# GEOLOGICAL AND GEOCHEMICAL REPORT
# ON THE
# SCUD RIVER PROJECT



Located in the Galore Creek Area
Liard Mining Division
NTS 104G/4E,5E
57° 15' North Latitude
131° 33' West Longitude



-prepared for-
CONSOLIDATED GOLDWEST RESOURCES LTD.

-prepared by-
Katherina V. Ross, Geologist

December, 1989

GEOLOGICAL AND GEOCHEMICAL REPORT ON THE SCUD RIVER PROJECT

## TABLE OF CONTENTS



APPENDICES



LIST OF FIGURES



LIST OF TABLES

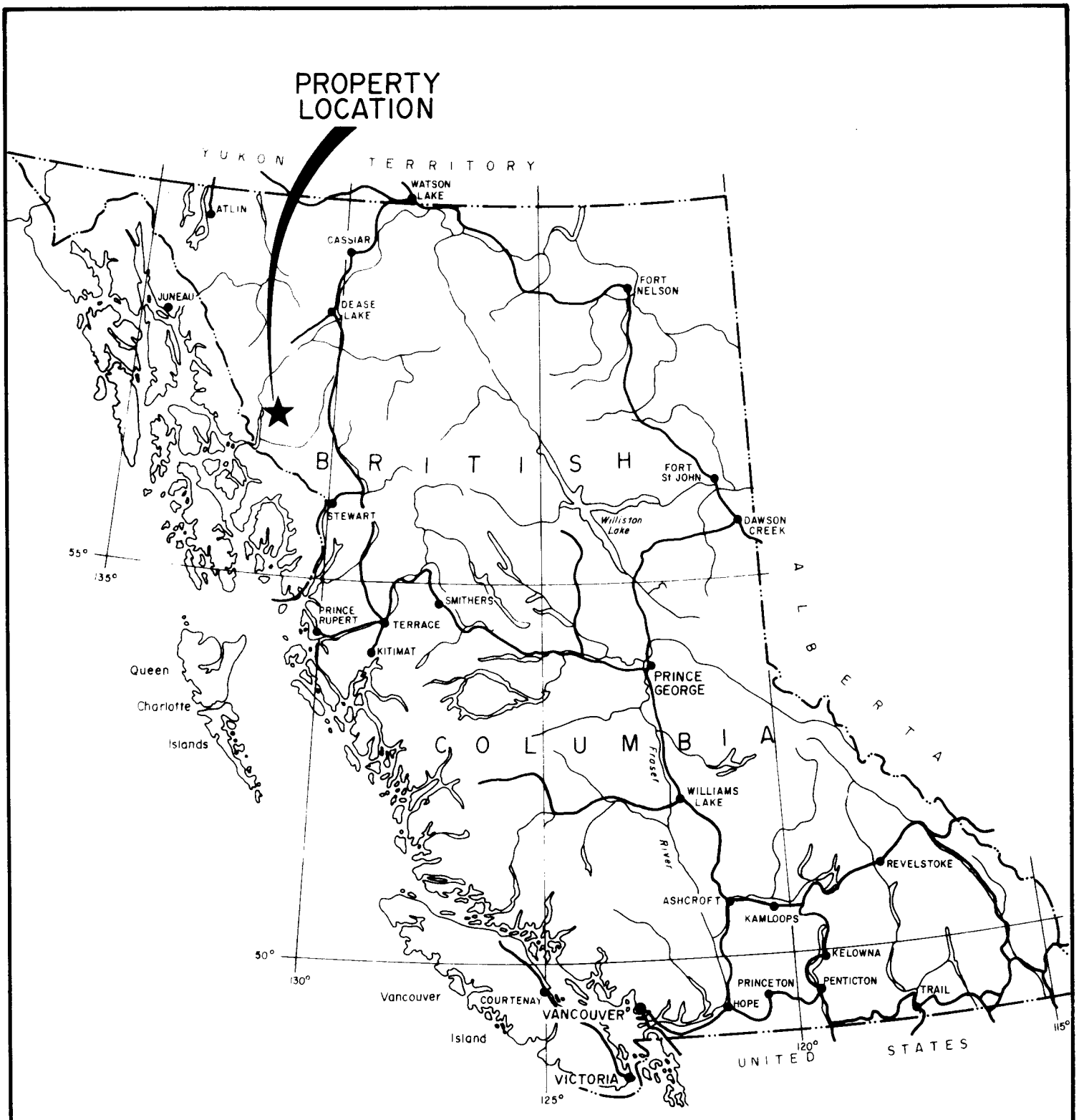
## 1.0 INTRODUCTION

The Scud River Project encompasses the JD I-VI, Bell 1-2, PL 1 and CB I-II claims, which were staked in 1988 and 1989 to cover favorable geology, geochemistry and sulphide-rich float in the Scud River drainage approximately 180 kilometers northwest of Stewart in northwestern British Columbia (Figure 1). Preliminary exploration of the JD I and II claims in 1988 returned highly gold-anomalous rock and stream sediment results. The geological similarity to the Iskut River, Sulphurets and Stewart mining camps to the south and the discovery in recent years of several major precious metals occurrences elsewhere in the Galore Creek district have sparked renewed exploration interest throughout the area.

Reconnaissance exploration, consisting of geological mapping, prospecting and geochemical sampling, was carried out over the Scud River property during September and October of 1989. Equity Engineering Ltd. conducted this program for Consolidated Goldwest 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 claims listed in Table 2.0.1, all of which are situated in the Liard Mining Division (Figure 2), are owned by Pass Lake Resources Ltd. Separate documents indicate that these claims are under option to Consolidated Goldwest Resources Ltd.




Km 0 100 200 300 400 500 Km

MILES 0 50 100 200 300 MILES

CONSOLIDATED GOLDWEST RESOURCES LTD.

# SCUD RIVER PROJECT
# LOCATION MAP

BRITISH COLUMBIA

EQUITY ENGINEERING LTD.

| | | |
|---|---|---|
| DRAWN: J.W. | MINING DIV. LIARD | FIGURE |
| N.T.S.: 104G/4E, 5E | SCALE: AS SHOWN | 1 |
| DATE: Dec. 1989 | REVISED: | |

TABLE 2.0.1

CLAIM DATA

| Claim Name | Record Number | No. of Units | Record Date | Expiry Year |
|---|---|---|---|---|
| Scud River North Group | | | | |
| JD I | 4641 | 20 | June 13, 1988 | 1993* |
| JD II | 4642 | 20 | June 13, 1988 | 1992* |
| JD III | 5552 | 20 | Dec. 9, 1988 | 1992* |
| JD IV | 5553 | 20 | Dec. 9, 1988 | 1992* |
| Scud River South Group | | | | |
| JD V | 5554 | 20 | Dec. 9, 1988 | 1991* |
| JD VI | 5555 | 20 | Dec. 9, 1988 | 1991* |
| Bell 1 | 5562 | 20 | Dec. 9, 1988 | 1991* |
| Bell 2 | 5563 | 20 | Dec. 9, 1988 | 1991* |
| PL 1 | 5370 | 20 | Oct. 11, 1988 | 1991* |
| Ungrouped | | | | |
| CB I | 6521 | 20 | Oct. 4, 1989 | 1990 |
| CB II | 6522 | 16 | Oct. 5, 1989 | 1990 |
| | | 216 | | |

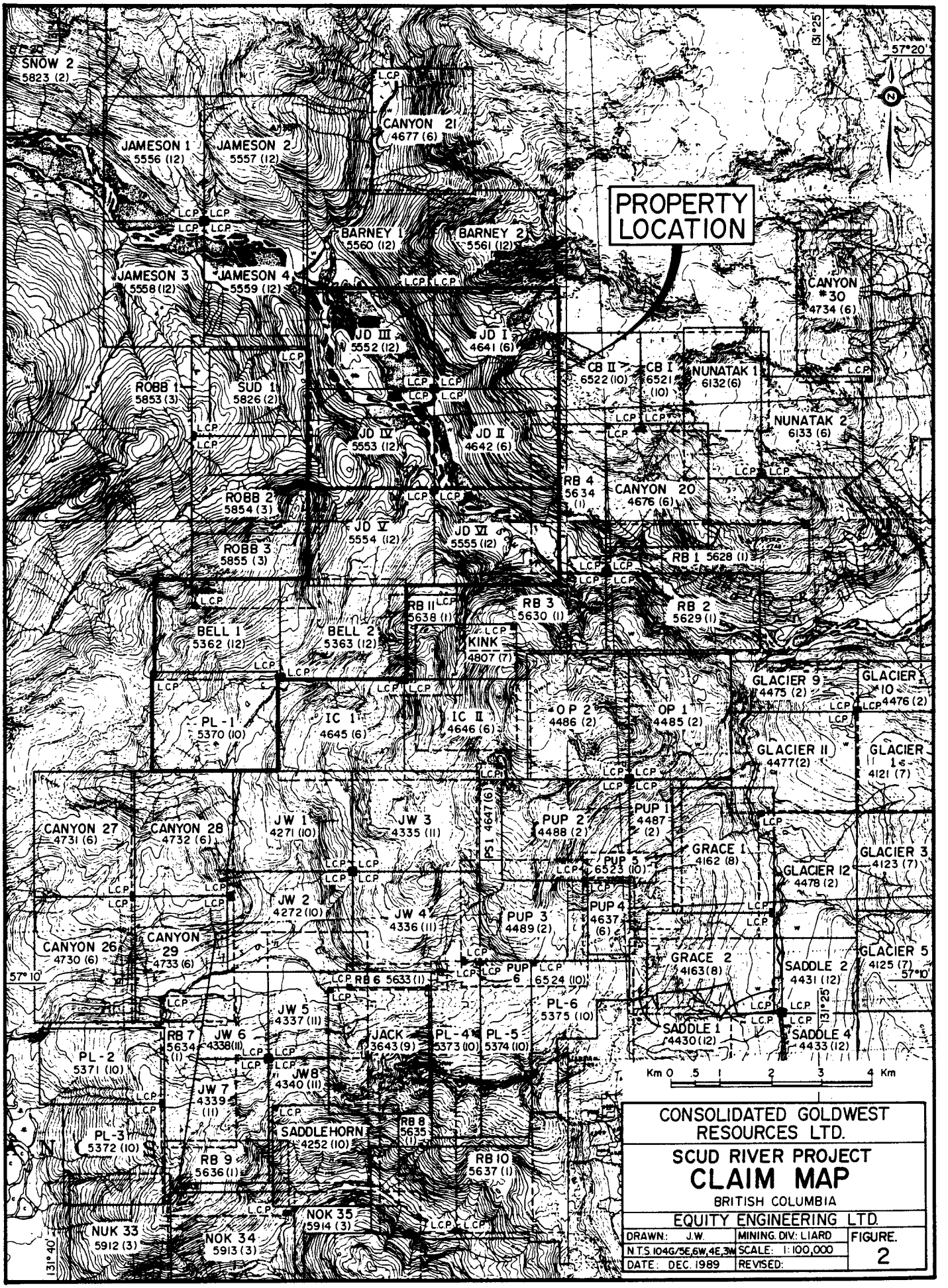
* Subject to approval of assessment work filed in October and December, 1989.

The positions of all legal corner posts for the claims have been verified by Equity Engineering Ltd. personnel.

## 3.0 LOCATION, ACCESS AND GEOGRAPHY

The JD I-VI, Bell 1-2, CB I-II and PL 1 claims are located within the Coast Range Mountains approximately 180 kilometers northwest of Stewart and 75 kilometers southeast of Telegraph Creek in northwestern British Columbia (Figure 1). They lie within the Liard Mining Division, centered at 57° 15' north latitude and 131° 33' west longitude.

Access to the Scud River property during the 1989 exploration program was provided by daily helicopter setouts from the Galore


PROPERTY LOCATION
SNOW 2 5823 (2)
CANYON 21 4677 (6)
JAMESON 1 5556 (12)
JAMESON 2 5557 (12)
BARNEY 1 5560 (12)
BARNEY 2 5561 (12)
JAMESON 3 5558 (12)
JAMESON 4 5559 (12)
CANYON #30 4734 (6)
JD III 5552 (12)
JD I 4641 (6)
CB II 6522 (10)
CB I 6521 (10)
NUNATAK 1 6132(6)
ROBB 1 5853 (3)
SUD 1 5826 (2)
NUNATAK 2 6133 (6)
JD IV 5553 (12)
JD II 4642 (6)
RB 4 5634 (1)
CANYON 20 4676 (6)
ROBB 2 5854 (3)
JD V 5554 (12)
JD VI 5555 (12)
ROBB 3 5855 (3)
RB 1 5628 (1)
RB II 5638 (1)
RB 3 5630 (1)
RB 2 5629 (1)
BELL 1 5362 (12)
BELL 2 5363 (12)
KINK 4807 (7)
GLACIER 9 4475 (2)
GLACIER 10 4476 (2)
PL-1 5370 (10)
IC 1 4645 (6)
IC II 4646 (6)
OP 2 4486 (2)
OP 1 4485 (2)
GLACIER II 4477(2)
GLACIER 1 4121 (7)
CANYON 27 4731 (6)
CANYON 28 4732 (6)
JW 1 4271 (10)
JW 3 4335 (11)
PS 1 4647 (6)
PUP 2 4488 (2)
PUP 1 4487 (2)
GRACE 1 4162 (8)
GLACIER 3 4123 (7)
GLACIER 12 4478 (2)
JW 2 4272 (10)
JW 4 4336 (11)
PUP 3 4489 (2)
PUP 5 6523 (10)
PUP 4 4637 (6)
CANYON 26 4730 (6)
CANYON 29 4733 (6)
GRACE 2 4163(8)
SADDLE 2 4431 (12)
GLACIER 5 4125 (7)
57° 10
RB 6 5633 (1)
PUP 6 6524 (10)
PL-6 5375 (10)
JW 5 4337 (11)
SADDLE 1 4430(12)
SADDLE 4 4433 (12)
RB 7 5634 (1)
JW 6 4338(11)
JACK 3643 (9)
PL-4 5373 (10)
PL-5 5374 (10)
PL-2 5371 (10)
JW 8 4340 (11)
JW 7 4339 (11)
RB 8 5635 (1)
SADDLE HORN 4252 (10)
PL-3 5372 (10)
RB 9 5636 (1)
RB 10 5637 (1)
NOK 35 5914 (3)
NUK 33 5912 (3)
NOK 34 5913 (3)
131° 40
131° 25
57° 20
Km 0 .5 1 2 3 4 Km
CONSOLIDATED GOLDWEST RESOURCES LTD.
SCUD RIVER PROJECT
CLAIM MAP
BRITISH COLUMBIA
EQUITY ENGINEERING LTD.
DRAWN: J.W.
MINING DIV.: LIARD
N.T.S. 104G/5E,6W,4E,3W
SCALE: 1:100,000
DATE: DEC. 1989
REVISED:
FIGURE. 2

Creek camp and airstrip, which is located approximately fifteen kilometers to the southeast. During the field season, fixed-wing aircraft fly charters from Smithers to the Galore Creek airstrip direct or via the Bronson airstrip. The Galore Creek airstrip is 425 meters in length, limiting the size of the aircraft that can be safely landed there. During the 1989 season, the Galore Creek camp was serviced by a Turbo Otter, based out of Smithers. The Scud River airstrip, located sixteen kilometers west of the property, is suitable for DC-3 aircraft.

On the Alaskan side of the border, Wrangell lies approximately 100 kilometers to the southwest and provides a full range of services and supplies, including a major commercial airport. The Stikine River has been navigated by 100-ton barges upriver as far as Telegraph Creek, allowing economical transportation of heavy machinery and fuel to within sixteen kilometers of the property. During the 1960's, Kennco constructed a cat road from their Galore Creek copper-gold deposit down the south side of the Scud River to the Scud River airstrip, passing through the JD II, III, IV and VI claims. This cat road has not been maintained and would require some reconstruction before becoming passable.

The JD I to VI claims straddle the Scud River, from fifteen to twenty-two kilometers above its confluence with the Stikine River (Figure 2). The JD I and II claims lie mainly on the north side of the Scud River, covering the lower part of the Rugose Creek drainage, including the toe of the Rugose Glacier, a valley glacier which descends to an elevation of 1100 meters. The CB I and II claims extend east from JD I, covering the upper portions of the Rugose Glacier. The other claims lie mainly on the south side of the Scud River, stretching southwest up the drainage of Contact Creek. Topography is rugged, typical of mountainous and glaciated terrain, with elevations ranging from 200 meters on the Scud River to over 1770 meters on an unnamed peak on the Bell 1 claim.

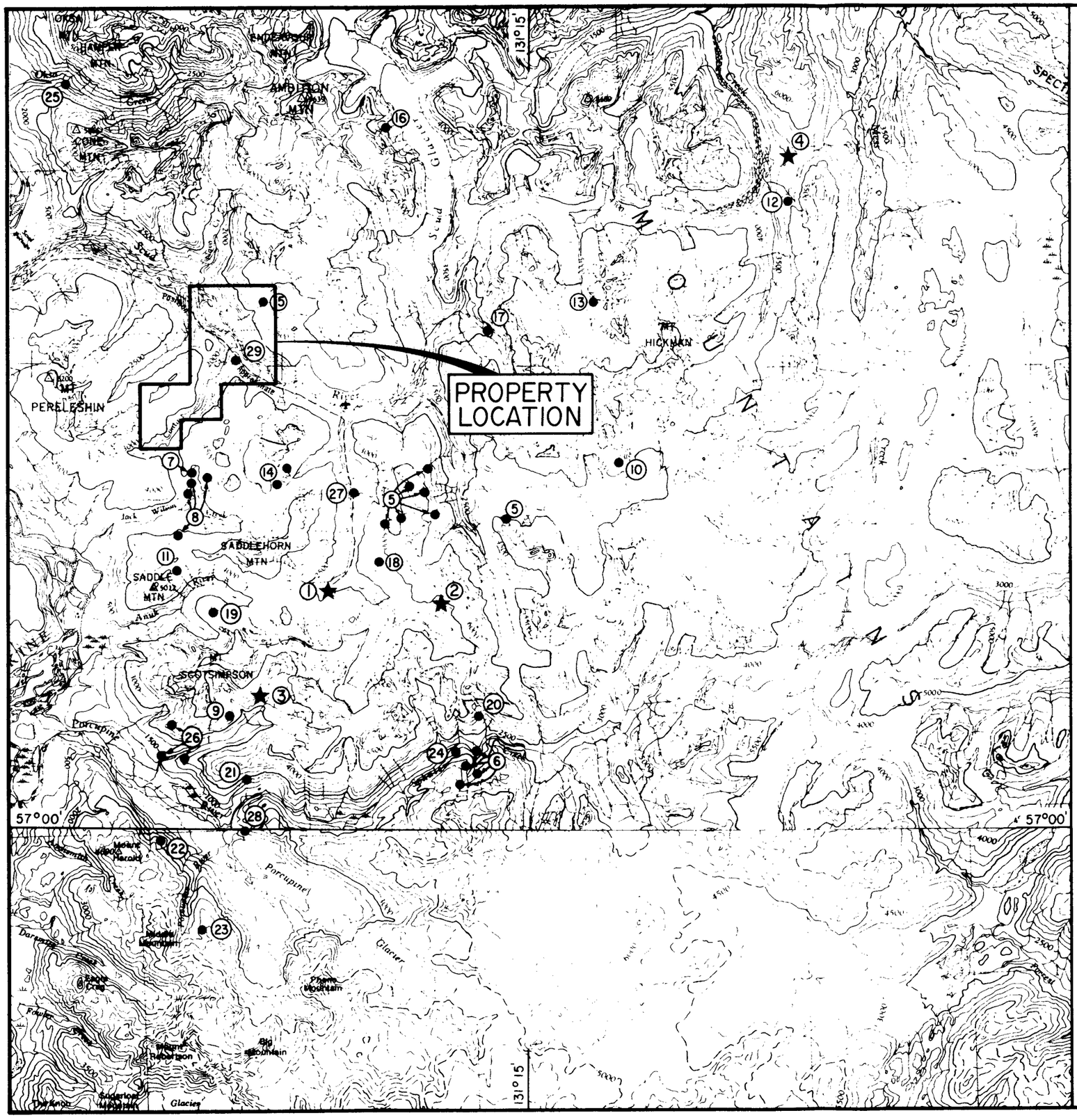
Lower slopes are covered by a mature forest of hemlock, spruce and balsam fir with a dense undergrowth of devil's club, alder and huckleberry. Above treeline, which occurs at approximately 1100 meters, the creek beds and slopes are covered by dense slide alder and willow growth. Steeper slopes are covered by short heather and other alpine vegetation. Northerly-facing slopes are covered with permanent snowfields at higher elevations.

The Scud River property lies in the wet belt of the Coast Range Mountains. Annual precipitation ranges from 190 to 380 centimeters (Kerr, 1948b). Except during July, August and September, precipitation at higher elevations falls mainly as snow, with accumulations reaching three meters or more. Both summer and winter temperatures are moderate, ranging from -5°C in the winter to 20°C in the summer months.

## 4.0 PROPERTY MINING HISTORY

### 4.1 Previous Work

The Galore Creek district was extensively explored for its copper potential throughout the 1960's (Figure 3), following the discovery in 1955 of the Galore Creek copper-gold porphyry deposit, whose Central Zone hosts reserves of 125 million tonnes grading 1.06% copper and 400 ppb gold (Allen et al, 1976). Several major mining companies conducted regional mapping and silt sampling programs over the entire Galore Creek area, and the Copper Canyon copper-gold porphyry, estimated by Grant (1964) to contain 28 million tonnes at a grade of 0.64% copper, was discovered eight kilometers east of the Central Zone in 1957. Unfortunately, most of the regional data collected at that time was not filed for assessment credit and is not available.




| NAME OF OCCURRENCE | | MINERAL RESERVES AND/OR ELEMENTS | |
|---|---|---|---|
| 1. | Galore Creek | 125,000,000 tonnes | 0.40 gm/tonne Au<br>7.70 gm/tonne Ag |
| 2. | Copper Canyon | 25,000,000 tonnes | 0.64% Cu |
| 3. | Paydirt | 185,000 tonnes | 4.11 gm/tonne Au |
| 4. | Schaft Creek | 330,000,000 tonnes | 0.32 gm/tonne Au<br>1.50 gm/tonne Ag<br>0.40% Cu 0.036% $MoS_2$ |
| 5. | Trophy | Au, Cu, Pb, Zn, Ag | |
| 6. | Trek | Au, Cu, Pb, Zn, Ag, Mo | |
| 7. | Icy | Au, Cu, Ag | |
| 8. | Jack Wilson | Au, Cu | |
| 9. | Ann/Su | Cu | |
| 10. | Jay | Cu, Au, Ag | |
| 11. | Devil's Club | Cu, Ag, Au | |
| 12. | Hicks | Cu, Mo | |
| 13. | Alberta | Cu | |
| 14. | Pup | Cu, Au, Pb, Zn | |
| 15. | JD | Cu, Au, Pb, Zn | |
| 16. | North Scud | Cu | |
| 17. | Middle Scud | Cu, Ag | |
| 18. | Stikine East | Cu | |
| 19. | Joan, MB | Cu, Au, Ag | |
| 20. | Kim | Cu, Au, Ag | |
| 21. | Wiser | Au, Ag | |
| 22. | Cuds | Au, Ag, Pb, Cu | |
| 23. | Ginny | Au | |
| 24. | Sphal | Cu, Au | |
| 25. | Oksa Creek | Cu, Pb, Zn, Au, Ag | |
| 26. | PL 7-11 | Au, Ag, Cu, Zn | |
| 27. | Bik | Cu | |
| 28. | Glenlivet | Au | |
| 29. | Bell | Au | |

● MINERAL OCCURRENCE

★ MINERAL DEPOSIT

Km 0 5 10 15 Km

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# SCUD RIVER PROJECT
# REGIONAL MINERAL OCCURRENCE MAP

BRITISH COLUMBIA

EQUITY ENGINEERING LTD.

| | | | |
|---|---|---|---|
| Drawn: | J.W. | MINING DIV: LIARD | FIGURE |
| N.T.S.: | 104 B, G | SCALE: 1:250,000 | 3 |
| DATE: | DEC. 1989 | REVISED: | |

In the early 1980's, Teck Corp. conducted regional reconnaissance for gold throughout the area, and delineated 185,000 tonnes of reserves grading 4.11 grams gold per tonne on the Paydirt deposit (Holtby, 1985), which is located approximately twenty kilometers south of the Scud River property. In 1987, several precious metal occurrences were discovered on the Trophy project located approximately seventeen kilometers to the southeast of the property. Continental Gold Corp., which acquired the Trophy project in 1988, reported trench samples averaging 2.40 grams per tonne (0.07 ounces/ton) gold and 164.5 grams per tonne (4.80 ounces/ton) silver across 56.4 meters from their Ptarmigan A zone (Continental, 1988a). During the 1988 field season, Continental drilled 2,834 meters in 16 holes, with intersections up to 11.1 meters grading 5.48 grams gold and 30.2 grams silver per tonne (Continental, 1988b).

Elsewhere in the Galore Creek district, several significant precious metals occurrences were discovered on each of the Trek, ICY and Jack Wilson properties during the 1988 field season (Figure 3). In each case, these properties had been explored for copper during the 1960's, but had never received due attention for their gold potential.

During 1987, the federal and provincial geological surveys conducted a joint regional geochemical survey throughout the Telegraph Creek and Sumdum map sheets. Eight silt samples were taken from streams draining the Scud River property, revealing several gold, silver, copper, lead, zinc and tin anomalies (GSC, 1988).

During September of 1988, Pass Lake Resources Ltd. carried out a limited exploration program of prospecting, stream and soil geochemistry on the JD I and II claims. Three of the four field-sieved stream sediment samples taken from Rugose Creek were highly

anomalous, with 1850, 3720 and 700 parts per billion gold. Five of the twelve rock samples taken from the JD claims returned values in excess of 3000 parts per billion gold (Awmack, 1989). No other work has been recorded on the ground currently covered by the JD I-VI, Bell 1-2, CB I-II or PL-1 claims.

### 4.2 1989 Work Program

From August to October of 1989, Consolidated Goldwest Resources Ltd. carried out a reconnaissance exploration program on the Scud River property, consisting of geological mapping, prospecting, stream sediment sampling and contour soil sampling. This program was targeted at structurally-controlled precious metal mineralization similar to that found elsewhere in the Galore Creek district and within a similar geological environment which stretches south to the Iskut River, Sulphurets and Stewart mining districts. In particular, it was designed to locate the source of mineralized float found in Rugose Creek and near the toe of the Rugose Glacier in 1988 and investigate the potential of Permian argillites, which had been noted as a possible host for massive sulphide mineralization (Brown and Gunning, 1988a).

During the course of this program, 11 field-sieved stream sediment samples, 22 silt samples, 67 soil samples and 82 rock samples were taken. The field-sieved stream sediment samples were taken from the active parts of major drainages and screened through a ten mesh screen, while unscreened silt samples were taken from minor drainages and back-eddies. Field-sieved stream sediment and silt samples were either screened in the laboratory through a minus thirty five mesh screen and pulverized to minus 150 mesh, or screened through a minus eighty mesh screen and left unpulverized, if there was sufficient fine material. All the sediment samples were analysed geochemically for gold and 32-element ICP.

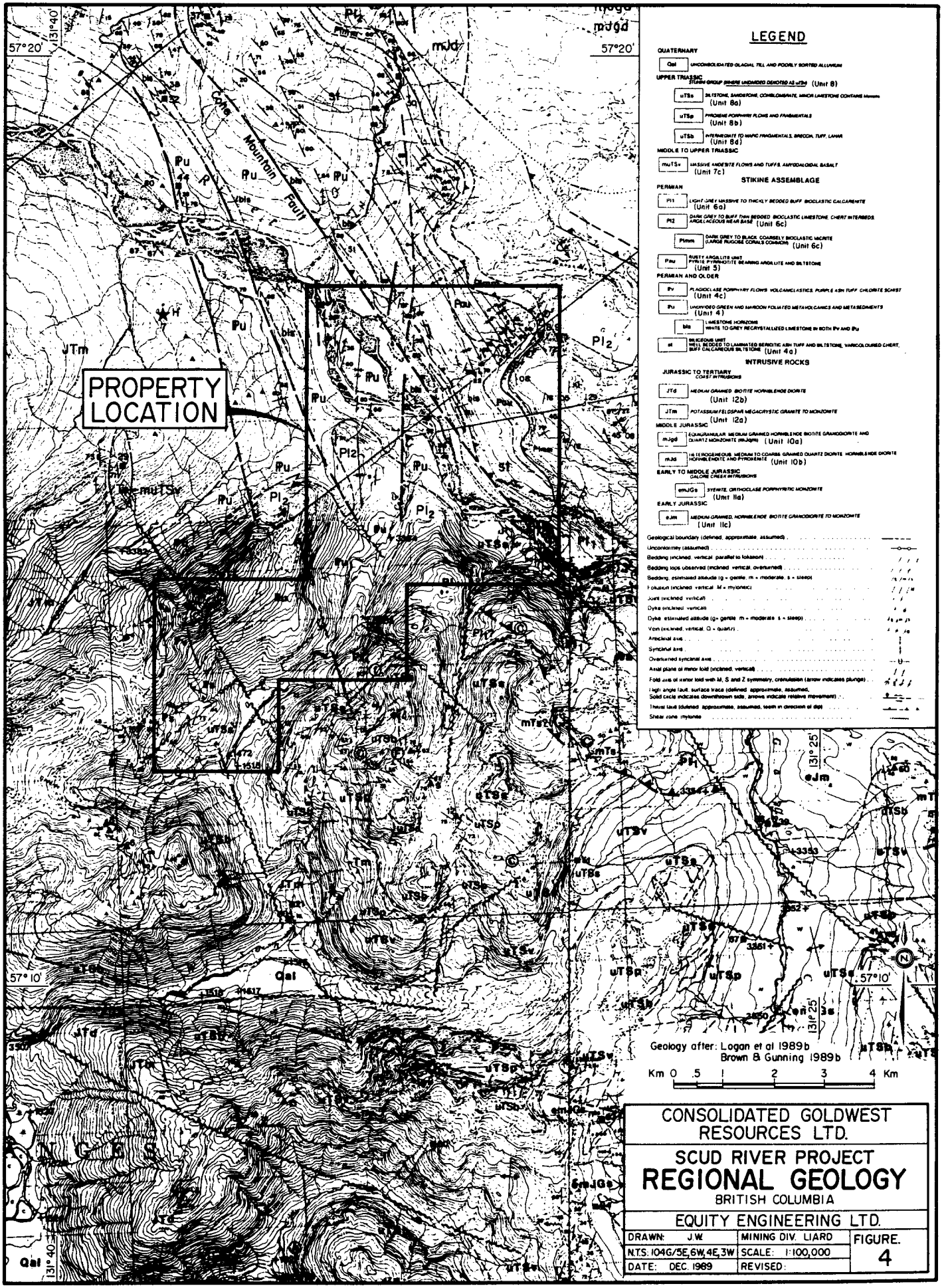
Five contour soil lines were established on the JD I and II claims, with samples taken at twenty-five meter intervals (Figure 5). Wherever possible, soil samples were taken from the red-brown B horizon. Where soil developement was poor, talus fines were taken. Samples were sieved to minus 80 mesh in the laboratory and analysed geochemically for gold and 10-element ICP. Contour soil samples taken from the lines on JD I are identified on the analytical certificates in Appendix D by the contour line elevation in feet. Samples taken on JD II are identified by sample numbers 459595-459600 and 463052-463058.

Prospecting and reconnaissance geological mapping were carried out on all claims, using a 1:10,000 topographic map as a base (Figures 5 and 6). Rock samples, described in Appendix C, were taken from zones of alteration and mineralization and analysed geochemically for gold and 10-element ICP. Samples that ran greater than 1000 parts per billion gold, 200 parts per million silver or 10,000 parts per million copper, lead or zinc were assayed. Analytical certificates are attached in Appendix D. Samples from the government regional silt survey and the 1988 exploration program have been included on Figures 5 and 6 for completeness.

The CB I and II claims were staked near the end of the program to the east of the JD I claim to cover the source of mineralized float found at the toe of Rugose Glacier. No subsequent work was performed on these claims.

## 5.0 REGIONAL GEOLOGY

The first geological investigations of the Stikine River in northwestern British Columbia began over a century ago when Russian geologists came to Russian North America assessing the area's


PROPERTY LOCATION
Coho Mountain Fault
57°20'
57°10'
131°40'
131°25'
Geology after: Logan et al 1989b
Brown & Gunning 1989b
Km 0 .5 1 2 3 4 Km
LEGEND
QUATERNARY
Qal UNCONSOLIDATED GLACIAL TILL AND POORLY SORTED ALLUVIUM
UPPER TRIASSIC
STIKINE GROUP WHERE UNDIVIDED DENOTED AS uTSv (Unit 8)
uTSs SILTSTONE, SANDSTONE, CONGLOMERATE, MINOR LIMESTONE CONTAINS Monotis (Unit 8a)
uTSp PYROXENE PORPHYRY FLOWS AND FRAGMENTALS (Unit 8b)
uTSb INTERMEDIATE TO MAFIC FRAGMENTALS, BRECCIA, TUFF, LAHAR (Unit 8d)
MIDDLE TO UPPER TRIASSIC
muTSv MASSIVE ANDESITE FLOWS AND TUFFS, AMYGDALOIDAL BASALT (Unit 7c)
STIKINE ASSEMBLAGE
PERMIAN
Pl1 LIGHT GREY MASSIVE TO THICKLY BEDDED BUFF BIOCLASTIC CALCARENITE (Unit 6a)
Pl2 DARK GREY TO BUFF THIN BEDDED BIOCLASTIC LIMESTONE, CHERT INTERBEDS, ARGILLACEOUS NEAR BASE (Unit 6c)
Plmm DARK GREY TO BLACK, COARSELY BIOCLASTIC MICRITE (LARGE RUGOSE CORALS COMMON) (Unit 6c)
Pau RUSTY ARGILLITE UNIT PYRITE PYRRHOTITE BEARING ARGILLITE AND SILTSTONE (Unit 5)
PERMIAN AND OLDER
Pv PLAGIOCLASE PORPHYRY FLOWS, VOLCANICLASTICS, PURPLE ASH TUFF, CHLORITE SCHIST (Unit 4c)
Pu UNDIVIDED GREEN AND MAROON FOLIATED METAVOLCANICS AND METASEDIMENTS (Unit 4)
bls LIMESTONE HORIZONS WHITE TO GREY RECRYSTALLIZED LIMESTONE IN BOTH Pv AND Pu
si SILICEOUS UNIT WELL BEDDED TO LAMINATED SERICITIC ASH TUFF AND SILTSTONE, VARICOLOURED CHERT, BUFF CALCAREOUS SILTSTONE (Unit 4a)
INTRUSIVE ROCKS
JURASSIC TO TERTIARY COAST INTRUSIONS
JTd MEDIUM GRAINED BIOTITE HORNBLENDE DIORITE (Unit 12b)
JTm POTASSIUM FELDSPAR MEGACRYSTIC GRANITE TO MONZONITE (Unit 12a)
MIDDLE JURASSIC
mJgd EQUIGRANULAR MEDIUM GRAINED HORNBLENDE BIOTITE GRANODIORITE AND QUARTZ MONZONITE (mJgm) (Unit 10a)
mJd HETEROGENEOUS MEDIUM TO COARSE GRAINED QUARTZ DIORITE HORNBLENDE DIORITE HORNBLENDITE AND PYROXENITE (Unit 10b)
EARLY TO MIDDLE JURASSIC GALORE CREEK INTRUSIONS
emJGs SYENITE, ORTHOCLASE PORPHYRITIC MONZONITE (Unit 11a)
EARLY JURASSIC
eJm MEDIUM GRAINED, HORNBLENDE BIOTITE GRANODIORITE TO MONZONITE (Unit 11c)
Geological boundary (defined, approximate, assumed)
Unconformity (assumed)
Bedding (inclined, vertical, parallel to foliation)
Bedding tops observed (inclined, vertical, overturned)
Bedding, estimated attitude (g = gentle, m = moderate, s = steep)
Foliation (inclined, vertical, M = mylonitic)
Joint (inclined, vertical)
Dyke (inclined, vertical)
Dyke estimated attitude (g= gentle, m = moderate, s = steep)
Vein (inclined, vertical, Q = quartz)
Anticlinal axis
Synclinal axis
Overturned synclinal axis
Axial plane of minor fold (inclined, vertical)
Fold axis of minor fold with M, S and Z symmetry, crenulation (arrow indicates plunge)
High angle fault, surface trace (defined, approximate, assumed, Solid circle indicates downthrown side, arrows indicate relative movement)
Thrust fault (dotted, approximate, assumed, teeth in direction of dip)
Shear zone, mylonite
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REGIONAL GEOLOGY
BRITISH COLUMBIA
EQUITY ENGINEERING LTD.
DRAWN: J.W.
MINING DIV. LIARD
N.T.S. 104G/5E, 6W, 4E, 3W
SCALE: 1:100,000
DATE: DEC. 1989
REVISED:
FIGURE. 4

mineral potential (Alaskan Geographic Society, 1979, in Brown and Gunning, 1989), and was followed by the first Geological Survey of Canada foray of G.M. Dawson and R. McConnel in 1887. Several more generations of federal and provincial geologists have been sent to the Stikine, including Kerr (1948b), the crew of Operation Stikine (GSC, 1957), Panteleyev (1976), Souther (1972), Souther and Symons (1974), Monger (1977), and Anderson (1989). The British Columbia Geological Survey has recently completed regional mapping of the area at a scale of 1:50,000 by Brown and Gunning (1989a,b) and Logan and Koyanagi (1989a,b).

The Galore Creek Camp lies within the Intermontane Belt, a geological and physiographic province of the Canadian Cordillera, and flanks the Coast Plutonic Complex to the west (Figure 4). At Galore Creek, the generally northwest-trending structure of the Intermontane Belt is discordantly cut across by the northeast-trending Stikine Arch which became an important, relatively positive tectonic element in Mesozoic time when it began to influence sedimentation into the Bowser Successor Basin to the southeast and into the Whitehorse Trough to the northwest (Souther et al., 1974).

Stikinian stratigraphy ranges from possibly Devonian to Jurassic, and was subsequently intruded by granitoid plutons of Upper Triassic to Eocene age. The oldest strata exposed in the Galore Creek camp are Mississippian or older mafic to intermediate volcanic flows and pyroclastic rocks (Map Units 4a and 4c) with associated clastic sediments and carbonate lenses (Map Unit 4b). These are capped by up to 700 meters of Mississippian limestone with a diverse fossil fauna (Map Unit 4d). It appears from fossil evidence that all of the Pennsylvanian system is missing and may be represented by an angular unconformity and lacuna of 30 million years, though field relationships are complicated by faulting (Monger, 1977; Logan and Koyanagi, 1989). Permian limestones (Map

Unit 6), also about 700 meters thick, lie upon the Mississippian limestone but are succeeded by a second lacuna amounting to about 20 million years from the Upper Permian to the upper Lower Triassic.

Middle and Upper Triassic siliciclastic and volcanic rocks (Map Unit 7) are overlain by Upper Triassic Stuhini Group siliciclastic (Map Unit 8a) and volcanic (Map Unit 8b, 8c and 8d) rocks, consisting of mafic to intermediate pyroclastic rocks and lesser flows. The Galore Creek porphyry copper deposit appears from field evidence to mark the edifice of an eroded volcanic center with numerous sub-volcanic plutons of syenitic composition. Jurassic Bowser Basin strata onlap the Stuhini Group strata to the southeast of Iskut River but, because of erosion and non-deposition, are virtually absent from the Galore Creek area.

The plutonic rocks follow a three-fold division (Logan and Koyanagi, 1989). Middle Triassic to Late Jurassic syenitic and broadly granodioritic intrusions are partly coeval and cogenetic with the Stuhini Group volcanics and include the composite Hickman Batholith (Map Unit 9) and the syenitic porphyries of the Galore Creek Complex (Map Unit 11). Jura-Cretaceous Coast Plutonic Complex intrusions (Map Unit 12) occur on the west side of the Galore Creek Camp, along the Stikine River, with the youngest of these intrusions occupying more axial positions along the trend of the Coast Plutonic Complex flanked by older intrusions. The youngest intrusives in the Galore Creek Camp are Eocene (quartz-) monzonitic plugs (Map Unit 13), felsic and mafic sills and dykes (Map Unit 14), and biotite lamprophyre (minette) dykes (Map Unit 14).

The dominant style of deformation in the Galore Creek area consists of upright north-trending, open to tight folds and northwest-trending, southwest-verging, folding and reverse faulting

in the greenschist facies of regional metamorphism. Localized contact metamorphism ranges as high as pyroxene hornfels grade; metasomatism is also noted near intrusions. Upright folding may be an early manifestation of a progressive deformation which later resulted in southwest-verging structures. Southwest-verging deformation involves the marginal phases of the Hickman Batholith and so is, at least in part, no older than Late Triassic.

Steeply dipping faults which strike north, northwest, northeast, and east have broken the area into a fault-block mosaic. North-striking faults are vertical to steeply east-dipping and parallel to the Mess Creek Fault (Souther, 1972), which was active from Early Jurass)c to Recent times (Souther and Symons, 1974); northwest-striking faults are probably coeval with the north-striking faults, but locally pre-date them. East-west trending faults are vertical or steeply dipping to the north and have normal-type motion on them (i.e., north-side down), whereas northeast-striking faults are the loci of (sinistral) strike-slip motion (Brown and Gunning, 1989a).

A number of metallic deposit types have been recognized in the Galore Creek camp: porphyry copper±molybdenum±gold deposits, structurally-controlled precious metal vein/shear deposits, skarns and breccia deposits (Figure 3). Porphyry copper deposits of this area include both the alkalic Galore Creek copper-gold and calc-alkalic Schaft Creek copper-molybdenum deposits. Galore Creek, which is associated with syenitic stocks and dikes rather than a quartz-feldspar porphyry, is further contrasted from the calc-alkaline Schaft Creek in that molybdenite is rare, magnetite is common and gold and silver are important by-products. The mineralization is clearly coeval and cogenetic with the spatially associated intrusive bodies. Other porphyry copper occurrences in the Galore Creek area include the Copper Canyon, Sue/Ann, Bik and Jack Wilson Creek deposits (Figure 3).

Structurally-controlled gold-silver deposits have been the focus of exploration in recent years. The vein/shear occurrences are similar throughout the Galore Creek camp in that they are mesothermal in nature, containing base metal sulphides with strong silica veining and alteration. However, it appears that the intrusive bodies associated with this mineralization fall into two classes on the basis of age and composition. These two classes are reflected in differences in the style of structures, sulphide mineralogy and associated alteration products. The intrusive types are: 1) Lower Jurassic alkaline "Galore Creek" stocks; and 2) Eocene quartz monzonite to porphyritic granodiorite intrusions. Lead isotope data from the Stewart mining camp (Alldrick et al., 1987) further supports the proposition that separate Jurassic and Tertiary mineralizing events were "brief regional-scale phenomena".

Structures associated with the Lower Jurassic syenites are typically narrow (less than 2.0 meters) quartz-chlorite veins mineralized predominately with pyrite, chalcopyrite and magnetite. Examples of these structures in the Galore Creek camp include many of the discrete zones peripheral to the Galore Creek deposit and the gold-rich veins at Jack Wilson Creek. The Tertiary mineralization comprises discrete quartz veins and larger 'shear' zones characterized by pervasive silicification, sericitization and pyritization whose total sulphide content is commonly quite low. The quartz veins contain a larger spectrum of sulphide minerals including pyrite, chalcopyrite, pyrrhotite, arsenopyrite, galena and sphalerite. Unlike the Jurassic mineralization, silver grades may be very high. A number of mineral showings discovered in the Porcupine River area, including the Paydirt deposit, are of this type.

Skarns represent a minor percentage of the precious metal-bearing occurrences in the Galore Creek camp. The mineralogy of these deposits could be influenced by the composition of the

intrusion driving the hydrothermal fluids, in much the same way as described above for the structurally-controlled deposits. If the invading intrusives are alkalic, the skarn assemblage will be dominated by magnetite and chalcopyrite, as at the Galore Creek deposit and the Hummingbird skarn on the east side of the South Scud River.

The breccia hosted mineralization discovered in the Galore Creek camp precious metal deposits appear to be unique in style and mineralization. Three occurences have been located in the camp: (1) the zinc-silver-gold Ptarmigan zone in the South Scud River area, (2) the copper-molybdenum-gold-silver breccia at the Trek property on Sphaler Creek and (3) the copper-bearing and magnetite breccias of the complex Galore Creek deposit. The single common denominator of each is that the zones are located along fault structures which may represent the main conduit for mineralizing fluids.

## 6.0 PROPERTY GEOLOGY AND GEOCHEMISTRY

### 6.1 Geology

The Scud River property is divided in two by the Cone Mountain Thrust Fault, which follows the northeast bank of the Scud River. To the northeast, Mississippian and older volcanics and sediments are overlain by Permian argillites and limestones which become younger up slope to the north (Figure 5). Southwest of the Scud River, the same units, along with Upper Triassic sediments and Jurassic(?) intrusives, form a fault block mosaic (Figure 6).

Northeast of the Cone Mountain Fault (Figure 5), the oldest rocks are Mississippian and older siliceous tuffs, cherts,

pyroclastics and flows with silicified limestone horizons (Units 4a-d). These units are folded and contorted by a series of northwest trending, southeasterly dipping small scale folds. On the JD III claim, a 500 meter thick wedge of massive, well jointed mafic volcanics (Unit 4c), carrying up to 3% finely disseminated pyrite, lies between massive limestone (Unit 4d) to the north and thick bedded siliciclastics (Unit 4a) to the south. Its north contact is a highly sheared fault contact, marked by a slice of highly foliated graphitic argillite. Foliation planes in the argillite and the volcanics generally strike north-south and dip 70-90° northeast. The southern contact with the siliceous sediments is gradational.

Continuing northeast, the siliceous sediments (Unit 4a) are conformably overlain by basal Permian argillites (Unit 5) at approximately 900 meters elevation (Brown and Gunning, 1989b). A northwesterly striking, northeasterly dipping thrust fault separates the dark grey, pyrite-pyrrhotite bearing, graphitic argillites which occur at the base of the Permian section, from overlying Permian limestones. Two types of Permian limestones occur: a grey to buff coloured crystalline limestone (Unit 6a) and a dark grey, bioclastic limestone (Unit 6c). Large rugosa corals, ten to fifteen centimeters in length, are common in the bioclastic unit. Minor dark grey, fissile argillites are interbedded with both limestones. Bedding attitudes within the limestones strike 320-330° and dip shallowly to the northeast. A ten meter wide gabbroic dyke (Unit 14b) intrudes the Permian limestone. Light grey, felsic dykes (Unit 14e), up to one meter in width, intrude the Permian argillites near Rugose Creek.

The Cone Mountain Fault, a major northwesterly trending, northeasterly dipping thrust fault, parallels the Scud River and separates the geology on the north and south sides of the Scud River. South of the Scud River, the geology is more complex

structurally and lithologically (Figures 5 and 6). A series of north-northwesterly and northeasterly trending faults, which divide the area into a fault block mosaic, have been mapped by Logan and Koyanagi (1989a,b).

Mississippian and older sediments and volcanics (Units 4a-c) are exposed along the Scud River, the lower portion of the Contact Creek drainage and the western edge of the PL-1 and Bell 1 claims. This assemblage comprises laminated argillites, limestones, a carbonate-cemented pebble conglomerate and feldspar-hornblende porphyry andesites (undivided as Unit 4) on the PL-1 and Bell 1 claims, truncated to the northeast by a northwesterly trending fault. Bedding in this area strikes 040-055° and dips vertically. On the JD V and Bell 2 claims, an assemblage of blue-grey siltstones, dark grey argillites, cherts and silicified limestones (Unit 4b) are exposed on the south side of Contact Creek, overlain by massive Permian limestones.

Thick-bedded, medium grey, crystalline Permian limestones (Unit 6a) underlie most of the Bell 1 and 2 claims and large portions of the JD IV and V claims. Bedding strikes northerly and dips 68 to 73° to the east. The limestones are unmineralized, but are intruded by small irregular masses of a pyrrhotite-bearing, highly oxidized intrusive, which forms prominent gossans on the Bell 2 claims. A prominent swarm of barren, pink quartz-carbonate veins occurs near the intrusives, parallel to bedding. The veins pinch and swell, ranging in width from five to fifteen centimeters and are continuous over tens of meters.

Logan and Koyanagi (1989b) have inferred a fault contact between Mississippian sediments and Upper Triassic Stuhini Group rocks north of Contact Creek on the PL-1 claim. The fault trends northeasterly but is progressively offset to the southwest by several north-northwesterly trending faults. In the field it is

difficult to distinguish the Mississippian assemblage from the younger Triassic assemblage, although the older rocks tend to be more intensely deformed. The argillites exposed southeast of the granodiorite body are undeformed and probably belong to the Stuhini Group (Unit 8a), as mapped by Logan and Koyanagi (1989b). These argillites overlie grey, fine-grained siliceous sediments (Unit 8a) which strike 336° and dip 30° to the northeast.

A bedded, pale grey, tuffaceous unit (Unit 8c) is exposed on an isolated knoll at 1000 meters elevation on the PL-1 claim. It appears to have been broken into discrete blocks and rotated prior to lithification. A siliceous, tuffaceous to volcaniclastic rock (Unit 8d) is exposed in the upper reaches of Contact Creek. Folded, black, rusty weathering argillites (Unit 8a) outcrop lower in the creek. Bedding in the Stuhini sedimentary units strikes east-northeast and dips 34 to 60° southeast.

A large hornblende granodiorite body (Unit 11c) intrudes foliated graphitic argillites of Unit 4 on the northwest corner of the PL-1 claim, and smaller exposures trend northeast across the Bell 1 claim. This hornblende granodiorite is the easternmost exposure of a hornblende-biotite granite to quartz monzonite mapped to the west by Logan and Koyanagi (1989b). Porphyritic felsic plugs (Unit 11b) intrude Permian mafic volcanics and laminated sediments on the Bell 1 claim. The pinkish weathering felsic intrusives are composed of two millimeter feldspar phenocrysts within a fine-grained grey-beige matrix.

## 6.2 Mineralization

Three mineralized quartz veins were found, hosted by three different host rocks. Sample #459343, which assayed 1.58 grams per tonne (0.046 ounces per ton) gold with 6.5 parts per million silver and 787 parts per million copper, was taken from an isolated, 25

centimeter wide quartz-sulphide vein exposed over ten meters along the sheared contact zone between pre-Permian limestones and volcanics on the JD III claim (Figure 5). Veining strikes 275° and dips 70° to the north, cutting the foliation, which strikes 172° with a vertical dip. The vein carries up to 15% blebby pyrrhotite and pyrite in places, although the overall sulphide content is less than 3%.

Sample #447249, which assayed 2.88 grams per tonne (0.084 ounces per ton) gold with low arsenic, copper and zinc values, was taken from an isolated twelve centimeter wide quartz-sulphide vein exposed along twenty meters in the granodiorite body on the PL-1 claim (Figure 6). It strikes 020° and dips 30° to the west, with up to 70% blebby pyrite.

A shear zone on the JD I claims which returned encouraging results of 0.014 and 0.238 ounces per ton gold from the 1988 reconnaissance program was examined this year (Figure 5). The shear zone is one meter in width and approximately 30 meters long, lying along the contact between greywacke and argillite. Mineralization occurs as blebby chalcopyrite and pyrite with minor galena in a four centimeter wide quartz vein in the center of the shear. It was not resampled this year.

Sample #463109, taken from a bleached argillite on the JD V claim (Figure 5), returned 3550 parts per billion gold, without significant silver, copper, lead or zinc values. It was taken from a small, poorly exposed outcrop in a forested area approximately 150 meters southwest of the legal corner post for the JD V and VI claims. The argillite was cherty, very pale grey, weathering white, with no visible sulphide mineralization. The size or potential of this occurrence is not yet clear.

Nine samples of massive sulphide and quartz-sulphide skarn float were taken from the morraine at the toe of Rugose Glacier on the JD I claim and east along the float train on the CB I and II claims (Figure 5). Sulphide-bearing skarn float constitutes five to twenty percent of morrainal material along this float train. These samples contained up to 80% pyrrhotite, pyrite, chalcopyrite, arsenopyrite and/or magnetite in a garnet-actinolite gangue. The relative percentages of each mineral vary markedly from boulder to boulder. A selection of samples was taken to represent the various sulphide assemblages found in float, and significant results are presented in Table 6.2.1.

TABLE 6.2.1

RUGOSE CREEK FLOAT MINERALIZATION

| Sample Number | Mineralization | Gold (oz/ton) | Copper (%) | Lead (%) | Zinc (%) |
|---|---|---|---|---|---|
| 447050 | massive magnetite,trace pyrite & chalcopyrite | 0.002 | 0.20 | <0.01 | 0.03 |
| 447233 | pyrite & chalcopyrite in quartz-carbonate | 0.068 | 1.62 | <0.01 | <0.01 |
| 463651 | massive pyrrhotite: chalcopyrite & pyrite 9:1 | 0.010 | 0.46 | <0.01 | 0.01 |
| 463652 | pyrite:arsenopyrite 1:1 | 0.410 | 0.09 | 0.97 | 0.81 |
| 463653 | pyrite:chalcopyrite 1:1 | 0.088 | 3.28 | 0.47 | 0.89 |
| 463654 | chalcopyrite, garnet | 0.005 | 0.16 | 0.03 | 0.05 |
| 463655 | 10% pyrite in argillite | 0.004 | 0.02 | <0.01 | 0.01 |

## 7.0 GEOCHEMISTRY

Eight silt samples were taken from streams draining the Scud River property in the course of a 1987 regional geochemical survey conducted by the federal and provincial geological surveys (GSC, 1988). Several of these were anomalous (exceeding the 90th

percentile for all streams sampled in the Telegraph Creek and Sumdum map sheets) to extremely anomalous (exceeding the 99th percentile) in one or more of the base and precious metals. Results are summarized in Table 7.0.1 and will be discussed below, jointly with results of 1989 silt sampling.

TABLE 7.0.1

GOVERNMENT REGIONAL SILT SAMPLING RESULTS

| Sample Number | Gold (ppb) | Silver (ppm) | Copper (ppm) | Lead (ppm) | Tin (ppm) | Zinc (ppm) | Arsenic (ppm) |
|---|---|---|---|---|---|---|---|
| 871472 | 21 | 0.3* | 42 | 8 | 2 | 54 | 7 |
| 871515 | 1 | 0.4** | 72 | 11 | 3 | 192** | 7 |
| 873383 | 7 | 1.5*** | 120* | 12 | 7* | 436** | 18* |
| 873384 | 2 | 0.2 | 44 | 8 | 3 | 71 | 5 |
| 873385 | 280*** | 0.6** | 272*** | 29** | 8* | 120 | 10 |
| 873410 | 19 | 0.1 | 44 | 8 | 32*** | 73 | 8 |
| 873412 | 108** | 0.1 | 17 | 7 | 28*** | 29 | 10 |
| 873419 | 13 | 0.2 | 51 | 7 | 3 | 78 | 4 |

* Indicates sample exceeded the 90th percentile, N=1291
** Indicates sample exceeded the 95th percentile, N=1291
*** Indicates sample exceeded the 99th percentile, N=1291
(GSC Open File 1646, 1988)

During the 1989 field season, 22 silt samples and 11 field-sieved stream sediment samples were collected from the Scud River property. The silt samples are directly comparable to the government results listed above, and anomalous results can be defined in the same way. Field-sieved stream sediment samples, whose geochemical values have been variably enhanced during the sieving process, cannot be directly compared to the silt samples. Table 7.0.2 summarizes anomalous silt samples from the 1989 program.

TABLE 7.0.2

SIGNIFICANT 1989 SILT SAMPLING RESULTS

| Sample | Au(ppb) | Ag(ppm) | Cu(ppm) | Pb(ppm) | Zn(ppm) | As(ppm) |
|---|---|---|---|---|---|---|
| 172377 | <5 | 0.4** | 47 | <2 | 294** | 10 |
| 172379 | <5 | <0.2 | 63 | <2 | 196** | <5 |
| 172427 | 15 | 0.2 | 161** | 6 | 350** | 15 |
| 447242 | 10 | 0.4** | 80 | 8 | 286** | 20* |
| 459317 | 5 | 1.0*** | 150** | 10 | 490*** | 25* |
| 459318 | <5 | 0.6** | 79 | 12 | 244** | 145*** |
| 459504 | 25 | 0.6** | 115* | 2 | 478*** | 35** |
| 459870 | 210** | <0.2 | 17 | 2 | 34 | 10 |
| 463107 | <5 | <0.2 | 155** | 6 | 274** | 15 |
| 463108 | <5 | <0.2 | 442*** | 6 | 516*** | 20* |
| 463202 | <5 | <0.2 | 51 | 4 | 98 | 20* |
| 463203 | <5 | <0.2 | 12 | 6 | 72 | 25* |
| 463205 | 130** | <0.2 | 276*** | 16* | 138* | 30** |
| 463552 | 40* | 0.2 | 62 | 2 | 878*** | 15 |
| 463553 | <5 | <0.2 | 80 | 10 | 268** | 5 |

* Indicates sample exceeded the 90th percentile, N=1291
** Indicates sample exceeded the 95th percentile, N=1291
*** Indicates sample exceeded the 99th percentile, N=1291
(GSC Open File 1646, 1988)

Rugose Creek has returned highly anomalous gold values in silt samples #873412 and #459870 from its mouth, and from several field-sieved stream sediment from its tributaries, without correspondingly high values for silver or any base metals except tin. If the source for the gold anomalies were the sulphide-rich skarn float found near the toe of the Rugose Glacier, the base metal values should be higher.

Silt sample #873385, which returned the highest gold value on the Scud River property, was taken from Creek #20 on the JD VI claim whose drainage lies mostly south and east of the property. Sample #463205, taken at the same location, confirms the anomaly with high gold, copper and arsenic values. Highly anomalous gold values have been reported for field-sieved stream sediment samples from this creek two kilometers upstream from the JD VI claim, suggesting that the anomaly source lies off the Scud River property (Awmack and Yamamura, 1988).

Field-sieved stream sediment sample #172359 was taken from a stream which flows north into Contact Creek from Stuhini Group sediments on the PL-1 claim (Figure 6). It returned 270 parts per billion gold without other anomalous elements. This creek drains 600 meters of the PL-1 claim, but the majority of its basin lies to the south of the Scud River property.

Silt samples #459317 and #459318 were taken from small streams which drain the hornblende granodiorite intrusive on the PL-1 claim. Both were anomalous to extremely anomalous in silver, zinc and arsenic; they could reflect mineralization similar to the gold-arsenic-copper-zinc showing hosted by the granodiorite 450 meters to the northwest.

Several highly anomalous zinc values were returned; generally, these drain Mississippian and older sediments. One exception is provided by silt samples #873383 and #459504, which were taken from a fault-controlled creek which drains Permian limestone and Upper Triassic sediments on the Bell 2 claim. Sample #873383 exceeds the 95th percentile in zinc and antimony and the 99th percentile in silver, molybdenum, barium and cadmium. No source has been found for this multi-element anomaly.

The soil lines established on the JD I and II claims were designed to locate the source of the 1988 stream sediment anomalies. It was thought that mineralization was related to the thrust fault which separates the rusty pyrite-pyrrhotite bearing argillite (Unit 5) from overlying limestones (Unit 6). A contour soil line was established at the 1310 meter elevation (4300 feet) on the northern side of Rugose Creek valley, and run 700 meters to the east. Two contour soil lines were run on the south side of the creek, along the 1230 meter (4050 feet) and 1330 meter (4400 feet) contours. Two short lines were established further south to test the same contact on the JD II claim. A 150 meter line was sampled

at 1000 meters elevation (samples 459595-459600) beneath the contact and a 175 meter line (samples 463052-463058) was run across the contact.

Results from the soil geochemical analyses were generally low for all elements except arsenic and zinc. Only twelve samples contained detectable gold, with a maximum value of 65 parts per billion. Arsenic values generally ranged between ten and twenty parts per million on the northern soil lines, with values up to 95 parts per million on the JD II claim. Zinc values were generally between 80 and 150 parts per million, with a maximum value of 326 parts per million. Silver, copper and lead returned low values, with highs of 1.0, 98 and 25 parts per million respectively. From these results, it is apparent that this thrust contact is unmineralized.

## 8.0 DISCUSSION AND CONCLUSIONS

Several new gold-bearing occurrences were discovered on the Scud River property during the 1989 exploration program. Of these, the most significant appears to be a silicified, bleached pre-Permian argillite on the JD V claim without sulphide mineralization, which contained 3550 parts per billion gold. The extent and potential of this poorly exposed alteration zone is not yet clear; it may indicate the presence of a larger system. Elsewhere in the Galore Creek camp, similar zones of pervasive silicification and weak gold mineralization are quite extensive and can host discrete gold-rich quartz-sulphide veins.

The source of the gold-bearing sulphide float found in 1988 in Rugose Creek and at the toe of the Rugose Glacier has been traced to skarn mineralization in a gossanous limestone cliff to the east of the JD I claim. Due to steep topography, sampling of

the zone was restricted to a single grab sample of massive magnetite. Judging from the quantity of sulphide-bearing float, this skarn zone may be quite extensive, although highly variable in mineralogy and grade. The CB I and II claims were staked to cover the suspected source at the end of the 1989 field season.

The gold in this sulphide-rich skarn float appears to be preferentially associated with arsenopyrite, and to a lesser extent with chalcopyrite. The high gold values in stream sediment samples from Rugose Creek may be partially due to this skarn mineralization. However, the low base metal values associated with the gold anomalies suggests that there may be another significant bedrock source for the gold within the Rugose Creek drainage, where gold is not associated with base metals. No such source has yet been found.

The Scud River property is largely underlain by Permian and older limestone, clastics and volcanics. Most of the significant precious metal occurrences elsewhere in the Galore Creek camp are hosted by Upper Triassic Stuhini Group volcanics, which are absent on the property. This cannot be considered as favorable for the potential of the property. However, the discovery of potentially extensive gold-bearing skarn mineralization at the head of the Rugose Glacier, scattered gold occurrences within intrusive and pre-Permian stratified rocks and favorable stream sediment geochemistry which has not yet been adequately explained provide abundant justification for further work.

Respectfully submitted,
EQUITY ENGINEERING LTD.

Katherina V. Ross, Geologist.

Vancouver, British Columbia
December, 1989

# APPENDIX A

## BIBLIOGRAPHY

## BIBLIOGRAPHY


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# APPENDIX B

## STATEMENT OF EXPENDITURES

# STATEMENT OF EXPENDITURES
## SCUD RIVER SOUTH CLAIM GROUP

| | | |
|---|---|---|
| **PROFESSIONAL FEES AND WAGES:** | | |
| Jim Lehtinen, Project Geologist | | |
| 0.75 days @ $400/day | $ 300.00 | |
| Katherina Ross, Geologist | | |
| 6.25 days @ $350/day | 2,187.50 | |
| Tom Bell, Prospector | | |
| 1.0 days @ $300/day | 300.00 | |
| Bruce Holden, Prospector | | |
| 2.0 days @ $300/day | 600.00 | |
| David Ridley, Prospector | | |
| 3.25 days @ $300/day | 975.00 | |
| Cathy Ridley, Prospector | | |
| 2.0 days @ $300/day | 600.00 | |
| David Hicks, Sampler | | |
| 2.0 days @ $200/day | 400.00 | |
| Dan Cosgrove, Sampler | | |
| 1.0 days @ $200/day | 200.00 | |
| Derek Roulston, Sampler | | |
| 2.0 days @ $200/day | 400.00 | |
| | | $ 5,962.50 |
| **EQUIPMENT RENTALS:** | | |
| Handheld Radios | | |
| 13 @ $5 | | 65.00 |
| **JOINT MOBILIZATION, SUPERVISION AND SUPPORT COSTS:** | | |
| Prorated in accordance with number of mandays worked on each of several claim groups in the Galore Creek area | | 4,685.32 |
| **CHEMICAL ANALYSES:** | | |
| Silt Samples | | |
| 29 @ $15.69 | $ 455.01 | |
| Rock Geochemical Samples | | |
| 43 @ $18.25 | 784.75 | |
| | | 1,239.76 |
| **EXPENSES:** | | |
| Materials and Supplies | $ 289.18 | |
| Maps and Publications | 2.17 | |
| Orthophoto Construction | 2,850.38 | |
| Printing and Reproductions | 536.61 | |
| Accomodation and Meals | 2,520.30 | |
| Helicopter Charters | 2,809.96 | |
| Telephone Distance Charges | 7.15 | |
| Freight | 21.04 | |
| | | 9,036.79 |
| **REPORT PREPARATION:** | | |
| (Estimated) | | 1,000.00 |
| | | $ 21,989.37 |

# STATEMENT OF EXPENDITURES
## SCUD RIVER NORTH CLAIM GROUP

| | | |
|---|---|---|
| **PROFESSIONAL FEES AND WAGES:** | | |
| Jim Lehtinen, Project Geologist | | |
| 1.75 days @ $400/day | $ 700.00 | |
| Katherina Ross, Geologist | | |
| 5.25 days @ $350/day | 1,837.50 | |
| Tom Bell, Prospector | | |
| 2.0 days @ $300/day | 600.00 | |
| Bruce Holden, Prospector | | |
| 2.0 days @ $300/day | 600.00 | |
| David Ridley, Prospector | | |
| 2.25 days @ $300/day | 675.00 | |
| David Hicks, Sampler | | |
| 4.0 days @ $200/day | 800.00 | |
| Derek Roulston, Sampler | | |
| 1.0 days @ $200/day | 200.00 | |
| | | $ 5,412.50 |
| **EQUIPMENT RENTALS:** | | |
| Handheld Radios | | |
| 13 @ $5 | | 65.00 |
| **JOINT MOBILIZATION, SUPERVISION AND SUPPORT COSTS:** | | |
| Prorated in accordance with number of mandays worked on each of several claim groups in the Galore Creek area | | 4,222.57 |
| **CHEMICAL ANALYSES:** | | |
| Silt Samples | | |
| 5 @ $15.69 | $ 78.45 | |
| Soil Samples | | |
| 69 @ $15.50 | 1,069.50 | |
| Rock Geochemical Samples | | |
| 32 @ $18.25 | 584.00 | |
| | | 1,731.95 |
| **EXPENSES:** | | |
| Materials and Supplies | $ 260.61 | |
| Maps and Publications | 1.95 | |
| Orthophoto Construction | 2,568.87 | |
| Printing and Reproductions | 483.61 | |
| Accomodation and Meals | 2,271.38 | |
| Helicopter Charters | 2,532.44 | |
| Telephone Distance Charges | 6.45 | |
| Freight | 18.96 | |
| | | 8,144.27 |
| **REPORT PREPARATION:** | | |
| (Estimated) | | 1,000.00 |
| | | $ 20,576.29 |

# APPENDIX C

## ROCK DESCRIPTIONS

**EQUITY ENGINEERING LTD.**

## Geochemical Data Sheet - ROCK SAMPLING

NTS 104G/5,4

Sampler Bruce Holdern

Project KGG-89-07

Location Ref

Date Sept 3

Property JDI-VI

Air Photo No

| SAMPLE NO. | LOCATION | SAMPLE TYPE | Sample Width / True Width | DESCRIPTION | | | ADDITIONAL OBSERVATIONS | ASSAYS | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Rock Type | Alteration | Mineralization | | Au ppb | Ag ppm | Cu ppm | Pb ppm | Zn ppm | As ppm |
| 447233 | 6352400N 3482100E | Float | | Quartz Carbonate | Malachite | PY, CP | elev. 1327, silicified carbonate bright green malachite staining | 0.068 oz/T | 16.5 | 1.62% | 10 | 492 | 16 |
| 447234 | 6352950N 3482300E | Float | | Altered Rock | | PY. CP MG | elev. 1350m, very dense, highly magnetic | 530 | 5.5 | 7250 | 15 | 284 | 11 |
| 447235 | 6344900N 3481050E | Grab O.C. | | Limestone | SI | PY | elev. 1339m, euhedral pyrite, up to 3cm, strike bedding 180° | 25 | <0.5 | 377 | 5 | 168 | 12 |
| 447236 | 6352600N 3481300E | Float | | Carbonate vein | CB | PY-minor | elev. 1421 m, vein in grey limestone, euhedral Pyrite | 15 | <0.5 | 43 | <5 | 46 | 7 |
| 447237 | 6352600N 3481300E | Float | | Carbonate | minor Malachite | PY-minor | elev. 1574, very minor malachite, sample probably proximal to source | 10 | <0.5 | 232 | <5 | 34 | 10 |
| 447238 | 6347900N 3483700E | Grab O.C. | | Quartz vein | SI, CB | PY-minor | elev. 1252m altered zone, 25m wide striking 160°/-90° | 5 | <0.5 | 12 | <5 | 26 | 7 |
| 447239 | 6346400N 3484300E | Grab O.C. | | Limestone | CB | PY - 1% | elev 795, argillite/sediment contact disseminated Pyrite | <5 | <0.5 | 31 | 5 | 82 | 9 |
| 447240 | 6346200N 3483450E | Grab O.C. | | Argillite | CB | PY - 2% | elev. 660m, Pyritized zone, continues down creek canyon | <5 | 0.5 | 44 | 5 | 24 | 10 |
| 447241 | 6346600N 3482600E | Silt | | | | | | 5 | – | – | – | – | – |
| 447242 | 6347400N 3481400E | Silt | | | | | | 10 | – | – | – | – | – |
| 447243 | 6350600N 3480600E | Grab O.C. | | Argillite | SI, minor CB | PY - 3% | elev 409 m, highly silicified, pyrite disseminated + blebby | <5 | 1.0 | 6 | <5 | 8 | 19 |
| 447244 | 6350400N 3482600E | Grab O.C. | | Quartz vein | SI | PY - 2% | elev. 235m, host rock silicified argillite disseminated pyrite in vein + host | 10 | 1.0 | 48 | <5 | 64 | 9 |
| 447245 | 6350200N 3482600E | Grab. O.C. | | Graphitic Argillite | | PY - 4% | elev. 200m, foliated | 15 | 3.0 | 180 | 15 | 192 | 43 |
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**EQUITY ENGINEERING LTD.**

## Geochemical Data Sheet - ROCK SAMPLING

NTS 104G/5E

Sampler Derek Ralston

Date Sept 11, 1989

Project KGG89-07

Property SCUD RIVER

Location Ref

Air Photo No

| SAMPLE NO. | LOCATION | SAMPLE TYPE | Sample Width / True Width | DESCRIPTION | | | ADDITIONAL OBSERVATIONS | ASSAYS | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Rock Type | Alteration | Mineralization | | Au ppb | Ag ppm | Cu ppm | Pb ppm | Zn ppm | As ppm |
| 459854 | 6346000 N 343110 E | GRAB O/C | 2m / 2 | LIMESTONE | OXIDIZED | PY >> CP | MINOR PY, CP IN limestone over 2m width | <5 | 0.5 | 13 | 5 | 46 | 9 |
| 855 | 6346010 N 343120 E | GRAB O/C | 15cm | diorite | SI | PY | PY <1% IN intrusion altered Inst. wall rock, oxidized | | <0.5 | 63 | <5 | 58 | 1 |
| 856 | 6346130 N 343440 E | GRAB O/C | 2m | LIMESTONE | SI, CB | PY, CP | sulfides 3% over 2m width, silica altered. | | | 53 | <5 | 34 | 1 |
| 857 | 6347480 N 345460 E | GRAB O/C | 1m | qtz | | PY, CP | | | | 123 | 5 | 200 | 14 |
| 858 | 6347160 N 345120 E | GRAB O/C | 1m | ARGILITE | SI | PY | PY VEINS IN ARGILITE, 2mm wide OVER 2m width of O/C | | | 80 | 45 | 136 | 1 |
| 859 | 6347480 N 345510 E | GRAB O/C | 3m | qtz | | PY, CP | WELL CRYSTALLIZED QTZ VEINS | ↓ | ↓ | 63 | <5 | 62 | 12 |
| | | | | | | | | | | | | | |
| J. Lehtinen | | | | | | | | oz/T | | % | % | % | |
| 447050 | e ? N 6,350,930 E 352,150 | Grab O/C | | Magnetite Skarn | | massive magnetite Trace pyrite, chalcopyrite | - Skarn zone in limestone - massive magnetite + sulphides | 0.002 | | 0.20 | <0.01 | 0.03 | |
| 463651 | e N E | Float | | Skarn | | Sulphides 80% Pyrrhotite 90% CCP, PY 10% | - Crude banding | 0.010 | | 0.4% | <0.01 | 0.01 | |
| 463652 | e N E | Float | | Skarn | | sulphides 25% Pyrite : Arsenopyrite 50 : 50 | - Trace galena + sphalerite | 0.410 | | 0.09 | 0.27 | 0.81 | |
| 463653 | e N E | Float | | Skarn | | Sulphides 25% Py : CCP 1:1 | Silica and chlorite matrix Sulphides as fracture fill. | 0.088 | | 3.28 | 0.47 | [illegible] | |
| 463654 | e N E | Float | | Skarn | Garnet | chalcopyrite | Garnet skarn | 0.005 | | [illegible] | [illegible] | [illegible] | |
| 463655 | e ? N 6,352,700 E 352,620 | Grab O/C | | Argillite | silicification | pyrite 10% | - disseminated sulphides (py) | 0.004 | | [illegible] | <0.01 | 0.01 | |

PRINTED IN CANADA

**EQUITY ENGINEERING LTD.**

# Geochemical Data Sheet - ROCK SAMPLING

NTS 104G/4,5

Sampler Kika Ross | Project KGG-89-07 | Location Ref

Date Sept 17/89, Sept. 21/89 | Property JD I-VI (SCUD RIVER PROJECT) | Air Photo No

| SAMPLE NO. | LOCATION | SAMPLE TYPE | Sample Width / True Width | DESCRIPTION | | | ADDITIONAL OBSERVATIONS | ASSAYS | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Rock Type | Alteration | Mineralization | | Au ppb | Ag ppm | Cu ppm | Pb ppm | Zn ppm | As ppm |
| 459346 | 6350570 N 346720 E | Grab O.C. | 1m | Silicified Limestone | SI | - | elev. 230m, fine grained, dark grey, siliceous, quartz stockwork - barren | 15 | <0.5 | 3 | 5 | 12 | 1 |
| 459347 | 6351340 N 346450 E | Grab O.C. | 1m | Schist | SI, CB | Py - minor | elev. 360m, foliated unit in undeformed silicified limestones, foliation 350°/60° | <5 | <0.5 | 28 | <5 | 28 | 15 |
| 459348 | 6351640 N 346290 E | Grab O.C. | 1m | Chert | SI | - | elev. 360, dark grey, barren quartz vein | <5 | <0.5 | 5 | 25 | 32 | 3 |
| 463106 | 6347670 N 346380 E | Grab O.C. | 2m ? | Chert | SI | - | elev. 560m, weak foliation 42°/52° mottled dark + light grey | 10 | 0.5 | 189 | <5 | 34 | 11 |
| 463107 | 6347700 N 346460 E | Silt | | | | | See Silt Sheet | | | | | | |
| 463108 | 6347800 N 346490 E | Silt | | | | | See Silt Sheet | | | | | | |
| 463109 | 6348460 N 346480 E | Grab O.C. | 0.5m 2m | Argillite | | - | elev. 300 m, pale grey - weathers white | 3550 | 0.5 | 98 | 5 | 36 | 1 |
| | | | | | | | | | | | | | |
| 463128 | 6346280 N 343450 E | Silt | | | | | See Silt Sheet | - | - | - | - | - | - |
| 463129 | 6346800 N 343500 E | Grab O.C. | 2m 15cm | Quartz Vein | SI | - | elev 1100m., Pinkish veins 5-15cm in limestone near intrusive, strike 30/60° | 70 | <0.5 | 38 | <5 | 14 | 2 |
| 463130 | 6346900 N 343510 E | Float | | Altered Intrusive | Oxidized | Py. 1% | elev. 1140m, highly oxidized granodiorite, irregularly intruded in limestone | 20 | 1.0 | 120 | 5 | 20 | 4 |
| 463131 | 6346660 N 343130 E | Grab O.C. | 1m - | Altered Intrusive | Oxidized | Py 1% | elev. 1220m, same as 463130 | <5 | <0.5 | 25 | <5 | 42. | 4 |
| | | | | | | | | | | | | | |
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**EQUITY ENGINEERING LTD.**

# Geochemical Data Sheet - ROCK SAMPLING

NTS 104G/4,5

Sampler David Ridley

Date Sept 11/89

Project KEG-89-07

Property JDI-VI, BELL 1+2, PL 1

Location Ref

Air Photo No

| SAMPLE NO. | LOCATION | SAMPLE TYPE | Sample Width / True Width | DESCRIPTION | | | ADDITIONAL OBSERVATIONS | ASSAYS | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Rock Type | Alteration | Mineralization | | Au ppb | Ag ppm | Cu ppm | Pb ppm | Zn ppm | As ppm |
| 459569 | 6345850N 342900E | Grab O.C. | 0.5m | Mafic Dyke | CL, CB | — | elev. 1000m, grey green, striking 140°/-50°NE, no visible sulphides | <5 | <0.5 | 22 | <5 | 52 | 1 |
| 459570 | 6346000N 342740E | Grab O.C. | 1.0m | Granodiorite | Biotite | — | elev 1090m, 40% biotite, cut by previous dyke, intrudes limestone | 30 | | 11 | 5 | 76 | 3 |
| 459571 | 6345780N 342250E | Float | — | Altered Sediments | SI | Py - 1% | elev. 1115m, gossan in limestone | 25 | | 110 | <5 | 174 | 11 |
| 459572 | 6346070N 342320E | Grab O.C. | 1.0m | Skarn | CALC-SILICATE | Py - 2% | elev 1237m, near contact with granodiorite, 3 skarn zones, agg. 1 | <5 | | 57 | 5 | 112 | 9 |
| 459573 | 6346050N 342270E | Grab O.C. | 1.0m | Skarn | " " | Py - 3% | elev. 1240 m, 70 m west of #572 | 50 | | 79 | 30 | 138 | 4 |
| 459574 | 6346040N 342240E | Grab O.C. | 1.0m | Skarn | " " | Py - 2-3% | elev 1240m, 70 m west of #573, | <5 | | 56 | 5 | 96 | 1 |
| 459575 | 6345790N 342710E | Grab O.C. | 1.0m | Hornfels | Biotite, Oxidized | Py - trace | elev 1005m, rusty weathering, probable continuation of #570 | <5 | | 3 | <5 | 34 | 2 |
| 459576 | 6344710N 343350E | Grab, O.C. | 1.0m / 2.5m | Altered sediment | CB | Py - 1% | elev. 934 m, interbedded with argillitic argillites, trending 90° | <5 | ↓ | 14 | 5 | 72 | 5 |
| 459589 | 6349500N 348320E | Float | — | Arenite | CB | Py - minor | elev. 1030m, talus, below a small gossan | <5 | <0.5 | 4 | <5 | 18 | 2 |
| | | | | | | | | | | | | | |
| 463051 | 6349580N 348340E | Float | ? | Arenite | CB, SI | Py - 1% | elev. 1030m, talus, carbonate veining, qtz. lenses 2x10 mm | <5 | <0.5 | 6 | 7 | <5 | 2 |

**EQUITY ENGINEERING LTD.**

# Geochemical Data Sheet - ROCK SAMPLING

NTS 104G/4,5

Sampler Kika Ross | Project KGG-89-07 | Location Ref

Date Sept 3/89, Sept 11/89 | Property JD I-VI, Bell 1&2, PL-1 (SCUD RIVER PROJECT) | Air Photo No

| SAMPLE NO. | LOCATION | SAMPLE TYPE | Sample Width / True Width | DESCRIPTION: Rock Type | Alteration | Mineralization | ADDITIONAL OBSERVATIONS | ASSAYS: Au ppb | Ag ppm | Cu ppm | Pb ppm | Zn ppm | As ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 459302 | 6352480 N 347860 E | Grab O.C. | 1m | Siltstone | CB | Py - 1% | elev. 1450m, siltstone/limestone contact, host rock weathers to a silty sacl | 10 | <0.5 | 10 | <5 | 46 | 10 |
| 459303 | 6352470 N 347690 E | Grab O.C. | 1m | Siltstone | CB | Py 1% | elev. 1420m, dark grey, barren qtz-carb, veins cut rock randomly | 15 | <0.5 | 1 | \| | 4 | 12 |
| 459304 | 6352470 N 347590 E | Grab O.C. | 1m / 6m | Argillite | SI | Py 1% | elev. 1400m, silicified zone, bleached to a pale grey - prob equivalent to previous samples | 5 | <0.5 | 26 | \| | 92 | 10 |
| 459305 | 6351710 N 348520 E | Grab O.C. | 2m | Quartz-carb vein in Argillite | CB, QZ | Py, cp | elev. 1060m, stringers in argillite, both host + vein contain blebby sulphide | <5 | <0.5 | 19 | \| | 62 | 19 |
| 459306 | 6351670 N 348440 E | Grab O.C. | 20cm | Dyke | | Py - 5% | elev 1450m, fine grained, pale grey/massive pyrite infills fractures, | <5 | 1.5 | 9 | ↓ | 76 | 10 |
| 459307 | 6351800 N 348440E | Grab O.C. | 0.5m | Cherty Sediment | FE | Py 2% | elev 1110m, grey, aphanitic, strongly magnetic, widscent Fe stain on surface | <5 | <0.5 | 17 | 5 | 84 | 9 |
| 459317 | 6344560 N 341640 E | Silt | | | | | See Silt Sheet | - | - | - | - | - | - |
| 459318 | 6344540 N 341540 E | Silt | | | | | See Silt Sheet | - | - | - | - | - | - |
| 459319 | 6344920 N 341500 E | Grab O.C. | 1.0m | Argillite | Oxidized | Py -1% | elev 1025, black - rusty weathering, bedding strikes 174°/-80° W | 10 | 1.5 | 118 | 10 | 168 | 4 |
| 459320 | 6344280 N 341230 E | Grab O.C. | 1.0m | Argillite | SI | Py -1% | elev. 980, silicified laminated argillite bedding strikes 176°/-66° E | 115 | <0.5 | 45 | <5 | 66 | 2 |
| 459321 | 6343880 N 342540E | Grab O.C. | 1.0m | Altered Sediment | SI | Py - 2% | elev. 560m, pyrite disseminated and massive in fractures | <5 | <0.5 | 45 | 5 | 78 | 3 |
| 459322 | 6343910 N 342670 E | Grab O.C. | 0.5m | Graphitic Argillite | CB | Py - trace | elev. 560m, bedding 62°/-34° SE | <5 | <0.5 | 51 | <5 | 570 | 6 |
| 459323 | 6343220 N 341800 E | Grab O.C. | 5cm | Lapilli Tuff | QZ-CB | PO - 15% | elev. 620m, high grade quartz-pyrrhotite vein | <5 | <0.5 | 239 | 25 | 64 | 1 |
| 459324 | 6343220 N 341800 E | Grab O.C. | 0.5m ? | Lapilli Tuff | CB | - | elev. 620m, tuff without veining | <5 | <0.5 | 54 | 5 | 76 | 2 |
| 459325 | 6343180 N 341740 E | Grab O.C. | 0.5m | Lapilli Tuff | CB | Py-1% | elev. 620m, tuff with disseminated pyrite | <5 | <0.5 | 77 | <5 | 60 | 6 |
| 459341 | 6352580 N 345770 E | Grab O.C. | 2m ? | Mafic Volcanic | CB, CL | Py 2% | elev. 420m, right at limestone/volcanic contact, disseminated pyrite | <5 | <0.5 | 72 | <5 | 66 | 5 |
| 459342 | 6352540 N 345770 E | Grab O.C. | 1.5m / 2m | Schist | CB, SI | Py - 2% | elev. 400m, quartz stringers with pyrite | <5 | <0.5 | 171 | 5 | 50 | 9 |
| 459343 | 6352500 N 345760 E | Grab O.C. | 1m / 25cm | Quartz Vein | SI | Po > Py 15% | elev 365m, in mafic volcanics, strike 275°/-70° N, massive sulphides | 1320 | 6.5 | 787 | <5 | 18 | 2 |
| 459344 | 6352330 N 345760 E | Grab O.C. | 1m | Schist | CB, SI | Py - 2% | elev. 290m, pyrite in foliations striking 338°/70° | <5 | <0.5 | 188 | <5 | 44 | 1 |
| 459345 | 6352050 N 345940 E | Grab O.C. | 2m | mafic Volcanic | SI | Py - 3% | elev. 260m, very fine grained with disseminated Pyrite and tiny veinlets | <5 | <0.5 | 150 | 25 | 24 | 4 |

**EQUITY ENGINEERING LTD.**

# Geochemical Data Sheet - ROCK SAMPLING

NTS 104G/4,5

Sampler Bruce Holder | Project KGG-89-07 | Location Ref

Date Sept 1989 | Property Bell 1+2, PL-1 | Air Photo No

| SAMPLE NO. | LOCATION | SAMPLE TYPE | Sample Width / True Width | DESCRIPTION | | | ADDITIONAL OBSERVATIONS | ASSAYS | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Rock Type | Alteration | Mineralization | | Au ppb | Ag ppm | Cu ppm | Pb ppm | Zn ppm | As ppm |
| 447246 | 341040E 6345220N | Grab/oc | | Altered argillite | Ox | Py-50% | 1372m. elev. Pyrite pods on argillite/intrusive contact; nonmagnetic | 25 | 1.5 | 383 | 5 | 82 | 33 |
| 447247 | 341140E 6345180N | Grab/oc | | Quartz-carb vein | silica | Py-minor | 1300m elev. host rock sediment with disseminated pyrite | <5 | <0.5 | 33 | 10 | 50 | 120 |
| 447248 | 341060E 6345000N | Grab/oc | | Altered Sediment | Ox | Py, CP -60% | 1300m. elev. massive sulphide pod; 2x3m in area, highly oxidized | <5 | 1.0 | 1165 | 10 | 64 | 10 |
| 447249 | 341320E 6344860N | Grab/oc | 12cm | Quartz vein | silica | PY-70% | 1084m. elev. vein in granodiorite intrusion, massive pyrite 020°/30° | 2480 | 1.5 | 211 | 30 | 204 | 110 |
| 447250 | 341500E 6345000N | Grab/oc | | Quartz vein | silica | PY-20% | 1084m. elev. gossanous sediment host; massive pyrite; silicified zone | 10 | <0.5 | 56 | 5 | 36 | 10 |
| 459501 | 341680E 6345020N | Grab/oc | | Argillite | silica | PY-15% | 1050m. elev. silicified rock with finely disseminated pyrite | <5 | <0.5 | 36 | 15 | 66 | 20 |
| 459502 | 343840E 6344650N | Float | | Quartz | silica | PY-1% | 600m elev. host-graphitic argillites, base of cliffs | <5 | <0.5 | 68 | <5 | 2350 | 15 |
| 459503 | 344070E 6344770N | Grab/oc | | Limestone | silica | PY-2% | 671m elev. white limestone with pyrite stringers | <5 | 2.5 | 6 | <5 | 32 | 9 |
| 459504 | 345110E 6345860N | Silt | | | See Silt Sheet | | | 25 | - | - | - | - | - |
| 459505 | 345080E 6345880N | Float | | Quartz vein | silica | Py-minor | 610m. elev. creek bed in canyon | <5 | <0.5 | 26 | <5 | 16 | 7 |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| Tom Bell | | Sept 5/89 | | Bell 1+2, PL1 | | | | | | | | | |
| 172425 | 345400E 6345240N | Float | | Calcite + quartz vein | CB, OX | PY-2% | 1090m. elev. talus, bladed | <5 | 0.5 | 42 | <5 | 10 | 7 |
| 172426 | 345230E 6344830N | Float | | Altered Sediment | Qtz, Chl, LI | PY-3% | 1160m. elev. talus, quartz vein in sediments, highly altered | <5 | 0.5 | 106 | 5 | 60 | 9 |
| 172427 | 344430E 6344480N | Silt | | | See Silt Sheet | | | - | | | | | |
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**EQUITY ENGINEERING LTD.**

# Geochemical Data Sheet - ROCK SAMPLING

NTS 104G/5: 104G/4

Sampler Tom BELL | Project KGG-89-07 | Location Ref

Date Sept 3+4, 1989 | Property SCUD RIVER PROJECT | Air Photo No

| SAMPLE NO. | LOCATION | SAMPLE TYPE | Sample Width / True Width | DESCRIPTION | | | ADDITIONAL OBSERVATIONS | ASSAYS | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Rock Type | Alteration | Mineralization | | Au ppb | Ag ppm | Cu ppm | Pb ppm | Zn ppm | As ppm |
| 172421 | 348640 E 6351970 N | Grab/oc | 50cm | Altered Seds | CB, LI | Py, Po | 1175m. elev. Toe of glacier. 50cm shear zone; 135°/vertical | <5 | <0.5 | 31 | <5 | 28 | 11 |
| 172422 | 348660 E 6351990 N | Grab/oc | | Altered Seds | CB | minor Py Cp | 1185m elev; 10-20cm. shear zone; 160°/30°NE. | <5 | ↓ | 21 | 5 | 56 | 22 |
| 172423 | 347950 E 6351225 N | Float | | Altered Seds | Ox | Py>>Cp>Po | 950m. elev; massive sulphides magnetic | 30 | | 3190 | 5 | 60 | 17 |
| 172424 | 347760 E 6351280 N | Grab/oc | 10m / 10cm | Calcite vein | CB | Py-3% | 860m elev.; host-dark siltstone/ argillite. vein strikes 145°/dip vertical | 5 | | 55 | 5 | 194 | 6 |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| Jim Lehtinen: Sept. 29/89 | | | | Scud R. | | | | | | | | | |
| 447030 | 348440 E 6351800 N | Grab/oc | 1.0m / 5.0m | Sediments | | Pyrrhotite | 1110m elev. Grab over 1.0m of 5.0m. width; rusty zone | 5 | 0.5 | 21 | 5 | 130 | 2 |
| 447031 | 348780 E 6351750 N | Float | | Quartz/ Sulphides | | Py; po; cp galena sphalerite | 1180m elev. -possibly skarn mineralization -potassium altered rx w/ cep | 445 | 13.5 | 8420 | 5 | 202 | 14 |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| Catherine Ridley: Sept. 17/89 | | | | JDI-VI | | | | | | | | | |
| 459829 | 344490 E 6348400 N | Grab/oc | | Limestone | S1 | Py-minor | 830m elev.; E side of saddle yellow coating on rock | <5 | <0.5 | 10 | <5 | 8 | 5 |
| 459830 | 344650 E 6348340 N | Grab/oc | 15x20m | mafic intrusive | S1 | Py-1% | 845m elev. W side of saddle; fine grained, dk. grey, jointing 10% | <5 | <0.5 | 56 | <5 | 116 | 2 |
| 459831 | 344700 E 6348250 N | Grab/oc | 30cm | Graphitic argillite | S1 | Py-trace | 780m. elev, barren qtz. stockwork foliated | <5 | 0.5 | 5 | 5 | 12 | 5 |
| 459832 | 344890 E 6348060 N | Grab/oc | 30m. | phyllite | S1 | Py-trace | 625m. elev.; shear zone, rusty weathering; crosses small creek | <5 | 0.5 | 37 | <5 | 64 | 3 |
| 459833 | 344900 E 6348020 N | Grab/oc | 25cm | Quartz vein | S1 | Py-trace | 625m elev.; vein in shear, exposed for 6m. hosted in graphitic phyllite | <5 | 0.5 | 16 | 5 | 168 | 6 |
| 459828 | 344470 E 6348480 N | Grab/oc | ? | chert | S1 CB | Py-trace | 830m elev near contact w/ argillite | <5 | <0.5 | 22 | 5 | 28 | 10 |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

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: ME EXPLORATIONS LTD.

808 W. HASTINGS ST., 10TH FLOOR
VANCOUVER, BC
V6C 2X6

Project : SCUD RIVER
Comments: ATTN: JIM FOSTER cc: EQUITY ENGINEERING

* Page No.
Tot. Page.
Date :29-SEP-89
Invoice # :I-8925768
P.O. # :KGG89-07

## CERTIFICATE OF ANALYSIS A8925768

| SAMPLE DESCRIPTION | PREP CODE | | Au ppb FA+AA | As ppm | Ag ppm | Co ppm | Cu ppm | Fe % | Mn ppm | Mo ppm | Ni ppm | Pb ppm | Zn ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 172421 | 205 | 298 | < 5 | 11 | < 0.5 | 14 | 31 | 3.65 | 280 | 5 | 40 | < 5 | 28 |
| 172422 | 205 | 298 | < 5 | 22 | < 0.5 | 16 | 21 | 3.06 | 220 | < 1 | 27 | 5 | 56 |
| 172423 | 205 | 298 | 30 | 17 | < 0.5 | 32 | 3190 | >15.00 | 1040 | < 1 | < 1 | 5 | 60 |
| 172424 | 205 | 298 | 5 | 6 | < 0.5 | 8 | 55 | 3.40 | 985 | < 1 | 42 | 5 | 194 |
| 447233 | 205 | 298 | 2500 | 16 | 16.5 | 34 | >10000 | 3.72 | 415 | 9 | 33 | 10 | 492 |
| 447234 | 205 | 298 | 530 | 11 | 5.5 | 45 | 7250 | >15.00 | 660 | < 1 | 9 | 15 | 284 |
| 447235 | 205 | 298 | 25 | 12 | < 0.5 | 31 | 377 | 10.95 | 540 | < 1 | 4 | 5 | 168 |
| 447236 | 205 | 298 | 15 | 7 | < 0.5 | 2 | 43 | 0.90 | 165 | < 1 | 4 | < 5 | 46 |
| 447237 | 205 | 298 | 10 | 10 | < 0.5 | < 1 | 252 | 0.89 | 195 | < 1 | 4 | < 5 | 34 |
| 447238 | 205 | 298 | 5 | 7 | < 0.5 | < 1 | 12 | 1.01 | 485 | 1 | 8 | < 5 | 26 |
| 447239 | 205 | 298 | < 5 | 9 | < 0.5 | 6 | 31 | 2.39 | 395 | < 1 | 7 | 5 | 82 |
| 447240 | 205 | 298 | < 5 | 10 | 0.5 | 10 | 44 | 3.52 | 80 | 1 | 3 | 5 | 24 |
| 447243 | 205 | 298 | < 5 | 19 | 1.0 | 1 | 6 | 0.50 | 35 | < 1 | 4 | < 5 | 8 |
| 447244 | 205 | 298 | 10 | 9 | 1.0 | 5 | 48 | 2.14 | 235 | < 1 | 6 | < 5 | 64 |
| 447245 | 205 | 298 | 15 | 43 | 3.0 | 29 | 180 | 6.98 | 165 | 37 | 45 | 15 | 192 |
| 459302 | 205 | 298 | 10 | 10 | < 0.5 | 4 | 10 | 1.33 | 380 | < 1 | 10 | < 5 | 46 |
| 459303 | 205 | 298 | 15 | 12 | < 0.5 | 1 | 1 | 0.20 | 40 | < 1 | 2 | < 5 | 4 |
| 459304 | 205 | 298 | 5 | 10 | < 0.5 | 7 | 26 | 2.56 | 350 | < 1 | 18 | < 5 | 92 |
| 459305 | 205 | 298 | < 5 | 19 | < 0.5 | 7 | 19 | 2.61 | 565 | < 1 | 36 | < 5 | 62 |
| 459306 | 205 | 298 | < 5 | 10 | 1.5 | 8 | 9 | 2.52 | 135 | < 1 | 15 | < 5 | 76 |
| 459307 | 205 | 298 | < 5 | 9 | < 0.5 | 6 | 17 | 2.10 | 185 | < 1 | 37 | 5 | 84 |

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CERTIFICATION : Ian R. Bichler

# Chemex Labs Ltd.

Analytical Chemists • Geochemists • Registered Assayers

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

PHONE (604) 984-0221


To: .ME EXPLORATIONS LTD.

808 W. HASTINGS ST., 10TH FLOOR
VANCOUVER, BC
V6C 2X6

Project : SCUD RIVER
Comments: ATTN: JIM FOSTER cc: EQUITY ENGINEERING

• Page No. :
Tot. Pages: 2
Date : 2-OCT-89
Invoice # : I-8925771
P.O. # : KGG89-07

## CERTIFICATE OF ANALYSIS A8925771

| SAMPLE DESCRIPTION | PREP CODE | | Au ppb FA+AA | As ppm | Ag ppm | Co ppm | Cu ppm | Fe % | Mn ppm | Mo ppm | Ni ppm | Pb ppm | Zn ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1230 L4050 000M | 201 | 298 | < 5 | 15 | < 0.5 | 9 | 6 | 5.79 | 800 | 6 | 18 | 5 | 80 |
| L4050 025M | 201 | 298 | < 5 | 16 | < 0.5 | 3 | 5 | 5.57 | 140 | 7 | 11 | 15 | 84 |
| L4050 050M | 201 | 298 | < 5 | 15 | 0.5 | 7 | 14 | 4.29 | 715 | 1 | 30 | 5 | 326 |
| L4050 075M | 201 | 298 | 25 | 24 | < 0.5 | 3 | 9 | 4.36 | 190 | 5 | 17 | 5 | 88 |
| L4050 100M | 201 | 298 | < 5 | 27 | < 0.5 | 6 | 17 | 3.04 | 790 | 2 | 26 | 10 | 112 |
| L4050 125M | 201 | 298 | < 5 | 16 | < 0.5 | 4 | 15 | 2.79 | 205 | 2 | 12 | 5 | 72 |
| L4050 150M | 201 | 298 | < 5 | 16 | < 0.5 | 4 | 7 | 3.91 | 325 | 3 | 6 | 10 | 82 |
| L4050 175M | 201 | 298 | < 5 | 22 | < 0.5 | 5 | 9 | 4.03 | 725 | 3 | 15 | 5 | 110 |
| L4050 200M | 201 | 298 | < 5 | 15 | < 0.5 | 7 | 14 | 3.35 | 645 | 1 | 24 | < 5 | 194 |
| L4050 225M | 201 | 298 | < 5 | 16 | < 0.5 | 3 | 4 | 2.54 | 240 | 1 | 10 | 10 | 102 |
| L4050 250M | 201 | 298 | < 5 | 16 | < 0.5 | 6 | 12 | 4.19 | 320 | < 1 | 15 | 10 | 114 |
| L4050 275M | 201 | 298 | 40 | 29 | < 0.5 | 7 | 25 | 3.15 | 705 | 2 | 29 | 10 | 120 |
| L4050 300M | 201 | 298 | 20 | 29 | < 0.5 | 13 | 38 | 3.92 | 1300 | 1 | 39 | 20 | 168 |
| L4050 325M | 201 | 298 | < 5 | 24 | < 0.5 | 10 | 18 | 3.69 | 625 | 5 | 40 | 5 | 130 |
| L4050 350M | 201 | 298 | 10 | 33 | < 0.5 | 13 | 21 | 4.53 | 1010 | 3 | 53 | 15 | 236 |
| L4050 400M | 201 | 298 | < 5 | 25 | < 0.5 | 13 | 25 | 4.13 | 1105 | 5 | 76 | 10 | 230 |
| L4050 425M | 201 | 298 | < 5 | 25 | < 0.5 | 11 | 15 | 4.17 | 415 | 6 | 89 | 5 | 220 |
| 1310 M L4300 000M | 201 | 298 | < 5 | 17 | < 0.5 | 8 | 24 | 3.25 | 4640 | 1 | 52 | 25 | 154 |
| L4300 025M | 201 | 298 | < 5 | 11 | < 0.5 | 9 | 15 | 2.96 | 910 | 2 | 13 | 10 | 102 |
| L4300 050M | 201 | 298 | < 5 | 15 | < 0.5 | 7 | 13 | 5.49 | 655 | 3 | 20 | 10 | 144 |
| L4300 075M | 201 | 298 | < 5 | 15 | < 0.5 | 8 | 11 | 3.59 | 400 | < 1 | 26 | < 5 | 120 |
| L4300 100M | 201 | 298 | < 5 | 12 | < 0.5 | 5 | 5 | 3.12 | 130 | < 1 | 18 | < 5 | 94 |
| L4300 125M | 201 | 298 | < 5 | 11 | < 0.5 | 2 | 3 | 3.36 | 100 | < 1 | 9 | < 5 | 72 |
| L4300 150M | 201 | 298 | < 5 | 11 | < 0.5 | 7 | 5 | 3.37 | 335 | 2 | 16 | < 5 | 94 |
| L4300 175M | 201 | 298 | < 5 | 12 | < 0.5 | 6 | 5 | 2.66 | 545 | 1 | 16 | < 5 | 96 |
| L4300 200M | 201 | 298 | < 5 | 17 | < 0.5 | 6 | 5 | 4.82 | 305 | < 1 | 13 | < 5 | 106 |
| L4300 225M | 201 | 298 | < 5 | 17 | < 0.5 | 8 | 7 | 3.51 | 1630 | 4 | 19 | < 5 | 90 |
| L4300 250M | 201 | 298 | < 5 | 22 | < 0.5 | 11 | 15 | 3.98 | 1145 | 1 | 31 | < 5 | 162 |
| L4300 275M | 201 | 298 | < 5 | 20 | < 0.5 | 10 | 11 | 4.40 | 500 | 2 | 24 | < 5 | 140 |
| L4300 300M | 201 | 298 | < 5 | 22 | < 0.5 | 10 | 14 | 4.02 | 890 | 1 | 24 | < 5 | 110 |
| L4300 325M | 201 | 298 | < 5 | 15 | < 0.5 | 8 | 13 | 3.76 | 940 | 1 | 25 | < 5 | 136 |
| L4300 350M | 201 | 298 | < 5 | 19 | < 0.5 | 9 | 18 | 3.50 | 545 | < 1 | 33 | < 5 | 142 |
| L4300 375M | 201 | 298 | < 5 | 22 | 0.5 | 9 | 19 | 3.55 | 470 | 1 | 34 | < 5 | 118 |
| L4300 400M | 201 | 298 | < 5 | 17 | < 0.5 | 7 | 8 | 3.44 | 460 | 2 | 21 | < 5 | 78 |
| L4300 425M | 201 | 298 | < 5 | 15 | < 0.5 | 5 | 7 | 2.49 | 520 | 1 | 15 | 5 | 82 |
| L4300 450M | 201 | 298 | < 5 | 15 | < 0.5 | 7 | 9 | 2.58 | 270 | 1 | 18 | < 5 | 88 |
| L4300 475M | 201 | 298 | < 5 | 17 | < 0.5 | 7 | 8 | 2.74 | 305 | 3 | 18 | < 5 | 102 |
| L4300 500M | 201 | 298 | < 5 | 50 | < 0.5 | 11 | 17 | 3.76 | 805 | 7 | 63 | < 5 | 134 |
| L4300 525M | 201 | 298 | < 5 | 14 | < 0.5 | 6 | 7 | 2.16 | 245 | 1 | 14 | < 5 | 92 |
| L4300 550M | 201 | 298 | < 5 | 15 | < 0.5 | 7 | 9 | 3.25 | 400 | 3 | 18 | < 5 | 102 |

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CERTIFICATION : Stewart Buchler

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

PHONE (604) 984-0221


To: ARIME EXPLORATIONS LTD.

808 W. HASTINGS ST., 10TH FLOOR
VANCOUVER, BC
V6C 2X6

Project : SCUD RIVER
Comments: ATTN: JIM FOSTER CC: EQUITY ENGINEERING


Date : 2-OCT-89
Invoice # : I-8925771
P.O. # : KGG89-07

## CERTIFICATE OF ANALYSIS A8925771

| SAMPLE DESCRIPTION | PREP CODE | | Au ppb FA+AA | As ppm | Ag ppm | Co ppm | Cu ppm | Fe % | Mn ppm | Mo ppm | Ni ppm | Pb ppm | Zn ppm | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L4300 575M | 201 | 298 | 10 | 15 | < 0.5 | 7 | 11 | 2.91 | 470 | 2 | 21 | < 5 | 94 | | | |
| L4300 600M | 201 | 298 | < 5 | 11 | < 0.5 | 6 | 13 | 2.25 | 420 | 1 | 15 | < 5 | 76 | | | |
| L4300 625M | 201 | 298 | 5 | 11 | < 0.5 | 7 | 13 | 2.49 | 400 | < 1 | 18 | 5 | 80 | | | |
| L4300 650M | 201 | 298 | < 5 | 19 | < 0.5 | 9 | 16 | 3.72 | 840 | 3 | 54 | < 5 | 176 | | | |
| L4300 675M | 201 | 298 | < 5 | 9 | < 0.5 | 6 | 15 | 2.24 | 365 | < 1 | 14 | < 5 | 80 | | | |
| 1330 L4400 000M | 201 | 298 | < 5 | 11 | < 0.5 | 5 | 12 | 1.44 | 330 | < 1 | 16 | 10 | 78 | | | |
| L4400 025M | 201 | 298 | < 5 | 10 | < 0.5 | 2 | 5 | 0.79 | 255 | < 1 | 6 | 5 | 50 | | | |
| L4400 050M | 201 | 298 | 5 | 12 | < 0.5 | 2 | 7 | 1.28 | 360 | < 1 | 10 | 5 | 62 | | | |
| L4400 075M | 201 | 298 | < 5 | 10 | 0.5 | 1 | 3 | 0.60 | 260 | < 1 | 4 | 5 | 42 | | | |
| L4400 100M | 201 | 298 | 5 | 9 | 0.5 | 1 | 3 | 0.39 | 185 | < 1 | 3 | < 5 | 24 | | | |
| L4400 125M | 201 | 298 | < 5 | 16 | < 0.5 | 2 | 7 | 1.58 | 190 | 1 | 14 | 5 | 66 | | | |
| L4400 150M | 201 | 298 | 15 | 12 | 1.0 | 2 | 5 | 1.06 | 385 | 1 | 8 | 5 | 56 | | | |
| L4400 175M | 201 | 298 | 65 | 11 | < 0.5 | 2 | 7 | 1.14 | 300 | < 1 | 6 | < 5 | 42 | | | |
| L4400 200M | 201 | 298 | 5 | 17 | 0.5 | 2 | 8 | 1.50 | 180 | < 1 | 11 | < 5 | 66 | | | |

CERTIFICATION : Dan Bichler

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PHONE (604) 984-0221


To: PRIME EXPLORATIONS LTD.

808 W. HASTINGS ST., 10TH FLOOR
VANCOUVER, BC
V6C 2X6

Project : SCUD RIVER
Comments: ATTN: JIM FOSTER CC: EQUITY ENGINEERING


Date : 21-NOV-89
Invoice # : I-8925772
P.O. # : KGG89-07

## CERTIFICATE OF ANALYSIS A8925772

| SAMPLE DESCRIPTION | PREP CODE | | Au ppb FA+AA | Al % | Ag ppm | As ppm | Ba ppm | Be ppm | Bi ppm | Ca % | Cd ppm | Co ppm | Cr ppm | Cu ppm | Fe % | Ga ppm | Hg ppm | K % | La ppm | Mg % | Mn ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 172427 | 201 | 238 | 15 | 2.25 | 0.2 | 15 | 210 | < 0.5 | < 2 | 1.64 | 4.5 | 21 | 66 | 161 | 5.79 | < 10 | < 1 | 0.10 | 10 | 1.61 | 960 |
| 447241 | 201 | 238 | 5 | 2.29 | < 0.2 | 5 | 140 | < 0.5 | 2 | 1.79 | 1.5 | 11 | 48 | 53 | 2.82 | 10 | < 1 | 0.09 | 10 | 0.84 | 620 |
| 447242 | 201 | 238 | 10 | 1.00 | 0.4 | 20 | 450 | < 0.5 | < 2 | 0.51 | 3.5 | 13 | 26 | 80 | 3.60 | < 10 | < 1 | 0.06 | 10 | 0.46 | 685 |

CERTIFICATION : B. Caplin

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PHONE (604) 984-0221

To: PRIME EXPLORATIONS LTD.
808 W. HASTINGS ST., 10TH FLOOR
VANCOUVER, BC
V6C 2X6
Project : SCUD RIVER
Comments: ATTN: JIM FOSTER CC: EQUITY ENGINEERING


Date : 21-NOV-89
Invoice # : I-8925772
P.O. # : KGG89-07

# CERTIFICATE OF ANALYSIS A8925772

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 172427 | 201 | 238 | 13 | 0.02 | 101 | 1640 | 6 | < 5 | 6 | 77 | 0.25 | < 10 | < 10 | 120 | < 10 | 350 |
| 447241 | 201 | 238 | 2 | 0.03 | 37 | 960 | 8 | 5 | 4 | 73 | 0.10 | 10 | 10 | 86 | < 10 | 126 |
| 447242 | 201 | 238 | 7 | 0.01 | 53 | 1060 | 8 | < 5 | 4 | 36 | 0.03 | < 10 | < 10 | 52 | < 10 | 286 |

CERTIFICATION : B. Caghi

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BRITISH COLUMBIA, CANADA V7J 2C1
PHONE (604) 984-0221

PRIME EXPLORATIONS LTD.

808 W. HASTINGS ST., 10TH FLOOR
VANCOUVER, BC
V6C 2X6

Project : SCUD RIVER
Comments: ATTN: JIM FOSTER CC: EQUITY ENGINEERING


Date : 28-SEP-89
Invoice # : I-8925773
P.O. # : KGG89-07

# CERTIFICATE OF ANALYSIS A8925773

| SAMPLE DESCRIPTION | PREP CODE | | Au ppb FA+AA | Al % | Ag ppm | As ppm | Ba ppm | Be ppm | Bi ppm | Ca % | Cd ppm | Co ppm | Cr ppm | Cu ppm | Fe % | Ga ppm | Hg ppm | K % | La ppm | Mg % | Mn ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 172354 | 217 | 238 | < 5 | 1.25 | < 0.2 | 10 | 630 | < 0.5 | < 2 | 0.65 | < 0.5 | 9 | 140 | 43 | 2.75 | 10 | < 1 | 0.24 | 20 | 0.60 | 515 |
| 172355 | 217 | 238 | < 5 | 0.98 | < 0.2 | 10 | 160 | < 0.5 | 2 | 0.66 | < 0.5 | 8 | 66 | 15 | 1.93 | 10 | < 1 | 0.18 | 10 | 0.66 | 420 |
| 172356 | 217 | 238 | < 5 | 1.20 | < 0.2 | 10 | 160 | < 0.5 | < 2 | 0.87 | < 0.5 | 9 | 99 | 25 | 2.56 | 10 | < 1 | 0.20 | 20 | 0.77 | 450 |
| 172357 | 217 | 238 | 10 | 1.22 | < 0.2 | < 5 | 260 | < 0.5 | < 2 | 1.04 | < 0.5 | 10 | 69 | 23 | 2.75 | 10 | < 1 | 0.18 | 20 | 0.77 | 460 |
| 172358 | 217 | 238 | < 5 | 1.83 | < 0.2 | < 5 | 190 | < 0.5 | < 2 | 0.88 | 0.5 | 11 | 135 | 38 | 3.17 | 10 | < 1 | 0.32 | 10 | 1.03 | 625 |
| 172359 | 217 | 238 | 270 | 1.35 | 0.2 | 10 | 140 | < 0.5 | 2 | 0.76 | 0.5 | 5 | 133 | 19 | 2.17 | 10 | < 1 | 0.21 | 20 | 0.54 | 405 |
| 172360 | 217 | 238 | < 5 | 1.39 | < 0.2 | 10 | 190 | < 0.5 | 2 | 0.98 | < 0.5 | 8 | 67 | 24 | 2.55 | 10 | < 1 | 0.21 | 20 | 0.80 | 485 |
| 172361 | 217 | 238 | 20 | 1.50 | < 0.2 | 5 | 200 | < 0.5 | < 2 | 1.11 | < 0.5 | 9 | 100 | 23 | 2.76 | 10 | < 1 | 0.22 | 20 | 0.66 | 505 |
| 172362 | 217 | 238 | < 5 | 1.69 | < 0.2 | 10 | 1160 | < 0.5 | < 2 | 1.14 | 1.5 | 9 | 193 | 42 | 3.13 | < 10 | < 1 | 0.31 | 10 | 0.56 | 520 |

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CERTIFICATION : B. Caughlin

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BRITISH COLUMBIA, CANADA V7J-2C1

PHONE (604) 984-0221


PRIME EXPLORATIONS LTD.

808 W. HASTINGS ST., 10TH FLOOR
VANCOUVER, BC
V6C 2X6

Project : SCUD RIVER
Comments: ATTN: JIM FOSTER CC: EQUITY ENGINEERING


Date :28-SEP-89
Invoice # :I-8925773
P.O. # :KGG89-07

## CERTIFICATE OF ANALYSIS A8925773

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 172354 | 217 | 238 | < 1 | 0.04 | 16 | 670 | 6 | < 5 | 4 | 64 | 0.08 | < 10 | < 10 | 58 | < 10 | 40 |
| 172355 | 217 | 238 | < 1 | 0.03 | 9 | 540 | 4 | < 5 | 3 | 61 | 0.07 | 10 | < 10 | 44 | < 10 | 28 |
| 172356 | 217 | 238 | < 1 | 0.04 | 11 | 670 | 4 | < 5 | 4 | 70 | 0.10 | 10 | < 10 | 64 | < 10 | 36 |
| 172357 | 217 | 238 | < 1 | 0.04 | 11 | 680 | 6 | < 5 | 4 | 91 | 0.11 | < 10 | < 10 | 70 | < 10 | 34 |
| 172358 | 217 | 238 | 1 | 0.06 | 23 | 810 | 8 | < 5 | 6 | 76 | 0.14 | < 10 | < 10 | 89 | < 10 | 84 |
| 172359 | 217 | 238 | 1 | 0.07 | 14 | 700 | 8 | < 5 | 4 | 56 | 0.12 | 10 | 10 | 65 | < 10 | 50 |
| 172360 | 217 | 238 | < 1 | 0.04 | 8 | 700 | 4 | < 5 | 5 | 96 | 0.13 | < 10 | < 10 | 70 | < 10 | 38 |
| 172361 | 217 | 238 | < 1 | 0.05 | 11 | 730 | 6 | < 5 | 5 | 122 | 0.14 | < 10 | < 10 | 81 | < 10 | 46 |
| 172362 | 217 | 238 | 12 | 0.03 | 37 | 1750 | 6 | < 5 | 5 | 50 | 0.04 | < 10 | < 10 | 116 | < 10 | 186 |

CERTIFICATION : B. Caughlin

# Chemex Labs Ltd.

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


PRIME EXPLORATIONS LTD.

808 W. HASTINGS ST., 10TH FLOOR
VANCOUVER, BC
V6C 2X6

Page Num : 1-A
Total Pages : 1
Invoice Date: 1-OCT-89
Invoice No. : I-8925967
P.O. Number : KGG89-07

Project : SCUD RIVER
Comments: ATTN: JIM FOSTER CC: EQUITY ENGINEERING

## CERTIFICATE OF ANALYSIS A8925967

| SAMPLE DESCRIPTION | PREP CODE | | Au ppb FA+AA | Al % | Ag ppm | As ppm | Ba ppm | Be ppm | Bi ppm | Ca % | Cd ppm | Co ppm | Cr ppm | Cu ppm | Fe % | Ga ppm | Hg ppm | K % | La ppm | Mg % | Mn ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 459504 | 201 | 238 | 25 | 0.75 | 0.6 | 35 | 230 | < 0.5 | 4 | 3.00 | 5.5 | 19 | 24 | 115 | 4.28 | < 10 | < 1 | 0.06 | 10 | 1.07 | 545 |

PROJECT: SCUD RIVER/CONSOLIDATED GOLDWEST PASS LAKE

Silt.

CERTIFICATION : B. Caughlin

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

PRIME EXPLORATIONS LTD.

808 W. HASTINGS ST., 10TH FLOOR
VANCOUVER, BC
V6C 2X6


Invoice Date: 1-OCT-89
Invoice No. : I-8925967
P.O. Number : KGG89-07

Project : SCUD RIVER
Comments: ATTN: JIM FOSTER CC: EQUITY ENGINEERING

## CERTIFICATE OF ANALYSIS A8925967

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 459504 | 201 | 238 | 33 | < 0.01 | 98 | 2040 | 2 | 5 | 3 | 74 | 0.03 | < 10 | < 10 | 55 | < 10 | 478 |

CERTIFICATION : B. Caughlin

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PRIME EXPLORATIONS LTD.

808 W. HASTINGS ST., 10TH FLOOR
VANCOUVER, BC
V6C 2X6

Project : SCUD RIVER
Comments: ATTN: JIM FOSTER CC: EQUITY ENGINEERING

Page No. : 1
Tot. Pages: 1
Date : 3-OCT-89
Invoice # : I-8925968
P.O. # : KGG89-07

## CERTIFICATE OF ANALYSIS A8925968

| SAMPLE DESCRIPTION | PREP CODE | | Au ppb FA+AA | As ppm | Ag ppm | Co ppm | Cu ppm | Fe % | Mn ppm | Mo ppm | Ni ppm | Pb ppm | Zn ppm | Au FA oz/T |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 172425 | 205 | 298 | < 5 | 7 | 0.5 | 2 | 42 | 0.94 | 270 | < 1 | 2 | < 5 | 10 | ---- |
| 172426 | 205 | 298 | < 5 | 9 | 0.5 | 15 | 106 | 3.98 | 215 | 3 | 7 | 5 | 60 | ---- |
| 447246 | 205 | 298 | 25 | 33 | 2.5 | 81 | 383 | >15.00 | 265 | < 1 | 20 | 5 | 82 | ---- |
| 447247 | 205 | 298 | < 5 | 120 | < 0.5 | 4 | 33 | 2.70 | 1060 | < 1 | 3 | 10 | 50 | ---- |
| 447248 | 205 | 298 | < 5 | 10 | 1.0 | 239 | 1165 | >15.00 | 1235 | < 1 | 26 | 10 | 64 | ---- |
| 447249 | 205 | 298 | 2480 | 110 | 1.5 | 74 | 211 | >15.00 | 60 | < 1 | 3 | 30 | 204 | 0.084 |
| 447250 | 205 | 298 | 10 | 10 | < 0.5 | 8 | 56 | 2.55 | 160 | 47 | 3 | 5 | 36 | ---- |
| 459501 | 205 | 298 | < 5 | 20 | < 0.5 | 24 | 36 | 8.00 | 140 | < 1 | 47 | 15 | 66 | ---- |
| 459502 | 205 | 298 | < 5 | 15 | < 0.5 | 2 | 68 | 0.83 | 75 | 2 | 10 | < 5 | 2350 | ---- |
| 459503 | 205 | 298 | < 5 | 9 | 2.5 | 3 | 6 | 0.64 | 195 | < 1 | 1 | < 5 | 32 | ---- |
| 459505 | 205 | 298 | < 5 | 7 | < 0.5 | 4 | 26 | 0.88 | 220 | < 1 | 5 | < 5 | 16 | ---- |

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CERTIFICATION : Ian Bichler

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PHONE (604) 984-0221


PRIME EXPLORATIONS LTD.

808 W. HASTINGS ST., 10TH FLOOR
VANCOUVER, BC
V6C 2X6

Project : SAND RIV PASS LAKE
Comments: ATTN: JIM FOSTER CC: EQUITY ENGINEERING


Date : 11-OCT-89
Invoice # : I-8926563
P.O. # : KGG89-07

## CERTIFICATE OF ANALYSIS A8926563

| SAMPLE DESCRIPTION | PREP CODE | | Au ppb FA+AA | As ppm | Ag ppm | Co ppm | Cu ppm | Fe % | Mn ppm | Mo ppm | Ni ppm | Pb ppm | Zn ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 459319 | 205 | 298 | 10 | 4 | 1.5 | 9 | 118 | 2.50 | 375 | 17 | 42 | 10 | 168 |
| 459320 | 205 | 298 | 115 | 2 | < 0.5 | 9 | 45 | 2.02 | 130 | 2 | 21 | < 5 | 66 |
| 459321 | 205 | 298 | < 5 | 3 | < 0.5 | 9 | 45 | 4.54 | 600 | 2 | 4 | 5 | 78 |
| 459322 | 205 | 298 | < 5 | 6 | < 0.5 | 5 | 51 | 1.16 | 200 | 26 | 50 | < 5 | 570 |
| 459323 | 205 | 298 | < 5 | 1 | < 0.5 | 28 | 239 | 6.47 | 450 | 1 | 27 | 25 | 64 |
| 459324 | 205 | 298 | < 5 | 2 | < 0.5 | 13 | 54 | 3.77 | 935 | < 1 | 15 | 5 | 76 |
| 459325 | 205 | 298 | < 5 | 6 | < 0.5 | 42 | 77 | 5.88 | 1030 | < 1 | 20 | < 5 | 60 |
| 459569 | 205 | 298 | < 5 | 1 | < 0.5 | 19 | 22 | 3.49 | 525 | < 1 | 24 | < 5 | 52 |
| 459570 | 205 | 298 | 30 | 3 | < 0.5 | 8 | 11 | 4.68 | 1105 | 1 | 4 | 5 | 76 |
| 459571 | 205 | 298 | 25 | 11 | < 0.5 | 77 | 110 | 6.83 | 535 | 6 | 408 | < 5 | 174 |
| 459572 | 205 | 298 | < 5 | 9 | < 0.5 | 17 | 57 | 5.89 | 275 | 1 | 37 | 5 | 112 |
| 459573 | 205 | 298 | 50 | 4 | < 0.5 | 15 | 79 | 6.61 | 330 | 1 | 28 | 30 | 138 |
| 459574 | 205 | 298 | < 5 | 1 | < 0.5 | 12 | 56 | 5.90 | 70 | 1 | 71 | 5 | 96 |
| 459575 | 205 | 298 | < 5 | 2 | < 0.5 | 8 | 3 | 4.61 | 695 | 1 | 6 | < 5 | 34 |
| 459576 | 205 | 298 | < 5 | 5 | < 0.5 | 3 | 14 | 1.70 | 625 | 6 | 8 | 5 | 72 |
| 459854 | 205 | 298 | < 5 | 9 | 0.5 | 1 | 13 | 1.99 | 70 | 7 | 6 | 5 | 46 |
| 459855 | 205 | 298 | < 5 | 1 | < 0.5 | 21 | 63 | 4.79 | 585 | 2 | 29 | < 5 | 58 |
| 459856 | 205 | 298 | < 5 | 1 | < 0.5 | 7 | 53 | 4.12 | 485 | 1 | 2 | < 5 | 34 |
| 459857 | 205 | 298 | < 5 | 14 | < 0.5 | 12 | 123 | 2.14 | 220 | 30 | 70 | 5 | 200 |
| 459858 | 205 | 298 | < 5 | 1 | < 0.5 | 43 | 80 | 8.98 | 740 | < 1 | 61 | 45 | 136 |
| 459859 | 205 | 298 | < 5 | 12 | < 0.5 | 2 | 63 | 4.11 | 35 | 51 | 15 | < 5 | 62 |



CERTIFICATION : B. Caplin

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

TO: PRIME EXPLORATIONS LTD.

808 W. HASTINGS ST., 10TH FLOOR
VANCOUVER, BC
V6C 2X6

Project : SAND RIV. PASS LAKE
Comments: ATTN: JIM FOSTER CC: EQUITY ENGINEERING

Page No. : 1
Tot. Pages: 1
Date : 16-OCT-89
Invoice # : I-8927164
P.O. # : KGG89-07

# CERTIFICATE OF ANALYSIS A8927164

| SAMPLE DESCRIPTION | PREP CODE | | Au ppb FA+AA | As ppm | Ag ppm | Co ppm | Cu ppm | Fe % | Mn ppm | Mo ppm | Ni ppm | Pb ppm | Zn ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 459595 | 201 | 298 | < 5 | 85 | < 0.5 | 27 | 46 | 6.69 | 240 | 10 | 87 | 5 | 132 |
| 459596 | 201 | 298 | < 5 | 67 | < 0.5 | 28 | 50 | 6.43 | 225 | 10 | 83 | 10 | 132 |
| 459597 | 201 | 298 | < 5 | 75 | < 0.5 | 29 | 56 | 6.67 | 185 | 5 | 82 | < 5 | 124 |
| 459598 | 201 | 298 | < 5 | 63 | < 0.5 | 41 | 79 | 8.95 | 280 | 6 | 119 | < 5 | 154 |
| 459599 | 201 | 298 | < 5 | 39 | < 0.5 | 62 | 82 | 10.15 | 400 | 6 | 154 | < 5 | 192 |
| 459600 | 201 | 298 | < 5 | 59 | < 0.5 | 27 | 46 | 6.11 | 180 | 6 | 79 | 5 | 118 |
| 463052 | 201 | 298 | 10 | 27 | < 0.5 | 19 | 24 | 5.82 | 900 | 5 | 45 | 5 | 136 |
| 463053 | 201 | 298 | < 5 | 25 | < 0.5 | 18 | 26 | 5.39 | 1105 | 4 | 45 | 5 | 186 |
| 463054 | 201 | 298 | < 5 | 67 | < 0.5 | 21 | 31 | 6.75 | 1190 | 12 | 68 | < 5 | 146 |
| 463055 | 201 | 298 | < 5 | 95 | < 0.5 | 32 | 52 | 8.02 | 740 | 14 | 100 | 10 | 158 |
| 463056 | 201 | 298 | < 5 | 12 | < 0.5 | 17 | 29 | 4.82 | 355 | 2 | 45 | 5 | 96 |
| 463057 | 201 | 298 | < 5 | 11 | < 0.5 | 18 | 30 | 5.49 | 1490 | 3 | 54 | 5 | 120 |
| 463058 | 201 | 298 | < 5 | 35 | < 0.5 | 51 | 98 | 10.50 | 1025 | 4 | 145 | 5 | 170 |

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808 W. HASTINGS ST., 10TH FLOOR
VANCOUVER, BC
V6C 2X6

Project : SAND RIV PASS LAKE
Comments: ATTN: JIM FOSTER CC: EQUITY ENGINEERING

Page : 1
Tot. Pages: 1
Date : 16-OCT-89
Invoice # : I-8927180
P.O. # : KGG89-07

## CERTIFICATE OF ANALYSIS A8927180

| SAMPLE DESCRIPTION | PREP CODE | | Au ppb FA+AA | As ppm | Ag ppm | Co ppm | Cu ppm | Fe % | Mn ppm | Mo ppm | Ni ppm | Pb ppm | Zn ppm | Au FA oz/T |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 459341 | 205 | 298 | < 5 | 5 | < 0.5 | 23 | 72 | 4.55 | 800 | < 1 | 12 | < 5 | 66 | ---- |
| 459342 | 205 | 298 | < 5 | 9 | < 0.5 | 18 | 171 | 3.91 | 1260 | < 1 | 12 | 5 | 50 | ---- |
| 459343 | 205 | 298 | 1320 | 2 | 6.5 | 39 | 787 | 4.61 | 205 | < 1 | 10 | < 5 | 18 | 0.046 |
| 459344 | 205 | 298 | < 5 | 1 | < 0.5 | 11 | 188 | 3.61 | 835 | < 1 | 5 | < 5 | 44 | ---- |
| 459345 | 205 | 298 | < 5 | 4 | < 0.5 | 17 | 150 | 2.73 | 245 | < 1 | 28 | 25 | 24 | ---- |
| 459346 | 205 | 298 | 15 | 1 | < 0.5 | < 1 | 3 | 0.23 | 395 | < 1 | 2 | 5 | 12 | ---- |
| 459347 | 205 | 298 | < 5 | 15 | < 0.5 | 12 | 28 | 1.61 | 495 | < 1 | 13 | < 5 | 28 | ---- |
| 459348 | 205 | 298 | < 5 | 3 | < 0.5 | < 1 | 5 | 0.28 | 960 | < 1 | 2 | 25 | 32 | ---- |
| 459589 | 205 | 298 | < 5 | 2 | < 0.5 | 4 | 4 | 1.51 | 375 | < 1 | 5 | < 5 | 18 | ---- |
| 459828 | 205 | 298 | < 5 | 10 | < 0.5 | 7 | 22 | 1.07 | 250 | < 1 | 12 | 5 | 28 | ---- |
| 459829 | 205 | 298 | < 5 | 5 | < 0.5 | 1 | 10 | 1.54 | 70 | 1 | 6 | < 5 | 8 | ---- |
| 459830 | 205 | 298 | < 5 | 2 | < 0.5 | 12 | 56 | 4.00 | 735 | 2 | 13 | < 5 | 116 | ---- |
| 459831 | 205 | 298 | < 5 | 5 | 0.5 | < 1 | 5 | 0.38 | 40 | 33 | 5 | 5 | 12 | ---- |
| 459832 | 205 | 298 | < 5 | 3 | 0.5 | 7 | 37 | 2.52 | 455 | < 1 | 24 | < 5 | 64 | ---- |
| 459833 | 205 | 298 | < 5 | 6 | 0.5 | 1 | 16 | 0.71 | 70 | 2 | 9 | 5 | 168 | ---- |
| 463051 | 205 | 298 | < 5 | 2 | < 0.5 | 4 | 6 | 2.73 | 370 | < 1 | 7 | < 5 | 38 | ---- |



CERTIFICATION : B. Caughlin

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PHONE (604) 984-0221

To: PRIME EXPLORATIONS LTD.

808 W. HASTINGS ST., 10TH FLOOR
VANCOUVER, BC
V6C 2X6

Project : PUP PROPERTY PUR OPT
Comments: ATT: JIM FOSTER CC: EQUITY ENGINEERING

* Page : 1-A
Tot. Pages: 1
Date : 16-OCT-89
Invoice # : I-8927193
P.O. # : KGG89-01

# CERTIFICATE OF ANALYSIS A8927193

| SAMPLE DESCRIPTION | PREP CODE | | Au ppb FA+AA | Al % | Ag ppm | As ppm | Ba ppm | Be ppm | Bi ppm | Ca % | Cd ppm | Co ppm | Cr ppm | Cu ppm | Fe % | Ga ppm | Hg ppm | K % | La ppm | Mg % | Mn ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 459317 | 201 | 238 | 5 | 2.04 | 1.0 | 25 | 340 | < 0.5 | < 2 | 1.59 | 8.5 | 20 | 58 | 150 | 5.57 | < 10 | < 1 | 0.07 | 10 | 0.64 | 775 |
| 459318 | 201 | 238 | < 5 | 1.74 | 0.6 | 145 | 250 | 0.5 | < 2 | 1.31 | 3.0 | 16 | 31 | 79 | 4.44 | < 10 | < 1 | 0.07 | 10 | 0.52 | 860 |



CERTIFICATION : B. Campbell

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808 W. HASTINGS ST., 10TH FLOOR
VANCOUVER, BC
V6C 2X6

Project : PUP PROPERTY PUP OPT
Comments: ATT: JIM FOSTER CC: EQUITY ENGINEERING

• Page : 1-B
Tot. Pages: 1
Date : 16-OCT-89
Invoice # : I-8927193
P.O. # : KGG89-01

## CERTIFICATE OF ANALYSIS A8927193

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 459317 | 201 | 238 | 22 | 0.02 | 94 | 2050 | 10 | < 5 | 7 | 48 | 0.06 | < 10 | < 10 | 181 | < 10 | 490 |
| 459318 | 201 | 238 | 11 | 0.04 | 52 | 1470 | 12 | < 5 | 5 | 58 | 0.04 | < 10 | < 10 | 97 | < 10 | 244 |

CERTIFICATION : B. Caughlin

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PHONE (604) 984-0221

To: IME EXPLORATIONS LTD.
608 W. HASTINGS ST., 10TH FLOOR
VANCOUVER, BC
V6C 2X6
Project : SCUD RIVER
Comments: ATTN: JIM FOSTER CC: EQUITY ENG.



# CERTIFICATE OF ANALYSIS A8927356

| SAMPLE DESCRIPTION | PREP CODE | | Cu % |
|---|---|---|---|
| 447233 | 214 | -- | 1.62 |

OCT - 6 1989

CERTIFICATION : W. Stenmacon

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BRITISH COLUMBIA, CANADA V7J-2C1

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808 W. HASTINGS ST., 10TH FLOOR
VANCOUVER, BC
V6C 2X6

Project : SCUD RIVER

Comments: ATTN: JIM FOSTER CC: EQUITY ENGINEERING



Date : 09-OCT-89

Invoice # : I-8927728

P.O. # : NONE

## CERTIFICATE OF ANALYSIS A8927728

| SAMPLE DESCRIPTION | PREP CODE | | Au FA oz/T | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 447233 | 214 | -- | 0.068 | | | | | | | | | |

CERTIFICATION : W. Kenbrowski

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To: PRIME EXPLORATIONS LTD.

808 W. HASTINGS ST., 10TH FLOOR
VANCOUVER, BC
V6C 2X6

Project : SAND RIVER
Comments: ATTN: JIM FOSTER CC: EQUITY ENGINEERING


Date :23-OCT-89
Invoice # :I-8927984
P.O. # :KGG-89-0

## CERTIFICATE OF ANALYSIS A8927984

| SAMPLE DESCRIPTION | PREP CODE | | Au ppb FA+AA | Al % | Ag ppm | As ppm | Ba ppm | Be ppm | Bi ppm | Ca % | Cd ppm | Co ppm | Cr ppm | Cu ppm | Fe % | Ga ppm | Hg ppm | K % | La ppm | Mg % | Mn ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 172375 | 203 | 238 | 5 | 1.94 | < 0.2 | 30 | 570 | < 0.5 | < 2 | 0.98 | 1.0 | 14 | 89 | 74 | 4.37 | < 10 | < 1 | 0.16 | 10 | 1.16 | 705 |
| 172376 | 203 | 238 | < 5 | 2.06 | < 0.2 | 20 | 640 | < 0.5 | < 2 | 1.01 | 2.0 | 9 | 113 | 47 | 3.53 | < 10 | < 1 | 0.19 | 10 | 1.03 | 555 |
| 172377 | 203 | 238 | < 5 | 1.60 | 0.4 | 10 | 500 | < 0.5 | < 2 | 1.11 | 2.5 | 8 | 124 | 47 | 2.88 | < 10 | < 1 | 0.17 | 10 | 0.61 | 390 |
| 172378 | 203 | 238 | < 5 | 1.18 | < 0.2 | < 5 | 150 | < 0.5 | < 2 | 0.68 | < 0.5 | 8 | 56 | 21 | 2.31 | < 10 | < 1 | 0.14 | 10 | 0.68 | 440 |
| 172379 | 203 | 238 | < 5 | 1.89 | < 0.2 | < 5 | 440 | < 0.5 | < 2 | 1.41 | 2.0 | 12 | 78 | 63 | 3.83 | < 10 | < 1 | 0.14 | 10 | 1.24 | 610 |
| 459870 | 201 | 238 | 210 | 0.41 | < 0.2 | 10 | 20 | < 0.5 | 30 | >15.00 | 0.5 | 3 | 10 | 17 | 0.95 | < 10 | < 1 | 0.02 | < 10 | 0.49 | 220 |
| 463107 | 203 | 238 | < 5 | 0.76 | < 0.2 | 15 | 100 | < 0.5 | < 2 | 1.04 | 2.0 | 5 | 63 | 155 | 1.65 | < 10 | < 1 | 0.09 | 10 | 0.49 | 615 |
| 463108 | 203 | 238 | < 5 | 0.89 | < 0.2 | 20 | 300 | < 0.5 | < 2 | 0.84 | 2.5 | 12 | 46 | 442 | 2.34 | < 10 | < 1 | 0.17 | 20 | 0.39 | 1430 |
| 463128 | 201 | 238 | 10 | 1.39 | < 0.2 | < 5 | 40 | < 0.5 | < 2 | 1.07 | 1.0 | 4 | 22 | 12 | 2.00 | < 10 | < 1 | 0.04 | 10 | 1.14 | 220 |
| 463201 | 201 | 238 | 5 | 1.08 | < 0.2 | < 5 | 160 | < 0.5 | < 2 | 1.05 | 1.0 | 11 | 15 | 38 | 2.98 | < 10 | < 1 | 0.08 | 10 | 0.97 | 555 |
| 463202 | 201 | 238 | < 5 | 1.25 | < 0.2 | 20 | 150 | < 0.5 | < 2 | 0.98 | < 0.5 | 10 | 48 | 51 | 3.08 | < 10 | < 1 | 0.03 | 10 | 0.59 | 860 |
| 463203 | 203 | 238 | < 5 | 0.79 | < 0.2 | 25 | 30 | < 0.5 | < 2 | 0.55 | < 0.5 | 5 | 51 | 12 | 2.52 | < 10 | < 1 | 0.06 | 10 | 0.54 | 235 |
| 463204 | 201 | 238 | < 5 | 0.48 | < 0.2 | 15 | 40 | < 0.5 | 6 | 5.76 | 0.5 | 7 | 14 | 17 | 2.64 | < 10 | < 1 | 0.02 | < 10 | 0.59 | 195 |
| 463205 | 201 | 238 | 130 | 1.13 | < 0.2 | 30 | 110 | < 0.5 | < 2 | 2.04 | 0.5 | 19 | 29 | 276 | 4.92 | < 10 | < 1 | 0.23 | 10 | 0.98 | 1030 |
| 463551 | 201 | 238 | < 5 | 0.70 | < 0.2 | < 5 | 40 | < 0.5 | < 2 | 0.84 | 0.5 | 6 | 34 | 25 | 2.19 | < 10 | < 1 | 0.02 | 10 | 0.62 | 325 |
| 463552 | 203 | 238 | 40 | 1.43 | 0.2 | 15 | 210 | < 0.5 | < 2 | 0.87 | 11.0 | 14 | 91 | 62 | 3.67 | < 10 | < 1 | 0.09 | 10 | 0.78 | 1355 |
| 463553 | 203 | 238 | < 5 | 0.64 | < 0.2 | 5 | 160 | < 0.5 | < 2 | 1.34 | 2.0 | 8 | 72 | 80 | 1.89 | < 10 | < 1 | 0.13 | 10 | 0.46 | 495 |
| 463554 | 203 | 238 | < 5 | 1.51 | < 0.2 | < 5 | 150 | < 0.5 | < 2 | 1.72 | < 0.5 | 9 | 73 | 29 | 2.67 | < 10 | < 1 | 0.14 | 10 | 1.06 | 490 |



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CERTIFICATION : B. Campbell

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PHONE (604) 984-0221


To: RIME EXPLORATIONS LTD.

808 W. HASTINGS ST., 10TH FLOOR
VANCOUVER, BC
V6C 2X6

Project : SAND RIVER
Comments: ATTN: JIM FOSTER CC: EQUITY ENGINEERING


Date :23-OCT-89
Invoice # :I-8927984
P.O. # :KGG-89-0

## CERTIFICATE OF ANALYSIS A8927984

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 172375 | 203 | 238 | 8 | 0.04 | 54 | 1500 | 2 | < 5 | 4 | 56 | 0.15 | < 10 | < 10 | 104 | < 10 | 224 |
| 172376 | 203 | 238 | 6 | 0.10 | 43 | 1440 | < 2 | < 5 | 4 | 77 | 0.15 | < 10 | < 10 | 123 | < 10 | 230 |
| 172377 | 203 | 238 | 14 | 0.02 | 47 | 2180 | < 2 | < 5 | 4 | 83 | 0.06 | < 10 | < 10 | 97 | < 10 | 294 |
| 172378 | 203 | 238 | 2 | 0.02 | 9 | 790 | 2 | < 5 | 3 | 67 | 0.09 | < 10 | < 10 | 59 | < 10 | 50 |
| 172379 | 203 | 238 | 7 | 0.03 | 43 | 1880 | < 2 | < 5 | 4 | 64 | 0.20 | < 10 | < 10 | 99 | < 10 | 196 |
| 459870 | 201 | 238 | 2 | 0.02 | 5 | 200 | 2 | 5 | 1 | 219 | 0.02 | < 10 | < 10 | 12 | < 10 | 34 |
| 463107 | 203 | 238 | 18 | 0.01 | 89 | 730 | 6 | < 5 | 2 | 38 | 0.05 | < 10 | < 10 | 69 | < 10 | 274 |
| 463108 | 203 | 238 | 16 | < 0.01 | 41 | 720 | 6 | < 5 | 1 | 45 | 0.03 | < 10 | < 10 | 31 | < 10 | 516 |
| 463128 | 201 | 238 | 2 | 0.01 | 11 | 580 | 8 | < 5 | 3 | 53 | 0.08 | < 10 | < 10 | 31 | < 10 | 106 |
| 463201 | 201 | 238 | 3 | 0.01 | 15 | 1040 | 8 | < 5 | 3 | 50 | 0.09 | < 10 | < 10 | 63 | < 10 | 88 |
| 463202 | 201 | 238 | 3 | < 0.01 | 25 | 820 | 4 | < 5 | 2 | 59 | 0.10 | < 10 | < 10 | 76 | < 10 | 98 |
| 463203 | 203 | 238 | 4 | 0.02 | 17 | 450 | 6 | < 5 | 2 | 23 | < 0.01 | < 10 | < 10 | 21 | < 10 | 72 |
| 463204 | 201 | 238 | 4 | < 0.01 | 17 | 710 | < 2 | 5 | 2 | 127 | < 0.01 | < 10 | < 10 | 17 | < 10 | 82 |
| 463205 | 201 | 238 | 9 | < 0.01 | 28 | 2000 | 16 | 5 | 3 | 92 | 0.13 | < 10 | < 10 | 58 | < 10 | 138 |
| 463551 | 201 | 238 | 4 | < 0.01 | 32 | 490 | 2 | < 5 | 2 | 17 | 0.03 | < 10 | < 10 | 35 | < 10 | 90 |
| 463552 | 203 | 238 | 8 | 0.02 | 107 | 1240 | 2 | < 5 | 3 | 44 | 0.02 | < 10 | < 10 | 59 | < 10 | 878 |
| 463553 | 203 | 238 | 9 | 0.01 | 42 | 1050 | 10 | 5 | 1 | 56 | 0.03 | < 10 | < 10 | 39 | < 10 | 268 |
| 463554 | 203 | 238 | 4 | 0.03 | 14 | 1280 | < 2 | < 5 | 4 | 89 | 0.12 | < 10 | < 10 | 70 | 10 | 70 |

CERTIFICATION : B. Caughlin

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PHONE (604) 984-0221

To: RIME EXPLORATIONS LTD.
608 W. HASTINGS ST., 10TH FLOOR
VANCOUVER, BC
V6C 2X6

Project : SAND RIVER
Comments: ATTN: JIM FOSTER CC: EQUITY ENGINEERING LTD.

* Page No.
Tot. Pages
Date : 19-OCT-89
Invoice # : I-8927985
P.O. # : KGG-89-0

# CERTIFICATE OF ANALYSIS A8927985

| SAMPLE DESCRIPTION | PREP CODE | | Au ppb FA+AA | As ppm | Ag ppm | Co ppm | Cu ppm | Fe % | Mn ppm | Mo ppm | Ni ppm | Pb ppm | Zn ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 447030 | 205 | 298 | 5 | 2 | 0.5 | 6 | 21 | 2.57 | 340 | 2 | 27 | 5 | 130 |
| 447031 | 205 | 298 | 445 | 14 | 13.5 | 16 | 8420 | >15.00 | 1030 | 29 | 4 | 5 | 202 |
| 463106 | 205 | 298 | 10 | 11 | 0.5 | 2 | 189 | 2.16 | 130 | 1 | 4 | < 5 | 34 |
| 463109 | 205 | 298 | 3550 | 1 | 0.5 | 3 | 98 | 2.05 | 465 | 1 | 7 | 5 | 36 |
| 463129 | 205 | 298 | 70 | 2 | < 0.5 | < 1 | 38 | 0.36 | 95 | < 1 | 3 | < 5 | 14 |
| 463130 | 205 | 298 | 20 | 4 | 1.0 | 4 | 120 | 4.15 | 160 | 2 | 3 | 5 | 20 |
| 463131 | 205 | 298 | < 5 | 4 | < 0.5 | 6 | 25 | 3.23 | 415 | 5 | 2 | < 5 | 42 |

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To: TIME EXPLORATIONS LTD.

808 W. HASTINGS ST., 10TH FLOOR
VANCOUVER, BC
V6C 2X6

Project : SCUD RIVER/PASS LK 0
Comments: ATTN: JIM FOSTER cc: EQUITY ENGINEERING

• Page No. :
Tot. Pages: 1
Date : 26-OCT-89
Invoice # : I-8928429
P.O. # : KGG89-02

## CERTIFICATE OF ANALYSIS A8928429

| SAMPLE DESCRIPTION | PREP CODE | | Au oz/T | Cu % | Pb % | Zn % |
|---|---|---|---|---|---|---|
| 447050 | 208 | -- | 0.002 | 0.20 | < 0.01 | 0.03 |
| 463651 | 208 | -- | 0.010 | 0.46 | < 0.01 | 0.01 |
| 463652 | 208 | -- | 0.410 | 0.09 | 0.97 | 0.81 |
| 463653 | 208 | -- | 0.088 | 3.28 | 0.47 | 0.89 |
| 463654 | 208 | -- | 0.005 | 0.16 | 0.03 | 0.05 |
| 463655 | 208 | -- | 0.004 | 0.02 | < 0.01 | 0.01 |

CERTIFICATION : W. Kon Armanini

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BRITISH COLUMBIA, CANADA V7J-2C1
PHONE (604) 984-0221

To: PRIME EXPLORATIONS LTD.

808 W. HASTINGS ST., 10TH FLOOR
VANCOUVER, BC
V6C 2X6

Project : SAND RIVER
Comments:


Date : 06-NOV-89
Invoice # : I-8929190
P.O. # : NONE

# CERTIFICATE OF ANALYSIS A8929190

| SAMPLE DESCRIPTION | PREP CODE | | Au tot oz/t | Au - oz/t | Au + mg | Wt. - grams | Wt. + grams | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 447031 REJECT | 207 | -- | 0.038 | 0.038 | 0.006 | 478 | 9.59 | | | | | |
| 463109 REJECT | 207 | -- | < 0.003 | < 0.003 | < 0.002 | 340 | 3.96 | | | | | |

CERTIFICATION : W. Slen Armanini

# APPENDIX E

## STATEMENTS OF QUALIFICATIONS

# STATEMENT OF QUALIFICATIONS

I, KATHERINA V. ROSS, of 4188 West 15th Avenue, Vancouver, in the Province of British Columbia, DO HEREBY CERTIFY:

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

2. THAT I am a graduate of the University of Waterloo with an honours Bachelor of Science degree in Geology.

3. THAT my primary employment since May, 1988 has been in the field of mineral exploration.

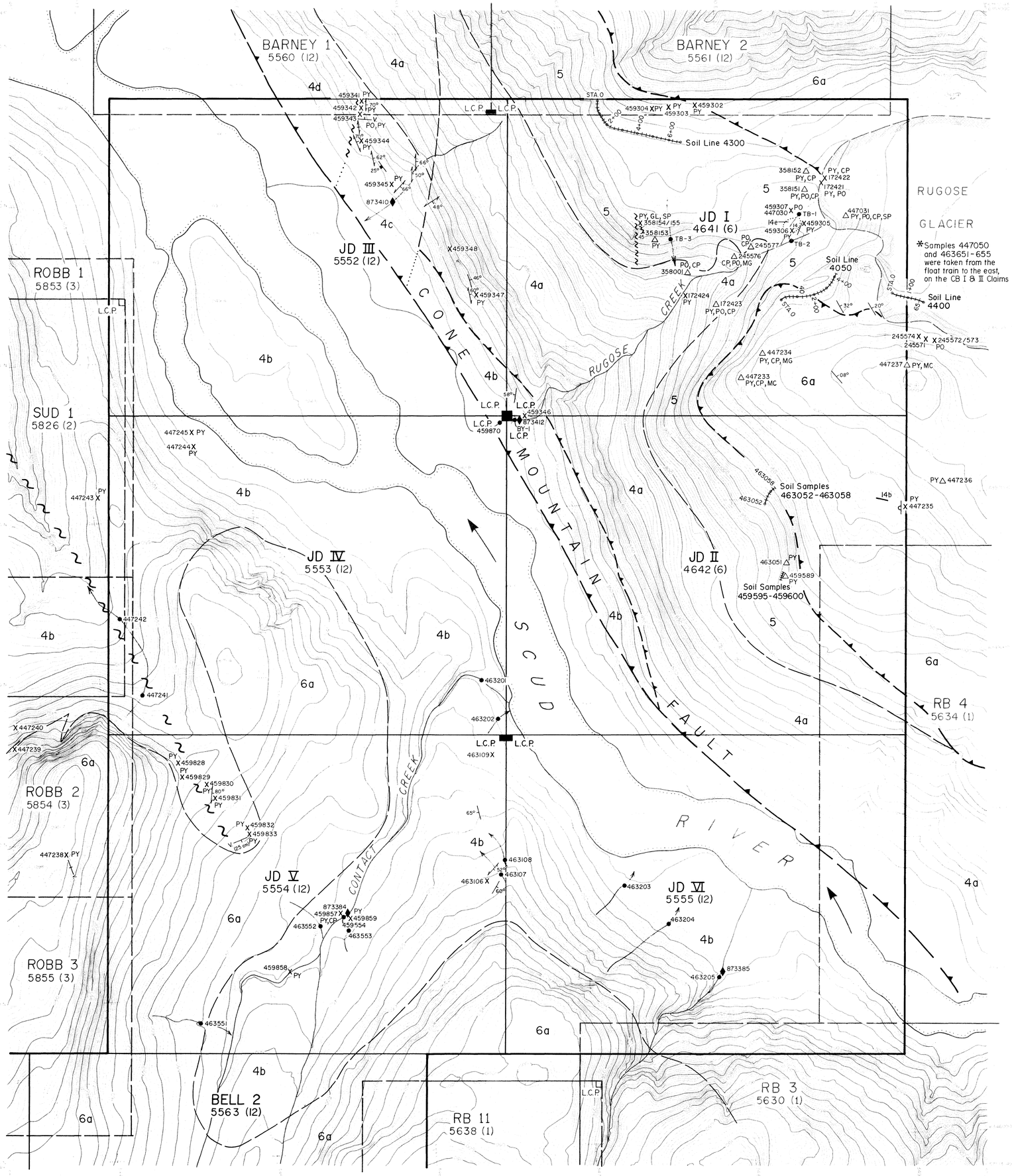
4. THAT this report is based on fieldwork conducted under my supervision on the Scud River Property during September and October 1989, and government publications and reports filed with the Government of British Columbia.

5. 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_____day of December, 1989.

Katherina Ross

Katherina Ross,
B.Sc. Geology




*Samples 447050 and 463651-655 were taken from the float train to the east, on the CB I & II Claims

## SAMPLE RESULTS

**1989 SILT SAMPLE RESULTS**

| Sample | Au(ppb) | Ag(ppm) | Cu(ppm) | Pb(ppm) | Zn(ppm) | As(ppm) |
|---|---|---|---|---|---|---|
| 447241 | 5 | <0.2 | 53 | 8 | 126 | 5 |
| 447242 | 10 | 0.4 | 80 | 8 | 286 | 20 |
| 459870 | 210 | <0.2 | 17 | 2 | 34 | 10 |
| 463107 | <5 | <0.2 | 155 | 6 | 274 | 15 |
| 463108 | <5 | <0.2 | 442 | 6 | 516 | 20 |
| 463201 | 5 | <0.2 | 38 | 8 | 88 | <5 |
| 463202 | <5 | <0.2 | 51 | 4 | 98 | 20 |
| 463203 | <5 | <0.2 | 12 | 6 | 72 | 25 |
| 463204 | <5 | <0.2 | 17 | <2 | 82 | 15 |
| 463205 | 130 | <0.2 | 276 | 16 | 138 | 30 |
| 463551 | <5 | <0.2 | 25 | 2 | 90 | <5 |
| 463552 | 40 | 0.2 | 62 | 2 | 878 | 15 |
| 463553 | <5 | <0.2 | 80 | 10 | 268 | 5 |
| 463554 | <5 | <0.2 | 29 | <2 | 70 | <5 |

**1987 GOVERNMENT SILT SAMPLE RESULTS (GSC OPEN FILE 1646, 1988)**

| Sample | Au(ppb) | Ag(ppm) | Cu(ppm) | Pb(ppm) | Zn(ppm) | As(ppm) |
|---|---|---|---|---|---|---|
| 873384 | 2 | 0.2 | 44 | 8 | 71 | 5 |
| 873385 | 279 | 0.6 | 272 | 29 | 120 | 10 |
| 873410 | 18 | 0.1 | 44 | 8 | 73 | 8 |
| 873412 | 108 | 0.1 | 17 | 7 | 29 | 10 |
| 90th %ile | 30 | 0.3 | 103 | 16 | 133 | 17 |
| 95th %ile | 65 | 0.4 | 132 | 22 | 181 | 29 |
| 99th %ile | 237 | 1.0 | 272 | 55 | 478 | 81 |

**1988 FIELD-SIEVED STREAM SEDIMENT RESULTS**

| Sample | Au(ppb) | Ag(ppm) | Cu(ppm) | Pb(ppm) | Zn(ppm) | As(ppm) |
|---|---|---|---|---|---|---|
| BY-1 | 1850 | 1.4 | 28 | 6 | 44 | 95 |
| TB-1 | 40 | 1.0 | 11 | <2 | 21 | <5 |
| TB-2 | 3720 | 1.2 | 14 | 6 | 25 | 10 |
| TB-3 | 700 | 0.8 | 16 | 6 | 31 | <5 |

**1989 ROCK GEOCHEMICAL RESULTS**

| Sample | Au(ppb) | Ag(ppm) | Cu(ppm) | Pb(ppm) | Zn(ppm) | As(ppm) |
|---|---|---|---|---|---|---|
| 172421 | <5 | <0.5 | 31 | <5 | 28 | 11 |
| 172422 | <5 | <0.5 | 21 | 5 | 56 | 22 |
| 172423 | 30 | <0.5 | 3190 | 5 | 60 | 17 |
| 172424 | 5 | <0.5 | 55 | 5 | 194 | 6 |
| 447030 | 5 | 0.5 | 21 | 5 | 130 | 2 |
| 447031 | 445 | 13.5 | 8420 | 5 | 202 | 14 |
| 447233 | 0.068* | 16.5 | 1.62% | 10 | 492 | 16 |
| 447234 | 530 | 5.5 | 7250 | 15 | 284 | 11 |
| 447235 | 25 | <0.5 | 377 | 5 | 168 | 12 |
| 447236 | 15 | <0.5 | 43 | <5 | 46 | 7 |
| 447237 | 10 | <0.5 | 252 | <5 | 34 | 10 |
| 447238 | 5 | <0.5 | 12 | <5 | 26 | 7 |
| 447239 | <5 | <0.5 | 31 | 5 | 82 | 9 |
| 447240 | <5 | 0.5 | 44 | 5 | 24 | 10 |
| 447243 | <5 | 1.0 | 6 | <5 | 8 | 19 |
| 447244 | 10 | 1.0 | 48 | <5 | 64 | 9 |
| 447245 | 15 | 3.0 | 180 | 15 | 192 | 43 |
| 459302 | 10 | <0.5 | 10 | <5 | 46 | 10 |
| 459303 | 15 | <0.5 | 1 | <5 | 4 | 12 |
| 459304 | 5 | <0.5 | 26 | <5 | 92 | 10 |
| 459305 | <5 | <0.5 | 19 | <5 | 62 | 19 |
| 459306 | <5 | 1.5 | 9 | <5 | 76 | 10 |
| 459307 | <5 | <0.5 | 17 | 5 | 84 | 9 |
| 459341 | <5 | <0.5 | 72 | <5 | 66 | 5 |
| 459342 | <5 | <0.5 | 171 | 5 | 50 | 9 |
| 459343 | 0.046* | 6.5 | 787 | <5 | 18 | 2 |
| 459344 | <5 | <0.5 | 188 | <5 | 44 | 1 |
| 459345 | <5 | <0.5 | 150 | 25 | 24 | 4 |
| 459346 | 15 | <0.5 | 3 | 5 | 12 | 1 |
| 459347 | <5 | <0.5 | 28 | <5 | 28 | 15 |
| 459348 | <5 | <0.5 | 5 | 25 | 32 | 3 |
| 459589 | <5 | <0.5 | 4 | <5 | 18 | 2 |
| 459828 | <5 | <0.5 | 22 | 5 | 28 | 10 |
| 459829 | <5 | <0.5 | 10 | <5 | 8 | 5 |
| 459830 | <5 | <0.5 | 56 | <5 | 116 | 2 |
| 459831 | <5 | 0.5 | 5 | 5 | 12 | 5 |
| 459832 | <5 | 0.5 | 37 | <5 | 64 | 3 |
| 459833 | <5 | 0.5 | 16 | 5 | 168 | 6 |
| 459857 | <5 | <0.5 | 123 | 5 | 200 | 14 |
| 459858 | <5 | <0.5 | 80 | 45 | 136 | 1 |
| 459859 | <5 | <0.5 | 63 | <5 | 62 | 12 |
| 463106 | 10 | 0.5 | 189 | <5 | 34 | 11 |
| 463109 | 3550 | 0.5 | 98 | 5 | 36 | 1 |
| 463051 | <5 | <0.5 | 6 | <5 | 38 | 2 |

**1988 ROCK GEOCHEMICAL RESULTS**

| Sample | Au(ppb) | Ag(ppm) | Cu(ppm) | Pb(ppm) | Zn(ppm) | As(ppm) |
|---|---|---|---|---|---|---|
| 245571 | 25 | <0.2 | 14 | 2 | 14 | <5 |
| 245572 | 20 | <0.2 | 26 | 6 | 100 | <5 |
| 245573 | 5 | <0.2 | 1 | 8 | 25 | 10 |
| 245574 | <5 | <0.2 | 1 | 2 | 6 | 5 |
| 245576 | 0.270* | 6.25* | 2.00% | 40 | 1.39% | 5 |
| 245577 | 450 | 3.6 | 1095 | <2 | 152 | <5 |
| 358151 | 135 | 11.0 | 9330 | <2 | 281 | <5 |
| 358152 | 905 | 10.8 | 4710 | <2 | 105 | 5 |
| 358153 | 0.102* | 0.26* | 0.29% | <2 | 1315 | 415 |
| 358154 | 0.104* | 0.12* | 98 | 66 | 67 | 515 |
| 358155 | 0.238* | 0.56* | 121 | 0.37% | 0.68% | 1130 |
| 358001 | 0.172* | 0.37* | 0.25% | <2 | 105 | <5 |

(* denotes assay in ounces per ton)

**CB I & II CLAIMS**
**1989 ROCK GEOCHEMICAL RESULTS**

| Sample | Au(ppb) | Ag(ppm) | Cu(ppm) | Pb(ppm) | Zn(ppm) | As(ppm) |
|---|---|---|---|---|---|---|
| 447050 | 0.002* | - | 0.20% | <0.01% | 0.03% | - |
| 463651 | 0.010* | - | 0.46% | <0.01% | 0.01% | - |
| 463652 | 0.410* | - | 0.09% | 0.97% | 0.81% | - |
| 463653 | 0.088* | - | 3.28% | 0.47% | 0.89% | - |
| 463654 | 0.005* | - | 0.16% | 0.03% | 0.05% | - |
| 463655 | 0.004* | - | 0.02% | <0.01% | 0.01% | - |

(* denotes assay in ounces per ton)

## LEGEND

### STRATIFIED ROCKS

MESOZOIC "STIKINIAN" STRATA
UPPER TRIASSIC
Stuhini Group

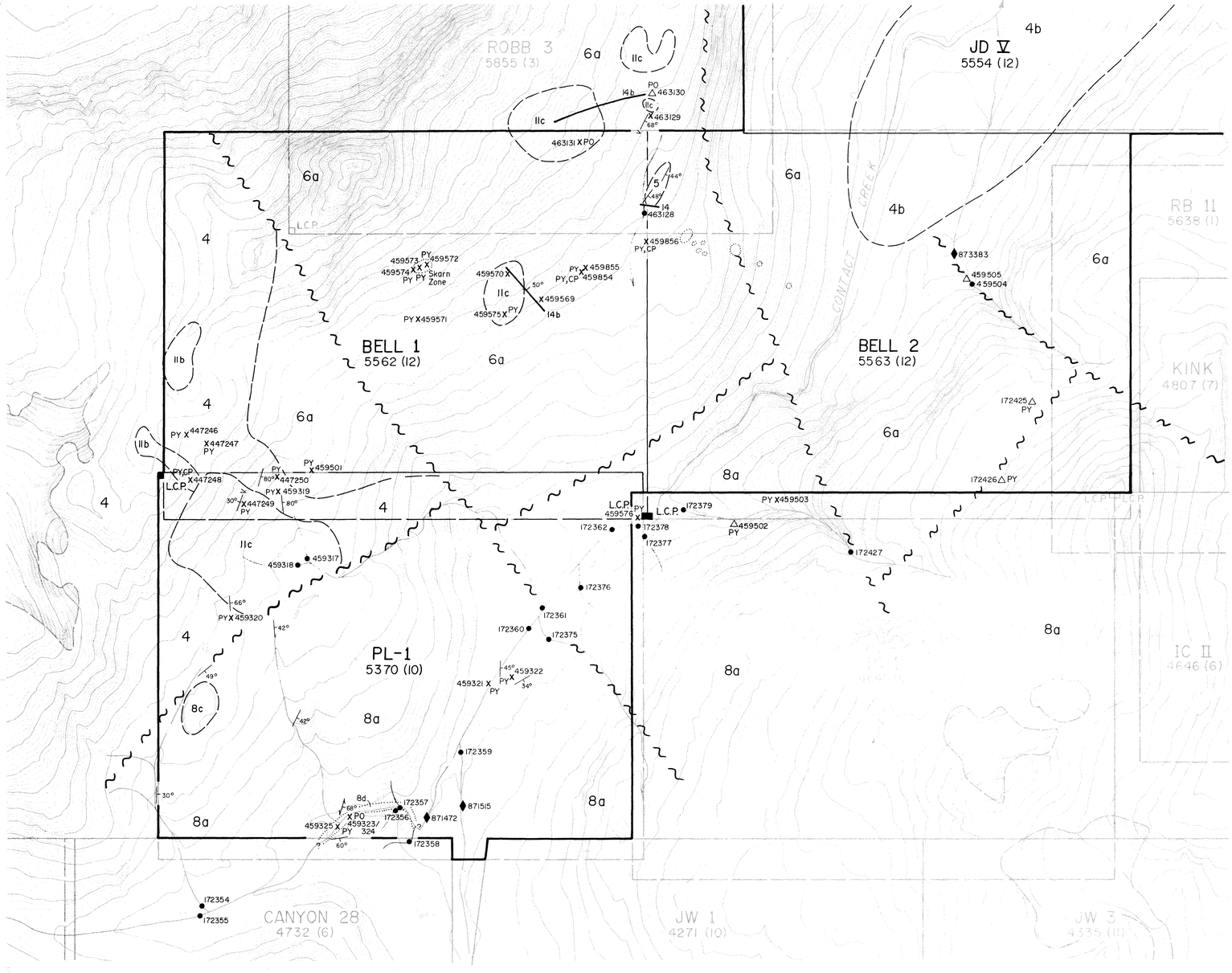
**8** Undivided volcanic, pyroclastic and volcaniclastic rock
8a shale, siltstone, argillite, limestone, conglomerate;
8b augite porphyritic basaltic andesite flows, breccia and agglomerate; aphanitic and plagioclase-porphyritic andesite;
8c bedded augite crystal tuff, tuffaceous siltstone;
8d volcaniclastic agglomerate with subangular-to-subrounded clasts

PALEOZOIC "STIKINE ASSEMBLAGE"
PERMIAN
(Un-named)

**6** Undivided Permian strata
6a upper member Permian limestone - massive, light coloured;
6c lower member Permian limestone - thin bedded, pyritic, argillaceous and bioclastic calcarenite with argillaceous interbeds

**5** "Rusty argillite" at base of Permian section

~~~ unknown, but probably faulted, contact ~~~

MISSISSIPPIAN or OLDER
(Un-named)

**4** 4a siliceous tuff; 4b fine grained siliciclastic;
4c intermediate flows, pyroclastic; 4d limestone-light coloured, crinoidal

### INTRUSIVE ROCKS

TERTIARY
Dykes and sills

**14** Undivided, probably Tertiary dykes
14b basaltic (gabbro); 14e felsic

MIDDLE TRIASSIC - to - ? MIDDLE JURASSIC
Galore Creek Intrusions

**11** Undivided Galore Creek intrusive rocks.
11b orthoclase porphyritic monzonite;
11c biotite-hornblende quartz monzonite-to-granodiorite

## SYMBOLS

- Geological boundary (defined, approximate, assumed); dip indicated
- Bedding, tops known (horizontal, inclined, vertical, overturned, dip unknown)
- Schistosity, gneissosity, cleavage, foliation (horizontal, inclined, vertical, dip unknown)
- Second generation (horizontal, inclined, vertical)
- Lineation (horizontal, inclined, plunge unknown, vertical
- Minor Folds and their symmetry viewed down-plunge: S, Z, M, W; angle of plunge
- Fault (defined, approximate, assumed). Inclined, vertical, downthrown side, horizontal movement
- Thrust fault (defined, approximate, assumed). Barbs on upper plate, dip indicated
- Dyke, vein (V), or stockwork (S), (defined, approximate, assumed). Dip, width indicated
- Gossan
- Legal Corner Post (located, approximate)

## SAMPLING

- Government Silt Sample
- Stream Sediment Sample
- Rock Sample - outcrop (Grab or Chip)
- Rock Sample - float
- (Au) (Cu) Contour Soil Sample Line; Station Number; Cu value in p.p.m. (145 p.p.m or greater); Au value in p.p.b. (40 p.p.b. or greater)
- Mineral Occurrence

CP Chalcopyrite PO Pyrrhotite
GL Galena PY Pyrite
MC Malachite SP Sphalerite
MG Magnetite

GEOLOGICAL BRANCH
ASSESSMENT REPORT

19,516

Grid North is 2° 09' West of True North

METRES 0 200 400 600 800 1000 METRES

CONSOLIDATED GOLDWEST RESOURCES LTD.

# SCUD RIVER NORTH
# GEOLOGY AND GEOCHEMISTRY

BRITISH COLUMBIA

EQUITY ENGINEERING LTD.

| | | | |
|---|---|---|---|
| DRAWN: J.W. | MINING DIV. LIARD | FIGURE 5 |
| N.T.S.: 104G/4E, 5E | SCALE: AS SHOWN | |
| DATE: DEC. 1989 | REVISED: | |
~~~




# LEGEND

## STRATIFIED ROCKS

MESOZOIC "STIKINIAN" STRATA
UPPER TRIASSIC
Stuhini Group

8 — Undivided volcanic, pyroclastic and volcaniclastic rock.
8a shale, siltstone, argillite, limestone, conglomerate;
8b augite porphyritic basaltic andesite flows, breccia and agglomerate; aphanitic and plagioclase-porphyritic andesite;
8c bedded augite crystal tuff, tuffaceous siltstone;
8d volcaniclastic agglomerate with subangular-to-subrounded clasts

PALEOZOIC "STIKINE ASSEMBLAGE"
PERMIAN
(Un-named)

6 — Undivided Permian strata
6a upper member Permian limestone-massive, light coloured;
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unknown, but probably faulted, contact

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14b basaltic (gabbro); 14e felsic

MIDDLE TRIASSIC-to-? MIDDLE JURASSIC
Galore Creek Intrusions

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- Lineation (horizontal, inclined, plunge unknown, vertical
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- Fault (defined, approximate, assumed). Inclined, vertical, downthrown side, horizontal movement
- Thrust fault (defined, approximate, assumed). Barbs on upper plate, dip indicated
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- Gossan
- Legal Corner Post (located, approximate)

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- Stream Sediment Sample
- X Rock Sample-outcrop (Grab or Chip)
- △ Rock Sample-float
- (Au) (Cu) Contour Soil Sample Line; Station Number; Cu value in p.p.m. (145 p.p.m or greater); Au value in p.p.b. (40 p.p.b or greater)
- X PY, CP Mineral Occurrence

CP Chalcopyrite PY Pyrite
PO Pyrrhotite

GEOLOGICAL BRANCH ASSESSMENT REPORT

19,519

METRES 0 200 400 600 800 1000 METRES

## SAMPLE RESULTS

1989 SILT SAMPLE RESULTS

| Sample | Au(ppb) | Ag(ppm) | Cu(ppm) | Pb(ppm) | Zn(ppm) | As(ppm) |
|---|---|---|---|---|---|---|
| 172377 | <5 | 0.4 | 47 | <2 | 294 | 10 |
| 172378 | <5 | <0.2 | 21 | 2 | 50 | <5 |
| 172379 | <5 | <0.2 | 63 | <2 | 196 | <5 |
| 172427 | 15 | 0.2 | 161 | 6 | 350 | 15 |
| 459317 | 5 | 1.0 | 150 | 10 | 490 | 25 |
| 459318 | <5 | 0.6 | 79 | 12 | 244 | 145 |
| 459504 | 25 | 0.6 | 115 | 2 | 478 | 35 |
| 463128 | 10 | <0.2 | 12 | 8 | 106 | <5 |

1987 GOVERNMENT SILT SAMPLE RESULTS (GSC OPEN FILE 1646, 1988)

| Sample | Au(ppb) | Ag(ppm) | Cu(ppm) | Pb(ppm) | Zn(ppm) | As(ppm) |
|---|---|---|---|---|---|---|
| 871472 | 21 | 0.3 | 42 | 8 | 54 | 7 |
| 871515 | 1 | 0.4 | 72 | 11 | 192 | 7 |
| 873383 | 7 | 1.5 | 120 | 12 | 436 | 18 |
| 90th %ile | 30 | 0.3 | 103 | 16 | 133 | 17 |
| 95th %ile | 65 | 0.4 | 132 | 22 | 181 | 29 |
| 99th %ile | 237 | 1.0 | 272 | 55 | 478 | 81 |

1989 FIELD-SIEVED STREAM SEDIMENT RESULTS

| Sample | Au(ppb) | Ag(ppm) | Cu(ppm) | Pb(ppm) | Zn(ppm) | As(ppm) |
|---|---|---|---|---|---|---|
| 172354 | <5 | <0.2 | 43 | 6 | 40 | 10 |
| 172355 | <5 | <0.2 | 15 | 4 | 28 | 10 |
| 172356 | <5 | <0.2 | 25 | 4 | 36 | 10 |
| 172357 | 10 | <0.2 | 23 | 6 | 34 | <5 |
| 172358 | <5 | <0.2 | 38 | 8 | 84 | <5 |
| 172359 | 270 | 0.2 | 19 | 8 | 50 | 10 |
| 172360 | <5 | <0.2 | 24 | 4 | 38 | 10 |
| 172361 | 20 | <0.2 | 23 | 6 | 46 | 5 |
| 172362 | <5 | <0.2 | 42 | 6 | 186 | 10 |
| 172375 | 5 | <0.2 | 74 | 2 | 224 | 30 |
| 172376 | <5 | <0.2 | 47 | <2 | 230 | 20 |

1989 ROCK GEOCHEMICAL RESULTS

| Sample | Au(ppb) | Ag(ppm) | Cu(ppm) | Pb(ppm) | Zn(ppm) | As(ppm) |
|---|---|---|---|---|---|---|
| 172425 | <5 | 0.5 | 42 | <5 | 10 | 7 |
| 172426 | <5 | 0.5 | 106 | 5 | 60 | 9 |
| 447246 | 25 | 2.5 | 383 | 5 | 82 | 33 |
| 447247 | <5 | <0.5 | 33 | 10 | 50 | 120 |
| 447248 | <5 | 1.0 | 1165 | 10 | 64 | 10 |
| 447249 | 0.084* | 1.5 | 211 | 30 | 204 | 110 |
| 447250 | 10 | <0.5 | 56 | 5 | 36 | 10 |
| 459319 | 10 | 1.5 | 118 | 10 | 168 | 4 |
| 459320 | 115 | <0.5 | 45 | <5 | 66 | 2 |
| 459321 | <5 | <0.5 | 45 | 5 | 78 | 3 |
| 459322 | <5 | <0.5 | 51 | <5 | 570 | 6 |
| 459323 | <5 | <0.5 | 239 | 25 | 64 | 1 |
| 459324 | <5 | <0.5 | 54 | 5 | 76 | 2 |
| 459325 | <5 | <0.5 | 77 | <5 | 60 | 6 |
| 459501 | <5 | <0.5 | 36 | 15 | 66 | 20 |
| 459502 | <5 | <0.5 | 68 | <5 | 2350 | 15 |
| 459503 | <5 | 2.5 | 6 | <5 | 32 | 9 |
| 459505 | <5 | <0.5 | 26 | <5 | 16 | 7 |
| 459569 | <5 | <0.5 | 22 | <5 | 52 | 1 |
| 459570 | 30 | <0.5 | 11 | 5 | 76 | 3 |
| 459571 | 25 | <0.5 | 110 | <5 | 174 | 11 |
| 459572 | <5 | <0.5 | 57 | 5 | 112 | 9 |
| 459573 | 50 | <0.5 | 79 | 30 | 138 | 4 |
| 459574 | <5 | <0.5 | 56 | 5 | 96 | 1 |
| 459575 | <5 | <0.5 | 3 | <5 | 34 | 2 |
| 459576 | <5 | <0.5 | 14 | 5 | 72 | 5 |
| 459854 | <5 | 0.5 | 13 | 5 | 46 | 9 |
| 459855 | <5 | <0.5 | 63 | <5 | 58 | 1 |
| 459856 | <5 | <0.5 | 53 | <5 | 34 | 1 |
| 463129 | 70 | <0.5 | 38 | <5 | 14 | 2 |
| 463130 | 20 | 1.0 | 120 | 5 | 20 | 4 |
| 463131 | <5 | <0.5 | 25 | <5 | 42 | 4 |

(* denotes assay in ounces per ton)

GRID NORTH IS 2° 10' WEST OF TRUE NORTH

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# SCUD RIVER SOUTH
# GEOLOGY AND GEOCHEMISTRY

BRITISH COLUMBIA

EQUITY ENGINEERING LTD.

| | | | |
|---|---|---|---|
| DRAWN: J.W. | MINING DIV. LIARD | | FIGURE. |
| N.T.S.: 104G/4E | SCALE: AS SHOWN | | 6 |
| DATE: DEC. 1989 | REVISED | | |