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#### **ASSESSMENT REPORT**

### ON OVERBURDEN DRILLING, GEOLOGICAL MAPPING,

## **PROSPECTING AND STREAM SILT SAMPLING**

## OF THE GJ PROPERTY

## Liard Mining Division, British Columbia NTS 104G/9E and 9W Latitude: 57°39'N Longitude: 130°14'W

for

#### ASCOT RESOURCES LTD. Vancouver, B.C.

by

#### David T. Mehner, B.Sc., FGAC KEEWATIN ENGINEERING INC. #800 - 900 West Hastings Street Vancouver, B.C. V6E 1E5



January 24, 1990

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#### **SUMMARY**

The GJ property is a porphyry Cu-Au prospect located on the Klastline Plateau in the Stikine region of northwestern B.C. Work by previous owners indicated an east-west mineralized zone containing numerous drill intersections with 0.20 to 0.40% Cu and 0.010 to 0.020 oz/ton Au that had the potential to contain approximately 30 to 40 million tons of 0.30% Cu equivalent or better. Resampling of selected sections of old drill core in 1989 confirmed previous copper assays and verified the presence of higher grade gold intersections (up to 10 feet of 0.044 oz/ton Au). Detailed stream silt geochemical sampling, prospecting, rock chip sampling and systematic bedrock sampling through extensive overburden on top of the Plateau have extended the porphyry Cu-Au target 300 metres to the east, 600 metres to the northwest and shown it to be still open in all directions. In addition, silt and rock geochemical sampling have identified a new porphyry target in the northeast corner of the property. Still, another zone measuring 1300 m x 500 m containing anomalous Pb-Zn-Ag-Au values in stream silts and rocks offers excellent potential for containing auriferous veins or shears south of the main porphyry target.

Future work should include compilation of all existing data on the property and construction of detailed cross and longitudinal sections through the main porphyry copper target area. This should be followed by a systematic drilling program which would test the main target along strike and at depth to confirm size potential and would include infill holes to determine grade consistency and distribution. More peripheral targets would be mapped, soil sampled and prospected to identify specific sites for follow-up drilling.

#### **INTRODUCTION**

The GJ and Spike claims are located in the Stikine area of northwestern British Columbia. They were staked in 1975 and 1976 to cover a porphyry Cu-Au prospect centred along Groat Creek on the Klastline Plateau. In mid-1989, the claims were optioned by Ascot Resources Ltd. from International Curator Resources Ltd. By making a cash payment and incurring certain exploration expenditures by 1993, Ascot can earn a 50% undivided interest in the property.

Upon acquiring the property, exploration work was contracted to Keewatin Engineering Inc. of Vancouver, B.C. Work included a systematic overburden-bedrock (Wacker) drilling program over much of the old grid, relogging and sampling of selected sections of old drill core, detailed stream silt geochemical sampling of all drainages, prospecting, rock sampling and geological mapping of most creek beds and limited soil geochemical sampling. Overall, rock chips from 389 Wacker drill holes were logged and 492 rock samples (grabs, chips, old core), 73 stream silts and 21 soils were analyzed for Cu-Pb-Zn-Ag-Au. Two hundred and eight (208) rock samples were also analyzed for Hg and 47 were analyzed for a 30 element suite ICP. Seven pieces of core had specific gravity tests performed on them.

Field work was carried out from a camp established on the Klastline Plateau about 1.7 km south of the property. Camp servicing and daily moves to various parts of the property were provided by a Hughes 500 helicopter which was permanently stationed in camp. Access to the claims from camp was also possible by motorbike along an old drill road established atop the Plateau in the early 1970's.

Field work was carried out by Mike Brown (sampler), Colin Adams (sampler, drill helper), Jim Roberts (wacker driller), Bob Charles (wacker driller), Adam Travis (geologist), Marty Bobyn (geologist) and David Mehner (project geologist).

#### Location and Access

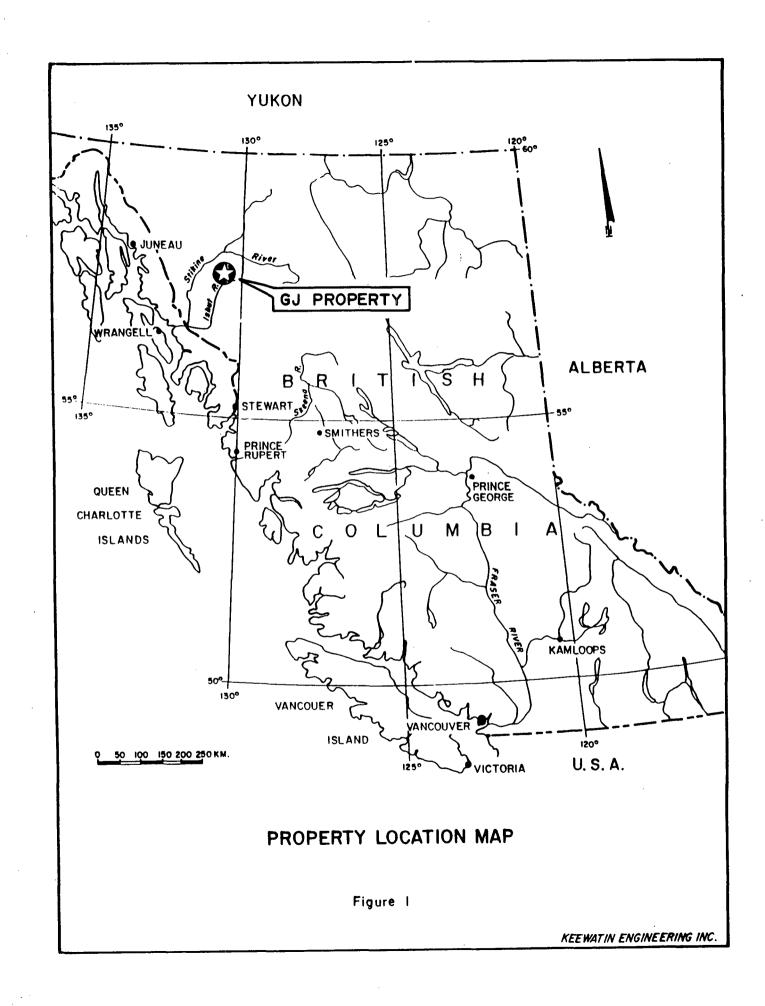
The GJ and Spike claims are located in the Stikine region of northwestern British Columbia, approximately 180 km north of Stewart, B.C. (Figure 1). They are centred along Groat Creek, about 6 km west of Kinaskan Lake and 28 km southwest of Iskut Village at about 57°38'40" North latitude and 130°14' West longitude on NTS map sheets 104G/9E and 9W (Figure 2).

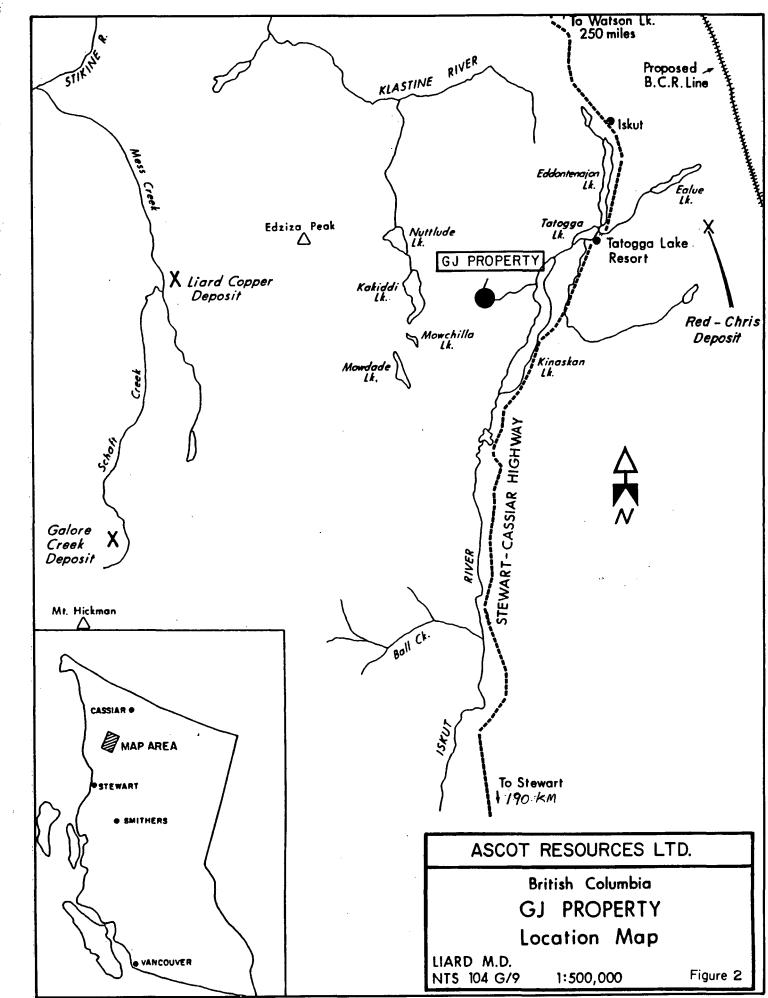
Access is via helicopter from Iskut Village or Tatogga Lake Lodge, which is located 29 km south of Iskut and 30 km northeast of the property. Both locations are on the Stewart-Cassiar Highway. The proposed B.C. Rail extension to Dease Lake is about 32 kilometres east of Kinaskan Lake.

#### **Topography and Vegetation**

The property is situated on the southern end of the Klastline Plateau, an area characterized by gently rolling hills with elevations varying between 5000 ft (1524 metres) and 5500 ft (1676 metres) above sea level. The Groat Creek Valley cuts deeply through the centre of the property, producing steep south facing slopes and more subdued north facing slopes. Elevations on the property vary from 5400 feet (1646 metres) above sea level at the northeast corner of the GJ claim to 3800 ft (1158 metres) above sea level along Groat Creek at the extreme east end of the Spike 2 claim (Plate 1).

Atop the Plateau vegetation consists of alpine grasses and flowers. Drainage is poor and much of the area, particularly the northern half of the GJ claim is boggy. Sub-alpine scrub meanders





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through the property between the 4300 and 4500 foot levels. Lower elevations are covered by spruce and fir with alder common along creek valleys.

Precipitation is moderate averaging 100 cm per year. Thick accumulations of snow are common during winter. It is seldom possible to begin surface geological work before July and difficult to continue past September.

#### **Property and Ownership**

The GJ property is located in the Liard Mining Division of British Columbia (Figure 3) and consists of the following claims:

<u>Claim Name</u>	Record No.	No. of <u>Units</u>	Date Recorded	Due Date
GJ	65	12	October 29, 1975	October 29, 1991
Spike 1	242	18	November 25, 1976	November 25, 1991
Spike 2	243	10	November 25, 1976	November 25, 1991

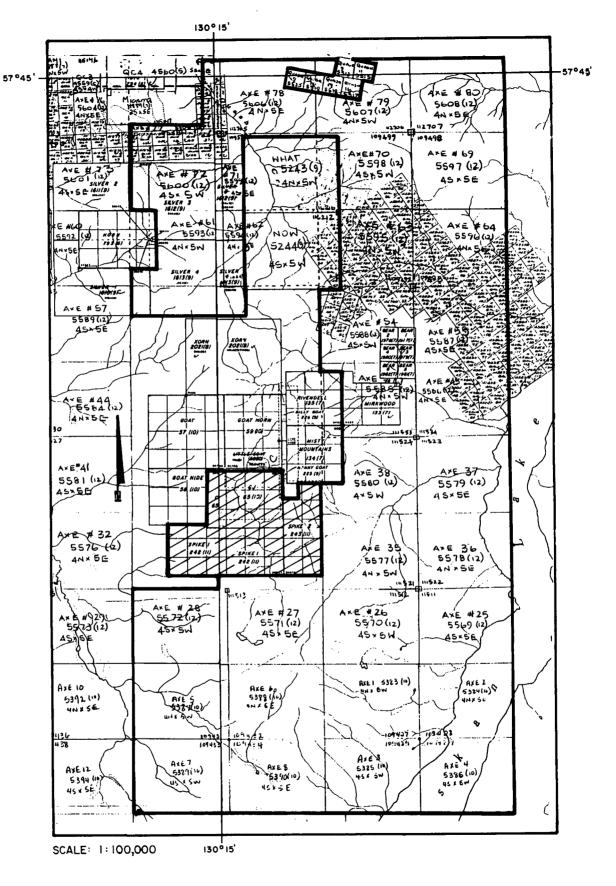
The claims are owned 100% by International Curator Resources Ltd. with offices at Suite 380, 789 West Pender Street, Vancouver, B.C. V6C 1H2.

#### **Previous Work**

The area covered by the GJ and Spike claims was originally examined by prospectors including Mr. Groat after whom the creek containing the discovery showing is named. The first recorded work by a company was 1964, when Conwest Exploration Co. Ltd. carried out a regional evaluation of the Klastline Plateau. That program led to staking of the 196 claim GJ group across the southern portion of the Klastline Plateau. Preliminary mapping/prospecting and stream silt and soil geochemical sampling followed. This identified the GJ prospect as the principal target within the claim group.

In 1965 Conwest carried out limited ground magnetometer and IP surveys over two perpendicular lines centred on the GJ showing in Groat Creek. Subsequent blasting and sampling of three trenches and analysis of 150 rock chip samples yielded values averaging between 0.5% and 0.6% copper. Following this early work all but 4 claims covering the showing were allowed to lapse.

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Amoco Canada Petroleum Co. Ltd. optioned the 4 claims and staked a further 180 claims around the showing in 1970. A grid of eight, 4,000 ft. lines was established and geologically mapped and covered with a ground magnetometer survey. Soil geochemical and IP surveys were conducted over part of the grid. A drill-access road was constructed from the west shore of Kinaskan Lake and five B.Q. diamond drill holes totalling 1,520 metres were drilled (one vertical and one each to the north, south, east and west) in Groat Creek over the showing. In 1971 Amoco carried out further mapping and drilled an additional 14 B.Q. holes totalling 2,465 metres. The option was subsequently dropped and Conwest allowed all the claims to lapse. In the fall of 1975, Mr. R. Dickinson staked the present GJ claim for Dimac Resource Corp. Within a month, Texasgulf Inc. (now Falconbridge Ltd.) staked the surrounding ground to the north, northeast and west.

In 1976, Great Plains Development Co. of Canada Ltd. optioned the ground and established a grid over the property. This was mapped at 1:4,800, soil sampled and covered with a ground magnetometer survey. Amoco's drill core was re-logged and the Sun claim was staked north of the Texasgulf property. The Spike 1 and 2 were staked south and east of the GJ claim.

The following year, Norcen Energy (formerly Great Plains Development) conducted an IP survey over the entire grid, systematic bedrock geochemical sampling over part of the grid and limited trenching. The property option was then dropped by Norcen.

In 1981, Canorex Minerals Ltd. optioned the ground form Dimac Resource Corp. and after drilling seven NQ holes totalling 1,779.4 metres, earned a 50% interest in the property. The Dimac interests were acquired by International Curator Resources Ltd. (formerly Canorex Minerals Ltd.) in the early 1980's from the Royal Bank after Dimac Resource Corp. declared bankruptcy.

No work has been carried out on the property since 1981 although the Klastline Plateau was covered by a regional stream silt sampling program (National Geochemical Reconnaissance, 1988) in 1988.

Ascot Resources Ltd. optioned the GJ and Spike claims in 1989.

#### Wacker Drilling

Due to extensive overburden over much of the property, particularly the Plateau area where previous diamond drilling indicated the presence of porphyry Cu-Au mineralization, a bedrock sampling program using a Wacker Drill was carried out. The procedure involves a gas powered portable drill (the Wacker Drill) that works much like a jackhammer in that it "vibrates" its way down through the overburden until it reaches the bedrock surface. The specially designed drill bit is able

to retrieve approximately 250 grams of material from the overburden-bedrock interface. Samples, which are logged with the aid of a binocular microscope provide geological data such as rock type, alteration style and type, and sulphide and oxide content, style and distribution that would otherwise be unmapped. The samples are then geochemically analyzed.

The Wacker Drill program was carried out over selected portions of an old picket grid. Samples (389) were collected at 60 metre (200 foot) centres from lines 60 metres apart. Hole depths ranging to 10.5 metres were plotted and an Isopach map of overburden thickness was prepared (Plate 2).

Geology and geochemistry results are discussed elsewhere in this report.

#### **GEOLOGY**

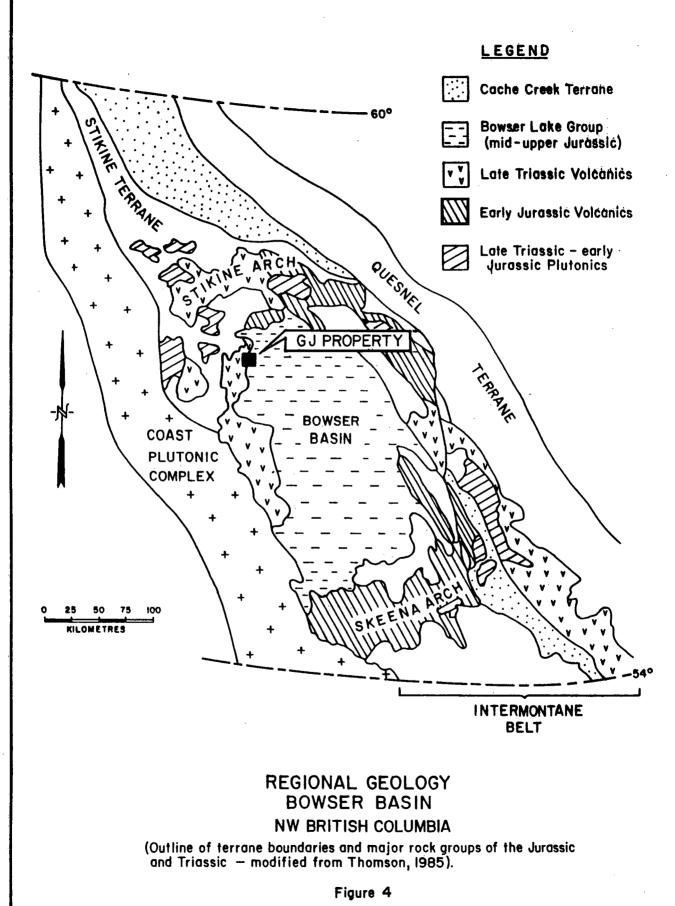
#### **Regional Geology**

The GJ property is located on the southwest portion of the Klastline Plateau within the Intermontane-Tectono-Stratigraphic Belt of the Canadian Cordillera (Figure 4). The claims lie within the northeast half of the Stikine Arch near the contact with the unmetamorphosed sediments of the Bowser Basin.

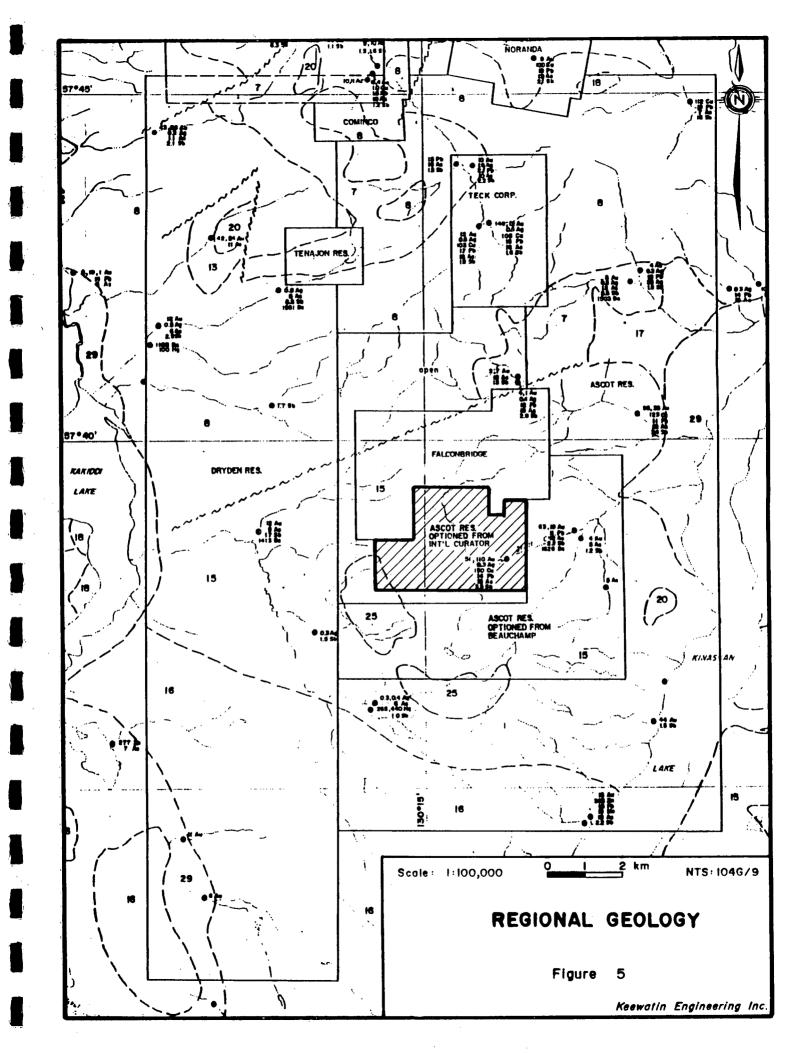
The northern half of the Klastline Plateau has been mapped (Figure 5) as Upper Triassic augite-andesite flows, pyroclastics and derived volcaniclastics ranging from conglomerates down to siltstones (Souther, 1971). Minor limestone and chert occur within the stratigraphy. Related coeval intrusives cut all rock types. A regional fault trending northeasterly passes through the centre of Kakiddi Lake and intersects the Iskut Valley fault zone at the north end of Kinaskan Lake. To the south of the fault, Souther (1971) mapped the rocks as a downthrown sequence of Middle Jurassic basalt pillow lavas, fragmentals and proximal volcaniclastic rocks intruded by coeval plutons. Subsequent K-Ar and Rb-Sr age dating (Schmitt, 1977) has yielded intrusive ages of 185 to 195 million years for the intrusive rocks south of the fault, suggesting the volcanic rocks are similar in age to the Upper Triassic stratigraphy north of the fault.

South of the volcanic units are chert pebble conglomerate, grit, greywacke and siltstone of the Middle and Upper Jurassic Bowser Group.

Intruding Upper Triassic volcanics are massive and flow banded rhyolite, orbicular rhyolite and massive felsite of Upper Cretaceous to Lower Tertiary age. Capping the southern portion of the



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	LEGEND		
			LOWER JURASSIC Conglomerate, polymicilo congiomerate; granite-boulder conglomerate, grit,
• .			13 Conglomerate, polymicile conglomerate; grante-bouter conglomerate, grav, graves, siltstone; basaltic and andesitic volcanic rocks, peperites,
QUATERNARY			Dillow-breccia and derived volcaniclastic rocks
PLEISTOCEN	E AND RECENT		billom-procers and delived Aptendiant Lorge
. 29 Fluviatile	gravel; sand, silt; glacial outwash, till, alpine moraine and colluvium		
	France, news, but Prover services, and where more and services		TRIASSIC AND JURASSIC
·			POST-UPPER TRIASSIC PRE-LOWER JURASSIC
28 Hot-sprin	g deposit, tufa , aragonite		12 Syenite, orthoclase porphyry, monzonite, pyroxenite
	· · · · · · · · · · · ·		12 Sydine, or morrase por payry, monetaine, pyronenice
	asait, related pyroclastic rocks and loose tephra; younger than		HICKMAN BATHOLITH
some of 2	9	n	10 Hornblanda granodiorita minor hornblanda-quartz diorita 11. Hornblanda
		ĕ	uo 11 quartz diorite, hornblende-pyroxene diorite, amphibolite and pyroxene-bearing
TERTIARY AND	2114 TERNARY	MESOZOIC	amphibolite
	TARY AND PLEISTOCENE	ES.	
		X	
	and dacite flows, lava domes, pyroclastic rocks and related sub-		TRIASSIC
Voicanic i	intrusions; minor basalt		UPPER TRIASSIC
Recelle of	deduce because devices and the form and the sector and antiperior		
	livine basalt, dacite, related pyroclastic rocks and subvolcanic		9 Undifferentiated volcanic and sedimentary rocks (units 5 to 8 inclusive)
intrusions	a; minor rhyolite; in part younger than some 26		
			Augite-andesite flows, pyroclastic rocks, derived volcaniclastic rocks and
			related subvolcanic intrusions; minor greywacke, sitistone and polymetic
CRETACEOUS AN			conglomerato
•	ACEOUS AND LOWER TERTIARY		
SLOKO G			Siltstone, thin-bedded siliceous siltstone, ribbon chert, calcareous and
	an, purple and white rhyolite, trachyte and dacite flows, pyroclastic		7 dolomictic siltstone, grcywacke, volcanic conglomerate, and minor limestone
rocks and	derived sediments		
			Limestone, fetid argillaceous limestone, calcareous shale and reefoid
	e leucogranite, subvolcanic stocks, dykes and sills		6 limestone; may be in part younger than some 7 and 8
23. Porph	yritic biotite andesite, lava domes, flows and (?) sills		
			5 Greywacke, silisione, shale; minor conglomerate, tuff and volcanic sandstone
SUSTUT C			
	ble conglomerate, granite-boulder conglomerate, quartzose		
sandstone,	, arkose, siltstone, carbonaceous shale and minor coal		MIDDLE TRIASSIC
Feleita a	uartz-feldspar porphyry, pyritiferous felsite, orbicular rhyolite; in		4 Shale, concretionary black shale; minor calcareous shale and silisione
	alert to 22	,	
pars oder			e de la companya de la
			PERMIAN
19 Medium-ta	o coarse-grained, pink biotite-hornblende quartz monzonite		MIDDLE AND UPPER PERMIAN
			Limestone, thick-bedded mainly bioclastic limestone; minor siltstone, chert
			and tuff
JURASSIC AND/O			
Post-upper	TRIASSIC PRE-TERTIARY	S	
18 Horablead	e diorite	(ğ	PERMIAN AND OLDER
18 Hornblead	# wears the	ឝុ័	Phyllite, argillaceous quartzite, quartz-soricite schist, chlorite schist,
		<b>V</b>	2 greenstone, minor chert, schistose tuff and limestone
17 Granodior	ite, quartz diorite; minor diorite, leucogranite and migmatite	Pi	Manager and Annual A
			MISSISSIPPIAN
JURASSIC		-	Limestone, crinoidal limestone, ferruginous limestone; marcon tuff, chert
	ND UPPER JURASSIC		1 and phyllite
BOWSER		,	· · · · · · · · · · · · · · · · · · ·
	ble conglomerate, grit, greywacke, subgreywacke, siltstone and		Amphibolite, amphibolite gneiss; age unknown probably pre-Upper Jurassic
	y include some 13		8 Amphibolite, amphibolite gieles, age unknown probably pre-opper surgesto
	1 999 August Artist 7 A		Ultramafio rocks; peridotite, dunite, serpentinite; age unknown, probably
MIDDLE JURA	18570		
	low lava, tuff-breccia, derived volcaniclastic rocks and related		pre-Lower Jurassic
15hunloon	VY THIS MESADA		
15 subvolcan			
LOWER AND I	MIDDLE JURASSIC	1	From G.S.C. Paper 71–44 by J.G. Souther.

Plateau are Upper Tertiary basalt and olivine basalt flows, often exhibiting excellent columnar jointing.

#### **Property Geology**

Owing to the extensive overburden cover on the property, geological mapping is largely restricted to traverses along creeks and examination of rock chips from the Wacker drilling, bedrock sampling program. Outcrops, drill holes and geological interpretation are plotted on Plate 1 and Wacker Drill Hole sample descriptions are given in Appendix B.

#### <u>Lithology</u>

The northern half of the GJ property is underlain by massive to well bedded to laminated black and white cherts, light green to grey cherty siltstones, quartzite and one outcrop of orange weathering dolomite. Minor greywacke beds are evident in portions of less altered cherty siltstone. Upper Triassic hornblende diorite, biotite  $\pm$  hornblende diorite, quartz diorite and porphyritic monzodiorite intrude the siliceous sediments in a very irregular pattern suggesting the sediments are a thin roof pendant atop a large intrusive mass. Quartzites and some of the cherty siltstones are likely contact metamorphically altered phases of chert and siltstone and not primary lithologies. Latite and andesite dykes and sills are likely later, finer-grained phases of the diorite and monzodiorite intrusives.

Wrapping around the siliceous sediments to the southeast, south and southwest are well bedded siltstones, greywackes and minor interbedded black and white chert and one outcrop of white limestone. These less siliceous, less altered rocks have also been identified over portions of the plateau north of the property. Conforming to and overlying the siltstones and greywackes to the southeast, south and west are maroon to grey-green andesite and possibly basalt flows. The contact between the sedimentary rocks and volcanic flows is marked locally by polymictic andesite rich conglomerate and coarse wackes units. Two lenses of lapilli-tuff and tuff breccia have been mapped within the clastic unit as well.

This overlying sequence of Triassic volcanic stratigraphy which occurs mostly to the south and west of Groat Creek contains a few plugs of diorite to porphyritic monzodiorite but the amount of intrusive rocks present and the extent of alteration is significantly less than that seen in the northern portion of the property.

Unconformably overlying the Triassic andesite to basalt flows on the far west side of the property are Upper Tertiary and Pleistocene basalt and olivine basalt flows.

## Structure

Structural measurements taken over the property indicate the cherts, cherty siltstones and quartzites are quite contorted with substantially different strikes and opposite dips over short distances. There is a suggestion of early small scale open folding along east-west fold axis. Bedding in the less deformed siltstones and greywackes out from the core area (main porphyry Cu-Au target north of Groat Creek) although variable, generally dip away from the core at 55° to 80°.

The trace of the contact between Triassic flows and underlying siltstones and wackes suggests a broad, open fold plunging at 55° to 75° southwest. However, this fold may be more apparent than real and the trace of stratigraphy could be reflecting uplifting (by the diorite plug), and subsequent erosion of overlying stratigraphy in the core part of the property. This would explain the presence of seemingly irregular, isolated pods of siltstone and volcanic flows in the northern part of the property where intrusive rocks are also irregularly distributed.

## Alteration

Alteration on the property is dominantly fracture and vein controlled chlorite, calcite, epidote and with lesser amounts of K-feldspar, plagioclase and quartz. This hydrothermal style of alteration is most evident in the intrusive rocks. Aside from quartz and occasional feldspar veining, alteration products are hard to identify in the cherts, quartzites and cherty siltstones. Pervasive chloritization of the mafic minerals and clay or sericite altered feldspars is common in the intrusive units.

Rocks more peripheral to the intrusives, such as the overlying andesite and basalt flows and volcaniclastics have been subjected to low grade, regional metamorphism.

Quartzite and some cherty siltstones in the core area are likely altered cherts and siltstone formed by recrystallization due to contact metamorphism. Dolomite in the northern part of the property along Groat Creek likely represents a contact metamorphosed/metasomatized limestone lens in a siltstone sequence.

## **Mineralization**

Mineralization in the main target area consists of vein and fracture controlled pyrite and chalcopyrite in intrusive rocks and siliceous sediments. The chalcopyrite content decreases proportionally with the distance from the intrusive contact. Often, particularly in the zones containing 1-4% chalcopyrite, the mineralization occurs as disseminated grains and stringers within

quartz veins and stockworks. Mapping of various copper showings, shows mineralized veins strike and dip in a number of directions. The main showing along Groat Creek has a number of 1-2 cm wide quartz veins striking north and dipping less than 25<sup>o</sup> east.

Disseminated pyrite up to 8% is very common in much of the siliceous sediment sequence particularly away from intrusive rocks. This peripheral mineralization does include pyrite veins and fracture filling, some of which are auriferous and have yielded values up to 0.078 oz/ton Au.

A considerable portion of the near surface sulphide mineralization has been oxidized to limonite making identification of types and percentages of original sulphides difficult.

Disseminated and vein magnetite is common in diorite to porphyritic monzodiorite. Isolated shears containing significant sphalerite, galena, chalcopyrite and sulphosalts(?) over narrow widths ( $\leq 30$  cm) have been found.

Selected sampling of core from previous drill programs included seven pieces of selected core which were sent to Terramin Labs in Calgary for specific gravity determination. Those results are given in Appendix C.

#### **GEOCHEMISTRY**

During August and September 1989, 689 stream silt samples were taken from the Axe, Tat, Spike and GJ claims (1400 units) which cover at least 360 sq. km. of the Klastline Plateau.

To complement the stream silt survey, rock and soil samples were taken from selected parts of the property. Portions of old drill core were sampled to compare and verify previous assay reports and rock chip samples were collected at the overburden/bedrock interface from Wacker drill holes.

Soil, silt and all but 47 rock chip samples (from Wacker drill holes) were sent to Terramin Research Labs Ltd. in Calgary, Alberta and fire assayed for Au and Ag and geochemically analyzed for Cu, Pb and Zn. A selected number of rock samples were also analyzed for Hg and specific gravity determinations were made on another seven samples.

The remaining 47 rock chip samples were sent to Eco-Tech Labs in Kamloops, B.C. for gold assay and 30 element ICP analysis.

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Analytical procedures used include:

## A) <u>Terramin Research Labs</u>

<u>Sample Preparation</u>: Silt and Soil - dry sieve through 80 mesh nylon screen (maximum particle size 200 microns)

Rock - crushed to approximately 1/8" in a jaw crusher, riffled to obtain a representative sample and pulverized to 150 mesh (100 micron particle size).

#### Analysis:

1) Gold and Silver values are determined by fusing approximately one assay ton of prepared sample with a litharge flux charge to obtain a lead button. The button is cupelled down to a precious metal prill which is then dissolved in aqua regia. The resulting solution is analyzed by atomic absorption spectrophotometry to determine Au and Ag amounts.

2) Copper, lead and zinc are determined by digesting a portion of prepared sample in hot nitric/perchloric acid mixture or hot aqua regia (nitric/hydrochloric acids). Element amounts are determined by atomic absorption spectrophotometry.

3) Mercury is determined by digesting the sample at low temperature in a sulphuric/permangate acid mix. Mercury is determined by the cold vapour/AA method.

#### B) <u>Eco-Tech Labs</u>

<u>Sample Preparation</u>: Rock - dry and crush to 140 mesh; take representative sample of minus 140 fraction.

<u>Analysis</u>: Fire assay with AA finish for gold; hot aqua regia digestion for ICP determination for 30 element suite.

## Stream Silt Sampling

Detailed stream silt sampling of drainages on the Spike and GJ claims yielded 73 samples. These results are listed in Appendix D and plotted on Plates 3 to 7.

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In order to evaluate all the stream silt sampling results, identify anomalous drainages for follow-up work and compare results for specific areas (such as the Spike and GJ claims) against the norm, a statistical analysis of the 689 silt samples collected from the entire area was carried out. Histograms for the various elements are plotted on Plate 9. A summary of the analysis follows:

Copper:	115 ppm $\ge$ 85% of samples 140 ppm $\ge$ 90% of samples 240 ppm $\ge$ 95% of samples Range: 14 ppm - 3,000 ppm Median: 63 ppm
Lead:	20 ppm $\ge$ 85% of samples 30 ppm $\ge$ 90% of samples 45 ppm $\ge$ 95% of samples Range: 1 ppm - 250 ppm Median: 7 ppm
Zinc:	225 ppm $\geq$ 85% of samples 275 ppm $\geq$ 90% of samples 380 ppm $\geq$ 95% of samples Range: 47 ppm - 1,000 ppm Median: 135 ppm
Silver:	0.50 ppm $\geq$ 85% of samples 0.75 ppm $\geq$ 90% of samples 0.95 ppm $\geq$ 95% of samples Range: 0.03 ppm - 5.40 ppm Median: 0.13 ppm
Gold:	20 ppb $\ge$ 85% of samples 60 ppb $\ge$ 90% of samples 120 ppb $\ge$ 95% of samples Range: 2 ppb - 2,820 ppb Median: 13 ppb

Stream silt sampling identified highly anomalous drainages on the GJ property particularly for copper and gold. A summary of the results obtained follows:

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Twenty-five samples are above the 90 percentile of 140 ppm Cu with 19 of these exceeding the 95 percentile (240 ppm) (Plate 3). Fifteen of the anomalous samples come from Groat Creek. They define a highly anomalous area which extends from north of the property down to the most southerly point on Groat Creek (Spike claim), a distance of about 3,000 metres. Within this zone only one sample (JD-03 at 84 ppm) was not anomalous.

> The highly anomalous Groat Creek drainage is underlain primarily by cherty siltstone, chert and quartzite intruded by diorite to monzodiorite. Where it flows east over siltstone and coarse fragmentals containing very minor chert and no sign of intrusive material, no anomalous silt samples were obtained.

> Anomalous tributary drainages include three draining from the west into Groat Creek and the upper portions of three south flowing creeks. The latter three drainages are anomalous near the contact of biotite diorite to monzodiorite with chert, cherty siltstone and quartzite. Two of the three west flowing creeks are anomalous where draining cherts and intrusives. The third is anomalous where underlain by andesite to basalt flows although a small plug of monzodiorite to diorite does exist up creek.

- Lead: Seven samples are above the 90 percentile of 30 ppm Pb and all are from tributary creeks flowing into Groat Creek (Plate 4). Four samples come from separate creeks in the central and northwestern part of the property. Each creek drains chert, cherty siltstone and quartzite intruded by diorite. Three samples come from a single drainage on the eastern side of the property where two highly anomalous values (78 and 80 ppm) come from separate forks of a stream underlain by chert and cherty siltstones. At a lower elevation where the creek flows over siltstones and minor wacke a 30 ppm value (JKL-37) was obtained.
- Zinc: Seven samples are above the 90 percentile of 275 ppm Zn and as for Pb all are from tributary creeks (Plate 5). Four samples from the central and western portion of the property come from the same four drainages which yielded anomalous Pb values. The remaining three highly anomalous values (280, 410 and 860 ppm) come from the same creek on the eastern side of the property which yielded high Pb values. The high Zn values come from underlying chert and cherty siltstone stratigraphy.

Copper:

Silver: Twenty-four samples yielded values above the 90 percentile of 0.75 ppm Ag (Plate 6). Twelve of those come from Groat Creek where all but one sample over about 2,200 metres are anomalous. This entire stretch of creek is underlain by chert, cherty siltstone and quartzite intruded by diorite to monzodiorite.

Anomalous samples (JK-06 = 0.91 ppm; JM-06 = 1.29 ppm) were also obtained from Groat Creek and a west flowing tributary north of the GJ claim. Both samples come from drainages underlain by monzodiorite and diorite.

Sample JK-14 (2.10 ppm Ag) comes from a tributary at the northwest corner of the property where diorite intrudes chert and quartzite.

Anomalous samples JA-03 (5.40 ppm), JM-02 (1.21 ppm) and JM-01 (1.04 ppm) come from two east flow streams in the west central part of the property. Unlike other anomalous drainages, these streams are largely underlain by siltstone and andesite to basalt flows. Small plugs of diorite to monzodiorite occur upstream in both drainages.

Sample JD-10 (1.40 ppm) identifies an anomalous section on a southwest flowing creek which is underlain by cherts and is downhill of known mineralization.

Sample JD-08 (4.60 ppm) comes from a small east flowing drainage underlain by cherts in the centre of the property.

Sample JK-26 (2.20 ppm) is an isolated anomaly on the eastern portion of Groat Creek. Underlying stratigraphy consists of siltstones and greywackes with minor interbedded limestone (an outcrop occurs near sample location).

On the east side of the property, the drainage previously discussed as being anomalous in Pb and Zn is also anomalous in Ag. Three of four anomalous samples are from stratigraphy underlain by cherts and cherty siltstones cut by microdiorite dykes. The fourth anomalous sample is underlain by siltstone and greywacke. At the extreme east side of the property, anomalous sample AM-26 (1.08 ppm) drains chert and cherty siltstone cut by microdiorite dykes. Samples taken downstream of this (off this property) are anomalous.

Gold: Twenty-four samples yielded values greater than the 90 percentile of 60 ppb (Plate 7). Of these, 11 samples come from Groat Creek where one anomalous section (aside from samples JD-03 and JK-20) extends for about 2,200 metres. The two excluded samples do have elevated values (24 and 58 ppb) respectively) and are above the 85 percentile of 20 ppb. The entire 2,200 metres are underlain by chert, cherty siltstone and quartzite intruded by diorite to monzodiorite.

> A further three anomalous silts occur along Groat Creek at the east end of the property where underlying rock types include siltstone, greywacke, conglomerate and minor interbedded limestone.

Anomalous tributaries include:

- a) A west flowing creek immediately north of the GJ property (JM-06, 862 ppb) underlain by monzodiorite and minor diorite.
- b) A small southeast flowing creek at the north property boundary (JK-07, 116 ppb) underlain by monzodiorite.
- c) The next southeast flowing creek near the northwest corner of the property (JK-14, 346 ppb). This drainage is underlain by chert and quartzite intruded by diorite.
- d) Two east flowing drainages in the west central part of the property. Both drainages are underlain by siltstone and andesite flows intruded by diorite upstream. Anomalous samples include JM-01 (100 ppb), JM-02 (486 ppb), JA-03 (2,820 ppb).
- e) Two southwest flowing drainages in the central part of the property yielded anomalous silts in the uppermost portions of their drainages. In both cases (JD-20 at 220 ppb and JD-21 at 180 ppb for the easterly creek and JD-09 at 136 ppb for the westerly one), the samples are underlain by cherts and quartzites but they are within 80 metres of diorite to monzodiorite intrusives.
- f) A very small, east flowing drainage in the centre of the property. The sample (JD-08 at 934 ppb) is underlain by cherts and quartzites.

East of the property anomalous values were obtained from southeast flowing creeks.

Stream silt sampling has yielded highly anomalous values particularly for Cu-Ag and Au. The number and strength of these anomalous samples from Groat Creek and numerous tributaries point to the occurrence of significant, widespread porphyry style mineralization. Areas that warrant follow-up prospecting and soil sampling as a result of the stream silt sampling include:

Area 1: Includes the south and southwesterly facing slopes of Groat Creek from the property boundary in the north to the most southerly point of Groat Creek in the centre of the property. Over most of this 2,600 metre distance, samples taken from Groat Creek are highly anomalous in Cu-Au and Ag. The anomalous values do extend upstream of the main known showing (Amoco drill holes 70-1 to -5) indicating the anomalous samples downstream of the showing cannot be simply attributed to the main showing. It is believed most of the anomalous samples reflect mineralization up the banks of Groat Creek and its tributaries.

Area 2: The east facing slopes along Groat Creek between the property boundary to the north and 300 metres south of the GJ claim to the south. Prospecting and contour soil sampling should be restricted to the areas below the andesite to basalt flow contact. This area contains a significant copper showing and highly anomalous silt geochemical values in tributary creeks including a 3000 ppm Cu, 4.60 ppm Ag and 2820 ppb Au.

Area 3: Covers the drainages at the northeast corner of the property where anomalous values in Pb-Zn and Ag were obtained.

## Soil Sampling

During the course of property exploration, 21 soil samples were collected from the B soil horizon (where present) with the aide of a mattock. The samples were collected in brown kraft sample bags and dried in the field before being sent for analysis. The results are listed in Appendix E and values are plotted on Plate 8.

The soil samples were collected in two separate locations:

A) Location 1 covered a portion of the hillside west of the starburst 1 to 5 holes drilled in 1970. Sampling here was confined to nine samples collected along old cat/drill roads with spacings of approximately 50 metres along the road. Soil varied from good B horizon to more poorly developed C horizon. Colour ranged from red brown to bright orange limonite. An additional two samples were collected near Groat Creek from C horizon material in a slide.

#### A summary of results is as follows:

Copper:	Range: 45 to 190 ppm; four samples yielded $\geq$ 115 ppm Cu
Lead:	Range: 6 to 22 ppm; one sample yielded $\geq$ 20 ppm
Zinc:	Range: 96 to 710 ppm; three samples yielded $\geq$ 225 ppm
Silver:	Range: 0.18 to 2.70 ppm; seven samples yielded $\geq$ 0.50 ppm
Gold:	Range: 12 to 176 ppb; five samples yielded $\geq$ 20 ppb

Underlying geology consists of chert, cherty siltstone, quartzite and siltstone intruded by a quartz stockworked, diorite sill containing 5% pyrite.

The results, although erratic are anomalous and indicate the presence of underlying mineralization, suggesting good potential for porphyry type mineralization. Further sampling away from this area is warranted.

B) Location 2 covered the banks of two creeks located about 450 metres south of Location
 1. The sampling was carried out to follow-up significant Cu-Ag-Au values obtained in earlier stream silt sampling.

Copper: Range: 49 to 107 ppm; copper values are low in this area.

Lead: Range: 4 to 14 ppm; lead values are low

Zinc: Range: 117 to 240 ppm; one sample  $\geq$  225 ppm

Silver: Range: 0.12 to 0.75 ppm; two samples yielded  $\geq$  0.50 ppm

Gold: Range: 4 to 250 ppb; five samples yielded  $\geq$  20 ppb

Underlying geology consists of andesite flows, siltstones and minor chert. Diorite to monzodiorite intrude the stratigraphy. Although Cu-Pb-Zn and Ag values are low, the presence of anomalous Au values and the occurrence of favourable geochemistry and geology to the north indicates additional soil sampling to the north is required. The area covered in

location 2 may host auriferous veins or shears often found peripheral to alkalic porphyry Cu-Au deposits.

## **Rock Sampling**

A) <u>Drill Core</u> - In order to verify assay results from diamond drilling in 1970, 1971 and 1981 (McInnes 1981; Winter, 1976), 41 selected sections of core from nine drill holes were assayed for Au and Ag and analyzed for Cu, Pb and Zn. Twenty-nine of the samples were also analyzed for Hg.

Sample numbers, drill holes and intervals sampled, previous Cu, Au and Ag results and 1989 Cu, Au and Ag results are given in Appendix C. Lead, Zn and Hg values are listed in Appendix F.

Copper results from 1989 compare very well with those obtained in the original sampling. Of the 41 intervals sampled, 15 yielded slightly higher values, 15 returned lower values and 11 yielded values within 0.01% Cu of the original results.

Correlation of gold values was not as good with 11 samples yielding higher values, 21 yielding lower values and nine returning assays within 0.002 oz/ton of the original assay.

Correlation of silver values is very poor with only two samples (JDR-63 and JDR-67) yielding values greater than those from earlier drilling. In most cases the 1989 result is 1/2 to 1/10 of the previous assay. Equally poor comparisons exist between the 1970 and 1971 results which are generally in the trace to 0.10 oz/ton Ag range and the 1981 results which are typically in the 0.08 to 0.50 oz/ton Ag range.

B) <u>Rock Chip Sampling</u> - In conjunction with detailed stream silt sampling and prospecting, 62 rock chip samples were collected from selected outcrops throughout the property. Most samples were grabs across outcrops where sulphide mineralization was visible. The geochemistry results are listed in Appendix F and sample locations are shown on Plates 3 through 8. Sample descriptions are given in Appendix G.

A summary of results follows:

Copper: Range 9 to 45,000 ppm; elevated copper values occur in three general areas (Plate 3). <u>Area 1</u> covers the central portion of the GJ claim including the main showing in Groat Creek, samples from old trenches on the Plateau (JDR-12 and 13), grabs from monzodiorite and chert at approximately line 35E/10S and samples around line 24E/10N.

<u>Area 2</u> covers copper mineralization hosted by chert and cherty siltstones which outcrops on the north side of an east flowing creek 250 metres south of the GJ claim. This showing appears isolated and discontinuous although mineralization may extend down hill to the northeast.

<u>Area 3</u> covers the extreme northeast corner of the property where float and outcrop samples have returned values to 3,000 ppm (just off the property).

Further prospecting and sampling is warranted in all three areas.

Lead: Range 1 to 4,200 ppm; elevated values (to 4,200 ppm) cluster in the northeast corner of the property (discussed above - area 3) and two samples (to 92 ppm) taken near line 0/24S (Plate 4). Two isolated highs (JDR-15 at 22 ppm occurs in dolomite and JDR-01 at 1,150 ppm from a vein/shear) occur in Area 1 described under copper.

Lead values are relatively low on the property.

Zinc: Range 8 to 76,000 ppm; anomalous Zn values cluster in the northeast corner of the property (as described for copper and lead - area 3) and isolated highs occur close to Groat Creek in the central part of the property (Plate 5). Most samples are underlain by fractured, pyritic chert and cherty siltstone. Two samples are from diorite.

Silver: Range 0.03 to 42.0 ppm. Elevated silver values cluster in four areas and occur as isolated highs elsewhere (Plate 6).

<u>Area 1</u> covers the northern boundary of the GJ claim immediately east of Groat Creek at approximately line 24E/10N. Values range to 3.90 ppm.

<u>Area 2</u> includes the main porphyry Cu-Au showing in Groat Creek at approximately line 8E/5S. Elevated values cover a 300 m x 300 m sq. zone with values to 42.0 ppm.

<u>Area 3</u> covers the copper mineralization located 250 metres south of the GJ claim, west of Groat Creek. Values range to 7.70 ppm Ag.

<u>Area 4</u> takes in the extreme northeast corner of the property. Values up to 36.0 ppm Ag have been obtained.

Isolated highs occur along Groat Creek and elsewhere on the property.

Most elevated samples come from chert, cherty siltstone and intrusives.

Gold: Range 4 to 2,660; gold values are relatively high with 10 samples yielding ≥ 500 ppb and four of these exceeding 1,500 ppb (0.044 oz/ton) (Plate 7). Anomalous zones are quite similar to those for Ag and Cu. They include:

<u>Area 1</u> - the northern GJ boundary area at about lines 24E/10N. Gold values of 1,568 and 1,674 ppb were obtained from this zone of chert and cherty siltstones surrounded by intrusive rocks.

<u>Area 2</u> which includes the zone around the main showing in Groat Creek at about line 8E/5S. Samples of mineralized rocks in the showing area yielded up to 1,626 ppb Au (0.047 oz/ton Au).

Area 3 covers the drainage at the extreme northeast corner of the property. Values here ranged up to 570 ppb Au (0.017 oz/ton Au) for a sample taken just off the property.

In addition isolated anomalies occur in the central part of the property. The most significant of these is sample JDR-11 which yielded 2,660 ppb Au (0.078 oz/ton) from pyritized veins in chert along Groat Creek. This sample, taken downstream of a highly altered monzodiorite outcrop is in a section of Groat Creek containing anomalous Au values in stream silts. A small tributary creek draining ground on the west side of Groat Creek about 60 metres further south yielded a stream silt value of 934 ppb Au.

A second highly anomalous sample, JDR-34, situated about 380 metres southeast of JDR-11 yielded 592 ppb Au (0.017 oz/ton) from altered diorite.

C) <u>Wacker Drill Sampling</u> - Drill chips from the 389 Wacker Drill holes were analyzed for Cu-Pb-Zn-Ag and Au with those taken from every second grid line (177) also analyzed for Hg. In addition, 47 chip samples were analyzed for a 30 element suite by ICP. The geochemical results are plotted on Plates 3 to 8 and listed in Appendix F. Sample descriptions are in Appendix B. In order to more fully evaluate and compare the geochemical results and identify targets for follow-up testing, a statistical analysis of the results was carried out. Histograms showing element distribution are given on Plate 10. A summary is as follows:

Copper:	270 ppm; $\geq$ 85% of samples 360 ppm; $\geq$ 90% of samples 720 ppm; $\geq$ 95% of samples Range: 10 to 4,639 ppm Median: 75 ppm
Lead:	9 ppm; $\geq 85\%$ of samples 13 ppm; $\geq 90\%$ of samples 50 ppm; $\geq 95\%$ of samples Range: <2 to 814 ppm Median: 3 ppm
Zinc:	120 ppm; $\geq 85\%$ of samples 135 ppm; $\geq 90\%$ of samples 240 ppm; $\geq 95\%$ of samples Range: 19 to 717 ppm Median: 89 ppm
Silver:	0.45 ppm; $\geq$ 85% of samples 0.50 ppm; $\geq$ 90% of samples 1.00 ppm; $\geq$ 95% of samples Range: <0.2 PPM - 8.40 PPM Median: 0.19 ppm
Gold:	60 ppb; $\geq$ 85% of samples 80 ppb; $\geq$ 90% of samples 120 ppb; $\geq$ 95% of samples Range: 2 - 1,114 ppb Median: 15 ppb
Mercury:	100 ppb; $\geq 85\%$ of samples 120 ppb; $\geq 90\%$ of samples 240 ppb; $\geq 95\%$ of samples

Range: 25 - 455 ppb Median: 61 ppb

Wacker drill bedrock anomalies are as follows:

Copper: A significant anomaly with values to 4,639 ppm exists between lines 18E and 42E from about the baseline south to 10S (Plate 3). This zone which measures 300 m x 800 m is open to the west and south with steep slopes preventing further drill hole sampling in either direction. The main copper showing in Groat Creek is 200 m to the west of line 18E. Underlying geology consists of cherts, quartzites and cherty siltstones cut by diorite, biotite diorite and monzodiorite.

> Approximately 200 metres east on lines 48E and 50E at 8 to 10S a smaller copper anomaly with values to 580 ppm was identified. Rock chip sampling yielded a value of 330 ppm downhill indicating the target is open to the south. Underlying geology consists of cherts and cherty siltstone cut by diorite dykes.

> A third anomaly is situated in the northern part of the property on line 24E at 8N. Additional rock chip sampling here indicates the target is at least 100 m x 100 m and is open to the north and west. Underlying geology is chert and cherty siltstone overlain by andesite flows all intruded by diorite to monzodiorite.

A fourth anomaly was identified at the far northwest corner of the property on line 6W from 12N to 14N. Values of 2,500 and 2,100 ppm Cu were obtained in 2 holes. This target is open to the east and south on GJ ground, and to the north and west on the adjoining Falconbridge claims. Underlying geology is quartzite in close contact with diorite and monzodiorite.

Lead: Lead values are quite low and aside from isolated highs at 18E/BL, 22E/10S and 24E/6S and the very suspicious looking highs along the baseline from 21E to 40E all anomalous Pb values occur away from or peripheral to the copper anomalies (Plate 4). These include:

> A northeast-southwest oriented anomaly on lines 6W and 8W at 4N to 8N. This target, underlain by quartzite is open to the west and east.

- An irregular shaped anomaly between lines 18E and 6E from about 16S to 34S. This zone is open to the north and west and is underlain by siltstone and greywacke overlain by andesite flows.
- Numerous scattered highs between lines 42E and 54E from the baseline to 16N. This area is underlain by chert, quartzite and siltstone intruded by diorite.
- 4) A spot high of 16 ppm on line 4W at 34S is underlain by monzodiorite.

The relatively high values along the baseline are from samples sent to Eco-Tech Labs and analyzed by ICP. The values are not considered valid.

Zinc: Anomalous zinc values are widely scattered over the grid but as with lead most are peripheral to the copper anomalies (Plate 5). The more significant anomalies include:

- The northeast corner of the grid between 4N and 16N from line 44E to 54E. This area underlain by chert, quartzite and siltstone intruded by diorite contains values up to 470 ppm Zn. This anomaly is open to the north and east.
- 2) The anomaly between lines 14E and 20E at 32S to 38S. Values to 300 ppm are underlain by chert and andesite flows.
- 3) Anomalous zones on lines 6W to 8W from 8S to 14N. Values in this area range to 530 ppm Zn. Underlying geology is chert and quartzite intruded by monzodiorite.
- 4) Anomalous zones between lines 36E to 58E from 10S to 14S. Values in this area of up to 400 ppm have been obtained from underlying chert cut by diorite dykes.
- 5) The area around line 24E and 8N. This target which coincides with a copper anomaly also returned anomalous rock chip samples to the north and west.
- Silver: Anomalous silver values are scattered over the sampled area and coincide with and are peripheral to the copper anomalies (Plate 6). They include:
  - Values to 8.4 ppm over anomalous zones between lines 18E and 42E from the baseline to 14S. This coincides with the largest copper anomaly.

- 2) Values to 3.00 ppm over the area covered by lines 24 and 26E at 8N to 10N. This target which is also anomalous in copper and zinc is open to the north and west and yielded values to 3.90 ppm in chip samples further north.
- 3) Anomalous samples on 6W at 12N to 14N coincide with a copper anomaly and samples on 6W and 8W at 2N to 8N coincide with a Pb and Zn anomaly.
- 4) The northeast corner of the grid area where anomalous Zn and Pb values also occur.
- 5) Anomalous values to 1.08 ppm Ag on lines 2W to 4W at 34S to 36S. This coincides with a Pb anomaly.

Gold: Anomalous gold values coincide very closely with those of copper (Plate 7). One large, widely dispersed anomaly covers a zone from line 18E to 42E and from 10N to 10S. This target covers two separate copper anomalies and the zone between them.

Anomalous gold values to 164 ppb also occur on line 6W at 12N to 14N (anomalous copper and silver) and on 8W at 4N to 6N where a value of 1,024 ppb Au coincides with a Pb-Zn-Ag anomaly.

A value of 542 ppb from line 4W at 34S coincides with anomalous Pb and Ag values. Anomalous Au values in silts and soils have been obtained downhill from this target which is underlain by monzodiorite.

Mercury: Elevated Hg values are mainly peripheral to the large coincident Cu-Au anomaly (Plate 8). The exception is anomalous values on lines 24E and 28E at 4N to 10N. This target is also anomalous in Cu-Zn-Ag and Au.

A large anomaly with Hg values to 455 ppb occurs on lines 6W and 8W from 20S to 40S. This target is underlain by andesite flows intruded by diorite.

Anomalous values also occur on line 8W from 8S to 4N.

#### **CONCLUSIONS**

Prospecting, detailed stream silt sampling, rock chip sampling and systematic Wacker drill testing of portions of the overburden covered Klastline Plateau have yielded highly encouraging results that have enhanced the size potential of the porphyry Cu-Au target and identified areas having potential for containing Au rich vein or shear zones. The exploration program completed in 1989 was not designed to provide results which would aid in a calculation of grade or tonnage for the GJ prospect. However, it did confirm the excellent potential the property has for a 100 million ton plus, porphyry Cu-Au deposit with zones of higher grade copper and gold values grading at least 1.34% Cu equivalent as shown by check assays for 20 feet of core from hole 81-5.

The porphyry Cu-Au target as defined by anomalous Cu-Ag-Au and a few Zn values in rock and silt samples covers the area between line 6E and 42E (1,100 metres) and 12N and 10S (670 metres). The zone is open to the north, west and south. Anomalous Cu-Ag-Au values 350 metres west on line 6W at 12N to 14N are likely a continuation of the target to the northwest.

Strongly anomalous Cu-Ag and Au with a few Pb and Zn values in stream silts, anomalous Au in soils and scattered but anomalous Pb-Zn-Ag and Au values in rocks make the area between 38E and 4W from 20S to 36S a prime target to explore for peripheral, gold rich veins or shears. A similar target exists on line 8W from 4N to 8N where anomalous Pb-Zn-Ag and Au values were obtained.

Anomalous Cu-Pb-Zn-Ag and Au values in rock and Cu-Ag-Au values in silts from the extreme northeast corner of the property suggests another porphyry Cu-Au target may exist in this area.

Further work including prospecting, soil sampling (where appropriate) and trenching is warranted over each of the target areas outlined by the 1989 work to define sites for follow-up drill testing. Compilation of existing data, relogging of old drill core and diamond drill testing is recommended for the main porphyry copper target.

**Respectfully submitted** 

**KEEWATIN ENGINEERING INC.** COCIATION P. Mehnen EMISc., David AC. Project Geologist Ó, FELLO

#### REFERENCES

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# APPENDIX A

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# Statement of Expenditures

## STATEMENT OF EXPENDITURES

for Work on the GJ and Spike 1 & 2 Claims (40 units)

## <u>Salaries</u>

(field work performed between August 17 and October 3, 1989; details on dates worked at end of Appendix)

	·			
Ron Nichols, Project Supervisor	12.5	davs	@\$425/day	\$ 5,312.50
David Mehner, Project Geologist			@\$350/day	18,900.00
Adam Travis, Geologist			@\$275/day	1,787.50
Marty Bobyn, Geologist			@\$275/day	1,237.50
Colin Adams, Sampler			@\$225/day	7,762.50
Mike Brown, Sampler			@\$225/day	2,362.50
Anne Serra, Cook/1st Aid			@\$250/day	6,250.00
Grant Sinitsin, Accountant			@\$225/day	1,012.50
Grant Sintsin, Mecoantant	ч.5	uays	@ <i>4225/day</i>	\$ 44,625.00
				ψ 44,025.00
Accommodation and Food				
Accommodation and Food				
Keewatin Personnel	112	dava	@ \$ 75/day	\$ 8,475.00
			@ \$ 75/day	
Taiga Personne	84 man	days	@ \$ 75/day	<u>6,300.00</u> \$ 14,775.00
				\$ 14,775.00
Transportation				
<u>Transportation</u>				
				<b>*</b> 0 001 57
Fixed Wing (Central Mountain Airli				\$ 2,921.56
(flights from Smithers to Iskut Vill	age)			
Mobilization/Demobilization				1,811.20
(flights from point of hire in B.C.	to Smithers	& Re	turn)	\$ 4,732.76*
<b>Haltannean</b>				
<u>Helicopter</u>				
Unches 600				
Hughes 500	10.0	<b>h</b>	@ \$ ( 00 /h	¢ 7 790 00
(Northern Mountain Helicopter)	12.3	nrs	@\$600/hour	\$ 7,380.00
Fuel (helicopter and heating fuel)				<u>5,778.63</u>
				\$ 13,158.63*
<u>Wacker Drilling</u>				
Sub-contracted to Taiga Consulting			ta	\$ 40,340 <i>9</i> 6*
(total invoices including labour, ex	pense accou	ints,		
material, and equipment rentals)	-			
Vehicle Rental				
Truck Rental for August-September	· (as per inv	oice)		
Motorbike Rental for August-Septer			ice)	\$ 3,027.09*
			)	+ 0,02102
Expense Rental				
Travel expenses				\$ 2,140.54*
outomoon				Ψ 2,140.54
Freight				\$ 3,347.89*
				Ψ 3,37702

# **Miscellaneous**

Maps, reproduction and photocopies Expediting (Jaycox Industries, Smithers, B.C.) Communications (radio, courier, telephone) Field Supplies/Wiring Supplies	\$ 1,389.68 1,433.25 733.73 <u>2,864.07</u> \$ 6,420.73*
Drafting 95.5 man hours @ \$30/hour	\$ 2,865.00
Geochemistry	
73 stream silts samples @ \$ 12.40 ea. (\$1.00 sample prep., Cu-Pb-Zn geochemistry @ \$3.60 ea., Au and Ag fire assay @ \$7.80 ea.)	\$ 905.20
445 rock samples @ \$14.90 each (\$3.50 sample prep., analysis costs as for silts) 208 Hg analysis on rock samples @ \$4.50 each	6,630.50
47 rock samples @ \$14.50 each (\$3.00 sample prep., \$11.50 for Au geochem + 30 element ICP)	681.50
21 soil samples @ \$12.40 each (costs as for silts)	260.40
7 Specific Gravity Determinations @ \$9.00 each	<u>63.00</u> \$ 8,540 <i>6</i> 0*
<u>Camp Construction</u>	
Total Cost - \$71,114.43 (see details at end of Appendix for camp construction costs)	
Pro-Rated (costs split between three projects) 50% GJ = \$71,114.43 x 0.50 25% Ascot Axe 25% Dryden Axe	\$ 30,557.22
Report Writing Costs	
Word Processing 16.0 hours @ \$ 30/hour Photocopying (eight copies including maps)	\$ 480.00  \$  
Sub-Total:	\$180,261.42
10%-Handling Fee on 3rd Party Invoices by Keewatin Engineering Inc. (3rd Party charges denoted by *)	<u>\$ 8,170.92</u>
TOTAL EXPEN	DITURES: <u>\$188.432.34</u>

# ASCOT RESOURCES LTD.

# DATES WORKED AND SALARY COSTS FOR GJ AND SPIKE CLAIMS, 1989

	August	September	October	November	December	<u>January</u>	February	<u>Total</u>
David Mehner, Project Geologist (\$350.00/day)	14,18,21,22, 26,30,31	1-7,9-23,25	2,4,6,12,13 23-27	1,4,6-9,11, 14,23		17-19,22-31	1,9,20,21	54.0
Adam Travis Geologist (\$275.00/day)	22,26,27	3,4,10,21, 23,26						6.5
Marty Bobyn Geologist (\$275.00/day)		3,4,10,21,23						4.5
Colin Adams Sampler (\$225.00/day)	17,18,19,	1-12,16-27	2					34.0
Ann Serra Cook, 1st Aid (\$250.00/day)	19-24,31	5-7,10-23	2					25.0
Mike Brown Sampler (\$225.00/day)		1-5,17-21,23	2					10.0
Ron Nichols Project Supervisor (\$425.00/day)	8,12	10-12,28-30	9	15,29	15	5		12.0
Grant Sinitsin Accountant (\$225.00/day)		28,29	31			31	1	<u>4.5</u>

## **KLASTLINE PLATEAU**

# **CAMP CONSTRUCTION COSTS - 1989**

# <u>Salaries</u>

Includes camp construction, site clearing and preparation, laying waterline; mobilization and demobilization to area; down time for increment weather.

Mike Waskett-Myers	10.0 days @ \$350/day	\$ 3,500.00	
Frank Ferguson	7.5 days @ \$300/day	2,250.00	
Grant Nagy	11.5 days @ \$250/day	2,875.00	
Martin Whist	5.0 days @ \$225/day	1,125.00	
Tim Termuende	9.5 days @ \$325/day	3,087.50	
Bob Charles	3.0 days @ \$275/day	825.00	
Jim Roberts	3.0 days @ \$250/day	750.00	
Colin Adams	3.0 days @ \$225/day	675.00	
	• - •		\$15,087.50

## **HELICOPTER**

Includes moving all aviation, diesel, propane, and kerosene fuel up to camp along with wood, stoves, applicances, etc.

Hughes 500 (Aug. 14 = 3.6 hrs; 15 = 2.8 hrs; 16 = 4 18 = 4.5 hrs; 19 = 4.7 hrs; 20 = 0.6 hrs; 22 = 1.8 hrs; 23 = 2.8 hrs)		• •	\$18,540.00					
Fuel	30.9 hrs @	\$ 82/hour	_2,533.80	\$21,073.80*				
FOOD AND ACCOMMODATION (1 man, 3 days lived at home in Iskut V	FOOD AND ACCOMMODATION 49.5 days @ \$75.00/man-day (1 man, 3 days lived at home in Iskut Village)							
TRUCK COSTS								
3 pick-up trucks were used to move eq Tatogga Lake; kept 1 truck in town for			\$3,948.74					
Fuel	,			\$ 4,475.97*				
CAMP SUPPLIES AND EQUIPMENT								
Includes wood, heaters, electrical supply supplies, etc.	lies, plumbing			\$19,636.38*				
GENERATOR RENTAL								
Includes rental and shipping costs of go four Jutland tents	enerator and			<u>\$ 2,372.34*</u>				
			Sub-Total:	\$66,358.49				
*10% handling fee on 3rd party invoice	es of \$47,558.4	9		4,755.85				
			TOTAL:	<u>\$71.114.34</u>				

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Cost distribution based on amount of work done on each project:

GJ property, Ascot Resources Ltd.	=	50%
Axe claims, Ascot Resources Ltd.	=	25%
Axe claims, Dryden Resource Corp.	=	25%

# APPENDIX B

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Wacker Drill Hole Sample Descriptions

Keewatin Engineering Inc.

### APPENDIX B

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## WACKER DRILL HOLE SAMPLE DESCRIPTIONS

Location	Rock Type	Colour	Sulphides/Oxides	Gangue	Hole Depth <u>(m)</u>	Description	Cu/Au ppm/ppb
1800E + 200N	quartzite biotite diorite	brown	trace fractured pyrite	chlorite + hematite - fractured biotite - fractured	2.5		330/70
1800E + BL	quartzite	red-brown			1.7		1821/>1000
1800E + 200S	quartzite	red-brown fractured	trace disseminated pyrite		1.7		115/18
1900E + BL	quartzite	red-brown			2.5		219/5
2000E + 400N	pegmatite				1.5	quartz-feldspar win; 2-3% hornblende	139/66
200E + 200N	granodiorite				4.0	15-20% quartz; 3% biotite	no assay
2000E + BL	quartzite	red-brown			0.8		231/155
2000E + 200S	quartz diorite		trace disseminated magnetite		3.7		320/42
2000E + 400S	quartzite	white; red- brown frac- tured	trace disseminated pyrite and chalcopyrite		2.5		570/84
2000E + 600S	quartzite	white; red- brown frac- tured	trace disseminated pyrite and chalcopyrite		3.4		420/56
2000E + 800S	siliceous siltstone	light green	trace disseminated pyrite; trace fractured chalcopyrite	< 1% fractured chlorite	1.6		350/50

	Location	Rock Type	Colour	<u>Sulphides/Oxides</u>	Gangue	Hole Depth <u>(m)</u>	Description	Cu/Au ppm/ppb
ı	2000E + 1000S	siliceous siltstone; fine wacke		trace disseminated	trace fractured chlorite	1.4		310/56
	2100E + BL	siliceous siltstone	light green	trace pyrite		2.0	oxidized	180/70
	2200E + 600N	biotite-horn- blende-quartz diorite	leucocratic			3.5		103/84
	2200E + 400N	quartzite; diorite	red-brown fractured	trace disseminated pyrite < 5% magnetite	chlorite	4.5		260/40
	2200E + 200N	quartzite	red-brown fractured	trace pyrite	biotite-chlorite fractured	5.3		220/22
	2200E + BL	quartzite diorite	light red- brown			1.5		230/85
	2200E + 200S	biotitic diorite	red-brown			4.4	decomposed	550/50
	2200E + 400S	monzodiorite	pink	trace chalcopyrite; <u>&lt;</u> 8% magnetite	chlorite after hornblende	2.5	hornblende phenocrysts; partiy decomposed	750/70
	2200E + 600S	cherty siltstone	red-brown	< 1% pyrite; trace chalcopyrite		2.3		350/32
	2200E + 800S	cherty siltstone	light brown	2% pyrite; trace frac- tured chalcopyrite; trace magnetite	quartz win	2.2	chalcopyrite with quartz wein/fractured	420/70
	2200E + 1000S	cherty siltstone	light green; red-brown	1% disseminated pyrite; trace to 1/2% chalco- pyrite	fractured biotite; fractured limonite	2.3	red-brown sand	930/72
	2300 + BL	siltstone	grey			1.7		133/30

Location	Rock Type	<u>Colour</u>	<u>Sulphides/Oxides</u>	Gangue	Hole Depth <u>(m)</u>	Description	Cu/Au ppm/ppb
2400E + 800N	biotitic diorite	leucocratic	hematite		3.0	decomposed	860/192
2400E + 600N	cherty siltstone	grey		chlorite + biotite fractured; quartz vein	4.6		51/8
2400E + 400N	quartzite = diorite	brown-fracture		chlorite after mafics	5.8	mixed chips	147/26
2400E + 200N	biotitic diorite			weak hematite	5.3	brown mud	290/94
2400E + BL	quartzite	green-grey			3.3	red-brown fractured	316/95
2400E + 200S	quartzite				3.5	white and red-brown clay; fault gauge??	240/16
2400E + 400S	intermediate volcanic?	brown clay	trace chalcopyrite	quartz wein; chlorite + biotite altered fragments	2.5	very broken chips; hard to determine rock type	2200/414
2400E + 600S	intermediate volcanic?		trace pyrite; rare chalcopyrite	intense, pervasive chlorite <u>+</u> biotite	2.4		380/1114
2400E + 800S	intermediate volcanic?		hematite -magnetite fractured	pervasive epidote-chlorite	1.5		230/40
2400E + 1000S	andesite		trace pyrite-chalco- pyrite-magnetite- hematite on fractures	pervasive chlorite-epidote; some "albite"	2.0	metasomatized?	770/110
2500E + BL	quartzite	light red- brown			2.8		190/15
2600E + 1000N	quartzite	brown			2.5	limonite clay on fractures	156/88
2600E + 800N	porphyry diorite		trace disseminated pyrite		3.0	10-15% plagioclase phenocrysts; clay altered phenocrysts	196/28

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Location	Rock Type	<u>Colour</u>	<u>Sulphides/Oxides</u>	Gangue	Hole Depth (m)	Description	Cu/Au ppm/ppb
2600E + 600N	overburden				4.4	clay hardpan; assorted assorted fragments and rock types	71/8
2600E + 400N	biotitic diorite			15% biotite books; sericite?	6.8	some quartzite fragments	169/58
2600E + 200N	biotitic diorite			as above	3.8	as above; more quartzite	199/76
2600E + BL	diorite	light brown			3.8		126/80
2600E + 200S	biotitic diorite			sericite; 10-15% biotite books	2.7		340/52
2600E + 400S	biotitic diorite			sericite grndmass; chlorite after biotite	2.8	more chloritization	370/76
2600E + 600S	siltstone	pale green	trace fractured pyrite- chalcopyrite	feldspar + quartz veinlets	1.5		720/102
2600E + 800S	siltstone		trace pyrite - fractured	trace chlorite on fractures	2.5		290/38
2600E + 1000S	quartzite	translucent	trace pyrite - chalco- pyrite on fractures		1.0	brown clay	1380/176
2700E + BL	quartzite	red-brown	trace disseminated pyrite		2.5		274/50
2800E + 1400N	diorite to quartz diorite		<1% magnetite; <1% frac- tured chalcopyrite > pyrite	chlorite after matics	1.6	weak iron stain	193/6
2800E + 1200N	andesite or microdiorite			chlorite after mafics; quartz win	2.4	till?? some quartzite	78/16
2800E + 1000N	microdiorite			chlorite after mafics	2.8	till? some quartzite	71/12
2800E + 800N	porphyry diorite			chlorite after mafics; sericite after feldspar phenocrysts	3.4		68/10

Rock Type	<u>Colour</u>	Sulphides/Oxides	Gangue	Depth (m)	Description	Cu/Au ppm/ppb
siltstone and quartzite	grey to green			3.5	weak iron stain	120/14
siltstone and quartzite	grey to green			4.0	weak iron stain	92/14
porphyry bio- titic diorite		trace hematite	10% biotite books/ sericitized grndmass	3.7		250/38
diorite	light brown			3.5	altered	271/255
biotitic diorite			< 2% quartz; 5% biotite books feldspar to clay + sericite	1.0	weak iron alt.	850/94
diorite		< 2% magnetite; trace fractured chalcopyrite	chlorite altered; weak epidote + K-feldspar alt.	0.6		1750/986
siltstone		trace fractured chalco- pyrite	fractured chlorite	1.0		2900/190
siltstone	pale green	trace pyrite	trace fractured chlorite	1.8		250/16
diorite	brown			3.9	altered; micaceous	750/420
siltstone	grey			0.7		63/5
siltstone	grey			2.5		67/10
siltstone	grey			5.0	clay rich	58/10
siltstone	dark grey			4.2	oxidized	47/15
siltstone	red-brown			3.3		54/5
siltstone	dark grey			3.4		138/25
siltstone	dark grey			4.8		64/15
	siltstone and quartzite siltstone and quartzite porphyry bio- titic diorite diorite biotitic diorite diorite siltstone siltstone siltstone siltstone siltstone siltstone siltstone siltstone siltstone siltstone	siltstone and quartzitegrey to greensiltstone and quartzitegrey to greenporphyry bio- titic dioritelight browndioritelight brownbiotitic diorite	siltstone and quartzitegrey to greensiltstone and quartzitegrey to greenporphyry bio- titic dioritetrace hematitedioritelight brownbiotitic dioritedioritedioritebiotitic dioritedioritebiotitic dioritedioritebiotitic dioritedioritebiotitic dioritedioritesiltstonepale greensiltstonegreysiltstonegreysiltstonegreysiltstonegreysiltstonedark greysiltstonedark greysiltstonedark grey	siltstone and quartzite green grey to green grey to green grey to green litte diorite green light brown biotitic diorite light brown biotite light brown 	Rock TypeColourSulphides/OxidesGangue(m)siltstone and quartzitegrey to green3.5siltstone and quartzitegrey to green4.0porphyry bio- titic dioritetrace hematite10% biotite books/ sericitized grndmass3.7dioritelight brown	Rock Type         Colour         Sulphides/Orides         Gangue         (m)         Description           siltstone and quartzite         grey to green         grey to green         3.5         weak iron stain           siltstone and quartzite         grey to green         grey to green         4.0         weak iron stain           siltstone and quartzite         grey to green         itrace hematite         10% biotite books/ sericitized gridmass         3.7         -           porphyry bio- titic diorite         light brown         10% biotite books/ sericitized gridmass         3.0         altered           diorite         light brown         c%% magnetite; trace fractured chalcopyrite         chlorite altered; weak epidote + fractured chalcopyrite         0.6         -           siltstone         pale green         trace pyrite         trace fractured chalco- pyrite         1.0         -           siltstone         pale green         trace pyrite         trace fractured chalco- pyrite         1.8         -           siltstone         grey         c.ser fractured chalco- pyrite         1.9         etered; micaceous           siltstone         grey         trace pyrite         trace fractured chalco- pyrite         3.9         altered; micaceous           siltstone         grey         trace pyrite

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Location	Rock Type	<u>Colour</u>	Sulphides/Oxides	Gangue	Hole Depth <u>(m)</u>	Description	Cu/Au ppm/ppb
3000E + 200N	diorite?	red-brown			5.4	altered diorite?	80/15
3000E + BL	quartzite	red-brown			3.7		294/80
3000E + 200S	quartzite	red-brown			3.0	decomposed	260/28
3000E + 400S	quartzite		trace pyrite		2.9	decomposed	710/62
3000E + 600S	quartzite? microdiorite?	green	trace magnetite	quartz veins	1.7		370/14
3000E + 800S	quartzite	red-brown	5% disseminated + frac- tured pyrite; 1% frac- tured chalcopyrite		1.5	limonite rich	2500/96
3100E + BL	quartzite	red-brown fracture; translucent			4.5		280/90
3200E + 1600N	diorite	light grey	trace disseminated magnetite		2.5	fresh	86/10
3200E + 1400N	diorite	red-brown			5.5	rusty	55/5
3200E + 1200N	till??	dark grey			4.5	grave; poor sample	60/10
3200E + 1000N	siltstone	dark grey			4.8	red-brown fracture/clay	70/15
3200E + 800N	till??				4.8	clay rich; poor sample	67/10
3200E + 600N	diorite	light grey- green			4.2		61/5
3200E + 400N	siltstone	light grey			3.5		81/25
3200E + 200N	quartzite and siltstone	dark grey			5.2		129/35

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Location	Rock Type	Colour	Sulphides/Oxides	Gangue	Hole Depth <u>(m)</u>	Description	Cu/Au ppm/ppb
3200E + BL	quartzite	red-brown fracture	trace speck malachite		4.0		195/40
3200E + 200S	quartzite	light grey			5.5	red-brown fracture	327/10
3200E + 400S	quartzite	light grey	trace disseminated pyrite		1.3		787/60
3200E + 600S	microdiorite	light brown	$\leq$ 5% chalcopyrite and $\leq$ 5% pyrite		2.0		4639/705
3200E + 800S	microdiorite	light brown			1.0		606/195
3300E + BL	siltstone	grey	trace malachite		3.0		63/45
3400E + 1600N	cherty siltstone	grey			6.0	grey-brown sand	55/12
3400E + 1400N	fine wacke	grey		≤ 1% biotite books; some chlorite after biotite	3.8	grey-brown soil	66/6
3400E + 1200N	cherty siltstone				5.2		53/4
3400E + 1000N	till?				1.5	mixture of clay, black	46/8
3400E + 800N	cherty siltstone	black	trace disseminated pyrite		2.6	siltstone, biotite altered rock, etc.	58/8
3400E + 600N	siltstone	black			4.3	abundant grey clay	43/6
3400E + 400N	monzonite silt- stone		1% pyrite; trace chalcopyrite; <u>&lt;</u> 8% magnetite		2.2	abundant grey clay	128/16
3400E + 200N	micaceous silt- stone; cherty siltstone				2.1	till?? rounded fragments; much clay	61/6
3400E + BL	quartzite	white to light grey			3.5		138/90

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Location	Rock Type	<u>Colour</u>	<u>Sulphides/Oxides</u>	Gangue	Hole Depth <u>(m)</u>	Description	Cu/Au ppm/ppb
3400E + 200S	siltstone	light grey- green			6.3	red-brown fracture/clay	183/45
3400E + 400S	diorite	red-brown			4.0		836/>100
3400E + 600S	microdiorite	light grey			1.0	red-brown fracture/clay	538/205
3400E + 800S	microdiorite	light grey			1.0	red-brown fracture/clay	344/70
3500E + BL	quartzite	grey-green			1.0		81/10
3 <b>6</b> 00E + 1600N	biotite-quartz diorite		magnetite		4.0		50/14
3600E + 1400N	till?				4.5	magnetite biotite diorite, cherty siltstone and biotite-chlorite	53/6
3600E + 1200N	biotite-quartz diorite?			<u>&lt; 3%</u> quartz	6.5	also looks like greywacke; has corroded feldspar + sericite	36/2
3600E + 1000N	cherty siltstone	light grey- green			10.5		47/6
3600E + 800N	cherty siltstone	translucent	< 1% disseminated pyrite		5.6		26/12
3600E + 600N	greywacke	,		15% biotite; quartz grains	4.5		45/4
3600E + 400N	greywacke			< 2% quartz grains; chlorite after mafics	3.2		64/6
3600E + 200N	mafic schist			few grains of quartz	1.6	chloritized flow?	151/30
3600E + BL	quartzite	light grey			1.2	oxidized fractures	92/20

Location	Rock Type	Colour	Sulphides/Oxides	Commo	Depth	Description	Cu/Au
<u>Location</u>	KOCK I YPC		Sulpinues/Ondes	Gangue	<u>(m)</u>	Description	<u>ppm/ppb</u>
3600E + 200S	biotite-quartz diorite		trace pyrite	10% sericite after feldspar	5.6		144/50
3600E + 400S	biotitic diorite cherty siltstone	grey			1.7		390/72
3600E + 600S	biotitic diorite			sericitized grndmass; 1-3% quartz grains	1.6		860/32
3600E + 800S	biotitic diorite		1-2% magnetite	2-3% quartz grains; trace chlorite	2.5	weak red-brown limonite	510/62
3600E + 1000S	quartzite, cherty siltstone	white	< 1% disseminated pyrite, trace chalcopyrite	fractured sericite	2.0		280/36
3600E + 1200S	cherty siltstone		< 1% disseminate and frac- tured pyrite; trace frac- tured chalcopyrite	trace sericite	1.4	well fractured and strong iron stain	40/8
3600E + 1400S	chert to cherty siltstone	white			1.3	well fractured; good limonite	87/134
3600E + 1600S	cherty siltstone		< 1% disseminated and frac- tured pyrite, trace chalco- pyrite		1.6		85/12
3600E + 1800S	cherty siltstone	white	rare pyrite grains	fractured chlorite	2.0	fractured limonite	30/16
3700E + BL	siltstone	dark grey			2.5		57/20
3800E + 1600N	quartzite	translucent			3.7		51/24
3800E + 1400N	quartzite			5-10% biotite books!	5.0	biotite-diorite fragments	80/22
3800E + 1200N	chlorite schist			rounded quartz; chlorite	3.8	sediment?; schistose	136/24
3800E + 1000N	till?				7.7	many rounded fragments; polymictic; abundant clay	52/24

Location	Rock Type	<u>Colour</u>	Sulphides/Oxides	Gangue	Depth (m)	Description	Cu/Au <u>ppm/ppb</u>
3800E + 800N	quartz vein	translucent			4.2	brown clay	53/32
3800E + 600N	cherty siltstone	grey	trace fractured pyrite		5.0	strong fracture + iron stain	51/14
3800E + 400N	cherty siltstone lithic wacke	translucent	magnetite veining		4.3	fractured iron	55/18
3800E + 200N	biotitic diorite				5.5	weakly altered	73/16
3800E + BL	quartzite to cherty siltstone	white to pale green			3.2	red-brown fractures	69/5
3800E + 200S	biotite -chlorite schist				3.0	tuff, flow??	66/4
3800E + 400S	biotitic diorite		weak magnetite		3.0	red brown clay, weathered	230/12
3800E + 600S	biotite <u>+</u> quartz diorite	light grey		chlorite after biotite	3.1	weathered	790/86
3800E + 800S	biotite <u>+</u> quartz diorite	light grey			3.5	weathered	230/18
3800E + 1000S	biotite <u>+</u> quartz diorite	light grey			1.7	weathered	300/14
3800E + 1200S	chert, quartzite	white	trace fracture + dissemi- nated pyrite; rare chalco- pyrite		<b>1.7</b>	fractured iron	70/18
3800E + 1400S	cherty siltstone	white, light green	trace fracture chalcopyrite		3.0	good iron limonite	143/40
3800E + 1600S	chert	grey	trace fractured chalcopyrite		3.5	well fractured; good iron	60/26
3900E + BL	quartzite	greygreen			1.3	weak fractured oxide	75/15

Location	Rock Type	<u>Colour</u>	Sulphides/Oxides	Gangue	Depth (m)	Description	Cu/Au ppm/ppb
4000E + 1600N	basalt	grey-brown			3.3	biotite/chlorite altered	52/4
4000E + 1400N	cherty siltstone	light green		weak epidote	7.9	few chips of above; frac- tured iron	48/4
4000E + 1200N	cherty siltstone	black and white	trace fractured pyrite		7.7	laminated	51/2
4000E + 1000N	cherty siltstone and wacke	translucent	trace pyrite		5.8		46/4
4000E + 800N	till?		trace disseminated pyrite		4.6	micaceous siltstone	34/2
4000E + 600N	porphyry-diorite cherty siltstone	grey	< 1% magnetite		4.0	good fractured limonite	37/6
4000E + 400N	biotite-chlorite schist; chert	translucent	trace fracture pyrite	weak quartz win		strong fractured limonite	31/4
4000E + 200N	monzonite, porphyry monzodiorite		trace disseminated/fractured pyrite and chalcopyrite; < 1% magnetite	trace epidote; pink grndmass, plagioclase to limonite	3.5	strong limonite	118/4
4000E + BL	siltstone	dark grey			3.2		102/15
4000E + 200S	siltstone	black			4.9		101/12
4000E + 400S	quartzite		trace fracture pyrite	trace fracture sericite	2.9	fracture limonite	127/30
4000E + 600S	cherty siltstone biotitic diorite	light grey	trace disseminated pyrite; 1-2% disseminated magnetite	sericite after plagioclase phenocrysts; weak quartz win	5.0		540/66
4000E + 800S	diorite cherty siltstone	weak magnetite	sericite/chlorite alt		4.3	fracture limonite; strongly altered	510/548
4000E + 1000S	biotitic diorite			1% quartz grains; feldspar to clay + + sericite; relict biotite = 10-15%	3.9	strongly altered; weak limonite after biotite	300/20

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Location	Rock Type	<u>Colour</u>	Sulphides/Oxides	Gangue	Hole Depth <u>(m)</u>	Description	Cu/Au ppm/ppb
4000E + 1200S	cherty siltstone	translucent	trace fracture pyrite		2.6	fractured limonite	109/6
4000E + 1400S	siltstone	grey to black		fractured biotite/chlorite; quartz vein	1.1	fractured limonite	41/4
4000E + 1600S	cherty siltstone	translucent			3.5	elongated grains	15/4
4200E + 1600N	microdiorite/ micromonzonite		trace disseminated pyrite	plagioclase + hornblende phenocrysts	6.8	pink grndmass	52/8
4200E + 1400N	cherty siltstone				8.7	minor fractured limonite	49/6
4200E + 1200N	microdiorite		weak magnetite		6.8	strong alteration	55/4
4200E + 1000N	silty chert	grey			3.8	fractured limonite	63/8
4200E + 800N	siltstone, fine wacke				3.7	rare limonite	74/6
4200E + 600N	siltstone, chert, quartz diorite				5.8		58/16
4200E + 400N	silty chert, andesite	grey	< 1% wein pyrite		5.0	strong limonite; decomposed	91/6
4200E + 200N	quartzite	translucent			3.0	strong limonite	61/6
4200E + BL	siltstone, quartz diorite				2.9		65/16
4200E + 200S	quartzite	translucent	trace vein chalcopyrite, < pyrite		3.6	moderate fracture limonite	18/6
4200E + 400S	silty chert	light grey	trace disseminated pyrite		3.5	weak fractured limonite	46/8
4200E + 600S	biotitic diorite	leucocratic	magnetite		4.4	unaltered	290/102
4200E + 800S	biotitic diorite	leucocratic	magnetite		4.0	fresh	450/60
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Location	Rock Type	<u>Colour</u>	Sulphides/Oxides	Gangue	Depth (m)	Description	Cu/Au ppm/ppb
4200E + 1000S	silty chert, quartzite	white			4.0	fractured limonite	178/14
4200E + 1200S	silty chert diorite	white	≤ 1% vein pyrite, trace chalcopyrite		1.9	good fractured limonite	110/10
4200E + 1400S	silty chert	grey to black	trace disseminated + fractured pyrite and chalco- pyrite		2.5	well brecciated; strong limonite	58/68
4400E + 1600N	biotite-quartz diorite		magnetite		6.0	possibly granodiorite	49/6
4400E + 1400N	cherty siltstone	light grey	grains of chalcopyrite in clay		9.5		67/6
4400E + 1200N	cherty siltstone lithic wacke				3.5	trace of dark limonite	51/4
4400E + 1000N	siltstone to fine wacke		trace fractured pyrite in quartz vein	chlorite after mafics	6.7	fractured limonite	59/10
4400E + 800N	till?				4.5	rounded fragments with clay	65/2
4400E + 600N	till?			sericite/chlorite	4.5	rounded fragments; mainly porphyry diorite; strong fractured limonite	56/4
4400E + 400N	till?				4.8	as above; chlorite-sericite schist, fragments common	47/4
4400E + 200N	siltstone + volcanic?			sericite frctured; chlorite replaced schist	4.0	weak fractured limonite	42/4
4400E + BL	basalt and siltstone	green-black & translucent		biotite-chlorite altered	4.6	limonite	82/10
4400E + 200S	biotitic diorite				4.5	decomposed; weak limonite	88/14

Location	Rock Type	<u>Colour</u>	Sulphides/Oxides	Gangue	Depth (m)	Description	Cu/Au ppm/ppb
4400E + 400S	cherty siltstone			mica on fractures	5.8		81/12
4400E + 600S	cherty siltstone			mica on fracturews	5.7	laminated	41/4
4400E + 800S	biotitic diorite			$\leq$ 1% quartz grains	4.5	decomposed	270/36
4400E + 1000S	biotitic diorite			green biotite; sericite fractured	6.1	iron stained	92/8
4600E + 1600N	diorite/quartz diorite		trace pyrite + chalcopyrite; magnetite	chlorite altered; clay after feldspars	3.8	good looking rock	109/2
4600E + 1200N	till?				2.0	good looking rock, weak fractured limonite	46/8
4600E + 1000N	diorite	black	•	hornblende rich	4.1		33/2
4600E + 800N	chert; quartz monzodiorite	white		chlorite-biotite fractured	2.7		51/6
4600E + 600N	chert	white	trace pyrite	chlorite after mafics; sericite after plagioclase	3.7	red-brown clay	90/62
4600E + 400N	chert, cherty siltstone, quartz monzodiorite		trace magnetite		5.0	possibly till	71/8
4600E + 200N	diorite, lithic wacke		trace disseminated pyrite	sericite after feldspars and groundmass	7.8		51/18
4600E + BL	biotitic diorite		strongly magnetic	3% quartz; chloritization	5.0	limonite clays	72/8
4600E + 200S	till?	black			0.9	andesite flow?	41/4
4600E + 400S	till?				1.0	brown clay, numerous rock types	49/4

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Location	Rock Type	<u>Colour</u>	<u>Sulphides/Oxides</u>	Gangue	Hole Depth <u>(m)</u>	Description	Cu/Au ppm/ppb
4600E + 600S	biotitic diorite cherty siltston		trace pyrite	chlorite after biotite	3.8	fractured limonite	196/10
4600E + 800S	chert	black & white			4.5	laminated; fractured limonite	98/10
4800E + 1600N	siltstone?			pervasive sericite	1.0	intensely altered intrusive?	106/2
4800E + 1400N	siltstone?		trace specks chalcopyrite	strong sericite; fractured chalcopyrite; possible K-feldspar alt.	0.5	as above?	56/2
4800E + 1200N	diorite			strong sericite; fractured chlorite quartz weining	2.3		91/10
4800E + 1000N	cherty siltstone		trace fine fractured pyrite		1.5		55/4
4800E + 800N	diorite to monzodiorite			chlorite after mafics; sericite	3.0	pink groundmass	51/2
4800E + 600N	diorite				2.9		87/8
4800E + 400N	diorite				2.9		36/4
4800E + 200N	cherty siltstone	light grey green			3.0		58/8
4800E + BL	diorite			sericite + clay after plagioclase phenocrysts	7.5		55/2
4800E + 200S	cherty siltstone & mafic flow?	grey	trace pyrite		1.0		48/4
4800E + 400S	chert, and greywacke	translucent dark grey			4.0		26/2
4800E + 600S	diorite		trace disseminated + fractured pyrite and chalcopyrite	d	4.3	red-brown clay; decomposed diorite?	48/4

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Location	Rock Type	Colour	Sulphides/Oxides	Gangue	Depth <u>(m)</u>	Description	Cu/Au ppm/ppb
4800E + 800S	biotitic diorite		<u>&lt; 2%</u> disseminated pyrite; trace chalcopyrite	chlorite after biotite	2.8	strong red limonite	390/8
4800E + 10009	6 cherty siltstone chlorite-biotite schist	translucent	trace disseminated pyrite		2.3	fractured limonite; some alt. flow or sed.	580/40
5000E + 16001	N diorite		strong magnetite; trace hematite	biotite to chlorite; $\leq$ 5% quartz	0.8		123/10
5000E + 14001	N diorite	dark green		sericite after feldspar	0.8	strongly altered	115/6
5000E + 12001	N cherty siltstone	trace pyrite	weak fractured chlorite/ biotite		1.5	fractured limonite	34/14
5000E + 10001	N siltstone		trace disseminated pyrite	some sericite	2.0	a few weathered diorite fragments	20/12
5000E + 800N	biotite-chlorite schist	pink ground- mass	trace disseminated pyrite	sericite flakes	2.8	pink-colour - suggests altered monzodiorite	113/6
5000E + 600N	monzonite		trace pyrite	biotite to limonite	4.3	pink groundmass	41/6
5000E + 400N	quartzite	white	trace pyrite	carbonate veins	3.8	fractured limonite	50/8
5000E + 200N	chert	white			3.5	fractured limonite	22/6
5000E + BL	cherty siltstone	black to translucent			5.5		85/4
5000E + 200S	chlorite-biotite schist				4.5	andesite flows	53/8
5000E + 400S	till		trace pyrite		4.0	chert, wacke, biotite- chlorite schist, limonite clays	39/2
5000E + 600S	cherty siltstone				4.5		37/10

Location	Rock Type	<u>Colour</u>	Sulphides/Oxides	Gangue	Depth (m)	Description	Cu/Au ppm/ppb
5000E + 800S	biotite schist				2.8	iron stained, decomposed	460/12
5000E + 1000S	quartzite				1.0	limonite	43/6
5200E + 1600N	microdiorite		trace disseminated + frac- tured pyrite-chalcopyrite	pervasive biotite + chlorite	1.8	possibly biotite-chlorite schist	89/6
5200E + 1400N	biotite schist?		trace fractured pyrite, disseminated chalcopyrite	fractured biotite	1.0		85/4
5200E + 1200N `	microdiorite			weak sericite	0.9	decomposed; schist?	141/10
5200E + 1000N	siltstone	grey	speck pyrite		1.0		43/4
5200E + 800N	microdiorite 🦠			biotite-chlorite alt.	2.0	sausseritized	60/4
5200E + 600N	microdiorite, siltstone		weak magnetite	sericite	3.0	limonite	60/8
5200E + 400N	siltstone			sericite + chlorite on fractures	3.3	stockwork fracturing; iron stained	69/10
5200E + 200N	cherty siltstone	light grey to cream			3.0	fractured limonite	36/6
5200E + BL	siltstone			chlorite after mafics	4.7	weak limonite	52/8
5200E + 200S	cberty siltstone	grey			2.8		47/4
5200E + 400S	siltstone	dark grey		chlorite + sericite on fractures	4.0	weakly schistose	41/4
5200E + 600S	siltstone	dark grey		chlorite + sericite on fractures	4.5		51/4
5200E + 800S	biotite <u>+</u> quartz diorite				1.5	decomposed	182/16
5200E + 1000S	biotitic diorite			chlorite after some mafics	1.5		200/26

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Location	Rock Type	<u>Colour</u>	<u>Sulphides/Oxides</u>	Gangue	Depth (m)	Description	Cu/Au ppm/ppb
5200E + 1200S	cherty siltstone	light grey	trace fractured pyrite	trace sericite on fractures	2.1	fractured limonite	<b>29</b> 1/4
5200E + 1400S	cherty siltstone, mafic volcanic	grey		sericite + chlorite flakes common	3.8	fractured limonite; possible andesite dyke	35/6
5200E + 1600S	chert	light green to white			6.3	fractured limonite	22/4
5400E + 1600N	biotite griesen			fractured chlorite	1.0	quartzite with biotite books	133/4
5400E + 1400N	biotitic diorite	leucocratic	trace fractured pyrite		0.8	quite leached, altered	101/10
5400E + 1200N	diorite?	leucocratic			1.0	very corroded	12/2
5400E + 1000N	cherty siltstone		•	fractured biotite, chlorite; quartz vein	0.9	layered	25/6
5400E + 800N	quartzite				1.5	weak fractured limonte	85/6
5400E + 600N	intermediate flow?			biotitized	3.0	sed. or alt. flow	12/6
5400E + 400N	chert	black & white		chlorite + biotite common	5.7	fractured limonite	59/24
5400E + 200N	cherty siltstone	light green	trace pyrite		3.7	trace liminote	42/2
5400E + BL	chert	white		trace fractured chlorite	4.6		67/2
5400E + 200S	cherty siltstone diorite	light grey- green	trace pyrite	chlorite-biotite alt.	2.5		42/6
5400E + 400S	cherty siltstone	light grey- green			2.8	trace limonite	41/12
5400E + 600S	quartzite				4.5	weak limonite	107/8
5400E + 800S	diorite			chlorite after matics	3.8	sausseritized; weak limonite	148/1 0

Location	Rock Type	<u>Colour</u>	Sulphides/Oxides	Gangue	Hole Depth <u>(m)</u>	Description	Cu/Au ppm/ppb
5400E + 1000S	quartzite	white			1.0	fractured with fractured limonite	177/2
5400E + 1200S	siltstone; diorite	light grey to green			1.7		43/2
5400E + 1400S	cherty siltstone	light green	trace fractured pyrite			trace limonite; hint of corroded feldspar; rhyolite?	41/12
5600E + 800S	biotite <u>+</u> quartz diorite				1.8	decomposed; weak limonite	103/8
5600E + 1000S	quartzite				2.3	weak fractured limonite	320/40
5600E + 1200S	cherty siltstone	light green-			2.5	weak fractured limonite	35/16
5600E + 1400S	cherty siltstone	grey			3.0	trace limonite	38/4
5800E + 800S	quartzite	white			2.2	weak limonite	36/6
5800E + 1000S	quartzite	white			0.9	fractured limonite	10/2
5800E + 1200S	porphyry diorite			chlorite-biotite after hornblende; sericite after plagioclase	1.5	5% plagioclase phenocrysts; propyllitic alt.	58/4
5800E + 1400S	cherty siltstone	light grey		weak fractured chlorite	0.7	weak fractured limonite	31/4
200W + 2200S	andesite flow	maroon	2% magnetite	weak jasper?	0.7	weak limonite	145/10
200W + 2400S	silty chert & andesite flows				1.7	orange limonite	73/4
200W + 2600S	porphyry andesite flow	green-grey			2.4	5% pyroze phenocrysts; fresh looking rock	55/12
200W + 2800S	chert	leucocratic			6.1		73/4

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Location	Rock Type	<u>Colour</u>	Sulphides/Oxides	Gangue	Depth (m)	Description	Cu/Au ppm/ppb
200W + 3000S	andesite flows			bright red mineral (jasper??) on fracture	1.3	fresh looking	16/6
200W + 3200S	andesite flows		1-2% magnetite	as above	2.8	fresh looking	25/2
400W + 2200S	biotitic diorite?		< 1% pyrite		2.6	strongly oxidized; possibly pink groundmass making unit latite/monzodiorite?	62/44
400W + 2400S	biotitic diorite?		< 1% pyrite	quartz vein	2.8	as above; strong fracture limonite	92/6
400W + 2600S	biotitic diorite?		trace pyrite	quartz vein	2.5	as above	89/8
400S + 2800S	greywacke	light grey- green			1.2		65/4
400W + 3000S	porphyry andesite	maroon	hematite	chlorite after hornblende; epidote after plagioclase	2.5		94/6
400W + 3200S	porphyry andesite?		rare pyrite		1.0	decomposed; looks like hornblende crystals	60/8
400W + 3400S	monzodiorite?	leucocratic	trace disseminated pyrite	$\leq$ 1% quartz grains; quartz-carbonate weins cut rock	1.0	medium grained; pink in groundmass	40/542
400W + 3600S	biotitic diorite			plagioclase particles gone to limonite	2.0		21/8
400W + 3800S	greywacke	orange	trace pyrite		1.8	strong, bright orange limonite	40/8
400W + 4000S	diorite; wacke		trace disseminated pyrite	plagioclase partly to limonite	1.1		26/42
600W + 1400N	quartzite; diorite		< 1% vein/fractured/dissemi- nated pyrite	quartz win in diorite pieces	1.8	strong limonite stain	2500/164
600W + 1200N	quartzite, diorite		1-2% disseminated and frac- tured pyrite; rare chalcopyrite		3.0	limonite on fractures	2100/92
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Hole

Location	Rock Type	Colour	Sulphides/Oxides	Gangue	Hole Depth <u>(m)</u>	Description	Cu/Au ppm/ppb
600W + 1000N	quartzite	translucent	trace disseminated pyrite		2.0	minor limonite	70/10
600W + 800N	quartzite	translucent	rare disseminated pyrite		1.0	minor limonite	58/6
600W + 600N	quartzite	translucent, white	trace disseminated pyrite		1.5	minor fractured limonite	72/38
600W + 400N	silty quartzite	white to translucent		·	1.0	fractured limonite	26/4
600W + 200N	silty chert	light grey	< 1% fractured/disseminated pyrite		1.5	fractured limonite	70/6
600W + BL	siltstone + fine wacke	red-brown			1.8		71/4
600W + 200S	andesite & quartzite	brown			5.5	no limonite	42/8
600W + 400S	andesite flows, siltstone	brown			4.5		49/4
600W + 600S	wacke, siltstone, quartz diorite	brown			2.5		40/4
600W + 800S	quartzite, wacke cherty siltstone	brown			3.5		48/12
600W + 1000S	siltstone			quartz vein (weak)	4.7		48/6
600W + 1200S	andesite flow	maroon		minor quartz win	3.3		53/6
600W + 1400S	andesite flows	grey			2.1	weak oxidation; looks fresh	49/4
600W + 1600S	flow?	brown to maroon			1.7	only sand retrieved	59/4

Location	<u>Rock Type</u>	<u>Colour</u>	Sulphides/Oxides	Gangue	Hole Depth (m)	Description	Cu/Au ppm/ppb
600W + 1800S	flow?	brown to maroon	magnetic	hematite	2.5	only sand	27/4
600W + 2000S	porphyry andesite	green to black		plagioclase phenos	3.0	looks fresh	80/14
600W + 2200S	porphyry andesite	green to black		limonite after plagioclase	1.0	fresh	56/6
600W + 2400S	andesite flow	ì			1.7	strong, pervasive limonite	78/10
600W + 2600S	andesite flow	green-grey to brown	magnetic		1.5		55/4
600W + 2800S	andesite flow	as above	magnetic	hematite	2.0	weathered	82/4
600W + 3000S	massive andesite or siltstone			fine grained quartz fragments	3.5	weathered	98/6
600W + 3200S	as above	grey to weak maroon		trace quartz win	2.0		79/4
600W + 3400S	porphyry andesite	green-grey			3.0		71/8
600W + 3600S	quartz diorite?				2.0	decomposed; weak limonite	102/2
600W + 3800S	quartz diorite		trace fractured pyrite		1.5	strong limonite	21/6
600W + 4000S	quartz diorite		trace fractured pyrite		1.7	strong limonite	27/8
800W + 1400N	porphyry monzo- diorite		fractured chalcopyrite	1-3% quartz win, chlorite after mafics; plagioclase phenocrysts	2.8	pink groundmass; cut by good limonite stockworks	94/4
800W + 1200N	diorite		magnetite; trace hematite	chlorite after mafics; epidote after plagioclase	2.9	strongly altered	59/8
800W + 1000N	quartzite	pink		minor calcite	2.5		24/6

Location	Rock Type	Colour	Sulphides/Oxides	Gangue	Depth (m)	Description	Cu/Au ppm/ppb
800W + 800N	quartzite	white, trans- lucent	< 1% pyrite veins		2.0		32/54
800W + 600N	cherty siltstone	pink	< 1% disseminated pyrite		1.5	weak fractured limonite	42/66
800W + 400N	quartzite	white	<1% disseminated pyrite		2.7	good fractured limonite	67/1024
800W + 200N	cherty siltstone	light green	$\leq$ 1% disseminated pyrite		1.5	as above	134/2
800W + BL	till?				3.1	diorite and siltstone frag- ments in grey clay	50/2
800W + 200S	cherty siltstone	black	trace hematite		4.1		43/2
800W + 400S	cherty siltstone	grey			4.9	weak fractured limonite	134/6
800W + 600S	siltstone to wacke	maroon	trace disseminated pyrite		6.5	as above	42/28
800W + 800S	cherty siltstone	grey, light green to maroon	1		5.5		53/10
800W + 1000S	volcaniclastics	maroon			6.0	decomposed	34/68
800W + 1200S	andesite flow		3-5% magnetite		0.8	oxidized; blocky plagioclase; no alteration or limonite	76/2
800W + 1400S	andesite flows + cherty fragments	red-brown			4.5		41/4
800W + 1600S	andesite flow	maroon			2.0	only sand recovered	26/2
800W + 1800S	as above	maroon		biotite flakes; some epidote	3.0		80/4
800W + 2000S	andesite flow	brown		hornblende phenocrysts?	4.1	weathered	117/6
800W + 2200S	andesite flow	brown			3.4	weathered; weak limonite	90/2
800W + 2400S	andesite flow	brown		sausseritized plagioclase phenocrysts	1.7	oxidized	97/4

Location	<u>Rock Type</u>	Colour	Sulphides/Oxides	Gangue	Hole Depth (m)	Description	Cu/Au ppm/ppb
800W + 2600S	andesite flow				2.2	very ligh coloured; some pieces weathered orange	99/4
800W + 2800S	flow and quartz vein				3.3	unaltered flow and angular white, quartz wein fragments	66/6
800W + 3000S	flows	light green	trace disseminated pyrite	1mm quartz wins	3.5	minor limonite	111/10
800W + 3200S	flow?	brown			4.0	sand; after decomposed flow?	125/6
800W + 3400S	flow?	brown			2.8	as above; seems fine grained	58/4
800W + 3600S	andesite flow	dark brown		sausseritized plagioclase	0.7		70/4
800W + 3800S	cherty siltstone or flows	maroon			1.1	limonite (after sulphide?)	65/2
800W + 4000S	andesite flows				2.5	red-brown-orange limonite (after sulphide?)	73/6
JWR-01	chert siltstone		fractured Mn oxides (?)		1.8	fractured limonite	73/6
JWR-02	porphyry flow		trace disseminated and frac- tured pyrite	quartz grains; plagioclase phenocrysts	4.2		66/6
JWR-03	flow; wacke				2.7	mostly fresh looking; minor limonite on some pieces	69/14
JWR-04	till?				2.1	flow, quartz, diorite, clay	44/16
JWR-05	hornblende-quartz diorite				3.0	rounded pieces	60/8
JWR-06	porphyry andesite			plagioclase phenocrysts	3.2	nice limonitic clay	50/8
JWR-07	andesite flows	green-grey + maroon			3.5		49/10

Location	Rock Type	Colour	Sulphides/Oxides	Gangue	Depth (m)	Description	Cu/Au <u>ppm/ppb</u>
JWR-08	andesite flows,		1-2% magnetite	minor quartz win	3.7	red-brown limonite sand	60/ <b>8</b> -
J W K-00	cherty siltstone		1-2/0 magnetite		511		
JWR-09	cherty siltstone		trace disseminated pyrite		2.2	minor limonite	42/6
JWR-10	andesite flow			plagioclase phenocrysts; few quartz grains	6.2	fresh	77/8
JWR-11	cherty siltstone	light grey- green		minor quartz win	3.1	weak fractured limonite	<b>₩</b> 0/4
JWR-12	andesite flow(?) cherty siltstone			weak quartz win	2.6	weak fractured limonite	69/6
JWR-13	chert	black			3.5	weak fractured limonite	40/2
JWR-14	quartz diorite				2.8	weak limonite	62/2
JWR-15	chert	grey	trace pyrite		2.9	weak fractured limonite	45/4
JWR-16	cherty siltstone	light green- green	rare pyrite		2.5		36/4
JWR-17	cherty siltstone	dark grey to black			3.6	good fractured limonite	39/2
JWR-18	basalt				4.5	brown weathered clay	121/10
JWR-19	greywacke	grey-brown			3.3		106/4
JW R -20	siltstone				5.5	weak limonite	88/2
JWR-21	granodiorite; cherty siltstone		trace pyrite		2.5		72/6
JWR-22	as above			some quartz win	4.0		50/6

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Location	Rock Type	<u>Colour</u>	<u>Sulphides/Oxides</u>	Gangue	Hole Depth <u>(m)</u>	Description	Cu/Au ppm/ppb
JW R-23	cherty siltstone, siltstone wacke			some quartz win	3.8	minor limonite	70/4
JWR-24	fine wacke	black + maroon	·		5.5		59/8
JWR-25	siltstone + porphyry andesite flows				5.5	weak fractured limonite	51/26
JWR-26	siltstone	dark grey to black	trace pyrite		2.3	good fractured limonite	74/6
<b>JWR-2</b> 7	cherty siltstone				3.0		53/8
JW R-28	fine grained wacke				2.0	weak limonite	44/4
JW R-29	porphyry andesite		trace disseminated pyrite		2.1	weak limonite	95/2
JWR-30	andesite flow	leucocratic			3.0	only sand; limonite clay	111/6
JWR-31	diorite				3.0	fine-grained; minor limonite	86/36
JWR-32	porphyry andesite			plagioclase phenocrysts	3.4	strong limonite	60/54
JWR-33	porphyry andesite			plagioclase phenocrysts	3.1	unaltered; no limonite	95/8
JWR-34	porphyry andesite			plagioclase phenocrysts	3.9	weak limonite	70/4
JWR-35	siltstone; porphyry andesite flow				2.8		103/4
JWR-36	siltstone	brown			3.8	weathered	91/8
<b>JWR-3</b> 7	siltstone/wacke	grey			2.5	fractured limonite	68/4
JW R-38	silty chert	black		stockwork quartz vein	5.0	fractured limonite	33/12
JWR-39	cherty	black to grey			3.0	crackle fracture; minor fractured limonite	25/4

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Location	Rock Type	<u>Colour</u>	Sulphides/Oxides	Gangue	Hole Depth <u>(m)</u>	Description	Cu/Au <u>ppm/ppb</u>
JWR-40	silty chert	light green to grey			2.5	weak fractured limonite	65/2
JWR-41	silty chert	grey			3.5	fractured limonite	12/6
JWR-42	chert	grey			2.0	weak fractured limonite	45/8
JWR-43	siltstone; chert			some quartz win chips	2.5	weak limonite	55/4
JWR-44	chert				3.5	minor limonite	49/4
JWR-45	greywacke; chert				4.3	weak fractured limonite	39/8
JW R -46	chert, cherty siltstone	grey			4.1		51/6
JWR-47	silty chert				2.0	fractured limonite	64/10
JW R-48	siltstone; chert porphyry andesite	grey maroon			4.5		41/2
JWR-49	porphyry andesite siltstone				1.5	good fractured, limonite	69/4

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# APPENDIX C

Check Geochemistry Results for Selected Sections of Old Drill Core, GJ Project]

Keewatin Engineering Inc.

# APPENDIX C

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## CHECK GEOCHEMISTRY RESULTS FOR SELECTED SECTIONS OF OLD DRILL CORE, GJ PROJECT

Hole	Interval <u>(feet)</u>	1989 Sample <u>Number</u>	ppm Cu	<u>1989 Results</u> ppb Au	ppm Ag	Specific <u>Gravity</u>	<u>% Cu</u>	<u>Previous Results</u> oz/ton Au	<u>oz/ton Ag</u>
81-1	390 - 400	JDR-35	2,800	6	0.04		0.27	0.020	0.20
	400 - 410	JDR-36	5,700	908 (1,362)*	1.05 (2.50)		0.52	0.020	0.58
	500 - 510	JDR-37	2,200	1,434 (302)	2.30 (0.55)		0.24	0.020	0.14
	510 - 520	JDR-38	1,640	522	0.44		0.27	0.020	0.06
	640 - 650	JDR-39	1,740	358	0.27		0.20	0.020	0.50
	840 - 850	JDR-40	500	214	0.39		0.07	0.030	0.38
81-3	190 - 200	JDR-41	1,660	122	0.20		0.14	tr.	0.08
	200 - 211	JDR-42	1,510	356	0.72		0.15	0.004	0.06
	211 - 222.5	JDR-43	1,570	346 (378)	0.51 (0.74)		0.15	0.036	0.10
	222.5 - 230	JDR-44	1,430	256 (258)	0.47 (0.58)		0.12	0.028	0.04
81-5	400 - 410	JDR-45	1,390	232	0.46		0.24	0.014	0.64
	450 - 460	JDR-46	4,500 (4,160)	1,090 (1,488)	1.44 (1.92)		. 0.54	0.032	0.38
	460 - 470	JDR-47	7,100 (6,680)	1,510 (1,580)	1.80 (2.60)		0.80	0.046	0.22
	590 - 600	JDR-48	1,940	<b>4</b> 76	1.35		0.17	0.014	0.28
81-6	660 - 670	JDR-49	760	78	2.50		0.12	tr.	0.22
	960 - 970	JDR-50	580	140	0.30		0.08	tr.	tr.
81-7	330 - 340	JDR-51	1,790	312	0.69		0.15	tr.	0.12
	340 - 350	JDR-52	1,930	400	1.98		0.23	tr.	0.38
	540 - 550	JDR-53	1,520	222 (210)	1.27 (1.57)		0.10	0.036	0.18
	550 - 560	JDR-54	1,850	526	<b>`0.79</b> ´		0.24	0.024	0.10
	770 - 780	JDR-55 A	820	214	0.66		0.10	0.016	0.10

# Appendix C Continued Page 2

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11-1-	Interval	1989 Sample		<u>1989 Results</u> ppb_Au		Specific Gravity	<u>% Cu</u>	<u>Previous_Results</u> oz/ton_Au	oz/ton Ag
Hole	<u>(feet)</u>	<u>Number</u>	<u>ppm Cu</u>	ppb Au	<u>ppm Ag</u>	Gravity	<u>70 Cu</u>	<u>02/1011 Au</u>	02/ TOIL THE
70-1	60 - 70	JDR-65	1,930	250	0.68		0.20	0.02	tr.
	140 - 150	JDR-66	2,500	276	0.64		0.24	tr.	tr.
	150 - 160	JDR-67	3,800	334	3.10		0.37	tr.	tr.
				(616)	(4.50)				
	329	JDR-68				2.74			
	330 - 340	JDR-69	9,500	1,254	2.50		0.72	0.02	0.10
	)			(1,452)	(2.80)				
	360 - 370	JDR-70	2,200	150	0.50		0.15	0.02	tr.
70-2	90 - 100	JDR-22	1720	250	0.34		0.16	tr.	tr.
	150 - 170	JDR-23	2000	712	1.08		0.34	0.010	0.10
	250 - 260	JDR-55 <b>B</b>	5,800	796	3.10		0.47	0.040	0.20
				(1,092)	(3.40)				
	199	JDR-56				2.69			
	227	JDR-57				2.75			
	323	JDR-58				2.76			
	310 - 320	JDR-59	4,200	654	1.31		0.38	0.030	0.10
				(1,122)	(1.44)				
	370 - 380	JDR-60	2,300	168	0.66		0.22	0.010	0.10
	376	<b>JDR-61</b>				2.74			
	482	JDR-62				2.70			
	480 - 490	JDR-63	4,300	196	16.4		0.30	0.020	0.30
				(284)	(13.6)				
	540 - 550	JDR-64	1,530	80	2.50		0.09	0.020	2.50
70-3	70 - 76	JDR-26	1500	320	0.42		0.14	0.010	tr.
	83 - 90	JDR-27	2600	620	1.01		0.23	0.020	tr.
	280 - 290	JDR-24	3300	910	1.47		0.36	0.040	0.10
	290 - 300	JDR-25	3000	836	1.44		0.29	0.040	0.10

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Appendix Page 3	Appendix C Continued Páge 3									
Hole	Interval (feet)	1989 Sample <u>Number</u>	ppm Cu	<u>1989 Results</u> ppb_Au	ppm Ag	Specific <u>Gravity</u>	<u>% Cu</u>	<u>Previous Results</u> oz/ton Au	oz/ton Ag	
70-4	80 - 90 90 - 100 100 - 110 110 - 120	JDR-28 JDR-29 JDR-30 JDR-31	1670 3500 1980 2700	272 514 280 446	0.33 1.31 0.55 0.56		0.21 0.33 0.18 0.22	0.010 0.030 0.010 0.020	tr. 0.10 tr. 0.10	
71-15	204	<b>JDR-71</b>				2.74				

• samples denoted by brackets () are check assays taken from a second cut of reject material.

# **APPENDIX D**

# Stream Silt Geochemistry Results

(samples denoted by \* are not applicable to this report)

## <u>Samplers</u>

JAL = Adam Travis JML = Marty Bobyn JDL = David Mehner JKL = Mike Brown

Keewatin Engineering Inc.

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Project: "GJ" Property

	Sample	Au	Ag	Cu	РЬ	Ζn
	Number	ррь	ppm	ppm	ppm	ppm
SILT JAL	1	18	0.09	33	4	173
	2	10	0.05	54	7	110
	3.	2820	5.40	50	42	178
JDL	1	132	0.81	460	14	158
JKL	1*	36	0.21	58	6	137
			0.00			
	2*	114	1.02	1060	24	220
	3*	192	0.87	1760	4	70
	4*	62	0.88	870	15	160
	5*	48	0.28	185	7	133
	6	50	0.91	810	15	194
			0.00			
	7	116	0.27	132	13	160
	8	42	0.46	135	9	173
	9	18	0.38	240	10	168
	10	108	0.48	184	20	240
	11	14	0.28	85	13	191
		:	0.00			
	12	54	0.39	260	7	76
	13	40	0.49	310	8	155
T.641	14	346	2.10	690 260	122	360
JML	1	100	1.04	360	29 10	300
	2	486	1.21	3000	13	111

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Silt	Number ppb ppm p		Cu ppm	Fb ppm	Zn ppm	
JDL	2	124	0.82	630	19	160
	3	24	0.28	84	8	126
	4	54	0.38	174	16	164
	5	444	0.78	340	14	164
	6	34	0.55	113	17	230
JKL	7	116	0.80	320	13	150
	8	934	4.60	73	250	410
	15 <del>*</del>	4	0.14	121	7	110
	16	2	0.10	67	4	108
	17	4	0.47	62	9	176
	18	4	0.13	66	6	115
	19	32	0.66	153	9	141
	20	56	0.88	290	18	172
	21	2	0.25	57	6	143
	22	98	0.84	300	27	174
	23	18	0.40	144	10	150
	24	106	0.77	310	17	175
	25	2	0.22	84	10	133
	26	80	2.20	103	11	133
	27	40	0.36	37	7	131
	28	312	0.59	104	9	133
	29 <b>米</b>	22	0.29	79	4	120
	30 <b>米</b>	22	0.23	77	7	121
	31 <b>米</b>	84	0.42	64	7	95

Project: "GJ"

	Sample	Au	Ag	Cu	РЬ	Zn
	Number	ppb	ppm	ppm	ppm	ppm
89 JDL	9	136	0.65	510	4	139
	10	24	1.40	120	73	360
	11	8	0.21	77	6	113
	12	18	0.64	78	19	184
	13	16	0.29	103	8	142
	14	2	0.19	57	5	138
	15	14	0.25	129	5	168
	16	200	0.89	260	15	164
	17	226	0.89	260	12	152
	18	12	0.35	50	10	153

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Project: "GJ" Property

Silt	Sample Number	Au ppb	Ag ppm	Cu ppm`	РЬ Ррм	Zn ppm
JAL	4 5	12 8	0.26 0.28	310 61	8 7	143 184
JDL	20	220	0.42	126	6	250
	21	180	0.34	169	2	195
	22	6	0.21	123	13	230
	23	12	0.37	94	5	150
	24	e	0.19	47	5	103
	25	94	0.93	320	17	174
JKL	32	12	0.94	84	80	410
	33	42	0.91	116	78	860
	34	10	0.26	101	11	180
	35	10	0.84	124	23	280
	36	10	0.55	88	27	230
	37	16	0.82	105	30	270
	38	47	0.16	46	6	220
	39	4	0.10	46	5	180
	40	8	0.10	94	9	163
	41	20	0.22	54	7	166
	42	8	0.47	50	7	162
	43	6	0.24	51	6	160
	44	4	0.38	56	7	250
	45	8	0.10	44	6	133
JML	З	8	0.24	71	7	162

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## TERRAMIN RESEARCH LABS Ltd.

Job#: 89-319

	Sample	Au	Ag	Cu	РЬ	Zn	
	Number	ррЬ	ppm	ppm	ppm	ppm	
Silt			·				
89-JML	4 *	62	0.19	59	7	131	, in the second s
	5	4	0.17	48	6	132	
	6	862	1.29	50	5	121	- f-
	7	14	0.26	72	8	140	2
	8	2	0.19	79	7	144	



## APPENDIX E

Soil Geochemistry Results

Keewatin Engineering Inc.

Project: "GJ" Property

		Sample Number	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm
BOIL	JDS	1 2	16 32	0.18 0.20	45 80	8 6	220 147

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	Sample Number	Au Ppb	Ag ppm	Cu Ppm	РЪ ppm	Zn ppm
Soil						
89-JAS	1	154	0.59	49	7	152
	2	с <b>‡</b> .	0.16	53	9	130
	3	20	0.42	74	7	1 나다
	4	10	0.18	54	8	137
	5	14	0.75	65	14	240
JDS	10	120	0.27	63	Э	130
	11	14	1.31	148	17	184
	12	16	0.27	82	19	280
	13	16	2.70	68	13	96
	14	20	1.69	183	22	152
	15	12	0.64	176	11	122
	16	176	0.96	92	14	240
	17	44	1.34	88	16	141
	18	114	1.28	190	11	710
JMS	1	250	0.38	107	9	153
	2	90	0.45	89	7	131
	3	18	0.22	101	7	130
	<del>.</del> ф	14	0.12	91	6	137
	5	202	0.31	51	4	117
		alors for alors	and the band all	1447 A.	•	

## **APPENDIX F**

## **Rock Geochemistry Results**

(samples denoted by \* are not applicable to this report)

<u>Samplers</u>

JDR = David Mehner JMR = Marty Bobyn JAR = Adam Travis

Keewatin Engineering Inc.

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Job**‡:** 89-277

ROCK	Sample Number	Au ppb	Ag ppm	Cu ppm	РЪ	Zn ppm	Hg ppb
DAR DAR JAR JDR	2*	94 464 736 - 122 430	16.5 32.0 3.70 0.93 42.0	23000 7600 1330 400 4800	39 75 3 6 1150	260 59 99 127 76000	100 225 6070
	2 3* 4* 5* 6*	18 20 776 34400 826	0.17 0.58 1.78 250.0 2.20	115 410 5200 1060 1530	4 4 680 22	97 58 43 23000 1300	40
JMR	7* 8 9 1* 2*	420 464 1626 8 12	0.72 0.59 1.68 0.04 0.24	3100 660 8600 39 ,27	2 1 N 3 9	56 250 47 58 164	
L 20 E L 24 E	8 8 10 8 8 N 6 N 4 N	50 56 192 26	0.20 0.22 3.00 0.14 0.40	350 310 860 51 147	1 25 3 8	37 20 260 74 124	75 105 315 240 115
	2 N 2 S 4 S 6 S 8 S	94 16 414 1114 40	0.42 0.25 0.68 1.65 0.17	290 240 2200 380 230	5 2 1 250 2	90 25 42 350 42	90 25 75 215 45
L 26 E	10 S 10 N 8 N 6 N 4 N	110 28 28 58	0.31 0.93 0.38 0.23 0.34	770 156 196 71 169	1 6 4 5	49 40 82 114 94	80
	2 N 2 S 4 S 6 S 8 S	76 52 76 102 38	0.45 0.29 0.53 0.20 0.16	199 340 370 720 290	7 1 4 1 1	134 61 52 46 58	
L 28 E	10 S 14 N 12 N 10 N 8 N	176 6 16 12 10	1.76 0.20 0.19 0.20 0.10	1380 193 78 71 68	11 3 5 6	18 107 83 115 108	20 90 115 50

		mple nber	Au ppb	Ag	Cu	Pb	Zn	Hg ppb
ROCK	14626	11 <b></b> 1	hi hi ni	ppm	ppm	ppm	ppm	₩₩.
L 28 E	6	N	14	0.19	120	4	98	95
	냐	N	14	0.21	92	5	116	110
	2	N.	38	0.45	250	6	108	80
	2	S	94	0.4Ŏ	850	2	65	80
	4	9	186	0.69	1750	1	43	30
	6	8	190	0.41	2900	4	45	65
	8	S	16	0.09	250	1	36	25

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	Sample	Au	Ag	Cu	Pb	Zm
	Number	ppb	ppm	ppm	ppm	ppm
Rock						
JDR	10	16	2.30	39	1 O	141
	11	2660	1.62	. Э	12	각각
	12	216	0.31	2300	1	38
	13	46	0.14	550	1	36
	14	182	0.78	2000	1	25
	15	12	0.58	95	22	980
	16	162	0.39	1080	1	18
	17	42	0.34	450	2	35
	18	24	0.48	95	7	124

Project: "GJ"

	Sample Number	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Hg ppb
JDR	19 20 21 22 23	4 4 250 712	0.37 0.05 0.06 0.34 1.08	17 23 89 1720 2000	5 1 1 2	91 17 66 24 36	
	24 25 26 27 28	910 836 320 620 272	1.47 1.44 0.42 1.01 0.33	3300 3000 1500 2600 1670	1 2 1 1	19 22 25 33 41	45 25 110 115 110
L 20 E	29 30 31 4 N 2 S	514 280 446 66 42	1.31 0.55 0.56 0.38 0.18	3500 1980 2700 139 320	1 1 9 1	36 34 81 35	115 80 105 45 60
L 36 E	4 6 16 N 14 12	84 56 14 6 2	0.22 0.30 0.12 0.14 0.14	570 420 50 53 36	N (3) N 4 4	45 139 102 109 99	15 45 55 70 70
·	10 8 6 4 2	6 12 4 6 30	0.19 0.09 0.16 0.17 0.27	47 26 45 64 151	N N O N N	100 71 112 105 86	100 5 85 105 75
	2 S 4 6 8 10	50 72 32 62 36	0.14 0.22 2.40 0.24 0.62	144 390 860 510 280	1 1 1 3	67 78 77 36 290	50 < 5 80 40 75
L 40 E	12 14 16 18 16 N	8 134 12 16 4	0.07 1.21 0.47 0.44 0.17	40 87 85 30 52	2 18 3 1 4	19 400 52 31 111	10 100 50 40 100
	14 12 10 8 6	4 2 4 2 6	0.18 0.15 0.16 0.14 0.16	48 51 46 34 37	6 4 2 4 5	111 103 91 116 106	100 85 80 95 65

.

Project: "GJ"

	Sample Number	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Hg ppb
L 40 E	4 N 2 S 4 6	4 4 30 66	0.28 0.29 0.29 0.21 0.33	31 118 101 127 540	1 2 3 2 1	50 111 82 42 43	50 65 55 90 35
	8 10 12 14 16	548 20 6 4 4	1.55 0.15 0.35 0.46 0.04	510 300 109 41 15	1 2 8 1	42 68 36 63 34	85 30 35 75 20
L 44 E	16 N 14 12 10 8	6 4 10 2	0.16 0.22 0.25 0.19 0.14	49 67 51 59 65	9 . 9 8 8 9 8	105 260 119 109 109	70 55 55 55 80
	6 4 2 BL 2 S	4 4 4 10 14	0.17 0.15 0.11 0.12 0.17	56 47 42 82 88	0 4 U 0 0 V	115 111 104 82 103	75 80 35 40 70
L 48 E	4 6 8 10 16 N	12 4 36 8 2	0.27 0.16 0.35 0.12 0.17	81 41 270 92 106	4 4 5 1 2	107 99 87 56 79	65 80 60 55 40
	14 12 10 8 6	2 10 4 2 8	0.10 0.45 0.24 0.25 1.03	56 91 55 51 87	3 9 7 1 22	146 53 83 83 360	35 50 35 60 100
	4 2 BL 2 S 4	4 8 9 4 9	0.10 0.12 0.14 0.25 0.10	36 58 55 48 26	₩4 00 0	100 92 102 99 61	50 50 65 60 65
L 52 E	6 8 10 16 N 14	4 8 40 6 4	0.07 0.45 0.25 0.55 0.45	48 390 580 89 85	2 1 2 11 9	77 118 69 470 186	90 90 35 50 45

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Project: "GJ"

	Sample	Au	Ag	Cu	Pb	Zn	Hg
	Number	ppb	ppm	ppm	ppm	ppm	ppb
L 52 E	12 N 10 8 6 4	10 4 8 10	0.50 0.19 0.22 0.45 0.38	141 43 60 60 69	10 4 6 3 13	163 68 310 56 67	50 30 85 45 50
	2	6	0.18	36	10	49	40
	BL	8	0.19	52	5	95	85
	2 S	4	0.21	47	4	88	65
	4	4	0.18	41	6	100	70
	6	4	0.21	51	4	96	70
н н	8 10 12 14 16	16 26 4 6 4	0.36 0.06 0.10 0.13 0.19	182 200 29 35 22	4 - 2 2 2 2 2	81 116 129 240 29	70 155 20 35 30
L 54 E	16 N 14 12 10 6	4 10 2 6	0.15 0.26 0.07 0.09 0.11	133 101 12 25 12	2 6 5 7 1	53 132 133 110 94	20 45 40 35 20
	4 2 BL 2 4	24 22 24 22 24 24 24 24 24 24 24 24 24 2	0.45 0.16 0.34 0.18 0.13	59 42 67 \ 42 41	654 44 2	51 87 102 89 73	25 45 40 55 40
	6	8	0.19	107	3	78	50
	8 <b>N</b>	6	0.49	85	32	360	70
	8 <b>S</b>	10	0.42	148	7	63	50
	10	2	0.10	177	9	52	15
	12	2	0.20	43	5	90	55
L 56 E	8 S	8	0.04	103	1	48	25
	10	40	0.38	320	2	86	25
	12	16	0.09	35	3	72	30
	14	4	0.13	38	6	97	5
	8 S	6	0.06	36	2	35	10
	10	고	0.04	10	1	73	10
	12	4	0.09	58	1	60	< 5
	14	4	0.12	31	4	137	15

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Job#: 89-306

	Sample Number	Au dqq	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Hg ppb
JAR	5 6 8 9 10	10 6 82 16 6	0.12 0.3 7.70 0.55 0.09	130 3900 45000 4900 1570	1 8 1 1	64 10 670 9 8	
JDR	11 12 32 33 34	4 42 10 24 592	0.03 0.51 0.16 0.15 0.68	46 340 61 330 119	2 1 1 2	76 48 31 83 68	
	35 36 37 38 39	6 908 1434 522 358	0.04 1.05 2.30 0.44 0.27	2800 5700 2200 1640 1740	न में पूर्व कर्म पूर्व कर्म	56 41 45 46 42	65 95 15 15 75
	40 41 42 43 · 44	214 122 356 346 256	0.39 0.20 0.72 0.51 0.47	500 1660 1510 1570 1430	1 0 5 1	28 65 83 86 34	10 125 75 85 100
	45 46 47 48 49	232 1090 1510 476 78	0.46 1.44 1.80 1.35 2.50	1390 4500 7100 1940 760		56 43 38 36 82	25 25 45 70
	50 51 52 53 54	140 312 400 222 526	0.30 0.69 1.98 1.27 0.79		1 2 3 3 2	56 53 54 85 39	10 75 85 35 65
. JMR	55 <b>A</b> 3 4 5 6	214 4 42 6 4	0.66 0.33 0.74 0.27 0.06	79 100	5 3 7 12 1	43 37 22 80 11	45
L 38 E	7 16 N 14 12 10	2 24 22 24 24	0.19 0.20		N ២ ២ ១ ១ ២ ១ ១ ១	80 96 104 87 90	

Project: "GJ" Property

	Sample	Au	Ag	Cu	Рb	Zn
	Number	ppb	ppm	ppm	ppm	ppm
L 38 f	E 8 N	32	0.25	53	З	106
	6	1 4	0.34	51	2	84
	· 4	18	0.21	55	4	101
	2	16	0.15	73	З	100
	14 S	40	0.41	143	4	25
-	16	26	0.26	60	2	<u></u>

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	Sample Number	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Hg ppb
Rock 89-JAR	7 13 14	4 2 4	0.88 0.40 1.45	3400 230 26	3 24 92	8 36 1110	
JDR	55 <b>B</b> 59	796 654	3.10 1.31	5800 4200	4 1	26 19	15 80
	60 63 64 65 66	168 196 80 250 276	0.66 16.4 2.50 0.68 0.64	2300 4300 1530 1930 2500	2 26 3 1 3	21 350 79 44 16	40 115 80 80 60
	67 69 70 72 73	334 1254 150 6 26	3.10 2.50 0.50 2.50 1.00	3800 9500 2200 6200 18	18 2 1 8	96 37 32 6 16	275 15 10
	74 <b>FALCONBRIDGE</b> 75 " 76 " 77 " 78	962 576 376 514 54	1.61 1.92 0.90 1.13 0.32	11200 9500 7800 7200 840	4 7 7 2	61 51 73 88 22	210 1300
JMR	79 80 8 9 10	982 58 20 254 36	1.25 0.19 0.21 0.30 0.32	152 53 173 115 230	1 33 4 2	10 48 48 36 50	
L 8 W	11 12 13 14 N 12	14 1568 1674 4 8	1.28 3.90 2.50 0.26 0.20	940 1360 1070 94 59	7 44 15 11 5	176 143 72 530 111	180 110
	10 8 6 4 2	6 54 66 1024 2	0.12 0.22 0.22 1.18 0.50	24 32 42 67 134	3 2 5 13 2	43 52 60 280 101	115 135 95 245 60
	BL 2 S 4 6 8	2 2 6 28 10	0.17 0.16 0.42 0.25 0.16	50 43 134 42 53	4 6 8 6 7	113 123 510 124 104	110 115 190 110 115

	Sample Number	Au ppb	Ag ppm	Cu ppm	Pb Mqq	Zn ppm	Hg ppb
L 8 W L 4 W	10 S 22 S 24 26 28	68 44 6 8 4	0.13 0.15 0.08 0.08 0.08	34 62 92 89 65	3 11 2 5 5	82 113 105 67 79	40 115 280 415 15
	30 32 34 36 38	6 8 542 8 8	0.09 0.17 1.08 0.09 0.13	94 60 40 21 40	4 3 16 2 5	75 70 47 46 71	10 70 270 120 115
L 18 E L 22 E	40 2 N 6 N 4 2	42 70 84 40 22	0.11 1.65 0.11 0.59 0.34	26 330 103 260 220	3 10 2 10 3	57 94 26 109 39	145
	2 5 4 6 · 8 10	50 70 32 70 72	0.20 0.21 0.19 0.32 1.28	550 750 350 420 930	1 2 1 2 13	47 38 63 53 121	
L 30 E	8 <b>8</b> 2 5 4 6 16 N	96 28 62 14 12	0.41 0.27 0.48 0.11 0.20	2500 260 710 370 55	1 2 4 2 6	28 38 71 23 129	
	14 12 10 8 6	64 88 6	0.24 0.19 0.12 0.14 0.19	66 53 46 58 43	ម្លាស់ មួយ	106 104 93 104 118	
L 38 E	4 2 2 5 4 6	16 6 4 12 86	0.23 0.25 0.31 0.19 0.28	128 61 66 230 790	4 6 4 2 1	122 109 58 68 44	
L 46 E	8 10 12 16 N 14	18 14 18 2 4	0.13 0.21 0.37 0.26 1.16	230 300 70 109 88	1 7 3 24	39 67 44 116 450	

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	Sample Number	Au ppb	Ag ppm	Cu ppm	Pb mqq	Zn ppm
L 46 E	12 N	8	0.15	46	6	114
1 "T L	10	2	0.16	33	6	146
L 46 E	10 8 N	6	0.18	51	7	121
·. L 40 L	6	62	0.23	90	5	99
	4	8	0.21	71	8	126
	2	18	o.20	51	8	89
	BL		0.15	72	10	87
	2 6	4	0.15	41	6	97
•		с. 1.	0.22	49	 	108
	6	10	0.28	196		71
	S	10	O.15	98	1	86
L 50 E	16 N	1.0	0.19	123	2	79
	14	6	0.83	115	7	380
	12	14	0.25	34	1	154
	10	12	0.17	28	2	330
- • • •		6	0.39	113	1	83
	6	6	0.18	41	2	75
	4	8	0.63	50	3	76
	2	6	O.O.Đ	22	1	58
	BL	κ.ļ.	0.22	85		122
	28	8	0.21	53	З	103
	ćļ.		0.15	39	3	일4
	e,	10	0.15	37	4	97
	8	12	1.08	460	1	113
	10	6	0.06	43	1	35
L 54 E	14 8	12	0.07	41	1	56

	Sample Number	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Hg ppb
JWR	1 2 3 4 5	6 6 14 16 8	0.21 0.18 0.16 0.21 0.21	73 66 69 44 60	5 9 13 15 13	76 92 97 109 93	
	6 7 8 9 10	8 10 8 8	0.22 0.23 0.33 0.29 0.25	50 49 60 42 77	9 13 13 11 9	46 78 78 81 111	
	11 12 13 14 15	4 6 2 4	0.15 0.17 0.16 0.43 0.21	70 69 40 62 45	9 6 4 8	82 123 56 101 90	
	16 17 18 19 20	4 2 10 4 2	0.17 0.17 6.40 0.41 0.20	36 39 121 106 88	50695 1195	69 127 300 121 101	60 280 95 65
	21 22 23 24 25	6 6 4 8 26	0.31 0.39 0.23 0.21 0.28	72 50 70 59 51	5 6 5 16	71 75 86 81 100	90 105 75 80
	26 27 28 29 30	6 8 4 2 6	0.50 0.54 0.18 0.10 0.05	74 53 44 95 111	4 6 7 1 3	240 108 74 83 87	
	31 32 33 34 35	36 54 8 4 4	0.14 0.21 0.09 0.09 0.13	86 60 95 70 103	1 N 4 15 0	82 46 86 86 77	
•	36 37 38 39 40	8 4 12 4 2	0.38 0.39 0.63 0.13 0.13	91 68 33 25 65	17 7 6 5 6	102 108 118 66 120	

. <sup>1</sup>. .•

	Sample Number	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Hg ppb
JWR	41 42 43 44 45	6 3 4 8	0.09 0.21 0.15 0.30 0.23	12 45 55 49 39	1 11 5 6 4	78 113 106 94 110	85 100 75
* 	46 47 48 49 12 S	6 10 2 4 2	0.25 0.38 0.15 0.69 0.08	51 64 41 69 76	6 3 30 4	102 119 102 500 172	70
	14 16 18 20 22	4 2 4 0 2	0.14 0.45 0.18 0.10 0.12	41 26 80 117 90	4 8 6 2 13	106 93 79 86 84	75 45 75 200 255
	24 26 28 30 32	4 4 6 10 6	0.09 0.07 0.07 0.14 0.10	97 99 66 111 125	10 3 5 5	115 94 62 87 99	455 380 125 270 105
. L 6 W	34 36 38 40 14 N	4 4 2 4 164	0.03 0.10 0.16 0.09 1.70	58 70 65 152 2500	6 2 4 1 3	98 93 80 108 84	255 245 115 85
	12 10 8 6 4	92 10 6 38 4	1.92 0.14 0.45 0.60 0.12	2100 70 58 72 26	7 4 28 16 10	93 56 28 187 112	
	2 BL 2 S 4 6	4 · 8	0.39 0.20 0.24 0.18 0.23	· 71 42		71 106 102 109 102	
·	8 10 12 14 16	6 6	0.18 0.17 0.09 0.18 0.09	48 48 50 49 59	0000	96 81 69 75 70	

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	Sample Number	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm
LGW	18 S 20 22 24 26	4 14 6 10 4	0.06 0.13 0.08 0.12 0.10	27 80 57 78 55	2 3 10 3 1	56 97 114 55 79
	28 30 32 34 36	4 6 4 8 2	0.09 0.11 0.12 0.06 0.09	82 98 79 71 102	2 2 6 1 2	109 87 72 107 66
L 2 W	38 40 22 S 24 26	6 8 10 4 12	0.08 0.10 0.14 0.43 0.06	21 27 145 73 55	N 10 10 N 10 N	77 75 86 65 163
. •	28 30 32 34 36	4 6 2 6	0.08 0.05 0.07 0.07 0.55	73 16 25 58 42	4 1 2 6	70 54 66 60 46
L 42 E	38 16 N 14 12 10	8 6 4 8	0.12 0.21 0.75 0.17 0.25	39 52 49 55 63	4 5 15 3 4	81 105 114 78 102
	8 6 4 2 BL	6 16 6 16	0.26 0.21 0.36 0.23 0.22	74 58 91 61 65	4 5 4 1 4	109 108 90 65 93
	2 S 4 6 8 10	6 8 102 60 14	0.20 0.41 0.48 0.36 0.49	18 46 290 450 178	<b>비</b> 학 대 대 (*)	33 82 77 60 76
AA R AMR	12 14 &7 31 32 33	10 68 370 178 530	0.49 0.95 0.07 1.74 //.8 /5.8	110 58 19 500 1220 2500	2 7 16 25 4200	270 158 24 142 149 12,800

## ECO-TECH LABORATORIES LTD.

ASSAYING - ENVIRONMENTAL TESTING 10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

AUGUST 30, 1989

# CERTIFICATE OF ANALYSIS ETK 89-640

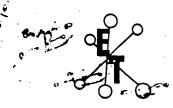
KEEWATIN ENGINEERING INC. 800, 900 WEST HASTINGS STREET VANCOUVER, B.C. V6C 165

ATTENTION: R.F. NICHOLS

								01: .004	GJ-FELSK RECCE				Ú1
ET#		(ies	зс. Ст	t F∙t	ior	Ĩ				Au (ppb)	Au (g/t)	) (	Au oz∕t)
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540 -	7		30	E	14 16		00 00	N		5			
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640 -		BL					-00 -00			70			
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640 - 640 -	29 30	BL BL			- 22	+	00			30			

Did Hiward, Certified Assayer

Page 1



## ECO-TECH LABORATORIES LTD.

ASSAYING • ENVIRONMENTAL TESTING 10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

KEEWATIN ENGINEERING INC.

AUGUST 30, 1989

ET#		Desc	ription	Au ( ppb )
640 -	31	BL.	24 + 00 E	95
640 -	32	BL	25 + 00 E	15
640 -	33	BL	26 + 00 E	80
640 -	34	BL	27 + 00 E	50
640 -	35	BL	28 + 00 E	255
640 -	36	BL.	29 + 00 E	420
640 -	37	BL.	30 + 00 E	80 .
640 -	38	BL.	31 + 00 E	90
640 -	39	BL.	32 + 00 E	40
640 -	40	BL	33 + 00 E	4.5
640 -	41	BL	34 + 00 E	90
640 -	42	BL	35 + 00 E	10
640 -	43	BL	36 + 00 E	20
640 -	44	8L.	37 + 00 E	20
640 -	45	BL	38 + 00 E	5
640 -	46	80	39 + 00 E	15
640 -	47	BL.	40 + 00 E	15

NOTE: <

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k = less than
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ECO-TECH LABORATORIES LTD. DOUG HOWARD B.C. Certified Assayer

FAX: VANCOUVER SC89/CRAZE5 Eco-Tech Laboratories Ltd. 10041 E. Trans Canada Huy. Kanloops, B.C. V2C 2J3 September 13, 1989

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KEEWATIN ENGINEERING INC. 800, 900 West Hastings St. Vancouver, B.C. VGC 125 ATTN: B.F. Nichols CENTIFICATE OF ANALYSIIS ETK 89-640A 47 Wacker Drill Samples, received August 22/89 Project: GJ-FELSK RECCE Grid Location: GJ CLAIM Shipment No.: LOI All values in PPM unless otherwise reported

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*******	***********		*******	********	*****		*******						*******			*******				******	*****	*******		=======			2922222	******	** =====	:=======	******
ETK	DESCRIPTION	Ag	AIZ	As	B	Ba	Bì	CaZ	Cđ	Co	Cr	Cu	Feľ	, KZ	La	NgZ	n	No	NaZ	Ni	P	РЬ	Sb	Sa	Sr	TiZ	۵	۷	W	Y	Zn
	************			********		*******		*******			******	*******	30223238	*******		******				******		*******	******			******	*====		*******	.2233397	1222222
640.1	L30E 2+00N	۲.2	2.91	< 5	12	166	11	0.62	< 1	32	120	80	3.25	0.12	21	1.28	1069	< 1	0.02	98	962	(2	95	< 20	32	0.08	< 10	88	12	10	100
640.2	L30E 4+00W	۲.۷	2.85	< 5	9	152	11	1.27	< 1	24	103	64	4.16	0.13	15	1.44	492	<1	0.01	111	674	< 2	75	< 20	47	0.02	< 10	70	< 10	6	93
640.3	L3NE 6+001	۲.۷	3.21	< 5	- 11	135	17	1.57	< 1	25	96	138	4.59	0.15	16	1.52	646	< 1	0.01	107	725	< 2	87	< 20	- 44	0.03	{ 10	86	30	7	97
640.4	L 30E 8+001	۲.۷	3.15	< 5	13	127	52	0.68	< 1	33	94	54	5.07	0.11	20	1.28	395	1	0.02	113	924	< 2	87	< 20	41	0.12	< 10	85	36	12	101
640.5	L30E 10+000	۲.۷	2.59	< 5	12	125	33	0.50	(1	22	113	47	3.98	0.10	16	1.10	346	<1	0.01	86	914	< 2	57	< 20	29	0.07	( 10	72	< 10	9	96
640.6	L30E 12+000	۲.۷	3.07	< 5	12	215	19	1.25	< 1	28	87	58	4.79	0.15	18	1.51	934	< E	0.01	96	856	< 2	93	< 20	54	0.06	< 10	81	< 10	9	104
640.7	L30E 14+000	<.2	2.75	< 5	11	213	12	0.51	<1	22	107	67	4.52	0.12	19	1.11	746	2	0.03	59	1004	< 2	54	< 20	28	0.05	( 10	84	< 10	9	87
640.B	L30E 16+00N	(.2	2.91	< 5	12	415	8	0.57	<b>(</b> 1	26	134	63	3.91	0.11	20	1.32	766	<1	0.05	68	905	< 2	69	< 20	41	0.10	< 10	88	< 10	11	87
640.9	L32E 2+00W	۲.۷	2.90	{ 5	11	190	13	0.68	< 1	28	96	129	4.45	0.13	19	1.25	769	<1	0.01	11	933	< 2	86	< 20	32	0.07	( 10	87	< 10	11	107
640,10	L32E 4+00M	۲.2	2.70	< 5	12	139	19	2.18	< 1	23	77	81	4.42	0.13	21	1.42	732	<1	0.02	85	637	< 2	<b>98</b>	< 20	65	0.08	(10	68	( 10	13	97
649.11	1.32E 6+00W	(.2	2.98	< 5	11	149	26	1.82	< 1	25	129	61	4.30	0.13	15	1.58	561	< 1	0.02	110	779	< 2	82	< 20	64	0.03	< 10	76	(10	6	83
640.12	L32E 8+00W	(.2	3.13	(5	12	189	< 5	0.43	<1	23	109	67	4.28	0.12	20	0.97	524	<1	0.01	69	746	< 2	51	(20	21	0.07	( 10	76	< 10	11	97
640.13	L32E 10+000	۲.2	2.65	< 5	12	148	20	0.47	Ć	25	106	70	5.05	0.12	16	1.11	681	< 1	0.01	91	751	< 2	50	< 20	26	0.04	< 10	72	(10	8	91
640.14	L32E 12+00W	(.2	2.55	(5	12	327	36	0.60	(1	31	149	60	5.07	0.10	22	1.19	739	<1	0.02	87	1247	< 2	78	< 20	63	0.24	< 10	80	< 10	19	101
649.15	L32E 14+00N	۲.2	2.79	(5	13	1079	27	0.84	<1	33	98	55	4.59	0.10	19	1.70	1040	< 1	0.03	104	829	< 2	81	< 20	233	0.12	( 10	72	< 10	12	92
640.16	L32E 16+00W	۲.2	2.82	(5	11	219	15	0.90	(1	26	89	86	5.33	0.09	20	1.23	852	< 1	0.02	46	1257	< 2	62	41	37	0.12	< 10	107	22	13	78
649.17	132E 2+005	0.2	1.81	< 5	9	213	(5	0.96	<1	27	96	327	4.98	0.12	21	0.78	1105	1	0.01	76	1278	< 2	43	< 20	20	<.01	< 10	89	< 10	8	43
640.18	L37E 4+005	1.2	<b>£.8</b> 7	< 5	8	108	< 5	0.14	6	24	106	787	4.84	0.07	22	0.97	1338	28	(.01	<b>9</b> 9	411	< 2	79	< 20	2	<.0I	< 10	127	< 10	13	248
640.19	L32E 6+005	1.2	2.17	< 5	11	121	< 5	3.06	<1	18	48	4639	3.67	0.18	18	2.07	860	(1	<.01	8	1485	< 2	81	< 20	52	0.02	<b>{ 10</b>	133	< 10	8	42
649.20	L32E 8+005	۲.2	1.18	< 5	10	79	(5	2.10	(1	14	45	606	4.55	0.17	15	0.85	531	<1	0.01	5	1339	< 2	65	< 20	19	(.01	< 10	89	< 10	5	21

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KEEWATIN ENGINEERING INC.		
ETK 89-640A		
Page 2	*	
September 13, 1989		

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ETK	DESC	RIPTION	Åg	AIX	As	8	Ba	Bi	Cal	Cđ	Co	Cr	Ca	FeI	KI.	la	HgZ	ňn	łło	NaZ	Ni	P	Pb	Sb	Sa	5 <b>r</b>	Tiz	U	V		· ¥	1
*******	******				2222222			ZEZES:		******	*******									******	*******	========			******	=====	******	======			===\$\$\$	:==
640.21	L 34E	2+005	۲.2	2.53	< 5	5	359	< 5	6.01	<1	24	63	183	7.50	0.10	20	1.67	1390	3	0.02	35	896	< 2	98	(20	62	0.07	< 10	103	< 10	9	
640.22	L34E	4+005	2.3	2.14	< 5	7	62	< 5	3.74	<1 ·	35	39	836	5.89	0.15	25	1.86	1321	3	<b>(.01</b> )	16	1213	< 2	105	24	- 44	< <b>.01</b>	< 10	141	< 10	3	
640.23	L34E	6+0 <b>0</b> S	۲.2	3.70	< 5	16	356	< 5	1.07	1	31	62	538	4.53	0.19	21	1.91	1052	3	0.06	17	1594	< 2	109	< 20	69	0.04	< 10	229	< 10	7	
640.24	1.34E	8+005	۲.2	2.14	< 5	11	75	< 5	2.19	< 1	20	83	344	6.59	0.10	17	1.63	979	<1	0.01	18	915	< 2	86	22	21	<.01	( 10	108	< 19	5	
640.25	BL	18+00E	8.4	0.35	4166	10	307	< 5	0.21	27	34	211	1821	5.61	0.06	21	0.09	5238	12	<.01	23	368	814	116	< 20	11	<.01	< 10	18	< 10	16	
640.26	BL	1 <del>9+00E</del>	۲.2	0.79	94	7	174	9	6.67	3	30	112	219	5.79	0.20	29	0.19	1260	< 1	(.01	55	2507	< 2	78	< 20	62	<.01	< 10	130	< 10	8	
640.27	BL.	20+00E	0.3	2.31	< 5	7	323	(5	0.52	1	25	106	231	4.88	0.15	18	0.84	986	5	(.01	66	920	< 2	62	<b>(20</b>	19	<.01	< 10	94	< 10	8	
640.28	81.	21+00E	۲.2	1.84	55	7	319	18	0.70	1	28	104	180	5.38	0.1B	29	1.28	898	< 1	0.02	61	1066	71	78	30	27	0.02	< 10	101	- 14	13	
640.29	ØL	22+00E	۲.۷	2.33	111	6	590	< 5	0.89	3	29	124	230	5.78	0.21	33	1.66	1033	< 1	<.01	94	1360	87	90	(20	63	0.03	{ 10	129	< 10	10	
640.30	BL.	23+00E	۲.2	1.58	62	6	222	1	0.48	1	17	93	133	4.17	0.11	26	1.07	789	1	0.01	46	1333	60	88	< 20	15	<.01	< 10	67	< 10	7	
540.3I	BL.	24+00E	(.2	1.69	117	4	222	(5	0.92	< 1	19	52	316	4.91	0.19	26	0.92	659	(1	<.01	25	1484	63	51	< 20	30	0.01	< 10	103	< 10	6	
540.32	BL	25+00E	0.2	0.76	41	9	427	< 5	0.13	3	12	264	190	2.49	0.09	19	0.46	419	7	(.01	28	396	38	51	(20	5	(.01	( 10	33	17	4	
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IEENATIN ENGINEERING INC. ETK 89-640Å Page 3 September 13, 1989

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FAI: Vancouver

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### APPENDIX G

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GJ Rock Sample Summary Log

Sampleas JMR = Marty Bobyn JAR = Adam Travis JDR = David Mehner

Keewatin Engineering Inc.

## APPENDIX G

## GJ ROCK SAMPLE SUMMARY LOG

Rock No.	Туре	Description	Mineralization	Assay Cu/Au <u>ppm/ppb</u>
89-JMR- 01	float	k-feldspar altered diorite	1-2% pyrite; pyrite fractured coatings	39/8
-02	grab o/c	iron carbonate <u>+</u> quartz vein (with 8 cm)	1% pyrite	27/12
-03	grab o/c	diorite (dyke?)	pyrite fracture coatings	79/4
-04	float	quartz weined cherty breccia	2-3% pyrite	100/42
-05	float	carbonate <u>+</u> quartz breccia	1/2-1% pyrite; syn blebs	23/6
-06	grab o/c	limonated stained chert	< 1/2% pyrite	39/4
-07	grab o/c	limonited stained chert	trace pyrite	28/2
-08	grab o/c	epidote-k-feldspar-chlorite diorite	1-2% pyrite	173/20
-09	grab o/c	epidote-k-feldspar-chlorite diorite	1-2% pyrite	115/254
-10	grab o/c	epidote-k-feldspar-chlorite diorite	1-2% pyrite	230/36
-11	grab o/c	siliceous sediments; chert	trace pyrite; malachite; az	940/14
-12	grab o/c	chert	pyrite fracture coating; malachite	1360/1568
-13	grab o/c	diorite sill/dyke	pyrite quartz veins (2-4cm)	1070/1674
89-AMR-31	float	carbonate + quartz boulder	2-3% pyrite	500/370
-32	float	carbonate + quartz boulder	3-5% pyrite	1220/178
-33	grab o/c	quartz + carbonate and silt- stone	$\leq 2\%$ pyrite; trace chalcopyrite; trace ZnS	2500/530
-34	grab o/c	siliceous siltstone; felsic dyke	$\leq$ 3% pyrite; trace chalcopyrite	3000/570
89-DMR-20	float	gossanous mafic rock boulder	5-7% pyrite	25/4
-21	grab	calcite-silicate; felsite	2-3% pyrite	8/4
-22	float	carbonate + quartz breccia	pyrite veinlets < 6mm	9/4
89-JDR -01	grab	shear/vein cutting, cherty sediments	sphalerite, galena, pyrite, chalcopyrite	4808/430

Rock N	<u>lo.</u>	Type	Description	<u>Mineralization</u>	Assay Cu/Au <u>ppm/ppb</u>
	-02	grab	from 18E/200S; quartzite	< 1% disseminated pyrite	115/68
	-03	grab	monzodiorite; north of property; fractured ep-cl	Тт Сру-Ру	410/20
	-04	chips/3 m	as above; + Ksp and < 1% quartz vein; fractured 103/645	malachite-chalcopyrite $\leq 2\%$ ; 1% pyrite	5280/776
	-05	grab	shear/vein $\leq 10$ cm	Py, PbS, ZnS + sulphosalts	1060/34,400
	-06	grab	vein monzodiorite	calc-chlr + < 1% pyrite and 1% chalco- pyrite	1530/826
	-07	grab	fractured monzodiorite + good Kp-ep alt.	trace magnetite; < 1% pyrite-chalcopyrite	3100/420
	-08	grab	diorite; stockwork; cp-chl-Kp	<u>         &lt; 5</u> % magnetite; < 1% pyrite, trace chalco-         pyrite	660/464
	-09	grab	siltstone + quartzite	3-5% stringer + fractured chalcopyrite < 1% pyrite	8600/1626
	-10	grab	carbonaceous chert	< 1% disseminated pyrite	39/16
	-11	grab	pyrite veins in chert	pyrite veins	9/2660
	-12	grab	monzodiorite	$\leq$ 1% pyrite + chalcopyrite in quartz vein and on fractures	2300/216
	-13	grabs	siltstone; quartz vein	1-2% chalcopyrite; trace pyrite	550/46
	-14	grabs	hornblende-biotitic diorite	chlorite after mafics; looks fresh	
	-14	grabs	monzodiorite	<8% pyrite, magnetite; <2% chalcopyrite	2000/182
	-15	grabs	dolomite	trace pyrite; rare malachite	95/12
	-16	grab	monzodiorite	< 1% pyrite and chalcopyrite; trace malachite; strong oxides	1080/162
	-17	grab	quartzite	trace chalcopyrite + pyrite; strong limonite	450/42
	-18	grab	chert; well fractured	1-2% pyrite	95/24
	-19	grab	chert; laminated	••	17/4
	-20	grab	chert; crackel brx.	trace pyrite; good limonite	23/4
	-21	grab	monzodiorite	trace pyrite; weak limonite	89/6
89-JDR	-32	grab	cherts, bedded	trace fractured pyrite	61/10
	-33	grab	diorite; quartz vein, Kspar, epidote, chlorite after mafics	trace fractured pyrite + chalcopyrite; <1% magnetite	330/24
	-34	float	diorite boulders	trace disseminated pyrite; rare chalco- pyrite	119/592
89-JDR	-72	grabs	cherty siltstone	1% copy; $\leq$ 1% pyrite	6200/6

-73	grabs	diorite; quartz stockwork	5-8% pyrite	18/26
-74	grabs	monzodiorite? quartz stockwork	15% quartz vein; 10% pyrite + chalco-	11,200/962
-75	grabs	monzodiorite? quartz stockwork	pyrite 15% quartz vein; 10% pyrite + chalco- pyrite	<b>.</b> .
-76	float	monzodiorite? quartz stockwork	$\leq$ 3% chalcopyrite; trace malachite; $\leq$ 2% pyrite	7800/376
-77	float	as above	as above	7200/514
-78	grabs	chert; cherty siltstone	$\leq 1\%$ pyrite; trace chalcopyrite	840/54
-79	grabs	chert; cherty siltstone	< 1% fractured pyrite	152/982
-80	grabs	cherty siltstone and quartz + feldspar veins	$\leq 2\%$ pyrite and $< 1\%$ chalcopyrite	53/58
89-JAR -01	float	malachite stained limestone	chalcopyrite 5%	23,000/94
-03	grab	sil. sediment, ca	5% pyrite on fractures	1330/736
-04	grab	goss. intrusive	20% pyrite	400/122
-05	grab	feldspar porphyry diorite	stockwork quartz, pyrite	130/10
-06	float	cherty sediment	malachite stained, abundant pyrite, chalcopyrite	3900/6
-07				3400/4
-08	grab	cherty sediments	over 6", shear malachite, azurite, chalcopyrite	45,000/82
-09	rep. sample	cherty sediment (3m)	minor malachite, chalcopyrit (2 <sup>^</sup> )	4900/16
-10	grab	cherty sediment	chalcopyrite (< 1%)	
-11	grab	carbonate		46/4
89-AAR -27	grab	pyrite, carb. volc.	minor pyrite	19/6

## APPENDIX H

## **Statement of Qualifications**

Keewatin Engineering Inc.

## **CERTIFICATE OF QUALIFICATIONS**

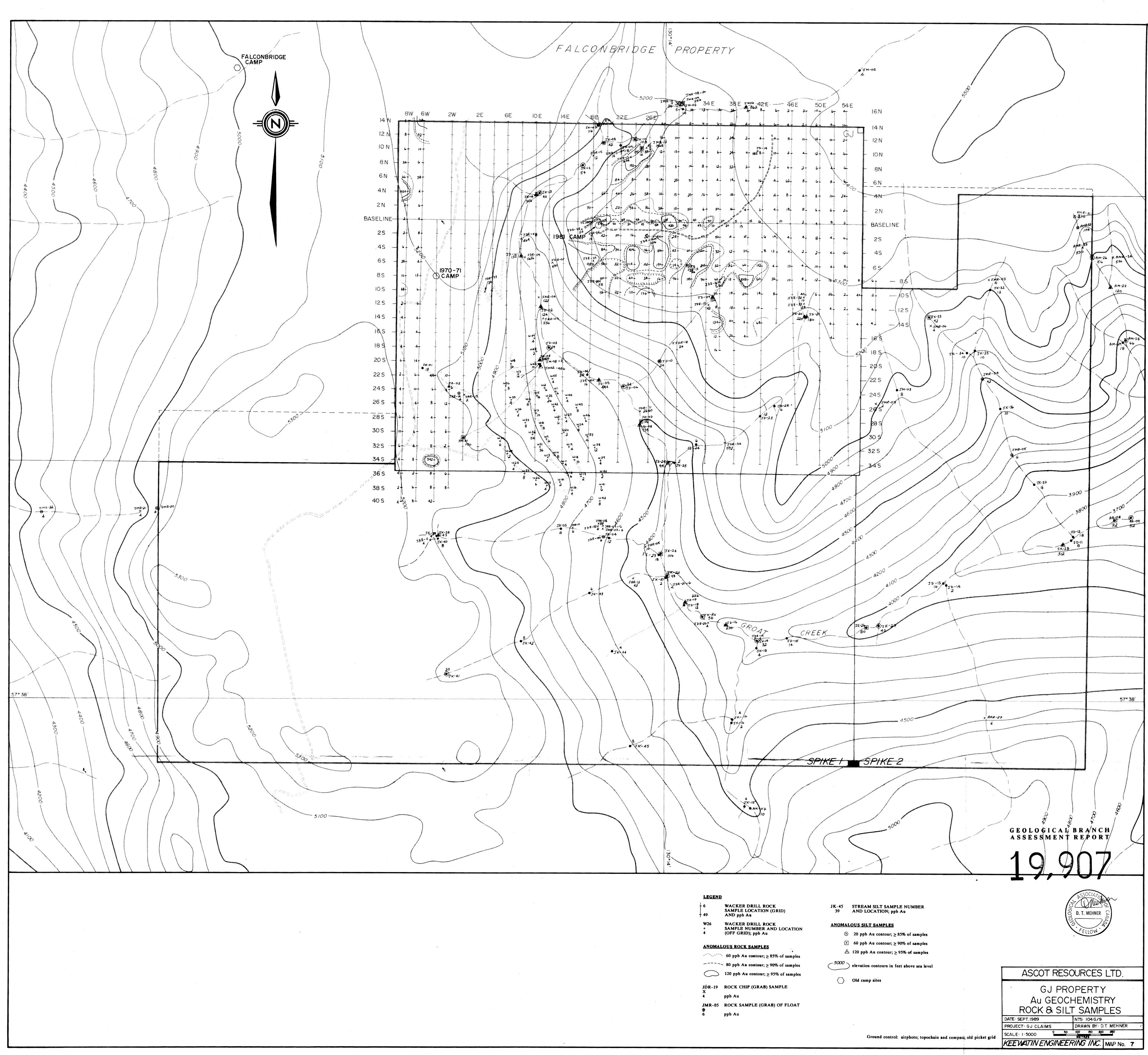
I, DAVID T. MEHNER, of #104, 2000 - 31st Street in the City of Vernon, in the Province of British Columbia, do hereby certify that:

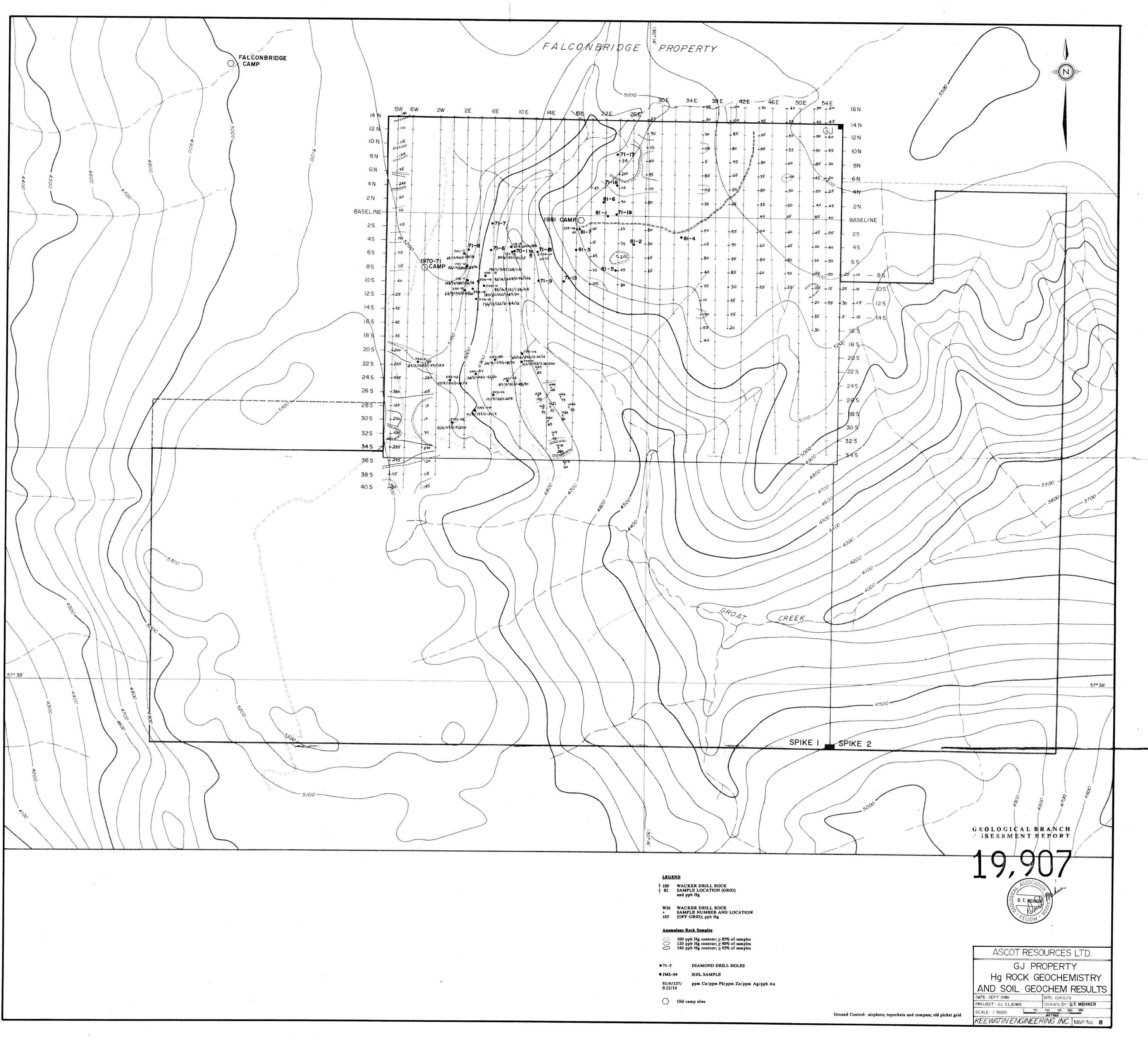
- 1. I am a Consulting Geologist with Keewatin Engineering Inc., with offices at 800 900 West Hastings Street, Vancouver, B.C. V6C 1E5.
- 2. I am a graduate of the University of Manitoba, B.Sc. Honours, 1976, M.Sc. Geology, 1982.
- 3. I have practised my profession continuously since 1979.
- 4. I am a Fellow of the Geological Association of Canada.
- 5. During the period of August October, 1989, I managed and carried out the exploration program on the Spike and GJ claims near Kinaskan Lake on behalf of Ascot Resources Ltd.
- 6. I do not own or expect to receive any interest (direct, indirect or contingent) in the properties described herein, nor in the securities of Ascot Resources Ltd. in respect of services rendered in the preparation of this report.

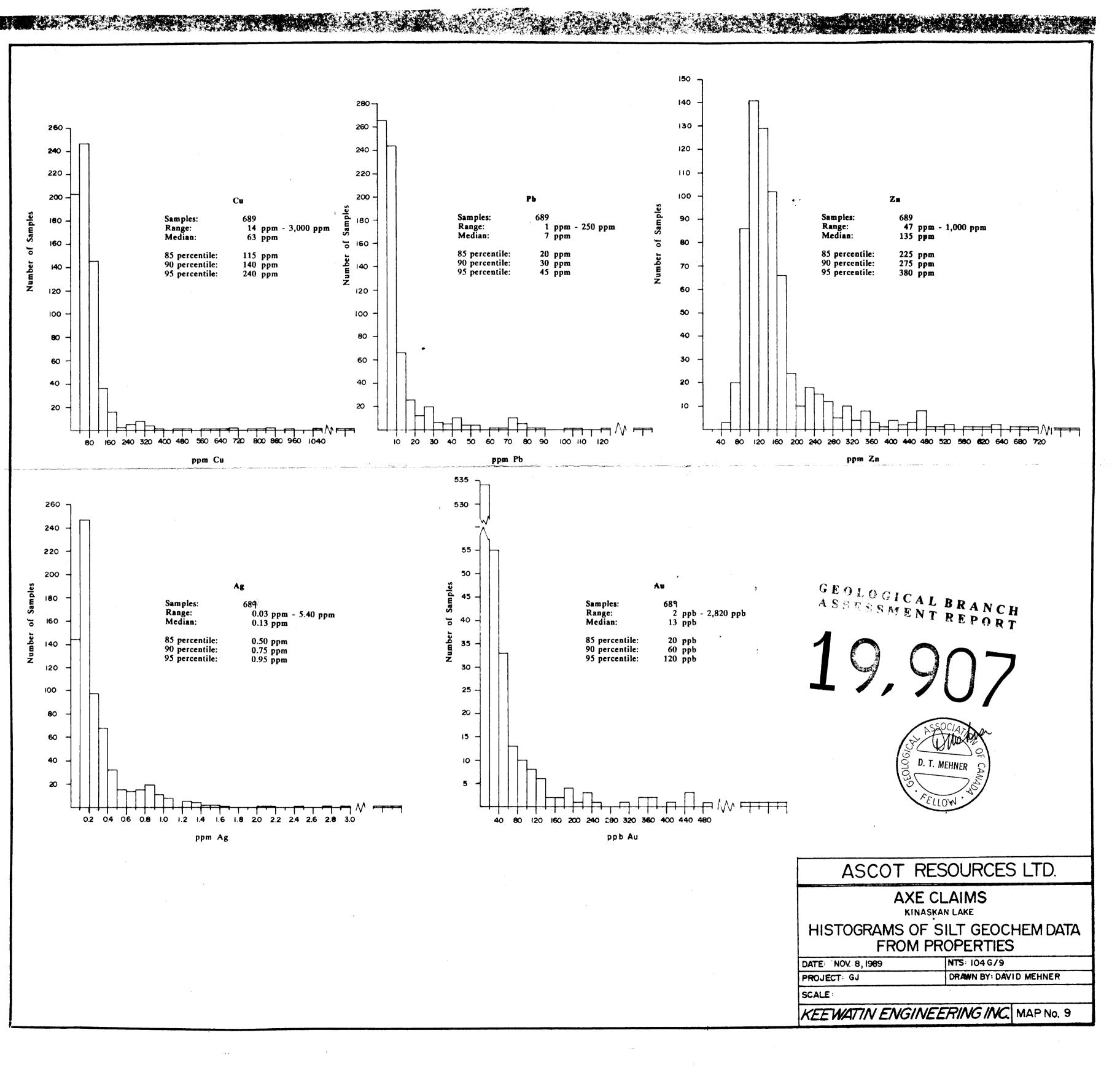
Dated at Vancouver, British Columbia, this <u>16th</u> day of <u>January</u>, A.D. 1990.

Respectfully submitted MEHNER David T. Mehner. M.Sc FELLO

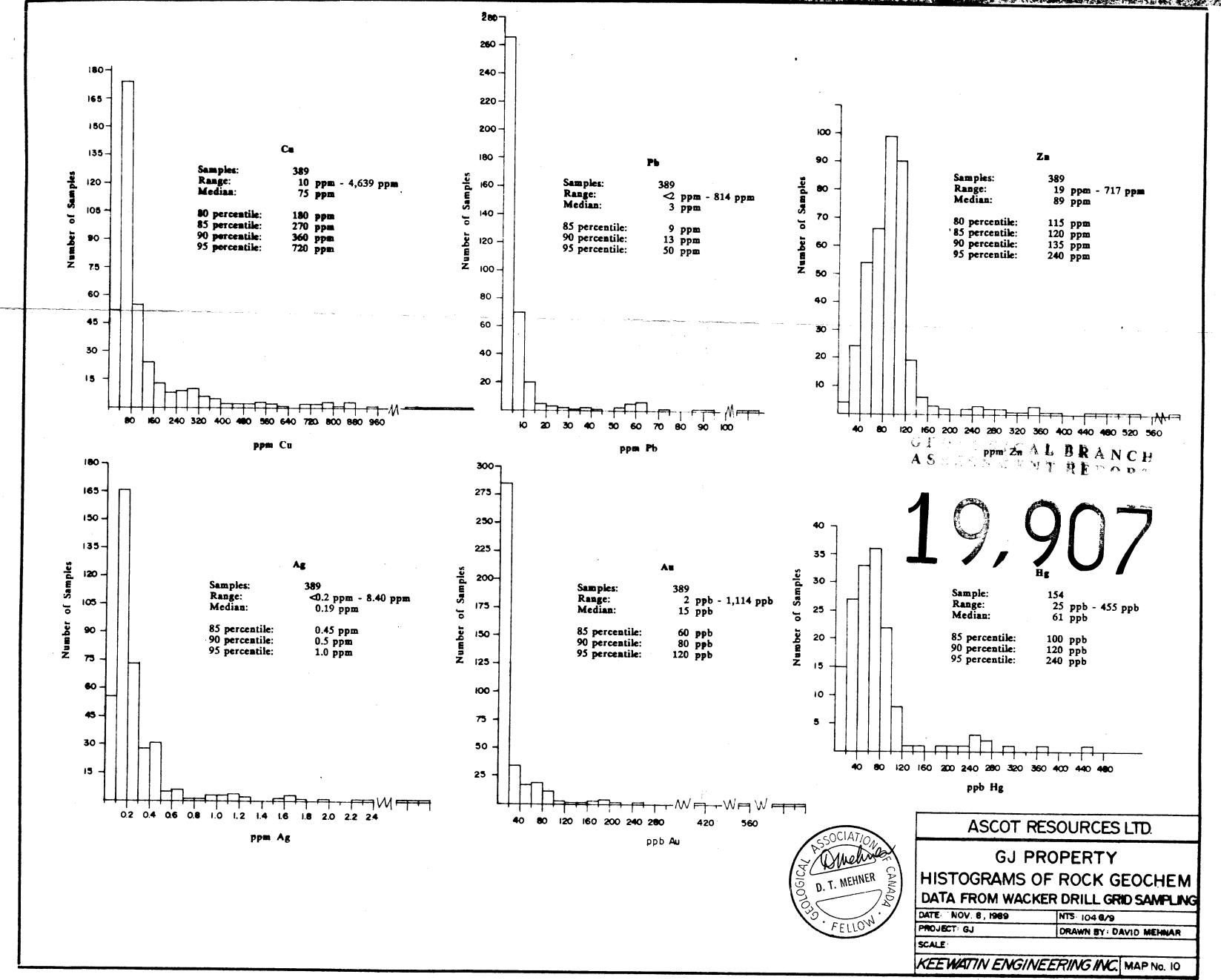
Keewatin Engineering Inc.



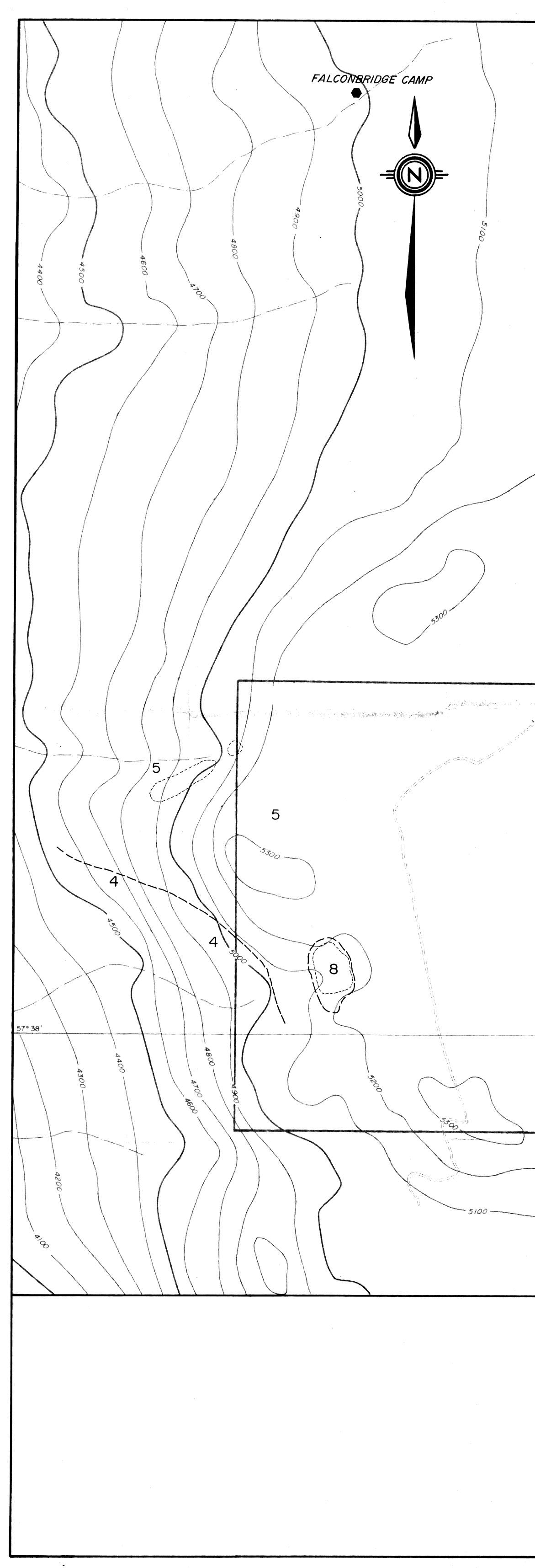








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	UPPER TRIASSIC TO LOWER JURASSIC 7 MONZODIORITE; usually with blocky plagioclase phenocrysts ± 10-15% prima biotite; also equigranular, hornblende bearing phases. Includes porp	ry (?) hyritic
	6 DIORITE; A) Equigranular and porphyritic phases of hornblende diorit quartz hornblende diorite. B) Biotite, quartz biotite and biotite + hornblende diorite.	e and
	C) Gneissic to schistose phases of above including biot chlorite schist and biotite-chlorite gneiss. UPPER TRIASSIC	
	<ul> <li>Augite porphyry basalt and porphyritic andesite flows; pillowed and brec grey-green to maroon coloured. Includes interflow sediments.</li> <li>Andesite lapill tuff, tuff eccia and poorly reworked volcaniclastics.</li> </ul>	ciated;
	<ul> <li>Polymictic conglomerate and greywacke; well sorted.</li> <li>A) Siltstone well bedded; minor interbedded chert and greywacke.</li> <li>B) Limestone.</li> </ul>	Cp Az Ma
	A) Chert; massive to well bedded. B) Quartzite; massive and translucent. C) Dolomite; massive.	Ma Mg Py Lm Pb
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