1991 DIAMOND DRILLING REPORT
ON THE
PUP PROJECT

Located in the Galore Creek Area
Liard Mining Division
NTS 104G/3W, 4E
57° 12′ North Latitude
131° 29′ West Longitude

-prepared for-

CONSOLIDATED GOLDWEST RESOURCES LTD.

-prepared by-
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September, 1991

1991 DIAMOND DRILLING REPORT ON THE PUP PROJECT

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1.0 INTRODUCTION

The Pup Project, comprising the OP 1-2 and Pup 1-5 claims, was staked in 1988 and 1989 over favourable lithology and copper geochemistry in the drainage of Galore Pup Creek, approximately 180 kilometres northwest of Stewart in northwestern British Columbia. The Pup property was first explored by Conwest Exploration for its copper potential following the discovery of the Galore Creek copper-gold porphyry deposit five kilometres to the south in 1955. Exploration by Consolidated Goldwest Resources Ltd. from 1988 to 1990 led to the discovery of copper-gold soil anomalies and mineralization in the Saddle and Malachite Zones.

Two diamond drill holes totalling 306.3 metres were drilled on the Pup property in July 1991. At the same time, limited prospecting and geological mapping were carried out in the vicinity of the drilling. 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

The Pup Project comprises seven contiguous claims totalling 101 units in the Liard Mining Division. Records of the British Columbia Ministry of Energy, Mines and Petroleum Resources indicate that these claims, summarized in Table 2.0.1, are owned by Consolidated Goldwest Resources Ltd. (Figure 2).

TABLE 2.0.1
CLAIM DATA

Claim Name	Record Number	Tenure Number	No. of Units	Record Date	Expiry Date
OP 1	4485	222919	20	Feb. 22, 1988	Feb. 22, 1994
OP 2	4486	222920	20	Feb. 22, 1988	Feb. 22, 1994
Pup 1	4487	222921	12	Feb. 22, 1988	Feb. 22, 1994
Pup 2	4488	222922	20	Feb. 22, 1988	Feb. 22, 1994
Pup 3	4489	222923	20	Feb. 22, 1988	Feb. 22, 1994
Pup 4	4637	223028	6	June 13, 1988	June 13, 1994
Pup 5	6523	224453	3	Oct. 14, 1989	Oct. 14, 1994
			101		

The locations for all legal corner posts for the OP 1-2 and Pup 1-5 claims have been verified by Equity Engineering Ltd. personnel. Due to claim overlaps, the actual ground covered by the Pup property is reduced to approximately 94 units (2350 hectares).

CONSOLIDATED GOLDWEST RESOURCES LTD.

PUP PROJECT
LOCATION MAP

BRITISH COLUMBIA

EQUITY ENGINEERING LTD.

DRAWN: J.W.	MINING DIV. LIARD	FIGURE
N.T.S.: 104G/3W, 4E	SCALE: AS SHOWN	1
DATE: SEPT., 1991	REVISED:	

3.0 LOCATION, ACCESS AND GEOGRAPHY

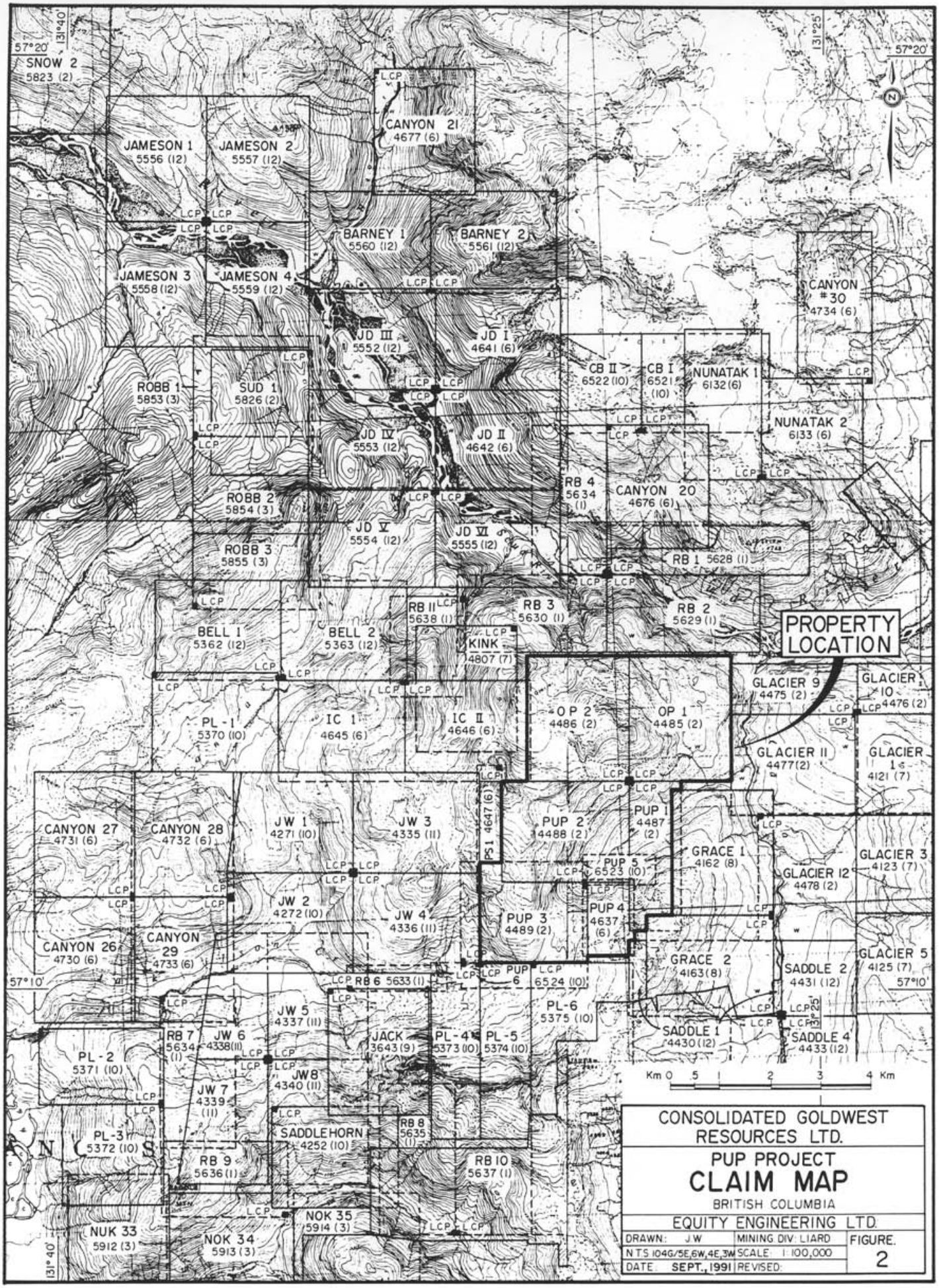
The Pup claim group is located within the Coast Range Mountains approximately 180 kilometres northwest of Stewart and 80 kilometres south of Telegraph Creek in northwestern British Columbia (Figure 1). It lies within the Liard Mining Division, centered at 57° 12′ north latitude and 131° 29′ west longitude.

Access to the Pup property during the 1991 exploration program was provided by daily helicopter setouts from the Porcupine River airstrip and base camp, which is located 19 kilometres south of the property. During the field season, fixed-wing aircraft as large as a Twin Otter flew charters to the Porcupine River airstrip, from Smithers, Wrangell or Telegraph Creek. In previous years, helicopter access was provided from the Galore Creek airstrip which is located approximately seven kilometres to the south-southeast. The Scud River airstrip, located 23 kilometres to the northwest of the Pup property, is suitable for DC-3 aircraft.

On the Alaskan side of the border, Wrangell lies approximately 100 kilometres to the southwest, and provides a full range of services and supplies, including a 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 the Scud River airstrip. In the early 1960's, Kennco constructed a cat road from their Galore Creek copper-gold deposit down the south side of the Scud River to the Stikine River and the Scud River airstrip. This cat road, which passes within a few hundred meters of the northeast corner of the Pup claim group, has not been maintained and would require major reconstruction before becoming passable.

The OP and Pup claims cover most of the Galore Pup Creek drainage, extending south into the headwaters of Jack Wilson Creek and north into the drainage of an unnamed creek which drains north into the Scud River (Figure 2). Topography is rugged, typical of mountainous and glaciated terrain, with elevations ranging from 350 meters in the Scud River valley on the northeast corner of the OP 1 claim to 2150 meters on the unnamed peak situated on the western boundary of the Pup 2 claim. Northerly-facing slopes are covered with permanent snowfields at higher elevations. One valley glacier descends to the 1150 meter elevation on the OP 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 1000 meters, the creek beds and slopes are covered by dense slide alder and willow growth. The steeper slopes are covered in short heather and other alpine vegetation. Rock exposure is excellent above 1000 meters, though much of it is inaccessible due to the steepness of the terrain.


57°20'
131°40'
131°25'
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)
PROPERTY LOCATION
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)
PS1 4647 (6)
PUP 2
4488 (2)
PUP 1
4487 (2)
GRACE 1
4162 (8)
GLACIER 3
4123 (7)
PUP 5
6523 (10)
GLACIER 12
4478 (2)
JW 2
4272 (10)
JW 4
4336 (11)
PUP 3
4489 (2)
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)
RB 7
5634 (1)
JW 6
4338(11)
JACK
3643 (9)
PL-4
5373 (10)
PL-5
5374 (10)
SADDLE 1
4430 (12)
SADDLE 4
4433 (12)
PL-2
5371 (10)
JW8
4340 (11)
JW 7
4339 (11)
Km 0 5 1 2 3 4 Km
PL-3
5372 (10)
SADDLEHORN
4252 (10)
RB 8
5635 (1)
RB 9
5636 (1)
RB 10
5637 (1)
NOK 35
5914 (3)
NUK 33
5912 (3)
NOK 34
5913 (3)
CONSOLIDATED GOLDWEST RESOURCES LTD.
PUP PROJECT
CLAIM MAP
BRITISH COLUMBIA
EQUITY ENGINEERING LTD.
DRAWN: J.W
MINING DIV: LIARD
FIGURE. 2
N.T.S. 104G/5E,6W,4E,3W
SCALE: 1:100,000
DATE: SEPT., 1991
REVISED:

The property lies in the wet belt of the Coast Range Mountains, with annual precipitation between 190 and 380 centimetres (Kerr, 1948). 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

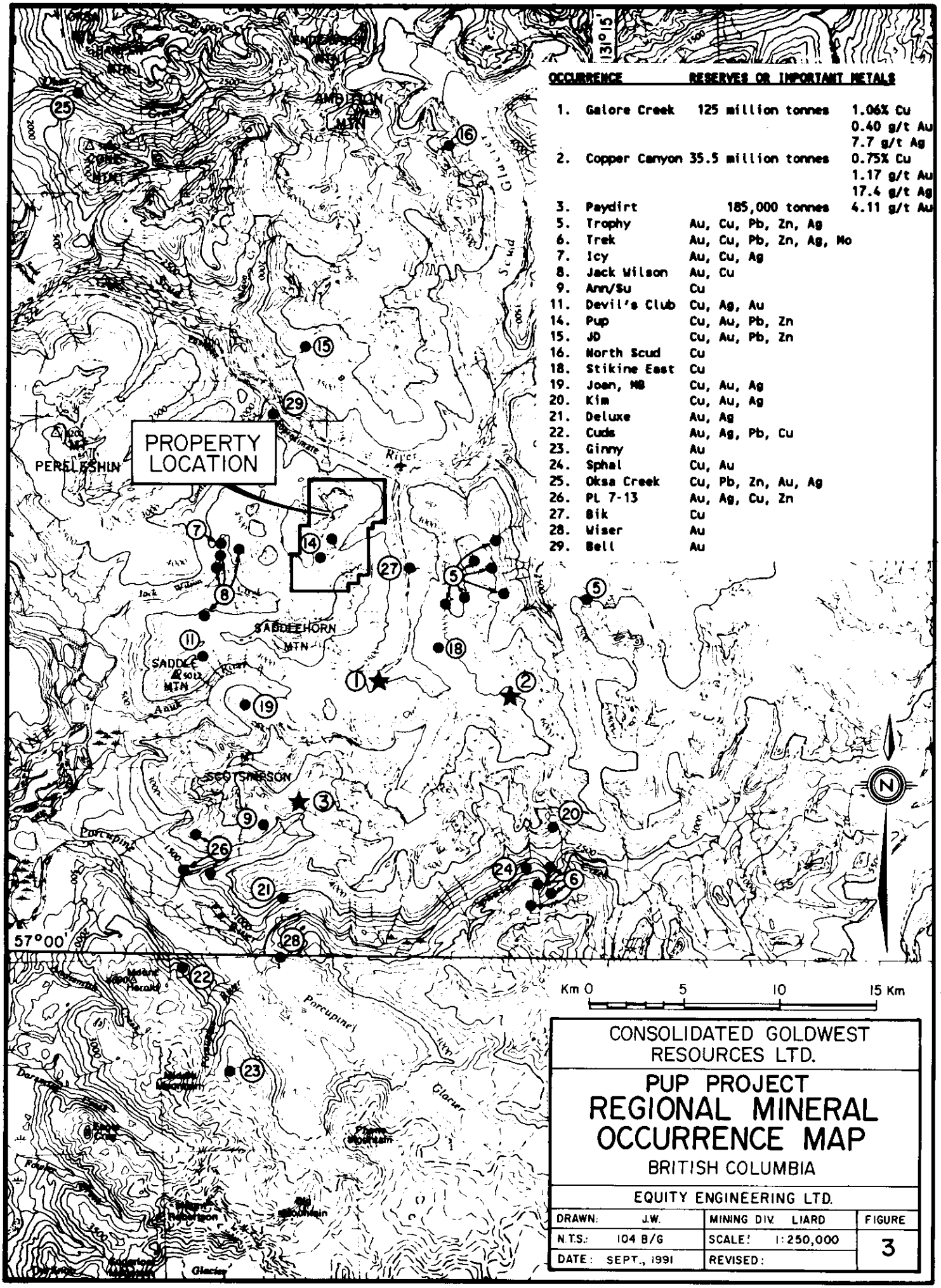
4.1 Previous Work

The Galore Creek district was extensively explored for its copper potential throughout the 1960's, following the discovery in 1955 of the Galore Creek copper-gold porphyry deposit (Figure 3). This deposit, whose Central Zone hosts reserves of 125 million tonnes grading 1.06% copper and 400 ppb gold (Allen et al, 1976), is located approximately five kilometres south of the Pup property. Kennecott is currently updating its feasibility study on the Galore Creek deposit, incorporating significant gold and copper results from drilling in recent years. Several major mining companies conducted regional mapping and silt sampling programs in the 1950's and 1960's over the entire Galore Creek area and in 1957 the Copper Canyon copper-gold porphyry deposit was discovered eight kilometres east of the Central Zone. The Copper Canyon deposit, with 35.7 million tonnes at a grade of 0.75% copper and 1.17 g/tonne (0.034 oz/ton) gold (Cons. Rhodes, 1991), was actively explored in 1990 after a hiatus of 33 years.

Conwest Exploration staked the CW claim group in 1964 over a large area north and west of the Galore Creek deposit, including the Galore Pup drainage. They conducted regional mapping and sampling over their claims, taking fifteen rock samples and 91 silt samples in 1964, of which five rock samples and 23 silt samples were taken from the area now covered by the OP and Pup claims. Of the thirteen silt samples which returned values of 300 ppm copper or higher, ten were taken from ground currently covered by the Pup claim group (Grant, 1964).

In 1965, PCE Explorations and Canadian Superior Explorations staked the O. P. claims near the present location of the OP 1 and 2 claims, but allowed them to lapse after performing limited soil and stream geochemical sampling (Hindson, 1965).

Consolidated Goldwest Resources Ltd. acquired the Pup property in 1988 and carried out a preliminary exploration program later that year, consisting of geological mapping, prospecting and geochemical sampling. Eleven screened stream sediment samples were collected from tributaries of Galore Pup Creek, with three exceeding 60 ppb gold. Five rock samples were collected from mineralized outcrop and float near Galore Pup Creek, with values



OCCURRENCE		RESERVES OR IMPORTANT METALS	
1.	Galore Creek	125 million tonnes	1.06% Cu 0.40 g/t Au 7.7 g/t Ag
2.	Copper Canyon	35.5 million tonnes	0.75% Cu 1.17 g/t Au 17.4 g/t Ag
3.	Paydirt	185,000 tonnes	4.11 g/t Au
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	
11.	Devil's Club	Cu, Ag, Au	
14.	Pup	Cu, Au, Pb, Zn	
15.	JD	Cu, Au, Pb, Zn	
16.	North Scud	Cu	
18.	Stikine East	Cu	
19.	Joan, MB	Cu, Au, Ag	
20.	Kim	Cu, Au, Ag	
21.	Deluxe	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 7-13	Au, Ag, Cu, Zn	
27.	Bik	Cu	
28.	Wiser	Au	
29.	Bell	Au	

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PUP 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: SEPT., 1991	REVISED:	

up to 1000 ppb gold and 4800 ppm copper (Awmack, 1989).

In 1989, Consolidated Goldwest carried out further prospecting and geological mapping, taking 8 silt samples and 130 rock samples. Two contour soil lines were established on the west side of Galore Pup Creek beneath some prominent gossans, in areas which returned positive silt sampling results for Conwest in 1964. Two zones of mineralization and alteration, the Malachite and Saddle Zones, were identified by the 1989 exploration program. The Malachite Zone is a porphyry-style copper-gold occurrence which covers an area 400 metres by 300 metres on the west side of Galore Pup Creek, with anomalous copper-gold soil geochemistry extending a further 500 metres south along the soil contour lines. The Saddle Zone is a system of northerly-trending shears and related copper-gold-lead-zinc occurrences over an area of 300 metres by 1,100 metres on the Pup 3 claim. Maximum values from grab sampling were 2.05% copper with 1.23 g/tonne (0.036 oz/ton) gold from the Malachite Zone and 1.30 g/tonne (0.038 oz/ton) gold from the Saddle Zone (Ross, 1989).

In 1990, Consolidated Goldwest established a grid over the Saddle Zone, extending 1,700 metres north from the south property boundary. Soil sampling over the grid yielded a gold anomaly (>50 ppb) extending 1,400 metres north from the property boundary, remaining open to the north and roughly coinciding with a copper anomaly. This soil anomaly included values up to 1400 ppb gold and 741 ppm copper. Geological mapping, rock sampling, magnetic and VLF-EM surveys were also carried out over the Saddle Zone grid. A small soil grid was emplaced over the Pickston Zone, a series of narrow quartz-sulphide veins within a gossanous thrust fault on the OP 1 claim. Additional mapping, prospecting and soil sampling were also carried out over the Malachite Zone (Chapman and Vanwermeskerken, 1990).

4.2 1991 Exploration Program

During July 1991, Consolidated Goldwest Resources Ltd. carried out a limited diamond drilling program on the Saddle Zone of the Pup property. Two drill holes with collars 425 metres apart, totalling 306.3 metres of BDGM core, were drilled to test gold-copper soil geochemical anomalies, a VLF-EM conductor and altered shear zones. Core was logged, split in its entirety and stored at the Porcupine River base camp. Drill logs are attached in Appendix C.

Geological mapping and prospecting were confined to the vicinity of the drilling, using the Saddle Zone grid and a 1:2,000 topographic enlargement for control. Thirty reconnaissance rock samples and 211 core samples were analyzed geochemically for gold and 31 elements by ICP. Rock samples that exceeded 1000 ppb gold, 100 ppm silver or 10,000 ppm copper, lead or zinc were assayed. Reconnaissance rock sample descriptions are attached in Appendix B and analytical certificates in Appendix D.

5.0 REGIONAL GEOLOGY

The basis for regional geological mapping in the Stikine River area was set out by Kerr (1948b), the crew of Operation Stikine (GSC, 1957) and Souther (1972). Their work has been refined in the Galore Creek area by Brown and Gunning (1989a,b) and Logan et al (1989a,b) at a scale of 1:50,000.

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 (Units 4A and 4B) with associated clastic sediments (Units 4C, 4D, 4G and 4J) and carbonate lenses (Unit 4E). These are capped by up to 700 metres of Mississippian limestone with a diverse fossil fauna (Unit 4E). 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, 1989a). Permian limestones (Units 6A, 6B and 6C), also about 700 metres 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 (Unit 7) are overlain by Upper Triassic Stuhini Group siliciclastic (Units 8A and 8B) and volcanic (Units 8D, 8E, 8G, 8H and 8I) 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 centre with numerous sub-volcanic plutons of syenitic composition. Jurassic Bowser Basin strata onlap the Stuhini Group strata to the southeast of the 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, 1989a,b). 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 (Unit 9) and the syenites of the Galore Creek Complex


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 Minfossils (Unit 8A, 8B, 8C)
uTSp PYROXENE PORPHYRY FLOWS AND FRAGMENTALS (Unit 8D)
uTSb INTERMEDIATE TO MAFIC FRAGMENTALS, BRECCIA, TUFF, LAHAR (Unit 8H)
MIDDLE TO UPPER TRIASSIC
muTSv MASSIVE ANDESITE FLOWS AND TUFFS, AMYGDALOIDAL BASALT
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 FUSULINE CORALS COMMON (Unit 6C)
Pau BUFF ARGILLITE UNIT PYRITE PYRRHOTITE BEARING ARGILLITE AND SILTSTONE (Unit 5)
PERMIAN AND OLDER
Pv PLAGIOCLASE PORPHYRY FLOWS, VOLCANICLASTICS, PURPLE ASH TUFF, CHLORITE SCHIST (Unit 4B)
Pu UNDIVIDED GREEN AND MAROON FOLIATED METAVOLCANICS AND METASEDIMENTS (Unit 4)
bls LIMESTONE HORIZONS WHITE TO GREY RECRYSTALLIZED LIMESTONE IN BOTH Pv AND Pu (Unit 4E)
sl SILICEOUS UNIT MED TO BEDDED TO LAMINATED SEMICHTIC 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 11C)
MIDDLE JURASSIC
mJgd EQUIGRANULAR, MEDIUM GRAINED HORNBLENDE BIOTITE GRANODIORITE AND QUARTZ MONZONITE (Mt Dagdy) (Unit 12B)
mJd HETEROGENEOUS, MEDIUM TO COARSE GRAINED QUARTZ DIORITE, HORNBLENDE DIORITE, HORNBLENDITE AND PYROXENITE (Unit 12)
EARLY TO MIDDLE JURASSIC CALDER CREEK INTRUSIONS
emJGs SYENITE, ORTHOCLASE PORPHYRITIC MONZONITE (Unit 11A, 11B)
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 (defined, approximate, assumed, teeth in direction of dip)
Shear zone, mylonite
PROPERTY LOCATION
57° 20' N
57° 10' N
131° 40' W
131° 25' W
Geology after: Logan et al 1989b
Brown & Gunning 1989b
Km 0 .5 1 2 3 4 Km
CONSOLIDATED GOLDWEST RESOURCES LTD.
PUP PROJECT
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: SEPT., 1991
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FIGURE 4

(Unit 11). Jura-Cretaceous Coast Plutonic Complex intrusions (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 (Unit 13), felsic and mafic sills and dykes (Unit 14), and biotite lamprophyre (minette) dykes (Unit 14C).

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 Jurassic 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 display north-side down dip slip kinematics, 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 $\pm$ molybdenum $\pm$ 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 dykes 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 Ann/Su, Copper Canyon, Sphal and Jack Wilson Creek deposits.

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 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. The Paydirt deposit appears to fall into this category.

Skarns represent a minor percentage of the precious metal-bearing occurrences in the Galore Creek camp. The mineralogy of these deposits is influenced by the composition of the intrusion driving the hydrothermal fluids. In deposits associated with alkalic intrusions, the skarn assemblage is commonly 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 occurrences 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.

Kuroko-type volcanogenic massive sulphide mineralization has not yet been reported from the Galore Creek area, but significant deposits occur in similar stratigraphy to the northwest and southeast. Volcanogenic massive sulphide deposits have long been known in the Tulsequah area, hosted by felsic and sedimentary units of a Paleozoic island arc complex (Nelson and Payne, 1984), which appears to correlate with the pre-Permian metamorphic rocks of the

Galore Creek district. The Tulsequah Chief deposit, located 200 kilometres northwest of the Paydirt property, has reported reserves of 4.7 million tonnes at a grade of 1.6% copper, 1.3% lead, 7% zinc, 2.7 g/tonne gold and 101 g/tonne silver (Northern Miner, Dec. 10/90). On the Rock and Roll property, located 45 kilometres southwest of the Paydirt claims in the Iskut River area, Thios Resources reports a new VMS discovery in Stuhini sediments with drill intersections up to 881 g/tonne silver, 5.35% zinc, 2.07% lead, 2.74 g/tonne gold and 0.58% copper over 9.7 metres (Thios, 1990).

6.0 PROPERTY GEOLOGY AND MINERALIZATION

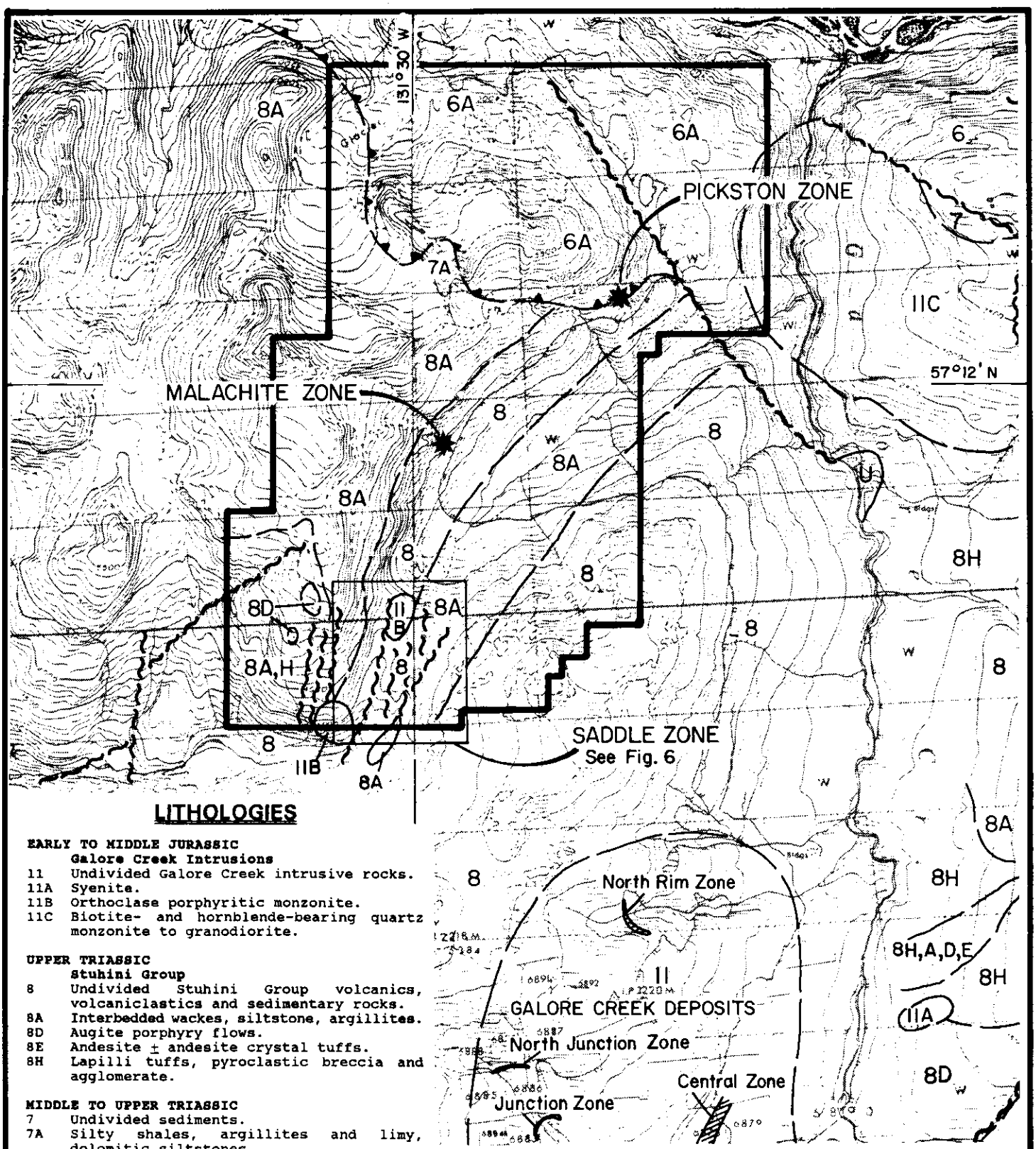
6.1 Geology

Geological mapping has been conducted over the Pup property by Ross (1989) and Chapman and Vanwermeskerken (1990). Descriptions of property geology are abridged from these reports (Figure 5). Additional mapping during the 1991 program was confined to the vicinity of drilling in the Saddle Zone area.

The oldest rock unit recognized on the property is a pale grey to buff-coloured, thickly bedded, crystalline Permian limestone (**Unit 6A**), with minor cherty and argillaceous interbeds, which underlies most of the OP 1 and 2 claims. Bedding generally strikes north and dips steeply to the west. The limestones on the property lie in the eastern limb of a northerly striking, southerly plunging syncline. A pronounced northwest striking fault cuts through the limestones across the OP 1 claim, truncating the thrust fault which has thrust the Permian limestone over the Upper Triassic Stuhini Group strata. Minor, irregular gabbroic dykes occur randomly in the limestones, apparently unrelated to any major structures.

The second oldest unit is a Middle Triassic carbonaceous silty shale (**Unit 7**). Logan et al. (1989b) have mapped this unit in fault-bounded wedges 600 meters northwest of the legal corner post for the OP 2 claim and at the edge of a glacier on the western boundary of that claim. Logan et al. (1989b) describe the unit as carbonaceous silty shales with elliptical concretions, overlain by siliceous and limy siltstones.

The remainder of the claim block is underlain by the Upper Triassic Stuhini Group of sediments, volcanic flows and tuffs (**Unit 8**) which are believed to overlie conformably the Middle Triassic sediments. Greywacke and sedimentary breccia (**Unit 8A**) are exposed along Galore Pup Creek. The greywacke is dark grey, micaceous and calcareous. The sedimentary breccia is composed of a grey-green fine- to medium-grained matrix containing numerous rip-up clasts of dark grey shale. Bedding strikes northeast and dips steeply northwest. Limited mapping along the southeastern slope of the valley confirmed the presence of siltstones and greywackes up to



LITHOLOGIES

EARLY TO MIDDLE JURASSIC
Galore Creek Intrusions

11 Undivided Galore Creek intrusive rocks.
11A Syenite.
11B Orthoclase porphyritic monzonite.
11C Biotite- and hornblende-bearing quartz monzonite to granodiorite.

UPPER TRIASSIC
Stuhini Group

8 Undivided Stuhini Group volcanics, volcaniclastics and sedimentary rocks.
8A Interbedded wackes, siltstone, argillites.
8D Augite porphyry flows.
8E Andesite ± andesite crystal tuffs.
8H Lapilli tuffs, pyroclastic breccia and agglomerate.

MIDDLE TO UPPER TRIASSIC

7 Undivided sediments.
7A Silty shales, argillites and limy, dolomitic siltstones.
7B Chert and cherty siltstones.

Stikine Assemblage

PERMIAN

6A Upper member Permian limestone.

MISSISSIPPIAN OR OLDER(?)

U Serpentinite

Geology adapted in part from Falls (1990), Chapman and Vanwermeskerken (1990), Harris (1991) and Taylor (1990).

0 1 2 3
KILOMETRES

CONSOLIDATED GOLDWEST RESOURCES LTD.

PUP PROJECT
GEOLOGY
BRITISH COLUMBIA

EQUITY ENGINEERING LTD.

DRAWN: J.J.E.	MINING DIV.: LIARD	FIGURE 5
N.T.S.: 104G/3W,4E	SCALE: 1:50000	
DATE: SEPT., 1991	REVISED:	

1250 metres elevation. On the northwestern slope of Galore Pup valley, the clastic sediments are overlain by 30 meters of black, graphitic, rusty-weathering argillite which is overlain by an unknown thickness of grey-green siltstones. These siltstones are slightly micaceous and contain 2-3% finely disseminated pyrite. Bedding strikes north-south with a steep dip to the west. Several discontinuous, pyrrhotite-bearing quartz-carbonate veins, less than 10 centimetres in width, crosscut the bedding.

Above the sediments, at approximately 1000 meters elevation, is a mixed package of weathered schistose rocks of uncertain origin and altered volcanics (Unit 8). Foliation strikes northeast and dips to the northwest. Finely disseminated pyrite occurs in the schist. The volcanics are pyritic, rusty-weathering and generally too oxidized to determine their original composition. At 1350 meters elevation, the volcanics are overlain by clastic sediments (**Unit 8A**), similar to those exposed in Galore Pup Creek and at higher elevations by dark grey, well laminated argillites and siltstones. Minor pyroxene porphyry flows (**Unit 8D**) are interbedded with the sediments.

The ridge on the western half of the Pup 3 claim is dominantly underlain by pale grey-green crystal tuffs and tuffaceous siltstones (**Unit 8A, 8H**), and minor pyroxene porphyry flows (**Unit 8D**). Contacts between the two units are sharp and irregular. The tuffaceous units dominate the western half of the ridge with the sedimentary unit on the eastern half. Thin-bedded, dark grey, rusty-weathering argillites of this unit (**Unit 8A**) outcrop on top of the ridge as faulted, sheared wedges caught up in the volcanics. Several well-defined shear zones, up to ten metres in width, strike 010°-020° along the length of the ridge and dip steeply to the west. A wide band of sheared argillite and tuff is exposed on the main cliff face where this western ridge drops to the Saddle Zone. These beds form a large overturned isoclinal fold dipping moderately to the west, closing to the east. Tightly folded and sheared argillite and tuff beds occupy the core of the fold. A fault-bounded band of foliated argillites parallel the shears on the western side of the ridge.

The Saddle area is a complex assemblage of Stuhini Group tuffaceous units, altered volcanics and minor graphitic argillites, with altered monzonite intrusives (Figure 6). Numerous north-northeast to north-northwest trending shear zones cross the area, obscuring contacts and imparting a strong foliation and sericitization to the affected units. Foliation strikes consistently north-northeast and dips forty to seventy degrees to the west. Highly altered, pyritiferous volcanics (**Units 8D, 8H**), tuffs (**Unit 8G**), siltstones (**Unit 8A**), and intrusives (**Unit 11B**) underlie the western half of the Saddle area, whereas relatively unaltered, undeformed lapilli and crystal tuffs (**Unit 8H**) and porphyritic intrusives (**Unit 11B**) underlie the eastern half of the saddle. The intrusives are pale grey, weathering to white or rusty

brown, with up to 10% black hornblende needles and up to 40% feldspar phenocrysts in a fine-grained grey matrix containing finely disseminated pyrite or pyrrhotite. Staining indicates that these commonly zoned phenocrysts are plagioclase within a matrix composed entirely of potassium feldspar. The monzonitic intrusives, which have not been dated, are assumed to be Jurassic Galore Creek intrusives; however, their textures resemble the Tertiary stocks found elsewhere in the Galore Creek district. The monzonite bodies appear to have been more resistant to the episodes of shearing, as the shear zones are locally deflected by the monzonites. The crystal and lapilli tuff (**Unit 8H**) is pale grey, weathering to white. Its fragments stand out in relief on weathered surfaces, giving the rock a gritty, sedimentary appearance.

6.2 Mineralization

Three zones of significant mineralization have been described by Chapman and Vanwermeskerken (1990) and Ross (1989): the Saddle Zone, located on the western half of the saddle area between the headwaters of Jack Wilson and Galore Pup Creeks (Figure 6), the Malachite Zone, located on the northwestern slope of the Galore Pup valley between 1000 and 1400 meters elevation and the Pickston Zone, located near 1100 metres west of Galore Pup Creek on the OP 2 claim. Of these, only the Saddle Zone was examined during the 1991 program, and descriptions for all zones are largely taken from Ross (1989) and Chapman and Vanwermeskerken (1990).

Saddle Zone

The Saddle Zone (Figure 6) comprises altered volcanics, intrusives and sediments, cut by a number of strong northerly-trending shears. Alteration is variable and irregular, with varying degrees of sericitization and silicification and later bleaching and clay alteration. Chlorite and epidote alteration is also locally present in the volcanics. Pyritization is widespread, with most rocks containing a minimum of 2-3% silvery pyrite. Mineralization consists of 1-5% finely disseminated pyrite with lesser disseminated chalcopyrite, galena and sphalerite, with or without quartz, in foliated host rocks. Galena and sphalerite are more prevalent in the southern half of the saddle, while pyrite dominates to the north. Significant results from the Saddle Zone are summarized in Table 6.2.1.

Sampling in the Saddle Zone has been concentrated on a major shear approximately ten meters in width, termed the "Jack Wilson Shear", which trends north-northeast and dips 50° to the west. The shear can be traced for approximately 1100 meters along strike, cutting across the saddle and disappearing under glacial debris in Jack Wilson Creek. Samples taken from this shear along 600 meters of strike length, returned anomalous gold and base metal values which ranged up to 480 ppb gold, 8610 ppm copper, 1.95% lead and 3.40% zinc (Ross, 1989). Two samples taken in 1991 (52771 and

52772) of sericitized, silicified and pyritized lapilli tuffs with traces of chalcopyrite and disseminated pyrite returned values of up to 1637 ppm copper with weakly anomalous gold (123 ppb).

Another well defined shear within the Saddle Zone, termed the "Galena Shear", trends 032° and dips vertically approximately one hundred meters east of and near parallel to the Jack Wilson Shear. It is marked by a gully approximately five meters deep, which is truncated to the north at the bowl shaped area at the head of the Jack Wilson Creek.

A zone of intense bleaching lies roughly between and along these two shear zones. Sampling in 1990 of a quartz-calcite-chalcopyrite stringer stockwork within this zone returned values of up to 260 ppb gold and 4300 ppm copper (Chapman and Vanwermeskerken, 1991).

Another major shear zone, parallel to the Galena Shear and a further 200 meters to the east, was sampled at only two locations along its inferred 1000 meter strike length. In both samples, erratic, discontinuous quartz-sulphide veins are hosted in dark green pyroxene porphyry flows adjacent to the shear. These quartz veins returned anomalous values up to 810 ppb gold, 40.0 ppm silver, 1.91% zinc, 9140 ppm lead and 1400 ppm copper (Ross, 1989).

An occurrence of porphyry-style mineralization in an area of previous chip sampling (Chapman and Vanwermeskerken, 1991) was re-examined in 1991. A 2.0 metre select sample (52778) consisting of fracture- and veinlet-controlled chalcopyrite within monzonite returned values of 820 ppb gold and 3556 ppm copper. A similar grab sample (39135) of chalcopyrite-bearing quartz stringers taken in 1990 contained 75 ppb gold and 14,000 ppm copper.

The Saddle Zone is penetrated by later bedding- and foliation-parallel and cross-cutting quartz veins with minor copper and iron sulphide mineralization. Chapman and Vanwermeskerken (1991) noted that these veins are oriented 154°/58° NE and are probably extensional features related to folding.

TABLE 6.2.1
SIGNIFICANT SADDLE ZONE SAMPLING RESULTS

SAMPLE	WIDTH (meters)	GOLD (ppb)	SILVER (ppm)	COPPER (ppm)	LEAD (ppm)	ZINC (ppm)
52771*	0.35	24	1.8	1229	19	45
52772*	5.0	123	2.8	1637	12	40
52778*	2.0	820	3.7	3556	17	165
39117#	n/a	45	--	1200	--	--
39135#	n/a	75	--	14000	--	--
39137#	n/a	230	--	2700	--	--
39139#	n/a	260	--	4300	--	--
37776#	n/a	<5	--	1300	--	--

TABLE 6.2.1 (Continued)
SIGNIFICANT SADDLE ZONE SAMPLING RESULTS

SAMPLE	WIDTH (meters)	GOLD (ppb)	SILVER (ppm)	COPPER (ppm)	LEAD (ppm)	ZINC (ppm)
447202&	Float	560	1.0	2160	35	40
447203&	0.3	480	2.0	962	5	34
447206&	1.0	210	16.5	1.57%	25	128
447212&	0.1-1.0	810	<0.5	375	30	130
447213&	0.2-0.5	50	40.0	1400	9140	1.91%
459580&	Float	280	13.0	1.92%	<5	60
459583&	1.0	130	3.5	2410	75	1.11%
459585&	1.5	0.038 oz/t	7.0	184	365	152
463059&	0.5	350	3.0	1780	230	704
463063&	0.5	260	5.5	8610	<5	78
463065&	1.5	95	5.0	716	1.95%	3.40%

* 1991 sample
\# 1990 sample (Chapman and Vanwermeskerken, 1991)
& 1989 sample (Ross, 1989)

Malachite Zone

The Malachite Zone extends 400 meters horizontally, between 1000 and 1400 meters elevation on the northwestern slope of the Galore Pup valley, in an area drained by several major tributaries of Galore Pup Creek. Intermediate tuffs and argillites, intruded by andesite and lamprophyre dykes, are very weakly foliated parallel to the Saddle Zone and contain 3-5% disseminated pyrite. Mineralization is both disseminated and within discrete quartz veins. In the first type, 1-7% pyrite and 1-2% chalcopyrite form blebs and disseminations within altered volcanics. Grab sample #459562, which was taken across one meter of this material from within a twenty meter patch of heavy malachite staining, assayed 1.23 g/tonne (0.036 oz./ton) gold with 2.05% copper. The second type of mineralization consists of quartz veins with up to 5% pyrite and 1% chalcopyrite. The quartz veins are generally 2-30 centimetres in width and up to five meters in length. A small outcrop of a felsic intrusive body, several meters square and containing up to 1% disseminated chalcopyrite, outcrops just below the Malachite Zone. Silver, lead and zinc values are relatively low for all Malachite Zone samples.

Pickston Zone

The Pickston Zone consists of a series of silicious sulphide-rich pods and quartz-sulphide veins within a gossanous thrust fault. Individual veins and pods are up to 20 centimetres wide and ten metres long, with up to 50% pyrite, 30% pyrrhotite, 20% galena, 5% chalcopyrite, minor bornite and traces of sphalerite. Gold contents are generally very low, with a maximum of 510 ppb (Chapman and Vanwermeskerken, 1991).

7.0 DIAMOND DRILLING

Two diamond drill holes, spaced 400 metres apart and totalling 306.3 metres of BDGM core, were drilled on the Saddle Zone of the Pup property from July 27 to 31, 1991. These holes were designed to test coincident copper-gold soil anomalies, a VLF-EM conductor, prominent north-northeasterly trending altered shear zones. Drill hole location and orientation data are summarized in Table 7.0.1 below.

TABLE 7.0.1
1991 DIAMOND DRILL HOLE DATA

Hole Number	Grid Location North	Grid Location East	Azimuth (degrees)	Dip (degrees)	Length (metres)
PUP91-01	13+25	1+50	090	-48	179.2
PUP91-02	8+94	1+51	090	-45	127.1

7.1 Drill Hole PUP91-01

Drill hole PUP91-01 was collared west of a strong coincident copper-gold soil geochemical anomaly, with maximum values of 1000 ppb gold and 430 ppm copper. This area, at the northern end of the Saddle Zone shears, is underlain by silicified and sericitized Stuhini Group mafic volcaniclastics containing 5% to 7% disseminated pyrite.

This drill hole intersected strongly sericitized and moderately to strongly silicified Stuhini Group mafic volcaniclastics and plagioclase-porphyritic monzonite dykes. Generally, these dykes are not as intensely altered as the volcanics they intrude. Overall, the hole contains 5% to 10% disseminated pyrite with lesser pyrrhotite and traces of chalcopyrite, commonly with the pyrrhotite, throughout the hole. This drill hole did not intersect any intervals with greater than 500 ppb gold or 1000 ppm copper.

7.2 Drill Hole PUP91-02

Drill hole PUP91-02 was designed to test a VLF-EM conductor axis and a copper-gold soil geochemical anomaly with values of up to 300 ppb gold and 550 ppm copper. It also tested the Jack Wilson Shear, which was well defined by the VLF-EM survey. On surface, epidote and potassium feldspar altered Stuhini Group crystal tuffs, sericite and pyrite altered mafic volcaniclastics, tuffs and plagioclase-porphyritic monzonites are exposed. Significant intersections from this hole are tabulated below in Table 7.2.1.

The rock types encountered by drilling correlate very well with the surface exposures. Of particular interest is a zone marked by numerous monzonite dykes, commonly with sub-parallel plagioclase phenocrysts which has been altered by potassium

feldspar from 22.8 to 80 metres in depth. Mineralization in this hole is similar to that intersected in PUP91-01, consisting of 3% to 10% disseminated pyrite with lesser pyrrhotite and traces of chalcopyrite. The cupriferous intersection near the top of the hole reflects mineralization within the Jack Wilson Shear consisting of 3% to 7% disseminated pyrite with minor chalcopyrite and malachite within rusty, strongly fractured sericite altered mafic volcanics. The highest auriferous intersection, assaying 1.26 g/tonne (0.037 oz./ton) gold from 68.4 to 69.9 metres, consists of sericitic mafic volcaniclastics with pyrite, pyrrhotite and traces of chalcopyrite, but otherwise there are no macroscopic characteristics that make this interval distinctive.

TABLE 7.2.1.
PUP91-02 SIGNIFICANT INTERSECTIONS

Depth (metres)	Length (metres)	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
9.3 - 19.8	10.5	114	1.5	1213	17	73
68.4 - 69.9	1.5	1.26g/t	2.0	398	78	52

8.0 DISCUSSION

The 1991 exploration program focused on drilling the Saddle Zone structures and mapping in the immediate vicinity of these two drill holes. The drill targets were defined by coincident copper-gold geochemistry, VLF-EM conductors and anomalous rock geochemistry. The Saddle Zone is typical of high alpine environments with poor soil development; as a result, the 1990 soil geochemical values closely resemble those obtained by surface rock sampling and through drilling. Intersections encountered by drilling are sub-economic in grade and size. The best mineralization sampled in 1991 was a chalcopyrite-bearing monzonite intrusive (52778) resembling porphyry-style mineralization of the Grey or West Zones on the Trek property (Awmack, 1991) containing 820 ppb gold and 3556 ppm copper. This monzonite, which appears to be potassium feldspar altered, contains 0.5% to 1% disseminated and fracture-controlled chalcopyrite and covers an area 50 metres by 60 metres, the southern extent of which has not been examined.

The genesis of the copper mineralization noted above in the Saddle Zone appears to be directly related to monzonitic intrusives, which are assumed to be Jurassic Galore Creek intrusions. The monzonite plugs generated a porphyry copper system that is similar in age and, in part, alteration to that observed at the Galore Creek Deposit three kilometres to the southeast. However, this monzonite seems to be a plug-like body in the Saddle Zone, as opposed to a series of episodic syenite dykes and sills as present at Galore Creek. Heavy sericite and pyrite alteration was introduced to this system along the north-trending shear zones.

The sericite-pyrite alteration has overprinted the potassium feldspar alteration, obscured original rock textures and replaced the regional propylitic alteration. These sericite altered shear zones have been noted as destructive to copper grades at the Galore Creek Deposit (E. Yarrow, pers. comm., 1991) and on the Paydirt property (Harris, 1991). The bedding-parallel Jack Wilson Shear is wider and more penetrative in the volcanic units and is pinched and deflected by the monzonite plug. The faulting associated with this shear zone continued after the sericite-pyrite mineralizing event into the late Tertiary, as evidenced by offset, unaltered Tertiary andesite dykes.

Although diamond drilling of the Saddle Zone did not return significant economic intersections, copper- and gold-bearing porphyry-style mineralized monzonite intrusives were observed within this zone peripheral to the sericite-pyrite alteration. The similarity of this mineralization to showings at the Trek property, and deposits at Galore Creek and Copper Canyon merits further investigation.

Respectfully submitted,
EQUITY ENGINEERING LTD.

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GEOLOGICAL ASSOCIATION OF CANADA — FELLOW

Vancouver, British Columbia
September, 1991

APPENDIX A

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APPENDIX B

ROCK SAMPLE DESCRIPTIONS

AS	Arsenopyrite	GO	Goethite
AZ	Azurite	JA	Jarosite
BO	Bornite	MC	Malachite
CA	Calcite	MG	Magnetite
CB	Fe-Carbonate	MO	Molybdenite
CL	Chlorite	MS	Sericite
CP	Chalcopyrite	PO	Pyrrhotite
CY	Clay	PY	Pyrite
EP	Epidote	SI	Silica
GL	Galena	SP	Sphalerite
GO	Goethite	SI	Silica
JA	Jarosite	SP	Sphalerite

Property : PUP NTS : 104G Date : 08/23/91

Sample No.						Au	Ag	Cu	Pb	Zn	As
	Location :	6339 292 N	Type : Grab	Alteration :	EP, MS, pQZ	(ppb)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
		347 336 E	Strike Length Exp. : 1 m	Sulphides :	5-10%PY						
52751	Elevation:	1175 m	Sample Width : 1 m	Oxides :	GE, JA	46	2.1	158	9	53	1
	Orientation:	? / ? ?	True Width : 1 m	Host :	Augite porphyry						

Comments : Sample from outcrop near soil anomaly, containing stringers of calcite and manganese. Sample was possibly from a vein.

Sample No.						Au	Ag	Cu	Pb	Zn	As
	Location :	6339 304 N	Type : Grab	Alteration :	EP, MS	(ppb)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
		347 364 E	Strike Length Exp. : ? m	Sulphides :	5%PY						
52752	Elevation:	1170 m	Sample Width : 30 cm	Oxides :	GE, JA	37	1.6	63	9	38	1
	Orientation:	? / ? ?	True Width : m	Host :	Augite porphyry						

Comments : Sample from a sericite-altered zone within a resistant epidote altered knob at station 0+25W 3+00N.

Sample No.						Au	Ag	Cu	Pb	Zn	As
	Location :	6339 296 N	Type : Grab	Alteration :	MS	(ppb)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
		347 356 E	Strike Length Exp. : ? m	Sulphides :	1%PY						
52753	Elevation:	1170 m	Sample Width : ? m	Oxides :		20	1.2	35	5	11	1
	Orientation:	? / ? ?	True Width : ? m	Host :	Augite porphyry						

Comments : Sample of recessive sericite alteration between 0+25W and 0+50W on line 3+00N.

Sample No.						Au	Ag	Cu	Pb	Zn	As
	Location :	6339 294 N	Type : Grab	Alteration :	EP, MS	(ppb)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
		347 366 E	Strike Length Exp. : 100 m	Sulphides :	<1%PY						
52754	Elevation:	1165 m	Sample Width : 3 m	Oxides :	GE	24	1.2	46	8	48	2
	Orientation:	? / ? ?	True Width : 3 m	Host :	Augite porphyry						

Comments : Epidote sericite alteration sampled at 1 metre intervals across true width.

Sample No.						Au	Ag	Cu	Pb	Zn	As
	Location :	6339 312 N	Type : Grab	Alteration :	MS	(ppb)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
		347 380 E	Strike Length Exp. : 100 m	Sulphides :	10%PY						
52755	Elevation:	1170 m	Sample Width : 10 m	Oxides :	GE, JA	18	.8	29	8	24	1
	Orientation:	? / ? ?	True Width : 10 m	Host :	Unknown						

Comments : Chip sample across 10 metres of bleached sericite alteration.

Sample No.						Au	Ag	Cu	Pb	Zn	As
	Location :	6340 324 N	Type : Grab	Alteration :	sMS, pSI	(ppb)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
		347 636 E	Strike Length Exp. : 30 m	Sulphides :	20%PY						
52756	Elevation:	1195 m	Sample Width : 15 m	Oxides :	GE, trJA, trMC	39	1.1	118	8	16	4
	Orientation:	039 / 52 W	True Width : 15 m	Host :	Lapilli tuff						

Comments : Sampled across a wide band of alteration. Sample taken to the west of sample number 52758

Sample No.	Location :	Type :	Alteration :		Au	Ag	Cu	Pb	Zn	As
	6340 270 N	Grab	sMS		(ppb)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
	347 672 E	Strike Length Exp. : 40 m	Sulphides :	TrCP, 10%PY						
52757	Elevation: 1225 m	Sample Width : 4 m	Oxides :	wGE	78	1.7	398	19	47	3
	Orientation: 026 / 50 W	True Width : 4 m	Host :	Monzonite						

Comments : Sample from a band of alteration about 20 metres up slope from station 2+50E L13+00N.

Sample No.	Location :	Type :	Alteration :		Au	Ag	Cu	Pb	Zn	As
	6340 276 N	Grab	MS		(ppb)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
	347 672 E	Strike Length Exp. : 30 m	Sulphides :	3-5%PY						
52758	Elevation: 1220 m	Sample Width : 4 m	Oxides :	GE	110	1.2	151	22	65	18
	Orientation: 021 / ? ?	True Width : 4 m	Host :	Monzonite						

Comments : Sample adjacent to #52757 taken at intervals across a schistose resistant ridge.

Sample No.	Location :	Type :	Alteration :		Au	Ag	Cu	Pb	Zn	As
	6340 284 N	Grab	pCL, MS, SI		(ppb)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
	347 680 E	Strike Length Exp. : 40 m	Sulphides :	3%PY						
52759	Elevation: 1220 m	Sample Width : 20 m	Oxides :	wGE	44	1.6	469	20	67	22
	Orientation: ? / ? ?	True Width : 20 m	Host :	Monzonite						

Comments : Sample taken from very hard, slightly rounded band of mineralization.

Sample No.	Location :	Type :	Alteration :		Au	Ag	Cu	Pb	Zn	As
	6340 304 N	Grab	sMS, wSI		(ppb)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
	347 800 E	Strike Length Exp. : 1 m	Sulphides :	5%PY						
52760	Elevation: 1145 m	Sample Width : 30 cm	Oxides :	wGE	5	1.2	36	7	21	4
	Orientation: 358 / ? ?	True Width : 30 cm	Host :	Mafic volcaniclastic						

Comments : Sample from a very small outcrop in a resesive gully @ 3+75E L13+00N.

Sample No.	Location :	Type :	Alteration :		Au	Ag	Cu	Pb	Zn	As
	6340 286 N	Grab	MS		(ppb)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
	347 856 E	Strike Length Exp. : 5 m	Sulphides :	5%PY						
52761	Elevation: 1145 m	Sample Width : 30 cm	Oxides :	GE	40	.7	158	8	18	4
	Orientation: 036 / 71 W	True Width : 30 cm	Host :	Mafic volcaniclastic						

Comments : Sample from a large shear zone; either pinches out or dives beneath overburden. Quartz veining present parallel to shear zone.

Sample No.	Location :	Type :	Alteration :		Au	Ag	Cu	Pb	Zn	As
	6340 302 N	Grab	wCL, mSI		(ppb)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
	347 298 E	Strike Length Exp. : 100 m	Sulphides :	3-5%PO						
52762	Elevation: 1130 m	Sample Width : 3 m	Oxides :		18	1.8	105	2	56	1
	Orientation: ? / ? ?	True Width : 3 m	Host :	Unknown						

Comments : Sample taken up slope from station 4+75E L13+00N from a large outcrop containing fine-grained disseminated PO.

Sample No.	Location	Type	Alteration		Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)
	6340 000 N 347 632 E	Grab Strike Length Exp. : 60-70 m	Alteration : Sulphides :	pCL, MS, sSI 3%PO						
52763	Elevation: 1250 m Orientation: ? / ? ?	Sample Width : 6 m True Width : ? m	Oxides : Host :	sGE Monzonite	34	1.3	182	17	27	2

Comments : Sample from large altered outcrop with numerous quartz veins (sample #52764). Strong GE staining is on the quartz veining in the footwall only.

Sample No.	Location	Type	Alteration		Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)
	6339 994 N 347 632 E	Grab Strike Length Exp. : 15 m	Alteration : Sulphides :	QZ						
52764	Elevation: 1250 m Orientation: 003 / 36 W	Sample Width : 20 cm True Width : 20 cm	Oxides : Host :	sGE, mJA Monzonite	16	.6	86	9	19	13

Comments : Sampled a strongly oxidized quartz vein directly up slope from station 2+25E L10+00N.

Sample No.	Location	Type	Alteration		Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)
	6340 270 N 347 624 E	Grab Strike Length Exp. : 3 m	Alteration : Sulphides :	mEP, mMS 7%PY						
52765	Elevation: 1245 m Orientation: 191 / 45 W	Sample Width : 1 m True Width : 1 m	Oxides : Host :	wGE Monzonite	28	1.1	144	16	46	11

Comments : Sample from recessive outcrop which had a distinctly different weathered surface.

Sample No.	Location	Type	Alteration		Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)
	6340 248 N 347 676 E	Select Strike Length Exp. : 3 m	Alteration : Sulphides :	mEP, sSI 7%PY, trGL						
52766	Elevation: 1240 m Orientation: 175 / 44 W	Sample Width : 20 cm True Width : 20 cm	Oxides : Host :	sGE, mJA Monzonite	187	.4	135	127	51	22

Comments : Sampled from a small vuggy lens of alteration.

Sample No.	Location	Type	Alteration		Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)
	6340 260 N 347 676 E	Select Strike Length Exp. : 1 m	Alteration : Sulphides :	sMS, sSI						
52767	Elevation: 1230 m Orientation: 350 / 62 W	Sample Width : 35 cm True Width : 35 cm	Oxides : Host :	sGE, sJA Monzonite	119	.4	118	15	18	7

Comments : Sample with abundant boxworks; width is approximate, footwall under overburden/snow. Possibly the same structure as 52766.

Sample No.	Location	Type	Alteration		Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)
	6340 256 N 347 668 E	Grab Strike Length Exp. : 30 m	Alteration : Sulphides :	mMS 3%PY						
52768	Elevation: 1240 m Orientation: ? / ? ?	Sample Width : 1 m True Width : 1 m	Oxides : Host :	mGE Monzonite	6	1.8	50	13	20	3

Comments : Sample from an outcrop coated with copper lichen.

Sample No.	Location :		Type :		Alteration :		Au	Ag	Cu	Pb	Zn	As
		6340 250 N		Select		mMS,sSI	(ppb)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
		347 650 E	Strike Length Exp. :	10 m	Sulphides :	3%PY						
52769	Elevation:	1250 m	Sample Width :	60 cm	Oxides :	GE, JA	8	1.1	81	10	18	9
	Orientation:	? / ? ?	True Width :	60 cm	Host :	Monzonite						

Comments : Sample of vuggy alteration with pyrite adjacent to a siliceous resistant knob. Possibly at contact between intrusive and volcanic.

Sample No.	Location :		Type :		Alteration :		Au	Ag	Cu	Pb	Zn	As
		6340 244 N		Grab		MS, SI	(ppb)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
		E	Strike Length Exp. :	10 m	Sulphides :							
52770	Elevation:	1290 m	Sample Width :	20 cm	Oxides :	GE, JA	49	.1	86	8	27	1
	Orientation:	051 / 59 W	True Width :	15 cm	Host :	Mafic Volcanic						

Comments : Sample of a relatively large lens or shear zone of alteration, very weathered.

Sample No.	Location :		Type :		Alteration :		Au	Ag	Cu	Pb	Zn	As
		6339 928 N		Grab		sMS, wSI	(ppb)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
		347 576 E	Strike Length Exp. :	2 m	Sulphides :	TrCP, 2%PY						
52771	Elevation:	1230 m	Sample Width :	35 cm	Oxides :	mGE, sJA	24	1.8	1229	19	45	2
	Orientation:	018 / 86 W	True Width :	35 cm	Host :	Lapilli Tuff						

Comments : Sample of a small resistant ridge in a more recessive trough along the main shear zone.

Sample No.	Location :		Type :		Alteration :		Au	Ag	Cu	Pb	Zn	As
		6339 920 N		Grab		wCA,wCL,wEP,sMS,mSI	(ppb)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
		347 578 E	Strike Length Exp. :	15 m	Sulphides :	0.5%CP, 2%PY						
52772	Elevation:	1230 m	Sample Width :	5 m	Oxides :	wAZ,mGE,sJA,mMC	123	2.8	1637	12	40	1
	Orientation:	027 / 77 W	True Width :	5 m	Host :	Lapilli Tuff						

Comments : Sample from a zone with pockets of varying grades of alteration and mineralization.

Sample No.	Location :		Type :		Alteration :		Au	Ag	Cu	Pb	Zn	As
		6339 916 N		Grab		mEP, sMS, wSI	(ppb)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
		347 584 E	Strike Length Exp. :	3 m	Sulphides :	4%PY						
52773	Elevation:	1230 m	Sample Width :	2 m	Oxides :	sGE	67	1.7	234	5	9	1
	Orientation:	041 / 69 W	True Width :	2 m	Host :	Lapilli Tuff						

Comments : Sample across a small lens of juicy staining, strongly oxidized.

Sample No.	Location :		Type :		Alteration :		Au	Ag	Cu	Pb	Zn	As
		6339 862 N		Select		wEP, wMS, mSI	(ppb)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
		347 594 E	Strike Length Exp. :	3 m	Sulphides :	1%PY						
52774	Elevation:	1230 m	Sample Width :	20 cm	Oxides :	TrAZ, trMC, mGE, mJA, mMN	3	1.8	268	3	47	1
	Orientation:	110 / 65 N	True Width :	20 cm	Host :	Lapilli Tuff						

Comments : Sampled small lens of mineralization running perpendicular to the main shear zone. There where small (2-3cm) quartz veinlets of similar orientation in the wall rock.

Sample No.						Au	Ag	Cu	Pb	Zn	As
	Location :	6339 856 N	Type : Chip	Alteration :	mMS, CB	(ppb)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
		347 584 E	Strike Length Exp. : 15 m	Sulphides :	3-5% PY						
52775	Elevation:	1230 m	Sample Width : 5 m	Oxides :		4	.1	194	18	42	9
	Orientation:	? / ? ?	True Width : 5 m	Host :	Lapilli Tuff						

Comments : Chip sample across the first half of the main fault/shear zone.

Sample No.						Au	Ag	Cu	Pb	Zn	As
	Location :	6339 856 N	Type : Chip	Alteration :	mMS, CB	(ppb)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
		347 584 E	Strike Length Exp. : 15 m	Sulphides :	3-5%PY						
52776	Elevation:	1230 m	Sample Width : 5 m	Oxides :		11	.5	296	18	82	45
	Orientation:	? / ? ?	True Width : 5 m	Host :	Lapilli Tuff						

Comments : Chip sample across the second half of the main fault/shear zone. Note; see DAC for further info on sample.

Sample No.						Au	Ag	Cu	Pb	Zn	As
	Location :	6339 882 N	Type : Grab	Alteration :	sMS	(ppb)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
		347 864 E	Strike Length Exp. : 2 m	Sulphides :	3%PY						
52777	Elevation:	1230 m	Sample Width : 1.5 m	Oxides :	sGE, mHE, sJA	130	1.0	65	12	21	8
	Orientation:	? / ? ?	True Width : 1.5 m	Host :	Monzonite						

Comments : Sampled across the most altered and oxidized part of the zone. Up to 40% boxworks

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Sample No.						Au	Ag	Cu	Pb	Zn	As
	Location :	6339 816 N	Type : Select	Alteration :	CA	(ppb)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
		347 516 E	Strike Length Exp. : 5 m	Sulphides :	TrBO, 1%CP, 1%PY						
52778	Elevation:	1220 m	Sample Width : 2 m	Oxides :	wAZ, wMC	820	3.7	3556	17	165	3
	Orientation:	340 / 50 E	True Width : 2 m	Host :	Monzonite						

Comments : Sample of very plain looking intrusive with MN veinlets and fracture-controlled chalcopyrite.

Sample No.						Au	Ag	Cu	Pb	Zn	As
	Location :	6340 352 N	Type : Grab	Alteration :	sMS, mSI	(ppb)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
		347 632 E	Strike Length Exp. : 3 m	Sulphides :	5-7%PY						
52801	Elevation:	1220 m	Sample Width : 6 m	Oxides :	GE	32	1.6	68	16	29	8
	Orientation:	005 / 42 W	True Width : 5 m	Host :	Lapilli Tuff						

Comments : Sample across a more intensely stained zone within MS-SI-PY altn. There are quartz veinlets (2-3cm) parallel to foliation.

Sample No.						Au	Ag	Cu	Pb	Zn	As
	Location :	6340 084 N	Type : Grab	Alteration :	sMS, mSI	(ppb)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
		347 78 E	Strike Length Exp. : 7 m	Sulphides :	10-15%PY						
52802	Elevation:	1265 m	Sample Width : 30 cm	Oxides :	GE	6	.2	88	12	24	1
	Orientation:	032 / 65 W	True Width : 30 cm	Host :	Monzonite						

Comments : Sample taken from a narrow lens of highly pyritic sheared intrusive. Alteration and mineralization pinch out along strike.

APPENDIX C

DIAMOND DRILL LOGS

EQUITY ENGINEERING LTD.

DRILL LOG

PROJECT: PUP (KGG PU)	GROUND ELEV.: 1255.8 m
HOLE NO.: PUP 91-01	BEARING: 090
LOCATION: 13+25 N 1+50E SADDLE ZONE	DIP: -48°
	TOTAL LENGTH: 179.2m
LOGGED BY: STEWART HARRIS	HORIZONTAL PROJECT: 123.0m
DATE: JULY 29/91	VERTICAL PROJECT: 120.4m
CONTRACTOR: FALCON DRILLING LTD	
CORE SIZE: BGM	
DATE STARTED: JULY 27 (M)	
DATE COMPLETED: JULY 30 (O)	
DIP TESTS: 89.6m : -47° CORRECTED 179.2m : -45° CORRECTED	

ALTERATION SCALE

absent
slight
moderate
intense

TOTAL SULPHIDE SCALE

traces only
< 1%
1% – 3%
3% – 10%
> 10%

COMMENTS

SAMPLES 8201-8325

LEGEND

SERICITE ALTERED STUHINI GROUP VOLCANICLASTIC 8H

MONZONITE DYKE 11B

PAGE 2 OF 9 | PROJECT: Dup | HOLE NO. 91-01

DEPTH (m)	% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION SE A	SI B	CA C	CL D	ED E	FRACTURE INTENSITY	% VEIN QTZ.
0				0.0 - 1.5 CASING - OVERBURDEN							
	95	LT	CC VNLTS 60° TO C.A.	1.5 - 28.7 LAPILLI TUFF - SUB ANGULAR CLASTS WHERE VISIBLE - LT GREY GREEN IN COLOUR, LOCALLY BLEACHED - STRONG SERICITE ALT'N, MODERATE SILICIFICATION (STRONGER WHERE BLEACHED) - MINOR EPIDOTE ALT'N, AS CLOTS - HAIRLINE CALCITE FRACTURES ARE COMMON - MINOR PATCHES OF MOD CHLORITE ALT'N. - LOCAL QTZ STRINGERS							
5											
	100										
10	100		ROCK FABRIC 30° TO C.A.								
	100										
15	100										
	95		PY VNLTS 45° TO C.A.	6.3 - 9.1: BROKEN, RUSTY CORE, WATER-BEARING FRACTURES, SURFACE WEATHERING TO GOETHITE + KAOLIN.							
20	100		ROCK FABRIC, 45° TO C.A.	13.2: BROKEN QUARTZ VEIN, NO SULPHIDES.							
	100			16.6 - 18.6: WELL SILICIFIED INTERVAL WITH ABUN SX, ALSO EPIDOTE							
25	100			18.6 - 23.5: BROKEN CORE SURFACE WEATHERING, SX TO GOETHITE, SERICITE TO KAOLINITE							
	100			28.7-31.5 MONZONITE DYKE							
30	100		EPID ALT'N 11° TO CONTACT 60° TO C.A.	- COARSE-GRAINED, NO QUARTZ - WELL SILICIFIED, ALSO SERICITE ALTERED - UPPER CONTACT: 32° TO C.A., LOWER, LESS DISTINCT CONTACT: 60° TO C.A. - PRE-ALTERATION + MINERALIZATION DYKE?							
	100			31.5-53.2 LAPILLI TUFF - SIMILAR TO PREVIOUS, LT GREY-GREEN, SERICITE + SILICA ALT'd							
35	100										
	100										
40	95										
	100			33.0 - 36.6: BROKEN CORE, SURFACE WEATHERING, SERICITE → KAOLINITE, SULPHIDES TO OXIDES							
	100		MASSIVE PY VNLT 80° TO C.A.								
45											

PAGE 3 OF 9 | PROJECT: PUP KGGPU | HOLE NO. 91-01

MINERALIZATION DESCRIPTION	TOTAL SULPHIDES	SAMPLES FROM	SAMPLES TO	SAMPLES WIDTH	SAMPLE NUMBER	ASSAYS Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm
1.5 – 16.9 : 5-10%		1.6	3.1	1.5	8201	10	1.3	421	9	33
FINELY DISSEMINATED		3.1	5.2	2.1	8202	4	1.0	109	7	22
SULPHIDES, MAINLY PY		5.2	6.3	1.1	8203	1	1.0	88	8	13
PY >> PO > CP ; ALSO IN		6.3	9.1	2.8	8204	3	1.1	138	8	25
SULPHIDE VEINLETS &		9.1	10.6	1.5	8205	1	1.3	167	5	14
BLEBS.		10.6	12.1	1.5	8206	1	1.5	209	4	21
		12.1	13.6	1.5	8207	2	1.1	223	6	14
		13.6	15.1	1.5	8208	2	0.9	189	3	20
		15.1	16.6	1.5	8209	1	0.9	147	6	28
		16.6	17.6	1.0	8210	2	0.9	313	10	44
16.9 – 18.6 : 10% - 15%.		17.6	18.6	1.0	8211	44	1.3	465	16	38
FINELY DISS PY WITH		18.6	20.8	2.2	8212	28	1.0	298	12	24
TRACE CHALCOPYRITE		20.8	23.5	2.7	8213	1	0.7	217	15	37
18.6 – 23.5: 1-3%. DISS PY,		23.5	25.0	1.5	8214	9	0.6	36	8	18
LOCALLY UP TO 5%.		25.0	26.5	1.5	8215	5	0.8	90	7	21
		26.5	28.0	1.5	8216	1	0.5	17	8	16
23.5 – 28.7: 5-10%. DISS										
SULFIDES, DOMINANTLY										
PYRITE, TR CP, RARE PO										
1-2%. "PURPLE" MINERAL										
(FLUORITE?)										
28.7 – 31.5 2-5%. DISS PY		28.0	28.7	0.7	8217	2	0.4	28	11	18
		28.7	30.1	1.4	8218	10	0.9	16	12	17
		30.1	31.5	1.4	8219	4	0.7	44	8	19
31.5 – 33.0 : 5-10%. DISS PY		31.5	32.9	1.4	8220	43	1.6	315	7	26
33.0 – 36.6 : SULPHIDES TO		32.9	34.8	1.9	8221	8	1.8	256	18	25
GOETHITE, LOCALLY STILL		34.8	36.6	1.8	8222	29	1.8	400	12	26
PRESENT, 1-3%. DISS PY										
36.6 – 39.0 : 7-10% FINELY		36.6	37.8	1.2	8223	1	1.2	45	10	22
DISS PY, TR PO		37.8	39.0	1.2	8224	17	1.2	82	14	22
39.0 – 40.2: 1-3% FINELY		39.0	40.5	1.5	8225	25	1.1	129	12	30
DISS PY		40.5	42.0	1.5	8226	4	0.7	30	11	24
40.2 – 45.8 : 7-10%. DISS PY,		42.0	43.5	1.5	8227	15	0.8	30	10	22
COMMONLY COARSE,		43.5	45.0	1.5	8228	2	1.5	322	6	17
BLEBBY, 0.2 IN MASSIVE										
PY VEINLETS										

PAGE 4 OF 9 | PROJECT: PUP KGG PU | HOLE NO. 91-0

DEPTH (m)	% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION A	ALTERATION B	ALTERATION C	ALTERATION D	ALTERATION E	FRACTURE INTENSITY	% VEIN QTZ.
	001		QTZ±CC VNLTS, 65° TO C.A	39.0 - 40.2: SURFACE WEATHERING, IN FRACTURED ZONE; BROKEN CORE; SERICITE → KAOLINITE SULPHIDES → GOETHITE							
50	001			45.8 - 53.2: STRONGLY SILICIFIED INTERVAL WITH ABUN 5%							
	100			53.2 - 54.4 MONZONITE DYKE - SIMILAR TO PREVIOUS							
	100		UPPER CONTACT OF DYKE, 80° TO C.A.	- UPPER CONTACT: 80° TO C.A, LOWER CONTACT IS INDISTINCT, ~55° TO C.A							
55	100		CA ON FRACS	- FRESH @ UPPER CONTACT ~10% MAFICS, HBL, + PYRX, LOCALLY CHLORITE ALT'D, - FELDSPARS NOT SERICITE							
	100		FABRIC 65° TO C.A	ALTERED, MORE ALTERED TO F.W. - WELL SILICIFIED							
60	100			54.4 - 121.1 MAFIC VOLCANIC STRONGLY SERICITE ALTERED AND SILICIFIED, SIMILAR TO							
	100		FOLIATION 11° TO DYKE	PREVIOUS; LT GREY-GREEN							
65	100		CONTACT 40° TO C.A.	59.3 - 59.9: ABUNDANT EPID AND UP TO 15% 5X, LESS SILICIFIED, MOD CALCITE 5X							
	100		FABRIC 70° TO C.A	- HIGHEST SULPHIDE CONTENT COMMONLY WITH EPIDOT							
70	100			67.1 - 67.5: MONZONITE DYKE - SIMILAR TO PREVIOUS, WEAK SERICITE ALTERATION, UPPER CONTACT							
	100		BLEBBY EPID QTZ VNLT; 35° TO C.A.	40° TO C.A., LOWER: 55° TO C.A.							
75	100			68.5 - 68.7: MONZONITE DYKE - SIMILAR TO PREVIOUS, MOD SERICITE ALT'N OF GROUND-MASS							
	100		CHL ON FRACS.	73.1 - 75.0: MONZONITE DYKE - SIMILAR TO PREVIOUS - BLEACHED, FELDSPARS ALTERED BUT NOT SERICITIZED							
80	100		CA VNLTS 75° TO C.A.	74.0: LIMIT OF SURFACE WEATHERING							
	100			78.6 - 79.6: MISLATCH, LOST CORE							
	100			87.4 m: CLASTS VISIBLE							
85											
90											

PAGE 5 OF 9 | PROJECT: PJD | HOLE NO. 91-01

MINERALIZATION DESCRIPTION	TOTAL SULPHIDES	SAMPLES FROM	SAMPLES TO	SAMPLES WIDTH	SAMPLE NUMBER	ASSAYS Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm
45.8 – 75.0: 5-10%, FINELY DISS SULPHIDES, LOCALLY UP TO 15%; PY > PO >> CP – UP TO 5% PO NUGGETS		45.0	46.5	1.5	8229	1	1.3	138	6	17
		46.5	48.0	1.5	8230	6	1.0	154	5	15
		48.0	49.5	1.5	8231	25	1.2	180	11	18
		49.5	51.0	1.5	8232	18	1.0	182	8	15
OTHER SULPHIDES ARE ABSENT, TR CP – PO COMMONLY ON FRACTURES.		51.0	52.0	1.0	8233	14	0.9	168	6	25
		52.0	53.2	1.2	8234	1	1.2	132	6	11
		53.2	54.4	1.2	8235	16	1.5	218	7	19
		54.4	55.9	1.5	8236	2	1.4	240	8	20
		55.9	57.3	1.4	8237	17	1.4	229	9	31
		57.3	58.3	1.0	8238	6	1.2	200	7	21
		58.3	58.9	0.6	8239	23	1.2	154	10	45
		58.9	60.4	1.5	8240	2	1.5	294	11	29
60.4: TRACE CP		60.4	61.9	1.5	8241	22	1.2	402	7	31
		61.9	63.4	1.5	8242	19	1.2	371	7	32
63.3: 1-2%. FINE-GRAINED DULL-GREY SX, CNT? MT?		63.4	64.9	1.5	8243	13	1.3	186	4	34
66.4 – 66.7: BRASS FROM DRILL STEEL ON CORE		64.9	66.4	1.5	8244	21	1.2	158	3	24
		66.4	67.9	1.5	8245	26	1.2	277	4	22
67.1 – 67.5: 1% CP, TR ML.		67.9	69.4	1.5	8246	17	1.2	179	9	27
69.2 – 75.0: TR CP		69.4	70.9	1.5	8247	8	1.1	267	16	39
		70.9	72.4	1.5	8248	1	1.2	310	6	22
		72.4	73.7	1.3	8249	14	1.3	488	5	21
		73.7	75.0	1.3	8250	13	1.8	513	6	22
75.0 – 78.8: 2-5%. FINELY DISS SULPHIDES; PY > PO >> CP, TRACE FINE-GRAINED STEELY BLUE-GREY MINERAL		75.0	76.5	1.5	8251	21	1.3	412	5	24
		76.5	78.0	1.5	8252	1	1.4	196	7	35
		78.0	79.5	1.5	8253	19	1.5	462	5	32
		79.5	81.0	1.5	8254	16	1.4	434	6	29
78.8 – 80.8: 5-10%. FINELY DISS SULPHIDES PY > PO >> CP		81.0	82.5	1.5	8255	6	1.6	513	5	29
		82.5	84.0	1.5	8256	12	1.3	287	8	34
76.5 – 78.6: BRASS FROM DRILL STEEL ON CORE		84.0	85.5	1.5	8257	4	1.1	368	3	30
80.8 – 90.4: 3-7%. FINELY DISS PY > PO >> CP; PY NOW A COMMONLY ASSOC WITH CHLORITIC FRACTURES		85.5	87.0	1.5	8258	19	1.1	244	13	41
		87.0	88.5	1.5	8259	2	1.1	297	6	24
		88.5	90.0	1.5	8260	1	1.0	226	5	33

PAGE 6 OF 9 | PROJECT: PUP KUA PJ | HOLE NO. 91-01

DEPTH (m)	% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION SE A	SI B	CA C	EP D	CL E	FRACTURE INTENSITY	% VEIN QTZ.
95	28		ROCK FABRIC; 70° TO C.A.	94.3 – 95.3: MONZONITE DYKE; SIMILAR TO PREVIOUS STRONGLY ALTERED, INDISTINCT UPPER CONTACT; LOWER CONTACT: 60° TO C.A.							
	001		BANDING; ~20° TO C.A.								
	L8		FLOW BANDING 60° TO C.A.	98.7 – 100.2: MONZONITE DYKE; S.A.P., PARALLEL FELDSPAR PHENO'S, FLOW BANDING 60° TO C.A., LOWER CONTACT: 30° TO C.A.							
100	001		QTZ+CC VNLTS, 50° TO C.A.								
105	001			102.6 – 103.4: LOCALLY BRX'd BY QTZ+CC VNLTS.							
	001		QTZ VNLTS, BRXX ROCK 30° TO C.A.	109.5 – 119.8: COMMONLY BRXX'd BY QTZ+CC VNLTS							
110	001			112.7 – 119.5: STRONGLY FOLIATED 60° TO C.A.							
	001		FOLIATED 60° TO C.A.								
115	L9			116.8 – 117.6: MONZONITE DYKE, SIMILAR TO PREVIOUS, JAGGIED CONTACTS							
120	001		FABRIC: 50° TO C.A.								
	001			121.1 – 132.6 MONZONITE DYKE - INTRUSIVE SIMILAR TO PREVIOUS SUB- TO EUHEDRAL FELDSPAR PHENOCRYSTS (50%) THAT ARE COMMONLY ALT'd TO SERICITE - MAFICS LOCALLY PRESENT (5%) - MOD SERICITE ALT'N - RARE EPIDOTE							
125	001		CALCITE VNLTS; CHLORITIC FRACTURES								
	001										
130	001			132.6 – 139.8 SERICITE ALTERED MAFIC VOLCANIC. - STRONGLY SERICITIZED & SILICIFIED, ORIGINAL							
	001										
135											

PAGE 7 OF 9 | PROJECT: PUP | HOLE NO. 91-01

MINERALIZATION DESCRIPTION	TOTAL SULPHIDES	SAMPLES FROM	SAMPLES TO	SAMPLES WIDTH	SAMPLE NUMBER	ASSAYS Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm
90.4 - 94.3 : 7-10% FINELY DISSEMINATED SULPHIDES PY > PO >> CP		90.0	91.5	1.5	8261	1	1.4	189	14	29
		91.5	93.0	1.5	8262	5	1.3	218	7	51
		93.0	94.3	1.3	8263	2	1.4	448	8	55
		94.3	95.3	1.0	8264	4	2.0	345	8	37
94.3 - 100.9: 3-7% FINELY		95.3	96.8	1.5	8265	3	2.0	236	8	27
DISS Sx ; PY > PO >> CP - PY + CHL, OR PO ON FRACTURES		96.8	98.7	1.9	8266	1	2.1	144	9	30
TR STEELY BLUE Sx @ 94.2 m		98.7	99.8	1.1	8267	2	1.7	164	9	45
		99.8	100.9	1.1	8268	1	1.9	289	6	28
100.9 - 103.7 : 1-3% DISSEMINATED & BLEBBY Sx ; PY ≈ PO >> CP		100.9	102.3	1.4	8269	1	1.8	218	4	24
		102.3	103.7	1.4	8270	6	1.6	186	8	26
		103.7	105.2	1.5	8271	7	1.6	235	4	31
103.7 - 121.1 : 3-7% DISS Sx; ALSO FRACTURE CONTROLLED		105.2	106.7	1.5	8272	4	1.3	267	10	29
		106.7	108.2	1.5	8273	8	1.3	193	8	29
PY ≈ PO > CP ; CP COMMONLY WITH PO ; UP TO 10% Sx WHERE PY IS ABUNDANT - CP COMMON UP TO 118.2		108.2	109.7	1.5	8274	10	1.5	179	7	23
		109.7	111.2	1.5	8275	2	1.4	125	7	28
		111.2	112.7	1.5	8276	4	1.7	401	9	42
		112.7	114.2	1.5	8277	2	1.2	412	10	28
		114.2	115.7	1.5	8278	10	1.4	452	11	35
		115.7	116.8	1.1	8279	2	1.8	750	7	50
		116.8	117.6	0.8	8280	1	1.9	99	7	31
		117.6	119.1	1.5	8281	7	1.6	297	64	70
		119.1	120.1	1.0	8282	2	1.8	280	12	22
		120.1	121.1	1.0	8283	17	1.8	528	8	29
121.1 - 132.6 : 1-3% DISS AND FRAC CONTROLLED SULPHIDES ; 1% PY, 1% PO, TR CP		121.1	122.6	1.5	8284	4	1.7	212	41	64
		122.6	124.1	1.5	8285	2	1.8	291	13	35
		124.1	125.6	1.5	8286	15	1.9	116	15	103
		125.6	127.1	1.5	8287	1	1.6	129	16	43
		127.1	128.6	1.5	8288	2	1.6	137	8	38
		128.6	130.1	1.5	8289	4	1.5	167	5	39
		130.1	131.6	1.5	8290	119	1.6	155	5	42
		131.6	132.6	1.0	8291	80	1.9	167	127	84
132.6 - 141.1 : 5-12% DISS PY ; PY >> PO ; RARE CP.		132.6	134.1	1.5	8292	2	1.1	267	10	57
		134.1	135.6	1.5	8293	3	1.0	114	10	61

PAGE 8 OF 9 | PROJECT: Dup | HOLE NO. 91-01

DEPTH (m)	% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION SE A	ALTERATION Si B	ALTERATION CA C	ALTERATION CL D	ALTERATION EP E	FRACTURE INTENSITY	% VEIN QTZ.
				TEXTURES OBLITERATED							
	000			- CHL ON FRACTURES							
				- CC STRINGERS ARE COMMON							
140				139.8-142.9 MONZONITE DYKE							
	001			- SIMILAR TO PREVIOUS, ALTERED BY SERICITE AND SILICA							
			FOLIATION IN SHEAR/FAULT ZONE, 60° TO 70° TO C.A.	- SUBHEDRAL, SERICITE ALT'D FELDSPARS							
145	001			142.3-142.6: BLEACHED TO BEIGE GREY CORRESPONDING WITH DROP IN SILICIFICATION, EPIDOTE ALT'N, INCREASE IN CALLITE ALT'N							
				142.9-144.0 SHEAR/FAULT ZONE							
	001			- LT GREY/BEIGE; BRXD, WITH							
150			FABRIC 65° TO C.A.	SUBROUNDED FRAGMENTS; GREY GOUGE IS COMMON; ABUN CALLITE							
	001			144.0-159.7 MONZONITE INTRUSIVE							
				- CROWDED FELDSPAR PORPHYRY							
155				- LOCALLY BLEACHED WITH ALL TEXTURES OBLITERATED							
	001			- MODERATE SERICITE							
				144.0-148.4: BLEACHING LOCALLY REVEALS WHAT APPEAR TO BE CLASTS? TRACHYTE FLOW??							
160	001			- MAFK VOLCANIC CLASTS							
			INTRUSIVE CONTACT: 85° TO C.A.	ARE COMMON IN THIS UNIT, SUB ANGULAR CLASTS							
	001			- EUHEDRAL, ZONED FELDSPARS							
165				159.7-179.2 CRYSTAL LAPILLI TUFF							
	001			- SUBROUNDED MAFIC VOLCANIC CLASTS, ALSO INTRUSIVE CLASTS.							
				- STRONG SERICITE ALT'N							
170				- MOD POTASSIC ALT'N, DUE TO INTRUSIVE CLASTS?							
	001		ROCK FABRIC: 60° TO C.A.								
				163.3-164.3: MONZONITE DYKE, SIMILAR TO PREVIOUS; JAGGED, INDISTINCT CONTACTS, ~85° TO C.A.							
175	001										
			ROCK FABRIC: 60° TO C.A.	165.3-166.7: MONZONITE DYKE, SIMILAR TO PREVIOUS; POSSIBLE K-SPAR ALT'N?							
	001										
				E.O.H. 179.2 m							

PAGE 9 OF 9 | PROJECT: PCP | HOLE NO. 91-01

MINERIZATION DESCRIPTION	TOTAL SULPHIDES	SAMPLES FROM	SAMPLES TO	SAMPLES WIDTH	SAMPLE NUMBER	ASSAYS Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm
		135.6	137.1	1.5	8294	1	1.4	437	5	43
		137.1	138.6	1.5	8295	1	1.0	280	18	46
		138.6	139.8	1.2	8296	42	1.2	201	13	42
		139.8	141.1	1.3	8297	1	0.8	106	11	49
141.1 - 142.9 : 2-5% DISS SX		141.1	142.3	1.2	8298	16	0.6	124	11	56
PY > PO >> CP		142.3	144.0	1.7	8299	2	0.5	163	24	40
142.9 - 144.0 : TR TO 3%		144.0	145.5	1.5	8300	6	0.4	304	13	27
DISS PY		145.5	147.0	1.5	8301	5	1.0	254	11	34
144.0 - 179.2 : 5 - 10% DISS		147.0	148.5	1.5	8302	2	1.4	249	90	36
PY, LOCALLY UP TO 12%.		148.5	150.0	1.5	8303	1	1.6	282	10	37
TR PO, CP										
165.3 - 166.7 : ~12% PY,										
COMMONLY MASSIVE BLEBS +										
VEINLETS.		150.0	151.5	1.5	8304	92	1.3	157	8	39
		151.5	153.0	1.5	8305	47	1.7	217	44	84
		153.0	154.5	1.5	8306	20	1.4	407	11	25
		154.5	156.0	1.5	8307	40	1.2	213	8	28
		156.0	157.5	1.5	8308	17	1.2	159	13	21
		157.5	158.6	1.1	8309	2	1.2	136	10	33
		158.6	159.7	1.1	8310	41	1.3	134	13	55
- MOST SULPHIDES ALONG		159.7	161.2	1.5	8311	60	1.9	239	18	35
FRACTURES.		161.2	162.3	1.1	8312	44	2.6	498	6	41
		162.3	163.3	1.0	8313	143	2.2	319	6	26
		163.3	164.3	1.0	8314	4	1.9	243	6	34
		164.3	165.3	1.0	8315	148	0.9	263	17	36
		165.3	166.7	1.4	8316	6	0.9	167	16	27
		166.7	168.1	1.4	8317	40	2.4	281	32	90
		168.1	169.6	1.5	8318	2	1.8	302	14	49
		169.6	171.1	1.5	8319	4	1.7	317	49	108
		171.1	172.6	1.5	8320	2	1.6	178	12	39
		172.6	174.1	1.5	8321	1	1.9	173	8	51
		174.1	175.6	1.5	8322	2	1.9	255	20	55
		175.6	177.1	1.5	8323	12	1.7	280	19	42
		177.1	178.1	1.0	8324	2	2.1	241	15	47
		178.1	179.2	1.1	8325	36	1.8	213	15	46
178.1 - 178.4: 15% BLEBBY										
PYRITE ASSOC'D WITH MOD										
CALCITE										

EQUITY ENGINEERING LTD.

DRILL LOG

PROJECT: PUP	GROUND ELEV.: 1239.9m
HOLE NO.: PUP 91-02	BEARING: 090
LOCATION: 8+94 N 1+51E	DIP: -45°
	TOTAL LENGTH: 127.1 m
LOGGED BY: S. HARRIS	HORIZONTAL PROJECT: 914.5m
DATE: 1/8/91	VERTICAL PROJECT: 84.2m
CONTRACTOR: FALCON DRILLING	
CORE SIZE: BGM	
DATE STARTED: JULY 30 (N)	
DATE COMPLETED: JULY 31 (D)	
DIP TESTS: @ 66.1m : -42° (CORRECTED) @ 127.1m : -40° (CORRECTED)	

ALTERATION SCALE

absent
slight
moderate
intense

TOTAL SULPHIDE SCALE

traces only
< 1%
1% – 3%
3% – 10%
> 10%

COMMENTS

SAMPLES: 8326 → 8411

LEGEND

SERICITE ALTERED STUHINI GROUP VOLCANICLASTIC SH

SERICITE ALTERED STUHINI GROUP TUFFS

MONZONITE DYKE

STUHINI GROUP CRYSTAL TUFF

PAGE 2 OF 7 | PROJECT: PUP | HOLE NO. 91-02

DEPTH (m)	% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION A	ALTERATION B	ALTERATION C	ALTERATION D	ALTERATION E	FRACTURE INTENSITY	% VEIN QTZ.
	02			0.0-2.8 OVERBURDEN							
				0.0 - 1.5 CASING							
5	28			2.8-8.1 FELDSPAR PORPHYRY							
			FLOW BANDING 85° TO C.A.	- FELDSPARS CLOWNED; SUB-PARALLEL, CRYSTAL TUFF? DYKE?							
	001			- FELDSPARS ALTERED TO EP. DOTE							
				- PATCHY KF ALTN ?							
			FOLIATION 70° TO C.A.	- CHL, HAEMATITE ON FRACS.							
10	05			8.1-48.8 SERICITE ALTERED							
				- MAFIC VOLCANIC							
			FOLIATION 60° TO C.A.	- WELL FOLIATED							
	15			- BEIGE-GREY-GREEN							
				9.1 - 13.3: RUSTY, STRONGLY							
15			FOLIATION 65° TO C.A.	FRACTURED, SURFACE							
	001			WEATHERING; JACK WILSON							
				SHEAR							
			FOLIATION: 50° TO C.A.								
	001			22.8 - 43.6: CHANGE IN							
20				TEXTURE, APPEARS GNEISSOSE,							
	001			PERHAPS INTRUSIVE?							
			FOLIATION 10° TO C.A.	23.0 - 48.6: WEAK TO MODERATE							
				% KF ALTN							
25	001			30.0 - 31.5: FELDSPAR							
				PORPHYRY; MONZONITIC							
				DYKE; COARSE SUBHEDRAL							
	001		FOLIATION 65° TO C.A.	FELDSPAR CRYSTALS							
30											
	001			32.2: MINOR FLUORITE?							
				PRESENT.							
			FOLIATION:								
35	001		70° TO C.A.								
			PARALLEL F-SPARS: 80° TO C.A.								
	001		LOWER INTRUSIVE CONTACT:								
40			40° TO C.A.	34.0 - 40.5: FELDSPAR							
	001			PORPHYRY, MONZONITE							
				DYKE; SIMILAR TO							
				PREVIOUS; LOWER CONTACT:							
	001		EPID + K-SPAR VNLT:	40° TO C.A.							
45			40° TO C.A.	45.0: K-SPAR ENVELOPE AROUND							
				EPIDOTE VEINLET							

PAGE 3 OF 7 | PROJECT: PUP | HOLE NO. 91-02

MINERIZATION DESCRIPTION	TOTAL SULPHIDES	SAMPLES FROM	SAMPLES TO	SAMPLES WIDTH	SAMPLE NUMBER	ASSAYS Au ppb	Ag ppm	Cu PPm	Pb ppm	Zn ppm
2.8-8.1 : 1-3% DISS		2.8	4.3	1.5	8326	5	2.2	387	9	66
AND FRACTURE-CONTROLLED		4.3	5.8	1.5	8327	8	2.1	322	8	69
PY, TR CP		5.8	7.0	1.2	8328	6	2.1	230	5	55
		7.0	8.1	1-1	8329	2	1.8	288	5	54
		8.1	9.3	1.2	8330	19	0.5	358	10	31
		9.3	10.8	1.5	8331	70	1.5	1537	15	54
8.1-14.2 : 3-7% DISS PY		10,8	12.3	1.5	8332	65	1-1	490	32	143
9.1-13.3 : TR CP+MLIN		12.3	13.8	1.5	8333	102	1-1	1155	11	48
SHEAR ZONE										
14.2-22.8: 7-10% DISS PY,		13.8	15.3	1.5	8334	280	1.5	1878	14	30
COMMONLY // PARALLEL TO		15.3	16.8	1.5	8335	114	1.2	975	15	43
FOLIATION		16.8	18.3	1.5	8336	63	1.7	1053	15	23
		18.3	19.8	1.5	8337	102	2.1	1401	16	167
		19.8	21.3	1.5	8338	37	2.0	793	6	32
		21.3	22.8	1.5	8339	27	2.1	755	9	16
		22.8	24.3	1.5	8340	28	2.0	845	7	13
		24.3	25.8	1.5	8341	141	2.6	574	36	75
22.8-31.8 : 5-7% DISS PY										
30.5 : CP ON FRACTURE		25.8	27.3	1.5	8342	116	2.4	310	8	29
WITHIN INTRUSIVE		27.3	28.8	1.5	8343	40	1.9	384	24	42
		28.8	30.3	1.5	8344	5	1.3	227	13	22
		30.3	31.8	1.5	8345	20	1.2	317	13	29
		31.8	33.3	1.5	8346	41	1.5	479	15	39
		33.3	34.8	1.5	8347	8	1.9	373	26	43
31.8-50.0 5-10% DISS PY		34.8	36.3	1.5	8348	57	1.7	439	19	32
		36.3	37.8	1.5	8349	15	1.9	763	17	39
		37.8	39.3	1.5	8350	3	1.5	410	41	33
		39.3	40.5	1.2	8351	1	1.7	487	8	19
		40.5	42.0	1.5	8352	13	2.2	919	11	19
40.2-41.2 : TR CP		42.0	43.6	1-6	8353	3	1.9	671	7	17
		43.6	45.1	1.5	8354	51	1.8	599	12	24

PAGE 4 OF 7 | PROJECT: PUP | HOLE NO. 91-02

DEPTH (m)	% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION SE A	ST B	CA C	CL D	EP E	FRACTURE INTENSITY	% VEIN QTZ.
	100										
	100			48.8-53.5 FELDSPAR PORPHYRY, MONZONITE DYKE							
50				- COARSE-GRAINED, ZONED							
	100		CHL ON	FELDSPARS WHERE VISIBLE							
			FRACTURES	- UPPER CONTACT AREA IS INDISTINCT							
55	100		FLOW BANDING IN DYKES: 70° TO C.A.	- EUHEDRAL, ZONED FELDSPARS							
				- PLAG IN POTASSIC GROUNDMASS							
	100			53.5- 127.1 SERICITE ALTERED LAPILLI TUFF / AGGLOMERATE							
60				- CLASTS VISIBLE @ 58.0m							
	100			- STRONGLY SERICITE + SILICA ALTERED; POTASSIC GROUNDMASS							
			FLOW BANDING IN DYKES: 70° TO C.A.	- BLEBBY EPID ALT'N; LESS ABUN IN INTRUSIVES.							
	93		FAULT ZONE, 40° TO C.A.	61.8-66.8: ZONE OF ZONED FELDSPAR PORPHYRY (MONZONITIC) DYKES; FROM 0.2-1.0m WIDE.							
65				64.3-64.5: FAULT ZONE; SHEARED, BRXD WITH GOUGE; 80° TO C.A.							
	100		CA, CHL FRACS; 35° TO CA	@ UPPER CONTACT							
				70.3: FLUORITE PRESENT							
70	100			58.8-59.6: VISIBLE KF ALT'N (GROUNDMASS THROUGHOUT IS POTASSIC)							
			FOLIATION, 35° TO CA.	72.2-79.7: VISIBLE KF ALT'N							
75	100			78.4; 79.8; 81.9: 6cm ZONES OF GOUGE + BRXD ROCK							
				87.5-89.7: FAULT/SHEAR ZONE, STRONGLY FRACTURED, MINOR GOUGE; ABUN QTZ-CL VNLTS							
80	100										
85	100		CHL CLOTS								
	100		FOLIATION IN ~~SHEAR ZONE~~ 55° TO C.A.								
90											

PAGE 5 OF 7 | PROJECT: PUP | HOLE NO. 91-07

MINERIZATION DESCRIPTION	TOTAL SULPHIDES	SAMPLES FROM	SAMPLES TO	SAMPLES WIDTH	SAMPLE NUMBER	ASSAYS Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm
45.5: FIRST APPEARANCE OF PYRRHOTITE		45.1	46.6	1.5	8355	10	1.7	434	10	22
		46.6	48.1	1.5	8356	7	1.7	803	12	21
		48.1	48.8	0.7	8357	56	1.9	854	18	32
50.0 – 99.1 : 3-7% DISS SULPHIDES, PY ≈ PO, TR CP WITH PO		48.8	50.3	1.5	8358	2	1.3	324	13	21
		50.3	51.8	1.5	8359	1	1.6	267	10	20
		51.8	53.4	1.6	8360	1	1.4	217	12	21
71.0 – 85.0 : MINOR PO, NO CP.		53.4	54.9	1.5	8361	4	1.4	383	21	31
		54.9	56.4	1.5	8362	3	1.4	269	20	22
		56.4	57.9	1.5	8363	1	1.2	135	8	22
		57.9	59.4	1.5	8364	2	1.5	178	8	17
		59.4	60.9	1.5	8365	5	1.7	437	8	20
		60.9	62.4	1.5	8366	3	1.7	182	10	21
		62.4	63.9	1.5	8367	1	1.5	123	16	33
		63.9	65.4	1.5	8368	19	1.6	282	59	283
		65.4	66.9	1.5	8369	21	1.9	546	50	33
		66.9	68.4	1.5	8370	9	2.3	713	12	39
		68.4	69.9	1.5	8371	1.26%	2.0	398	78	52
		69.9	71.4	1.5	8372	8	1.8	443	10	29
		71.4	72.9	1.5	8373	16	1.7	383	18	70
73.1 : MOLYBDENUM? VEINLET. (BLUE-GREY, SOFT SULPHIDE)		72.9	74.4	1.5	8374	17	1.1	312	18	47
		74.4	75.9	1.5	8375	3	0.8	169	18	43
		75.9	77.4	1.5	8376	2	0.6	166	32	30
		77.4	78.9	1.5	8377	2	1.2	175	15	18
		78.9	80.4	1.5	8378	4	1.7	200	28	42
		80.4	81.9	1.5	8379	2	1.4	488	16	37
		81.9	83.4	1.5	8380	6	1.7	390	21	40
		83.4	84.9	1.5	8381	11	1.6	252	18	40
		84.9	86.4	1.5	8382	8	1.5	54	9	32
		86.4	87.5	1.1	8383	57	1.5	59	18	51
85.0 – 99.1 : 1-2% PO, NO CP		87.5	88.6	1.1	8384	13	1.5	122	12	28
		88.6	89.7	1.1	8385	7	2.5	185	19	20

PAGE 6 OF 7 | PROJECT: PUP | HOLE NO. 91-02

DEPTH (m)	% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION A (SE)	ALTERATION B (SI)	ALTERATION C (CA)	ALTERATION D (CL)	ALTERATION E (EP)	FRACTURE INTENSITY	% VEIN QTZ.
	100		FOLIATION, BEDDING? IN TUFFACEOUS HORIZON 65° TO C.A.	91.5–100.6: COMMON TUFFACEOUS HORIZONS							
95	100			95.3–122.1: MOD CALCITE ALT'N OF GROUND MASS AND IN STRINGERS							
	100			98.9–104.3: POTASSIC ALT'N (VISIBLE)							
100	100		FOLIATION, BEDDING? IN TUFFACEOUS HORIZON 55° TO C.A.	100.8–101.8: CLASTS VISIBLE, CHLORITE AFTER AUGITE							
	100		WEAK FOLIATION 70° TO C.A.								
105	100										
	100		PY+CHL STRINGERS 55° TO C.A.								
110	100										
	100		PY+CHL STRINGERS, 45° TO C.A.								
115	100										
	100										
120	100		FOLIATION IN SHEAR ZONE, 75° TO C.A.	122.0–122.5: FAULT/SHEAR ZONE FRACTURED, MINOR GOUGE, 75° TO C.A.							
	100										
125	100			E.O.H. 127.1m							
130											

PAGE 7 OF 7 | PROJECT: PUP | HOLE NO. 91-02

MINERALIZATION DESCRIPTION	TOTAL SULPHIDES	SAMPLES FROM	SAMPLES TO	SAMPLES WIDTH	SAMPLE NUMBER	ASSAYS Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm
		89.7	91.2	1.5	8386	3	1.6	76	16	266
		91.2	92.7	1.5	8387	16	2.3	285	12	140
		92.7	94.2	1.5	8388	62	2.1	384	14	90
93.5 : TR CP										
95.0 : TR CP		94.2	95.7	1.5	8389	10	1.6	251	23	83
		95.7	97.2	1.5	8390	5	0.9	27	9	11
		97.2	99.1	1.9	8391	4	1.1	28	24	18
		99.1	100.3	1.2	8392	9	2.5	345	9	195
		100.3	101.5	1.2	8393	4	1.7	251	9	40
99.1 - 102.8 : 7-10% DISS		101.5	102.8	1.3	8394	14	1.7	260	15	39
5% LOCALLY UP TO 12%		102.8	104.3	1.5	8395	43	1.4	182	16	33
(ASSOC' WITH FRACTURES)		104.3	105.8	1.5	8396	3	2.2	188	19	48
PY > PO >> CP										
102.7 : FINE-GRAINED BLUE-										
GREY SX (GALENA?) WITH										
PY, PO, CP										
102.8 - 107.8 : 7-10%		105.8	106.8	1.0	8397	2	2.4	427	21	33
DISS PY, COMMONLY COARSE		106.8	107.8	1.0	8398	37	5.0	781	72	1203
107.8 - 114.9 : 3-7% DISS		107.8	109.3	1.5	8399	1	2.9	608	22	107
5%, PY > PO, TR CP		109.3	110.8	1.5	8400	2	1.6	217	13	22
WITH PO		110.8	112.3	1.5	8401	15	1.4	290	20	28
106.9 - 107.6 : SPHALERITE		112.3	113.6	1.3	8402	3	1.2	223	16	37
VEINLETS PRESENT		113.6	114.9	1.3	8403	1	1.1	129	18	84
		114.9	116.4	1.5	8404	4	1.0	142	12	67
114.9 - 127.1 : 3-8% DISS		116.4	117.9	1.5	8405	2	0.6	89	13	35
PY, MINOR PO										
		117.9	119.4	1.5	8406	1	0.7	43	14	23
		119.4	120.9	1.5	8407	5	0.6	81	17	41
		120.9	122.4	1.5	8408	3	0.5	76	16	40
		122.4	123.9	1.5	8409	1	0.3	52	12	41
		123.9	125.4	1.5	8410	2	0.4	51	13	48
		125.4	127.1	1.7	8411	1	0.2	16	11	33

APPENDIX D

ANALYTICAL PROCEDURES AND CERTIFICATES OF ANALYSIS

MINERAL
•ENVIRONMENTS
LABORATORIES

Division of Assayers Corp. Ltd.

ANALYTICAL PROCEDURE REPORT FOR ASSESSMENT WORK:

PROCEDURE FOR 31 ELEMENT TRACE ICP

Ag, Al, As, B, Ba, Be, Bi, Ca, Cd, Co, Cu,
Fe, K, Li, Mg, Mn, Mo, Na, Ni P, Pb, Sb,
Sr, Th, Ti, V, Zn Ga, Sn, W, Cr

Samples are processed by Min-En Laboratories, at 705 West 15th Street, North Vancouver, employing the followint procedures.

After drying the samples at 95 C, soil and stream sediment samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed by a jaw crusher and pulverized by ceramic plated pulverizer or ring mill pulverizer.

0.5 gram of the sample is digested for 2 hours with an aqua regia mixture.

After cooling samples are diluted to standard volume. The solutions are analysed by computer operated Jarrall Ash 9000 ICAP or Jobin Yvon 70 Type II Inductively Coupled Plasma Spectrometers. Reports are formatted and printed using a dot-matrix printer.

OFFICE AND LABORATORIES:
705 WEST FIFTEENTH STREET, NORTH VANCOUVER, B.C.
CANADA V7M 1T2

PHONE: (604) 980-5814 (604) 988-4524
TELEX: VIA USA 7601067
FAX: (604) 980-9621

MINERAL
• ENVIRONMENTS
LABORATORIES

Division of Assayers Corp. Ltd.

GOLD ASSAY PROCEDURE:

Samples are dried @ 95 C and when dry are crushed on a jaw crusher. The 1/4 inch output of the jaw crusher is put through a secondary roll crusher to reduce it to - 15 mesh. The whole sample is then riffled on a Jones Riffle down to a statistically representative 500 gram sub-sample (in accordance with Gy's statistical rules.) This sub-sample is then pulverized on a ring pulverizer to 95% minus 120 mesh, rolled and bagged for analysis. The remaining reject from the Jones Riffle is bagged and stored.

Samples are fire assayed using one assay ton sample weight. The samples are fluxed, a silver inquart added and mixed. The assays are fused in batches of 24 assays along with a natural standard and a blank. This batch of 26 assays is carried through the whole procedure as a set. After cupellation the precious metal beads are transferred into new glassware, dissolved, diluted to volume and mixed.

These aqua regia solutions are analyzed on an atomic absorption spectrometer using a suitable standard set. The natural standard fused along with this set must be within 2 standard deviations of its known or the whole set is re-assayed. Likewise the blank must be less than 0.015 g/tonne.

The top 10% of all assays per page are rechecked and reported in duplicate along with the standard and blank.

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MINERAL
• ENVIRONMENTS
LABORATORIES

Division of Assayers Corp. Ltd.

AG, CU, PB, ZN, NI, AND CO ASSAY PROCEDURE

Samples are dried @ 95 C and when dry are crushed on a jaw crusher. The -1/4 inch output of the jaw crusher is put through a secondary roll crusher to reduce it to -1/8 inch. The whole sample is then riffled on a Jones Riffle down to a statistically representative 300-400 gram sub-sample (in accordance with Gy's statistical rules.) This sub-sample is then pulverized in a ring pulverizer to 95% minus 120 mesh, rolled and bagged for analysis. The remaining reject from the Jones Riffle is bagged and stored.

A sub-sample is weighed from the pulp bag for analysis, usually 0.200 to 2.000 gram, depending upon estimated range. Each batch of 70 assays has a natural standard and a reagent blank included. The assays are digested using a HNO3 - KCLO4 mixture and when reaction subsides, HCL is added to assay before it is placed on a hotplate to digest. After digestion is complete the assays are cooled, diluted to volume and mixed.

The assays are analyzed on atomic absorption spectrometers using the appropriate standard sets. The natural standard digested along with this set must be within 2 standard deviations of its known or the whole set is re-assayed. If any of the assays are >1% they are re-assayed at a lower weight.

OFFICE AND LABORATORIES:
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MINERAL
•ENVIRONMENTS
LABORATORIES

Division of Assayers Corp. Ltd.

ANALYTICAL PROCEDURE REPORT FOR ASSESSMENT WORK

PROCEDURE FOR AU, PT OR PD FIRE GEOCHEM

Geochemical samples for Au Pt Pd are processed by Min-En Laboratories, at 705 West 15th St., North Vancouver, B.C., laboratory employing the following procedures:

After drying the samples at 95 C, soil and stream sediment Samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed and pulverized by ceramic plated pulverizer or ring mill pulverizer.

A suitable sample weight; 15.00 or 30.00 grams is fire assay preconcentrated. The precious metal beads are taken into solution with aqua regia and made to volume.

For Au only, samples are aspirated on an atomic absorption spectrometer with a suitable set of standard solutions. If samples are for Au plus Pt or Pd, the sample solution is analyzed in an inductively coupled plasma spectrometer with reference to a suitable standard set.

OFFICE AND LABORATORIES:
705 WEST FIFTEENTH STREET, NORTH VANCOUVER, B.C.
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PHONE: (604) 980-5814 (604) 988-4524
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COMP: EQUITY ENGRG., CON.GOLDWEST
PROJ: OP AND PUP P.O. KGGPU
ATTN: D.CAULFIELD/P.LOUGHEED

MIN-EN LABS — ICP REPORT

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
(604)980-5814 OR (604)988-4524

FILE NO: 1S-0287-RJ1
DATE: 91/08/12
* ROCK * (ACT:F31)

SAMPLE NUMBER	AG PPM	AL PPM	AS PPM	B PPM	BA PPM	BE PPM	BI PPM	CA PPM	CD PPM	CO PPM	CU PPM	FE PPM	K PPM	LI PPM	MG PPM	MN PPM	MO PPM	NA PPM	NI PPM	P PPM	PB PPM	SB PPM	SR PPM	TH PPM	TI PPM	V PPM	ZN PPM	GA PPM	SN PPM	W PPM	CR PPM	AU-FIRE PPB
52751	2.1	20390	1	15	69	.1	21	17740	.1	27	158	62110	4030	10	15260	869	3	230	1	2820	9	1	166	1	5003	169.9	53	1	4	4	36	46
52752	1.6	17690	1	9	125	.1	18	12930	.1	17	63	54400	5130	6	12210	667	3	300	1	2320	9	1	166	1	4359	118.2	38	1	3	5	67	37
52753	1.2	7660	1	5	51	.1	12	9070	.1	8	35	28370	2380	2	2110	213	1	240	1	1090	5	1	138	3	2722	65.4	11	1	2	2	24	20
52754	1.2	16690	2	6	129	.1	13	12740	.1	14	46	35120	5170	5	8700	818	3	280	1	1850	8	1	187	2	2598	73.5	48	2	2	4	46	24
52755	.8	8300	1	5	103	.1	11	9180	.1	9	29	34050	3210	2	3860	505	3	280	1	1390	8	1	74	1	2246	47.1	24	1	2	2	32	18
52756	1.1	9660	4	5	68	.1	14	11660	.1	15	118	45490	2100	2	4510	337	7	350	1	1390	8	1	74	1	2904	68.0	16	1	2	4	47	39
52757	1.7	11360	3	4	43	.1	11	17290	.1	11	398	34820	2030	2	6290	612	1	320	1	1420	19	1	108	2	2405	69.1	47	2	2	4	35	78
52758	1.2	13260	18	5	92	.1	8	22940	.1	13	151	41500	4470	3	7410	883	2	330	1	1550	22	1	69	2	1498	57.7	65	3	1	5	48	110
52759	1.6	10940	22	5	89	.1	10	19380	.1	13	469	41830	3860	3	5410	655	1	270	1	1360	20	1	60	2	1833	44.8	67	1	2	3	30	44
52760	1.2	10120	4	4	139	.2	9	18440	.1	9	36	27780	3500	3	4750	525	6	450	1	1130	7	1	64	4	1745	33.0	21	3	1	3	43	5
52761	.7	12500	4	4	134	.1	8	14080	.1	17	158	37990	4630	3	5480	345	3	300	1	970	8	1	24	2	1537	52.6	18	2	1	2	32	40
52762	1.8	24700	1	5	57	.1	21	17720	.1	27	105	58090	1790	10	21140	1184	1	450	1	1610	2	1	28	1	4543	134.5	56	2	3	4	29	18
52763	1.3	13130	2	3	81	.1	11	21320	.1	12	182	33020	3000	4	8100	753	2	370	1	1340	17	1	87	3	2036	63.6	27	4	2	3	36	34
52764	.6	3880	13	2	37	.1	3	12450	.1	6	86	16620	950	1	2330	481	13	260	1	490	9	1	33	2	107	15.3	19	2	1	8	189	16

COMP: EQUITY ENGRG./CON.GOLDWEST RES.
PROJ: OP AND PUP P.O. KGGPU
ATTN: P.LOUGHEED

MIN-EN LABS — ICP REPORT

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
(604)980-5814 OR (604)988-4524

FILE NO: 1S-0333-RJ1
DATE: 91/08/12
* ROCK * (ACT:F31)

SAMPLE NUMBER	AG PPM	AL PPM	AS PPM	B PPM	BA PPM	BE PPM	BI PPM	CA PPM	CD PPM	CO PPM	CU PPM	FE PPM	K PPM	LI PPM	MG PPM	MN PPM	MO PPM	NA PPM	NI PPM	P PPM	PB PPM	SB PPM	SR PPM	TH PPM	TI PPM	V PPM	ZN PPM	GA PPM	SN PPM	W PPM	CR PPM	AU-FIRE PPB
52801	1.6	10990	8	25	45	.1	12	9230	.1	12	68	40340	1390	12	7560	431	11	250	1	1170	16	1	47	1	2854	63.6	29	1	2	4	50	32
52802	.2	11410	1	16	39	.1	13	3790	.1	13	88	80020	1930	8	11590	340	4	260	1	1290	12	1	12	1	3283	106.5	24	1	2	3	25	6
52765	1.1	10890	11	8	59	.1	11	19990	.1	12	144	41820	2800	4	7710	667	3	260	1	1770	16	1	84	1	2464	72.5	46	1	2	2	29	28
52766	.4	8990	22	7	34	.1	11	9000	.1	16	135	74980	1890	3	6330	479	1	230	1	1520	127	1	52	1	2813	98.1	51	1	2	11	22	187
52767	.4	11650	7	6	51	.1	12	5710	.1	11	118	67640	2470	3	6510	446	1	210	1	1680	15	1	62	1	2779	89.1	18	1	2	7	20	119
52768	1.8	12120	3	3	25	.1	16	12620	.1	13	50	41280	1160	3	7090	509	1	280	1	1900	13	1	133	1	3782	101.5	20	3	3	3	23	6
52769	1.1	11280	9	2	40	.1	11	11240	.1	12	81	39860	1200	3	6460	489	3	370	1	1060	10	1	104	1	2545	63.5	18	2	1	4	55	8
52770	.1	21520	1	5	7	.1	13	13690	.1	15	86	104500	220	2	16340	729	1	180	1	940	8	1	77	1	3257	113.9	27	1	1	3	48	49
52771	1.8	11340	2	2	103	.1	7	17600	.1	16	1229	39100	2850	4	9700	791	3	270	9	1760	19	1	49	1	1174	91.9	45	4	1	3	38	24
52772	2.8	12340	1	2	47	.1	12	16090	.1	26	1637	41300	2190	4	9460	627	16	250	13	1420	12	1	111	1	2699	79.7	40	3	2	3	35	123
52773	1.7	6750	1	1	10	.1	14	16370	.1	17	234	35520	590	1	2500	182	3	350	8	4240	5	1	103	1	3465	97.9	9	1	3	4	60	67
52774	1.8	22280	1	1	20	.1	19	16150	.1	23	268	51890	1570	9	23940	740	1	300	1	2120	3	1	118	1	4407	141.3	47	2	4	3	20	3
52775	.1	7240	9	1	103	.1	2	7230	.1	8	194	24610	3910	1	1780	467	3	280	1	1080	18	1	18	2	146	19.4	42	1	1	1	29	4
52776	.5	6380	45	1	342	.3	2	17780	.1	8	296	24830	3970	1	1500	943	2	220	3	1450	18	1	38	1	66	20.5	82	1	1	1	25	11
52777	1.0	13430	8	3	79	.1	19	8480	.1	19	65	76330	4200	3	6250	486	4	200	1	2310	12	1	32	1	4502	81.1	21	1	3	3	11	130
52778	3.7	9560	3	1	36	.1	10	9610	.1	13	3556	32350	2430	3	4600	535	1	330	1	1060	17	1	35	1	2393	77.4	165	2	2	3	29	820

COMP: EQUITY ENGRG./CON. GOLDWEST
PROJ: OP & PUP
ATTN: D.CAULFIELD/P.LOUGHEED

MIN-EN LABS — ICP REPORT

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
(604)980-5814 OR (604)988-4524

FILE NO: 1S-0322-RJ1+2
DATE: 91/08/12
* ROCK * (ACT:F31)

SAMPLE NUMBER	AG PPM	AL PPM	AS PPM	B PPM	BA PPM	BE PPM	BI PPM	CA PPM	CD PPM	CO PPM	CU PPM	FE PPM	K PPM	LI PPM	MG PPM	MN PPM	MO PPM	NA PPM	NI PPM	P PPM	PB PPM	SB PPM	SR PPM	TH PPM	TI PPM	V PPM	ZN PPM	GA PPM	SN PPM	W PPM	CR PPM	AU-FIRE PPB
8201	1.3	19660	1	12	23	.1	10	21190	.1	22	421	41270	920	6	16620	617	8	280	1	1190	9	1	54	1	2411	62.7	33	1	2	3	50	10
8202	1.0	14840	7	8	55	.1	10	15140	.1	12	109	34220	2060	5	10260	411	6	300	1	1180	7	1	53	1	2495	56.8	22	1	2	4	56	4
8203	1.0	12410	1	6	85	.1	10	14220	.1	11	88	31630	2550	3	5300	350	3	440	1	1170	8	1	72	1	2586	67.0	13	1	2	4	53	1
8204	1.1	16830	9	7	86	.1	13	11260	.1	12	138	47810	3500	4	9120	408	12	440	1	1180	8	1	63	1	3282	81.4	25	1	2	5	72	3
8205	1.3	15250	1	5	54	.1	12	16200	.1	18	167	40530	2250	3	8560	346	8	400	1	1310	5	1	59	1	3002	60.5	14	1	2	3	41	1
8206	1.5	23930	1	6	50	.1	16	23660	.1	21	209	45870	1970	4	11730	430	9	690	1	1350	4	1	130	1	3686	84.1	21	2	3	6	117	1
8207	1.1	13790	1	3	51	.1	10	14920	.1	19	223	37140	1920	2	6220	240	3	430	1	1200	6	1	62	1	2812	54.4	14	1	1	4	60	2
8208	.9	11910	1	4	40	.1	10	15110	.1	17	189	37220	1500	2	6230	268	5	370	1	1340	3	1	54	1	2487	46.4	20	1	1	3	52	2
8209	.9	15840	1	4	72	.1	11	16010	.1	17	147	37600	2170	2	7260	348	6	470	1	1150	6	1	86	1	2835	58.4	28	1	1	4	73	1
8210	.9	11500	1	4	64	.1	10	17360	.1	16	313	37640	2030	2	5260	307	13	330	1	1240	10	1	71	1	2392	43.4	44	1	1	3	41	2
8211	1.3	7680	4	4	72	.1	9	18290	.1	17	465	38800	2860	1	2840	243	28	300	1	1280	16	1	50	1	2053	35.8	38	1	1	2	39	44
8212	1.0	15790	7	5	150	.1	11	12110	.1	14	298	51510	5600	3	6780	526	23	420	1	1150	12	1	63	1	2535	52.4	24	1	2	4	56	28
8213	.7	18180	4	4	87	.1	13	7850	.1	16	217	53150	3400	4	12750	921	15	220	1	1190	15	1	71	1	2910	66.9	37	1	2	3	30	1
8214	.6	9100	2	3	110	.2	6	15800	.1	8	36	22930	4140	2	2680	498	3	450	1	770	8	1	54	3	1325	23.6	18	1	1	2	44	9
8215	.8	8440	1	3	87	.1	6	26440	.1	8	90	24480	3930	1	3090	663	1	270	1	920	7	1	74	2	1350	28.5	21	1	1	2	38	5
8216	.5	7730	3	3	92	.3	4	24490	.1	7	17	21990	4200	2	2150	607	2	400	1	780	8	1	63	2	888	18.4	16	1	1	2	44	1
8217	.4	5980	5	2	64	.2	4	19180	.1	6	20	22070	2800	1	2530	610	2	330	1	730	11	1	49	2	802	18.4	18	1	1	2	55	2
8218	.9	8780	3	3	81	.1	7	20210	.1	8	16	24360	3560	2	2840	517	3	610	1	700	12	1	79	4	1603	38.2	17	1	1	4	75	10
8219	.7	6630	5	3	73	.1	6	16590	.1	6	44	20850	3050	1	1760	384	2	510	1	550	8	1	57	3	1244	25.4	19	1	1	3	84	4
8220	1.6	11410	1	5	86	.1	14	22800	.1	20	315	44660	3030	3	5780	527	15	270	1	1770	7	1	85	1	3577	87.5	26	1	3	3	32	43
8221	1.8	20210	1	5	98	.1	18	12720	.1	21	256	52960	3550	4	11800	949	11	430	1	1770	16	1	94	1	4196	114.5	25	2	3	6	88	8
8222	1.8	15310	1	5	105	.1	15	18800	.1	24	400	50790	3760	3	8010	749	11	290	1	1780	12	1	90	1	3592	87.9	26	1	3	3	31	29
8223	1.2	12390	9	4	85	.1	9	19380	.1	11	45	32000	4000	3	5930	754	2	380	1	1290	10	1	77	2	2164	57.4	22	2	1	3	56	1
8224	1.2	13080	4	4	93	.2	9	22820	.1	12	82	32070	4930	3	5570	854	2	310	1	1380	14	1	64	3	1856	50.6	22	2	1	3	56	17
8225	1.1	17430	1	6	133	.1	9	14210	.1	14	129	35640	6770	4	6070	946	1	340	1	1410	12	1	71	3	2135	59.8	30	1	2	3	36	25
8226	.7	9680	3	3	54	.2	7	22850	.1	10	30	28430	3160	3	5460	690	1	300	1	1280	11	1	62	2	1578	42.5	24	1	1	3	69	4
8227	.8	10950	3	3	61	.1	7	23250	.1	10	30	29440	3690	3	5710	709	2	320	1	1280	10	1	68	3	1712	47.9	22	1	1	4	74	15
8228	1.5	12320	4	5	72	.1	12	22760	.1	19	322	37720	3520	3	5480	472	9	350	1	1880	6	1	85	1	2823	73.5	17	1	2	5	85	2
8229	1.3	13800	1	2	50	.1	11	19500	.1	16	138	32860	2160	2	6050	538	2	420	1	1370	6	1	98	1	2607	64.3	17	2	2	4	59	1
8230	1.0	13750	1	2	53	.1	9	15830	.1	16	154	28670	1920	2	5570	415	5	400	1	1200	5	1	85	1	2397	46.9	15	1	2	5	91	6
8231	1.2	12250	4	21	40	.1	9	15880	.1	16	180	29080	1460	8	4960	311	5	280	1	1160	11	1	63	1	2258	44.2	18	1	2	3	41	25
8232	1.0	11600	1	12	45	.1	8	15900	.1	16	182	27650	1750	4	4160	292	4	270	1	1250	8	1	68	1	2053	36.9	15	1	2	2	29	18
8233	.9	14450	1	11	46	.1	11	15900	.1	17	168	34340	2080	4	6490	401	5	290	1	1220	6	1	77	1	2583	49.5	25	1	2	3	45	14
8234	1.2	11660	3	8	56	.1	8	14190	.1	13	132	23020	1910	3	3660	282	5	320	6	900	6	1	102	1	1809	37.3	11	2	2	2	41	1
8235	1.5	10940	1	6	56	.1	11	22880	.1	15	218	33190	2500	3	5380	503	4	270	1	1220	7	1	84	1	2510	61.2	19	1	2	2	32	16
8236	1.4	11610	1	7	59	.1	12	24510	.1	16	240	35850	2670	3	5850	543	4	280	1	1310	8	1	86	1	2661	64.9	20	1	2	2	34	2
8237	1.4	18930	1	5	42	.1	15	24010	.1	20	229	46680	1610	4	13080	894	2	340	1	1370	9	1	101	1	3380	83.9	31	2	2	3	26	17
8238	1.2	18920	1	5	54	.1	12	19380	.1	18	200	36010	1920	3	9550	633	3	300	1	1140	7	1	121	1	2886	63.9	21	1	2	3	32	6
8239	1.2	20080	1	7	73	.1	12	26230	.1	20	154	47250	3210	5	15150	1059	1	280	1	2160	10	1	91	1	2659	93.9	45	1	2	3	28	23
8240	1.5	21800	1	5	82	.1	12	26080	.1	17	294	38440	3260	4	13510	910	1	210	1	1230	11	1	103	1	2753	64.5	29	2	2	2	20	2
8241	1.2	21300	1	6	97	.1	13	22560	.1	19	402	38410	3500	4	12010	783	6	300	1	1240	7	1	99	1	2898	61.0	31	1	3	3	38	22
8242	1.2	21140	1	5	55	.1	12	21040	.1	21	371	44960	2140	5	15960	973	2	270	1	1430	7	1	74	1	2893	69.9	32	1	2	3	26	19
8243	1.3	23770	1	4	47	.1	12	23320	.1	18	186	39740	1630	4	15470	1000	4	320	1	1270	4	1	118	1	2935	66.4	34	2	2	3	34	13
8244	1.2	17430	1	4	62	.1	11	18880	.1	15	158	31430	1920	3	9810	662	5	280	1	1210	3	1	101	1	2515	53.0	24	1	2	3	29	21
8245	1.2	14860	1	4	81	.1	11	18740	.1	17	277	36650	2850	3	8560	573	1	310	1	1350	4	1	65	1	2774	60.1	22	1	2	2	28	26
8246	1.2	19190	1	4	72	.1	12	26480	.1	17	179	39540	2890	4	13150	917	2	300	1	1230	9	1	79	1	2751	68.5	27	2	1	3	41	17
8247	1.1	15540	1	4	75	.1	10	27770	.1	14	267	35760	3680	4	10240	782	2	320	1	1190	16	1	61	1	2120	53.8	39	2	1	3	44	8
8248	1.2	18600	1	4	56	.1	11	20860	.1	16	310	35730	1920	4	11090	696	5	290	1	1230	6	1	87	1	2674	65.4	22	1	2	3	34	1
8249	1.3	15360	1	4	71	.1	11	14640	.1	16	488	32410	2440	4	6990	386	10	310	1	1260	5	1	75	1	2879	69.9	21	2	2	3	39	14
8250	1.8	14750	1	3	59	.1	15	20080	.1	15	513	33760	2190	4	6660	392	12	560	1	1320	6	1	88	2	3521	91.9	22	3	3	4	67	13
8251	1.3	17760	1	4	84	.1	13	21100	.1	19	412	36540	3450	3	6270	402	3	390	1	1390	5	1	117	1	3120	71.7	24	1	2	3	40	21
8252	1.4	23360	1	5	36	.1	14	21840	.1	19	196	40380	1610	3	12890	714	10	260	1	1250	7	1	136	1	3291	81.3	35	2	3	3	36	1
8253	1.5	18720	1	4	55	.1	13	19220	.1	17	462	38760	2410	4	10540	623	39	400	1	1410	5	1	99	1	3122	84.9	32	3	2	4	39	19
8254	1.4	22240	1	4	50	.1	13	21140	.1	16	434	35470	2230	4	12930	590	29	340	1	1130	6	1	97	1	2854	70.8	29	3	2	3	46	16
8255	1.6	19300	1	4	67	.1	13	21910	.1	17	513	37690	2800	4	10320	554	26	400	1	1360	5	1	94	1	2989	71.1	29	2	2	3	43	6
8256	1.3	17220	1	3	32	.1	11	19360	.1	17	287	35910	1580	4	12400	575	8	260	1	1170	8	1	62	1	2629	61.2	34	1	2	3	35	12
8257	1.1	19190	1	3	56	.1	13	21790	.1	18	368	38380	2440	5	12530	596	6	370	1	1220	3	1	63	1	2940	67.6	30	1	2	3	43	4
8258	1.1	16840	1	3	41	.1	11	27920	.1	16	244	40150	1790	4	12430	876	4	330	1	1340	13	1	62	1	2523	67.9	41	2	2	3	44	19
8259	1.1	12990	1	2	56	.1	10	19170	.1	14	297	29520	2240	4	8720	510	10	410	1	1220	6	1	51	1	2289	49.3	24	1	2	3	42	2
8260	1.0	15960	1	2	31	.1	11	15880	.1	16	226	33440	1160	4	12460	706	3	370	1	1310	5	1	50	1	2410	61.2	33	2	2	3	45	1

COMP: EQUITY ENGRG./CON. GOLDWEST
PROJ: OP & PUP
ATTN: D.CAULFIELD/P.LOUGHEED

MIN-EN LABS — ICP REPORT

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
(604)980-5814 OR (604)988-4524

FILE NO: 1S-0322-RJ3
DATE: 91/08/12
• ROCK • (ACT:F31)

SAMPLE NUMBER	AG PPM	AL PPM	AS PPM	B PPM	BA PPM	BE PPM	BI PPM	CA PPM	CD PPM	CO PPM	CU PPM	FE PPM	K PPM	LI PPM	MG PPM	MN PPM	MO PPM	NA PPM	NI PPM	P PPM	PB PPM	SB PPM	SR PPM	TH PPM	TI PPM	V PPM	ZN PPM	GA PPM	SN PPM	W PPM	CR PPM	AU-FIRE PPB
8261	1.4	12150	3	15	54	.1	9	23860	.1	14	189	33730	2510	10	7070	623	4	290	1	1380	14	1	65	1	2176	51.8	29	2	2	2	34	1
8262	1.3	12800	1	5	35	.1	9	22130	.1	15	218	32620	1750	5	8710	675	3	330	1	1430	7	1	64	1	2291	59.3	51	2	1	3	40	5
8263	1.4	15120	1	3	67	.1	10	24700	.1	16	448	37010	3160	5	10670	709	4	280	1	1520	8	1	50	1	2490	75.7	35	3	2	3	35	2
8264	2.0	19120	1	3	35	.1	19	25610	.1	18	345	40560	900	4	12700	733	3	280	1	2510	8	1	129	1	3928	120.1	37	4	3	4	42	4
8265	2.0	19070	4	1	31	.1	17	19890	.1	19	236	35250	1550	4	9240	627	17	390	8	1220	8	1	124	1	3456	89.6	27	4	3	5	72	3
8266	2.1	19210	6	1	42	.1	17	26380	.1	18	144	37340	2030	5	11890	882	4	290	4	1070	9	1	97	1	3642	112.8	30	5	3	4	42	1
8267	1.7	18690	3	1	68	.1	12	27690	.1	17	164	38240	2970	5	11950	956	3	260	1	1290	9	1	110	1	2718	78.4	45	4	2	3	29	2
8268	1.9	18800	1	1	23	.1	15	26170	.1	17	289	33450	1010	4	9780	679	8	240	6	1400	6	1	141	1	3321	95.8	28	3	3	5	79	1
8269	1.8	19310	1	1	42	.1	16	21090	.1	20	218	34630	1630	4	10540	654	2	440	10	1160	4	1	93	1	3769	108.5	24	3	2	5	65	1
8270	1.6	17960	1	1	21	.1	13	22990	.1	13	186	27890	840	3	10760	678	4	220	2	1190	8	1	93	1	2960	78.8	26	3	2	4	64	6
8271	1.6	19210	1	1	45	.1	16	20380	.1	19	235	39330	2100	4	11680	748	5	310	8	1020	4	1	78	1	3614	109.7	31	2	2	4	60	7
8272	1.3	14730	1	1	46	.1	11	17940	.1	20	267	34770	1740	3	7980	572	5	310	3	1170	10	1	62	1	2500	59.9	29	2	1	3	53	4
8273	1.3	16670	1	1	54	.1	12	22840	.1	16	193	32710	1690	3	8570	692	3	340	4	1270	8	1	81	1	2458	61.8	29	3	2	3	51	8
8274	1.5	14540	2	1	48	.1	11	20950	.1	19	179	32850	1870	5	6300	526	4	370	3	1330	7	1	81	1	2571	58.4	23	2	2	4	52	10
8275	1.4	19240	1	1	44	.1	13	18750	.1	17	125	36160	1860	4	11840	739	3	350	1	1290	7	1	90	1	2885	74.0	28	3	2	4	44	2
8276	1.7	20300	1	1	63	.1	12	24650	.1	19	401	40390	2610	5	13430	900	10	330	1	1380	9	1	97	1	3055	80.0	42	4	2	3	38	4
8277	1.2	13840	6	1	69	.1	8	28010	.1	13	412	31690	3940	4	8510	706	9	290	1	1120	10	1	51	1	1461	55.2	28	4	1	2	30	2
8278	1.4	15170	5	1	51	.1	11	26640	.1	16	452	38030	2470	4	10750	760	12	300	1	1630	11	1	95	1	2347	85.6	35	4	2	3	37	10
8279	1.8	10700	3	1	32	.1	8	22730	.1	15	750	31210	1770	3	7620	574	17	340	1	1650	7	1	92	1	1802	75.5	50	3	1	3	48	2
8280	1.9	22230	1	1	19	.1	15	27640	.1	15	99	36100	900	4	12650	852	8	360	1	1550	7	1	215	1	3320	98.6	31	5	2	4	48	1
8281	1.6	16780	7	1	46	.1	13	21100	.1	17	297	36640	2420	4	10120	572	5	440	1	1350	64	1	91	1	2760	68.2	70	3	2	3	44	7
8282	1.8	15840	7	1	36	.1	14	19180	.1	18	280	32620	1900	3	9610	494	5	370	1	1330	12	1	85	1	2974	71.0	22	3	2	3	39	2
8283	1.8	18990	1	1	62	.1	14	27670	.1	23	528	42440	3960	6	11810	682	2	320	1	1320	8	1	94	1	3142	80.1	29	3	2	3	25	17
8284	1.7	16220	1	1	39	.1	13	24400	.1	14	212	34630	1770	3	8830	717	2	390	1	1190	41	1	138	1	2738	81.0	64	4	2	4	57	4
8285	1.8	20060	6	1	28	.1	13	26220	.1	16	291	38490	1280	4	11370	816	3	420	1	1130	13	1	187	1	2990	96.3	35	6	2	4	54	2
8286	1.9	17220	1	7	33	.1	15	21840	.1	14	116	35250	1350	4	8560	778	3	380	1	1230	15	1	166	1	3248	92.3	103	4	2	4	55	15

COMP: EQUITY ENGRG./CON.GOLDWEST RES.
PROJ: OP & PUP P.O. KGGPU
ATTN: P.LOUGHEED

MIN-EN LABS — ICP REPORT

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
(604)980-5814 OR (604)988-4524

FILE NO: 1S-0334-RJ1+2
DATE: 91/08/13
* ROCK * (ACT:F31)

SAMPLE NUMBER	AG PPM	AL PPM	AS PPM	B PPM	BA PPM	BE PPM	BI PPM	CA PPM	CD PPM	CO PPM	CU PPM	FE PPM	K PPM	LI PPM	MG PPM	MN PPM	MO PPM	NA PPM	NI PPM	P PPM	PB PPM	SB PPM	SR PPM	TH PPM	TI PPM	V PPM	ZN PPM	GA PPM	SN PPM	W PPM	CR PPM	AU-FIRE PP8
8287	1.6	14340	1	5	26	.1	11	17890	.1	13	129	32330	850	4	8500	722	1	360	1	1420	16	1	145	2	2751	74.8	43	1	2	3	51	1
8288	1.6	17710	1	1	25	.1	14	21030	.1	15	137	36220	710	1	10280	793	2	370	1	1360	8	1	171	1	3426	85.3	38	2	2	5	81	2
8289	1.5	15820	1	1	31	.1	14	23050	.1	14	167	37800	1140	1	10190	853	1	360	1	1450	5	1	121	1	3293	90.4	39	3	2	4	45	4
8290	1.6	18760	1	1	40	.1	14	24330	.1	14	155	37810	1610	1	10390	925	2	370	1	1470	5	1	194	1	3353	92.3	42	3	2	5	77	119
8291	1.9	19890	1	1	37	.1	14	24300	.1	15	167	38350	1540	1	11210	1038	1	390	1	1320	127	1	203	1	3474	96.9	84	3	2	4	53	80
8292	1.1	19170	1	1	25	.1	11	24780	.1	17	267	39520	2100	1	13140	1013	1	350	1	1390	10	1	129	1	2709	64.8	57	2	1	3	52	2
8293	1.0	18720	1	1	35	.1	11	21300	.1	16	214	44250	1980	1	15470	1031	1	330	1	1230	10	1	88	1	2568	69.0	61	1	2	3	33	3
8294	1.4	18250	1	1	24	.1	11	21300	.1	18	437	35760	1650	1	12100	840	4	350	1	1180	5	1	122	1	2731	69.1	43	2	2	5	70	1
8295	1.0	20180	1	1	27	.1	11	24760	.1	18	280	40020	1880	1	13640	1044	1	340	1	1270	18	1	125	1	2784	83.5	46	2	2	3	51	1
8296	1.2	22160	1	1	30	.1	12	22170	.1	18	201	38730	540	1	13190	933	3	340	1	1170	13	1	147	1	2853	79.8	42	2	2	5	73	42
8297	.8	14010	1	1	39	.1	9	24530	.1	11	106	33070	1370	1	8220	914	1	290	1	1290	11	1	127	1	1895	80.0	49	3	1	3	47	1
8298	.6	17890	1	1	124	.1	7	28170	.1	12	124	37810	1950	1	11270	1377	2	330	1	1560	11	1	257	1	1326	96.9	56	4	1	4	62	16
8299	.5	5740	12	1	782	.9	2	50600	.1	8	163	27230	3640	1	6960	1100	2	210	1	550	24	4	155	1	41	28.7	40	2	1	2	52	2
8300	.4	10880	7	1	197	.1	3	40450	.1	10	304	35740	4680	1	6280	1066	2	330	1	1530	13	1	141	1	364	59.4	27	3	1	3	50	6
8301	1.0	10570	1	1	60	.1	9	26940	.1	12	254	36870	2550	1	7310	785	1	220	1	1550	11	1	136	1	2051	70.7	34	1	1	3	34	5
8302	1.4	11860	8	1	76	.1	9	28000	.1	11	249	39810	3260	1	7620	796	3	260	1	1420	90	1	148	1	1810	66.9	36	1	1	4	63	2
8303	1.6	12930	6	1	31	.1	11	25150	.1	13	282	35260	1420	1	8060	778	5	280	1	1570	10	1	158	1	2425	83.5	37	3	2	4	53	1
8304	1.3	15600	1	1	29	.1	11	28090	.1	12	157	37220	1230	1	8940	953	2	310	1	1500	8	1	222	1	2372	96.8	39	4	2	5	71	92
8305	1.7	13510	2	1	46	.1	13	34010	.1	12	217	40490	2510	1	8400	890	7	320	1	1510	44	1	146	1	2742	72.8	84	2	2	4	67	47
8306	1.4	9280	1	1	50	.1	11	26280	.1	16	407	46140	1960	1	6520	654	4	240	1	1940	11	1	97	1	2539	68.1	25	1	2	4	36	20
8307	1.2	13380	2	1	56	.1	11	24770	.1	16	213	44110	2400	1	9410	757	4	260	1	1550	8	1	104	1	2723	66.8	28	2	2	3	50	40
8308	1.2	10710	1	1	38	.1	12	27090	.1	13	159	45300	1300	1	6760	612	3	330	1	1710	13	1	125	1	2998	70.2	21	1	2	4	60	17
8309	1.2	8590	3	1	51	.1	10	26460	.1	13	186	37370	2300	1	3780	549	4	290	1	1550	10	1	106	1	2442	58.6	33	1	1	3	53	2
8310	1.3	13160	1	1	60	.1	10	28170	.1	12	134	34240	3090	1	7020	849	2	260	1	1380	13	1	130	1	2246	64.6	55	2	1	4	50	41
8311	1.9	13500	1	1	71	.1	13	26750	.1	14	239	38720	2420	1	7740	773	3	310	1	1520	18	1	128	1	3028	82.2	35	2	2	6	50	60
8312	2.6	17850	1	1	35	.1	18	26170	.1	21	498	41350	1230	1	9530	765	2	510	1	1490	6	1	162	1	4067	105.1	41	1	3	5	74	44
8313	2.2	19190	1	1	28	.1	18	26270	.1	23	319	42870	810	1	9500	820	3	460	1	1550	6	1	189	1	4233	110.7	26	1	3	7	92	143
8314	1.9	16550	1	1	35	.1	15	22780	.1	14	243	40190	870	1	9790	770	1	400	1	1670	6	1	161	1	3555	94.5	34	1	2	4	63	4
8315	.9	11140	6	1	18	.1	11	26440	.1	25	263	69490	530	1	8100	764	1	230	1	2670	17	1	107	1	2495	82.8	36	1	1	33	51	148
8316	.9	10360	1	1	27	.1	10	24690	.1	18	167	50600	810	1	7910	704	1	310	1	1590	16	1	103	1	2149	66.6	27	1	1	8	45	6
8317	2.4	11550	14	26	46	.1	11	30940	.1	14	281	38740	1580	19	8440	896	1	260	1	1520	32	1	101	4	2615	77.7	90	1	2	4	57	40
8318	1.8	13070	7	12	51	.1	11	22760	.1	18	302	42900	1870	8	8530	760	1	290	1	1290	14	1	94	1	2825	68.8	49	1	2	3	39	2
8319	1.7	13470	4	8	73	.1	10	52550	.1	13	317	37100	4230	6	7200	983	2	200	1	1310	49	1	79	1	2018	44.5	108	2	1	2	40	4
8320	1.6	15000	5	5	37	.1	12	26650	.1	18	178	43390	1220	5	10010	880	1	360	1	1220	12	1	114	1	2712	73.8	39	2	1	4	52	2
8321	1.9	18860	1	4	29	.1	13	33450	.1	17	173	43050	1190	5	13530	1067	1	400	1	1190	8	1	143	1	3026	88.2	51	3	2	4	44	1
8322	1.9	15390	1	3	48	.1	13	31900	.1	15	255	39370	2750	4	9240	923	2	340	1	1250	20	1	112	1	2870	72.1	55	3	2	3	47	2
8323	1.7	12180	4	2	47	.1	10	28300	.1	15	280	37570	3010	4	7920	857	10	260	1	1380	19	1	77	1	2432	67.6	42	2	2	3	38	12
8324	2.1	13550	4	1	42	.1	14	71480	.1	14	241	36950	2490	5	10260	2056	11	280	1	1610	15	1	306	1	2811	92.6	47	5	2	3	28	2
8325	1.8	17300	9	2	65	.1	14	50980	.1	23	213	55500	3660	5	11190	1239	13	210	1	1620	15	1	125	1	3060	93.7	46	3	2	5	65	36
8326	2.2	23750	1	1	38	.1	18	25790	.1	21	387	43730	4110	6	15550	1077	1	340	1	2370	9	1	396	1	4177	136.8	66	2	3	4	55	5
8327	2.1	21100	1	1	41	.1	16	24850	.1	20	322	43860	4210	7	17390	1180	1	280	1	2400	8	1	266	1	3862	121.2	69	2	3	4	36	8
8328	2.1	19250	1	1	45	.1	15	24700	.1	19	230	39790	3400	5	13920	979	1	290	1	2290	5	1	288	1	3564	117.7	55	3	3	4	49	6
8329	1.8	18600	1	1	73	.1	15	23360	.1	18	288	38340	3000	5	13170	908	1	270	1	2220	5	1	292	1	3620	123.7	54	3	2	4	46	2
8330	.5	7630	5	1	103	.4	2	25840	.1	8	358	25670	3980	2	5010	718	2	230	1	1160	10	1	80	3	178	34.3	31	2	1	2	29	19
8331	1.5	7850	56	2	416	1.0	1	28090	.1	10	1537	30310	4800	1	3110	991	5	220	2	1960	15	34	69	2	58	28.6	54	1	1	3	46	70
8332	1.1	6720	30	1	231	.4	1	29650	.1	9	490	31030	4550	1	3050	770	2	200	1	1410	32	4	63	2	52	23.1	143	1	1	2	37	65
8333	1.1	5340	28	1	77	.3	2	26180	.1	9	1155	27400	2600	1	4220	692	3	230	1	1160	11	2	53	2	109	26.2	48	2	1	2	28	102
8334	1.5	6680	70	1	88	.2	2	27970	.1	8	1878	26650	4010	2	4560	672	4	170	1	960	14	5	54	3	52	24.7	30	2	1	2	40	280
8335	1.2	14750	18	1	72	.1	4	58090	.1	15	975	41890	2740	4	12880	1411	3	200	26	1540	15	1	84	1	608	82.3	43	3	1	4	73	114
8336	1.7	6390	61	1	118	.1	2	52560	.1	15	1053	36420	3780	1	4940	873	12	230	22	1100	15	1	63	1	85	43.2	23	2	1	3	45	63
8337	2.1	9440	19	1	95	.1	4	33450	.1	16	1401	34830	4130	3	6100	642	4	210	1	1960	16	1	67	1	641	70.1	167	2	1	3	45	102
8338	2.0	10070	4	1	72	.1	12	26910	.1	19	793	41560	3360	3	6730	518	2	280	1	2450	6	1	98	1	2763	93.3	32	1	2	4	45	37
8339	2.1	7440	1	1	44	.1	13	25020	.1	21	755	43280	2410	1	3370	347	2	300	1	2120	9	1	85	1	3330	91.4	16	1	2	3	45	27
8340	2.0	7040	3	1	40	.1	13	25680	.1	22	845	43120	2380	1	2750	359	3	340	20	1340	7	1	74	1	3106	83.4	13	1	2	4	60	28
8341	2.6	7360	13	1	38	.1	10	29770	.1	17	574	36890	2110	3	7070	731	54	290	25	1150	36	1	54	1	2324	81.8	75	2	2	5	85	141
8342	2.4	5460	7	1	24	.1	13	26440	.1	17	310	32820	1600	1	3370	441	31	410	32	1230	8	1	52	1	3171	85.0	29	1	2	4	74	116
8343	1.9	4690	5	1	24	.1	12	25620	.1	18	384	32060	1730	1	2070	333	10	280	21	1560	24	1	49	1	2958	69.1	42	1	2	4	73	40
8344	1.3	10210	2	1	47	.1	7	31640	.1	12	227	26370	1950	3	6840	672	10	220	8	920	13	1	122	1	1583	56.6	22	3	1	4	63	5
8345	1.2	7920	4	1	41	.1	8	23020	.1	11	317	28330	2490	2	5040	532	3	320	1	1060	13	1	69	1	1969	38.1	29	1	1	3	45	20
8346	1.5	7710	1	1	33	.1	10	34920	.1	15	479	34370	2270	2	5640	749	5	230	6	1420	15	1	102	1	2190	46.3	39	1	1	3	60	41

COMP: EQUITY ENGRG./CON.GOLDWEST RES.
PROJ: OP & PUP P.O. KGGPU
ATTN: P.LOUGHEED

MIN-EN LABS — ICP REPORT

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
(604)980-5814 OR (604)988-4524

FILE NO: 1S-0334-RJ3+4
DATE: 91/08/13
* ROCK * (ACT:F31)

SAMPLE NUMBER	AG PPM	AL PPM	AS PPM	B PPM	BA PPM	BE PPM	BI PPM	CA PPM	CD PPM	CO PPM	CU PPM	FE PPM	K PPM	LI PPM	MG PPM	MN PPM	MO PPM	NA PPM	NI PPM	P PPM	PB PPM	SB PPM	SR PPM	TH PPM	TI PPM	V PPM	ZN PPM	GA PPM	SN PPM	W PPM	CR PPM	AU-FIRE PPB
8347	1.9	9570	11	19	72	.1	11	55820	.1	17	373	40460	1620	11	7780	834	5	230	17	2780	26	1	116	1	2238	64.6	43	2	2	4	54	8
8348	1.7	8440	8	10	25	.1	10	31800	.1	19	439	40280	1730	7	9080	869	2	240	26	1170	19	1	60	1	2204	67.8	32	2	1	3	46	57
8349	1.9	10850	4	6	46	.1	12	28110	.1	18	763	41620	3030	6	9010	709	3	260	1	1820	17	1	78	1	2775	84.2	39	2	2	3	44	15
8350	1.5	10330	3	3	245	.1	9	24450	.1	13	410	34170	2880	5	7610	548	5	230	1	1360	41	1	71	2	1955	74.2	33	3	1	3	34	3
8351	1.7	8540	4	1	33	.1	10	21350	.1	11	487	25370	1610	3	6620	372	6	310	1	1230	8	1	62	2	2343	77.5	19	3	2	3	40	1
8352	2.2	11000	1	1	29	.1	14	26590	.1	19	919	36910	1890	4	9040	455	4	270	1	2210	11	1	90	1	3140	106.5	19	3	2	4	36	13
8353	1.9	12580	1	1	47	.1	14	24660	.1	21	671	42150	3310	4	8450	412	6	230	1	2280	7	1	82	1	3362	105.4	17	2	3	3	33	3
8354	1.8	14110	1	1	41	.1	13	24140	.1	17	599	38800	2590	4	11310	522	2	250	1	2010	12	1	82	1	3034	97.0	24	3	2	3	27	51
8355	1.7	14290	1	1	65	.1	15	24220	.1	20	434	44590	2860	5	11620	585	1	210	1	1650	10	1	79	1	3456	105.7	22	3	3	4	40	10
8356	1.7	11790	8	1	36	.1	12	24740	.1	24	803	42690	2390	4	10670	562	8	210	15	1310	12	1	68	1	2698	87.5	21	2	2	4	41	7
8357	1.9	12250	7	1	38	.1	11	49880	.1	16	854	39250	2360	4	10000	813	4	190	1	1350	18	1	132	1	2300	81.1	32	3	1	4	42	56
8358	1.3	9760	2	1	35	.1	11	25670	.1	13	324	33590	1910	2	7040	544	3	260	1	1300	13	1	81	1	2364	67.1	21	3	1	3	42	2
8359	1.6	11200	1	1	48	.1	12	26440	.1	12	267	32240	2370	3	8350	586	3	300	1	1300	10	1	94	1	2643	76.5	20	3	2	3	33	1
8360	1.4	9630	3	1	39	.1	9	23090	.1	12	217	31200	2230	3	7110	455	1	230	1	1160	12	1	76	1	2079	56.6	21	3	1	3	36	1
8361	1.4	12120	12	1	62	.1	10	28040	.1	15	383	35270	3370	4	8670	556	1	190	1	2140	21	1	67	1	2031	66.4	31	3	1	2	20	4
8362	1.4	12020	6	1	59	.1	10	30040	.1	15	269	36610	3540	3	8620	570	1	200	1	1860	20	1	78	1	2150	66.0	22	3	2	3	27	3
8363	1.2	11710	2	1	67	.1	11	32520	.1	16	135	38480	3290	3	8460	649	2	260	1	1550	8	1	65	1	2413	53.3	22	2	2	2	27	1
8364	1.5	12790	1	1	60	.1	13	29820	.1	16	178	39250	3750	3	9480	585	1	240	1	1660	8	1	76	1	2784	68.1	17	2	2	3	31	2
8365	1.7	11360	17	1	51	.1	11	46740	.1	16	437	35440	3200	3	7570	660	7	240	5	1520	8	1	83	1	2395	64.7	20	3	2	3	28	5
8366	1.7	11500	1	1	49	.1	13	34420	.1	13	182	32660	2490	2	6390	704	2	330	1	1120	10	1	128	1	2896	75.0	21	2	2	3	36	3
8367	1.5	11660	1	1	53	.1	14	24350	.1	12	123	33930	2270	2	6380	580	4	380	1	1050	16	1	135	2	2993	84.3	33	3	2	3	36	1
8368	1.6	11890	6	1	100	.1	9	28190	.1	11	282	28760	4230	3	6260	761	30	230	1	1110	59	1	87	2	1864	52.6	283	4	1	2	28	19
8369	1.9	10940	1	1	51	.1	11	30360	.1	16	546	35120	2990	2	5440	619	25	260	1	1280	50	1	108	1	2509	64.8	33	2	1	3	36	21
8370	2.3	17400	1	1	67	.1	16	26460	.1	21	713	46480	2850	4	11850	620	1	310	1	2590	12	1	119	1	3676	112.6	39	2	2	3	27	9
8371	2.0	14560	1	1	70	.1	13	26400	.1	19	398	41860	3090	3	8820	549	2	320	1	2170	78	1	115	1	3173	93.0	52	2	3	3	23	1050
8372	1.8	10450	5	1	55	.1	12	24680	.1	14	443	32210	2940	2	6840	482	30	320	1	1380	10	1	70	1	2652	70.5	29	2	2	3	35	8
8373	1.7	10730	7	1	28	.1	12	23310	.1	17	383	32290	1480	2	9350	517	11	300	14	1270	18	1	62	1	2585	69.8	70	2	2	4	43	16
8374	1.1	6640	6	1	35	.1	9	17720	.1	20	312	33810	1490	1	5500	316	13	370	20	1260	18	1	40	1	2055	55.5	47	1	1	3	41	17
8375	.8	6210	1	1	24	.1	9	14290	.1	17	169	32430	1070	1	5200	299	2	350	19	1260	18	1	29	1	1907	49.1	43	1	1	2	35	3
8376	.6	6910	1	1	43	.1	9	15820	.1	19	166	36790	1470	1	5690	302	1	5100	15	1240	32	1	31	1	1844	45.6	30	1	1	2	37	2
8377	1.2	6540	21	12	39	.1	9	20020	.1	23	175	36260	1220	3	6060	338	8	1310	19	1280	15	1	39	1	1829	49.4	18	2	2	3	47	2
8378	1.7	9200	22	7	38	.1	9	34790	.1	16	200	34200	1640	3	8800	753	5	1610	18	1270	28	1	50	1	1924	51.4	42	3	2	4	55	4
8379	1.4	11490	24	8	36	.1	6	29670	.1	18	488	38960	1430	6	12300	724	10	970	12	1280	16	1	58	1	1183	43.9	37	3	1	3	53	2
8380	1.7	11450	23	6	47	.1	8	26100	.1	17	390	35470	1860	4	11290	545	9	1000	8	1230	21	1	64	1	1697	47.5	40	4	1	4	59	6
8381	1.6	11210	17	4	59	.1	8	24480	.1	13	252	29680	1860	4	10490	520	6	360	5	1340	18	1	59	1	1616	42.3	40	4	1	3	58	11
8382	1.5	10600	15	4	118	.1	7	29060	.1	11	59	24920	3090	4	7230	872	4	200	2	1130	9	1	100	1	1178	27.3	32	4	1	2	33	8
8383	1.5	10650	10	4	119	.1	7	29380	.1	8	59	20570	3400	3	5320	1002	1	1310	1	970	18	1	84	1	1159	21.3	51	4	1	2	38	57
8384	1.5	11950	30	5	178	.1	5	33150	.1	14	122	30920	4270	4	6720	748	5	1010	11	1360	12	1	94	1	650	32.5	28	4	1	3	57	13
8385	2.5	4930	24	4	101	.1	6	60400	.1	12	185	26750	3620	2	940	856	13	860	4	1270	19	1	158	1	1048	12.9	20	3	1	2	43	7
8386	1.6	7340	24	3	158	.2	5	31550	4.9	9	76	24610	4010	1	3300	618	3	1410	1	1200	16	1	95	1	682	23.5	266	3	1	2	35	3
8387	2.3	10460	27	4	67	.1	8	25950	.1	16	285	30680	2730	5	7640	518	7	350	13	1610	12	1	72	1	1658	49.6	140	3	2	3	44	16
8388	2.1	11590	15	3	51	.1	7	24050	.1	13	334	28650	1750	3	10350	613	8	1680	13	1410	14	1	59	1	1316	46.5	90	4	1	3	54	62
8389	1.6	10010	19	3	68	.1	7	25710	.1	12	251	28950	2130	3	7910	619	8	2500	4	1360	23	1	60	1	1286	39.1	83	5	1	3	45	10
8390	.9	5110	18	3	91	.1	5	30880	.1	7	27	19890	2940	2	1530	551	1	1070	1	1090	9	1	87	1	674	13.3	11	3	1	2	32	5
8391	1.1	6770	17	3	94	.1	6	32650	.1	9	28	23120	3080	2	3110	711	2	1370	1	1140	24	1	81	1	825	15.3	18	4	1	2	38	4
8392	2.5	19220	13	3	41	.1	11	52930	.1	24	345	46980	1440	6	20270	1281	17	380	26	1050	9	1	86	1	2241	89.2	195	3	1	5	87	9
8393	1.7	16180	14	3	53	.1	12	25620	.1	26	251	49290	1980	5	15750	830	3	380	19	1180	9	1	63	1	2507	78.5	40	3	2	4	77	4
8394	1.7	15990	21	4	62	.1	10	35910	.1	25	260	48440	2390	5	15100	1055	8	1830	17	1240	15	1	79	1	2270	73.6	39	3	2	4	59	14
8395	1.4	8010	14	3	61	.1	8	25530	.1	11	182	29100	2430	2	5500	568	4	1890	1	1250	16	1	81	1	1513	36.4	33	3	1	3	46	43
8396	2.2	10160	11	3	86	.1	11	32560	.1	14	188	36620	3450	2	5440	735	2	1400	1	1560	19	1	116	1	2447	50.7	48	4	2	3	44	3
8397	2.4	6440	11	2	89	.1	10	30300	.1	10	427	26300	3260	2	2000	526	2	2740	1	1220	21	1	96	1	2213	32.8	33	2	2	3	59	2
8398	5.0	7140	13	3	125	.1	8	32480	33.0	11	781	28180	4290	2	1610	568	2	1340	1	1350	72	1	108	1	1874	26.0	1203	1	1	3	55	37
8399	2.9	6850	13	2	100	.1	6	27160	.2	9	608	21820	3450	1	2580	555	1	1230	1	1100	22	1	89	1	1085	18.3	107	3	1	2	35	1
8400	1.6	7110	12	2	95	.1	6	25810	.1	9	217	23830	3010	1	3520	553	2	1290	1	1070	13	1	81	1	1069	18.7	22	3	1	2	47	2
8401	1.4	7240	18	2	107	.1	5	41620	.1	10	290	27080	3030	2	3280	635	2	1180	1	1180	20	1	111	1	796	20.2	28	3	1	2	43	15
8402	1.2	9500	17	2	93	.1	5	28930	.1	9	223	26350	2360	2	6720	786	2	1430	1	1090	16	1	90	1	969	28.5	37	4	1	3	61	3
8403	1.1	6660	16	2	101	.1	4	30560	.1	8	129	23620	2060	2	4390	721	2	1380	1	1070	18	1	98	1	693	16.8	84	3	1	2	29	1
8404	1.0	5730	22	1	57	.1	4	27150	.1	7	142	21730	1910	2	4030	630	2	250	1	1080	12	1	106	1	534	13.3	67	3	1	2	44	4
8405	.6	4080	74	2	102	.1	2	33900	.1	7	89	22370	1820	2	3780	628	2	180	1	1110	13	1	189	1	37	8.2	35	3	1	1	27	2
8406	.7	5230	22	1	60	.1	3	28830	.1	7	43	22750	1790	2	3690	556	1	230	1	1050	14	1	147	1	296	9.5	23	2	1	.2	44	1

COMP: EQUITY ENGRG./CON.GOLDWEST RES.
PROJ: OP & PUP P.O. KGGPU
ATTN: P.LOUGHEED

MIN-EN LABS — ICP REPORT

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
(604)980-5814 OR (604)988-4524

FILE NO: 1S-0334-RJ5
DATE: 91/08/13
* ROCK * (ACT:F31)

SAMPLE NUMBER	AG PPM	AL PPM	AS PPM	B PPM	BA PPM	BE PPM	BI PPM	CA PPM	CD PPM	CO PPM	CU PPM	FE PPM	K PPM	LI PPM	MG PPM	MN PPM	MO PPM	NA PPM	NI PPM	P PPM	PB PPM	SB PPM	SR PPM	TH PPM	TI PPM	V PPM	ZN PPM	GA PPM	SN PPM	W PPM	CR PPM	AU-FIRE PPB
8407	.6	5910	36	20	78	.2	2	26670	.1	8	81	25470	2050	9	4160	524	4	220	1	1010	17	1	157	4	91	11.2	41	1	1	1	28	5
8408	.5	3810	55	11	73	.3	2	27450	.1	7	76	22860	2180	3	4060	495	2	210	1	930	16	2	187	2	27	8.3	40	1	1	2	41	3
8409	.3	4140	33	6	61	.1	2	32710	.1	7	52	23100	2190	2	3790	642	2	230	1	1090	12	1	256	2	24	8.3	41	2	1	1	26	1
8410	.4	6330	17	4	65	.2	2	33590	.1	6	51	22660	2110	3	5780	707	2	220	1	990	13	1	291	2	27	10.9	48	2	1	1	30	2
8411	.2	6170	9	3	66	.1	1	33080	.1	7	16	22540	2280	2	4110	700	1	240	1	1100	11	1	269	2	27	10.5	33	2	1	1	27	1

• EN LABORATORIES
(DIVISION OF ASSAYERS CORP.)

SPECIALISTS IN MINERAL ENVIRONMENTS
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

VANCOUVER OFFICE:
705 WEST 15TH STREET
NORTH VANCOUVER, B.C. CANADA V7M 1T2
TELEPHONE (604) 980-5814 OR (604) 988-4524
FAX (604) 980-9621

SMITHERS LAB.:
3176 TATLOW ROAD
SMITHERS, B.C. CANADA V0J 2N0
TELEPHONE (604) 847-3004
FAX (604) 847-3005

Assay Certificate

1S-0334-RA1

Company: EQUITY ENGRG./CON.GOLDWEST RES.
Project: OP & PUP P.O. KGGPU
Attn: P.LOUGHEED

Date: AUG-13-91
Copy 1. CONSOLIDATED GOLDWEST, VANCOUVER, B.C.
2. EQUITY ENGRG., C/O MIN-EN LABS.

We hereby certify the following Assay of 1 ROCK samples submitted AUG-06-91 by D.CAULFIELD.

Sample Number	AU g/tonne	AU oz/ton
8371	1.26	.037

Certified by

MIN-EN LABORATORIES

APPENDIX E

STATEMENT OF EXPENDITURES

OP AND PUP CLAIMS
(July 10 - August 5, 1991)

PROFESSIONAL FEES AND WAGES:		
Henry Awmack, P. Eng.		
1.375 days @ $400/day	$ 550.00	
David Caulfield, F.G.A.C.		
5.625 days @ $400/day	2,250.00	
Ann Doyle, Geologist		
0.375 days @ $350/day	131.25	
Stewart Harris, Project Geologist		
12.975 days @ $400/day	5,190.00	
David Hicks, Prospector		
6.5 days @ $300/day	1,950.00	
Bruno Kasper, Geologist		
0.5 days @ $300/day	150.00	
Donald McInnes, Project Manager		
6.875 days @ $300/day	2,062.50	
		$ 12,283.75
MOBILIZATION AND SUPPORT COSTS:		
Pro rata according to mandays on each of several properties operated out of the Galore Creek/Porcupine River Camps		7,953.70
CHEMICAL ANALYSES:		
Rock Geochemical Analyses		
30 @ $16.00 each	$ 480.00	
Core Geochemical Analyses		
211 @ $16.00 each	3,376.00	
Assays	8.50	
		3,864.50
EQUIPMENT RENTAL:		
Core Splitter		
10 days @ $5/day	$ 50.00	
4x4 Truck		
1 day @ $80/day	80.00	
4x4 Truck Standby		
1.8 days @ $10/day	18.00	
Handheld Radios		
16.75 mandays @ $5/day	83.75	
Porcupine Camp		
47.375 mandays @ $125/day	5,921.88	
		6,153.63

EXPENSES:		
Aircraft Charters	$ 2,740.31	
Automotive Fuel	14.53	
Courier and Telefax	64.84	
Drafting	37.50	
Drilling	28,565.77	
Expediting	72.80	
Freight	320.39	
Fuel	616.92	
Helicopter Charters	12,755.98	
Materials and Supplies	97.29	
Printing and Reproductions	428.32	
Telephone Distance Charges	70.66	
		$ 45,785.31
OVERHEAD CHARGE @ 5%		2,482.49
		$ 78,523.38
REPORT (estimated)		4,000.00
		$ 82,523.38

APPENDIX F

STATEMENTS OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

I, A. STEWART HARRIS, of 13319 67 B Avenue, Surrey, 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 British Columbia with a Bachelor of Science degree in Geology.

3. THAT my primary employment since June, 1987 has been in the field of mineral exploration.

4. THAT this report is based on fieldwork carried out by personnel of Equity Engineering Ltd. in July 1991 under my direction.

5. THAT I have no interest, directly or indirectly, in the property or securities of Consolidated Goldwest Resources Ltd., nor do I expect to acquire such interest.

6. THAT I consent to the use by Consolidated Goldwest Resources Ltd. of this report in a Statement of Material Facts or any such document as may be required by the Vancouver Stock Exchange or the Office of the Superintendent of Brokers.

DATED at Vancouver, British Columbia, this 12TH day of SEPT., 1991.

A. Stewart Harris

A. Stewart Harris, Geologist

STATEMENT OF QUALIFICATIONS

I, DAVID A. CAULFIELD, of 3142 Gambier Street, Coquitlam, 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 British Columbia with a Bachelor of Science degree in Geology.

3. THAT I am a Fellow of the Geological Association of Canada.

4. THAT this report is based on fieldwork carried out by myself and personnel of Equity Engineering Ltd. in July, 1991, government publications and assessment reports filed with the Province of British Columbia. I have examined the property in the field and I have extensive experience in the Galore Creek district.

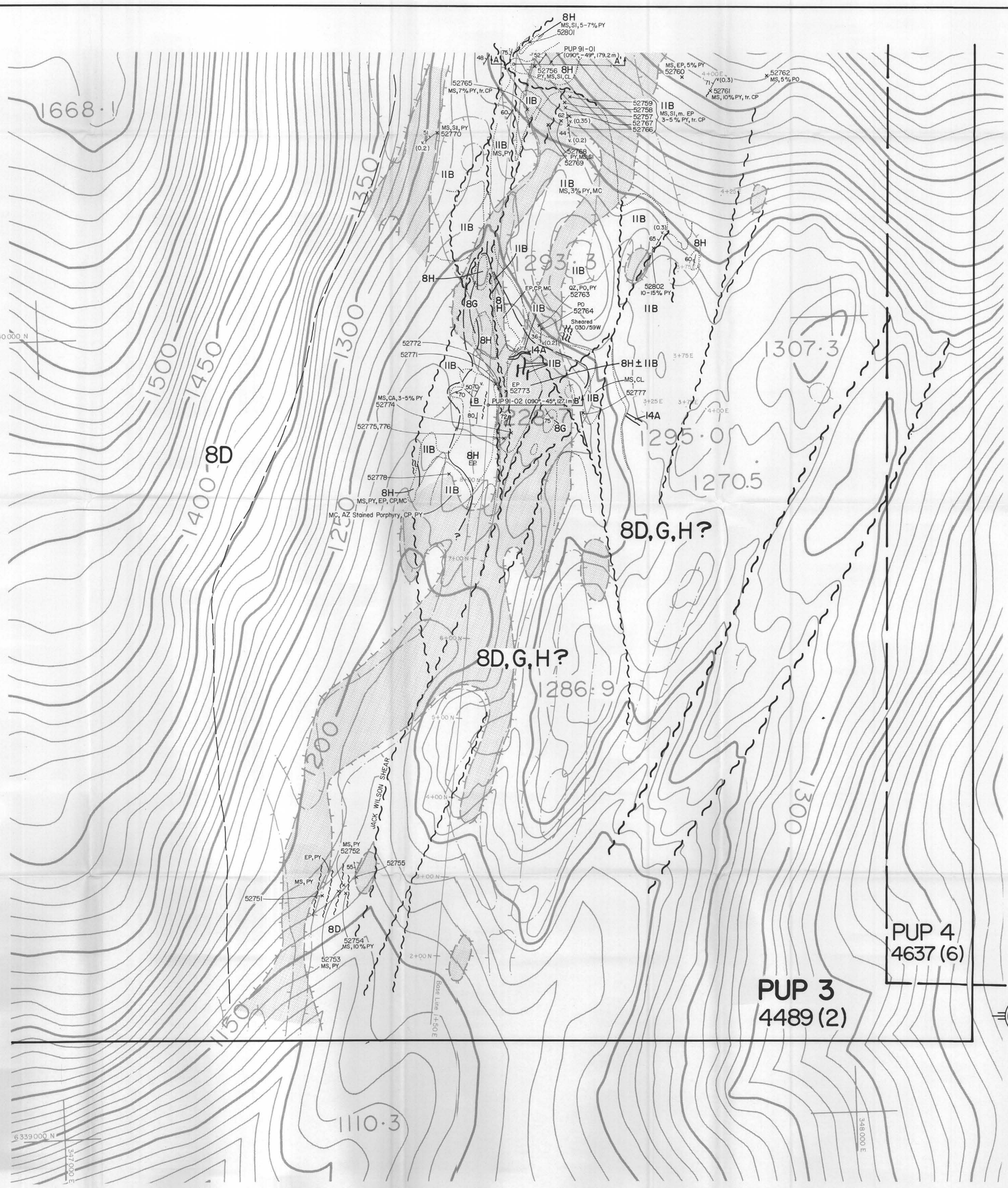
5. THAT I consent to the use by Consolidated Goldwest Resources Ltd. of this report in a Statement of Material Facts or any such document as may be required by the Vancouver Stock Exchange or the Office of the Superintendent of Brokers.

DATED at Vancouver, British Columbia, this 13th day of September, 1991.

GEOLOGICAL ASSOCIATION OF CANADA — FELLOW —

D. A. Caulfield

David A. Caulfield, F.G.A.C.



LITHOLOGIES

TERTIARY

Dykes and sills

14A Andesitic

MIDDLE TRIASSIC TO MIDDLE JURASSIC

Galore Creek Intrusions

11B Plagioclase-porphyritic monzonite: medium-grained, orthoclase-rich groundmass.

UPPER TRIASSIC

Stuhini Group

8 Undivided Stuhini Group volcanics, volcaniclastics and sedimentary rocks.

8D Augite porphyry: includes pyroxene-phyric flows, generally dark green to black, characterized by the presence of pyroxene phenocrysts which are larger than the feldspar phenocrysts, phenocrysts usually oriented subparallel to each other, flow breccias common.

8G Tuffs/tuffaceous sediment: pyroclastic with fragments <2mm, usually felsic in composition, well developed laminations, may be easily confused with unit 8A.

8H Lapilli tuffs, pyroclastic breccia and agglomerate: pyroclastics with fragments >2mm in a matrix of crystal to ash tuff, generally dark green to black, includes lithic lapilli crystal tuffs.

MINERALS AND ALTERATION TYPES

AZ	azurite	CA	calcite	CL	chlorite
CP	chalcopyrite	EP	epidote	GE	goethite
GL	galena	MC	malachite	MG	magnetite
MS	sericite	PO	pyrrhotite	PY	pyrite
QZ	quartz	SI	silica		

SYMBOLS

- Rock outcrop
- Geological boundary (defined, approximate, inferred)
- Fault with dip (approximate, inferred)
- Bedding with dip (horizontal, inclined, vertical, overturned, dip unknown)
- Foliation with dip (inclined, vertical, dip unknown)
- Vein with dip (inclined, vertical, unknown) and true width in metres
- Rock sample (float, grab from outcrop)
- Diamond drill hole
- Au soil geochemical anomaly (≥50 ppb Au)
- Cu soil geochemical anomaly (≥125 ppm Cu)

1991 ROCK SAMPLE ANALYSES

Sample	Au(ppb)	Ag(ppm)	Cu(ppm)	Pb(ppm)	Zn(ppm)	As(ppm)
52751	46	2.1	158	9	53	1
52752	37	1.6	63	9	38	1
52753	20	1.2	35	5	11	1
52754	24	1.2	46	8	48	2
52755	18	0.8	29	8	24	1
52756	39	1.1	118	8	16	4
52757	78	1.7	398	19	47	3
52758	110	1.2	151	22	65	18
52759	44	1.6	469	20	67	22
52760	5	1.2	36	7	21	4
52761	40	0.7	158	8	18	4
52762	18	1.8	105	2	56	1
52763	34	1.3	182	17	27	2
52764	16	0.6	86	9	19	13
52765	28	1.1	144	16	46	11
52766	187	0.4	135	127	51	22
52767	119	0.4	118	15	18	7
52768	6	1.8	50	13	20	3
52769	8	1.1	81	10	18	9
52770	49	0.1	86	8	27	1
52771	24	1.8	1229	19	45	2
52772	123	2.8	1637	12	40	1
52773	67	1.7	234	5	9	1
52774	3	1.8	268	3	47	1
52775	4	0.1	194	18	42	9
52776	11	0.5	296	18	82	45
52777	130	1	65	12	21	8
52778	820	3.7	3556	17	165	3
52801	32	1.6	68	16	29	8
52802	6	0.2	88	12	24	1

GEOLOGICAL BRANCH
ASSESSMENT REPORT

22,151

50 0 100 200
METRES

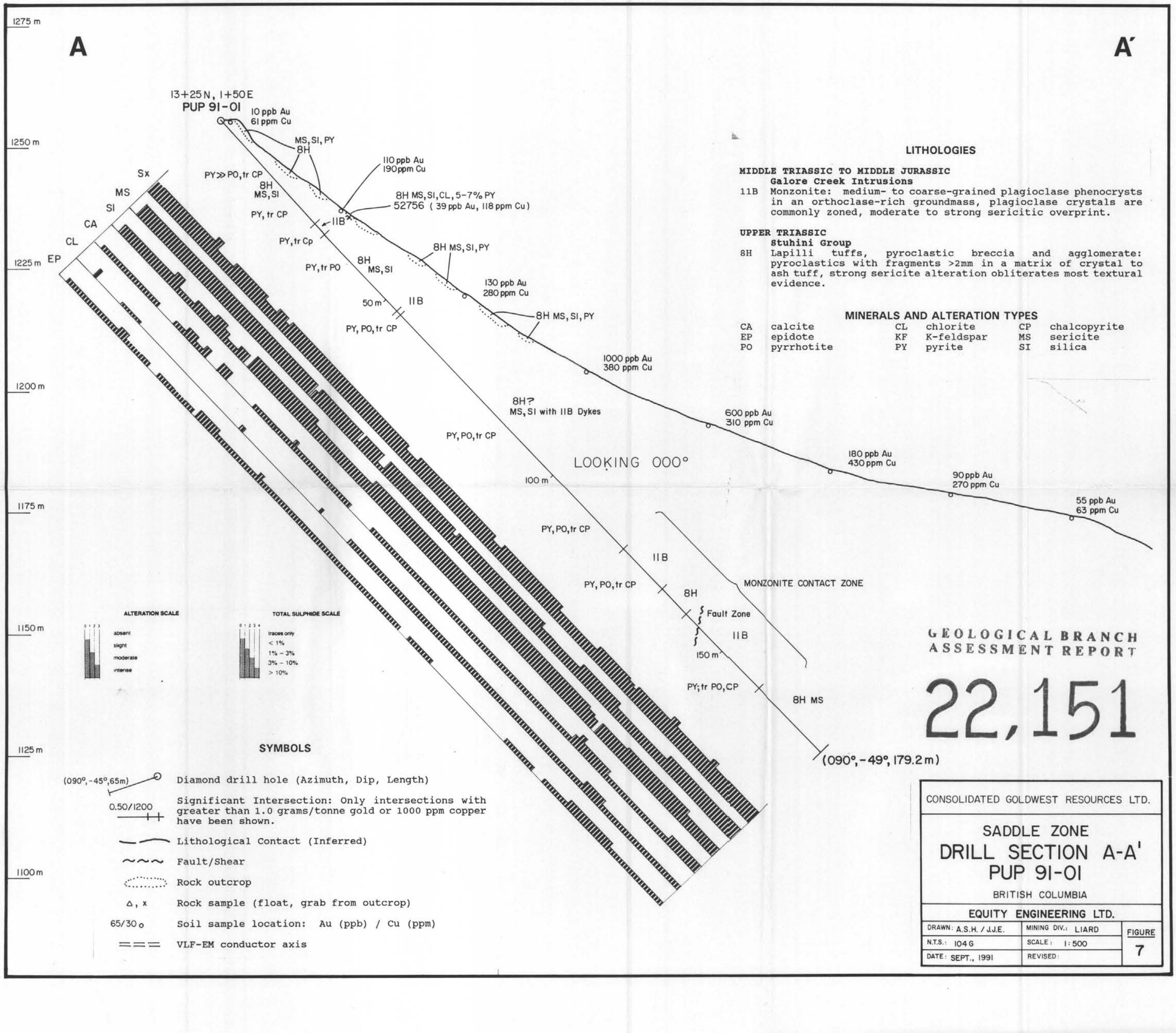
CONSOLIDATED GOLDWEST RESOURCES LTD.

PUP PROJECT - SADDLE ZONE
GEOLOGY & DDH PLAN

BRITISH COLUMBIA

EQUITY ENGINEERING LTD.

DRAWN: D.A.C. / J.J.E.	MINING DIV.: LIARD	FIGURE 6
N.T.S.: 104 G/4	SCALE: 1:2000	
DATE: SEPT., 1991	REVISED:	



LITHOLOGIES

MIDDLE TRIASSIC TO MIDDLE JURASSIC
Galore Creek Intrusions

11B Monzonite: medium- to coarse-grained plagioclase phenocrysts in an orthoclase-rich groundmass, plagioclase crystals are commonly zoned, moderate to strong sericitic overprint.

UPPER TRIASSIC
Stuhini Group

8H Lapilli tuffs, pyroclastic breccia and agglomerate: pyroclastics with fragments >2mm in a matrix of crystal to ash tuff, strong sericite alteration obliterates most textural evidence.

MINERALS AND ALTERATION TYPES

CA	calcite	CL	chlorite	CP	chalcopyrite
EP	epidote	KF	K-feldspar	MS	sericite
PO	pyrrhotite	PY	pyrite	SI	silica

SYMBOLS

(090°, -45°, 65m) — Diamond drill hole (Azimuth, Dip, Length)

0.50/1200 — Significant Intersection: Only intersections with greater than 1.0 grams/tonne gold or 1000 ppm copper have been shown.

Lithological Contact (Inferred)

Fault/Shear

Rock outcrop

Δ, x — Rock sample (float, grab from outcrop)

65/30 o — Soil sample location: Au (ppb) / Cu (ppm)

VLF-EM conductor axis

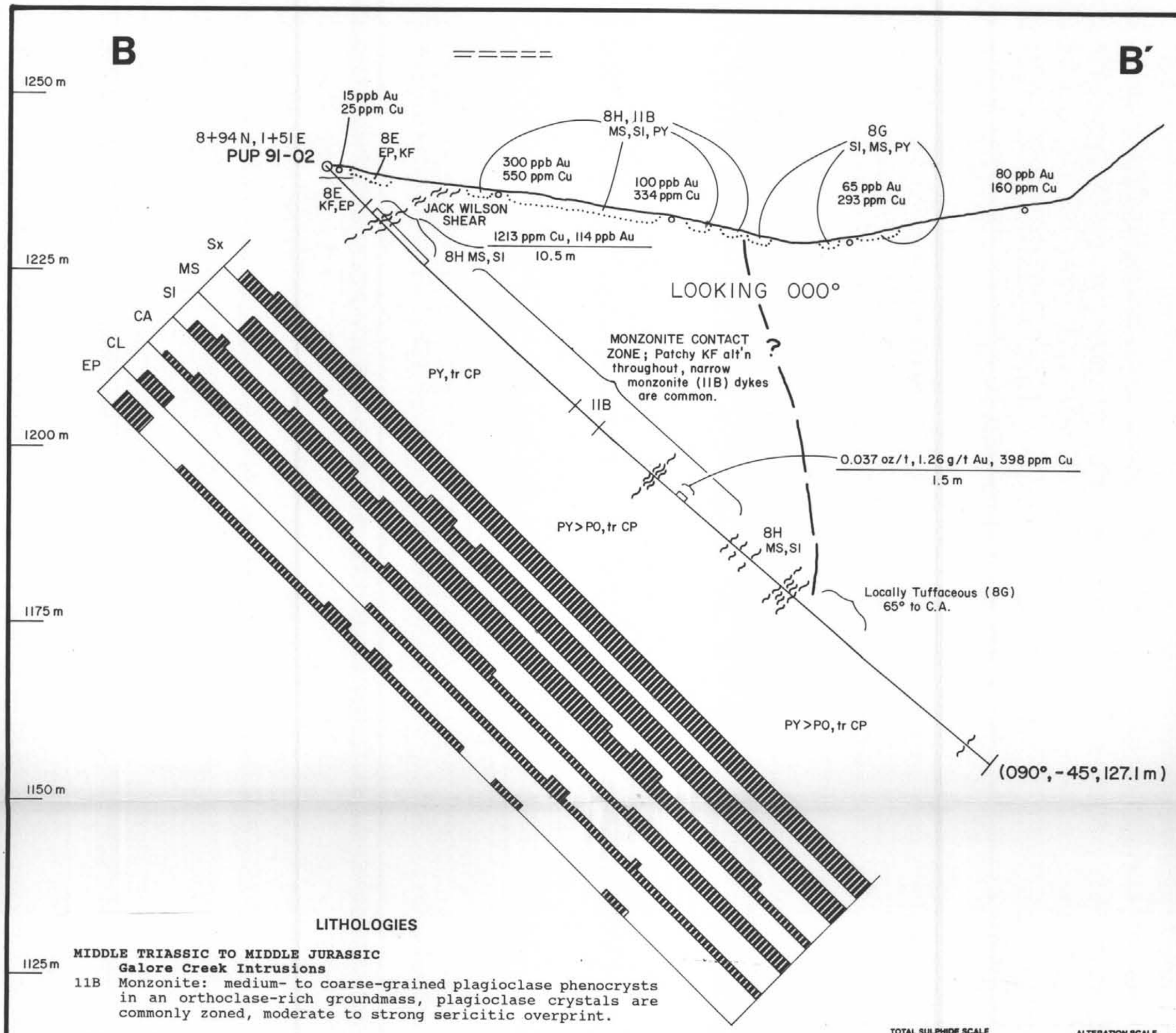
CONSOLIDATED GOLDWEST RESOURCES LTD.

SADDLE ZONE
DRILL SECTION A-A'
PUP 91-01

BRITISH COLUMBIA

EQUITY ENGINEERING LTD.

DRAWN: A.S.H. / J.J.E.	MINING DIV.: LIARD	FIGURE 7
N.T.S.: 104 G	SCALE: 1:500	
DATE: SEPT., 1991	REVISED:	



LITHOLOGIES

MIDDLE TRIASSIC TO MIDDLE JURASSIC

Galore Creek Intrusions

11B Monzonite: medium- to coarse-grained plagioclase phenocrysts in an orthoclase-rich groundmass, plagioclase crystals are commonly zoned, moderate to strong sericitic overprint.

UPPER TRIASSIC

Stuhini Group

8E Andesite flow, crystal tuff: crowded, subparallel feldspar phenocrysts, lacks mafic phenocrysts.

8H Lapilli tuffs, pyroclastic breccia and agglomerate: pyroclastics with fragments >2mm in a matrix of crystal to ash tuff, strong sericite alteration obliterates most textural evidence.

MINERALS AND ALTERATION TYPES

CA	calcite	CL	chlorite	CP	chalcopyrite
EP	epidote	KF	K-feldspar	MS	sericite
PO	pyrrhotite	PY	pyrite	SI	silica

SYMBOLS

(090°,-45°,65m) — Diamond drill hole (Azimuth, Dip, Length)

0.50/1200 — Significant Intersection: Only intersections with greater than 1.0 grams/tonne gold or 1000 ppm copper have been shown.

Lithological Contact (Inferred)

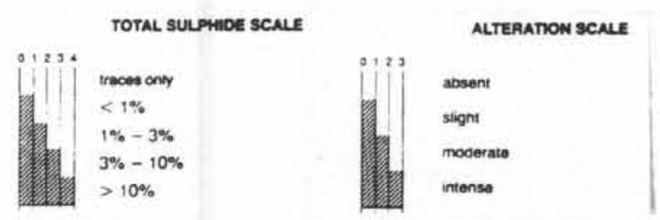
Fault/Shear

Rock outcrop

Δ, x — Rock sample (float, grab from outcrop)

65/30 o — Soil sample location: Au (ppb) / Cu (ppm)

VLF-EM conductor axis



CONSOLIDATED GOLDWEST RESOURCES LTD.

SADDLE ZONE

DRILL SECTION B-B'
PUP 91-02

BRITISH COLUMBIA

EQUITY ENGINEERING LTD.

DRAWN: A.S.H. / J.J.E.	MINING DIV.: LIARD	FIGURE 8
N.T.S.: 104 G / 4E	SCALE: 1:5000	
DATE: SEPT., 1991	REVISED:	