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GEOLOGICAL AND GEOCHEMICAL SURVEYS

PERFORMED ON THE

FRS CLAIM GROUP (FRS 9, 11)
FRS 9 (1480), FRS 11 (1481)

VICTORIA MINING DIVISION

N.T.S. 92B/12

Latitude 48°30'30" Longitude 123°49'00"

GEOLOGICAL BRANCH
ASSESSMENT REPORT

18,900

SUB-RECORDER
RECEIVED
JUL 10 1989
M.R. # .... $..........
VANCOUVER, B.C.

Authors : Terence J. McIntyre
D.R. Bull
R. G. Wilson
Date : June 21, 1989

Owner : Beau-Pre Exploration Ltd.
Valentine Gold Corp.
Operator: Noranda Exploration Company, Limited
(no personal liability)

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1.1 Location and Access

The FRS Group lies approximately 15 km north-northwest of the township of Sooke, Vancouver Island, B.C. (Figures 1 & 2). The property is accessed from Sooke via the Butler Main logging road. Access to the various areas within the claim group is via Bone Yard, Weeks Lake, and North Main roads. The logging roads here are generally in good condition.

1.2 Physiography

The FRS Group lies within the Vancouver Island Mountain Range in the southern portion of the Insular Belt.

The physiography varies from a relatively flat valley bottom and gently rolling mountain tops to the west, to a precipitous gorge to the east. Elevations range from 370 m up to 650 m at the peaks.

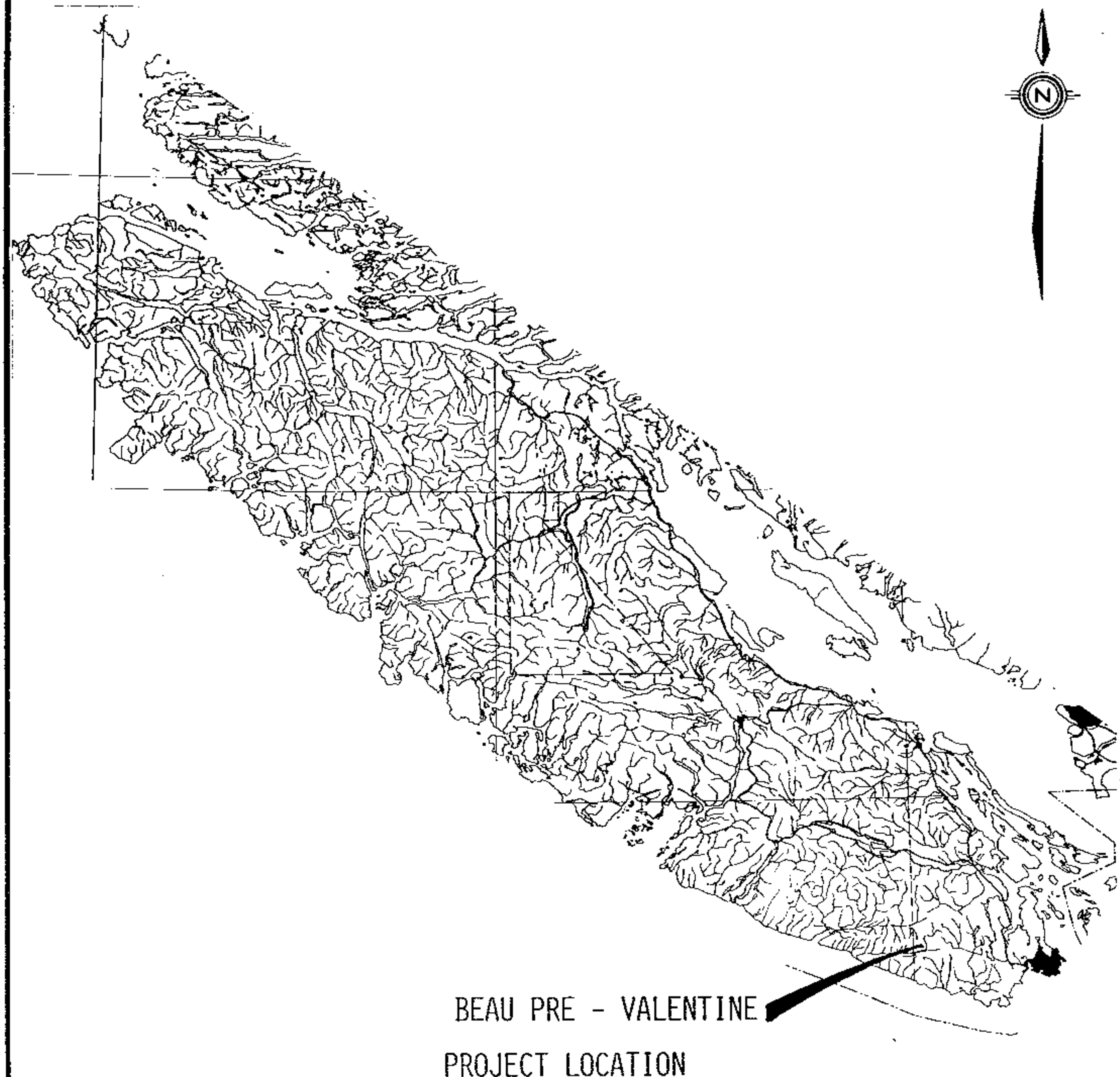
The climate in this part of Vancouver Island is generally mild. Heavy precipitation occurs mainly during the winter months, from November to March, with considerable accumulation of snow at higher elevations. The spring, summer and fall are a mixture of cool wet days and warm sunny days in approximately equal proportions. Due to the amount of snow which falls during the winter, work above the 500 m elevation cannot begin before mid-April, and above 800 m not before mid-May.

Most of the property has been clear cut logged and the vegetation is in various stages of rapidly generating second growth.

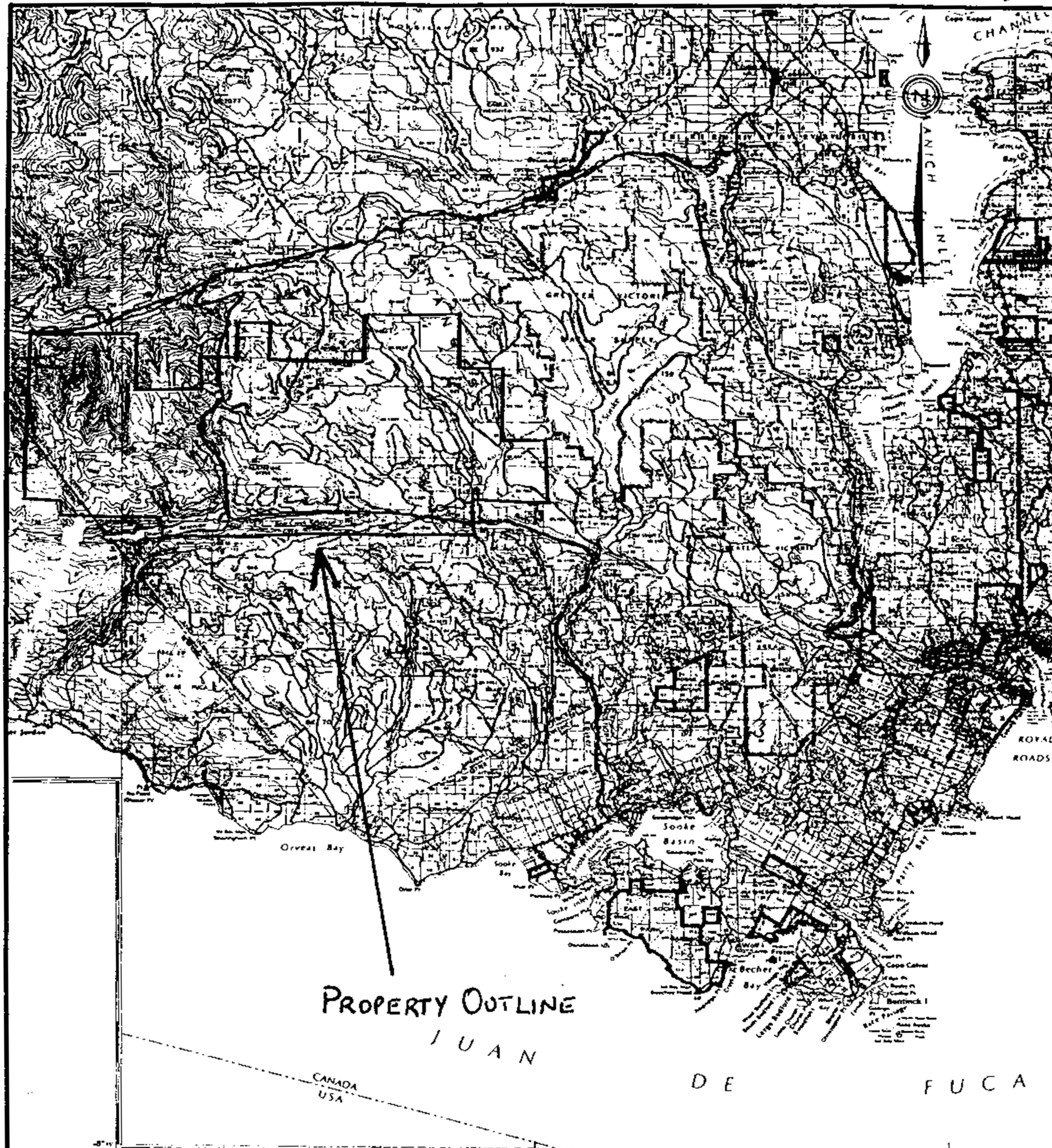
1.3 Claims and Ownership

The FRS group is composed of the following claims (Figure 3):

Name	Record #	Units	Due Date
FRS 9	1480	18	April 15, 1989
FRS 11	1481	12	April 15, 1989

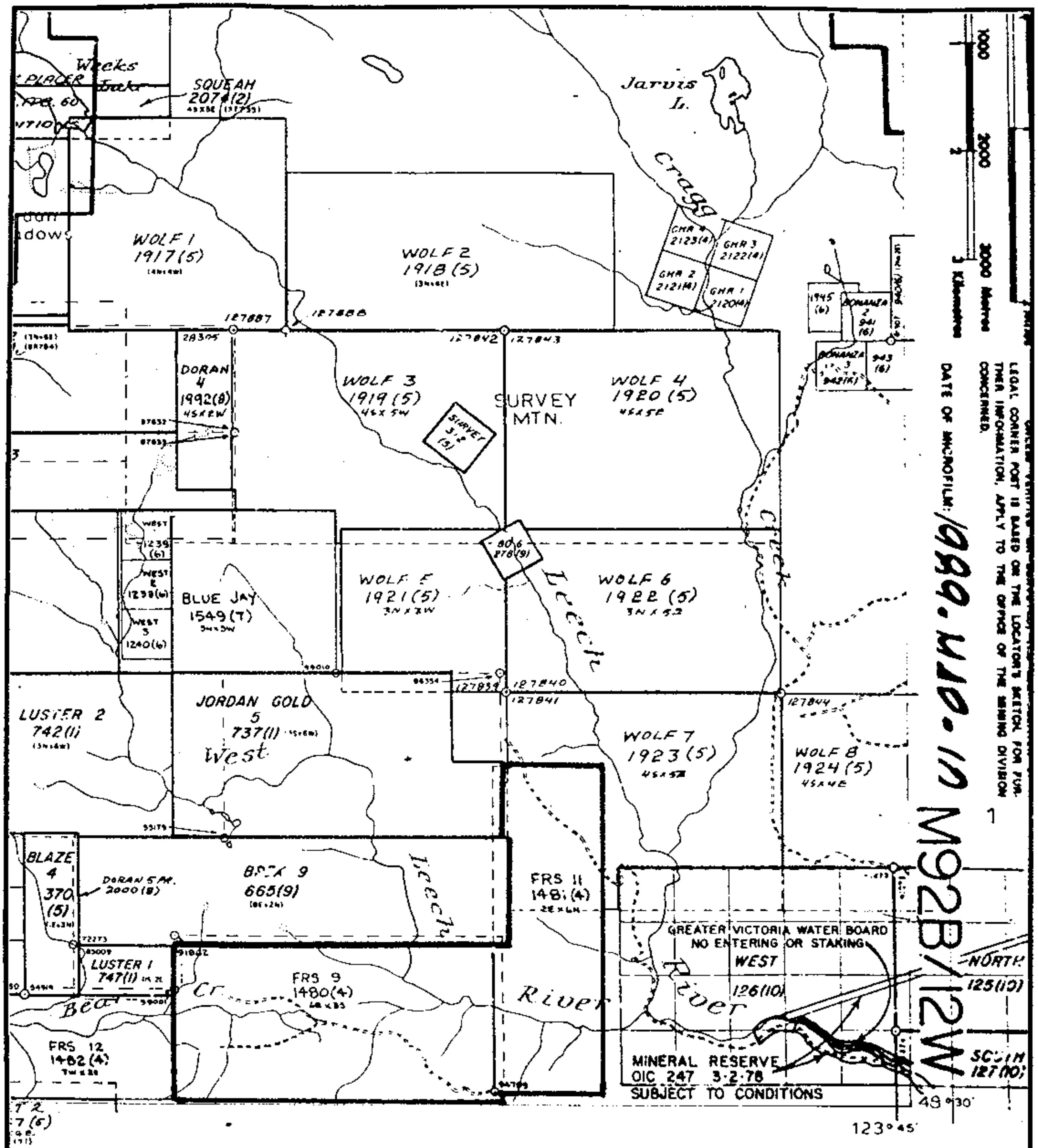


REVISED	BEAU PRE VALENTINE	
	PROJECT LOCATION	
PROJ.No. 120	SURVEY BY:	DATE: June 89
N.T.S. 92B/C	DRAWN BY: rgw	SCALE: 1:2.5mil
DWG. No. 1	**NORANDA EXPLORATION** OFFICE: VANCOUVER BC	



REVISED	BEAUPRE-VALENTINE
	PROPERTY LOCATION
PROJ No. 120	SURVEY BY: DATE: JUNE 1989
N.T.S. 92B/5,12	DRAWN BY: SCALE: 1:250,000
DWG. No. 2	**NORANDA EXPLORATION** OFFICE: VANCOUVER, B.C.

VANCAL 11927



UM RESOURCES

/12W(M)

This map is prep... to the positions o... and Placer Mining... claims and leases... sketches and are...

REVISED	BEAU PRE - VALENTINE
	FRS GROUP
	CLAIMS LOCATION
PROJ No. 120	SURVEY BY: rgw — DATE: June 1989
N.T.S. 92F12	DRAWN BY: — SCALE: 1:50000
DWG. No. 3	NORANDA EXPLORATION OFFICE: VANCOUVER

VANCAL 11927

All interest in the FRS Group of claims have been transferred for administration purposes to Noranda Exploration Company, Limited (no personal liability), as stated in the option agreement between Noranda, Beau Pre Explorations Ltd., and Valentine Gold Corp.

1.4 Previous Work

The discovery of placer gold in the Leech River in 1864 led to a major but short lived gold rush in the area. Subsequently, many of the streams flowing across the "Leech River Schists" have been shown to contain fine placer gold.

In 1976 native gold was found in narrow quartz veins on Valentine Mountain, approximately 42 km west of Victoria.

Since then over 85 other occurrences of native gold within quartz veins have been found within metasedimentary rocks of the Leech River complex.

Previous work on the FRS Group has been limited to minor prospecting and by regional stream sampling, roadside soils and rock samples taken by Valentine Gold Corp. in 1987. Anomalous Au values were obtained from Heavy mineral concentrate (pan) samples taken from many of the streams on the property.

1.5 Work Performed

A total of 43 mandays were spent, from March 19, 1989 to May 26, 1989 on a reconnaissance exploration programme on the FRS claim group. A total of $6,495.00 in exploration expenditures on the FRS group occurred between March 15, 1989 and April 10, 1989. A further total of $2879.81 in exploration expenditures occurred between April 15, 1989 and May 18, 1989.

The programme consisted of geological mapping and geochemical rock and soil sampling. Reconnaissance geological traverses were completed at a scale of 1:5,000. A total of 7 rocks and 102 soils were taken. The samples were analyzed by ICP for 30 elements and geochemically analyzed by atomic absorption for Au.

1.6 PERSONNEL

The work carried out on the Leech Group was performed by T. McIntyre (Regional Property Party Chief), J. MacCorquodale (Detailed Property Party Chief), C.D. Frew (Geologist), K. Pearson (Geologist), S. Louden, D. Dempsey, and D. Collicott (Fieldmen).

2.0 METHODS

2.1 Geological Mapping

Geological mapping coincident with geochemical sampling was carried out along north-south compassed traverses. The mapping, conducted at a scale of 1:5,000, was carried out with a view to identifying lithology, metamorphism, structure, mineralization, and quartz veining. Mapping occurred over a total area of 3.25 square kilometres.

2.2 Geochemical Sampling

Rock chip samples were taken of quartz veins, shear zones and fault gouge. The samples of the quartz vein material were taken, for a distance of 1.0 m, along it's strike length. Samples of the shear zones and fault gouge were taken for a distance of 0.5 m to 1.0 m perpendicular to the strike of the zone.

A rock chip sample was taken of a shear zone containing a trace of arsenopyrite occurring in an outcrop near the junction of Butler Main and Bone Yard roads. Additional geochemical sampling includes sampling of the Leech River fault and shear zone fault gouge.

Rock samples, each weighing approximately 2 kg, were placed in 6 ml plastic bags and shipped to Acme Analytical Laboratory in Vancouver for analysis. The samples were analyzed by I.C.P. for 30 elements.

Soil samples were taken along north-south compassed traverse lines. These lines were spaced approximately 300 m apart with stations established every 50 m. Samples, weighing approximately 1 kg each, were placed into Kraft paper bags and air dried prior to shipment to Noranda's Vancouver Laboratory. The samples were analyzed by I.C.P. for 30 elements by Acme Analytical Laboratory and by atomic absorption for Au by Noranda's analytical laboratory. See Appendix I for a description of Noranda's laboratory analytical procedures.

3.0 GEOLOGY

3.1 Regional Geology

Regionally, the area is underlain by the metamorphosed pelitic, arenaceous, and volcanic rocks of the Leech River Formation. Together, these make up the Leech River Block (Figure 4).

The Leech River Block is a discrete geotectonic unit (terrane) separated along it's northern edge by the San Juan Fault Zone from early Jurassic Bonanza volcanics. The southern edge of the Leech River Block is separated from Eocene Metchosin Group volcanics by the Leech River Fault Zone. To the east the Leech River Block is separated from the Wark Diorite and Colquitz Gneiss by the Cragg Creek Fault (Fairchild, 1979).

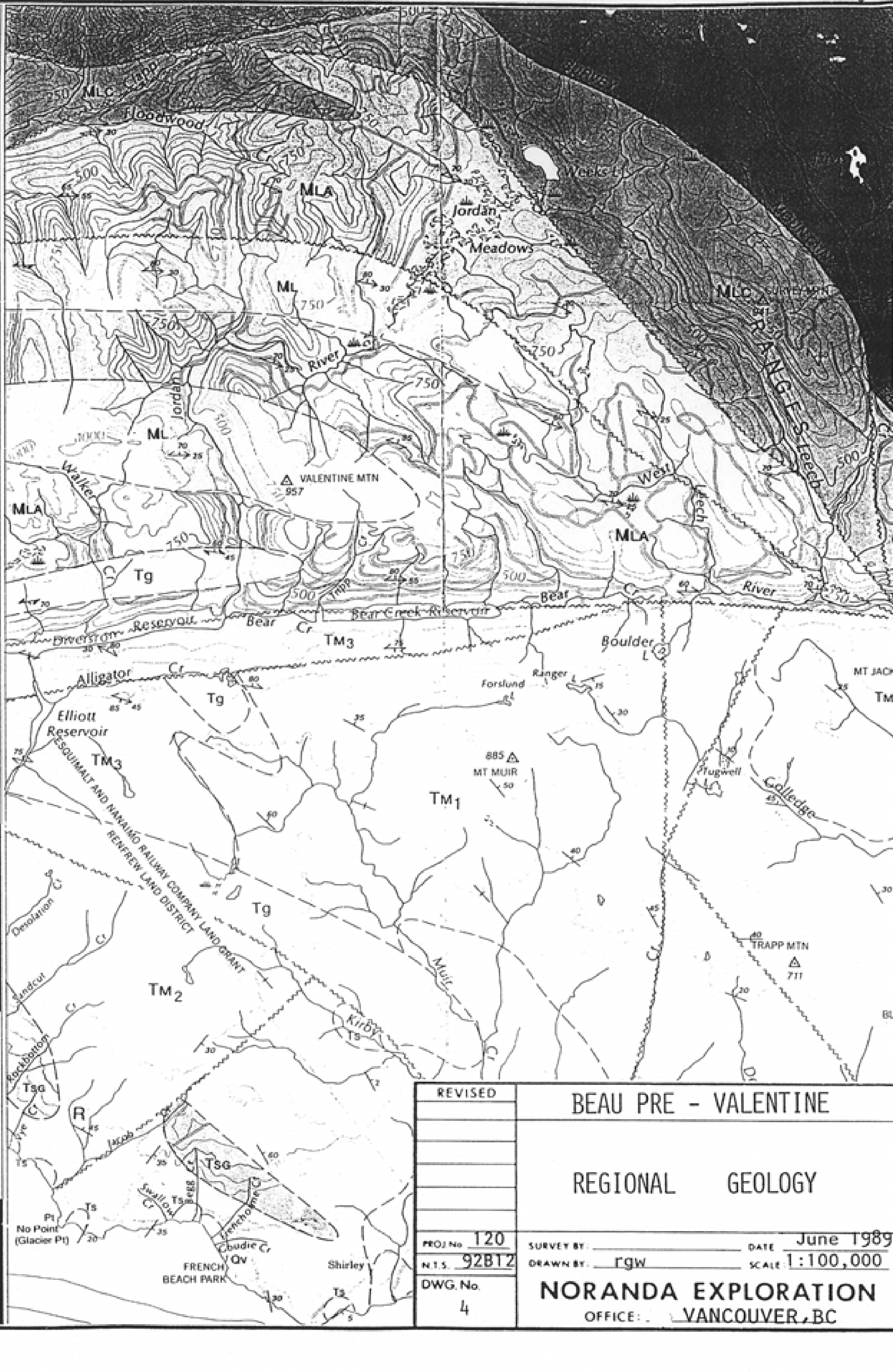
The area outlined by these fault zones is a narrow east-west trending block which extends from Port Renfrew on the west coast to Langford, near Victoria, on the east coast of Vancouver Island. The block is approximately 75 km long east to west and varies in width from 7-12 km in the west to less than 2 km in the east.

The Leech River Formation consists of metamorphosed arenites, pelites, and volcanics as well as granitoid intrusive bodies. The age of deposition of these sediments, by Rb-Sr method is late Jurassic to Cretaceous (Fairchild, 1982). K-Ar dating indicates that the metamorphism and deformation occurred in early Tertiary time (Fairchild, 1982).

The rocks of the Leech River Formation have undergone regional progressive metamorphism from green schist up to amphibolite facies, and have been deformed into tight overturned megascopic folds whose axis trend approximately east-west and plunge easterly. A pervasive axial planar cleavage exists which strikes approximately east-west and dips within 15° north or south of vertical.

3.2 Property Geology

The geology of the FRS Group consists of the metasandstones and metapelites of the Leech River Formation to the north in contact with, along the Leech River Fault, the Metchosin volcanics to the south (Figure 5).



REVISED

BEAU PRE - VALENTINE

REGIONAL GEOLOGY

PROJ. No. 120

N.T.S. 92B12

DWG. No. 4

SURVEY BY:

DRAWN BY: rgw

DATE June 1989

SCALE 1:100,000

NORANDA EXPLORATION

OFFICE: VANCOUVER, BC

LEGEND

CENOZOIC

QUATERNARY

RECENT

Q	*Recent sediments*
Qc	*CAPILANO SEDIMENTS: sand, gravel; silt, clay*
Qv	*VASHON DRIFT: gravel, sand, till*
Qq	*QUADRA SEDIMENTS: sand, gravel (includes some older beds)*

TERTIARY

OLIGOCENE AND/OR MIOCENE

Ts	*SOOKE FORMATION: conglomerate, sandstone, shale*

EOCENE (AND OLDER?)

Tg	*CATFACE INTRUSIONS: quartz diorite, agmatite*
TM	*METCHOSIN VOLCANICS: TM_1: pillow basalt, breccia, tuff; TM_2: mainly basaltic lava; TM_3: schistose metavolcanic rock*
TSG	*SOOKE GABBRO: mainly gabbro*

MESOZOIC

CRETACEOUS

UPPER CRETACEOUS

NANAIMO GROUP (KC to KGA)

KGA	*GABRIOLA FORMATION: sandstone, conglomerate; minor siltstone, shale*
KS	*SPRAY FORMATION: shale, siltstone; minor sandstone*
KG	*GEOFFREY FORMATION: sandstone, conglomerate; minor siltstone, shale*
KN	*NORTHUMBERLAND FORMATION: shale, siltstone; minor sandstone*
KDC	*DE COURCY FORMATION: sandstone, conglomerate; minor siltstone, shale*
KCD	*CEDAR DISTRICT FORMATION: shale, siltstone; minor sandstone*
KEP	*EXTENSION-PROTECTION FORMATION: sandstone, conglomerate; minor siltstone, shale*
KH	*HASLAM FORMATION: shale, siltstone; minor sandstone*
KC	*COMOX FORMATION: sandstone, conglomerate; minor siltstone, shale*

JURASSIC AND CRETACEOUS

UPPER JURASSIC AND LOWER CRETACEOUS

JKs	*SPIEDEN FORMATION: conglomerate, sandstone, siltstone*

TRIASSIC TO CRETACEOUS

LEECH RIVER FORMATION: (MLC to ML)

ML	*METAGREYWACKE UNIT: metagreywacke, meta-arkose, quartz-feldspar-biotite schist*
MLA	*ARGILLITE-METAGREYWACKE UNIT: thinly bedded greywacke and argillite, slate, phyllite, quartz-biotite schist*
MLC	*CHERT-ARGILLITE-VOLCANIC UNIT: ribbon chert, cherty argillite, metarhyolite, metabasalt, chlorite schist*
MC	*CONSTITUTION FORMATION (San Juan Island): thinly bedded greywacke, argillite and chert*

JURASSIC

LOWER TO MIDDLE JURASSIC

Jg	*ISLAND INTRUSIONS: granodiorite, quartz diorite*

BONANZA GROUP

JB	*Basaltic to rhyolitic tuff, breccia, flows, minor argillite, greywacke*

TRIASSIC AND/OR JURASSIC

TJo	*ORCAS FORMATION (San Juan Island): ribbon chert, minor tuff, breccia, lava*

TRIASSIC

UPPER TRIASSIC

TH	*HARO FORMATION (San Juan Island): volcaniclastic sandstone, breccia, argillite*

VANCOUVER GROUP

TK	*KARMUTSEN FORMATION: pillow basalt, breccia tuff, minor flows*

PALEOZOIC

PERMIAN AND/OR TRIASSIC

PTv	*Unnammed volcanics (San Juan island, Saanich Peninsula): basaltic to dacitic lava, breccia, tuff; minor limestone*
Pl	*Limestone*

PENNSYLVANIAN AND PERMIAN

SICKER GROUP (PN, PM, PSS, PB)

PB	*BUTTLE LAKE FORMATION: limestone, greywacke, argillite*

PENNSYLVANIAN AND MISSISSIPPIAN

PSS	*SEDIMENT-SILL UNIT: argillite, greywacke, chert, diabase sills*

LOWER DEVONIAN AND OLDER

PG	*SALTSPRING INTRUSIONS: metagranodiorite, metaquartz porphyry, quartz sericite schist*
PM	*MYRA FORMATION: well bedded silicic tuff and breccia, argillite, rhyodacite in flows and domes, minor basic tuff; quartz-sericite schist, phyllite; massive sulphides*
PN	*NITINAT FORMATION: pillow lava and breccia of augite (uralite) porphyry; basic tuff; chlorite-actinolite schist*

LOWER PALEOZOIC (OR YOUNGER?)

PC	*COLQUITZ GNEISS: quartz-feldspar gneiss*
PW	*WARK GNEISS: massive and gneissic metadiorite, metagrabbro, amphibolite*

Geological boundary, (approximate)

Fault, (approximate)

Anticlinal axis

Synclinal axis

Bedding, (inclined, vertical, overturned)

Foliation (inclined, vertical, with plunge of lineation)

Gneissosity, (inclined, vertical)

Geology by J. E. Muller, 1970, 1980

Compilation by J.E. Muller, 1979, 1980

Geological cartography by the Geological Survey of Canada

Any revisions or additional geological information known to the user would be welcomed by the Geological Survey of Canada

FIGURE 4a

3.2.1 Metasandstone (Unit 2)

The metasandstone unit occurs as interbeds within the metapelites.

The unit is a fine to medium grained quartzo-feldspathic sandstone. In fresh surface the colour is generally light grey although in some localities it is dark grey to black. In weathered surface it is grey to buff coloured. This unit is massive and very prominent. No bedding was observed except in contact with other units. It displays only minor schistosity and is centrally not fissile. The quartz-feldspar grains of which it is composed are elongated in the plane of foliation. Disseminated biotite, up to 5% is common. This unit is very hard to break as it has been at least partially recrystallized.

3.2.2 Metapelite (Unit 3)

The metapelite unit occurs as interbeds of metasiltstone (biotite schist) and metamudstones (phyllite) from 0.5 m to greater than 20 metres thick. The metapelites themselves are interbedded with the metasandstone unit described on the previous page.

The phyllite (Unit 3) is believed to have originally been a mudstone, the phyllites are extremely fine grained and vary in colour from medium grey to black (carbonaceous) in some localities and light grey to medium brown in others.

The phyllites are extremely fissile, with abundant sericite and minor biotite on cleavage surfaces.

3.2.3 Biotite Schist (Unit 3b)

This unit occurs as minor interbveds with the metapelite in the northern portion of the property.

The biotite schist is fine grained, medium grey to black in colour and composed of quartz and biotite which occur as light and dark bands 1-3 mm across (biotite schist). In a few localities, fine garnet porphyroblasts were observed within the schist (biotite-garnet schist). Sericite coatings were often observed on foliation.

3.2.4 Metchosin Volcanics (Unit 4)

In the southern portion of the FRS Group separated from the Leech River Formation by the east-west trending Leech River Fault is the Metchosin volcanics. The Metchosin volcanics here are typically composed of andesitic tuff, lapilli tuff, agglomerate and flows.

3.3 Structure

Wherever observed, structural features were measured and noted.

The most predominant and pervasive structural feature observed during the mapping programme was the foliation, in the form of coplanar schistosity and cleavage. These foliation features strike approximately east-west and dip steeply north or south of vertical.

Some minor arasitic folds were observed within the metapelites. These were visible small "S" or "Z" folds within schist layers and quartz veinlets. The size of the parasitic folds vary between 1 cm and 5 cm across.

3.4 Quartz Veins and Mineralization

Quartz veins and veinlets occur throughout the rocks of the area mapped. They vary in size from 5 mm to 0.20 metres and are generally white milky "bull" quartz, with occasional subhedral crystals. Rusty weathering products were frequently observed, although sulfide mineralization was rare. Occasionally small amounts of fine grained pyrite and lesser amounts of pyrrhotite were observed on fracture coatings. The sulfide mineralization was not observed to exceed 5% of any quartz vein material, and was generally far less.

The majority of the quartz veins occur within the metasiltstones, where they generally parallel the schistosity. In the metasandstones, quartz veinlets 5 mm to 10 cm wide cross-cut the sandstone beds at angles of between 30° and 45°. Only rarely were quartz veinlets observed within the phyllites. In such cases, the veinlets occur parallel to foliation cleavage.

The variations in the quartz veining between the various lithological units is believed to reflect the nature of the units themselves, and suggests that the quartz vein material is of metamorphic origin (sweats) rather than the result of hydrothermal activity.

The phyllites contain very little quartz vein material, due to the lack of available silica in this rock type. The quartz veins sub-parallel the cleavage, since this foliation provided the path of least resistance.

The metasiltstones contain the majority of the quartz vein material since they contained the available silica. The quartz veins in this unit occur mostly parallel to foliation, since this provided the path of least resistance.

The metasandstones and amphibolites contain more quartz veins than the phyllites, but far less than the metasiltstones. In most cases the quartz veins cross-cut the sandstones at angles of between 30° and 45°. The reason for these phenomena is as follows: Whilst these rock units contained ample silica for the sweating of material to form quartz veins, their massive, competent nature did not allow passage of silica bearing fluids until the tectonic stresses were sufficient to cause brittle deformation ie. breakage. This fracturing at 30-45° to stress direction was subsequently filled with quartz of metamorphic origin.

Mineralization within the Metchosin volcanics is limited to a trace of arsenopyrite and pyrite in quartz stringers, and within the fault gouge of shear zones and the Leech River Fault.

The Leech River Fault trends 283° and dips 72° to the south. It is 0.75 to 0.95 metres in width and the fault gouge is composed of, in order of abundance, chlorite, clays, and limonite.

4.0 GEOCHEMISTRY

Geochemical sample locations (Figure 6) and results (Au & As Figure 7) Cu, Zn, Pb, Ag (Figure 8) are shown in plan at 1:5,000 scale. Results of other ICP elements from Appendix III have not been plotted.

4.1 Rock Samples

Rock chip samples obtained from quartz veins, mineralized shear zones, and the Leech River Fault produced no significant Au values. The only rock geochemical value appreciably above background value was R.59642 which yielded 41 ppb Au, and 3 ppm As. This sample was taken of a strongly silicified shear zone near the intersection of Butler Main and Bone Yard Road.

4.2 Soil Samples

Soil samples taken near this area yielded anomalous values of 39 ppb, 41 ppb and 96 ppb Au approximately 25 to 50 metres south of this intersection.

At the western edge of the claim group a 2.0 m shear zone in the tuff was observed and sampled. There are values of 10 ppb, 116 ppb, 30 ppb and 130 ppb Au in the soil which occur 50 m to 100 m on either side of the shear zone. A rock chip across the shear zone itself produced no anomalous Au values. Background soil values are approximately 5 ppb Au.

Results of other elements analyzed were at or near background values with no anomalies recognized.

5.0 INTERPRETATION

Metamorphosed medium to deep water sandstones and pelites of the Leech River schists have been brought into fault contact along the Leech River fault with younger intermediate to basic volcanics of the Metchosin Volcanics. No significant mineralization or alteration was observed along the trace of the Leech River Fault. The only geochemical anomalies on the FRS group however, came from or were observed next to shear zones. These zones, are found in the Metchosin volcanics trend 296° and dip 82° to the north, and have an average width of 1.5 m. The zones occur in close proximity to the Leech River Fault and do not appear to have much strike length to them.

This property is still considered a grassroots prospect, however it's proximity to the Leech River Fault, a deep seated tectonic element, maintains its economic geological potential.

APPENDIX I

ANALYTICAL METHOD DESCRIPTIONS FOR GEOCHEMICAL ASSESSMENT REPORTS

ANALYTICAL METHOD DESCRIPTIONS FOR GEOCHEMICAL ASSESSMENT REPORTS

The methods listed are presently applied to analyses 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	

EJvL/ie

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
Telephone: 253-3158

GEOCHEMICAL LABORATORY METHODOLOGY & PRICES - 1989

Sample Preparation

S80	Soils or silts up to 2 lbs drying at 60 deg.C and sieving 30 gms -80 mesh (other size on request)	$ .85
SJ	Saving part or all reject	.45
S20R	Soils or silts - drying at 60 deg.C and sieving -20 mesh & pulverizing (other mesh size on request.)	2.00
SP	Soils or silts - drying at 60 deg.C pulverizing (approx . 100 gms)	1.50
RP100	Rocks or cores - crushing to -3/16" up to 10 lbs, then pulverizing 1/2 lb to -100 mesh (98%)	3.00
Cr	Surcharge crushing over 10 lbs	.25/lb
2PX	Surcharge for pulverizing over 1/2 lb	1.00/lb
RPS100	Same as RP100 except sieving to -100 mesh and saving +100 mesh (200gms)	3.75
RPS100 1/2	Same as above except pulverizing 1/2 the reject - additional	1.00/lb
RPS100 A	Same as above except pulverizing all the reject - additional	1.00/lb
OP	Compositing pulps - each pulp	.50
	Mixing & pulverizing composite.	1.50
HM	Heavy mineral separation - S.G.2.96 + wash -20 mesh	12.00
V1	Drying vegetation and pulverizing 50 gms to -80 mesh	3.00
V2	Ashing up to 1 lb wet vegetation at 475 deg.C	2.00
H1	Special Handling	17.00/hr

Sample Storage

Rejects - Approx. 2 lbs of rock or total core are stored for three months and discarded unless claimed.

Pulps are retained for one year and discarded unless claimed.

Additional storage - for 3 years $10.00/1.2 cu.ft. box
or 15 cents/sample pulp
or 5 cents/sample soil

Supplies

Soil Envelopes	4" x 6"	$125.00/thousand
Soil Envelopes	4" x 6" with gusset	$140.00/thousand Plastic
Bags	7" x 13" 4 ml	$10.00/hundred
Plastic Bags	12" x 20" 6 ml	$ 20.00/hundred
Ties		$ 2.00/hundred
Assay Tags		N/C
10% HCl		$ 5.00/liter
Dropping bottles		$ 1.00/each
Zn Test	A & B	$ 12.00/each liter

Conversion Factors

1 Troy oz = 31.10 g
1 oz/ton = 34.3 ppm = 34.3 g/tonne = 34,300 ppb
1 % = 10,000 ppm

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
Telephone: 253-3158

GEOCHEMICAL ANALYSES - Rocks and Soils

Group 1 Digestion

.50 gram sample is digested with 3 mls 3-1-2 HCl-HNO3-H2O at 95 deg.C for one hour and is diluted to 10 ml with water. This leach is near total for base metals, partial for rock forming elements and very slight for refractory elements. Solubility limits Ag, Pb, Sb, Bi, W for high grade samples.

Group 1A - Analysis by Atomic Absorption.

Element	Detection	Element	Detection	Element	Detection
Antimony*	2 ppm	Copper	1 ppm	Molybdenum	1 ppm
Bismuth*	2 ppm	Iron	0.01 %	Nickel	1 ppm
Cadmium*	0.1 ppm	Lead	2 ppm	Silver	0.1 ppm
Chromium	1 ppm	Lithium	2 ppm	Vanadium	2 ppm
Cobalt	1 ppm	Manganese	5 ppm	Zinc	2 ppm

First Element $2.25 Subsequent Element $1.00

Group 1B - Hydride generation of volatile elements and analysis by ICP.

This technique is unsuitable for sample grading over .5% Ni or Cu. Cu Massive Sulphide.

Element	Detection
Arsenic	0.1 ppm
Antimony	0.1 ppm
Bismuth	0.1 ppm
Germanium	0.1 ppm
Selenium	0.1 ppm
Tellurium	0.1 ppm

First Element $4.75 All Elements $5.50

Group 1C - Hg

Detection limit - 5 ppb Price $2.50

Hg in the solutions are determined by cold vapour AA using a F & J scientific Hg assembly. The aliquots of the extract are added to a stannous chloride/hydrochloric acid solution. The reduced Hg is swept out of the solution and passed into the Hg cell where it is measured by AA.

Group 1D - ICP Analysis

Element	Detection
Ag	0.1 ppm
Cd,Co,Cr,Cu,Mn,Mo,Ni,Sr,Zn	1 ppm
As,Au,B,Ba,Bi,La,Pb,Sb,Th,V,W	2 ppm
U	5 ppm
Al,Ca,Fe,K,Mg,Na,P,Ti	0.01 %

Any 2 elements	$3.25
5 elements	4.50
10 elements	5.50
All 30 elements	6.25

Group 1E - Analysis by ICP/MS

Element	Detection
Ga,Ge	1 ppm
Au,Bi,Cd,Hg,In,Ir,Os,Re,Rh,Sb,Te,Th,Tl,U	0.1 ppm

All Elements 15.00 (minimum 20 samples per batch or $15.00 surcharge)

Hydro Geochemical Analysis

Natural water for mineral exploration

26 element ICP - Mo,Cu,Pb,Zn,Ag,Co,Ni,Mn,Fe,As,Sr,Cd,V,Ca,P, Li,Cr,Mg,Ti,B,Al,Na,K,Ce,Be,Si $8.00

F by Specific Ion Electrode	- detection	20 ppb	$3.75
U by UA3	- detection	.01 ppb	5.00
pH		.1 pH	1.50
Au	- detection	.001 ppb	4.00

* Minimum 20 samples or $5.00 surcharge for ICP or AA and $15.00 surcharge for ICP/MS. All prices are in Canadian Dollars

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
Telephone: 253-3158

Group 2 - Geochemical Analysis by Specific Extraction and Instrumental Techniques

Element	Method	Detection	Price
Barium	0.100 gram samples are fused with .6 gm LiB02 dissolved in 50 mls 5% HNO3 and analysed by ICP. (other whole rock elements are also determined)	10 ppm	$4.00
Boron	.5 g/Na202 fustion - 50ml in 20% HCl	2 ppm	4.00
Carbon	LECO (total as C or CO2)	.01 %	5.75
Carbon+Sulfur	Both by LECO	.01 %	6.50
Carbon (Graphite)	HCl leach before LECO	.01 %	8.00
Chromium	0.50 gram samples are fused with 1 gm Na202 dissolved in 50 ml 20% HCl, analysed ICP.	5 ppm	4.00
Fluorine	0.25 gram samples are fused with NaOH; leached solution is adjusted for pH and analysed by specific ion electrode.	10 ppm	4.50
Sulphur	LECO (Total as S)	.01 %	5.50
Sulphur insoluble	LECO (After 5% HCl leach)	.01 %	8.00
Tin	1.00 gram samples are fused with NH4I. The sublimed Iodine is leached with 5 ml 10% HCl, and analysed by Atomic Absorption.	1 ppm	4.00
Tl	.50 gram digested with 50% HNO3 - Dilute to 10 ml - graphite AA	.1 ppm	4.00
Tungsten	.50 gram samples are fused with Na202 dissolved in 20 ml H20, analysed by ICP.	1 ppm	4.00

Group 3 - Geochemical Noble Metals

Element	Method	Detection	Price
Au*	10.0 gram samples are ignited at 600 deg.C, digested with hot aqua regia, extracted by MIBK, analysed by graphite furnace AA.	1 ppb	$ 4.50
Au** Pd,Pt,Rh	10.0 gram samples are fused with a Ag inquart with fire assay fluxes. After cupulation, the dore bead is dissolved and analysed by AA or ICP/MS.	1 ppb 2 ppb	6.00 - first element 2.50 - per additional 10.00 - for All 4

Larger samples - 20 gms add $1.50
30 gms add $2.50

Group 4A - Geochemical Whole Rock Assay

0.200 gram samples are fused with LiBO2 and are dissolved in 100 mls 5% HNO3.

SiO2, Al2O3, Fe2O3, CaO, MgO, Na2O, K2O, MnO, TiO2, P2O5, Cr2O5, LOI + Ba by ICP.

Price: $3.75 first metal $1.00 each additional $9.00 for All.

Group 4B - Trace elements

Element	Detection	Analysis	Price
Co,Cu,Ni,Zn,Sr	10 ppm	ICP	$3.75 first element or $1.00 additional to 4A $6.00 for All.
Ce,Nb,Ta,Y,Zr	20 ppm	ICP	

Group 4C - analysis by ICP/MS.

Be, Rb, Y, Zr, Nb, Sn, Cs, La, Ce, Pr, Nd, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu, Hf, Ta, W, Th, U

Detection: 1 to 5 ppm   Price : $20.00 for All.

* Minimum 20 samples or $5.00 surcharge for ICP or AA and $15.00 surcharge for ICP/MS. All prices are in Canadian Dollars

ACTLABS

ACTIVATION LABORATORIES LTD

FEE SCHEDULE

EFFECTIVE MARCH 1, 1989

ACTIVATION LABORATORIES LTD.
383 Elgin Street, Units #2 & 17
P. O. Box 1420
Brantford, Ontario, Canada
N3T 5T6
Telephone: 519-758-0310 (ERIC HOFFMAN)
Fax: 519-758-8766
Envoy 100: ACTLAB
iNET 2000: ACTLAB

Preparation Facilities

ACTIVATION LABORATORIES LTD.
c/o TSL
1270 Fewster Drive, Unit 3
Mississauga, Ont. L4W 1A1

ACTIVATION LABORATORIES LTD.
c/o TSL
302–48th Street East, Unit #2
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ACTIVATION LABORATORIES LTD.
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2031 Riverside Drive, Unit #2
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ACTIVATION LABORATORIES LTD.
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ACTIVATION LABORATORIES LTD.
c/o TSL
2971 Viking Way, Unit 108
Richmond, B.C. V6V 1Y1

604 - 270 - 4669
Ivan Perry

QUALITY ANALYSES WITH
RAPID TURNAROUND TIME
AT A COMPETITIVE PRICE

ACTLABS

INTRODUCTION

Activation Laboratories is dedicated to providing **high quality analyses** with a **rapid turnaround** time at a **very competitive price.** The principals of the company have many years experience at providing analyses to the mineral exploration, university and government sectors and recognize the different needs of these groups.

Activation Laboratories is a full service laboratory and can handle all your analytical needs. We rely on many analytical methods, however, the primary techniques used include instrumental neutron activation analysis (INAA), inductively coupled plasma emission spectrometry (ICAP) and fire assay.

Our team of dedicated professionals will do their utmost to serve the needs of our clients. Please contact us to discuss your analytical requirements.

INSTRUMENTAL NEUTRON ACTIVATION ANALYSIS (INAA)

INAA is an analytical technique which is dependant on measuring primarily gamma radiation which is emitted by the radioactive isotopes produced by irradiating samples in a nuclear reactor. Each element which is activated, will emit a "fingerprint" of gamma radiation which can be measured and quantified. Activation Labs use state of the art detection, electronic and computer systems to provide the most reliable analytical results available.

There are a number of advantages to using the INAA technique. These include:

1. No chemistry required, therefore little worry of contamination or whether the elements in question are in solution. The additional worry of whether there are abnormal amounts of a particular element which will cause chemical or instrumental interferences is also avoided with INAA.
2. INAA is a multielement technique capable of determining up to 35 elements simultaneously in most materials.
3. INAA is exceptionally sensitive to a number of trace elements including gold, the rare earths, platinum group metals and many other elements like arsenic, antimony, tantalum, uranium, thorium, etc. Many of these elements are very difficult and expensive to determine by conventional chemical procedures.
4. Trace elements including gold in organic materials such as humus or vegetation are easily determined directly with exceptionally low detection limits. The INAA technique does not require the expensive and slow ashing procedure of other chemical methods. This lack of ashing prevents potential loss of gold and improves the reliability of data due to lesser sample handling and potential human error.

INDUCTIVELY COUPLED PLASMA EMISSION SPECTROMETRY (ICAP)

The ICAP technique relies on placing the sample material into solution using either single acid, mixed acids or fusion techniques using fluxes. The sample solution is then introduced into a radio frequency excited plasma ($\approx$8000°K). Each element in the solution produces a characteristic spectrum. The intensity of the spectral lines are directly proportional to the quantity of the element present. The advantages of this technique include:

1. ICAP is a multielement technique. The major rock forming elements and some important trace elements can be determined simultaneously to sensitivities better than x-ray fluorescence.
2. ICAP can provide very low cost multielement packages on partial acid digests.
3. Elements determined by ICAP are very complimentary to the INAA method.

APPENDIX II

ROCK SAMPLE DESCRIPTIONS

NORANDA EXPLORATION COMPANY, LIMITED

PROJECT # 120

LAB REPORT # ____________

N.T.S. 92B/12

DATE March/April/89

PROJECT BEAU PRE VALENTINE (FRS)

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% Sulph.	TYPE	WIDTH (m)	Cu ppm	Pb ppm	Zn ppm	Ag ppm	As ppm	Au ppb		SAMPLED BY
R55097	Phyllite? Sample taken from shear zone (5cm wide) in creek bed near the Leech River fault, along Traverse FRS#2 at 513m. Limonitic/iron staining intense Fairly soft - fresh surface - green. Locally mangese oxide evident.	0	Grab	~5cm	38	2	109	0.3	8	1		Dempsey
R59126	Qtz vein sampled near the Leech River Fault. Host rock: black -dark grey biotite phyllite. Qtz vein 3m long - 10cm wide. 90% milky qtz 10% clear qtz. <1% visible sulphides within wall rock. FRS claim group.				30	7	38	0.1	3	1		McCorquo-dale
R55658	Quartz vein located west of Line "FRS-1" on FRS Claim Group. Abundant Ankeritic(?)/ Limonitic staining with a trace	Nil	Representative Grab	2	14	2	15	0.1	2	1		Frew

NORANDA EXPLORATION COMPANY, LIMITED

PROJECT # 120

LAB REPORT #

N.T.S. 92B/12

DATE March/April/89

PROJECT BEAU PRE VALENTINE (FRS)

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% Sulph.	TYPE	WIDTH (m)	Cu ppm	Pb ppm	Zn ppm	Ag ppm	As ppm	Au ppb		SAMPLED BY
R55658(con't)	of disseminated pyrite. Vein is vertical and oriented @ 270											
R59176	Line FRS #8 at 400mN. Andesite - silicified quite intensely/chloritized containing qtz/epidote veining up to ~7cm wide. Finely disseminated sulfides of py/cp. From large sheared outcrop about 50m of exposure length.	<1	Chip	1/2	10	2	19	0.1	2	1		Pearson

NORANDA EXPLORATION COMPANY, LIMITED

PROJECT # 120

LAB REPORT #

N.T.S. 92B/12

DATE May 17/89

PROJECT BEAU PRE VALENTINE (FRS)

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% Sulph.	TYPE	WIDTH (m)	Cu ppm	Pb ppm	Zn ppm	Ag ppm	As ppm	Au ppb		SAMPLED BY
R58626	FRS Grp, Trav. 7-40m W of 58580, 30% smokey qtz, str Fe stain, volcanics.	-	Grab	-	43	4	39	0.2	8	2		Singh
R59292	FRS Grp, Trav. 7-12m West of P59059. Qtz vein with Chl, musc & limonite in metasand-stone. 0.15x1.0m.	-	Chip	0.15	21	2	8	0.1	3	5		McIntyre
R59298	FRS Grp, Trav. 8. Qtz vein vgy with hematite staining 0.12m x 1.8m.	-	Chip	0.12	12	4	19	0.1	5	4		McIntyre
R59299	FRS Grp, Trav 8. Qtz vein pinches to 0.08, swells to 0.36m, 0.08m x 1.0m.	-	Chip	0.08	9	3	8	0.1	5	4		McIntyre
R59300	FRS Grp. Quarry. Contact between metchosin volc & meta seds. Fault gouge, chlorite, limonite, & clays. Chip perp to strike.	-	Chip	0.95	40	2	17	0.1	66	4		McIntyre
R59301	FRS Grp, Trav 11. 5+15m shear	-	Chip	1.0	34	7	107	0.3	4	4		McIntyre

NORANDA EXPLORATION COMPANY, LIMITED

PROJECT # 120

LAB REPORT # ____________

N.T.S. 92B/12

DATE May 17/89

PROJECT BEAU PRE VALENTINE (FRS)

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% Sulph.	TYPE	WIDTH (m)	Cu ppm	Pb ppm	Zn ppm	Ag ppm	As ppm	Au ppb		SAMPLED BY
R59301(con't)	zone in tuff; sample of limonite, clays, & chlorite gouge & tuff.											
R59642	FRS Grp. Trav. 6, 10mN + 10mE of P54986. Strongly silicified shear zone w/ bull Qtz. Strong limonitic staining.	Tr As Py	Grab	-	25	10	36	0.1	3	41		Singh
R58601	FRS Grp. Trav. 130m E of Sample P58632 on traverse line. 10m wide shear zone limonitic clay gouge at S. edge.	-	Chip	0.5	315	2	127	0.1	2	2		Northcote

APPENDIX III

ANALYSIS CERTIFICATES

NORANDA VANCOUVER LABORATORY

PROPERTY/LOCATION:BEAUPRE-VALENTINE CODE : 8903-012

Project No. :120 Sheet:1 of 7 Date rec'd:MAR.28
Material :336 SOILS & Geol.:J.Mc. Date compl:APR.06
Remarks :10 RX

Values in PPM, except where noted.

T.T. No.		SAMPLE No.	PPB Au
52	FRS-1	55231	5
53		55232	5
54		55233	5
55		55234	5
56		55235	5
57		55236	5
58		55237	5
59		55238	10
60		55239	5
61		55240	5
62		55241	5
63		55242	5
64		55243	5
65		55244	5
66		55245	5
67		55246	5
68		55247	5
69		55248	5
70		55249	5
71		55602	5
72		55603	5
73		55604	5
74		55605	5
75		55606	5
76		55607	5
77		55608	5
78		55609	5
79	FRS-1	55610	5
80	FRS-2	55401	5
81		55402	5
82		55403	5
83		55404	5
84		55405	5
85		55406	5
86		55407	5
87		55408	5
88		55409	15
89		55410	5
90		55411	5
91		55412	5
92		55413	130
93		55414	5
94		55415	5
95		55417	5
96		55418	5
97		55419	5
98		55420	5
99	FRS-1	55421	5

RK JMc

T.T. No.		SAMPLE No.	PPB Au
100	FRS-1	55422	5
2		55423	5
3		55424	5
4		55425	5
5		55426	5
6		55427	5
7		55428	5
8		55429	5
9	FRS-2	55430	5
10	FRS-3	55551	5
11		55552	5
12		55553	5
13		55554	5
14		55555	5
15		55556	5
16		55557	5
17		55558	5
18		55559	5
19		55560	5
20		55561	5
21		55562	5
22		55563	5
23		55564	5
24		55565	5
25		55566	5
26		55567	5
27		55568	5
28		55569	5
29		55570	5
30		55571	5
31		55572	10
32		55573	5
33		55574	5
34		55575	5
35		55576	5
36		55577	5
37		55578	5
38		55579	5
39	FRS-3	55580	5
40	FRS-4	54976	5
41		54977	5
42		54978	5
43		54979	15
44		54980	5
45		54981	5
46		54982	5
47		54983	10
48		54984	5
49		54985	5
50		54986	20
2		54987	5
3		54988	5
4		54989	5
5		54990	5
6		54991	5
7		54992	5
8	FRS-4	54993	5

T.T. No.		SAMPLE No.	PPB Au
9	FRS-4	54994	5
10		54995	5
11		54996	5
12		54997	5
13		54998	5
14		54999	5
15		55000	5
16		55001	5
17		55002	5
18		55003	5
19		55004	5
20	FRS-4	55005	5
21	FRS-5	55431	5
22		55432	5
23		55433	5
24		55435	5
25		55436	5
26		55437	5
27		55438	5
28		55439	5
29		55440	5
30		55441	5
31		55442	5
32		55443	5
33		55444	5
34		55445	5
35		55446	5
36		55447	5
37		55448	5
38		55449	5
39		55450	5
40		55451	5
41		55452	5
42		55453	5
43		55454	5
44		55455	5
45		55456	5
46		55457	10
47		55458	5
48		55459	10
49	FRS-5	55460	5
50	FRS-6	55006	5
52		55007	5
53		55008	5
54		55009	5
55		55010	170
56		55011	5
57		55012	5
58		55013	5
59		55014	5
60		55015	5
61		55016	5
62		55017	5
63		55018	5
64		55019	5
65		55020	5
66	FRS-6	55021	5

T.T. No.		SAMPLE No.	PPB Au
67	FRS-6	55023	5
68		55024	5
69		55025	5
70		55026	5
71		55027	5
72		55028	5
73		55029	5
74		55030	5
75		55031	5
76		55032	5
77		55033	5
78		55034	5
79	FRS-6	55035	5
80	FRS-7	59143	5
81		59144	5
82		59145	5
83	FRS-7	59146	5
84	FRS-8	59127	5
85		59128	5
86		59129	5
87		59130	5
88		59131	5
89		59132	5
90		59133	5
91		59134	5
92		59135	5
93		59136	5
94		59137	5
95		59138	5
96		59139	5
97		59140	100
98		59141	5
99		59142	5
100		59147	5
2		59148	5
3		59149	5
4		59151	5
5		59152	5
6		59153	5
7		59154	5
8		59155	5
9		59156	5
10		59157	5
11		59158	5
12		59159	5
13		59160	5
14		59161	5
15		59162	5
16		59163	5
17	FRS-8	59164	5
18	FRS-9	55076	5
19		55077	5
20		55078	5
21		55079	5
22		55080	5
23		55081	5
24	FRS-9	55082	5

T.T. No.		SAMPLE No.	PPB Au
25	FRS-9	55083	5
26		55084	5
27		55085	5
28		55086	5
29		55087	5
30		55088	5
31		55089	5
32		55090	5
33		55091	5
34		55092	5
35		55093	5
36		55094	5
37		55095	5
38	FRS-9	55096	5

.T. o.		SAMPLE No.	PPB Au
52	RX	55658	5
53			-
54			
55			
56			
57			
58		59176	5
59			
60			
61	RX	55097	5

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: P1-P10 SOIL PULP P11 ROCK PULP

DATE RECEIVED: APR 5 1989 DATE REPORT MAILED: April 7/89 SIGNED BY [signature] ..D.TOYE. C.LEONG. J.WANG; CERTIFIED B.C. ASSAYERS

NORANDA EXPLORATION CO. LTD. PROJECT 8903-012 120 File # 89-0732 Page 1

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM
55231	1	47	2	63	.1	31	9	235	3.62	2	5	ND	3	15	1	2	2	71	.25	.025	5	59	.75	29	.21	2	5.51	.01	.02	1
55232	1	28	2	69	.1	26	8	233	3.80	2	5	ND	2	13	2	2	2	72	.22	.054	6	55	.81	32	.19	3	4.42	.01	.06	1
55233	1	42	4	55	.1	21	6	221	3.53	2	5	ND	2	12	2	2	2	73	.20	.043	5	44	.64	30	.15	2	3.98	.01	.05	1
55234	1	7	2	15	.1	5	2	102	1.14	2	5	ND	1	9	1	2	2	54	.13	.009	7	17	.06	10	.14	2	.44	.01	.02	3
55235	1	10	3	26	.1	3	3	116	2.25	2	5	ND	1	10	1	2	2	76	.17	.023	6	23	.22	11	.17	2	.99	.01	.02	3
55236	11	51	2	71	.2	31	8	236	4.41	3	5	ND	2	11	2	2	2	88	.20	.046	6	60	.78	30	.23	2	4.36	.01	.06	1
55237	1	57	6	57	.1	21	6	239	3.16	5	5	ND	2	12	1	2	2	65	.19	.040	5	44	.59	35	.16	2	3.54	.01	.04	1
55238	1	13	13	37	.2	9	4	129	3.97	2	5	ND	2	9	1	2	2	99	.15	.039	5	38	.30	14	.22	2	2.16	.01	.02	1
55239	1	34	4	55	.1	22	8	301	2.83	2	5	ND	2	13	1	2	2	60	.21	.044	7	42	.72	41	.14	2	2.79	.01	.08	1
55240	1	13	7	60	.1	21	7	219	4.14	6	5	ND	2	11	1	2	2	86	.13	.035	6	43	.53	34	.18	2	2.94	.01	.03	1
55241	1	10	2	32	.2	10	3	111	1.62	6	5	ND	1	10	1	2	2	65	.15	.017	5	24	.17	35	.11	5	.72	.01	.02	3
55242	1	7	6	19	.1	3	2	73	2.53	4	5	ND	1	9	1	2	2	122	.12	.022	4	18	.09	9	.16	5	.75	.01	.01	2
55243	2	37	10	100	.1	63	13	372	3.62	2	5	ND	2	11	1	2	2	60	.23	.032	8	49	1.08	45	.13	9	3.34	.01	.05	1
55244	1	43	11	86	.2	35	8	335	4.19	2	5	ND	4	12	3	2	2	73	.16	.053	7	60	1.03	62	.15	2	4.39	.01	.10	1
55245	1	42	6	33	.2	34	11	363	3.85	3	5	ND	4	12	2	2	2	69	.17	.034	7	55	1.09	66	.17	2	4.56	.01	.10	1
55246	1	44	6	30	.2	25	8	241	4.14	17	5	ND	4	10	1	2	2	73	.16	.089	7	62	.71	38	.16	2	5.05	.01	.07	1
55247	1	68	10	94	.1	50	57	4275	4.58	10	5	ND	1	19	2	2	2	72	.33	.058	12	67	1.13	80	.13	4	3.54	.01	.09	1
55248	1	8	9	51	.1	9	5	293	2.52	8	5	ND	1	12	1	2	2	67	.10	.031	6	25	.47	32	.11	5	1.11	.01	.04	2
55249	1	42	4	63	.1	26	8	314	2.58	9	5	ND	3	12	1	2	2	50	.20	.047	8	39	.84	57	.14	6	2.42	.01	.13	1
55602	1	18	7	62	.2	21	7	249	3.15	2	5	ND	2	9	1	2	2	71	.11	.038	6	38	.57	40	.12	4	2.39	.01	.07	1
55603	3	76	23	93	.4	42	8	210	3.49	2	5	ND	7	6	1	2	2	47	.05	.129	15	52	.60	39	.07	4	10.22	.01	.08	13
55604	1	11	6	43	.2	14	6	176	2.61	8	5	ND	1	9	1	2	2	75	.11	.014	6	25	.41	26	.11	3	1.48	.01	.03	4
55605	1	5	5	30	.1	10	4	142	1.93	3	5	ND	1	11	2	2	2	61	.14	.009	5	18	.26	23	.12	4	1.03	.01	.02	3
55606	1	15	8	55	.2	19	6	197	2.84	5	5	ND	2	11	1	2	2	55	.13	.036	6	33	.61	37	.11	2	3.01	.01	.08	1
55607	2	41	17	79	.1	33	10	294	3.25	9	5	ND	4	10	2	2	2	56	.10	.023	7	49	.99	65	.16	7	6.27	.01	.12	1
55608	1	20	3	65	.1	26	8	192	3.01	6	5	ND	2	10	2	2	2	60	.11	.028	6	35	.61	53	.14	6	3.31	.01	.09	1
55609	1	9	2	30	.1	6	2	101	1.60	4	5	ND	1	9	1	2	4	38	.08	.016	5	16	.18	34	.07	5	1.02	.01	.04	2
55610	1	18	2	66	.1	14	6	155	4.23	11	5	ND	2	9	1	2	2	89	.10	.037	5	34	.49	39	.19	5	2.47	.01	.07	1
55401	1	24	9	47	.1	17	6	141	3.64	2	5	ND	2	12	2	2	2	68	.21	.064	4	44	.36	16	.17	2	4.54	.01	.02	1
55402	1	24	9	53	.1	22	6	191	3.86	2	5	ND	2	14	2	2	2	77	.23	.056	5	57	.59	19	.17	3	4.27	.01	.03	1
55403	1	7	5	26	.1	7	3	88	2.41	3	5	ND	1	10	1	2	4	76	.14	.020	4	25	.16	9	.12	4	.84	.01	.01	2
55404	1	5	2	38	.1	7	3	134	1.63	2	5	ND	1	12	1	2	3	43	.19	.012	4	21	.41	27	.12	2	1.19	.01	.05	1
55405	1	22	10	44	.1	13	5	147	2.39	6	5	ND	1	11	1	2	2	61	.17	.028	5	30	.34	26	.13	4	2.16	.01	.03	2
55406	2	35	15	65	.4	24	8	219	4.61	2	5	ND	2	12	3	2	2	91	.29	.039	4	52	.63	30	.22	2	3.47	.01	.05	1
55407	1	17	5	37	.1	17	5	157	3.70	2	5	ND	1	16	1	2	2	84	.14	.079	5	48	.39	13	.15	2	2.40	.01	.02	1
55408	1	56	17	74	.1	68	11	284	3.53	9	5	ND	3	12	2	2	2	73	.17	.022	5	88	1.05	66	.17	6	5.29	.01	.08	1
STD C	21	62	44	141	7.7	73	32	1052	4.07	42	22	7	39	52	20	15	21	58	.50	.098	42	58	.94	177	.07	28	1.90	.06	.13	12

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM
55409	1	26	2	51	.1	26	6	216	2.82	2	5	ND	2	9	1	2	4	66	.14	.027	5	41	.62	54	.12	3	2.53	.01	.07	1
55410	1	45	2	64	.1	35	12	404	3.25	12	5	ND	2	10	1	2	3	70	.17	.047	6	57	1.09	60	.13	5	3.01	.01	.10	1
55411	1	67	4	87	.1	36	11	348	5.22	2	5	ND	2	8	1	2	2	107	.14	.105	4	69	.82	29	.15	2	5.05	.01	.04	1
55412	1	44	2	62	.1	33	8	225	3.55	5	5	ND	3	9	1	2	2	74	.14	.022	7	53	.65	49	.13	3	3.31	.01	.06	1
55413	1	49	2	43	.2	16	7	194	5.12	10	5	ND	2	7	1	2	3	131	.14	.052	4	54	.46	19	.18	2	4.19	.01	.03	1
55414	1	20	2	31	.2	9	4	120	4.24	13	5	ND	2	6	1	2	2	114	.09	.057	5	43	.25	14	.13	4	1.98	.01	.02	3
55415	1	16	2	46	.1	11	5	180	3.72	10	5	ND	1	10	1	2	2	92	.16	.043	4	27	.53	23	.16	4	2.09	.01	.04	2
55417	1	38	10	66	.2	20	6	186	4.73	6	5	ND	4	8	1	2	3	80	.14	.109	5	55	.52	27	.14	6	5.93	.01	.04	1
55418	1	3	9	31	.1	4	2	95	2.82	5	5	ND	1	5	1	2	2	77	.09	.064	3	28	.19	12	.12	5	1.47	.01	.02	2
55419	1	54	4	96	.2	32	10	252	4.15	4	5	ND	3	11	1	2	3	86	.14	.054	7	60	.76	44	.15	5	4.95	.01	.07	1
55420	1	19	11	61	.2	16	4	194	3.12	6	5	ND	3	7	1	2	2	59	.09	.050	6	35	.44	34	.11	2	3.18	.01	.04	1
55421	1	16	5	53	.1	12	5	189	3.30	10	5	ND	2	6	1	2	3	73	.07	.028	5	38	.51	27	.10	3	3.07	.01	.05	1
55422	1	6	5	38	.1	5	3	215	2.56	2	5	ND	1	6	1	2	2	66	.06	.033	4	27	.37	28	.06	2	1.52	.01	.04	1
55423	1	13	18	77	.1	15	7	570	4.95	3	5	ND	2	14	1	2	3	90	.06	.254	6	47	.79	39	.11	6	2.31	.01	.07	1
55424	1	15	10	54	.1	16	5	240	2.72	4	5	ND	2	8	1	2	2	52	.09	.060	5	29	.46	24	.08	2	2.25	.01	.04	1
55425	1	34	10	88	.1	19	7	311	3.76	2	5	ND	4	6	1	2	4	55	.06	.050	11	40	.75	31	.03	2	3.51	.01	.05	1
55426	1	4	5	39	.1	7	3	210	1.67	5	5	ND	1	7	1	3	4	46	.09	.029	5	20	.36	20	.07	2	.97	.01	.04	1
55427	1	7	7	39	.1	10	3	150	2.17	2	5	ND	1	8	1	2	2	53	.10	.018	5	21	.39	19	.11	2	1.25	.01	.04	1
55428	1	23	13	78	.2	16	8	225	3.56	11	5	ND	2	8	1	3	2	64	.10	.040	6	40	.66	41	.14	2	3.72	.01	.07	1
55429	2	37	9	75	.1	22	8	246	3.62	8	5	ND	4	8	1	2	2	64	.07	.050	7	47	.82	50	.13	2	5.62	.01	.10	1
55430	1	13	11	56	.2	10	6	155	3.54	15	5	ND	3	6	1	2	3	77	.05	.053	6	35	.53	38	.17	2	3.91	.01	.06	1
55551	1	17	8	38	.3	10	5	129	4.25	7	5	ND	2	13	1	2	3	88	.22	.049	4	43	.26	11	.13	3	2.50	.01	.02	2
55552	1	21	4	36	.2	14	5	146	4.04	4	5	ND	2	8	1	2	2	84	.15	.049	3	54	.40	14	.13	4	3.46	.01	.03	1
55553	1	82	7	64	.2	17	5	171	3.26	5	5	ND	1	13	1	2	2	68	.27	.067	4	39	.30	21	.10	2	4.10	.01	.02	1
55554	2	44	12	66	.1	16	12	254	3.57	9	5	ND	2	10	1	2	2	58	.18	.075	5	31	.34	27	.11	3	7.23	.01	.03	1
55555	1	5	9	15	.1	5	1	85	1.70	2	5	ND	1	9	1	2	5	73	.19	.010	3	16	.17	10	.11	2	.59	.01	.01	1
55556	1	38	2	46	.1	14	6	168	3.24	2	5	ND	2	9	1	2	2	79	.15	.025	5	39	.49	29	.11	6	3.48	.01	.04	1
55557	1	39	6	58	.1	39	8	235	3.23	6	5	ND	2	11	1	2	2	72	.18	.030	4	62	.85	29	.14	2	3.87	.01	.04	1
55558	1	12	2	37	.2	10	5	175	2.63	6	5	ND	1	20	1	2	5	79	.44	.035	5	35	.42	17	.25	2	1.46	.01	.03	3
55559	1	46	5	98	.2	82	19	343	5.00	2	5	ND	2	9	2	2	3	126	.15	.028	3	133	1.51	79	.29	2	6.33	.01	.02	1
55560	1	58	5	92	.3	53	13	303	5.81	12	5	ND	2	12	2	2	2	109	.17	.094	4	102	1.08	39	.20	3	4.80	.01	.05	1
55561	1	37	2	62	.2	22	10	203	3.90	3	5	ND	2	9	1	2	2	83	.15	.038	5	63	.61	36	.15	2	3.53	.01	.02	1
55562	1	75	5	81	.2	32	13	244	4.92	7	5	ND	3	9	1	2	2	90	.18	.030	5	82	.75	26	.16	3	6.40	.01	.03	1
55563	1	54	10	63	.3	20	10	195	5.72	10	5	ND	3	8	1	2	2	133	.13	.059	5	75	.52	20	.19	7	4.67	.01	.03	1
55564	1	67	8	77	.3	37	13	306	4.41	7	5	ND	2	10	1	2	2	96	.16	.055	4	80	.91	33	.17	2	4.76	.01	.04	1
55565	1	37	12	60	.4	27	10	207	6.24	10	5	ND	2	9	1	2	2	116	.14	.046	5	79	.50	25	.17	4	3.52	.01	.02	4
STD C	19	52	40	133	7.4	71	30	1021	4.01	43	18	7	37	49	19	14	22	60	.49	.092	39	55	.89	173	.06	38	1.82	.06	.14	13

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SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM
55566	1	14	4	25	.2	1	4	102	3.40	5	5	ND	1	6	1	2	2	135	.12	.015	5	26	.20	11	.18	2	1.13	.01	.01	1
55567	1	18	7	44	.3	10	3	196	3.58	10	5	ND	1	11	1	2	2	104	.15	.032	4	32	.35	25	.16	2	1.13	.01	.03	1
55568	1	67	15	75	.2	40	14	456	3.29	7	5	ND	2	11	1	2	2	72	.21	.043	6	65	1.09	42	.15	6	2.81	.01	.09	1
55569	1	53	11	97	.3	33	9	267	4.09	4	5	ND	3	8	2	2	2	77	.12	.104	4	75	.35	32	.14	2	4.93	.01	.06	2
55570	1	22	18	73	.4	18	7	275	3.47	2	5	ND	3	13	1	2	2	66	.16	.045	5	45	.59	40	.12	6	4.59	.01	.05	1
55571	1	13	14	54	.3	12	4	186	3.43	5	5	ND	2	7	1	2	2	73	.06	.022	5	37	.46	25	.11	3	2.00	.01	.04	2
55572	1	34	28	95	.2	22	3	252	4.04	2	5	ND	3	8	3	2	2	69	.09	.069	5	50	.71	38	.14	4	4.94	.01	.08	1
55573	1	17	8	55	.3	14	5	212	2.63	3	5	ND	2	9	1	2	2	62	.11	.037	5	33	.49	33	.11	5	3.37	.01	.07	2
55574	1	15	16	55	.3	17	5	197	3.52	5	5	ND	2	10	1	2	2	81	.10	.012	5	26	.53	36	.14	5	2.55	.01	.05	1
55575	1	15	7	75	.1	21	18	293	2.43	3	5	ND	1	10	1	2	2	49	.11	.011	8	30	.72	54	.11	2	1.34	.01	.06	1
55576	1	35	16	93	.2	27	10	299	3.56	2	5	ND	4	10	1	2	2	61	.10	.029	6	43	.79	61	.17	2	4.96	.01	.05	1
55577	1	17	11	75	.1	15	5	221	3.49	2	5	ND	2	9	1	2	3	65	.08	.051	6	41	.61	42	.12	10	3.72	.01	.07	2
55578	1	6	9	39	.2	4	3	211	2.43	5	5	ND	2	9	1	2	2	65	.03	.037	7	17	.42	26	.11	2	1.07	.01	.04	2
55579	1	11	2	47	.1	4	3	201	2.71	5	5	ND	3	6	1	2	2	81	.06	.038	7	39	.83	38	.19	3	1.34	.01	.19	1
55580	1	16	12	56	.1	11	5	292	2.98	6	5	ND	2	6	1	2	2	70	.08	.049	5	35	.67	55	.15	3	2.40	.01	.10	2
54976	1	226	11	48	.1	24	6	228	3.56	2	5	ND	2	11	2	2	2	72	.21	.032	4	60	.62	19	.17	2	4.30	.01	.03	2
54977	1	11	3	18	.1	8	3	117	.84	2	5	ND	1	10	1	2	2	36	.37	.010	3	25	.26	5	.09	2	.51	.01	.02	2
54978	1	10	2	26	.2	5	1	131	1.52	2	5	ND	1	15	1	2	2	73	.32	.007	4	22	.21	9	.15	2	.64	.01	.02	1
54979	1	124	8	42	.2	16	6	212	3.15	2	5	ND	1	34	1	2	2	91	.36	.021	4	41	.61	14	.23	3	1.77	.01	.02	2
54980	1	106	9	53	.1	16	5	202	3.70	2	5	ND	2	12	2	2	2	32	.22	.032	4	65	.59	16	.18	6	3.57	.01	.03	1
54981	1	46	11	47	.2	15	4	186	3.51	2	5	ND	1	18	1	2	2	79	.39	.044	4	56	.46	19	.17	2	3.16	.01	.03	2
54982	1	60	9	58	.2	39	9	276	3.92	2	5	ND	1	15	2	2	2	88	.30	.022	4	88	.65	26	.24	4	4.61	.01	.03	1
54983	1	48	2	47	.1	26	7	174	4.02	2	5	ND	1	17	1	2	8	85	.37	.051	4	96	.56	13	.23	3	3.33	.01	.02	1
54984	1	61	2	69	.1	46	10	253	3.54	9	5	ND	2	15	2	2	2	79	.29	.040	5	126	.90	24	.19	3	4.81	.01	.03	1
54985	1	110	48	74	.2	70	21	646	3.59	10	5	ND	2	20	2	2	2	84	.40	.054	5	119	1.23	37	.21	2	4.43	.01	.03	2
54986	1	38	18	87	.2	244	25	570	3.92	83	5	ND	2	13	2	2	2	81	.28	.045	6	308	2.46	45	.12	2	3.59	.01	.09	1
54987	1	84	14	80	.1	323	35	760	3.83	78	5	ND	1	21	1	2	2	81	.37	.040	5	415	3.30	42	.10	4	3.13	.01	.08	1
54988	1	15	7	30	.1	9	5	139	3.34	2	5	ND	1	10	2	2	2	96	.15	.013	4	35	.30	13	.23	2	1.74	.01	.01	1
54989	1	9	6	22	.1	9	4	121	2.35	8	5	ND	1	7	1	2	2	86	.12	.033	4	23	.22	7	.11	2	.96	.01	.01	1
54990	1	24	2	42	.1	20	5	194	3.45	6	5	ND	1	12	1	2	2	71	.18	.020	4	46	.53	26	.12	2	3.76	.01	.02	1
54991	1	30	2	71	.1	29	8	344	3.73	2	5	ND	2	8	1	2	2	67	.09	.034	4	53	.84	20	.10	3	2.85	.01	.04	1
54992	1	25	4	74	.2	18	8	250	5.45	9	5	ND	2	8	2	2	2	97	.11	.030	5	52	.69	22	.14	5	3.16	.01	.04	1
54993	1	25	7	65	.1	19	6	241	4.04	11	5	ND	3	9	1	2	2	75	.13	.097	5	46	.62	22	.12	3	3.23	.01	.06	1
54994	1	18	2	53	.1	11	4	193	2.97	9	5	ND	2	5	1	2	2	67	.06	.038	4	38	.38	27	.09	2	1.98	.01	.04	1
54995	1	40	15	80	.1	29	10	394	3.52	9	5	ND	4	10	2	2	2	71	.11	.048	7	49	.89	85	.13	4	4.25	.01	.18	1
54996	1	43	16	74	.2	31	11	342	3.36	2	5	ND	4	15	3	2	2	66	.23	.025	5	53	.93	47	.17	2	5.07	.01	.08	3
STD C	19	63	42	133	7.3	68	31	1032	3.90	43	19	7	37	49	19	15	24	60	.48	.096	39	55	.87	173	.06	33	1.71	.06	.13	12

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM
54997	1	16	8	54	.1	20	7	154	4.47	2	5	ND	2	12	1	2	5	91	.16	.028	4	44	.43	32	.13	2	2.98	.01	.04	1
54998	1	3	13	41	.1	13	3	295	3.27	5	5	ND	1	7	1	2	2	70	.08	.032	4	27	.38	23	.07	2	1.56	.01	.03	2
54999	1	15	10	53	.6	14	5	166	4.56	13	5	ND	1	13	1	2	6	95	.19	.096	4	46	.46	21	.14	11	2.86	.01	.03	1
55000	1	14	10	62	.1	17	6	217	3.82	12	5	ND	3	10	1	2	2	84	.11	.024	6	40	.60	38	.14	4	2.25	.01	.06	1
55001	1	11	7	61	.2	16	8	242	2.74	9	5	ND	2	30	1	2	2	72	.10	.031	6	38	.53	56	.13	2	1.59	.01	.09	2
55002	1	17	2	82	.2	18	7	305	4.12	7	5	ND	3	10	1	2	2	83	.06	.050	6	48	.76	37	.11	3	2.55	.01	.09	1
55003	1	10	11	44	.2	11	4	158	2.27	7	5	ND	2	11	1	2	2	49	.12	.033	5	25	.34	23	.08	4	1.78	.01	.03	2
55004	2	32	13	66	.1	21	8	194	4.51	8	5	ND	3	8	1	2	3	77	.10	.039	5	50	.68	23	.12	2	4.93	.01	.05	1
55005	1	11	12	46	.2	10	4	143	3.03	17	5	ND	2	8	1	4	2	60	.08	.039	5	26	.41	20	.07	2	1.87	.01	.03	2
55431	1	157	7	61	.1	21	8	263	3.68	8	5	ND	4	13	2	2	2	72	.22	.041	5	56	.76	21	.19	2	4.32	.01	.05	2
55432	1	153	12	59	.1	22	7	254	3.30	3	5	ND	5	13	1	2	3	74	.22	.039	5	58	.73	18	.19	2	5.27	.01	.04	1
55433	1	20	7	38	.2	13	4	163	2.63	7	5	ND	1	11	1	2	2	66	.20	.052	4	30	.32	15	.12	7	1.84	.01	.02	1
55435	1	17	3	32	.1	8	4	153	2.57	5	5	ND	1	17	1	2	2	72	.36	.017	5	32	.31	10	.22	2	1.36	.01	.02	1
55436	1	19	9	31	.1	11	5	163	2.89	5	5	ND	1	17	1	2	3	76	.35	.017	5	34	.32	10	.21	2	1.29	.01	.02	1
55437	1	18	12	40	.1	10	4	162	2.69	5	5	ND	1	12	1	2	3	70	.22	.056	4	28	.30	10	.13	5	1.61	.01	.02	1
55438	1	1	16	16	.1	2	1	157	1.40	2	5	ND	1	18	1	2	2	62	.35	.015	5	15	.12	3	.15	3	.71	.01	.01	2
55439	1	5	12	26	.1	7	3	163	2.00	2	5	ND	1	18	1	2	2	71	.35	.026	5	22	.22	6	.15	2	.97	.01	.01	2
55440	1	21	7	43	.1	15	4	177	2.66	3	5	ND	2	11	1	2	2	60	.18	.025	4	36	.37	19	.10	2	2.65	.01	.02	2
55441	1	30	9	71	.1	23	8	246	3.28	5	5	ND	2	12	1	2	2	65	.20	.070	4	49	.66	33	.14	2	4.91	.01	.05	1
55442	1	30	7	78	.3	24	8	259	3.35	10	5	ND	2	13	2	2	3	66	.20	.050	5	49	.64	40	.14	3	4.21	.01	.06	1
55443	1	16	14	60	.2	16	6	277	3.06	9	5	ND	2	11	1	2	2	75	.16	.032	6	44	.75	23	.13	2	2.59	.01	.05	1
55444	1	28	16	60	.1	15	7	175	4.06	2	5	ND	2	11	1	2	2	92	.16	.053	4	47	.41	26	.14	4	4.45	.01	.03	1
55445	1	13	4	32	.1	9	5	112	4.34	9	5	ND	1	11	1	2	3	111	.18	.054	3	36	.24	6	.17	2	1.74	.01	.02	1
55446	1	48	7	91	.2	31	10	319	5.21	8	5	ND	4	9	1	2	2	87	.13	.048	7	68	.96	34	.15	2	5.28	.01	.09	1
55447	1	28	4	67	.2	19	6	250	3.78	10	5	ND	2	13	1	2	2	82	.21	.036	5	42	.62	22	.15	3	2.72	.01	.05	1
55448	1	42	6	93	.1	22	9	406	4.95	5	5	ND	4	10	2	2	3	93	.15	.114	7	61	.64	33	.17	2	5.90	.01	.06	1
55449	1	27	6	61	.3	16	7	321	3.23	10	5	ND	3	15	1	2	2	67	.15	.057	7	37	.47	74	.12	2	2.80	.01	.07	1
55450	1	44	11	72	.1	27	11	297	3.19	12	5	ND	4	11	1	2	2	63	.16	.037	7	41	.79	53	.13	2	2.97	.01	.11	2
55451	1	17	10	48	.1	14	3	147	3.33	8	5	ND	2	10	1	2	2	83	.14	.050	4	32	.38	25	.10	2	1.98	.01	.04	2
55452	1	50	20	88	.1	36	13	362	3.63	9	5	ND	5	11	1	2	2	68	.12	.045	10	45	1.13	89	.15	2	3.52	.01	.18	1
55453	1	17	8	49	.1	13	3	171	2.50	5	5	ND	1	12	1	2	2	56	.15	.021	5	28	.37	40	.08	4	1.75	.01	.04	1
55454	1	41	7	72	.1	20	6	174	3.87	2	5	ND	3	7	1	2	2	74	.10	.161	5	51	.47	47	.13	2	4.90	.01	.08	1
55455	1	19	14	77	.1	19	7	285	5.12	13	5	ND	3	9	1	3	3	92	.09	.064	5	53	.77	25	.12	2	3.52	.01	.07	1
55456	1	25	14	60	.1	13	6	198	3.65	2	5	ND	2	11	1	2	2	63	.14	.055	6	39	.61	22	.11	2	3.45	.01	.04	1
55457	1	29	9	58	.1	15	7	182	3.68	8 ID	5	ND	3	12	1	2	2	67	.17	.061	5	43	.54	26	.12	4	4.28	.01	.05	1
55458	1	41	20	94	.2	28	10	212	4.57	12	5	ND	3	13	1	2	2	83	.16	.071	6	50	.77	38	.16	2	5.07	.01	.08	2
STD C	19	62	43	133	7.4	64	33	1005	4.00	43	20	7	38	49	19	14	23	60	.48	.095	39	55	.88	172	.07	33	1.75	.06	.13	12

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM
55459	1	16	6	58	.1	9	4	138	4.03	4	5	ND	2	10	1	2	2	81	.12	.048	6	32	.37	19	.11	4	2.60	.01	.05	1
55460	1	19	16	48	.3	10	2	161	2.61	5	5	ND	2	16	2	2	2	57	.22	.034	6	34	.32	25	.12	2	3.31	.01	.03	1
55006	1	12	13	55	.1	15	6	200	3.58	7	5	ND	2	12	2	2	2	73	.14	.036	6	35	.50	30	.15	4	2.23	.01	.04	1
55007	1	3	6	21	.1	6	1	76	1.14	4	5	ND	1	4	1	2	2	42	.06	.010	4	11	.17	10	.13	2	.55	.01	.02	1
55008	1	38	19	87	.1	25	6	237	4.09	8	5	ND	3	12	2	2	2	75	.10	.019	7	44	.79	48	.15	2	3.54	.01	.09	1
55009	1	20	14	59	.1	16	4	180	4.08	2	5	ND	2	11	1	3	3	70	.11	.050	5	42	.52	19	.11	2	3.38	.01	.04	1
55010	1	36	26	86	.1	27	9	365	3.35	10	5	ND	3	12	2	2	2	64	.16	.016	7	46	.98	59	.15	2	3.62	.01	.11	1
55011	1	13	11	59	.1	8	4	128	4.12	8	5	ND	2	6	1	2	2	93	.07	.042	5	38	.45	29	.17	2	2.90	.01	.05	1
55012	1	19	14	53	.1	13	5	190	3.58	2	5	ND	2	12	1	2	2	73	.14	.045	5	40	.51	22	.13	2	3.54	.01	.04	1
55013	1	31	13	76	.2	27	7	323	3.70	9	5	ND	3	13	2	2	2	68	.18	.063	6	52	.96	34	.15	7	4.92	.01	.07	1
55014	1	9	8	37	.1	6	3	134	2.86	4	5	ND	1	10	1	2	2	77	.12	.049	6	25	.38	21	.12	2	1.46	.01	.04	2
55015	1	18	20	57	.1	14	7	186	5.06	12	5	ND	2	11	2	2	2	117	.15	.121	6	43	.46	21	.15	4	2.59	.01	.04	1
55016	1	31	13	70	.1	19	7	243	4.31	8	5	ND	3	12	2	3	2	82	.14	.028	6	50	.75	26	.14	4	3.69	.01	.06	1
55017	1	16	8	45	.1	17	5	158	2.98	12	5	ND	2	12	1	2	2	72	.17	.090	6	33	.43	29	.14	2	2.16	.01	.04	1
55018	1	31	24	80	.1	22	7	245	3.95	5	5	ND	2	12	1	2	2	73	.18	.072	5	55	.67	44	.15	4	5.64	.01	.05	2
55019	1	31	14	63	.1	22	8	270	4.82	9	5	ND	2	21	2	3	5	104	.43	.086	4	57	.72	21	.17	3	3.59	.01	.04	1
55020	2	61	29	131	.2	45	12	391	5.05	6	5	ND	4	6	2	4	2	76	.08	.072	5	71	.83	29	.07	4	5.31	.01	.05	1
55021	1	41	22	85	.1	29	7	306	4.73	7	5	ND	4	8	2	4	2	34	.11	.064	5	62	.69	29	.11	3	4.32	.01	.05	1
55023	1	26	7	59	.1	20	6	313	3.39	2	5	ND	3	13	1	2	2	72	.20	.060	6	47	.63	21	.14	3	2.93	.01	.05	1
55024	1	29	13	61	.2	23	7	225	5.20	13	5	ND	3	9	2	4	2	95	.12	.057	5	58	.64	27	.17	7	4.53	.01	.04	1
55025	1	44	14	70	.1	22	7	343	4.19	5	5	ND	3	11	1	2	2	81	.18	.070	5	55	.68	36	.13	2	4.09	.01	.04	1
55026	1	17	20	44	.2	9	4	158	4.33	4	5	ND	1	15	1	2	2	99	.25	.037	5	40	.31	16	.12	2	2.19	.01	.02	3
55027	1	19	7	38	.2	17	5	172	3.75	6	5	ND	1	17	1	2	2	106	.33	.039	4	41	.37	13	.17	2	1.68	.01	.02	2
55028	1	10	6	28	.1	9	2	150	2.04	3	5	ND	1	20	1	2	2	107	.40	.022	5	26	.28	4	.20	2	1.09	.01	.01	1
55029	1	62	20	57	.1	30	9	272	4.01	2	5	ND	2	18	2	3	2	101	.31	.041	5	64	.71	21	.19	3	4.61	.01	.03	1
55030	1	22	2	45	.1	14	4	162	2.53	3	5	ND	1	20	1	2	2	77	.42	.022	4	35	.32	10	.19	3	1.37	.01	.02	1
55031	2	85	23	63	.1	20	9	241	4.71	6	5	ND	2	17	4	2	3	108	.33	.087	5	65	.66	24	.18	4	6.93	.01	.03	2
55032	1	5	15	18	.1	3	1	247	1.72	2	5	ND	1	24	1	2	2	69	.50	.014	4	6	.04	1	.16	2	.42	.01	.03	1
55033	1	20	10	34	.1	10	2	187	3.12	2	5	ND	1	18	1	2	2	77	.33	.026	5	29	.39	7	.17	2	1.53	.01	.02	1
55034	1	132	11	35	.1	18	5	222	3.66	2	5	ND	1	19	1	2	2	73	.47	.023	5	41	.44	13	.19	4	2.16	.01	.02	2
55035	1	81	21	40	.1	11	5	166	4.09	2	5	ND	1	16	2	2	3	85	.32	.046	5	49	.35	10	.18	2	3.82	.01	.02	1
59127	1	12	13	38	.2	9	3	145	2.31	3	5	ND	2	10	1	2	3	56	.14	.051	5	23	.31	23	.12	2	1.74	.01	.04	2
59128	1	16	14	45	.1	17	3	164	2.62	10	5	ND	2	13	1	2	2	56	.17	.031	5	34	.38	21	.13	4	2.14	.01	.04	1
59129	1	18	21	51	.1	19	9	254	2.17	4	5	ND	1	22	1	2	2	49	.27	.027	7	30	.50	44	.10	2	2.05	.01	.06	1
59130	1	7	7	25	.1	11	2	169	1.28	3	5	ND	1	14	1	2	2	37	.20	.020	5	17	.23	14	.09	4	.76	.01	.03	1
59131	1	27	22	128	.1	38	15	314	4.39	2	5	ND	3	17	1	3	2	65	.20	.076	7	50	.76	57	.12	2	5.12	.01	.07	1
STD C	19	62	36	136	7.3	67	31	1032	4.06	41	20	8	38	49	20	17	23	61	.50	.092	40	55	.91	175	.07	35	1.81	.06	.14	12

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SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM
59132	1	11	3	65	.1	15	15	457	1.82	2	5	ND	1	20	1	2	2	37	.25	.021	11	23	.50	44	.08	4	1.40	.01	.04	1
59133	1	35	9	124	.1	37	14	370	4.36	2	5	ND	3	11	1	2	2	70	.14	.070	6	62	.93	57	.12	2	4.69	.01	.05	1
59134	1	8	2	48	.1	14	5	207	1.71	3	5	ND	2	12	1	3	6	41	.15	.021	8	24	.40	36	.09	2	1.36	.01	.04	3
59135	1	33	9	133	.2	48	14	366	3.81	2	5	ND	2	14	2	2	2	55	.17	.064	7	54	1.02	61	.14	3	3.79	.01	.08	1
59136	1	65	7	142	.3	85	22	984	4.39	8	5	ND	4	14	1	2	4	81	.19	.105	8	70	1.09	73	.14	8	5.07	.01	.11	1
59137	1	35	6	109	.2	34	11	352	4.51	2	5	ND	2	12	2	2	6	77	.12	.075	6	58	.35	60	.13	2	4.66	.01	.07	1
59138	1	21	7	112	.1	27	9	549	3.45	4	5	ND	2	13	1	2	2	66	.17	.075	6	49	.51	97	.13	2	2.78	.01	.14	1
59139	1	79	5	131	.1	65	18	510	4.76	2	5	ND	7	12	3	2	6	69	.12	.040	15	60	1.66	139	.20	2	5.51	.01	.40	1
59140	1	22	5	108	.2	33	14	511	4.82	7	5	ND	3	12	2	2	2	75	.14	.097	6	53	.74	51	.13	3	3.58	.01	.08	1
59141	1	43	5	134	.1	52	17	463	4.63	10	5	ND	3	9	1	2	2	86	.08	.069	5	92	1.33	115	.14	5	3.52	.01	.14	1
59142	1	27	8	136	.2	41	13	562	3.84	22	5	ND	2	11	2	2	4	75	.13	.055	7	61	1.07	95	.12	10	2.65	.01	.10	1
59143	1	29	8	147	.3	39	16	994	3.61	5	5	ND	5	17	1	2	2	62	.15	.125	10	46	1.01	203	.14	5	3.20	.01	.28	1
59144	1	41	6	111	.3	40	12	376	3.62	5	5	ND	4	14	1	2	3	55	.15	.076	7	50	.90	77	.14	3	4.14	.01	.13	1
59145	1	32	11	140	.2	37	13	452	3.93	7	5	ND	3	14	2	2	5	67	.15	.081	7	53	.31	110	.12	2	3.65	.01	.14	1
59146	1	37	17	111	.2	37	13	361	2.96	10	5	ND	3	12	1	2	2	71	.12	.079	6	62	1.02	64	.13	2	5.44	.01	.13	1
59147	1	16	4	57	.4	14	4	165	2.39	2	5	ND	2	12	1	2	2	50	.14	.031	7	28	.39	49	.08	3	2.11	.01	.04	1
59148	1	19	8	68	.1	22	6	214	2.83	4	5	ND	2	13	1	2	2	54	.17	.063	6	36	.66	30	.11	2	3.19	.01	.05	1
59149	1	33	10	93	.1	18	16	310	2.87	6	5	ND	2	11	1	3	3	53	.13	.041	7	31	.67	53	.09	4	1.93	.01	.06	1
59151	1	107	2	83	.2	22	3	265	3.66	2	5	ND	1	19	1	2	2	60	.41	.053	4	35	.57	23	.20	2	3.65	.01	.02	1
59152	1	96	6	65	.1	13	4	346	3.39	4	5	ND	1	20	1	2	2	79	.39	.065	4	33	.35	20	.16	2	1.96	.01	.03	1
59153	1	101	5	71	.2	16	6	289	2.85	2	5	ND	1	21	1	2	3	71	.42	.033	4	33	.48	26	.15	4	2.26	.01	.03	1
59154	1	58	2	60	.2	14	7	253	2.65	2	5	ND	1	20	1	2	5	65	.41	.033	5	33	.46	22	.17	3	2.46	.01	.02	1
59155	1	69	10	55	.1	16	7	237	3.63	2	5	ND	2	20	1	2	2	83	.40	.054	4	52	.55	20	.19	2	4.64	.01	.03	1
59156	1	37	12	49	.3	15	6	228	2.66	5	5	ND	2	22	1	3	2	72	.43	.032	5	32	.42	21	.17	3	2.70	.01	.02	1
59157	1	11	8	26	.1	10	3	164	1.76	4	5	ND	1	22	1	3	3	65	.47	.015	6	18	.20	11	.16	2	1.06	.01	.01	2
59158	1	25	2	115	.3	15	8	566	3.09	6	5	ND	2	20	1	2	8	64	.38	.073	6	36	.47	35	.16	3	3.34	.01	.04	1
59159	1	34	9	59	.1	27	10	336	3.40	3	5	ND	2	22	1	2	2	86	.45	.023	5	43	.81	42	.19	4	2.51	.01	.05	1
59160	2	118	19	153	.4	72	14	366	5.18	14	5	ND	3	7	1	2	2	76	.10	.065	5	59	.98	44	.12	4	3.52	.01	.07	1
59161	1	84	18	116	.1	52	18	445	4.26	6	5	ND	2	17	1	2	2	85	.17	.056	6	56	1.24	129	.15	7	5.26	.01	.11	1
59162	1	64	2	124	.1	50	16	422	4.45	2	5	ND	1	10	2	2	2	101	.07	.036	2	63	1.45	113	.15	4	5.57	.01	.13	1
59163	1	56	5	90	.3	41	11	350	3.93	2	5	ND	2	11	1	2	2	88	.20	.040	4	65	1.04	52	.13	2	4.56	.01	.06	1
59164	1	125	12	102	.3	48	15	336	4.54	7	5	ND	2	8	1	2	6	99	.25	.068	3	85	1.09	43	.20	2	5.88	.02	.06	1
55076	1	44	16	93	.1	44	16	506	3.46	7	5	ND	3	17	1	2	2	60	.22	.039	8	50	1.06	56	.12	3	2.78	.01	.13	1
55077	1	28	3	103	.1	41	23	756	3.64	6	5	ND	3	23	1	2	3	67	.29	.031	9	52	.95	71	.12	3	2.85	.01	.08	1
55078	1	20	13	84	.1	20	8	306	3.75	2	5	ND	3	12	1	2	2	77	.10	.024	7	52	.90	44	.11	3	2.64	.01	.11	1
55079	1	7	7	35	.1	11	4	195	1.44	6	5	ND	1	17	1	2	2	43	.23	.011	7	20	.38	39	.09	3	1.07	.01	.04	2
STD C	19	63	36	132	7.2	69	31	1030	3.91	43	20	7	37	48	19	14	22	60	.49	.092	39	55	.89	173	.06	40	1.77	.06	.14	11

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM
55080	1	10	2	63	.1	23	9	362	2.54	2	5	ND	1	17	1	2	2	50	.24	.019	7	32	.61	20	.09	7	1.47	.01	.03	1
55081	1	4	2	32	.1	6	2	109	1.86	2	5	ND	1	6	1	2	2	64	.08	.015	3	24	.22	24	.02	2	1.65	.01	.03	2
55082	1	45	11	86	.1	36	10	264	3.54	3	5	ND	3	15	1	3	2	64	.21	.031	7	50	.80	42	.14	3	4.73	.01	.08	1
55083	1	43	7	125	.1	48	21	553	3.67	5	5	ND	2	21	1	2	3	62	.29	.041	11	48	1.12	78	.14	3	2.94	.01	.17	1
55084	1	52	15	88	.1	46	13	387	3.70	6	5	ND	3	18	1	2	2	64	.25	.031	9	51	1.11	67	.18	2	3.87	.01	.13	1
55085	1	7	4	32	.1	3	2	125	1.79	2	5	ND	1	17	1	2	2	62	.18	.016	6	19	.28	20	.10	2	.35	.01	.02	1
55086	1	19	5	87	.1	20	7	415	4.20	7	5	ND	2	10	1	2	2	75	.10	.039	8	49	.64	54	.09	2	2.82	.01	.08	1
55087	1	7	8	67	.1	20	29	447	1.64	6	5	ND	1	23	1	2	2	33	.29	.032	7	22	.40	120	.06	3	1.07	.01	.05	3
55088	2	40	14	79	.1	34	7	269	2.63	2	5	ND	2	20	1	2	2	45	.34	.050	7	33	.65	60	.10	2	2.46	.01	.09	1
55089	1	6	13	65	.1	5	3	89	.67	5	5	ND	1	31	1	2	2	18	.35	.031	2	10	.14	70	.03	6	.35	.01	.05	1
55090	1	4	3	26	.1	4	2	88	.63	6	5	ND	1	28	1	2	2	26	.30	.018	4	7	.09	33	.05	4	.34	.01	.05	1
55091	1	29	12	83	.1	28	6	283	3.62	3	5	ND	2	14	1	2	2	60	.17	.046	7	43	.70	38	.13	4	4.04	.01	.09	1
55092	1	17	10	65	.3	16	7	217	3.49	6	5	ND	2	15	1	4	2	64	.21	.028	7	37	.57	42	.12	2	2.75	.01	.05	1
55093	1	18	4	82	.1	19	10	1151	3.78	3	5	ND	2	12	1	2	2	65	.10	.052	8	39	.90	60	.08	3	2.74	.01	.13	1
55094	1	9	5	99	.1	17	12	728	3.37	2	5	ND	2	13	1	2	2	55	.09	.045	9	41	.87	52	.11	2	2.24	.01	.09	1
55095	1	20	8	110	.2	31	14	356	4.33	2	5	ND	3	11	1	3	2	70	.12	.053	8	44	.74	59	.15	2	3.56	.01	.12	2
55096	1	31	7	64	.1	29	13	477	3.09	3	5	ND	2	16	1	2	2	59	.24	.041	8	44	.78	46	.11	3	3.33	.01	.06	1

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM
55656	1	14	2	15	.1	6	1	59	.72	2	5	ND	1	3	1	2	2	9	.01	.004	2	216	.13	12	.02	5	.22	.01	.06	1
59150	1	28	6	31	.2	12	3	122	1.08	5	5	ND	1	23	1	2	3	32	.46	.007	2	152	.30	19	.02	2	.55	.03	.14	1
55491	1	26	3	41	.2	23	7	193	3.89	6	5	ND	1	8	1	2	2	17	.08	.032	2	128	.17	31	.02	2	.71	.02	.10	1
59201	1	9	8	19	.1	7	4	186	.90	2	5	ND	1	8	1	2	2	10	.06	.017	3	159	.28	55	.05	2	.44	.04	.23	1
55665-#1	1	16	4	27	.1	16	4	86	1.20	6	5	ND	1	7	1	2	2	11	.04	.021	2	190	.24	9	.01	2	.38	.01	.04	1
55665-#2	1	10	2	13	.1	7	1	47	.76	2	5	ND	1	4	1	2	2	5	.03	.015	2	200	.11	6	.01	3	.16	.01	.02	1
59176	1	10	2	19	.1	7	6	155	1.62	2	5	ND	2	27	1	2	2	13	.58	.013	21	137	.31	2	.10	3	.66	.07	.01	1
55657	1	3	3	7	.1	7	2	38	.49	2	5	ND	1	26	1	2	2	5	.01	.005	2	231	.05	9	.01	2	.09	.01	.03	2
59126	1	30	7	38	.1	21	7	306	1.51	3	5	ND	1	28	1	2	2	29	.68	.113	2	141	.50	3	.03	6	1.29	.06	.05	1
55097	1	38	2	109	.3	113	48	1988	10.64	8	5	ND	1	4	6	2	2	151	.05	.029	6	164	2.66	79	.01	5	3.93	.02	.08	1
STD C	18	61	43	134	7.3	72	31	1012	3.76	44	20	8	34	46	18	19	20	59	.45	.090	37	56	.83	166	.06	35	1.81	.06	.14	12

NORANDA VANCOUVER LABORATORY

PROPERTY/LOCATION:VALENTINE FRS GROUP CODE : 8905-026

Project No. :120 Sheet:1 of 2 Date rec'd:MAY.25
Material :91 SOILS Geol.:T.Mc. Date compl:MAY.31
Remarks :

Values in PPM, except where noted.

T.T. No.	SAMPLE No.	PPB Au
38	58576	5
39	58577	5
40	58578	5
41	58579	5
42	58580	5
43	58581	20
44	58582	5
45	58583	5
46	58584	5
47	58585	5
48	58586	10
49	58587	5
50	58632	5
52	58633	10
53	58634	5
54	58635	5
55	58636	5
56	58637	5
57	58638	20
58	58639	5
59	58640	5
60	59001	5
61	59002	5
62	59003	5
63	59004	5
64	59005	10
65	59006	5
66	59007	5
67	59008	5
68	59009	5
69	59010	5
70	59011	5
71	59012	5
72	59013	35
73	59014	5
74	59627	5
75	59628	5
76	59629	5
77	59630	5
78	59631	5
79	59633	10
80	59634	5
81	59635	5
82	59636	5
83	59637	5
84	59638	10
85	59639	5
86	59640	5

RW

T.T. No.	SAMPLE No.	PPB Au
87	59641	30
88	58801	5
89	58802	5
90	58803	5
91	58804	5
92	58805	5
93	58806	5
94	58807	5
95	58808	5
96	58809	5
97	58810	5
98	58811	5
99	58812	5
100	58813	5
52	58814	5
53	58815	5
54	58816	5
55	58817	5
56	58818	5
57	58819	5
58	58820	5
59	58821	5
60	58822	5
61	58823	5
62	58824	30
63	58825	5
64	58826	10
65	58827	5
66	58828	5
67	58829	5
68	58830	5
69	58831	5
70	58832	5
71	58833	5
72	58834	5
73	58835	5
74	58836	5
75	58837	5
76	58838	5
77	58839	5
78	58840	5
79	58841	5
80	58842	5

Valentine FRS (TMc)

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: ROCK AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: MAY 25 1989 DATE REPORT MAILED: May 31/89 SIGNED BY. C. Leong ..D.TOYE. C.LEONG. J.WANG: CERTIFIED B.C. ASSAYERS

NORANDA EXPLORATION CO. LTD. PROJECT 8905-026 120 File # 89-1215

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	Au* PPB
R 58601	1	315	2	127	.1	120	46	1055	5.35	2	5	ND	1	41	1	2	14	211	.73	.037	3	278	4.87	43	.27	2	6.59	.01	.02	1	2
R 56626	2	43	4	39	.2	13	7	358	1.93	3	5	ND	2	43	1	2	4	29	1.16	.027	15	19	.61	3	.20	2	1.45	.02	.01	1	7
R 59292	1	21	2	8	.1	11	4	83	.61	3	5	ND	3	5	1	2	2	15	.07	.006	2	37	.26	7	.04	2	.32	.01	.01	1	5
R 59293	1	22	15	61	.1	18	9	302	2.54	13	5	ND	4	16	1	2	2	17	.17	.043	6	14	.33	52	.03	2	1.22	.02	.09	1	1
R 59294	2	12	4	33	.3	7	3	123	1.18	2	5	ND	5	5	1	2	2	14	.05	.012	6	30	.38	12	.04	2	.52	.02	.03	1	8
R 59295	1	24	16	94	.1	19	6	317	3.59	15	5	ND	9	17	1	2	2	19	.23	.083	16	18	1.12	50	.09	8	1.83	.01	.10	1	7
R 59296	1	17	5	16	.1	22	5	137	.82	3	5	ND	2	2	1	3	2	5	.02	.012	3	39	.17	15	.03	6	.31	.01	.03	1	4
R 59297	1	24	8	58	.3	55	8	447	2.48	8	5	ND	3	5	1	2	2	31	.14	.037	2	49	1.31	20	.07	2	1.35	.01	.04	1	5
R 59298	1	12	4	19	.1	9	2	150	.86	5	5	ND	3	19	1	2	2	11	.11	.011	2	33	.24	11	.01	3	.45	.01	.04	3	4
R 59299	3	9	3	8	.1	10	2	64	.51	5	5	ND	3	4	1	2	3	4	.02	.004	2	9	.07	3	.01	2	.13	.01	.02	1	4
R 59300	1	40	2	17	.1	840	52	904	2.12	66	5	ND	1	100	1	2	2	26	3.90	.004	2	664	3.06	6	.01	2	.68	.01	.01	1	4
R 59301	1	34	7	107	.3	145	58	2096	9.21	4	5	ND	4	5	1	2	3	139	.13	.038	5	193	3.89	72	.01	3	4.24	.01	.05	1	4
R 59642	1	25	10	36	.1	13	2	100	.89	3	5	ND	4	5	1	2	2	4	.08	.009	6	28	.14	51	.01	2	.34	.02	.09	2	41
STD C/AU-R	18	63	39	133	6.6	73	30	1006	3.80	45	23	7	39	50	18	14	20	58	.46	.087	38	56	.85	184	.07	31	1.31	.06	.14	12	480

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: SOIL PULP AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: MAY 31 1989 DATE REPORT MAILED: June 2/89 SIGNED BY. C. Leong ..D.TOYE. C.LEONG. J.WANG: CERTIFIED B.C. ASSAYERS

NORANDA EXPLORATION CO. LTD. PROJECT 8905-026 120 File # 89-1274 Page 1

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	Au* PPB
58576	1	42	12	70	.2	23	7	310	4.33	9	5	ND	1	9	1	2	2	93	.14	.046	3	45	.96	70	.14	4	3.75	.01	.05	1	3
58577	1	52	6	103	.2	32	11	446	4.62	13	5	ND	2	3	1	3	2	105	.16	.058	3	58	1.56	109	.13	7	4.50	.01	.20	1	2
58578	1	62	9	82	.1	27	9	326	4.34	6	5	ND	2	11	1	2	2	87	.22	.036	5	53	1.04	37	.16	12	3.94	.01	.04	1	1
58579	1	50	7	74	.1	24	7	251	4.36	9	5	ND	1	24	1	2	2	93	.57	.059	4	72	.75	20	.30	2	3.56	.01	.01	1	1
58580	1	41	6	67	.1	19	6	238	4.40	5	5	ND	2	25	1	2	2	82	.59	.037	6	56	.64	18	.20	5	3.60	.01	.02	1	3
58581	1	38	7	61	.1	11	3	169	2.56	5	5	ND	1	33	1	2	2	70	1.08	.034	4	37	.18	13	.23	2	1.79	.01	.03	2	2
58582	1	61	9	57	.1	17	5	232	3.83	6	5	ND	1	17	1	2	2	76	.45	.051	4	51	.57	20	.18	2	2.95	.01	.02	1	2
58583	1	208	14	35	.1	11	4	101	2.69	13	5	ND	3	7	1	2	2	53	.16	.115	7	54	.30	13	.14	7	6.46	.01	.03	2	4
58584	1	76	11	39	.1	13	4	152	3.19	5	5	ND	1	13	1	2	2	64	.29	.037	3	46	.41	14	.15	6	3.54	.01	.01	1	4
58585	1	148	7	49	.2	19	5	204	4.20	7	5	ND	2	16	1	2	2	75	.34	.064	4	55	.62	13	.19	5	3.43	.01	.02	1	4
58586	1	151	7	55	.2	31	7	293	4.03	8	5	ND	2	17	1	2	2	64	.41	.049	5	67	1.09	16	.15	2	3.16	.01	.03	1	2
58587	1	209	11	49	.1	22	5	216	4.95	9	5	ND	2	12	1	2	2	80	.31	.086	3	72	.60	18	.16	2	5.06	.01	.01	1	2
58632	1	65	15	57	.1	30	6	170	9.34	26	5	ND	4	7	1	2	3	145	.13	.174	4	152	.66	21	.19	2	7.34	.01	.04	1	1
58633	1	31	9	48	.2	23	6	234	3.40	11	5	ND	1	13	1	3	2	72	.30	.031	4	56	.62	21	.14	2	2.56	.01	.03	2	1
58634	1	13	8	41	.1	11	4	169	3.63	6	5	ND	2	16	1	2	2	72	.33	.037	5	36	.35	16	.16	2	2.27	.01	.02	1	10
58635	1	14	6	37	.1	8	3	151	4.57	2	5	ND	1	18	1	2	2	90	.36	.052	4	35	.31	15	.11	2	2.09	.01	.01	1	5
58636	1	54	7	55	.1	19	6	215	3.93	9	5	ND	1	11	1	2	2	70	.25	.088	4	46	.67	21	.15	2	4.48	.01	.02	1	3
58637	1	31	13	45	.1	14	5	151	5.07	9	5	ND	1	12	1	2	2	109	.20	.067	3	57	.40	19	.14	2	5.01	.01	.02	1	4
58638	1	34	11	43	.1	18	5	211	4.34	5	5	ND	1	14	1	2	2	92	.28	.034	4	48	.65	14	.21	2	3.13	.01	.01	1	3
58639	1	69	16	42	.1	6	4	133	2.55	2	5	ND	2	8	1	2	2	52	.15	.090	3	39	.16	21	.09	2	9.41	.01	.01	1	4
58640	1	8	6	21	.1	3	1	122	1.00	3	5	ND	1	12	1	2	2	62	.40	.015	4	21	.10	8	.14	2	.65	.01	.01	2	4
59001	1	25	9	78	.1	25	11	318	4.12	18	5	ND	3	17	1	3	2	77	.18	.032	17	45	1.08	125	.17	3	3.63	.01	.26	3	2
59002	1	14	12	69	.1	13	4	163	4.10	17	5	ND	2	8	1	2	2	64	.10	.062	5	33	.44	42	.11	2	3.01	.01	.04	1	2
59003	1	27	12	93	.1	25	8	293	3.89	8	5	ND	4	8	1	2	2	62	.10	.056	5	44	.85	68	.15	5	4.79	.01	.11	1	2
59004	1	33	11	89	.2	32	12	449	3.75	16	5	ND	4	9	1	2	2	62	.10	.047	11	45	1.16	108	.15	3	4.12	.01	.25	2	1
59005	1	26	13	86	.1	23	7	532	4.11	12	5	ND	3	11	1	2	2	62	.09	.112	6	40	.86	67	.13	5	4.03	.01	.11	1	1
59006	1	49	17	134	.1	42	12	559	5.05	17	5	ND	6	7	1	2	2	71	.07	.071	8	62	1.49	65	.10	2	6.72	.01	.14	2	2
59007	1	25	10	119	.2	47	21	495	3.92	11	5	ND	2	12	1	2	2	60	.12	.049	9	41	.95	79	.12	6	3.68	.01	.10	1	2
59008	1	20	13	107	.2	29	10	299	4.84	7	5	ND	2	9	1	2	2	71	.10	.072	5	46	.82	50	.14	4	4.38	.01	.10	1	2
59009	1	34	8	87	.1	38	9	356	3.66	18	5	ND	4	13	1	2	2	63	.22	.048	9	42	1.16	93	.14	2	3.03	.01	.22	1	2
59010	1	15	15	81	.1	18	44	1257	3.28	8	5	ND	1	16	1	2	2	55	.16	.056	8	33	.65	75	.08	5	2.49	.01	.08	1	2
59011	1	31	12	119	.2	31	9	347	4.75	9	5	ND	3	8	1	2	2	79	.09	.068	6	61	1.05	48	.13	9	4.80	.01	.07	1	1
59012	1	50	12	96	.1	48	98	2947	4.43	14	5	ND	3	17	1	2	2	72	.31	.051	10	62	1.35	77	.14	8	3.39	.01	.12	1	5
59013	1	12	6	44	.1	6	3	115	5.01	15	5	ND	1	7	1	2	2	130	.11	.044	4	29	.21	16	.16	2	1.97	.01	.01	1	3
59014	1	31	9	85	.1	22	6	251	4.12	9	5	ND	3	9	1	2	3	75	.15	.041	5	42	.77	39	.14	7	3.77	.01	.04	1	3
STD C/AU-S	18	59	36	132	6.6	73	28	999	4.09	43	18	6	37	49	15	14	21	56	.52	.083	37	55	.92	173	.07	32	1.96	.06	.14	12	51

NORANDA EXPLORATION CO. LTD. PROJECT 8905-026 120 FILE # 89-1274

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	Au* PPB
59627	1	73	11	62	.7	29	8	239	4.90	12	7	ND	3	16	1	2	2	92	.45	.083	5	88	.69	19	.30	2	3.44	.01	.05	2	4
59628	1	22	8	31	.3	9	3	125	2.55	2	5	ND	1	16	1	2	2	75	.47	.015	3	36	.34	10	.21	2	1.17	.01	.03	2	1
59629	1	16	11	43	.2	13	3	147	3.39	5	5	ND	2	10	1	2	2	72	.25	.042	3	43	.42	13	.13	2	2.05	.01	.04	2	5
59630	1	16	9	27	.2	9	3	133	2.74	6	5	ND	1	11	1	2	2	63	.29	.018	3	38	.31	10	.12	6	2.07	.01	.02	2	1
59631	1	56	4	53	.2	22	6	238	3.03	7	5	ND	2	10	1	2	2	56	.25	.018	3	46	.65	20	.19	2	2.24	.01	.05	1	3
59633	1	88	6	36	.1	10	3	139	3.76	2	5	ND	2	8	1	2	2	61	.17	.345	3	41	.39	13	.15	2	3.74	.01	.03	1	2
59634	1	23	6	31	.1	7	2	113	3.57	2	5	ND	1	7	1	2	2	67	.17	.036	3	31	.31	8	.16	6	1.54	.01	.02	1	1
59635	1	134	9	40	.1	11	4	176	4.39	3	5	ND	2	9	1	2	2	78	.23	.030	3	40	.52	12	.23	2	2.35	.01	.04	1	1
59636	1	44	7	34	.1	8	3	107	2.87	4	5	ND	1	9	1	2	2	60	.22	.024	4	27	.27	12	.13	2	1.46	.01	.03	2	4
59637	1	30	7	46	.1	20	4	183	3.22	2	5	ND	1	8	1	2	2	67	.21	.011	2	53	.64	16	.13	3	2.52	.01	.02	1	6
59638	1	44	10	66	.1	33	6	222	3.49	4	5	ND	1	7	1	2	2	65	.19	.012	5	80	.87	23	.13	2	3.31	.01	.02	1	2
59639	1	12	6	32	.1	17	3	115	3.51	11	5	ND	1	8	1	2	2	78	.17	.030	3	68	.36	13	.11	2	1.38	.01	.02	2	2
59640	1	16	8	51	.2	16	4	129	3.53	4	5	ND	2	6	1	2	2	79	.12	.028	4	52	.34	18	.08	2	2.08	.01	.03	1	95
59641	1	60	9	73	.1	46	15	427	3.37	6	5	ND	2	15	1	2	2	63	.51	.035	4	64	1.52	37	.17	2	2.37	.01	.06	1	39
58801	1	8	11	39	.2	5	2	80	4.15	12	5	ND	2	5	1	2	2	101	.07	.049	3	22	.24	15	.14	2	2.04	.01	.03	1	3
58802	1	27	9	76	.1	21	6	228	3.78	7	5	ND	3	7	1	2	2	58	.07	.052	4	47	.88	44	.13	3	5.92	.01	.08	1	1
58803	1	13	12	42	.1	10	3	135	3.46	6	5	ND	2	5	1	2	2	72	.07	.044	4	29	.44	23	.13	2	2.33	.01	.05	1	4
58804	1	7	9	35	.3	5	2	78	3.21	10	5	ND	2	5	1	2	2	66	.06	.049	4	23	.26	21	.12	4	1.61	.01	.05	2	1
58805	1	4	6	26	.1	3	1	98	2.57	6	5	ND	1	4	1	2	2	58	.05	.017	3	15	.18	17	.10	2	.90	.01	.04	2	1
58806	1	8	5	31	.2	6	2	86	2.95	7	5	ND	2	8	1	2	2	92	.07	.013	4	21	.31	46	.15	8	1.13	.01	.08	2	15
58807	1	11	12	41	.1	8	3	176	2.28	5	5	ND	2	7	1	2	2	53	.09	.028	3	23	.42	39	.10	2	1.43	.01	.08	2	9
58808	1	33	6	70	.1	28	8	253	2.89	5	5	ND	2	13	1	2	2	59	.22	.036	5	47	1.15	77	.34	2	2.82	.01	.15	1	1
58809	1	25	7	57	.1	16	5	191	3.00	9	5	ND	2	10	1	2	2	54	.11	.032	4	32	.58	36	.10	3	3.05	.01	.05	1	2
58810	1	8	7	51	.2	7	4	108	3.39	8	5	ND	4	5	1	2	2	35	.03	.027	4	33	.50	49	.18	5	2.36	.01	.09	1	1
58811	1	17	9	61	.1	16	6	221	4.22	4	5	ND	2	10	1	2	2	75	.14	.021	4	37	.64	44	.15	4	2.37	.01	.05	1	1
58812	1	28	5	71	.1	13	5	162	4.47	10	5	ND	3	5	1	2	2	75	.05	.030	5	40	.82	57	.13	2	3.72	.01	.13	1	1
58813	1	15	10	69	.1	11	5	157	3.74	6	5	ND	2	5	1	2	2	75	.07	.043	4	35	.56	51	.13	2	3.25	.01	.09	1	2
58814	1	7	6	42	.1	7	3	103	3.71	9	5	ND	1	5	1	2	2	70	.06	.034	4	25	.35	21	.14	2	1.92	.01	.03	1	6
58815	1	8	7	40	.2	5	2	102	2.83	6	5	ND	2	5	1	2	2	46	.04	.021	3	20	.30	21	.03	4	1.62	.01	.03	2	1
58816	1	22	10	78	.1	15	5	164	4.52	7	5	ND	3	9	1	2	2	76	.07	.037	5	41	.56	45	.12	2	3.40	.01	.06	1	1
58817	2	24	4	66	.1	11	4	171	3.78	9	5	ND	2	17	1	2	2	61	.11	.024	4	31	.80	54	.11	6	1.86	.01	.07	1	1
58818	1	5	5	37	.2	6	3	333	2.01	3	5	ND	1	6	1	2	2	54	.09	.013	5	17	.40	21	.09	2	1.17	.01	.04	2	1
58819	1	10	6	44	.2	10	3	129	2.77	10	5	ND	2	6	1	2	2	53	.08	.024	5	26	.41	22	.10	3	1.99	.01	.04	2	1
58820	1	30	9	76	.1	25	7	270	3.27	6	5	ND	4	9	1	2	2	51	.11	.042	7	39	.96	55	.14	4	3.38	.01	.11	1	14
58821	1	20	5	48	.2	20	5	193	3.46	8	5	ND	2	8	1	2	2	68	.14	.018	4	39	.61	40	.11	3	2.53	.01	.04	2	2
58822	1	21	3	41	.1	22	5	136	3.30	5	5	ND	1	7	1	2	2	75	.12	.026	4	51	.54	23	.10	2	2.72	.01	.01	1	2
STD C/AU-S	18	58	37	132	6.7	76	29	963	4.07	39	22	6	36	48	17	18	21	56	.53	.089	36	55	.90	173	.07	32	1.84	.06	.14	12	50

NORANDA EXPLORATION CO. LTD. PROJECT 8905-026 120 FILE # 89-1274

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	Au* PPB
58823	2	17	10	45	.3	14	5	159	3.31	8	5	ND	2	8	1	2	2	58	.12	.029	4	32	.52	23	.13	2	2.67	.01	.05	1	2
58824	1	31	13	52	.1	15	5	150	4.89	3	5	ND	4	7	1	2	2	96	.13	.082	4	52	.55	22	.15	6	4.26	.01	.04	1	1
58825	1	17	10	38	.3	11	4	129	3.01	9	5	ND	3	8	1	2	2	86	.16	.035	4	27	.38	14	.13	8	1.73	.01	.04	1	2
58826	1	38	10	73	.3	31	8	326	3.49	11	5	ND	5	9	1	2	2	60	.12	.030	5	50	.97	69	.12	7	4.42	.01	.09	1	1
58827	1	14	9	41	.3	12	4	196	2.99	5	5	ND	3	9	1	2	2	65	.14	.044	4	28	.36	36	.09	4	1.99	.01	.05	1	116
58828	1	17	11	51	.1	18	7	191	2.98	9	5	ND	2	8	1	2	2	61	.14	.037	5	33	.55	33	.10	3	2.17	.01	.05	1	1
58829	1	16	11	57	.3	17	5	173	3.63	11	6	ND	3	8	1	5	2	75	.13	.022	5	36	.59	30	.11	7	2.32	.01	.06	1	1
58830	1	11	12	47	.1	11	3	144	5.23	20	5	ND	2	9	1	2	4	126	.14	.051	5	32	.37	30	.12	3	2.74	.01	.03	1	2
58831	1	34	17	72	.3	20	6	190	4.57	11	5	ND	5	7	1	4	2	67	.11	.101	4	52	.60	34	.09	3	4.37	.01	.05	1	9
58832	1	81	14	62	.1	23	7	141	7.49	2	5	ND	3	3	1	2	2	90	.07	.055	5	92	.53	28	.15	4	8.99	.01	.02	1	3
58833	1	75	10	76	.2	42	12	274	4.48	9	5	ND	4	8	1	5	2	86	.14	.034	5	66	1.05	43	.16	3	5.14	.01	.06	2	10
58834	1	25	11	36	.1	8	4	112	7.89	16	5	ND	2	5	1	4	3	169	.07	.077	4	45	.25	10	.18	6	1.94	.01	.03	1	8
58835	1	51	8	71	.1	19	7	239	6.40	14	5	ND	1	8	1	2	2	116	.14	.105	3	81	.56	23	.15	6	5.30	.03	.01	1	8
58836	1	39	9	42	.1	11	6	132	5.45	8	5	ND	2	6	1	4	2	145	.14	.032	5	39	.33	13	.10	7	2.78	.01	.02	1	16
58837	1	33	17	47	.1	25	6	172	4.45	9	5	ND	3	6	1	4	2	66	.11	.046	4	60	.65	23	.15	11	4.71	.01	.05	1	3
58838	1	146	11	100	.1	93	32	918	6.08	2	5	ND	2	10	1	2	2	129	.10	.029	6	155	2.34	69	.17	3	4.94	.01	.05	1	1
58839	1	63	11	77	.1	49	12	307	4.78	9	5	ND	2	8	1	4	2	109	.14	.070	2	98	1.36	46	.20	8	4.41	.01	.05	1	1
58840	1	16	6	33	.1	10	3	98	4.87	12	5	ND	2	7	1	2	2	105	.12	.065	3	44	.32	12	.13	4	2.24	.01	.03	1	1
58841	1	16	10	43	.1	15	4	161	2.67	10	5	ND	2	10	1	2	2	58	.17	.022	4	32	.50	24	.19	7	1.91	.01	.04	1	1
58842	1	6	6	21	.1	4	2	92	1.31	5	5	ND	1	9	1	2	2	34	.13	.014	4	11	.23	10	.07	5	.98	.01	.03	1	1
STD C/AU-S	18	60	36	133	6.7	76	29	929	4.23	44	23	7	37	49	19	15	21	58	.49	.092	37	55	.91	173	.07	33	1.92	.06	.14	12	47

APPENDIX IV

STATEMENT OF COSTS

STATEMENT OF COSTS
FOR THE FRS GROUP
(FIELD COSTS)

1. WAGES: March 15, 1989 to May 18, 1989 *

8 mandays x $140.00	$1,120.00		
7 mandays x $104.00	$ 728.00		
1 manday x $190.00	$ 190.00		
2 mandays x $112.00	$ 224.00		
1 manday x $ 74.00	$ 74.00		
2 mandays x $124.00	$ 248.00		
1 manday x $ 65.00	$ 65.00		
22 mandays x $131.86	$2,649.00		$2,649.00

2. ACCOMMODATION March 15, 1989 to May 18, 1989

22 mandays x $10.72/manday — $ 235.84

3. GROCERIES

22 mandays x $13.92/manday — $ 306.32

4. TRUCK RENTAL

8 days x $40.32/day — $ 322.56

5. GAS

8 days x $12.75/day (averaged) — $ 102.00

6. OFFICE SUPPLIES (Field) — $ 8.45

7. TRUCK/TIRE REPAIRS — $ 11.45

8. FIELD EQUIPMENT & SUPPLIES — $ 32.97

9. SHIPPING — $ 40.50

10. MISCELLANEOUS/TRANSPORTATION RELATED — $ 18.47

11. ANALYSES — $4,242.25

12. AUTHOR, DRAFTING (AUTOCAD), TYPING — $1,400.00

$9,374.81

GEOCHEMICAL COSTS
FOR THE FRS GROUP

SOILS:	332 x $6.25/sample analyzed by ICP for 30 elements listed below:	
	332 x $3.50/sample analyzed by AA for Au	
	332 x $1.60/sample drying and sieving	
	332 x $1.10/sample data processing	
TOTAL:	332 x $12.45/sample	$4,133.40
ROCKS:	11 x $3.00/sample crushing & pulverizing	
	11 x $6.25/sample analyzing by ICP for 30 elements listed below	
	11 x $1.10/sample data processing	
TOTAL:	11 x $10.35/sample	$ 113.85
	TOTAL:	$4,247.25

Analysis for ICP 30 element - Mo, Cu, Pb, Zn, Ag, Ni, Co, Mn, Fe, U, Th, Sr, Cd, Sb, Bi, V, Ca, P, La, Cr, Mg, Ba, Ti, B, Al, Na, K, W, Au.

APPENDIX V

AUTHORS QUALIFICATIONS

AUTHORS QUALIFICATIONS
****

I, Terence J. McIntyre of 894 Pacific Drive, Delta, Province of British Columbia, do hereby certify that:

- I have been employed as a Geologist for Noranda Exploration Company, Limited (no personal liability) from the spring of 1987 to the present.

- I graduated from the Montana College of Mineral Science and Technology in 1986 with a BSc degree in geological engineering.

- I have worked in mineral exploration and in mines since 1983.

Terence J. McIntyre

AUTHORS QUALIFICATIONS
****

I, Dennis R. Bull of the Municipality of Surrey, Province of British columbia, do hereby certify that:

- I am a Geologist residing at 12918 - 64th. Avenue, Surrey, B.C.

- I graduated from the University of Alberta in 1986 with a BSc (Honours) degree in Geology.

- I have worked in Mineral Exploration since 1974 and have practised my profession as a Geologist since May, 1987.

- I am presently a Project Geologist with Noranda Exploration Company, Limited.

Dennis R. Bull

AUTHORS QUALIFICATIONS

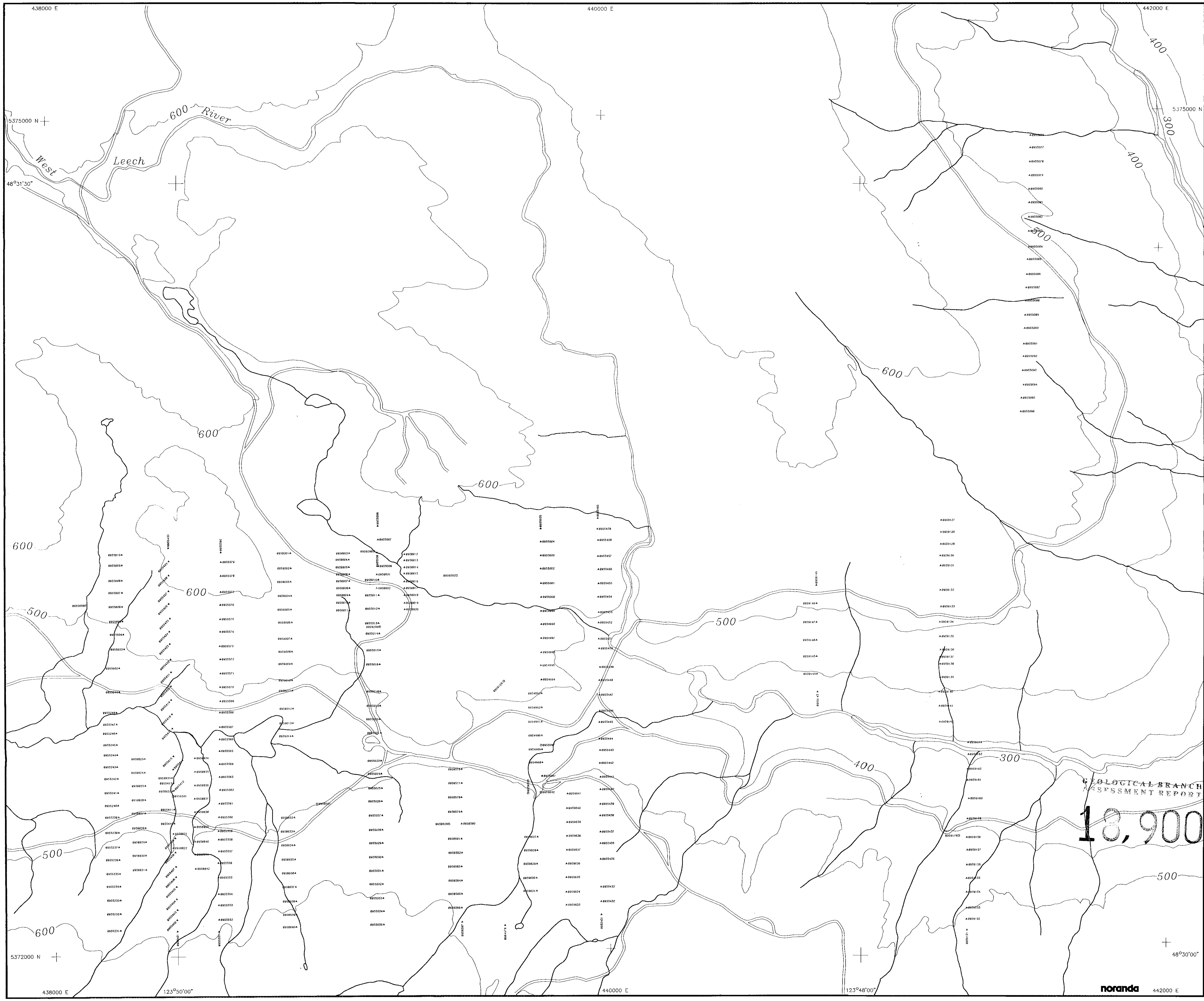
****

I, Robert G. Wilson of the City of Vancouver, Province of British Columbia, do hereby certify that:

- I am a geologist residing at 3328 West 15th. Avenue, Vancouver B.C.
- I graduated from the University of British Columbia in 1976 with a BSc degree in Geology.
- I have worked in mineral exploration since 1973 and have practiced my profession as a geologist since 1976.
- I am presently a Project Geologist with Noranda Exploration Company, Limited (no personal liability).
- I am a member of the Geological Association of Canada (Cordillera Division).
- I supervised this project and have reviewed the findings presented within this report.

Rob Wilson
Project Geologist

LEGEND
EOCENE (AND OLDER?)
CATFACE INTRUSIONS
6 PEGMATITE – Leucocratic with calic feldspar, sericite, and quartz occuring as dykes and sills average width 1.5m.
5 INTRUSIVES
5a – Quartz Diorite – Equigranular medium grained weathers to a buff colour, fresh surface light to medium grey
METCHOSIN VOLCANICS
4 BASALTIC VOLCANICS
4a – Lapilli tuff – Medium to light green, fine grained matrix with sub angular clasts averaging 2–3mm across
4b – Agglomerate – Medium to light green. Medium to course grained matrix with large angular clasts 7cm–0.5m, averaging 8–10cm.
4c – Flow – Medium to light green fine grained with quartz and carbonate filled vesicules 1–2mm in width.
TRIASSIC TO CRETACEOUS
LEECH RIVER FORMATION
3 METAPELITE
3a – Biotitic phyllite – Very fine grained grey black strongly fissile with a sheen along cleavage planes.
3b – Biotite Schist – Medium grained, biotite, quartz segregated layers 1–3mm wide. Fresh and weathered surfaces are medium to dark grey.
3c – Biotite – Garnet schist – same as 3b with porphyroblasts of euhedral almandine garnet, ranging in size from <1mm to 1cm, averaging 2–3mm.
3d – Biotite – Garnet – staurolite schist (order does not imply relative modal occurrence)–same as 3a with porphyroblasts of euhedral staurolite often cruciform, dark brown to black, ranging in size from <1mm–1.5cm, averaging 7–9mm.
3e – Biotite – Garnet – staurolite – andalusite schist (order does not imply relative modal occurrence) same as 3d with porphyroblasts of subeuhedral to anhedral andalusite (chiastolite), 2–8cm in length. Weathers medium to dark grey fresh surface light pink.
2 METASANDSTONE
2a – Greywacke – Medium to dark grey, fine to medium grained with lithic fragments and less than 25% quartz.
2b – Massive metasandstone – Medium grained equigranular locally feldspathic. Weathers buff brown, fresh surface medium to light grey. Often forming prominent cliffs.
1 AMPHIBOLITE
Weathers chloritic green to dark green. Ranges from strongly foliated to massive with local pitted surfaces. Amphiboles (actinolite) vary from fine to course grained. The amphibolite unit varys from volcanic to calc-silicate in nature.
1a – Tuff – Medium to dark green. Matrix is fine grained and extensively chloritized. The clasts are sub angular ranging 0.5–2cm in width.
1b – Flow – Medium green chloritized amphiboles seen along cleavage planes. Vesicules are filled with quartz and carbonate.
1c – Chloritic phyllite – very fine grained, strongly fissile, and displays a sheen along cleavage planes. The fresh and wethered surfaces are light green.
SYMBOLS
Bedding (Strike+Dip)
Bedding (Strike+Vertical Dip)
Foliation (Strike+Vertical Dip)
Foliation (Strike+Dip)
Vein (Strike+Dip)
Vein (Strike+Vertical Dip)
Fracture (Strike+Dip)
Fracture (Strike+Vertical Dip)
Fault (Approximate)
Fault (Defined, Showing Dip)
Geologic Contact (Approximate)
LEGAL CORNER POSTS
Location Known
Location Approximate
Metres 100 50 0 100 200 300 400 Metres
GEOLOGICAL BRANCH
ASSESSMENT REPORT
18,900
West Leech River
Leech River
WEEKS LAKE ROAD
ACCESS MAIN
NORTH MAIN
BUTLER MAIN
VALENTINE
SKYLINE ROCK CORNER
LCP FRS 9
LCP FRS 11
LCP FRS 12
438000 E
440000 E
442000 E
5375000 N
5372000 N
48°31'30"
48°30'00"
123°50'00"
123°48'00"
REVISED
BEAU PRE–VALENTINE
FRS GROUP
GEOLOGY
DATE June 1989
SCALE 1:5000
NORANDA EXPLORATION
OFFICE: VANCOUVER
DWG No. 5
PLANIMETRIC & TOPOGRAPHIC BASE BY EAGLE MAPPING
noranda



OSILT ⊡ROCK ⚹TALUS FINE +OTHER
△SOIL ⊕PAN CONC ⌛WATER
ⓘNMBR

Metres 100 50 0 100 200 300 400 Metres

REVISED	BEAU PRE–VALENTINE
	FRS GROUP
	REGIONAL GEOCHEMISTRY SAMPLE LOCATIONS
PROJ.No. 120	SURVEY BY: ___ DATE: June 1989
N.T.S.	DRAWN BY: J.Serwin (ACAD) SCALE: 1:5000
DWG No.	NORANDA EXPLORATION OFFICE: VANCOUVER

REVISED	BEAU PRE-VALENTINE
	FRS GROUP
	CU, ZN, PB, AG IN PPM
PROJ.No. 120	SURVEY BY: DATE: June 1989
N.T.S.	DRAWN BY: J.Serwin (ACAD) SCALE: 1:5000
DWG No.	NORANDA EXPLORATION OFFICE: VANCOUVER

GEOLOGICAL BRANCH
ASSESSMENT REPORT

18,900

○SILT □ROCK ✱TALUS FINE +OTHER
△SOIL ◇PAN CONC ⧗WATER

○AU/AS

ALL VALUES IN PPM EXCEPT AU IN PPB
NA - NOT ANALYSED
IS - INSUFFICIENT SAMPLE

Metres 100 50 0 100 200 300 400 Metres

REVISED	BEAU PRE-VALENTINE
	FRS GROUP
	AU IN PPB, AS IN PPM
PROJ.No. 120	SURVEY BY: DATE: June 1989
N.T.S.	DRAWN BY: J.Serwin (ACAD) SCALE: 1:5000
DWG No.	NORANDA EXPLORATION OFFICE: VANCOUVER