

LOG NO: *April 26/91* RD.

ACTION:

FILE NO:

**SUB-RECORDER
RECEIVED
APR 19 1991**
M.R. # \$
VANCOUVER, B.C.

**1990 GEOLOGICAL
AND GEOCHEMICAL REPORT
ON THE**

BAR 1-8 AND RAB 1-4 CLAIMS

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

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

-prepared by-
Bruno Kasper, Geologist

March, 1991

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

21,232

1990 GEOLOGICAL AND GEOCHEMICAL REPORT ON THE BAR 1-8 AND RAB 1-4 CLAIMS

TABLE OF CONTENTS

	<u>Page</u>
1.0 INTRODUCTION	.1.
2.0 LIST OF CLAIMS	.1.
3.0 LOCATION, ACCESS AND GEOGRAPHY	.2.
4.0 PROPERTY MINING HISTORY	
4.1 Previous Work	.3.
4.2 1990 Work Program	.5.
5.0 REGIONAL GEOLOGY	.5.
6.0 PROPERTY GEOLOGY AND MINERALIZATION	
6.1 Property Geology	.6.
6.2 Mineralization	.9.
7.0 GEOCHEMISTRY	.11.
8.0 DISCUSSION AND CONCLUSIONS	.12.

APPENDICES

Appendix A	Bibliography
Appendix B	Statement of Expenditures
Appendix C	Rock Descriptions
Appendix D	Certificates of Analysis
Appendix E	Statement of Qualifications

LIST OF FIGURES

	<u>Following Page</u>
Figure 1	Location Map .1.
Figure 2	Claim Map .2.
Figure 3	Regional Geology .5.
Figure 4	Geology and Geochemistry -Pocket-

LIST OF TABLES

	<u>Page</u>
Table 2.0.1	Claim Data .1.
Table 6.1.1	Correlation of Lithological Units .7.

1.0 INTRODUCTION

The Bar 1-8 claims were staked in 1989 to cover favourable geology and geochemistry approximately 40 kilometres west of Telegraph Creek in northwestern British Columbia (Figure 1). Initial exploration of the Bar claims later that year resulted in the discovery of several base and precious metal occurrences. 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 sampling, was carried out over the Bar 1-8 claims in September of 1990. Four additional claims, the Rab 1-4, were staked at this time, but no exploration was carried out on them. 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

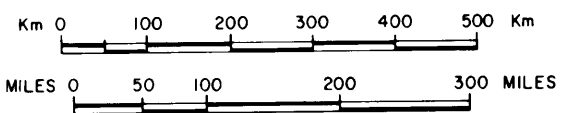
Records of the British Columbia Ministry of Energy, Mines and Petroleum Resources indicate that the following claims, located in the Liard Mining Division (Figure 2), are owned by Pass Lake Resources Ltd.. Separate documents indicate that the claims are held in trust for a joint venture composed of Pass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

TABLE 2.0.1
CLAIM DATA

Claim Name	Record Number	No. of Units	Record Date	Expiry Year
Bar 1	5934	20	Mar. 27, 1989	1991
Bar 2	5935	20	Mar. 27, 1989	1991
Bar 3	5936	15	Mar. 27, 1989	1991
Bar 4	5937	20	Mar. 27, 1989	1991
Bar 5	5938	18	Mar. 26, 1989	1991
Bar 6	5939	18	Mar. 26, 1989	1991
Bar 7	5940	12	Mar. 26, 1989	1991
Bar 8	5941	12	Mar. 26, 1989	1991
Rab 1	7824	20	Sept. 5, 1990	1991
Rab 2	7825	8	Sept. 5, 1990	1991
Rab 3	7826	3	Sept. 4, 1990	1991
Rab 4	7845	5	Sept. 5, 1990	1991

171

**PROPERTY
LOCATION**



PASS LAKE RESOURCES LTD.

**BAR PROJECT
LOCATION MAP**

BRITISH COLUMBIA

EQUITY ENGINEERING LTD.

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

The positions of the legal corner posts for the Bar 1-4, Bar 7-8 and Rab 1-4 claims were verified by field crews of Equity Engineering Ltd.. The southwest corner of the Bar 4 claim overlaps the previously staked Canyon #82 claim. The Rab 1-4 claims were staked to cover open ground on the south side of the existing Bar 1-8 claims, and partially overlap the previously staked Bar 3-4, Canyon #82 and the Gran 11 claims.

3.0 LOCATION, ACCESS AND GEOGRAPHY

The Bar and Rab claims are located within the Boundary Ranges of the Coast Mountains approximately 40 kilometres west of Telegraph Creek in northwestern British Columbia (Figure 1). They lie within the Liard Mining Division, centred at 57° 51' north latitude and 131° 51' west longitude.

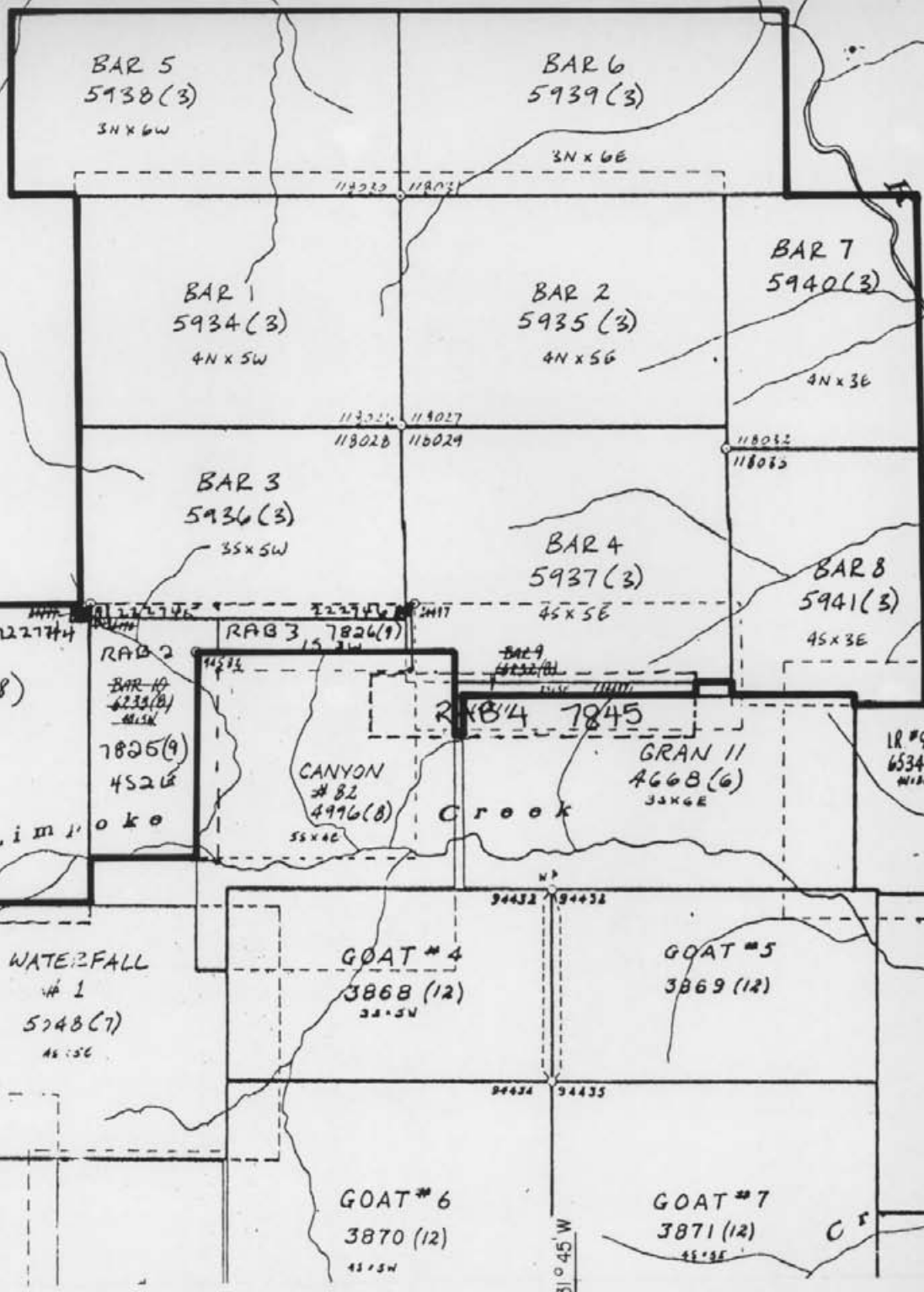
Access to the property during the 1990 field season was provided by daily helicopter setouts from the Ball Ranch, located thirty kilometres to the east on Callbreath Creek. The Ball Ranch is connected by road and ferry to Glenora, which lies sixteen kilometres south of Telegraph Creek along a secondary road. An access road suitable for four-wheel drive vehicles has been constructed west-southwest from Glenora to the site of a placer mining camp on the Barrington River, approximately four kilometres upstream from its confluence with the Chutine River and fifteen kilometres south of the property. In the 1960's, a cat road was built up Shakes Creek from the Barrington River road to the MH iron occurrence, terminating four kilometres east of the eastern boundary of the Bar claims. This cat road would have to be cleared and upgraded before it could be used.

The Bar and Rab claims are roughly bounded on the north and east sides by the Barrington River and by Limpoke Creek to the south. Minor creeks on the property flow in a radiating pattern outward from a main "horseshoe" shaped ridge, 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.

Topography is rugged, typical of mountainous and glaciated terrain, with elevations ranging from 490 metres along the Barrington River to over 1,835 metres 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 1,200 to 1,500 metres 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

57° 51' N



RAB 1
7824(8)
5S4W
BAR 11
6207(8)
5S4W

RAB 2
BAR 10
6230(8)
4S1W
7825(9)
4S2E

RAB 3
7826(9)
1S2W

RAB 4
7845

GRAN 11
4668(6)
3S4E

LR #9
6534(10)
N12W

CANYON
#82
4996(8)
5S4E

POKER 5
6200(7)
5S2E

WATERFALL
#1
5748(7)
4S1E

GOAT #4
3868(12)
3S1W

GOAT #5
3869(12)

POKER 6
6201(7)

GOAT #6
3870(12)
4S1W

GOAT #7
3871(12)
4S1E



PASS LAKE RESOURCES LTD.

BAR PROJECT
CLAIM MAP
BRITISH COLUMBIA

EQUITY ENGINEERING LTD.

DRAWN:	MINING DIV.: LIARD	FIGURE
N.T.S.: 1046/13W	SCALE: 1:50000	2
DATE: DEC., 1990	REVISED:	

resulting from snow avalanches. Active glaciation is absent on the Bar claims, but prevalent above 1,600 metres further 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 kilometres south-southwest and 62 kilometres 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 kilometre 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 kilometres 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 kilometres 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 122.57 g/tonne (3.575 oz/ton) gold

from narrow pods of massive pyrite, arsenopyrite, chalcopyrite and pyrrhotite.

The earliest known work carried out on the property was in the spring of 1980, when Du Pont collected five field-sieved stream sediment samples during a regional survey of the Telegraph Creek area (Harron, 1981). Only one of these samples was highly enriched in silver, copper and lead. The Bar claim was then staked by Du Pont to cover favourable gold geochemistry on the north side of Limpoke Creek. This claim covered what is now the Gran 11 and the southern part of the Bar 4 claim. Du Pont carried out limited geological mapping and prospecting on the property, collecting three rock samples from the area now covered by the Bar 4 claim. All three rock samples returned low gold values (see Figure 4).

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 1,291 samples (GSC, 1988). Seven silt samples were taken from creeks draining the Bar claims, one of which exceeded the 95th percentile in gold.

In the summer of 1989, Integrated Resources Ltd. conducted limited prospecting and geological mapping on their Waterfall #1 property, which adjoins the Rab 1 claim to the south, and Goat claims, located on the south side of Limpoke Creek. Numerous gold-bearing, shear-hosted veins were found within northerly trending shears zones on the south side of the Mount Barrington stock, seven kilometres south of the Bar claims. Samples from these arsenopyrite-rich veins assayed up to 41.55 g/tonne (1.212 oz/ton) gold (Lehtinen, 1989). Auriferous quartz float containing 9,670 ppb gold, was also found on the Waterfall #1 claim (Bell, 1989). Copper-gold mineralization associated with syenitic and granodiorite intrusives were found on the Goat claims, too. These intrusives were mineralized with or contained quartz veins mineralized with magnetite and chalcopyrite. Samples taken of this mineralization contained up to 3.05 g/tonne (0.089 oz/ton) gold and 1.53% copper.

Pass Lake Resources Ltd. and Golden Sitka Resources Inc. carried out limited geological mapping, prospecting and silt sampling on the Bar 1-8 claims in 1989, taking 20 silt samples and 55 rock samples. Silicified volcanics on Lab Creek assayed 1.99 g/tonne (0.058 oz/ton) gold across one metre. No source was found for anomalous silt samples taken from Club Creek and Beagle Creek.

In the summer of 1990, extensive geological and geophysical work was carried out on the properties that border the Bar and Rab claims to the south. The focus of most of this work was gold- and copper-bearing mineralization related to the Mount Barrington intrusives and associated dykes. Extensive drilling was also conducted on two of the properties: the Goat and the Poker claims.

To date, none of the results of this year's work programs has been released.

4.2 1990 Work Program

In September 1990, Pass Lake Resources Ltd. and Golden Sitka Resources Inc. carried out further geological mapping, prospecting and silt sampling on the Bar 1-8 claims. This program was targeted at mesothermal, gold-rich, base metal veins comparable to those found 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, eight silt samples and 33 rock samples were taken from the Bar claims. The silt samples were collected from silt accumulations in creek drainages, sieved to minus 80 mesh in the laboratory and analyzed geochemically for gold and 32-elements by ICP (Figure 4). Samples with insufficient fines were pulverized to minus 150 mesh before being analyzed.

Geological mapping and prospecting were carried out over the property, using a 1:10,000 enlargement of the government 1:50,000 topographic map as a base (Figure 4). Rock samples, described in Appendix C, were taken from zones of alteration and mineralization and analyzed geochemically for gold and 32 elements by ICP. Samples exceeding 1,000 ppb gold were fire assayed. 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).

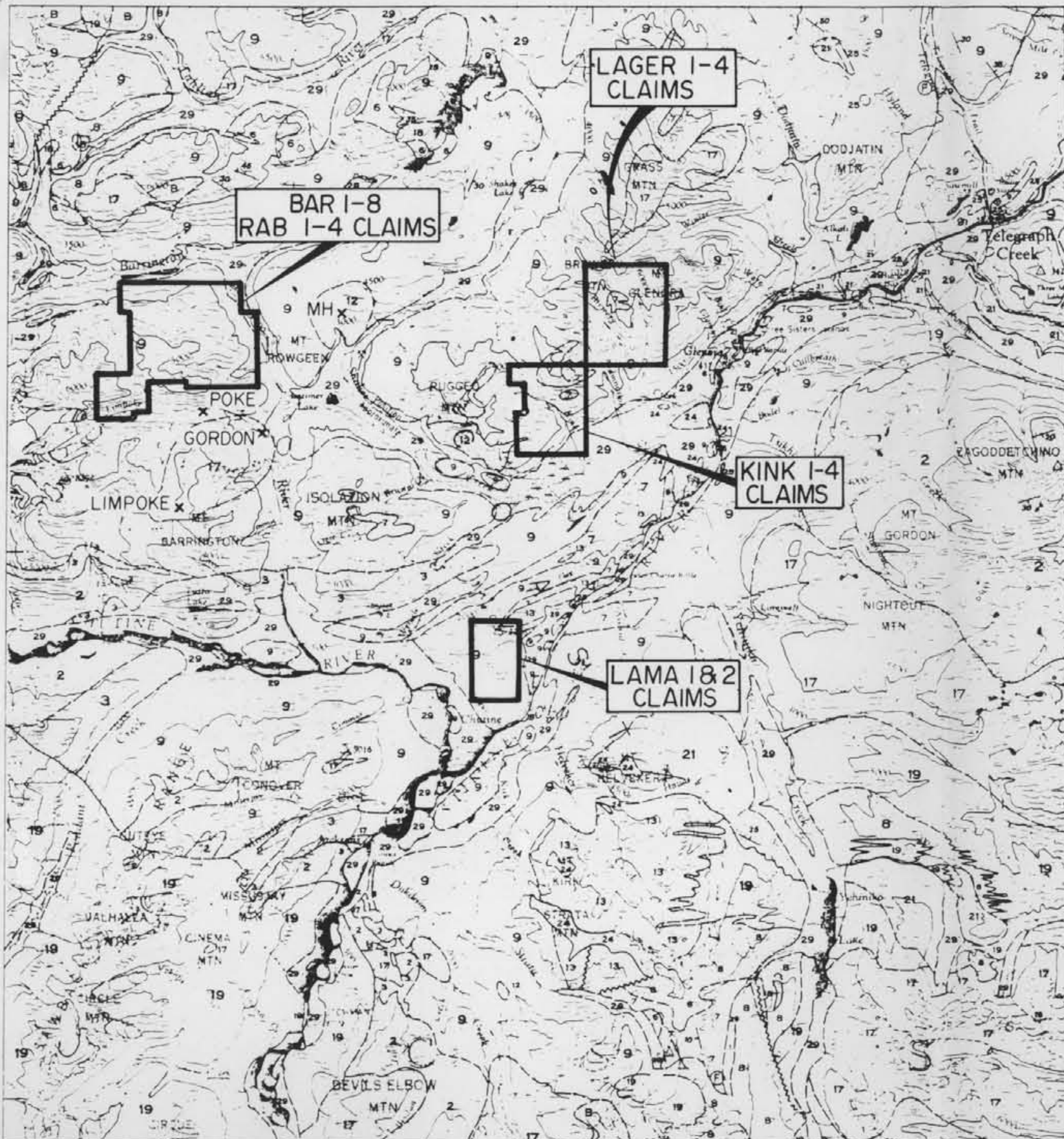
Unconformably overlying the Permian limestone unit are Upper Triassic rocks (Units 5 through 8) equivalent to the Stuhini Group island arc volcanics and sediments. In the Telegraph Creek area, Souther (1972) grouped these volcanic and sedimentary members in Unit 9, noting however that it was composed predominantly of augite andesite breccia, conglomerate and volcanic sandstone. Several significant gold occurrences are hosted by Upper Triassic Stuhini

132° 00'
58° 00'

45

30

15



LEGEND

- QUATERNARY**
PLEISTOCENE AND RECENT
29 Fluvialite 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 28
- 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
SUBTUT GROUP
21 Chert-pebble conglomerate, granite-boulder conglomerate, quartzose sandstone, arkose, siltstone, carbonaceous shale and minor coal
19 Medium-to coarse-grained, pink biotite-hornblende quartz monzonite
- JURASSIC AND/OR CRETACEOUS**
POST-UPPER TRIASSIC PRE-TERTIARY
18 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 Granite, 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, feld argillaceous limestone, calcareous shale and reefoid 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, gneiss, minor chert, schistose tuff and limestone
8 Amphibolite, amphibolite gneiss; age unknown probably pre-Upper Jurassic



SYMBOLS

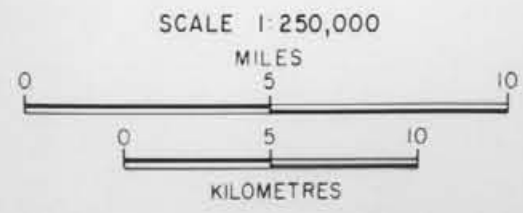
- Geological boundary (defined and approximate, assumed)
- Bedding (horizontal, inclined, vertical, overturned)
- Anticline
- Syncline
- Fault (defined and approximate, assumed)
- Thrust fault, teeth on hanging-wall side (defined and approximate, assumed)
- Fossil locality
- Mineral property
- Glacier

PASS LAKE RESOURCES LTD.

**TELEGRAPH CREEK PROPERTIES
REGIONAL GEOLOGY**

LIARD MINING DIVISION, B.C.

EQUITY ENGINEERING LTD.



DRAWN: JW	NTS 1046/13	DATE DEC., 1990	FIG. No. 3
--------------	----------------	--------------------	---------------

volcanics in a cluster around Galore Creek seventy kilometres to the south.

Small, equidimensional syenite, pyroxenite and orthoclase porphyry stocks (Unit 12), dated as Late Triassic to Early Jurassic by Souther (1972), 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, 1972).

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 metres of felsic to intermediate, mainly pyroclastic rocks (Unit 24), correlated by Souther (1972) 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 Stuhini Group volcanics, pyroclastics and sedimentary rocks underlie most of the Bar claims. These rocks have been intruded by Jurassic and/or Cretaceous (?) dykes varying in composition from dioritic to syenitic. Regional greenschist 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 a compilation of geological mapping completed during the 1990 and 1989 programs. Table 6.1.1 correlates the lithological units used in Figure 4 with those of Souther (1972) used in Figure 3.

TABLE 6.1.1
CORRELATION OF LITHOLOGICAL UNITS

Map Unit (Figure 4)	Lithological Unit	Map Unit (Souther)
Upper Triassic:		
8	- undifferentiated strata:	9
8A	- sedimentary fine-grained siliciclastics:	5 & 7
8C	- fossiliferous limestone and calcareous mudstone:	6
8D	- augite porphyry:	8
8E	- andesite (plagioclase porphyry):	8
8G	- crystal tuff and tuffaceous sediments:	8
8H	- lapilli tuffs and agglomerates:	8
Jurassic and/or Cretaceous		
12B	- diorite and plagioclase-phyric andesitic dykes:	17
12F	- syenite - megacrystic orthoclase porphyry dykes:	17

The Bar claims are predominately underlain by a sedimentary sequence consisting of thin bedded to thinly laminated, dark grey, black and green argillaceous mudstone and siltstone with minor wacke and chert (Unit 8A). The wackes, composed of volcanic-derived clasts, are poorly sorted and are commonly calcareous. Soft sediment deformation and slump structures are observed in outcrop. The argillites and siltstones are generally slightly pyritic, but a series of outcrops at the headwaters of Prune Creek contain up to 10% finely-disseminated pyrite and pyrrhotite. The weathering of these sulphides results in a distinct gossanous appearance. Lehtinen (1990) noted a large scale debris flow composed of volcanic, limestone and clastic and pelitic sediments cemented in a fine-grained matrix of chlorite at the headwaters of Wet Creek in addition to a large outcrop of medium- to coarse-grained, poorly sorted wacke with subangular to subrounded clasts south of the headwaters of Wet Creek.

A large, single outcrop of dark grey, thinly bedded, fossiliferous limestone and calcareous mudstone (Unit 8C) has been noted by Lehtinen (1990) 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.

Volcanic flows dominate in the northeastern and southeastern corner of the property as well as along the north side of Wet Creek. These flows have been divided into two main units based on the presence of augite phenocrysts: augite porphyry (Unit 8D) and andesitic (plagioclase-phyric) (Unit 8E) flows. The augite porphyry flows are composed of dark green to black augite phenocrysts, up to eight millimetres in length, in a fine- to medium-grained, dark green or grey-green, magnetic matrix. In places, the matrix has been bleached to a light grey colour due to iron-carbonate alteration. A large section of these volcanics is exposed along Dry Creek and along the escarpment on the north side of Wet Creek. The feldspar porphyry flows are composed of less than five millimetre, white to light green plagioclase phenocrysts with minor hornblende phenocrysts in a variably coloured dark matrix. These feldspar porphyry flows represent a small proportion of the rocks on the Bar Claims but form a majority of outcrops along the northern part of the property. Massive to aphanitic volcanics, which are thought to be the finer-grained equivalents of the porphyritic flows, are also included in Unit 8E. These aphanitic volcanics are medium to light green and appear featureless in hand specimen due to masking of textures by local and regional alteration. All of the flow units exhibit minor flow brecciation which is limited to outcrop scale exposures.

Pyroclastic rocks are generally interbedded with the volcanic flows on the property and have been divided into two units based on the size of the fragments present: crystal ash tuffs and tuffaceous sediments (Unit 8G) and crystal lithic lapilli tuffs and agglomerates (Unit 8H). The dark grey crystal ash tuff is generally well-sorted and is thought to underlie the area cut by Fault Creek. Ash tuff layers are interbedded with the coarser-grained pyroclastics near the Rab 3 legal corner post. The more poorly-sorted lapilli tuff and agglomerate consist of fragments of augite and feldspar porphyritic flows within a fine- to coarse-grained crystal and ash tuff matrix. Along Lab Creek, augite crystal fragments up to two millimetres in size are common within the matrix. The lapilli tuffs and agglomerates are found throughout the property, outcropping along the headwaters of Wet, Lab, Prune and Dry Creeks as well as forming an easterly trending band through the northern part of the Bar 5 claim.

The only intrusive rocks on the Bar property are Jurassic and/or Cretaceous dykes which vary in thickness up to five metres. These dykes vary in composition from dioritic (Unit 12B) to syenitic (Unit 12F) and are believed to be related with the multi-phase Mount Barrington Stock located on the south side of Limpoke Creek. The dioritic dykes are found throughout the property, of which, the plagioclase-phyric andesites (Unit 12B,) are the most common. The plagioclase-phyric andesitic dykes are composed of

white plagioclase phenocrysts up to five millimetres in length within a grey, fine-grained matrix. The phenocrysts may form up to 35% of the dykes composition. At the headwaters of Prune Creek and within Dry Creek, these dykes have undergone moderate to intense iron-carbonate alteration. Megacrystic orthoclase porphyry dykes (Unit 12F) were only found along Dry Creek. These easterly trending dykes are characterized by orthoclase phenocrysts up to three centimetres in length within a grey-green matrix. These dykes are similar to those noted by Lehtinen (1989) around the Mount Barrington stock, which are believed to be part of the marginal phases of the stock.

Bedding measurements on the Bar claims indicate an east-northeast attitude in sedimentary or volcanoclastic sequences as volcanic flows are massive and featureless. Lehtinen (1990) has indicated that the cliffs south of Wet Creek displayed large scale features interpreted to be east-west bedding in the sedimentary and volcanoclastic sequence, consistent with bedding measurements in the area.

At least three different fault trends have been noted on the property trending northeast-southwest, southeast-northwest and generally north-south. Lehtinen has inferred a major northeast-southwest trending fault extending from Fault Creek to the West side of the property. This fault direction coincides with the bedding attitudes on the property and may be a bedding plane fault. He also noted that major erosional lineaments on the property trend between 060° and 070° and may be either faults, contacts or a combination of the two.

The second set of faults strike between 130° to 170° . The surface expression of these faults is easily visible on the property as a result of intense iron-carbonate alteration zones which are infilled with ankerite and quartz breccia. A carbonate altered shear zone containing chromium mica mineralization was noted by Lehtinen (1990) on the lower portion of Club Creek. The chromium mica-carbonate alteration relationship is commonly associated with ultramafic rocks or major tectonic structures and are common indicators of mesothermal lode gold mineralization. Unfortunately, no significant rock geochemistry values were returned from the two samples taken from this shear zone in 1989. Other minor faults, observed in the sedimentary rocks immediately north of the headwaters of Fault Creek, are oriented north-south and display sinistral strike slip motion. Some of these faults are also highlighted by an iron-carbonate alteration halo.

6.2 Mineralization

Several areas of significant mineralization were discovered on the Bar claims during the 1989 program of which the Ador showing is the most significant. The Ador showing consists of a strongly silicified shear zone hosted within lapilli tuff at approximately

945 metres elevation on the east side of Lab Creek. The exposed portion of this shear zone is generally lenticular in shape, varying from one to two metres in width and extending for over 20 metres in length. Pyrite mineralization is found within frothy quartz veinlets along the fractures or is coarsely disseminated throughout the silicified rock. The zone, which has a general south-southeast trend and moderate easterly dip, pinches off to the north and is covered in overburden and thick brush to the south. Smaller gossanous pods that are thought to be of the same style of alteration and mineralization, are exposed on the face of the escarpment north of the Ador showing. A northerly trending fault highlighted by an intense iron-carbonate alteration zone outcrops approximately 30 metres east of the showing. The fault dips steeply to the east and can be traced along strike for over 200 metres. Its relationship on the Ador showing is unknown at this time.

Resampling of the Ador showing this year returned a value of 700 ppb gold with no associated base metals. This 1.3 metre grab sample (one metre true width) was taken two metres south of grab sample 446759 which assayed 1.99 g/tonne (0.058 oz/ton) gold in 1989. A two metre select sample was taken of pyritic quartz veins within a smaller, 0.8 metre wide, silicified alteration zone (possible splay), located six metres upslope within the hanging wall of the Ador showing. This sample (rock sample 484902) returned 8.43 g/tonne (0.246 oz/ton) gold with low silver and base metal values. A 1.2 metre grab (sample 484901) across the iron-carbonate altered fault that borders the Ador showing to the east, returned very low precious and base metal values.

The Ador showing may also be the source of the auriferous float found last year at approximately 685 metres elevation in Lab Creek. Float sample 446755, which assayed 2.26 g/tonne gold (0.066 oz/ton), contained a quartz veinlet and secondary calcite stringers within a volcanic host. The lack of silver and base metals and the presence of simply pyrite mineralization, indicates that this float may have come from the Ador showing.

Narrow gold-bearing quartz veinlets, containing pyrite and chalcopyrite, were found last year 300 metres to the northwest of the Ador Showing. Grab sample 446758, taken from a four centimetre wide veinlet, contained 1.10 g/tonne (0.032 oz/ton) gold with 12.6 ppm silver and 5,100 ppm copper. Although these veinlets have a similar strike as the Ador Showing, the lack of an intense silica alteration halo and the presence of silver and chalcopyrite suggest that they represent a different mineralizing event.

Mapping and prospecting was conducted along Dry Creek this year to find the northern extension of the Bowser Showing. Although numerous samples were taken of intense iron-carbonate altered areas and altered dykes, all samples returned low precious and base metal values.

Further prospecting was also conducted along the western boundary of the Bar 1 claim to find the source of float sample 446691 found in 1989. This sample assayed 2.07% zinc along with 1,780 ppm copper, but the source or similar float material could not be found this year.

7.0 GEOCHEMISTRY

During the course of the field season, eight silt samples were collected from drainages on the Bar claims. Values from these silt samples were compared with the statistical data generated by the Geological Survey of Canada's National Geochemical Reconnaissance of the Sumdum - Telegraph Creek map sheets. The silt samples are directly comparable to the government results listed in Figure 4 and anomalous results can be defined in the same way.

Two of the silt samples, 90BK-40 and 90BK-41, exceeded the government's 95th percentile in gold (65 ppb) while a third silt sample, 90RG-32, exceeded the government's 90th percentile (30 ppb). Sample 90BK-40 (110 ppb gold) was taken from Lab Creek at approximately the 945 metre elevation just above its confluence with a tributary from which sample 90BK-41 (70 ppb gold) was collected. Both silt samples were taken below an iron-carbonate altered fault; however, a grab sample from the fault (sample 484905) contained only low precious and base metal values. Both silt samples were also low in silver, arsenic and base metal values, which is geochemically similar to the Ador Showing and therefore, may indicate a southern extension to the showing.

Silt sample 90RG-32 (40 ppb gold) was collected from a tributary of Wet Creek on the Bar 4 claim at approximately 1,235 metres elevation. This sample was also weakly anomalous in copper (121 ppm) and arsenic (20 ppm). The tributary drains an area which is crosscut by an inferred, major east-west trending fault. Limited prospecting has been conducted along this tributary to date, but the copper content may be indicative of mineralization similar to the copper-enriched, massive sulphide float found one kilometre to the northeast on the Fault Creek side of a ridge which separates Fault Creek from Wet Creek.

Further reconnaissance work was conducted along the tributary at the headwaters of Club Creek from which 1989 silt sample TB-7 was collected. This sample was highly anomalous in copper (205 ppm), zinc (190 ppm) and arsenic (190 ppm). Although no source for the copper or zinc anomalies was found, rock samples taken from northerly trending iron-carbonate alteration zones contained arsenic values up to 640 ppm. Volcanic float containing 2.07% zinc and 1,780 ppm copper was found in the next drainage basin, 800 metres to the north. Although the source of this float was not

found, the zinc-copper silt anomaly for silt sample TB-7, indicates the potential for similar base-metal mineralization.

Previous silt sampling during regional reconnaissance programs, by Du Pont Explorations Limited in 1981 and by the government in 1987, outlined several anomalous drainages. Field-sieved stream sediment sample 2623, collected by Du Pont from a stream draining the southeast corner of the property, contained elevated levels of silver (1.9 ppm), copper (305 ppm) and lead (71 ppm) (Harron, 1981). The copper anomaly may be related to similar copper mineralization as is found at the Gordon showing located to the southeast of the property. Two silt samples collected to the north from Wet Creek, government silt sample 871157 and 1989 silt sample 446719, were also weakly anomalous in copper and may represent similar style of mineralization along the north side of the ridge.

Government silt sample 871154 collected from Beagle Creek, was anomalous in silver (0.4), copper (174 ppm), zinc (272 ppm) and arsenic (54 ppm). The source of this anomaly may be gold- and copper-bearing quartz veinlets similar to those found along Lab Creek.

The source of the government's gold-copper-zinc anomaly (silt sample 871155: 149 ppm gold, 161 ppm copper and 168 ppm zinc) in Fault Creek has yet to be found. Although copper-rich massive sulphide float was found in the upper reaches of the drainage, gold values were low for this float and its source is unknown.

8.0 DISCUSSION AND CONCLUSIONS

Numerous gold- and base metal-bearing mineralization has been found on the property to date. The most significant of these is the Ador showing, a northerly trending silicified shear zone exposed in Lab Creek. Although resampling of this showing returned a low gold value (700 ppb), a select grab of pyrite-rich, frothy quartz vein within a smaller shear zone in the hanging wall assayed 8.43 g/tonne (0.246 oz/ton) gold. Two silt samples collected further upstream at a junction in Lab Creek, were anomalous in gold. These anomalous drainages may indicate the presence of the southern extension of the Ador showing or similar mineralization.

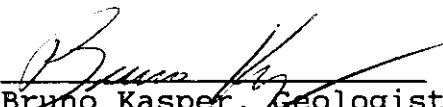
Two occurrences of base metal rich float was found in 1989 on the Bar 1 and 2 claims at opposite ends of the property along inferred east-west trending faults. Further prospecting conducted at the western end of the property failed to locate the source of the zinc- (along with minor copper) enriched float. A silt sample collected in 1989 from a tributary of Club Creek located 750 metres to the south, was anomalous in zinc and copper.

Limited exploration work was conducted north of the Bowser Showing this year to locate its northern extension. Although extensive areas of iron-carbonate alteration related to faults and dykes were sampled, no significant precious and base metal values were returned. Similar iron-carbonate alteration zones elsewhere on the property contained areas of arsenic-enrichment which is reflected in the stream sediment sampling. The Bowser Showing itself is poorly exposed and further work would be required to determine its full potential.

Results from stream sediment sampling throughout the property has returned many anomalous copper values. These anomalies may be the result of copper mineralization similar to that found the south of Limpoke Creek related to the Mount Barrington stock. Numerous dioritic and syenitic dykes, that are believed to be part of the Mount Barrington intrusive event, have been found on the Bar property. To date, no copper mineralization has been found near these dykes.

Limited exploration indicates a favourable geological environment containing gold-bearing structures, unexplained geochemical anomalies and base metal occurrences. Exploration successes to the south along Limpoke Creek and a similar geological environment to that found in the Galore Creek, Iskut River, Sulphurets and Stewart Camps, provides incentive for further exploration.

Respectfully submitted,
EQUITY ENGINEERING LTD.


Bruno Kasper, Geologist
Vancouver, B.C.
March, 1991.

APPENDIX A

BIBLIOGRAPHY

BIBLIOGRAPHY

- Allen, D.G., A. Panteleyev and A.T. Armstrong (1976): Galore Creek, in CIM Special Volume 15, pp. 402-414.
- BCDM (1963-66): Annual Reports; British Columbia Department of Mines.
- Bell, T. (1989): 1989 Prospecting Report on the Waterfall #1 Claims; British Columbia Ministry of Energy, Mines and Petroleum Resources Assessment Report #19,231.
- British Columbia Ministry of Energy, Mines and Petroleum Resources (1988): Telegraph Creek - Mineral Occurrence Map; Minfile Map 104G.
- Brown, D.A. and Greig, C.J. (1990): Geology of the Stikine River-Yehiniko Lake Area, Northwestern British Columbia (104G/11W and 12E); British Columbia Ministry of Energy, Mines and Petroleum Resources, Geological Fieldwork 1989, Paper 1990-1, pages 141-151.
- Eccles, L. (1981): Geological and Geochemical Report On The Bar Claim; British Columbia Ministry of Energy, Mines and Petroleum Resources Assessment Report #9193.
- Fox, P.E., E.W. Grove, R.H. Seraphim and A. Sutherland Brown (1976): Schaft Creek, in CIM Special Volume 15, pp. 219-226.
- Geological Survey of Canada (1988): National Geochemical Reconnaissance, Sumdum - Telegraph Creek, British Columbia (NTS 104F - 104G); GSC Open File 1646.
- Harron G.A. (1981): Geochemical Report on Heavy Mineral Sampling For Gold In Five Areas Of British Columbia, Telegraph Creek Area; British Columbia Ministry of Energy, Mines and Petroleum Resources Assessment Report #9025.
- Korenic, J.A. (1982): Assessment Report of Geological, Geochemical and Geophysical work performed on the Tuff 1 Claim; British Columbia Ministry of Energy, Mines and Petroleum Resources Assessment Report #10,475.
- Lehtinen, J. (1989): 1989 Geological and Geochemical Report on the Goat 1 to 11 Claims; Report submitted for assessment credit to the British Columbia Ministry of Energy, Mines and Petroleum Resources.
- Lehtinen, J. (1990): 1989 Geological and Geochemical Report on the Bar 1-11 Claims; British Columbia Ministry of Energy, Mines and Petroleum Resources Assessment Report #19,836.

Souther, J.G. (1972): Telegraph Creek Map Area, British Columbia;
Geological Survey of Canada Paper 71-44.

APPENDIX B

STATEMENT OF EXPENDITURES

BAR NORTH CLAIM GROUP
(BAR 1,2,5 and 6 CLAIMS)
(September 26 - September 29, 1991)

PROFESSIONAL FEES AND WAGES:

Bruno Kasper, Geologist		
2 days @ \$300/day	\$	600.00
Mark O'Dea, Prospecting Geologist		
1.5 day @ \$250/day		375.00
Ron Gibbs, Prospector		
0.5 days @ \$250/day		125.00
Don Coolidge, Prospector		
1 day @ \$250/day		<u>250.00</u>
	\$	1,350.00

CHEMICAL ANALYSES:

Rock Geochemical Samples		
18 @ \$17.75 each	\$	319.50
Silt Samples		
5 @ \$14.94 each		<u>74.70</u>
		394.20

EXPENSES:

Accommodation	\$	575.00
Aircraft Charter		45.23
Courier and Telefax		20.66
Drafting		41.49
Expediting		6.23
Freight		24.52
Fuel		10.86
Geochemical Supplies		24.28
Helicopter Charters		1,352.80
Materials and Supplies		5.86
Maps and Publications		2.97
Meals		10.47
Printing and Reproductions		201.35
Radio Rental		25.00
Telephone Distance Charges		11.90
Truck Standby		<u>15.00</u>
		<u>2,373.62</u>
	\$	4,117.82

MANAGEMENT FEE @ 15% on expenses

409.17
\$ 4,526.99

REPORT (estimated)

1,500.00
\$ 6,026.99

BAR SOUTH CLAIM GROUP
(BAR 3,4,7 and 8 CLAIMS)
(September 26 - September 29, 1991)

PROFESSIONAL FEES AND WAGES:

Mark O'Dea, Prospecting Geologist		
1.5 days @ \$250/day	\$	375.00
Ron Gibbs, Prospector		
2.5 days @ \$250/day		625.00
Don Coolidge, Prospector		
1 day @ \$250/day		<u>250.00</u>
	\$	1,250.00

CHEMICAL ANALYSES:

Rock Geochemical Samples		
14 @ \$17.75 each	\$	248.50
Silt Samples		
3 @ \$14.94 each		<u>44.82</u>
		293.32

EXPENSES:

Accommodation	\$	575.00	
Aircraft Charter		45.23	
Courier and Telefax		20.66	
Drafting		41.49	
Expediting		6.23	
Freight		24.52	
Fuel		10.86	
Geochemical Supplies		24.28	
Helicopter Charters		1,352.80	
Materials and Supplies		5.86	
Maps and Publications		2.97	
Meals		10.47	
Printing and Reproductions		201.35	
Radio Rental		25.00	
Telephone Distance Charges		11.90	
Truck Standby		<u>15.00</u>	
			<u>2,373.62</u>
	\$		3,916.94

MANAGEMENT FEE @ 15% on expenses

394.04
\$ 4,310.98

REPORT (estimated)

1,500.00
\$ 5,810.98

APPENDIX C

ROCK SAMPLE DESCRIPTIONS

Mineral Abbreviations:

AS	Arsenopyrite	KF	Potassium Feldspar
AZ	Azurite	LI	Limonite
BI	Biotite	MC	Malachite
BO	Bornite	MG	Magnetite
CA	Calcite	MO	Molybdenite
CC	Chalcocite	MN	Manganese-oxides
CB	Fe-Carbonate	MR	Mariposite
CL	Chlorite	MS	Sericite
CP	Chalcopyrite	MU	Muscovite
CV	Covellite	PO	Pyrrhotite
CY	Clay	PY	Pyrite
DO	Dolomite	QZ	Quartz
EP	Epidote	SI	Silica
GE	Goethite	SM	Smithsonite
GL	Galena	SP	Sphalerite
HE	Hematite	TA	Talc
JA	Jarosite	TT	Tetrahedrite

Sample No. Location : 6415 150 N Type : Float Alteration : MOD CA>QZ Au Ag Cu Pb Zn As
330 175 E Strike Length Exp. : --- m Sulphides : 20%PY (ppb) (ppm) (ppm) (ppm) (ppm) (ppm)
BAR ROCK-1 Elevation: 1450.0 m Sample Width : --- m Oxides : GE, JA 10 <0.2 42 2 34 990
Orientation: -- / -- True Width : --- m Host : Siltstone

Comments : Sample consists of a pyrite vein hosted within siltstone. Pyrite vein has a layered texture and contains brecciated fragments of the host rock and abundant vugs, some infilled with quartz, jarosite and goethite. Only 2 pieces of float found on talus.

Sample No. Location : 6414 410 N Type : Grab Alteration : CB, SI, CA STRINGERS Au Ag Cu Pb Zn As
328 110 E Strike Length Exp. : ? m Sulphides : 1%PY (ppb) (ppm) (ppm) (ppm) (ppm) (ppm)
484801 Elevation: 1527.0 m Sample Width : 0.5 m Oxides : NONE OBSERVED <5 0.8 104 <2 70 40
Orientation: ? / ? True Width : 2.5 m Host : Silicified tuff

Comments : Orange to buff-brown stain. Calcite vein located 20 metres east.

Sample No. Location : 6414 390 N Type : Select Alteration : CB, QZ, CA Au Ag Cu Pb Zn As
328 140 E Strike Length Exp. : ? m Sulphides : 1%PY (ppb) (ppm) (ppm) (ppm) (ppm) (ppm)
484802 Elevation: 1528.0 m Sample Width : 0.3 m Oxides : NONE OBSERVED <5 0.4 106 <2 68 25
Orientation: ? / ? True Width : 0.3 m Host : Tuff

Comments : Orange buff weathering. Cross-cutting calcite stringers are millimetres thick. Pyrite is either finely disseminated or found as stringers.

Sample No. Location : 6414 410 N Type : Float Alteration : CB, SI, CA VEINLETS Au Ag Cu Pb Zn As
328 170 E Strike Length Exp. : -- m Sulphides : 1%PY (ppb) (ppm) (ppm) (ppm) (ppm) (ppm)
484803 Elevation: 1525.0 m Sample Width : -- m Oxides : GE <5 1.0 97 8 82 <5
Orientation: -- / -- True Width : -- m Host : Argillite

Comments : Located in creek bed immediately below rock sample 484802. Sample consists of calcite veins hosted in argillite. Boulder measures 35 x 75 centimetres.

Sample No. Location : 6414 500 N Type : Grab Alteration : CB, TR.MR, SI Au Ag Cu Pb Zn As
328 090 E Strike Length Exp. : ? m Sulphides : 1%PY (ppb) (ppm) (ppm) (ppm) (ppm) (ppm)
484804 Elevation: 1518.0 m Sample Width : 0.5 m Oxides : NONE OBSERVED <5 0.4 125 <2 90 10
Orientation: ? / ? True Width : ? m Host : Carbonate altered tuff?

Comments : Buff orange weathered surface. Taken from outcrop in creek north of 484802.

Sample No. Location : 6415 200 N Type : Float Alteration : UNALTERED Au Ag Cu Pb Zn As
328 390 E Strike Length Exp. : -- m Sulphides : 3%PY (ppb) (ppm) (ppm) (ppm) (ppm) (ppm)
484805 Elevation: 1737.0 m Sample Width : 20 cm Oxides : GE <5 <0.2 143 <2 128 15
Orientation: -- / -- True Width : m Host : Grey/green tuff

Comments : Sample located at head of drainage. A few small, similar boulders in vicinity. Pyrite is finely disseminated.

Date : 03/25/91

Sample No.	Location :	6414 160 N	Type :	Grab	Alteration :	CB, CL, SI	Au	Ag	Cu	Pb	Zn	As
		328 420 E	Strike Length Exp. :	2.0 m	Sulphides :	<2%PY	(ppb)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
485457	Elevation:	1730.0 m	Sample Width :	0.5 m	Oxides :	HE	<5	0.4	33	<2	30	425
	Orientation:	050 / 78 S	True Width :	0.5 m	Host :	Carbonate/silica altered volcanic						

Comments : Pyrite occurs in stringers and small pods. Zone contains colloform textured carbonate veins.

Sample No.	Location :	6414 200 N	Type :	Grab	Alteration :	CB, CL	Au	Ag	Cu	Pb	Zn	As
		328 560 E	Strike Length Exp. :	100.0 m	Sulphides :	1%PY	(ppb)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
485458	Elevation:	1740.0 m	Sample Width :	0.5 m	Oxides :	NONE OBSERVED	<5	0.6	154	2	108	<5
	Orientation:	000 / ?	True Width :	100.0 m	Host :	Bedded siltstone/wacke and tuffaceous sediments						

Comments : Mineralization consists of pyrite in stringers and fine disseminations. Strike noted above is that of the fracture cleavage.

Sample No.	Location :	6414 180 N	Type :	Grab	Alteration :	CA, CB, QZ, SI	Au	Ag	Cu	Pb	Zn	As
		328 540 E	Strike Length Exp. :	10.0 m	Sulphides :	<2%PO, TR.PY	(ppb)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
485459	Elevation:	1740.0 m	Sample Width :	30 cm	Oxides :	HE, JA	<5	0.8	116	10	96	<5
	Orientation:	? / ?	True Width :	30 cm	Host :	Wacke/ siltstone/ tuffaceous sediments						

Comments : Fractured alteration zone. Fractures, oriented 245/77N, 300/42N, crosscut general trend of unit. Sampled from a mineralized zone crosscutting package.

Sample No.	Location :	6414 240 N	Type :	Grab	Alteration :	CB, SI?	Au	Ag	Cu	Pb	Zn	As
		328 570 E	Strike Length Exp. :	2.0 m	Sulphides :	1%PY	(ppb)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
485460	Elevation:	1720.0 m	Sample Width :	30 cm	Oxides :	HE, JA, MN	15	0.4	17	8	78	630
	Orientation:	159 / 70 W	True Width :	20 cm	Host :	siltstone						

Comments : Very frothy rock. Most sulphides have been leached out. This zone doesn't appear to have any strike length, however, the Fe-carbonate altered zone it's hosted in does.

Sample No.	Location :	6414 440 N	Type :	Grab	Alteration :	CA, CB, CL, SI	Au	Ag	Cu	Pb	Zn	As
		328 540 E	Strike Length Exp. :	2.0 m	Sulphides :	2%PY	(ppb)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
485461	Elevation:	730.0 m	Sample Width :	15 cm	Oxides :	NONE OBSERVED	<5	0.6	54	<2	40	640
	Orientation:	210 / 65 NW	True Width :	15 cm	Host :	Siltstone/ wacke						

Comments : 15 centimetre wide mineralized zone within Fe-carbonate cemented fault zone. Pyrite is fracture controlled.

Sample No.	Location :	6413 300 N	Type :	Grab	Alteration :	CB, CL, MR?	Au	Ag	Cu	Pb	Zn	As
		333 090 E	Strike Length Exp. :	10.0 m	Sulphides :	<1%PY	(ppb)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
485462	Elevation:	980.0 m	Sample Width :	1.5 m	Oxides :	GE	<5	0.2	83	<2	62	10
	Orientation:	? / ?	True Width :	? m	Host :	Andesite						

Comments : Fe-carbonate altered zone appears to be oriented parallel to the gully. Perhaps faulted off. Abundant calcite stringers. Fractures oriented 128/80 SW, 005/66 E.

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

A9024445

Comments: ATTN: HENRY AWMACK

CERTIFICATE

A9024445

EQUITY ENGINEERING LTD.

Project: BAR 1-8
 P.O. #: PLJ90-03

Samples submitted to our lab in Vancouver, BC.
 This report was printed on 16-OCT-90.

SAMPLE PREPARATION

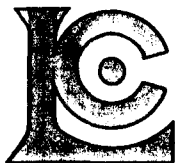
CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	32	Geochem ring to approx 150 mesh
294	32	Crush and split (0-10 pounds)
238	32	NITRIC-AQUA REGIA DIGESTION

* 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	32	Au ppb: Fuse 10 g sample	FA-AAS	5	10000
396	1	Au oz/T: 1/2 assay ton	FA-GRAVIMETRIC	0.003	20.000
922	32	Ag ppm: 32 element, soil & rock	ICP-AES	0.2	200
921	32	Al %: 32 element, soil & rock	ICP-AES	0.01	15.00
923	32	As ppm: 32 element, soil & rock	ICP-AES	5	10000
924	32	Ba ppm: 32 element, soil & rock	ICP-AES	10	10000
925	32	Be ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
926	32	Bi ppm: 32 element, soil & rock	ICP-AES	2	10000
927	32	Ca %: 32 element, soil & rock	ICP-AES	0.01	15.00
928	32	Cd ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
929	32	Co ppm: 32 element, soil & rock	ICP-AES	1	10000
930	32	Cr ppm: 32 element, soil & rock	ICP-AES	1	10000
931	32	Cu ppm: 32 element, soil & rock	ICP-AES	1	10000
932	32	Fe %: 32 element, soil & rock	ICP-AES	0.01	15.00
933	32	Ga ppm: 32 element, soil & rock	ICP-AES	10	10000
951	32	Hg ppm: 32 element, soil & rock	ICP-AES	1	10000
934	32	K %: 32 element, soil & rock	ICP-AES	0.01	10.00
935	32	La ppm: 32 element, soil & rock	ICP-AES	10	10000
936	32	Mg %: 32 element, soil & rock	ICP-AES	0.01	15.00
937	32	Mn ppm: 32 element, soil & rock	ICP-AES	5	10000
938	32	Mo ppm: 32 element, soil & rock	ICP-AES	1	10000
939	32	Na %: 32 element, soil & rock	ICP-AES	0.01	5.00
940	32	Ni ppm: 32 element, soil & rock	ICP-AES	1	10000
941	32	P ppm: 32 element, soil & rock	ICP-AES	10	10000
942	32	Pb ppm: 32 element, soil & rock	ICP-AES	2	10000
943	32	Sb ppm: 32 element, soil & rock	ICP-AES	5	10000
958	32	Sc ppm: 32 elements, soil & rock	ICP-AES	1	10000
944	32	Sr ppm: 32 element, soil & rock	ICP-AES	1	10000
945	32	Ti %: 32 element, soil & rock	ICP-AES	0.01	5.00
946	32	Tl ppm: 32 element, soil & rock	ICP-AES	10	10000
947	32	U ppm: 32 element, soil & rock	ICP-AES	10	10000
948	32	V ppm: 32 element, soil & rock	ICP-AES	1	10000
949	32	W ppm: 32 element, soil & rock	ICP-AES	10	10000
950	32	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

Page Number : 1-A
Total Pages : 1
Invoice Date : 16-OCT-90
Invoice No. : I-9024445
P.O. Number : PLJ90-03

Project : BAR 1-8
Comments : ATTN: HENRY AWMACK

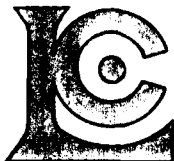
CERTIFICATE OF ANALYSIS

A9024445

SAMPLE DESCRIPTION	PREP CODE	Au ppb FA+AA	Au FA oz/T	Ag ppm	Al %	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 %
484801	205 294	< 5	-----	0.8	1.63	40	50	1.0	< 2	13.50	< 0.5	18	79	104	4.41	< 10	< 1	0.25	< 10	1.61
484802	205 294	< 5	-----	0.4	0.79	25	160	1.0	< 2	10.00	< 0.5	19	65	106	5.51	< 10	< 1	0.08	< 10	3.67
484803	205 294	< 5	-----	1.0	7.16	< 5	10	1.5	< 2	9.78	< 0.5	9	113	97	3.34	< 10	< 1	0.01	< 10	1.04
484804	205 294	< 5	-----	0.4	1.76	10	50	1.5	< 2	5.82	< 0.5	23	84	125	5.24	< 10	< 1	0.26	< 10	1.68
484805	205 294	< 5	-----	< 0.2	3.61	15	10	1.0	< 2	1.55	< 0.5	33	176	143	6.26	< 10	< 1	< 0.01	< 10	3.37
484901	205 294	< 5	-----	0.6	0.38	5	20	1.0	< 2	>15.00	< 0.5	6	10	20	5.08	< 10	< 1	0.04	< 10	5.35
484902	205 294	7830	0.246	2.6	0.78	180	30	1.0	< 2	1.51	< 0.5	8	81	69	5.13	< 10	< 1	0.27	< 10	0.39
484903	205 294	700	-----	0.4	0.40	10	30	0.5	< 2	0.17	< 0.5	4	117	12	3.75	< 10	< 1	0.24	< 10	0.08
484904	205 294	35	-----	0.4	2.38	< 5	50	1.0	< 2	5.59	< 0.5	15	81	237	4.69	< 10	< 1	0.17	< 10	1.68
484905	205 294	10	-----	0.6	0.60	10	30	0.5	< 2	8.78	< 0.5	9	24	47	4.23	< 10	< 1	0.12	< 10	2.71
484906	205 294	20	-----	0.8	2.82	< 5	70	1.0	< 2	1.69	< 0.5	8	117	110	4.46	< 10	< 1	0.16	10	0.56
484907	205 294	15	-----	0.8	5.94	< 5	80	1.5	< 2	3.75	0.5	14	54	245	5.15	< 10	< 1	0.15	< 10	0.69
484908	205 294	10	-----	0.8	0.64	60	140	1.0	< 2	10.80	< 0.5	12	17	81	4.02	< 10	< 1	0.22	< 10	0.55
484909	205 294	< 5	-----	0.6	3.09	< 5	60	0.5	< 2	5.85	< 0.5	12	71	145	2.08	< 10	< 1	0.05	< 10	0.56
484910	205 294	< 5	-----	0.2	1.14	5	50	1.0	< 2	5.31	< 0.5	13	22	167	4.90	< 10	< 1	0.21	< 10	1.39
484911	205 294	< 5	-----	< 0.2	3.33	15	10	1.0	< 2	0.35	< 0.5	14	36	99	6.59	< 10	1	0.07	10	2.01
485051	205 294	< 5	-----	0.4	3.01	< 5	20	1.0	< 2	4.95	< 0.5	15	37	65	5.23	< 10	< 1	0.06	< 10	1.30
485451	205 294	< 5	-----	0.6	2.93	< 5	10	1.0	< 2	3.05	< 0.5	15	35	66	4.65	< 10	< 1	0.02	< 10	1.22
485452	205 294	< 5	-----	1.0	0.43	< 5	20	< 0.5	< 2	>15.00	< 0.5	4	118	11	1.44	< 10	< 1	0.09	< 10	0.18
485453	205 294	< 5	-----	0.4	1.34	< 5	110	0.5	< 2	5.31	< 0.5	9	18	42	3.06	< 10	< 1	0.23	< 10	0.39
485454	205 294	< 5	-----	0.4	3.69	< 5	10	1.0	< 2	3.63	< 0.5	18	35	56	6.41	< 10	< 1	0.05	< 10	1.78
485455	205 294	< 5	-----	0.4	3.91	< 5	< 10	0.5	< 2	4.28	< 0.5	18	25	81	5.79	< 10	< 1	0.03	< 10	1.33
485456	205 294	< 5	-----	0.2	2.84	< 5	30	1.0	< 2	4.86	< 0.5	22	51	119	5.82	< 10	< 1	0.10	< 10	2.55
485457	205 294	< 5	-----	0.4	0.66	425	30	1.0	< 2	11.50	< 0.5	7	40	33	4.25	< 10	< 1	0.04	< 10	2.89
485458	205 294	< 5	-----	0.6	4.51	< 5	50	1.0	< 2	4.75	< 0.5	15	45	154	5.63	< 10	< 1	0.10	< 10	2.05
485459	205 294	< 5	-----	0.8	5.68	< 5	40	1.0	< 2	7.37	0.5	13	66	116	4.43	< 10	< 1	0.05	< 10	1.25
485460	205 294	15	-----	0.4	0.77	630	230	1.0	< 2	0.31	< 0.5	5	18	17	5.29	< 10	< 1	0.05	20	0.06
485461	205 294	< 5	-----	0.6	0.45	640	50	1.0	< 2	8.57	< 0.5	5	20	54	5.38	< 10	< 1	0.13	< 10	1.79
485462	205 294	< 5	-----	0.2	1.78	10	730	1.0	< 2	5.36	< 0.5	14	48	83	4.35	< 10	< 1	0.22	< 10	1.55
485463	205 294	< 5	-----	0.6	3.05	< 5	10	1.0	< 2	1.42	< 0.5	17	79	187	9.81	< 10	< 1	0.02	10	2.01
485464	205 294	< 5	-----	0.6	2.81	< 5	70	1.5	< 2	6.70	< 0.5	21	57	126	6.04	< 10	< 1	0.06	< 10	1.63
485465	205 294	< 5	-----	0.6	0.58	< 5	70	0.5	2	1.03	< 0.5	< 1	70	4	0.69	< 10	< 1	0.19	10	0.06

CERTIFICATION:

B. Campbell



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

Page Number : 1-B
 Total Pages : 1
 Invoice Date: 16-OCT-90
 Invoice No. : I-9024445
 P.O. Number : PLJ90-03

Project : BAR 1-8
 Comments : ATTN: HENRY AWMACK

CERTIFICATE OF ANALYSIS

A9024445

SAMPLE DESCRIPTION	PREP CODE		Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn
			ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
484801	205	294	1740	< 1	0.01	18	1020	< 2	< 5	11	250	< 0.01	< 10	< 10	98	< 10	70
484802	205	294	1250	< 1	0.02	23	770	< 2	5	20	283	< 0.01	< 10	< 10	134	< 10	68
484803	205	294	625	< 1	0.08	8	890	8	5	12	35	0.23	< 10	< 10	168	< 10	82
484804	205	294	1005	< 1	0.01	36	880	< 2	5	16	199	0.10	< 10	< 10	109	< 10	90
484805	205	294	1090	< 1	0.01	62	510	< 2	< 5	9	31	0.26	< 10	< 10	134	< 10	128
484901	205	294	1635	4	0.01	3	180	< 2	5	4	545	< 0.01	< 10	< 10	45	< 10	36
484902	205	294	450	3	0.03	3	530	8	< 5	1	52	< 0.01	< 10	< 10	22	< 10	32
484903	205	294	115	2	0.02	3	450	< 2	< 5	1	5	< 0.01	< 10	< 10	8	< 10	4
484904	205	294	1055	< 1	0.02	9	670	< 2	< 5	6	87	0.01	< 10	< 10	73	< 10	72
484905	205	294	1260	< 1	0.01	2	670	< 2	10	5	254	< 0.01	< 10	< 10	49	< 10	62
484906	205	294	465	17	0.19	26	1020	2	5	6	140	0.14	< 10	< 10	67	< 10	74
484907	205	294	620	4	0.56	3	1600	8	5	10	392	0.27	< 10	< 10	132	< 10	108
484908	205	294	1215	2	0.01	7	1250	14	10	8	200	< 0.01	< 10	< 10	61	< 10	76
484909	205	294	230	< 1	0.10	8	790	6	< 5	4	67	0.17	< 10	< 10	68	< 10	30
484910	205	294	775	< 1	0.03	8	950	< 2	5	27	125	< 0.01	< 10	< 10	189	< 10	68
484911	205	294	600	1	0.03	11	1130	6	5	10	11	< 0.01	< 10	< 10	170	< 10	60
485051	205	294	1105	< 1	0.09	9	890	2	< 5	10	37	0.52	< 10	< 10	198	< 10	80
485451	205	294	890	1	0.06	6	1310	4	< 5	8	83	0.35	< 10	< 10	141	< 10	82
485452	205	294	1880	< 1	< 0.01	3	250	< 2	< 5	1	262	< 0.01	< 10	< 10	16	< 10	48
485453	205	294	935	< 1	0.03	2	1000	< 2	< 5	6	74	< 0.01	< 10	< 10	33	< 10	64
485454	205	294	1165	< 1	0.09	5	780	< 2	< 5	16	33	0.53	< 10	< 10	265	< 10	84
485455	205	294	1365	< 1	0.05	6	700	4	< 5	20	24	0.52	< 10	< 10	207	< 10	84
485456	205	294	1010	< 1	0.04	20	830	2	< 5	15	132	< 0.01	< 10	< 10	182	< 10	84
485457	205	294	970	7	0.01	8	230	< 2	25	5	436	< 0.01	< 10	< 10	55	< 10	30
485458	205	294	925	< 1	0.22	8	1320	2	< 5	15	90	0.47	< 10	< 10	273	< 10	108
485459	205	294	690	< 1	0.07	6	1240	10	< 5	12	47	0.33	< 10	< 10	199	< 10	96
485460	205	294	475	3	< 0.01	6	1240	8	15	8	12	< 0.01	< 10	< 10	45	< 10	78
485461	205	294	1860	1	0.01	6	510	< 2	15	8	72	< 0.01	< 10	< 10	40	< 10	40
485462	205	294	935	< 1	0.02	10	840	< 2	5	11	100	0.02	< 10	< 10	90	< 10	62
485463	205	294	745	129	0.03	68	1120	10	5	13	37	0.37	< 10	< 10	906	< 10	114
485464	205	294	940	2	0.03	23	810	< 2	5	15	82	0.32	< 10	< 10	203	< 10	90
485465	205	294	695	4	0.02	1	30	18	< 5	2	61	< 0.01	< 10	< 10	6	< 10	70

CERTIFICATION: _____

B. Coughlin



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

Page Number : 1-A
Total Pages : 1
Certificate Date: 13-MAR-91
Invoice No. : I9112185
P.O. Number : PLJ90-03

Project : BAR 1-8 CLAIMS
Comments : ATTN: HENRY AWMACK

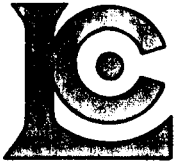
CERTIFICATE OF ANALYSIS

A9112185

SAMPLE DESCRIPTION	PREP CODE		Au ppb	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	La	Mg	Mn
			FA+AA	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	%	ppm
BAR ROCK-1	205	294	10	< 0.2	0.41	990	< 10	< 0.5	< 2	6.74	1.0	10	90	42	8.67	< 10	3	< 0.01	< 10	0.54	1165

CERTIFICATION:

B. Coughlin



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 : BAR 1-8 CLAIMS
Comments: ATTN: HENRY AWMACK

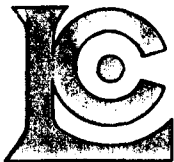
Page Number : 1-B
Total Pages : 1
Certificate Date: 13-MAR-91
Invoice No. : I9112185
P.O. Number : PLJ90-03

CERTIFICATE OF ANALYSIS

A9112185

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
BAR ROCK-1	205 294	< 1	< 0.01	19	180	2	40	10	64	< 0.01	< 10	< 10	36	< 10	34

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

A9024444

Comments: ATTN: HENRY AWMACK

CERTIFICATE

A9024444

EQUITY ENGINEERING LTD.

Project: BAR 1-8
P.O.#: PLJ90-03

Samples submitted to our lab in Vancouver, BC.
This report was printed on 16-OCT-90.

SAMPLE PREPARATION

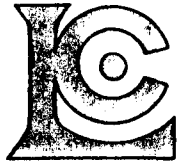
CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
203	2	Dry, sieve to -35 mesh
205	2	Geochem ring to approx 150 mesh
217	2	Geochem ring entire sample
238	4	NITRIC-AQUA REGIA DIGESTION

* 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	4	Au ppb: Fuse 10 g sample	FA-AAS	5	10000
922	4	Ag ppm: 32 element, soil & rock	ICP-AES	0.2	200
921	4	Al %: 32 element, soil & rock	ICP-AES	0.01	15.00
923	4	As ppm: 32 element, soil & rock	ICP-AES	5	10000
924	4	Ba ppm: 32 element, soil & rock	ICP-AES	10	10000
925	4	Be ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
926	4	Bi ppm: 32 element, soil & rock	ICP-AES	2	10000
927	4	Ca %: 32 element, soil & rock	ICP-AES	0.01	15.00
928	4	Cd ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
929	4	Co ppm: 32 element, soil & rock	ICP-AES	1	10000
930	4	Cr ppm: 32 element, soil & rock	ICP-AES	1	10000
931	4	Cu ppm: 32 element, soil & rock	ICP-AES	1	10000
932	4	Fe %: 32 element, soil & rock	ICP-AES	0.01	15.00
933	4	Ga ppm: 32 element, soil & rock	ICP-AES	10	10000
951	4	Hg ppm: 32 element, soil & rock	ICP-AES	1	10000
934	4	K %: 32 element, soil & rock	ICP-AES	0.01	10.00
935	4	La ppm: 32 element, soil & rock	ICP-AES	10	10000
936	4	Mg %: 32 element, soil & rock	ICP-AES	0.01	15.00
937	4	Mn ppm: 32 element, soil & rock	ICP-AES	5	10000
938	4	Mo ppm: 32 element, soil & rock	ICP-AES	1	10000
939	4	Na %: 32 element, soil & rock	ICP-AES	0.01	5.00
940	4	Ni ppm: 32 element, soil & rock	ICP-AES	1	10000
941	4	P ppm: 32 element, soil & rock	ICP-AES	10	10000
942	4	Pb ppm: 32 element, soil & rock	ICP-AES	2	10000
943	4	Sb ppm: 32 element, soil & rock	ICP-AES	5	10000
958	4	Sc ppm: 32 elements, soil & rock	ICP-AES	1	10000
944	4	Sr ppm: 32 element, soil & rock	ICP-AES	1	10000
945	4	Ti %: 32 element, soil & rock	ICP-AES	0.01	5.00
946	4	Tl ppm: 32 element, soil & rock	ICP-AES	10	10000
947	4	U ppm: 32 element, soil & rock	ICP-AES	10	10000
948	4	V ppm: 32 element, soil & rock	ICP-AES	1	10000
949	4	W ppm: 32 element, soil & rock	ICP-AES	10	10000
950	4	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

Page Number : 1-A
Total Pages : 1
Invoice Date: 16-OCT-90
Invoice No. : I-9024444
P.O. Number : PLJ90-03

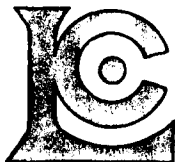
Project : BAR 1-8
Comments : ATTN: HENRY AWMACK

CERTIFICATE OF ANALYSIS

A9024444

SAMPLE DESCRIPTION	PREP CODE	Au ppb	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	La	Mg	Mn	
		FA+AA	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	%	ppm	
90 BK-40	217	238	110	< 0.2	2.71	< 5	100	< 0.5	< 2	1.05	< 0.5	17	74	98	5.42	10	< 1	0.24	10	1.79	1400
90 BK-41	217	238	70	< 0.2	2.92	< 5	80	< 0.5	< 2	1.17	< 0.5	15	69	46	5.25	10	< 1	0.19	< 10	1.82	1120
90 MO-50	203	205	5	< 0.2	2.93	< 5	70	< 0.5	< 2	1.11	< 0.5	15	50	58	5.12	20	< 1	0.10	10	1.47	1140
90 MO-51	203	205	5	0.2	2.69	5	70	< 0.5	< 2	1.01	< 0.5	14	77	66	4.94	20	< 1	0.09	10	1.35	1015

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

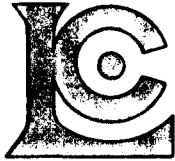
Page Number : 1-B
Total Pages : 1
Invoice Date: 16-OCT-90
Invoice No. : I-9024444
P.O. Number : PLJ90-03

Project : BAR 1-8
Comments: ATTN: HENRY AWMACK

CERTIFICATE OF ANALYSIS A9024444

SAMPLE DESCRIPTION	PREP CODE		Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn
			ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
90 BK-40	217	238	< 1	0.03	8	1420	2	5	6	48	0.06	< 10	< 10	91	< 10	104
90 BK-41	217	238	1	0.03	6	940	2	< 5	4	65	0.05	< 10	< 10	75	< 10	92
90 MO-50	203	205	1	0.03	10	970	6	< 5	7	47	0.15	< 10	< 10	116	< 10	104
90 MO-51	203	205	1	0.04	15	850	8	< 5	8	35	0.16	< 10	< 10	138	< 10	106

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

Project : BAR1-8
Comments: ATTN:HENRY AWMACK

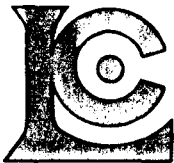
Page Number : 1-A
Total Pages : 1
Invoice Date: 16-OCT-90
Invoice No. : I-9024448
P.O. Number : PLJ90-03

CERTIFICATE OF ANALYSIS

A9024448

SAMPLE DESCRIPTION	PREP CODE		Au ppb	Ag ppm	Al %	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
			FA+AA																		
90RG-30	203	205	< 5	< 0.2	3.78	< 5	40	< 0.5	< 2	1.84	< 0.5	18	62	98	6.08	< 10	< 1	0.11	< 10	1.93	1030
90RG-31	201	238	< 5	0.2	3.40	< 5	80	< 0.5	< 2	1.24	< 0.5	27	75	149	6.41	< 10	< 1	0.16	10	1.75	1485
90RG-32	203	205	40	< 0.2	3.71	20	70	< 0.5	< 2	1.37	< 0.5	22	44	121	6.48	< 10	< 1	0.15	10	1.82	1365
90RG-33	203	205	10	0.2	3.58	< 5	60	< 0.5	< 2	1.78	< 0.5	16	47	82	5.55	< 10	< 1	0.11	10	1.58	965

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

Page Number : 1-B
Total Pages : 1
Invoice Date : 16-OCT-90
Invoice No. : I-9024448
P.O. Number : PLJ90-03

Project : BAR1-8
Comments: ATTN:HENRY AWMACK

CERTIFICATE OF ANALYSIS

A9024448

SAMPLE DESCRIPTION	PREP CODE		Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn
			ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
90RG-30	203	205	1	0.05	14	1020	2	5	12	44	0.22	< 10	< 10	195	< 10	102
90RG-31	201	238	< 1	0.03	19	1130	2	< 5	18	76	0.11	< 10	< 10	186	< 10	118
90RG-32	203	205	1	0.04	15	910	4	5	13	64	0.13	< 10	< 10	184	< 10	116
90RG-33	203	205	1	0.04	12	920	4	< 5	10	60	0.22	< 10	< 10	164	< 10	106

CERTIFICATION:

APPENDIX E

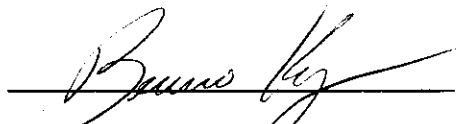
STATEMENT OF QUALIFICATIONS

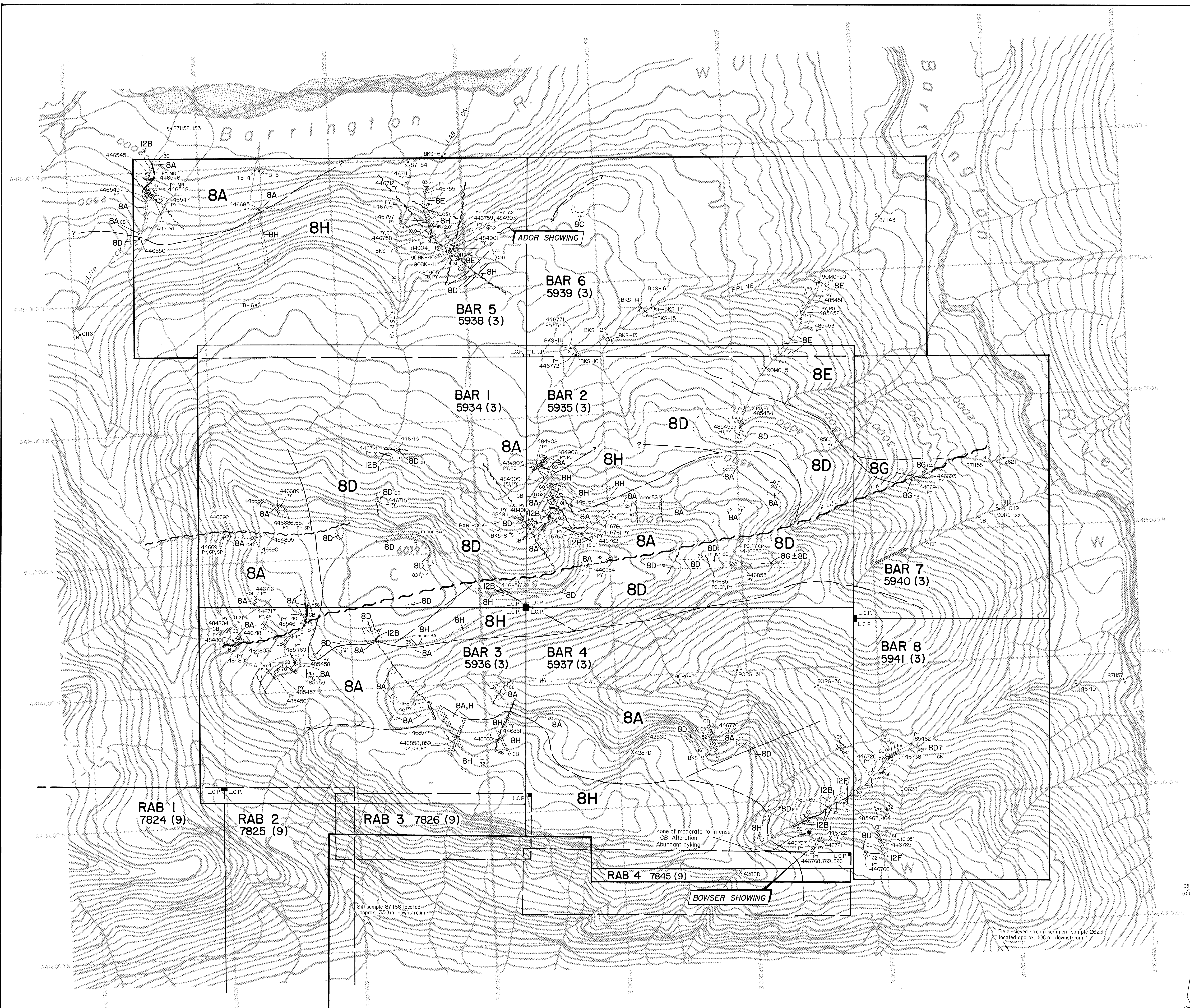
STATEMENT OF QUALIFICATIONS

I, BRUNO KASPER, of 101-1990 West 6th Avenue, Vancouver, in the Province of British Columbia, DO HEREBY CERTIFY:

1. THAT I am a Consulting Geologist with offices at Suite 207, 675 West Hastings Street, Vancouver, British Columbia.
2. THAT I am a graduate of the University of Alberta with a Bachelor of Science degree in Geology.
3. THAT my primary employment since June, 1988 has been in the field of mineral exploration.
4. THAT this report is based on fieldwork carried out under my direction.
5. THAT I have no interest, directly or indirectly, in the securities of Pass Lake Resources Ltd. and Golden Sitka Resources Inc. or any of their affiliates. I have no interest, directly or indirectly in the property.

DATED at Vancouver, British Columbia, this 28th day of March, 1991.


Bruno Kasper, Geologist



1990 ROCK SAMPLE ANALYSES

Sample	Au(ppb)	Ag(ppm)	Cu(ppm)	Pb(ppm)	Zn(ppm)	As(ppm)
484801	<5	0.8	104	<2	70	40
484802	<5	1.0	97	8	82	<5
484803	<5	0.4	125	<2	90	10
484804	<5	0.2	143	<2	126	15
484901	<5	0.6	20	<2	36	5
484902	8.43g/t	2.6	69	8	32	180
484903	<5	0.4	12	<2	4	10
484904	35	0.4	237	<2	72	<5
484905	10	0.6	47	<2	62	10
484906	20	0.8	110	74	2	<5
484907	15	0.8	245	8	108	<5
484908	10	0.8	81	14	76	60
484909	<5	0.6	183	6	30	<5
484910	<5	0.2	167	<2	68	5
484911	<5	<0.2	99	6	80	15
485051	<5	0.4	65	2	80	<5
485451	<5	0.6	66	4	82	<5
485452	<5	1.0	11	<2	14	<5
485453	<5	0.4	42	<2	64	<5
485454	<5	0.4	56	<2	84	<5
485455	<5	0.4	81	4	84	<5
485456	<5	0.2	119	2	84	<5
485457	<5	0.4	33	<2	30	425
485458	<5	0.6	154	2	108	<5
485459	<5	0.8	116	10	96	<5
485460	15	0.4	17	8	78	630
485461	15	0.2	54	<2	4	440
485462	<5	0.2	83	<2	62	10
485463	<5	0.6	163	10	114	<5
485464	<5	0.6	126	<2	90	<5
485465	<5	0.6	4	18	70	<5
BAR ROCK-1	10	<0.2	42	2	34	990

1989 ROCK SAMPLE ANALYSES

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	81	<2	50	65
446548	<5	<0.2	53	<2	48	140
446549	<5	<0.2	162	24	80	90
446585	<5	<0.2	52	2	60	20
446686	<5	<0.2	37	6	60	170
446687	<5	<0.2	220	6	1020	175
446688	<5	<0.2	62	8	80	20
446689	<5	<0.2	50	<2	66	25
446690	<5	<0.2	124	2	78	35
446691	<5	2.2	1780	2	2.07t	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	84	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	62	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	74	<5
446722	<5	<0.2	131	2	90	5
446725	2.26g/t	0.8	4	4	24	15
446756	120	<0.2	2	<2	6	5
446757	400	0.2	3	8	8	10
446758	1.10g/t	12.6	5100	18	194	250
446759	1.2	0.2	57	<2	12	25
446760	45	<0.2	64	<2	46	30
446761	65	<0.2	75	6	50	25
446762	5	<0.2	63	10	70	10
446763	5	<0.2	96	2	62	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	70
446768	330	11.8	75	378	58	100
446769	210	5.8	360	166	214	55
446770	63	0.2	70	6	80	20
446771	10	0.4	128	8	42	55
446772	<5	<0.2	86	10	48	25
446826	295	10.4	476	668	480	50
446851	20	4.2	5680	14	124	<5
446852	760	6.4	3290	742	1750	95
446853	5	0.4	111	<2	106	20
446854	<5	1.4	43	10	82	270
446855	<5	<0.2	134	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	10	35
446860	<5	0.4	30	2	22	615
446861	<5	0.4	25	2	20	50

1981 DUPONT ROCK SAMPLE ANALYSES

Sample	Au(ppb)	Ag(ppm)	Cu(ppm)	Pb(ppm)	Zn(ppm)	As(ppm)
4286D	0.034	-	-	-	-	-
4287D	0.103	-	-	-	-	-
4288D	0.069	-	-	-	-	-

Note: g/t denotes grams per tonne

LEGEND

LITHOLOGIES

JURASSIC AND/OR CRETACEOUS

- 12B Diorite: includes minor pyroxenite and gabbro.
- 12H Plagioclase-phyric andesite.
- 12F Megacrystic orthoclase porphyry.

UPPER TRIASSIC

Stuhini Group

- 8 Undivided Stuhini Group volcanics, volcanoclastics and sedimentary rocks.
- 8A Interbedded argillaceous mudstone and siltstone with minor wackes and chert.
- 8C Thinly bedded fossiliferous limestone and calcareous mudstone.
- 8D Augite porphyry flows.
- 8E Andesitic (plagioclase-phyric) flows.
- 8G Crystal ash tuffs and tuffaceous sediments.
- 8H Crystal lithic lapilli tuff and tuff breccia.

SYMBOLS

- Rock outcrop
- Geological contact or boundary (defined, approximate)
- Fault (approximate, inferred) with dip (inclined, vertical) and sense of movement
- Lineation (inclined) with plunge (known, unknown)
- Bedding with dip
- Schistosity, cleavage and foliation with dip (inclined, vertical)
- Dike with dip (known, unknown) and true width in metres
- Vein with dip (inclined, vertical, unknown) and true width in metres
- Joint with dip (inclined, vertical)
- Rock sample (float, grab from outcrop)
- Silt sample
- Field-sieved stream sediment sample
- Alteration zone
- Legal corner post (located, approximate)

1990 SILT SAMPLE ANALYSES

Sample	Au(ppb)	Ag(ppm)	Cu(ppm)	Pb(ppm)	Zn(ppm)	As(ppm)
90-BK40	110	<0.2	98	2	104	<5
90-BK41	70	<0.2	46	2	92	<5
90-MO50	5	<0.2	58	6	104	<5
90-MO51	5	0.2	66	8	106	5
90-RG30	<5	<0.2	98	2	102	<5
90-RG31	<5	0.2	149	2	138	<5
90-RG32	40	<0.2	121	4	136	20
90-RG33	10	0.2	82	4	106	<5

1989 SILT SAMPLE ANALYSES

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	92	4	206	55
TB-7	<5	0.4	205	4	190	190

1981 DUPONT FIELD-SIEVED STREAM SEDIMENT SAMPLE ANALYSES (-100 MESH FRACTION)

Sample	Au(ppb)	Ag(ppm)	Cu(ppm)	Pb(ppm)	Zn(ppm)	As(ppm)
0116	35	1.7	137	32	-	-
0119	25	1.5	79	26	-	-
0628	35	1.4	98	24	-	-
2621	25	1.6	98	26	-	-
2623	20	1.9	305	71	-	-

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

STATISTICAL 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

MINERALS AND ALTERATION TYPES

AS	arsenopyrite	CA	calcite	CB	Fe-carbonate
CL	chlorite	CP	chalcopyrite	CY	clay
EP	epidote	HE	hematite	MR	mariposite
PO	pyrrhotite	PP	pyrite	OZ	quartz
SI	silica	SP	sphalerite		

Geology adapted in part from Lehtinen (1990)
 Du Pont Rock Sample Data from Socius (1981)
 Du Pont Field-sieved Stream Sediment Sample Data from Harron (1981)
 Government Regional Geochemical Data from G.S.C. OPEN FILE 1646

GEOLOGICAL BRANCH ASSESSMENT REPORT

21,232

21232

PASS LAKE RESOURCES LTD.

BAR 1-8 CLAIMS GEOLOGY & GEOCHEMISTRY

BRITISH COLUMBIA

EQUITY ENGINEERING LTD.

DRAWN: BK / J.E.	MINING DIV: LIARD	FIGURE
N.T.S.: 104G/13W	SCALE: AS SHOWN	4
DATE: MARCH, 1991	REVISED:	

21232