

1221	PP
FILE NO	

1989 GEOLOGICAL  
AND GEOCHEMICAL REPORT  
ON THE  
GOAT 1 TO 11 CLAIMS

FILMED

Located in the Telegraph Creek Area  
Liard Mining Division  
NTS 104G/12W and 13W  
57° 46' North Latitude  
131° 50' West Longitude

-prepared for-  
INTEGRATED RESOURCES LTD.

-prepared by-  
Jim Lehtinen, B.Sc. Geology

November 1989

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

19,439

1989 GEOLOGICAL AND GEOCHEMICAL REPORT ON THE GOAT 1 TO 11 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	.4.
4.2	1989 Work Program	.5.
5.0	REGIONAL GEOLOGY	.6.
6.0	PROPERTY GEOLOGY AND MINERALIZATION	
6.1	Geology	.8.
6.2	Mineralization	.10.
7.0	GEOCHEMISTRY	.13.
8.0	DISCUSSION AND CONCLUSIONS	.14.

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	.3.
Figure 4	Sample Locations and Results	-Pocket-
Figure 5	Bob Showing - Sample Locations and Results	.12.

LIST OF TABLES

		<u>Page</u>
Table 6.2.1	West Grid Area Sampling Results	.11.
Table 6.2.2	Main Grid/Barrington Grid Area Sampling Results	.12.
Table 6.2.3	Bob Showing Sampling Results	.12.

## 1.0 INTRODUCTION

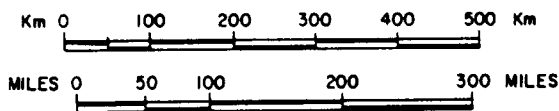
The Goat 1 to 11 claims were staked in 1986 to cover favorable geology and gossanous slopes observed in the Mount Barrington area. The claims, centered on Mount Barrington, are approximately 41 kilometers southwest of Telegraph Creek in northwestern British Columbia (Figure 1). The geological similarity 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 area.

Reconnaissance exploration, consisting of geological mapping, prospecting and silt and rock geochemical sampling, was carried out over the Goat 1 to 11 claims in late August of 1989. Equity Engineering Ltd. conducted this program for Intergrated Resources Ltd. 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 (Figure 2) are owned by Integrated Resources Ltd..

# GOAT 1-11 CLAIMS



INTEGRATED RESOURCES LTD.		
GOAT 1-11 CLAIMS LOCATION MAP BRITISH COLUMBIA		
EQUITY ENGINEERING LTD.		
DRAWN:	MINING DIV. LIARD	FIGURE
N.T.S.: 104-G/12W,13W	SCALE: AS SHOWN	1
DATE: November 1989	REVISED:	

Claim Name	Record Number	No. of Units	Record Date	Expiry Year
Goat #1	3865	20	Dec.5, 1986	1990*
Goat #2	3866	20	Dec.5, 1986	1990*
Goat #3	3867	20	Dec.5, 1986	1990*
Goat #4	3868	15	Dec.5, 1986	1990*
Goat #5	3869	15	Dec.5, 1986	1990*
Goat #6	3870	20	Dec.5, 1986	1990*
Goat #7	3871	20	Dec.5, 1986	1990*
Goat #8	3872	20	Dec.5, 1986	1990*
Goat #9	3873	20	Dec.5, 1986	1990*
Goat #10	3874	20	Dec.5, 1986	1990*
Goat #11	3875	<u>20</u>	Dec.5, 1986	1990*
		210		

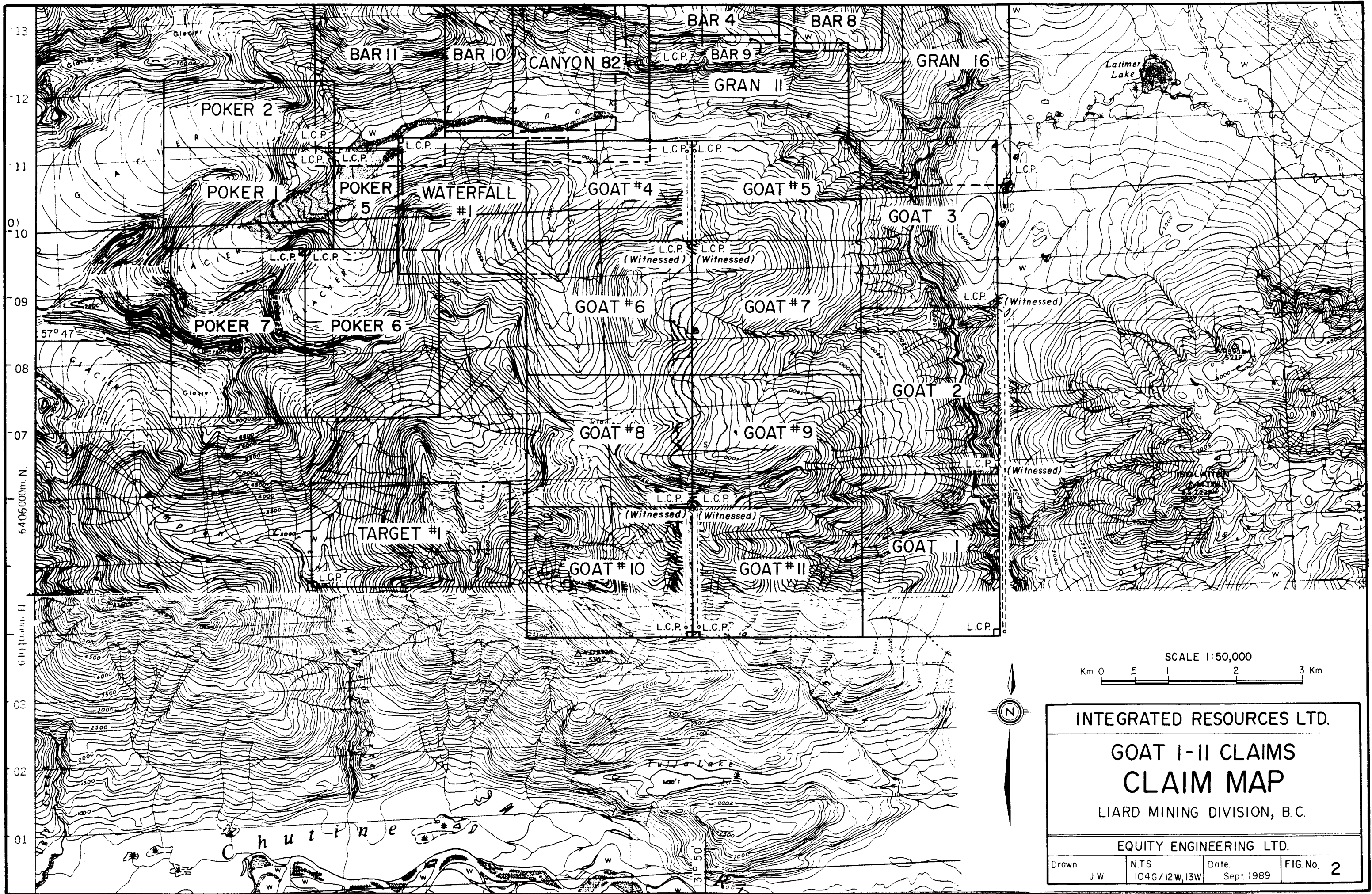
\*note: 1989 assessment work completed in August, 1989.

The position of the Goat 1 legal corner post and Goat 2 and 3 witness posts were verified by the field crews of Equity Engineering Ltd.

### 3.0 LOCATION, ACCESS AND GEOGRAPHY

The Goat 1 to 11 claims are located within the Coast Range Mountains approximately 41 kilometers west-southwest of Telegraph Creek in northwestern British Columbia (Figure 1). They lie within the Liard Mining Division, centered at 57° 46' north latitude and 131° 50' 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. In the 1960's, a cat road was built up Shakes Creek from the Barrington River road, passing within four kilometers of the Goat #3 claim. This cat road would have to be cleared and upgraded before it could be used. Access to the Goat property for the 1989 exploration program was provided by daily



SCALE 1:50,000  
 Km 0 5 1 2 3 Km

INTEGRATED RESOURCES LTD.

**GOAT I-II CLAIMS  
 CLAIM MAP**

LIARD MINING DIVISION, B.C.

EQUITY ENGINEERING LTD.

Drawn. J.W.	N.T.S. 104G/12W,13W	Date. Sept. 1989	FIG. No. 2
----------------	------------------------	---------------------	---------------

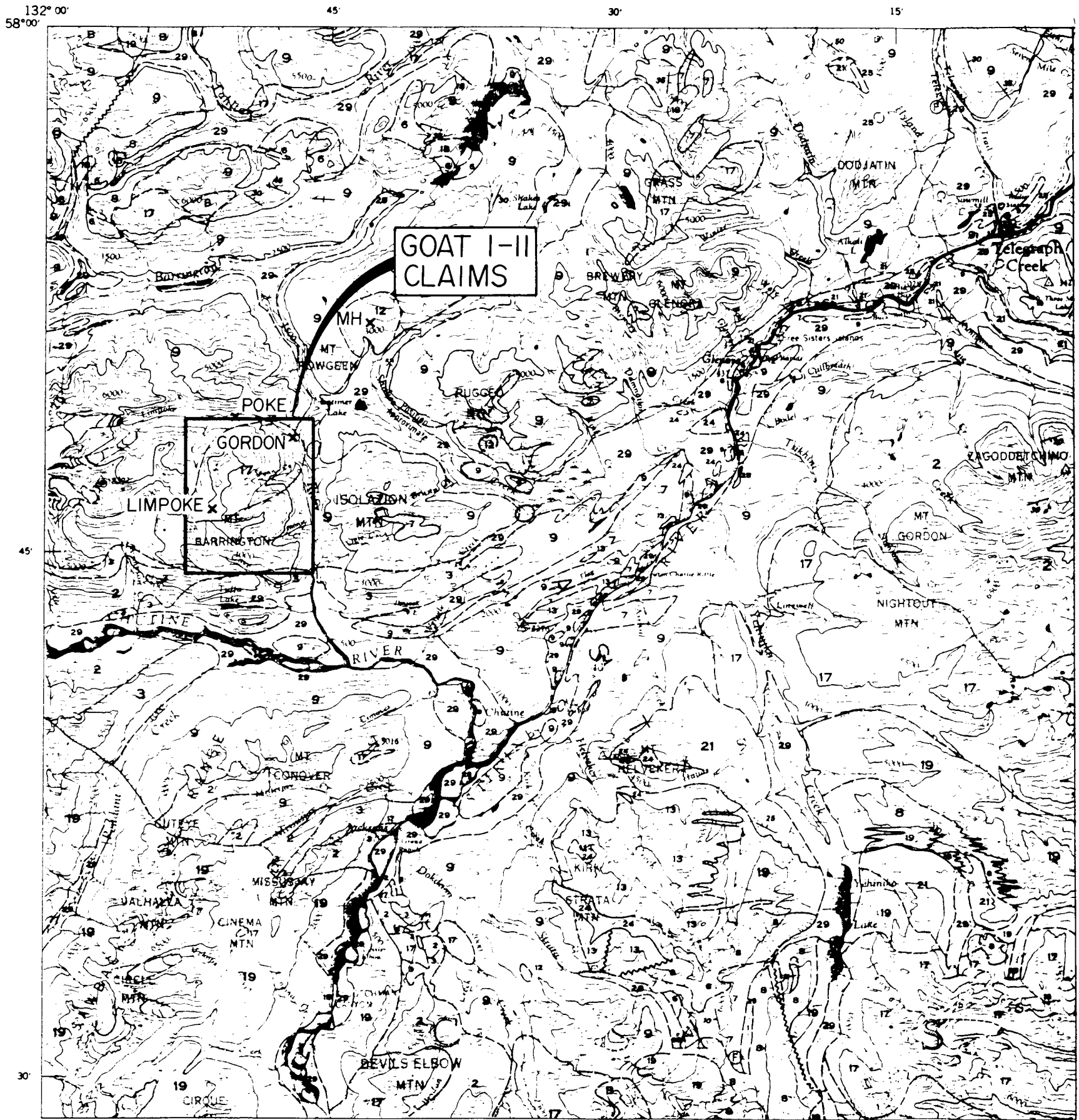
helicopter setouts from Integrated Resources' placer mining camp on the Barrington River, a distance of less than five kilometers.

Topography on the Goat claims is rugged, typical of mountainous and glaciated terrain, with elevations ranging from 200 meters along the Barrington River to 1980 meters at the peak on Mount Barrington. The property, particularly at higher elevations, is characterized by precipitous gossanous and talus covered slopes. Access within these upper slopes is commonly difficult.

Tree-line varies from 1000 to 1200 meters above sea level. Below this point, particularly within the lower valleys, vegetation predominantly consists of a dense growth of conifers. Active glaciation is prevalent in the area above 1500 to 2000 meters.

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 the occasional snowfall. Accumulated snow in the winter is considerably less than in the wet belt. Prospecting 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.





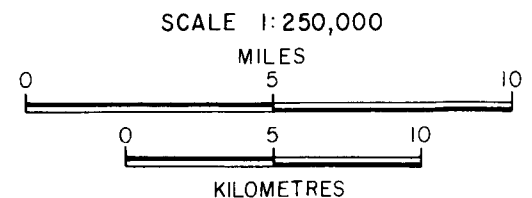
**LEGEND**

- QUATERNARY**  
**PLEISTOCENE AND RECENT**  
 29 Fluvial gravel; sand, silt; glacial outwash, till, alluvial 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  
 19 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-breccias and derived volcanoclastic 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 Andite-andesite flows, pyroclastic rocks, derived volcanoclastic 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, greenstone, minor chert, schistose tuff and limestone  
 1 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 .....



INTEGRATED RESOURCES LTD.

GOAT I-II CLAIMS  
**REGIONAL GEOLOGY**

LIARD MINING DIVISION, B.C.

---

EQUITY ENGINEERING LTD.

DRAWN. J.W.	N.T.S. 1046/12	DATE. NOV 1989	FIG. No. <b>3</b>
----------------	-------------------	-------------------	----------------------



## 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, in the vicinity of the Goat 1 to 3 claims, have been worked sporadically since 1903.

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 85 kilometers south-southwest and 60 kilometers south, 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, just north of the Goat property. 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, ten kilometers northeast of the Goat property, was also explored extensively in the 1960's.

Prior to the Goat claims being staked, Du Pont of Canada Exploration Ltd. held the Tuff 1 to 4 claims, centered on Mount Barrington. The claims were staked on the basis of highly anomalous gold geochemistry, from field sieved stream sediment

samples, collected during a regional survey by Du Pont in 1980.

Du Pont conducted preliminary exploration programs on the ground in 1980 and 1981 and concluded that "gold mineralization occurs within limited 'sweat-like' pods of pyrite-arsenopyrite-pyrrhotite-chalcopyrite." They concluded also that, "although such pods were observed across a widespread area their individual size and distribution rendered such zones individually or collectively uneconomic." The sources of anomalous gold soil geochemistry in certain treed areas of the Tuff 1 claim were not located by Du Pont (Korenic, 1982).

Evidence of diamond drilling was found on a ridge at the headwaters of Pokey Creek but it is believed to predate Du Pont's exploration activities and no records were found to document the work.

Integrated Resources Ltd. has done limited prospecting and geological exploration on the Goat claims since 1986 (Shensha, 1989; Wetherley, 1989).

#### 4.2 1989 Work Program

During August of 1989, Integrated Resources Ltd. carried out reconnaissance exploration on the Goat 1 to 11 claims, consisting of prospecting, geological mapping, and rock and stream sediment sampling. A computer generated 1:10,000 scale plan base map with 20 metre contour intervals was used to locate sample and outcrop locations. In addition to the 1:10,000 scale base map, a 1:5,000 scale contoured orthophoto centered over the Goat 10 claim was used for field work. The orthophoto was constructed from aerial photography dated July 1982.

The program 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, 1 silt sample and 141 rock samples were taken. The silt sample was collected from silt accumulations in Pokey Creek. Silts are sieved to minus 80 mesh in the laboratory and analysed geochemically for gold and 32-element 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-element ICP. Samples with results over 2000 parts per billion gold were fire assayed for gold, silver and significant base metals. 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 Stuhini Group 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 Stuhini Group island arc volcanics and sediments (Units 5 through 8). 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. This Upper Triassic volcano-sedimentary package is also correlative with that which hosts the Snip and Stonehouse gold deposits of the Iskut River district a further sixty 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 overlie Triassic sediments of the Stuhini Group. The Jurassic volcano-sedimentary strata are similar in appearance to those of the underlying Stuhini Group, with differentiation possible mainly through fossil identification.

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 have been noted by Government geologists,

to be syenitic and they conclude, "much additional work is needed to subdivide the many phases of this map-unit" (Souther, 1972).

The stock (Unit 17), which outcrops south of Limpoke Creek and west of the Barrington River in areas of the Goat 2, 3, 4, 5, 6 and 7 claims, is related to the Coast Plutonic Complex. The complex marginal phases of the stock have created some confusion as to what intrusive classification this unit belongs. The Poke and Gordon copper occurrences are associated with the syenitic marginal phases of this stock near the northern boundary of the Goat group of claims. The Limpoke showing is situated in the southwest section of the intrusion and is hosted in altered granodiorite.

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 (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

The Goat 1 to 11 claims are underlain by Upper Triassic volcanic and sedimentary rocks intruded by a Jurassic and/or Cretaceous granitic or syenitic stock located in the northern half

of the claim block (Figure 4).

In 1989, mapping was confined to the western half of the Goat claim block and along Jimmie Creek. Outcrop exposure was generally good in the upper alpine areas. Rock types encountered are predominated by clastic and pelitic sediments (Unit 7a), and minor mafic to intermediate volcanics (Unit 7b). Thin bedded calcareous mudstones and limestone outcrop on the west side of the property. These limestone units may be useful in the future as marker horizons for mapping purposes. The clastic sediments are dominated by dark grey to black siltstones with lesser argillite and sandstone.

Areas of volcanic rocks (Unit 7b) were encountered within the sediment package. The volcanics are aphanitic to augite porphyritic and are likely andesitic to basaltic in composition. The area bordering the intrusive is complicated due to hornfels alteration and faulting making stratigraphic relationships between sedimentary and volcanic members uncertain.

The stock (Unit 17) varies in composition between granodiorite, monzonite, diorite and syenite. Border phases of the intrusive are commonly syenite orthoclase megacryst porphyry composed of large orthoclase phenocrysts up to ten centimeters in length in a medium gray fine-grained matrix.

Bedding attitudes in the sediments in the area of North Cave Creek indicate an east-west strike with dips varying both north and south. Faulting is commonly oriented north-south and northeast-southwest. Quartz and/or carbonate veining is localized along these fault structures.

## 6.2 Mineralization

Gossanous zones explored during the 1989 field season are associated with hornfelsing of the sedimentary/volcanic package, iron carbonate alteration zones paralleling fault structures and strong pyrite mineralization in syenite. Iron alteration, dominantly as pyrrhotite, occurs marginal to the large stock mapped as Unit 17. Local concentrations of massive sulphides dominated by pyrrhotite with minor chalcopyrite occur as erratic discontinuous bodies within altered sedimentary or volcanic rocks. Sulphide concentrations were collected at sample locations #446899 and #446900 north of Mount Barrington, and #149333, #149334 and #149335 west of the saddle between "Pokey" Creek and North Cave Creek. These sulphide bodies appear to be associated with either fault structures or large inclusions of altered volcanic/sedimentary rocks within the stock or marginal to its boundary. All geochemical analyses returned low gold values and very low arsenic values.

Shear-hosted gold mineralization was discovered in the volcano-sedimentary and intrusive rocks on the property. Some of these shear zones were occupied by carbonate and/or quartz veins which contained varying amounts of sulphide minerals dominated by pyrite with lesser arsenopyrite and chalcopyrite.

An auriferous mineral occurrence discovered prior to the 1989 program in the West Grid area and known as the "Little Cave Creek Showing", was re-examined. This occurrence is situated on a small steep tributary on the west side of North Cave Creek, (Figure 4). The mineralized zone is hosted in sub-parallel fault structures within greywacke, siltstone and argillite units. Arsenopyrite and pyrite occur as disseminations in the sediments and in quartz veins within the shear structure. The veins strike north with their dip varying from vertical to a dominantly steep easterly direction.



The shear zone has a maximum width of 6.0 meters while strike length is restricted to less than 15 meters due to poor exposure and late cross-cutting faults which have segmented and displaced the shear-hosted vein structure. Sampling on earlier programs returned samples assaying greater than one ounce gold per ton from this zone. Detailed sampling during this year's program did not show significant gold values but did indicate a positive association between arsenic and gold. The highest values returned were 860 parts per billion gold with 3480 parts per million arsenic and 950 parts per million copper. The lower gold values resulted from poorly selected channel sample locations across the gossanous structure. The structure is faulted near the base of the outcrop and the samples collected were likely taken below the best mineralized area. This fault appears to lie sub-parallel to the slope of the hillside, dips to the east, and may have displaced the lower section of the gossanous zone.

Other quartz veins, in the North Cave Creek area, are commonly associated with steep, north striking faults in clastic sediments. The veins contain massive arsenopyrite and appear to host the best gold mineralization. Significant sample results in the West Grid area are summarized in Table 6.2.1.

TABLE 6.2.1  
WEST GRID AREA SAMPLING RESULTS

Sample	Type	Width meters	Gold oz/ton	Copper ppm	Arsenic ppm
446794	Grab	0.10	0.114	1680	>10,000
446796	Grab	0.30	0.170	760	>10,000
446895	Chip	0.65	1.104	37	>10,000
446892	Grab	1.25	0.802	46	>10,000

An area to the south of Mount Barrington and to the east of North Cave Creek was prospected and returned significant gold values. This area is shown on Figure 4 as the Main Grid/Barrington Grid area. The majority of gold mineralization occurs in calcite

veins hosted in shear zones in sedimentary rocks. The strike potential of these structures was not determined. Vein widths are generally restricted to less than one meter but do swell to greater than two meters in isolated areas. Significant assay results are summarized below.

TABLE 6.2.2  
MAIN GRID/BARRINGTON GRID AREA SAMPLING RESULTS

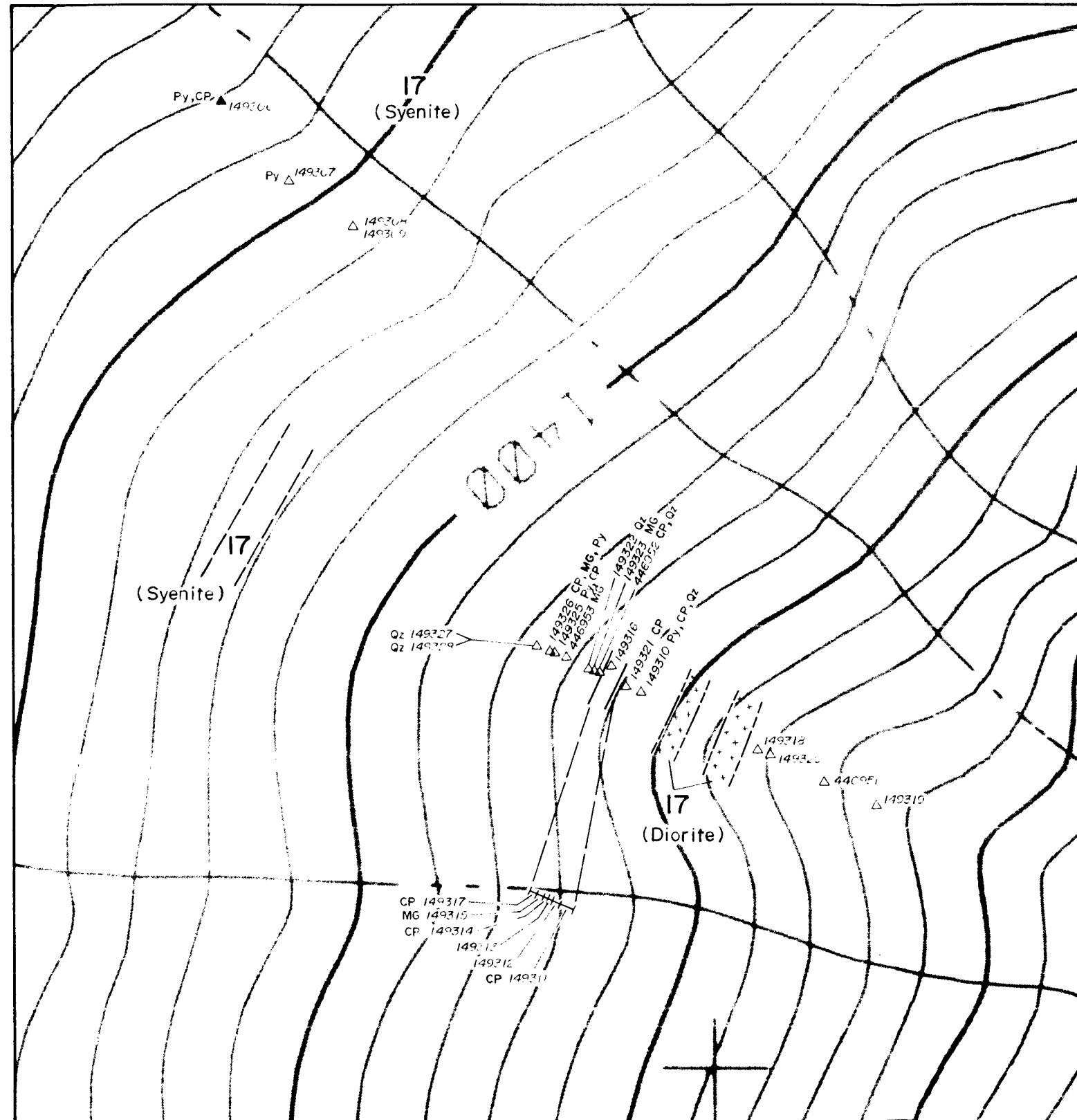
Sample	Type	Width meters	Gold oz./ton	Copper ppm	Arsenic ppm
446833	Grab	0.25	0.052	26	125
446834	Grab	0.10	1.212	395	>10,000
446836	Grab	1.00	0.962	1855	>10,000
446837	Grab	0.50	0.107	1050	>10,000
446841	Grab	0.50	0.138	130	>10,000
446842	Grab	0.25	0.172	192	>10,000

An area known as the "Bob Showing" situated east of "Pokey" Creek was sampled in detail after discovering encouraging mineralization within the stock (Figure 5). Zones of massive magnetite with minor chalcopyrite greater than one meter in width are hosted in granitic to syenitic rocks. The highest gold assays encountered were from veins or vein zones hosting quartz and chalcopyrite mineralization. Strike length of both styles of mineralization was not determined. Significant sample results are summarized in Table 6.2.3.

TABLE 6.2.3  
BOB SHOWING SAMPLING RESULTS

Sample	Type	Width meters	Gold oz./ton	Copper ppm*	Arsenic ppm
149309	Grab	0.025	0.192	2.30%	15
149310	Chip	0.20	0.089	1.53%	25
149316	Chip	1.07	0.064	7190	75
149325	Grab	0.06	0.067	572	<5
149328	Grab	0.10	0.168	1285	25
446951	Grab	0.50	0.012	9440	40

\* Note: Copper values are in parts per million (ppm) unless noted as percent in the table.



## LEGEND

JURASSIC and/or CRETACEOUS

17 - Granodiorite, quartz diorite, minor diorite and minor syenite.

### GEOLOGICAL FEATURES

Rock Sample: Grab or Chip  $\Delta$  149307  
 Float  $\blacktriangle$  149306

Geological Boundary (approximate)

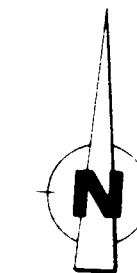
### MINERAL OCCURRENCE (Symbol)

CP Chrysopyrite  
 MG Magnetite  
 Py Pyrite  
 QZ Quartz

### ROCK GEOCHEMICAL RESULTS

Sample	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	As ppm
149306	45	1.6	402	10	88	<5
149307	50	0.8	371	12	38	15
149308	30	0.2	48	10	20	10
149309	*0.192	42.8	2.30%	26	610	15
149310	*0.089	61.2	1.53%	<2	404	25
149311	50	2.8	1105	10	70	5
149312	150	6.8	1590	2	118	10
149313	260	7.0	1260	<2	56	5
149314	65	2.4	834	2	76	15
149315	125	1.6	856	16	138	<5
149316	*0.064	37.4	7190	28	242	75
149317	160	3.6	1605	12	110	15
149318	40	1.2	502	4	56	25
149319	100	2.0	154	4	10	15
149320	110	3.2	1225	30	48	10
149321	510	24.6	1.00%	12	346	25
149322	<5	<0.2	173	4	142	<5
149323	55	6.8	2410	12	178	5
149325	*0.067	8.4	572	72	46	<5
149326	67	24.6	7390	58	426	15
149327	45	30.2	8050	24	442	35
149328	*0.168	8.8	1285	68	92	25
446951	*0.012	15.2	9440	8	380	40
446952	365	6.6	4690	<2	168	20
446953	180	1.8	823	4	52	5

\* INDICATES - oz/t



INTEGRATED RESOURCES LTD.

'BOB' Showing  
 GEOLOGY and  
 SAMPLE LOCATION MAP

LIARD MINING DIVISION, BRITISH COLUMBIA

EQUITY ENGINEERING LTD.

Scale 1:2500 N.T.S. 104-G/12W,13W Date Nov. 1989 Figure 5

A single rock grab sample, #446915, taken over a 0.10 to 0.15 meter wide quartz vein assayed 0.040 oz./ton gold, 2.24% copper and 110 parts per million arsenic. This sample is located on a ridge on the west side of "Pokey" Creek and is hosted in intrusive rocks.

## 7.0 GEOCHEMISTRY

Several rock samples from the Goat claims displayed extremely anomalous but erratic gold geochemistry which is believed to be caused by a coarse gold nugget effect. Results for these samples ranged from 1050 ppb to 5000 ppb for sample #446515, 645 ppb to 4760 ppb for sample #446921 and 4580 ppb to >10,000 ppb for sample #446951. An alternative technique of sample preparation (grinding to 150 mesh) and fire assay was recommended by Chemex Labs Ltd. Sample pulps from these samples were re-assayed several times to average out the nugget effect.

One silt sample was taken during the course of the program. Silt samples were not taken on North Cave Creek as previous sampling returned highly anomalous gold values over the entire drainage. Jimmie Creek was inaccessible for silt sampling owing to extremely thick slide debris from winter avalanches filling the creek valley for a depth of 20 meters. The single silt sample taken on "Pokey" Creek returned a value of 75 parts per billion gold. This silt sample result is statistically above the 95th percentile for all silt samples taken during a 1987 National Geochemical Reconnaissance survey of map sheets 104F and 104G (GSC Open File 1646).

## 8.0 DISCUSSION AND CONCLUSIONS

Exploration of the Goat Claims is at a very early stage. Reconnaissance prospecting, mapping and sampling was carried out during twenty-two man days of work, concentrating on the west side of the claim block in areas marked by strong gossans. Some of these gossanous areas coincide with the contact between the Jurassic and/or Cretaceous intrusive rocks and the upper Triassic volcano-sedimentary rocks. Zones sampled suggest that mineralization is concentrated near the margins of the stock and is commonly associated with fault structures oriented north-south. Many of the gold anomalous samples were of quartz and/or carbonate veins occupying north-south oriented fault structures. It appears that gold mineralization may be related to the intrusive activity and zoned marginally to the intrusive with the highest values proximal to the stock. Sampling of rocks at the contact indicate that anomalous gold values occur in all rock types. This contact area presents an excellent exploration target.

A number of gold occurrences were discovered in the North Cave Creek area. The gold commonly occurs in fault structures, of undetermined strike potential, which host quartz and/or carbonate veining with associated sulphides. These vein structures are up to 1.25 meters wide with gold concentrations up to 0.802 ounces gold per ton. Numerous centimeter scale veins carried gold values greater than 0.100 ounces gold per ton and are encouraging indicators of a gold-bearing hydrothermal system. The North Cave Creek area has received minimal prospecting and geological reconnaissance mapping and is an extremely good target for further work.

During the 1989 program, the area of Du Pont's Barrington Grid and Main Grid was re-examined resulting in the discovery of mineralized zones containing gold grades up to 1.212 oz./ton from

sample widths of 10 to 15 centimeters and 0.962 oz./ton over 1.0 meters. Further prospecting and mapping are required over areas which have previously been stream sediment and soil sampled in order to re-evaluate anomalous gold values.

Prospecting of the area northwest of North Cave Creek was conducted to follow up a highly gold-anomalous soil line sampled by Du Pont Exploration in 1981. This soil line, known as the West Sidehill traverse, returned gold values from 35 to 1500 parts per billion gold over a total length of approximately 800 meters. Results of this year's rock sampling in the area did show anomalous gold values but these results are not of sufficient magnitude to be the source of the higher gold values of the 1981 survey. It appears that the prospecting conducted this year may have been carried out too far to the west of the soil line. Further work in this area is required to investigate the source of the soil anomalies.

The "Bob" Showing was prospected and chip sampled and returned good gold values over narrow widths. The most significant sample was taken from a magnetite and chalcopyrite mineralized zone, 1.07 meters in width, that assayed 0.064 ounces gold per ton. The area of the showing is hosted in an intrusive unit in close proximity to the inferred contact with the volcano-sedimentary rocks. The structures appear to be crudely oriented north-south and may be fault-controlled. Geological mapping, prospecting and soil or talus fines geochemical sampling should be conducted in the area to locate any further mineralized structures.

Jimmie Creek is underlain by minor syenite dykes and diorite to monzonite dykes in a package of predominantly sedimentary rocks. Gossanous fault structures oriented northeast-southwest contained anomalous gold and strongly anomalous arsenic values which suggest that a gold-bearing hydrothermal system was also active in this

area.

The lode sources of the Barrington River placer gold deposits still remain to be discovered. At the invitation of Integrated Resources personnel, the placer gold recovered during the 1989 test pitting was examined. All of the gold examined was flattened and well polished which suggests considerable transporting of the nuggets. Some of the larger nuggets had small grains of adhering clastic material which suggests that the gold may have been reworked from a previous placer source of Tertiary(?) age or the gold has eroded from a sedimentary source rock.

Extremely encouraging initial results, coupled with the exploration successes achieved all along the regional trend between the Stewart, Iskut River and Galore Creek areas provide abundant incentive to conduct further exploration work on the Goat 1 to 11 claims.

Respectfully submitted,  
EQUITY ENGINEERING LTD.



Jim Lehtinen,  
B.Sc. Geology

Vancouver, British Columbia  
November, 1989



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 Report; British Columbia Department of Mines.
- Fox, P.E., E.W. Grove, R.H. Seraphim and A. Sutherland Brown (1976): Schaft Creek, in CIM Special Volume 15, pp. 219-226.
- Folk, P. (1981): Geochemical Report on the Limp #2 Claim; British Columbia Ministry of Energy, Mines and Petroleum Resources Assessment Report #9,092.
- Geological Survey of Canada (1988): National Geochemical Reconnaissance, Sumdum - Telegraph Creek, British Columbia (NTS 104F - 104G); GSC Open File 1646.
- Korenic, J.A. (1982): Assessment Report of Geological, Geochemical and Geophysical Work Performed on the Tuff 1 Claim, Assessment Report #10,475.
- Shensha Consultants Ltd. (1989): Report on Evaluation of Previous Work on Goat Claims, Telegraph Creek Area, B.C.; Private report prepared for Integrated Resources Ltd.
- Souther, J.G. (1972): Telegraph Creek Map Area, British Columbia; Geological Survey of Canada Paper 71-44.
- Wetherly, M. (1989): Qualifying Report on the Goat Claims; Private report prepared for Integrated Resources Ltd.

APPENDIX B

STATEMENT OF EXPENDITURES

STATEMENT OF EXPENDITURES  
GOAT 1 to 11 CLAIMS  
(August 20 to 27)

PROFESSIONAL FEES AND WAGES:

J. Lehtinen, Geologist		
24.0 days @ \$350/day	\$	8,400.00
L. Eccles, Geologist		
2.25 days @ \$350/day		787.50
D. Caulfield, Geologist		
0.5 days @ \$350/day		175.00
B. Kasper, Geologist		
5.5 days @ \$250/day		1,375.00
D. Ethier, Prospector		
5.0 days @ \$250/day		1,250.00
T. Bell, Prospector		
4.0 days @ \$250/day		1,000.00
R. Cournoyer, Prospector		
7.0 days @ \$250/day		1,750.00
I. Anderson, Sampler		
5.0 days @ \$175/day		<u>875.00</u>
	\$	15,612.50

EQUIPMENT RENTALS:

Truck Rental (Mobilization)		
4 days @ \$60/day	\$	240.00
Truck Rental (Standby)		
8 days @ \$10/day		80.00
Handheld Radios		
13 days @ \$5/day		65.00
Fly Camp		
21 mandays @ \$10/manday		<u>210.00</u>
		595.00

EXPENSES:

Chemical Analyses		
Stream sediment		
1 @ \$14.33	\$	14.33
Rock Assay		
17 @ \$13.16		223.72
5 @ \$6.50		32.50
Rock geochemical		
140 @ \$16.69		2,336.60
Printing and Reproductions		90.42
Meals (Integrated Camp)		926.61
Telephone Distance Charges		19.16
Courier and Telefax		73.80
Drafting		10.00
Camp Food		18.30
Automotive Fuel		298.73
Helicopter Charges		4,585.00
Freight		<u>27.20</u>
		8,656.37

REPORT (estimated)

\$ 1,000.00

MANAGEMENT FEE:  
15% on expenses

1,298.46

\$ 27,162.33  
=====

APPENDIX C

ROCK DESCRIPTIONS

Sampler Dan Ethier

 Project INT 89-02

Location Ref \_\_\_\_\_

 Date Aug. 25/89

 Property Goat

Air Photo No \_\_\_\_\_

SAMPLE NO.	U.T.M. LOCATION	SAMPLE TYPE	Sample Width True Width	DESCRIPTION			ADDITIONAL OBSERVATIONS	ASSAYS ppm					
				Rock Type	Alteration	Mineralization		* = %/cm		* = %			
							ppb	Ag	Cu	Pb	Zn	As	
							Au						
149306	N 6,409,455 E 329,650	Float	30.5cm			pyrite magnetite		45	1.6	402	10	88	<5
149307	N 6,409,420 E 329,805	Grab		Syenite		pyrite		50	0.8	371	12	38	15
149308	N 6,409,400 E 329,835	Chip	41cm	Syenite		pyrite, calcite, chlorite	channel sample	30	0.2	48	10	20	10
149309	N 6,409,400 E 329,835	Grab	2.5cm	Syenite		pyrite, cpy qtz	- Quartz stringers numerous. Approx. 1 per metre	* 0.192	42.8	*2.30 719,000	26	610	15
149310	N 6,409,173 E 329,965	Chip	20 cm			pyrrhotite - 75% chalcopyrite - 5% quartz - 10%	3 veins in 2m. widths = 2.5cm, 3-8, 17-8 cm	* 0.009		*1.53 719,000	<2	404	25
149311	N 6,409,180 E 329,955	Chip	2.40m	fault zone	Quartz	pyrite chalcopyrite magnetite	"Bob" Showing	50	2.8	1105	10	70	5
149312	N 6,409,180 E 329,955	Chip	1.60m	"	"	"	Continuation of chip sample from 149311	150	6.8	1590	2	118	10
149313	N 6,409,180 E 329,955	Chip	0.90m	"	"	"	" " " " 149312	260	7.0	1260	2	56	5
149314	N 6,409,180 E 329,955	chip	0.70	"	"	"	" " " " 149313	65	2.4	834	2	76	15
149315	N 6,409,180 E 329,955	chip	1.60m	"	"	"	" " " " 149314	125	1.6	856	16	138	<5
149316	N 6,409,180 E 329,955	chip	1.07m	"	"	"	Same structure as "Bob" Showing	* 0.064	37.4	7190	28	242	75
149317	N 6,409,180 E 329,955	chip	1.50m	"	"	"	Continuation of chip sample from 149315	160	3.6	1605	12	110	15
149318	N 6,409,145 E 330,020	Grab	?	Vein		10% pyrite + pyrrhotite, minor sphalerite		40	1.2	502	4	56	25
149319	N 6,409,120 E 330,080	Grab	?	Carbonate + Quartz? Vein		pyrite		100	2.0	154	4	10	15
149320	N 6,409,140 E 330,030	Chip	51cm.	?		chalcopyrite, pyrite	At diorite contact	110	3.2	1225	30	48	10
149321	N 6,409,180 E 329,955	Grab	8cm	Quartz Vein		chalcopyrite, pyrite		510	24.6	*1.00 19,000	12	346	25
149322	N 6,409,190 E 329,935	Grab	71m.	magnetite in vein?		magnetite	- massive magnetite of undulinal size	25	40.2	173	4	142	45
149323	N 6,409,190 E 329,955	Grab	1m	magnetite Vein		magnetite	- Magnetite paralleling "Bob" Showing	55	6.8	2410	12	178	5
149324	No Sample			Sample Lost →			—						
149325	N 6,409,200 E 329,920	Grab	6cm	Quartz Vein		minor chalcopyrite pyrite		* 0.067	8.4	572	72	46	<5



Sampler Don Ethier

 Project INT 89-02

Location Ref \_\_\_\_\_

 Date Aug 25/89

 Property Goat

Air Photo No \_\_\_\_\_

\* = 02/6m

SAMPLE NO.	LOCATION	SAMPLE TYPE	Sample Width True Width	DESCRIPTION			ADDITIONAL OBSERVATIONS	ASSAYS ppm					
				Rock Type	Alteration	Mineralization		ppb	Ag	Cu	Pb	Zn	As
149326	N 6, 409, 200 E 329, 920	Grab	0.5m	Quartz Vein		chalcopyrite magnetite pyrite		67	24.6	7390	58	426	15
149327	N 6, 409, 200 E 329, 915	Grab	13cm	Quartz Vein		magnetite chalcopyrite		45	30.2	8050	24	442	35
149328	N 6, 409, 200 E 329, 920	Grab	10cm	Quartz Vein		chalcopyrite		* 0.168	8.8	1285	68	92	25
149329	N 6, 406, 650 E 329, 530	Grab	< 1m	Intensive Granodiorite		Pyrite		100	1.4	945	2	34	< 5
149330	N 6, 406, 640 E 329, 540	Grab	20cm	clay fault (Ganga Zone)		Pyrite, (5-10% Py, Pb)	- minor Malachite	380	4.6	5300	34	204	< 5
149331	N 6, 406, 640 E 329, 570	Grab	?	Granodiorite		Pyrite, Pyrrhotite	5-10% combined sulphides	50	1.2	650	2	18	15
149332	N 6, 406, 655 E 329, 500	Grab	13cm	Qtz - Calcite		-	Vein in fault	70	4.2	931	8	118	35
149333	N 6, 406, 660 E 329, 440	Chip	1.0m	Pyrrhotite Pyrite Vein		Pyrite Pyrrhotite magnetite(?)	Massive sulphides Proximal to Syenite(?)	120	3.4	1900	< 2	140	< 5
149334	N 6, 406, 665 E 329, 425	Grab	1.0m	? Vein		Pyrite Pyrrhotite magnetite(?)	" " "	< 5	4.2	1950	< 2	90	< 5
149335	N 6, 406, 635 E 329, 430	Chip	2.0m	Vein		Pyrite Pyrrhotite	" " "	55	1.6	4180	< 2	136	15
446951	N 6, 409, 130 E 330, 050	Grab	0.5	Quartz stringers up to 5cm		chalcopyrite pyrite	- Quartz stringers up to 5cm. in gangue zone. Pyrite, chalcopyrite up to 10%	* 0.012	15.2	9440	8	380	40
446952	N 6, 409, 185 E 329, 940	Chip	1.0m	1.0m Quartz Vein		chalcopyrite Pyrite		365	6.6	4690	< 2	168	20
446953	N 6, 409, 195 E 329, 920	Chip	1.22m	1.22m magnetite vein		massive to semi-massive magnetite		180	1.8	823	4	52	5

NTS 1046/3W

 Sampler Bravo Kasper

 Project INT89-02

Location Ref \_\_\_\_\_

 Date Aug. 23 - Aug. 25, 1989

 Property GOAT 1-11

Air Photo No \_\_\_\_\_

SAMPLE NO.	LOCATION	SAMPLE TYPE	Sample Width True Width	DESCRIPTION			ADDITIONAL OBSERVATIONS	ASSAYS ppm					
				Rock Type	Alteration	Mineralization		ppb	Au	Ag	Cu	Pb	Zn
446794	6404617N 329935E	Grab o/c	10-15 cm	QZ Vein	QZ	AS, CP? 15-20%	mineralization viewed as clusters strike 170° dip 70°E	0.114	9.8	1680	4	130	710,000
446795	6404617N 329935E	"	0.75m 0.5m	Argillite?	QZ, BI	diss AS 5-10%	alteration zone around QZ vein - extends up to 0.5m on each side	80	0.4	274	2	56	3010
446796	6404617N 329935E	"	0.5m 0.3m	Argillite?	QZ	Mass AS + LF zone	- thin massive zone of mineralization 0.3 to 0.4m from vein but // to vein contains up to 70% sulfides.	0.170	4.8	760	26	60	710,000
446797	6404612N 329915E	Chip o/c	6.0m 4.0m	Argillite	CL, CA, Clay?	LI products	- strongly fractured and gossanous zone, strike ? 073° dip 79°SE near contact of QZ vein (446794) w/ strong fracturing	90	1.8	212	22	2230	188
446798	6404613N 329887E	Chip o/c	3.0m 3.0m	Argillite	CL, CA, Clay?	MnO <sub>2</sub> , LI products	strong fracturing + gossanous, possible fault?, almost // to 446797 strike 023° dip 76°N fracturing appears to // bedding	45	1.8	75	2	120	218
446799	6404622N 329852E	Grab o/c	5.0m	Argillite	CL, CA, Clay, minor QZ	≤10% LI 2-3% PY, AS?	mineralization stringers + blebs - continuation of 446797 + 446798 which have merged strike 101° dip 76°S	145	2.2	202	14	202	2210
446800	6404612N 329803E	Grab o/c	1.5m	Breccia Zone	CA, AK?	PY (1-2%)	mineralization occurs as 4mm blebs contain argillite clasts strike 221° dip 48°SW	10	40.2	41	22	36	50



Sampler Bruno Kasper

 Project INT 89-02

Location Ref \_\_\_\_\_

 Date August 23 - 25, 1989

 Property GOAT 1-11

Air Photo No \_\_\_\_\_

SAMPLE NO.	LOCATION	SAMPLE TYPE	Sample Width True Width	DESCRIPTION			ADDITIONAL OBSERVATIONS	ASSAYS ppm					
				Rock Type	Alteration	Mineralization		Au	Ag	Cu	Pb	Zn	As
447062	Elev. 1520m 6404025 N 329795 E	Grab o/c	1.0m 3.0m?	Argillite	CL, CA	LI products	Strongly fractural, possible fault zone? orientation? strike 106° dip 92°S	<5	0.6	119	<2	302	60
447063	Elev. 1505m 6404565 N 329805 E	"	1.5m ?	Interbedded Chert/argillite	QZ >> CL	PY, AS? (<5%)	mineralization appears interstitial! bedding orientation: strike 082° dip 83°N	<5	0.8	55	2	60	20
447064	Elev. 1430m 6404508 N 329930 E	Grab o/c	2.0m 7.0m?	Argillite	Weak CL, QZ	LI products (<4%)	- strongly fractural zone - some karstwork texture to LI products, probable orientation strike 101° dip 78°S	<5	1.6	63	8	230	65
447065	Elev. 1350m 6404495 N 329015 E	Grab o/c	1.5m ?	Argillite	Weak CL, QZ	LI products (<10%)	- continuation of 447064 - beds are folded in "S" shape	<5	1.2	39	<2	82	65
447066	Elev. 1660m 6405309 N 329680 E	Grab o/c	1.0m 10-25 cm	Volcaniclastic	Minor CL QZ > CA	CP, PY? (2-3%)	- blob (<1mm) mineralization - mineralization found in QZ part of vein - 1.25m alt <sup>10</sup> zone around vein - followed along o/c for 5m - oriented strike 160° dip 74°N	655	0.8	397	10	270	85
447067	Elev. 1685m 6405296 N 329678 E	Grab o/c	0.5m 10-20 cm	Volcaniclastic	CA > QZ	Mass PR+AS, PY? and Diss PR+AS (2-3%)	- CA > QZ vein, massive mineralization found in QZ rich part while diss. mineralization found in CA rich areas - vein exposed for 30m - strike 135° dip 73°5N	745	0.2	1040	12	84	40
447068	Elev. 1685m 6405320 N 329652 E	Grab o/c	1.0m 5-10 cm	Volcanic?	CL > QZ BI?	PY (<6%)	CL > QZ vein containing blebs + stringers of PY, strike 126° dip 76°SW	35	0.2	403	2	72	10
447069	Elev. 1738m 6405313 N 329688 E	Grab o/c	2.0m ?	Volcaniclastic Nacke?	BI, CL, CA	PR, AS? (5-10%)	- mineralized zone extends over mountain from 1700m up. o/c in varies locally shows same mineralization + alt <sup>10</sup>	85	0.2	130	4	34	45
447070	Elev. 1738m 6405320 N 329613 E	Grab o/c	20cm 20-25cm	"	QZ > AK	PY, AS? (5-15%)	- mineralization associated w/QZ - QZ > AK vein w/mineralization occurring as stringers + blebs - vein orientation: strike 135° dip 76°SW	710	0.6	444	2	54	345
447071	Elev. 1800m 6405270 N 329890 E	Grab o/c	1.5m ?	Apatite? Intrusive	minor CL	PR (5%)	- o/c over an 20m x 40m area - no contact observed	10	0.4	85	<2	14	5

Sampler R. Casnover

 Project INT 89-02

Location Ref \_\_\_\_\_

 Date August 89

 Property Goat

Air Photo No \_\_\_\_\_

SAMPLE NO.	LOCATION	SAMPLE TYPE	Sample Width	True Width	DESCRIPTION			ADDITIONAL OBSERVATIONS	ASSAYS ppm					
					Rock Type	Alteration	Mineralization		* = oz/ton      * = %					
									ppb	Au Ag Cu Pb Zn As				
446906	N 6,404,570 E 330,215	Grab			Argillite		pyrite	massive pyrite in 5cm wide carbonate vein	55	1.6	2280	2	132	50
446907	N 6,404,570 E 330,215	"					pyrite	10cm W carbonate fracture filling	10	<0.2	1740	<2	186	45
446908	N 6,404,005 E 330,565	"						2m W siliceous zone carrying disseminated pyrite along fractures.	10	<0.2	86	14	164	35
446909	N 6,404,000 E 330,605	"			Chert			60cm W zone with pyrite along fractures.	15	<0.2	53	16	58	60
446910	N 6,403,930 E 330,685	"			Argillite			8cm W fracture filling of quartz carrying pyrite.	10	<0.2	23	28	50	65
446911	N 6,404,670 E 330,205	"						calcite carbonate 3cm W carrying cpy, pyrr, py.	30	<0.2	287	<2	84	15
446912	N 6,404,670 E 330,205	"						calcite carbonate 1-3cm W with py and pyrr.	10	<0.2	264	<2	68	25
446913	N 6,407,795 E 328,610	"			syenite			py, pyrr on dyke contact.	15	0.8	307	6	30	10
446914	N 6,407,795 E 328,610	"			"			massive py and cpy in 25cm W vein on diorite-k-spar syenite	160	25.6	710,000	6	228	20
446915	N 6,408,330 E 328,625	"			"			10-15cm Qtz vein with massive cpy and malachite	0.040	51.2	710,000	82	438	110
446916	N 6,408,055 E 328,660	"			Sediment			py in fractures	<5	1.0	880	4	114	30
446917	N 6,408,010 E 328,835	"			syenite			cpy in Qtz, carbonate vein 2-5cm W	<5	0.2	178	38	402	30
446918	N 6,407,750 E 328,940	"			"			py in syenite in shear	20	0.6	820	4	30	15
446919	N 6,407,950 E 328,940	"			"			40cm W Qtz carbonate with minor pyrite	110	4.0	104	46	322	20
446920	N 6,407,890 E 329,010	"			"			1-2cm Qtz veinlet with pyrite.	60	0.4	42	4	36	25
446921	N 6,407,830 E 328,975	"			"			2-10cm Qtz carbonate with massive pyrite	925	16.4	130	42	14	20
446922	N 6,407,830 E 328,975	"			"			8-15cm Qtz carbonate with py and Mo	235	2.6	49	28	10	<5
446923	N 6,407,760 E 328,775	"			"			3m wide zone disseminated py in Qtz veinlets	10	1.6	337	4	82	35
446924	N 6,407,670 E 328,715	"			"			chlorite alteration with disseminated pyrite	15	0.8	480	<2	32	20
446925	N 6,407,590 E 328,700	"			"			siliceous alteration with pyrite and pyrr.	25	0.8	521	6	32	10

NTS 104 G/1.3 W

Sampler R. Cournoyer

Project INT.

Location Ref \_\_\_\_\_

Date August 89

Property Goat Group

Air Photo No \_\_\_\_\_

SAMPLE NO.	LOCATION	SAMPLE TYPE	Sample Width	True Width	DESCRIPTION			ADDITIONAL OBSERVATIONS	ASSAYS ppm					
					Rock Type	Alteration	Mineralization		* oz/ton					
									ppb	ppm				
								Au	Ag	Cu	Pb	Zn	As	
446926	N 6,407,590 E 328,700	Grab			Syenite			disseminated py, cpv and malachite with gtz. veinlets	<5	<0.2	191	4	34	15
446927	N 6,407,590 E 328,700	"			"			disseminated py in siliceous alteration	<5	1.0	521	<2	66	15
446928	N 6,407,575 E 328,650	"			"			"	10	1.2	337	4	30	10
446929	N 6,407,575 E 328,650	"			"			"	20	1.4	716	<2	36	35
446930	N 6,407,575 E 328,545	"			"			"	<5	0.6	260	<2	40	20
446931	N 6,407,330 E 328,780	"			"			"	5	1.0	320	4	26	20
446932	N 6,407,330 E 328,780	"			"			10 cm w gtz. carbonate with chlorite	<5	<0.2	99	<2	44	10
446933	N 6,407,330 E 328,780	"			"			malachite in gtz chlorite carbonate stringer	<5	0.4	156	<2	30	15
446934	N 6,407,330 E 328,780	"			"			disseminated py	<5	1.0	622	<2	34	15
446935	N 6,407,210 E 328,880	"			"			py and magnetite in gtz fracture filling	<5	0.6	473	<2	32	15
446936	N 6,407,250 E 329,110	"			"			mag. pyr. py and chlorite in gtz. veinlet	25	0.2	571	4	88	40
446937	N 6,407,030 E 329,165	"			"			2m w Alteration zone with chlorite, pyr, py	30	0.8	773	<2	36	10
446938	N 6,406,985 E 329,100	"			"			py, pyr, chlorite in gtz fracture filling.	10	0.2	413	4	94	<5
446939	N 6,406,825 E 329,135	"			"			py, pyr in siliceous alteration.	5	0.2	908	12	70	10
446940	N 6,406,825 E 329,135	"			"			"	15	0.4	540	<2	36	20
446941	N 6,406,690 E 329,205	"			"			disseminated py in alteration.	5	0.8	130	2	28	5
446942	N 6,406,650 E 329,170	"			"			disseminated pyr, py and mo	35	0.6	398	8	46	20
446943	N 6,406,575 E 329,090	"			"			disseminated pyr, py	<5	0.4	94	6	38	5
446944	N 6,406,370 E 329,130	"			diorite			20cm diorite dyke on syenite contact	<5	<0.2	65	6	92	35
446945	N 6,406,370 E 329,130	"			limestone			next to diorite dyke	<5	<0.2	67	<2	282	20





Sampler J. Lehtinen

Project Integrated Resources Int 89-02

Location Ref \_\_\_\_\_

Date Aug 25/89

Property Great Claims (1-11)

Air Photo No \_\_\_\_\_

SAMPLE NO.	UTM N E	SAMPLE TYPE	Sample Width True Width	DESCRIPTION			ADDITIONAL OBSERVATIONS	ASSAYS ppm.						
				Rock Type	Alteration	Mineralization		# oz/ton	Au	Ag	Cu	Pb	Zn	As
446892	<u>Elevation</u> N 6,404,655 E 330,170 1230	Grab		Sulphide		Pyrrhotite Chalcopyrite	Large blocks of massive sulphide in vein quartz	*	0.802	2.6	46	<2	128	70,000
446893	N 6,404,795 E 329,780 1300	Grab	1.0m	Carbonated Quartz		pyrite	- Carbonate alteration zone with weak quartz veining - minor malpaisite	135	<0.2	92	<2	62	195	
446894	N 6,404,800 E 329,960 1390	Grab		Aplite		Ilmenite?	Aplite dyke	115	0.9	37	26	26	100	
446895	N 6,404,730 E 329,870 1460	Chip	0.65	Quartz		Arsenopyrite	Quartz vein (vegy) with arsenopyrite as massive pods and as disseminated grains major fault with minor calcite veining, minor Quartz	*	1.104	8.0	37	16	36	71,000
446896	N 6,404,760 E 333,760 690	Grab	1.5m	Fault	Carbonate	-		245	<0.2	59	4	90	645	
446897	N 6,405,120 E 334,110 600	Grab	7.0	Sediments		Pyrite	Composite grab sample over 7.0m in pyritized zone. Fracture fill in argillite / limestone	100	<0.2	92	8	94	365	
446898	N 6,406,000 E 330,570 1655	Grab	2.0m	Intrusive/ Sediments		Pyrite	Rusty Gossan	60	0.4	408	8	32	110	
446899	N 6,405,980 E 330,595 1660	Grab	1.5m	Massive sulphide		Pyrrhotite	massive Pyrrhotite fault hosted (Paddy)	25	<0.2	2580	2	74	60	
446900	N 6,405,965 E 330,600 1665	Grab		massive sulphide		Pyrrhotite Pyrite Chalcopyrite	"	40	1.2	4260	<2	96	35	
447001	N 6,405,870 E 330,810 1655	Float		Syenite		15% Pyrite	Heavy Syenite float	240	0.4	149	12	32	10	
447002	N 6,406,535 E 329,975 1770	Grab		Granodiorite		Py ccp	Heavily pyritized Minor Chalcopyrite	50	1.0	260	<2	48	<5	
447003	N 6,406,600 E 329,775 1730	Grab	5m	Intrusive Seds + Vols.		Py Py	Composite grab over 5m-	30	0.2	400	2	32	5	
447004	N 6,405,840 E 330,870 1668	Grab	2.0m	"		Py Py		45	<0.2	275	<2	28	<5	
447005	N 6,405,950 E 331,110 1490	Grab/Talus	30m	"		Py, ccp.	Composite grab of talus	135	0.4	256	2	30	30	
447006	N 6,405,955 E 331,315 1470	"	30m	"		Py, Pp	Composite grab over 30m of highest percentage sulphides	30	0.4	327	<2	32	<5	
447007	N 6,405,935 E 331,555 1470	Talus		Syenite		Py	Float of syenite porphyry with 20% Pyrite	70	<0.2	297	<2	74	190	

Sampler Tom Bell

 Project INT 89-02

Location Ref \_\_\_\_\_

 Date Aug 24-26/89

 Property GOAT 1-11

Air Photo No \_\_\_\_\_

\* = oz/ton

SAMPLE NO.	LOCATION	SAMPLE TYPE	Sample Width True Width	DESCRIPTION			ADDITIONAL OBSERVATIONS	ASSAYS PPM						
				Rock Type	Alteration	Mineralization		ppb	Ag	Cu	Pb	Zn	As	
446827	N 6, 406, 060 E 329, 480 1715m	o/c	2m 25-30cm	Argillite	silica clay chlorite	Py, Mang Py, Py, Qtz	Shearing 030/62 NW.	25	40.2	162	4	40	20	
446828	N 6, 405, 920 E 329, 390 1707m	o/c	1m	Argillite	chlorite	Py, Pb, Cpy	Sulphides in fracture filling	25	40.2	226	2	22	180	
446829	N 6, 405, 900 E 329, 330 1707m	o/c	10m 5m	Argillite/Kspar	clay calcite	Py, Pb, Mang. Lim	Contact zone 100°	25	40.2	277	12	26	45	
446830	N 6, 405, 910 E 327, 310 1715m	o/c	50cm 15-20cm	Argillite	chlorite clay	Py, Pb Mang, Lim	Shearing 165°/60 N/E	25	0.2	426	22	38	25	
446831	N 6, 405, 930 E 329, 300 1722m	o/c	25cm	Argillite	clay chlorite	Py, Mang, Lim	Limestone Pad	35	1.0	1115	2	68	15	
446832	N 6, 405, 925 E 329, 170 1694m	o/c	15m 0.75-10m	Argillite	Epoxide, chlorite Carbonate	Py Calcite	Shearing 110/50 N	25	40.2	149	22	60	30	
446833	N 6, 405, 580 E 330, 270 1540m	o/c	25-30cm	Argillite	chlorite Carbonate	Py Calcite	Grab for 10m along strike 015/N.W Vein	*	0.052	40.2	26	22	16	125
446834	N 6, 405, 580 E 330, 250 1545m	o/c	10-15cm	Argillite	chlorite Carbonate	As, Py Calcite	Grab sample 2m. strike 165°/90 = Vein	*	1.212	5.6	395	34	80	719,000
446835	N 6, 405, 560 E 330, 265 1530m	o/c	1m.	Syenite	chlorite clay	Py, Mang. Lim	Grab sample along zone for 5m, 020/90 = Dyke	560	0.8	95	22	24	1155	
446836	N 6, 405, 575 E 330, 340 1550m	o/c	1m	Argillite	Carbonate	Py, As	Grab sample for 3m along zone 020/45 NW Vein	*	0.962	16.4	1855	22	76	719,000
446837	N 6, 405, 560 E 330, 370 1565m	o/c	50cm	Limestone Argillite contact	chlorite Carbonate	Py, As Lim, Mang	Grab sample along strike for 2.0m 165/60 E Vein	*	0.107	1.8	1050	36	64	716,000
446838	N 6, 405, 620 E 330, 358 1600m	o/c	30cm	Chert	carbonate	Py	130/90 - chert + stringers	295	0.2	359	22	48	625	
446839	N 6, 405, 530 E 330, 530 1610m	o/c	50cm	K-SPAR	chlorite clay	Py, As Mang	dyke	55	0.6	692	22	62	170	
446840	N 6, 405, 210 E 331, 123 1800m	o/c	50cm	Argillite	chlorite clay	Py	shearing 020/65 E	90	1.6	275	12	28	1005	
446841	N 6, 405, 250 E 331, 068 1780m	o/c	50cm	Argillite	chlorite clay	massive As, Py Calcite	shearing 175/75 W	*	0.138	0.8	130	12	48	719,000
446842	N 6, 405, 265 E 331, 035 1780m	o/c	25cm	Argillite	chlorite clay	Mang Py As Lim	175/75 W Bedding/shear	*	0.172	3.0	192	12	46	719,000
446843	N 6, 405, 250 E 331, 035 1780m	o/c	10cm	Argillite	clay chlorite	As, Py Mang	170/60 W - Calcite stringer	470	15.0	512	1085	374	3440	
446844	N 6, 405, 295 E 331, 010 1780m	o/c	25cm	Argillite	clay chlorite	As, Py Mang.		65	0.4	129	10	54	1015	
446845	N 6, 405, 345 E 331, 010 1790m	o/c	1m	Argillite	clay chlorite	Pyrite, Lim Mang	180/80W	120	0.4	344	12	48	170	
446846	N 6, 405, 345 E 330, 970 1785m	o/c	50cm	Argillite	clay chlorite	Mang Lim massive Py	Shear 145/45 S.W. 75 m strike	570	2.6	1350	156	200	2030	

NTS 104 G / 13 W

Sampler Tom Bell

Project INT 89-02

Location Ref \_\_\_\_\_

Date Aug 26/89

Property GOAT 1-11

Air Photo No \_\_\_\_\_

SAMPLE NO.	LOCATION	SAMPLE TYPE	Sample Width True Width	DESCRIPTION			ADDITIONAL OBSERVATIONS	ASSAYS					
				Rock Type	Alteration	Mineralization		A <sub>4</sub>					
446847	N 6, 405, 320 E 330, 910 1725m	o/c	10-15cm	Argillite	clay chlorite	Py, calcite	140/45 - bedding	45	2.0	1675	<2	92	270
446848	N 6, 405, 280 E 330, 820 1675m	o/c	1m	Argillite	clay	Py, calcite	075/70 - Carbonate structure	10	<0.2	92	<2	70	60
446849	N 6, 405, 290 E 330, 700 1610m	o/c	50cm	Argillite	carbonate	Minor Py	strike 110° - Carbonate flooded argillite (10m width)	45	<0.2	46	<2	76	115



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

A8925526

Comments: ATTN: DAVID CAULFIELD

## CERTIFICATE A8925526

EQUITY ENGINEERING LTD

PROJECT : INT89-02

P.O.# : NONE

Samples submitted to our lab in Vancouver, BC.

This report was printed on 26-SEP-89.

## SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
202	1	Dry, sieve -80 mesh, save reject
238	1	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	1	Au ppb: Fuse 10 g sample	FA-AAS	5	10000
921	1	Al %: 32 element, soil & rock	ICP-AES	0.01	15.00
922	1	Ag ppm: 32 element, soil & rock	ICP-AES	0.2	200
923	1	As ppm: 32 element, soil & rock	ICP-AES	5	10000
924	1	Ba ppm: 32 element, soil & rock	ICP-AES	10	10000
925	1	Be ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
926	1	Bi ppm: 32 element, soil & rock	ICP-AES	2	10000
927	1	Ca %: 32 element, soil & rock	ICP-AES	0.01	15.00
928	1	Cd ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
929	1	Co ppm: 32 element, soil & rock	ICP-AES	1	10000
930	1	Cr ppm: 32 element, soil & rock	ICP-AES	1	10000
931	1	Cu ppm: 32 element, soil & rock	ICP-AES	1	10000
932	1	Fe %: 32 element, soil & rock	ICP-AES	0.01	15.00
933	1	Ga ppm: 32 element, soil & rock	ICP-AES	10	10000
951	1	Hg ppm: 32 element, soil & rock	ICP-AES	1	10000
934	1	K %: 32 element, soil & rock	ICP-AES	0.01	10.00
935	1	La ppm: 32 element, soil & rock	ICP-AES	10	10000
936	1	Mg %: 32 element, soil & rock	ICP-AES	0.01	15.00
937	1	Mn ppm: 32 element, soil & rock	ICP-AES	5	10000
938	1	Mo ppm: 32 element, soil & rock	ICP-AES	1	10000
939	1	Na %: 32 element, soil & rock	ICP-AES	0.01	5.00
940	1	Ni ppm: 32 element, soil & rock	ICP-AES	1	10000
941	1	P ppm: 32 element, soil & rock	ICP-AES	10	10000
942	1	Pb ppm: 32 element, soil & rock	ICP-AES	2	10000
943	1	Sb ppm: 32 element, soil & rock	ICP-AES	5	10000
958	1	Sc ppm: 32 elements, soil & rock	ICP-AES	1	100000
944	1	Sr ppm: 32 element, soil & rock	ICP-AES	1	10000
945	1	Ti %: 32 element, soil & rock	ICP-AES	0.01	5.00
946	1	Tl ppm: 32 element, soil & rock	ICP-AES	10	10000
947	1	U ppm: 32 element, soil & rock	ICP-AES	10	10000
948	1	V ppm: 32 element, soil & rock	ICP-AES	1	10000
949	1	W ppm: 32 element, soil & rock	ICP-AES	10	10000
950	1	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: INT89-02

Comments: ATTN: DAVID CAULFIELD

Page No: 1-A

Tot. Pages: 1

Date: 26-SEP-89

Invoice #: I-8925526

P.O. #: NONE

## CERTIFICATE OF ANALYSIS A8925526

SAMPLE DESCRIPTION	PREP CODE		Au ppb	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
	FA+AA																				
RCOIS	202	238	75	1.50	0.2	5	50	< 0.5	< 2	0.90	< 0.5	14	24	442	7.60	< 10	< 1	0.08	20	0.73	645

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: INT89-02

Comments: ATTN: DAVID CAULFIELD

Page No.: 1-B  
Tot. Pages: 1  
Date: 26-SEP-89  
Invoice #: I-8925526  
P.O. #: NONE

## CERTIFICATE OF ANALYSIS A8925526

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
RCOIS	202   238	10	0.03	9	1450	6	< 5	6	90	0.09	< 10	< 10	231	< 10	66

CERTIFICATION :

*B. Caulfield*





# 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

A8925527

Comments: ATTN: DAVID CAULFIELD CC: AL JENKINS

**CERTIFICATE**

**A8925527**

EQUITY ENGINEERING LTD.

Project: INT89-02  
P.O.#: NONE

Samples submitted to our lab in Vancouver, BC.  
This report was printed on 26-SEP-89.

## SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	140	Rock Geochem: Crush, split, ring
238	140	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	140	Au ppb: Fuse 10 g sample	FA-AAS	5	10000
396	4	Au oz/T: 1/2 assay ton	FA-GRAVIMETRIC	0.003	20.000
921	140	Al %: 32 element, soil & rock	ICP-AES	0.01	15.00
922	140	Ag ppm: 32 element, soil & rock	ICP-AES	0.2	200
923	140	As ppm: 32 element, soil & rock	ICP-AES	5	10000
924	140	Ba ppm: 32 element, soil & rock	ICP-AES	10	10000
925	140	Be ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
926	140	Bi ppm: 32 element, soil & rock	ICP-AES	2	10000
927	140	Ca %: 32 element, soil & rock	ICP-AES	0.01	15.00
928	140	Cd ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
929	140	Co ppm: 32 element, soil & rock	ICP-AES	1	10000
930	140	Cr ppm: 32 element, soil & rock	ICP-AES	1	10000
931	140	Cu ppm: 32 element, soil & rock	ICP-AES	1	10000
932	140	Fe %: 32 element, soil & rock	ICP-AES	0.01	15.00
933	140	Ga ppm: 32 element, soil & rock	ICP-AES	10	10000
951	140	Hg ppm: 32 element, soil & rock	ICP-AES	1	10000
934	140	K %: 32 element, soil & rock	ICP-AES	0.01	10.00
935	140	La ppm: 32 element, soil & rock	ICP-AES	10	10000
936	140	Mg %: 32 element, soil & rock	ICP-AES	0.01	15.00
937	140	Mn ppm: 32 element, soil & rock	ICP-AES	5	10000
938	140	Mo ppm: 32 element, soil & rock	ICP-AES	1	10000
939	140	Na %: 32 element, soil & rock	ICP-AES	0.01	5.00
940	140	Ni ppm: 32 element, soil & rock	ICP-AES	1	10000
941	140	P ppm: 32 element, soil & rock	ICP-AES	10	10000
942	140	Pb ppm: 32 element, soil & rock	ICP-AES	2	10000
943	140	Sb ppm: 32 element, soil & rock	ICP-AES	5	10000
958	140	Sc ppm: 32 elements, soil & rock	ICP-AES	1	100000
944	140	Sr ppm: 32 element, soil & rock	ICP-AES	1	10000
945	140	Ti %: 32 element, soil & rock	ICP-AES	0.01	5.00
946	140	Tl ppm: 32 element, soil & rock	ICP-AES	10	10000
947	140	U ppm: 32 element, soil & rock	ICP-AES	10	10000
948	140	V ppm: 32 element, soil & rock	ICP-AES	1	10000
949	140	W ppm: 32 element, soil & rock	ICP-AES	10	10000
950	140	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: INT89-02

Comments: ATTN: DAVID CAULFIELD CC: AL JENKINS

Page No.: 1/1  
 Tot. Pages: 4  
 Date: 1-NOV-89  
 Invoice #: I-8925527  
 P.O. #: NONE

## CERTIFICATE OF ANALYSIS A8925527

SAMPLE DESCRIPTION	PREP CODE		Au ppb	Au FA	Al	Ag	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	La	Mg
			FA+AA	oz/T	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm
149306	205	238	45	—	0.60	1.6	< 5	< 10	< 0.5	< 2	0.22	< 0.5	23	11	402	>15.00	< 10	< 1	0.05	< 10	0.23
149307	205	238	50	—	0.76	0.8	15	40	< 0.5	< 2	0.40	< 0.5	19	8	371	5.90	< 10	< 1	0.11	10	0.27
149308	205	238	30	—	0.24	0.2	10	670	< 0.5	2	2.00	< 0.5	3	33	48	1.34	< 10	< 1	0.16	< 10	0.03
149309	205	238	6820	—	0.36	42.8	15	20	< 0.5	< 2	0.24	13.5	39	29	>10000	12.70	< 10	< 1	0.05	< 10	0.13
149310	205	238	1940	—	1.19	61.2	25	10	< 0.5	< 2	0.17	3.5	62	34	>10000	10.10	< 10	< 1	0.06	< 10	0.69
149311	205	238	50	—	0.90	2.8	5	10	< 0.5	< 2	0.94	1.0	12	18	1105	7.22	< 10	< 1	0.07	10	0.42
149312	205	238	150	—	1.13	6.8	10	10	< 0.5	< 2	0.61	1.0	14	21	1590	>15.00	< 10	< 1	0.05	10	0.41
149313	205	238	260	—	0.75	7.0	5	< 10	< 0.5	< 2	0.20	0.5	2	20	1260	10.75	< 10	< 1	0.05	< 10	0.32
149314	205	238	65	—	0.88	2.4	15	< 10	< 0.5	< 2	0.86	0.5	10	13	834	>15.00	< 10	< 1	0.04	10	0.46
149315	205	238	125	—	0.63	1.6	< 5	< 10	< 0.5	< 2	0.52	2.0	< 1	10	856	>15.00	< 10	< 1	0.03	10	0.19
149316	205	238	1890	—	0.55	37.4	75	20	< 0.5	< 2	0.12	3.0	12	75	7190	4.00	< 10	< 1	0.08	< 10	0.23
149317	205	238	160	—	1.70	3.6	15	80	< 0.5	< 2	1.58	1.5	20	11	1605	>15.00	< 10	< 1	0.06	10	0.52
149318	205	238	40	—	1.31	1.2	25	40	1.0	< 2	1.74	< 0.5	9	24	502	3.14	< 10	< 1	0.11	20	0.40
149319	205	238	100	—	0.34	2.0	15	60	< 0.5	< 2	0.59	< 0.5	1	13	154	2.03	< 10	< 1	0.14	20	0.06
149320	205	238	110	—	0.61	3.2	10	50	< 0.5	< 2	1.53	< 0.5	5	29	1225	2.10	< 10	< 1	0.11	20	0.16
149321	205	238	510	—	0.61	24.6	25	30	< 0.5	< 2	0.73	5.0	13	69	>10000	2.62	< 10	< 1	0.12	10	0.21
149322	205	238	< 5	—	0.83	< 0.2	< 5	< 10	< 0.5	< 2	1.45	1.0	15	21	173	>15.00	< 10	< 1	0.05	10	0.40
149323	205	238	55	—	0.77	6.8	5	30	< 0.5	< 2	1.10	3.5	12	45	2410	2.81	< 10	< 1	0.10	10	0.33
149325	205	238	5130	—	0.22	8.4	< 5	20	< 0.5	< 2	0.03	0.5	2	75	572	2.17	< 10	< 1	0.04	< 10	0.05
149326	205	238	67	—	0.43	24.6	15	20	< 0.5	< 2	0.95	18.5	10	127	7390	1.76	< 10	< 1	0.10	< 10	0.18
149327	205	238	45	—	3.89	30.2	35	< 10	< 0.5	< 2	0.64	6.0	31	40	8050	8.66	< 10	< 1	0.04	10	3.27
149328	205	238	5610	—	0.71	8.8	25	30	< 0.5	10	0.44	1.0	7	137	1285	1.84	< 10	< 1	0.16	< 10	0.32
149329	205	238	100	—	2.28	1.4	< 5	10	< 0.5	< 2	1.78	0.5	14	30	945	5.67	< 10	< 1	0.06	< 10	0.96
149330	205	238	380	—	3.82	4.6	< 5	10	0.5	< 2	2.71	1.5	118	52	5300	3.03	< 10	< 1	0.11	10	2.23
149331	205	238	50	—	0.86	1.2	15	10	< 0.5	< 2	1.02	< 0.5	7	22	650	3.51	< 10	< 1	0.06	10	0.13
149332	205	238	90	—	3.90	< 0.2	35	40	0.5	< 2	10.75	< 0.5	54	57	931	3.08	< 10	< 1	0.10	< 10	1.25
149333	205	238	120	—	0.71	3.4	< 5	10	< 0.5	< 2	8.69	1.5	18	15	1900	>15.00	< 10	< 1	0.03	< 10	0.13
149334	205	238	< 5	—	0.24	< 0.2	< 5	< 10	< 0.5	< 2	0.24	0.5	8	4	1950	>15.00	< 10	< 1	< 0.01	< 10	0.03
149335	205	238	55	—	0.65	1.6	15	10	< 0.5	< 2	1.35	< 0.5	1055	22	4180	>15.00	< 10	< 1	0.06	10	0.17
446794	205	238	3360	—	0.25	9.8	>10000	140	< 0.5	< 2	0.27	85.0	69	17	1680	>15.00	< 10	< 1	0.03	< 10	0.03
446795	205	238	80	—	1.94	0.4	3010	160	< 0.5	< 2	0.81	< 0.5	11	18	274	5.49	< 10	< 1	0.33	10	1.55
446796	205	238	5480	—	0.60	4.8	>10000	50	< 0.5	< 2	0.21	>100.0	335	21	760	>15.00	< 10	< 1	0.07	< 10	0.26
446797	205	238	90	—	2.85	1.8	2230	190	< 0.5	< 2	0.86	< 0.5	16	108	212	5.84	< 10	< 1	0.67	20	1.17
446798	205	238	< 5	—	1.22	1.8	120	40	< 0.5	< 2	0.18	< 0.5	5	137	75	4.36	< 10	< 1	0.37	10	0.63
446799	205	238	145	—	1.60	2.2	2210	120	< 0.5	< 2	1.97	< 0.5	15	133	202	5.89	< 10	< 1	0.35	< 10	0.68
446800	205	238	10	—	1.11	< 0.2	50	60	< 0.5	4	>15.00	< 0.5	10	9	41	3.81	< 10	< 1	0.10	< 10	3.85
446827	205	238	< 5	—	4.04	< 0.2	20	10	< 0.5	< 2	4.53	< 0.5	14	66	162	4.36	< 10	< 1	0.05	< 10	1.12
446828	205	238	< 5	—	2.74	< 0.2	180	10	< 0.5	< 2	2.42	< 0.5	28	25	226	4.38	< 10	< 1	0.06	< 10	0.36
446829	205	238	25	—	2.46	< 0.2	45	10	0.5	< 2	2.56	< 0.5	19	35	277	4.70	< 10	< 1	0.08	< 10	0.66
446830	205	238	< 5	—	4.19	0.2	< 5	< 10	< 0.5	< 2	4.16	< 0.5	34	49	426	12.10	< 10	< 1	0.06	< 10	0.80

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: INT89-02

Comments: ATTN: DAVID CAULFIELD CC: AL JENKINS

Page No. : 1-B

Tot. Pages: 4

Date : 1-NOV-89

Invoice #: I-8925527

P.O. #: NONE

## CERTIFICATE OF ANALYSIS A8925527

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
149306	205	238	460	< 1	0.02	49	390	10	5	2	12	0.14	< 10	< 10	2900	< 10	88
149307	205	238	300	1	0.02	46	1250	12	< 5	2	25	< 0.01	< 10	< 10	184	< 10	38
149308	205	238	320	< 1	0.01	3	520	10	< 5	1	65	< 0.01	< 10	< 10	16	50	20
149309	205	238	155	1	< 0.01	3	< 10	26	< 5	1	9	< 0.01	< 10	< 10	19	< 10	610
149310	205	238	290	2	0.01	95	640	< 2	5	4	7	< 0.01	< 10	< 10	91	20	404
149311	205	238	340	12	0.02	9	600	10	< 5	1	25	0.02	< 10	< 10	676	50	70
149312	205	238	435	28	0.02	33	2110	2	< 5	2	23	0.06	< 10	< 10	1855	40	118
149313	205	238	225	25	0.02	18	430	< 2	< 5	1	10	0.03	< 10	< 10	825	60	56
149314	205	238	390	13	0.02	38	3340	2	< 5	1	26	0.05	< 10	< 10	1400	50	76
149315	205	238	875	3	0.01	58	620	16	5	2	19	0.10	< 10	< 10	4210	< 10	138
149316	205	238	170	48	0.01	4	310	28	< 5	1	8	< 0.01	< 10	< 10	80	10	242
149317	205	238	850	20	0.02	15	2300	12	5	4	46	0.03	< 10	< 10	1730	10	110
149318	205	238	435	6	0.02	5	1400	4	< 5	2	92	0.08	< 10	< 10	140	< 10	56
149319	205	238	65	< 1	0.04	1	1680	4	< 5	1	91	0.06	< 10	< 10	96	< 10	10
149320	205	238	395	3	0.01	3	810	30	< 5	2	37	0.07	< 10	< 10	103	< 10	48
149321	205	238	215	9	0.02	9	370	12	< 5	2	19	< 0.01	< 10	< 10	65	80	346
149322	205	238	945	< 1	0.02	78	1220	4	5	3	44	0.14	< 10	< 10	3720	< 10	142
149323	205	238	265	25	0.06	7	700	12	< 5	3	65	0.08	< 10	< 10	191	20	178
149325	205	238	60	116	< 0.01	3	60	72	< 5	< 1	4	< 0.01	< 10	< 10	23	10	46
149326	205	238	180	42	0.01	9	140	58	< 5	1	56	< 0.01	< 10	< 10	29	10	426
149327	205	238	1635	137	0.01	6	720	24	< 5	13	25	0.01	< 10	< 10	620	70	442
149328	205	238	195	21	0.03	3	430	68	< 5	1	21	< 0.01	< 10	< 10	58	10	92
149329	205	238	305	6	0.02	12	960	2	< 5	3	84	0.20	< 10	< 10	140	10	34
149330	205	238	1665	11	0.05	29	450	34	< 5	6	63	0.05	< 10	< 10	99	< 10	204
149331	205	238	95	2	0.04	7	2140	2	< 5	1	36	0.06	< 10	< 10	61	100	18
149332	205	238	1835	8	0.01	83	750	8	5	8	182	0.03	< 10	< 10	131	10	118
149333	205	238	1170	4	< 0.01	24	1600	< 2	5	1	89	0.02	< 10	< 10	43	80	140
149334	205	238	135	< 1	< 0.01	95	510	< 2	5	2	6	< 0.01	< 10	< 10	< 1	< 10	90
149335	205	238	505	3	< 0.01	68	1120	< 2	< 5	2	11	0.03	< 10	< 10	35	< 10	136
446794	205	238	245	< 1	< 0.01	5	180	4	35	2	9	< 0.01	< 10	< 10	2	< 10	130
446795	205	238	350	< 1	0.05	13	1210	2	< 5	8	48	0.07	< 10	< 10	121	< 10	56
446796	205	238	385	< 1	< 0.01	26	110	26	45	3	134	< 0.01	< 10	< 10	15	< 10	60
446797	205	238	820	8	0.23	41	1420	< 2	5	8	144	0.07	< 10	< 10	143	< 10	188
446798	205	238	215	7	0.03	39	810	2	< 5	4	12	0.01	< 10	< 10	67	< 10	218
446799	205	238	315	6	0.09	56	1090	14	5	5	55	0.04	< 10	< 10	78	< 10	202
446800	205	238	1445	< 1	0.02	5	290	< 2	5	7	925	< 0.01	< 10	< 10	54	< 10	36
446827	205	238	360	24	0.03	9	970	4	< 5	7	42	0.25	< 10	< 10	162	< 10	40
446828	205	238	200	< 1	0.26	31	1450	2	5	3	202	0.17	< 10	< 10	44	< 10	22
446829	205	238	210	< 1	0.11	17	1240	12	< 5	6	73	0.22	< 10	< 10	128	< 10	26
446830	205	238	250	< 1	0.02	25	840	< 2	5	10	20	0.23	< 10	< 10	141	< 10	38

CERTIFICATION :

*B. Caulfield*



# 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: INT89-02

Comments: ATTN: DAVID CAULFIELD CC: AL JENKINS

Page No.: 2-A  
Tot. Pages: 4  
Date: 1-NOV-89  
Invoice #: I-8925527  
P.O. #: NONE

## CERTIFICATE OF ANALYSIS A8925527

SAMPLE DESCRIPTION	PREP CODE	Au ppb FA+AA	Au FA oz/T	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 %
446831	205 238	35	—	0.56	1.0	15	< 10	< 0.5	< 2	5.03	< 0.5	13	24	1115	>15.00	< 10	< 1	0.02	< 10	0.10
446832	205 238	< 5	—	4.53	< 0.2	30	10	< 0.5	2	13.65	< 0.5	16	43	149	4.68	< 10	< 1	0.20	< 10	1.27
446833	205 238	1300	—	0.40	< 0.2	125	10	< 0.5	8	>15.00	< 0.5	5	6	26	4.12	< 10	< 1	< 0.01	< 10	0.27
446834	205 238	>10000	1.200	1.73	5.6	>10000	< 10	< 0.5	70	11.00	>100.0	562	7	395	>15.00	< 10	< 1	0.01	< 10	0.98
446835	205 238	560	—	0.67	0.8	1155	50	< 0.5	< 2	0.67	< 0.5	16	9	95	4.87	< 10	< 1	0.07	10	0.33
446836	205 238	>10000	1.016	1.18	16.4	>10000	< 10	< 0.5	136	7.46	12.0	256	10	1855	>15.00	< 10	< 1	< 0.01	< 10	0.55
446837	205 238	6240	—	0.86	1.8	>10000	< 10	< 0.5	< 2	14.05	1.5	116	15	1050	11.30	< 10	< 1	< 0.01	< 10	0.41
446838	205 238	295	—	1.15	0.2	625	50	< 0.5	< 2	7.24	< 0.5	27	37	359	5.72	< 10	< 1	0.04	< 10	0.81
446839	205 238	55	—	3.57	0.6	170	10	< 0.5	< 2	1.83	< 0.5	61	28	692	>15.00	< 10	< 1	0.03	< 10	0.68
446840	205 238	90	—	0.79	1.6	1005	60	< 0.5	< 2	0.97	< 0.5	19	47	275	6.19	< 10	< 1	0.10	< 10	0.17
446841	205 238	4570	—	1.66	0.8	>10000	40	< 0.5	180	1.46	>100.0	1025	23	130	13.00	< 10	< 1	0.18	< 10	1.01
446842	205 238	5820	—	1.48	3.0	>10000	40	< 0.5	176	2.90	75.5	507	32	192	9.92	< 10	< 1	0.25	< 10	1.08
446843	205 238	470	—	1.12	15.0	3440	10	< 0.5	162	0.19	< 0.5	71	48	512	14.45	< 10	< 1	0.01	< 10	0.89
446844	205 238	65	—	1.47	0.4	1015	50	< 0.5	< 2	5.79	< 0.5	21	45	129	3.72	< 10	< 1	0.15	< 10	1.14
446845	205 238	120	—	1.50	0.4	170	10	< 0.5	16	2.97	< 0.5	55	46	344	9.89	< 10	< 1	0.09	< 10	1.07
446846	205 238	570	—	1.53	2.6	2030	< 10	< 0.5	< 2	2.71	< 0.5	310	17	1350	>15.00	< 10	< 1	0.01	< 10	0.62
446847	205 238	45	—	1.68	2.0	270	< 10	< 0.5	< 2	1.52	< 0.5	125	37	1675	>15.00	< 10	< 1	< 0.01	< 10	0.23
446848	205 238	10	—	1.12	< 0.2	60	10	< 0.5	4	14.50	< 0.5	12	28	92	3.85	< 10	< 1	0.03	< 10	0.45
446849	205 238	< 5	—	0.39	< 0.2	115	20	< 0.5	< 2	11.25	< 0.5	11	34	46	5.98	< 10	< 1	0.03	< 10	2.82
446892	205 238	>10000	0.792	0.46	2.6	>10000	10	< 0.5	< 2	0.12	< 0.5	52	7	5990	>15.00	< 10	< 1	0.03	< 10	0.22
446893	205 238	135	—	0.56	< 0.2	195	120	< 0.5	< 2	>15.00	< 0.5	15	21	92	3.54	< 10	< 1	0.18	< 10	1.30
446894	205 238	115	—	0.34	0.4	100	50	1.0	< 2	0.39	< 0.5	2	12	37	1.04	< 10	< 1	0.16	10	0.03
446895	205 238	>10000	1.048	0.18	8.0	>10000	30	< 0.5	16	0.03	>100.0	39	28	743	14.65	< 10	< 1	0.02	< 10	0.02
446896	205 238	245	—	0.45	< 0.2	645	80	< 0.5	< 2	8.72	< 0.5	12	45	59	3.40	< 10	< 1	0.07	< 10	0.50
446897	205 238	100	—	1.96	< 0.2	365	30	< 0.5	< 2	8.31	< 0.5	15	59	92	4.04	< 10	< 1	0.11	< 10	1.68
446898	205 238	60	—	0.85	0.4	110	< 60	< 0.5	< 2	0.67	< 0.5	11	21	408	3.44	< 10	< 1	0.13	10	0.46
446899	205 238	25	—	0.88	< 0.2	60	< 10	< 0.5	< 2	0.83	< 0.5	77	17	2580	>15.00	< 10	< 1	< 0.01	< 10	0.12
446900	205 238	40	—	1.70	1.2	35	< 10	< 0.5	< 2	1.47	< 0.5	93	26	4260	>15.00	< 10	< 1	< 0.01	< 10	0.19
446906	205 238	55	—	0.59	1.6	50	< 10	< 0.5	< 2	0.42	< 0.5	209	12	2280	>15.00	< 10	< 1	0.02	< 10	0.27
446907	205 238	10	—	1.03	< 0.2	45	20	< 0.5	< 2	0.92	< 0.5	190	22	1740	>15.00	< 10	< 1	0.04	< 10	0.74
446908	205 238	10	—	0.66	< 0.2	35	330	< 0.5	< 2	0.66	0.5	12	42	86	2.84	< 10	< 1	0.08	< 10	0.60
446909	205 238	15	—	0.69	< 0.2	60	160	< 0.5	< 2	0.06	< 0.5	11	72	53	2.06	< 10	< 1	0.03	< 10	0.46
446910	205 238	10	—	0.12	< 0.2	65	1130	< 0.5	< 2	0.99	< 0.5	6	80	23	1.12	< 10	< 1	0.01	< 10	0.33
446911	205 238	30	—	1.46	< 0.2	15	250	< 0.5	< 2	14.50	< 0.5	19	22	287	3.26	< 10	< 1	0.13	< 10	0.74
446912	205 238	10	—	1.40	< 0.2	25	160	< 0.5	2	12.30	< 0.5	23	31	264	3.90	< 10	< 1	0.22	< 10	0.89
446913	205 238	15	—	0.72	0.8	10	80	0.5	< 2	1.51	0.5	8	22	307	2.18	< 10	< 1	0.08	10	0.11
446914	205 238	160	—	2.14	25.6	20	20	< 0.5	< 2	8.43	1.5	2	21	>10000	11.55	< 10	< 1	0.04	< 10	0.18
446915	205 238	1050	—	0.73	51.2	110	120	< 0.5	26	5.11	16.0	10	62	>10000	4.77	< 10	< 1	0.14	< 10	0.20
446916	205 238	< 5	—	2.01	1.0	30	100	1.5	< 2	3.22	< 0.5	17	15	880	4.36	< 10	< 1	0.25	< 10	1.62
446917	205 238	< 5	—	0.29	0.2	30	3130	0.5	< 2	10.10	3.5	6	19	178	2.92	< 10	< 1	0.20	< 10	0.39

CERTIFICATION :

*B. Caulfield*



# 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: INT89-02

Comments: ATTN: DAVID CAULFIELD CC: AL JENKINS

Page No.: 2-B  
Tot. Pages: 4  
Date: 1-NOV-89  
Invoice #: I-8925527  
P.O. #: NONE

## CERTIFICATE OF ANALYSIS A8925527

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
446831	205	238	1140	< 1	0.01	11	350	2	< 5	2	32	0.02	< 10	< 10	28	620	68
446832	205	238	905	< 1	0.02	9	720	< 2	5	12	258	0.18	< 10	< 10	159	30	60
446833	205	238	1370	< 1	0.13	1	110	< 2	10	2	1430	< 0.01	< 10	< 10	16	20	16
446834	205	238	710	< 1	0.01	24	440	34	55	4	183	< 0.01	< 10	< 10	34	50	80
446835	205	238	180	13	0.05	4	1040	< 2	< 5	5	64	0.18	< 10	< 10	81	< 10	24
446836	205	238	550	3	< 0.01	35	150	22	15	3	134	< 0.01	< 10	< 10	18	50	70
446837	205	238	1125	4	< 0.01	23	210	30	15	3	169	< 0.01	< 10	< 10	13	30	64
446838	205	238	815	< 1	0.06	33	1390	< 2	< 5	13	233	0.23	< 10	< 10	155	10	48
446839	205	238	550	11	0.31	56	1030	< 2	< 5	9	184	0.20	< 10	< 10	112	20	62
446840	205	238	100	5	0.12	22	1070	12	5	7	32	0.25	< 10	< 10	117	< 10	28
446841	205	238	375	< 1	0.02	62	1010	12	80	9	43	0.06	< 10	< 10	143	20	48
446842	205	238	385	< 1	0.01	53	750	12	70	11	34	0.06	< 10	< 10	147	20	46
446843	205	238	395	< 1	0.05	14	1000	1085	< 5	8	21	0.12	< 10	< 10	150	10	374
446844	205	238	680	< 1	0.03	12	980	10	5	18	80	0.19	< 10	< 10	221	< 10	54
446845	205	238	420	< 1	0.01	42	830	12	< 5	13	31	0.19	< 10	< 10	172	< 10	48
446846	205	238	980	< 1	0.01	55	60	156	15	3	62	< 0.01	< 10	< 10	47	< 10	200
446847	205	238	175	< 1	< 0.01	198	140	< 2	10	4	6	0.02	< 10	< 10	19	< 10	92
446848	205	238	850	3	0.09	18	700	< 2	5	6	484	0.14	< 10	< 10	72	< 10	40
446849	205	238	1320	< 1	0.01	7	560	< 2	< 5	13	486	< 0.01	< 10	< 10	109	10	76
446892	205	238	105	< 1	< 0.01	51	< 10	< 2	15	3	4	< 0.01	< 10	< 10	< 1	< 10	128
446893	205	238	1175	< 1	0.02	12	920	< 2	5	14	240	< 0.01	< 10	< 10	83	< 10	62
446894	205	238	475	< 1	0.03	< 1	90	26	< 5	2	56	< 0.01	< 10	< 10	2	< 10	26
446895	205	238	65	< 1	0.01	2	120	16	100	2	4	< 0.01	< 10	< 10	9	< 10	36
446896	205	238	775	4	0.01	19	980	4	5	11	309	< 0.01	< 10	< 10	85	< 10	90
446897	205	238	840	1	0.02	18	1080	8	5	10	201	0.09	< 10	< 10	175	< 10	94
446898	205	238	230	6	0.03	5	990	8	< 5	3	20	0.21	< 10	< 10	115	< 10	32
446899	205	238	295	< 1	0.01	53	650	2	< 5	3	8	0.06	< 10	< 10	61	< 10	74
446900	205	238	455	1	0.03	49	450	< 2	5	4	34	0.06	< 10	< 10	57	< 10	96
446906	205	238	260	2	< 0.01	69	< 10	2	5	4	8	< 0.01	< 10	< 10	16	< 10	132
446907	205	238	465	< 1	0.01	71	110	< 2	5	7	14	0.04	< 10	< 10	53	< 10	186
446908	205	238	160	< 1	0.01	25	250	14	< 5	2	36	< 0.01	< 10	< 10	9	< 10	164
446909	205	238	120	< 1	0.01	36	80	16	< 5	1	6	< 0.01	< 10	< 10	13	< 10	58
446910	205	238	545	< 1	0.01	22	20	28	< 5	2	27	< 0.01	< 10	< 10	10	< 10	50
446911	205	238	1105	< 1	0.03	13	530	< 2	5	6	337	0.08	< 10	< 10	81	< 10	84
446912	205	238	1340	< 1	0.03	11	630	< 2	5	7	265	0.03	< 10	< 10	82	< 10	68
446913	205	238	540	18	0.08	2	330	6	5	1	75	0.07	< 10	< 10	124	< 10	30
446914	205	238	2580	6	0.02	2	290	6	< 5	2	23	0.05	< 10	< 10	88	< 10	228
446915	205	238	835	32	0.01	26	320	82	125	3	95	< 0.01	< 10	< 10	52	< 10	438
446916	205	238	945	4	0.05	7	1670	4	< 5	12	138	0.20	< 10	< 10	170	< 10	114
446917	205	238	1765	42	< 0.01	2	50	38	20	< 1	279	< 0.01	< 10	< 10	7	< 10	402

CERTIFICATION :

*B. Caulfield*



# 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: INT89-02

Comments: ATTN: DAVID CAULFIELD CC: AL JENKINS

Page No.: 3-A  
Tot. Pages: 4  
Date: 1-NOV-89  
Invoice #: I-8925527  
P.O. #: NONE

## CERTIFICATE OF ANALYSIS A8925527

SAMPLE DESCRIPTION	PREP CODE		Au ppb	Au FA	Al	Ag	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	La	Mg
			FA-AA	oz/T	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	%
446918	205	238	20	—	0.58	0.6	15	360	< 0.5	< 2	1.82	< 0.5	16	17	820	2.33	< 10	< 1	0.18	10	0.19
446919	205	238	110	—	0.51	4.0	20	1260	< 0.5	8	4.55	2.0	11	76	104	3.05	< 10	< 1	0.21	< 10	1.07
446920	205	238	60	—	0.49	0.4	25	50	< 0.5	240	0.35	< 0.5	10	141	42	10.10	< 10	< 1	0.08	< 10	0.32
446921	205	238	925	—	0.29	16.4	20	70	< 0.5	106	0.47	< 0.5	9	135	130	2.85	< 10	< 1	0.14	< 10	0.10
446922	205	238	235	—	0.10	2.6	< 5	130	< 0.5	4	0.51	0.5	13	114	49	1.83	< 10	< 1	0.08	10	0.02
446923	205	238	10	—	1.85	1.6	35	10	< 0.5	< 2	5.66	< 0.5	1	87	337	9.16	< 10	< 1	0.07	< 10	0.40
446924	205	238	15	—	1.13	0.8	20	10	< 0.5	< 2	2.05	< 0.5	19	117	480	4.56	< 10	< 1	0.05	10	0.39
446925	205	238	25	—	0.27	0.8	10	10	< 0.5	< 2	0.92	0.5	18	77	521	3.38	< 10	< 1	0.06	10	0.08
446926	205	238	< 5	—	0.68	< 0.2	15	10	< 0.5	2	4.57	0.5	4	48	191	2.43	< 10	< 1	0.03	< 10	0.16
446927	205	238	< 5	—	0.30	1.0	15	20	< 0.5	< 2	0.56	1.0	19	54	521	3.82	< 10	< 1	0.09	10	0.14
446928	205	238	10	—	0.15	1.2	10	10	< 0.5	< 2	0.57	< 0.5	20	47	337	3.47	< 10	< 1	0.03	10	0.03
446929	205	238	20	—	0.86	1.4	35	20	< 0.5	< 2	2.17	< 0.5	11	79	716	3.48	< 10	< 1	0.10	10	0.24
446930	205	238	< 5	—	0.71	0.6	20	20	< 0.5	< 2	1.04	< 0.5	10	56	260	3.65	< 10	< 1	0.12	10	0.75
446931	205	238	5	—	0.23	1.0	20	10	< 0.5	< 2	0.49	< 0.5	23	42	320	4.08	< 10	< 1	0.06	10	0.05
446932	205	238	< 5	—	0.46	< 0.2	10	20	< 0.5	4	>15.00	0.5	9	84	99	1.95	< 10	< 1	0.35	< 10	0.63
446933	205	238	< 5	—	3.11	0.4	15	290	< 0.5	< 2	5.32	< 0.5	6	28	156	3.09	< 10	< 1	0.19	< 10	0.13
446934	205	238	< 5	—	0.52	1.0	15	40	< 0.5	< 2	0.81	< 0.5	16	28	622	4.66	< 10	< 1	0.07	20	0.21
446935	205	238	< 5	—	4.00	0.6	15	30	1.5	2	2.87	< 0.5	14	32	473	2.70	< 10	< 1	0.28	< 10	0.38
446936	205	238	25	—	3.53	0.2	40	140	< 0.5	< 2	3.01	< 0.5	42	17	571	7.34	< 10	< 1	0.13	< 10	1.48
446937	205	238	30	—	0.72	0.8	10	10	< 0.5	< 2	0.62	< 0.5	22	17	773	4.44	< 10	< 1	0.05	20	0.27
446938	205	238	10	—	2.49	0.2	< 5	40	< 0.5	< 2	1.40	0.5	24	104	413	4.51	< 10	< 1	0.60	10	1.42
446939	205	238	5	—	2.99	0.2	10	< 10	< 0.5	< 2	1.02	< 0.5	39	235	908	9.53	< 10	< 1	0.05	10	2.18
446940	205	238	15	—	2.25	0.4	20	10	< 0.5	< 2	2.20	< 0.5	21	35	540	3.95	< 10	< 1	0.10	< 10	0.27
446941	205	238	5	—	0.54	0.8	5	10	< 0.5	< 2	0.88	< 0.5	14	41	130	2.84	< 10	< 1	0.03	10	0.08
446942	205	238	35	—	1.45	0.6	20	10	< 0.5	< 2	2.09	< 0.5	19	15	398	6.13	< 10	< 1	0.04	< 10	0.27
446943	205	238	< 5	—	0.56	0.4	5	20	< 0.5	< 2	0.65	0.5	11	13	94	2.41	< 10	< 1	0.06	< 10	0.21
446944	205	238	< 5	—	1.09	< 0.2	35	1090	< 0.5	< 2	8.96	< 0.5	11	15	65	4.37	< 10	< 1	0.16	< 10	1.43
446945	205	238	< 5	—	0.57	< 0.2	20	40	< 0.5	< 2	12.70	1.5	9	12	67	3.92	< 10	< 1	0.10	< 10	2.83
446946	205	238	20	—	2.49	0.2	30	380	< 0.5	< 2	3.80	15.0	15	34	71	5.12	< 10	< 1	0.06	< 10	0.65
446947	205	238	< 5	—	0.56	< 0.2	< 5	60	< 0.5	< 2	6.76	0.5	11	32	107	3.23	< 10	< 1	0.03	< 10	0.45
446951	205	238	5680	—	0.61	15.2	40	10	< 0.5	< 2	0.20	5.0	22	69	9440	2.22	< 10	< 1	0.07	< 10	0.32
446952	205	238	365	—	1.10	6.6	20	60	< 0.5	< 2	3.02	1.0	9	32	4690	3.40	< 10	< 1	0.08	< 10	0.31
446953	205	238	180	—	0.94	1.8	5	10	< 0.5	< 2	0.72	0.5	10	17	823	8.18	< 10	< 1	0.05	10	0.44
447001	205	238	240	—	0.62	0.4	10	30	< 0.5	< 2	0.45	0.5	9	18	149	2.61	< 10	< 1	0.09	20	0.09
447002	205	238	50	—	1.64	1.0	< 5	20	< 0.5	< 2	1.13	< 0.5	71	37	2660	8.89	< 10	< 1	0.03	10	0.26
447003	205	238	30	—	1.35	0.2	5	40	< 0.5	< 2	1.30	< 0.5	25	33	408	4.49	< 10	< 1	0.16	10	0.62
447004	205	238	45	—	0.82	< 0.2	< 5	30	< 0.5	< 2	2.53	< 0.5	21	24	275	4.73	< 10	< 1	0.08	< 10	0.56
447005	205	238	135	—	0.84	0.4	30	30	< 0.5	< 2	1.08	< 0.5	25	26	256	4.22	< 10	< 1	0.12	10	0.39
447006	205	238	30	—	1.05	0.4	< 5	70	< 0.5	< 2	0.93	< 0.5	36	16	327	6.35	< 10	< 1	0.22	10	0.57
447007	205	238	70	—	7.68	< 0.2	190	< 10	< 0.5	2	13.00	< 0.5	35	24	297	6.71	< 10	< 1	0.07	10	1.55

CERTIFICATION :

*B. Caulfield*



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers

112 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 : INT89-02

Comments: ATTN: DAVID CAULFIELD CC: AL JENKINS

Page No. : 3-B

Tot. Pages: 4

Date : 1-NOV-89

Invoice # : 1-8925527

P.O. # : NONE

## CERTIFICATE OF ANALYSIS A8925527

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
446918	205	238	240	1	0.02	3	430	4	< 5	2	123	< 0.01	< 10	< 10	26	< 10	30
446919	205	238	1165	29	0.01	5	150	46	10	1	308	< 0.01	< 10	< 10	21	< 10	322
446920	205	238	250	16	0.01	4	280	4	< 5	3	19	0.03	< 10	< 10	25	< 10	36
446921	205	238	180	4	< 0.01	2	160	42	< 5	< 1	19	< 0.01	< 10	< 10	4	< 10	14
446922	205	238	120	957	< 0.01	5	90	28	< 5	< 1	11	< 0.01	< 10	< 10	< 1	< 10	10
446923	205	238	1430	40	0.05	14	640	4	< 5	4	26	0.05	< 10	< 10	91	< 10	82
446924	205	238	330	8	0.03	41	1290	< 2	< 5	6	33	0.11	< 10	< 10	214	< 10	32
446925	205	238	100	15	0.03	43	1170	6	5	3	15	0.13	< 10	< 10	173	< 10	32
446926	205	238	370	< 1	0.02	12	970	4	5	8	18	0.08	< 10	< 10	290	< 10	34
446927	205	238	55	30	0.04	49	1230	< 2	< 5	3	19	0.16	< 10	< 10	114	< 10	66
446928	205	238	50	77	0.02	94	850	4	< 5	3	7	0.26	< 10	< 10	428	< 10	30
446929	205	238	315	8	0.05	39	1250	< 2	5	8	51	0.19	< 10	< 10	133	< 10	36
446930	205	238	200	6	0.05	23	1240	< 2	< 5	6	27	0.24	< 10	< 10	118	< 10	40
446931	205	238	50	83	0.05	33	1000	4	< 5	2	21	0.18	< 10	< 10	61	< 10	26
446932	205	238	815	10	0.02	35	540	< 2	< 5	4	161	0.13	< 10	< 10	86	< 10	44
446933	205	238	860	2	0.16	9	1470	< 2	5	7	6340	0.13	< 10	< 10	75	< 10	30
446934	205	238	160	11	0.04	14	1740	< 2	< 5	2	91	0.16	< 10	< 10	32	< 10	34
446935	205	238	200	3	0.37	12	490	< 2	< 5	1	393	0.10	< 10	< 10	88	< 10	32
446936	205	238	545	2	0.10	33	2000	4	5	5	330	0.31	< 10	< 10	297	< 10	88
446937	205	238	175	12	0.04	18	610	< 2	< 5	1	56	0.11	< 10	< 10	37	< 10	36
446938	205	238	415	< 1	0.16	42	1270	4	< 5	3	196	0.20	< 10	< 10	95	< 10	94
446939	205	238	595	3	0.02	38	1080	12	< 5	6	27	0.45	< 10	< 10	249	< 10	70
446940	205	238	235	5	0.17	24	2000	< 2	< 5	2	198	0.09	< 10	< 10	97	< 10	36
446941	205	238	140	7	0.05	38	860	2	< 5	2	49	0.09	< 10	< 10	62	< 10	28
446942	205	238	225	24	0.08	19	1060	8	< 5	2	71	0.14	< 10	< 10	40	< 10	46
446943	205	238	115	1	0.07	4	1340	6	< 5	2	43	0.15	< 10	< 10	40	< 10	38
446944	205	238	1090	< 1	0.02	6	1670	6	< 5	11	225	< 0.01	< 10	< 10	80	< 10	92
446945	205	238	1200	< 1	0.01	4	1170	< 2	5	11	193	< 0.01	< 10	< 10	79	< 10	282
446946	205	238	1045	41	0.37	68	870	22	< 5	8	516	0.18	< 10	< 10	152	< 10	1235
446947	205	238	285	14	0.03	26	1050	< 2	< 5	3	326	0.14	< 10	< 10	51	< 10	64
446951	205	238	345	22	0.01	2	390	8	< 5	2	8	< 0.01	< 10	< 10	47	< 10	380
446952	205	238	1520	17	0.02	3	620	< 2	< 5	2	47	0.08	< 10	< 10	198	< 10	168
446953	205	238	300	16	0.04	17	820	4	< 5	3	40	0.12	< 10	< 10	854	< 10	52
447001	205	238	70	7	0.03	3	230	12	< 5	1	24	0.09	< 10	< 10	126	< 10	32
447002	205	238	170	< 1	0.12	61	1330	< 2	< 5	3	81	0.05	< 10	< 10	98	< 10	48
447003	205	238	235	2	0.05	17	1180	2	< 5	3	16	0.14	< 10	< 10	94	< 10	32
447004	205	238	210	1	0.04	21	1090	< 2	< 5	4	213	0.12	< 10	< 10	71	< 10	28
447005	205	238	205	< 1	0.08	14	1120	2	< 5	4	34	0.16	< 10	< 10	65	< 10	30
447006	205	238	190	< 1	0.05	13	1280	< 2	5	4	31	0.17	< 10	< 10	82	< 10	32
447007	205	238	670	1	0.01	16	660	< 2	15	10	73	0.11	< 10	< 10	123	< 10	74

CERTIFICATION :

*B. Caulfield*



# 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: INT89-02

Comments: ATTN: DAVID CAULFIELD CC: AL JENKINS

Page No.: 4-A  
Tot. Pages: 4  
Date: 1-NOV-89  
Invoice #: I-8925527  
P.O. #: NONE

## CERTIFICATE OF ANALYSIS A8925527

SAMPLE DESCRIPTION	PREP CODE		Au ppb	Au FA	Al	Ag	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	La	Mg
	FA-AA	oz/T	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	%
447051	205	238	< 5	—	4.19	< 0.2	35	650	< 0.5	< 2	2.18	< 0.5	24	9	171	6.18	< 10	< 1	1.48	< 10	2.03
** 447052 + 447053	205	238	75	—	2.02	0.4	230	50	< 0.5	< 2	0.19	< 0.5	2	14	196	6.66	< 10	< 1	0.15	< 10	1.55
447054	205	238	60	—	2.71	0.4	70	260	< 0.5	< 2	0.97	< 0.5	6	11	251	6.95	< 10	< 1	0.76	10	1.86
447055	205	238	< 5	—	3.64	< 0.2	50	580	< 0.5	< 2	1.74	< 0.5	17	10	156	5.74	< 10	< 1	1.28	< 10	2.06
447056	205	238	< 5	—	3.14	< 0.2	40	270	< 0.5	< 2	1.41	< 0.5	13	6	223	7.12	< 10	< 1	0.75	10	2.09
447057	205	238	25	—	3.23	< 0.2	20	460	< 0.5	< 2	3.70	< 0.5	18	23	141	4.99	< 10	< 1	1.30	< 10	2.09
447058	205	238	40	—	2.66	< 0.2	20	130	< 0.5	< 2	2.85	< 0.5	15	11	88	5.08	< 10	< 1	0.37	< 10	2.17
447059	205	238	860	—	1.61	0.6	3480	50	< 0.5	< 2	0.51	< 0.5	13	20	950	8.61	< 10	< 1	0.16	10	1.39
447060	205	238	315	—	2.56	< 0.2	1760	170	< 0.5	< 2	2.02	< 0.5	17	27	511	6.73	< 10	< 1	0.78	< 10	2.02
447061	205	238	80	—	3.18	< 0.2	90	490	< 0.5	< 2	1.90	< 0.5	16	20	208	5.97	< 10	< 1	1.53	< 10	2.34
447062	205	238	< 5	—	1.72	0.6	60	140	< 0.5	< 2	0.15	< 0.5	< 1	108	119	>15.00	< 10	< 1	0.36	10	0.48
447063	205	238	< 5	—	2.09	0.8	20	250	< 0.5	< 2	0.57	< 0.5	5	12	55	2.57	< 10	< 1	0.38	10	0.94
447064	205	238	< 5	—	1.43	1.6	65	360	< 0.5	< 2	0.63	1.0	6	55	63	2.75	< 10	< 1	0.24	10	0.63
447065	205	238	< 5	—	1.14	1.2	65	630	< 0.5	< 2	1.19	< 0.5	5	65	39	2.63	< 10	< 1	0.30	10	0.61
447066	205	238	655	—	3.88	0.8	85	10	< 0.5	< 2	4.87	1.5	10	67	397	4.24	< 10	< 1	0.01	< 10	1.10
447067	205	238	745	—	1.63	0.2	40	10	< 0.5	< 2	0.99	< 0.5	133	50	1040	>15.00	< 10	< 1	0.02	< 10	0.73
447068	205	238	35	—	2.81	0.2	10	< 10	< 0.5	< 2	1.07	< 0.5	46	104	403	12.40	< 10	< 1	0.01	< 10	1.93
447069	205	238	85	—	1.96	0.2	45	20	< 0.5	< 2	1.93	< 0.5	21	58	130	4.96	< 10	< 1	0.27	< 10	0.81
447070	205	238	710	—	0.77	0.6	345	10	< 0.5	< 2	8.38	< 0.5	36	49	444	10.85	< 10	< 1	0.05	< 10	1.19
447071	205	238	10	—	1.17	0.4	5	60	< 0.5	< 2	1.92	< 0.5	13	11	85	3.52	< 10	< 1	0.05	10	0.26

\*\* Samples mixed in crushing. - Corrected Copy.

CERTIFICATION :





# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 212 BROOKSBANK AVE., NORTH VANCOUVER,  
 BRITISH COLUMBIA, CANADA V7J-2C1  
 PHONE (604) 984-0211

To: EQUITY ENGINEERING LTD.

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

Project: INT89-02

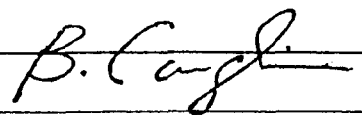
Comments: ATTN: DAVID CAULFIELD CC: AL JENKINS

Page No. : 4-B  
 Tot. Pages: 4  
 Date : 1-NOV-89  
 Invoice #: I-8925527  
 P.O. #: NONE

## CERTIFICATE OF ANALYSIS A8925527

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
447051	205	238	1120	< 1	0.12	6	1280	2	5	13	109	0.27	< 10	< 10	178	< 10	98
447052 + 447053	205	238	285	< 1	0.03	1	1070	< 2	< 5	8	8	0.02	< 10	< 10	156	< 10	48
447054	205	238	410	< 1	0.06	1	1310	< 2	< 5	10	32	0.16	< 10	< 10	166	< 10	54
447055	205	238	960	< 1	0.13	2	1250	< 2	5	11	105	0.32	< 10	< 10	182	< 10	86
447056	205	238	780	< 1	0.06	2	1220	< 2	< 5	13	57	0.24	< 10	< 10	184	< 10	80
447057	205	238	930	< 1	0.09	12	1210	< 2	< 5	12	100	0.26	< 10	< 10	189	10	118
447058	205	238	945	< 1	0.04	5	1360	< 2	5	12	43	0.15	< 10	< 10	186	< 10	52
447059	205	238	340	< 1	0.03	6	990	< 2	< 5	8	13	0.07	< 10	< 10	125	< 10	58
447060	205	238	595	< 1	0.03	11	1060	< 2	< 5	14	29	0.15	< 10	< 10	186	< 10	74
447061	205	238	600	< 1	0.04	8	1220	< 2	< 5	17	38	0.26	< 10	< 10	225	< 10	74
447062	205	238	330	11	0.04	25	1020	< 2	5	6	42	< 0.01	< 10	< 10	128	< 10	302
447063	205	238	110	6	0.09	9	1520	2	< 5	1	32	< 0.01	< 10	< 10	9	< 10	60
447064	205	238	185	60	0.02	26	2310	8	< 5	3	46	0.09	< 10	< 10	159	< 10	230
447065	205	238	190	72	0.02	10	4930	< 2	5	3	55	0.05	< 10	< 10	103	< 10	82
447066	205	238	385	< 1	0.01	1	440	10	< 5	11	13	0.07	< 10	< 10	145	< 10	270
447067	205	238	320	< 1	0.02	44	570	12	5	12	19	0.06	< 10	< 10	132	< 10	84
447068	205	238	535	2	0.02	26	1070	2	< 5	12	18	0.13	< 10	< 10	244	< 10	72
447069	205	238	280	< 1	0.15	20	1110	4	< 5	5	74	0.24	< 10	< 10	124	< 10	34
447070	205	238	735	< 1	0.01	35	580	2	5	14	149	0.01	< 10	< 10	123	< 10	54
447071	205	238	130	2	0.09	7	1460	< 2	5	2	80	0.10	< 10	< 10	35	< 10	14

\*\* Samples mixed in crushing. - Corrected Copy.

CERTIFICATION : 



# Chemex Labs Ltd.

*Analytical Chemists*

*Geochemists*

*Registered Assayers*

212 Brooksbank Ave.  
North Vancouver, B.C.  
Canada V7J 2C1

Phone: (604) 984-0221

Telex: 04-352597

Fax: (604) 984-0218

Equity Engineering Ltd.

November 1, 1989

207 - 675 West Hastings Street  
Vancouver, BC  
V6B 1N2

Attn: Bruno Kasper

Subject: Certificate A8925527

The two samples # 447052 & 447053 were mixed during the crushing stage of sample preparation. Once mixed, all we can do is to report a composite value.

Sorry for any problems this may have caused.

Ron Minions  
Preparation Department Manager

RM/jp



# Chemex Labs Ltd.

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

EQUITY ENGINEERING LTD.

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

A8926973

Comments: ATTN: DAVID CAULFIELD

## CERTIFICATE A8926973

EQUITY ENGINEERING LTD  
PROJECT : INT89-02  
P.O.# :

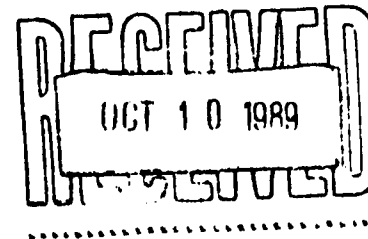
Samples submitted to our lab in Vancouver, BC.  
This report was printed on 9-OCT-89.

## SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
207	17	Assay: Crush.split.pulv -150

## ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
396	17	Au oz/T: 1/2 assay ton	FA-GRAVIMETRIC	0.003	20.000





# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers

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

PHONE (604) 984-0221

1 EQUITY ENGINEERING LTD.

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

Project : INT89-02

Comments: ATTN: DAVID CAULFIELD

Page No. 1  
Tot. Pages: 1  
Date : 9-OCT-89  
Invoice # : I-8926973  
P.O. # :

## CERTIFICATE OF ANALYSIS A8926973

SAMPLE DESCRIPTION	PREP CODE	Au FA oz/T									
149309 RESPLITS	207 ---	0.192									
149310 RESPLITS	207 ---	0.089									
149316 RESPLITS	207 ---	0.064									
149325 RESPLITS	207 ---	0.067									
149328 RESPLITS	207 ---	0.168									
446794 RESPLITS	207 ---	0.114									
446796 RESPLITS	207 ---	0.170									
446833 RESPLITS	207 ---	0.052									
446834 RESPLITS	207 ---	1.212									
446836 RESPLITS	207 ---	0.962									
446837 RESPLITS	207 ---	0.107									
446841 RESPLITS	207 ---	0.138									
446842 RESPLITS	207 ---	0.172									
446892 RESPLITS	207 ---	0.802									
446895 RESPLITS	207 ---	1.104									
446915 RESPLITS	207 ---	0.040									
446951 RESPLITS	207 ---	0.012									

CERTIFICATION :

*W. J. ...*



# 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

A8929194

Comments: ATTN: BRUNO KASPER

## CERTIFICATE A8929194

EQUITY ENGINEERING LTD

PROJECT : INT89-02

P O # : NONE

Samples submitted to our lab in Vancouver, BC.

This report was printed on 7-NOV-89.

## SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
214	5	Received sample as pulp

## ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
301	5	Cu %: 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

PHONE (604) 984-0221

To: EQUITY ENGINEERING LTD.

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

Project: INT89-02

Comments: ATTN: BRUNO KASPER

Page No.: 1  
Tot. Pages: 1  
Date: 7-NOV-89  
Invoice #: I-8920104  
P.O. #: NONE

## CERTIFICATE OF ANALYSIS A8929194

SAMPLE DESCRIPTION	PREP CODE	Cu %									
149309	214 ---	2.30									
149310	214 ---	1.53									
149321	214 ---	1.00									
446914	214 ---	1.33									
446915	214 ---	2.24									

CERTIFICATION : *W. Sturman*

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 23 to 26, 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.

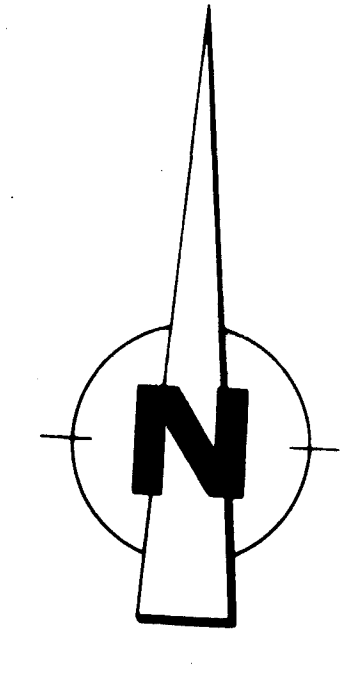
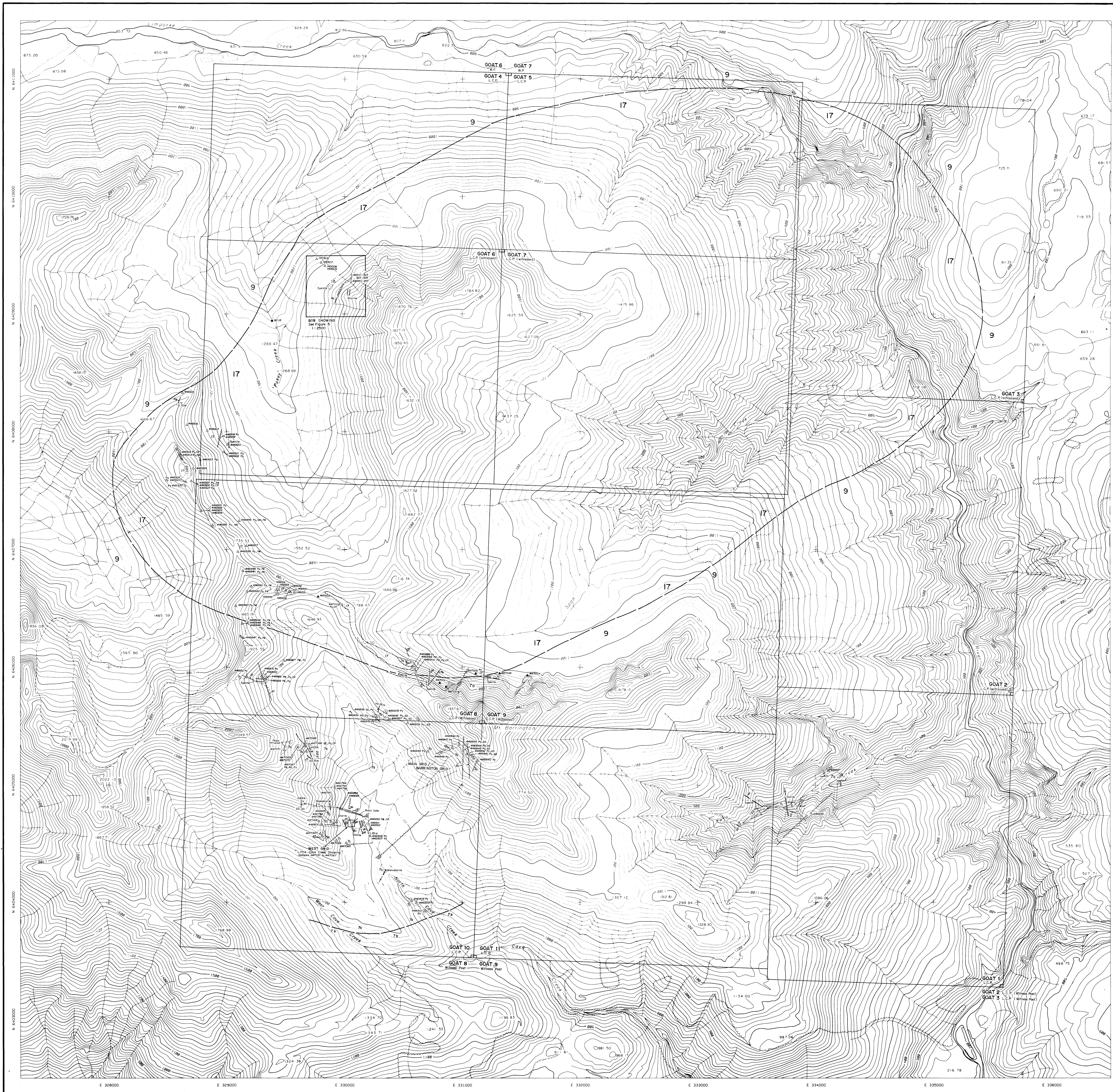
DATED at Vancouver, British Columbia, this 30th day of November, 1989.



---

Jim Lehtinen,  
B.Sc. Geology





ROCK GEOCHEMICAL RESULTS

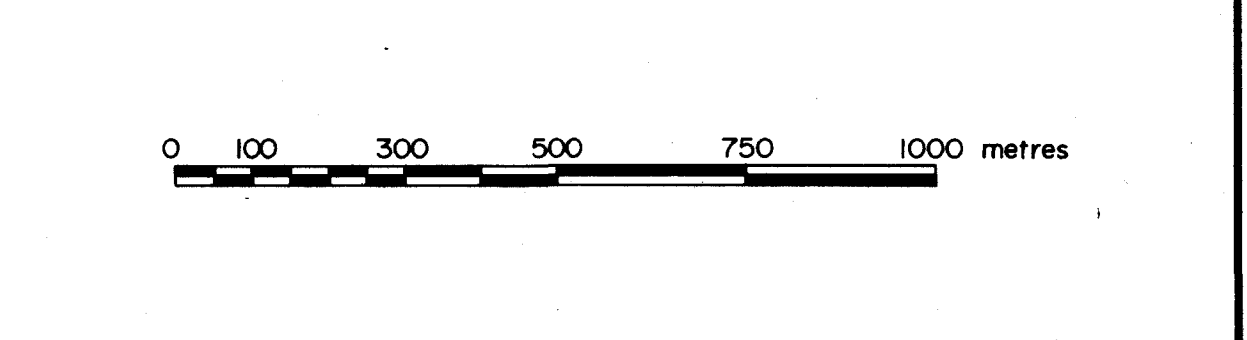
SAMPLE	Au	Ag	Cu	Pb	Zn	As
	ppm	ppm	ppm	ppm	ppm	ppm
48704	45	1.3	402	10	45	15
48705	200	300	2000	200	200	200
48706	30	1.2	144	10	20	10
48707	40	1.2	134	10	20	10
48708	40	1.2	134	10	20	10
48709	40	1.2	134	10	20	10
48710	40	1.2	134	10	20	10
48711	40	1.2	134	10	20	10
48712	40	1.2	134	10	20	10
48713	40	1.2	134	10	20	10
48714	40	1.2	134	10	20	10
48715	40	1.2	134	10	20	10
48716	40	1.2	134	10	20	10
48717	40	1.2	134	10	20	10
48718	40	1.2	134	10	20	10
48719	40	1.2	134	10	20	10
48720	40	1.2	134	10	20	10
48721	40	1.2	134	10	20	10
48722	40	1.2	134	10	20	10
48723	40	1.2	134	10	20	10
48724	40	1.2	134	10	20	10
48725	40	1.2	134	10	20	10
48726	40	1.2	134	10	20	10
48727	40	1.2	134	10	20	10
48728	40	1.2	134	10	20	10
48729	40	1.2	134	10	20	10
48730	40	1.2	134	10	20	10
48731	40	1.2	134	10	20	10
48732	40	1.2	134	10	20	10
48733	40	1.2	134	10	20	10
48734	40	1.2	134	10	20	10
48735	40	1.2	134	10	20	10
48736	40	1.2	134	10	20	10
48737	40	1.2	134	10	20	10
48738	40	1.2	134	10	20	10
48739	40	1.2	134	10	20	10
48740	40	1.2	134	10	20	10
48741	40	1.2	134	10	20	10
48742	40	1.2	134	10	20	10
48743	40	1.2	134	10	20	10
48744	40	1.2	134	10	20	10
48745	40	1.2	134	10	20	10
48746	40	1.2	134	10	20	10
48747	40	1.2	134	10	20	10
48748	40	1.2	134	10	20	10
48749	40	1.2	134	10	20	10
48750	40	1.2	134	10	20	10
48751	40	1.2	134	10	20	10
48752	40	1.2	134	10	20	10
48753	40	1.2	134	10	20	10
48754	40	1.2	134	10	20	10
48755	40	1.2	134	10	20	10
48756	40	1.2	134	10	20	10
48757	40	1.2	134	10	20	10
48758	40	1.2	134	10	20	10
48759	40	1.2	134	10	20	10
48760	40	1.2	134	10	20	10
48761	40	1.2	134	10	20	10
48762	40	1.2	134	10	20	10
48763	40	1.2	134	10	20	10
48764	40	1.2	134	10	20	10
48765	40	1.2	134	10	20	10
48766	40	1.2	134	10	20	10
48767	40	1.2	134	10	20	10
48768	40	1.2	134	10	20	10
48769	40	1.2	134	10	20	10
48770	40	1.2	134	10	20	10
48771	40	1.2	134	10	20	10
48772	40	1.2	134	10	20	10
48773	40	1.2	134	10	20	10
48774	40	1.2	134	10	20	10
48775	40	1.2	134	10	20	10
48776	40	1.2	134	10	20	10
48777	40	1.2	134	10	20	10
48778	40	1.2	134	10	20	10
48779	40	1.2	134	10	20	10
48780	40	1.2	134	10	20	10
48781	40	1.2	134	10	20	10
48782	40	1.2	134	10	20	10
48783	40	1.2	134	10	20	10
48784	40	1.2	134	10	20	10
48785	40	1.2	134	10	20	10
48786	40	1.2	134	10	20	10
48787	40	1.2	134	10	20	10
48788	40	1.2	134	10	20	10
48789	40	1.2	134	10	20	10
48790	40	1.2	134	10	20	10
48791	40	1.2	134	10	20	10
48792	40	1.2	134	10	20	10
48793	40	1.2	134	10	20	10
48794	40	1.2	134	10	20	10
48795	40	1.2	134	10	20	10
48796	40	1.2	134	10	20	10
48797	40	1.2	134	10	20	10
48798	40	1.2	134	10	20	10
48799	40	1.2	134	10	20	10
48800	40	1.2	134	10	20	10

- LEGEND**
- JURASSIC and/or CRETACEOUS
- 17** Granodiorite, quartz diorite, minor diorite and minor syenite.
- UPPER TRIASSIC
- 9** Undifferentiated volcanic and sedimentary rocks.
  - 7a** Siltstone, thin bedded siliceous siltstone, ribbon chert, calcareous and siliceous siltstone, greywacke, volcanic conglomerate and minor limestone.
  - 7b** Basalt to andesite volcanics (may be Unit-8 in part - see regional geology legend)

- SYMBOLS**
- Helipad
  - Legal Corner Post
  - Rock Sample grab or chip float
  - Silt Sample
  - Area of outcrop
  - Geological boundary (defined, approximate, assumed, dip indicated)
  - Bedding, tops known (horizontal, inclined, vertical)
  - Fault (defined, approximate, assumed) (inclined, vertical, downthrow side, horizontal movement)
  - Dike, vein (v), stockwork (s) - (defined, approximate, dip, width noted)

MINERAL OCCURRENCE SYMBOLS

As	Arsenopyrite
Ca	Calcite
CP	Chalcopyrite
MG	Magnetite
Py	Pyrite
QZ	Quartz



**INTEGRATED RESOURCES LTD.**

GOAT 1-11 CLAIMS

**GEOLOGY & SAMPLE LOCATIONS**

LIARD MINING DIVISION, BRITISH COLUMBIA

EQUITY ENGINEERING LTD.

SCALE: 1:10,000    DRAWN: J.L. /w.g.l.    FIG. NO. 4

N.T.S. 104-6/12W, 13W    REVISED:    DATE: November 1989