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GEOLOGICAL AND GEOCHEMICAL SURVEYS

PERFORMED ON THE

LEECH GROUP

(Leech 1-3, Au 2-3, West 1-3)

**SUB-RECORDER
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GEOLOGICAL BRANCH
A

18,901

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Date : June 21, 1989
Owner : Beau Pre Exploration Ltd.
Valentine Gold Corporation
Operator: Noranda Exploration Company, Limited
(no personal liability)

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1.0 INTRODUCTION

1.1 Location and Access

The Leech Group lies approximately 23 km north-northwest of the township of Sooke, B.C. (Figure 1 and 2). The property is accessed from Sooke via the Butler Main and Jordan Main logging routes. Access from here to the various parts of the property is via logging roads which are generally in fair condition.

1.2 Physiography

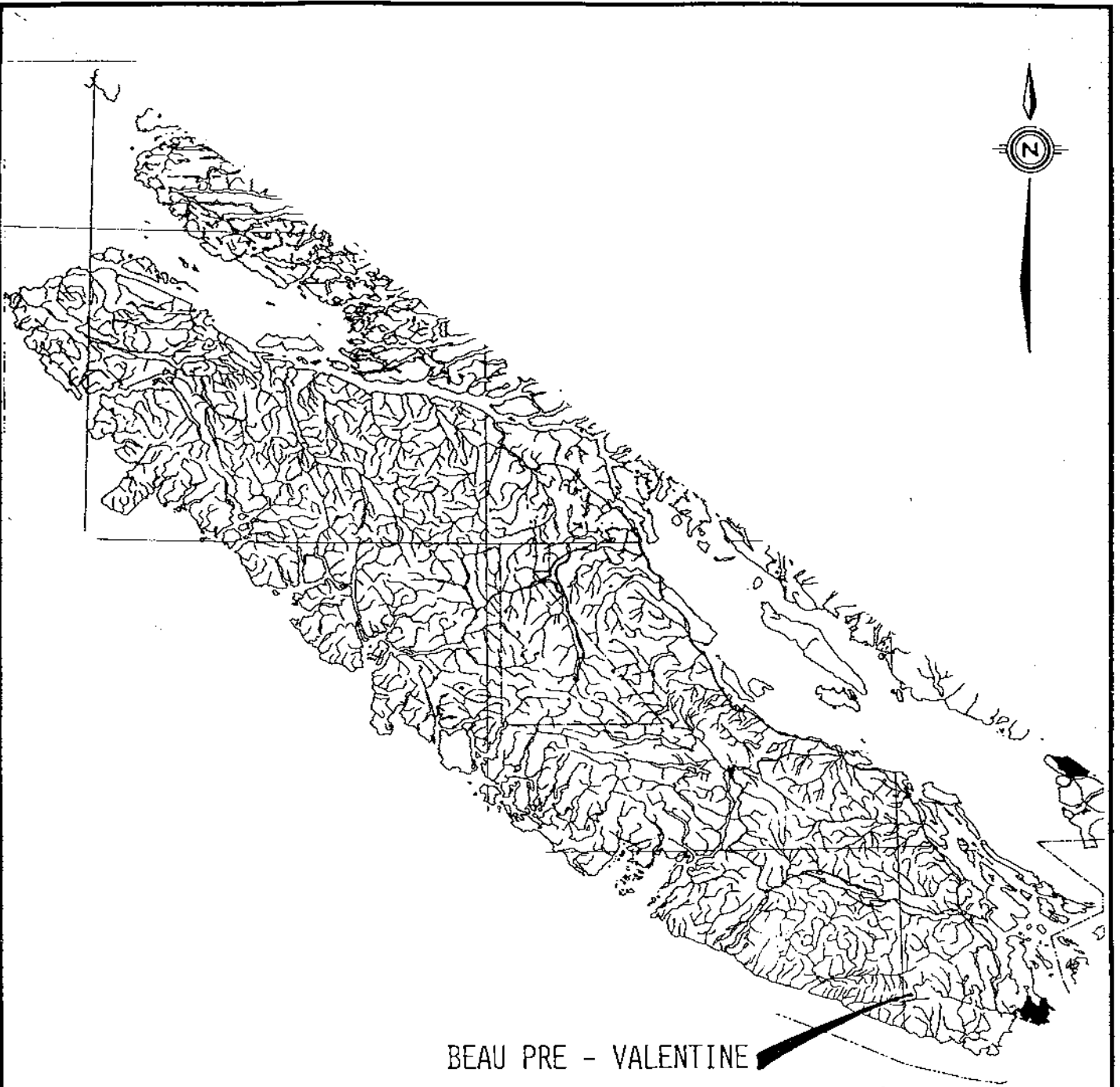
The Leech Group lies with the Vancouver Island Mountain Range in the southern portion of the Insular Belt.

The physiography consists of relatively flat valley bottoms with moderate to precipitous valley sides. Elevations range from 490 m, at the valley floor, up to 850 m at the peaks.

Typically, the property is buried beneath thick glacial fluvial deposits at the valley floor, however, there is abundant outcrop above this elevation.

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.

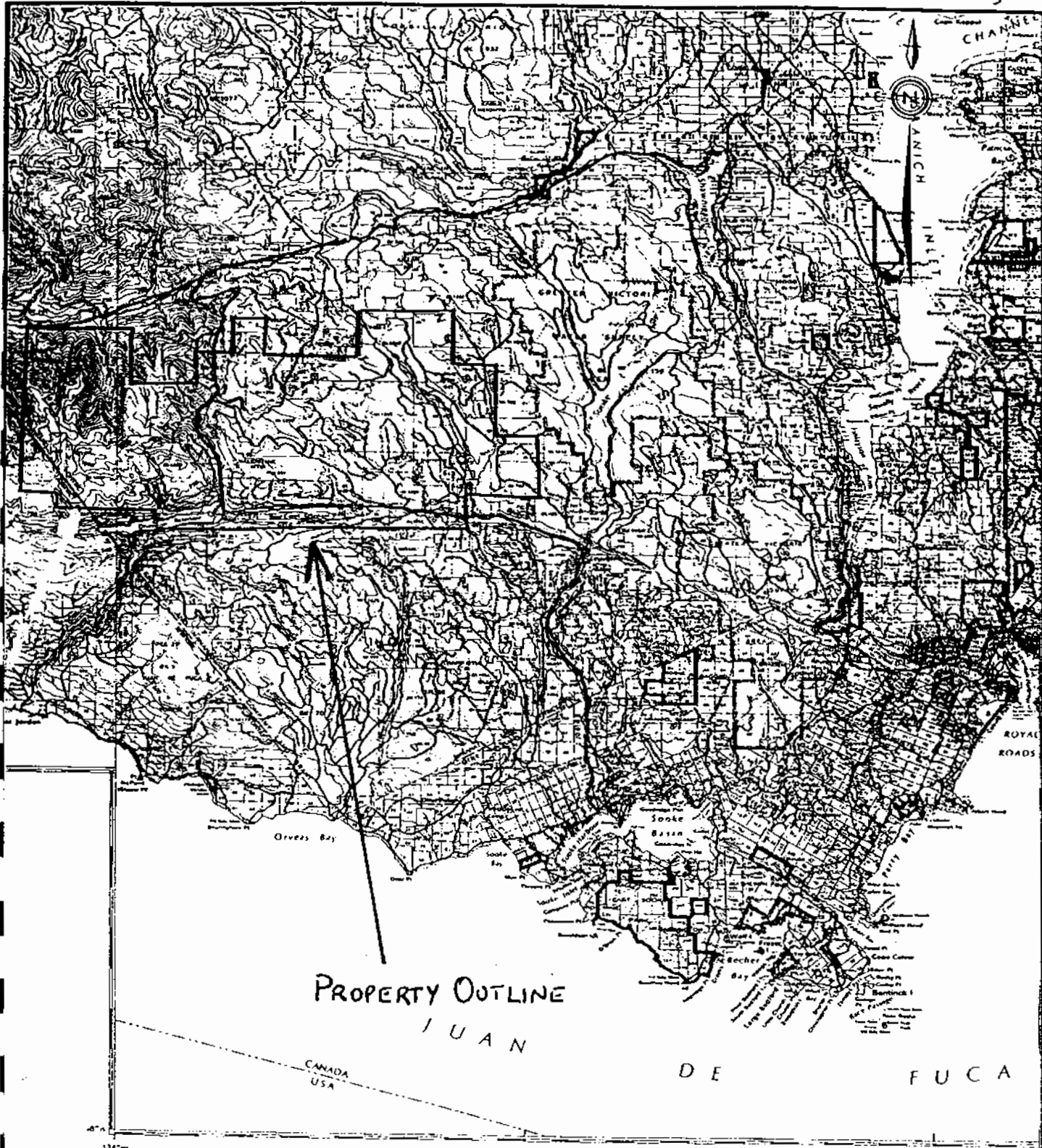
Vegetation in the area consists of a second growth forest of cedar, hemlock and douglas fir. All of the Leech Group has been clear cut logged providing very good access to all parts of the property as well as ample road cut outcrop exposure.



BEAU PRE - VALENTINE
PROJECT LOCATION

REVISED	BEAU PRE VALENTINE
	PROJECT LOCATION
PROJ. No. 120	SURVEY BY: _____ DATE: June 89
N.T.S. 92870	DRAWN BY: LGW SCALE: 1:2.5mi:b.
DWG. No.	NORANDA EXPLORATION
1	OFFICE: VANCOUVER BC

NO-774



PROPERTY OUTLINE
JUAN

DE FUCA

CANADA
USA

REVISED	BEAUPRE-VALENTINE	
	PROPERTY LOCATION	
PROJ. No. 120	SURVEY BY:	DATE: JUNE 1989
N.T.S. 328/512	DRAWN BY:	SCALE: 1:250,000
DWG. No. 2	NORANDA EXPLORATION	
	OFFICE: VANCOUVER, B.C.	

CAL 1

1.3 Claims and Ownership

The Leech Group (Figure 2) consists of the following claims:

TABLE 1: List of Claims

Name	Record #	Units	Due Date
Leech 1	838	20	April 11, 1989
Leech 2	839	16	April 11, 1989
Leech 3	840	16	April 11, 1989
Au 2	1241	1	June 5, 1990
Au 3	1242	1	June 5, 1990
West 1	1238	1	June 5, 1990
West 2	1239	1	June 5, 1990
West 3	1240	1	June 5, 1990

=====
Claim boundaries at 1:5,000 scale are shown on Figures 5.

The claims are owned by Valentine Gold Corporation subject to a net smelter royalty payable to an original owner. These claims are also subject to a former agreement between Valentine Gold Corp., and Beau-Pre Explorations Ltd.

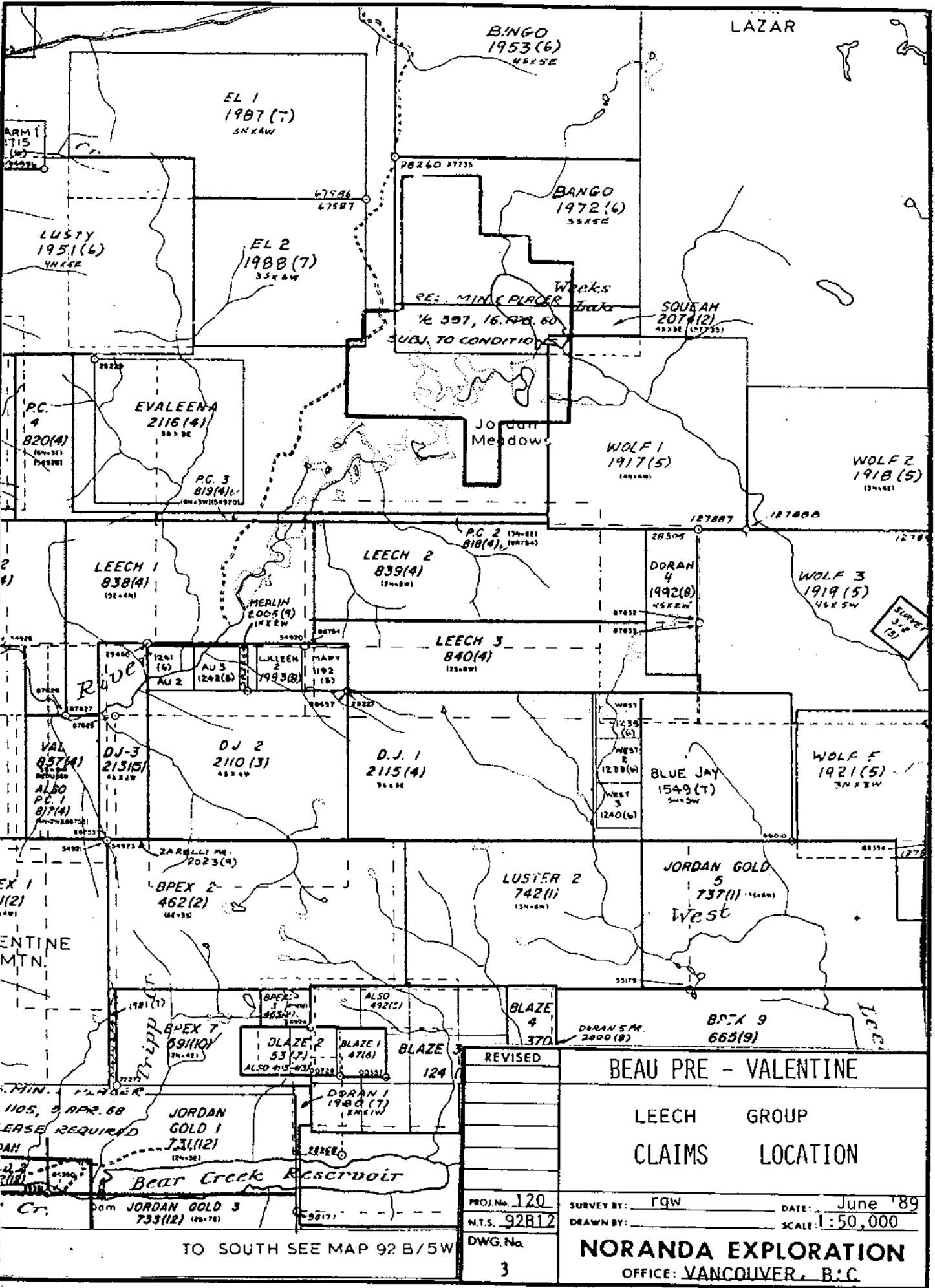
All interest in the Leech Group of claims have been transferred for administrative purposes to Noranda Exploration Company, Limited (no personal liability), as stated in the option agreement between Noranda, Beau-Pre Explorations Ltd. and Valentine Gold Corporation.

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 the metasedimentary rocks of the Leech River complex.



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PROJ. No. 120
N.T.S. 92B12
DWG. No. 3

BEAU PRE - VALENTINE

LEECH GROUP
CLAIMS LOCATION

SURVEY BY: rgw DATE: June '89
DRAWN BY: SCALE: 1:50,000

NORANDA EXPLORATION
OFFICE: VANCOUVER, B.C.

VANCAL 11927

TO SOUTH SEE MAP 92 B/5W

Recent work on the Leech group has been restricted to a few pan concentrate, silt, soil, and rock samples, taken by Valentine Gold Corp. in 1987. None of the samples returned significant anomalous values. Historical work included prospecting and minor sampling by the original vendor, Elmo K. Johnson.

1.5 Work Performed

A total of 89 mandays were spent, from March 15, 1989 to June 21, 1989 on a reconnaissance exploration programme on the Leech claim group. A total of \$11,850.00 in exploration expenditures on the Leech group occurred between March 15, 1989 and April 10, 1989. A further total of \$12,111.45 of exploration expenditures occurred between April 11, 1989 and June 20, 1989.

The programme consisted of geological mapping and geochemical rock, soil, and pan/silt sampling. A total of 29 rocks, 450 soils, 9 pan concentrates and 11 silts were taken. The samples were analyzed for 30 element ICP plus atomic absorption Au.

1.6 Personnel

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

2.0 METHODS

2.1 Geological Mapping

Geological mapping coincident with geochemical sampling was carried out along north-south compassed traverses, along logging roads, and up creeks. Mapping was conducted at a scale of 1:5,000 over a total area of 10.89 square kilometres.

The geological mapping was carried out with a view to identifying lithology, metamorphism, structure, mineralization and quartz veining.

2.2 Geochemical Sampling

In most cases rock chip samples were taken of the quartz veins with a separate sample taken of the wall rock. The samples of the quartz vein material were taken, for a distance of 1.0 m, along its strike length. Samples of the wall rock were taken for a distance of 0.5 m perpendicular to the strike of the quartz vein. Occasionally samples were taken of the vein only. These chip samples were across the vein for a representative strike length.

Rock samples, each weighing approximately 2 kg, were placed in 6 ml plastic bags, along with a sample tag number and shipped to Acme Analytical Laboratory in Vancouver for analysis.

Soil samples were taken along north-south running traverse lines. These lines were spaced approximately 400 m apart with stations established every 50 m. Samples weighing approximately 1 kg each were placed in Kraft paper bags, given a sample number, then air dried prior to shipment to Noranda's Vancouver laboratory.

Heavy mineral concentrate and silt samples were taken from tributaries leading into the Jordan River. The heavy mineral sampling was carried out using a method pioneered by C.E. Fipke. Favourable locations were selected on the property, and samples were taken from 30 cm deep holes. The material was sieved to -6 mesh until a 14 kg bulk sample was obtained. The sample was then shipped to C.E. Fipke's facilities in Kelowna for size fractionation and heavy liquid magnetic separation. Resultant -150 mesh and +150 - 60 mesh heavy, non-magnetic fractions were sent to Activation Laboratories Ltd. in Brantford, Ontario for Neutron Activation analysis for Au plus 33 other heavy elements.

In addition, a few pan and coincident silt samples were taken in the northeastern portion of the property. Pan samples were obtained by sieving stream sediment down to -6 mesh and panning this to a final volume of approximately 20 ml. Silt samples weighing approximately 1 kg were obtained from the same location as the pan sample. Both were given a sample number, partially air dried, then shipped to Noranda's Vancouver laboratory.

Appendix I contains descriptions of analytical techniques of analyzing used by Noranda's lab (Au analysis for stream sediments and soils) and Acme's lab (ICP + Au analysis for rocks, stream sediments and soils), C.E. Fipke's heavy mineral concentrate laboratory, and Activation Laboratories Ltd. (neutron activation for Au in heavy mineral concentrates). Appendix II contains rock sample lithologic descriptions, and Appendix III contains the laboratory analysis certificates of results.

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 (figure 4). Together, these make up the Leach River Block.

The Leech River Block is a discrete geotectonic unit (terrane) separated along its northern edge by the San Juan Fault Zone from early Jurassic Bonanza volcanics. The southern edge of the Leach River Block is separated from Eocene Metchosin Group volcanics by the Leach River Fault Zone. To the east the Leach River Block is separated from the Wark Diorite and the 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-west and varies in width from 7-12 km in the west to less than 2 km in the east.

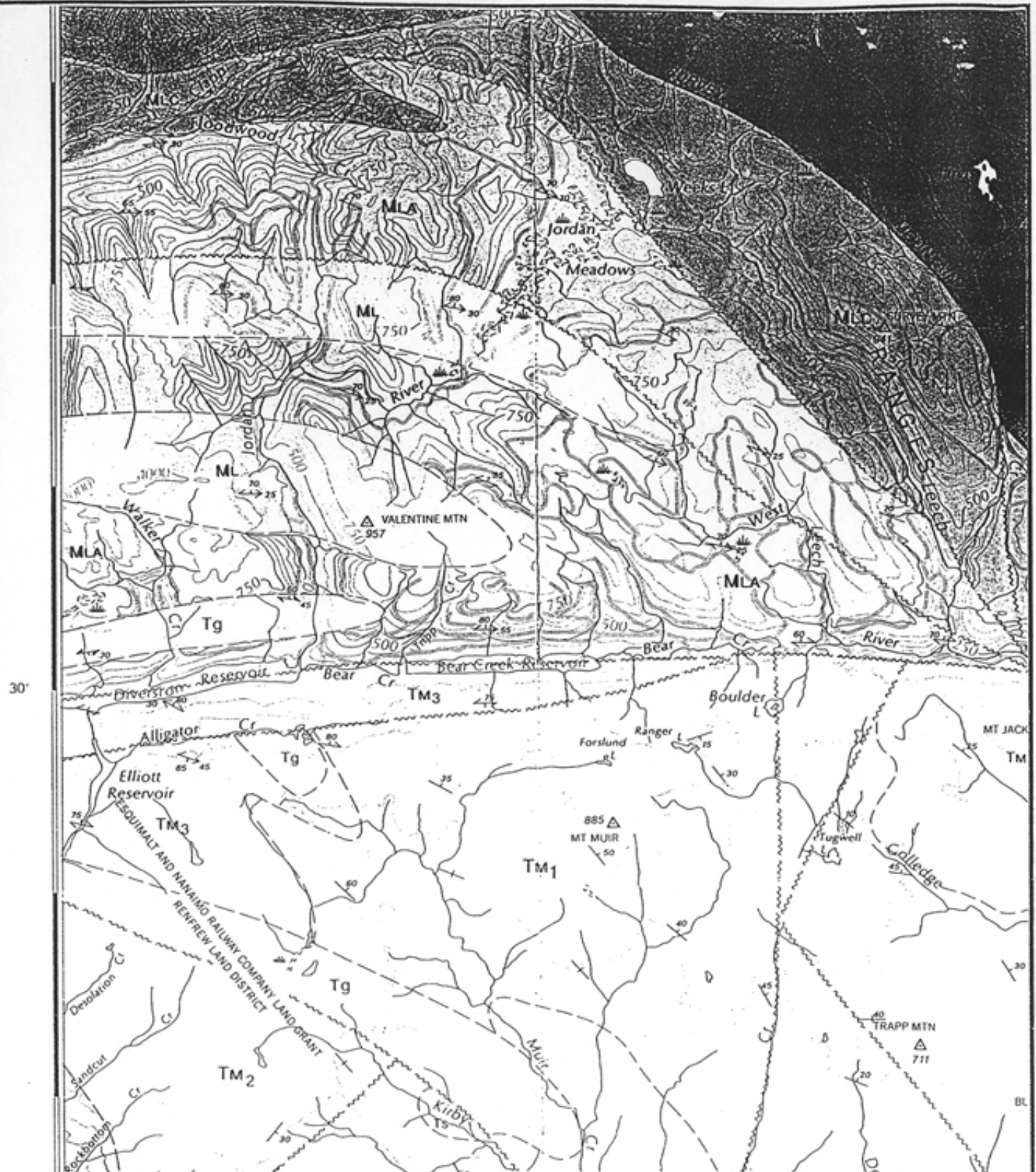
The Leech River Formation consists of metamorphosed arenites, pelites and volcanics as well as granitoid intrusive bodies. The age of deposition of these sediments, by Rb-Sr method is late Jurassic to Cretaceous (Fairchild, 1982). K-Ar dating indicates that the metamorphism and deformation occurred in 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 axes 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 Leech group is shown in Figure 5.

Results of geological mapping show the property to be underlain by continuous sequences of meta-sandstones, metapelites and minor metavolcanics (amphibolites) of the Leach River Formation. These have undergone regional metamorphism and been deformed into large scale tight folds whose axial planes trend approximately north-west and dip on average 74° to the north.

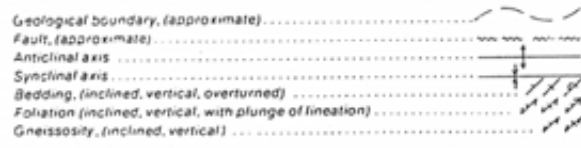


REVISED	BEAU PRE - VALENTINE	
	REGIONAL GEOLOGY	
PROJ. No. 120	SURVEY BY: _____	DATE June 1989
N.T.S. 92B12	DRAWN BY: rgw	SCALE 1:100,000
DWG. No. 4	NORANDA EXPLORATION	
	OFFICE: VANCOUVER, BC	

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
Tg	SOOKE GABBRO: mainly gabbro	
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	
Kh	NORTHUMBERLAND FORMATION: shale, siltstone; minor sandstone	
Koc	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	

PALEOZOIC	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		
LJo	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		
Karm	KARMUTSEN FORMATION: pillow basalt, breccia tuff, minor flows	
PERMIAN AND/OR TRIASSIC		
Unnamed 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 siliceous tuff and breccia, argillite, rhyodacite in flows and domes, minor basic tuff; quartz-sericite schist, phyllite; massive sulphides	
Nit	NITINAT FORMATION: pillow lava and breccia of augite (uralite) porphyry; basic tuff; chlorite-actinolite schist	
LOWER PALEOZOIC (OR YOUNGER?)		
PG	COLOQUITZ GNEISS: quartz-feldspar gneiss	
Wark	WARK GNEISS: massive and gneissic metadiorite, metagabbro, amphibolite	



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 AMPHIBOLITE (Unit 1)

The amphibolite unit occurs in beds which are generally 1 to 3 m thick. In fresh surface this unit varies from a pale grey-green to strong, bright chloritic green colour, and weathers pale to medium green. Several varieties of amphibolites were observed during mapping: (i) Ash Tuff; very fine grained, pale green in colour, moderately fissile, with sericite coatings on cleavage surfaces. (ii) Ash/Crystal Tuff; very fine grained matrix with approximately 10% amphibole clasts up to 10 mm long, the amphibole having disappeared due to retrograde metamorphism. (iii) Lapilli Tuff; fine to medium grained with fragments of feldspar, quartz and mafic minerals. Medium chloritic green colour, moderately schistose, slightly to moderately fissile. (iv) Volcanic Flows and Volcanic Breccia: medium to bright chloritic green colour in fresh surface, weathering to medium green-grey. Fine to medium grained, composed of feldspar, minor quartz and chlorite. Schistose and slightly fissile, with sericite on foliation surfaces.

The volcanic breccias consist of sub-angular to sub-rounded pebble to small cobble sized fragments of chloritic green volcanic in a fine grained chloritic green volcanic matrix.

3.2.2 METASANDSTONE (Unit 2)

The metasandstone unit occurs as interbeds within the metapelites. The metasandstone may be divided into two major sub units, the protoliths of which are believed to have been quartzo-feldspathic sandstone and greywackes. The sub-units have been termed massive metasandstone and greywacke in field mapping.

- i) Massive Metasandstone (Unit 2b): The quartzo-feldspathic sandstone is fine to medium grained. Colour in fresh surface 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.
- ii) Greywacke (Unit 2a): This unit is not seen to occur on the Leech claim group.

3.2.3 METAPELITE (Unit 3)

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

The metapelites are subdivided into the following sub-units:

- i) **Biotite Schist (Unit 3b):** These are fine grained, medium grey to black in colour and are 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.
- ii) **Phyllite (Unit 3a):** 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.

3.3 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 parasitic folds were observed within the metapelites. These were visible as small "S" or "Z" folds within schist layers and quartz veinlets. The sizes 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 2 metres and are generally white milky "bull" quartz, with occasional subhedral crystals. Rusty weathering products such as limonite 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 meta siltstones, 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.

Within the amphibolite unit, quartz vein material occurs in veinlets 5 mm to 5 cm wide at angles of 0° to 45° to foliation.

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 and amphibolites 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 3--45° to stress direction was subsequently filled with quartz of metamorphic origin.

4.0 GEOCHEMISTRY

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

4.1 Rock Samples

Rock samples obtained from quartz veins and quartz microveining within the metasandstone and phyllite units revealed no significant Au values. The only assay value appreciably above background value was R.59091 which assayed 54 ppb Au, and 14 ppm As. This sample was taken from a quartz vein in a road cut on the eastern portion of the property.

4.2 Soil Samples

Soil samples gave a few spot Au highs. These occurred along Traverse #1 which had a high of 85 ppb Au, along Traverse #13 which had a single high of 30 ppb Au, and along Traverse #14 which had values of 15 ppb, 55 ppb and 10 ppb Au occurring along the northern 400 m of the line. Background soil values are approximately 5 ppb Au. These were subsequently followed up with "fill in" 25 m soil samples taken along the traverse line and along detail soil lines 50 m on either side, and parallel to, the existing Traverse line. In addition, rock samples were taken of quartz veins and mineralization in the vicinity of the soil anomalies.

Follow-up samples collected around the 85 ppb Au sample of Traverse #1 returned only background values. Follow-up of Traverse #13 did not expand on the original 30 ppb Au anomaly. Two samples near the northern ends of the follow-up lines returned spot highs of 24 and 19 ppb Au. Follow-up of Traverse #14 confirmed the anomalies and expanded the area of Au anomalous soil samples. Values range from 12 to 45 ppb Au and the anomaly is open to the south.

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

4.3 Heavy Mineral Concentrate Samples

Heavy mineral concentrate (Fipke) samples returned anomalous gold results for six of the eight drainages sampled. Anomalous results ranged from 610 ppb Au to 7430 ppb Au and occurred mainly within the -150 mesh fraction. Results for other elements show no discernable pattern. The following table is a summary of the results and sample weights for Au.

TABLE 2: Heavy Mineral Concentrate (Fipke) Sample Results

<u>Sample No.</u>	<u>Weight</u> <u>(gms)</u>	<u>Au -150 HN</u> <u>(ppb)</u>	<u>Weight</u> <u>(gms)</u>	<u>Au +150-60HN</u> <u>(ppb)</u>
55134	1.057	4690	0.811	45
55160	8.790	1670	5.652	7430
55176	0.779	1120	0.419	40
55502	1.878	87	1.596	<5
55611	0.800	980	0.700	7
55613	1.076	1020	1.080	8
55615	0.723	610	0.802	<14
55655	1.617	47	1.482	<14

The anomalies lie mainly within the finer -150 mesh sizes with the exception of #55160 which is anomalous in both -150 mesh (1670 ppb Au) and +150-60 mesh (7430 ppb Au).

Silt samples from these drainages show no anomalous results.

5.0 INTERPRETATION

The rocks underlying the Leech claims are mainly interbedded metamorphosed mudstones, siltstones and sandstones with occasional intercalated intermediate to basic volcanic derived amphibolites. The units, which strike northwest and dip northeast, contain minor quartz veining but limited sulphides. A lack of intrusive rocks limits the potential of hydrothermal activity and thus the economic potential for quartz hosted Au is considered low.

Geochemical samples (pan, silt, soil, rock) recorded background values with the exception of the "Fipke" heavy mineral concentrates. HMC samples from six of eight separate drainages returned anomalous values in the fine fraction. This fraction may represent a distant source and would require collection of individual gold grains for microscopic examination of roundness, gangue and deformity for confirmation of source. One sample contains elevated coarse and fine fraction Au values which may represent a near source anomaly.

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	3.00
Cr	1/2 lb to -100 mesh (98%) 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 Mixing & pulverizing composite.	.50 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	First Element	\$4.75
Germanium	0.1 ppm	All Elements	\$5.50
Selenium	0.1 ppm		
Tellurium	0.1 ppm		

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

<u>Element</u>	<u>Method</u>	<u>Detection</u>	<u>Price</u>
Barium	0.100 gram samples are fused with .6 gm LiBO2 dissolved in 50 mls 5% HNO3 and analysed by ICP. (other whole rock elements are also determined)	10 ppm	\$4.00
Boron	.5 g/Na2O2 fusion - 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 Na2O2 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 Na2O2 dissolved in 20 ml H2O, analysed by ICP.	1 ppm	4.00

Group 3 - Geochemical Noble Metals

<u>Element</u>	<u>Method</u>	<u>Detection</u>	<u>Price</u>
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 inquant 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

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

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

Saskatoon, Saskatchewan S7K 6A4

ACTIVATION LABORATORIES LTD.

c/o TSL

2031 Riverside Drive, Unit #2

Timmins, Ontario P4N 7C3

ACTIVATION LABORATORIES LTD.

c/o TSL

P.O. Box 9, Site 12

Rural Route 2, Reidville

Deer Lake, Newfoundland A0K 2E0

ACTIVATION LABORATORIES LTD.

c/o TSL

2971 Viking Way, Unit 108

Richmond, B.C. V6V 1Y1

604 - 270 - 4669

Ivan Peary

**QUALITY ANALYSES WITH
RAPID TURNAROUND TIME
AT A COMPETITIVE PRICE**

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 ($\approx 8000^{\circ}\text{K}$). 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

N.T.S. 92B/12

LAB REPORT # _____

DATE March/April/89

PROJECT BEAU PRE VALENTINE (LEECH GROUP)

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% Sulph.	TYPE	WIDTH (m)	Cu	Pb	Zn	Ag	As	Au		SAMPLED BY
					ppm	ppm	ppm	ppm	ppm	ppb		
R59150 (con't)	rusty colour and locally vuggy texture. 1-2% visible sulphides cpy + py. Host rock is an Fe stained very fine grained phyllite with visible sulphides 2-3% py + cpy. Vein pinches & swells continuous over 4m. Taken on Leech Line #2 at 162mN											
R59201	Milky qtz vein sampled 20-30cm wide and length of outcrop 4m long. Chip sampled along 2m <1% visible sulphides py + cpy. Host rock Metasandstone. Vein parallel to foliation taken from Leech 2 Line at 535m.	<1	Chip Sample	2	9	8	19	0.1	2	1		McCorquodale
R55657	Quartz vein, Leech Claim Group, 20 metres upstream from H55655, white quartz, abundant Fe-stain, no visible sulphides,	Nil	Chip	1	3	3	7	0.1	2	2		Frew

NORANDA EXPLORATION COMPANY, LIMITED

PROJECT # 120

N.T.S. 92B/12

LAB REPORT # _____

DATE March/April/89

PROJECT BEAU PRE VALENTINE (LEECH GROUP)

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% Sulph.	TYPE	WIDTH (m)	Cu	Pb	Zn	Ag	As	Au		SAMPLED BY
					ppm	ppm	ppm	ppm	ppm	ppb		
R55635 (con't)	high biotite content - outcrop 7.0m wide ~ 30m long - taken 118m up logging road 940 on Leech claim group.											
R55521	Leech claim group, northeast portion of claim block, boulder-like quartz vein in biotite phyllite.	Nil	Grab	0.2	9	8	52	0.1	8	5		Dempsey
R55665 #1 & #2	Taken 50m west of the north end of line Leech-4. Strongly stained white sacrosic quartz, strongly convoluted within phyllite by shearing (?), vuggy with abundant weathered feldspar.	Nil	Grab	1x1m	16 10	4 2	27 13	0.1 0.1	6 2	1 1		Frew
R59150	2 Qtz veins each 20cm wide sampled over 3 metres on each vein. Qtz vein has 60% clear qtz and 40% milky qtz with	1-2	Chip	3	28	6	31	0.2	5	1		McCorquodale

NORANDA EXPLORATION COMPANY, LIMITED

PROJECT # 120

N.T.S. 92B/12

LAB REPORT # _____

DATE March/April/89

PROJECT BEAU PRE VALENTINE (LEECH GROUP)

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% Sulph.	TYPE	WIDTH (m)	Cu	Pb	Zn	Ag	As	Au		SAMPLED BY
					ppm	ppm	ppm	ppm	ppm	ppb		
R42092	-McIntyre, Dempsey, Louden 44.3m upstream. 17.2m downstream from H55160.	-	Grab	Float	12	2	43	0.1	3	9		Dempsey
R55167	Road side. Qtz vein Po, minor mag <1%.	<1	Chip hi grade	-	148	5	67	0.1	2	4		McIntyre
R55168	Road side. Footwall Amph, Po, Cpy 1%.	1	wallrock grab	-	843	8	179	0.1	7	7		Dempsey
R55170	McIntyre, Dempsey. trav. qtz vein 125m S, 8m East.	-	Grab	-	32	12	64	0.1	11	3		McIntyre
R55171	McIntyre, Dempsey. Trav, qtz vein, 85m S mark.	-	Grab	-	15	7	29	0.1	6	1		Dempsey
R80411	Qtz stringer taken out of host biotite metasandstone. Quartz stringer in stockwork pattern within host rock - taken on line at St 800mN.	-	Grab	<2cm	10	3	30	0.3	3	3		Pearson
R55635	Hematitic? Metasandstone - medium to fine grained containing phyllite lenses throughout-	-	Grab	20cm	18	6	52	0.2	2	4		Pearson

APPENDIX III
ANALYSIS CERTIFICATES

C.F. MINERAL RESEARCH LTD
263 LAKE AVENUE
KELOWNA, BRITISH COLUMBIA
CANADA V1Y 5W6

TEL(604)763-181
(604)860-852

NORANDA EXPLORATION COMPANY LIMITED
PROJECT:120
R. WILSON
19/05/89

C.F.M. 89-705

CODE	SAMPLE NO.	FRACTION	VIAL WEIGHT (gms)
67V	H55134	-60+150HN	0.811
68V	H55160	-60+150HN	5.652
69V	H55176	-60+150HN	0.419
70V	H55502	-60+150HN	1.596
71V	H55611	-60+150HN	0.700
72V	H55613	-60+150HN	1.080
73V	H55615	-60+150HN	0.802
74V	H55655	-60+150HN	1.482



C.F. MINERAL RESEARCH LIMITED

1677 POWICK ROAD
KELOWNA, BRITISH COLUMBIA
CANADA V1X 4L1

TEL. (604) 860-8525
(604) 763-1815

COMPANY NORANDA

C.F.M. Batch 89-705

The following discrepancies were noted when your samples were logged in :

<u>Bag Marking</u>	<u>List Marking</u>	<u>Label used</u>
<u>55134</u>	<u>H 55134</u>	<u>H55134</u>
<u>55611</u>	<u>H 55611</u>	<u>H 55611</u>
<u>55613</u>	<u>H 55613</u>	<u>H 55613</u>
<u>55615</u>	<u>H 55615</u>	<u>H 55615</u>
<u>55655</u>	<u>H 55655</u>	<u>H 55655</u>

The following samples were received but not listed :

_____	_____
_____	_____
_____	_____
_____	_____

The following samples were listed but not received :

_____	_____
_____	_____
_____	_____
_____	_____

C.F. MINERAL RESEARCH LTD.
263 LAKE AVENUE
KELOWNA, BRITISH COLUMBIA
CANADA V1Y 5W6

TEL(604)763-1815
(604)860-8525

NORANDA EXPLORATION COMPANY LIMITED
PROJECT: 120
R. WILSON
19/05/89

C.F.M. 89-705

SAMPLE NUMBER	ORIGINAL WEIGHT (KG)	FRACTION	WEIGHT (GMS)
H55134	8.400		
H55134		-60+150HM	0.62
H55134		-60+150HP	4.86
H55134		-60+150HN	0.78
H55134		-150HM	0.32
H55134		-150HP	2.53
H55134		-150HN	1.03
H55160	7.800		
H55160		-60+150HM	3.05
H55160		-60+150HP	30.54
H55160		-60+150HN	5.66
H55160		-150HM	1.54
H55160		-150HP	14.16
H55160		-150HN	8.80
H55176	9.000		
H55176		-60+150HM	0.46
H55176		-60+150HP	5.42
H55176		-60+150HN	0.42
H55176		-150HM	0.20
H55176		-150HP	2.64
H55176		-150HN	0.77
H55502	7.400		
H55502		-60+150HM	1.46
H55502		-60+150HP	13.47
H55502		-60+150HN	1.60
H55502		-150HM	1.10
H55502		-150HP	6.99
H55502		-150HN	1.89
H55611	7.800		
H55611		-60+150HM	0.30
H55611		-60+150HP	8.75
H55611		-60+150HN	0.70
H55611		-150HM	0.11
H55611		-150HP	4.10
H55611		-150HN	0.80

NORANDA EXPLORATION COMPANY LIMITED

C.F.M. 89-705

R. WILSON
19/05/89

SAMPLE NUMBER	ORIGINAL WEIGHT (KG)	FRACTION	WEIGHT (GMS)
H55613	8.500		
H55613		-60+150HM	0.56
H55613		-60+150HP	4.55
H55613		-60+150HN	1.04
H55613		-150HM	0.26
H55613		-150HP	2.81
H55613		-150HN	1.07
H55615	10.000		
H55615		-60+150HM	0.36
H55615		-60+150HP	3.56
H55615		-60+150HN	0.78
H55615		-150HM	0.10
H55615		-150HP	1.81
H55615		-150HN	0.74
H55655	7.600		
H55655		-60+150HM	0.26
H55655		-60+150HP	10.01
H55655		-60+150HN	1.47
H55655		-150HM	0.06
H55655		-150HP	6.95
H55655		-150HN	1.61

ALL SAMPLES HAVE BEEN UV LIGHT EXAMINED - NO SCHEELITE GRAINS WERE FOUND.

NORANDA EXPLORATION CO. LTD. PROJECT 8906-066 120 FILE # 89-1588

SAMPLE#	NO PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	NI PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	St PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Hg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	V PPM	Au* PPM
58665	1	30	15	84	.2	30	9	512	5.75	7	5	ND	2	17	1	2	2	92	.22	.082	5	47	.97	59	.12	2	3.82	.01	.09	1	3
58666	1	22	11	58	.2	18	6	199	4.40	6	5	ND	2	13	1	2	2	65	.11	.054	6	30	.58	16	.09	2	3.18	.01	.04	1	6
58667	1	13	9	40	.3	10	4	133	5.07	9	5	ND	1	12	1	2	2	95	.13	.051	4	24	.28	22	.11	2	2.07	.01	.03	1	15
58668	1	13	8	35	.1	6	3	124	3.64	9	5	ND	1	10	1	2	2	85	.09	.040	4	20	.21	21	.09	2	2.35	.01	.02	1	4
58669	1	26	9	53	.1	17	9	502	3.42	6	5	ND	2	18	1	2	2	64	.24	.058	8	25	.54	30	.11	2	2.18	.01	.04	1	9
58670	1	8	7	23	.1	9	2	97	1.32	2	5	ND	3	6	1	2	2	36	.03	.017	15	14	.19	14	.01	2	1.35	.01	.02	1	15
58671	1	22	12	65	.1	19	7	297	4.01	3	5	ND	2	17	1	2	2	78	.20	.036	7	34	.62	48	.12	2	3.20	.01	.03	1	5
58672	1	22	17	73	.3	18	6	138	4.64	9	5	ND	3	18	1	2	2	68	.13	.080	14	35	.53	44	.05	2	3.43	.01	.03	1	7
58673	1	33	17	90	.1	25	11	323	4.86	4	5	ND	3	15	1	2	2	70	.17	.088	8	43	.69	51	.09	2	4.62	.01	.04	1	2
58674	1	20	8	54	.2	14	5	218	3.58	2	5	ND	3	14	1	2	2	67	.15	.042	6	28	.44	36	.06	2	3.13	.01	.03	1	33
58675	1	16	11	66	.2	15	7	239	4.24	4	5	ND	2	14	1	2	2	60	.13	.051	8	28	.45	32	.06	2	2.88	.01	.03	1	17
58677	1	15	13	66	.1	13	5	297	3.97	6	5	ND	3	12	1	2	2	64	.13	.044	8	30	.43	35	.05	2	3.11	.01	.03	1	13
58678	1	12	8	54	.4	12	5	219	3.87	6	5	ND	2	18	1	2	2	82	.22	.047	8	26	.39	26	.09	3	2.54	.01	.03	1	45
58679	1	22	11	67	.1	21	9	527	3.40	5	5	ND	2	21	1	2	2	64	.22	.047	8	30	.68	49	.06	2	2.73	.01	.04	1	12
58680	1	25	11	105	.1	32	13	541	3.30	12	5	ND	2	29	1	2	2	40	.19	.031	15	37	1.02	31	.05	2	2.51	.01	.03	1	5
58681	1	15	14	59	.1	22	10	412	2.71	7	5	ND	1	28	1	2	2	56	.26	.035	8	31	.77	42	.07	2	2.47	.01	.04	1	24
58682	1	11	12	44	.1	8	3	122	4.44	5	5	ND	1	13	1	2	2	80	.15	.047	5	26	.21	19	.09	2	1.98	.01	.03	1	18
58683	1	20	13	64	.1	16	4	199	5.62	12	5	ND	2	17	1	2	2	76	.11	.063	12	30	.53	27	.05	2	2.58	.01	.04	1	20
58684	1	25	11	92	.1	27	25	747	4.05	11	5	ND	1	20	1	2	2	59	.15	.078	13	32	.59	59	.05	2	3.35	.01	.04	1	9
58685	1	10	6	40	.1	8	3	154	2.08	6	6	ND	2	11	1	2	2	40	.12	.031	4	15	.25	23	.02	3	1.63	.01	.02	2	3
58686	1	18	11	59	.2	18	6	214	6.22	18	5	ND	2	15	1	2	2	90	.12	.063	6	38	.57	35	.09	2	2.83	.01	.04	1	14
58687	1	11	11	73	.1	23	9	362	4.78	7	5	ND	3	14	1	2	2	73	.20	.172	8	38	.75	30	.12	2	3.95	.01	.03	1	18
58688	1	22	12	53	.2	14	6	269	4.50	6	5	ND	1	14	1	2	2	85	.19	.103	7	29	.45	26	.12	2	2.92	.01	.02	1	13
58689	1	32	12	86	.1	25	9	294	6.31	11	5	ND	6	13	1	2	2	84	.16	.120	7	43	.64	55	.09	2	5.09	.01	.04	1	22
58692	1	32	12	72	.3	15	6	210	5.55	8	5	ND	3	12	1	2	2	88	.17	.135	5	45	.45	25	.10	4	5.38	.01	.02	1	4
58691	1	28	11	61	.2	14	6	190	6.89	8	5	ND	2	12	1	2	2	89	.15	.080	5	43	.43	23	.12	2	4.69	.01	.02	1	15
58694	1	30	12	77	.3	16	6	167	10.32	14	5	ND	2	19	1	2	2	138	.21	.144	6	56	.35	34	.14	2	5.14	.01	.03	1	12
58695	1	26	14	64	.1	17	5	207	4.24	10	5	ND	2	14	1	3	2	63	.14	.067	8	29	.51	25	.08	2	1.53	.01	.02	1	5
58696	1	8	11	37	.1	7	3	132	2.44	3	5	ND	1	18	1	2	2	73	.19	.028	6	16	.26	28	.09	2	1.42	.01	.02	2	9
58697	1	7	9	48	.1	10	12	438	1.27	2	5	ND	1	16	1	2	2	38	.16	.413	7	21	.30	36	.04	2	2.05	.01	.03	1	10
44350	1	27	13	90	.1	28	14	804	4.00	9	5	ND	1	29	1	2	2	65	.30	.073	9	34	.89	61	.10	2	2.90	.01	.05	1	6
58690	1	32	12	75	.1	26	12	575	3.42	5	5	ND	3	22	1	2	2	55	.27	.055	13	28	.80	46	.09	3	2.33	.01	.04	1	1
STD C/AU-S	18	58	36	132	7.1	67	29	1011	4.06	38	18	5	37	68	17	14	19	57	.50	.087	37	56	.87	173	.06	31	1.96	.06	.13	11	49

NORANDA EXPLORATION CO. LTD. PROJECT 8906-066 120 FILE # 89-1588

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	V	Au	Tb	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Hg	Ba	Ti	B	Al	Mg	K	W	Au*
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	PPM	PPM	
R 58343	2	37	25	45	.3	14	4	168	2.06	10	5	ND	1	10	1	2	2	43	.12	.038	2	31	.59	75	.07	3	1.21	.03	.32	3	3
R 58676	1	29	18	99	.1	30	9	351	4.12	9	5	ND	6	12	1	2	2	36	.06	.038	12	41	1.45	55	.04	2	3.07	.02	.10	1	3
R 59691	1	11	8	33	.3	13	2	129	1.54	6	5	ND	2	5	1	2	2	13	.06	.024	3	18	.41	17	.02	9	.78	.01	.04	3	3

ACTLABS

ACTIVATION LABORATORIES LTD

P.O. Box 1420, 383 Elgin St., Unit 17, Brantford, Ontario, Canada N3T 5T6

Telephone (519) 758-0310 ■ Fax (519) 758-8766

Invoice No.: 893
Work Order: 899
Invoice Date: 03-JUN-89
Date Submitted: 23-MAY-89
Your Reference: C.F.M. 89-705
Account Number: N-01

CANADA EXPLORATION CO. LTD.
1050 DAVIE ST.
P.O. BOX 2380
VIA COUVER. B.C.
V6B 3T5

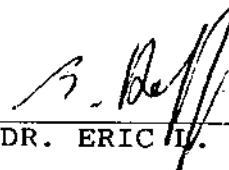
NAME: R. WILSON

CERTIFICATE OF ANALYSIS

INAA package, elements and detection limits:

P	5.	PPB	AG	5.	PPM	AS	2.	PPM	BA	200.	PPM
E..	5.	PPM	CA	1.	%	CO	5.	PPM	CR	10.	PPM
CS	2.	PPM	FE	0.02	%	HF	1.	PPM	HG	5.	PPM
I	40.	PPB	MO	20.	PPM	NA	500.	PPM	NI	200.	PPM
F	50.	PPM	SB	0.2	PPM	SC	0.1	PPM	SE	20.	PPM
SR	0.2	%	TA	1.	PPM	TH	0.5	PPM	U	0.5	PPM
W	4.	PPM	ZN	100.	PPM	LA	1.	PPM	CE	3.	PPM
M	10.	PPM	SM	0.1	PPM	EU	0.2	PPM	TB	2.	PPM
Yb	0.2	PPM	LU	0.1	PPM						

CERTIFIED BY :



DR. ERIC H. HOFFMAN

Activation Laboratories Ltd. Work Order: 899 Report: 893

Sample description	AU	AG	AS	BA	BR	CA	CO	CR	CS	FE	HF	HG	IR	MO	NA	NI	RB	SB	SC	SE	SR	TA
	PPB	PPH	PPH	PPH	PPH	%	PPH	PPH	PPH	%	PPH	PPH	PPB	PPH	PPH	PPH	PPH	PPH	PPH	PPH	%	PPH
H55134-60+150HN	45	<5	14	<200	46	14	9	120	<2	4.54	720	<5	<40	INT	1610	<200	<50	6.2	71	<20	<0.2	18
H55160-60+150HN	7430	<5	12	<200	64	10	14	320	<2	9.79	230	<5	<40	INT	1950	<200	<50	4.4	59	<20	0.3	13
H55176-60+150HN	40	<5	11	<200	35	<2	10	50	<2	2.33	1400	<5	<40	INT	1780	<200	<50	8.2	51	<20	<0.2	65
H55502-60+150HN	<5	<5	26	<200	43	11	9	180	<2	6.44	140	<5	<40	INT	2070	<200	<50	4.6	62	<20	<0.2	8
H55611-60+150HN	7	<5	<2	<200	32	12	<5	<10	<2	1.83	1500	<5	<40	INT	1040	<200	<50	5.4	40	<20	<0.2	78
H55613-60+150HN	8	<5	13	<200	49	<2	<5	120	<2	4.11	640	<5	<40	INT	1400	<200	<50	6.9	56	<20	<0.2	59
H55615-60+150HN	<14	<7	19	1400	52	15	<5	49	<2	3.28	1100	<5	<40	INT	2180	<200	<60	4.6	45	<27	<0.2	73
H55655-60+150HN	<14	<7	140	<220	27	<4	18	88	<2	4.35	400	<5	<40	INT	2400	<200	<50	7.2	49	<20	<0.2	48
H55134-150HN	4690	<5	8	<200	35	<2	<5	99	<2	2.76	1400	<5	<40	INT	4410	<200	<50	3.3	60	<20	<0.2	10
H55160-150HN	1670	<5	10	<200	49	9	14	310	3	8.83	310	<5	<40	INT	4580	<200	<50	3.1	55	<20	<0.2	7
H55176-150HN	1120	<5	6	<200	38	7	9	140	<2	3.34	1500	<5	<40	INT	5980	<200	<50	4.0	54	<20	<0.2	11
H55502-150HN	87	<5	7	<200	28	6	6	110	<2	2.87	250	<5	<40	INT	4690	<200	<50	3.2	50	<20	<0.2	8
H55611-150HN	980	<5	<2	<200	36	<2	<5	<10	<2	1.49	2500	<5	<40	INT	4620	<200	<50	3.6	52	<20	<0.2	23
H55613-150HN	1020	<5	7	<200	40	8	<5	84	<2	2.46	1600	<5	<40	INT	3090	<200	<50	5.4	65	<20	<0.2	27
H55615-150HN	610	<5	<2	<200	52	14	<5	61	<2	2.43	2000	<5	<40	INT	5950	<200	<50	3.5	58	<20	<0.2	12
H55655-150HN	47	<5	17	870	27	<1	6	68	<2	2.25	980	<5	<40	INT	4580	<200	<50	3.7	54	<20	<0.2	11

Sample description	TH	V	W	ZN	LA	CE	ND	SK	EU	TB	YB	LU	Mass
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	g
H55134-60+150HN	110	60	18	<100	660	1000	540	73	19.6	5	49.9	10.0	0.8110
H55160-60+150HN	46	12	<4	<100	390	590	260	41	11.2	5	21.3	4.2	5.652
H55176-60+150HN	150	120	13	<100	490	1300	1100	190	44.0	29	121	20.1	0.4190
H55502-60+150HN	28	12	18	<100	140	250	140	25	7.8	4	16.5	2.9	1.596
H55611-60+150HN	150	120	91	<100	550	1300	1000	190	45.9	32	119	21.6	0.7600
H55613-60+150HN	180	94	29	<100	1000	1800	1100	170	42.7	27	88.4	16.4	1.080
H55615-60+150HN	290	120	140	<120	1600	2700	1500	220	50.4	34	115	21.7	0.8020
H55655-60+150HN	270	70	110	<100	1500	2100	1100	160	34.9	25	62.9	12.5	1.482
H55134-150HN	61	98	15	<100	240	430	230	34	10.4	6	72.9	16.2	1.057
H55160-150HN	26	14	<4	<200	190	290	160	23	7.7	4	23.0	4.7	8.790
H55176-150HN	72	100	8	<100	240	450	330	44	10.9	8	79.4	16.9	0.7790
H55502-150HN	25	20	5	<100	120	180	83	17	6.5	3	20.4	3.9	1.878
H55611-150HN	97	180	12	230	220	530	370	57	18.1	11	137	29.6	0.8000
H55613-150HN	96	130	22	<100	340	670	400	58	20.0	14	100	21.2	1.076
H55615-150HN	100	150	<4	<100	350	670	390	65	19.5	13	116	25.0	0.7230
H55655-150HN	86	82	12	<100	360	600	330	52	14.5	8	63.5	13.8	1.617

C.F. MINERAL RESEARCH LTD.
263 LAKE AVENUE
KELOWNA, BRITISH COLUMBIA
CANADA V1Y 5W6

TEL (604) 763-1815
(604) 860-8525

05-23-1989

INVOICE NUMBER: 618
Please quote invoice
number when making payment.

NORANDA EXPLORATION COMPANY LIMITED

P.O. BOX 2380
VANCOUVER, BC
V68 3T5

Attention: R. WILSON

Project: 120

INVOICE RE PROCESSING HEAVY MINERAL SAMPLES

C.F.M. 89-705

Number of samples	Sample size: ~10KG	C\$
Washing & Drying @ \$9.60/sample		76.80
Wet Sieving, Sizing and semigravity concentration @ \$16.75/sample		134.00
Tetrabromoethane separations using 0.5-1.0 micron double filtration: First 3000 g sized concentrate @ \$14.50/sample		116.00
Methylene Iodide separations using 0.5-1.0 micron double filtration: First sized concentrate @ \$22.00/sample		176.00
Sieving sample 1 times @ \$2.60 each/sample		20.80
Electromagnetic separations: 2 sized heavy concentrates @ \$7.50 each/sample		120.00
Weighing 48 resultant concentrates to 0.02 gm tare accuracy @ \$.70 each		33.60
Vialing, Coding and weighing to 0.001 gm accuracy 16 concentrates @ \$2.60 each		41.60
Storing -20+60 mesh fractions @ \$2.20 each		17.60
Prepaid Shipping charges		28.50

TOTAL COST \$ 764.90

THIS IS A PROFESSIONAL SERVICE.
ACCOUNT DUE WHEN RENDERED.
ACCOUNTS OVER 30 DAYS WILL BE
CHARGED 2% PER MONTH INTEREST.

120-F₆ R₁



ACTIVATION LABORATORIES LTD

P.O. Box 1420, 383 Elgin St. Unit 2, Brantford, Ontario, Canada N3T 5T6

(519) 758-0310

If special, please provide special instructions and/or additional remarks

C.F.M. 89-705 H55134, 160, 176, 502, 611, 613, 615, 655 - 60+150HN
" " " " " " " " - 150HN

Total No. Samples

No. Parcels in Shipment

Type of Samples	No. of Samples	Sample Numbers (Series)	Elements to be Analyzed	Remarks
	16	67V-82V	Al+33	

Size Fraction to be analyzed (geochem. Only)

Disposal of Oversize: Store 1 month Dispose of Return

Disposal of Pulps: Store 1 year and return Return immediately

Date Shipped May 19/89 Via Purolator

Prepaid
Collect

Results and Invoices To Be Sent To

Noranda Exploration Co. Ltd
c/o Dave St.
P.O. Box 2380
Vancouver, BC V6B 3T5
Attn: R. Wilson

- Results
- Invoices
- Results
- Invoices

Note: Noranda requires results
by June 9 - please fax to
R. Wilson A.S.A.P. Fax No:
604-689-8439

Submitted By
C.P. MINERALS RESEARCH LTD.
263 LAKE AVENUE
KELOWNA, B.C. V1Y 5W6

Client Project Number

C.F. MINERAL RESEARCH LTD
263 LAKE AVENUE
KELOWNA, BRITISH COLUMBIA
CANADA V1Y 5W6

TEL(604)763-181
(604)860-852

NORANDA EXPLORATION COMPANY LIMITED
PROJECT:120
R. WILSON
19/05/89

C.F.M. 89-705

CODE	SAMPLE NO.	FRACTION	VIAL WEIGHT (gms)
75V	H55134	-150HN	1.057
76V	H55160	-150HN	8.790
77V	H55176	-150HN	0.779
78V	H55502	-150HN	1.878
79V	H55611	-150HN	0.800
80V	H55613	-150HN	1.076
81V	H55615	-150HN	0.723
82V	H55655	-150HN	1.617

NORANDA VANCOUVER LABORATORY

PROPERTY/LOCATION: BEAUPRE-VALENTINE

CODE : B905-017

Project No. : 120

Sheet: 1 of 3

Date rec'd: MAY. 15

Material : 140 SOILS &

Geol.: J. Mc.

Date compl: MAY. 19

Remarks : 1 SILT

Values in PPM, except where noted.

T. T. No.	SAMPLE No.	PPB Au
73	44587	5
74	44588	5
75	44589	5
76	44590	5
77	44591	5
78	44592	5
79	44593	5
80	44594	5
81	44595	5
82	44596	5
83	44597	5
84	44598	5
85	58701	5
86	58702	5
87	58703	5
88	58704	5
89	58705	5
90	58706	5
91	58707	5
92	58708	5
93	58709	5
94	58710	5
95	58711	5
96	58712	5
97	58713	5
98	58714	5
99	58715	5
100	58716	5
2	58717	5
3	58718	5
4	58719	5
5	58720	5
6	58721	5
7	58988	5
8	58989	5
9	58990	5
10	58991	5
11	58992	5
12	58993	5
13	58994	30
14	58995	5
15	58996	5
16	58997	5
17	58998	5
18	58999	5
19	59000	5
20	59101	5
21	59102	5

Subst. ... RW' 20

T. T.
No.

SAMPLE
No.

PPB
Au

8905-017
Pg. 2 of 3

22	59103	5
23	59104	20
24	59105	5
25	59106	5
26	59107	5
27	59108	5
28	59109	5
29	59110	5
30	59111	5
31	59112	5
32	59113	5
33	59114	5
34	59115	5
35	59116	5
36	59117	5
37	59118	5
38	59119	5
39	59120	5
40	59121	5
41	59122	5
42	59123	5
43	59124	5
44	59125	5
45	59126	5
46	59127	5
47	59128	5
48	59533	5
49	59534	5
50	59535	5
52	59536	5
53	59537	5
54	59538	5
55	59539	5
56	59540	5
57	59541	5
58	59542	5
59	59543	5
60	59544	5
61	59545	5
62	59546	5
63	59547	5
64	59029	5
65	59030	5
66	59031	5
67	59032	5
68	59033	5
69	59034	5
70	59035	15
71	59036	5
72	59037	55
73	59038	5
74	59039	5
75	59040	5
76	59041	10
77	59043	5
78	58951	10
79	58952	5

T. T. No.	SAMPLE No.	PPB Au
80	58953	5
81	58954	5
82	58955	5
83	58956	5
84	58957	5
85	58958	5
86	58959	5
87	58960	5
88	58961	5
89	58962	5
90	58963	5
91	58964	5
92	58965	5
93	58966	5
94	58967	5
95	58968	5
96	58969	5
97	58970	5
98	58971	5
99	58972	5
100	58973	5
52	58974	5
53	58975	5
54	58976	5
55	58977	5
56	58978	5
57	58979	5
58	58980	5
59	58981	5
60	58982	5
61	58983	5
62	58984	5
63	58985	5
64	58986	5
65	58987	5
66	58993	5

Beauchamp-Valentine (Inc)

8905-017

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 1-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR 6HR 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 15 1989 DATE REPORT MAILED: May 18/89 SIGNED BY: C. Long D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

NORANDA EXPLORATION CO. LTD. PROJECT 8905-017 120 File # 89-1077

Table with columns for SAMPLE#, Mo, Cu, Pb, Zn, Ag, Ni, Co, Mn, Fe, As, Cr, Au, Th, Sr, Cd, Sb, Bi, V, Ca, P, La, Cr, Mg, Ba, Ti, B, Al, Na, K, W, Au*, and units (PPM, PPB). Rows include sample numbers 58725 through 80297 and a total row STD C/AO-R.

8905-017

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 KM FE SR CA P LA CR NG BA TI B W AND LIMITED FOR NA K AND AG. AU DETECTION LIMIT BY ICP IS 3 PPM.
 - SAMPLE TYPE: Pulp

DATE RECEIVED: MAY 11 1989 DATE REPORT MAILED: May 23/89 SIGNED BY: C. Long, D. TOPE, C. LEONG, J. WANG: CERTIFIED B.C. ASSAYERS

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SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	V	Kr	Tb	Sr	Ca	Sc	Bi	V	Cr	P	La	Cr	Mo	Ba	Ti	B	Al	Na	S	W
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM
44587	1	6	4	32	.1	8	5	128	1.07	1	5	ND	1	28	1	1	3	25	.17	.023	9	17	.36	59	.06	5	1.11	.01	.03	1
44588	1	22	12	56	.2	8	6	124	4.15	4	5	ND	4	10	1	2	2	15	.36	.146	5	40	.45	51	.11	2	5.08	.01	.10	1
44589	1	22	5	59	.2	10	4	85	.73	2	5	ND	1	65	1	1	2	28	.19	.072	14	17	.23	157	.02	11	1.71	.01	.02	1
44590	1	27	15	54	.1	22	10	250	1.02	4	5	ND	1	26	1	2	2	69	.19	.002	9	35	.71	102	.05	6	3.25	.01	.03	1
44591	1	1	4	63	.1	2	1	42	.33	2	5	ND	2	117	1	1	5	3	.44	.027	2	2	.10	56	.01	1	1.14	.01	.03	1
44592	1	1	3	56	.1	1	1	11	.14	3	5	ND	2	92	1	3	3	1	.51	.045	3	1	.09	46	.02	7	.13	.02	.04	1
44593	1	14	10	46	.1	6	2	48	.21	1	5	ND	1	77	1	2	2	9	.52	.062	20	6	.06	80	.01	2	.46	.01	.02	1
44594	1	15	13	93	.1	29	28	2800	1.86	11	5	ND	1	51	1	2	2	82	.37	.047	25	31	.52	125	.08	2	1.15	.01	.05	1
44595	1	35	15	81	.2	28	8	341	3.63	4	5	YC	3	9	1	1	2	46	.07	.038	5	40	.70	39	.08	2	4.09	.01	.04	1
44596	1	14	6	65	.1	16	17	454	1.96	4	5	ND	1	32	1	1	1	37	.24	.033	13	11	.42	59	.04	2	1.71	.01	.04	1
44597	1	35	6	82	.1	23	5	237	3.44	8	5	SD	3	12	1	2	2	65	.10	.065	1	39	.54	44	.12	2	3.46	.01	.04	1
44598	1	18	10	40	.1	5	5	106	1.59	12	5	ND	3	12	1	2	1	96	.11	.132	4	28	.21	15	.13	2	2.19	.01	.02	1
58701	1	29	13	75	.2	19	10	315	2.96	3	5	SD	3	25	1	2	2	52	.19	.042	7	34	.36	64	.12	1	3.23	.01	.06	1
58702	1	17	15	67	.1	25	10	275	2.15	5	5	ND	3	11	1	2	2	45	.38	.041	7	31	.73	42	.11	4	2.06	.01	.04	1
58703	1	25	13	69	.1	22	10	255	2.37	6	5	ND	3	13	1	1	2	60	.11	.045	7	30	.61	52	.15	4	3.01	.01	.04	1
58704	1	36	15	76	.1	30	12	387	3.19	4	5	ND	3	15	1	2	2	52	.11	.039	6	34	.91	83	.14	2	2.64	.01	.08	1
58705	1	27	17	60	.2	18	8	244	3.17	9	5	SD	5	12	1	2	2	59	.18	.044	7	25	.56	39	.14	4	1.64	.01	.03	1
58706	1	32	6	60	.1	18	7	237	3.41	10	5	ND	1	11	1	1	2	59	.11	.055	5	10	.56	27	.13	2	1.33	.01	.02	1
58707	1	36	15	65	.1	23	9	258	1.96	6	5	ND	3	12	1	2	3	50	.19	.024	6	32	.70	47	.13	3	3.27	.01	.05	1
58708	1	11	10	40	.2	21	5	126	2.53	4	5	ND	2	13	1	2	2	46	.08	.014	5	10	.24	31	.12	2	1.83	.01	.01	1
58709	1	32	7	62	.1	21	8	263	2.65	4	5	ND	3	12	1	2	2	52	.10	.026	4	29	.75	52	.14	2	3.30	.02	.08	1
58710	1	44	12	85	.1	10	11	485	3.39	12	5	ND	4	10	1	2	2	52	.08	.048	7	40	.91	30	.12	3	3.56	.02	.04	1
58711	1	13	9	21	.1	5	3	86	2.86	2	5	ND	1	6	1	3	2	84	.06	.036	5	20	.13	11	.08	4	1.25	.01	.02	1
58712	1	19	6	52	.1	17	7	562	3.45	10	5	ND	1	9	1	2	2	56	.29	.043	5	32	.52	27	.08	2	2.53	.01	.03	1
58713	1	22	16	49	.1	12	6	259	3.15	12	5	ND	2	7	1	2	3	51	.06	.064	6	33	.47	26	.04	2	2.44	.01	.04	1
58714	1	27	7	62	.1	19	8	506	1.71	8	5	ND	2	13	1	2	2	51	.16	.052	4	26	.69	58	.11	2	2.16	.01	.10	1
58715	1	25	7	70	.1	17	7	227	3.32	2	5	ND	3	14	1	2	2	63	.11	.049	6	31	.64	41	.15	2	3.56	.01	.04	1
58716	1	17	3	88	.1	27	11	359	3.77	10	5	ND	3	14	1	2	2	62	.13	.055	7	34	1.00	53	.14	2	3.05	.01	.09	1
58717	1	14	12	44	.4	7	4	125	1.71	6	5	ND	2	16	1	2	2	51	.13	.032	4	21	.36	37	.10	2	1.59	.01	.04	1
58718	1	29	10	53	.2	22	11	304	3.24	12	5	ND	2	16	1	3	2	10	.14	.022	7	31	.81	52	.16	1	3.32	.01	.07	1
58719	1	16	5	40	.3	8	3	124	3.02	7	5	ND	2	11	1	2	2	71	.08	.042	5	25	.30	22	.12	2	1.95	.01	.02	1
58720	1	12	4	21	.1	6	5	138	2.71	6	5	ND	2	12	1	3	4	91	.12	.033	5	17	.20	14	.14	3	1.57	.01	.01	1
58721	1	52	8	92	.2	19	12	388	3.96	10	5	ND	4	13	1	2	2	72	.10	.043	7	52	1.02	74	.17	7	5.53	.02	.10	1
58988	1	44	9	14	.1	30	13	432	3.20	11	5	ND	4	14	1	2	2	49	.15	.056	9	33	.92	41	.12	2	2.58	.01	.08	1
58989	1	45	6	86	.3	21	10	355	3.87	11	5	ND	5	10	1	2	3	55	.08	.030	1	39	1.03	46	.15	3	3.42	.01	.07	1
58990	1	1	5	16	.2	3	2	57	.32	7	5	ND	2	6	1	1	2	39	.04	.010	5	6	.08	11	.07	2	1.45	.01	.02	1
STD C	19	60	40	131	.1	12	21	1012	1.90	41	18	1	17	42	19	15	10	65	.48	.029	39	51	.89	182	.07	32	1.74	.06	.11	13

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SAMPLE#	Mo	Co	Pb	Zn	Ag	Mn	Co	Mn	Fe	As	U	Vu	Th	Sr	Ca	SD	Bi	V	Ca	P	La	Ce	Hg	Ba	Ti	B	Al	Mo	K	N
	PPM	PPM	PPM	PPM	PPM	SPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	PPM	
58991	1	70	10	80	.1	45	19	515	4.90	4	5	ND	1	10	1	2	2	50	.14	.053	6	72	1.31	60	.20	2	2.85	.01	.17	1
58992	1	41	15	89	.1	38	24	1105	3.61	11	5	ND	1	13	1	2	2	42	.13	.051	10	35	.98	59	.06	2	2.37	.01	.06	1
58993	1	10	2	45	.1	14	3	166	1.91	3	5	ND	1	1	1	2	2	37	.04	.007	4	21	.57	35	.05	2	1.16	.01	.03	1
58994	1	34	21	73	.3	15	6	172	5.31	7	5	ND	5	6	1	2	2	67	.04	.028	6	53	.90	23	.13	2	5.27	.01	.02	1
58995	1	9	3	29	.1	6	4	172	1.63	2	5	ND	1	12	1	2	2	41	.10	.013	5	15	.32	58	.06	2	.80	.01	.03	2
58996	1	21	10	59	.1	18	5	153	3.54	8	5	ND	2	7	1	2	2	54	.04	.014	5	31	.49	46	.08	3	2.66	.01	.04	1
58997	1	16	5	36	.1	10	4	107	4.24	7	5	ND	2	6	1	2	2	57	.02	.016	4	24	.32	15	.06	4	1.36	.01	.04	1
58998	1	24	7	40	.1	11	6	130	4.58	12	5	ND	2	6	1	2	2	99	.04	.022	4	29	.14	29	.12	2	2.11	.01	.03	1
58999	1	32	6	55	.1	29	9	245	3.65	6	5	ND	3	8	1	2	2	47	.05	.036	6	39	.71	57	.09	5	4.15	.01	.05	1
59000	1	22	7	60	.1	17	7	114	3.30	11	5	ND	3	9	1	2	2	52	.05	.039	6	32	.59	43	.10	2	2.63	.01	.04	1
59101	1	21	9	71	.1	19	10	311	3.72	5	5	ND	1	9	1	2	2	62	.07	.039	5	26	.63	48	.12	2	2.00	.01	.05	1
59102	1	18	9	42	.1	11	49	1741	2.03	2	5	ND	1	9	1	2	2	42	.07	.025	8	17	.30	57	.06	2	1.18	.01	.03	1
59103	1	23	3	63	.1	20	7	241	3.21	3	5	ND	2	8	1	2	2	45	.07	.036	6	26	.56	52	.08	2	2.28	.01	.03	1
59104	1	28	3	88	.1	25	11	306	5.31	7	5	ND	2	8	1	2	2	51	.06	.028	4	36	.73	53	.11	2	3.53	.01	.04	1
59105	1	32	3	78	.1	25	11	357	3.30	3	5	ND	2	8	1	2	2	47	.05	.033	5	33	.67	49	.08	2	3.11	.01	.04	1
59106	1	57	13	89	.2	45	13	448	3.34	12	5	ND	4	10	1	2	2	51	.07	.046	5	40	.99	60	.13	8	4.13	.01	.06	1
59107	1	32	6	63	.1	20	9	222	2.92	3	5	ND	2	9	1	2	2	53	.06	.034	5	34	.70	50	.14	2	3.47	.01	.10	1
59108	1	19	7	51	.1	13	6	153	3.96	2	5	ND	2	8	1	2	2	65	.06	.041	4	33	.51	53	.20	2	2.57	.01	.07	1
59109	2	23	2	66	.4	12	7	275	2.51	6	5	ND	2	9	1	2	2	106	.08	.029	4	49	1.15	47	.26	2	1.95	.01	.05	1
59110	1	22	16	55	.1	3	5	107	2.77	2	5	ND	2	6	1	2	4	41	.06	.069	5	23	.22	36	.08	2	3.35	.01	.05	1
59111	1	7	5	24	.2	10	4	115	1.85	5	5	ND	1	6	1	2	2	68	.06	.025	3	22	.46	44	.21	2	1.10	.01	.09	1
59112	1	20	4	53	.1	16	7	173	2.95	2	5	ND	1	8	1	2	2	78	.06	.021	3	18	.78	54	.20	2	2.34	.01	.10	1
59113	1	20	7	47	.2	13	5	183	3.84	4	5	ND	2	6	1	2	4	67	.05	.065	5	28	.35	14	.06	2	1.84	.01	.03	1
59114	1	24	3	46	.7	12	6	166	5.56	12	5	ND	1	8	1	2	2	122	.07	.073	4	33	.33	10	.12	2	1.45	.01	.03	1
59115	1	35	13	85	.1	20	11	355	3.94	8	5	ND	4	8	1	2	2	47	.06	.056	7	43	.85	33	.09	2	3.38	.01	.04	1
59116	1	27	15	55	.3	19	7	229	3.38	11	5	ND	5	7	1	2	5	58	.05	.038	6	25	.54	17	.09	3	2.12	.01	.03	1
59117	1	22	9	62	.3	19	8	241	4.00	4	5	ND	2	12	1	2	2	73	.11	.048	5	28	.69	55	.21	3	2.37	.01	.11	1
59118	1	15	3	52	.3	9	6	176	3.69	2	5	ND	2	11	1	2	5	78	.08	.022	3	30	.78	43	.25	4	1.83	.01	.07	1
59119	1	16	7	45	.3	8	3	123	3.57	3	5	ND	2	7	1	2	2	65	.05	.022	3	29	.52	19	.07	2	1.94	.01	.04	1
59120	1	23	7	50	.1	16	7	188	3.38	4	5	ND	1	7	1	2	2	68	.07	.021	3	35	.54	36	.06	2	2.61	.01	.03	1
59121	1	29	10	70	.4	18	7	183	5.17	7	5	ND	5	9	1	2	2	66	.08	.075	7	44	.54	34	.06	4	4.37	.01	.05	1
59122	1	40	17	80	.3	31	10	248	4.06	3	5	ND	4	9	1	2	2	58	.06	.035	7	38	.82	62	.04	2	3.90	.01	.05	1
59123	1	33	9	91	.1	25	10	324	3.42	4	5	ND	2	14	1	2	2	54	.11	.059	6	32	.78	48	.06	4	3.00	.01	.07	1
59124	1	32	5	57	.2	25	8	242	3.23	5	5	ND	3	12	1	2	2	54	.11	.045	5	29	.65	19	.07	2	2.73	.01	.05	1
59125	1	14	3	42	.6	9	5	177	2.45	6	5	ND	1	12	1	2	3	56	.14	.045	4	18	.26	18	.06	3	1.31	.01	.03	2
59126	1	23	7	56	.3	14	6	205	3.69	3	5	ND	2	12	1	2	2	72	.14	.020	5	26	.56	34	.08	3	2.33	.01	.03	1
STO C	18	63	17	132	2.1	73	30	957	3.86	39	20	7	36	50	18	15	18	58	.47	.087	37	55	.87	176	.07	32	1.81	.06	.13	11

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SAMPLE#	Mo	Cu	Pb	Zn	Ag	Mn	Co	Ni	Pb	As	U	Au	Th	St	Ch	Sb	Bi	V	Ca	P	La	Ct	Mg	Ba	Yt	Sr	Al	Fe	I	Y
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	%	PPM
59127	2	17	15	88	.3	35	33	262	1.67	2	5	ND	1	22	1	2	2	29	.17	.043	18	28	.51	47	.02	3	2.75	.01	.04	1
59128	1	5	5	50	.2	11	4	137	1.60	0	5	ND	1	11	1	2	2	30	.08	.011	4	17	.45	29	.02	4	1.36	.01	.03	1
59132	1	18	16	49	.2	6	5	114	3.53	7	5	ND	2	8	1	2	2	80	.07	.055	4	32	.41	21	.13	2	2.97	.01	.02	1
59134	1	17	9	61	.2	8	6	129	4.17	10	5	ND	3	11	1	2	2	83	.07	.143	5	44	.62	47	.15	8	2.65	.01	.09	1
59135	1	14	7	75	.1	13	13	216	2.62	12	5	ND	1	26	1	2	2	50	.13	.015	4	28	.80	122	.09	2	1.36	.01	.06	1
59136	1	6	9	35	.1	5	5	113	2.34	3	5	ND	1	8	1	2	2	62	.09	.013	3	23	.32	20	.16	2	1.27	.01	.02	1
59137	1	8	7	54	.3	14	8	203	2.74	3	5	ND	1	10	1	2	2	72	.10	.006	4	36	.75	52	.21	4	1.89	.01	.09	1
59138	1	12	15	32	.1	8	4	104	2.18	6	5	ND	3	5	1	2	2	64	.04	.032	4	24	.32	28	.19	2	3.11	.01	.06	1
59139	1	16	8	48	.2	18	5	172	2.86	5	5	ND	2	9	1	2	2	49	.08	.034	4	34	.46	36	.09	3	3.52	.01	.04	2
59140	1	20	13	61	.2	20	8	242	3.09	7	5	ND	3	12	1	2	2	53	.10	.033	5	31	.63	45	.12	3	2.74	.01	.06	1
59142	1	34	13	79	.3	27	9	248	3.28	5	5	ND	4	10	1	2	2	50	.05	.031	6	40	.79	77	.13	2	5.41	.01	.12	1
59143	1	18	16	62	.3	15	7	157	4.15	3	5	ND	5	9	1	2	2	65	.04	.055	3	36	.46	54	.23	3	4.46	.01	.14	1
59145	1	27	10	52	.2	13	6	176	3.23	3	5	ND	3	10	1	2	3	65	.06	.031	4	35	.52	32	.12	2	3.70	.01	.05	1
59144	1	3	2	35	.2	12	7	113	1.04	2	5	ND	1	13	1	2	2	27	.09	.005	7	20	.41	84	.06	2	1.59	.01	.03	1
59145	1	4	2	54	.1	2	1	65	.14	2	5	ND	1	87	1	2	5	2	.57	.044	2	1	.10	62	.01	9	.10	.01	.05	1
59146	1	4	12	46	.1	4	3	18	.86	2	5	ND	1	28	1	2	3	8	.67	.090	7	5	.08	73	.01	2	.35	.01	.06	2
59147	1	0	6	28	.1	9	3	61	.61	2	5	ND	1	15	1	2	3	21	.09	.053	8	17	.19	35	.02	4	.91	.01	.02	1
59129	1	6	8	22	.1	6	1	85	1.42	7	5	ND	1	7	1	2	4	46	.05	.017	5	12	.15	17	.04	2	.89	.01	.02	2
59131	1	11	7	57	.2	13	5	181	2.39	4	5	ND	2	6	1	2	2	32	.04	.022	6	19	.51	29	.02	2	1.74	.01	.03	1
59031	1	10	3	37	.2	3	2	104	1.56	4	5	ND	1	8	1	2	2	29	.06	.023	5	15	.30	14	.02	2	.92	.01	.02	2
59032	1	22	11	68	.2	15	7	341	2.95	6	5	ND	3	8	1	2	2	16	.06	.058	7	29	.47	41	.01	2	3.27	.01	.04	1
59023	1	12	8	72	.4	31	12	172	3.27	6	5	ND	3	15	1	3	2	61	.13	.134	8	37	.70	55	.09	2	3.17	.01	.05	1
59034	1	34	10	75	.1	30	13	529	3.92	9	5	ND	1	22	1	2	2	70	.24	.069	8	42	.94	62	.12	3	2.92	.01	.06	1
59025	1	44	12	79	.5	27	12	347	3.87	7	5	ND	3	17	1	2	2	75	.19	.033	7	40	.89	59	.11	3	3.26	.01	.05	1
59036	1	27	6	54	.3	20	9	290	3.24	8	5	ND	2	12	1	2	2	68	.11	.047	5	30	.65	39	.08	4	2.42	.01	.03	1
59027	1	13	6	34	.2	9	4	141	2.70	4	5	ND	2	15	1	2	2	64	.13	.024	5	19	.27	37	.04	2	1.32	.01	.03	1
59028	1	43	21	93	.3	32	15	451	4.28	12	5	ND	7	12	1	2	2	49	.08	.107	27	35	.82	61	.02	2	3.91	.01	.05	1
59039	1	28	14	75	.5	21	10	342	3.42	12	5	ND	2	15	1	2	2	52	.17	.081	9	30	.50	42	.04	2	2.53	.01	.04	1
59040	1	10	10	28	.3	6	3	99	2.09	8	5	ND	3	6	1	2	2	44	.05	.024	4	17	.26	47	.05	2	1.66	.01	.02	1
59041	1	60	4	59	.7	24	9	319	2.91	4	5	ND	3	16	1	2	2	60	.23	.064	5	35	.82	35	.16	2	2.24	.01	.02	1
59042	1	20	1	29	.2	9	5	151	2.36	3	5	ND	2	8	1	2	2	63	.09	.027	4	20	.28	17	.10	2	1.81	.01	.01	2
58951	3	98	11	140	.3	69	23	374	4.55	13	5	ND	4	14	1	2	2	95	.08	.032	9	59	1.38	98	.16	2	4.96	.01	.22	1
58952	2	38	10	110	.4	25	16	690	4.96	4	5	ND	3	15	1	2	2	78	.05	.052	6	49	.79	87	.10	6	3.50	.01	.10	1
58953	1	19	13	60	.3	13	7	359	3.81	9	5	ND	3	6	1	2	2	69	.04	.038	4	35	.61	51	.10	2	3.53	.01	.07	1
58954	1	21	16	59	.5	12	7	234	4.38	5	6	ND	4	7	1	3	2	72	.06	.079	4	42	.45	41	.15	5	3.77	.01	.06	1
58955	1	15	2	55	.5	14	7	248	3.30	5	5	ND	3	7	1	2	2	84	.05	.060	3	35	.66	38	.22	2	2.57	.01	.08	1
STD C	18	61	38	132	7.0	73	30	945	3.75	38	19	7	37	49	18	19	17	57	.46	.085	37	55	.85	171	.06	34	1.79	.06	.14	12

NORANDA EXPLORATION CO. LTD. PROJECT 8905-017 120 FILE # 89-1130

SAMPLER	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Tb	St	Co	Sc	Bi	V	Ca	P	La	Cr	Mg	Ba	Th	B	Al	Na	K	H
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM
58554	1	15	5	51	.1	10	7	423	2.32	2	5	ND	1	10	1	2	3	64	.11	.029	4	32	.66	52	.19	2	1.03	.01	.06	1
58557	2	21	11	55	.2	10	8	243	1.53	2	5	ND	2	11	1	2	2	63	.15	.043	7	35	.67	72	.15	6	3.11	.01	.13	1
58558	1	6	11	25	.3	5	2	74	1.48	2	5	ND	1	6	1	2	2	16	.03	.021	4	14	.17	53	.08	2	1.12	.01	.02	1
58559	1	14	10	35	.1	12	8	182	1.65	1	5	ND	1	10	1	1	2	42	.04	.011	6	17	.30	50	.05	5	1.68	.01	.04	2
58561	1	10	12	56	.2	18	8	126	3.22	7	5	ND	1	9	1	3	6	35	.08	.036	7	28	.42	46	.10	3	2.64	.03	.08	2
58561	1	17	11	35	.1	12	12	354	1.98	5	5	ND	1	12	2	2	13	55	.15	.034	10	41	1.30	105	.12	10	3.61	.01	.07	1
58562	1	45	14	107	.1	44	18	361	3.45	2	5	ND	3	13	1	2	2	51	.05	.028	11	46	1.20	126	.22	2	4.92	.01	.23	1
58563	1	12	4	31	.2	12	5	147	2.74	2	5	ND	1	7	1	1	3	61	.05	.028	4	19	.42	36	.12	5	1.92	.01	.07	2
58564	1	17	8	62	.1	16	5	182	4.77	2	5	ND	2	9	1	2	2	31	.06	.044	5	35	.62	86	.21	2	2.75	.03	.03	1
58565	1	15	10	69	.3	21	12	214	2.54	2	5	ND	2	13	1	3	4	47	.05	.052	12	39	.74	79	.30	6	3.18	.01	.14	2
58566	1	48	14	101	.1	35	13	133	4.35	2	5	ND	5	14	1	2	8	50	.03	.042	11	47	1.21	100	.16	2	5.62	.02	.23	1
58567	1	41	6	95	.2	29	11	250	4.14	2	5	ND	5	11	1	2	7	56	.04	.029	8	43	1.08	122	.12	1	4.90	.01	.20	1
58568	1	18	13	58	.1	13	6	182	2.77	3	5	ND	2	10	1	1	2	65	.05	.023	5	32	.63	55	.13	5	2.38	.01	.05	1
58569	1	1	5	21	.1	5	1	88	.63	2	5	ND	1	9	1	2	5	23	.06	.009	3	10	.22	47	.13	11	.67	.01	.08	1
58570	1	22	5	45	2	12	5	138	5.63	2	5	ND	3	5	1	2	20	1.04	.04	.032	5	42	.45	31	.19	5	3.00	.01	.08	1
58571	1	15	7	44	.4	9	7	208	5.39	2	5	ND	4	17	2	3	12	37	.07	.047	7	26	.56	69	.20	8	2.56	.01	.12	2
58572	1	33	12	38	.1	23	12	275	4.42	4	5	ND	1	13	1	1	5	62	.05	.042	5	45	1.24	52	.21	7	4.37	.01	.08	1
58573	1	25	14	76	.4	13	10	250	4.29	3	5	ND	1	11	1	1	2	68	.05	.026	10	41	.96	51	.08	3	3.71	.01	.11	1
58574	1	21	8	58	.3	13	7	204	4.52	5	5	ND	2	5	1	2	14	83	.04	.046	6	41	.79	32	.10	2	3.01	.01	.06	1
58575	1	42	17	77	.3	26	9	271	5.67	5	5	ND	4	7	1	2	13	51	.03	.058	9	44	.61	50	.06	4	3.92	.01	.07	1
58576	1	19	3	117	.1	22	37	173	3.74	9	5	ND	2	18	1	3	2	82	.14	.047	8	41	.87	141	.13	5	2.52	.01	.11	1
58577	2	14	8	73	.2	25	12	195	1.65	2	5	ND	2	9	1	2	11	86	.12	.030	4	46	.30	57	.53	8	2.78	.01	.08	1
58578	1	15	5	35	.1	15	9	212	2.35	2	5	ND	1	9	1	4	2	75	.13	.019	3	38	.76	66	.27	1	1.74	.01	.05	1
58579	1	14	5	58	.1	12	3	153	1.05	2	5	ND	2	3	1	2	11	82	.13	.018	4	36	.84	55	.24	4	1.92	.01	.07	1
58580	1	28	8	78	.1	24	15	252	3.42	3	5	ND	2	10	1	2	4	84	.12	.020	4	50	1.13	76	.28	2	3.32	.01	.11	2
58581	1	5	4	30	.1	5	5	115	1.16	1	5	ND	1	12	1	4	2	55	.12	.010	4	16	.33	25	.22	9	.62	.01	.02	1
58582	1	21	12	50	.1	14	16	293	3.02	2	5	ND	2	13	1	4	4	87	.12	.023	5	38	.83	110	.26	2	1.97	.01	.11	1
58583	1	16	6	63	.2	12	13	158	4.32	13	5	ND	3	8	1	5	2	103	.04	.035	5	55	.74	44	.26	4	2.27	.01	.05	1
58584	1	20	2	64	.1	24	14	207	3.68	9	5	ND	2	11	1	1	3	88	.13	.022	5	58	1.03	61	.26	13	2.10	.01	.06	1
58585	1	23	4	38	.1	22	9	147	2.08	2	5	ND	1	7	1	2	5	80	.24	.013	3	33	.64	5	.27	2	2.16	.02	.02	2
58586	1	24	7	28	.2	26	8	200	2.15	2	5	ND	1	5	1	5	2	54	.30	.015	2	64	.98	1	.21	2	1.58	.02	.01	1
58587	2	22	18	45	.2	14	8	129	4.95	2	5	ND	3	7	3	2	11	102	.09	.037	4	57	.58	14	.25	7	2.52	.01	.03	1
58593	1	16	9	121	.3	34	28	885	3.40	9	5	ND	3	26	1	3	2	54	.30	.040	12	36	.88	42	.11	8	2.83	.01	.05	1
STD C	18	62	40	132	7.1	73	31	1619	3.87	42	17	7	35	51	15	15	22	59	.47	.088	38	53	.87	173	.07	32	1.70	.06	.13	12

Valentine - Leech Group (TMe)

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 NH 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-P2 SOIL P3 ROCK AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: JUN 19 1989 DATE REPORT MAILED: June 23/89 SIGNED BY: C. Long, D. TOPE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

NORANDA EXPLORATION CO. LTD. PROJECT 8906-066 120 File # 89-1588 Page 1

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Mn	Co	Ni	Fe	As	U	Au	Pb	Sr	Ca	Sb	Bi	V	Cr	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au*
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	%	%	%	PPM	PPM
P58401	1	31	10	91	.1	31	23	1328	3.91	10	5	ND	1	15	1	2	42	.16	.053	12	34	.95	68	.07	5	2.46	.01	.06	1	3	
P58402	1	11	10	54	.1	18	8	302	2.72	2	5	ND	1	14	1	2	56	.12	.015	5	33	.96	77	.17	2	2.11	.01	.14	1	1	
P58403	1	9	9	45	.1	14	4	213	1.88	2	5	ND	4	14	1	2	4	40	.12	.010	6	23	.57	58	.14	2	1.60	.01	.07	1	1
P58404	1	9	7	31	.2	9	3	112	1.29	6	5	ND	2	7	1	2	2	62	.06	.015	4	19	.24	28	.09	3	1.57	.01	.03	1	2
P58405	1	14	11	62	.1	20	6	229	3.56	5	5	ND	2	10	1	2	2	51	.07	.021	7	29	.62	41	.09	2	2.61	.01	.04	1	1
P58406	1	22	11	65	.1	22	7	286	4.02	7	5	ND	2	11	1	2	2	55	.11	.033	6	34	.69	37	.14	2	2.94	.01	.04	1	3
P58407	1	26	14	82	.2	23	85	3030	4.07	9	5	ND	1	17	1	2	2	57	.13	.059	15	38	.66	119	.12	5	3.50	.01	.08	1	2
P58408	2	20	11	74	.1	23	27	9928	3.16	4	5	ND	1	24	1	2	2	52	.21	.056	10	29	.59	186	.08	6	2.60	.01	.08	1	2
P58409	1	19	10	64	.1	26	11	772	2.99	5	5	ND	1	16	1	2	2	52	.12	.019	8	37	.81	106	.13	3	2.85	.01	.11	1	1
P58410	1	24	13	72	.1	21	10	265	3.61	6	5	ND	2	15	1	2	2	67	.12	.028	6	45	.90	77	.22	3	3.78	.01	.13	1	1
P58411	1	23	14	69	.2	23	6	258	4.33	10	5	ND	3	7	1	2	2	49	.04	.019	6	37	.78	48	.07	3	2.89	.01	.04	1	1
P58412	1	24	11	80	.1	29	8	373	3.92	7	5	ND	2	10	1	2	2	46	.09	.014	8	36	.99	58	.08	1	2.55	.01	.04	1	24
P58414	1	41	11	76	.1	32	10	355	3.82	12	5	ND	3	13	1	2	2	55	.13	.056	8	41	1.00	50	.14	7	2.99	.01	.12	1	19
P58415	1	34	9	66	.1	27	8	304	3.41	7	5	ND	3	12	1	2	2	54	.12	.048	7	36	.83	42	.12	4	2.69	.01	.10	1	2
P58416	1	36	10	78	.1	34	21	656	3.30	8	5	ND	2	18	1	2	3	49	.18	.045	9	33	.89	59	.11	4	2.22	.01	.12	1	2
P58417	1	25	8	57	.1	21	6	198	4.29	11	5	ND	2	7	1	2	4	60	.05	.023	7	35	.60	39	.07	2	2.89	.01	.03	1	7
P58418	1	15	6	30	.1	10	3	116	3.25	8	5	ND	2	6	1	2	2	80	.03	.013	4	20	.26	26	.08	2	1.96	.01	.02	1	1
P58419	1	39	17	92	.2	36	10	279	5.73	13	5	ND	4	8	1	2	3	61	.03	.020	7	55	.97	81	.09	6	4.77	.01	.06	1	2
P58420	1	22	10	81	.1	31	9	337	3.41	6	5	ND	1	12	1	2	2	41	.11	.021	9	36	1.03	69	.08	2	2.56	.01	.06	1	2
P58422	1	15	11	41	.1	13	4	161	5.25	9	5	ND	1	7	1	2	2	76	.05	.043	6	26	.38	33	.09	2	2.44	.01	.03	1	1
58327	1	13	10	51	.2	13	6	184	3.82	5	5	ND	1	7	1	2	2	89	.07	.030	4	34	.69	37	.30	2	2.71	.01	.07	1	1
58328	1	3	2	17	.1	2	1	58	.98	4	5	ND	1	5	1	2	2	24	.04	.015	2	7	.10	9	.05	2	.73	.01	.02	2	1
58329	1	12	6	45	.1	10	4	131	3.27	7	5	ND	1	6	1	2	2	63	.04	.023	4	28	.50	20	.10	2	2.39	.01	.03	8	1
58330	1	38	12	81	.1	23	8	292	3.70	9	5	ND	3	14	1	2	3	60	.06	.035	7	37	1.07	106	.15	2	3.59	.01	.30	1	3
58331	1	9	8	44	.1	10	4	163	2.50	5	5	ND	1	7	1	2	3	48	.07	.029	4	21	.48	43	.18	2	2.42	.01	.14	1	1
58332	1	9	9	48	.2	8	3	132	3.29	7	5	ND	2	7	1	2	3	64	.04	.027	4	26	.48	32	.15	2	2.26	.01	.07	1	1
58333	1	3	7	28	.1	5	2	101	1.51	2	5	ND	1	9	1	2	2	38	.17	.011	4	13	.27	33	.15	2	1.15	.01	.07	1	1
58334	1	6	8	33	.1	6	2	118	3.42	4	5	ND	1	7	1	2	2	73	.15	.038	3	20	.26	27	.15	3	1.61	.01	.05	1	2
58335	1	20	12	61	.2	16	6	180	4.09	4	5	ND	2	4	1	2	2	85	.03	.030	4	51	.82	41	.12	4	3.41	.01	.10	1	2
58336	1	29	15	78	.1	18	8	201	4.07	6	5	ND	2	9	1	2	2	76	.05	.038	4	45	.89	106	.20	2	4.03	.01	.22	1	1
58337	1	24	14	62	.1	18	7	208	3.93	3	5	ND	2	9	1	2	2	73	.06	.030	4	40	.82	71	.21	3	3.78	.01	.13	1	1
58339	1	8	9	48	.1	12	5	181	3.49	5	5	ND	1	7	1	2	3	73	.07	.021	3	32	.65	53	.20	2	2.38	.01	.12	2	1
58339	1	11	10	50	.1	8	3	214	2.79	4	5	ND	1	6	1	2	2	54	.06	.033	4	29	.61	38	.09	2	2.00	.01	.10	1	1
58340	1	9	6	42	.1	7	2	123	2.88	6	5	ND	1	7	1	2	3	57	.05	.041	4	21	.40	20	.08	2	1.93	.01	.04	1	1
58341	1	21	13	62	.1	17	6	205	1.39	3	5	ND	2	7	1	2	2	66	.04	.025	4	38	.78	47	.16	2	4.78	.01	.08	1	1
58342	1	8	6	25	.1	7	2	87	2.22	3	5	ND	1	5	1	2	2	42	.03	.031	3	17	.27	20	.12	2	2.23	.01	.05	2	1
STD C/AU-5	17	58	39	132	6.6	68	30	1825	4.15	40	20	7	36	49	18	14	16	58	.49	.088	38	56	.86	177	.07	41	1.91	.06	.13	11	52

76% RW

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

DATE RECEIVED: APR 12 1989

DATE REPORT MAILED: *April 11/89.*

GEOCHEMICAL ANALYSIS CERTIFICATE

- SAMPLE TYPE: ORGANIC
AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

SIGNED BY *C. Long* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

NORANDA EXPLORATION CO. LTD. PROJECT 8903-012 120 FILE # 89-0785

SAMPLE#	AU* ppb
55484	4
55485	2
55492	2
55493	4
55651	2
55652	1
55653	3
55659	1
55666	1

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 NH ZR SR CA P LA CR NG BA YI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
 - SAMPLE TYPE: P1-P2 SOIL PULP P3 SILT PULP

DATE RECEIVED: APR 17 1989 DATE REPORT MAILED: April 19/89 SIGNED BY: C. L. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

NORANDA EXPLORATION CO. LTD. PROJECT 8904-010 120 File # 89-0803 Page 1

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	V	Au	Tl	Sr	Ca	Sb	Bi	Y	Ce	F	La	Cr	Mg	Ba	U	Th	Al	Na	K	W
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	PPM	
42093	1	17	14	54	.1	17	6	195	3.35	2	5	ND	2	9	1	2	13	54	.16	.025	4	29	.46	28	.07	3	2.54	.01	.02	1
42094	1	36	19	102	.1	31	12	351	3.79	2	5	ND	3	11	1	2	3	61	.13	.040	3	35	.34	45	.11	3	3.55	.01	.03	1
42095	1	21	10	64	.1	15	8	207	3.18	2	5	ND	2	11	1	2	4	60	.12	.046	5	25	.41	28	.08	2	2.48	.01	.02	1
42096	1	15	12	43	.1	12	6	175	3.09	4	5	ND	1	11	1	2	2	78	.13	.022	4	21	.39	26	.13	5	1.50	.01	.02	1
42097	1	34	20	102	.1	32	10	408	4.30	2	5	ND	4	11	1	2	2	59	.10	.027	5	28	1.02	68	.15	2	3.60	.01	.04	1
42098	1	39	10	79	.1	26	10	503	4.23	3	5	ND	2	10	1	2	11	84	.10	.042	4	34	.71	43	.09	2	3.44	.01	.02	1
42099	1	16	10	39	.3	18	4	117	3.29	2	5	ND	1	12	1	2	4	72	.14	.032	4	20	.25	21	.10	4	1.25	.01	.01	2
42100	1	12	9	34	.1	6	9	134	3.25	3	5	ND	1	11	1	2	2	88	.14	.026	4	20	.23	20	.09	3	1.43	.01	.01	1
55137	1	23	8	59	.2	15	6	193	2.58	2	5	ND	4	7	1	2	2	50	.05	.036	5	27	.59	47	.15	2	3.23	.01	.07	1
55138	1	15	11	47	.1	6	4	102	2.53	2	5	ND	2	6	1	2	2	44	.05	.033	3	23	.31	20	.11	3	3.06	.01	.04	1
55139	1	31	20	66	.1	10	7	145	4.14	2	5	ND	4	11	1	2	2	86	.05	.057	5	40	.65	72	.22	5	4.50	.01	.18	1
55140	1	22	18	56	.2	8	6	132	4.03	4	5	ND	4	8	1	2	3	73	.04	.087	4	30	.46	36	.17	5	3.38	.01	.06	1
55141	1	10	12	31	.2	5	4	38	2.46	2	5	ND	2	8	1	2	12	63	.08	.074	4	16	.28	21	.15	3	1.16	.01	.04	1
55142	1	5	8	14	.2	3	2	44	1.15	2	5	ND	2	5	1	2	5	52	.08	.022	2	9	.11	13	.25	2	.42	.01	.03	1
55143	1	21	11	50	.1	14	6	166	3.88	8	5	ND	4	5	1	2	2	61	.03	.066	5	30	.39	21	.07	2	2.57	.01	.02	1
55144	1	47	12	88	.1	31	13	450	3.82	12	5	ND	5	8	1	2	2	51	.08	.077	4	33	1.06	33	.11	3	2.49	.01	.06	1
55145	1	24	9	62	.1	20	7	251	4.46	10	5	ND	3	7	1	2	10	63	.04	.021	4	32	.64	28	.07	2	2.22	.01	.02	1
55146	1	4	5	10	.2	4	2	46	.97	2	5	ND	2	5	1	2	3	32	.06	.010	5	7	.06	4	.04	7	.38	.01	.01	2
55147	1	43	15	86	.5	25	10	274	5.59	9	5	ND	7	4	1	2	4	53	.03	.074	6	56	.71	27	.10	2	5.49	.01	.02	1
55148	1	30	15	62	.2	17	8	222	7.23	12	5	ND	4	7	1	2	4	72	.03	.052	5	41	.57	18	.11	2	2.39	.01	.02	1
55149	1	3	4	20	.1	4	2	93	1.28	2	5	ND	1	7	1	2	2	23	.08	.026	3	8	.15	9	.04	2	.70	.01	.03	2
55150	1	33	22	74	.2	29	8	255	3.22	6	5	ND	5	7	1	2	2	47	.04	.014	5	32	.83	38	.11	2	4.72	.01	.09	1
55151	1	18	25	115	.3	7	1	4102	.28	2	5	ND	1	56	1	2	2	6	2.07	.077	2	4	.13	50	.01	9	.23	.01	.06	1
55152	1	4	6	14	.1	2	1	70	1.21	2	5	ND	1	8	1	2	2	61	.10	.011	3	7	.05	6	.05	5	.48	.01	.03	2
55153	1	26	7	72	.3	20	9	256	4.34	5	5	ND	3	11	1	2	2	73	.10	.030	5	32	.79	50	.13	2	2.96	.01	.07	1
55154	1	22	16	80	.1	23	10	257	3.77	4	5	ND	3	12	1	2	3	63	.10	.037	7	32	.70	64	.11	2	3.23	.01	.06	1
55155	1	28	10	77	.4	24	13	205	3.38	7	5	ND	2	13	1	2	2	58	.11	.034	19	29	.77	74	.10	3	2.98	.01	.07	1
55156	1	33	9	86	.3	27	17	384	3.46	2	5	ND	2	15	1	2	2	61	.13	.033	11	32	.94	105	.12	4	3.10	.01	.12	1
55154	1	59	23	94	.1	32	13	344	3.94	2	5	ND	6	9	1	2	2	81	.04	.046	6	49	1.35	183	.17	2	5.35	.01	.18	1
55155	1	9	2	15	.1	8	4	115	1.82	3	5	ND	1	9	1	2	2	43	.07	.017	4	12	.22	37	.06	2	.81	.01	.03	2
55156	1	8	4	15	.1	5	3	77	2.01	2	5	ND	2	9	1	2	2	65	.07	.024	4	11	.14	11	.08	3	.64	.01	.02	1
55157	1	23	10	68	.4	19	9	251	3.69	5	5	ND	4	3	1	2	2	56	.08	.054	5	32	.52	44	.10	2	2.66	.01	.04	1
55158	1	9	49	.2	2	3	2999	.38	2	5	ND	1	69	1	2	2	2	8	.54	.037	2	3	.11	98	.01	2	.19	.01	.03	1
55159	1	4	7	27	.5	1	1	103	.36	2	5	ND	1	27	1	2	2	1	.60	.061	2	1	.06	19	.01	4	.07	.01	.07	2
55160	1	48	5	65	.1	34	12	362	3.86	7	5	ND	4	9	1	2	4	62	.08	.078	7	27	.89	77	.11	5	4.46	.01	.07	1
55161	1	23	11	48	.1	13	7	208	3.24	3	5	ND	3	9	1	2	2	75	.08	.054	6	22	.38	41	.13	3	2.30	.01	.03	1
STD C	19	54	41	102	7.2	56	31	1028	3.92	42	17	7	39	51	19	15	23	61	.47	.393	41	55	.90	181	.07	37	1.77	.06	.13	13

NORANDA EXPLORATION CO. LTD. PROJECT 8904-010 120 FILE # 89-0803

SAMPLE#	Hc PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	St PPM	Cd PPM	Se PPM	Bi PPM	V PPM	Cr %	P %	Ga PPM	Ct PPM	Mo %	Ba PPM	Ti %	S PPM	Al %	Na %	K %	W PPM
55512	1	11	2	43	.1	10	8	342	1.12	2	5	ND	1	59	1	2	21	.55	.044	12	10	.28	89	.04	2	.89	.01	.03	2	
55513	1	24	11	69	.2	22	10	235	3.31	11	5	ND	2	10	1	6	2	58	.07	.027	7	34	.76	83	.13	3	3.02	.01	.12	1
55514	1	6	11	48	.3	1	1	239	.05	2	9	ND	1	31	1	2	2	.57	.062	2	1	.09	33	.01	5	.06	.01	.10	4	
55515	1	32	17	60	.2	22	9	254	5.14	10	5	ND	5	3	1	2	2	68	.08	.049	5	49	.51	26	.11	4	1.70	.01	.13	1
55516	1	27	12	53	.1	9	8	184	4.98	10	5	ND	1	11	1	2	2	99	.17	.091	3	31	.40	19	.11	2	3.04	.01	.02	1
55517	1	19	7	27	.1	5	4	117	2.52	3	5	ND	1	11	1	5	2	74	.16	.020	1	17	.21	13	.10	2	1.12	.01	.01	1
55518	1	6	4	18	.1	5	3	109	1.96	4	5	ND	1	12	1	2	2	87	.11	.014	3	12	.17	8	.14	2	.83	.01	.01	1
55519	1	25	12	65	.2	19	11	275	3.41	4	5	ND	1	12	1	2	2	71	.15	.026	4	35	.60	36	.12	2	3.59	.01	.03	1
55520	1	7	4	27	.1	7	4	120	1.85	9	5	ND	1	13	1	2	2	57	.17	.022	4	15	.24	20	.09	2	.85	.01	.02	1
55626	1	25	15	76	.1	16	7	221	2.73	6	5	ND	2	9	1	2	2	51	.06	.043	5	32	.66	50	.12	2	2.92	.01	.04	1
55627	1	21	13	58	.1	18	7	231	3.31	5	5	ND	2	7	1	2	2	49	.64	.046	4	35	.67	24	.13	2	3.82	.01	.04	1
55628	1	27	14	69	.4	28	9	241	3.21	14	5	ND	4	8	1	2	3	52	.85	.057	5	45	.75	41	.09	4	3.40	.01	.05	1
55629	1	10	8	41	.1	7	4	130	2.21	6	5	ND	2	8	1	2	2	45	.03	.021	3	22	.55	33	.07	2	1.54	.01	.07	1
55630	1	21	16	63	.1	17	7	227	3.08	7	5	ND	2	8	1	5	2	60	.85	.042	4	41	.70	35	.18	5	3.99	.01	.06	1
55631	1	12	12	51	.2	9	5	157	2.61	5	5	ND	2	8	1	2	2	50	.05	.029	4	27	.43	28	.09	2	2.18	.01	.07	1
55632	1	23	17	65	.2	14	7	258	3.26	17	5	ND	3	7	1	1	2	60	.05	.068	5	36	.64	45	.13	4	3.96	.01	.07	1
55633	1	5	7	20	.1	3	2	69	1.95	5	5	ND	2	6	1	2	2	47	.03	.020	2	12	.18	22	.11	2	1.19	.01	.03	1
55634	1	31	21	64	.1	17	8	257	3.23	9	5	ND	5	9	1	2	2	57	.07	.042	6	34	.69	45	.13	3	4.44	.01	.09	1
80401	1	9	12	37	.1	10	4	82	.75	2	5	ND	1	21	1	3	2	28	.15	.063	16	20	.23	82	.02	3	1.41	.01	.02	2
80402	1	1	7	31	.1	12	4	63	.72	3	5	ND	1	13	1	2	2	20	.10	.048	12	18	.19	99	.02	2	1.17	.01	.02	1
80403	1	5	7	24	.1	6	1	18	.21	2	5	ND	1	66	1	2	2	5	.43	.012	13	6	.06	95	.02	3	.59	.01	.01	1
80404	1	26	11	58	.1	24	11	420	2.75	10	5	ND	3	15	1	2	2	51	.11	.036	7	30	.81	116	.12	2	2.47	.01	.21	1
80405	1	21	10	64	.1	19	9	221	3.49	12	5	ND	2	10	1	2	2	59	.06	.015	5	31	.69	63	.11	2	2.46	.01	.07	1
80406	1	12	13	36	.1	7	4	110	2.72	7	5	ND	3	9	1	2	3	61	.05	.021	4	22	.27	25	.09	4	2.11	.01	.03	2
80407	1	17	2	49	.1	16	10	402	2.68	2	5	ND	1	10	1	2	3	47	.08	.019	6	27	.62	47	.08	2	1.57	.01	.05	1
80408	1	25	15	42	.1	9	8	172	8.69	10	5	ND	3	6	1	3	2	155	.05	.059	4	40	.26	18	.20	2	2.20	.01	.02	1
80409	1	18	10	36	.3	11	5	211	2.91	9	5	ND	2	7	1	5	3	55	.08	.062	5	23	.32	21	.06	3	1.51	.01	.02	1
80410	1	17	8	39	.1	11	4	217	3.18	11	5	ND	1	6	1	2	2	59	.06	.052	5	26	.34	20	.07	3	1.81	.01	.02	1
80376	1	6	8	22	.8	2	2	55	1.39	5	5	ND	1	9	1	2	3	47	.11	.036	3	7	.03	13	.03	7	.39	.01	.02	2
STD C	19	63	43	124	7.0	69	32	1022	3.94	45	18	8	40	50	19	15	21	60	.46	.091	40	55	.89	101	.07	17	1.74	.06	.13	11

NORANDA EXPLORATION CO. LTD. PROJECT 8904-010 120 FILE # 89-0803

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Tb PPM	St PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Ce PPM	Mo %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM
55125	1	22	10	86	.3	22	15	800	2.58	8	5	ND	1	31	1	3	2	56	.23	.035	9	30	.72	157	.11	3	2.22	.01	.16	1
55159	1	30	14	78	.1	25	14	450	3.27	8	5	ND	2	17	1	2	2	60	.14	.022	7	31	.83	93	.12	3	2.30	.01	.11	1
55169	1	45	8	53	.1	140	77	1568	6.32	6	5	ND	1	5	1	2	2	171	.08	.008	3	504	.10	48	.04	2	2.68	.01	.01	1
55503	1	36	11	69	.2	31	16	587	3.28	10	5	ND	3	21	1	3	2	52	.19	.047	9	31	.86	63	.07	2	2.27	.01	.08	1
55612	1	30	6	97	.2	32	30	595	2.79	8	5	ND	2	11	1	2	2	64	.07	.022	8	35	.84	154	.16	2	2.98	.01	.23	1
55614	1	26	6	85	.1	23	18	616	2.46	6	5	ND	1	33	1	2	2	52	.17	.031	6	30	.76	150	.14	2	2.26	.01	.18	1
55616	1	25	6	80	.1	22	14	489	2.89	6	5	ND	1	31	1	2	2	67	.16	.028	6	37	.87	168	.17	2	2.64	.01	.17	1
55656	1	37	5	72	.1	26	12	362	2.49	7	5	ND	2	19	1	2	2	48	.14	.032	7	31	.93	175	.14	2	1.70	.01	.41	1
59169	1	25	7	104	.1	25	13	500	2.87	5	5	ND	2	19	1	2	2	55	.17	.029	7	35	.95	168	.13	2	2.17	.01	.24	1
80377	1	32	9	76	.2	24	12	451	3.38	7	5	ND	3	20	1	2	2	60	.24	.036	6	31	.80	38	.10	2	2.15	.01	.02	1

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 NA FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA R AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: ROCK AU* ANALYSIS BY ACID LEACH/AA FROM 10 GR SAMPLE.

DATE RECEIVED: APR 12 1989 DATE REPORT MAILED: April 14/89 SIGNED BY: C. Long, D. TOE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

NORANDA EXPLORATION CO. LTD. PROJECT 8904-010 120 File # 89-0784

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Cc	Mn	Fe	As	U	Au	Th	Str	Cd	Sb	Bi	V	Co	P	La	Cr	Mo	Ba	Ti	B	Al	W	K	N	Au*
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	%	%	%	PPM	PPM	
42092	2	12	2	43	.1	19	7	323	1.81	3	5	ND	1	26	1	2	2	34	.19	.031	4	20	.68	91	.10	2	1.01	.04	.32	1	9
55167	4	148	5	67	.1	32	12	361	3.09	2	5	ND	1	26	1	2	2	46	.47	.154	7	77	.63	107	.09	2	1.40	.04	.57	1	4
55168	1	843	8	179	.1	143	53	873	10.50	7	5	ND	1	16	1	2	16	142	.38	.151	5	528	1.53	71	.21	4	3.66	.05	1.05	1	7
55170	2	32	12	64	.1	30	13	436	2.66	11	5	ND	4	8	1	2	2	24	.06	.032	11	23	.89	44	.03	2	1.48	.02	.09	2	3
55171	3	15	7	29	.1	19	5	239	1.38	6	5	ND	1	4	1	2	2	11	.03	.018	8	13	.35	19	.02	2	.57	.01	.04	2	1
55172	2	8	7	59	.1	14	8	407	2.66	15	5	ND	3	16	1	2	2	64	.10	.022	8	28	1.04	207	.22	4	1.87	.07	1.05	1	1
55173	2	8	3	4	.1	9	1	157	.50	18	5	ND	1	8	1	2	2	6	.19	.075	2	7	.08	17	.01	7	.16	.01	.04	1	6
55174	3	9	3	23	.2	22	5	143	1.17	4	5	ND	2	5	1	2	2	26	.16	.025	3	19	.42	41	.04	17	.58	.02	.11	2	3
55521	2	9	8	52	.1	18	5	231	2.00	8	5	ND	2	11	1	2	3	21	.09	.019	3	16	.70	35	.07	2	.95	.02	.08	1	5
55522	2	10	33	7	2.2	7	1	27	.25	3	5	ND	1	2	1	2	2	3	.03	.008	2	4	.05	6	.01	2	.20	.08	.02	1	28
55523	1	91	9	46	.1	56	21	397	3.08	15	5	ND	1	35	1	2	2	87	1.11	.021	2	99	1.95	39	.23	8	3.48	.12	.27	3	5
55524	2	7	2	1	.3	7	1	34	.25	2	5	ND	1	1	1	2	2	1	.01	.001	2	6	.01	2	.01	3	.05	.01	.01	1	6
55525	3	7	2	4	.1	6	1	39	.37	2	5	ND	1	1	1	2	2	2	.01	.004	2	6	.05	6	.01	3	.08	.01	.02	1	12
55635	2	16	6	52	.2	14	7	108	2.26	2	5	ND	3	24	1	2	2	49	.20	.038	5	26	1.01	192	.18	2	1.30	.05	.67	1	4
59170	2	18	4	70	.1	1	4	339	2.95	2	5	ND	2	29	1	2	2	45	.18	.065	6	2	.80	277	.12	2	1.82	.08	.14	1	3
59171	1	168	8	10	.3	55	11	137	.83	2	5	ND	1	68	1	2	2	21	3.20	.018	2	29	.42	7	.14	2	4.51	.36	.02	1	4
80351	1	103	11	46	.3	39	18	311	2.48	18	5	ND	2	185	1	2	2	59	2.48	.161	2	48	.71	101	.17	2	3.90	.22	.31	3	5
80411	2	10	3	30	.3	12	5	179	1.33	3	5	ND	3	14	1	2	2	25	.10	.015	3	17	.49	100	.08	2	.65	.02	.31	2	3
STD C/AU-R	19	62	42	136	7.2	71	31	1042	3.94	43	18	8	39	52	20	15	17	61	.46	.092	41	54	.87	181	.07	37	1.75	.06	.13	12	510

NORANDA VANCOUVER LABORATORY

PROPERTY/LOCATION: BEAUPRE-VALENTINE

CODE : 8904-010

Project No. : 120

Sheet: 1 of 2

Date rec'd: APR. 12

Material : 65 SOILS &

Geol.: T.Mc.

Date compl: APR. 18

Remarks : 10 SILTS

Values in PPM, except where noted.

T. T. No.	SAMPLE No.	PPB Au
68	42093 SOIL	5
69	42094	5
70	42095	5
71	42096	5
72	42097	5
73	42098	5
74	42099	5
75	42100	5
76	55137	5
77	55138	5
78	55139	5
79	55140	5
80	55141	5
81	55142	5
82	55143	5
83	55144	5
84	55145	5
85	55146	5
86	55147	5
87	55148	5
88	55149	5
89	55150	5
90	55162	5
91	55163	5
92	55164	5
93	55165	5
94	55166	10
95	55626	5
96	55627	5
97	55628	5
98	55629	5
99	55630	5
100	55631	5
52	55632	5
53	55633	5
54	55634	5
55	55504	5
56	55505	5
57	55506	5
58	55507	5
59	55510	5
60	55511	5
61	55513	5
62	55515	5
63	55516	5
64	55517	25
65	55518	5
66	55519 SOIL	5

24 APR 1K JMc TMc RW JF

T. T. No.	SAMPLE No.	PPB Au
67	55520 SOIL	5
68	80405	5
69	80406	5
70	80407	40
71	80408	5
72	80409	5
73	80410	5
74	55169 SILT	5
75	80377 SILT	5
76	55656 SILT	5
77	55612 SILT	5
78	55159 SILT	5
79	59169 SILT	5
80	55503 SILT	5
81	55616 SILT	5
82	55614 SILT	5
83	55161 SOIL	5
84	80376	5
85	55508	5
86	55509	5
87	55512	5
88	55514 SOIL	5
89	55135 SILT	5
90	80401 SOIL	5
91	80402	5
92	80403	5
93	80404 SOIL	5

SAMPLE#	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM	FE %	AS PPM	V PPM	AU PPM	TH PPM	SR PPM	CD PPM	SB PPM	BI PPM	V PPM	CA %	P %	LA PPM	CR PPM	MO %	BA PPM	TI %	B PPM	AL %	NA %	K %	W PPM	AU* PPB
55581	1	20	8	35	.3	7	3	169	1.69	103	5	ND	4	13	1	2	2	6	.07	.023	9	5	.23	116	.05	2	.78	.04	.37	1	2
55582	1	22	8	27	.1	4	3	191	1.63	2	5	ND	3	16	1	2	2	4	.10	.046	7	3	.20	86	.04	2	.76	.06	.19	2	1
55583	1	56	5	16	.1	16	9	266	1.38	3	5	ND	1	12	1	2	2	47	1.19	.038	2	54	.70	6	.20	2	.75	.10	.02	2	2
55584	3	10	3	12	.1	9	2	105	.77	4	5	ND	1	4	1	2	2	16	.06	.016	2	13	.19	55	.04	2	.30	.02	.18	1	2
55585	3	26	5	10	.2	16	4	180	1.71	55	5	ND	3	5	1	2	2	54	.10	.038	5	44	.66	198	.08	2	1.06	.03	.55	1	1
55586	2	7	2	6	.1	8	2	78	.46	2	5	ND	1	2	1	2	2	7	.02	.004	2	9	.09	28	.02	2	.17	.01	.11	1	1
55587	2	56	4	90	.1	33	10	503	3.76	2	5	ND	5	13	1	2	2	79	.13	.050	7	53	1.21	280	.19	2	2.27	.03	1.34	1	1
55588	2	21	6	68	.2	25	9	435	3.01	2	5	ND	6	8	1	2	4	57	.09	.032	6	36	.99	209	.17	2	1.80	.03	1.12	1	1
59226	3	31	6	43	.2	28	11	333	3.82	9	5	ND	5	10	1	2	2	105	.15	.062	9	70	1.45	332	.17	2	2.52	.03	1.13	1	5
59227	3	8	2	3	.1	14	1	44	.62	3	5	ND	2	2	1	2	2	7	.01	.002	2	16	.08	23	.01	2	.13	.01	.06	1	6
59228	4	5	2	2	.1	9	1	25	.37	558	5	ND	1	1	1	2	2	1	.01	.003	2	9	.01	23	.01	7	.02	.01	.01	1	13
59229	3	20	15	21	.1	34	12	396	4.37	35	5	ND	3	6	1	2	2	118	.15	.066	7	31	1.65	463	.19	4	2.99	.04	1.44	1	5
59235	1	70	13	181	.1	56	36	525	7.68	2	5	ND	1	76	1	2	2	169	1.73	.365	2	100	1.10	226	.32	2	5.79	.19	2.29	1	13
59234	1	103	8	40	.1	68	17	262	2.38	2	5	ND	1	88	1	2	2	66	2.42	.406	2	94	.81	26	.08	2	2.53	.16	.04	72	4
59496	3	13	5	15	.2	20	4	71	.89	8	5	ND	2	4	1	2	2	7	.03	.011	2	13	.11	9	.01	3	.29	.01	.03	2	2
59497	2	24	3	61	.1	25	7	177	2.13	2	5	ND	4	11	1	2	2	50	.07	.021	4	28	.67	116	.09	2	1.11	.02	.65	1	3
59560	2	31	6	46	.1	14	6	225	1.94	5	5	ND	1	9	1	2	2	28	.07	.025	2	15	.63	34	.03	2	.76	.03	.10	1	2
59581	3	12	9	29	.1	14	4	130	1.44	4	5	ND	1	11	1	2	2	22	.05	.019	2	18	.25	15	.02	4	.51	.03	.06	1	2
59584	2	43	19	106	.1	17	10	289	3.89	10	5	ND	10	13	1	2	2	80	.06	.046	8	49	1.30	129	.11	2	2.34	.02	.66	1	4
59585	2	27	7	16	.2	14	5	79	1.73	145	5	ND	1	9	1	2	4	14	.04	.018	2	11	.14	59	.02	6	.34	.02	.13	1	32
59586	3	6	2	3	.1	9	1	39	.34	5	5	ND	2	5	1	3	4	3	.02	.002	2	12	.04	17	.01	8	.06	.01	.02	1	5
80352	2	9	4	28	.2	9	3	154	1.19	4	5	ND	4	7	1	2	2	18	.04	.017	1	15	.40	71	.05	2	.62	.02	.37	1	3
STD C/AU-R	17	62	40	132	6.6	72	31	956	3.73	38	20	7	38	50	18	14	20	58	.46	.089	38	55	.84	178	.06	34	1.81	.06	.12	12	480

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59529	1	53	14	123	.7	62	16	588	4.41	11	5	ND	2	10	1	2	2	63	.14	.028	21	51	.96	67	.07	2	3.50	.01	.03	1
595	1	11		.8		7		.80		5	5	ND	2	1	1	2	2	63	.14	.022	33	37	.37	37	.07	2	3.50	.01	.03	1
59531	1	25	10	58	.7	19	8	239	4.69	11	5	ND	2	11	1	2	2	80	.18	.034	4	43	.46	29	.05	6	2.32	.01	.01	1
59532	1	27	13	62	.7	15	7	218	4.63	10	5	ND	2	12	1	2	2	77	.20	.057	4	39	.38	29	.05	1	2.23	.01	.02	1
80433	1	43	12	85	.2	29	11	278	3.61	10	5	ND	5	12	1	4	2	59	.10	.035	7	36	.69	49	.07	2	3.83	.01	.04	1
80434	1	34	18	97	.3	33	12	304	4.64	15	5	ND	4	12	1	2	2	58	.09	.039	5	40	.91	45	.05	2	3.58	.01	.03	1
STD C	18	62	39	132	6.5	71	31	960	3.71	42	22	6	38	50	18	14	22	58	.44	.087	38	55	.82	175	.07	36	1.80	.06	.14	12

LEACH

NORANDA EXPLORATION CO. LTD. PROJECT 8905-009 120 FILE # 89-1060

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Mn	Co	Ni	Fe	As	U	Au	TH	Sr	Ca	P	La	Cr	Hg	Ba	Tl	B	Al	Na	K	W				
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM				
80435	1	13	15	56	.3	11	5	134	4.18	9	5	ND	3	7	1	2	2	59	.06	.042	4	21	.34	26	.03	2	1.95	.01	.03	1
80436	1	6	5	25	.1	9	4	101	2.05	5	5	ND	1	8	1	2	2	59	.06	.013	6	15	.17	23	.03	2	.98	.01	.02	1
80437	1	25	12	73	.2	22	8	233	3.98	9	5	ND	1	10	1	2	2	62	.10	.039	6	29	.60	50	.07	2	3.20	.01	.03	1
80438	1	54	11	101	.1	44	14	339	4.65	15	5	ND	4	10	1	2	2	69	.11	.063	5	43	.82	74	.11	2	5.99	.01	.05	1
80439	1	20	9	46	.5	15	6	138	3.50	13	5	ND	5	7	1	2	2	60	.05	.043	6	22	.40	26	.04	4	2.43	.01	.03	1
80440	1	29	16	69	.8	20	7	205	4.99	14	5	ND	5	7	1	2	2	58	.08	.144	6	32	.45	25	.03	2	4.02	.01	.03	1
80441	1	23	10	61	.3	13	6	252	3.97	6	5	ND	3	6	1	2	2	49	.03	.049	5	23	.58	38	.04	5	2.04	.01	.03	1
80442	1	9	6	39	.1	6	3	156	2.25	3	5	ND	1	6	1	2	2	35	.03	.022	5	14	.39	17	.03	2	1.37	.01	.02	2
80443	1	19	15	54	.1	15	5	179	3.27	7	5	ND	3	7	1	2	2	47	.05	.039	6	23	.56	32	.04	2	3.16	.01	.03	1
80444	1	43	11	92	.2	25	10	228	4.33	13	5	ND	5	8	1	2	2	46	.06	.080	5	35	.75	34	.03	2	5.34	.01	.05	1
80445	1	4	3	26	.1	2	1	86	.86	3	5	ND	1	6	1	2	2	16	.03	.014	3	7	.15	11	.02	3	.73	.01	.03	1
80446	1	19	8	54	.2	16	5	159	2.56	4	5	ND	2	6	1	2	2	37	.02	.028	4	19	.51	22	.04	2	2.32	.01	.05	1
80447	1	7	8	40	.2	8	4	143	2.76	5	5	ND	3	6	1	2	2	45	.04	.022	4	18	.33	29	.04	2	1.90	.01	.03	2
80448	2	16	9	61	.1	18	7	196	3.19	6	5	ND	2	8	1	2	2	52	.06	.014	4	21	.65	30	.05	3	1.80	.01	.05	1
80449	1	18	8	60	.1	16	5	184	3.05	4	5	ND	2	6	1	2	3	52	.03	.015	5	22	.57	38	.05	3	2.19	.01	.05	1
80450	1	18	9	55	.3	15	5	144	3.76	9	5	ND	4	5	1	2	2	53	.03	.045	8	21	.45	24	.04	2	2.11	.01	.06	1
59581	1	10	10	25	.1	6	4	78	2.83	7	5	ND	3	8	1	2	2	73	.06	.050	3	16	.18	19	.11	3	1.38	.01	.02	1
59582	1	14	10	44	.1	14	5	137	3.43	5	5	ND	2	8	1	2	2	80	.06	.038	3	27	.41	41	.10	2	3.28	.01	.05	2
59583	1	3	9	20	.1	5	2	70	1.62	4	5	ND	3	5	1	2	2	47	.04	.023	2	11	.18	16	.14	2	.72	.01	.03	2
59584	1	5	12	29	.1	8	4	121	2.28	5	5	ND	2	8	1	2	2	64	.06	.026	4	17	.41	22	.15	2	1.01	.01	.04	1
59585	1	4	15	51	.4	3	1	211	.16	3	5	ND	1	34	1	2	2	4	.28	.060	2	2	.12	64	.01	4	.19	.01	.05	1
59586	1	36	15	76	.1	26	10	269	4.37	6	5	ND	4	9	1	2	2	87	.09	.041	3	52	1.05	63	.29	5	4.70	.01	.08	1
59587	1	6	11	21	.1	7	4	84	2.56	3	5	ND	1	7	1	2	2	105	.03	.024	2	20	.27	3	.28	2	.64	.01	.02	1
59588	1	20	7	53	.2	13	7	167	4.59	9	5	ND	4	8	1	2	2	97	.09	.040	3	37	.52	31	.21	2	2.37	.01	.05	1
59589	1	6	7	15	.1	6	2	64	.87	4	5	ND	2	5	1	2	2	38	.05	.014	2	10	.22	18	.13	2	.51	.01	.04	1
59590	1	25	14	34	.3	6	2	167	.59	3	5	ND	1	16	1	2	2	19	.16	.029	2	6	.13	14	.03	10	.36	.01	.03	2
59591	1	24	17	58	.1	20	9	193	4.02	3	5	ND	3	8	1	2	2	85	.08	.066	3	45	.82	69	.28	2	2.69	.01	.13	1
59592	1	8	9	41	.1	19	5	133	2.05	2	5	ND	2	8	1	2	2	56	.07	.014	4	35	.64	50	.22	4	1.74	.01	.07	2
59230	2	24	11	58	.7	14	5	161	4.29	107	5	3	6	5	1	2	2	89	.06	.043	6	34	.50	55	.15	2	3.26	.01	.14	2
59231	1	17	10	31	.2	12	6	108	5.68	19	5	ND	4	5	1	2	3	149	.05	.071	5	37	.26	17	.24	2	3.03	.01	.04	1
59232	1	40	9	44	.3	15	7	115	2.79	11	5	ND	3	9	1	4	2	63	.10	.034	7	26	.43	48	.12	5	2.26	.01	.10	2
STD C	18	59	41	132	7.0	72	30	924	3.64	36	18	7	36	49	17	18	21	56	.44	.085	36	52	.81	174	.06	34	1.79	.06	.14	11

LEACH

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25			
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36			
37			
38			
39	LEECH-1	55462	5
40		55463	5
41		55464	5
42		55465	5
43		55466	85
44		55467	5
45		55468	5
46		55469	5
47		55470	5
48		55471	5
49		55472	5
50		55473	5
51		55474	5
52		55475	5
53		55476	5
54	LEECH-1	55478	5
55	LEECH-2	55036	5
56		55037	5
57		55038	5
58		55039	5
59		55040	5
60		55041	5
61		55042	5
62		55043	5
63		55044	5
64		55045	5
65		55046	5
66		55047	5
67		55048	5
68		55049	5
69		55050	5
70		55051	5
71		55052	5
72	LEECH-2	55053	5
73	LEECH-3	55054	5
74		55055	30
75		55056	5
76		55057	5
77		55058	5
78		55059	5
79		55060	5
80		55061	5
81	LEECH-3	55062	5

T. T.
No.

SAMPLE
No.

PPB
Au

83	LEECH-3	55063		5
84		55064		5
85		55065		5
86		55066		5
87		55067		5
88		55068		5
89		55069		5
90		55070		5
91		55071		5
92		55072		5
93		55073		5
94	LEECH-3	55074		5
95	LEECH-4	55101		5
96		55102		5
97		55103		5
98		55104		5
99		55105		5
00		55106		5
01		55107		5
02		55108		5
03		55109		5
04		55110		5
05		55111		5
06		55112		5
07		55113		5
08	LEECH-4	55114		5
09		55484	SOIL PIT #1	5
10		55485		5
11		55486		5
12		55487		5
13		55488		5
14		55489		5
15		55490	SOIL PIT #1	5
16	LEECH-2	55666	SOIL PIT #2	5
17		55667		5
18		55668		5
19		55669		5
20		55670		5
21		55671		5
22		55672		5
23	LEECH-2	55673	SOIL PIT #2	5
24	LEECH-3	55492	SOIL PIT #3	5
25		55493		5
26		55494		5
27		55495		5
28		55496		5
29		55497		5
30		55498		5
31		55499		5
32	LEECH-3	55500	SOIL PIT #3	5
33	FRS	55659	SOIL PIT	5
34		55660		5
35		55661		5
36		55662		5
37		55663		5
38		55664	SOIL PIT	5
39		55651	SOIL PIT	5

GRID 5

5	RX	55658	5
53		59150	5
5		55491	5
5		59201	5
56		55665 #1	5
57		55665 #2	5
5		59176	5
59		55657	5
60		59126	5
6			

NORANDA EXPLORATION CO. LTD. PROJECT 8903-012 120 FILE # 89-0732

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Hg	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	M
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM
55462	2	33	12	38	.1	8	8	168	1.82	2	5	ND	2	5	1	2	2	34	.01	.151	13	33	.24	39	.08	2	8.76	.01	.08	5
55463	1	17	6	53	.1	19	9	156	3.32	7	5	ND	2	7	1	3	3	77	.08	.033	4	39	.65	40	.27	2	2.66	.01	.07	2
55464	1	20	8	60	.1	17	7	156	3.57	3	5	ND	1	7	1	2	2	76	.09	.048	4	45	.76	62	.29	2	2.90	.01	.13	1
55465	1	24	7	66	.1	12	5	124	2.96	12	5	ND	3	7	1	2	2	69	.03	.032	5	40	.59	40	.15	2	3.49	.01	.11	1
55466	1	1	3	10	.1	1	1	51	.89	6	5	ND	1	6	1	2	2	33	.04	.016	3	7	.04	3	.06	2	.34	.01	.01	2
55467	1	30	6	57	.1	20	6	204	2.77	3	5	ND	3	9	1	2	3	53	.06	.014	5	36	.72	59	.15	2	3.85	.01	.08	1
55468	1	8	7	51	.1	12	6	194	3.39	12	5	ND	2	9	1	2	2	89	.11	.033	3	36	.65	37	.29	2	1.71	.01	.08	1
55469	1	5	6	33	.1	11	4	128	2.24	6	5	ND	1	10	1	2	2	86	.09	.012	4	28	.66	14	.20	2	.85	.01	.02	1
55470	1	29	15	96	.1	13	7	216	4.96	20	5	ND	5	12	1	3	2	102	.02	.024	7	55	1.08	41	.13	2	3.20	.01	.12	1
55471	1	25	14	72	.1	15	8	251	3.88	2	5	ND	2	9	1	2	3	68	.06	.041	5	42	.86	49	.16	2	5.10	.01	.09	1
55472	1	9	11	40	.1	11	5	130	3.09	4	5	ND	2	8	1	2	2	75	.05	.017	4	23	.41	27	.20	2	1.91	.01	.06	2
55473	1	6	3	31	.1	3	4	106	2.79	6	5	ND	2	8	1	3	2	86	.04	.013	4	21	.34	20	.21	2	1.17	.01	.04	2
55474	1	23	6	76	.1	19	9	240	3.58	3	5	ND	2	9	1	2	3	64	.06	.024	4	39	.79	56	.22	2	4.44	.01	.11	1
55475	1	5	5	20	.1	3	2	61	1.80	3	5	ND	1	4	1	2	2	45	.02	.019	2	12	.14	15	.10	2	.73	.01	.04	1
55476	1	4	3	20	.1	1	2	55	1.18	6	5	ND	1	4	1	2	2	43	.02	.013	2	9	.09	16	.03	3	.73	.01	.02	1
55478	1	34	6	81	.1	24	10	304	3.57	3	5	ND	4	18	1	2	2	56	.08	.039	8	36	.95	86	.14	4	3.30	.01	.25	1
55036	1	14	6	56	.1	10	6	118	4.54	14	5	ND	3	5	1	3	2	101	.05	.066	4	44	.48	31	.24	2	3.35	.01	.06	1
55037	1	18	10	52	.2	11	7	152	3.70	10	5	ND	3	6	2	2	2	81	.05	.045	5	35	.53	42	.21	2	3.44	.01	.07	1
55038	1	8	9	34	.1	3	5	99	3.03	11	5	ND	2	5	1	2	3	81	.05	.040	3	25	.44	33	.26	2	1.20	.01	.08	2
STD C	20	63	44	137	7.5	71	31	1037	4.12	42	20	7	38	49	20	15	22	51	.51	.097	40	56	.92	175	.07	34	1.81	.06	.14	12

SAMPLE#	Mo	Cu	Pb	Zn	As	K1	Co	Mn	Fe	As	U	Am	Th	Sc	Cd	Sb	Bi	P	Ca	P	La	Ct	Hg	Ba	Ti	B	Al	Na	K	W
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	%	%	%	%	PPM
55039	1	6	2	25	.1	2	2	75	1.74	6	5	ND	1	5	1	2	2	42	.05	.016	3	13	.25	32	.16	2	.95	.01	.06	1
55040	1	34	22	87	.1	24	12	336	3.73	2	5	ND	3	8	2	2	2	74	.97	.042	5	49	1.05	80	.32	2	6.56	.01	.15	1
55041	1	21	7	53	.1	15	8	135	3.31	3	5	ND	2	7	2	2	3	91	.12	.024	3	41	.64	50	.34	2	1.98	.01	.09	1
55042	1	15	7	62	.2	12	9	135	3.19	6	5	ND	2	15	1	3	2	79	.08	.037	5	29	.61	31	.13	2	1.55	.01	.06	1
55043	1	6	5	39	.1	2	4	132	1.72	2	5	ND	1	5	1	2	2	41	.05	.017	4	17	.50	35	.07	4	1.19	.01	.08	1
55044	1	12	7	49	.1	13	7	214	2.63	2	5	ND	2	11	1	2	2	72	.11	.023	3	33	.86	31	.13	3	1.65	.01	.06	2
55045	1	25	20	77	.1	14	9	231	3.15	3	5	ND	3	10	1	2	2	58	.07	.052	5	35	.77	60	.15	2	4.11	.01	.13	1
55046	2	17	9	50	.1	7	6	141	4.08	3	5	ND	2	8	1	2	5	66	.05	.039	3	35	.50	33	.19	3	3.30	.01	.06	1
55047	1	20	17	72	.1	16	11	215	4.25	2	5	ND	3	10	2	3	2	87	.05	.036	4	44	.90	63	.27	2	3.02	.01	.11	1
55048	1	14	7	34	.1	9	5	163	2.62	2	5	ND	1	11	1	2	3	60	.13	.038	2	33	.55	29	.25	6	1.62	.01	.05	1
55049	1	17	9	44	.1	12	8	212	2.77	9	5	ND	2	9	1	2	2	70	.11	.054	3	35	.79	39	.29	2	1.94	.01	.06	1
55050	1	10	10	34	.1	9	4	93	3.13	5	5	ND	2	7	1	3	2	61	.04	.030	3	22	.38	10	.66	6	1.00	.01	.03	2
55051	1	12	9	34	.1	10	4	146	2.46	3	5	ND	1	13	1	3	4	64	.15	.029	3	27	.47	44	.22	2	1.16	.01	.08	2
55052	1	40	14	68	.1	26	14	338	4.45	2	5	ND	2	13	2	1	2	89	.11	.082	4	59	1.14	144	.29	3	4.24	.01	.10	1
55053	1	15	14	40	.1	5	4	128	2.77	3	5	ND	1	10	1	3	2	59	.05	.039	4	26	.34	35	.09	8	2.18	.01	.06	1
55054	1	11	3	52	.1	15	7	202	3.30	9	5	ND	2	6	1	3	2	91	.09	.032	4	38	.69	15	.31	3	1.52	.01	.03	1
55055	1	26	17	37	.2	15	8	235	4.17	1	5	ND	3	7	2	3	3	79	.06	.066	6	47	.75	72	.22	3	5.85	.01	.12	1
55056	1	16	4	59	.1	17	5	222	3.34	5	5	ND	4	7	1	2	2	76	.07	.052	4	43	.52	43	.24	2	3.66	.01	.07	1
55057	1	11	5	39	.1	7	4	175	1.99	3	5	ND	2	8	1	2	2	61	.07	.017	4	25	.48	75	.19	2	1.66	.01	.09	1
55058	1	12	8	58	.1	11	8	258	3.42	5	5	ND	3	10	1	2	3	64	.06	.057	5	30	.51	56	.18	2	2.62	.01	.08	1
55059	1	18	18	56	.1	6	7	164	3.72	5	5	ND	5	7	1	3	2	60	.05	.057	5	33	.48	49	.14	2	3.26	.01	.10	1
55060	1	27	16	31	.5	16	6	823	3.85	8	5	ND	3	9	1	3	2	71	.07	.065	5	41	.62	38	.09	2	3.33	.01	.07	3
55061	1	41	28	108	.1	36	13	514	3.92	12	5	ND	4	13	1	2	2	57	.06	.055	10	44	1.11	115	.12	7	4.36	.01	.19	2
55062	1	25	15	74	.1	21	9	326	3.51	3	5	ND	3	11	2	2	2	70	.08	.048	6	41	.80	34	.16	3	3.22	.01	.14	1
55063	1	37	21	92	.1	22	11	294	4.45	10	5	ND	5	9	1	2	2	60	.05	.021	8	50	.82	65	.13	3	5.46	.01	.14	2
55064	1	42	22	101	.1	38	12	325	3.90	3	5	ND	4	12	3	2	3	58	.05	.028	3	46	1.10	92	.14	2	5.24	.01	.23	3
55065	1	36	13	96	.1	33	11	294	3.95	3	5	ND	3	11	2	2	2	66	.05	.036	6	49	1.01	106	.14	2	5.08	.01	.14	1
55066	1	26	20	84	.1	19	8	215	3.67	3	5	ND	4	9	1	2	2	56	.04	.039	6	47	.64	56	.11	3	4.71	.01	.08	1
55067	1	22	13	75	.2	23	9	265	4.27	2	5	ND	3	11	1	2	2	67	.06	.054	6	40	.81	50	.12	4	3.19	.01	.12	1
55068	1	21	13	85	.1	20	15	341	3.52	2	5	ND	2	10	2	2	3	72	.11	.028	6	48	1.18	58	.22	2	3.27	.01	.09	1
55069	1	13	18	57	.1	10	5	123	3.87	6	5	ND	4	7	1	3	2	80	.04	.045	6	35	.38	40	.10	4	3.29	.01	.05	2
55070	1	31	16	80	.1	22	10	276	4.38	3	5	ND	3	11	3	2	3	69	.06	.052	8	47	.95	75	.16	2	4.23	.01	.18	1
55071	1	24	20	59	.1	15	6	173	4.76	7	5	ND	3	12	2	3	2	83	.06	.038	5	45	.58	41	.17	6	3.81	.01	.09	1
55072	1	27	20	78	.1	23	6	259	3.69	2	5	ND	4	9	1	2	2	55	.04	.050	8	40	.88	143	.16	4	4.51	.01	.34	3
55073	1	35	22	90	.1	26	11	288	3.91	8	5	ND	4	11	2	2	3	59	.04	.049	9	43	1.04	96	.12	2	4.21	.01	.23	1
55074	1	23	11	65	.1	18	9	211	3.50	15	5	ND	2	16	2	3	2	83	.05	.023	7	39	1.01	58	.11	2	3.02	.01	.05	1
STD C	20	63	40	142	7.9	70	31	1053	4.10	10	22	8	39	52	20	15	23	64	.51	.098	42	57	.96	182	.07	38	1.85	.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
55499	1	14	3	46	.2	13	6	177	2.58	9	5	ND	2	11	1	2	2	60	.09	.031	6	26	.61	36	.17	2	2.06	.01	.05	1
55500	1	24	8	61	.1	13	8	246	3.10	6	5	ND	3	13	2	2	2	59	.12	.047	7	32	.76	53	.16	2	2.95	.01	.08	1
55651	1	3	7	44	.3	1	1	387	.10	2	5	ND	1	28	1	2	2	3	.31	.030	2	2	.15	21	.01	5	.09	.01	.04	1
55652	1	1	4	49	.1	1	1	440	.03	2	5	ND	1	20	1	2	2	1	.16	.025	2	1	.08	11	.01	2	.05	.02	.03	1
55653	1	3	5	16	.1	1	1	354	.06	2	5	ND	1	17	1	2	2	2	.11	.017	2	1	.04	17	.01	5	.09	.01	.01	1
55654	1	3	2	3	.1	1	1	36	.11	3	5	ND	1	3	1	2	2	5	.01	.003	8	1	.01	5	.02	3	.10	.01	.01	1
55659	1	31	12	45	.2	26	9	406	2.01	6	5	ND	1	25	1	2	2	47	.58	.031	3	44	.83	36	.13	3	1.23	.01	.07	1
55660	1	22	15	52	.1	17	7	215	3.66	6	5	ND	2	14	1	2	2	79	.21	.023	5	39	.56	31	.15	2	2.91	.01	.05	1
55661	1	10	9	32	.1	1	5	122	3.16	2	5	ND	1	10	1	2	2	107	.15	.015	5	25	.24	21	.14	6	1.35	.01	.03	1
55662	1	22	15	76	.1	24	10	257	4.01	5	5	ND	2	13	2	2	2	82	.20	.023	6	45	.69	42	.16	2	3.40	.01	.05	1
55663	1	30	31	71	.1	32	10	311	3.66	3	5	ND	2	14	1	2	2	72	.24	.019	5	46	.88	45	.16	2	3.65	.01	.05	1
55664	1	28	16	67	.1	27	8	284	3.64	12	5	ND	2	14	1	2	2	74	.23	.023	6	44	.76	41	.16	5	3.33	.01	.05	1
STD C	19	62	41	132	7.3	73	31	1023	3.92	45	18	8	36	48	18	18	24	59	.49	.091	38	56	.90	175	.06	35	1.85	.01	.14	12

SAMPLE#	NO										PRC										FII									
	Mo	Cu	Pb	Zn	Ag	Hg	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	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	.18	.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	1	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	.03	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

APPENDIX IV
STATEMENT OF COSTS

STATEMENT OF COSTS
FOR THE LEECH GROUP
(FIELD COSTS)

1.	<u>WAGES:</u> March 15, 1989 to June 20, 1989.		
	35 mandays x \$140/manday	\$ 4,900.00	
	27 mandays x \$104/manday	\$ 2,808.00	
	10 mandays x \$190/manday	\$ 1,900.00	
	2 mandays x \$112/manday	\$ 224.00	
	7 mandays x \$ 74/manday	\$ 518.00	
	2 mandays x \$124/manday	\$ 248.00	
	1 manday x \$117/manday	\$ 117.00	
	5 mandays x \$ 65/manday	\$ 325.00	

	89 mandays x \$124.04/manday	\$11,040.00	\$11,040.00
		=====	
2.	<u>ACCOMMODATION:</u> March 15, 1989 to June 20, 1989		
	89 mandays x \$10.72/manday		\$ 954.08
3.	<u>GROCERIES</u>		
	89 mandays x \$14.21/man		\$ 1,264.91
4.	<u>TRUCK</u>		
	35 mandays x \$9.15/day		\$ 1,411.20
5.	<u>GAS</u>		
	35 days x \$12.75/day		\$ 446.25
6.	<u>OFFICE SUPPLIES (FIELD)</u>		
	Blueprints, Photocopies		\$ 34.37
7.	<u>TRUCK/TIRE REPAIR</u>		\$ 40.08
8.	<u>FIELD EQUIPMENT</u>		\$ 89.20
9.	<u>SHIPPING</u>		\$ 57.26
10.	<u>MISCELLANEOUS/TRANSPORTATION</u>		\$ 86.17
11.	<u>ANALYSES</u>		\$ 7137.93
12.	<u>AUTHOR, DRAFTING (AUTOCAD), TYPING</u>		\$ 1400.00
			=====
			\$ 23961.45*

* A total of \$11,850 in exploration expenditures occurred between March 15, 1989 and April 10, 1989.

GEOCHEMICAL ANALYSIS COSTS
FOR THE
LEECH GROUP

1.	SOILS*		
		\$ 6.25/sample analyzing by ICP for 30 elements.	
		\$ 3.50/sample analyzing by AA for Au.	
		\$ 1.60/sample drying and sieving.	
		\$ 1.10/sample data processing.	

		\$ 12.45/sample * 450 samples	\$5602.50
2.	ROCKS *		
		\$ 3.50/sample crushing & pulverizing	
		\$ 6.25/sample analyzing by ICP for 30 elements.	
		\$ 1.10/sample data processing.	

		\$10.35/sample * 29 samples	\$ 300.15
3.	SILTS *		
		as soils listed above. \$ 12.45 * 16	\$ 199.20
4.	PAN CONCENTRATES		
		\$1.60/sample digestion and Cu analysis	
		\$ 1.80/sample Zn, Pb, Ag analysis by AA	
		\$ 5.00/sample Au Analysis by AA	

		\$ 8.40/sample * 4	\$ 67.20
5.	HEAVY MINERAL CONCENTRATE - (FIPKE ANALYSIS)		
		\$ 95.61/sample seiving, heavy liquid separation, electromagnetic separation.	
		\$ 95.61 * 8	\$ 764.88
		\$ 12.75/sample INAA 34 element analysis (2 fractions).	
		\$ 12.75 * 16	\$ 204.00

			\$ 7137.93

* Analysis by 30 element I.C.P.: Mo, Cu, Pb, Zn, Ag, Ni, Co, Mn, Fe, As, U, Au, Th, Sr, Cd, Sb, Bi, V, Ca, P, La, Cr, Mg, Ba, Ti, B, Al, Na, K, W.

APPENDIX V
AUTHORS QUALIFICATIONS

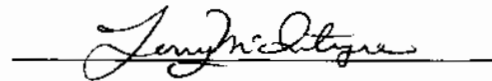
AUTHORS QUALIFICATIONS

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.

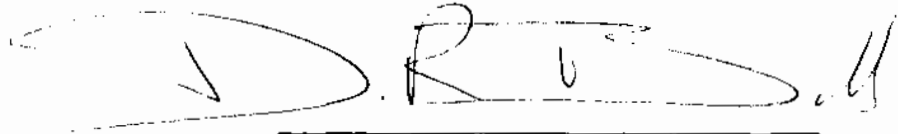


Terence J. McIntyre

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.

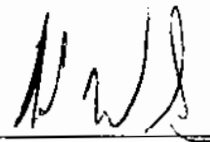
A handwritten signature in black ink, appearing to read 'D. R. Bull', written over a horizontal line.

Dennis R. Bull

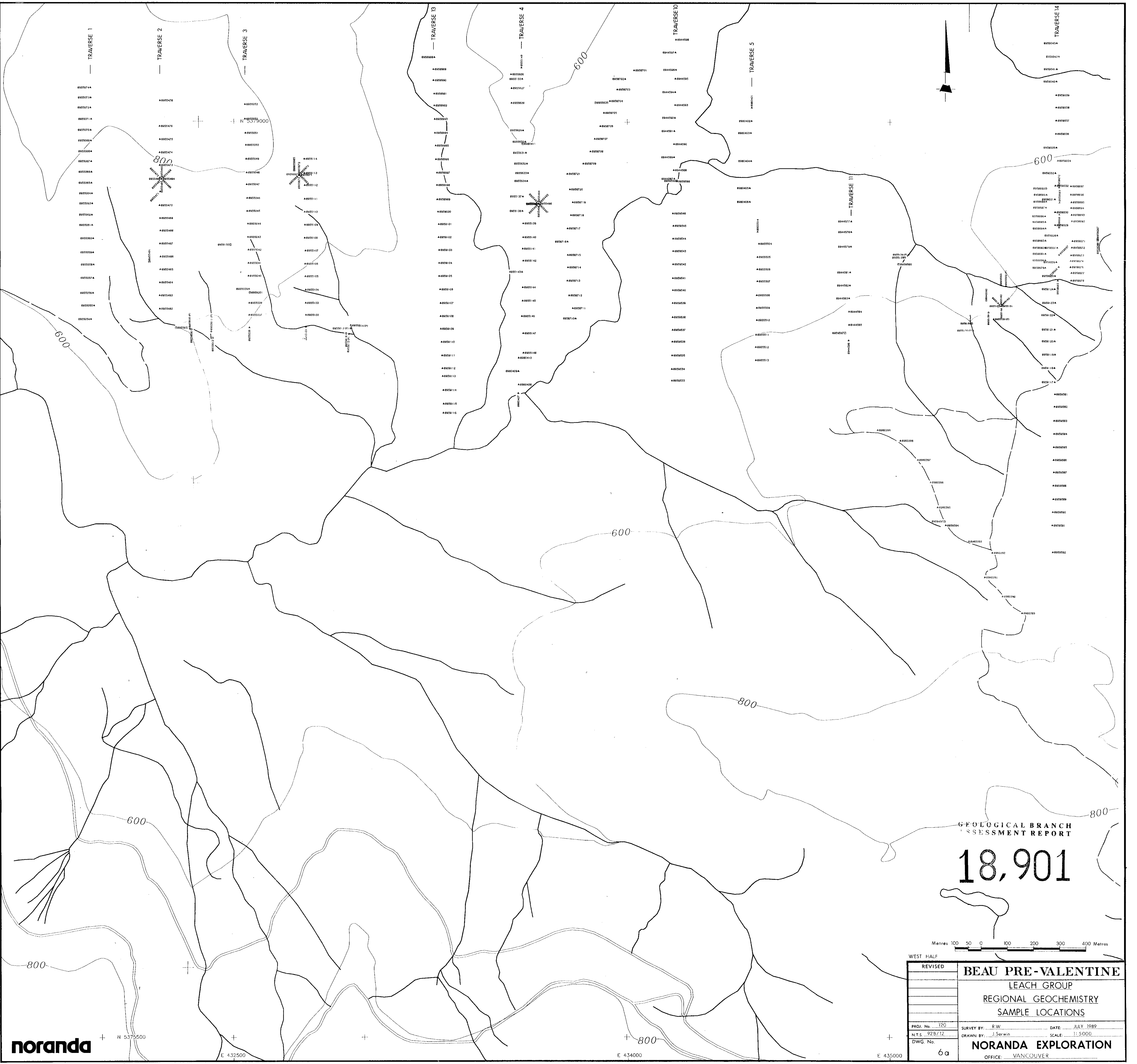
AUTHORS QUALIFICATIONS

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



GEOLOGICAL BRANCH
ASSESSMENT REPORT

18,901

Metres 100 50 0 100 200 300 400 Metres

WEST HALF		REVISED	
BEAU PRE-VALENTINE			
LEACH GROUP			
REGIONAL GEOCHEMISTRY			
SAMPLE LOCATIONS			
PROJ. No. 120	SURVEY BY: R.W.	DATE: JULY 1989	
N.T.S. 228/12	DRAWN BY: J. Serwin	SCALE: 1:5000	
DWG. No. 6a	NORANDA EXPLORATION		
	OFFICE: VANCOUVER		

noranda

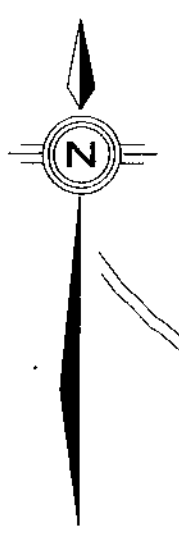
N 5379500

E 432500

E 434000

E 435000

123° 50' 00"
48° 34' 00"



N 5379000
E 438500

600

800

48° 33' 00"

OSILT BRCK TALUS FINE + OTHER
LASOIL OPAN CONC WATER
ONMBR

GEOLOGICAL BRANCH
ASSESSMENT REPORT

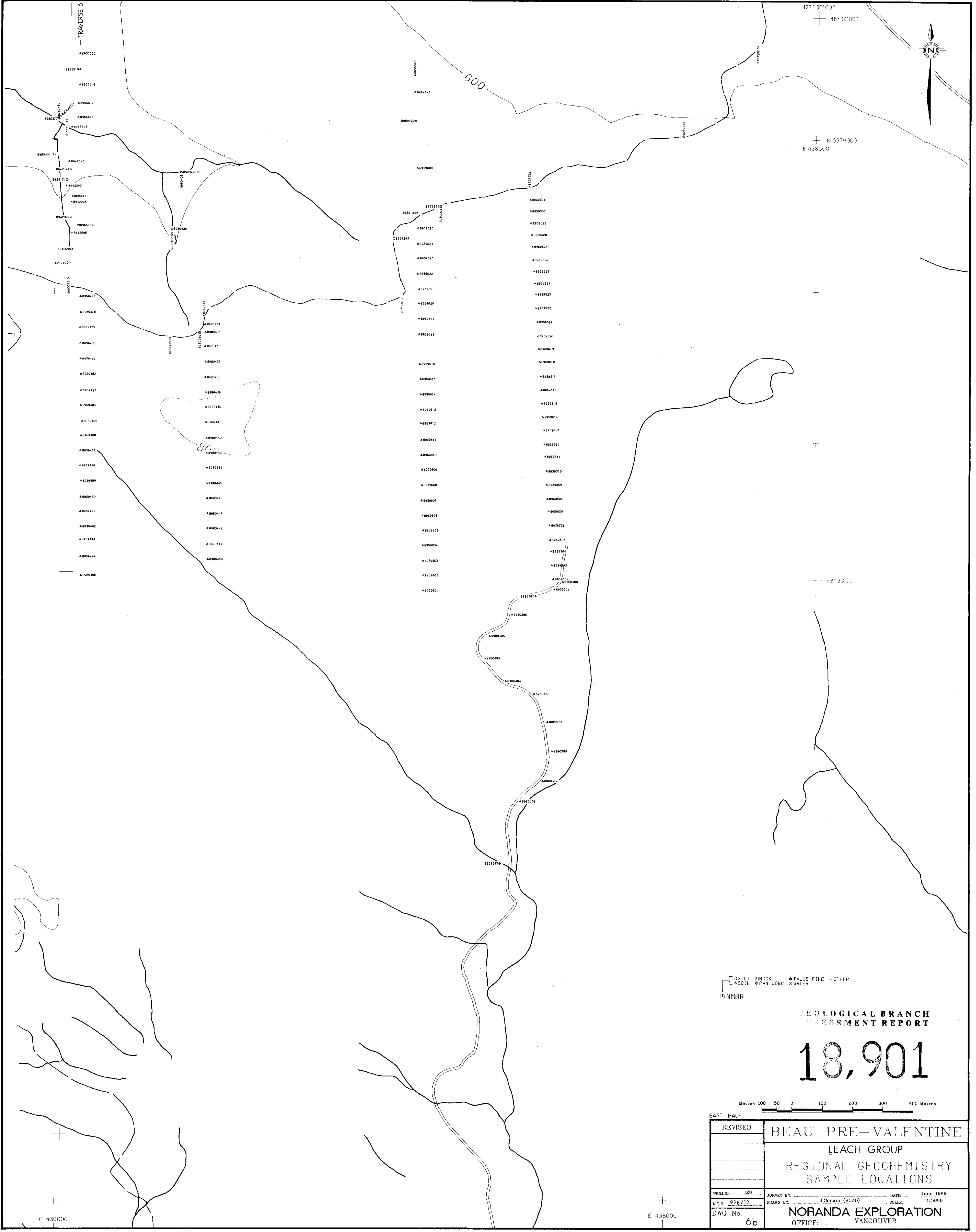
18,901

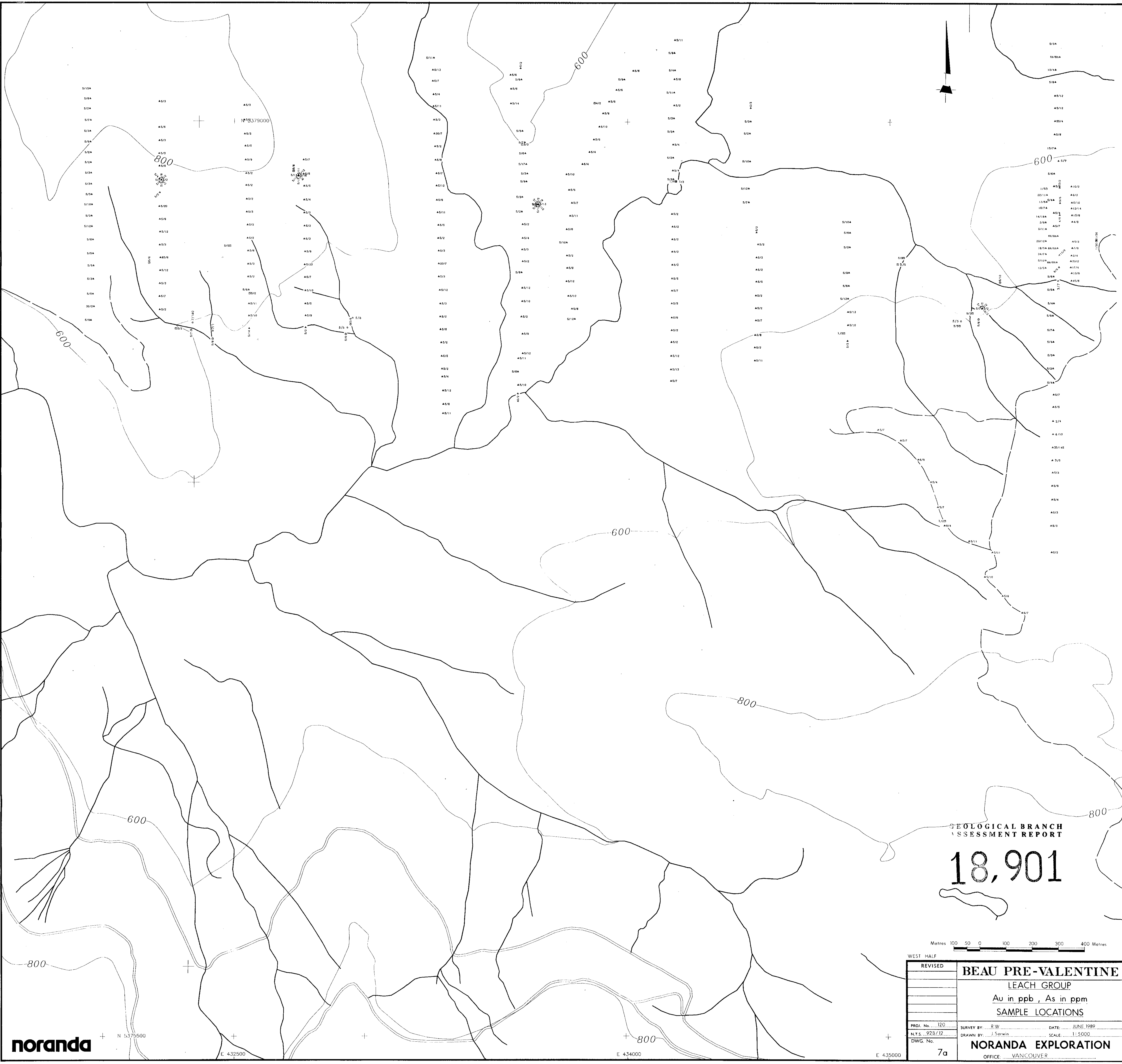
Metres 100 50 0 100 200 300 400 Metres

REVISED	BEAU PRE-VALENTINE		
	LEACH GROUP		
	REGIONAL GEOCHEMISTRY		
	SAMPLE LOCATIONS		
PROJ. No. 120	SURVEY BY: J. Serwin (ACAD)	DATE: June 1989	
N.T.S. 928/12	DRAWN BY:	SCALE: 1:5000	
DWG No. 6b	NORANDA EXPLORATION		
	OFFICE: VANCOUVER		

E 438000

E 436000





GEOLOGICAL BRANCH
ASSESSMENT REPORT
18,901

Metres 100 50 0 100 200 300 400 Metres

REVISED	BEAU PRE-VALENTINE	
	LEACH GROUP	
	Au in ppb, As in ppm	
	SAMPLE LOCATIONS	
PROJ. No. 120	SURVEY BY: R.W.	DATE: JUNE 1989
N.T.S. 92B/12	DRAWN BY: J. Serwin	SCALE: 1:5000
DWG. No.	NORANDA EXPLORATION	
	OFFICE: VANCOUVER	

noranda

N 5375500

E 432500

E 434000

E 435000

7a

123° 50' 00"
48° 34' 00"



N 5379000
E 438500

600

48° 33' 00"

□ SILT □ ROCK □ TALUS FINE + OTHER
○ SOIL ○ PAN CONC X WATER
○ AU/AS

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

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

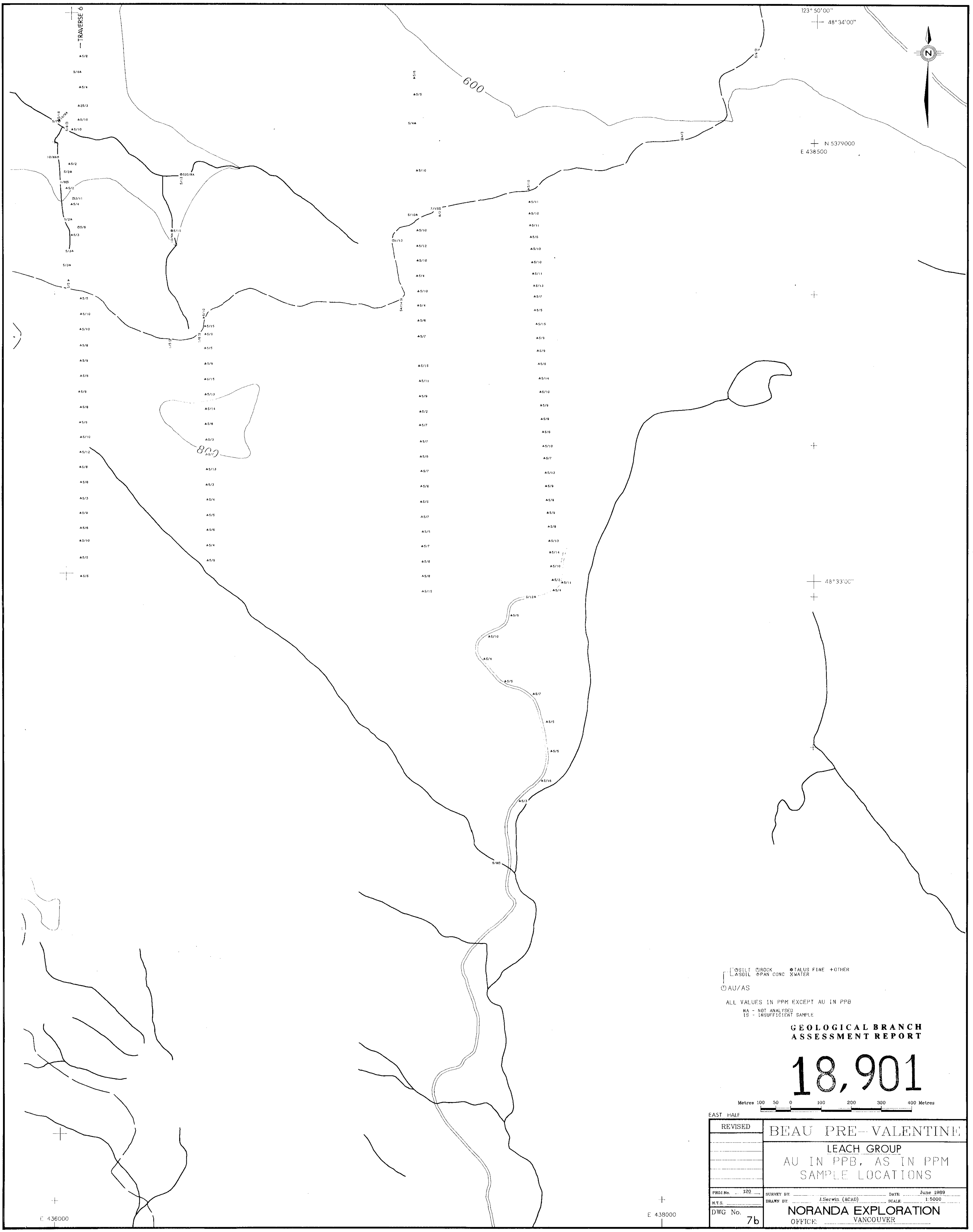
18,901

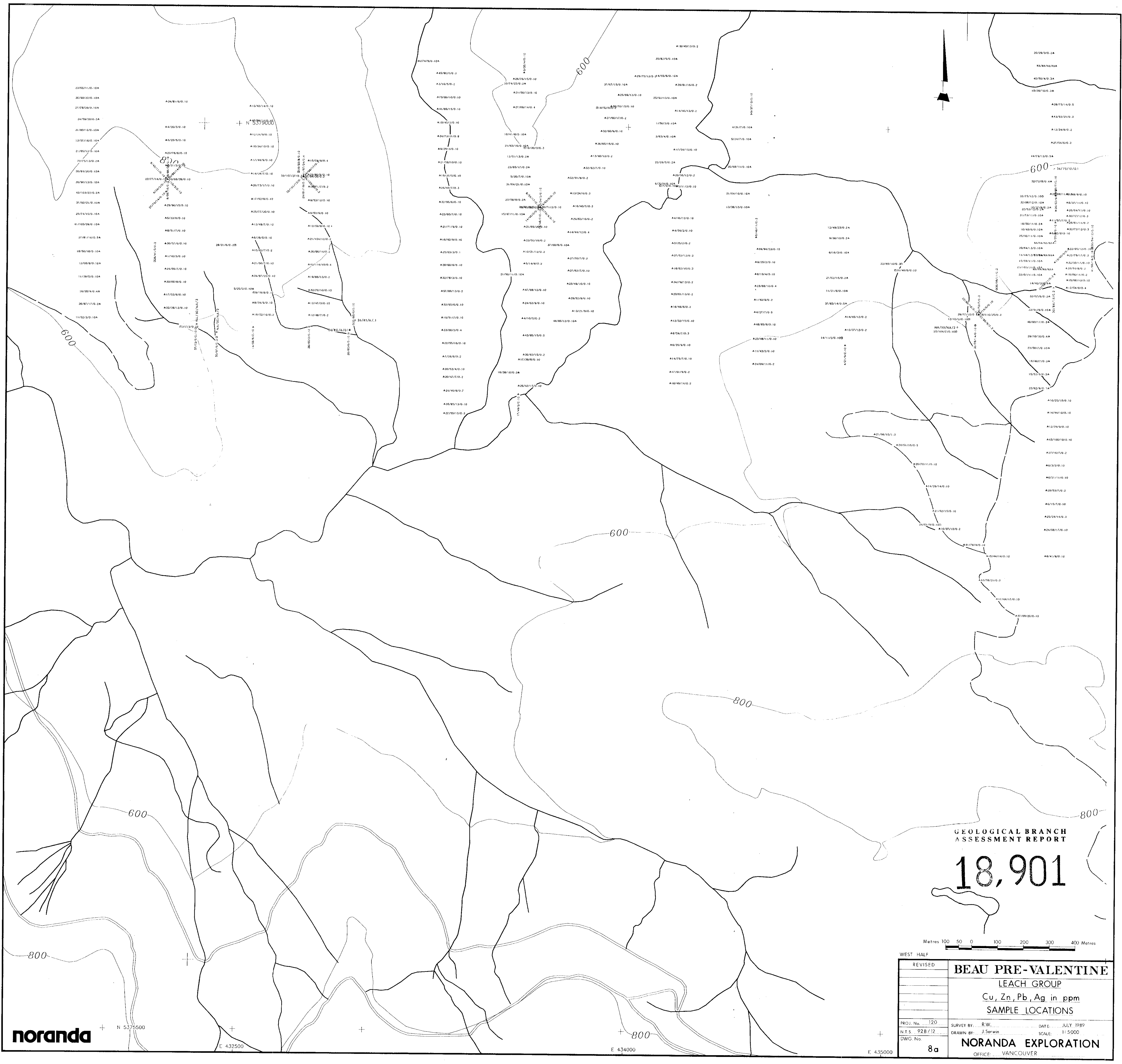
Metres 100 50 0 100 200 300 400 Metres

EAST HALF		REVISD		BEAU PRE-VALENTINE	
				LEACH GROUP	
				AU IN PPB, AS IN PPM	
				SAMPLE LOCATIONS	
PROJ No.	120	SURVEY BY	J. Serwin (ACAD)	DATE	June 1989
N.T.S.		DRAWN BY		SCALE	1:5000
DWG No.	7b	NORANDA EXPLORATION OFFICE: VANCOUVER			

E 438000

E 436000





GEOLOGICAL BRANCH
ASSESSMENT REPORT

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Metres 100 50 0 100 200 300 400 Metres

WEST HALF		BEAU PRE-VALENTINE LEACH GROUP Cu, Zn, Pb, Ag in ppm SAMPLE LOCATIONS
REVISED		
PROJ. No. 120	SURVEY BY: R.W.	DATE: JULY 1989
N.T.S. 92B/12	DRAWN BY: J.Serwin	SCALE: 1:5000
DWG. No.	NORANDA EXPLORATION OFFICE: VANCOUVER	

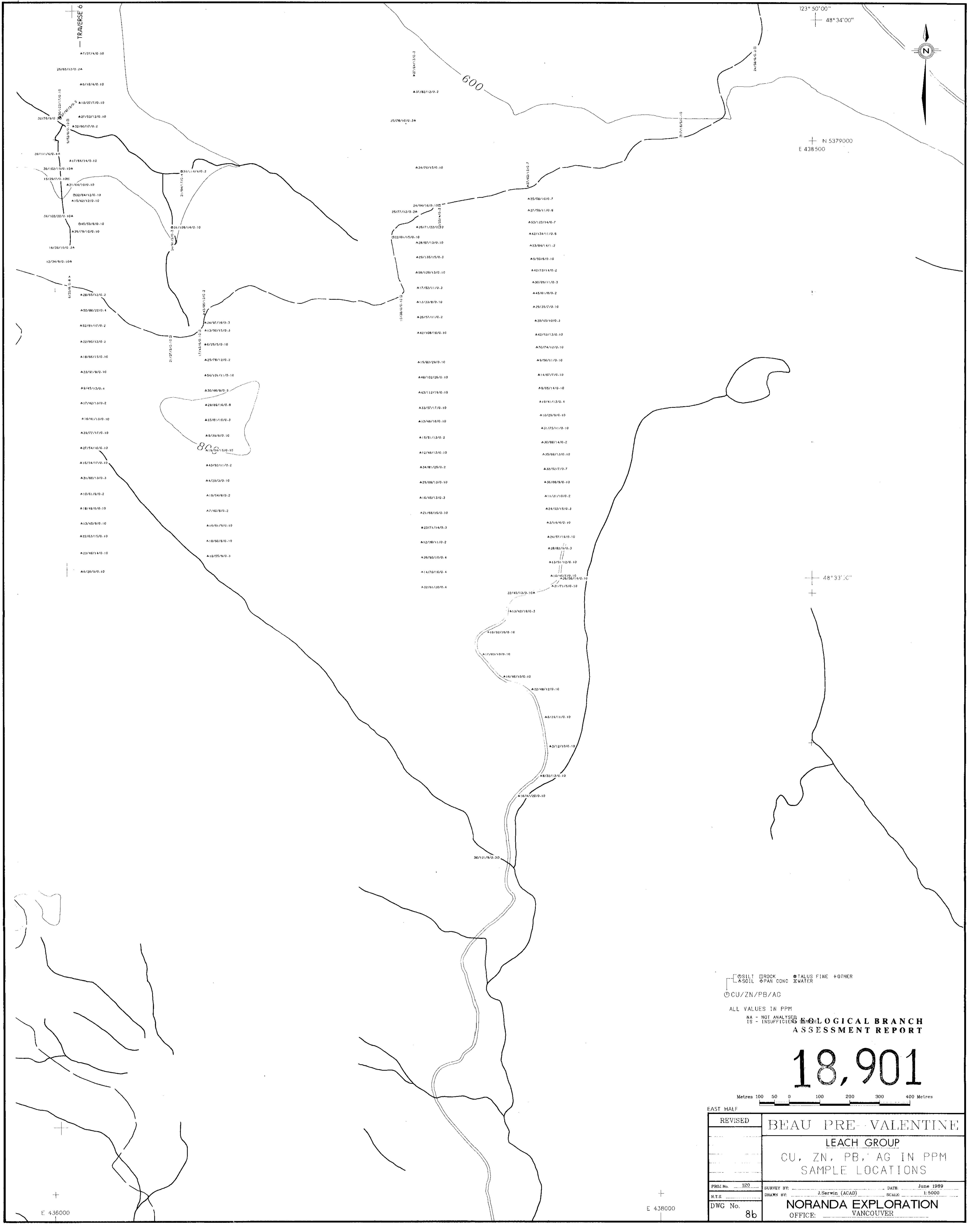
noranda

N 5375500
E 432500

N 5375500
E 434000

E 435000

8a



123° 50' 00"
48° 34' 00"



N 5379000
E 438500

48° 33' 00"

SILT ROCK TALUS FINE + OTHER
 SOIL PAN COND WATER
 CU/ZN/PB/AG

ALL VALUES IN PPM

NA - NOT ANALYSED
IS - INSUFFICIENT

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

18,901

Metres 100 50 0 100 200 300 400 Metres

EAST HALF		REVISED		BEAU PRE VALENTINE	
				LEACH GROUP	
				CU, ZN, PB, AG IN PPM	
				SAMPLE LOCATIONS	
PROJ. No.	320	SURVEY BY:	J. Serwin (ACA)	DATE:	June 1999
N.T.S.		DRAWN BY:		SCALE:	1:5000
DWG No.	8b	NORANDA EXPLORATION			
		OFFICE: VANCOUVER			

E 436000

E 438000