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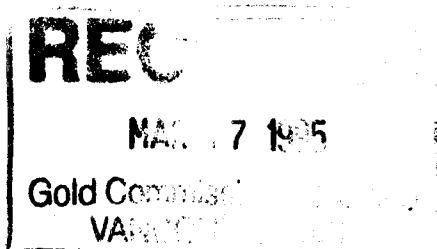
## GEOLOGICAL

### ASSESSMENT REPORT

ON

THE JOH 3 GROUP OF CLAIMS

N.T.S.: MAPSHEET 94D/9



FILMED

### G E O L O G I C A L   B R A N C H A S S E S S M E N T   R E P O R T

23,842

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Operator: Hemlo Gold Mines Inc.  
Date: February, 1995

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## **1.0 INTRODUCTION**

During the period between August 16 and September 25, 1994, Noranda Exploration Company, Limited conducted soil and rock geochemistry as well as mapping on the Joh 3 group of claims of the Joh Property.

This report describes the work conducted by Noranda during the latter portion of the 1994 field season and incorporates historic data (gained through Government assessment reports) in an effort to define possible Cu-Au occurrences.

### **1.1 Location and Access**

The Joh project area is located approximately 200 km north-northeast of Smithers, B.C. on N.T.S. Mapsheet 94D/9 in the Omineca Mining Division.

Camp mobilization was based at the eastern end of Johanson Lake and the property was accessed via helicopter (see Drawing #1).

### **1.2 Topography and Physiography**

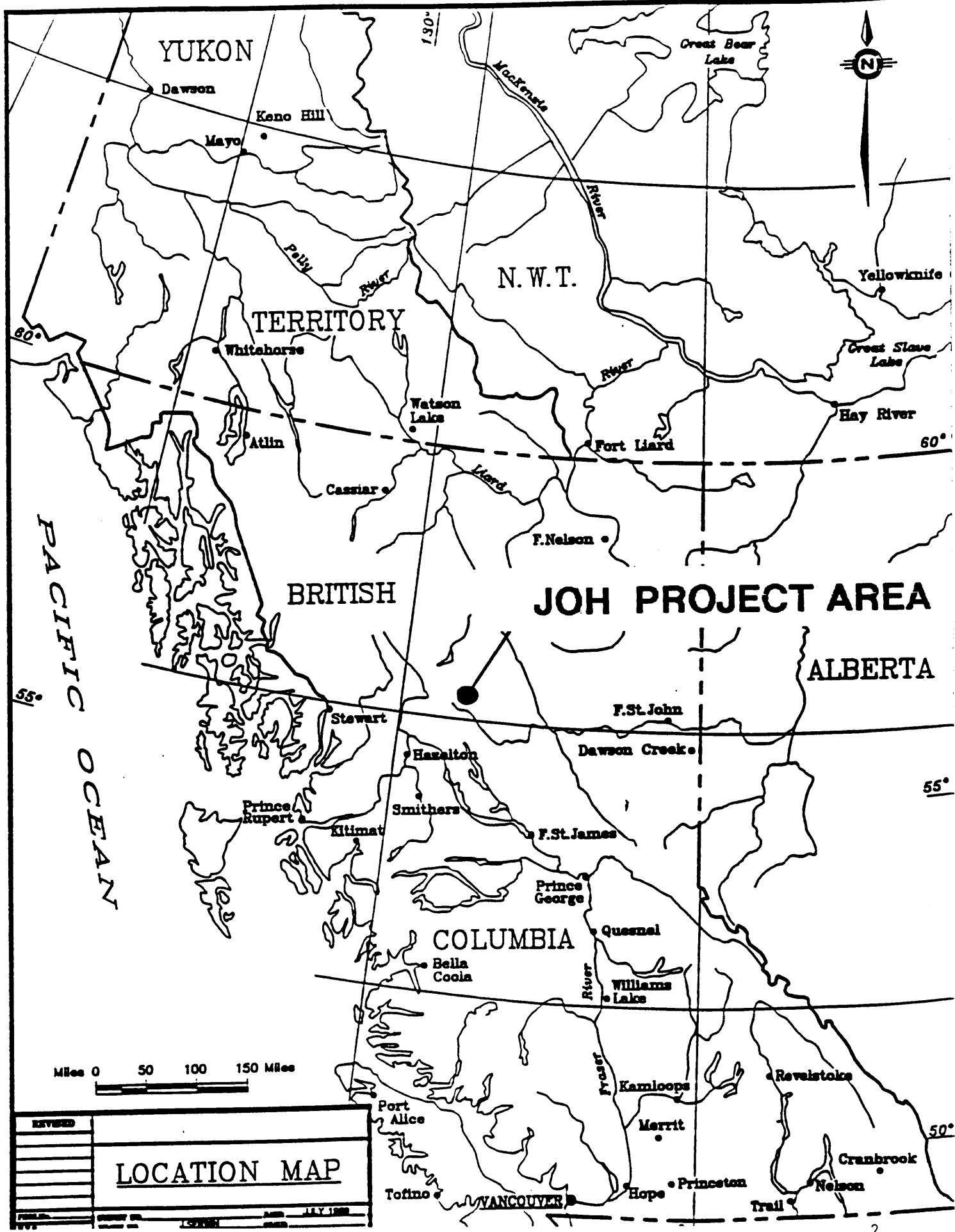
The Joh project area is situated within the Osilinka Ranges and is located directly east of Goldway and Doretelle Peaks. The claim groupings stretch from Johanson Lake in the north to the upper portions of Darb Creek in the south. Most of the area is above treeline with elevations ranging from 1460 to 2380 meters. The project area is drained by Darb Creek in the north, Johanson Creek to the west and the headwaters of Lay Creek to the east.

Slopes of +45° occur along the dominantly north-northwest trending ridges although the central portion of the area consists of the Darb Lake valley floor.

### **1.3 History**

Below is brief outline of documented work performed in the project area in chronological order.

- 1949: Preliminary work on auriferous quartz veins conducted by Goldway Peak Mines Ltd. in the Goldway Peak area.
- 1970-1972: The Kliyul property was staked and geochemically and geophysically surveyed by Kennco Explorations. These surveys delineated a 2.5 km x 1.0 km I.P. chargeability anomaly and coincident (yet smaller) copper soil geochemical and magnetic anomalies.



- 1971-1972: Geological, geochemical and geophysical (magnetics) surveys were conducted by El Paso Mining and Milling Co. who discovered skarn zones along the sheared contact between ultramafics and volcanics on lower Kliyul Creek.
- 1973: Kliyul property optioned to Sumac Mines Ltd. who drilled 3 x-ray holes (no results available).
- 1973: San Jacinto Explorations Ltd. performed soil surveying near the gold/quartz veins on Goldway Peak.
- 1974: Sumac Mines drilled 6 'BQ' holes on the Kliyul property to test the West and East Zone copper soil anomalies and 5 'BQ' holes into the magnetic high. The latter drill holes intersected magnetite-copper-gold mineralization within a well fractured, sericite, chlorite, epidote, carbonate, quartz, pyrite skarn hosted by calcareous andesite tuffs and agglomerates and lesser dioritic units. A reserve of 2.5 million tons of 0.3% Cu and 0.03 opt Au was returned from this skarn zone.
- 1974-1975: BP Minerals Ltd. completed geological, geochemical and geophysical (mag/JEM) over the Bap mineral claims which overly intensely sheared, clay-sericite altered feldspar porphyry volcanics/intrusives and auriferous quartz veins.
- 1976: Maxmin (EM) surveying completed over the Bap claims by BP Minerals Ltd.
- 1981: Geological and geochemical surveying was completed by Dupont of Canada on the AS 1 claim near Goldway Creek.
- 1981: Kennco and Vital Pacific drilled 4 NQ holes (1978 feet) into the central skarn zone on the Kliyul property, all in a southerly direction.
- 1982: A trace element study was performed by BP Minerals on previously collected samples from the Bap claims.
- 1982: Further geochemistry was completed in the Goldway Peak area by Dermot Fahey and by Laramie Mining Corporation.
- 1983: A preparatory study to determine road access to Goldway Peak was undertaken by Laramie Mining Corporation.
- 1984: BP Minerals relogged and sampled portions of available core and conducted geological mapping and geochemical sampling on the Kliyul property.
- 1984: Laramie Mining Corporation conducted mapping, geophysics (VLF) and sampling/assaying of their Goldway Peak Property.

- 1984: Mapping and geochemistry was completed in the lower Kliyul Creek area by BP Resources Canada, Ltd.
- 1984: After obtaining the KC 1 & 2 mineral claims and conducted preliminary sampling and prospecting, Golden Rule Resources Ltd. completed further geological, geochemical and geophysical (magnetics) surveys.
- 1985: Geological and geochemical surveying in the Goldway Peak area by BP Resources, Canada, Ltd. delineated auriferous quartz veins and fractures within quartz-carbonate-pyrite altered zones.
- 1985: Further geological, geochemical and geophysical work (magnetics, VLF) was performed by Golden Rule Resources Ltd. on the KC 1 & 2 claims.
- 1985-1986: Prospecting, mapping, trenching and sampling of the auriferous quartz veins in the Goldway Peak area continued with Laramie as the operator.
- 1986: Soil surveying was performed by Lemming Mining Resources for BP Resources on the Bap claims.
- Ritz Resources Ltd. for Goldnev Rule Resources Ltd. performed further geological, geochemical and geophysical (magnetics, VLF) work on the KC 1 & 2 claims.
- 1990: Placer Dome conducted linecutting, magnetometer and VLF-EM surveying, soil and rock sampling and prospecting on the Kliyul property in order to delineate magnetic anomalies similar to the known skarn zone, possible porphyry style mineralization and/or mineralized structures parallel to the large glacial valley.
- 1992: Noranda Exploration Company, Ltd. conducted 1:5,000 geological mapping on the Kliyul property, concentrating on alteration assemblages as well as rock and minor sampling.
- 1993: Noranda completed a 6 hole, 560 meter reverse circulation drill programme on the Kliyul main skarn zone. Results were encouraging enough to pursue options on surrounding properties which host similar stratigraphy, intrusives and mineralization.

#### **1.4      Claims**

The claims which comprise the Joh property are listed below with corresponding owner, expiry dates, and tenure numbers.

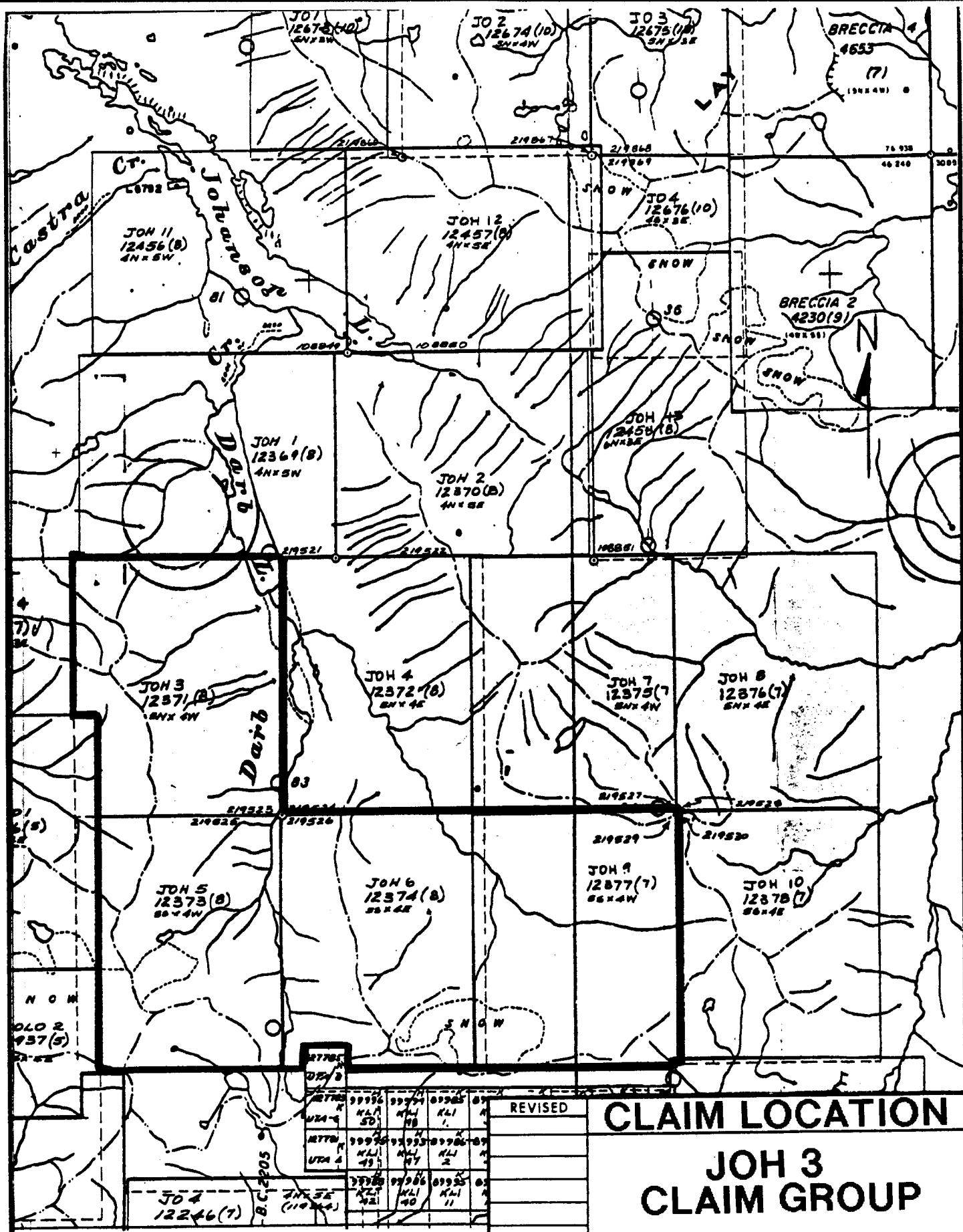
<b><u>CLAIM</u></b>	<b><u>TENURE NO.</u></b>	<b><u>UNITS</u></b>	<b><u>EXPIRY DATE</u></b>	<b><u>OWNER</u></b>
JOH 1	242519	20	August 1, 1997	Hemlo Gold Mines Inc.
JOH 2	242520	20	August 1, 1997	" "
*JOH 3	242521	20	August 1, 1997	" "
JOH 4	242522	20	August 1, 1997	" "
*JOH 5	242523	20	August 1, 1997	" "
*JOH 6	242524	20	August 1, 1997	" "
JOH 7	242525	20	July 31, 1997	" "
JOH 8	242526	20	July 31, 1996	" "
*JOH 9	242527	20	July 31, 1998	" "
JOH 10	242528	20	July 31, 1998	" "
JOH 11	242606	20	August 21, 1996	" "
JOH 12	242607	20	August 21, 1996	" "
JOH 13	242608	18	August 21, 1996	" "

Only those claims with an asterisk are being filed for assessment. Please refer to the Statement of Exploration at the beginning of this report for further clarification of assessment and work performed.

#### **1.5      Economic Potential**

The Joh project area is considered to be ideal for hosting high-grade Cu-Fe-Au skarn deposits and/or bulk-tonnage Au-Cu deposits for the following reasons.

1. Favourable stratigraphy (Takla Volcanics) and related intrusive complexes (monzonites-diorites) which form the northern part of the Hogem Batholith, a large hydrothermal cell associated with known porphyry Cu deposits (Mt. Milligan) are known to exist on the property.
2. Known Cu-Fe-Au skarn occurrences exist on the property within calcareous stratigraphic horizons which remain under-explored.



# **CLAIM LOCATION**

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## **JOH 3 CLAIM GROUP**

PROJ No.	SURVEY BY:	DGG	DATE:	Feb 1945
NTS 94D/9	DRAWN BY:	DGG	SCALE:	1:50,000
DWG No.	NORANDA EXPLORATION			
2	OFFICE:	VANCOUVER		

NOP AND

DATE: FEB 1995

DRAWN BY: DGG

SCALE: 1:50,000

NORAND

## **ILLUSTRATION**

NORAND

TEGRATION  
ER

OFFICE: \_\_\_\_\_

*[Signature]*

**NORANDA EXPLORATION**  
OFFICE: VANCOUVER

3. The positioning between the Cu-rich porphyry systems to the south and Au-Cu rich porphyry and epithermal deposits to the north (Kemess/Cheni) may suggest a more Au-rich zonation northward from the Hogem Batholith.

#### **1.6    Survey Control**

The surveying of a flagged, slope corrected base line over the Pacific Sugar Zone was conducted with the aid of a compass, inclinometer and metric hipchain and was tied into topographic features. Other prospecting/sampling traverses on the western side of the Joh property were tied into topography using government topographic bases, altimeters, compass and metric hipchaining for control.

#### **1.7    Sampling**

Rock samples were collected as grab or chips whenever representative, altered and/or mineralized bedrock or float was encountered. The samples were sent to the Noranda Exploration Laboratory at Unit # 1, 7550 - 76th Street, Delta, B.C. for analysis.

Refer to Appendix I for the laboratory analytical techniques and Appendix II for geochemical results and descriptions.

A total of 196 rocks and their accompanying analytical charges are being applied toward assessment.

## 2.0 GEOLOGY

### 2.1 Regional Geology (See Drawing #3)

The Joh property is situated within the Intermontane Belt which is comprised of Upper Triassic to Lower Jurassic island arc volcanics, volcaniclastics and sediments of the Takla Group which hosts such Cu-Au porphyry deposits as Mt. Milligan and Kemess. The dominantly volcanic package has been intruded by Jura-Cretaceous aged diorites, monzonites and syenites associated with the Hogem Batholith.

Prominent structural features in the area include NW, E-W, N-S and NNE-SSW trending fault systems.

### 2.2 Pacific Sugar Zone

A programme of detailed mapping (1:1,000 and 1:5,000) and chip sampling, was conducted on the Pacific Sugar Zone skarn occurrence located 4.5 km south-southeast of Darb Lake on the north side of a prominent east-west trending ridge which separates the Joh and Kliyul properties. The skarn horizon strikes north-south and dips eastward 30°. Exposed dimensions of the mineralization are 100 meters (east-west), 40 meters (north-south) and 3 to 6 meters thick. The skarn body 'skies out' to the north and west (updip), is covered by talus to the south and appears to end to the east in a north trending gully although at this point it is not known if the mineralization seen exists as a singular entity or as one in a series of conformable mineralized zones extending down dip and buried by younger stratigraphy.

This mineralized horizon occurs at the contact of underlying feldspar phryic andesite flows and tuffs and an overlying package of calcareous and non-calcareous siltstones and limestones (situated within a thick succession of feldspar phryic andesites) overlain in turn by augite porphyry flows.

Occurring immediately below the massive magnetite horizon is a plug of medium to fine grained endoskarned diorite that also contains disseminated magnetite and variable amounts of sulfide. Randomly oriented dykes of similar composition were also seen intruding the mineralized zone.

The skarn mineralization occurs mainly as massive magnetite with medium to coarse grained pyrite, pyrrhotite disseminations, impregnations and clots from 5-20%. Chalcopyrite is also present locally and occurs in the same manner as the former sulfide components and malachite was frequently observed on fracture surfaces.

Gangue minerals in the skarn horizon consisted mainly of epidote, local garnet, and carbonate occurring as pervasive, fine grained flooded zones, clots, fracture fillings and replacing or rimming primary mafic and feldspathic phenocrysts.

Due to topographic constraints and constant rock bombardment chip sampling of the skarn zone consisted of a series of 3 chip lines parallel to strike and 6 smaller lines oriented vertically across the mineralization. A total of 76, 1.5 m long chip samples were taken from exoskarn material while 4 chips were obtained from endoskarned diorite.

Referring to the tables below the best values returned from the chip sampling were 1.68 gpt Au over 3.0 meters taken across the dip in the western section of the zone, 1.2 gpt Au over 16.5 meters (including 3.04 gpt Au/7.5 meters) taken across strike in the eastern end of the exposure and 1.5 gpt Au, 0.40% Cu over 9.0 meters also collected across strike in the eastern portion of the zone.

**CHIP SAMPLING PROGRAMME  
- PACIFIC SUGAR ZONE -**

**WEST END**

VERTICAL CHIPS			HORIZONTAL CHIPS		
NUMBER	Au (ppb)	Cu (ppm)	NUMBER	Au (ppb)	Cu (ppm)
SL0011	70	92	DC0052	900	338
			DC0060	100	238
SL0012	420	168	DC0059	530	336
			DC0053	140	171
SL0013	2000	2251	DC0054	170	221
			DC0061	30	187
SL0014	460	1514	DC0062	140	275
SL0015	2900	4367	DC0063	120	444
			DC0064	310	373
WZ0050	100	274	DC0065	170	1228
WZ0051	100	215	DC0067	110	108
WZ0052	1200	2503	DC0068	170	96
WZ0054	100	154	DC0069	200	480
WZ0053	90	563	DC0070	20	351
			DC0071	140	166
			DC0072	50	137
			DC0073	120	218
			DC0074	110	204
			DC0075	30	429
			DC0076	130	148
			SL0005	100	114
			SL0006	140	228
			SL0007	470	307
			SL0008	200	411
			SL0009	200	460
			SL0010	100	150

**CHIP SAMPLING PROGRAMME**  
**- PACIFIC SUGAR ZONE -**

**EAST END**

VERTICAL CHIPS			HORIZONTAL CHIPS		
NUMBER	Au (ppb)	Cu (ppb)	NUMBER	Au (ppb)	Cu (ppb)
DC0045	120	163	JP0002	880	568
DC0046	110	210	JP0003	1100	491
DC0047	140	403	JP0004	560	571
DC0048	120	167	JP0005	310	92
DC0049	100	178	JP0006	470	621
DC0050	120	369	JP0007	470	435
DC0051	390	4261	JP0008	2000	1576
			JP0009	4000	4104
WZ0059	80	290	JP0010	1200	3222
WZ0060	180	1629	JP0011	1600	4576
WZ0058	140	1089	JP0012	730	4612
WZ0057	5	178	WZ0063	50	741
			WZ0062	5	976
WZ0055	120	288	WZ0061	280	2384
WZ0056	240	438	SL0016	70	156
			SL0017	30	121
			SL0018	70	449
			SL0019	120	331
			SL0020	760	1761
			DC0058	30	227
			DC0057	70	458
			DC0056	1200	2826
			DC0055	130	1018
			WZ0075	2700	5245
			WZ0074	3200	7740
			WZ0073	2310	4895
			WZ0072	2900	3325
			WZ0071	720	834
			WZ0070	1800	1816

More regional reconnaissance style traverses were conducted along the top of the ridge and bottom of the cirque wall to the east of the exposed skarn mineralization. A 100° trending base line was established along the bottom of the cirque wall from which lines were run to gossanous areas observed along the cliff face. (The west end of this baseline corresponds to Line 98N/97+50E of the 1993 Moraine grid).

A package of sediment comprised primarily of siltstone is exposed immediately across the gully east of the skarn body. Bedding is generally oriented north-south and dips approximately 30°. Prospecting of these sediments revealed two, 10 cm wide bands of skarn material interbedded with the sediment beds. Eleven grab samples were collected from the sediments and skarn bands. Sulphides comprise up to 20% of the skarn bands and include pyrite and pyrrhotite with localized areas of malachite stain on fracture faces. Generally the sediment unit is only weakly sulphidized with trace amounts of pyrite.

Stratigraphically above the sedimentary unit, running the length of the ridge andesite tuffs and flows were observed. Andesite at the east end of the ridge is an augite porphyritic-feldspar phric flow. Dark green, euhedral to subhedral augite phenocrysts range in size up to 8 mm wide and comprise 10-20% of the rock. Evidence of the tuff beds having undergone sedimentary reworking was locally observed including graded bedding. The andesite unit is frequently intruded by diorite dykes of random orientation. Gossanous zones with elevated pyrite and pyrrhotite content were evident along the length of the ridge. These zones are frequently coincident with joint sets or dyke margins. In total 21 grab samples and one chip sample were collected from gossanous areas observed in the volcanics/intrusive package. Sulphides observed included pyrrhotite and pyrite comprising up to 10% of the sample material.

No further evidence of massive magnetite-epidote-garnet-pyrite skarn mineralization was noted in this section of the claim group.

Mapping, prospecting and sampling was also conducted to the west of the magnetite skarn zone in an area of gossanous outcrop and high magnetic susceptibility as outlined in the 1993 airborne survey.

This area is dominated by a large granodiorite intrusive in contact with feldspar phric andesite flows and tuffs and minor sedimentary units. Bedding orientations are variable from north-south strikes, easterly dips (10-40°) to east-west strikes and northerly and southerly dips from 18 to 45°. Dioritic dykes were observed cutting the andesite/sedimentary pile.

Prospecting along the intrusive/volcanic contact resulted in the discovery of well fractured volcanics with gossanous shears and fractures containing up to 3-5% disseminated and fracture filled pyrite.

No exposed skarn mineralization was noted although talus boulders containing calcite, garnet, malachite, pyrite and chalcopyrite, weathered, pyritic fault breccia and bornite, malachite, magnetite, calcite veins returned values of 170, 2200 and 11,000 ppb Au respectively in samples PM0159, PM0160 and PM0161.

## **2.3    Reconnaissance Traverses**

Several recce traverses were conducted on the west and southwest portions of the Joh Property in order to investigate areas of gossans, high magnetic readings (airborne), faulting and known gold in soil geochemistry.

One area, 1.5 km west of Darb Lake (Joh West), was prospected in order to examine large gossanous zones where 10 rock samples and 15 soil samples were collected (see Sample Location Map). The geology in this area consists primarily of andesitic tuffs intruded by medium to fine grained diorite dykes along the northeast trending ridge and as small plugs to the west within the cirque. The gossanous zones contain weak to strong ankerite alteration and are locally limonitic. Non-gossanous rocks contains abundant pervasive and fracture filled chlorite. Magnetite encountered was disseminated and often associated with the diorite units. The strongest area of magnetism is located in the west portion of the cirque underlain by a very rusty microdiorite.

Mineralization in this area consists mainly of pyrite up to 4% and occurs on fracture surfaces and as disseminations.

The recce, north-south soil line was run along a ledge approximately 100-200 meters below the talus apron in beige to rusty colored soils.

Anomalous gold in soil results were returned from the nose of the ridge traversed and at the location of the southernmost soil collected along the soil line. One rock sample (PM0449) returned a value of 670 ppb Au, 1460 ppm Cu from quartz-carbonate veined andesite.

Several anomalous gold values were returned from sheared, veined and sulfide-rich andesites in an area mapped in 1993 to the south of the rusty ridge/cirque zone mentioned above. No evidence of large scale skarnification was observed here.

Another area (labeled Joh Southwest) was prospected due to the gossans exposed along the headwaters of Darb Creek along which the north-south trending Doretelle fault runs. No anomalous results were returned from the samples collected here.

The remainder of the areas mapped and sampled (Joh North) have been reported in an earlier assessment report (September, 1994) and are not included in this write-up.

### **3.0 CONCLUSIONS**

1. Mapping of the Pacific Sugar Zone area of the Joh property has outlined a 40 meter x 100 meter, 3-6 meter thick magnetite-pyrite-epidote-garnet skarn horizon hosted within limestones and calcareous siltstones of the Takla Group. Best results from the chip sampling programme returned 1.68 gpt Au/3.0 meters, 1.2 gpt Au/16.5 meters (including 3.04 gpt Au/7.5 meters) and 1.5 gpt Au, 0.40% Cu over 9.0 meters.
2. Endoskarn found with very fine grained to fine grained, melanocratic, magnetic diorite indicates this intrusive type to be the source of mineralization.
3. The skarn horizon 'skies out' updip, and along strike to the north and is buried by talus originating from an east-west trending ridge to the south. No evidence of similar mineralization exists to the south of this ridge.
4. The skarn horizon is observed to end in the eastern section of the zone where more diorite exists. Further mineralization may exist at depth and downdip to the east under the strata constituting the steep east-west trending ridge.
5. Mapping and sampling to the immediate west of the skarn horizon reveals that similar stratigraphy and intrusive activity exists in an area of very rugged relief. Talus boulders sampled in this area contained calcite, garnet, malachite, pyrite and chalcopyrite, pyritic fault breccia and cupriferous magnetite bearing calcite veins and returned values of 170, 2200 and 11,000 ppb Au respectively. This area should be prospected and mapped in more detail.
6. The gossanous zones in the Joh West and Joh Southwest areas returned only limited gold values mainly from sheared, veined material and sulfide with pods with limited extent.

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**APPENDIX I**  
**LABORATORY ANALYTICAL TECHNIQUES**

## ANALYTICAL METHOD DESCRIPTIONS FOR GEOCHEMICAL ASSESSMENT REPORTS

The methods listed are presently applied to analyse geological materials by the Noranda Geochemical Laboratory at Vancouver.

### Preparation of Samples:

Sediments and soils are dried at approximately 80°C and sieved with a 80 mesh nylon screen. The -80 mesh (0.18 mm) fraction is used for geochemical analysis.

Rock specimens are pulverized to -120 mesh (0.13 mm). Heavy mineral fractions (panned samples \* from constant volume), are analysed in its entirety, when it is to be determined for gold without further sample preparation.

### Analysis of Samples:

Decomposition of a 0.200 g sample is done with concentrated perchloric and nitric acid (3:1), digested for 5 hours at reflux temperature. Pulps of rock or core are weighed out at 0.4 g and chemical quantities are doubled relative to the above noted method for digestion.

The concentrations of Ag, Cd, Co, Cu, Fe, Mn, Mo, Ni, Pb, V and Zn can be determined directly from the digest (dissolution) with a conventional atomic absorption spectrometric procedure. A Varian-Techtron, Model AA-5 or Model AA-475 is used to measure elemental concentrations.

### Elements Requiring Specific Decomposition Method:

Antimony - Sb: 0.2 g sample is attacked with 3.3 ml of 6% tartaric acid, 1.5 ml conc. hydrochloric acid and 0.5 ml of conc. nitric acid, then heated in a water bath for 3 hours at 95°C. Sb is determined directly from the dissolution with an AA-475 equipped with electrodeless discharge lamp (EDL).

Arsenic - As: 0.2 - 0.3 g sample is digested with 1.5 ml of perchloric 70% and 0.5 ml of conc. nitric acid. A Varian AA-475 equipped with an As-EDL is used to measure arsenic content in the digest.

Barium - Ba: 0.1 g sample digested overnight with conc. perchloric, nitric and hydrofluoric acid; Potassium chloride added to prevent ionization. Atomic absorption using a nitrous oxide-acetylene flame determines Ba from the aqueous solution.

Bismuth - Bi: 0.2 - 0.3 g is digested with 2.0 ml of perchloric 70% and 1.0 ml of conc. nitric acid. Bismuth is determined directly from the digest with an AA-475 complete with EDL.

**Gold - Au:** 10.0 g sample is digested with aqua regia (1 part nitric and 3 parts hydrochloric acid). Gold is extracted with MIBK from the aqueous solution. AA is used to determine Au.

**Magnesium - Mg:** 0.05 - 0.10 g sample is digested with 4 ml perchloric/nitric acid (3:1). An aliquot is taken to reduce the concentration to within the range of atomic absorption. The AA-475 with the use of a nitrous oxide flame determines Mg from the aqueous solution.

**Tungsten - W:** 1.0 g sample sintered with a carbonate flux and thereafter leached with water. The leachate is treated with potassium thiocyanate. The yellow tungsten thiocyanate is extracted into tri-n-butyl phosphate. This permits colourimetric comparison with standards to measure tungsten concentration.

**Uranium - U:** An aliquot from a perchloric-nitric decomposition, usually from the multi-element digestion, is buffered. The aqueous solution is exposed to laser light, and the luminescence of the uranyl ion is quantitatively measured on the UA-3 (Scintrex).

**N.B.:** If additional elemental determinations are required on panned samples, state this at the time of sample submission. Requests after gold determinations would be futile.

**LOWEST VALUES REPORTED IN PPM:**

Ag - 0.2	Mn - 20	Zn - 1	Au - 0.01
Cd - 0.2	Mo - 1	Sb - 1	W - 2
Co - 1	Ni - 1	As - 1	U - 0.1
Cu - 1	Pb - 1	Ba - 10	
Fe - 100	V - 10	Bi - 1	

**APPENDIX II**  
**ROCK GEOCHEMICAL DESCRIPTIONS/ASSAYS**

NUMBER	LOCATIONX	LOCATIONY	EXPOSURE	UNIT	COLOR	TEXTURE	HORNFELS	PROPYLITC	ARGILLIC	SERICITIC	POTASSIC	SILICA	CARBONATE	CHLORITE	EPIDOTE	PYRITE	PYRRHO	CPY	MAGN	LITHO	SAMPLETYP	COMMENTS	
169824	675614	6267284																			SILT	silt from glacial runoff base of psz	
DC0045	676079	6266716	OUTCROP	SKARN	BLK	massive	none	none	none	none	veined	none	weak	none	5 none	none	strong				CHIP		
DC0046	676079	6266716	OUTCROP	SKARN	BLK	massive	none	weak	none	none	veined	none	none	weak	5 none	none	strong				CHIP		
DC0047	676079	6266716	OUTCROP	SKARN	BLK	massive	none	mod	none	none	veined	pervasive	weak	pervasive	5 none	<1	strong				CHIP	tr gar and bor	
DC0048	676079	6266716	OUTCROP	SKARN	BLK	massive	none	weak	none	none	none	pervasive	pervasive	weak	1 none	none	strong				CHIP	hem on ff 1% gar tr bor mal on ff	
DC0049	676079	6266716	OUTCROP	SKARN	BLK	massive	none	weak	none	none	none	weak	weak	none	5 none	tr	strong				CHIP	minor gar observed	
J050	676079	6266716	OUTCROP	SKARN	BLK	massive	none	weak	none	none	weak	mod	mod	none	weak	5 none	none	strong			CHIP		
DC0051	676011	6266759	OUTCROP	SKARN	BLK	massive										5		strong			CHIP	1.5M CHIP	
DC0052	676010	6266758	OUTCROP	SKARN	BLK	massive										5		strong			CHIP	1.5M CHIP	
DC0053	676012	6266780	OUTCROP	SKARN	BLK	massive										5		strong			CHIP	1.5M CHIP	
DC0054	676010	6266759	OUTCROP	SKARN	BLK	massive										5		strong			CHIP	1.5M CHIP	
DC0055	676056	6266728	OUTCROP	SKARN	BLK	massive										5		strong			CHIP	1.5M CHIP	
DC0056	676057	6266727	OUTCROP	SKARN	BLK	massive										5		strong			CHIP	1.5M CHIP	
DC0057	676057	6266728	OUTCROP	SKARN	BLK	massive										5		strong			CHIP	1.5M CHIP	
DC0058	676057	6266728	OUTCROP	SKARN	BLK	massive										5		strong			CHIP	1.5M CHIP	
DC0059	676013	6266759	OUTCROP	SKARN	BLK	massive										5		strong			CHIP	1.5M CHIP	
DC0060	676012	6266759	OUTCROP	SKARN	BLK	massive										5		strong			CHIP	1.5M CHIP	
DC0061	676010	6266759	OUTCROP	SKARN	BLK	massive										5		strong			CHIP	1.5M CHIP	
DC0062	676011	6266760	OUTCROP	SKARN	BLK	massive										5		strong			CHIP	1.5M CHIP	
DC0063	676009	6266761	OUTCROP	SKARN	BLK	massive										5		strong			CHIP	1.5M CHIP	
DC0064	676010	6266764	OUTCROP	SKARN	BLK	massive										5		strong			CHIP	1.5M CHIP	
DC0065	676010	6266764	OUTCROP	SKARN	BLK	massive										5		strong			CHIP	1.5M CHIP	
DC0067	676009	6266764	OUTCROP	SKARN	BLK	massive										5		strong			CHIP	1.5M CHIP	
DC0068	676009	6266766	OUTCROP	SKARN	BLK	massive										5		strong			CHIP	1.5M CHIP	
DC0069	676007	6266764	OUTCROP	SKARN	BLK	massive										5		strong			CHIP	1.5M CHIP	
DC0070	676007	6266766	OUTCROP	SKARN	BLK	massive										5		strong			CHIP	1.5M CHIP	
DC0071	676007	6266767	OUTCROP	SKARN	BLK	massive										5		strong			CHIP	1.5M CHIP	
DC0072	676005	6266766	OUTCROP	SKARN	BLK	massive										5		strong			CHIP	1.5M CHIP	
DC0073	676004	6266766	OUTCROP	SKARN	BLK	massive										5		strong			CHIP	1.5M CHIP	
DC0074	676004	6266767	OUTCROP	SKARN	BLK	massive										5		strong			CHIP	1.5M CHIP	
DC0075	676004	6266768	OUTCROP	SKARN	BLK	massive										5		strong			CHIP	1.5M CHIP	
DC0076	676004	6266770	OUTCROP	SKARN	BLK	massive										5		strong			CHIP	1.5M CHIP	
GG041	675218	6271914	OUTCROP	ANDESITE	MDGREEN	mg	none	none	none	none	none	none	mod	mod	none	none	weak	AUGFELDPHYRC	GRAB			malachite on fracs	
GG042	675257	6271982	OUTCROP	ANDESITE	MDGREEN	mg	none	weak	none	none	none	none	none	weak	3 none	none	none	AUGFELDPHYRC	GRAB			bleached with fg diss/ff py, limon't ff/epid	
GG043	675176	6272070	OUTCROP	ANDESITE	MDGREEN	fg	none	none	none	none	none	none	weak	none	4 none	none	none	AUGFELDPHYRC	GRAB			rusty shear parallel to ridge(west side)	
GG044	675155	6271955	OUTCROP	ANDESITE	MDGREEN	mg	none	mod	none	none	none	none	mod	mod	strong	none	none	mod	ASHTF	GRAB			pervasive epidote, chloritic mafics
GG045	675099	6271859	OUTCROP	ANDESITE	MDGREEN	fg	none	none	none	none	none	none	strong	weak	none	none	none	mod				foliat. chlor contact betwn dio (up) ashtf (down), malachite on ff	
JP002	676040	6266736	OUTCROP	SKARN	BLK	massive	none	weak	none	none	none	weak	none	none	mod	1 none	none	strong			CHIP		
JP003	676040	6266736	OUTCROP	SKARN	BLK	massive	none	mod	none	none	mod	none	mod	weak	mod	15 none	tr	strong			CHIP		
JP004	676040	6266736	OUTCROP	SKARN	BLK	massive	none	mod	none	none	mod	none	mod	weak	mod	3 none	<1	strong			CHIP		
JP005	676040	6266736	OUTCROP	SKARN	BLK	massive	none	weak	none	none	mod	none	mod	weak	mod	10 none	tr	strong			CHIP	mal on ff	
JP006	676040	6266736	OUTCROP	SKARN	BLK	massive	none	weak	none	none	mod	none	mod	weak	mod	15 none	1	strong			CHIP	clotted epi	
JP007	676040	6266736	OUTCROP	SKARN	BLK	massive	none	mod	none	none	mod	none	mod	weak	mod	20 none	2	strong			CHIP		
JP008	676040	6266736	OUTCROP	SKARN	BLK	massive	none	mod	none	none	mod	none	mod	mod	mod	3 none	tr	strong			CHIP	mal on ff, mang stin	
JP009	676040	6266736	OUTCROP	SKARN	BLK	massive	none	strong	none	none	mod	none	mod	mod	mod	5 none	<1	strong			CHIP		
JP010	676040	6266736	OUTCROP	SKARN	BLK	massive	none	weak	none	none	mod	none	mod	weak	mod	10 none	1	strong			CHIP		
JP011	676040	6266736	OUTCROP	SKARN	BLK	massive	none	mod	none	none	mod	none	mod	weak	mod	2 none	none	strong			CHIP	possible micro dio component	
JP012	676040	6266736	OUTCROP	SKARN	BLK	massive	none</																

NUMBER	LOCATIONX	LOCATIONY	EXPOSURE	UNIT	COLOR	TEXTURE	HORNFELS	PROPYLITC	ARGILLIC	SERICITIC	POTASSIC	SILICA	CARBONATE	CHLORITE	EPIDOTE	PYRITE	PYRRHO	CPY	MAGN	LITHO	SAMPLETYP	COMMENTS
LE0034	674786	6272416	OUTCROP	ANDESITE	MDGREY	fg	none	weak	none	none	none	none	weak	none	3	none	none	none		XLTTF	CHIP	2m chip, recessive, west side of spine, hanging wall
LE0050	674670	6272427	OUTCROP	ANDESITE	DKGREY	fg	none	none	none	none	none	none	none	none	3	none	none	mod		XLTTF	CHIP	2m chip, fgd/ff Py
LE0051	674673	6272400	OUTCROP	ANDESITE	MDGREY	fg	none	none	none	none	none	none	none	weak	10	none	none	none		LEUCOCRAT	CHIP	2m chip, Py from 7% to 15%, fgd/ff Py
LE0052	674673	6272400	OUTCROP	DIOR	LTGREY	mg	none	none	none	none	none	none	none	weak	2	none	none	weak		XLTTF	CHIP	1m chip, spine forming trend 096, prop. along fracs, fracs argill., chlor/carb ff
LE0054	674658	6272389	OUTCROP	ANDESITE	LTGREY	fg	none	none	weak	none	none	none	weak	weak	tr	none	none	mod		XLTTF	CHIP	2m chip, mgd Py, local ff Py
LE0055	674795	6272256	OUTCROP	ANDESITE	GRYGRN	fg	none	none	none	none	none	none	none	weak	4	none	none	mod		XLTTF	CHIP	2m chip, aug phenos, fs frags, ep ff
E0056	674795	6272256	OUTCROP	ANDESITE	MDGREY	mg	none	none	none	none	none	weak	none	weak	1	none	none	weak		XLTTF	CHIP	2m chip, aug phenos, ep ff, mafics to chlor, mg Py
LE0057	674795	6272256	OUTCROP	ANDESITE	MDGREY	fg	none	none	none	none	none	none	weak	weak	1	none	none	weak		XLTTF	CHIP	2m chip, aug phenos, fgd/ff Py
PM0108	677137	6269655	OUTCROP	DIOR	MDGREY	mg	none	mod	none	none	weak	none	weak	weak	none	none	tr	strong		GRAB	tr. cpy and malachite stain on ff.	
PM0103	677380	6269740	OUTCROP	DIOR	MDGREY	mg	none	none	none	none	none	none	none	none	1	none	none	mod		GRAB	samp of sheared rusty dior w carb vns follow ff. Mod to strong propy wall rk	
PM0104	677193	6269715	OUTCROP	DIOR	MDGREY	mg	none	mod	none	none	none	none	weak	mod	tr	none	tr	weak		GRAB	carb weak perv, malachite on ff.	
PM0105	677137	6269743	OUTCROP	DIOR	MDGREY	mg	none	mod	none	none	none	weak	weak	mod	1	none	tr	mod		GRAB	epi patchy and streaky locally, py concentrated on ff weakly diss as well.	
PM0106	677123	6269806	OUTCROP	DIOR	DKGREY	mg	none	mod	none	none	none	none	mod	mod	10	none	none	strong		FLOW	GRAB	py diss and concentrated in stringers
PM0107	677123	6269858	OUTCROP	ANDESITE	DKGREEN	fg	none	weak	none	none	none	none	mod	mod	2	none	none	none		TUFF	GRAB	py concen in vns
PM0108	677198	6269991	OUTCROP	ANDESITE	DKGREEN	mg	none	weak	none	none	none	none	weak	weak	15	none	none	strong		GRAB	py layered in aspect extremely mag epi concen in layers, extreme rust.	
PM0109	677241	6270049	OUTCROP	ANDESITE	DKGREEN	fg	none	mod	none	none	none	none	weak	mod	3	none	none	weak		TUFF	CHIP	py extremely finely diss, strong rust on surface and ff, 1.5m chip
PM0140	675180	6267507	OUTCROP	ANDESITE	MDGREEN	fg	none	weak	none	none	none	weak	weak	weak	3	none	none	weak		XLTTF	CHIP	1m chip, epi on ff, as above
PM0141	675180	6267508	OUTCROP	ANDESITE	MDGREEN	fg	none	weak	none	none	none	mod	none	weak	2	none	none	none		TUFF	CHIP	1.5m chip strongly gossanous on surface and ff, 10m E of last samples
PM0142	675193	6267504	OUTCROP	ANDESITE	MDGREEN	fg	none	weak	none	none	none	mod	none	weak	2	none	none	none		TUFF	CHIP	as above
PM0143	675194	6267504	OUTCROP	ANDESITE	MDGREEN	fg	none	weak	none	none	none	mod	none	weak	mod	15	none	none	strong		GRAB	1m chip 10m E of samples 142,143, rusty on surface and ff, py weakly diss
PM0144	675206	6267505	OUTCROP	ANDESITE	MDGREEN	fg	none	none	weak	none	mod	none	weak	none	tr	none	none	none		TUFF	CHIP	1.5m chip extreme rust on surface and ff, epi on ff
PM0145	675206	6267504	OUTCROP	ANDESITE	MDGREEN	fg	none	weak	none	none	mod	none	weak	weak	3	none	none	none		TUFF	CHIP	as above
PM0146	675207	6267505	OUTCROP	ANDESITE	MDGREEN	fg	none	weak	none	none	mod	none	weak	weak	2	none	none	none		TUFF	CHIP	3m chip, felsic dyke close by, random qtz/carb vns
PM0147	675232	6267502	OUTCROP	ANDESITE	MDGREY	fg	none	none	none	none	none	none	weak	weak	1	none	none	none		FLOW	CHIP	epi along ff, py diss throughout, 1.5m chip, massive ff? mafic dyke?
PM0148	675264	6267508	OUTCROP	ANDESITE	DKGREEN	fg	none	weak	none	none	none	none	weak	weak	1	none	none	none		GRAB	py concen along ff, chi perv, epi spotty, concen on ff	
PM0149	675270	6267512	OUTCROP	ANDESITE	MDGREEN	fg	none	weak	none	none	none	none	weak	weak	1	none	none	none		GRAB	rusty cobble, py concen along ff and as stringers epi the same	
PM0150	675639	6267477	TALUS	ANDESITE	MDGREY	fg	none	mod	none	none	none	none	weak	mod	2	none	none	mod		XLTTF	GRAB	epi alteration throughout, epi in fracs, py perv, magnetite throughout
PM0151	675645	6267458	TALUS	MICRODIO	MDGREY	fg	none	mod	none	none	none	none	weak	strong	1	none	none	mod		GRAB	silicification has destroyed original texture, possible calc silicate, py diss	
PM0152	675604	6267429	TALUS	SEDS	MDGREY	vfg	none	none	strong	none	none	strong	none	none	10	none	none	none		MASSLST	GRAB	py concen in units and fracs, vnlts of calcite throughout
PM0153	675596	6267409	TALUS	SEDS	LTGREY	fg	none	none	weak	none	none	weak	mod	mod	2	none	none	mod		SILST	GRAB	py diss, mag as streaks, poss. calcsilicate, carb, chi on ff, py strings
PM0154	675597	6267396	TALUS	SEDS	MDGREY	vfg	none	weak	none	none	strong	mod	none	weak	2	none	none	mod		LIMEYSILTS	GRAB	weak epi on ffs, interbedded with qtz rich layers, py finely diss
PM0155	675560	6267395	TALUS	SEDS	DKGREY	fg	none	none	mod	none	mod	mod	mod	mod	tr	none	1	weak		GRAB	contact? malachite and azurite stain. talus	
PM0156	675545	6267375	TALUS		DKGREY	mg	none	weak	none	none	mod	strong	none	none	6	none	none	strong		MASSLST	GRAB	py diss in magnetite rich layers, skam?
PM0157	675268	6267099	TALUS	SEDS	LTGREY	fg	none	none	mod	none	mod	strong	none	mod	4	none	none	weak		GRAB	py diss, rusty on ws, qv in rk, epi & chi perv, layers of lmst and dio py in dio.	
PM0158	675221	6267107	TALUS	MICRODIO	MDGREY	fg	none	mod	none	none	mod	strong	weak	mod	tr	none	none		MASSLST	GRAB	sugar text, pink cal, garnets, mal stain on ws, py and cpy following lineaments	
PM0159	675248	6267186	TALUS	SEDS	PINK	vfg	none	weak	none	none	strong	mod	none	weak	2	none	none	mod		FLTBX	GRAB	remnant pyrite really weathered + talus
PM0160	675248	6267185	TALUS	SEDS	MDBROWN	mg	none	none	mod	none	none	mod	mod	mod	3	none	1	weak		GRAB	bornite, malachite, magnetite, calcite vns and associated magnetite + talus	
PM0161	675197	6267143	TALUS	MICRODIO	MDGREY	fg	none	mod	none	none	mod	strong	none	weak	3	none	none	weak		SILST	GRAB	py ls perv, carb perv, rusty on ws
PM0162	675312	6267166	TALUS	SEDS	BLK	vfg	none	none	mod	none	mod	mod	mod	mod	tr	none	none	none		GRAB	lower end of limestone unit	
A0163	675543	6267304	TALUS	SEDS	MDBROWN	cg	none	none	mod	none	mod	mod	mod	mod	tr	none	none	none		GRAB	qtz/carb pods and vns within pod of sed that is within volcs, up to 10% galena	
PM0348	676012	6266649	OUTCROP		WHITE	massive	none	none	none	none	veined	strong	mod	mod	1	none	none	none		LIMEYSILTS	GRAB	hosts PM0348 possible tr gal, sed pod approx 2m wide disappears into talus slope
PM0349	676013	6266648																				

NUMBER	LOCATIONX	LOCATIONY	EXPOSURE	UNIT	COLOR	TEXTURE	HORNFELS	PROPYLITC	ARGILLIC	SERICITIC	POTASSIC	SILICA	CARBONATE	CHLORITE	EPIDOTE	PYRITE	PYRRHO	CPY	MAGN	LITHO	SAMPLETYP	COMMENTS	
PM0440	672562	6271089	TALUS		RED-BRO	bxted	none	mod	none	none	none	pervasivef	mod	mod	tr	none	none	strong		GRAB	poss contact skarn betw volc and int, talus bldrs followed up slope to source		
PM0441	672684	6271153	OUTCROP		RED-BRO	fg	none	mod	none	none	none	mod	mod	mod	5	none	none	strong		GRAB	zone within fd porph approx 2m wide, mag present in bands, andesite		
PM0442	671576	6272632	OUTCROP		MDGREEN	cg	none	none	none	none	none	veined	veined	mod	none	none	none	none		GRAB	pyroxenite, ank alt st along qtz/carb filled fracs of random orientation		
PM0443	671516	6272526	OUTCROP	DIOR	MDGREY	mg	none	weak	none	none	none	mod	mod	mod	3	none	none	mod		GRAB	tan/rusty ws, epi present as streaks and patches, py diss as specks		
PM0444	671522	6272504	OUTCROP	DIOR	MDGREY	mg	none	weak	none	none	none	mod	mod	mod	1	1	none	mod		GRAB	poddy ruston ws and ff, locally o/c appears ultramafic		
PM0445	671539	6272492	OUTCROP	DIOR	MDGREY	mg	none	weak	none	none	none	mod	mod	mod	15	none	none	none		GRAB	extreme rusty red hematite on ws and ff, rusty zone within fresh dior		
PM0446	671562	6272374	TALUS	MICRODIO	DKGREY	fg	none	weak	none	none	none	mod	mod	mod	3	1	none	mod		GRAB	perv chl, sulphs extremly fg, talus bldr w rust on ws and ff		
PM0447	671633	6272376	TALUS	ANDESITE	GRYGRN	fg	none	none	none	none	none	veined	none	mod	weak	7	none	none	mod		GRAB	ff epi, fg diss py and vfg, chl perv	
PM0448	671682	6272390	TALUS	MICRODIO	DKGREY	fg	none	weak	none	none	none	veined	veined	mod	mod	6	none	none	none	TUFF	GRAB	726t samp fr last yr, highly goss on ws and ff, rusty pits throughout, locally s	
PM0449	672014	6272335	OUTCROP	ANDESITE	MDGREEN	fg	none	mod	none	none	none	veined	none	mod	mod	3	1	none	mod		GRAB	presence of poss clasts? lapilli tuff? sulphs present in patches, epi perv	
PM0450	672025	6272269	OUTCROP	ANDESITE	MDGREEN	fg	none	mod	weak	none	none	veined	none	mod	mod	mod	1	3	none	mod		GRAB	poss contact zone betwn dior and seds? rusty on ws and ff
PM0451	672219	6271522	OUTCROP	ANDESITE	DKGREEN	vfg	none	weak	none	none	none	veined	none	mod	mod	2	none	none	weak	ASHTF	GRAB	carb ffs,	
RL0001	675070	6271524	OUTCROP	ANDESITE	DKGREY	mg	none	mod	none	none	none	veined	none	none	tr	none	none	none		GRAB	vein rsty ws diss py 6cm thck		
RL0002	675440	6271507	OUTCROP	DIOR	WHITE	mg	none	none	none	none	none	none	none	weak	weak	<1	none	none	weak	AUGFELDPHYRC	GRAB	py ffs	
RL0008	675322	6271335	OUTCROP	ANDESITE	DKGREY	fg	none	none	none	none	none	none	none	weak	5	none	none	weak	AUGFELDPHYRC	GRAB	rusty shear 1-2 m width, vfg py ff/diss		
RL0011	675059	6271294	OUTCROP	ANDESITE	DKGREY	fg	none	none	none	none	none	none	none	none	none	7	none	none	none	ASHTF	CHIP	rusty ws,2m chip,py diss	
RL0013	674488	6272723	OUTCROP	ANDESITE	DKGREY	fg	none	none	none	none	none	none	none	none	none	7	none	none	none	ASHTF	CHIP	as above	
RL0014	674488	6272723	OUTCROP	ANDESITE	DKGREEN	fg	none	weak	none	none	none	weak	none	weak	none	8	none	none	weak	ASHTF	CHIP	as above	
RL0015	674488	6272723	OUTCROP	ANDESITE	MDGREEN	vfg	none	weak	none	none	none	weak	weak	weak	none	8	none	none	none	ASHTF	CHIP	as above,carb ffs	
RL0016	674548	6272697	OUTCROP	ANDESITE	MDGREY	fg	none	weak	none	none	none	mod	mod	mod	none	10	none	none	none	ASHTF	CHIP	as above,carb ffs	
RL0017	674548	6272697	OUTCROP	ANDESITE	MDGREY	fg	none	weak	none	none	none	mod	mod	mod	none	10	none	none	weak	ASHTF	CHIP	as above,carb ffs	
RL0018	674548	6272697	OUTCROP	ANDESITE	MDGREY	fg	none	none	none	none	none	weak	weak	none	none	7	none	none	weak	ASHTF	CHIP	as above	
RL0019	674548	6272697	OUTCROP	ANDESITE	LTGREEN	fg	none	weak	none	none	none	weak	none	none	none	10	none	none	none	XTLTF	CHIP	as above	
RL0020	674626	6272601	OUTCROP	ANDESITE	MDGREY	fg	none	weak	none	none	strong	none	none	none	5	none	none	weak	ASHTF	CHIP	carb ff, argillic ff, shear at 105deg/vert. chip .75m.		
RL0021	674627	6272602	OUTCROP	ANDESITE	WHITE	vfg	none	weak	none	none	strong	mod	mod	mod	none	10	none	none	weak	ASHTF	CHIP	rusty ws,carb perv,2m chip	
RL0022	674627	6272602	OUTCROP	ANDESITE	LTGREEN	vfg	none	weak	none	none	mod	mod	mod	mod	none	6	none	none	none	XTLTF	CHIP	as above	
RL0023	674615	6272609	OUTCROP	ANDESITE	LTGREY	mg	none	weak	none	none	weak	weak	mod	mod	none	8	none	none	none	XTLTF	CHIP	as above	
RL0024	674561	6272595	OUTCROP	ANDESITE	MDGREEN	mg	none	mod	none	none	mod	mod	mod	mod	none	3	none	none	none		GRAB	heavy carb alt w qtz vns py diss and along ff	
RL0045	677244	6269647	OUTCROP	DIOR	RED-BRO	fg	none	none	none	none	strong	none	none	mod	weak	1	none	1	weak		GRAB	azurite and mal stain, py and cpy in vns and ff epi along ff chl perv	
RL0046	677139	6269738	OUTCROP	DIOR	DKGREY	mg	none	mod	none	none	weak	none	mod	mod	weak	3	none	none	none		GRAB	py diss and along vns chl perv epi along ff, rusty in exposure	
RL0047	677163	6269912	OUTCROP	DIOR	DKGREY	mg	none	mod	none	none	none	weak	mod	mod	weak	2	none	none	none	TUFF	GRAB	py diss chl and epi perv	
RL0048	677182	6269924	OUTCROP	ANDESITE	DKGREEN	fg	none	mod	none	none	none	weak	mod	mod	none	15	none	none	none	TUFF	GRAB	py in massive pocket unit strongly sheared rusty zone	
RL0049	677205	6269999	OUTCROP	ANDESITE	DKGREEN	fg	none	mod	none	none	none	mod	mod	mod	weak	2	none	none	none	TUFF	GRAB	py diss and along ff, chl perv epi perv and on ff.	
RL0050	677263	6270063	OUTCROP	ANDESITE	DKGREEN	fg	none	weak	none	none	none	mod	mod	mod	mod	2	none	tr	none		CHIP	2.5 m wide fracture zone, cpy and py perv, mal stain chl perv	
RL0052	677102	6269710	OUTCROP	DIOR	MDGREY	mg	none	weak	none	none	none	mod	mod	mod	mod	1	none	none	weak	XTLTF	CHIP	2m py perv and along ff, epi in vns and ff	
RL0053	677123	6269803	OUTCROP	ANDESITE	DKGREEN	fg	none	weak	none	none	mod	mod	mod	mod	mod	2	none	none	weak	XTLTF	CHIP	2m py perv and along ff	
RL0054	677123	6269801	OUTCROP	ANDESITE	DKGREEN	fg	none	mod	none	none	none	mod	mod	mod	mod	2	none	none	weak	XTLTF	CHIP	2m py perv and along ff feld alt to epi, epi concen along ff	
RL0055	677123	6269801	OUTCROP	ANDESITE	DKGREEN	fg	none	mod	none	none	none	mod	mod	mod	mod	2	none	none	weak	XTLTF	CHIP	2.5m same as above	
RL0056	677123	6269801	OUTCROP	ANDESITE	DKGREEN	fg	none	mod	none	none	none	mod	mod	mod	mod	2	none	mod	XTLTF	CHIP	same as above		
RL0057	677123	6269801	OUTCROP	ANDESITE	DKGREEN	fg	none	mod	none	none	none	mod	mod	mod	mod	2	none	tr	weak	XTLTF	CHIP	malachite stain, 2.5m, same as above	
RL0058	677123	6269801	OUTCROP	ANDESITE	DKGREEN	fg	none	weak	none	none	none	mod	mod	mod	mod	2	none	none	strong	XTLTF	CHIP	1.5m, strong mal stain locally.	
RL0059	677123	6269801	OUTCROP	ANDESITE	DKGREEN	fg	none</td																

NUMBER	LOCATIONX	LOCATIONY	EXPOSURE	UNIT	COLOR	TEXTURE	HORNFELS	PROPYLITC	ARGILLIC	SERICITIC	POTASSIC	SILICA	CARBONATE	CHLORITE	EPIDOTE	PYRITE	PYRRHO	CPY	MAGN	LITHO	SAMPLETYP	COMMENTS	
RL0221	673631	6266491	OUTCROP	DIOR	GRYGRN	fg	none	strong	none	mod	none	none	strong	mod	2	none	none	none		GRAB	fol,py in fol, rusty on ws,qtz eyes in fol,ser on ffs		
RL0222	673663	6266736	OUTCROP	DIOR	LTGREY	fg	none	weak	none	mod	none	none	mod	weak	3	none	none	none		GRAB	strongly fol,py in fol,		
RL0223	673795	6266899	OUTCROP	DIOR	LTGREY	fg	none	weak	none	none	none	weak	none	mod	weak	2	none	none	none	GRAB	highly frac,rusty on ws,py perv		
RL0224	673884	6266969	OUTCROP	DIOR	GRYGRN	fg	none	weak	none	none	none	none	none	none	none	1	none	none	none	CHIP	same as 223		
RL0225	673962	6266916	OUTCROP	SEDS	BLK	vfg	none	none	none	none	none	none	mod	none	none	2	none	none	none	SILTYSLT	PY IN BANDS,CALC VNING,CARB PERV		
L0226	673926	6266852	OUTCROP	DIOR	GRYGRN	fg	none	weak	none	none	none	weak	none	none	none	2	none	none	none	GRAB	lightly frac dio,py perv,rusty on ws,		
L0227	673915	6266810	OUTCROP	DIOR	GRYGRN	fg	none	weak	none	none	none	none	weak	none	none	2	none	none	none	GRAB	same as 227		
SL0005	676011	6266765	OUTCROP	SKARN	BLK	massive	none	weak	none	none	none	none	none	weak	tr	none	none	strong		CHIP	1.5m chip		
SL0006	676010	6266767	OUTCROP	SKARN	BLK	massive	none	none	none	none	none	none	none	none	tr	none	none	strong		CHIP	as above, epi concentrated on ff		
SL0007	676008	6266769	OUTCROP	SKARN	BLK	massive	none	weak	none	none	none	none	none	weak	25	none	none	strong		CHIP	1.5m chip, mal on ff		
SL0008	676008	6266770	OUTCROP	SKARN	BLK	massive	none	weak	none	mod	none	mod	mod	weak	tr	none	none	none		CHIP	1.5m chip		
SL0009	676008	6266772	OUTCROP	SKARN	BLK	massive	none	weak	none	none	none	none	none	weak	20	none	none	strong		CHIP	as above		
SL0010	676005	6266773	OUTCROP	SKARN	BLK	massive	none	weak	none	none	none	none	none	weak	7	none	none	strong		CHIP	as above		
SL0011	676005	6266777	OUTCROP	SKARN	BLK	massive	none	weak	none	none	none	none	none	weak	5	none	none	strong		CHIP	as above		
SL0012	675999	6266763	OUTCROP	SKARN	BLK	massive	none	weak	none	none	none	weak	none	weak	tr	none	none	strong		CHIP	as above		
SL0013	675999	6266761	OUTCROP	SKARN	BLK	massive	none	weak	none	none	none	none	mod	mod	tr	none	none	mod		CHIP	as above, epi and mal present in patches		
SL0014	675998	6266759	OUTCROP	SKARN	BLK	massive	none	mod	none	none	none	strong	none	mod	5	none	none	mod		CHIP	1.5m chip mal on ff		
SL0015	675998	6266759	OUTCROP	SKARN	BLK	massive	none	mod	none	none	none	weak	none	mod	<1	none	none	strong		CHIP	1.5m chip		
SL0016	676074	6266712	OUTCROP	SKARN	BLK	massive	none	none	none	none	none	weak	none	none	tr	none	none	strong		CHIP	as above		
SL0017	676073	6266709	OUTCROP	SKARN	BLK	massive	none	none	none	none	none	weak	none	none	5	none	1	strong		CHIP	as above, mal on ff, patchy sulphides		
SL0018	676072	6266708	OUTCROP	SKARN	BLK	massive	none	none	none	none	none	mod	none	none	2	none	tr	strong		CHIP	as above		
SL0019	676072	6266706	OUTCROP	SKARN	BLK	massive	none	none	none	none	none	weak	none	none	6	none	2	strong		CHIP	as above		
SL0020	676071	6266706	OUTCROP	SKARN	BLK	massive	none	none	none	none	none	none	none	weak	5	none	none	strong		CHIP			
WZ0050	676025	6266745	OUTCROP	SKARN	BLK	massive	none	weak	none	none	none	none	none	mod	20	none	none	strong		CHIP			
WZ0051	676025	6266745	OUTCROP	SKARN	BLK	massive	none	mod	none	none	none	none	mod	strong	1	none	2	strong		CHIP	bor present possible micro dio comp		
WZ0052	676025	6266745	OUTCROP	SKARN	BLK	massive	none	strong	none	none	none	mod	mod	weak	1	none	none	strong		CHIP			
WZ0053	676025	6266745	OUTCROP	MICRODIO	MDGREEN	cg	none	none	none	none	none	none	weak	weak	mod	weak	<1	none	none	strong		CHIP	
WZ0054	676025	6266745	OUTCROP	MICRODIO	MDGREEN	cg	none	none	none	none	none	mod	none	strong	mod	5	none	none	weak		CHIP		
WZ0055	676069	6266735	OUTCROP	MICRODIO	DKGREEN	vfg	none	strong	none	none	none	mod	none	strong	mod	3	none	<1	strong		CHIP		
WZ0056	676069	6266735	OUTCROP	SKARN	BLK	massive	none	weak	none	none	none	weak	none	weak	2	none	none	strong		CHIP			
WZ0057	676069	6266735	OUTCROP	SKARN	BLK	massive	none	mod	none	none	none	none	mod	mod	mod	2	none	tr	strong		CHIP	mal on ff	
WZ0058	676068	6266735	OUTCROP	SKARN	BLK	massive	none	weak	none	none	none	none	none	weak	3	none	none	strong		CHIP	tr gar		
WZ0059	676068	6266735	OUTCROP	SKARN	BLK	massive	none	strong	none	none	mod	none	mod	weak	1	none	<1	strong		CHIP	mal on ff		
WZ0060	676068	6266735	OUTCROP	SKARN	BLK	massive	none	weak	none	none	none	mod	mod	mod	mod	2	none	1	strong		CHIP	same as above	
WZ0061	676072	6266721	OUTCROP	SKARN	BLK	massive	none	none	none	none	none	mod	mod	mod	mod	tr	none	1	strong		CHIP	same as above	
WZ0062	676073	6266723	OUTCROP	SKARN	BLK	massive	none	none	none	none	mod	mod	mod	mod	mod	none	none	strong		CHIP	AS ABOVE		
WZ0063	676025	6266749	OUTCROP	SKARN	BLK	massive	none	mod	none	weak	none	strong	mod	mod	1	none	tr	strong		CHIP	mal on ff		
WZ0070	676073	6266723	OUTCROP	SKARN	BLK	massive	none	none	none	none	none	mod	mod	mod	15	none	none	strong		CHIP			
WZ0071	676073	6266723	OUTCROP	SKARN	BLK	massive	none	weak	none	none	none	mod	mod	mod	mod	1	none	none	strong		CHIP		
Z0072	676073	6266723	OUTCROP	SKARN	BLK	massive	none	strong	none	none	none	mod	mod	strong	strong	<1	none	none	strong		CHIP	mal on ff, tr gar	
Z0073	676073	6266723	OUTCROP	SKARN	BLK	massive	none	strong	none	none	mod	mod	mod	strong	strong	3	none	none	strong		CHIP	flooded epi	
WZ0074	676073	6266723	OUTCROP	SKARN	BLK	massive	none	strong	none	none	mod	mod	mod	mod	mod	5	strong			CHIP	1.5M CHIP		
WZ0075	676057	6266725	OUTCROP	SKARN	BLK	massive										5	strong			CHIP	1.5M CHIP		
WZ0076	676057	6266724	OUTCROP	SKARN	BLK	massive										5	strong			CHIP	1.5M CHIP		
WZ0077	676057	6266724	OUTCROP	SKARN	BLK	massive										5	strong			CHIP	1.5M CHIP		

**NORANDA DELTA LABORATORY**  
**Geochemical Analysis**

Project Name & No.: JOH - 45584 PAC SUE

Material: 10 Rx

Remarks: • Sample screened @ -35 MBSH (0.5 mm)

■ Organic, A Humus, S Sulfide

Geol.: G.G.

Sheet: 1 of 1

Date received: AUG. 04

Date completed: AUG. 22

LAB CODE:

9408-015

(105, p.m.v.)

Au - 10.0 g sample digested with aqua-regia and determined by A.A. (D.L. 5 PPB)

ICP - 0.2 g sample digested with 3 ml HClO<sub>4</sub>/HNO<sub>3</sub> (4:1) at 203 °C for 4 hours diluted to 10 ml with water. Leeman PS3000 ICP determined elemental contents.

N.B. The major oxide elements and Ba, Be, Ce, La, Li, Ga are rarely dissolved completely from geological materials with this acid dissolution method.

T.T. No.	SAMPLE No.	Au ppb	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sr ppm	Ti %	V ppm	Zn ppm
221	PM - 0140	5	0.2	0.84	16	149	0.2	5	1.05	0.3	41	12	67	184	3.23	0.24	12	6	0.41	225	2	0.05	29	0.09	2	34	0.34	75	28
222	141	5	0.2	1.62	5	212	0.2	5	1.43	0.2	50	13	48	203	4.24	0.42	13	11	1.01	330	2	0.13	27	0.10	2	48	0.36	138	33
223	142	5	0.2	0.72	2	90	0.2	5	0.86	0.2	42	8	51	260	2.57	0.13	16	4	0.28	153	1	0.04	23	0.10	2	43	0.30	58	22
224	143	5	0.2	2.16	2	46	0.2	5	2.37	0.2	57	18	26	323	4.80	0.29	11	7	1.02	444	10	0.19	8	0.13	2	87	0.47	159	36
225	PM - 144	5	0.2	1.04	7	403	0.2	5	0.99	0.2	49	12	75	172	3.20	0.23	14	6	0.53	133	1	0.08	25	0.11	2	55	0.32	81	27
226	PM - 145	5	0.2	2.46	6	96	0.2	5	4.11	0.2	71	13	33	596	4.35	0.12	14	7	0.32	783	4	0.13	16	0.09	2	78	0.28	92	20
227	146	5	0.2	1.53	3	370	0.2	5	1.48	0.3	46	10	29	141	3.41	0.23	7	9	0.88	290	13	0.17	4	0.07	2	44	0.31	103	22
228	147	5	0.2	2.25	3	204	0.2	5	2.06	0.2	54	13	21	83	4.88	0.18	9	9	1.30	604	6	0.19	4	0.09	2	80	0.40	161	45
229	148	5	0.2	1.07	2	154	0.2	5	1.61	0.2	54	15	34	185	4.40	0.23	11	5	1.12	554	3	0.18	20	0.11	2	12	0.38	145	48
230	PM - 0149	5	0.2	1.50	3	118	0.2	5	2.03	0.2	52	15	31	71	5.04	0.18	9	7	1.89	839	1	0.28	9	0.08	2	17	0.38	191	77

27.8 46 66

**NORANDA DELTA LABORATORY**  
**Geochemical Analysis**

*Imported*

Project Name & No.: JOH - 45584 PAC SUG

Material: 1 Silt & 38 Rx

Remarks: • Sample screened @ -35 MESH (0.5 mm)

▪ Organic, A Humus, S Sulfide

Geol.: G.G.  
Sheet: 1 of 2

Date received: AUG. 05  
Date completed: AUG. 24

LAB CODE: 9408-022

Au - 10.0 g sample digested with aqua-regia and determined by A.A. (D.L. 5 PPB)

ICP - 0.2 g sample digested with 3 ml HClO<sub>4</sub>/HNO<sub>3</sub> (4:1) at 203 °C for 4 hours diluted to 10 ml with water. Leeman PS3000 ICP determined elemental contents.

N.B. The major oxide elements and Ba, Be, Ce, La, Li, Ga are rarely dissolved completely from geological materials with this acid dissolution method.

F.T. No.	SAMPLE No.	Au ppb	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sr ppm	Ti %	V ppm	Zn ppm
35	PM0150 rx	5	0.8	2.63	4	182	0.2	5	1.33	0.2	38	21	35	295	4.09	0.80	8	11	0.66	612	3	0.09	9	0.07	2	143	0.28	109	85
36	PM0151	5	0.2	2.96	9	140	0.2	5	3.07	0.3	56	14	62	57	4.02	0.40	9	9	0.89	598	4	0.20	7	0.07	2	172	0.25	125	74
37	PM0152	5	0.2	1.61	8	135	0.2	5	1.70	0.4	48	23	91	319	4.52	0.33	11	9	1.05	467	3	0.14	19	0.07	2	62	0.34	140	28
38	PM0153	20	1.6	0.78	46	183	0.5	5	22.71	0.2	37	17	32	326	5.13	0.20	1	11	0.41	1508	68	0.08	22	0.08	2	145	0.09	81	69
39	PM0154	5	0.2	3.72	2	77	0.4	5	2.71	0.2	56	30	26	65	5.47	0.80	12	14	1.03	449	5	0.36	17	0.11	2	77	0.41	239	56
40	PM0155	5	2.4	0.55	53	75	0.2	5	1.41	0.2	38	13	64	73	2.96	0.11	8	6	0.30	188	3	0.08	18	0.07	3	20	0.44	66	57
41	PM0156	130	0.2	1.50	33	108	0.6	5	21.85	1.0	64	12	35	236	2.93	0.27	2	20	0.83	2407	6	0.05	11	0.05	17	385	0.06	90	77
42	PM0157	5	0.2	6.69	2	543	0.5	5	4.68	0.2	71	11	12	81	5.01	3.13	10	7	0.65	746	1	0.11	12	0.10	2	55	0.09	196	57
43	PM0158	5	0.2	6.15	2	26	0.3	5	7.78	0.2	98	12	27	122	4.72	0.07	11	5	0.15	423	5	0.07	8	0.09	2	467	0.43	258	14
44	PM0159	170	0.4	0.56	30	20	0.6	5	33.08	0.2	5	8	11	431	0.86	0.08	1	9	0.39	2232	7	0.06	10	0.05	2	125	0.03	85	32
46	PM0160	2200	70.0	1.27	2949	142	0.2	5	0.21	61.2	6	32	147	602	32.16	0.59	12	2	0.16	109	16	0.02	11	0.13	5630	6	0.05	334	6736
47	PM0161	11000	193.6	4.09	11	127	0.3	6	4.01	2.1	63	16	29	37000	4.36	0.44	9	10	0.68	797	5	0.08	8	0.09	4	163	0.22	112	113
48	PM0162	5	0.8	5.07	2	143	1.9	5	3.68	2.7	61	15	130	194	10.96	0.19	17	10	1.35	768	13	0.45	24	0.09	7	110	0.29	220	225
51	PM0163	5	0.2	1.60	14	30	0.4	5	10.92	1.0	86	11	37	31	2.05	0.11	4	7	0.24	796	3	0.18	13	0.11	2	114	0.23	91	26
52	RL0100	5	0.2	1.87	19	345	0.2	5	2.17	0.7	52	25	54	157	4.90	0.27	11	9	1.57	641	7	0.18	25	0.08	2	57	0.45	178	47
53	RL0101	5	0.2	2.44	4	97	0.2	5	2.39	0.2	56	11	26	111	5.98	0.25	9	12	1.69	817	11	0.17	5	0.11	2	46	0.50	220	49
54	RL0102	5	0.2	1.47	5	365	0.2	5	1.70	0.2	53	17	47	151	4.49	0.22	8	11	1.59	544	9	0.16	19	0.08	2	27	0.47	190	39
55	RL0103	5	0.2	2.35	3	109	0.2	5	2.51	0.7	60	12	35	64	5.08	0.29	8	9	1.36	778	5	0.20	6	0.10	2	57	0.43	179	45
56	RL0104	5	0.2	1.96	9	72	0.3	5	1.96	0.2	55	13	22	82	5.11	0.19	11	8	1.40	679	13	0.26	7	0.09	2	56	0.42	170	56
57	RL0105	5	0.2	1.60	6	127	0.2	5	1.87	0.2	51	17	23	101	5.17	0.21	10	7	1.58	809	6	0.24	8	0.09	2	27	0.41	172	62
58	RL0106	5	0.2	3.86	7	187	0.4	5	4.05	0.2	67	26	60	93	6.92	0.35	9	13	2.89	1269	3	0.44	25	0.09	2	80	0.47	241	94
59	RL0107	5	0.2	2.77	10	133	0.3	6	3.14	0.6	61	21	46	89	6.57	0.30	12	12	2.86	1250	21	0.34	17	0.08	2	37	0.52	277	80
60	RL0108	5	0.2	2.89	4	114	0.3	5	2.76	0.3	61	24	46	163	6.74	0.20	10	12	2.53	1173	3	0.26	16	0.09	2	54	0.52	270	97
61	RL0109	5	0.2	3.01	7	77	0.4	5	3.13	1.0	65	20	40	91	6.34	0.24	13	13	2.86	1237	2	0.28	15	0.10	2	64	0.52	289	87
62	RL0110	5	0.2	3.34	5	308	0.3	5	3.10	0.5	62	20	50	155	6.26	0.31	12	13	2.45	1013	4	0.26	16	0.09	2	80	0.51	245	77
63	RL0111	5	0.2	3.13	4	42	0.3	11	3.35	0.3	65	18	49	105	5.97	0.23	12	12	2.54	926	2	0.24	13	0.08	3	55	0.51	252	62
64	RL0112	5	0.2	4.19	9	69	0.3	8	4.54	0.2	74	15	48	205	6.41	0.26	12	9	1.68	841	4	0.22	12	0.08	2	108	0.49	214	64
66	RL0113	5	0.2	4.09	7	140	0.3	6	4.09	0.9	74	22	49	157	5.97	0.48	13	11	1.95	775	1	0.22	18	0.10	2	88	0.49	216	47
67	RL0114	5	0.2	2.03	8	790	0.2	6	1.84	0.6	49	16	24	74	5.55	0.69	12	11	1.99	934	1	0.19	16	0.10	2	25	0.45	217	59
68	RL0115	5	0.2	2.42	2	530	0.2	9	2.09	0.3	51	18	34	111	5.29	0.44	13	13	1.91	786	3	0.15	16	0.10	2	69	0.46	194	30
69	RL0117	5	0.2	0.75	3	105	0.2	5	0.49	0.2	24	3	139	20	0.76	0.17	7	2	0.20	149	8	0.11	5	0.01	3	177	0.05	20	10
70	RL0118	5	0.2	4.64	12	354	0.3	5	2.81	0.8	64	14	38	160	6.25	0.86	16	16	1.73	1043	6	0.35	15	0.14	2	111	0.46	215	175
71	RL0119	20	0.8	4.56	1207	152	0.4	5	3.84	3.5	63	26	90	210	5.23	1.10	11	18	0.87	931	72	0.13	13	0.08	28	78	0.37	215	292
72	RL0121	20	0.2	0.80	6	37	0.2	5	0.87	0.3	40	16	113	187	3.00	0.12	12	5	0.37	177	5	0.11	32	0.09	4	20	0.49	82	29
73	RL0124 rx	50	0.2	3.93	8123	51	0.4	5	9.68	0.2	99	35	36	202	4.83	0.10	10	4	0.20	332	5	0.05	47	0.10	2	295	0.51	128	62

T.T. No.	SAMPLE No.	Au ppb	Ag ppm	Al %	As ppm	Ba ppm	Bc ppm	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sr ppm	Ti %	V ppm	Zn ppm	0408-022 Pg. 2 of 2
274	RL0125 rx	5	0.2	4.23	15	91	0.3	5	4.13	0.5	64	12	32	240	4.94	0.42	9	8	0.75	550	3	0.11	10	0.09	2	223	0.27	152	69	
275	RL0126	5	0.2	1.76	8	136	0.2	5	1.51	0.2	41	18	55	57	3.76	0.27	6	7	0.37	304	7	0.10	16	0.09	2	45	0.29	127	28	
276	RL0127 rx	190	0.2	4.73	73	18	0.5	5	13.59	0.2	81	39	30	429	6.39	0.08	4	9	0.35	948	43	0.07	50	0.10	2	224	0.20	140	59	
278	169824 silt	20	0.2	2.23	2	179	0.2	5	1.36	0.4	31	11	10	42	2.79	0.33	6	8	0.89	522	1	0.10	6	0.05	2	78	0.14	93	46	

*PAC SUG*

# NORANDA DELTA LABORATORY

## Geochemical Analysis

Project Name & No.: JOH - 45584

Material: 80 Rx

Remarks: N.B. The high Fe contents degrade trace elemental determination

Geol.: G.G.

Sheet: 1 of 2

Date received: AUG. 26

LAB CODE: 9408-067

Date completed: SEP. 13

Au - 10.0 g sample digested with aqua-regia and determined by A.A. (D.L. 5 PPB)

ICP - 0.2 g sample digested with 3 ml HClO<sub>4</sub>/HNO<sub>3</sub> (4:1) at 203 °C for 4 hours diluted to 10 ml with water. Leeman PS3000 ICP determined elemental contents.

N.B. The major oxide elements and Ba, Be, Ce, La, Li, Ga are rarely dissolved completely from geological materials with this acid dissolution method.

T.T. No.	SAMPLE No.	Au ppb	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sr ppm	Ti %	V ppm	Zn ppm
177	DC0045 rx	120	0.2	0.54	23	20	0.6	5	1.28	0.2	36	84	21	163	39.35	0.06	17	3	0.23	541	5	0.03	67	0.11	2	20	0.03	237	80
179	DC0046	110	0.8	0.79	26	44	0.6	5	1.68	0.8	46	59	22	210	38.84	0.08	22	5	0.36	659	5	0.04	58	0.11	2	25	0.04	215	83
180	DC0047	140	0.4	0.52	24	58	0.6	5	1.31	0.6	38	33	18	403	39.70	0.07	19	3	0.21	755	1	0.04	33	0.11	2	17	0.03	297	94
181	DC0048	120	0.4	0.42	23	51	0.8	5	0.56	1.5	24	37	21	167	39.51	0.07	18	4	0.20	776	4	0.03	35	0.11	2	14	0.03	292	77
182	DC0049	100	0.4	0.79	25	108	0.5	5	0.87	0.3	30	46	40	178	38.42	0.15	19	4	0.54	1018	2	0.06	36	0.11	2	17	0.06	176	96
184	DC0050	120	1.2	0.88	53	34	0.6	5	4.43	0.6	56	46	18	369	33.82	0.08	16	4	0.42	1693	1	0.06	28	0.11	2	16	0.02	176	76
185	DC0051	390	2.0	1.22	65	39	0.6	5	7.22	0.7	72	44	31	4261	31.99	0.11	25	6	0.33	2035	3	0.04	22	0.13	2	29	0.03	98	65
186	DC0052	900	4.0	0.41	36	35	0.7	5	0.37	2.0	25	118	24	338	43.91	0.07	19	3	0.18	478	191	0.02	42	0.13	2	13	0.02	83	79
188	DC0053	140	1.6	0.62	28	28	0.4	5	0.63	1.0	30	55	27	171	39.66	0.05	20	3	0.14	478	10	0.02	28	0.11	2	19	0.03	68	70
189	DC0054	170	1.2	0.69	21	14	0.4	5	0.79	1.2	47	35	42	221	40.47	0.04	29	3	0.14	438	5	0.02	31	0.11	2	22	0.03	72	64
190	DC0055	130	1.2	0.95	28	83	0.7	5	0.89	0.2	43	31	28	1018	42.28	0.14	22	7	0.51	1005	7	0.04	37	0.13	2	10	0.05	217	90
191	DC0056	1200	2.4	3.14	12	149	0.5	5	6.70	0.2	64	107	23	2826	10.54	0.38	20	8	0.66	1634	4	0.12	8	0.11	2	88	0.24	111	52
192	DC0057	70	1.2	1.34	12	214	0.7	5	2.22	0.2	40	60	51	458	32.71	0.25	16	6	0.91	1252	1	0.09	35	0.11	2	35	0.12	299	87
193	DC0058	30	0.8	1.37	17	376	0.6	5	0.80	0.2	22	45	31	227	37.54	0.44	16	9	0.59	1091	21	0.03	30	0.12	2	13	0.06	206	85
195	DC0059	530	2.4	0.52	32	35	0.4	5	0.49	1.1	17	63	26	336	40.76	0.04	18	2	0.17	343	43	0.02	37	0.13	2	12	0.02	94	61
196	DC0060	100	0.8	0.55	26	43	0.5	5	0.59	2.2	23	105	24	238	41.03	0.08	20	2	0.15	420	54	0.02	33	0.13	2	14	0.02	76	74
197	DC0061	30	0.8	0.47	22	14	0.6	5	0.43	0.9	23	49	20	187	40.99	0.04	19	2	0.12	358	4	0.02	32	0.11	2	13	0.02	114	67
198	DC0062	140	2.4	0.70	16	46	0.4	5	0.63	0.4	22	253	22	275	38.67	0.07	17	2	0.23	435	16	0.02	32	0.11	2	26	0.02	67	65
201	DC0063	120	1.6	0.63	28	51	0.7	5	0.55	1.3	25	57	25	444	37.18	0.10	19	3	0.25	464	1	0.02	34	0.12	2	26	0.02	115	72
202	DC0064	310	2.4	0.52	28	25	0.5	5	0.44	0.8	21	46	18	373	37.75	0.05	17	2	0.22	361	1	0.02	38	0.12	2	21	0.02	150	64
203	DC0065	170	2.0	0.71	19	21	0.5	5	0.53	0.2	28	51	19	1228	34.95	0.05	22	3	0.38	436	1	0.07	25	0.13	2	16	0.03	132	63
205	DC0067	110	2.0	0.48	25	61	0.4	5	0.44	0.3	25	75	22	108	38.78	0.08	22	3	0.19	605	5	0.02	32	0.10	2	16	0.03	86	68
206	DC0068	170	1.6	0.34	34	50	0.4	5	0.34	1.3	18	67	23	96	40.66	0.06	18	2	0.14	511	7	0.02	41	0.10	2	15	0.02	123	70
207	DC0069	200	2.0	0.74	24	61	0.4	5	0.62	0.2	23	343	21	480	37.91	0.08	17	3	0.31	476	1	0.03	36	0.12	2	18	0.02	126	70
209	DC0070	20	0.4	4.72	2	493	0.3	5	3.09	0.2	50	37	12	351	8.75	1.82	12	21	2.15	1020	1	0.15	8	0.13	2	151	0.49	256	106
210	DC0071	140	1.2	0.57	27	78	0.5	5	0.47	1.2	23	302	20	166	40.14	0.11	17	2	0.23	416	2	0.02	46	0.12	2	14	0.03	175	68
211	DC0072	50	1.2	0.62	27	127	0.6	5	0.39	1.9	24	121	28	137	39.36	0.11	19	4	0.21	439	2	0.02	44	0.13	2	17	0.03	176	70
212	DC0073	120	2.0	0.44	29	176	0.5	5	0.23	1.5	19	108	24	218	40.04	0.12	18	2	0.23	374	4	0.02	49	0.13	2	11	0.03	163	63
213	DC0074	110	1.6	0.98	20	110	0.4	5	0.80	0.9	32	116	20	204	35.98	0.16	17	3	0.30	539	3	0.06	36	0.12	2	38	0.07	160	63
215	DC0075	30	0.4	3.24	2	137	0.3	5	3.28	0.2	61	34	5	429	3.79	0.40	12	7	0.53	528	1	0.23	5	0.16	2	158	0.41	92	21
216	DC0076	130	1.2	0.57	26	482	0.5	5	0.48	2.3	27	134	24	148	38.24	0.09	18	2	0.28	472	2	0.03	30	0.12	2	25	0.03	52	72
218	JP0002	880	2.0	1.68	22	96	0.4	5	3.89	0.2	53	136	24	568	25.88	0.08	17	3	0.15	994	37	0.04	32	0.10	2	72	0.07	69	41
219	JP0003	1100	2.0	0.94	24	72	0.4	5	4.54	0.2	53	35	21	491	26.91	0.07	14	3	0.15	1241	13	0.04	31	0.10	2	32	0.04	58	49
220	JP0004	560	1.2	0.51	32	28	0.5	5	3.73	1.9	53	83	20	571	34.11	0.07	17	3	0.18	1206	4	0.03	50	0.11	2	12	0.02	73	62
221	JP0005	310	1.6	0.24	29	29	0.5	5	0.29	1.8	15	108	21	92	40.14	0.05	17	2	0.11	555	7	0.02	43	0.11	2	6	0.02	84	68

15/04 66 GB  
J. P. T. M. A.

T.T. No.	SAMPLE No.	Au ppb	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sr ppm	Ti %	V ppm	Zn ppm	9408-067 Pg. 2 of 2
223	JP0006	470	2.4	0.23	34	65	0.5	5	0.25	0.7	14	349	17	621	38.77	0.04	15	2	0.14	431	6	0.02	58	0.11	2	5	0.01	75	65	
225	JP0007	470	2.4	0.76	40	46	0.6	5	5.65	0.2	93	102	19	435	30.66	0.06	47	4	0.10	1431	5	0.03	57	0.10	2	27	0.02	73	50	
226	JP0008	2000	3.6	2.31	21	84	0.5	5	4.50	0.2	94	244	13	176	27.62	0.11	51	4	0.19	947	2	0.04	25	0.15	2	93	0.10	123	50	
227	JP0009	4000	5.2	1.66	105	15	0.4	5	12.96	0.2	30	157	15	4104	18.67	0.04	5	5	0.14	3992	1	0.04	18	0.11	2	29	0.01	57	39	
228	JP0010	1200	3.2	1.45	12	149	0.7	5	1.94	0.4	41	239	31	3222	32.60	0.12	16	4	0.26	669	3	0.04	43	0.15	2	78	0.05	136	69	
230	JP0011	1600	4.0	2.85	2	658	0.4	5	3.10	0.2	57	192	60	4776	16.24	0.54	20	6	0.66	549	16	0.07	23	0.16	2	225	0.13	150	34	
231	JP0012	730	2.4	0.45	28	52	0.5	5	0.38	0.8	18	142	25	4612	39.32	0.12	17	3	0.19	417	9	0.05	41	0.10	2	10	0.03	96	70	
233	KP0313	8700	12.0	0.90	40	21	0.4	5	11.04	0.7	43	72	12	15000	14.43	0.05	9	4	0.26	2449	6	0.05	8	0.09	2	31	0.02	37	69	
234	PM0348	50	0.4	1.17	22	144	0.4	5	13.25	0.2	37	19	30	132	3.91	0.51	1	6	0.22	2069	3	0.08	16	0.05	2	75	0.03	155	41	
235	PM0349	50	0.4	3.23	5	143	0.5	5	6.02	0.4	54	24	47	400	4.69	1.46	6	10	0.77	946	2	0.09	29	0.08	2	50	0.09	171	70	
236	PM0350	30	0.8	3.56	4	434	0.3	5	3.24	0.2	59	18	6	166	5.49	0.88	12	11	1.30	1003	3	0.13	5	0.18	2	166	0.36	111	88	
237	PM0352	230	0.4	6.43	9	40	0.6	5	8.49	0.4	69	40	36	279	10.25	0.09	17	8	1.47	2552	8	0.13	32	0.16	2	298	0.39	230	87	
238	PM0354	10	0.4	3.01	10	196	0.4	5	5.66	0.8	62	25	46	35	5.18	0.74	9	17	1.58	1403	3	0.15	40	0.08	2	86	0.05	168	105	
239	PM0358	50	0.4	3.02	3	68	0.2	5	1.83	0.2	54	36	6	30	6.31	0.39	13	11	1.46	657	2	0.10	4	0.18	2	112	0.31	136	71	
240	PM0359	10	0.4	3.44	10	63	0.2	5	1.74	0.3	53	18	12	94	6.13	0.69	14	11	1.47	668	1	0.10	6	0.17	2	104	0.26	117	78	
241	PM0361	80	0.8	2.37	8	85	0.2	5	2.14	0.2	46	58	57	83	5.84	0.39	11	8	1.31	591	1	0.12	28	0.08	14	96	0.27	144	114	
242	PM0362	10	0.4	3.56	4	134	0.3	5	2.84	0.2	47	31	31	41	4.41	0.36	11	6	0.93	462	1	0.31	27	0.12	2	155	0.15	76	37	
243	PM0363	20	0.2	3.35	2	76	0.3	5	2.69	0.6	50	19	41	26	5.96	0.43	11	11	2.25	676	1	0.31	17	0.09	2	77	0.43	184	68	
244	PM0365	10	0.2	2.05	3	17	0.2	5	0.69	0.2	26	19	50	35	5.80	0.05	9	18	2.38	307	77	0.10	24	0.08	2	35	0.27	228	29	
245	PM0366	10	0.2	2.89	2	80	0.2	5	2.03	0.2	41	31	19	45	6.04	0.32	8	11	1.96	555	1	0.26	19	0.10	2	65	0.28	186	32	
246	PM0367	70	0.4	2.22	9	104	0.2	5	0.71	0.2	34	19	8	18	5.57	0.65	10	12	1.27	377	2	0.16	4	0.13	2	40	0.17	118	36	
247	PM0368	270	1.2	3.80	2	99	0.3	5	2.97	0.2	48	31	56	106	7.73	0.35	12	10	2.93	997	1	0.25	31	0.12	2	200	0.40	215	64	
248	PM0369	80	0.8	3.58	2	81	0.2	5	2.46	0.2	52	21	15	47	7.05	0.56	12	9	1.04	379	1	0.11	14	0.09	2	159	0.52	191	32	
251	WZ0050	100	0.4	0.40	26	37	0.5	5	0.33	0.2	10	110	20	274	40.04	0.06	17	2	0.12	315	257	0.02	25	0.10	2	10	0.02	98	55	
253	WZ0051	100	0.2	1.19	23	92	0.5	5	0.84	0.2	24	228	26	215	38.94	0.15	19	2	0.31	385	127	0.02	33	0.10	2	19	0.05	162	55	
255	WZ0052	1200	4.0	4.93	2	174	0.5	5	5.38	0.2	260	67	30	2503	17.10	0.28	173	5	0.76	822	30	0.05	17	0.11	2	208	0.23	161	38	
256	WZ0053	90	0.2	2.42	4	184	0.4	5	2.12	0.2	46	42	50	563	3.69	0.67	11	5	0.75	598	27	0.09	15	0.11	2	77	0.31	78	30	
257	WZ0054	100	0.2	3.62	5	143	0.4	5	3.94	0.2	59	20	33	154	4.76	0.53	14	6	0.44	586	3	0.05	8	0.09	2	178	0.30	96	21	
258	WZ0055	120	0.2	6.50	2	667	0.4	5	5.53	0.2	101	58	21	288	11.01	1.33	46	14	1.22	995	3	0.06	10	0.10	2	171	0.29	113	52	
259	WZ0056	240	0.4	0.76	28	49	0.9	5	0.63	0.2	20	348	22	438	41.12	0.08	19	2	0.30	593	13	0.03	25	0.10	2	12	0.04	165	70	
261	WZ0057	5	0.2	5.82	2	520	0.6	5	4.82	0.2	145	23	46	178	12.06	1.60	83	17	2.20	1257	1	0.09	13	0.13	2	143	0.37	171	65	
262	WZ0058	140	0.2	1.19	20	62	1.1	5	1.71	0.5	65	51	25	1089	37.73	0.14	35	4	0.29	718	1	0.06	25	0.09	2	49	0.09	201	74	
264	WZ0059	80	0.2	2.60	25	60	0.7	5	3.37	0.3	141	78	14	290	32.88	0.10	84	4	0.20	820	9	0.03	19	0.12	2	117	0.10	104	55	
266	WZ0060	180	1.2	0.67	28	67	1.3	5	1.99	0.9	56	23	19	1629	37.19	0.11	24	3	0.25	735	8	0.07	19	0.12	2	18	0.04	179	72	
267	WZ0061	280	0.8	0.81	28	129	0.6	5	0.60	1.2	32	76	23	2384	41.75	0.16	22	5	0.34	447	4	0.06	65	0.13	2	14	0.03	100	74	
269	WZ0062	5	0.2	0.54	30	109	0.6	5	1.31	2.0	43	16	21	976	41.29	0.18	24	4	0.20	410	3	0.02	48	0.13	2	12	0.02	107	73	
270	WZ0063	50	0.2	2.97	13	169	0.3	5	3.79	0.5	61	27	40	741	4.74	0.46	14	11	1.51	914	1	0.15	14	0.13	2	138	0.36	172	45	
271	WZ0070	1800	1.2	0.59	22	22	0.7	5	1.09	0.2	27	56	22	1816	37.26	0.04	14	4	0.27	1172	8	0.02	21	0.11	2	12	0.03	113	66	
272	WZ0071	720	0.4	0.58	23	33	1.1	5	1.20	0.2	34	109	19	834	39.68	0.06	15	3	0.14	1439	8	0.02	32	0.11	2	20	0.03	153	92	
273	WZ0072	2900	2.8	4.34	2	83	0.5	5	5.53	0.2	119	106	30	3323	20.00	0.35	56	9	0.76	2050	4	0.04	18	0.15	2	157	0.18	181	80	
274	WZ0073	2310	3.6	3.07	13	34	0.4	5	7.86	0.2	131	90	17	4895	10.99	0.09	67	5	0.57	2218	2	0.06	8	0.13	2	123	0.15	79	51	
275	WZ0074	3200	5.6	4.07	2	118	0.4	5	6.13	0.2	134	64	10	7740	9.28	0.32	70	8	0.69	1144	1	0.07	6	0.13	2	153	0.17	90	65	
276	WZ0075	2700	4.4	5.70	2	139	0.4	5	7.53	0.2	110	59	12	5243	8.02	0.37	47	8	0.69	1298	1	0.06	7	0.10	2	206	0.33	185	63	
277	WZ0076	160	0.2	0.49	23	88	0.8	5	0.98	0.2	31	43	18	606	42.07	0.09	17	3	0.19	804	2	0.03	24	0.13	2	12	0.03	204	81	
279	WZ0077 rx	90	0																											

*Imported -*

# NORANDA DELTA LABORATORY

## Geochemical Analysis

Project Name &amp; No.: PACIFIC SUGAR ZONE (JOH) - 45584

Material: 25 Rx

Remarks: \* Sample screened @ -35 MBSII (0.5 mm)

\*\* Organic, A Humus, S Sulfide

Geol.: G.G.  
Sheet: 1 of 1Date received: SEP. 09  
Date completed: SEP. 21

LAB CODE: 9409-014

Au - 10.0 g sample digested with aqua-regia and determined by A.A. (D.L. 5 PPB)

ICP - 0.2 g sample digested with 3 ml HClO<sub>4</sub>/HNO<sub>3</sub> (4:1) at 203 °C for 4 hours diluted to 10 ml with water. Leeman PS3000 ICP determined elemental contents.

N.B. The major oxide elements and Ba, Be, Ce, La, Li, Ga are rarely dissolved completely from geological materials with this acid dissolution method.

T.T. No.	SAMPLE No.	Au ppb	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sr ppm	Ti %	V ppm	Zn ppm
3	SL0005 rx	100	0.2	0.45	38	629	0.4	5	0.36	0.9	34	42	22	114	38.07	0.09	13	1	0.17	406	15	0.02	23	0.11	2	21	0.04	60	55
5	SL0006	140	0.6	0.62	45	1218	0.5	5	0.55	2.6	35	113	29	228	40.51	0.13	14	1	0.24	543	24	0.03	34	0.15	2	31	0.04	85	66
7	SL0007	470	1.6	0.58	47	83	0.5	5	0.63	1.4	40	317	26	307	36.99	0.05	13	2	0.22	475	13	0.03	31	0.14	2	30	0.02	94	66
9	SL0008	200	0.2	6.98	5	411	0.5	5	5.43	0.4	105	119	5	411	5.65	1.35	19	15	1.34	837	2	0.18	9	0.16	2	279	0.48	150	40
10	SL0009	200	1.0	1.03	48	74	0.6	5	0.97	2.2	52	108	30	460	37.90	0.10	14	3	0.33	386	20	0.03	30	0.15	2	19	0.03	83	61
11	SL0010	100	0.2	1.07	32	91	0.4	5	0.79	2.0	39	60	34	150	34.12	0.08	14	2	0.28	284	27	0.02	25	0.11	2	16	0.05	47	50
13	SL0011	70	0.2	0.99	28	145	0.4	5	0.75	1.5	39	43	32	92	33.03	0.20	14	2	0.30	285	16	0.02	25	0.10	2	16	0.06	74	50
15	SL0012	420	0.2	3.00	15	280	0.3	5	2.97	0.6	65	19	9	168	9.07	1.29	10	18	2.42	1162	1	0.17	15	0.09	2	56	0.52	284	93
16	SL0013	2000	2.8	2.63	22	52	0.7	5	8.07	0.4	100	27	20	2251	18.85	0.19	17	7	0.90	1282	9	0.07	16	0.10	4	139	0.11	109	80
17	SL0014	460	1.2	3.44	7	120	0.5	5	4.00	0.6	79	14	31	1514	6.51	0.78	16	12	1.76	1382	3	0.11	22	0.11	10	142	0.28	159	100
18	SL0015	2900	6.0	4.71	13	45	0.5	5	7.54	1.2	102	41	18	4367	8.29	0.22	15	6	0.60	1144	5	0.06	17	0.09	2	261	0.23	105	56
19	SL0016	70	0.4	0.44	32	21	0.5	5	0.90	1.3	82	27	18	156	32.82	0.06	38	3	0.20	617	9	0.02	33	0.10	2	13	0.02	160	61
21	SL0017	30	0.2	0.65	31	99	0.5	5	0.23	4.0	33	22	31	121	36.92	0.16	16	4	0.25	513	11	0.02	42	0.11	2	6	0.03	201	69
23	SL0018	70	0.2	0.37	36	60	0.6	5	0.69	3.9	45	31	21	449	36.71	0.12	16	2	0.14	455	10	0.02	40	0.12	2	5	0.03	237	65
25	SL0019	120	0.2	0.33	45	53	0.5	5	0.64	3.8	44	153	20	331	36.40	0.12	17	3	0.13	406	10	0.02	46	0.11	2	4	0.02	210	63
27	SL0020	760	1.2	0.65	39	82	0.7	5	0.40	4.0	38	199	23	1761	35.72	0.16	16	3	0.23	518	29	0.02	43	0.11	2	10	0.03	280	65
29	PM0370	90	0.2	3.72	9	49	0.3	5	2.89	1.4	74	22	23	81	6.77	0.39	13	11	1.56	519	1	0.10	15	0.11	21	178	0.47	211	38
30	PM0371	30	0.2	4.04	6	113	0.3	5	2.64	1.4	72	17	15	39	6.19	0.61	13	12	1.99	686	2	0.17	15	0.10	2	155	0.40	192	48
31	PM0372 s	30	0.2	2.86	12	57	0.2	5	2.07	0.3	57	40	19	70	5.77	0.50	9	8	1.00	475	1	0.09	19	0.07	2	110	0.23	141	37
32	PM0373	140	5.0	2.29	33	83	0.5	5	15.39	1.2	107	43	8	2143	5.97	0.40	12	11	1.82	2502	5	0.04	24	0.03	38	121	0.01	167	116
33	PM0374	90	0.2	1.78	9	238	0.2	5	1.06	0.6	44	20	15	30	4.49	0.72	7	12	1.64	510	2	0.10	19	0.06	2	34	0.28	125	30
34	PM0375	30	0.2	3.79	5	137	0.2	5	2.98	0.2	74	84	14	32	7.43	0.56	14	10	1.28	426	2	0.15	19	0.09	2	173	0.34	159	40
35	PM0378	20	0.2	1.79	9	211	0.2	5	1.47	0.2	51	42	34	32	4.69	0.55	8	8	1.63	537	1	0.12	16	0.07	2	45	0.24	135	37
36	PM0379	10	0.2	2.94	12	505	0.2	5	1.32	0.2	51	12	6	72	4.85	0.91	9	10	1.59	943	3	0.27	5	0.10	2	76	0.30	81	54
37	PM0411	30	0.2	3.74	14	233	0.2	5	2.37	0.6	59	24	24	105	5.31	0.55	9	9	1.31	703	7	0.19	20	0.08	2	132	0.30	139	61
38	PM0414	150	0.4	2.78	10	48	0.2	5	4.25	1.5	77	47	40	249	5.88	0.28	14	12	1.28	836	3	0.12	34	0.08	2	86	0.37	147	199
39	PM0415	160	0.2	4.83	18	15	0.3	5	9.89	0.2	99	119	24	335	7.65	0.09	11	4	0.17	1039	4	0.04	14	0.09	2	228	0.31	241	15
40	PM0416	120	0.8	2.32	6	59	0.2	5	2.11	0.2	62	87	37	567	4.45	0.60	13	8	0.86	398	2	0.08	36	0.07	2	85	0.34	105	39
41	PM0417 sI	500	1.6	2.23	9	4	0.4	5	4.16	0.2	71	618	30	963	6.99	0.03	11	3	0.14	515	42	0.03	25	0.02	2	102	0.01	92	18
43	PM0421 s	80	1.2	4.49	4	298	0.3	5	4.85	0.3	85	141	19	1023	8.91	0.59	16	8	1.30	1490	2	0.21	42	0.09	2	143	0.06	124	54
45	PM0422	50	1.0	5.61	7	97	0.3	5	5.83	0.2	90	91	19	666	9.04	0.34	13	7	1.04	1118	2	0.13	23	0.12	2	182	0.21	182	50
46	PM0423	420	2.0	6.03	2	17	0.3	5	8.00	0.2	99	11	13	367	9.41	0.14	10	4	0.57	1095	2	0.11	6	0.12	2	300	0.25	177	31
47	PM0426 rx	140	1.2	5.07	8	3	0.3	5	8.00	0.2	97	113	19	992	8.40	0.03	11	3	0.15	573	2	0.03	56	0.07	2	275	0.22	113	19

23/09 64 6A

*Imported*

**NORANDA DELTA LABORATORY**  
Geochemical Analysis

Project Name & No.: JOH - 45584 (*WEST*)

Material: 7 Rx

Remarks: • Sample screened @ -35 MESH (0.5 mm)

■ Organic, A Humus, S Sulfide

ICP - 0.2 g sample digested with 3 ml HClO<sub>4</sub>/HNO<sub>3</sub> (4:1) at 203 °C for 4 hours diluted to 10 ml with water. Leeman PS3000 ICP determined elemental contents.

N.B. The major oxide elements and Ba, Be, Ce, La, Li, Ga are rarely dissolved completely from geological materials with this acid dissolution method.

Geol.: G.G.

Sheet: 1 of 1

Date received: AUG. 10

LAB CODE: 9408-030

Date completed: AUG. 29

Au - 10.0 g sample digested with aqua-regia and determined by A.A. (D.L. 5 PPB)

T.T. No.	SAMPLE No.	Au ppb	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sr ppm	Ti %	V ppm	Zn ppm
251	RL0221 rx	25	0.8	2.10	4	63	0.2	5	0.93	0.2	33	9	29	26	3.92	0.16	8	17	0.89	697	1	0.11	2	0.05	2	39	0.20	69	77
252	RL0222	25	0.4	3.75	2	250	0.2	5	0.86	0.2	31	8	18	59	4.42	0.91	6	13	0.87	539	1	0.11	1	0.05	2	43	0.17	46	56
253	RL0223	10	0.8	4.79	2	19	0.3	5	4.29	0.3	65	34	41	278	6.13	0.06	8	11	2.77	1010	1	0.36	19	0.06	2	48	0.41	294	60
255	RL0224	20	0.4	4.65	2	13	0.2	5	3.11	0.2	63	17	25	62	5.99	0.08	8	11	2.17	551	1	0.18	9	0.08	2	55	0.38	203	52
256	RL0225	5	0.8	3.58	3	480	0.5	5	9.18	0.8	98	14	27	74	3.90	0.92	7	12	0.98	604	17	0.10	37	0.07	2	134	0.14	246	75
258	RL0226	10	0.8	4.87	2	17	0.2	5	3.18	0.2	66	16	28	92	7.41	0.07	9	10	2.13	748	1	0.28	9	0.09	2	111	0.47	210	67
259	RL0227 rx	15	0.4	4.47	2	42	0.2	5	1.18	0.2	30	39	55	144	9.31	0.13	7	13	2.66	689	1	0.07	19	0.07	2	38	0.32	216	72

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**NORANDA DELTA LABORATORY**  
**Geochemical Analysis**

Project Name & No.: JOH - 45584 (IAEST)

Material: 10 Rx

Remarks: \* Sample screened @ -35 MBSII (0.5 mm)

\*\* Organic, A Humus, S Sulfide

Geol.: G.G.

Sheet: 1 of 1

Date received: AUG. 24

**LAB CODE:** 9408-061

Date completed: SEP. 14

Au - 10.0 g sample digested with aqua-regia and determined by A.A. (D.L. 5 PPB)

ICP - 0.2 g sample digested with 3 ml HClO<sub>4</sub>/HNO<sub>3</sub> (4:1) at 203 °C for 4 hours diluted to 10 ml with water. Leeman PS3000 ICP determined elemental contents.

N.B. The major oxide elements and Ba, Be, Ce, La, Li, Ga are rarely dissolved completely from geological materials with this acid dissolution method.

T.T. No.	SAMPLE No.	Au ppb	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sr ppm	Ti %	V ppm	Zn ppm
176	KP0291 rx	5	1.2	4.78	19	50	0.4	7	5.23	1.1	87	36	56	386	10.29	0.18	15	8	3.23	1220	1	0.44	19	0.10	2	176	0.42	327	72
177	KP0292	5	0.8	4.47	7	555	0.3	5	3.21	0.6	70	18	43	207	4.92	0.74	15	9	1.08	625	15	0.31	22	0.08	2	269	0.25	140	85
178	KP0293	5	0.6	3.37	75	5	0.2	5	4.16	2.6	72	16	68	134	3.07	0.03	12	3	0.06	310	4	0.05	30	0.10	2	379	0.26	206	94
179	KP0294	5	0.2	3.38	6	421	0.2	5	2.12	0.3	53	21	31	149	6.13	1.01	12	10	1.90	831	1	0.24	8	0.06	2	75	0.29	178	102
180	KP0295	5	0.2	3.58	19	24	0.2	5	4.31	1.2	73	15	37	120	4.27	0.11	11	5	0.39	471	16	0.09	12	0.09	2	320	0.42	171	43
181	KP0296	5	0.8	4.11	2	73	0.4	5	3.98	1.1	60	18	44	185	4.53	0.42	16	7	0.92	497	3	0.06	15	0.08	2	202	0.31	208	61
182	KP0297	5	0.2	3.19	8	193	0.3	5	2.32	0.2	55	15	30	56	5.39	0.38	13	8	1.34	610	1	0.31	3	0.07	2	102	0.39	107	44
183	KP0298	40	0.6	3.59	13	116	0.2	5	2.84	0.2	55	18	33	109	5.85	0.26	12	10	1.43	607	2	0.18	8	0.06	2	144	0.31	174	62
184	KP0299	5	0.4	2.38	27	123	0.2	5	2.58	0.3	58	15	31	68	5.06	0.17	12	5	1.36	597	3	0.19	4	0.07	2	126	0.33	173	50
185	KP0300 rx	5	0.8	6.34	6	1	0.5	5	7.57	0.2	76	19	51	174	6.67	0.04	17	4	0.33	1335	20	0.07	25	0.16	2	518	0.28	583	41

1409 14 GB

**NORANDA DELTA LABORATORY**  
**Geochemical Analysis**

Project Name & No.: JOH - 45584 (WEST)

Material: 15 Soils

Remarks: • Sample screened @ -35 MBSII (0.5 mm)

• Organic, A Humus, S Sulfide

ICP - 0.2 g sample digested with 3 ml HClO<sub>4</sub>/HNO<sub>3</sub> (4:1) at 203 °C for 4 hours diluted to 10 ml with water. Leeman PS3000 ICP determined elemental contents.

N.B. The major oxide elements and Ba, Be, Ce, La, Li, Ga are rarely dissolved completely from geological materials with this acid dissolution method.

Geol.: G.G.

Sheet: 1 of 1

Date received: AUG. 24

LAB CODE: 9408-061

Date completed: AUG. 31

Au - 10.0 g sample digested with aqua-regia and determined by A.A. (D.L. 5 PPB)

T.T. No.	SAMPLE No.	Au ppb	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sr ppm	Ti %	V ppm	Zn ppm
221	168526 soil	25	0.6	4.18	13	170	0.4	5	1.37	0.4	36	14	21	108	5.43	0.18	10	9	1.03	588	3	0.08	13	0.12	10	74	0.27	145	66
222	168527	35	0.4	3.89	20	412	0.4	5	1.25	0.6	36	40	21	291	6.10	0.25	10	10	1.31	1329	10	0.07	27	0.14	9	94	0.26	156	107
223	168528	140	0.4	4.94	4	162	0.4	5	2.83	0.8	38	26	15	131	4.76	0.21	8	9	1.17	948	3	0.10	19	0.10	9	110	0.24	143	83
224	174414	15	0.6	3.36	14	303	0.3	5	1.33	1.1	39	33	14	329	5.43	0.50	11	12	1.53	999	2	0.08	31	0.09	9	59	0.29	155	157
225	174415	20	0.6	3.78	13	285	0.3	5	1.25	0.5	42	40	16	334	5.61	0.43	13	12	1.40	954	2	0.09	29	0.11	11	81	0.26	137	138
226	174416	45	0.8	3.39	13	322	0.3	5	1.48	0.8	44	38	14	236	5.28	0.43	12	10	1.49	989	2	0.11	27	0.09	20	99	0.27	149	107
227	174417	35	0.6	4.40	15	278	0.3	5	1.68	1.0	44	38	17	256	5.74	0.64	12	12	1.55	1142	3	0.11	40	0.10	25	94	0.27	191	147
228	174418	10	0.4	7.11	9	332	0.4	5	1.22	0.7	45	27	10	141	5.21	1.43	15	12	1.22	1438	1	0.18	23	0.12	13	47	0.16	173	123
229	174419	55	0.6	3.78	15	336	0.2	5	1.74	0.4	40	29	10	319	6.27	0.51	10	11	1.55	771	5	0.09	9	0.10	11	120	0.26	160	60
230	174420	270	0.6	3.94	12	225	0.3	5	1.77	0.4	44	26	10	364	6.24	0.26	12	7	1.11	660	25	0.07	11	0.11	96	161	0.23	158	55
231	174421	270	1.4	2.97	130	171	0.3	5	0.81	0.5	31	61	27	462	8.16	0.39	14	9	0.92	2477	14	0.06	68	0.15	12	60	0.20	371	85
232	174422	20	0.6	5.05	4	195	0.3	5	1.70	0.2	33	15	21	152	4.64	0.14	7	9	1.47	644	1	0.10	18	0.10	7	81	0.25	140	75
233	174423	15	0.4	4.38	4	264	0.2	5	1.17	0.2	31	11	21	169	5.63	0.34	8	8	1.71	638	1	0.07	14	0.09	7	83	0.27	157	57
234	174424	85	0.8	5.18	2	146	0.3	5	1.65	0.2	33	10	12	154	6.08	0.21	9	8	1.16	634	3	0.05	8	0.14	7	98	0.25	113	58
235	174425 soil	30	0.6	4.96	2	276	0.3	5	1.46	0.2	33	21	11	289	6.88	0.45	9	9	1.59	863	8	0.08	14	0.10	10	96	0.28	134	87

02/09 99 46

**NORANDA DELTA LABORATORY**  
**Geochemical Analysis**

Project Name & No.: JOH(WEST) - 45584  
 Material: 16 Rx

Remarks: • Sample screened @ -35 MESH (0.5 mm)  
 □ Organic, □ Humus, □ Sulfide

Geol.: G.G.  
 Sheet: 1 of 1

Date received: SEP. 16  
 Date completed: SEP. 27

LAB CODE: 9409-025

Au - 10.0 g sample digested with aqua-regia and determined by A.A. (D.L. 5 PPB)

ICP - 0.2 g sample digested with 3 ml HClO<sub>4</sub>/HNO<sub>3</sub> (4:1) at 203 °C for 4 hours diluted to 10 ml with water. Leeman PS3000 ICP determined elemental contents.

N.B. The major oxide elements and Ba, Be, Ce, La, Li, Ga are rarely dissolved completely from geological materials with this acid dissolution method.

T.T. No.	SAMPLE No.	Au ppb	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sr ppm	Ti %	V ppm	Zn ppm
139	PM0435 rx	190	0.2	1.58	36	53	0.2	5	0.05	0.2	5	315	5	391	14.34	0.14	6	6	0.65	412	3	0.01	14	0.04	2	2	0.03	36	50
140	PM0436	990	3.6	5.00	938	227	0.2	5	0.91	0.2	26	41	13	2744	11.58	0.64	10	6	1.39	644	5	0.03	3	0.07	2	50	0.20	158	92
141	PM0438	10	0.2	2.95	21	49	0.2	5	3.51	0.4	50	14	20	84	5.35	0.11	11	4	0.66	640	2	0.09	11	0.06	2	174	0.27	161	34
142	PM0439	5	0.2	3.18	18	224	0.3	5	3.56	0.8	53	18	30	95	5.60	0.26	12	8	1.64	873	12	0.18	16	0.07	2	190	0.34	164	59
143	PM0440	570	18.0	0.55	36	20	0.2	5	0.30	0.2	5	7	4	419	17.97	0.06	7	1	0.22	291	13	0.04	1	0.04	2	11	0.05	304	73
144	PM0441	30	0.2	6.32	221	1148	0.2	5	0.26	0.2	5	52	3	362	12.60	1.46	9	9	1.70	1013	1	0.11	2	0.08	2	25	0.33	130	75
145	PM0442	5	0.2	1.18	25	22	0.4	5	9.03	0.9	53	40	745	27	4.36	0.06	7	11	6.26	840	1	0.05	115	0.03	2	98	0.05	96	38
146	PM0443	5	0.2	4.44	6	124	0.3	5	4.49	0.5	57	15	36	114	5.40	0.20	12	7	1.16	824	23	0.36	16	0.10	2	182	0.34	298	63
147	PM0444	5	0.2	5.97	6	91	0.4	5	5.50	0.6	68	41	24	367	8.71	0.16	18	7	2.19	1073	1	0.46	26	0.05	2	185	0.13	150	75
151	PM0445	10	0.2	3.58	13	26	0.4	5	3.93	0.5	49	78	42	504	10.31	0.12	12	6	1.53	710	40	0.20	27	0.11	2	243	0.33	481	50
152	PM0446	5	0.2	5.99	24	51	0.4	5	5.66	0.3	51	48	61	557	7.96	0.10	10	5	2.34	1081	2	0.60	58	0.08	2	313	0.29	210	68
153	PM0447	5	0.2	3.25	13	265	0.3	5	3.09	0.5	45	17	10	88	5.18	1.18	12	9	1.24	649	1	0.14	9	0.06	2	37	0.24	161	71
154	PM0448	30	0.2	2.85	6	90	0.3	5	3.14	0.2	50	26	4	328	7.14	0.20	13	9	1.88	858	1	0.21	7	0.08	2	121	0.47	198	73
155	PM0449	670	3.6	4.64	2	34	0.2	5	2.63	0.8	50	20	14	1460	8.32	0.08	14	14	2.90	1178	4	0.22	3	0.08	2	147	0.48	257	140
156	PM0450	5	0.2	1.73	10	22	0.2	5	1.97	0.3	47	8	19	50	3.85	0.08	12	4	0.65	376	1	0.10	9	0.05	2	124	0.35	147	30
157	PM0451 rx	5	0.2	4.50	13	24	0.3	5	4.87	0.7	58	41	20	383	8.10	0.11	14	7	1.72	1027	5	0.34	18	0.10	2	300	0.50	218	75

29/09 99 93  
 (100% P.M.)

copied to 6

# NORANDA DELTA LABORATORY

## Geochemical Analysis

**Project Name & No.:** JOII - 45584  
**Material:** 48 RX

**Geo.: G.G.**  
**Sheet: 1 of 2**

**Date received:** JULY 07  
**Date completed:** JULY 13

**LAB CODE:** 9407-009

**Remarks:**  
 • Sample screened @ -35 MBSH (0.5 mm)

■ Organic, Allumus, S Sulfide

Au - 10.0 g sample digested with aqua-regia and determined by A.A. (D.L. 5 PPB)

ICP - 0.2 g sample digested with 3 ml HClO<sub>4</sub>/HNO<sub>3</sub> (4:1) at 203 °C for 4 hours diluted to 10 ml with water. Leeman PS3000 ICP determined elemental contents.

N.B. The major oxide elements and Ba, Be, Ce, La, Li, Ga are rarely dissolved completely from geological materials with this acid dissolution method.

T.T. No.	SAMPLE No.	Au ppb	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Cu %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Ca ppm	Fe %	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sr ppm	Ti %	V ppm	Zn ppm
78	LE-02	5	0.2	2.95	2	192	0.2	5	2.45	0.2	61	10	19	47	3.59	0.50	14	6	0.43	193	2	0.07	5	0.10	2	210	0.20	95	2
79	3	5	0.2	3.68	7	213	0.3	8	7.29	0.7	70	29	189	185	4.87	1.54	13	11	3.37	768	4	0.06	54	0.06	2	124	0.07	163	27
80	5	5	0.2	3.86	4	85	0.2	6	3.98	0.2	61	26	25	143	5.75	0.35	15	9	1.79	715	3	0.18	19	0.09	2	129	0.41	210	29
81	6	5	0.2	3.50	6	34	0.3	5	2.69	0.5	69	19	12	244	4.56	0.38	14	9	1.03	347	2	0.09	5	0.12	2	137	0.36	149	22
82	LE-18	810	4.8	4.23	10	150	0.3	5	2.94	0.5	83	33	31	8756	4.54	0.73	22	16	1.99	771	1	0.10	40	0.15	2	291	0.54	184	44
83	LE-29	5	0.2	4.14	2	100	0.3	6	3.16	0.6	69	19	18	146	5.94	0.39	17	10	1.60	558	1	0.12	16	0.09	2	139	0.46	236	35
84	30	5	0.2	5.84	3	60	0.3	7	3.98	0.2	74	26	10	419	5.70	0.32	14	14	1.05	582	1	0.06	13	0.13	2	238	0.42	161	27
85	31	5	0.2	3.78	3	56	0.2	5	2.72	0.2	67	15	18	161	6.24	0.36	16	12	1.66	467	1	0.12	14	0.10	2	125	0.47	224	28
86	32	5	0.2	4.33	12	30	0.3	6	2.25	0.3	67	31	6	283	5.24	0.31	17	16	1.41	479	1	0.05	8	0.13	2	139	0.47	194	29
87	LE-33	5	0.2	3.88	10	40	0.2	8	2.88	0.2	71	18	13	192	5.58	0.38	17	9	1.23	412	1	0.09	6	0.13	2	163	0.49	177	23
88	LE-34	5	0.2	3.60	9	79	0.2	5	2.31	0.2	60	13	17	194	5.88	0.31	13	8	1.16	421	1	0.11	10	0.10	2	101	0.42	171	24
89	50	5	0.2	3.58	10	159	0.2	5	3.35	0.9	68	22	58	143	6.06	0.39	15	8	2.33	727	1	0.30	31	0.10	2	117	0.40	210	35
90	51	5	0.2	4.68	9	181	0.2	5	4.10	0.6	72	21	41	193	6.36	0.46	17	9	2.21	775	1	0.40	28	0.12	2	190	0.42	228	37
91	52	5	0.2	4.27	5	198	0.3	5	3.87	0.2	70	25	16	457	6.35	0.48	15	8	0.80	305	6	0.10	8	0.16	2	325	0.22	164	21
92	LE-54	5	0.2	4.26	4	75	0.3	5	4.60	0.4	67	21	123	394	7.56	0.25	13	6	1.01	510	5	0.20	53	0.08	2	198	0.23	139	30
93	LE-55	5	0.2	4.47	9	102	0.3	5	3.86	1.0	64	18	25	158	5.62	0.56	13	10	1.46	560	10	0.12	16	0.08	2	215	0.40	224	32
94	56	5	0.2	4.40	6	96	0.2	5	4.46	0.2	68	17	21	135	5.78	0.37	14	9	1.26	586	1	0.11	13	0.09	2	241	0.41	226	34
95	57	5	0.2	4.41	3	121	0.2	5	3.83	0.3	63	19	28	177	5.67	0.53	13	8	1.42	548	2	0.16	18	0.08	2	182	0.38	215	34
96	LE-58	5	0.2	4.72	8	137	0.2	5	3.69	0.8	64	18	29	216	5.58	0.60	14	10	1.69	577	2	0.16	20	0.08	4	167	0.40	219	42
97	GG-41	5	0.2	3.71	11	111	0.2	6	3.78	1.0	66	20	54	397	4.80	0.55	14	11	1.81	639	1	0.19	26	0.09	6	169	0.33	160	41
98	GG-42	5	0.4	3.96	7	23	0.2	7	4.10	0.2	69	14	25	49	5.46	0.21	13	9	1.74	603	1	0.12	14	0.09	2	241	0.44	214	36
101	43	60	0.2	3.03	53	44	0.4	5	1.27	0.6	44	90	50	353	9.46	0.24	12	17	2.11	2053	20	0.06	84	0.07	2	53	0.26	160	54
102	44	5	0.2	5.25	10	63	0.4	5	5.47	0.7	79	28	43	64	6.16	0.19	16	17	2.43	922	3	0.07	39	0.10	2	377	0.46	254	68
103	GG-45	20	0.2	3.04	15	116	0.3	5	3.68	1.1	66	33	21	775	6.60	0.38	15	11	2.51	926	1	0.33	17	0.11	2	71	0.58	237	57
104	KP-20	5	0.2	4.15	11	227	0.3	5	3.38	0.2	76	6	16	72	3.93	0.59	17	9	0.74	415	2	0.11	5	0.13	2	327	0.37	149	29
105	KP-26	5	0.2	4.15	6	148	0.2	5	2.91	0.5	73	8	15	300	4.21	0.44	16	9	0.91	404	2	0.08	5	0.14	2	229	0.32	159	28
106	28	5	0.2	4.82	9	127	0.2	5	3.86	0.5	67	14	18	300	6.28	0.59	14	12	1.47	603	3	0.11	13	0.09	2	273	0.36	223	36
107	30	5	0.2	4.78	13	104	0.2	5	4.34	0.2	67	15	22	177	5.75	0.58	12	9	1.31	611	2	0.13	15	0.09	2	240	0.39	226	32
108	33	5	0.2	3.08	11	112	0.2	6	2.98	0.7	62	15	26	77	5.42	0.35	16	9	1.70	642	5	0.19	16	0.09	2	143	0.47	198	37
109	KP-34	5	0.2	3.34	15	121	0.2	5	3.20	1.1	63	24	34	212	5.55	0.44	14	9	1.57	664	3	0.20	23	0.09	2	126	0.50	201	38
110	KP-35	5	0.2	4.22	13	140	0.2	5	3.69	0.3	63	18	25	161	5.93	0.42	15	11	1.44	535	2	0.14	12	0.11	2	257	0.42	200	34
111	KP-45	5	0.2	7.45	12	1475	0.4	8	1.02	0.9	43	10	12	43	5.20	2.69	13	15	2.24	1237	1	0.07	9	0.11	10	53	0.40	207	316
112	RL-01	5	0.2	2.27	13	23	0.2	5	3.15	0.2	66	40	58	754	5.46	0.07	13	5	0.31	308	3	0.07	83	0.12	3	145	0.28	131	19
113	2	80	0.2	0.69	2	107	0.2	5	0.05	0.2	8	11	189	40	8.22	0.26	3	4	0.11	123	13	0.07	1	0.06	2	12	0.02	86	15
114	RL-8	5	0.2	1.88	10	44	0.2	5	2.52	0.7	65	23	35	111	5.13	0.27	15	8	1.88	571	1	0.18	12	0.09	2	26	0.39	158	33

11/07 Use 11/11

T.T. No.	SAMPLE No.	Au ppb	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	La ppm	Li ppm	Mg %	Ma ppm	Mo ppm	Na %	Ni %	P %	Pb ppm	Sr ppm	Ti %	V ppm	Zn ppm	9407-009 Pg. 2 of 2
115	RL- 11	5	0.4	1.42	10	32	0.2	5	2.23	0.6	61	19	53	275	4.57	0.12	15	6	0.60	431	2	0.13	16	0.09	2	56	0.30	144	23	
116	13	5	0.2	2.21	8	23	0.2	6	2.78	0.3	65	13	50	102	3.35	0.09	14	5	0.51	425	3	0.11	19	0.09	2	105	0.23	91	24	
117	14	5	0.2	3.29	11	44	0.2	5	3.74	0.5	69	19	38	149	4.43	0.17	14	6	0.86	600	2	0.15	12	0.10	2	125	0.32	144	27	
118	15	5	0.2	2.64	13	63	0.2	6	3.02	0.5	69	24	81	198	3.59	0.20	18	6	0.53	421	5	0.13	29	0.08	3	90	0.24	126	30	
119	RL- 16	20	0.2	3.26	9	32	0.2	5	4.28	0.3	75	7	57	87	4.92	0.07	16	4	0.38	776	5	0.11	13	0.10	2	145	0.26	108	31	
120	RL- 17	5	0.2	3.33	10	42	0.2	5	3.99	0.3	74	10	32	130	4.16	0.18	14	6	0.42	570	4	0.08	7	0.13	2	146	0.27	101	25	
121	18	5	0.2	3.32	2	35	0.4	6	4.54	0.5	83	11	42	68	3.79	0.10	19	6	0.19	620	5	0.08	13	0.12	2	259	0.22	101	22	
122	19	5	0.2	2.54	5	33	0.3	5	3.30	0.4	74	13	49	144	4.00	0.08	16	5	0.25	643	3	0.11	23	0.11	2	132	0.24	90	29	
123	20	5	0.2	2.34	7	11	0.3	5	3.26	0.2	75	8	63	129	4.25	0.04	24	4	0.12	650	4	0.07	12	0.11	3	114	0.21	66	32	
124	RL- 21	5	0.2	2.00	3	12	0.2	5	3.29	0.2	70	13	71	218	4.04	0.03	17	4	0.14	522	5	0.09	24	0.10	2	90	0.25	73	35	
125	RL- 22	5	0.2	3.14	2	17	0.3	5	6.92	0.4	85	11	86	118	2.63	0.04	15	5	0.07	674	5	0.05	30	0.11	2	45	0.22	60	52	
126	23	5	0.2	2.41	2	42	0.2	5	3.18	0.2	66	7	43	113	4.14	0.07	16	3	0.16	482	3	0.08	12	0.09	2	118	0.23	86	25	
127	RL-24	5	0.2	4.70	3	806	0.2	5	2.03	0.2	58	25	26	351	7.41	0.97	14	14	1.46	378	9	0.12	12	0.08	2	123	0.38	352	28	

*Entered Aug 25*

**NORANDA DELTA LABORATORY**  
**Geochemical Analysis**

Project Name & No.: JOH - 45584

Material: 34 Rx

Remarks: • Sample screened @ -35 MBSII (0.5 mm)  
• Organic, A Humus, S Sulfide

Geol.: G.G.

Sheet 1 of 1

Date received: JUL. 22

Date completed: AUG. 05

**LAB CODE:** 9407-035

Au - 10.0 g sample digested with aqua-regia and determined by A.A. (D.L. 5 PPB)

ICP - 0.2 g sample digested with 3 ml HClO<sub>4</sub>/HNO<sub>3</sub> (4:1) at 203 °C for 4 hours diluted to 10 ml with water. Leeman PS3000 ICP determined elemental contents.

N.B. The major oxide elements and Ba, Be, Ce, La, Li, Ga are rarely dissolved completely from geological materials with this acid dissolution method.

T.T. No.	SAMPLE No.	Au ppb	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sr ppm	Ti %	V ppm	Zn ppm
245	PM - 0102	70	0.2	2.68	4	65	0.2	5	2.19	0.6	61	14	8	1077	3.55	0.52	14	11	0.99	302	3	0.08	7	0.23	3	154	0.41	157	21
246	103	5	0.2	2.55	4	42	0.2	5	1.89	0.3	57	12	9	206	3.13	0.39	12	9	0.94	265	5	0.12	8	0.13	2	193	0.32	131	19
247	104	90	0.2	2.02	7	43	0.2	5	1.92	0.4	56	29	6	2200	4.16	0.24	10	8	0.51	296	5	0.06	5	0.09	3	139	0.24	93	19
248	105	70	0.2	3.40	4	47	0.2	5	3.45	0.7	63	31	8	1624	5.34	0.41	14	17	1.50	563	3	0.13	6	0.16	3	255	0.45	179	48
251	PM - 106	10	0.2	4.54	2	74	0.2	5	4.42	0.8	53	18	15	271	6.24	0.46	13	10	1.28	646	1	0.16	16	0.10	2	231	0.57	232	35
252	PM - 107	70	0.8	4.09	5	25	0.2	5	5.45	0.3	38	99	11	953	13.37	0.14	12	4	0.64	593	6	0.10	39	0.06	2	339	0.24	223	31
253	108	5	0.2	2.89	6	141	0.2	5	3.07	0.9	45	33	14	176	7.62	0.53	13	10	1.96	700	2	0.23	19	0.09	2	65	0.57	207	39
254	PM - 0109	60	0.2	3.40	14	29	0.2	5	4.43	0.8	45	179	15	2404	12.95	0.23	14	5	1.36	1099	4	0.20	33	0.07	2	102	0.25	159	54
255	RL - 0045	5	0.2	5.41	2	472	0.5	5	5.15	1.1	51	27	8	143	5.45	2.56	12	9	1.01	632	1	0.08	8	0.15	2	61	0.11	245	45
256	RL - 46	20	0.2	4.10	4	95	0.2	5	3.95	1.3	61	22	9	1945	5.21	0.73	15	13	1.19	631	2	0.14	6	0.18	2	262	0.50	223	44
257	RL - 47	5	0.2	4.27	6	400	0.2	5	3.57	1.0	60	21	13	292	6.41	0.68	15	11	1.53	478	4	0.21	10	0.15	2	185	0.50	201	37
258	48	5	0.2	2.56	7	68	0.2	5	3.04	0.3	60	34	18	485	5.38	0.27	13	9	1.26	419	3	0.18	18	0.10	2	132	0.62	178	26
259	49	30	0.2	3.99	2	73	0.2	5	3.77	0.4	48	90	9	333	8.70	0.42	11	8	1.04	634	8	0.10	10	0.06	2	114	0.39	182	41
260	50	5	0.2	3.32	7	99	0.2	5	3.41	0.3	46	35	16	335	7.19	0.60	14	10	1.88	761	2	0.24	17	0.11	2	88	0.64	228	41
261	RL - 52	40	0.2	3.37	2	42	0.2	5	3.38	0.7	46	16	7	393	4.17	0.47	12	9	0.86	400	5	0.12	6	0.14	2	257	0.39	172	29
262	RL - 53	50	0.2	3.38	7	89	0.2	5	3.27	0.6	47	23	15	411	5.04	0.50	11	10	1.50	553	3	0.18	17	0.10	2	134	0.54	181	34
263	54	30	0.2	3.72	2	72	0.2	5	3.76	0.6	44	18	12	399	5.03	0.46	11	10	1.38	479	1	0.14	13	0.09	2	179	0.54	192	31
264	55	60	0.2	3.88	2	100	0.2	5	3.78	0.4	44	19	14	617	5.31	0.57	11	10	1.56	579	1	0.23	14	0.09	2	159	0.56	200	36
265	56	5	0.2	3.75	2	118	0.2	5	3.89	0.6	52	18	11	225	4.86	0.44	12	10	1.13	496	3	0.18	13	0.10	2	180	0.52	179	27
266	RL - 57	10	0.2	4.24	2	109	0.2	5	4.54	0.8	52	18	12	197	5.48	0.50	12	9	1.34	624	3	0.21	13	0.11	2	178	0.58	204	32
267	RL - 58	10	0.2	3.35	2	60	0.2	5	3.41	0.6	50	27	17	491	6.19	0.52	14	11	1.96	601	10	0.23	18	0.10	2	115	0.56	204	39
268	59	50	0.2	3.10	7	77	0.2	5	2.84	0.4	47	26	17	1250	4.61	0.50	12	12	1.36	348	3	0.12	24	0.09	3	152	0.56	190	27
269	60	5	0.2	3.15	10	188	0.2	5	3.14	0.6	49	25	22	264	6.10	0.72	13	11	1.96	629	3	0.15	24	0.09	2	123	0.49	191	41
270	61	5	0.2	3.26	11	66	0.2	5	3.32	0.6	50	18	18	329	6.03	0.35	13	11	1.24	480	11	0.14	14	0.09	2	158	0.58	175	30
271	RL - 62	5	0.2	3.76	2	401	0.2	5	3.14	0.2	52	19	14	142	6.06	0.58	16	11	1.44	496	3	0.19	11	0.12	2	172	0.44	189	37
272	RL - 63	5	0.2	3.66	4	429	0.2	5	3.14	0.3	51	16	10	160	5.64	0.60	15	9	1.35	438	1	0.18	8	0.12	2	178	0.41	175	32
273	64	20	0.2	3.66	2	167	0.2	5	3.68	0.4	47	37	11	198	7.87	0.53	15	9	1.34	490	4	0.14	10	0.10	2	198	0.49	198	31
274	65	5	0.2	3.44	2	231	0.2	5	2.73	0.2	50	18	9	347	5.31	0.61	14	9	1.03	287	3	0.13	7	0.12	2	168	0.40	154	23
275	66	5	0.2	2.98	12	137	0.2	5	3.37	0.3	55	27	25	118	6.22	0.45	13	9	1.58	582	4	0.24	19	0.09	2	99	0.55	186	30
276	RL - 67	5	0.2	2.61	10	145	0.2	5	2.94	0.4	54	22	19	160	5.61	0.52	14	10	1.84	544	7	0.22	17	0.09	2	63	0.54	188	34
277	RL - 68	5	0.2	3.82	7	159	0.2	5	3.73	0.5	53	21	18	80	6.16	0.51	16	11	1.88	602	2	0.29	14	0.10	2	112	0.54	214	34
278	69	5	0.2	3.38	5	87	0.2	5	4.02	0.3	54	23	16	200	6.00	0.38	18	9	1.35	494	17	0.18	17	0.09	2	160	0.56	201	29
279	RL - 0070	5	0.2	2.65	7	49	0.2	5	2.48	0.4	46	22	17	213	6.91	0.33	13	8	1.45	650	4	0.14	15	0.08	2	46	0.58	172	42
280	SL - 0003	5	0.2	0.07	2	6	0.2	5	0.09	0.2	17	3	6	18	0.65	0.01	6	1	0.04	123	3	0.01	3	0.01	5	3	0.01	6	4

10/8 66' GG

**APPENDIX III**  
**STATEMENT OF COSTS**

**NORANDA EXPLORATION COMPANY, LIMITED**  
**STATEMENT OF COSTS**

PROJECT: JOH

DATE: DECEMBER 1994

TYPE OF REPORT: GEOLOGICAL

a) Wages:

No. of Mandays :	33 mandays	
Rate per Manday:	\$190.76/manday	
Dates From :	August 16 to September 25, 1994	
Total Wages :	33 mandays x 190.76/manday	\$6,295.00

b) Food & Accommodations:

No. of Mandays :	33 mandays	
Rate per Manday:	\$20.07/manday	
Dates From :	August 16 to September 25, 1994	
Total Costs :	33 mandays x \$20.07/manday	\$662.23

c) Transportation:

No. of Mandays :	33 mandays	
Rate per Manday:	\$24.51/manday	
Dates From :	August 16 to September 25, 1994	
Total Costs :	33 mandays x \$24.51/manday	\$808.95

d) Supplies: \$191.32

e) Analysis: 196 rocks \$16.00 \$3,136.00  
(See attached schedule)

f) Cost of Preparation of Report:  
Author : 2 mandays @ \$260.00 \$520.00  
Drafting: 2 mandays @ \$260.00 \$520.00  
Typing : 1 manday @ \$180.00 \$180.00

g) Other: Helicopter

Contractor: Pacific Western Helicopters Ltd.  
6.1 hours @ \$702.00/hour including fuel \$4,279.34

**TOTAL COST** **\$16,592.84**

h) Unit Costs for Geology:

No. of Mandays : 33 mandays  
No. of Units : 33 mandays  
Unit Costs : \$502.81/manday  
Total Cost : 33 mandays x \$502.81/manday \$16,592.84

**GRAND TOTAL** **\$16,592.84**

**NORANDA EXPLORATION COMPANY, LIMITED**

**DETAILS OF ANALYSIS COSTS**

**PROJECT: GEOLOGICAL**

<b>ELEMENT</b>	<b>NO. OF DETERMINATIONS</b>	<b>COST PER DETERMINATION</b>	<b>TOTAL COSTS</b>
ICP (30 Element) + Geochem Au	196 Rocks	\$16.00	\$3,136.00

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**APPENDIX IV**  
**STATEMENT OF QUALIFICATIONS**

## **STATEMENT OF QUALIFICATIONS**

I, D. Graham Gill of the City of Vancouver, Province of British Columbia, hereby certify  
that:

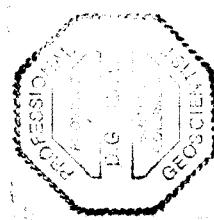
I am a geologist residing at 5442 - 7th Avenue, Delta, B.C.

I have graduated from the University of British Columbia in 1983 with a BSc in geology.


I have worked in mineral exploration since 1979.


I have been a temporary employee with Noranda Exploration Company, Limited since  
May, 1983 and a permanent employee since November 1987.

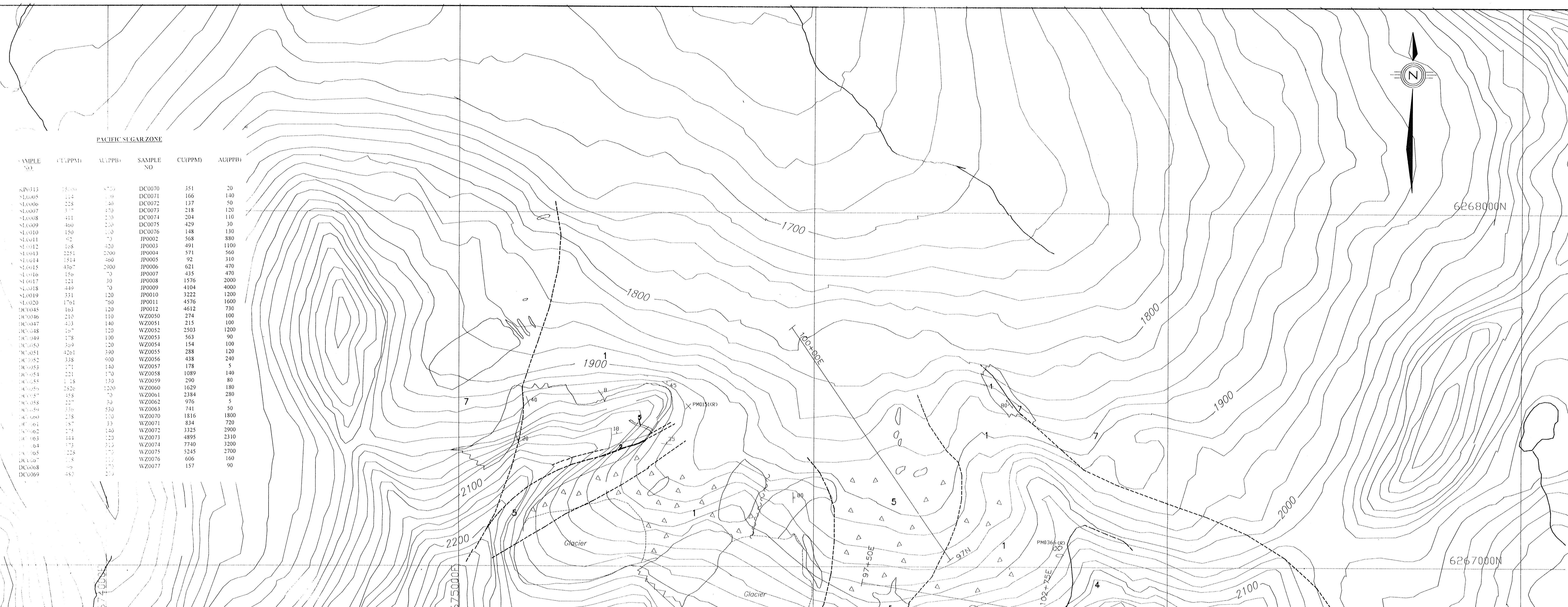
I am a member in good standing of the Professional Engineers & Geoscientist of British  
Columbia.



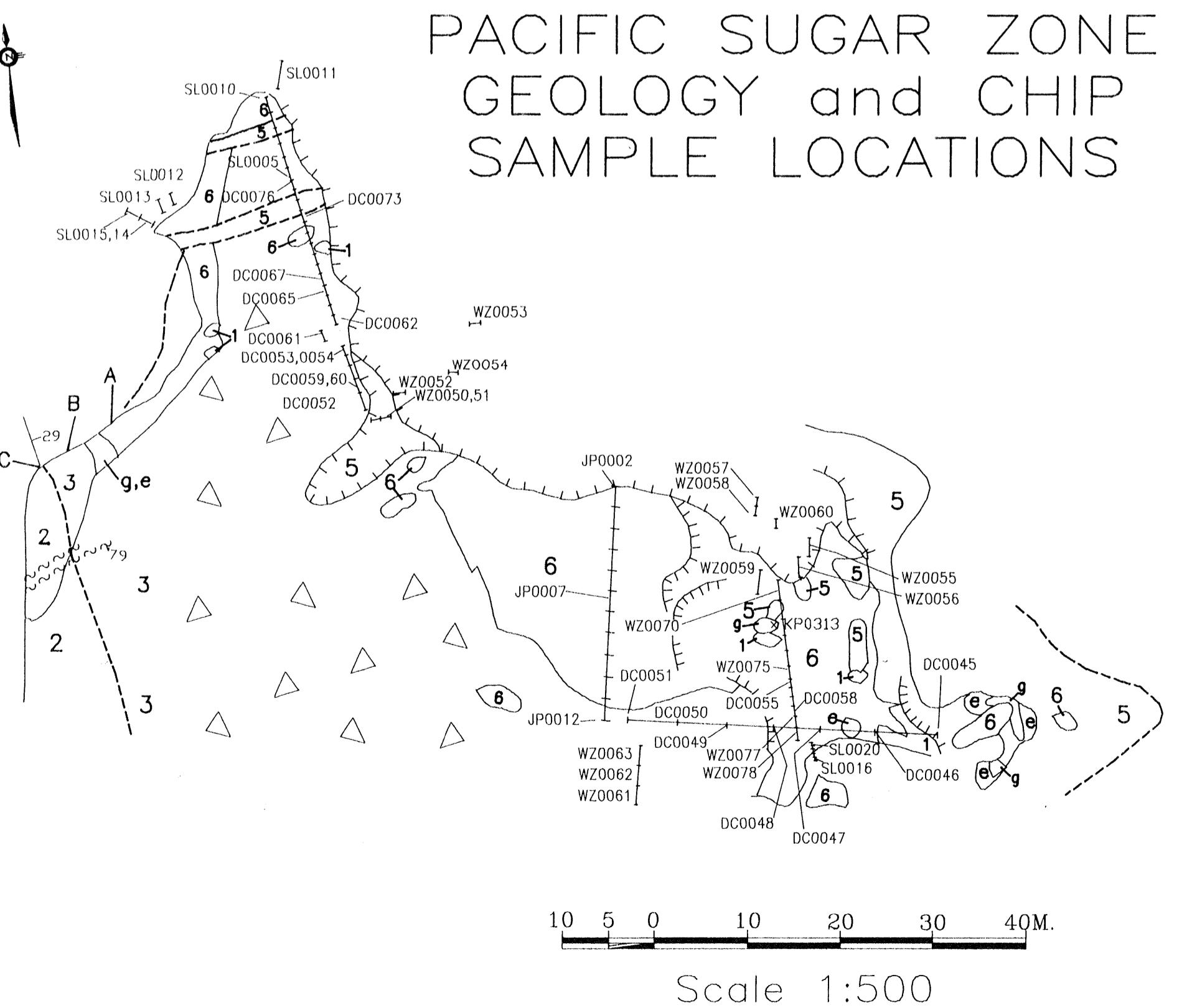
*D. H. Gill*  
D. Graham Gill, P.Geo.







### PACIFIC SUGAR ZONE GEOLOGY and CHIP SAMPLE LOCATIONS

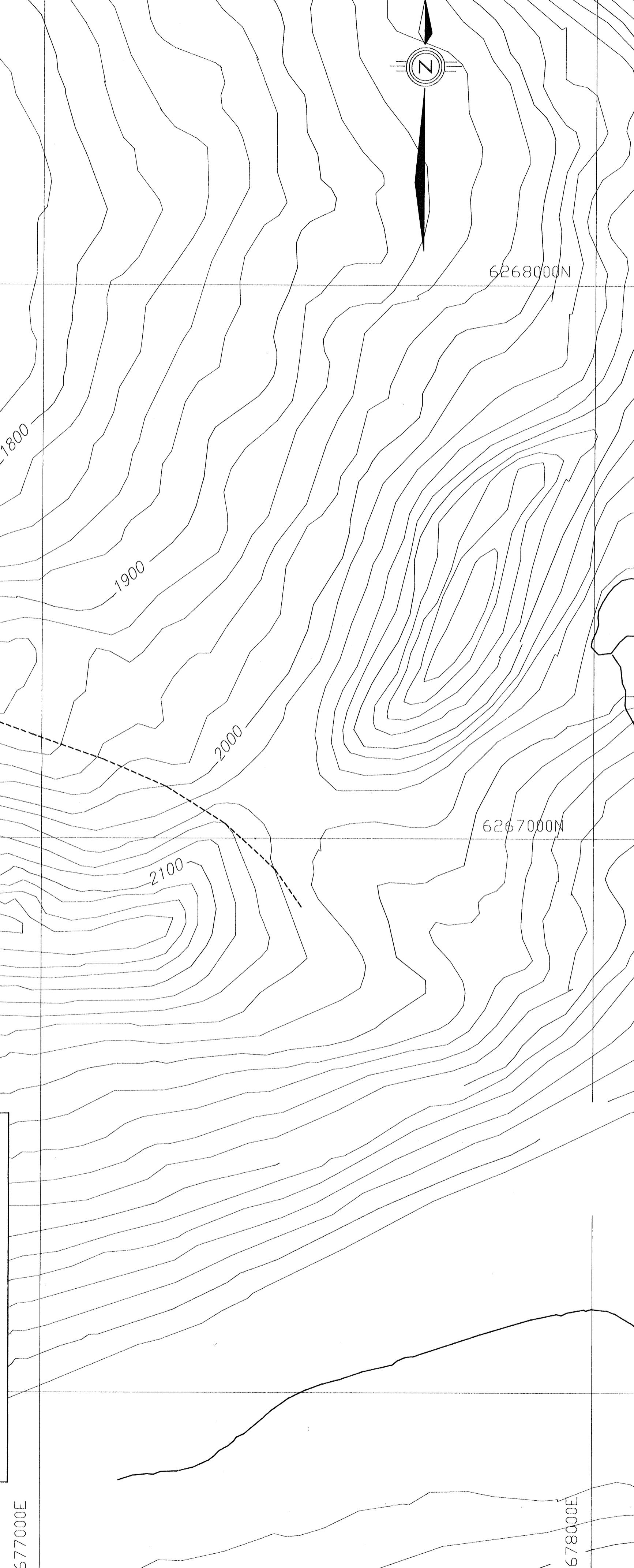
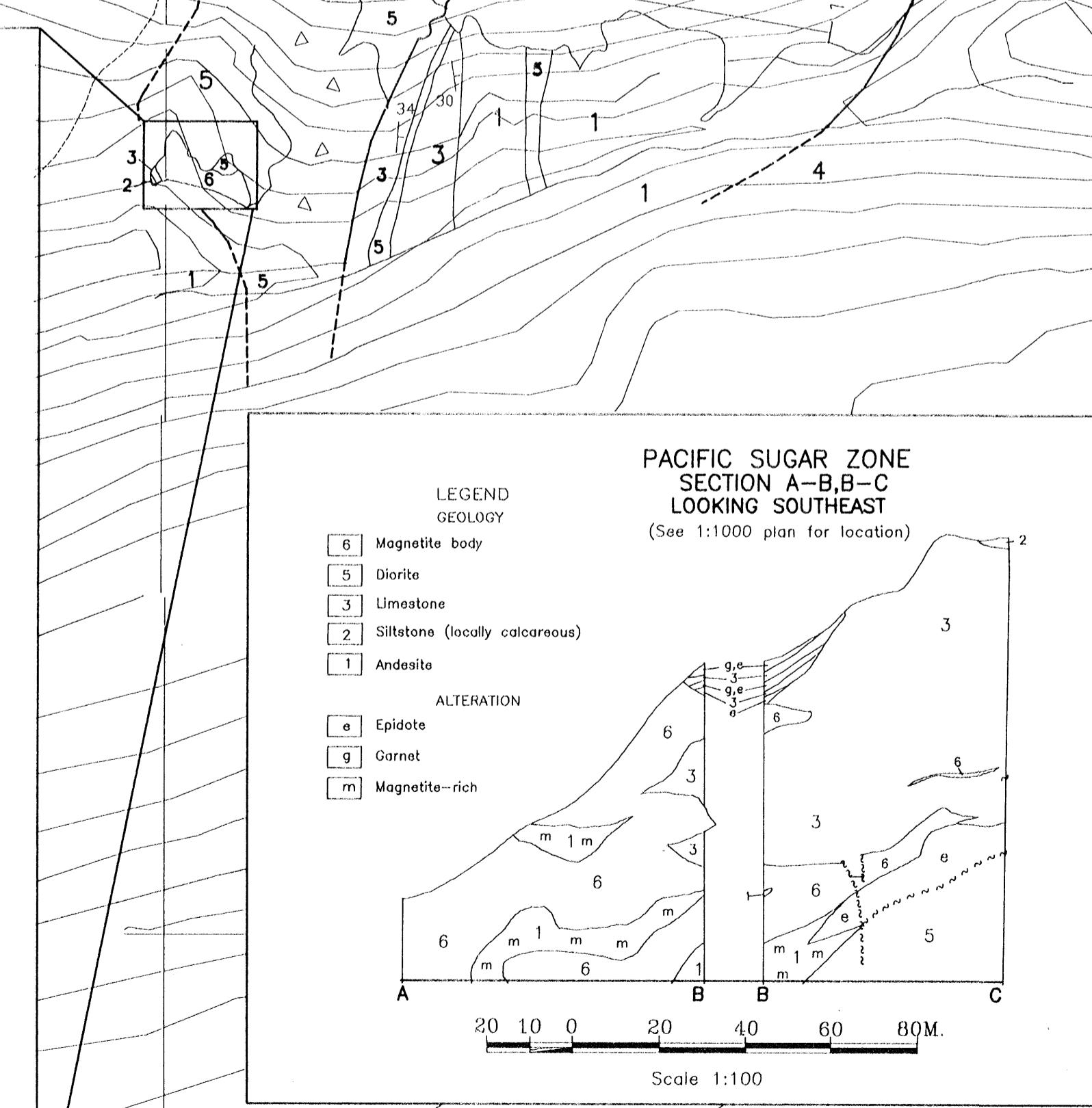


**GEOLOGY**

- [2] Calcareous/non-calcareous sediments
- [3] Limestone
- [6] Magnetite body
- [1] Andesite volcanics
- [5] Diorite/microdiorite
- [7] Granodiorite
- ALTERATION
- e Epidote
- g Garnet

**SYMBOLS**

- Shear zone
- Ledge
- Approximate o/c exposure
- O/C outline
- x KP0317 Sample location/number
- WZ0056 Chipline(horizontal/vertical)
- △ Talus



**LEGEND**  
TAKLA GROUP

- [4] Augite porphyry
- [3] Limestone
- [2] Calcareous/non-calcareous sediments
- [1] Andesitic flows/tuffs (mostly feldspar phricic)

**INTRUSIVES**

- [7] Granodiorite/quartz monzonite
- [6] Magnetite epidite/garnet/pyrite skarn
- [5] Diorite/microdiorite

**SYMBOLS**

- ~ Shear zone
- ~ Bedding (tops known, unknown)
- ~ Foliation
- Approximate o/c exposure
- O/C outline
- x Sample location/number
- △ Talus

23842

REvised

DATE RECEIVED SEP 14 1995

100 50 0 100 200 300 400M

100 50 0 100 200 300 400M

JOH PROPERTY  
GEOLOGY

PROJ. No. 584  
N.T.S. 94D/9  
DWG No. 5

SURVEY BY C.GILL DATE MARCH 8, 1995  
DRAWN BY C.GILL, G.MARTIN SCALE 1:5000  
HEMLO GOLD MINES INC.  
OFFICE: VANCOUVER

