the south side of the existing Bar



PASS LAKE RESOURCES LTD.

BAR I - II CLAIMS

CLAIM MAP

BRITISH COLUMBIA

EQUITY ENGINEERING LTD.

DRAWN: J.J.E.	MINING DIV.: LIARD	FIGURE 2
N.T.S.: 104G/13W	SCALE: 1:50000	
DATE: JAN., 1990	REVISED:	

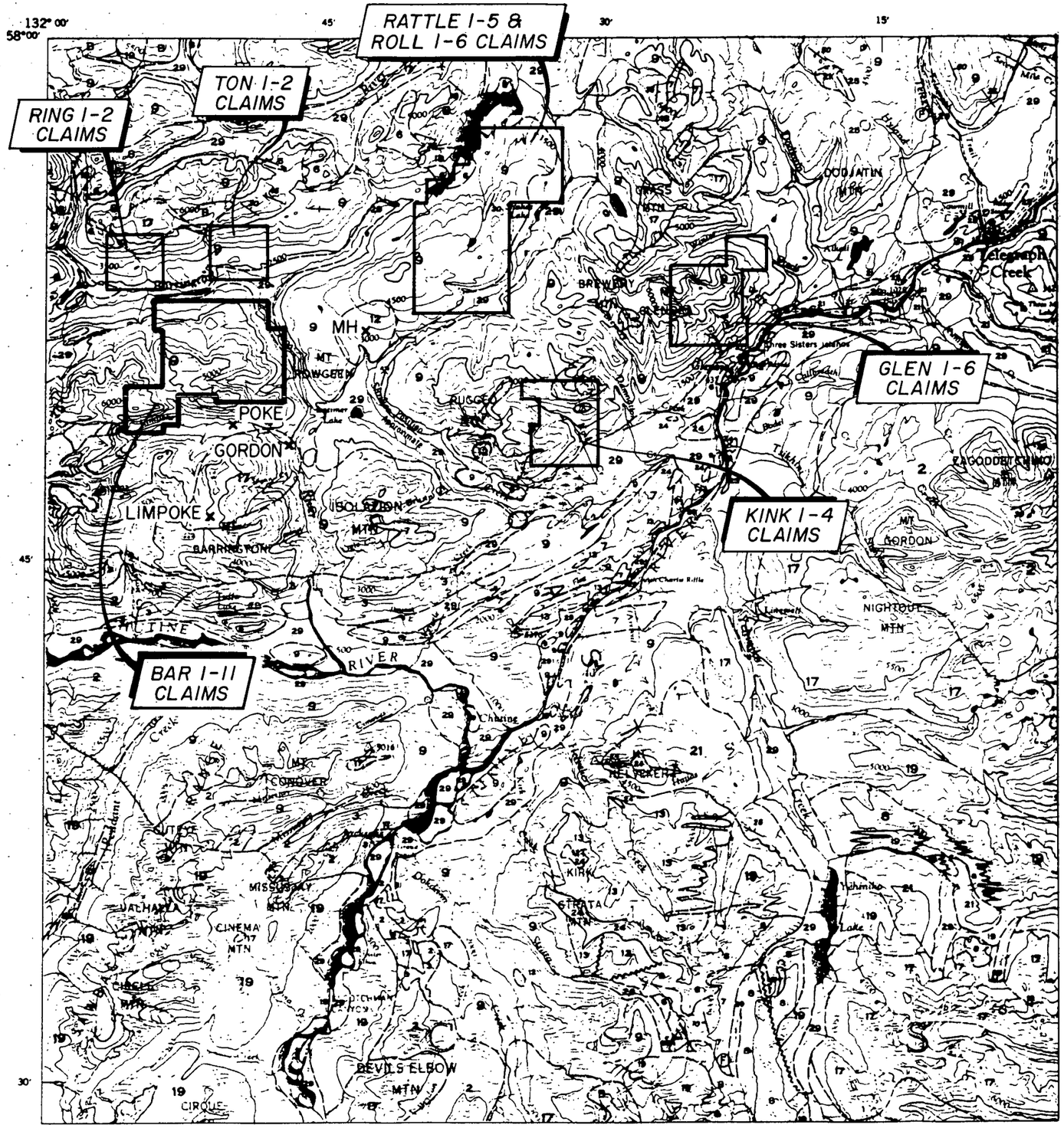
1 To Bar 8 claims. The Bar 9 to Bar 11 claims patially overlap the previously staked Canyon 82 and the Gran 11 claims.

3.0 LOCATION, ACCESS AND GEOGRAPHY

The Bar claims are located within the Boundary Ranges of the Coast Mountains approximately 44 kilometers west of Telegraph Creek in northwestern British Columbia (Figure 1). They lie within the Liard Mining Division, centered at 57° 51' north latitude and 131° 51' west longitude.

A secondary road extends sixteen kilometers south of Telegraph Creek to Glenora on the Stikine River. An access road suitable for four-wheel drive vehicles has been constructed west-southwest from Glenora to the site of Integrated Resources' placer mining camp on the Barrington River approximately four kilometers upstream from its confluence with the Chutine River. In the 1960's, a cat road was built up Shakes Creek from the Barrington River road to the MH iron occurrence, terminating four kilometers east of the eastern boundary of the Bar claims. This cat road would have to be cleared and upgraded before it could be used. Access to the Bar claims, for the 1989 exploration program, was provided by daily helicopter setouts from Integrated Resources' placer mining camp on the Barrington River, a distance of approximately fifteen kilometers.

The Bar claims are crudely bounded on the north and east sides by the Barrington River and by Limpoke Creek on the south. Minor creeks on the property flow in a radiating pattern outward from a main "horseshoe" shaped ridge. This ridge is located on the southern side of the Bar 1 and Bar 2 claims and on the Bar 3 and Bar 4 claims. The "horseshoe" shaped ridge opens to the east and Wet Creek, which occupies the valley, flows east to the Barrington River.



LEGEND

QUATERNARY
PLEISTOCENE AND RECENT

29 — Fluvatile gravel; sand, silt; glacial outwash, till, alpine moraine and colluvium

TERTIARY AND QUATERNARY
UPPER TERTIARY AND PLEISTOCENE

28 — Basalt, olivine basalt, dacite, related pyroclastic rocks and subvolcanic intrusions; minor rhyolite; in part younger than some 26

CRETACEOUS AND TERTIARY
UPPER CRETACEOUS AND LOWER TERTIARY
SLOKO GROUP

24 — Light green, purple and white rhyolite, trachyte and dacite flows, pyroclastic rocks and derived sediments

SUSTUT GROUP

21 — Chert-pebble conglomerate, granite-boulder conglomerate, quartzose sandstone, arkose, siltstone, carbonaceous shale and minor coal

18 — Medium- to coarse-grained, pink biotite-hornblende quartz monzonite

JURASSIC AND/OR CRETACEOUS
POST-UPPER TRIASSIC PRE-TERTIARY

16 — Hornblende diorite

17 — Granodiorite, quartz diorite; minor diorite, leucogranite and migmatite

LOWER JURASSIC

13 — Conglomerate, polymictic conglomerate; granite-boulder conglomerate, grit, greywacke, siltstone; basaltic and andesitic volcanic rocks, peperites, pillow-breccia and derived volcaniclastic rocks

TRIASSIC AND JURASSIC
POST-UPPER TRIASSIC PRE-LOWER JURASSIC

12 — Syenite, orthoclase porphyry, monzonite, pyroxenite

TRIASSIC
UPPER TRIASSIC

9 — Undifferentiated volcanic and sedimentary rocks (units 5 to 8 inclusive)

8 — Augite-andesite flows, pyroclastic rocks, derived volcaniclastic rocks and related subvolcanic intrusions; minor greywacke, siltstone and polymictic conglomerate

7 — Siltstone, thin-bedded siliceous siltstone, ribbon chert, calcareous and dolomitic siltstone, greywacke, volcanic conglomerate, and minor limestone

6 — Limestone, fetid argillaceous limestone, calcareous shale and recrystallized limestone; may be in part younger than some 7 and 8

PERMIAN
MIDDLE AND UPPER PERMIAN

3 — Limestone, thick-bedded mainly bioclastic limestone; minor siltstone, chert and tuff

PERMIAN AND OLDER

2 — Phyllite, argillaceous quartzite, quartz-sericite schist, chlorite schist, greenstone, minor chert, schistose tuff and limestone

1 — Amphibolite, amphibolite gneiss; age unknown probably pre-Upper Jurassic

CENOZOIC
MESOZOIC
PALEOZOIC

SYMBOLS

Geological boundary (defined and approximate, assumed)
Bedding (horizontal, inclined, vertical, overturned) + / ⊥
Anticline
Syncline
Fault (defined and approximate, assumed)
Thrust fault, teeth on hanging-wall side (defined and approximate, assumed)
Fossil locality
Mineral property .15 M
Glacier

SCALE 1:250,000
MILES 0 5 10
0 5 10
KILOMETRES

PASS LAKE RESOURCES LTD.

TELEGRAPH CREEK PROPERTIES
REGIONAL GEOLOGY

LIARD MINING DIVISION, B.C.

EQUITY ENGINEERING LTD.

DRAWN.	N.T.S.	DATE.	FIG. No.
J.J.E.	104G/13,14	JAN., 1990	3

Topography is rugged, typical of mountainous and glaciated terrain, with elevations ranging from 490 meters along the Barrington River to over 1835 meters along an east-west ridge on the Bar 3 and 4 claims. The property, particularly at higher elevations, is characterized by precipitous outcrop and talus covered slopes, making access difficult.

Tree-line varies from 1200 to 1500 meters above sea level. Below tree-line, particularly within the lower valleys, vegetation predominantly consists of a dense growth of conifers. Steep slopes are frequently covered by scrub brush mixed with a tangle of debris resulting from snow avalanches. Active glaciation is absent on the Bar claims, but prevalent above 1600 meters to the west.

The property lies in an intermediate or gradational belt between the wet belt of the Coast Range and the dry belt of the Stikine Plateau. The summers are typically cool and showery with occasional snowfalls. Accumulated snow in the winter is considerably less than in the wet belt. Prospecting and mapping could be started in July and continued through till October in a normal year. Shaded creek beds commonly contain packed snow until mid to late July.

4.0 PROPERTY MINING HISTORY

4.1 Previous Work

Placer gold was discovered on gravel bars of the Stikine River between Glenora and Telegraph Creek in 1861 and worked extensively until the early 1900's. The placer gold deposits of the lower Barrington River have been worked sporadically since 1903 (Figure 3).

The area south and west of Telegraph Creek was extensively explored for its copper potential throughout the 1960's, following the discovery of the Galore Creek copper-gold porphyry deposit in 1955 and the Schaft Creek copper-molybdenum deposit in 1957, both of which host greater than one million tonnes of contained copper. These deposits are located 87 kilometers south-southwest and 62 kilometers south-southeast, respectively, from Telegraph Creek.

Several copper occurrences were discovered southwest of Telegraph Creek at this time (Figure 3). Kennco explored copper mineralization within a syenitic border phase of a large granodiorite stock and its intruded volcanics on their Poke claims, located approximately one kilometer south of the southern boundary of the Bar claims, on Limpoke Creek. Their Gordon claims, located at the junction of Limpoke Creek and the Barrington River, also host disseminated copper mineralization within the syenitic phase of the stock and the intruded volcanics (BCDM, 1966). The MH iron deposit, hosted by a pyroxenite stock on Shakes Creek approximately four kilometers east of the eastern boundary of the Bar claims, was also explored extensively in the 1960's (BCDM, 1966).

With increased gold exploration during the late 1970's and early 1980's, most of the copper prospects were re-evaluated for their gold potential. Du Pont of Canada Exploration Ltd. conducted geological, geochemical and geophysical surveys over Mount Barrington, eight kilometers south of the Bar claims, following up highly anomalous gold geochemistry from field-sieved stream sediment samples collected during a regional survey. Korenic (1982) reported assays up to 122 grams per tonne (3.575 oz/ton) gold from narrow pods of massive pyrite, arsenopyrite, chalcopyrite and pyrrhotite.

In 1987, the federal and provincial geological surveys conducted a joint regional silt sampling program over the entire Telegraph Creek and Sumdum map sheets, taking a total of 1291 samples (GSC, 1988). Seven silt samples were taken from creeks draining the Bar claims, one of which exceeded the 99th percentile in gold.

4.2 1989 Work Program

The 1989 exploration program on the Bar claims was targeted at mesothermal, gold-rich, base metal veins comparable to those occurring within a similar geological environment to the southeast in the Galore Creek, Iskut River, Sulphurets and Stewart mining districts. During the course of this program, 20 silt samples and 55 rock samples were taken on the Bar claims. The silt samples were collected from silt accumulations in creek drainages, sieved to minus 80 mesh in the laboratory and analysed geochemically for gold and 32-elements by ICP (Figure 4).

Geological mapping, prospecting and rock sampling were carried out over the property (Figure 4). Rock samples, described in Appendix C, were taken from zones of alteration and mineralization and analysed geochemically for gold and 32-elements by ICP. Analytical certificates are attached in Appendix D.

5.0 REGIONAL GEOLOGY

The Telegraph Creek area lies on the western margin of the Intermontane Belt within the Stikine Arch near its contact with the Coast Plutonic Complex (Figure 3). A sequence of Paleozoic to Middle Triassic oceanic sediments is unconformably overlain by Upper Triassic island arc volcanics and sediments. These have been

intruded by Upper Triassic to Lower Jurassic syenitic stocks and by Jurassic to Lower Cretaceous quartz diorite and granodiorite plutons of the Coast Plutonic Complex.

The oldest rock assemblage in the Telegraph Creek area consists of Permian bioclastic limestone (Unit 3) overlying metamorphosed sediments and volcanics (Unit 2) and crinoidal limestone (Unit 1).

Unconformably overlying the Permian limestone unit are Upper Triassic rocks (Units 5 through 8) equivalent to the Stuhini Group island arc volcanics and sediments. In the Telegraph Creek area, Souther (1971) grouped these volcanic and sedimentary members in Unit 9, noting however that it was composed predominantly of augite andesite breccia, conglomerate and volcanic sandstone. Several significant gold occurrences are hosted by Upper Triassic Stuhini volcanics in a cluster around Galore Creek seventy kilometers to the south.

Small, equidimensional syenite, pyroxenite and orthoclase porphyry stocks (Unit 12), dated as Late Triassic to Early Jurassic by Souther (1971), intrude mainly Stuhini volcanics. The Galore Creek and Copper Canyon copper-gold porphyry deposits are hosted by Upper Triassic volcanics intruded by syenitic stocks of Unit 12. Orthoclase porphyry or syenite stocks are associated with most significant precious metals deposits in the Stewart, Sulphurets and Iskut River districts, including the Silbak Premier, Sulphurets, and Snip deposits.

Lower Jurassic conglomerates (Unit 13) with granodiorite clasts unconformably overly Stuhini Group equivalent Triassic sediments. The Jurassic volcano-sedimentary strata are similar in appearance to those of the underlying Triassic rocks, with differentiation possible mainly through fossil identification. To

the southwest, these Jurassic rocks have been assigned to the Hazelton Group by Brown and Greig (1990).

Jurassic and/or Cretaceous granodiorite to quartz diorite batholiths (Unit 17) of the Coast Plutonic Complex intrude all older lithologies. This unit consists mainly of medium-grained hornblende-biotite granodiorite with lesser hornblende quartz diorite and is locally foliated near its margins. Marginal phases of this intrusive unit are syenitic and, "much additional work is needed to subdivide the many phases of this map-unit" (Souther, 1971).

Coarse conglomerate, sandstone, siltstone and minor black shale of the Upper Cretaceous and Lower Tertiary Sustut Group (Unit 21) unconformably overlies Jurassic strata on Mount Helveker and are found along the Stikine River below Telegraph Creek. Conformably overlying the Sustut Group on Helveker Mountain are about 160 meters of felsic to intermediate, mainly pyroclastic rocks (Unit 24), correlated by Souther (1971) to the Early Tertiary Sloko Group found further to the northwest.

Upper Tertiary and Quaternary basalt flows (Unit 25) are exposed in the Stikine River and north of Dodjatin Mountain.

6.0 PROPERTY GEOLOGY AND MINERALIZATION

6.1 Property Geology

Upper Triassic mafic to intermediate volcanics, volcaniclastics, pyroclastics, clastic and pelitic sediments and limestone underlie most of the Bar claims. These rocks have been intruded by Upper Triassic to Jurassic dykes varying in composition between monzonite and syenite. Outcrop patterns combined with

bedding and foliation measurements indicate an east-west to northeast-southwest trend of rock units on the property.

Regional greenschist facies metamorphism, consisting of weak to moderate chlorite, calcite and epidote alteration, is evident throughout the Upper Triassic rocks. Faults, which appear to offset all rock units, are commonly indicated by surface expressions such as drainage patterns and gullies. Geology in Figure 4 is modified from Souther (1971) as a result of reconnaissance mapping during the 1989 program.

The rock units of the Bar claims have been assigned a threefold major subdivision structured after Souther's (1971) map units 7, 8 and 12. These units are subdivided further to help define the lithologies on the property. Unit 7 and Unit 8 each contain subunits which are lithologically similar, but which have been distinguished by the sequence in which they occur. Unit 7 is a clastic and pelitic sequence (Unit 7a) with lesser proportions of interbedded volcanic (Unit 7b) and pyroclastic (Unit 7c) rocks. Unit 8 is a volcanic sequence (Unit 8a) with lesser proportions of pyroclastic (Unit 8c), clastic and pelitic (Unit 8b) rocks and limestone (Unit 8d). The stratigraphic relationship and age of these two sequences is unclear. Minor intrusive rocks are assigned to Unit 12.

Unit 7 is subdivided into three units, with Unit 7a the dominant lithology. Unit 7a is well exposed at the headwaters of Wet Creek and is interbedded with Units 7b and 7c on the north and south sides of Wet Creek. Unit 7a, which is equivalent to Unit 8b, is composed of thin bedded to thinly laminated, dark grey, black and green argillaceous mudstone and siltstone with wacke and chert representing a smaller proportion of the total sedimentary package. The wackes, composed of volcanic-derived clasts, are poorly sorted and are commonly calcareous. Soft sediment deformation and slump

structures are observed in outcrop. A large scale debris flow composed of volcanic, limestone and clastic and pelitic sediments cemented in a fine grained matrix of chlorite was observed at the headwaters of Wet Creek. A large outcrop of medium- to coarse-grained, poorly sorted wacke with subangular to subrounded clasts lies south of the headwaters of Wet Creek.

Interbedded with the sedimentary rocks are locally prominent volcanic rocks (Unit 7b). These comprise augite porphyry, feldspar porphyry and massive aphanitic flows, which are described in detail under Unit 8a below. Since Unit 7c's pyroclastic and volcaniclastic rocks are similar to the equivalent unit in the volcanic sequence, they also are described below under Unit 8c.

Unit 8 underlies most of the Bar Claims on the northern two-thirds of the property and to the southeast, on the Bar 4 and Bar 8 claims. It is a volcanic sequence with interbeds and thicker intervals of sedimentary, pyroclastic and volcaniclastic rocks. The most common rock types in Unit 8a (and Unit 7b), in decreasing order are; augite porphyritic flows, massive aphanitic flows, feldspar porphyry flows and minor flow breccia. The augite porphyry flows are composed of dark green to black augite phenocrysts, up to eight millimeters in length, in a fine- to medium-grained, medium to dark green or grey-green matrix. A large section of these volcanics is exposed at the headwaters of Dry Creek. The massive to aphanitic volcanics are medium to light green and appear featureless in hand specimen due to masking of textures by local and regional alteration. These rocks may, in part, be finer-grained equivalents of the porphyritic flows or altered porphyritic volcanic units. The feldspar porphyry flows are composed of less than five millimeter, white to light green plagioclase phenocrysts with minor hornblende phenocrysts in a variably coloured dark matrix. These feldspar porphyry flows are a small proportion of the rocks on the Bar Claims but are a major

constituent of some flows. All of the flow units exhibit minor flow brecciation which is limited to outcrop scale exposures.

The sedimentary rocks (Unit 8b) in the volcanic sequence are similar to those described above for Unit 7a. Large sections of sediments within the volcanics were mapped and assigned to the volcanic sequence as they appear to be bordered by a thicker volcanic sequence. Further mapping is required to determine stratigraphic relationships of these interbedded units.

Pyroclastic rocks, volcaniclastic rocks, tuffs and volcanic-derived sediments (Unit 8c and Unit 7c) are common on the Bar claims. The most prominent exposure of pyroclastic rocks occurs along the ridge north of Wet Creek and is composed of fragments ranging in size from ash to thirteen centimeter blocks with a modal fragment size of one centimeter. The fragments are composed of augite and feldspar porphyritic volcanic and fine grained crystal and ash tuff. The common matrix of the pyroclastics is crystal tuff. Associated with this unit are volcanic-derived sediments which vary in size from wacke to conglomerate. The clast and matrix composition is of volcanic origin and the color is usually dark grey to green-black.

A large single outcrop of dark grey, thin bedded, fossiliferrous limestone and calcareous mudstone (Unit 8d) occurs north-northwest of Prune Creek near the north central property boundary. This exposure is isolated from any other bedrock exposures and therefore, the limestone's stratigraphic relationship with other units in the volcanic sequence is unknown.

The only intrusive rocks on the Bar property are dykes that are mostly less than five meters wide. On the northern section of the property, the intrusives encountered were all monzonitic in composition (Unit 12b). They are variable in color and texture,

ranging from fine-grained pink orthoclase phenocrysts in a medium to dark brown-grey, epidote-altered matrix to white feldspar phenocrysts in a red matrix. A single, three to four meter wide, syenite dyke located near the southern claim boundary east of the Bowser Showing and hosted in volcanic rocks, is composed of orthoclase phenocrysts up to three centimeters in length in a grey-green matrix. This dyke strikes east-west and dips to the south at 62°.

Bedding measurements on the Bar claims indicate an east-northeast attitude of the rock units. Bedding measurements were limited to sedimentary or volcaniclastic sequences as volcanic flows are massive and featureless. Observed from a distance, the cliffs south of Wet Creek displayed large scale features interpreted to be east-west bedding in the sedimentary and volcaniclastic sequence, consistent with bedding measurements in the area.

Major erosional lineaments on the property trend between azimuth 060° and 070°. One example of these lineaments is Fault Creek on the east-central part of the claims. The incised creek valley extends from the Barrington River southwest towards the ridge on the central portion of the claims. At the east end of the ridge, a major fault, which is likely causing the Fault Creek lineament, was mapped along the contact between a volcanic unit and a sedimentary unit. This fault direction coincides with the bedding attitudes on the property and may be a bedding plane fault. Other lineaments in this direction may be either faults, contacts or a combination of the two. A second fault direction, which crosscuts the stratigraphy, varies from 150° to 170° azimuth. The surface expression of these faults is easily visible on the property as iron stained fault zones infilled with iron carbonate and quartz breccia and enveloped by iron-stained carbonate-altered wallrock. Other minor faults, observed in the sedimentary rocks

of Unit 8b immediately north of the headwaters of Fault Creek, are oriented north-south and display sinistral strike slip motion. The significance of these minor faults is not known at the present time. A single shear zone encountered on the lower portion of Club Creek is oriented at 135°, dipping steeply to the northeast. The shear zone is five to ten meters in width and crosses Club Creek a distance of 20 meters along strike. Associated with this zone is carbonate alteration and chromium mica mineralization commonly associated with ultramafic rocks or major tectonic structures. This type of alteration and shear zone are common indicators of mesothermal lode gold mineralization. No significant rock geochemistry values were returned from two samples of the shear zone during the current program. Since no ultramafics were encountered in the immediate area it is suggested that this shear zone may be related to a major tectonic break in the Barrington River valley.

6.2 Mineralization

During the 1989 exploration program, fifty-five mineralized or altered bedrock and float samples were taken for geochemical analysis from the Bar claims (Figure 4). Two areas of auriferous mineralization were discovered in Lab Creek. Grab sample #446758 was taken from a four centimeter quartz vein striking 130°, dipping 78° southwest and hosted in porphyritic volcanics in Lab Creek at approximately the 790 meter elevation. This sample assayed 0.032 ounces per ton gold, 12.6 parts per million silver and 5100 parts per million copper. Grab sample #446759, collected at the 930 meter elevation on Lab Creek, is from a one meter wide sample of silicified, porphyritic volcanics with weak quartz stringering striking 006° and dipping 84° east. This sample assayed 0.058 ounces per ton gold without other significant values. Also on Lab Creek at 685 meter elevation, quartz-carbonate stringered volcanic

float from sample #446755 with 5% pyrite assayed 0.066 ounces per ton gold with negligible silver and base metal values.

A second mineralized area, known as the Bowser Showing, is located near the southeastern claim boundary south of Dry Creek. The showing is a poorly exposed recessive zone which appears to strike 033° with dip unknown. Rusty weathering, fractured material composed of clay altered volcanic rock, within a suspected fault, produces the surface expression of this showing. Mineralization, exposed in hand trenching across 3.1 meters of this zone, appears to be pyrite with minor amounts of sphalerite and galena. The best rock geochemical results obtained were from selected grab sample #446767, consisting of fractured material lying on the surface above the zone. The highest assay results from all samples are 980 parts per billion gold, 27.0 parts per million silver, 496 parts per million copper, 668 parts per million lead and 480 parts per million zinc.

In an area south of Fault Creek at the 1515 meter elevation, approximately ten pieces of massive sulfide and sulfide enriched float were discovered over an area of two hundred and fifty square meters on a small morraine/talus slope. The float samples contained, in decreasing order of abundance, pyrrhotite and pyrite with minor chalcopyrite, sphalerite and galena. Sample #446851 and sample #446852 returned maximum values of 760 parts per billion gold, 6.4 parts per million silver, 5680 parts per million copper, 742 parts per million lead, 1755 parts per million zinc and 95 parts per million arsenic.

Float sample #446691, located at the southwest corner of the Bar 1 claim near the headwaters of Club Creek, assayed 2.07% zinc with very low precious metal values. This mineralized float contained quartz, sphalerite and minor chalcopyrite in volcanic rocks.

7.0 GEOCHEMISTRY

Silt samples taken from streams draining the Bar claims were compared with statistical data generated by the Geological Survey of Canada's National Geochemical Reconnaissance of the Sumdum - Telegraph Creek map sheets. This survey used a population of 1291 silt samples which were analysed and the results statistically interpreted to determine the various percentiles (GSC, 1988). A total of seven government silt samples were taken during 1987 (GSC 1988) and 20 silt samples were collected during the current program. The Bar claims, overall, are anomalous in arsenic and copper and weakly anomalous in zinc, cobalt and antimony.

Sample #871155 taken from Fault Creek near its confluence with the Barrington River, has a gold value of 149 parts per billion, which is above the 95th percentile for the National Geochemial Reconaissance Survey (GSC, 1988). This sample also has copper (161 ppm), vanadium (154 ppm) and antimony (2.3 ppm) values greater than or equal to the 95th percentile and zinc (168 ppm) and cadmium (1.0 ppm) values greater than the 90th percentile. No bedrock source of this silt geochemical anomaly was discovered although numerous sulfide-enriched and massive sulfide float boulders were discovered at the 1515 meter elevation on the south side of Fault Creek.

Silt sample #871153, from Club Creek, has a gold value of 23 parts per billion and a silver value of 0.4 parts per million which is equal to the 95th percentile. A second sample #871152, from this same location, was weakly anomalous in gold with a concentration of 17 parts per billion and anomalous in copper (125 ppm) and arsenic (34 ppm).

Sample #TB-7 was taken from a small tributary of Club Creek on the northwest side of the Bar 3 Claim with volcanic, volcaniclastic and sedimentary bedrock. This silt sample had values greater than the 95th percentile in silver (0.4 ppm), arsenic (190 ppm), cadmium (1.5 ppm), cobalt (37 ppm), copper (205 ppm), antimony (5 ppm), zinc (190 ppm), iron (7.92%) and vanadium (165 ppm). No bedrock source for these anomalies was discovered although carbonate alteration with minor pyrite and arsenopyrite mineralization was noted in both sedimentary and volcanic rocks.

Sample #871154, located on Beagle Creek above the confluence with the Barrington River, is strongly anomalous in numerous elements. This sample is above the 99th percentile in molybdenum (27 ppm) and iron (5.81%) and equal to or above the 95th percentile in zinc (272 ppm), copper (172 ppm), cobalt (24 ppm), silver (0.4 ppm), arsenic (54 ppm), mercury (360 ppm), cadmium (3.1 ppm) and antimony (5.4 ppm). No bedrock source for this anomaly was discovered during the current program although silicified and quartz stringered volcanics assayed 0.058 ounces per ton on Lab Creek, immediately east of Beagle Creek.

The entire area underlying the Bar claims is anomalous in numerous elements, particularly arsenic and copper. Copper mineralization related to intrusive rocks in the area may be the source of increased background copper values obtained in numerous samples on the Bar claims. Elevated arsenic values in silt samples may be related to narrow, gold-bearing, fault-hosted quartz-carbonate-arsenopyrite veins such as those found by Dupont (Korenic, 1982) in Upper Triassic rocks bordering an intrusive stock in the Cave Creek drainage, ten kilometers south of the Bar claims.

8.0 DISCUSSION AND CONCLUSIONS

Reconnaissance exploration conducted over the Bar claims in 1989 encountered an upper Triassic volcano-sedimentary package, equivalent to the Stuhini Group, intruded by Mesozoic monzonite to syenite dykes. Similar geological environments host significant precious metal deposits to the south in the Galore Creek, Iskut, Sulphurets and Stewart Camps.

Results of the current silt geochemistry program indicate the Bar property to be anomalous in several base metal elements when compared to the values from the Government's regional database. It is thought that these anomalies may be in part related to a large intrusive body south of Limpoke Creek, which has copper occurrences around its perimeter.

Some of the mineralization found to date may be rerlated to a major lineament that is interpreted to be a fault zone. This zone is exposed in outcrop at sample location #446854 and divides the sediments (Unit 8b) to the north from the volcanic and pyroclastic (Units 8a and 8c) rocks to the south. At this locality, the fault zone is two to three meters wide and displays vuggy textures associated with open space filling of the numerous small faults. Although the fault zone had no significant mineralization or geochemical values at this location, an area of massive sulfide and sulfide-enriched float, samples #446852 and #446853, was found approximately 1100 meters to the east-northeast and occurs at the 1515 meter elevation. Continuing east-northeast along this lineament, defined by Fault Creek, silt sample #871155, taken from Fault Creek near the Barrington River, returned a gold (149 ppb) and a weak multi-element anomaly. West-southwest of sample #446854, the fault lineament appears to extend 3000 meters through a slight recessive area near the highest point on the claim group and continues west-southwest into the creek from which silt

sample #TB-7 was collected. Silt sample #TB-7 was strongly anomalous in silver, copper, zinc, antimony and arsenic. The zone was not well mineralized at the one location sampled, but this segment of the lineament represents only a very small proportion of the total six kilometer strike length on the Bar claims. If the metal values indicated by silt sampling and sulphide float come from fault-hosted mineralization, and assuming that this lineament is a single structure, then the entire length of this lineament reprents a good prospecting target.

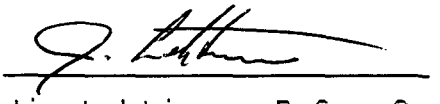
The Bowser showing consists of pyrite with subordinate galena and sphalerite mineralization with gold values up to 980 parts per billion. To date, this area has only received limited surface exploration due to its poor exposure. The showing should be investigated along strike in order to determine the extent and nature of the mineralization.

The shear zone discovered along Club Creek is of interest due to the contained chromium micas and carbonate alteration which are common indicators for mesothermal lode gold deposits. Although no mineralization was discovered, the weak gold geochemical value from the silt sample taken at the mouth of Club Creek combined with the shear zone and its distinct alteration makes the area a prospective exploration target.

A government airborne, magnetometer survey (total field magnetics) of NTS map sheet 104G/13 indicates a magnetic low centered over the Bar property. The areas to the north, south and east are underlain by intrusive bodies, which are likely responsible for the magnetic highs flanking the Bar property. It has been suggested that this magnetic low may indicate a thickened pile of Triassic volcano-sedimentary rocks that has been preserved by a graben structure with an east-west axis which is cut off on the east by a fault located in the Barrington River valley.

Limited exploration indicates a favourable geological environment with unexplained geochemical anomalies, gold-bearing samples and favourable structures. Exploration successes to the south in a similar geological environment in the Galore Creek, Iskut River, Sulphurets and Stewart Camps provide incentive for further exploration.

Respectfully submitted,
EQUITY ENGINEERING LTD.



Jim Lehtinen, B.Sc. Geology
Vancouver, B.C.
March, 1990.

APPENDIX A

BIBLIOGRAPHY

BIBLIOGRAPHY

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APPENDIX B

STATEMENT OF EXPENDITURES

STATEMENT OF EXPENDITURES
Bar 1-4, 7 & 8: South Bar Group

PROFESSIONAL FEES AND WAGES:		
Jim Lehtinen, Project Geologist		
3 days @ $350/day	$ 1,050.00	
Bruno Kasper, Geologist		
2 days @ $250/day	500.00	
Tom Bell, Prospector		
3 days @ $250/day	750.00	
Don Coolidge, Prospector		
4 days @ $250/day	1,000.00	
		$ 3,300.00
JOINT MOBILIZATION, SUPERVISION AND SUPPORT COSTS:		
Prorated in accordance with number of mandays worked on each of several claim groups in the Galore Creek area		489.73
CHEMICAL ANALYSES:		
Silt Samples		
7 @ $14.64	$ 102.48	
Rock Geochemical Samples		
43 @ $16.45	707.35	
Assays	6.46	
		816.29
EXPENSES:		
Camp Rental	$ 240.00	
Radio Rental	60.00	
Truck Standby	60.00	
Materials and Supplies	81.48	
Printing and Reproductions	100.10	
Meals & Accommodation	514.05	
Travel	81.76	
Automotive	25.88	
Aircraft Charters	88.42	
Helicopter Charters	1,719.38	
Freight	37.68	
Expediting	19.19	
		3,081.58
REPORT PREPARATION:		
(Estimated)		1,500.00
MANAGEMENT FEE:		
15% on expenses only		636.41
		$ 9,824.01

STATEMENT OF EXPENDITURES
Bar 5&6: North Bar Group

PROFESSIONAL FEES AND WAGES:		
Jim Lehtinen, Project Geologist		
1 days @ $350/day	$ 350.00	
Bruno Kasper, Geologist		
2 days @ $250/day	500.00	
Tom Bell, Prospector		
1 days @ $250/day	250.00	
Don Coolidge, Prospector		
1 days @ $250/day	250.00	
		$ 1,350.00
JOINT MOBILIZATION, SUPERVISION AND SUPPORT COSTS:		
Prorated in accordance with number of mandays worked on each of several claim groups in the Galore Creek area		205.46
CHEMICAL ANALYSES:		
Silt Samples		
13 @ $14.64	$ 190.32	
Rock Geochemical Samples		
12 @ $16.45	197.40	
Assays	19.38	
		407.10
EXPENSES:		
Camp Rental	$ 100.00	
Radio Rental	25.00	
Truck Standby	20.00	
Materials and Supplies	33.95	
Printing and Reproductions	41.71	
Meals & Accommodation	214.22	
Travel	34.07	
Automotive	10.78	
Aircraft Charters	36.85	
Helicopter Charters	1,719.38	
Telephone & Telefax	22.35	
Freight	15.71	
Expediting	8.00	
		1,463.26
REPORT PREPARATION:		
(Estimated)		1,500.00
MANAGEMENT FEE:		
15% on expenses only		265.33
		$ 5,191.15

APPENDIX C

ROCK DESCRIPTIONS

EQUITY ENGINEERING LTD.

Geochemical Data Sheet - ROCK SAMPLING

NTS 104 G/13

Sampler J. Lehtinen | Project PLJ - 89-05 | Location Ref

Date Aug 12/89 | Property Bar Group | Air Photo No

SAMPLE NO.	LOCATION	SAMPLE TYPE	Sample Width / True Width	DESCRIPTION			ADDITIONAL OBSERVATIONS	ASSAYS					
				Rock Type	Alteration	Mineralization		Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	As ppm
446546	elev. 620m E 327,630 N 6,417,950	Float		Mafic Volcanic	CB	PY	Chromium Micas Mariposite / Fuchsite	<5	<0.2	33	<2	38	75
446547	elev. 670m E 327,650 N 6,417,840	Grab o/c		Sediments	Clay	PY	- Cross fault in shear zone	<5	<0.2	91	8	50	65
446548	elev. 670m E 327,635 N 6,417,855	"		mafic volcanics	CB	PY	Mariposite / Fuchsite	<5	<0.2	53	<2	48	140
446549	elev. 675m E 327,600 N 6,418,830	"		"	CB	PY		<5	<0.2	162	24	80	90
446851	elev. 1515m E 331,950 N 6,414,810	Float		massive Sulfide		PO, CP PY	- Single float block	20	4.2	5680	14	124	<5
446652	elev. 1515m E 331,950 N 6,414,810	"		sulphide enriched		"	Composite sample of 5 to 10 boulders	760	6.4	3290	742	1755	95
446853	elev. 1515m E 332,000 N 6,414,820	Subcrop		Tuff?		PY	- Sample from 11 pits across 12m. of alteration	5	0.4	111	<2	106	20
446854	elev. 1690m E 330,830 N 6,414,850	Grab o/c		Fault Argillite/Volcanic		PY		<5	1.4	43	10	82	270
446855	elev. 1640m E 329,360 N 6,413,825	"		Wacke	CB	PY		<5	<0.2	103	4	100	20
446856	elev. 1720m E 330,165 N 6,414,695	"	5m	Diorite		"	Sill	<5	<0.2	157	<2	114	10
446857	elev. 1625m E 329,690 N 6,413,750	Chip	0.15m	Quartz Vein	CB		Volcanic / sedimentary / pyroclastic / Volcaniclastic host	<5	<0.2	15	6	10	230
446858	elev. 1680m E N 6,413,610	Grab o/c	0.10m	Quartz Vein	CB	PY		5	<0.2	69	2	42	3090
446859	elev. 1680m E 329,770 N 6,413,610	Chip	0.7m	Quartz Vein	CB		Brecciated Vein	<5	<0.2	25	6	30	35
446860	elev. 1680m E 330,080 N 6,413,550	Grab o/c	5cm.	Quartz Stringer	CB, Clay	PY	Fault hosted	<5	0.4	30	2	22	615
446861	elev. 1670m E 330,140 N 6,413,665	Float	10cm	Quartz Vein		PY	Float as talus over Carbonate altered zone	<5	0.4	25	2	20	50

EQUITY ENGINEERING LTD.

Geochemical Data Sheet - ROCK SAMPLING

NTS 104 G/13

Sampler Don Coolidge Project PLJ 89-05 Location Ref

Date Aug 8-12 Property Bar Air Photo No

SAMPLE NO.	LOCATION	SAMPLE TYPE	Sample Width / True Width	DESCRIPTION			ADDITIONAL OBSERVATIONS	ASSAYS					
				Rock Type	Alteration	Mineralization		Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	As ppm
446711	elev. 640m N 6,417,860 E 329,610	Float	35cm³	mafic Volcanic	SI	7% PY	Diorite o/c on East Bank of Creek	<5	<0.2	29	2	68	10
446712	elev. 665m N 6,417,820 E 329,580	Grab o/c	0.12m / 0.75m	mafic Volc	Rusty	1-2% PY	Disseminated PY	<5	<0.2	72	<2	84	20
446713	elev 1370m N6,415,810 E 329,410	Grab o/c	0.5m / 1.0m	Volc.	CB	Diss. PY	o/c Trends 270° for 20m Crackle Brecciated	<5	<0.2	145	<2	76	26
446714	elev 1400m N6,415,790 E 329,240	chip	0.8m / 1.5m	Grey-Green Volc. dyke	CB	1% PY	Strike 280° for 25m Possible continuation of 446713	<5	<0.2	15	2	72	75
446715	elev 1585m N6,415,425 E 329,260	Grab	10x20 cm	Volc.	CB, MR	2% PY	-Buff weathering shear Zone. Strike 360° for 25m	<5	<0.2	105	6	82	110
446716	elev 1660m N6,414,705 E 328,275	Chip	0.5 / 2-3	Argillite	SI CB	1-2% PY	Mineralized zone is in center of alteration (30-40cm)	<5	<0.2	93	<2	62	10
446717	elev 1615m N6,414,510 E 328,350	select Grab	25cm² / 2mm	Argillite	CB stringer	PY, AS	Red gossan	<5	<0.2	85	<2	66	550
446718	elev. 1525m N 6,414,420 E 328,140	Chip	1.5 / 1.5	Calcite vein	in Argillite	—	strike 360° for 10m.	<5	<0.2	12	<2	10	10
446720	elev. 830m N6,413,270 E 333,020	Float		K-spar porphyry		PY		<5	<0.2	25	<2	52	30
446721	elev 1370m N6,412,680 E 332,520	Chip	0.2m / 0.2m	mafic Volc.	SI	PY	Trends 080° for 1m.	<5	0.2	63	4	34	<5
446722	elev 1370m N6,412,680 E 332,580	Chip	15cm / 1.0m	"	"		Trends 030° in fault zone	<5	<0.2	131	2	90	5

EQUITY ENGINEERING LTD.

Geochemical Data Sheet - ROCK SAMPLING

NTS 104 G/13

Sampler Tom Bell
Date Aug 8-11/89

Project PLJ 89-05
Property Bar Group

Location Ref
Air Photo No

SAMPLE NO.	LOCATION	SAMPLE TYPE	Sample Width / True Width	DESCRIPTION			ADDITIONAL OBSERVATIONS	ASSAYS					
				Rock Type	Alteration	Mineralization		Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	As ppm
146685	elev 730m N 6,917,670 E 328,460	Grab c/c	1.0m	phyllite	chlorite, CB	Py		<5	<0.2	52	2	60	10
446686	elev 1705m N 6,415,390 E 328,540	Subcrop	1.0m / 1.0m	Argillite	" +SI	"		<5	<0.2	37	6	60	170
446687	elev 1715m N 6,415,310 E 328,540	"	5.0m / 50.0m	"	chlorite CB	PY, SP		<5	0.2	220	8	1020	175
446688	elev. 1705m N 6,415,395 E 328,500	Grab c/c	/ 0.5-1.0m	"	CB chlorite	PY	CB alteration zone	<5	<0.2	62	8	86	20
446689	elev. 1705m N 6,415,395 E 328,500	"	2m / 10m	"	"	PY	" " "	<5	<0.2	50	<2	66	25
446690	elev. 1645m N 6,415,180 E 328,290	"	1.0 / 0.25-0.3m	Volcanic	"	"		<5	<0.2	154	2	78	35
446691	elev 1530m N 6,415,205 E 328,080	Talus		"	Hydrozincite	QZ, PY, SP, CP		<5	2.2	1780	2	2.07%	25
446692	elev 1555m N 6,415,220 E 328,100	Grab c/c	5.0m / 25.0m	"	Chlorite, Epidote	PY, CP SP, QZ, CB		<5	<0.2	113	<2	202	30
446693	elev 790m N 6,415,450 E 333,430	"	1.0m	Volcanic Tuffs	chlorite	PY, CP		<5	<0.2	86	14	196	5
446694	elev. 820m N 6,415,430 E 333,330	"	5.0m / 2.0m	"	Hornfels	PY, CB	Shear - 100°/45 N	50	<0.2	77	18	134	35
146826	elev 1410m N 6,412,610 E 332,430	Subcrop	3.1m / ?	Augite porphyry Volcanics	SI, CB CLAY	PY, CP, SP	- Chip sample Bowser Showing	295	10.4	4%	668	480	50

EQUITY ENGINEERING LTD.

Geochemical Data Sheet - ROCK SAMPLING

NTS 104G/13

Sampler Bruno Kasper

Date Aug 8-10/89

Project PLJ 89-05

Property Bar Claims

Location Ref

Air Photo No

SAMPLE NO.	LOCATION	SAMPLE TYPE	Sample Width / True Width	DESCRIPTION			ADDITIONAL OBSERVATIONS	* = oz/ton ASSAYS					
				Rock Type	Alteration	Mineralization		Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	As ppm
446755	elev. 2250m N 6,417,740 E 329,720	Float		porphyritic Volcanics	Chlorite. CB, SI	PY	Rusty stained, disseminated and blebby Pyrite	* 0.066	0.8	4	4	24	15
446756	elev. 752m N 6,417,580 E 329,705	Grab o/c	5-5cm	"	CB, Sericite	PY	Strike 099/50 south	120	<0.2	2	<2	6	5
446757	elev. 760m N 6,417,540 E 329,730	Float		QZ		PY	Vein material	400	0.2	3	8	8	10
446758	elev. 2600 N 6,417,490 E 329,750	Grab o/c	30cm / 4cm	porphyritic Volcanic	Chlorite, SI, CB	CP, PY	Highly fractured vein system strike 130°/78 S.W	* 0.032	12.6	5100	18	194	250
446759	elev. 930m N 6,417,350 E 329,870	Grab o/c	1.0m	"	SI	PY	3m. strike 006/86E	* 0.058	1.2	57	<2	12	25
446760	elev. 153... N 6,415,200 E 330,920	"	? / 0.3-0.6m	Argillite	CB, SI	PY	strike 060/42 N.W.	45	<0.2	64	<2	46	30
446761	elev. 1580m N 6,415,150 E 330,830	"	4m / ?	"	"	"	Highly fractured zone 20m. strike 081/61N	15	<0.2	75	6	50	25
446762	elev. 1620 m N 6,415,090 E 330,790	"	10m?	Syenite dyke	CB, SI	PY	Alteration zone 122/74 NE	<5	<0.2	63	10	70	10
446763	elev 1618m N 6,415,110 E 330,740	"	10m?	"	"	"	As above, 100m east	5	<0.2	96	2	62	885
446764	elev. 1520m N 6,415,310 E 330,710	"	1-2m	mafic Volc.	CB, SI, Chlorite		Shear zone 144°/81 SW. (40m strike	<5	<0.2	84	2	56	20
446765	elev. 1342m N 6,412,660 E 332,950	"	0.5	"	Qz vein in CB alt'n		Qz vein (5cm) Strike 159/55 NE	110	2.4	483	84	204	80
446766	elev. 1382m N 6,412,560 E 332,850	"	1.0m / 5-10cm	Syenite + mafic Volc.	SI		Contact zone contact 088/62	85	3.0	172	116	690	30
446767	elev. 1440m N 6,412,610 E 332,440	Subcrop	0.5m ? / 3-4m	Porphyritic Volcanics	Clay + SI	PY, GL	Trend 033° - Subcrop gossan trail	980	27.0	229	760	304	75
446768	elev 1405m N 6,412,610 E 332,440	"	0.3m ? / 3-4m	"	"	"	" (Sample 10m below 767)	330	11.8	75	378	58	100
446769	elev 1410m N 6,412,610 E 332,440	"	" / "	"	"	"	Float from surrounding slope	210	5.8	360	166	214	55
446770	elev. 1470m N 6,413,450 E 331,720	Grab o/c	5-10cm	Argillite Wacke	SI, Chlorite CB	PY	Qz vein orientation 146/52SW	<5	<0.2	61	6	80	25
446771	elev. 1075m N 6,416,540 E 330,780	Float		Qz Vein	SI, CB	PY, CP	Rounded float at silt location BKS-11	10	0.4	128	8	42	55
446772	elev. 1060m N 6,416,450 E 330,790	Float		Argillite	Qz veins CB, Clay	PY	Near silt location BKS-10	<5	<0.2	58	10	48	25

APPENDIX D

CERTIFICATES OF ANALYSIS

Chemex Labs Ltd.
Analytical Chemists * Geochemists * Registered Assayers
212 BROOKSBANK AVE., NORTH VANCOUVER,
BRITISH COLUMBIA, CANADA V7J-2C1
PHONE (604) 984-0221

To: EQUITY ENGINEERING LTD.

207 - 675 W. HASTINGS ST.
VANCOUVER, BC
V6B 1N2

A8924716

Comments:

CERTIFICATE A8924716

EQUITY ENGINEERING LTD.
PROJECT : PLJ-89-05/LOT B
P.O. # : NONE

Samples submitted to our lab in Vancouver, BC.
This report was printed on 11-SEP-89.

SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	54	Rock Geochem Crush,split,ring
238	54	ICP: Aqua regia digestion

* NOTE 1:

The 32 element ICP package is suitable for trace metals in soil and rock samples. Elements for which the nitric-aqua regia digestion is possibly incomplete are: Al, Ba, Be, Ca, Cr, Ga, K, La, Mg, Na, Sr, Ti, Tl, W.

ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
100	54	Au ppb: Fuse 10 g sample	FA-AAS	5	10000
921	54	Al %: 32 element, soil & rock	ICP-AES	0.01	15.00
922	54	Ag ppm: 32 element, soil & rock	ICP-AES	0.2	200
923	54	As ppm: 32 element, soil & rock	ICP-AES	5	10000
924	54	Ba ppm: 32 element, soil & rock	ICP-AES	10	10000
925	54	Be ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
926	54	Bi ppm: 32 element, soil & rock	ICP-AES	2	10000
927	54	Ca %: 32 element, soil & rock	ICP-AES	0.01	15.00
928	54	Cd ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
929	54	Co ppm: 32 element, soil & rock	ICP-AES	1	10000
930	54	Cr ppm: 32 element, soil & rock	ICP-AES	1	10000
931	54	Cu ppm: 32 element, soil & rock	ICP-AES	1	10000
932	54	Fe %: 32 element, soil & rock	ICP-AES	0.01	15.00
933	54	Ga ppm: 32 element, soil & rock	ICP-AES	10	10000
951	54	Hg ppm: 32 element, soil & rock	ICP-AES	1	10000
934	54	K %: 32 element, soil & rock	ICP-AES	0.01	10.00
935	54	La ppm: 32 element, soil & rock	ICP-AES	10	10000
936	54	Mg %: 32 element, soil & rock	ICP-AES	0.01	15.00
937	54	Mn ppm: 32 element, soil & rock	ICP-AES	5	10000
938	54	Mo ppm: 32 element, soil & rock	ICP-AES	1	10000
939	54	Na %: 32 element, soil & rock	ICP-AES	0.01	5.00
940	54	Ni ppm: 32 element, soil & rock	ICP-AES	1	10000
941	54	P ppm: 32 element, soil & rock	ICP-AES	10	10000
942	54	Pb ppm: 32 element, soil & rock	ICP-AES	2	10000
943	54	Sb ppm: 32 element, soil & rock	ICP-AES	5	10000
958	54	Sc ppm: 32 elements, soil & rock	ICP-AES	1	100000
944	54	Sr ppm: 32 element, soil & rock	ICP-AES	1	10000
945	54	Ti %: 32 element, soil & rock	ICP-AES	0.01	5.00
946	54	Tl ppm: 32 element, soil & rock	ICP-AES	10	10000
947	54	U ppm: 32 element, soil & rock	ICP-AES	10	10000
948	54	V ppm: 32 element, soil & rock	ICP-AES	1	10000
949	54	W ppm: 32 element, soil & rock	ICP-AES	10	10000
950	54	Zn ppm: 32 element, soil & rock	ICP-AES	2	10000

Chemex Labs Ltd.
Analytical Chemists • Geochemists • Registered Assayers
212 BROOKSBANK AVE., NORTH VANCOUVER,
BRITISH COLUMBIA, CANADA V7J-2C1
PHONE (604) 984-0221

To : EQUITY ENGINEERING LTD.

207 - 675 W. HASTINGS ST.
VANCOUVER, BC
V6B 1N2

Project : PLI-89-05/LOT B
Comments:

Page No. : 1-A
Tot. Pages: 2
Date : 11-SEP-89
Invoice # : I-8924716
P.O. # : NONE

CERTIFICATE OF ANALYSIS A8924716

SAMPLE DESCRIPTION	PREP CODE		Au ppb FA+AA	Al %	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm
446546	205	238	< 5	0.39	< 0.2	75	40	< 0.5	< 2	12.90	< 0.5	26	229	33	4.07	< 10	< 1	0.07	< 10	5.85	1165
446547	205	238	< 5	2.64	< 0.2	55	20	< 0.5	2	>15.00	< 0.5	42	827	91	5.33	< 10	< 1	< 0.01	< 10	3.50	1005
446548	205	238	< 5	1.31	< 0.2	140	50	< 0.5	< 2	10.35	< 0.5	28	473	53	4.01	< 10	< 1	0.08	< 10	5.70	900
446549	205	238	< 5	2.93	< 0.2	90	40	< 0.5	2	7.36	< 0.5	46	170	162	7.22	10	< 1	0.04	< 10	3.87	1160
446685	205	238	< 5	1.60	< 0.2	10	240	< 0.5	2	14.15	< 0.5	12	46	52	3.63	< 10	< 1	0.07	< 10	2.14	1985
446686	205	238	< 5	0.43	< 0.2	170	160	< 0.5	2	12.55	< 0.5	9	37	37	6.65	< 10	< 1	0.08	< 10	3.30	2190
446687	205	238	< 5	0.80	0.2	175	270	< 0.5	< 2	6.01	11.0	12	41	220	5.18	< 10	2	0.16	< 10	0.86	1700
446688	205	238	< 5	0.64	< 0.2	20	290	< 0.5	6	14.90	0.5	17	27	62	9.30	< 10	< 1	0.12	< 10	2.16	1965
446689	205	238	< 5	0.43	< 0.2	25	190	< 0.5	< 2	11.30	< 0.5	11	14	50	4.82	< 10	< 1	0.22	< 10	3.43	1320
446690	205	238	< 5	0.69	< 0.2	35	500	< 0.5	4	10.90	< 0.5	16	25	154	6.53	< 10	< 1	0.14	< 10	3.64	1295
446691	205	238	< 5	0.93	2.2	25	50	< 0.5	2	0.85	>100.0	12	78	1780	2.06	< 10	1	0.12	< 10	0.73	335
446692	205	238	< 5	5.20	< 0.2	30	80	< 0.5	< 2	6.12	0.5	14	59	113	3.84	< 10	< 1	0.06	< 10	2.05	805
446693	205	238	< 5	4.69	< 0.2	5	10	< 0.5	< 2	6.70	1.0	23	35	86	5.80	< 10	< 1	< 0.01	< 10	1.94	1060
446694	205	238	50	1.10	< 0.2	35	40	< 0.5	2	5.99	0.5	12	64	77	3.90	< 10	< 1	0.15	< 10	0.44	360
446711	205	238	< 5	0.51	< 0.2	10	170	< 0.5	2	4.15	< 0.5	12	18	29	3.63	< 10	< 1	0.26	< 10	0.83	1285
446712	205	238	< 5	2.68	< 0.2	20	290	< 0.5	< 2	3.73	< 0.5	20	30	72	5.57	< 10	< 1	0.20	< 10	1.37	1040
446713	205	238	< 5	1.87	< 0.2	25	150	< 0.5	2	6.56	< 0.5	21	69	145	5.11	< 10	< 1	0.27	< 10	2.38	1075
446714	205	238	< 5	1.05	< 0.2	75	570	< 0.5	2	3.84	< 0.5	9	15	15	3.20	< 10	< 1	0.38	< 10	0.65	1060
446715	205	238	< 5	0.50	< 0.2	110	150	< 0.5	2	6.17	< 0.5	33	85	105	5.96	< 10	< 1	0.12	< 10	3.18	1215
446716	205	238	< 5	0.53	< 0.2	10	310	< 0.5	< 2	12.15	0.5	13	20	93	7.05	< 10	< 1	0.03	< 10	4.25	1205
446717	205	238	< 5	0.43	< 0.2	550	30	< 0.5	2	6.54	1.0	10	13	85	5.53	< 10	2	0.16	< 10	1.28	1325
446718	205	238	< 5	0.08	< 0.2	10	10	< 0.5	< 2	>15.00	< 0.5	4	8	12	1.63	< 10	< 1	0.02	< 10	0.94	1410
446720	205	238	< 5	1.09	< 0.2	30	20	< 0.5	< 2	2.11	< 0.5	9	13	25	2.71	< 10	< 1	0.05	10	0.83	840
446721	205	238	< 5	1.53	0.2	< 5	< 10	< 0.5	4	1.71	< 0.5	20	18	63	4.80	< 10	< 1	0.04	< 10	1.27	465
446722	205	238	< 5	2.16	< 0.2	5	10	< 0.5	2	2.52	< 0.5	23	20	131	4.87	< 10	1	0.04	< 10	1.99	990
446755	205	238	2080	0.61	0.8	15	20	< 0.5	< 2	1.45	< 0.5	13	19	4	5.24	< 10	< 1	0.14	< 10	0.33	370
446756	205	238	120	0.30	< 0.2	5	90	< 0.5	< 2	>15.00	< 0.5	5	10	2	1.19	< 10	< 1	0.05	< 10	0.32	4410
446757	205	238	400	0.15	0.2	10	20	< 0.5	< 2	2.73	< 0.5	7	37	3	2.66	< 10	< 1	0.10	< 10	0.45	950
446758	205	238	1040	2.11	12.6	250	20	< 0.5	2	5.08	2.5	134	24	5100	14.75	10	< 1	0.10	< 10	0.80	1330
446759	205	238	2000	0.45	1.2	25	30	< 0.5	2	0.23	< 0.5	6	30	57	4.50	< 10	< 1	0.19	< 10	0.15	130
446760	205	238	45	0.30	< 0.2	30	70	< 0.5	2	>15.00	< 0.5	11	28	64	4.93	< 10	< 1	0.07	< 10	3.01	2450
446761	205	238	15	0.33	< 0.2	25	70	< 0.5	2	9.22	< 0.5	13	25	75	3.96	< 10	< 1	0.15	< 10	1.73	1320
446762	205	238	< 5	0.42	< 0.2	10	80	< 0.5	2	7.06	< 0.5	10	15	63	4.32	< 10	< 1	0.15	< 10	1.40	1335
446763	205	238	5	0.76	< 0.2	885	70	< 0.5	< 2	12.55	1.5	13	65	96	4.61	< 10	< 1	0.07	< 10	2.05	1760
446764	205	238	< 5	0.34	< 0.2	20	90	< 0.5	< 2	9.97	< 0.5	14	25	84	4.53	< 10	< 1	0.16	< 10	1.60	1540
446765	205	238	110	1.32	2.4	80	20	< 0.5	< 2	0.38	1.0	22	18	483	>15.00	20	< 1	0.03	10	0.92	670
446766	205	238	85	0.60	3.0	30	10	< 0.5	< 2	0.35	5.0	10	11	172	9.06	10	< 1	0.03	10	0.28	465
446767	205	238	980	0.20	27.0	75	30	< 0.5	< 2	0.02	0.5	6	8	229	12.55	10	< 1	0.06	< 10	0.03	360
446768	205	238	330	0.38	11.8	100	140	< 0.5	< 2	0.03	< 0.5	2	15	75	5.92	10	< 1	0.33	< 10	0.34	105
446769	205	238	210	1.15	5.8	55	30	< 0.5	< 2	0.46	0.5	8	17	360	8.67	10	< 1	0.08	10	0.68	440

CERTIFICATION : B. Caughlin

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212 BROOKSBANK AVE., NORTH VANCOUVER,
BRITISH COLUMBIA, CANADA V7J-2C1

PHONE (604) 984-0221

To: EQUITY ENGINEERING LTD.

207 - 675 W. HASTINGS ST.
VANCOUVER, BC
V6B 1N2

Project : PLI-89-05/LOT B
Comments:

Page No. : 1-B
Tot. Pages: 2
Date : 11-SEP-89
Invoice # : I-8924716
P.O. # : NONE

CERTIFICATE OF ANALYSIS A8924716

SAMPLE DESCRIPTION	PREP CODE		Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
446546	205	238	< 1	0.02	52	800	< 2	5	57	764	< 0.01	< 10	< 10	44	30	38
446547	205	238	< 1	0.01	101	1150	8	10	59	832	< 0.01	< 10	< 10	127	40	50
446548	205	238	< 1	0.01	79	1010	< 2	5	45	698	< 0.01	< 10	< 10	60	20	48
446549	205	238	6	0.02	38	2930	24	< 5	37	547	< 0.01	< 10	< 10	196	40	80
446685	205	238	1	0.01	32	510	2	5	7	540	< 0.01	< 10	< 10	46	20	60
446686	205	238	< 1	0.03	18	240	6	15	9	161	< 0.01	< 10	< 10	74	40	60
446687	205	238	10	0.02	35	860	8	20	7	137	< 0.01	< 10	< 10	82	30	1020
446688	205	238	< 1	0.02	16	510	8	10	11	174	< 0.01	< 10	< 10	82	60	86
446689	205	238	< 1	0.02	7	1260	< 2	10	7	436	< 0.01	< 10	< 10	36	20	66
446690	205	238	2	0.02	19	1550	2	5	14	376	< 0.01	< 10	< 10	97	40	78
446691	205	238	< 1	0.01	9	460	2	< 5	3	22	< 0.01	< 10	< 10	43	50	>10000
446692	205	238	< 1	0.10	17	1110	< 2	< 5	19	53	0.32	< 10	< 10	230	20	202
446693	205	238	< 1	0.03	10	960	14	5	19	62	0.53	< 10	< 10	202	40	196
446694	205	238	23	0.04	42	1110	18	5	10	117	0.21	< 10	< 10	131	20	134
446711	205	238	< 1	0.04	6	1090	2	< 5	6	143	< 0.01	< 10	< 10	19	20	68
446712	205	238	< 1	0.16	9	1030	< 2	5	8	170	0.05	< 10	< 10	125	40	84
446713	205	238	< 1	0.05	28	1000	< 2	5	31	217	< 0.01	< 10	< 10	189	30	76
446714	205	238	1	0.05	4	980	2	5	4	154	< 0.01	< 10	< 10	27	20	72
446715	205	238	< 1	0.04	69	1200	6	10	21	401	< 0.01	< 10	< 10	86	40	82
446716	205	238	< 1	0.05	15	660	< 2	10	11	681	< 0.01	< 10	< 10	102	60	62
446717	205	238	< 1	0.01	10	920	< 2	60	6	90	< 0.01	< 10	< 10	40	40	66
446718	205	238	< 1	0.01	1	60	< 2	10	2	429	< 0.01	< 10	< 10	12	10	10
446720	205	238	< 1	0.03	5	1190	< 2	5	3	101	0.07	< 10	< 10	91	10	52
446721	205	238	< 1	0.03	10	1330	4	< 5	5	38	0.20	< 10	< 10	99	30	34
446722	205	238	< 1	0.04	13	1290	2	< 5	10	66	0.24	< 10	< 10	137	40	90
446755	205	238	< 1	0.02	5	430	4	< 5	1	63	0.01	< 10	< 10	20	30	24
446756	205	238	< 1	0.01	5	50	< 2	5	2	1110	< 0.01	< 10	< 10	8	10	6
446757	205	238	< 1	0.01	7	390	8	< 5	1	100	< 0.01	< 10	< 10	5	10	8
446758	205	238	< 1	0.01	6	520	18	< 5	4	89	0.08	< 10	< 10	39	100	194
446759	205	238	7	0.02	3	640	< 2	< 5	1	8	< 0.01	< 10	< 10	11	20	12
446760	205	238	< 1	0.01	36	310	< 2	5	9	490	< 0.01	< 10	< 10	30	40	46
446761	205	238	< 1	0.01	20	980	6	5	11	346	< 0.01	< 10	< 10	28	30	50
446762	205	238	< 1	0.02	12	1140	10	5	8	348	< 0.01	< 10	< 10	30	30	70
446763	205	238	< 1	0.02	21	1070	2	10	10	342	< 0.01	< 10	< 10	82	30	62
446764	205	238	< 1	0.01	10	1290	2	5	11	426	< 0.01	< 10	< 10	34	30	56
446765	205	238	< 1	0.02	5	1080	84	< 5	12	15	< 0.01	< 10	< 10	147	50	204
446766	205	238	143	0.03	4	1090	116	5	3	28	< 0.01	< 10	< 10	108	50	690
446767	205	238	4	0.04	7	750	760	< 5	3	8	< 0.01	< 10	< 10	29	60	304
446768	205	238	1	0.07	3	1070	378	< 5	4	92	0.02	< 10	< 10	108	30	58
446769	205	238	< 1	0.03	4	1200	166	< 5	9	22	0.14	< 10	< 10	149	50	214

CERTIFICATION : B. Caughlin

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

212 BROOKSBANK AVE., NORTH VANCOUVER,
BRITISH COLUMBIA, CANADA V7J-2C1

PHONE (604) 984-0221

To : EQUITY ENGINEERING LTD.

207 - 675 W. HASTINGS ST.
VANCOUVER, BC
V6B 1N2

Project : PLI-89-05/LOT B
Comments:

Date : 11-SEP-89
Invoice # : I-8924716
P.O. # : NONE

CERTIFICATE OF ANALYSIS A8924716

SAMPLE DESCRIPTION	PREP CODE	Au ppb FA+AA	Al %	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm
446770	205 238	< 5	0.73	< 0.2	25	90	< 0.5	< 2	12.70	< 0.5	18	45	61	5.06	< 10	< 1	0.15	< 10	3.43	1855
446771	205 238	10	0.36	0.4	55	30	< 0.5	54	1.29	< 0.5	17	82	128	1.76	< 10	< 1	0.04	< 10	0.47	435
446772	205 238	< 5	0.29	< 0.2	25	420	< 0.5	2	10.50	< 0.5	11	64	58	4.03	< 10	1	0.12	< 10	1.74	1275
446851	205 238	20	0.30	4.2	< 5	< 10	< 0.5	2	0.28	0.5	194	59	5680	>15.00	10	< 1	< 0.01	10	0.17	555
446852	205 238	760	2.09	6.4	95	40	< 0.5	12	0.77	7.5	35	51	3290	>15.00	20	1	0.03	10	0.73	1070
446853	205 238	5	1.14	0.4	20	30	< 0.5	< 2	0.83	< 0.5	16	30	111	5.36	10	< 1	0.13	10	0.32	1135
446854	205 238	< 5	0.42	1.4	270	30	< 0.5	< 2	0.04	0.5	2	77	43	2.50	< 10	< 1	0.12	< 10	0.02	60
446855	205 238	< 5	1.13	< 0.2	20	50	< 0.5	< 2	4.05	< 0.5	19	29	103	5.81	< 10	< 1	0.13	< 10	1.34	1360
446856	205 238	< 5	3.08	< 0.2	10	30	< 0.5	< 2	2.47	0.5	26	53	157	6.17	< 10	< 1	0.06	< 10	2.59	1130
446857	205 238	< 5	0.33	< 0.2	230	110	< 0.5	< 2	0.14	< 0.5	2	114	15	1.97	< 10	< 1	0.17	< 10	0.06	50
446858	205 238	5	2.33	< 0.2	3090	130	< 0.5	< 2	2.25	4.5	7	126	69	6.06	< 10	5	0.24	< 10	0.18	270
446859	205 238	< 5	0.19	< 0.2	35	30	< 0.5	< 2	7.54	< 0.5	6	99	25	3.94	< 10	< 1	0.08	< 10	2.03	1330
446860	205 238	< 5	0.29	0.4	615	120	< 0.5	< 2	0.20	1.0	6	97	30	4.75	< 10	< 1	0.08	< 10	0.04	150
446861	205 238	< 5	0.94	0.4	50	20	< 0.5	2	0.13	< 0.5	11	93	25	4.70	< 10	1	0.07	< 10	0.43	90

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CERTIFICATE OF ANALYSIS A8924716

SAMPLE DESCRIPTION	PREP CODE		Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
446770	205	238	< 1	0.01	11	490	6	5	8	410	< 0.01	< 10	< 10	46	40	80
446771	205	238	9	0.01	30	170	8	< 5	2	26	< 0.01	< 10	< 10	8	10	42
446772	205	238	1	0.01	11	860	10	15	5	187	< 0.01	< 10	< 10	28	30	48
446851	205	238	25	0.01	6	210	14	< 5	2	3	< 0.01	< 10	< 10	12	150	124
446852	205	238	57	0.04	15	1340	742	< 5	9	26	0.11	< 10	< 10	252	1900	1755
446853	205	238	1	0.02	7	1320	< 2	< 5	9	15	< 0.01	< 10	< 10	99	50	106
446854	205	238	7	0.01	11	780	10	10	3	12	< 0.01	< 10	< 10	40	10	82
446855	205	238	< 1	0.04	5	1430	4	< 5	17	130	< 0.01	< 10	< 10	156	20	100
446856	205	238	4	0.07	29	1240	< 2	< 5	13	51	0.21	< 10	< 10	226	20	114
446857	205	238	1	0.01	3	200	6	5	1	13	< 0.01	< 10	< 10	10	< 10	10
446858	205	238	2	0.02	6	480	2	195	6	25	< 0.01	< 10	< 10	68	30	42
446859	205	238	< 1	0.01	7	220	6	5	3	121	< 0.01	< 10	< 10	15	20	30
446860	205	238	4	0.01	7	180	2	30	3	14	< 0.01	< 10	< 10	24	10	22
446861	205	238	1	0.01	9	430	2	5	3	6	< 0.01	< 10	< 10	38	< 10	20

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To: EQUITY ENGINEERING LTD.

207 - 675 W. HASTINGS ST.
VANCOUVER, BC
V6B 1N2

A8924713

Comments:

CERTIFICATE A8924713

EQUITY ENGINEERING LTD
PROJECT : PLJ-89-05/LOT B
P.O.# : NONE

Samples submitted to our lab in Vancouver, BC.
This report was printed on 11-SEP-89.

SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
201	9	Dry, sieve -80 mesh: soil sed
203	5	Dry, sieve -35 mesh and ring
217	6	Geochem:Ring only,no crush/spli
238	20	ICP: Aqua regia digestion

* NOTE 1:

The 32 element ICP package is suitable for trace metals in soil and rock samples. Elements for which the nitric-aqua regia digestion is possibly incomplete are: Al, Ba, Be, Ca, Cr, Ga, K, La, Mg, Na, Sr, Ti, Tl, W.

ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
100	20	Au ppb: Fuse 10 g sample	FA-AAS	5	10000
921	20	Al %: 32 element soil & rock	ICP-AES	0.01	15.00
922	20	Ag ppm: 32 element, soil & rock	ICP-AES	0.2	200
923	20	As ppm: 32 element, soil & rock	ICP-AES	5	10000
924	20	Ba ppm: 32 element, soil & rock	ICP-AES	10	10000
925	20	Be ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
926	20	Bi ppm: 32 element, soil & rock	ICP-AES	2	10000
927	20	Ca %: 32 element, soil & rock	ICP-AES	0.01	15.00
928	20	Cd ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
929	20	Co ppm: 32 element, soil & rock	ICP-AES	1	10000
930	20	Cr ppm: 32 element, soil & rock	ICP-AES	1	10000
931	20	Cu ppm: 32 element, soil & rock	ICP-AES	1	10000
932	20	Fe %: 32 element, soil & rock	ICP-AES	0.01	15.00
933	20	Ga ppm: 32 element, soil & rock	ICP-AES	10	10000
951	20	Hg ppm: 32 element, soil & rock	ICP-AES	1	10000
934	20	K %: 32 element, soil & rock	ICP-AES	0.01	10.00
935	20	La ppm: 32 element, soil & rock	ICP-AES	10	10000
936	20	Mg %: 32 element, soil & rock	ICP-AES	0.01	15.00
937	20	Mn ppm: 32 element, soil & rock	ICP-AES	5	10000
938	20	Mo ppm: 32 element, soil & rock	ICP-AES	1	10000
939	20	Na %: 32 element, soil & rock	ICP-AES	0.01	5.00
940	20	Ni ppm: 32 element, soil & rock	ICP-AES	1	10000
941	20	P ppm: 32 element, soil & rock	ICP-AES	10	10000
942	20	Pb ppm: 32 element, soil & rock	ICP-AES	2	10000
943	20	Sb ppm: 32 element, soil & rock	ICP-AES	5	10000
958	20	Sc ppm: 32 elements, soil & rock	ICP-AES	1	100000
944	20	Sr ppm: 32 element, soil & rock	ICP-AES	1	10000
945	20	Ti %: 32 element, soil & rock	ICP-AES	0.01	5.00
946	20	Tl ppm: 32 element, soil & rock	ICP-AES	10	10000
947	20	U ppm: 32 element, soil & rock	ICP-AES	10	10000
948	20	V ppm: 32 element, soil & rock	ICP-AES	1	10000
949	20	W ppm: 32 element, soil & rock	ICP-AES	10	10000
950	20	Zn ppm: 32 element, soil & rock	ICP-AES	2	10000

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

212 BROOKSBANK AVE., NORTH VANCOUVER,
BRITISH COLUMBIA, CANADA V7J-2C1

PHONE (604) 984-0221

To : EQUITY ENGINEERING LTD.

207 - 675 W. HASTINGS ST.
VANCOUVER, BC
V6B 1N2

Project : PLJ-89-05/LOT B
Comments:

Date : 11-SEP-89
Invoice # : I-8924713
P.O. # : NONE

CERTIFICATE OF ANALYSIS A8924713

SAMPLE DESCRIPTION	PREP CODE	Au ppb FA+AA	Al %	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm
BKS-06	201 238	< 5	1.11	< 0.2	50	150	< 0.5	< 2	3.76	0.5	15	14	99	4.39	< 10	1	0.09	< 10	0.64	810
BKS-07	217 238	5	3.13	0.2	< 5	120	< 0.5	< 2	1.55	< 0.5	20	43	116	5.51	10	< 1	0.17	< 10	1.75	1240
BKS-08	203 238	25	2.85	0.2	75	100	< 0.5	< 2	1.31	< 0.5	24	60	133	5.98	10	< 1	0.11	10	1.64	1225
BKS-09	217 238	10	4.03	0.2	30	30	< 0.5	< 2	1.78	< 0.5	26	47	138	6.83	20	< 1	0.04	10	2.33	1220
BKS-10	201 238	< 5	2.63	< 0.2	95	140	< 0.5	< 2	1.27	1.0	28	30	109	6.06	10	< 1	0.12	10	1.32	2370
BKS-11	217 238	15	2.68	0.2	15	110	< 0.5	< 2	1.46	0.5	20	51	135	5.41	10	< 1	0.10	10	1.69	1120
BKS-12	203 238	< 5	2.84	0.2	45	110	< 0.5	< 2	1.33	0.5	21	48	109	5.57	10	< 1	0.16	10	1.58	1210
BKS-13	203 238	< 5	2.83	0.2	20	120	< 0.5	< 2	1.53	< 0.5	18	53	90	5.08	10	< 1	0.12	10	1.64	960
BKS-14	217 238	< 5	3.37	0.2	30	150	< 0.5	< 2	1.95	< 0.5	20	56	104	5.64	10	< 1	0.10	< 10	2.03	1060
BKS-15	201 238	< 5	2.68	0.2	60	130	< 0.5	< 2	1.28	< 0.5	22	35	124	5.72	10	< 1	0.12	10	1.44	1565
BKS-16	217 238	< 5	2.74	0.2	10	120	< 0.5	< 2	1.35	0.5	17	59	89	4.94	10	< 1	0.12	10	1.65	935
BKS-17	217 238	< 5	2.85	< 0.2	20	110	< 0.5	< 2	1.33	< 0.5	18	38	84	5.24	10	< 1	0.09	10	1.80	955
TB-4	201 238	25	2.01	0.2	35	280	< 0.5	< 2	0.92	< 0.5	21	27	85	5.33	10	< 1	0.11	10	1.08	1130
TB-5	201 238	10	1.98	0.2	15	300	< 0.5	< 2	1.38	< 0.5	23	25	84	5.15	10	< 1	0.10	10	1.14	1170
TB-6	203 238	< 5	1.72	0.4	55	250	< 0.5	< 2	1.45	1.5	20	36	92	5.15	10	< 1	0.09	10	0.90	1395
TB-7	201 238	< 5	2.78	0.4	190	120	< 0.5	< 2	0.65	1.5	37	39	205	7.92	10	< 1	0.08	10	1.31	1615
446545	201 238	< 5	2.35	0.2	50	120	< 0.5	< 2	2.56	0.5	24	35	142	5.93	10	< 1	0.07	< 10	1.59	1055
446550	203 238	< 5	2.52	< 0.2	60	110	< 0.5	< 2	2.90	< 0.5	18	40	126	5.57	10	< 1	0.09	< 10	1.65	970
446719	201 238	< 5	2.99	< 0.2	20	80	< 0.5	< 2	1.81	< 0.5	26	30	126	5.84	10	< 1	0.08	10	1.64	1150
446738	201 238	< 5	3.08	< 0.2	20	130	< 0.5	< 2	1.46	< 0.5	26	48	116	6.11	10	< 1	0.15	10	1.91	1135

CERTIFICATION : B. Caughlin

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212 BROOKSBANK AVE. NORTH VANCOUVER,
BRITISH COLUMBIA, CANADA V7J-2C1

PHONE (604) 984-0221

To: EQUITY ENGINEERING LTD.

207 - 675 W. HASTINGS ST.
VANCOUVER, BC
V6B 1N2

Project : PLJ-89-05/LOT B
Comments:

Page No. : 1-B
Tot. Pages: 1
Date : 11-SEP-89
Invoice # : I-8924713
P.O. # : NONE

CERTIFICATE OF ANALYSIS A8924713

SAMPLE DESCRIPTION	PREP CODE		Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
BKS-06	201	238	16	0.02	42	1270	4	< 5	8	105	0.02	< 10	< 10	81	< 10	180
BKS-07	217	238	< 1	0.04	9	1150	< 2	5	7	140	0.12	< 10	< 10	103	< 10	112
BKS-08	203	238	< 1	0.04	41	1160	10	< 5	13	54	0.15	< 10	< 10	168	< 10	140
BKS-09	217	238	< 1	0.04	23	1160	4	< 5	16	46	0.38	< 10	< 10	237	< 10	126
BKS-10	201	238	3	0.03	27	1240	10	< 5	11	46	0.12	< 10	< 10	168	< 10	160
BKS-11	217	238	< 1	0.06	21	1470	< 2	5	14	40	0.18	< 10	< 10	201	< 10	116
BKS-12	203	238	< 1	0.06	21	1330	2	< 5	13	44	0.16	< 10	< 10	180	< 10	136
BKS-13	203	238	< 1	0.06	18	1230	< 2	< 5	12	41	0.21	< 10	< 10	180	< 10	102
BKS-14	217	238	< 1	0.08	16	1410	< 2	< 5	16	45	0.29	< 10	< 10	225	< 10	102
BKS-15	201	238	< 1	0.04	28	1330	12	5	13	49	0.13	< 10	< 10	166	< 10	144
BKS-16	217	238	< 1	0.07	18	1330	6	< 5	12	38	0.20	< 10	< 10	176	< 10	90
BKS-17	217	238	< 1	0.06	19	1360	< 2	< 5	12	43	0.23	< 10	< 10	176	< 10	92
TB-4	201	238	< 1	0.02	22	1180	6	< 5	9	49	0.08	< 10	< 10	106	< 10	138
TB-5	201	238	< 1	0.02	23	1170	4	< 5	8	59	0.04	< 10	< 10	91	< 10	114
TB-6	203	238	1	0.03	30	1350	4	< 5	9	51	0.07	< 10	< 10	108	< 10	206
TB-7	201	238	< 1	0.02	42	1290	4	5	14	30	0.06	< 10	< 10	165	< 10	190
446545	201	238	< 1	0.02	31	1340	< 2	5	12	70	0.14	< 10	< 10	164	< 10	146
446550	203	238	< 1	0.03	23	1360	< 2	< 5	11	73	0.13	< 10	< 10	165	< 10	136
446719	201	238	< 1	0.03	15	1180	< 2	5	14	66	0.19	< 10	< 10	195	< 10	112
446738	201	238	< 1	0.06	19	1110	< 2	< 5	15	59	0.19	< 10	< 10	205	< 10	114

CERTIFICATION : B. Caughlin

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
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PHONE: 604-984-0221

To: EQUITY ENGINEERING LTD.

207 - 675 W. HASTINGS ST.
VANCOUVER, BC
V6B 1N2

A9010530

Comments: ATTN: BRUNO KASPER

CERTIFICATE A9010530

EQUITY ENGINEERING LTD.

Project: PLJ89-05
P.O. # :

Samples submitted to our lab in Vancouver, BC.
This report was printed on 25-JAN-90.

SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
214	3	Received sample as pulp

ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
100	3	Au ppb: Fuse 10 g sample	FA-AAS	5	10000
396	3	Au oz/T: 1/2 assay ton	FA-GRAVIMETRIC	0.003	20.000

Chemex Labs Ltd.

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212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

To: EQUITY ENGINEERING LTD.

207 - 675 W. HASTINGS ST.
VANCOUVER, BC
V6B 1N2

Project : PLJ89-05
Comments: ATTN: BRUNO KASPER

Invoice Date: 22-JAN-90
Invoice No. : I-9010530
P.O. Number :

* CORRECTED COPY *

CERTIFICATE OF ANALYSIS A9010530

SAMPLE DESCRIPTION	PREP CODE	Au ppb FA+AA	Au FA oz/T
446755	214 --	2230	0.066
446758	214 --	1000	0.032
446759	214 --	2130	0.058

CERTIFICATION :

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

212 BROOKSBANK AVE., NORTH VANCOUVER,
BRITISH COLUMBIA, CANADA V7J-2C1

PHONE (604) 984-0221

To: EQUITY ENGINEERING LTD.

207 - 675 W. HASTINGS ST.
VANCOUVER, BC
V6B 1N2

A9010529

Comments: ATTN: BRUNO KASPER

CERTIFICATE A9010529

EQUITY ENGINEERING LTD.
PROJECT : PEJ89-05
P.O.# :

Samples submitted to our lab in Vancouver, BC.
This report was printed on 22-JAN-90.

SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
214	1	Received sample as pulp

ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
316	1	Zn %: HClO4-HNO3 digestion	AAS	0.01	100.0

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

212 BROOKSBANK AVE., NORTH VANCOUVER,
BRITISH COLUMBIA, CANADA V7J-2C1

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To: EQUITY ENGINEERING LTD.

207 - 675 W. HASTINGS ST.
VANCOUVER, BC
V6B 1N2

Project : PLJ89-05
Comments: ATTN: BRUNO KASPER

Page No. : 1
Tot. Pages: 1
Date : 22-JAN-90
Invoice # : I-9010529
P.O. # :

CERTIFICATE OF ANALYSIS A9010529

SAMPLE DESCRIPTION	PREP CODE		Zn %
446691	214	--	2.07

CERTIFICATION : W. Ellenbrecht

APPENDIX E

STATEMENT OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

I, JIM LEHTINEN, of 302-880 West 71st Avenue, Vancouver, in the Province of British Columbia, DO HEREBY CERTIFY:

1. THAT I am a Contract Geologist, with offices at Suite 207, 675 West Hastings Street, Vancouver, British Columbia.

2. THAT I am a graduate of the University of British Columbia with a Bachelor of Science Degree in Geology, 1984.

3. My primary employment since 1978 has been in the field of mineral exploration.

4. My experience has encompassed a wide range of geological environments and has allowed considerable familiarization with geophysical, geochemical, and diamond drilling techniques.

5. This report is based on data generated from work supervised by myself from August 8 through August 11, 1989.

6. I have no interest in the property described herein, nor in securities of any company associated with the property, nor do I expect to acquire any such interest.

DATED at Vancouver, British Columbia, this 23 day of March 1990.

J. Lehtinen

Jim Lehtinen,
B.Sc. Geology

EQUITY ENGINEERING LTD.

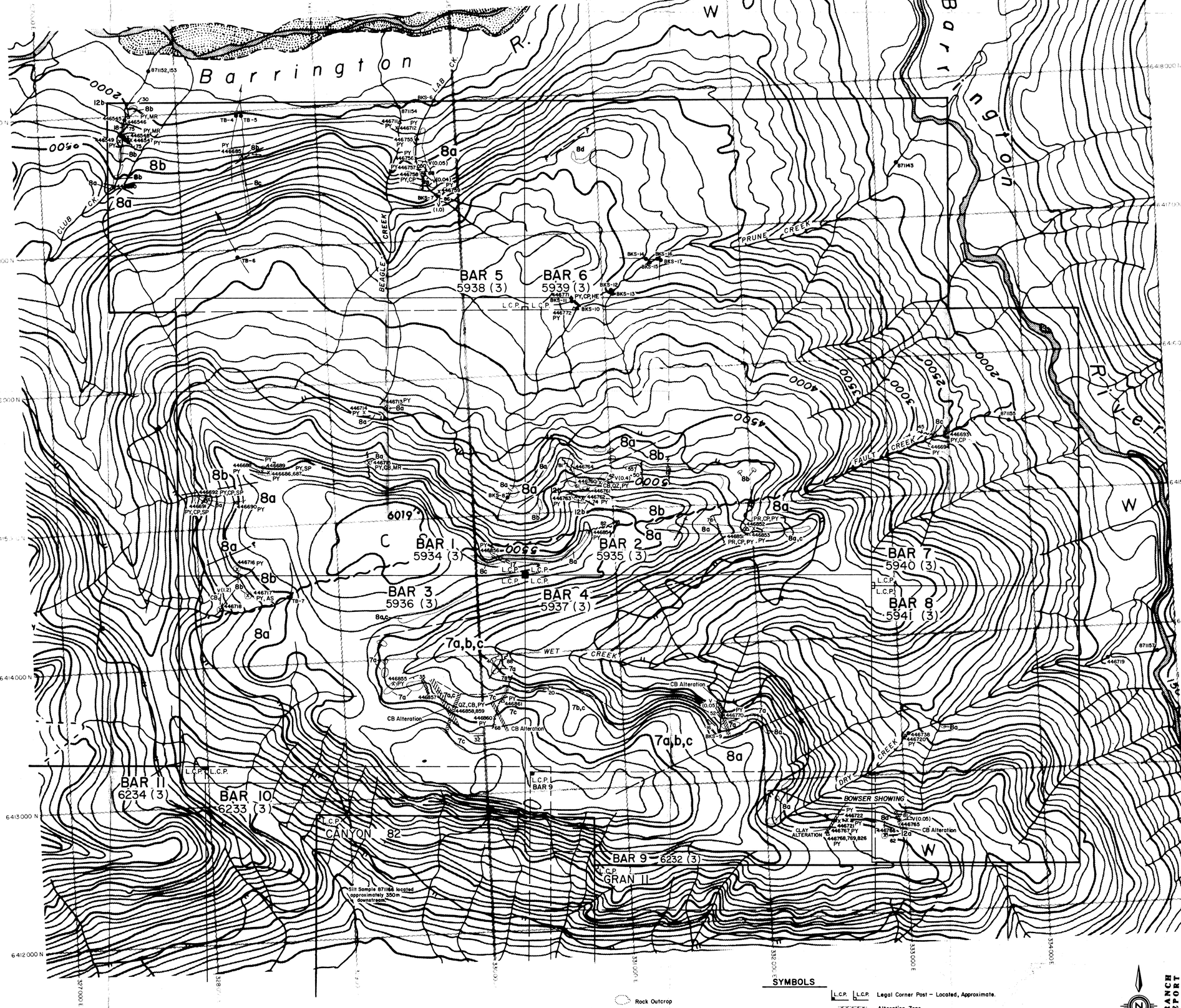
Geochemical Data Sheet - ROCK SAMPLING

NTS 104 G/13

Sampler Bruno Kasper | Project PLJ 89-05 | Location Ref

Date Aug 8-10/89 | Property Bar Claims | Air Photo No

SAMPLE NO.	LOCATION	SAMPLE TYPE	Sample Width / True Width	DESCRIPTION: Rock Type	DESCRIPTION: Alteration	DESCRIPTION: Mineralization	ADDITIONAL OBSERVATIONS	* = oz/ton ASSAYS: Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	As ppm
446755	elev 1250m N 6,417,740 E 329,720	Float		porphyritic Volcanics	Chlorite, CB, SI	PY	Rusty stained, disseminated and blebby Pyrite	* 0.066	0.8	4	4	24	15
446756	elev. 752m N 6,417,580 E 329,705	Grab o/c	5-5cm	"	CB, Sericite	PY	Strike 099/50 south	120	<0.2	2	<2	6	5
446757	elev. 760m N 6,417,540 E 329,730	Float		QZ		PY	Vein material	400	0.2	3	8	8	10
446758	elev 2600 N 6,417,490 E 329,750	Grab o/c	30cm / 4cm	porphyritic Volcanic	Chlorite, SI, CB	CP, PY	Highly fractured vein system strike 130°/78 S.W	* 0.032	12.6	5100	18	194	250
446759	elev. 930m N 6,417,350 E 329,870	Grab o/c	1-2m	"	SI	PY	3m. strike 006/86E	* 0.058	1.2	57	<2	12	25
446760	elev. 1530m N 6,415,200 E 330,920	"	? 0.3-0.6m	Argillite	CB, SI	PY	strike 060/42 N.W.	45	<0.2	64	<2	46	30
446761	elev. 1580m N 6,415,150 E 330,830	"	4m / ?	"	"	"	Highly fractured zone 20 m. strike 081/61N	15	<0.2	75	6	50	25
446762	elev. 1620 m N 6,415,090 E 330,790	"	10m?	Syenite dyke	CB, SI	PY	Alteration zone 122/74 NE	<5	<0.2	63	10	70	10
446763	elev 1618m N 6,415,110 E 330,740	"	10m?	"	"	"	As above, 100m east	5	<0.2	96	2	62	885
446764	elev. 1520m N 6,415,310 E 330,710	"	1-2m	mafic Volc	CB, SI, Chlorite		Shear zone 144°/81 SW. (4om strike	<5	<0.2	84	2	56	20
446765	elev. 1342m N 6,412,660 E 332,950	"	0.5	"	QZ vein in CB alt'n		QZ vein (5cm) Strike 159/55 NE	110	2.4	483	84	204	80
446766	elev. 1382m N 6,412,560 E 332,850	"	1.0m / 5-10cm	Syenite + mafic Volc.	SI		Contact zone Contact 088/62	85	3.0	172	116	690	30
446767	elev. 1440m N 6,412,610 E 332,440	Subcrop	0.5m / ? 3-4m	Porphyritic Volcanics	Clay + SI	PY, GL	Trend 033° - Subcrop gossan trail	980	27.0	229	760	304	75
446768	elev 1405m N 6,412,610 E 332,440	"	0.3m / ? 3-4m	"	"	"	" (Sample 10m below 767)	330	11.8	75	378	58	100
446769	elev 1410m N 6,412,610 E 332,440	"	"	"	"	"	Float from surrounding slope	210	5.8	360	166	214	55
446770	elev. 1470m N 6,413,450 E 331,720	Grab o/c	5-10cm	Argillite Wacke	SI, Chlorite CB	PY	QZ vein orientation 146/52SW	<5	<0.2	61	6	80	25
446771	elev. 1075m N 6,416,540 E 330,780	Float		QZ Vein	SI, CB	PY, CP	Rounded float at silt location BKS-11	10	0.4	128	8	42	55
446772	elev. 1060m N 6,416,450 E 330,790	Float		Argillite	QZ veins CB, Clay	PY	Near silt location BKS-10	<5	<0.2	58	10	48	25



ROCK GEOCHEMICAL RESULTS

Sample	Au(ppb)	Ag(ppm)	Cu(ppm)	Pb(ppm)	Zn(ppm)	As(ppm)
446546	<5	<0.2	33	<2	38	75
446547	<5	<0.2	91	8	50	65
446548	<5	<0.2	53	<2	48	140
446549	<5	<0.2	162	24	80	90
446685	<5	<0.2	52	2	80	10
446686	<5	<0.2	37	6	80	170
446687	<5	0.2	220	8	1020	175
446688	<5	<0.2	62	6	86	20
446689	<5	<0.2	50	<2	66	25
446690	<5	<0.2	154	2	78	35
446691	<5	2.2	1780	2	2.07%	25
446692	<5	<0.2	113	<2	202	30
446693	<5	<0.2	86	14	196	5
446694	50	<0.2	77	18	134	35
446711	<5	<0.2	29	2	68	10
446712	<5	<0.2	72	<2	94	20
446713	<5	<0.2	145	<2	76	25
446714	<5	<0.2	15	2	72	75
446715	<5	<0.2	105	6	82	110
446716	<5	<0.2	93	<2	82	10
446717	<5	<0.2	85	<2	66	550
446718	<5	<0.2	12	<2	10	10
446720	<5	<0.2	25	<2	52	30
446721	<5	0.2	63	4	34	<5
446722	<5	<0.2	131	2	90	5
446755	0.066*	0.8	4	4	24	15
446756	120	<0.2	2	<2	6	5
446757	400	0.2	3	8	8	10
446758	0.032*	12.6	5100	18	194	250
446759	0.058*	1.2	57	<2	12	25
446760	45	<0.2	64	<2	46	30
446761	15	<0.2	75	6	50	25
446762	<5	<0.2	53	10	70	10
446763	5	<0.2	98	2	82	885
446764	<5	<0.2	84	2	56	20
446765	110	2.4	483	84	204	80
446766	85	3.0	172	116	690	30
446767	980	27.0	229	760	304	75
446768	330	11.8	75	378	58	100
446769	210	5.8	360	186	214	55
446770	<5	<0.2	61	6	80	25
446771	10	0.4	128	8	42	55
446772	<5	<0.2	58	10	48	25
446826	295	10.4	496	668	480	50
446851	20	4.2	5680	14	124	<5
446852	760	6.4	3290	742	1755	95
446853	5	0.4	111	<2	106	20
446854	<5	1.4	43	10	82	270
446855	<5	<0.2	103	4	100	20
446856	<5	<0.2	157	<2	114	10
446857	<5	<0.2	15	6	10	230
446858	5	<0.2	69	2	42	3090
446859	<5	<0.2	25	6	30	35
446860	<5	0.4	30	2	22	615
446861	<5	0.4	25	2	20	60

* Denotes oz/ton

SILT GEOCHEMICAL RESULTS

Sample	Au(ppb)	Ag(ppm)	Cu(ppm)	Pb(ppm)	Zn(ppm)	As(ppm)
446545	<5	0.2	142	<2	146	50
446550	<5	<0.2	126	<2	136	60
446719	<5	<0.2	126	<2	112	20
446738	<5	<0.2	116	<2	114	20
BKS-6	<5	<0.2	99	4	180	50
BKS-7	5	0.2	116	<2	112	<5
BKS-8	25	0.2	133	10	140	75
BKS-9	10	0.2	138	4	126	30
BKS-10	<5	<0.2	109	10	160	95
BKS-11	15	0.2	135	<2	116	15
BKS-12	<5	0.2	109	2	136	45
BKS-13	<5	0.2	90	<2	102	20
BKS-14	<5	0.2	104	<2	102	30
BKS-15	<5	0.2	124	12	144	60
BKS-16	<5	0.2	89	6	90	10
BKS-17	<5	<0.2	84	<2	92	20
TB-4	25	0.2	85	6	138	35
TB-5	10	0.2	84	4	114	15
TB-6	<5	0.4	82	4	206	55
TB-7	<5	0.4	205	4	190	190

GOVERNMENT REGIONAL GEOCHEMICAL SAMPLES

Sample	Au(ppb)	Ag(ppm)	Cu(ppm)	Pb(ppm)	Zn(ppm)	As(ppm)
871143	9	0.3	104	8	113	26
871152	17	0.3	125	15	118	34
871153	23	0.4	102	20	115	17
871154	1	0.4	174	12	272	54
871155	149	0.2	161	10	168	15
871157	1	0.1	103	10	90	4
871166	1	0.1	118	8	145	19

STATISICAL ANALYSIS FOR GOVERNMENT REGIONAL GEOCHEMICAL SAMPLES

Percentile	Au(ppb)	Ag(ppm)	Cu(ppm)	Pb(ppm)	Zn(ppm)	As(ppm)
90th	30	0.3	103	16	133	17
95th	65	0.4	132	22	181	29
99th	237	1.0	272	55	478	81

LEGEND

JURASSIC AND/OR CRETACEOUS

- 18 — Hornblende Diorite, Minor Pyroxenite and Gabbro.
- 17 — Granodiorite, Quartz Diorite; Minor Diorite, Leucogranite and Migmatite.

TRIASSIC AND JURASSIC

- 12 — 12a Syenite, Orthoclase Porphyry. 12b Monzonite.

TRIASSIC

- 9 — Upper Triassic: Undifferentiated Volcanic and Sedimentary Rocks. (Units 6 to 8 Inclusive).
- 8 — Volcanic Rocks:
  - 8a Volcanic – Massive Aphanitic, Augite Porphyry, Feldspar Porphyry Flows and Flow Breccia.
  - 8b Sediments – Greywacke, Siltstone, Chert, Argillite, Mudstone, Volcanic Conglomerate.
  - 8c Pyroclastic Rocks – Tuff, Agglomerate.
  - 8d Limestone, Calcareous Siltstone and Mudstone.
- 7 — Sedimentary Rocks:
  - 7a Siltstone, Chert, Wacke, Mudstone, Argillite and Sandstone.
  - 7b Volcanic Rocks: Minor Augite Porphyry, Feldspar Porphyry and Massive Aphantic Flows.
  - 7c Pyroclastic and Volcaniclastic Rocks, Tuffs and Volcanic Derived Sediments.
  - 7d Limestone, Calcareous Siltstone and Mudstone.
- 6 — Limestone, Fetid Argillaceous Limestone, Calcareous Shale and Reefoid Limestone; May Be in Part Younger Than Some 7 and 8.

Geology adapted in part from SOUTHER (1971)
Government Regional Geochemical Data from G.S.C. OPEN FILE 1646

SYMBOLS

- Rock Outcrop
- Vein with Dip – Known, Vertical, Unknown – and True Width in Metres
- Bedding – Inclined, Vertical.
- Geological Contact – Defined, Approximate.
- Schistosity, Cleavage, Foliation – Inclined, Vertical.
- Lineation – Inclined – Plunge Known, Unknown.
- Fault – Defined with Dip and Sense of Movement, Approximate.
- Dyke with Dip.
- Jointing – Inclined, Vertical.
- L.C.P. — Legal Corner Post – Located, Approximate.
- Alteration Zone.
- X △ — Rock Sample, Float Sample.
- ● — Silt Sample.
- MC (F) — Mineral Occurrence, Fossil Occurrence

AS	Arsenopyrite	MC	Malachite
AZ	Azurite	MG	Magnetite
BO	Bornite	MR	Mariposite
CB	Carbonate	PR	Pyrrhotite
CP	Chalcopyrite	PY	Pyrite
GL	Galena	QZ	Quartz
HE	Hematite	SP	Sphalerite
LI	Limonite	TT	Tetrahedrite

U.T.M. Grid North is 2°20' W of True North.

0 500 1000 1500
METRES

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DRAWN: J.J.E.	MINING DIV.: LIARD	FIGURE 4
N.T.S.: 104G/13W	SCALE: AS SHOWN	
DATE: JAN., 1990	REVISED:	