

**GEOLOGICAL AND GEOCHEMICAL
SURVEYS ON THE WOLF AND LITTLE WOLF GROUP OF CLAIMS
VICTORIA MINING DIVISION**

N.T.S. 92B/12

**DORAN 4 (1992), WOLF 1 (1917), WOLF 2 (1918),
1-WOLF 3 (1919), WOLF 4 (1920), WOLF 5 (1921),
WOLF 6 (1922), WOLF 7 (1923), & WOLF 8 (1924)**

Latitude 48°33'00" Longitude 123°47'30"

**Owner : Beau Pre Explorations Limited
Valentine Gold Corporation**

**Operator : Noranda Exploration Company, Limited (no personal
liability)**

**Authors : Terence J. McIntyre
R.G. Wilson**

**GEOLOGICAL
ASSESSMENT
BRANCH
REPORT**

19,381

FILE NO: 1203
ACTION:
FILE NO:
PAGE

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SUMMARY

The Wolf and Little Wolf claim groups, comprising 100 units and 42 units respectively, are located approximately 21 km north-northwest of the township of Sooke, B.C. The claims are accessed via the Butler Main and Weeks Lake (Access 2) logging roads, or alternatively the Boneyard and McDonald Main logging roads.

A reconnaissance style exploration program was carried out from June 24 to July 18, 1989 and consisted of geological mapping, rock and soil geochemical sampling, and stream sediment sampling.

Geological mapping, at a scale of 1:5,000 and coincident with geochemical sampling, was carried out along east-west compassed traverses and along creeks.

The regional geology of the Wolf and Little Wolf groups consists of the Leech River Formation in the west in contact with, along the Survey Mountain Fault, the Colquitz Gneiss and Wark Diorite to the east.

The Leech River Formation is composed of metasediments to the west in sharp contact with metavolcanics in the center of the claim group.

The units observed and mapped on the claim groups consist of metasedimentary, metavolcanics and intrusive rocks. The Colquitz Gneiss and Wark Diorite were not observed within the claim groups.

The metasediments are composed of metasandstone, phyllite, and well banded "ribbon" chert. The metavolcanic sequence consists of felsic to mafic tuff which grade from fine grained ash to lapilli tuff.

The intrusives consist of a small oblong shaped diorite plug, which intrudes the metavolcanic unit in the southeast corner of the claim group, and an aplite dyke which lies to the west of the diorite plug.

Quartz veins, discontinuous quartz lenses, quartz sweats, and minor quartz stockwork occur throughout the metasedimentary unit. Visible sulfides within the quartz veins is a rare occurrence and where present constitutes a trace of pyrite and or pyrrhotite.

The metavolcanic unit typically contains shear zones, fault zones, localized sulfide zones, and a hydrothermal alteration zone. The most pervasive sulfides are found along the Survey Mountain Ridge. The sulfide content here is as high as 7% and consists of pyrite, pyrrhotite, and trace amounts of chalcopyrite.

The results of rock chip samples obtained from quartz veins, lenses, and stockworks, shear and fault zones, sulfide zones, and a hydrothermal alteration zone failed to produce significant Au or Cu mineralization.

Soils samples taken over targeted zones of interest managed to produce threshold Au values but nothing that could be considered significantly anomalous.

A pan concentrate sample obtained from the Leech River returned 5,000 ppb Au (H58366), and 340 metres upstream from this site a pan sample taken from Dalriada creek returned 1,050 ppb Au (H58365). The results of the pan concentrate survey seem to suggest that the Au mineralization may have its sources at the headwaters of the Leech River or that it may originate in a unit located to the northwest of the river.

1.0 INTRODUCTION

1.1 Location and Access

The Wolf and Little Wolf group lie approximately 21 km north-northwest of the township of Sooke, B.C. (Figure 1 & 2). The property is centred roughly around Survey Mountain and between the Leech River and Cragg Creek. The western portion of the claim group is accessed via the Butler main and Weeks Lake (Access 2) logging roads. The eastern portion of the property is best accessed via the Boneyard and McDonald main logging roads.

Generally there is very good access to most of the claim group with the roads being in good condition.

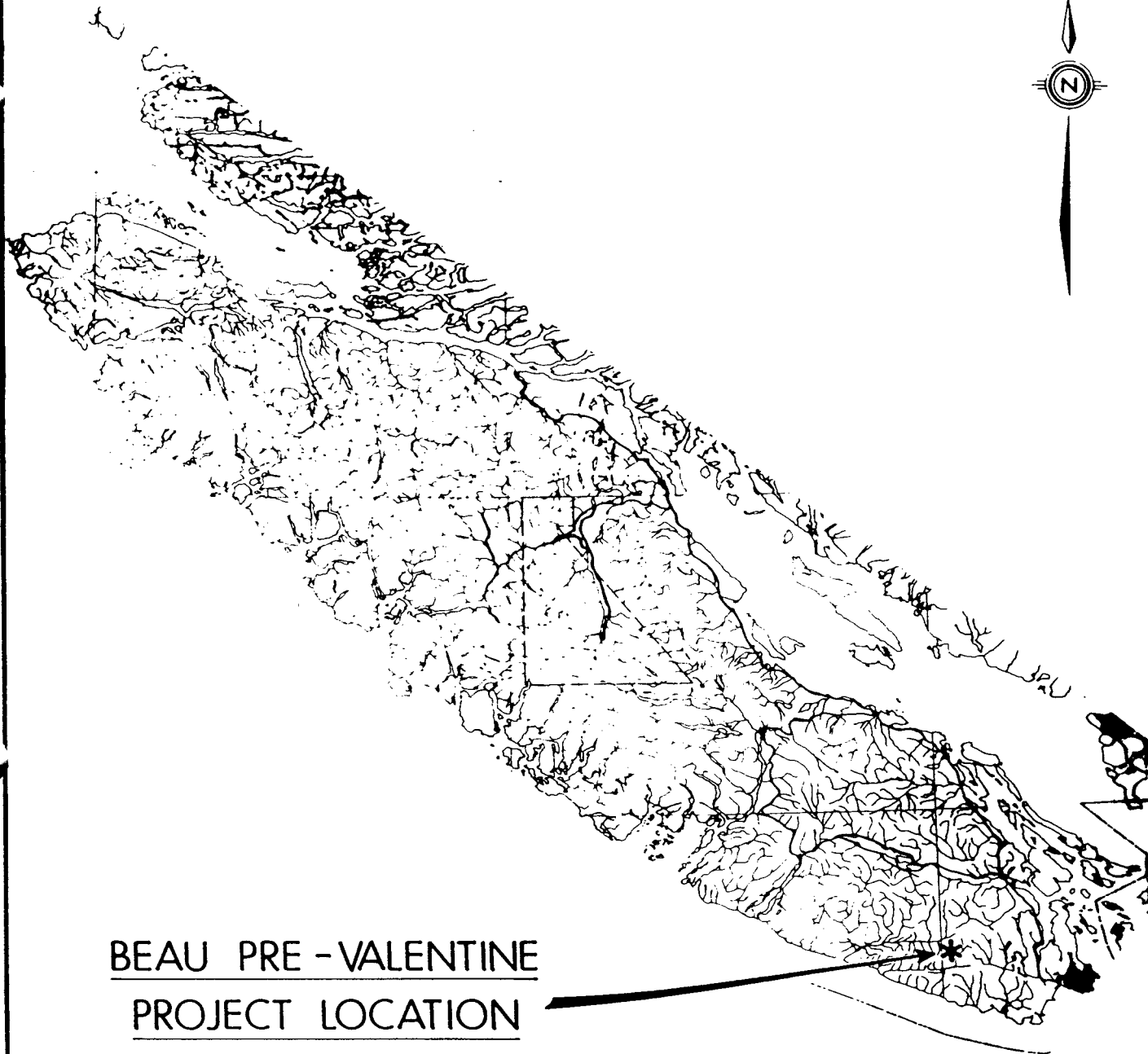
1.2 Physiography

The Wolf and Little Wolf group lie within the Vancouver Island Ranges in the southern portion of the Insular Mountains.

The topography is composed of relatively flat valley bottoms with moderate to precipitous valley sides. The Leech River flows through a narrow deep gorge towards the south of the property. The Leech River Valley is a broad flat valley which consists of a varying accumulation of glacial debris. The best outcrop exposures occur along creeks, logging roads, or above the 700 metre elevation mark. Elevations range from 250 m at the Leech River up to 942 m at the peak of Survey Mountain.

The climate of the southern Vancouver Island is quite mild. The fall, winter and spring months are typified by heavy precipitation which can result in a considerable snow pack at elevations greater than 600 meters. Below this elevation work can proceed almost year round, however, above this elevation the snow pack remains until May and June. The summer months are hot and dry with up to six weeks of forest closure annually due to forest fire hazard.

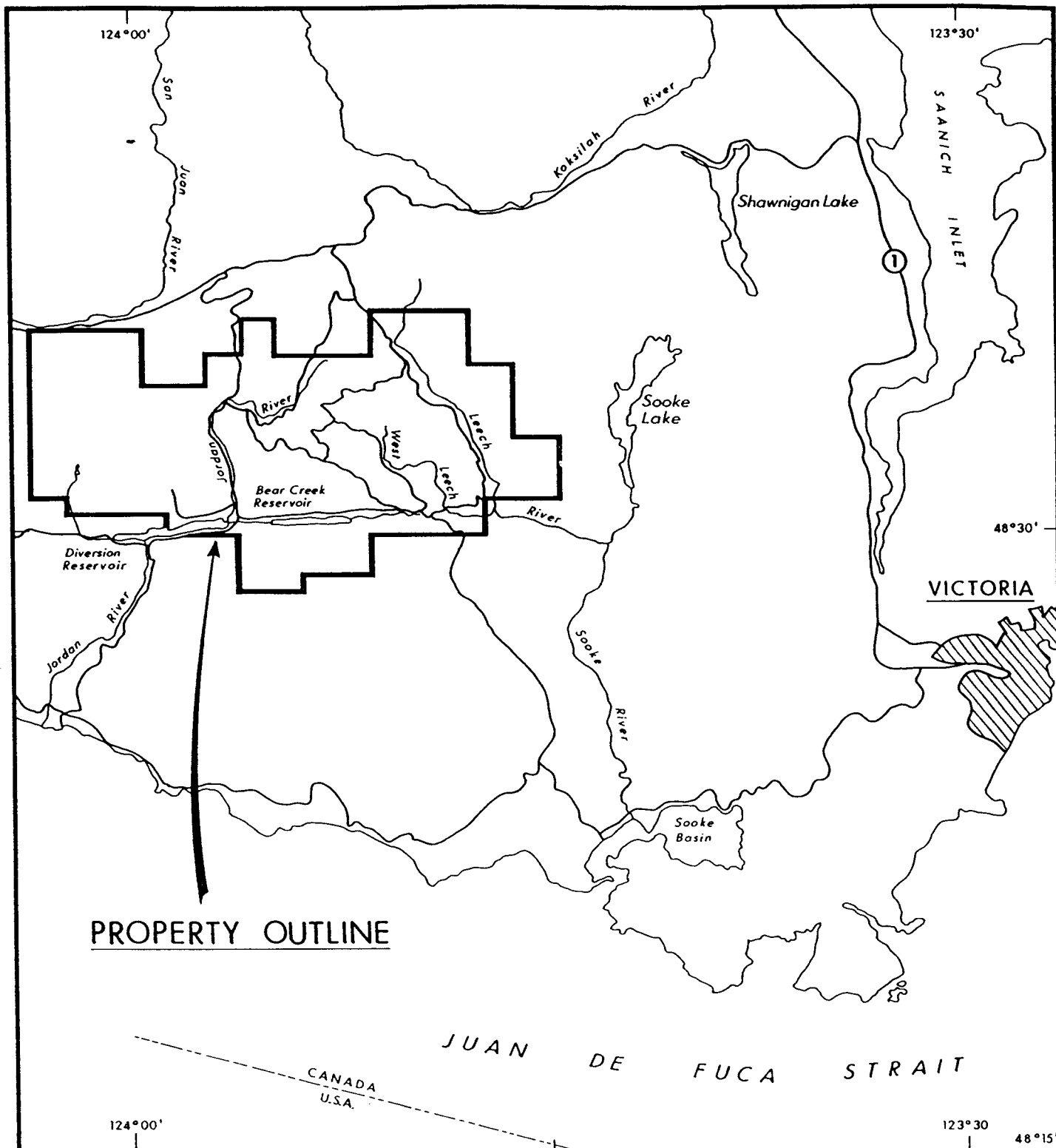
Most of the claim group has been clear cut logged and there is a profusion of second growth in various stages of maturation.



BEAU PRE - VALENTINE
PROJECT LOCATION

Km. 40 20 0 40 Km.

REVISED	BEAU PRE - VALENTINE	
	<u>PROJECT LOCATION</u>	
PROJ No 120	SURVEY BY R.W.	DATE JULY 1989
N.T.S 928/C	DRAWN BY J.S.	SCALE 1:2,000,000
DWG No 1	NORANDA EXPLORATION	
	OFFICE VANCOUVER	



Km. 5 2.5 0 5 Km.

REVISED	BEAU PRE - VALENTINE	
	PROPERTY LOCATION	
PROJ. No. 120	SURVEY BY: R.W.	DATE: JUNE 1989
N.T.S. 928/5,12	DRAWN BY: J. Serwin	SCALE: 1:250,000
DWG. No. 2	NORANDA EXPLORATION	
	OFFICE: VANCOUVER	

1.3 Claims and Ownership

The Wolf and Little Wolf group is made up of the following claims (Figure 3):

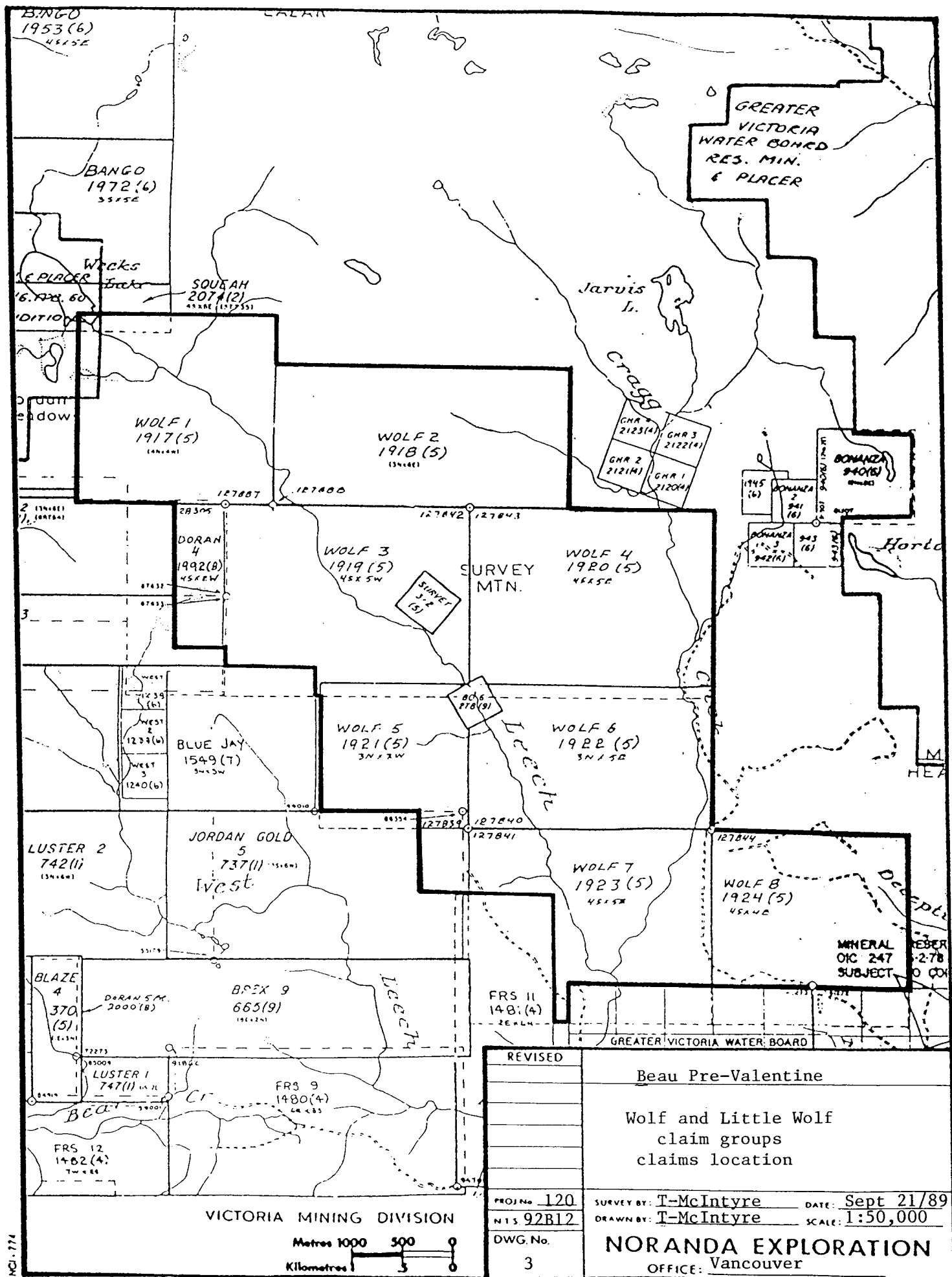
Name	Record #	Units	Previous Due Date	New Expiry Due Date
Doran 4	1992	8	Aug 5/90	Aug 5/91
Wolf 1	1917	16	May 6/90	May 6/91
Wolf 2	1918	18	May 6/90	May 6/91
Wolf 3	1919	20	May 6/90	May 6/91
Wolf 4	1920	20	May 6/90	May 6/91
Wolf 5	1921	9	May 6/90	May 6/91
Wolf 6	1922	15	May 6/90	May 6/91
Wolf 7	1923	20	May 6/90	May 6/91
Wolf 8	1924	16	May 6/90	May 6/91

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

1.4 Previous Work

Discovery of the placer gold in the Leech river gave rise to a gold rush in 1864 to 1865. A tent city with a population of upwards of 4,000 people sprang up at the confluence of the Leech and Sooke Rivers. Placer gold and nuggets ranging from 1/2 to 1 ounce were reported, however, a bedrock source was not found. Total value of the placer gold recovered in this area, in 1866 dollars, is estimated between \$100,000 and \$200,000.

In 1966 Mr. Fred Zorelli discovered native gold in a piece of quartz float on Valentine Mountain. In 1976 Bob Beaupre discovered native gold in a narrow quartz vein called the "A" Vein and began an exploration programme from 1976 to 1983. The programme, centred on Valentine Mountain, involved soil geochemical surveys, trenching, bulk sampling, geological mapping, and drilling. In 1985 Falconbridge Limited conducted a trenching and sampling programme. In 1987 Valentine Gold Corporation conducted bulk sampling and a regional exploration programme on the property.



Previous work on the claim group consists of a 1981 Gulf Minerals Canada program which entailed an airborne electromagnetic and magnetic survey, and a geological and stream sediment sampling survey. As well as, a 1987 Valentine Gold Corporation program composed of geophysical interpretation to identify targets, geological mapping, soil geochemistry, stream sediment sampling and prospecting.

1.5 Work Performed

A reconnaissance style exploration program was carried out in the Survey Mountain area on both the Wolf and the Little Wolf claim groups.

A total of 25 mandays were spent on the Wolf group from June 24 to July 18, 1989. The program consisted of geological mapping, rock and soil geochemical sampling, and stream sediment sampling. A total of 67 rocks, 147 soils, 2 silts and 5 pan concentrate samples were taken.

On the Little Wolf group 12 mandays were spent from June 21-24, 1989. The program entailed geological mapping, rock geochemical sampling, and stream sediment sampling. A total of 41 rocks, 4 silts and 6 pan concentrate samples were obtained during this survey.

The soil and pan concentrate samples were analyzed by Acme Analytical Laboratories and by Noranda's Vancouver Laboratory. The rock samples were analyzed entirely by Acme Analytical Laboratories.

During the third week of August an airphoto study of the Little Wolf group was completed to aid in the geologic interpretation of field mapping.

1.6 Personnel

The work was carried out on the claim groups by T. McIntyre (Regional Property Crew Chief), D. Sharpe (Geologist), B. Singh (Geological Assistant), and I. Saunders (Fieldman). Project supervision and airphoto study was completed by R. Wilson (Project Geologist).

2.0 METHODS

2.1 Geological Mapping

Geological mapping coincident with geochemical sampling was carried out along east-west compassed traverses, and along creeks. The mapping, at a scale of 1:5,000, was carried out with a view to identifying lithology, metamorphism, structure, mineralization, quartz veining and alteration.

2.2 Geochemical Sampling

Geochemical sampling surveys were conducted on the Wolf and Little Wolf group of claims. The surveys consisted of rock chip geochemical sampling, soil sampling, and silt and pan concentrate sampling.

Rock chip samples were obtained from both the Wolf and Little Wolf groups. The samples were taken along the strike of quartz veins, across the width of mineralized zones, and across the width of shear and alteration zones.

Rock samples collected on the Wolf and Little Wolf group each weighing approximately 2 kg, were placed in 6 ml plastic bags and shipped to Acme Analytical Laboratories Limited in Vancouver for analysis.

The samples were dried, sieved to -80 mesh, and subjected to a 95°C solution of 3:1:2 - HCl:HNO₃:H₂O for a period of 1 hour. The samples were analyzed using the 30-element ICP (inductively coupled argon plasma) method and geochemically analyzed for Au by Atomic Absorption determination.

Soil samples obtained from the Wolf claim group consist of samples collected over zones of interest, and along soil geochemical reconnaissance lines.

The soil samples obtained from geochemically anomalous zones were collected from 10 metre spaced soil stations placed over anomalies on Valentine Corporation's 1987 S-2 grid.

Soil samples were taken along east-west compassed traverse lines placed perpendicular to the trend of the Survey Mountain Fault. Each line is 900 m to 1100 m in length with soil stations established every 50 metres.

Samples, weighing approximately 1 kg each, were taken in the B Horizon at an approximate depth of 30 cm, placed into Kraft paper bags, and partially air dried prior to shipment to Noranda's Vancouver laboratory.

Analysis was carried out by Acme Analytical Laboratories Limited using the 30-element ICP method used for rock samples. Noranda's Vancouver laboratory conducted the analysis of Au in soil samples using Atomic Absorption determination. See Appendix I for further details on Noranda's and Acme's laboratory analytical techniques.

Pan concentrate and coincident silt samples were taken at selected locations from tributaries draining into the Leech River and Cragg Creek. The pan samples were obtained by sieving stream sediment down to -6 mesh and subsequently panning this down to a final volume of approximately 20 ml. Silt samples weighing approximately 1 kg were obtained from the same location as the pan sample and placed into Kraft paper bags. Both were given a sample number and partially air dried prior to shipment to Noranda's Vancouver Laboratory.

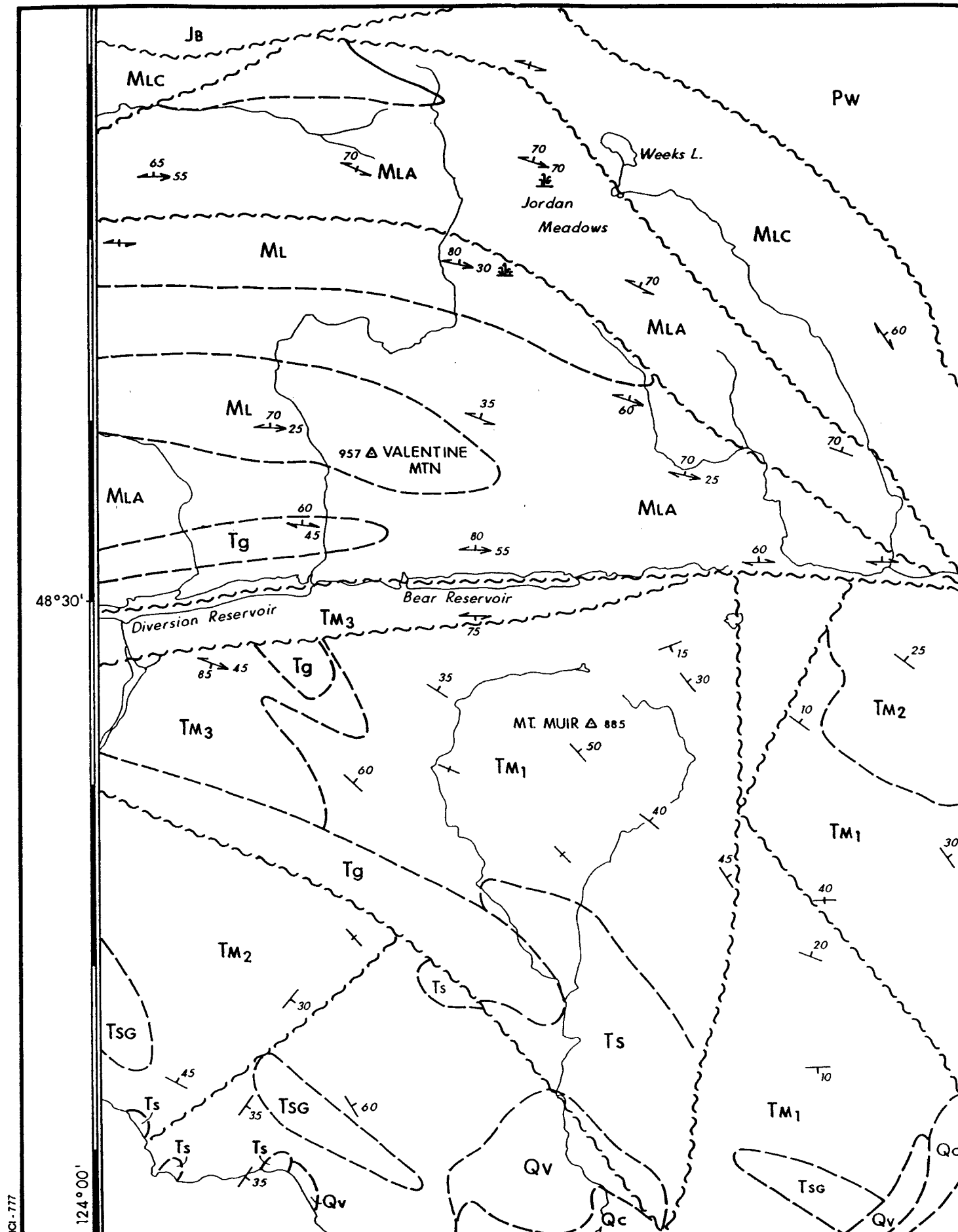
Analysis was carried out by Acme Analytical Laboratories Limited using the 30 element ICP method used for rock samples. Noranda's Vancouver laboratory conducted the analysis of Au in pan and silt samples using Atomic Absorption determination.

Sample type and location, designated by symbol, and sample numbers are displayed on Figures 5, 6, and 7.

3.0 GEOLOGY

3.1 Regional Geology

The southern portion of Vancouver Island is composed of a series of volcanics and sediments, of Mesozoic to Cenozoic Age, which have subsequently been deformed and faulted into a structurally complex stratigraphic sequence (Figure 4).



LEGEND

QUATERNARY RECENT

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

TERTIARY

OLIGOCENE AND/OR MIOCENE

- Ts** SOOKE FORMATION:
conglomerate, sandstone, shale
- Tg** EOCENE (AND OLDER ?)
CATFACE INTRUSIONS:
quartz, diorite, agmatite
- TM** METCHOSIN VOLCANICS:
TM₁ pillow basalt, breccia, tuff;
TM₂ mainly basaltic lava;
TM₃ schistose metavolcanic rock
- Tsg** SOOKE GABBRO:
mainly gabbro

JURASSIC AND CRETACEOUS

UPPER JURASSIC AND LOWER CRETACEOUS

- JKs** SPIEDEN FORMATION:
conglomerate, sandstone, siltstone

TRIASSIC TO CRETACEOUS

LEECH RIVER FORMATION (MLC to ML)

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

JURASSIC

LOWER TO MIDDLE JURASSIC

BONANZA GROUP

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

PENNSYLVANIAN AND MISSISSIPPIAN

LOWER PALEOZOIC (OR YOUNGER ?)

- Pc** COLQUITZ GNEISS:
quartz - feldspar gneiss
- Pw** WARK GNEISS: massive and gneissic
metadiorite, metagabbro, amphibolite.

- Geological boundary, (approximate)
- ~~~~~ Fault, (approximate)
- ↑ Antyclinal axis
- ↓ Synclinal axis
- Bedding, (inclined, vertical, overturned)
- Foliation (inclined, vertical, with plunge
of lineation)
- Gneissosity, (inclined, vertical)

SCALE
1: 100,000

Kilometres 2 1 0 2 4 Kilometres

REVISED	BEAU PRE - VALENTINE	
	REGIONAL GEOLOGY	
PROJ.No. 120	SURVEY BY: J. Serwin	DATE: October 89
N.T.S. 92B/12	DRAWN BY: J. Serwin	SCALE: 1: 100,000
DWG.No. 4	NORANDA EXPLORATION	
	OFFICE: VANCOUVER	

19381

This stratigraphic sequence is represented by the Bonanza Volcanics, Leech River Formation, Metchosin Volcanics, and the Colquitz Gneiss and Wark Diorite.

At the centre of this sequence is the discrete geotectonic Leech River Formation (Grove, 1984). It is a fault bounded complex package of sediments and volcanics which have undergone regional metamorphism to produce metasandstones, metapelites and amphibolites. The metapelites range from phyllite, to biotite schist through to biotite-garnet-andalusite-schist depending upon metamorphic grade. These units have been subsequently intruded by Tertiary granitic and quartz diorite sills.

The age of the Leech River Formation is somewhere between Late Jurassic to Early Cretaceous (Fairchild, 1982). It is thought originally to have been sediments from a Pacific rim trench which have subsequently been deformed and faulted to produce a major, east-west trending, east plunging anticline.

South of the Leech River Formation, separated by the Leech River Fault, lie the Metchosin Volcanics a sequence of basaltic lavas, aquagene breccia, and pyroclastics of Eocene age.

North of the Leech River Formation, separated by the San Juan Fault lie the Karmutsen and Bonanza volcanics. These are represented by massive andesite and dacite tuffs, and flows, and are Paleozoic to Jurassic in age.

To the east, separated by the Survey Mountain Fault, lie the Colquitz Gneiss, and Wark Diorite. These are considered to be basement rocks (Muller, 1977) and Paleozoic to Mesozoic in age.

3.2 Property Geology

The geology of the Wolf and Little Wolf groups consists of the Leech River Formation in the west in contact with, along the Survey Mountain Fault, the Colquitz Gneiss and Wark Diorite to the east (Figure 5).

The Leech River Formation here is represented by metasediments to the west in sharp contact with metavolcanics in the center of the claim group. The contact trends north-northwest and occurs between the Leech River and Survey Mountain Ridge.

The metavolcanic unit is intruded by a small diorite plug in the southeastern portion of the claim group.

The metavolcanic unit in the centre of the claim group is separated from the Colquitz Gneiss and Wark Diorite by the northwest trending Survey Mountain Fault.

The units observed and mapped on the claim groups consist of metasedimentary, metavolcanics and intrusive rocks. The Colquitz Gneiss and Wark Diorite were not observed within the claim groups.

The metasedimentary rocks are composed of metasandstones, phyllite, and chert.

The metasandstone is a fine to medium grained quartz-feldspathic sandstone. In fresh surface it is medium to light grey, weathering to a buff brown color. The unit is massive and often forms prominent cliffs. In some locations it exhibits minor schistosity and occurs as minor laminations within the phyllite.

The phyllite unit is a very fine grained biotitic phyllite. It is strongly fissile, grey-black in color and exhibits a micaceous sheen along cleavage planes. It is somewhat a recessive unit, but makes up the bulk of the metasedimentary units mapped. The chert layer, occurring along the contact of the metasedimentary and metavolcanic units, was observed in outcrop at three separate locations. It is light grey to white in fresh surface weathering to a bleached white color. Typically it is dense, very hard, and microcrystalline with a dull chalky luster. The chert layer is well banded, referred to by Muller as "ribbon chert", and achieves a maximum width of 4.0 metres averaging 0.30 metres.

The metavolcanic sequence is composed of felsic to mafic tuffs, and grades from a fine grained to a lapilli tuff. The lapilli tuff is composed of subangular pyroclastics averaging 2-3 mm in width within a fine grained pelitic matrix.

The felsic tuff is buff brown to pale yellow in color in weathered surface and is strongly foliated.

The mafic tuff is a fine to medium grained mafic equivalent of the felsic tuff described above, and it is generally a grey brown color in weathered surface.

The intrusives occur within the felsic tuff unit and consist of a diorite plug and an aplite dyke.

The diorite plug occurs southeast of Survey Mountain near Cragg Creek. It is speckled white, green, and dark grey in color and is a fine to moderately crystalline, equigranular, diorite body. It is somewhat oblong in shape, compressed at its southwestern edge, and roughly 950 m by 950 m in dimension.

The aplite dyke is white to light grey in color, finely crystalline and quartz rich. It is variable in width but averages 5-7 metres. It is found west of the diorite plug, and trends north-south.

The dominant structural feature on the Wolf and Little Wolf groups is the foliation. Pervasive throughout the phyllite unit it trends northwest and dips moderately to steeply to the northwest.

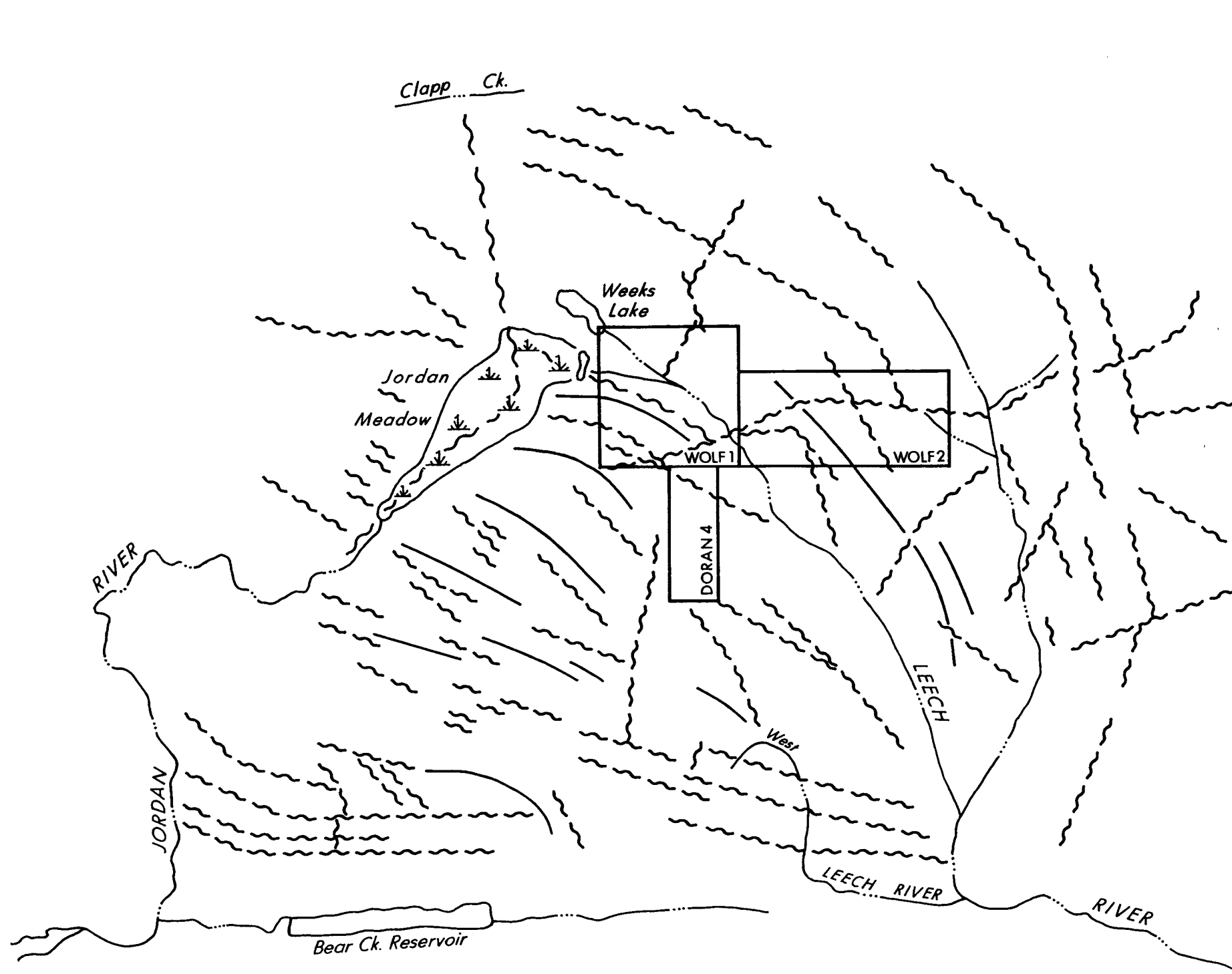
The contact between the metasediments and metavolcanics is well defined and trends north-northwest. The metavolcanic unit is strongly foliated, trending northwest and dipping steeply to the northeast. The strong foliation is due to its close proximity to the Survey Mountain Fault. The Survey Mountain Fault is a northwest trending shearzone which shows up as the Cragg Creek lineament.

3.3 Airphoto Interpretation

To aid in the geologic interpretation of the Little Wolf Group, a photogeological study was completed using two scales of aerial photography. The airphotos employed for this study are shown in Table 2 and the interpretation is presented as Figures 9 and 10.

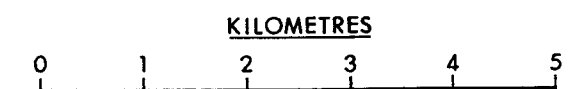
TABLE 2: Little Wolf Group Airphotos

<u>Airphoto Line</u>	<u>Photo #</u>	<u>Scale</u>
BC84026	258	Approx. 1:22,880
	259	
	260	
BC87024	117	Approx. 1:72,580
	116	
	115	



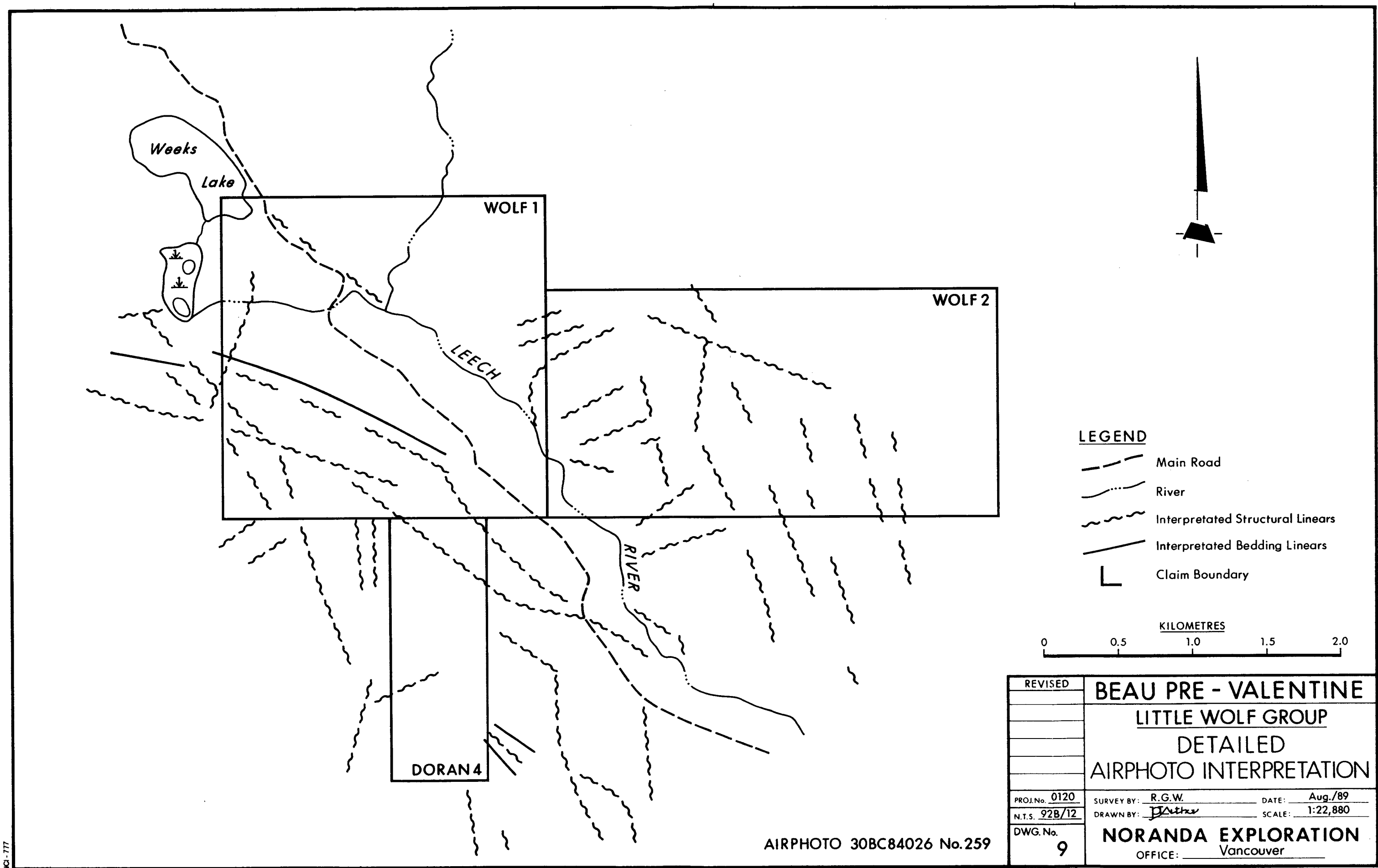
LEGEND

- River or Creek
- Interpretated Structural Linears
- Interpretated Bedding Linears
- Claim Boundary



REVISED	BEAU PRE - VALENTINE		
	LITTLE WOLF GROUP		
	REGIONAL		
	AIRPHOTO INTERPRETATION		
PROJ. No. 0120	SURVEY BY: R.G.W.	DATE: Aug./89	
N.T.S. 92B/12	DRAWN BY: <i>Pathe</i>	SCALE: 1:72,580	
DWG. No. 8	NORANDA EXPLORATION		
	OFFICE: Vancouver		

AIRPHOTO 15BC87024 No.116



REVISED	BEAU PRE - VALENTINE		
	LITTLE WOLF GROUP		
	DETAILED		
	AIRPHOTO INTERPRETATION		
PROJ.No. 0120	SURVEY BY: R.G.W.	DATE: Aug./89	
N.T.S. 92B/12	DRAWN BY: <i>[Signature]</i>	SCALE: 1:22,880	
DWG.No. 9	NORANDA EXPLORATION		
	OFFICE: Vancouver		

Two airphoto scales were employed to investigate regional and local structural features. Regional structural trends are more apparent from the smaller scale 1:72,580 airphotos whereas in large scale 1:22,880 airphotos gross regional trends are lost but local features such as bedding planes are more apparent. Regional airphoto interpretation is presented on Figure 8 and detailed airphoto interpretation is displayed on Figure 9.

The Little Wolf Group area is characterized by a broad, flat, wetland (Jordan Meadows) which is drained to the SW by the Jordan River, SE by the Leech River and N by tributaries of Clapp Creek. Few linear features are visible within the Little Wolf Group, hence it was necessary to expand the regional interpretation in an attempt to extrapolate features into the claim group.

The area investigated is roughly square in shape. Regional (1:72,580) examination extended from the San Juan River in the North to Bear Creek Reservoir/Leech River in the South, and from Jordan River in the west to Cragg Creek in the east. Local (1:22,880) examination concentrated on the area within the Little Wolf Claim Group.

Regionally, lineations are semi-spherical, cut off to the south by the east-west Leech River Fault and extending beyond the limit of survey to the west. The shape outlined by lineations may also be described as rollfront as is sometimes found adjacent to lateral faulting. No lateral motion on the Leech River Fault has been documented and a ground study would be required to provide evidence for this theory. Weak radial faulting nevertheless accompanies this spherical pattern.

Two forms of linears were identified, resistive ridge forming trends and recessive gulley trends. Both resistive and recessive directions are parallel and are likely caused by a series of hard and soft lithologies which may be folded repetitions. The trends range from NW to NNW, except in the far east of the study area. The eastern area has trends ranging from N to NNE.

All linear trends pass through Jordan Meadows which itself appears to be at the junction of three independent linears with directions NNW, SW, and SE. A complex structural setting for bedrock lithologies is envisioned beneath the meadows and it is interesting to note that this is a possible source area for Leech River placer gold. Heavy mineral concentrate (pan) samples immediately downstream from the meadows in the Leech River contain highly anomalous gold values. An area of anomalous Au soil geochemistry was located within the Leech Claim Group on a tributary of the Jordan River at the SE edge of the meadows. No source rocks for either anomaly was discovered. It is suggested that the meadows area contains potential for hosting gold mineralization.

Locally the Little Wolf Group exhibits two main linear trends, NNW and SE. The Wolf 2 claim exhibits mainly NNW linears cut by occasional NW linears. NNW trends are postulated to be bedding planes with steep easterly dips. The western edge of the claim displays SW trending gulleys. These appear to reflect nothing more than runoff channels evidenced by trends that do not continue past the ridge crest.

The Wolf 1 claim is dominated by SE linears. This includes a minimum of one ridge/valley pair reflecting possible resistive/recessive lithologies. The straight strike across topographical changes suggests a steep dip. The claim covers a relatively flat portion of the Jordan Meadows and few other details can be seen at the local level.

The Doran 4 claim occupies a rolling plateau displaying limited linear features. Centrally the claim contains a swamp (meadow) with a NE trend rarely seen elsewhere within the study area. The northern tip of the claim is cut by a long NW linear displaying a moderate NE dip. No other features of note exist within the claim area.

The Little Wolf claim group occupies the eastern side of the Jordan Meadows and contains a limited number of airphoto trends. Evidence for bedding suggests a NW strike on the Wolf 1 claim and NNW strike on the Wolf 2 claim. No evidence of bedding was seen on the Doran 4 claim. While complex structure is envisioned centrally for Jordan Meadows, the Little Wolf claim group on the eastern side is thought to be structurally simple. Economically, of the Little Wolf Group, the Wolf 1 claim holds the most potential as a source area for the anomalous Leech River heavy mineral concentrate (pan) samples.

3.4 Mineralization and Alteration

Quartz veins, discontinuous quartz lenses, quartz sweats and minor quartz stockwork occur throughout the metasedimentary unit.

Quartz veins are parallel to the foliation and range in size from 5 mm to 0.40 metres. They are composed of a white bull quartz to semi-translucent quartz with subhedral to anhedral crystals. Sulfide mineralization is a rare occurrence although the quartz veins generally exhibit limonitic or hematitic staining. Visible sulfides within quartz veins consist of a trace of pyrite and/or pyrrhotite.

Alteration within the metasedimentary unit consists chiefly of minor amounts of chlorite and sericite within the quartz veins, silicification of the wall rock in the vicinity of quartz veins, and gouge material within shear and fault zones.

The metavolcanic unit is typically composed of disseminated and localized sulfide mineralization. The most pervasive sulfides occur along the Survey Mountain Ridge where the sulfide content may be as high as 7% and consist of pyrite, pyrrhotite, and trace amounts of chalcopyrite. There is a notable increase in the sulfide content of the unit at the intersection of foliation and joint planes near Survey Mountain Ridge, and near the contact with the diorite plug.

Alteration within the metavolcanic unit consists of minor amounts of chlorite, siliceous zones, and a hydrothermal alteration zone occurring east of Survey Mountain. The alteration zone occurs within the felsic tuff unit and contains chlorite, montmorillonite and amorphous clay. The zone averages 3.0 metres in width.

4.0 GEOCHEMICAL RESULTS

Geochemical sampling surveys conducted on the Wolf group included regional rock chip sampling, soil sampling, and silt and pan concentrate sampling.

See Figure 6 & 7 for sample locations, Figures 5a, 6a, & 7a for Au/As geochemical results, and Figures 5b, 6b, & 7b for Cu, Zn, Pb, and Ag geochemical results.

Continuous rock chip sampling and soil geochemical sampling was carried out over a number of zones of interest. The zones targeted for geochemical sampling comprise the Survey Mountain gossan zone, Berryland zone, B & D zone, Glenncoee zone, Glennlyon zone, and the Survey Mountain Fault. For the Berryland zone, B & D zone, Glenncoee zone and Glennlyon zone results, see Figures 10a & 10b for sample locations, Figures 11a & 11b for Au & As geochemical results, and Figures 12a & 12b for Cu, Zn, Pb, and Ag results.

Continuous rock chip samples taken across sulfide zones within the Survey Mountain gossan zone failed to produce Au or Cu values significantly above background levels.

The results of continuous rock chip samples obtained from a gossan zone in a quarry located along the western edge of the Berryland zone produced only background levels for Au and Cu. Soil sampling over the zone returned geochemical highs of 280 ppb and 155 ppb for Au, but only background levels for Cu.

Results of the geochemical sampling over the B & D zone consist of background levels for Au and Cu in rock chip samples, and 121 ppb and 46 ppb Au, but only background Cu levels in soil samples.

Rock chip samples and soil samples obtained from the minigrid over the Glenncoee zone failed to produce significant Au or Cu values.

The results of the soil sampling over the Glennlyon zone produced a single geochemical high of 760 ppb Au, but only background Cu levels.

Results of the geochemical sampling over the Survey Mountain Fault consist of background Au and Cu levels in rock chip samples, and Au and Cu values only marginally elevated above background levels in soil samples.

Pan concentrate samples obtained from the Wolf group produced three anomalies. A pan sample taken from the Leech River returned 5000 ppb Au (H58366). To the west of this site a pan sample obtained from Highgrade Creek, produced 760 ppb Au (H58367). A pan sample taken from Dalriada Creek 340 metres upstream from H58366 returned 1050 ppb Au (H58365). Rock chip sampling carried out in this area produced only background Au levels.

For the Wolf group the only rock sample to return values above background levels was one taken along the metasediment/metavolcanic contact which produced 12 ppb Au (R59383).

Geochemical sampling surveys conducted on the Little Wolf group comprise regional rock chip sampling, and silt and pan concentrate sampling.

Results of the continuous rock chip sampling produced one geochemical high of 111 ppb Au (R59360). A grab sample taken from rock float found on the Survey Mountain access road produced 628 ppm Cu (R59361). A grab sample obtained from a silicified and mineralized zone in Last Creek produced 304 ppm Pb, 480 ppm Zn, 3.3 ppm Ag and 2 ppb Au (R44486). The zone contains 2-4% sulfides and occurs in felsic lapilli tuff.

Pan concentrate samples only managed to produce geochemical highs of 390 ppb Au (H58396) obtained from Trickle Creek, and 310 ppb Au (H58394) obtained from Glenndock Creek.

For the Wolf and Little Wolf groups as a whole the results of rock chip samples obtained from quartz veins, lenses and stockworks, shear and fault zones, sulfide zones, and a hydrothermal alteration zone failed to produce significant Au or Cu values.

Soil samples taken over targeted zones of interest managed to produce threshold Au values but nothing significantly anomalous.

The results of the pan concentrate samples obtained from the Leech River and from Dalriada creek seem to suggest that the Au mineralization may originate at the headwaters of the Leech River, or that it may originate within a unit located to the northwest of the river.

5.0 CONCLUSIONS

The geology of the Wolf and Little Wolf groups consists of the Leech River Formation in the west in contact with, along the Survey Mountain Fault, the Colquitz Gneiss and Wark Diorite to the east.

The western portion of the claim group consists of metasediments with the center composed of metavolcanics, and both of these units comprise the Leech River Formation.

The metavolcanics unit is intruded by a small diorite plug in the southeastern portion of the claim group.

The contact between the metasediments and the metavolcanics trends north-northwest and occurs between the Leech River and Survey Mountain Ridge.

The Survey Mountain Fault is an northwest trending shear zone and shows up as the Cragg Creek lineament.

Quartz veins, discontinuous quartz lenses, quartz sweats and minor quartz stockwork occur throughout the metasedimentary unit.

The metavolcanic unit is typified by disseminated and localized sulfides are found along Survey Mountain Ridge. The sulfide content here is as high as 7% and consists of pyrite, pyrrhotite, and trace amounts of chalcopyrite.

Results of rock chip sampling carried out on the Wolf and Little Wolf groups failed to produce significant Au or Cu mineralization. Soil geochemical sampling carried out over targeted zones of interest managed to produce threshold Au values but nothing that could be considered significantly anomalous.

Pan concentrate samples obtained from the Leech River and from Dalriada Creek returned values of 5000 ppb Au (H58366), and 1050 ppb Au (H58365) respectively.

A possible source of the Au mineralization may be the headwaters of the Leech River or a unit located northwest of the Leech River.

6.0 REFERENCES

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- Grove, E.W. (1984) : Geological Report and Work Proposal on the Valentine Mountain Property for Beau-Pre Explorations Ltd., N.T.S. 92B/12W, Victoria Mining Division.
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- Malczak, J. (1982),
Vergos, S., Dvorak, Z.: A Combined Report on Geological, Geochemical and Airborne Geophysical Surveys on the Leech River Project. Victoria Mining Division. N.T.S. 92B/12W 92B/12E. Gulf Minerals Canada Limited.

APPENDIX I
ANALYTICAL METHOD DESCRIPTIONS FOR
GEOCHEMICAL ASSESSMENT REPORTS

ANALYTICAL METHOD DESCRIPTIONS FOR GEOCHEMICAL ASSESSMENT REPORTS

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

Preparation of Samples:

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

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

Analysis of Samples:

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

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

Elements Requiring Specific Decomposition Method:

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

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

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

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

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

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

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

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

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

LOWEST VALUES REPORTED IN PPM:

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

EJvL/ie

**ACME ANALYTICAL LABORATORIES LTD.**

Assaying & Trace Analysis

852 E. Hastings St., Vancouver, B.C. V6A 1R6

Telephone: 253-3158

GEOCHEMICAL LABORATORY METHODOLOGY & PRICES - 1989.**Sample Preparation**

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

Sample Storage

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

Pulps are retained for one year and discarded unless claimed.

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

Supplies

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

Conversion Factors

1 Troy oz	= 31.10 g
1 oz/ton	= 34.3 ppm = 34.3 g/tonne = 34,300 ppb
1 t	= 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 \$1.00¹¹

Group 1B - Hydride generation of volatile elements and analysis by ICP. This technique is unsuitable for sample grading over .5% Ni or Cu. Cu Massive Sulphide.

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

First Element \$4.75

All Elements \$5.50

Group 1C - Hg

Detection limit - 5 ppb

Price \$2.50

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

Group 1D - ICP Analysis

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

Any 2 elements \$3.25

5 elements 4.50

10 elements 5.50

All 30 elements 6.25

Group 1E - Analysis by ICP/MS

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

All Elements 15.00

(minimum 20 samples per batch or \$15.00 surcharge)

Hydro Geochemical Analysis

Natural water for mineral exploration

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

F by Specific Ion Electrode	-	detection	20 ppb	\$3.75
U by UAL3	-	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



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Telephone: 253-3158

Group 2 - Geochemical Analysis by Specific Extraction and Instrumental Techniques

Element	Method	Detection	Price
Barium	0.100 gram samples are fused with .6 gm 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

Element	Method	Detection	Price
Au*	10.0 gram samples are ignited at 600 deg.C, digested with hot aqua regia, extracted by MIBK, analysed by graphite furnace AA.	1 ppb	\$ 4.50
Au** Pd, Pt, Rh	10.0 gram samples are fused with a Ag inquart with fire assay fluxes. After cupulation, the dore bead is dissolved and analysed by AA or ICP/MS.	1 ppb 2 ppb	6.00 - first element 2.50 - per additional 10.00 - for All 4
	Larger samples - 20 gms add \$1.50 30 gms add \$2.50		

Group 4A - Geochemical Whole Rock Assay

0.200 gram samples are fused with LiBO2 and are dissolved in 100 mls 5% HNO3. SiO2, Al2O3, Fe2O3, CaO, MgO, Na2O, K2O, MnO, TiO2, P2O5, Cr2O5, LOI + Ba by ICP.

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

Group 4B - Trace elements

Element	Detection	Analysis	Price
Co, Cu, Ni, Zn, Sr	10 ppm	ICP	\$3.75 first element or
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

APPENDIX II
ROCK SAMPLE DESCRIPTIONS

NORANDA EXPLORATION COMPANY, LIMITED

PROJECT # 120

N.T.S. 92B/12

LAB REPORT # _____

DATE June/July'89

PROJECT BEAU PRE VALENTINE (WOLF GROUP)

ROCK SAMPLE REPORT

[illegible]

NORANDA EXPLORATION COMPANY, LIMITED

PROJECT # 120

N.T.S. 92B/12

LAB REPORT # _____

DATE June/July'89

PROJECT BEAU PRE VALENTINE (WOLF 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	
R44500	At end of North Main on road opposite lake, ~100m west of Valentine 250, 225 ppb Au rock samples. 1.0m chip of metasand-stone and vuggy sericitized quartz veining, both at 294°/63°(RH). Veining ~15-17%.	-	Chip	1.0	23	9	40	0.1	8	2	Sharpe
R58533	230m east of R58532b bearing 130°. 1.0m chip of metasand-stone and quartz veining/sweats both at 305/64°. Veining locally gossanous, vuggy and sericitized ~10-20%. On strike with Valentine 250/225 ppb Au rocks.	-	Chip	1.0	14	3	25	0.1	10	1	Sharpe
R58534	90m below upper road, due east of Creek with 640 ppb pan. Grab of milky/clear quartz veining and silicified biotitic phyllite. Veining parallel foliation at 255°/35°, at ~25% of outcrop.	-	Grab		10	9	55	0.1	3	3	Sharpe
R58535	Up 650 ppb Au Cr. mouth. 1.0m chip of 5-7cm wide quartz vein and biotitic phyllite at 330°/69°.	-	Chip	1.0	11	12	36	0.1	3	2	Sharpe

NORANDA EXPLORATION COMPANY, LIMITED

PROJECT # 120

N.T.S. 92B/12

LAB REPORT # _____

DATE June/July'89

PROJECT BEAU PRE VALENTINE (WOLF GROUP)

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% Sulph.	TYPE	WIDTH (m)	Cu ppm	Pb ppm	Zn ppm	Ag ppm	As ppm	Au ppb		SAMPLED BY
R58536 (con't)	waters at 1100N S-2 Grid. 1.0m chip of mineralized silicified biotitic phyllite at 325°/ 66° (RHR), quartz sweats ~10-15% parallel foliation. Mineralized 4-5% with Po 3-4%, Py Tr-1%, Cpy Tr-1%. Very high for this area, mineralization concentrated in bands parallel foliation.											
R58537	65m up creek from R58536. 1.0m chip of biotite phyllite + vuggy quartz sweats.	-	Chip	1.0	25	5	106	0.1	12	1		Sharpe
R58538	5m up creek from R58537. 0.5m chip of 0-20cm wide quartz vein and biotite phyllite. Vein coarsely crystalline, vuggy, and mineralized with botroical hematite 3-4% and Po 1-2%. Phyllite 283°/78°, vein 285°/65°.	3	Chip	1.0	15	2	18	0.1	2	1		Sharpe
R58539	25m up creek from R58538. 1m chip of 1.5m wide quartz vein and felsic tuff. Sample from mid vein into tuff. Vein @ 236°/22°, tuff @ 118°/67°.	-	Chip	1.0	12	2	51	0.1	8	1		Sharpe

NORANDA EXPLORATION COMPANY, LIMITED

PROJECT # 120

N.T.S. 92B/12

LAB REPORT # _____

DATE June/July'89

PROJECT BEAU PRE VALENTINE (WOLF GROUP)

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% Sulph.	TYPE	WIDTH (m)	Cu ppm	Pb ppm	Zn ppm	Ag ppm	As ppm	Au ppb		SAMPLED BY
R58530(con't)	Leech R. 1m chip of silicified mineralized gossanous biotitic phyllite, 336°/ 78°. Py + Po 1-2%.											
R58531	210m south on upper road from intersection at LCP separating Wolf 3/4. 1.0m chip along 5-10cm wide quartz veining 185°/ 53, wall rock lapilli tuff included. Py+Po 1-2%.	1-2% Py+Po	Chip	1	30	2	23	0.1	2	2		Sharpe
R58532	25m S. of R58530 on road, 0.5m chip across fault gouge and breccia in lapilli tuff 237°/ 80°. Py+Po+Cp 4-5%.	4-5 Py+Po+Cp	Chip	0.5	56	8	88	0.1	2	2		Sharpe
R58516	Wolf 1835N 1040E (S-2 Grid); Intrusive, very strongly limonitic, up to 1% Py, Po, Aspy some hematite, strong Mn stain, minor Qtz veining, strongly chloritic chip 0.20m.	1	Chip	0.20	149	2	69	0.1	5	1		Singh
R58517	Wolf, 1834N 1040E (S-2 Grid) Same as R58516 but stronger limonitic staining, possible leaching and secondary enrichment.	1	Chip	0.20	72	7	87	0.1	2	3		Singh
R58536	At 480m up Creek with head-	4-5	Chip	1.0	99	2	61	0.1	6	4		Singh

NORANDA EXPLORATION COMPANY, LIMITED

PROJECT # 120

N.T.S. 92B/12

LAB REPORT # _____

DATE June/July'89

PROJECT BEAU PRE VALENTINE (WOLF GROUP)

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% Sulph.	TYPE	WIDTH (m)	Cu ppm	Pb ppm	Zn ppm	Ag ppm	As ppm	Au ppb		SAMPLED BY
R44498 (con't)	mineralized gossanous lapilli tuff, highly fractured and recessive. Fractured @ 146°/76° (RHR) and 216°/60°. Pyrite 1-2%.		Grab									
R44499	30m S of end of road which runs through 200N 240E. Grab of aplite dyke and lapilli tuff. Dyke is internally zoned due to successive intrusions 30cm wide at this point, and mineralized with Py 2-3%, orient. 025°/62°.	2-3	Grab		39	3	85	0.1	2	1		Sharpe
R58528	135m N of first intersection to north of bridge on W. Leech R. 1m chip of fault gouge and quartz infilling in lapilli tuff. Gouge is ~2cm wide hematitic argillac with sporadic vuggy clear quartz in plain of fault 072°/ 88° (RH).	-	1m Chip		255	12	38	0.1	4	3		Sharpe
R58529	45m @ 1350 from above intersection. Silicified brecciated and mineralized lapilli tuff. Quartz veining sporadic 10-12%. Trace Py+Po.	Tr Py+Po	Grab		32	7	21	0.1	2	4		Sharpe
R58530	In river bed at bridge on W.	1-2% Py+Po	Chip	1	24	9	70	0.1	8	1		Sharpe

NORANDA EXPLORATION COMPANY, LIMITED

PROJECT # 120

N.T.S. 92B/12

LAB REPORT # _____

DATE June/July '89

PROJECT BEAU PRE VALENTINE (WOLF GROUP)

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% Sulph.	TYPE	WIDTH (m)	Cu ppm	Pb ppm	Zn ppm	Ag ppm	As ppm	Au ppb		SAMPLED BY
R59392 (con't)	finely crystalline with 1-2% finely disseminated Po.											
R58258	Bob & Dave Zone - Aplite Dyke with 1-2% Py finely disseminated throughout a gossanous zone in center of the Dyke.	2	Chip	0.50								McIntyre
R59393	Glennduinemor Creek, East ridge - Gossanous Felsic Tuff with 1% Py. Disseminated throughout	1	Chip	0.50	41	3	97	0.2	7	1		McIntyre
R59394	Glennduinemor Cr, East ridge - Felsic Tuff, minor gossan 1% Py 1% Po (Py stringers, Po finely disseminated).	2	Chip	0.30	70	9	76	0.3	5	1		McIntyre
R59395	Glennduinemor Cr, East ridge - 2.0m Gossanous zone. Silicified Argillite? or v. fine grained mafic tuff?	1	Chip	1.0	154	18	104	0.2	9	1		McIntyre
R59396	Glennduinemor Cr, East ridge - Qtz vein, vuggy with Druse Qtz and white anhedral semi-transparent Qtz.	-	Chip	0.50	15	2	10	0.1	2	1		McIntyre
R44497	At 220N 240E of S-2 grid. Grab of mineralized gossanous Lapilli tuff, aplite dyke. Contact @ 250'. Trace pyrite.	Tr Py	Grab		42	7	86	0.1	2	1		Sharpe
R44498	40m NE of 220N 260E. Grab of	Tr Py	Random		35	8	84	0.2	2	1		Sharpe

NORANDA EXPLORATION COMPANY, LIMITED

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LAB REPORT # _____

DATE June/July'89

PROJECT BEAU PRE VALENTINE (WOLF GROUP)

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% Sulph.	TYPE	WIDTH (m)	Cu ppm	Pb ppm	Zn ppm	Ag ppm	As ppm	Au ppb		SAMPLED BY
R59384	Glencoe Zone - Gossanous fracture plane within Felsic Tuff 1-2% Py.	1-2	Chip	0.50	146	4	43	0.1	2	1		McIntyre
R59385	Glencoe Zone - Felsic Tuff Hanging wall containing 1-2% Py disseminated.	1-2	Chip	0.50	1989	6	63	0.2	2	1		McIntyre
R59386	Glencoe Zone - Diorite Footwall containing a trace of sulfides & Qtz.	Tr	Chip	0.50	108	9	71	0.2	5	1		McIntyre
R59387	Glenlyon - Aplite Dyke, Qtz rich limonitic & hematitic staining.	-	Chip	1.50	24	9	20	0.1	2	1		McIntyre
R59388	Gate Rd - Silicified felsic Tuff minor Py, limonitic & hematitic staining.	Tr	Chip	0.50	19	5	21	0.1	2	1		McIntyre
R59389	Troll Bridge - Shear zone - Argillite with 1% Py. Very fine grained & silicified.	1	Chip	0.30	57	11	68	0.1	2	1		McIntyre
R59390	Glenn fiddich Creek - Felsic Tuff with 1% Po, TrPy. Shear parallels Survey Mtn Fault.	>1	Chip	0.30	48	9	61	0.1	4	2		McIntyre
R59391	Glenn fiddich Creek - Felsic Tuff with 1-2% finely disseminated Po, parallels Survey Mtn fault.	2	Chip	0.30	56	16	78	0.1	6	2		McIntyre
R59392	Glenn fiddich Creek - Diorite -	2	Chip	0.50	115	2	74	0.1	2	1		McIntyre

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LAB REPORT # _____

DATE June/July'89PROJECT BEAU PRE VALENTINE (WOLF GROUP)ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% Sulph.	TYPE	WIDTH (m)	Cu ppm	Pb ppm	Zn ppm	Ag ppm	As ppm	Au ppb		SAMPLED BY
R59374 (con't)	Mn stain, with vuggy Qtz, & shear zone gouge (brown clays).											
R59375	McIntyre Traverse; Gossanous Tuff, o/c <1%Po, 1%Py + 1% Marchasite, chl & limonite + silica.	<3	Chip	0.30	36	7	107	0.1	2	2		McIntyre
R59376	McIntyre Traverse; Tuff-minor shear 1% finely disseminated Po	1	Chip	0.50	60	4	88	0.1	2	2		McIntyre
R59377	McIntyre Traverse; Gossanous Tuff with 2cm Qtz stringers Tr Py, Mn stain.	Tr	Chip	0.50	22	2	41	0.1	2	3		McIntyre
R59378	McIntyre Traverse; Tuff with 1% Po disseminated throughout.	1	Chip	1.0	39	2	73	0.1	2	4		McIntyre
R59379	McIntyre Traverse; Tuff with limonitic Qtz veins & Mn staining occurs in Rd cut.	-	Chip	0.50	17	5	47	0.1	3	5		McIntyre
R58511	Highgrade Crk; Siliceous phyllite with Qtz veining. Qtz is sugar Qtz with some limonitic staining, some Mn.	-	Grab	-	45	4	73	0.4	8	1		Singh
R58512	Highgrade Crk (leech river) Shear zone in creek bed. Mod - strongly limonitic pure milky High T Qtz.	-	Chip	0.30	37	6	21	0.1	2	4		Singh
R59383	700N 585W S-2 Grid - Silicified Phyllite along contact with Felsic Tuff.	-	Chip	0.50	99	12	218	0.1	2	12		McIntyre

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PROJECT BEAU PRE VALENTINE (WOLF GROUP)

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% Sulph.	TYPE	WIDTH (m)	Cu ppm	Pb ppm	Zn ppm	Ag ppm	As ppm	Au ppb		SAMPLED BY
R44496(con't)	quartz sweat.											
R58513	Highgrade Crk. Graphitic phyllite in creek bed (Leech river bed) tr Aspy. 2m away from qtz vein.	Tr	Chip	1.0	52	10	100	0.1	2	6		Singh
R58514	Highgrade Crk; strongly sheared graphitic phyllite. Some Qtz micro-veining tr Aspy.	Tr	Chip	0.50	26	16	108	0.2	4	4		Singh
R58515	Highgrade Crk; Graphitic phyllite <1%. Qtz micro veining. Tr Aspy.	Tr	Chip	0.50	34	12	110	0.2	8	1		Singh
R59380	McIntyre W2 Creek - Qtz vein in phyllite, vuggy rotten bull qtz 1.0m x 0.10m.	-	Chip	0.10	26	23	66	0.1	6	5		McIntyre
R59381	McIntyre W2 Creek - Qtz lense in Phyllite limonitic Bull Qtz parallel to foliation.	-	Chip	0.50	43	6	53	0.1	4	1		McIntyre
R59382	McIntyre W2 Cr - Qtz vein, limonitic Bull Qtz, vuggy 1.0mX0.40.	-	Chip	0.40	45	11	65	0.3	9	2		McIntyre
R59372	McIntyre Traverse; Gossanous Tuff with 2-3% sulfides (Po). Subangular boulder.	3	"float" Chip	-	48	6	97	0.3	6	6		McIntyre
R59373	McIntyre Traverse; Tuff; sheared with 2% Po finely disseminated & in stringers.	2	Chip	1.0	43	6	88	0.3	4	4		McIntyre
R59374	McIntyre Traverse; Tuff, sheared	-	Chip	0.45	120	10	76	0.1	7	7		McIntyre

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PROJECT BEAU PRE VALENTINE (WOLF GROUP)

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% Sulph.	TYPE	WIDTH (m)	Cu ppm	Pb ppm	Zn ppm	Ag ppm	As ppm	Au ppb		SAMPLED BY
R44492(con't)	311°/83°. Py 3-5%.											
R44493	At 71m down creek from road at . Grab of silicified mineralized biotite phyllite at 329°/53°. Quartz sweats from 1-10cm wide vuggy and hematitic, parallel foliation. Py + Cpy 2-3%.	2-3 Py+Cpy	Grab		16	6	54	0.1	9	4		Sharpe
R44494	At 190m down creek. Grab of silicified biotitic phyllite & quartz sweats (locally gossanous 40% of rock).	-	Grab		41	8	114	0.1	12	1		Sharpe
R44495	20m up from Cr. to South as replotted on map (or 130m N from Cr. flowing from west). Grab of gossanous quartz sweat and biotitic phyllite sweats make up 5-6% of rock are gossanous, vuggy, sericitic, and parallel foliation at 314°/71°.	-	Grab		35	19	73	0.2	3	2		Sharpe
R44496	230m up Cr. flowing from west. Grab of highly silicified sericitized biotitic phyllite at 300°/52°. Wall rock of previously sampled 0.5m wide	-	Grab		43	5	29	0.1	3	4		Sharpe

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PROJECT BEAU PRE VALENTINE (WOLF GROUP)

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% Sulph.	TYPE	WIDTH (m)	Cu ppm	Pb ppm	Zn ppm	Ag ppm	As ppm	Au ppb		SAMPLED BY
R44488	At 0m on E-W traverse starting at approx. E441500m and road, just inside claim boundary 25m. Random grab of quartz vein and silicified lapilli tuff. Quartz vein is vuggy, coarsely crystal-line and locally gossanous at 002°/16°. Tuff is silicified and slightly mineralized with Pyrite 1-2%.	1-2 Py	Random Grab		38	3	16	0.3	7	5		Sharpe
R44489	At 80m on E-W traverse. Grab of massive mineralized silicified lapilli tuff. Py+Po 2-3%.	2-3 Py+Po	Grab		22	2	91	0.2	24	2		Sharpe
R44490	At 160m on E-W traverse. Grab of hematite stained mineralized silicified lapilli tuff at 313°/86°. Quartz sweats 2-3%, hematitic and gossanous. Py 1-2%.	1-2 Py	Grab		67	6	91	0.2	11	3		Sharpe
R44491	At road intersection between line 600N and 500N, east end of S-1 Grid. Grab of rock as R44490 orientation at 311°/88°.	1-2 Py	Grab		45	4	92	0.3	4	3		Sharpe
R44492	At 125m south on road from R44492, by 40 ppb Au soil anomaly. Grab of silicified mineralized lapilli tuff at	3-5 Py	Grab		18	5	62	0.1	13	1		Sharpe

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DATE June '89

PROJECT BEAU PRE VALENTINE (LITTLE WOLF GROUP)

ROCK SAMPLE REPORT

[illegible]

NORANDA EXPLORATION COMPANY, LIMITED

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N.T.S. 92B/12

LAB REPORT # _____

DATE June '89

PROJECT BEAU PRE VALENTINE (LITTLE WOLF GROUP)

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% Sulph.	TYPE	WIDTH (m)	Cu ppm	Pb ppm	Zn ppm	Ag ppm	As ppm	Au ppb		SAMPLED BY
R58501(con't)	Quartz micro veining. 1% Aspy + Py both disseminated and in stringers. 0.50m chip.											
R58502	BS Trav; Moderate to strongly silicified volcanic. Very strongly limonitic and strong Mn staining. 1% As Py - Py both disseminated and in stringers.	1	Chip	1.0	55	10	89	0.1	2	3		Singh
R58503	BS Trav; N-S trending Qtz vein in volcanics. Slight to moderately limonitic some Mn stain. Some vuggy Qtz and some dark grey Qtz. 0.50m with strike.	-	Chip	0.50	9	33	75	0.1	2	1		Singh
R58504	BS Trav; Fault gouge - strongly limonitic 0.50m wide.	-	Chip	0.20	75	4	116	0.1	4	1		Singh
R58505	BS Trav; Strongly silicified volcanic. Blue grey silica with up to 2% Aspy + <Py mostly disseminated but some stringers Very strong Mn + limonitic staining.		Chip	0.20	87	6	143	0.2	2	1		Singh
R58506	BS Trav; Sugar Qtz vein in Volcanics, slightly limonitic pure Qtz. 0.20m wide. Sample is true width.	-	Chip	0.20	13	15	36	0.1	3	2		Singh

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PROJECT BEAU PRE VALENTINE (LITTLE WOLF 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	
R44485	130m down creek from confluence at headwaters, the creek is last on Index II mapsheet to flow into Leech R. in the north Grab of quartz sweats and Lapilli Tuff. Tuff is siliceous and weakly foliated at 125°/84° (RHR). Sweats are sporadic and ~3-5% of rock.	-	Grab		66	133	197	1.2	2	1	Sharpe
R44486	50m down creek from R44485. Grab of silicified and mineralized Lapilli Tuff. Pyrite + Po 2-4%.	2-4 Py+Po	Grab		36	304	480	3.3	6	2	Sharpe
R44487	90m down creek from old growth tree line. Grab of fault breccia and wall rock, silicified and mineralized Lapilli Tuff and Biotitic Phyllite. Fault at 277°/66° 5-15cm wide breccia. Wall rock mineralized with Po+Py at 5-6%. Hematitic staining in fault plus cataclastic texture in phyllite.	5-6 Po+Py	Grab		108	21	131	0.1	19	2	Sharpe
R58501	BS Trav; Moderately silicified volcanics. Moderate-strong limonitic staining. 1-2% dark	1	Chip	0.50	58	20	149	0.2	2	2	Singh

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PROJECT BEAU PRE VALENTINE (LITTLE WOLF 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		
R59366	Nonexistant Creek; Sheared graphitic Metapelite hematitic & limonitic staining, 1% Py.	1	Chip	0.25	120	25	382	0.1	2	5		McIntyre
R59367	Nonexistant Creek; 4.0m siliceous zone within the sheared graphitic meta pelite.	-	Chip	0.50	22	4	33	0.1	5	3		McIntyre
R59368	Nonexistant Creek; Gossanous, limonitic graphitic Meta pelite with 1% Py.	1	Chip	0.50	62	14	207	0.1	2	3		McIntyre
R59369	Nonexistant Creek; Zone 0.10m wide of 2% Po rich (very finely disseminated) within the graphitic Metapelite.	2	Chip	0.10	91	12	189	0.2	23	1		McIntyre
R58348	Phahard Ki Crk; Mod-strongly silicified phyllite. Blue-grey silicification could be due to disseminated Py.	-	Chip	0.50	16	5	26	0.2	2	1		Singh
R58349	Phahard Ki Creek; Stockwork Qtz veining in volcanics, moderately limonitic some vuggy qtz.	-	Chip	0.50	85	5	85	0.1	10	1		Singh
R58350	Phahard Ki Creek; 10m x 3m Qtz lense. Sugar Qtz mod-strongly limonitic, mod-strongly hematitic, surfacial Mn, 0.5% Py as 2-3m subhedral cubes also leached sulphides & vuggy qtz.	0.5	Chip	1.0	17	3	10	0.1	2	44		Singh

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PROJECT BEAU PRE VALENTINE (LITTLE WOLF GROUP)

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% Sulph.	TYPE	WIDTH (m)	Cu ppm	Pb ppm	Zn ppm	Ag ppm	As ppm	Au ppb		SAMPLED BY
R59357	Cragg Creek Rd: Siliceous zone, very fine grained grey to bleached white color Tr Po, along side Phyllite.	Tr	Chip	0.25	20	10	41	0.1	9	6		McIntyre /Saunders
R59358	Cragg Creek Rd: Tuff silicified & sheared with 5% limonite.	-	Chip	2.0	65	12	68	0.1	2	3		McIntyre /Saunders
R59359	Cragg Creek Rd: Tuff - very siliceous <1% Cpy & Tr Py; 1/2m chip across o/c.	<1	Chip	0.50	52	3	91	0.1	3	2		McIntyre /Saunders
R59360	Cragg Creek Rd: Tuff - <1% Py & (Tr Cpy?).	<1	Chip	1.0	10	5	7	0.1	2	111		McIntyre /Saunders
R59361	Survey Mtn Rd: Diorite-silicified & chloritized with 1-2% Py & <1% Cpy.	2	Grab FLOAT	-	628	6	36	0.3	2	4		McIntyre /Saunders
R59362	Survey Mtn Rd: Shear zone in chloritized, hydrothermally altered Volcanic, 3.0m chip.	-	Chip	3.0	44	11	58	0.1	7	2		McIntyre /Saunders
R59363	Upper Leech River Rd: Qtz vein, limonitic and vuggy Qtz 1.0m x 0.10m.	-	Chip	0.10	34	11	87	0.1	6	3		McIntyre /Saunders
R59364	Upper Leech Upper Rd: Shear zone in Tuff, altered to soil in places.	-	Chip	0.50	53	10	90	0.1	4	3		McIntyre
R59365	Upper Leech River Rd: Shear zone in Tuff, with a 3cm Qtz vein, limonitic.	-	Chip	0.50	39	7	68	0.1	4	3		McIntyre

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DATE June '89

PROJECT BEAU PRE VALENTINE (LITTLE WOLF GROUP)

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% Sulph.	TYPE	WIDTH (m)	Cu ppm	Pb ppm	Zn ppm	Ag ppm	As ppm	Au ppb		SAMPLED BY
R58474 (con't)	stockwork exposed for 10x10m. ~60-65% of rock is vuggy milky quartz veining. Wall rock silicified biotitic phyllite included.											
R58475	70m West of road 30m North from creek. Random grab of milky quartz stockwork exposed for 10x10m. ~60-65% of rock is vuggy milky quartz veining. Wall rock silicified biotitic phyllite included.		Random Grab		5	7	38	0.1	2	1		Sharpe
R59353	Upper Leech River Rd: Qtz vein, vuggy, limonitic with in Phyllite - 30% limonite - 1.0m x 0.12m.	-	Chip	0.12	35	9	76	0.1	5	1		McIntyre /Saunders
R59354	Upper Leech River Rd: Qtz vein & str in Phyllite. Vuggy & limonite - 1.0m x 0.15m.	-	Chip	0.15	13	7	56	0.2	11	2		McIntyre /Saunders
R59355	Upper Leech River Rd: Tuff containing <1% Po & Tr Cpy. 1.0m chip across o/c.	<1	Chip	1.0	45	7	83	0.1	5	2		McIntyre /Saunders
R59356	Upper Leech River Rd: Silicified Phyllite with very finely disseminated sulfides. Chip across o/c.	1-2	Chip	0.25	79	14	85	0.1	2	3		McIntyre /Saunders

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PROJECT BEAU PRE VALENTINE (LITTLE WOLF GROUP)

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% Sulph.	TYPE	WIDTH (m)	Cu ppm	Pb ppm	Zn ppm	Ag ppm	As ppm	Au ppb		SAMPLED BY
R58470	Located 110m South of Survey Mtn. Saddle Back road on a skid road. Grab of Biotitic Phyllite oriented at 315°/83°(RHR). Somewhat sheared and brecciated the same. Chloritized and silicified. Vugs with granular quartz and hematitic alteration observed in shear zone.		Grab		66	12	112	0.2	5	1		Sharpe
R58471	Located at 50m from south end of road which is east of Survey Mtn. Saddle Back road. Grab of highly silicified brecciated biotitic phyllite. Vuggy with hematitic staining.		Grab		47	6	55	0.1	6	1		Sharpe
R58472	Located 40m north of R58471 on road. Grab of highly silicified Biotitic phyllite oriented at 314°/68°. Brecciated, vuggy, locally gossanous with hematitic alteration.		Grab		26	6	52	0.1	2	1		Sharpe
R58473	Located 73m north of R58472 on road. As R58472.		Grab		81	5	142	0.1	5	2		Sharpe
R58474	On road at middle creek head-water 15m to North. Random grab of irregular milky quartz		Random Grab		86	17	98	0.1	8	1		Sharpe

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LAB REPORT # _____

DATE June '89PROJECT BEAU PRE VALENTINE (LITTLE WOLF GROUP)ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% Sulph.	TYPE	WIDTH (m)	Cu ppm	Pb ppm	Zn ppm	Ag ppm	As ppm	Au ppb		SAMPLED BY
R58470	Located 110m South of Survey Mtn. Saddle Back road on a skid road. Grab of Biotitic Phyllite oriented at 315°/83°(RHR). Somewhat sheared and brecciated the same. Chloritized and silicified. Vugs with granular quartz and hematitic alteration observed in shear zone.		Grab		66	12	112	0.2	5	1		Sharpe
R58471	Located at 50m from south end of road which is east of Survey Mtn. Saddle Back road. Grab of highly silicified brecciated biotitic phyllite. Vuggy with hematitic staining.		Grab		47	6	55	0.1	6	1		Sharpe
R58472	Located 40m north of R58471 on road. Grab of highly silicified Biotitic phyllite oriented at 314°/68°. Brecciated, vuggy, locally gossanous with hematitic alteration.		Grab		26	6	52	0.1	2	1		Sharpe
R58473	Located 73m north of R58472 on road. As R58472.		Grab		81	5	142	0.1	5	2		Sharpe
R58474	On road at middle creek head-water 15m to North. Random grab of irregular milky quartz		Random Grab		86	17	98	0.1	8	1		Sharpe

NORANDA EXPLORATION COMPANY, LIMITED

PROJECT # 120N.T.S. 92B/12

LAB REPORT # _____

DATE June '89PROJECT BEAU PRE VALENTINE (LITTLE WOLF GROUP)ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% Sulph.	TYPE	WIDTH (m)	Cu ppm	Pb ppm	Zn ppm	Ag ppm	As ppm	Au ppb		SAMPLED BY
R58470	Located 110m South of Survey Mtn. Saddle Back road on a skid road. Grab of Biotitic Phyllite oriented at 315°/83°(RHR). Somewhat sheared and brecciated the same. Chloritized and silicified. Vugs with granular quartz and hematitic alteration observed in shear zone.		Grab		66	12	112	0.2	5	1		Sharpe
R58471	Located at 50m from south end of road which is east of Survey Mtn. Saddle Back road. Grab of highly silicified brecciated biotitic phyllite. Vuggy with hematitic staining.		Grab		47	6	55	0.1	6	1		Sharpe
R58472	Located 40m north of R58471 on road. Grab of highly silicified Biotitic phyllite oriented at 314°/68°. Brecciated, vuggy, locally gossanous with hematitic alteration.		Grab		26	6	52	0.1	2	1		Sharpe
R58473	Located 73m north of R58472 on road. As R58472.		Grab		81	5	142	0.1	5	2		Sharpe
R58474	On road at middle creek head-water 15m to North. Random grab of irregular milky quartz		Random Grab		86	17	98	0.1	8	1		Sharpe

APPENDIX III
ANALYSIS CERTIFICATES

Valentine Wolf Co.

8907-020

ACME ANALYTICAL LABORATORIES LTD.

852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6

PHONE (604) 253-3158 FAX (604) 253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.

THIS LEACH IS PARTIAL FOR MN FR SR CA P LA CR NG 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: JUL 5 1989 DATE REPORT MAILED: July 12/89 SIGNED BY: C. Long D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

NORANDA EXPLORATION CO. LTD. PROJECT 8907-020 120 File # 89-1946

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	Au* PPB
44488	2	38	3	16	.3	15	7	590	1.00	7	5	ND	2	6	1	2	3	14	.08	.015	2	23	.09	24	.04	8	.45	.01	.02	3	5
44489	1	22	2	91	.2	36	22	1139	7.59	24	6	ND	1	13	1	3	2	155	.94	.069	2	82	2.77	17	.60	8	3.48	.01	.10	1	2
44490	1	67	6	91	.2	40	28	864	7.16	11	5	ND	1	19	1	2	2	136	.91	.063	2	58	2.17	45	.66	10	3.18	.01	.02	1	3
44491	1	45	4	92	.3	29	21	802	7.84	4	5	ND	1	17	1	4	2	131	.74	.044	2	62	2.55	12	.58	13	3.47	.01	.01	1	3
44492	1	18	5	62	.1	21	11	675	4.81	13	5	ND	1	10	1	2	2	109	.82	.066	2	70	1.75	6	.50	4	2.38	.01	.02	1	1
44493	3	15	6	54	.1	37	8	426	2.35	9	5	ND	2	5	1	2	2	19	.08	.030	4	35	.62	18	.01	12	1.28	.02	.04	2	4
44494	3	41	8	114	.1	69	18	1197	4.94	12	5	ND	4	7	1	2	2	50	.17	.050	6	63	1.70	22	.07	2	2.70	.01	.04	1	1
44495	3	35	19	73	.2	46	11	664	3.27	3	5	ND	2	61	1	2	2	21	1.10	.044	4	36	1.05	27	.01	6	1.66	.01	.06	1	2
44496	2	43	5	29	.1	21	5	1160	.76	3	5	ND	2	4	1	2	2	3	.06	.020	4	18	.13	26	.01	7	.29	.01	.05	3	4
58511	3	45	4	73	.4	16	12	585	5.23	8	5	ND	1	8	1	2	2	66	.13	.048	3	20	1.65	13	.01	16	2.62	.03	.02	2	1
58512	2	37	6	21	.1	26	13	1767	.51	2	5	ND	1	198	1	2	2	2	11.93	.052	6	10	.09	89	.02	3	.17	.01	.02	4	4
58513	2	52	10	100	.1	46	17	1072	4.41	2	5	ND	1	20	1	2	2	36	.56	.059	8	40	1.25	66	.07	2	2.13	.01	.07	1	6
58514	1	26	16	108	.2	47	11	760	4.88	4	5	ND	4	10	1	2	2	38	.25	.058	8	59	1.64	30	.06	14	2.72	.01	.07	1	4
58515	2	34	12	110	.2	79	13	807	4.76	8	5	ND	4	9	1	2	2	41	.29	.071	7	64	1.74	29	.15	14	2.78	.01	.07	1	1
59372	1	48	6	97	.3	25	26	1018	8.61	6	5	ND	1	17	1	10	2	147	1.01	.095	2	49	2.30	68	.55	7	2.99	.01	.10	1	6
59373	1	43	6	88	.3	16	14	847	7.27	4	5	ND	1	10	1	10	2	162	.93	.079	2	72	2.52	6	.71	11	3.16	.01	.01	1	4
59374	1	120	10	76	.1	56	26	2456	4.28	7	5	ND	2	7	1	2	2	75	.07	.036	26	86	1.14	123	.22	10	2.89	.01	.05	1	7
59375	1	36	7	107	.1	35	23	728	10.46	2	5	ND	1	18	1	4	3	128	.62	.086	2	71	1.65	19	.46	4	2.36	.01	.01	1	2
59376	1	60	4	88	.1	34	28	803	6.79	2	5	ND	1	8	1	4	2	143	.90	.085	2	57	1.99	11	.64	6	2.80	.02	.01	1	2
59377	1	22	2	41	.1	24	19	492	3.57	2	5	ND	1	5	1	2	2	56	.28	.032	2	29	.90	16	.25	2	1.41	.01	.03	1	3
59378	1	39	2	73	.1	25	20	808	6.25	2	5	ND	1	16	1	3	2	131	1.01	.083	2	68	1.93	14	.64	3	2.60	.01	.04	1	4
59379	2	17	5	47	.1	16	6	237	5.14	3	5	ND	1	5	1	2	3	39	.15	.034	2	34	.33	11	.10	2	.66	.01	.01	2	5
59380	2	26	23	66	.1	38	13	641	3.15	6	5	ND	3	7	1	2	3	26	.11	.036	5	34	.69	31	.03	5	1.72	.01	.05	1	5
59381	2	43	6	53	.1	17	10	588	3.06	4	5	ND	1	4	1	2	2	53	.07	.022	2	32	1.16	12	.01	2	1.70	.02	.02	1	1
59382	3	45	11	65	.3	29	13	823	3.54	9	5	ND	2	8	1	2	2	40	.17	.055	6	27	1.16	25	.02	14	1.86	.02	.04	2	2
STD C/AU-R	18	60	42	132	7.0	70	31	1008	4.09	40	17	7	36	50	19	14	21	60	.49	.092	39	56	.86	179	.07	38	1.98	.06	.14	12	490

8907-020

NORANDA VANCOUVER LABORATORY

PROPERTY/LOCATION: VALENTINE

CODE : 8907-023

Project No. : 120

Sheet: 1 of 1

Date rec'd: JUL05

Material : 9 PANS

Geol.: T. Mc

Date compl: JUL19

Remarks :

Values in PPM, except where noted.

T. T. No.	SAMPLE No.	wt. (g)	PPB Au	Cu	Zn	Pb	Ag
84	58361	15.7	180	24	50	2	0.2
85	58363	12.0	10	22	38	1	0.1
86	58366	13.0	5000	14	40	1	0.4
87	58391	8.9	10	8	24	1	0.2
88	58392	9.8	90	12	26	1	0.1
89	58394	10.4	310	10	22	1	0.1
90	58396	10.0	390	14	20	1	0.1
91	58398	16.1	10	18	42	1	0.4
92	58400	14.7	30	16	44	2	0.1

N.B. Pan-con: entire sample used for Au determination.

*Cu, Zn, Pb, Ag values obtained from Aqua Regia sol'n.

GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO₃-H₂O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN PR SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: Soil -80 Mesh AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: JUL 17 1989

DATE REPORT MAILED:

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

NORANDA EXPLORATION CO. LTD. PROJECT 8907-055 120-F2 File # 89-2232 Page 1

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	AU* PPB
620N 21CE	1	16	11	49	.1	14	8	317	2.57	5	5	ND	1	33	1	2	3	68	1.01	.038	3	25	.59	23	.14	4	2.27	.01	.02	1	1
620N 22OE	1	29	12	50	.1	16	7	255	3.62	9	5	ND	1	27	1	2	2	82	.85	.089	3	31	.56	21	.13	3	3.25	.01	.02	1	26
620N 23OE	1	43	17	58	.1	30	11	326	4.62	9	5	ND	1	22	1	2	2	98	.79	.066	3	52	.99	27	.21	2	4.75	.01	.02	1	6
620N 24OE	1	14	6	35	.1	13	5	189	2.98	7	5	ND	1	34	1	2	2	87	1.05	.029	3	29	.48	14	.14	4	2.49	.01	.01	1	11
620N 25OE	1	7	11	22	.1	8	3	190	1.63	5	5	ND	1	37	1	2	2	62	1.05	.019	3	17	.30	20	.12	2	1.47	.01	.01	4	1
610N 21OE	1	44	10	49	.1	26	11	290	3.49	12	5	ND	1	28	1	2	2	90	.92	.057	4	46	.78	33	.16	3	3.62	.01	.03	1	12
610N 22OE	1	15	13	44	.1	12	6	257	2.63	6	5	ND	1	37	1	2	2	71	.99	.040	3	23	.53	20	.13	3	2.38	.01	.02	1	2
610N 23OE	1	13	7	31	.1	9	4	240	1.93	5	5	ND	1	41	1	2	2	57	.94	.016	3	16	.45	13	.13	2	1.95	.01	.01	1	7
610N 24OE	1	20	9	43	.2	12	7	260	3.14	9	5	ND	1	28	1	2	2	71	.72	.034	3	25	.57	22	.14	4	2.53	.01	.02	1	4
610N 25OE	1	10	9	35	.1	9	5	234	2.55	4	5	ND	1	32	1	2	2	69	.79	.019	3	20	.53	15	.15	2	2.04	.01	.01	1	8
600N 21CE	1	34	4	43	.1	17	9	296	3.11	6	5	ND	1	26	1	2	3	74	.81	.119	3	32	.64	21	.12	2	3.19	.01	.02	2	9
600N 23OE	1	10	20	40	.1	9	6	445	2.04	9	5	ND	1	37	1	2	2	56	.96	.026	2	16	.56	28	.14	2	1.86	.01	.02	1	2
600N 25OE	1	21	4	55	.1	13	12	500	3.17	9	5	ND	1	33	1	2	2	75	.88	.042	3	27	.56	23	.14	2	2.99	.01	.02	1	5
590N 21OE	1	25	6	49	.1	24	10	346	3.30	3	5	ND	1	26	1	2	2	80	1.03	.071	2	38	.94	24	.15	5	2.90	.01	.02	1	12
590N 22OE	1	10	12	36	.1	10	6	257	2.15	2	5	ND	1	35	1	2	2	57	.98	.034	2	21	.51	17	.13	2	2.00	.01	.01	1	3
590N 23OE	1	17	9	47	.1	11	8	319	2.79	2	5	ND	1	33	1	2	2	65	.91	.040	3	23	.64	21	.16	5	2.56	.01	.02	1	16
590N 24OE	1	24	10	52	.1	11	7	412	3.13	7	5	ND	1	29	1	2	2	73	.84	.047	3	24	.66	20	.16	2	2.89	.01	.02	1	1
590N 25OE	1	15	11	43	.1	9	6	518	2.90	9	5	ND	1	34	1	2	2	71	.91	.051	3	23	.41	25	.13	4	2.19	.01	.02	2	760
580N 21OE	1	13	12	45	.1	13	17	735	2.32	11	5	ND	1	28	1	2	2	56	.87	.076	2	25	.53	30	.12	3	2.08	.01	.02	2	6
580N 22OE	1	27	12	59	.1	15	9	328	3.82	5	5	ND	1	23	1	2	2	75	.67	.073	4	34	.52	27	.16	2	3.69	.01	.02	1	4
580N 23OE	1	31	12	62	.2	16	8	300	3.87	6	5	ND	1	25	1	2	2	78	.81	.105	3	39	.61	21	.13	2	3.91	.01	.02	1	12
580N 24OE	1	30	9	50	.1	15	7	358	3.55	11	5	ND	1	27	1	2	2	77	.83	.053	3	33	.61	20	.15	5	3.05	.01	.02	2	2
580N 25OE	1	21	6	51	.1	12	7	387	3.75	12	5	ND	1	25	1	3	2	82	.80	.089	3	30	.53	23	.12	5	3.04	.01	.02	1	9
420N 13OE	1	40	11	55	.1	7	7	507	4.00	7	5	ND	1	22	1	2	2	77	.47	.057	2	13	.80	18	.25	2	2.22	.01	.03	1	2
420N 14OE	1	58	18	63	.1	17	7	427	4.63	5	5	ND	2	17	1	2	2	89	.41	.071	4	42	.77	24	.22	2	4.31	.01	.03	1	2
420N 15OE	1	43	19	54	.2	10	5	281	3.92	3	5	ND	1	19	1	2	2	77	.40	.174	3	29	.70	23	.13	2	3.48	.01	.02	1	2
420N 16OE	1	39	12	48	.1	10	7	427	3.08	6	5	ND	1	17	1	2	2	61	.41	.138	4	23	.39	25	.10	5	3.10	.01	.02	1	2
410N 13OE	1	36	6	55	.1	10	6	397	3.20	3	5	ND	1	25	1	2	2	74	.56	.078	2	22	.54	24	.13	2	2.22	.01	.02	1	1
410N 14OE	1	20	6	35	.2	8	4	339	2.69	10	5	ND	1	31	1	2	2	74	.62	.027	2	18	.50	18	.17	2	1.70	.01	.02	1	5
410N 15OE	1	12	5	27	.2	6	4	255	2.08	5	5	ND	1	28	1	2	2	71	.57	.025	2	11	.43	13	.21	2	1.48	.01	.02	1	4
410N 16OE	1	69	13	59	.2	20	10	519	4.22	7	5	ND	1	21	1	2	2	93	.62	.081	3	40	.94	29	.22	7	3.98	.01	.03	1	1
400N 13OE	1	57	2	59	.1	19	9	325	4.00	6	5	ND	1	20	1	2	2	88	.61	.091	3	44	.73	23	.17	3	4.29	.01	.02	1	1
400N 15OE	1	92	13	58	.1	28	11	393	3.85	6	5	ND	1	17	1	3	3	80	.44	.099	3	52	1.04	22	.24	2	4.98	.01	.03	1	8
400N 35OE	1	11	9	31	.2	7	4	388	1.78	8	5	ND	1	32	1	2	2	61	.70	.034	2	12	.42	21	.17	5	1.51	.01	.02	2	29
400N 40OE	1	34	9	45	.2	15	9	492	2.88	2	5	ND	1	25	1	2	2	70	.75	.057	2	29	.74	30	.15	3	2.81	.01	.02	1	1
400N 45OE	1	17	7	33	.1	14	8	341	2.10	6	5	ND	1	28	1	2	2	58	.87	.036	2	26	.73	22	.14	4	1.99	.01	.02	1	1
STD C/AU-S	17	60	42	133	7.7	67	30	1029	4.02	41	20	7	36	47	19	15	23	61	.51	.093	39	55	.93	173	.07	37	2.07	.06	.13	12	49

26 Inks NW 200

8907-055

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	AU* PPB
400N 500E	2	38	13	51	.1	12	6	321	2.15	3	5	ND	2	20	1	2	2	51	.36	.026	2	22	.68	79	.16	3	2.35	.01	.05	1	1
400N 550E	1	33	8	60	.1	20	10	319	2.83	7	5	ND	1	24	1	2	2	62	.66	.089	2	31	.62	46	.14	3	2.67	.01	.03	1	6
400N 600E	1	10	5	36	.1	12	5	235	2.84	6	5	ND	1	24	1	2	2	80	.68	.033	3	28	.50	37	.22	3	1.99	.01	.02	1	13
400N 650E	1	29	4	56	.2	19	7	363	2.65	2	5	ND	1	19	1	2	2	60	.70	.063	2	32	.84	51	.16	3	2.33	.01	.02	1	8
400N 700E	1	6	5	30	.2	6	8	318	1.27	2	5	ND	1	27	1	2	2	43	.67	.011	3	15	.28	31	.14	3	1.20	.01	.02	2	1
400N 750E	1	39	5	105	.4	17	6	413	4.06	8	5	ND	1	13	1	2	2	66	.27	.063	4	33	.84	71	.27	4	3.25	.01	.05	1	3
400N 800E	2	30	13	110	.3	23	9	386	4.15	6	5	ND	1	13	1	2	2	76	.28	.055	4	48	.91	98	.28	2	3.42	.01	.04	1	1
400N 850E	1	13	7	55	.3	8	2	170	3.71	8	5	ND	1	15	1	2	2	72	.35	.098	3	26	.40	37	.27	3	2.13	.01	.02	1	1
400N 900E	1	5	11	39	.1	6	3	207	1.59	2	5	ND	1	19	1	2	2	47	.39	.020	4	21	.39	37	.14	2	1.20	.01	.03	1	1
400N 950E	2	28	14	58	.2	12	5	289	2.86	2	5	ND	1	15	1	2	2	65	.35	.043	8	31	.51	70	.20	3	2.15	.01	.04	1	2
400N 1000E	1	24	14	46	.1	15	6	191	3.33	6	5	ND	1	23	1	2	2	78	.65	.028	3	42	.48	29	.23	3	2.72	.01	.02	1	3
400N 1050E	1	51	14	51	.1	29	14	402	4.15	4	5	ND	1	23	1	2	2	98	.74	.027	5	52	1.01	33	.21	4	3.47	.01	.02	1	8
400N 1100E	1	90	6	53	.2	21	10	304	3.68	2	5	ND	1	19	1	2	2	76	.59	.116	2	43	.79	21	.17	3	4.00	.01	.02	1	5
400N 1150E	1	23	3	43	.1	10	5	194	3.21	2	5	ND	1	25	1	2	2	83	.63	.026	3	31	.52	25	.21	6	2.67	.01	.02	1	4
400N 1200E	2	17	23	71	.1	16	7	498	2.54	17	5	ND	3	11	1	2	2	32	.15	.052	16	21	.43	75	.10	3	1.90	.01	.07	1	11
400N 1250E	1	50	4	33	.1	13	6	254	2.83	2	5	ND	1	25	1	2	3	72	.71	.059	2	28	.59	16	.16	4	2.34	.01	.02	1	17
400N 1300E	1	10	5	20	.1	1	2	149	1.75	2	5	ND	1	41	1	2	2	75	.56	.015	2	5	.29	10	.18	6	.90	.01	.01	1	5
400N 1350E	1	10	3	20	.1	2	2	133	1.93	2	5	ND	1	36	1	2	2	69	.56	.010	2	8	.24	8	.12	10	1.18	.01	.01	2	6
400N 1400E	1	18	5	32	.1	6	5	210	3.86	2	5	ND	1	37	1	2	2	115	.72	.025	2	18	.57	14	.27	4	1.88	.01	.02	1	4
390N 130E	1	35	2	53	.1	27	10	476	3.17	6	5	ND	1	27	1	2	2	81	1.01	.051	2	42	1.00	38	.17	4	3.22	.01	.02	1	5
390N 140E	1	32	3	59	.2	20	9	302	3.82	2	5	ND	1	26	1	2	2	85	.81	.052	3	45	.72	28	.18	4	3.92	.01	.02	1	4
390N 150E	1	43	4	66	.1	20	9	343	3.41	3	5	ND	1	21	1	2	2	68	.45	.049	3	34	.74	27	.17	7	3.40	.01	.03	1	1
390N 160E	1	52	11	65	.2	13	11	354	3.42	7	5	ND	1	25	1	2	2	74	.55	.054	3	27	.70	27	.19	3	2.96	.01	.02	1	2
380N 130E	1	63	3	48	.1	27	10	331	3.18	6	5	ND	1	21	1	2	2	78	.78	.042	2	40	1.04	17	.22	4	2.99	.01	.02	1	9
380N 140E	1	49	3	36	.1	25	11	304	2.77	6	5	ND	1	24	1	2	2	80	.94	.031	3	43	.99	22	.18	3	2.97	.01	.02	1	5
380N 150E	1	35	6	41	.1	18	8	259	2.99	2	5	ND	1	26	1	2	2	78	.71	.023	6	35	.64	22	.19	7	2.98	.01	.02	1	1
380N 160E	1	16	9	38	.1	9	5	251	2.32	6	5	ND	1	25	1	2	2	64	.60	.041	3	24	.49	21	.16	6	1.91	.01	.02	1	3
220N 220E	1	75	8	60	.1	28	12	356	4.11	2	5	ND	1	21	1	2	2	96	.61	.057	4	54	.89	39	.24	2	5.06	.01	.03	1	6
220N 230E	1	24	2	32	.1	18	9	262	2.48	2	5	ND	1	26	1	2	2	70	.84	.023	3	33	.74	20	.15	3	2.40	.01	.02	3	1
220N 240E	1	46	2	78	.1	13	11	1416	3.90	3	5	ND	1	23	1	2	2	70	.71	.216	3	30	.68	42	.15	4	3.35	.01	.03	1	6
220N 250E	1	47	10	99	.1	11	10	1024	4.11	2	5	ND	1	20	1	2	2	62	.38	.128	3	14	.98	36	.22	2	2.91	.01	.03	1	1
220N 260E	1	19	4	84	.1	10	10	493	2.95	2	5	ND	1	27	1	2	2	54	.48	.031	3	14	.79	34	.19	7	1.99	.01	.02	1	3
210N 220E	1	21	8	38	.1	18	7	300	2.64	3	5	ND	1	27	1	2	2	76	.94	.033	2	34	.71	21	.17	7	2.50	.01	.02	1	8
210N 230E	1	41	7	54	.1	24	11	346	3.70	2	5	ND	1	22	1	2	2	81	.73	.070	3	44	.85	27	.20	9	3.59	.01	.03	1	43
210N 240E	1	28	2	81	.1	12	9	472	4.00	4	5	ND	1	25	1	2	2	73	.62	.130	3	27	.73	24	.17	3	3.33	.01	.02	1	9
210N 250E	1	55	7	141	.2	13	15	1460	4.30	2	5	ND	1	27	1	2	2	68	.48	.120	4	25	.61	48	.18	3	2.82	.01	.02	1	2
STD C/AU-S	18	62	39	134	7.6	67	30	1030	4.00	41	20	7	36	47	18	15	21	60	.50	.096	39	55	.93	179	.07	37	2.07	.06	.13	12	49

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	AU* PPB
210N 260E	1	11	9	55	.1	7	7	669	2.97	2	5	ND	1	32	1	2	2	59	.50	.039	4	14	.66	28	.22	2	1.59	.01	.02	1	1
200N 220E	1	11	9	29	.1	13	6	238	2.18	8	5	ND	1	32	1	3	2	65	.94	.021	3	26	.57	23	.14	3	1.81	.01	.02	1	2
200N 240E	1	5	9	27	.1	6	4	408	1.73	2	5	ND	1	32	1	2	2	54	.93	.026	2	18	.34	19	.13	8	1.39	.01	.02	1	8
200N 250E	1	20	2	38	.1	15	6	238	2.81	2	5	ND	1	29	1	2	2	70	.71	.032	2	26	.52	19	.17	2	2.34	.01	.02	1	3
200N 260E	1	45	11	46	.1	21	12	404	3.71	8	5	ND	1	26	1	4	3	82	.74	.045	3	37	.81	22	.21	2	2.86	.01	.03	2	5
190N 220E	1	30	9	45	.1	23	9	256	3.68	5	5	ND	1	25	1	2	2	87	.68	.041	3	44	.59	25	.18	2	3.54	.01	.02	1	5
190N 230E	1	26	5	36	.1	20	9	262	2.71	7	5	ND	1	28	1	2	2	73	.97	.030	3	36	.75	22	.16	2	2.57	.01	.02	1	4
190N 240E	1	31	11	43	.1	21	11	287	3.71	9	5	ND	1	27	1	2	2	94	.75	.039	3	42	.73	27	.20	4	3.24	.01	.02	1	7
190N 250E	1	29	11	42	.2	21	8	253	3.70	5	5	ND	1	31	1	2	2	87	.79	.039	3	41	.63	26	.20	2	3.41	.01	.03	1	2
190N 260E	1	13	15	31	.1	11	6	244	2.62	6	5	ND	1	26	1	2	2	65	.68	.022	3	24	.46	17	.15	6	1.90	.01	.02	1	2
180N 220E	1	26	9	38	.1	12	5	245	2.90	6	5	ND	1	23	1	2	2	66	.56	.123	3	31	.39	20	.12	2	2.44	.01	.02	1	121
180N 230E	1	43	9	46	.1	22	8	272	3.65	4	5	ND	1	21	1	3	2	85	.62	.052	3	43	.66	21	.19	3	3.35	.01	.03	1	46
180N 240E	1	28	8	35	.1	21	48	873	2.01	5	5	ND	1	25	1	2	2	51	.74	.026	7	28	.64	26	.11	2	2.31	.01	.02	1	8
180N 250E	1	9	4	19	.1	5	9	415	1.02	2	5	ND	1	30	1	3	2	38	.78	.011	3	13	.28	19	.09	4	1.02	.01	.02	2	7
180N 260E	1	6	5	28	.1	9	9	249	1.54	3	5	ND	1	32	1	2	2	47	.72	.013	4	15	.42	26	.13	2	1.36	.01	.02	1	12
P 11651	2	41	6	56	.1	25	17	488	3.08	2	5	ND	1	27	1	2	2	74	.67	.042	3	35	.73	34	.22	7	2.97	.01	.03	1	4
P 11652	1	25	14	73	.2	16	10	665	3.35	4	5	ND	1	21	1	2	2	63	.46	.043	3	31	.68	46	.22	5	2.73	.01	.03	1	5
P 11653	1	37	12	63	.1	17	10	519	3.41	2	5	ND	1	22	1	2	2	66	.48	.036	3	33	.78	34	.23	2	3.03	.01	.04	1	4
P 11654	1	11	11	41	.1	8	5	255	2.29	3	5	ND	1	31	1	2	2	55	.66	.018	3	17	.51	18	.17	7	1.74	.01	.02	1	1
P 11655	1	38	5	54	.2	11	8	266	3.72	4	5	ND	1	26	1	2	2	74	.56	.039	3	21	.56	19	.18	7	2.27	.01	.02	1	3
P 11656	1	27	8	54	.2	11	8	403	3.01	2	5	ND	1	28	1	2	2	59	.60	.040	3	22	.59	27	.19	8	2.38	.01	.03	1	5
P 11657	1	33	8	59	.1	16	7	328	3.09	8	5	ND	1	21	1	2	2	64	.42	.024	3	28	.73	30	.25	5	2.75	.01	.03	1	5
P 11658	1	16	8	63	.1	12	6	387	2.92	4	5	ND	1	24	1	2	3	58	.51	.028	3	26	.62	33	.19	3	2.25	.01	.03	1	4
P 11659	1	53	6	60	.1	27	10	302	3.40	6	5	ND	1	21	1	2	2	84	.55	.037	3	45	.77	27	.27	2	4.45	.01	.02	1	4
P 11660	1	22	7	50	.1	19	8	348	2.96	5	5	ND	1	24	1	2	2	74	.71	.038	2	32	.58	29	.24	5	2.78	.01	.02	1	280
P 11661	1	13	5	42	.1	10	6	229	2.51	5	5	ND	1	25	1	2	2	62	.57	.036	2	21	.46	21	.24	2	1.88	.01	.02	1	2
P 11662	1	33	9	57	.1	15	7	415	3.00	2	5	ND	1	21	1	2	2	64	.42	.028	3	28	.71	31	.20	2	2.58	.01	.04	1	2
P 11663	1	62	4	65	.1	24	10	438	3.41	4	5	ND	1	21	1	2	2	59	.44	.023	3	40	1.17	31	.25	3	3.00	.01	.04	1	3
P 11664	1	64	8	68	.1	25	12	560	3.94	7	5	ND	1	19	1	2	2	76	.43	.038	3	40	1.04	32	.26	2	3.73	.01	.04	1	23
P 11665	1	48	4	56	.1	20	12	396	3.54	7	5	ND	1	23	1	2	3	79	.63	.038	3	35	.81	26	.26	5	2.93	.01	.02	1	31
P 11666	1	25	9	53	.1	16	10	559	2.65	4	5	ND	1	28	1	2	3	64	.67	.038	3	26	.58	36	.22	2	2.27	.01	.03	1	3
P 11667	1	56	8	67	.2	29	13	399	3.64	10	5	ND	1	21	1	2	3	78	.50	.042	3	37	.82	28	.26	5	3.43	.01	.03	1	4
P 11668	1	46	6	78	.1	33	47	486	3.12	8	5	ND	1	22	1	2	2	67	.57	.037	4	32	.68	29	.21	2	2.74	.01	.03	1	155
P 11669	1	14	2	42	.1	14	37	463	1.97	5	5	ND	1	27	1	2	2	49	.64	.019	3	20	.49	22	.16	4	1.60	.01	.01	1	5
P 11670	3	46	6	55	.1	22	16	489	3.30	6	5	ND	1	22	1	3	2	76	.61	.040	3	35	.82	22	.25	2	2.80	.01	.02	1	4
P 11671	1	19	12	51	.1	13	39	950	2.16	7	5	ND	1	29	1	2	4	47	.64	.023	4	19	.68	42	.15	5	1.87	.01	.03	1	7
P 11672	1	32	7	53	.2	19	8	311	2.98	2	5	ND	1	19	1	2	3	64	.51	.036	2	32	.70	23	.22	3	3.01	.01	.02	1	1
STD C/AU-S	18	61	38	140	7.8	68	31	1033	4.01	43	20	6	36	48	19	15	24	58	.49	.098	40	55	.88	175	.07	37	1.98	.06	.13	13	51

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Tl PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	Au* PPB
R 58528	1	255	12	38	.1	28	28	369	3.47	4	5	ND	1	32	1	3	4	36	.74	.007	2	27	2.03	25	.18	3	2.36	.02	.08	1	3
R 58529	2	32	7	21	.1	6	1	141	1.17	2	5	ND	1	2	1	4	2	7	.08	.007	3	11	.39	61	.08	3	.48	.01	.10	1	4
R 58530	1	24	9	70	.1	66	29	655	4.83	8	5	ND	1	14	1	2	2	66	1.06	.024	2	181	2.75	15	.41	5	2.96	.01	.08	1	1
R 58531	2	30	2	23	.1	30	17	348	2.22	2	5	ND	1	9	1	2	2	47	.19	.019	2	23	.49	14	.24	5	.85	.01	.01	1	2
R 58532	1	56	8	98	.1	52	41	1064	7.57	2	5	ND	1	21	2	2	2	152	.72	.046	3	74	3.06	47	.53	3	4.17	.01	.02	1	2
R 59383	1	99	12	218	.1	139	12	1336	5.29	2	5	ND	5	1	1	2	2	33	.01	.025	7	17	.52	120	.11	3	1.48	.01	.17	1	12
R 59384	1	146	4	43	.1	3	11	411	4.84	2	5	ND	1	17	1	2	2	60	.69	.018	2	6	1.77	3	.22	5	2.12	.02	.01	2	1
R 59385	1	198	6	63	.2	12	21	601	5.52	2	5	ND	1	42	1	2	2	90	.49	.004	2	16	2.84	13	.19	2	3.01	.01	.02	1	1
R 59386	1	108	9	71	.2	6	22	668	6.19	5	5	ND	1	75	1	2	2	93	.74	.005	2	7	2.49	2	.24	2	3.13	.01	.01	1	1
R 59387	1	24	.9	20	.1	17	4	372	1.59	2	5	ND	1	13	1	4	2	17	.19	.022	4	8	.31	34	.06	5	.57	.01	.10	1	1
R 59388	1	19	5	21	.1	5	3	252	1.56	2	5	ND	3	5	1	2	2	12	.12	.016	5	10	.42	76	.08	2	.57	.01	.11	2	1
R 59389	5	57	11	63	.1	33	9	504	2.37	2	5	ND	3	8	1	2	2	40	.29	.053	5	40	1.73	56	.16	2	1.37	.01	.09	1	1
R 59390	3	48	9	61	.1	99	24	497	3.74	4	5	ND	1	23	1	2	2	55	.72	.110	3	90	1.70	117	.22	2	1.44	.03	.12	1	2
R 59391	1	56	16	78	.1	34	25	757	5.34	6	5	ND	1	23	1	2	2	165	.86	.070	2	53	2.18	21	.27	2	2.46	.03	.07	1	2
R 59392	2	115	2	74	.1	8	20	678	4.91	2	5	ND	1	79	1	2	2	79	1.20	.092	2	11	2.03	26	.23	2	2.48	.03	.06	2	1
R 59393	1	41	3	97	.2	18	22	914	7.16	7	5	ND	1	9	2	2	2	135	.90	.069	2	58	1.43	10	.64	4	3.59	.01	.02	1	1
R 59394	1	70	9	76	.3	27	23	716	6.00	5	5	ND	1	7	3	2	2	125	1.19	.088	2	53	2.42	10	.79	11	2.75	.01	.03	1	1
R 59395	59	154	18	104	.2	58	15	4236	6.33	9	5	ND	2	24	1	3	5	75	.27	.069	6	21	.67	455	.05	29	1.09	.01	.23	1	1
R 59396	3	15	2	10	.1	15	1	288	.73	2	5	ND	1	1	1	2	2	3	.01	.002	2	10	.01	22	.01	3	.03	.01	.01	1	1
R 44497	1	42	7	86	.1	6	16	921	5.48	2	5	ND	1	30	1	2	2	64	.96	.122	2	12	2.02	17	.25	2	2.83	.01	.03	3	1
R 44498	1	35	8	84	.2	4	16	902	5.57	2	5	ND	1	47	1	2	2	92	.99	.098	2	3	1.74	62	.27	6	2.84	.04	.22	1	1
R 44499	1	39	3	85	.1	9	19	950	5.34	2	5	ND	1	38	1	2	2	62	.83	.079	2	5	2.41	15	.26	5	3.10	.01	.07	1	1
STD C/NO-R	18	62	41	133	6.7	69	31	1013	4.18	36	18	7	37	49	19	14	21	59	.50	.091	39	53	.92	176	.07	32	1.93	.06	.13	12	510

ACME ANALYTICAL LABORATORIES LTD.

852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6

PHONE (604) 253-3158 FAX (604) 253-1716

Valentine Wolf Claims (Jr)

8907-063

GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO₃-H₂O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
 THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
 - SAMPLE TYPE: P1 ROCK P2 SOIL AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: JUL 18 1989 DATE REPORT MAILED: *July 25/89* SIGNED BY: *C. Long* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

NORANDA EXPLORATION CO. LTD. PROJECT 8907-063 120 File # 89-2272 Page 1

SAMPLE#	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	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 58528	1	103	4	44	.1	38	17	798	2.84	20	5	ND	1	8	1	2	3	27	.50	.022	2	95	1.53	14	.23	86	2.19	.01	.03	1	2

8907-063

SAMPLE#	Mo	Cu	Pd	Cd	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	AU*
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM	PPB
L200N 350E	1	38	3	53	.2	15	9	510	3.46	5	5	ND	1	28	1	3	2	81	.82	.130	3	33	.61	26	.15	3	3.41	.01	.02	1	16
L200N 400E	1	55	13	54	.2	11	14	584	3.40	2	5	ND	1	27	1	2	2	79	.75	.077	3	35	.84	31	.18	3	3.45	.01	.04	1	27
L200N 450E	1	22	9	56	.2	9	7	423	3.02	3	5	ND	1	32	1	2	2	67	.68	.051	4	20	.45	29	.14	2	2.42	.01	.02	1	13
L200N 500E	1	16	15	84	.2	5	9	1794	3.07	2	5	ND	1	33	1	2	2	67	.53	.079	2	11	.59	52	.19	5	2.17	.01	.03	3	3
L200N 550E	1	22	8	53	.1	7	10	611	2.29	4	5	ND	1	31	1	3	3	57	.63	.030	3	15	.51	24	.19	2	2.17	.01	.03	2	3
L200N 600E	1	20	8	48	.1	11	7	253	2.58	2	5	ND	1	28	1	3	2	64	.69	.032	3	24	.43	26	.18	2	2.31	.01	.02	1	41
L200N 650E	1	13	8	30	.2	11	7	252	1.90	2	5	ND	1	27	1	2	2	55	.56	.018	3	20	.46	24	.16	4	1.75	.01	.02	2	14
L200N 700E	1	47	3	69	.1	16	11	357	4.03	2	5	ND	1	24	1	2	2	78	.45	.058	4	31	.80	28	.23	2	3.27	.01	.03	1	6
L200N 750E	1	55	9	53	.2	18	9	341	3.28	4	5	ND	1	22	1	3	2	72	.55	.049	3	40	.67	24	.22	4	3.70	.01	.02	1	16
L200N 800E	1	14	9	37	.1	14	15	338	1.77	4	5	ND	1	39	1	2	2	51	.93	.017	3	22	.51	30	.13	2	1.81	.01	.02	1	8
L200N 850E	1	20	10	40	.2	9	5	322	3.42	2	5	ND	1	25	1	2	3	76	.47	.051	2	27	.50	18	.21	5	2.45	.01	.02	1	4
L200N 900E	1	66	9	53	.2	17	8	321	3.13	4	5	ND	1	23	1	2	2	64	.44	.048	3	27	.75	28	.23	7	2.59	.01	.03	1	6
L200N 950E	1	54	9	45	.1	19	9	366	3.17	4	5	ND	1	23	1	2	2	68	.50	.027	3	35	.94	23	.30	2	2.82	.01	.03	1	7
L200N 1000E	1	9	14	30	.2	9	4	255	3.26	2	5	ND	1	34	1	3	3	74	.49	.028	2	24	.51	23	.17	2	2.23	.01	.02	3	4
L200N 1100E	1	28	6	40	.1	24	13	413	2.80	4	5	ND	1	25	1	2	2	75	.75	.021	3	36	.90	28	.18	2	2.18	.01	.02	1	1
L200N 1150E	1	62	7	43	.1	22	11	352	3.12	2	5	ND	1	23	1	2	2	77	.65	.070	3	39	.78	28	.18	2	3.56	.01	.02	1	58
L200N 1200E	1	15	3	29	.1	9	3	165	2.83	4	5	ND	1	31	1	2	2	85	.79	.057	2	26	.36	11	.19	3	2.09	.01	.01	1	2
L200N 1250E	1	39	4	33	.1	16	7	277	2.46	3	5	ND	1	29	1	2	2	69	.83	.056	2	32	.68	20	.19	3	2.71	.01	.02	1	23
L200N 1300E	1	31	6	29	.2	10	5	181	3.01	6	5	ND	1	29	1	2	2	83	.65	.033	2	27	.43	16	.20	2	2.67	.01	.02	1	6
L200N 1350E	1	80	10	44	.2	17	7	210	3.41	4	5	ND	1	21	1	3	2	80	.46	.060	3	37	.54	20	.20	2	3.96	.01	.03	1	1
L200N 1400E	1	12	5	27	.1	8	21	251	1.30	2	5	ND	1	33	1	2	2	45	.66	.012	5	13	.28	29	.13	3	1.15	.01	.01	1	3
STD C/AU-S	18	59	44	132	7.1	67	29	1022	3.84	42	22	6	36	47	17	15	22	58	.45	.095	38	55	.86	175	.07	34	1.90	.06	.14	11	49

ACME ANALYTICAL LABORATORIES LTD.

852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6

PHONE (604) 253-3158

FAX (604) 253-1716

Valentine Wof Cl. (The)

8907-074

GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO₃-H₂O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.

THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.

- SAMPLE TYPE: P1 ROCK P2 SOIL AU ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: JUL 20 1989

DATE REPORT MAILED:

July 26/89

SIGNED BY: C. Long

D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

NORANDA EXPLORATION CO. LTD. PROJECT 8907-074 120

File # 89-2327

Page 1

SAMPLE#	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	Au*
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM	PPB
R 44500	1	23	9	40	.1	13	4	332	1.93	8	5	ND	3	47	1	2	3	12	.78	.024	5	12	.58	47	.07	4	1.03	.01	.11	2	2
R 58516	1	149	2	69	.1	6	15	634	5.47	5	5	ND	1	31	1	2	2	47	.59	.105	3	16	1.57	54	.20	10	2.31	.02	.10	1	1
R 58517	1	72	7	87	.1	6	18	842	5.55	2	5	ND	1	28	1	2	2	104	.75	.172	4	20	2.26	18	.12	13	2.89	.02	.03	1	3
R 58533	1	14	3	25	.1	9	2	160	1.16	10	5	ND	1	7	1	3	2	8	.05	.014	4	8	.30	15	.01	4	.53	.02	.06	2	1
R 58534	1	10	9	55	.1	35	7	283	2.58	3	5	ND	1	3	1	2	3	39	.07	.025	3	38	4.23	1	.01	5	3.11	.01	.01	1	3
R 58535	2	11	12	36	.1	22	6	397	1.88	3	5	ND	1	4	1	3	2	14	.08	.025	2	25	.58	16	.03	8	.89	.01	.03	2	2
R 58536	1	99	2	61	.1	46	17	2110	3.73	6	5	ND	1	35	1	2	2	42	.75	.038	4	27	1.04	109	.19	10	1.55	.01	.34	1	4
R 58537	1	25	5	106	.1	28	24	1053	6.64	12	5	ND	1	9	1	2	2	73	.28	.046	3	29	2.43	35	.23	8	3.15	.01	.05	1	1
R 58538	1	15	2	18	.1	7	3	152	1.76	2	5	ND	1	1	1	2	2	14	.01	.007	2	6	.32	1	.02	6	.38	.01	.01	2	1
R 58539	1	12	2	51	.1	42	26	1572	2.33	8	5	ND	1	6	1	2	2	56	.36	.005	2	90	1.68	10	.22	148	2.16	.01	.01	1	1
R 59397	1	25	7	54	.1	7	9	632	2.92	2	5	ND	1	10	1	3	2	30	.13	.038	2	16	.88	15	.02	4	1.61	.01	.03	1	1
R 59398	2	19	2	28	.1	5	3	273	1.65	2	5	ND	1	3	1	2	2	14	.14	.011	2	6	.55	21	.08	7	.86	.03	.02	1	3
R 59399	1	55	2	67	.3	28	19	613	10.39	4	5	ND	1	5	1	2	2	60	.60	.047	2	77	1.95	5	.45	5	1.76	.01	.06	1	1
R 59400	1	39	2	90	.1	23	23	1012	6.89	7	5	ND	1	16	2	2	2	122	1.11	.095	2	58	2.41	6	.57	19	2.86	.01	.01	1	3
R 79801	1	52	2	75	.1	22	18	702	5.98	10	5	ND	1	8	1	2	4	87	.74	.063	2	61	2.20	4	.50	6	2.67	.01	.01	1	1
R 79802	1	55	2	80	.1	19	21	597	6.70	5	5	ND	1	5	2	2	2	121	.71	.058	2	53	2.27	4	.60	6	2.80	.01	.01	1	1
R 79803	1	46	6	95	.1	15	19	999	7.37	3	5	ND	1	17	1	2	2	123	.82	.167	2	23	2.14	78	.46	4	2.77	.01	.11	1	3
R 79804	1	52	2	95	.1	26	20	936	7.37	4	5	ND	1	12	1	2	2	131	.86	.089	2	38	2.45	61	.51	11	3.11	.01	.08	1	1
R 79805	1	47	3	80	.1	18	18	725	6.19	3	5	ND	1	7	2	2	2	110	.75	.083	2	41	2.02	7	.51	14	2.67	.01	.03	1	1
STD C/AU-R	18	58	38	133	6.7	68	31	1308	4.08	39	19	7	37	49	19	14	19	59	.51	.086	39	55	.90	176	.07	34	2.02	.05	.13	12	525

8907-074

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	Ca PPM	Si PPM	Al PPM	Ti %	V PPM	Cr PPM	F %	La PPM	Cr PPM	Mg %	Ba PPM	Bi %	Li PPM	B %	K %	Na %	I %	W PPM	AN** PPE
1850N 300E	5	34	12	44	.2	29	15	318	3.97	5	5	ND	1	36	1	2	1	95	1.12	.027	3	45	1.02	32	.20	8	3.56	.02	.03	2	2		
1850N 350E	1	37	5	40	.1	29	15	178	3.95	7	5	ND	1	21	1	2	1	95	1.04	.039	1	50	.96	23	.20	12	3.72	.02	.02	1	1		
1850N 400E	1	52	7	54	.2	28	13	232	3.88	5	5	ND	1	29	1	2	3	90	.93	.051	3	50	.70	23	.17	5	3.73	.02	.02	1	5		
1850N 450E	1	51	10	92	.1	38	14	695	4.66	7	5	ND	2	23	1	2	2	91	.64	.021	4	59	1.70	50	.30	5	3.61	.01	.03	1	4		
1850N 500E	1	27	8	41	.2	19	9	287	2.98	2	5	ND	1	31	1	2	2	77	.90	.035	3	40	.63	26	.16	7	2.89	.01	.02	1	6		
1850N 550E	1	25	5	44	.1	14	8	327	3.08	3	5	ND	1	31	1	2	2	75	.88	.057	3	39	.51	16	.17	2	3.14	.01	.02	1	3		
1850N 600E	1	19	8	38	.2	13	7	219	3.40	3	5	ND	1	32	1	2	2	84	.93	.041	2	40	.47	12	.17	7	3.31	.01	.02	2	7		
1850N 650E	1	16	4	26	.2	12	6	175	2.47	3	5	ND	1	29	1	2	2	68	.84	.033	3	33	.36	14	.13	2	2.13	.01	.01	1	36		
1850N 700E	1	22	9	28	.1	17	8	203	2.40	2	5	ND	1	30	1	2	2	66	.87	.023	4	38	.47	11	.15	6	2.11	.01	.02	1	166		
1850N 750E	1	30	7	40	.2	10	8	158	5.19	5	5	ND	1	20	1	2	2	112	.50	.040	3	45	.43	24	.19	7	3.60	.01	.02	2	6		
1850N 800E	1	29	4	38	.2	12	7	194	3.52	2	5	ND	1	26	1	2	2	92	.71	.031	2	34	.48	12	.18	8	2.32	.01	.02	1	6		
1850N 850E	2	38	2	29	.3	12	6	156	3.38	2	5	ND	1	32	1	2	2	103	.69	.033	3	26	.35	13	.16	3	2.05	.01	.01	1	26		
1850N 900E	1	24	10	33	.3	8	6	153	3.81	2	5	ND	1	30	1	2	4	85	.48	.042	3	26	.38	11	.18	6	2.97	.01	.02	1	2		
1850N 950E	1	35	11	38	.2	6	8	202	4.61	7	5	ND	1	27	1	2	2	102	.52	.054	2	26	.52	7	.22	5	2.71	.01	.02	1	1		
1850N 1000E	1	24	2	35	.2	2	5	153	4.21	4	5	ND	1	26	1	2	2	97	.55	.058	3	24	.39	11	.18	9	2.86	.01	.02	1	4		
1850N 1050E	1	27	5	38	.2	8	7	174	5.13	7	5	ND	1	27	1	2	2	112	.42	.077	4	25	.45	12	.20	5	3.12	.01	.02	2	2		
1850N 1100E	1	9	2	24	.2	4	5	129	3.62	4	5	ND	1	29	1	2	2	122	.58	.062	2	16	.27	7	.25	7	1.65	.01	.02	1	11		
STD C/AU-S	18	62	43	132	6.6	67	31	1043	4.12	44	18	7	37	48	18	15	18	58	.52	.092	38	56	.91	174	.07	35	2.02	.06	.13	12	51		

NORANDA VANCOUVER LABORATORY

PROPERTY/LOCATION: VALENTINE

CODE : 8908-022

Project No. : 120

Sheet: 1 of 1

Date rec'd: AUG02

Material : 2 PANS

Geol.: T.M.

Date compl: AUG17

Remarks :

Values in PPM, except where noted.

T. T. No.	SAMPLE No.	Wt (g)	PPB Au	Cu	Zn	Pb	Ag
1	58365	16.9	1050	18	44	1	0.2
2	58367	12.8	760	14	28	1	0.1

N.B. Pan-con: entire sample used for Au determination.

*Cu, Zn, Pb, Ag values obtained from Aqua Regia sol'n.

Valentine Little Wolf Cl. (TMC)

8906-098

ACME ANALYTICAL LABORATORIES LTD.

852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6

PHONE (604) 253-3158 FAX (604) 253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

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

DATE RECEIVED: JUN 26 1989 DATE REPORT MAILED: June 29/89 SIGNED BY: C. Long, D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

NORANDA EXPLORATION CO. LTD. PROJECT 8906-098 120 File # 89-1730

SAMPLE#	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	AU*
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM	PPM
R58345	1	16	5	26	.2	6	3	552	1.14	2	5	ND	2	4	1	2	3	4	.08	.012	2	7	.29	32	.03	2	.48	.01	.04	2	1
R58349	1	85	5	65	.1	3	13	1037	5.87	10	5	ND	1	9	1	2	2	74	.36	.044	2	25	1.97	14	.22	2	2.72	.01	.02	1	1
R58350	2	17	3	10	.1	6	1	539	1.10	2	5	ND	1	5	1	2	2	8	.04	.022	2	4	.02	13	.01	6	.09	.01	.01	2	44
R58470	1	66	12	112	.2	37	34	1633	3.26	5	5	ND	1	10	1	2	4	146	.54	.057	2	79	3.32	24	.49	10	3.92	.01	.01	1	1
R58471	1	47	6	55	.1	45	20	2229	1.91	5	5	ND	1	3	1	2	4	14	.04	.023	2	15	.51	31	.09	2	.99	.01	.04	2	1
R58472	1	56	6	52	.1	27	3	1526	1.93	2	5	ND	1	4	1	2	2	15	.11	.027	4	43	.57	20	.06	5	1.00	.01	.03	1	1
R58473	2	31	5	142	.1	29	24	813	6.17	5	5	ND	1	5	1	2	2	93	.12	.017	2	128	3.21	47	.12	2	3.76	.01	.01	1	2
R58474	1	86	17	98	.1	52	21	1372	5.33	3	5	ND	1	11	1	2	2	97	.18	.051	2	24	1.53	15	.20	5	2.79	.01	.01	1	1
R58475	1	5	7	38	.1	4	5	544	1.75	2	5	ND	1	5	1	2	2	14	.30	.032	2	8	.70	15	.10	3	1.10	.02	.04	2	1
R59353	2	25	9	75	.1	30	3	1050	2.71	5	5	ND	1	4	1	2	2	44	.13	.028	2	30	.73	26	.07	2	1.05	.02	.03	1	1
R59354	2	10	7	56	.2	36	10	609	2.75	11	5	ND	1	2	1	2	2	45	.10	.015	2	70	1.57	8	.11	5	1.62	.01	.01	1	2
R59355	1	45	7	23	.1	36	20	1102	6.53	5	5	ND	1	7	1	2	2	177	.73	.052	2	80	2.39	8	.52	9	2.80	.01	.01	1	2
R59356	1	79	14	85	.1	27	7	1046	8.55	2	5	ND	1	7	1	2	2	33	.08	.073	11	19	.52	51	.07	8	.71	.01	.07	1	3
R59357	1	20	10	41	.1	23	7	1568	1.72	9	5	ND	1	9	1	2	2	10	.27	.022	4	25	.39	45	.01	4	.84	.01	.04	2	6
R59358	3	65	12	68	.1	27	8	208	2.59	2	5	ND	3	5	1	2	2	23	.01	.038	8	17	.48	52	.07	3	1.90	.01	.10	1	3
R59359	1	52	3	91	.1	46	31	705	4.91	3	5	ND	1	32	1	2	2	60	1.52	.034	2	73	2.05	19	.30	3	2.49	.02	.05	1	2
R59360	2	10	5	7	.1	3	1	189	1.31	2	5	ND	1	3	1	2	2	11	.01	.006	2	6	.09	159	.01	2	.17	.01	.01	3	111
R59361	11	628	6	35	.2	21	3	1683	6.23	2	5	ND	1	3	1	2	4	52	.09	.041	2	16	.44	4	.01	7	1.03	.01	.01	1	4
R59362	1	44	11	58	.1	18	17	392	2.50	7	5	ND	2	8	1	2	2	33	.09	.026	4	14	.76	59	.13	2	1.79	.01	.08	1	2
R59363	4	34	11	87	.1	28	9	322	4.95	6	5	ND	1	3	1	2	2	23	.07	.067	2	25	.39	14	.08	9	.66	.01	.02	1	3
R59364	1	53	10	90	.1	23	10	725	3.99	4	5	ND	1	12	1	2	4	42	.11	.049	2	29	1.23	68	.22	2	2.89	.01	.08	1	3
R59365	1	39	7	68	.1	32	21	737	4.91	4	5	ND	1	5	1	2	4	105	.13	.034	3	43	1.87	24	.28	2	2.72	.01	.03	1	3
R59366	9	120	25	382	.1	91	18	1364	14.52	2	5	ND	3	9	1	2	2	74	.07	.063	23	48	.44	122	.09	5	1.53	.01	.11	1	5
R59367	1	22	4	33	.1	15	6	1081	1.24	5	5	ND	1	3	1	2	2	11	.05	.020	4	8	.27	58	.01	6	.55	.01	.04	3	3
R59368	2	62	14	207	.1	100	18	920	8.45	2	5	ND	2	7	1	2	2	49	.09	.104	6	35	1.07	91	.01	2	2.43	.01	.11	1	3
R59369	1	91	12	189	.2	63	35	2694	9.35	23	5	ND	1	36	1	2	2	213	.64	.060	2	118	3.02	49	.03	5	4.12	.02	.05	1	1
STD C/AU-R	18	63	38	132	7.0	71	31	1030	3.89	44	19	7	36	50	19	15	21	61	.50	.095	39	55	.88	179	.07	35	1.90	.06	.14	11	520

8906-098

Valentine L. Wolf (TMC)

8907-021

ACME ANALYTICAL LABORATORIES LTD.

852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6

PHONE (604) 253-3158 FAX (604) 253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

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

DATE RECEIVED: JUL 5 1989

DATE REPORT MAILED:

July 10/89

SIGNED BY: C. Long

D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

NORANDA EXPLORATION CO. LTD. PROJECT 8907-021 120 File # 89-1945

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	AU* PPB
44425	1	56	133	197	1.2	33	30	948	7.80	2	5	ND	1	16	2	2	2	122	.91	.068	2	53	2.27	71	.59	2	3.26	.01	.05	1	1
44486	1	35	304	480	3.3	7	5	771	2.99	6	5	ND	1	8	3	4	3	24	.18	.034	2	12	.79	39	.15	2	1.47	.01	.13	1	2
44487	1	105	21	131	.1	48	34	1097	7.64	19	5	ND	1	21	1	2	2	132	.91	.098	2	69	3.04	11	.48	3	3.76	.01	.05	1	2
58501	1	58	20	149	.2	36	33	1001	6.59	2	5	ND	1	15	1	2	2	113	.96	.098	2	41	2.31	44	.49	3	3.13	.01	.02	1	2
58502	1	55	10	89	.1	26	25	812	7.27	2	5	ND	1	12	1	2	2	124	.83	.058	2	53	2.60	6	.62	2	3.55	.01	.01	1	3
58503	1	9	33	75	.1	6	6	174	.93	2	5	ND	1	2	1	2	2	17	.06	.008	2	10	.11	3	.04	2	.30	.01	.01	2	1
58504	1	75	4	116	.1	34	23	831	5.88	4	5	ND	4	15	1	2	2	110	.09	.044	8	35	1.39	95	.17	5	4.42	.01	.07	1	1
58505	1	87	6	142	.2	34	25	792	6.10	2	5	ND	1	6	2	2	2	120	.80	.063	2	57	2.23	8	.57	2	2.49	.01	.01	1	1
58506	1	13	15	36	.1	13	5	152	.82	3	5	ND	1	2	1	2	2	11	.04	.004	2	17	.29	16	.03	4	.46	.01	.01	5	2
58507	1	95	8	31	.1	35	28	767	5.72	2	5	ND	1	11	1	2	2	112	.92	.079	2	62	2.19	10	.49	2	2.83	.01	.02	1	1
58508	2	53	9	43	.1	29	8	11342	1.37	7	5	ND	1	35	1	2	2	9	.04	.010	3	11	.20	107	.03	2	.47	.01	.05	4	2
58509	2	55	20	54	.1	24	7	249	2.49	41	5	ND	4	2	1	3	2	10	.01	.017	7	9	.43	54	.01	3	.98	.01	.07	1	2
58510	1	52	13	53	.1	21	4	332	2.43	12	5	ND	3	3	1	2	2	21	.01	.026	9	12	.50	60	.01	3	.97	.01	.06	1	105
59370	4	60	10	82	.1	62	19	1374	3.50	7	5	ND	1	5	1	2	3	47	.11	.025	4	24	.83	22	.09	2	1.36	.01	.02	1	3
59371	2	62	11	70	.1	9	10	567	3.93	2	5	ND	1	6	1	2	2	46	.27	.035	2	7	1.19	20	.17	5	1.76	.03	.03	1	2
STD C/AU-R	18	63	41	132	6.6	68	31	968	4.10	38	23	7	38	49	18	15	22	59	.51	.090	38	56	.89	176	.07	35	1.99	.06	.13	12	510

8907-02

Valentine L Wolf & Wolf (TMC)

8907-023

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

GEOCHEMICAL ANALYSIS CERTIFICATE

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

DATE RECEIVED: JUL 5 1989 DATE REPORT MAILED: July 10/89 SIGNED BY: C. Long D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

NORANDA EXPLORATION CO. LTD. PROJECT 8907-023 120 File # 89-1952

SAMPLE#	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	Au*
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM	PPM
58362	1	39	10	30	.2	35	21	854	4.09	15	5	ND	1	21	1	2	2	69	.52	.047	4	42	1.05	55	.16	4	2.63	.01	.24	1	4
58364	1	69	7	85	.1	45	21	745	3.65	17	5	ND	1	32	1	2	2	64	.78	.054	5	39	1.05	66	.14	2	2.22	.01	.03	1	2
58368	1	45	6	100	.1	40	20	688	3.12	10	5	ND	1	31	1	2	2	73	.84	.046	5	36	.71	46	.13	3	2.10	.01	.03	1	12
58393	1	49	6	72	.1	37	24	770	3.17	4	5	ND	1	35	1	2	2	76	1.25	.049	7	44	.91	62	.12	5	2.77	.01	.03	1	11
58395	1	46	9	63	.1	33	34	980	3.27	13	5	ND	1	33	1	2	2	78	1.09	.047	7	42	.95	66	.15	5	2.54	.01	.03	1	4
58397	1	47	10	57	.1	31	14	602	3.69	6	5	ND	1	28	1	2	2	92	.84	.037	4	48	.93	49	.19	2	2.83	.01	.03	1	14
58399	1	46	7	79	.1	32	17	885	3.60	4	5	ND	1	36	1	2	2	78	1.06	.043	5	40	.92	69	.15	3	2.60	.01	.03	1	76
STD C/AU-3	18	62	41	132	7.3	69	30	1027	4.04	45	21	7	36	48	19	15	17	61	.52	.095	37	55	.91	174	.07	36	1.88	.06	.14	13	48

8907-01

APPENDIX IV
STATEMENT OF COSTS

COST STATEMENT FOR THE WOLF GROUP OF CLAIMS

WAGES:

T.M.	11 mandays @ \$140.00/day.	
B.S.	3 mandays @ \$112.00/day.	
D.S.	10 mandays @ \$117.00/day.	
I.S.	1 manday @ \$190.00/day.	
	-----	\$3,236.00
		=====

ACCOMMODATIONS:

June 24-28, 1989 (5 days @ \$11.43/day)	
July 10-18, 1989 (9 days @ \$21.42/day)	
	\$ 249.92
	=====

GROCERIES:

June 24-28, 1989 (5 days @ \$20.02/day)	
July 10-18, 1989 (9 days @ \$17.37/day)	
	\$ 256.44
	=====

TRUCK RENTAL:

June 24-28, 1989 (5 days @ \$28.08/day)	
July 10-18, 1989 (9 days @ \$41.66/day)	
	\$ 515.42
	=====

GAS:

June 24-28, 1989 (5 days @ \$7.49/day)	
July 10-18, 1989 (9 days @ \$9.52/day)	
	\$ 123.23
	=====

TRUCK/TIRE REPAIR:

	\$ 8.98
	=====

FIELD OFFICE SUPPLIES: (Blue Prints)

	\$ 18.95
	=====

MISCELLANEOUS:

	\$ 6.88
	=====

SHIPPING: (Samples)

June 24-28 (1 box \$6.11)
July 10-18 (9 boxes \$55.05)

\$ 61.16
=====

GEOCHEMICAL ANALYSIS:

\$ 3,407.40
=====

REPORT WRITE-UP AND PREPARATION

Author \$600.00
Drafting \$600.00
Typing \$200.00

\$ 1,400.00
=====

TOTAL COSTS:

\$ 9,284.38
=====

COST OF GEOCHEMICAL ANALYSIS ON THE WOLF GROUP

1. Rocks*

67 samples @ \$ 6.25/sample analysis by ICP for 30 elements.
67 samples @ \$ 4.50/sample analysis by AA for Au.
67 samples @ \$ 2.40/sample handling & preparation.
67 samples @ \$ 1.50/sample data processing & entry.
67 samples @ \$ 3.00/sample crushing & pulverizing.

67 samples @ \$17.65/sample \$1,182.55
=====

2. Soils*

147 samples @ \$ 6.25/sample analysis by ICP for 30 elements.
147 samples @ \$ 4.50/sample analysis by AA for Au.
147 samples @ \$ 2.40/sample handling & preparation.
147 samples @ \$ 1.50/sample data processing & entry.

147 samples @ \$14.65/sample \$2,153.55
=====

3. Silts*

2 samples @ \$ 6.25/sample analysis by ICP 30 elements.
2 samples @ \$ 4.50/sample geochemical analysis for Au by AA.
2 samples @ \$ 2.40/sample handling and preparation.
2 samples @ \$ 1.50/sample data processing and entry.

2 samples @ \$14.65/sample \$ 29.30
=====

4. Pan Concentrates

5 samples @ \$1.60/sample analysis for Cu.
5 samples @ \$1.80/sample analysis for Zn, Pb, and Ag.
5 samples @ \$5.00/sample analysis for Au by A.A.

5 samples @ \$8.40/sample \$ 42.00
=====

TOTAL COST FOR GEOCHEMICAL ANALYSIS: \$3,407.40
=====

* Analysis is by ICP for 30 elements: 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.

LITTLE WOLF
COST STATEMENT

WAGES:

R.W.	3 mandays x \$225.00	
T.M.	3 mandays x \$140.00	
I.S.	4 mandays x \$190.00	
D.S.	2 mandays x \$117.00	
B.S.	3 mandays x \$112.00	
	-----	\$2,650.00
		=====

ACCOMMODATION:

June 21-24, 1989 (4 days @ \$21.43/day)	
	\$ 85.71
	=====

TRUCK RENTAL:

June 21-24, 1989 (4 days @ \$31.50/day)	
	\$ 126.00
	=====

GROCERIES:

June 21-24, 1989 (4 days @ \$37.53/day)	
	\$ 150.14
	=====

GAS:

June 21-24, 1989 (4 days @ \$14.05/day)	
	\$ 56.20
	=====

GEOCHEMICAL ANALYSIS:

	\$ 832.65
	=====

REPORT WRITE-UP AND PREPARATION

Author	\$600.00	
Drafting	\$600.00	
Typing	\$200.00	\$ 1,400.00
		=====

TOTAL COSTS:	\$ 5,300.70
	=====

COST OF GEOCHEMICAL
ANALYSIS FOR THE
LITTLE WOLF GROUP

1. Rocks*

41 samples @ \$ 6.25/sample analysis by ICP for 30 elements.
41 samples @ \$ 4.50/sample geochemical analysis for Au by AA.
41 samples @ \$ 2.40/sample handling & preparation.
41 samples @ \$ 1.50/sample data processing & entry.
41 samples @ \$ 3.00/sample crushing & pulverizing.

41 samples @ \$17.65/sample \$ 723.65
=====

2. Silts*

4 samples @ \$ 6.25/sample analysis by ICP for 30 elements.
4 samples @ \$ 4.50/sample geochemical analysis for Au by AA.
4 samples @ \$ 2.40/sample handling & preparation.
4 samples @ \$ 1.50/sample data processing & entry.

4 samples @ \$14.65/sample \$ 58.60
=====

3. Pan Concentrates

6 samples @ \$1.60/sample analysis for Cu.
6 samples @ \$1.80/sample analysis for Zn, Pb, and Ag.
6 samples @ \$5.00/sample analysis for Au by A.A.

2 samples @ \$8.40/sample \$ 50.40
=====

COST OF GEOCHEMICAL ANALYSIS: \$ 832.65
=====

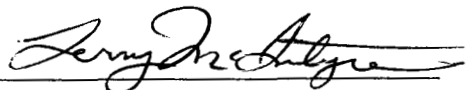
* Analysis is by ICP for 30 elements: Mo, Cu, Pb, Zn, Ag, Ni, Co, Mn, Fe, As, U, Au, Th, Sr, Cd, Sb, Bi, V, Ca, P, La, Cr, Mg, Ba, Ti, B, Al, Na, K, W.

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.

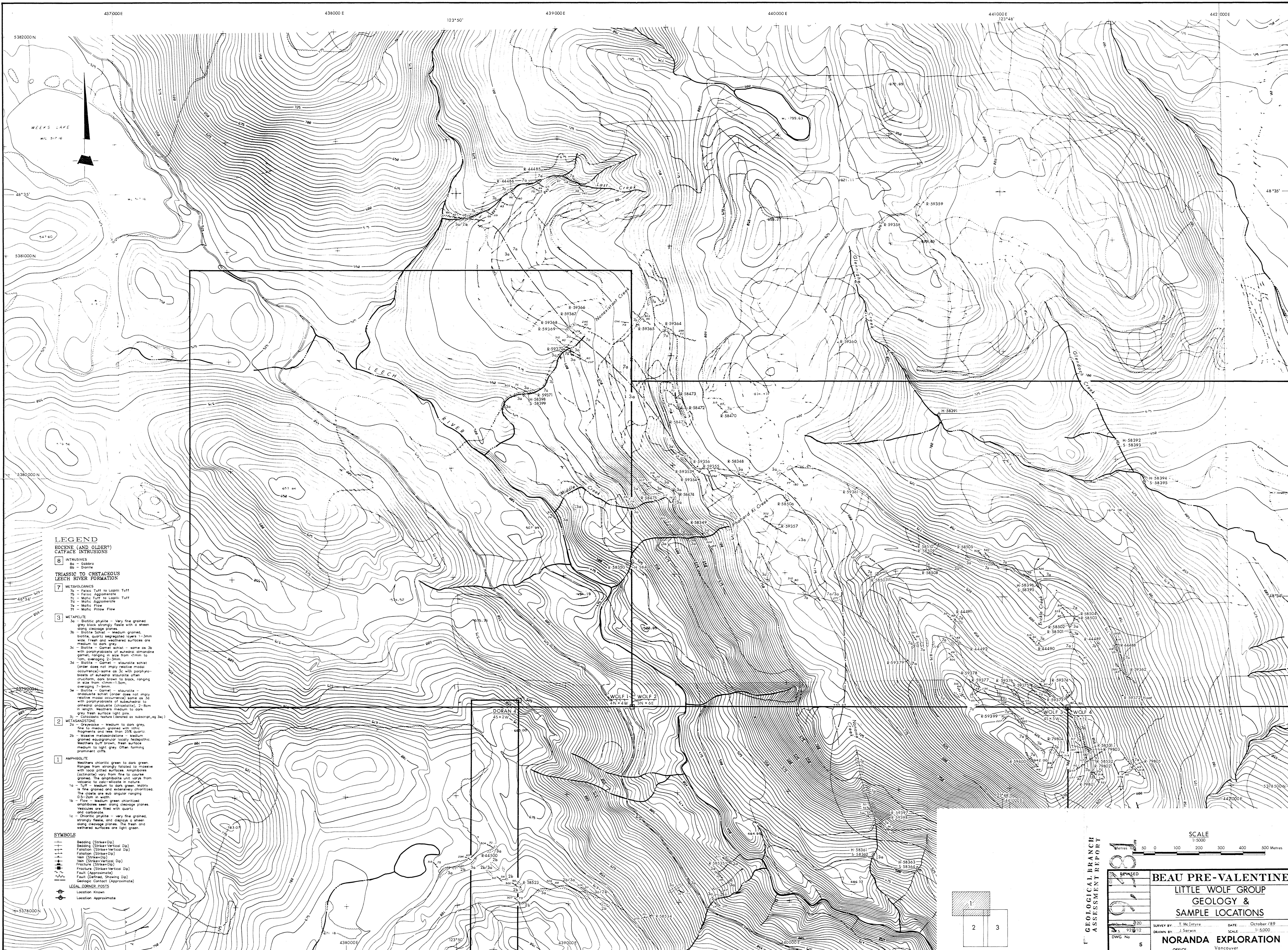

Terence J. McIntyre

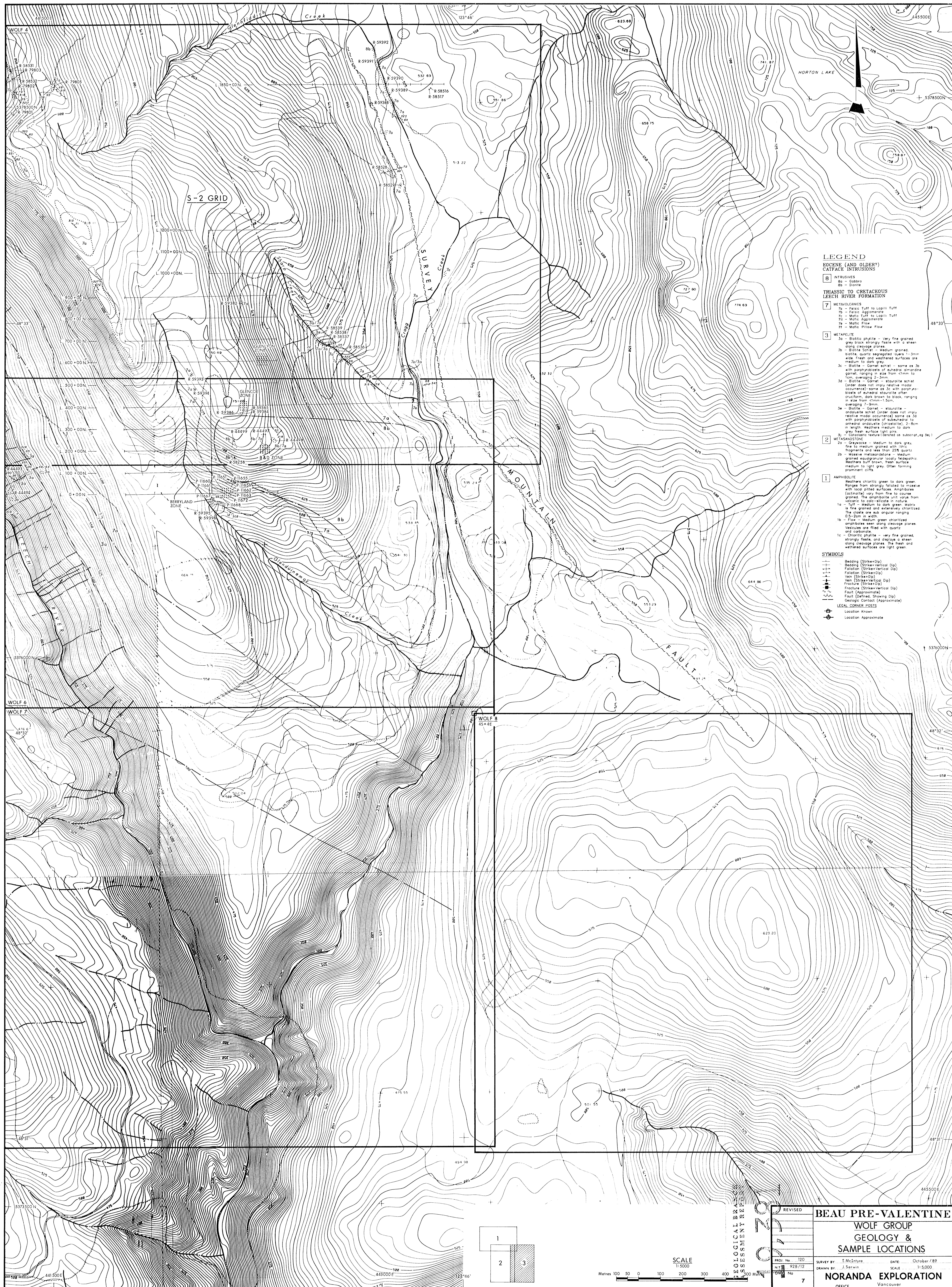
AUTHORS QUALIFICATIONS

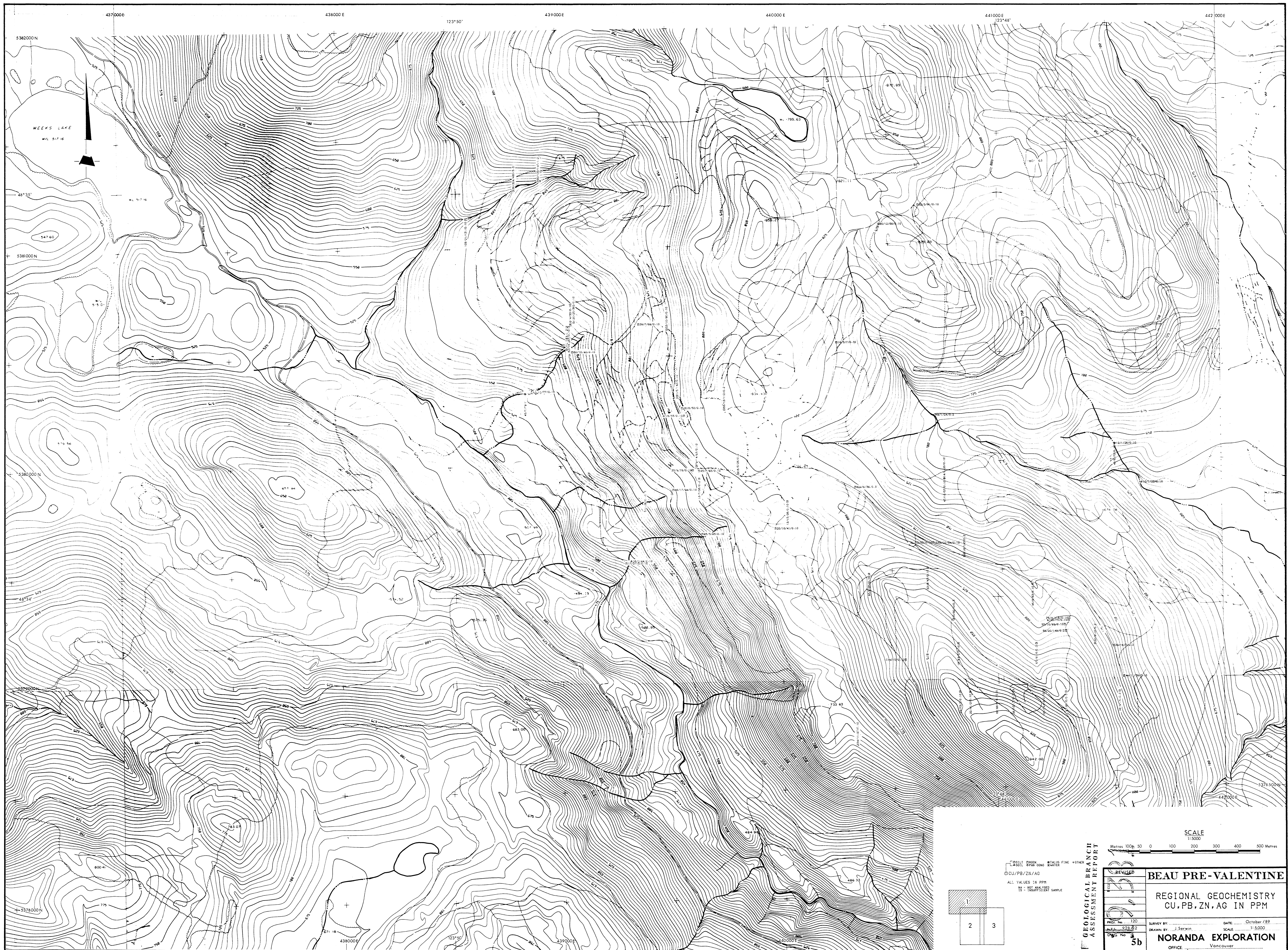
I, Robert G. Wilson of the City of Vancouver, Province of British Columbia, do hereby certify that:

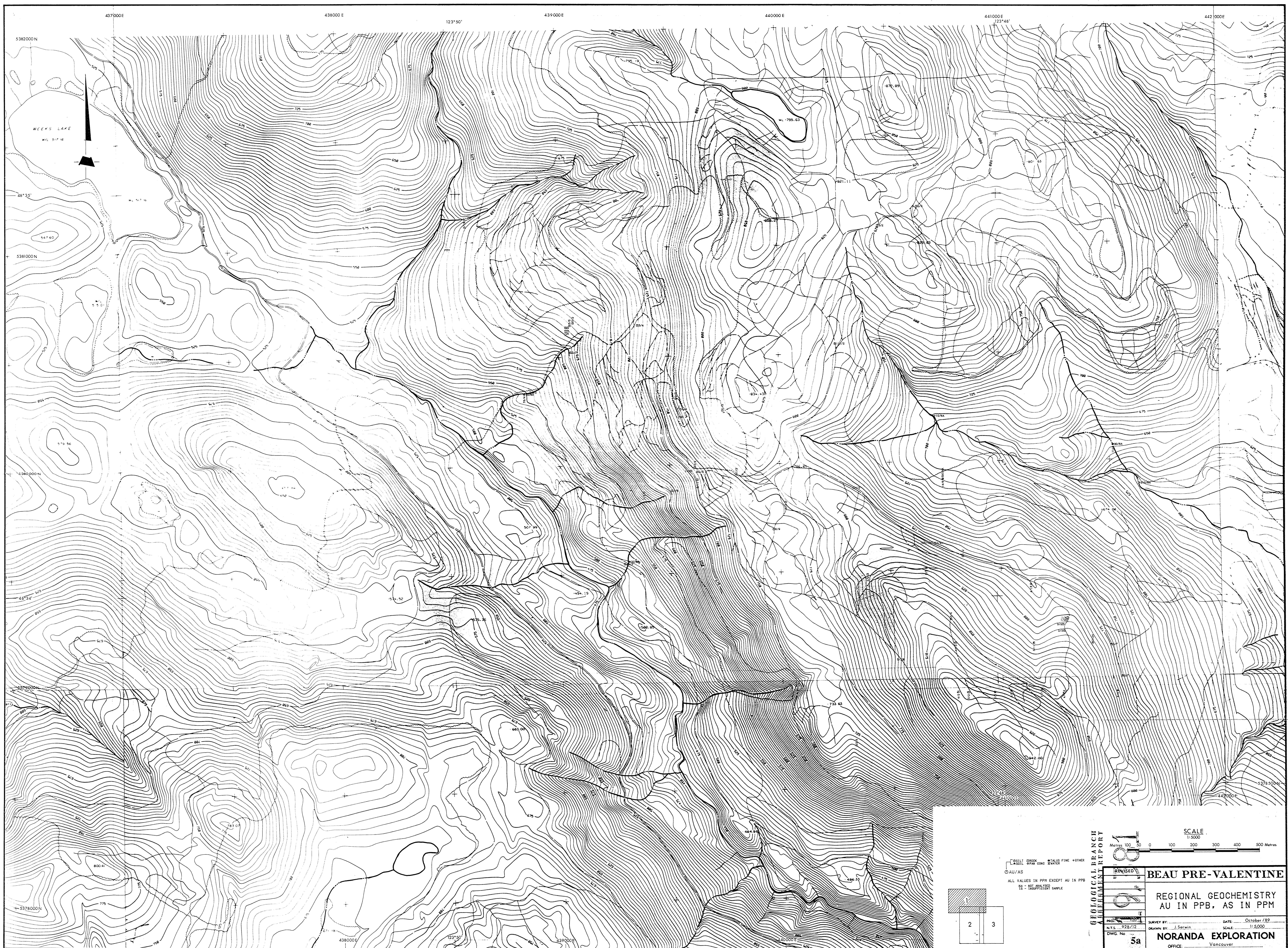
- I am a geologist residing at 3328 West 15th. Avenue, Vancouver B.C.
- I graduated from the University of British Columbia in 1976 with a BSc degree in Geology.
- I have worked in mineral exploration since 1973 and have practiced my profession as a geologist since 1976.
- I am presently a Project Geologist 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.

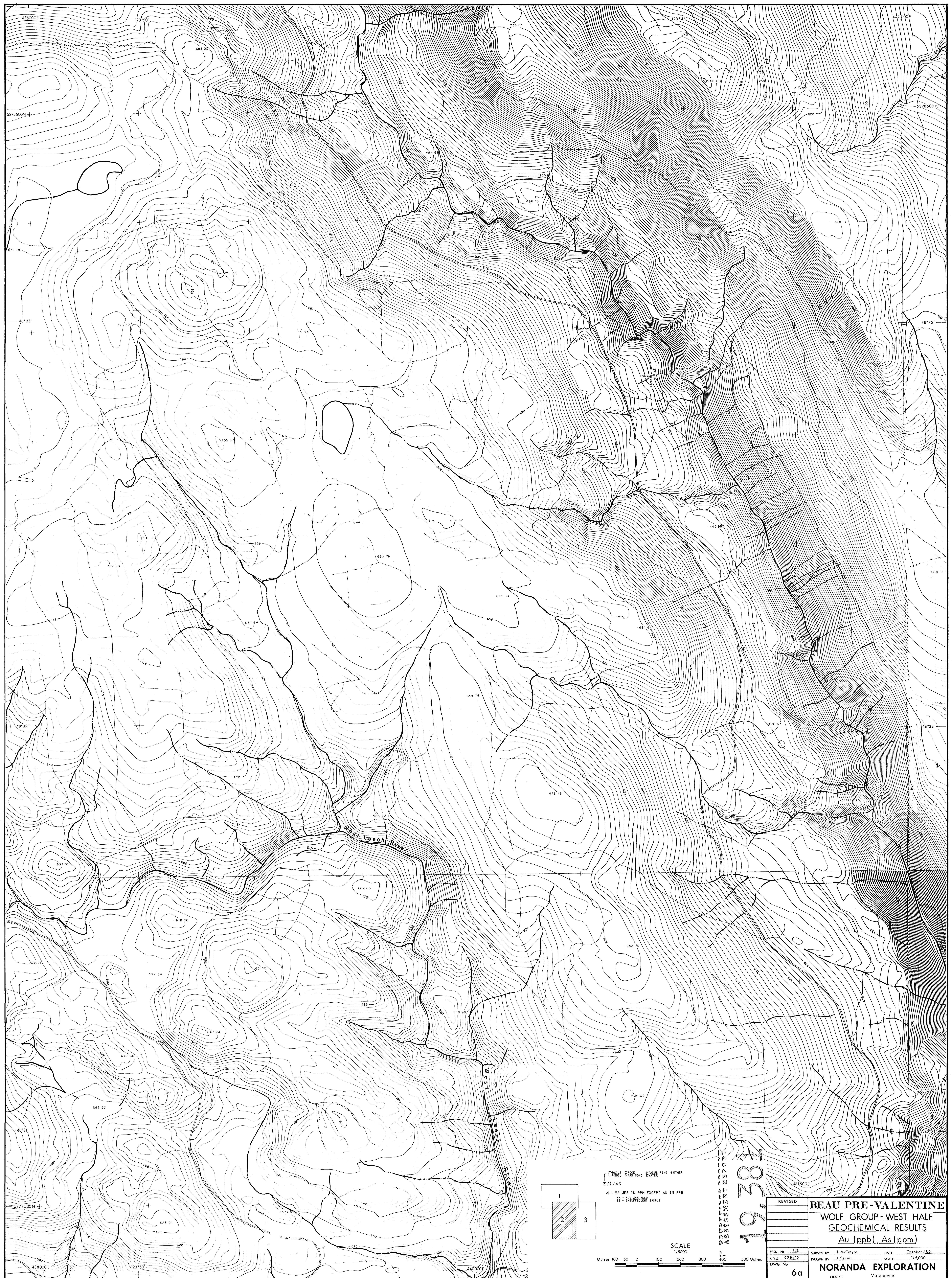
Rob Wilson
Project Geologist

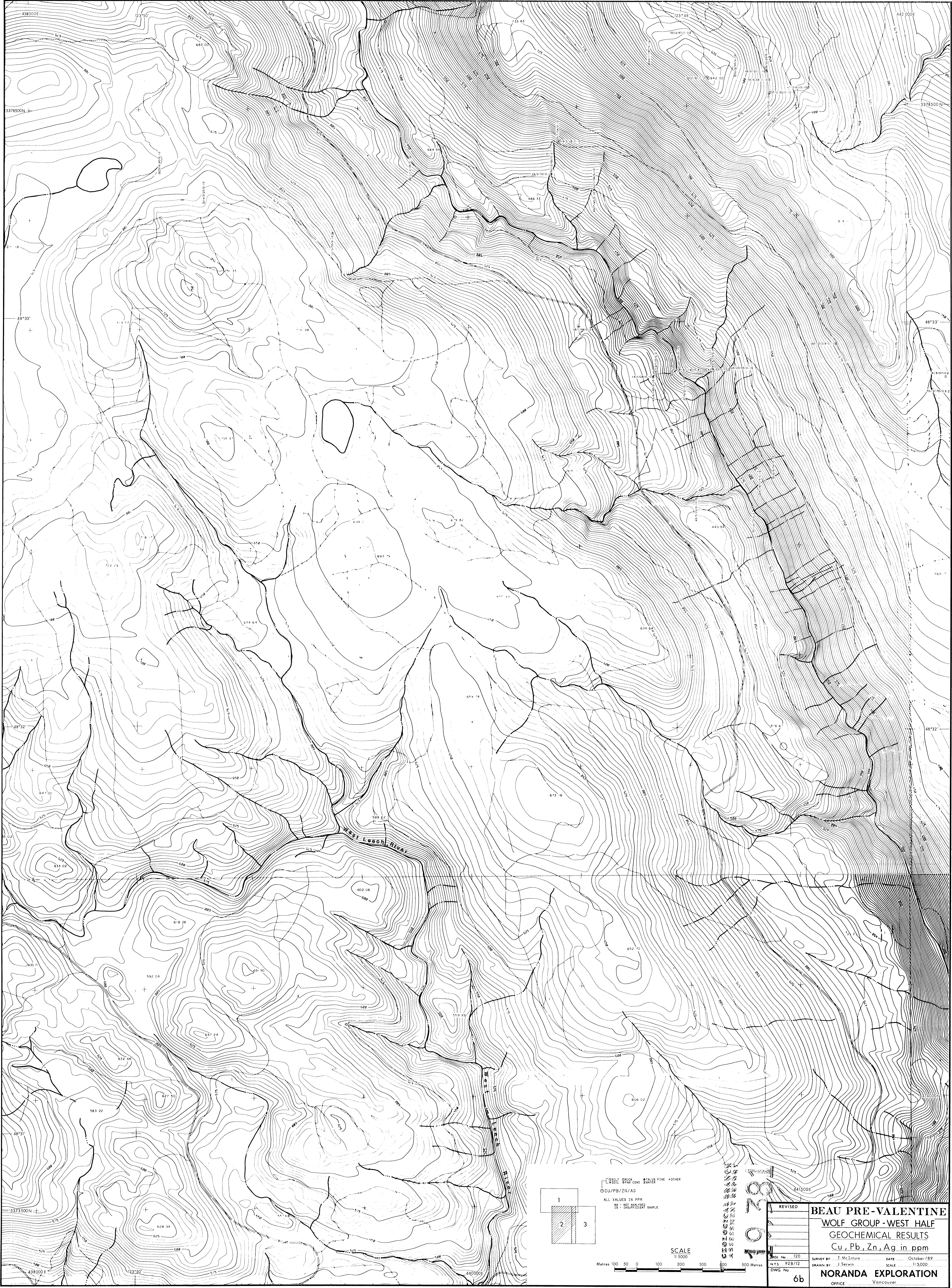








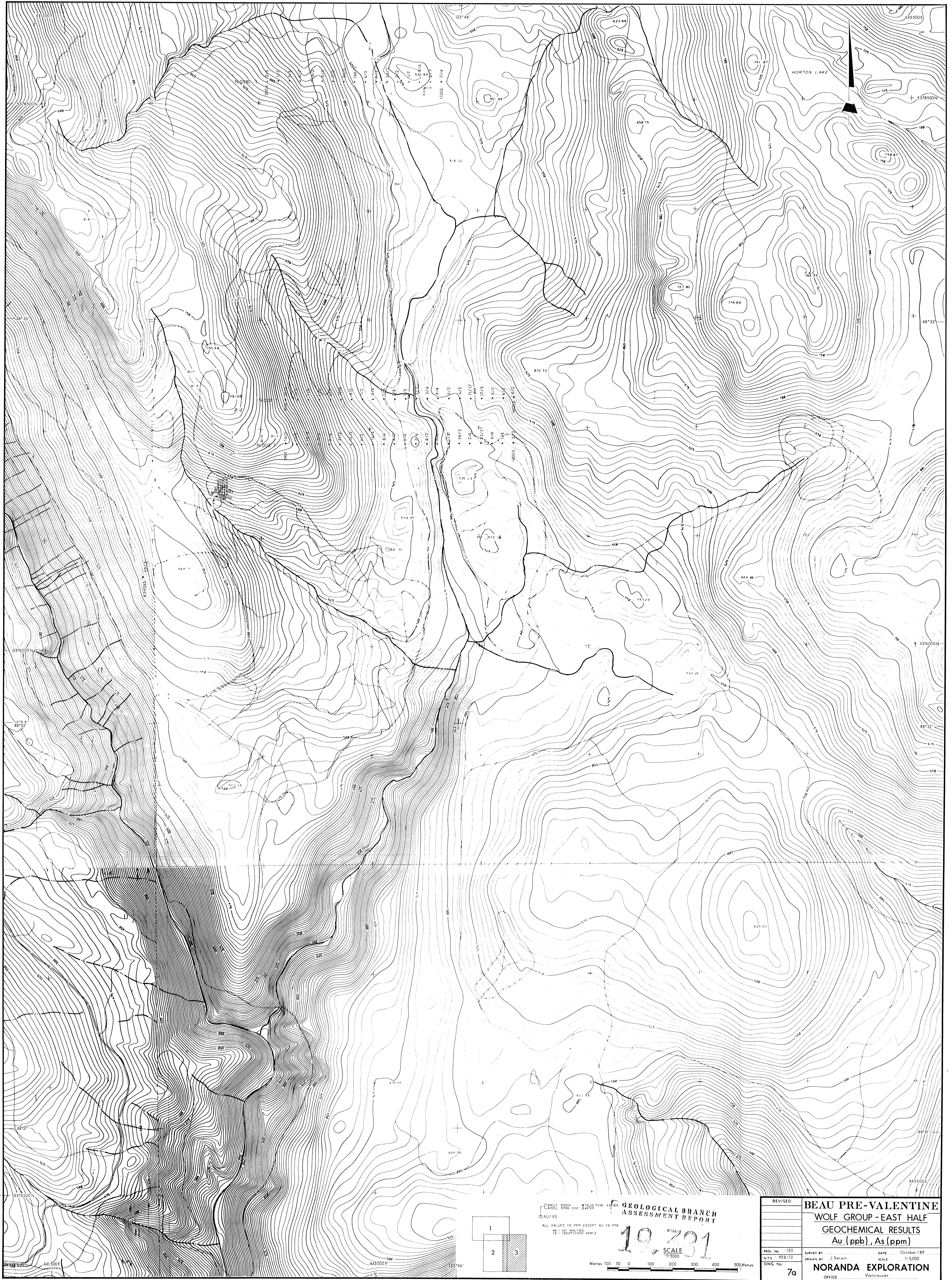


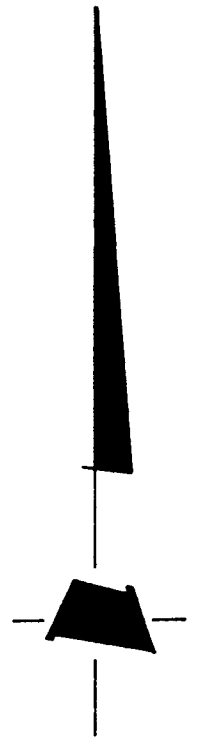


Gravel
Sand
Silt
Clay
Other
Geochemical Results
Cu, Pb, Zn, Ag in ppm

SCALE
1:5000
Metres 100 200 300 400 500

REVISED	BEAU PRE-VALENTINE	
	WOLF GROUP - WEST HALF	
	GEOCHEMICAL RESULTS	
	Cu, Pb, Zn, Ag in ppm	
SURV. No. 120	SURV. BY: J. McIntyre	DATE: October /89
N.T.S. 928/12	DRAWN BY: J. Serin	SCALE: 1:5000
DWG. No.	NORANDA EXPLORATION	
	OFFICE: Vancouver	





5377500N
442500E

100+00E

200+00E

300+00E

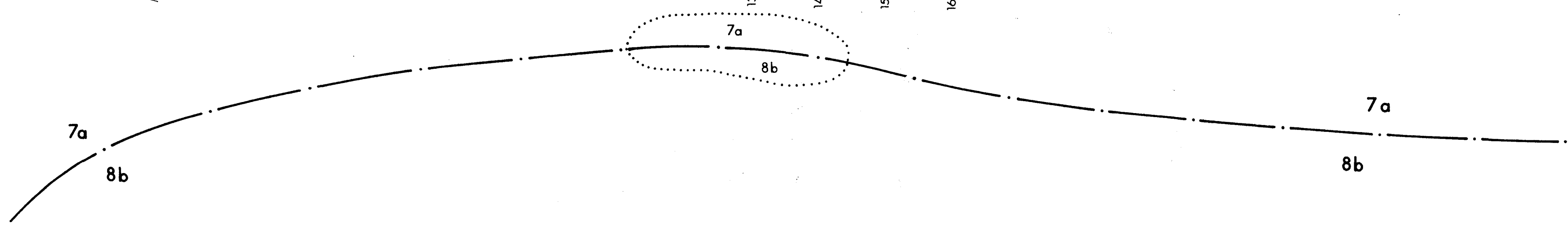
BL 00
700+00N
600+00N
500+00N
400+00N

GLENLYON ZONE

620+00N
610+00N
590+00N
580+00N
210+00E . 220+00E . 230+00E . 240+00E . 250+00E

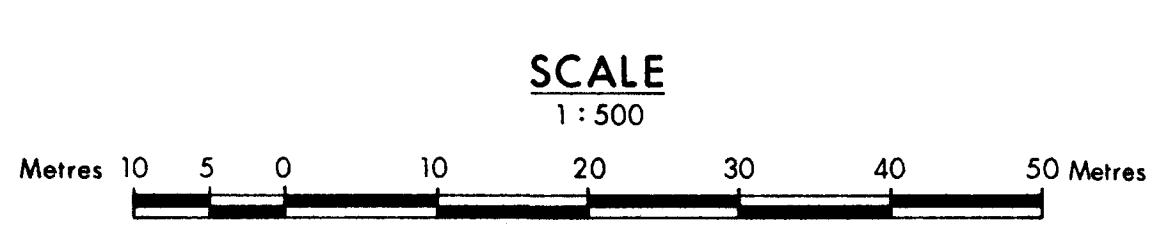
GLENCOE ZONE

420+00N
410+00N
390+00N
380+00N . 130+00E . 140+00E . 150+00E . 160+00E



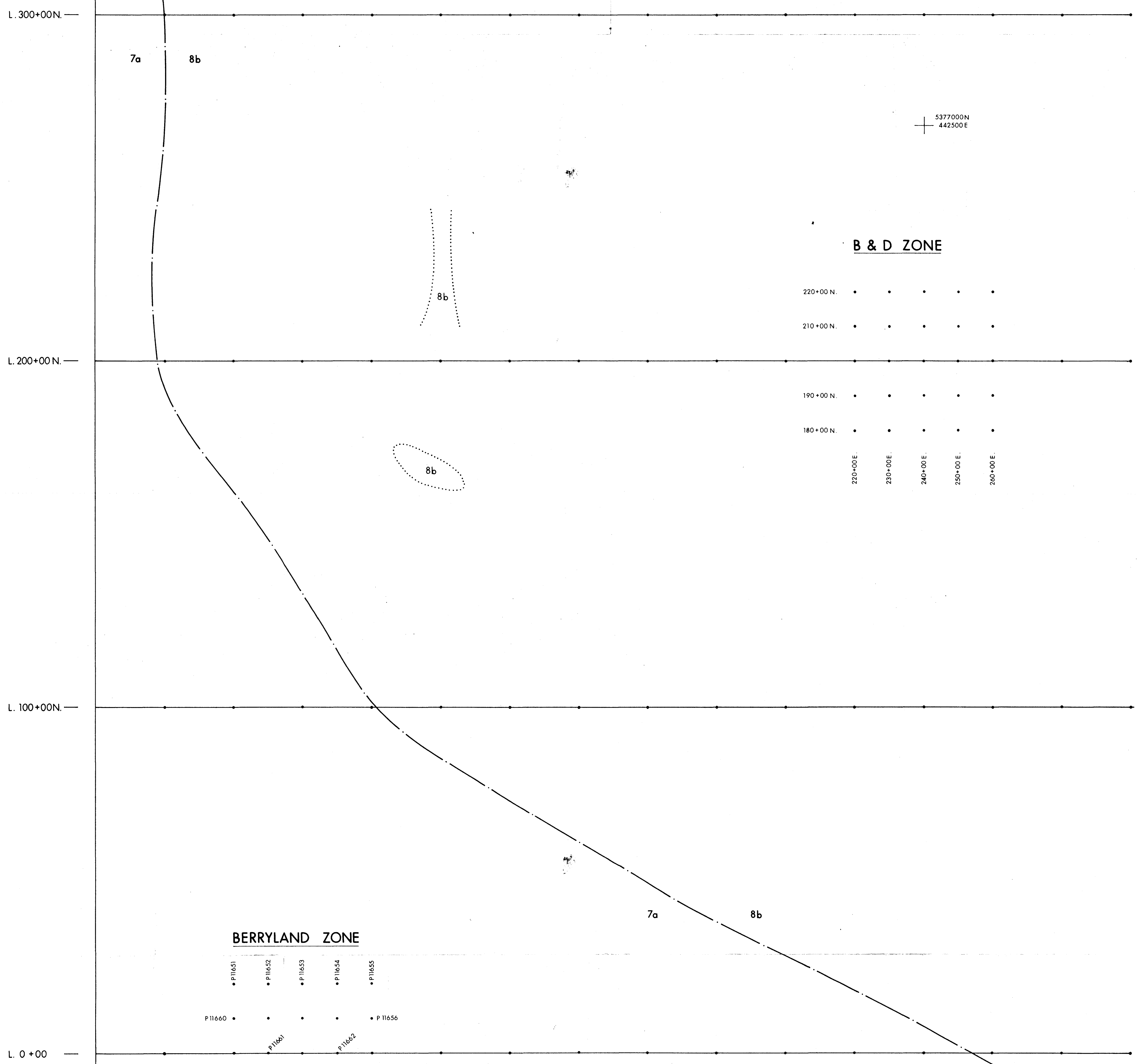
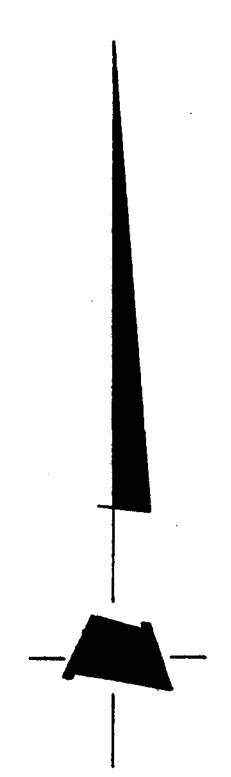
GEOLOGICAL BRANCH
ASSESSMENT REPORT

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REVISED	BEAU PRE-VALENTINE		
	WOLF GROUP		
	GEOLOGY &		
	S-2 GRID SAMPLE LOCATIONS		
	GLENLYON & GLENCOE ZONE		
PROJ. No. 120	SURVEY BY: T. McIntyre	DATE: October / 89	
N.T.S. 92B/12	DRAWN BY: J. Serwin	SCALE: 1:500	
DWG. No. 10b	NORANDA EXPLORATION		
	OFFICE: Vancouver		

BL 0+00 100+00 E. 200+00 E. 300+00 E.

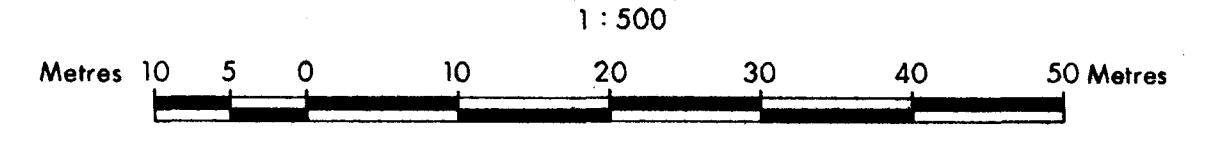


B & D ZONE

BERRYLAND ZONE

GEOLOGICAL BRANCH
ASSESSMENT REPORT

19,381
SCALE
1:500



REVISED	BEAU PRE-VALENTINE	
	WOLF GROUP	
	GEOLOGY &	
	S-2 GRID SAMPLE LOCATIONS	
	B & D ZONE & BERRYLAND ZONE	
PROJ. No. 120	SURVEY BY: T. McIntyre, Singh, Sharp	DATE: July 18 / 1989
N.T.S. 928/12	DRAWN BY: J. Serwin	SCALE: 1:500
DWG. No. 10a	NORANDA EXPLORATION	
	OFFICE: VANCOUVER	

BL 0+00

100+00 E.

200+00 E.

300+00 E.



L. 300+00 N.

L. 200+00 N.

L. 100+00 N.

L. 0+00

7a

8b

8b

8b

7a

8b

BERRYLAND ZONE

4/2 5/4 4/3 1/3 5/4
280/5 4/6 4/4 3/8 5/2
4/10 3/4 5/7 2/1 3/4
155/8 5/5 4/6 7/1 1/2

B & D ZONE

6/2 1/2 6/3 1/2 5/2
8/3 43/2 4/4 2/2 1/2
2/8 8/2 3/2 5/8
9/5 4/7 7/9 2/5 2/6
10/6 44/4 8/5 7/2 12/3

Au (ppb), As (ppm)

SCALE
1:500

Metres 10 5 0 10 20 30 40 50 Metres

GEOLOGICAL BRANCH
ASSESSMENT REPORT

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REVISED	BEAU PRE-VALENTINE WOLF GROUP	
	GEOCHEMICAL RESULTS Au & As B & D ZONE & BERRYLAND ZONE	
PROJ. No. 120	SURVEY BY: T. McIntyre, Singh, Sharp	DATE: July 18/1989
N.T.S. 928/12	DRAWN BY: J. Serwin	SCALE: 1:500
DWG. No. 11a	NORANDA EXPLORATION	
	OFFICE VANCOUVER	

BL 00

100+00E

200+00E

300+00E



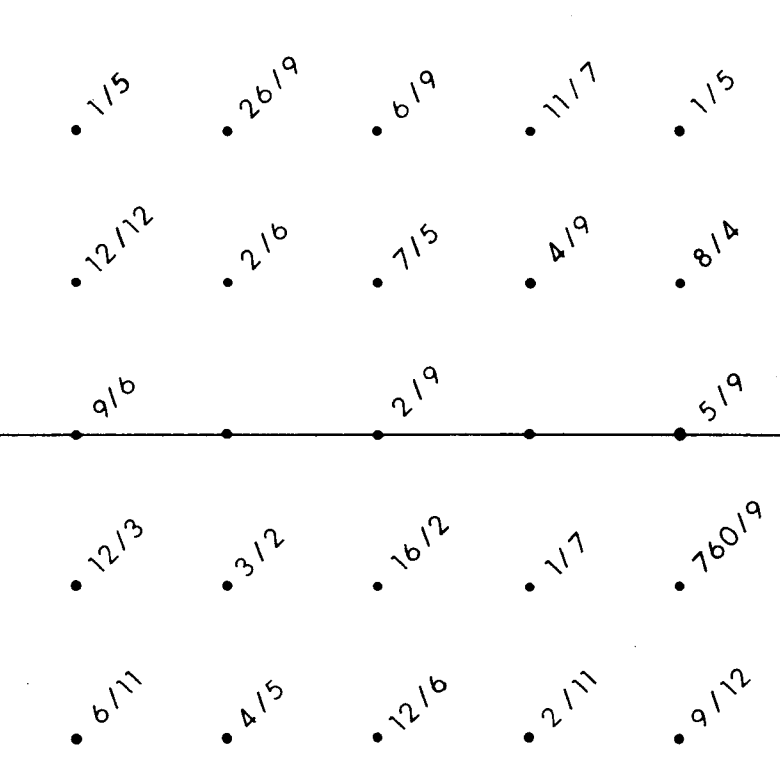
700+00N

600+00N

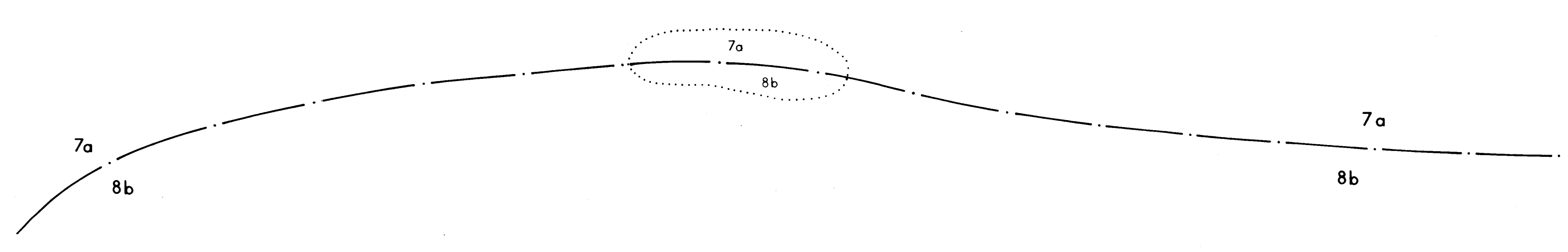
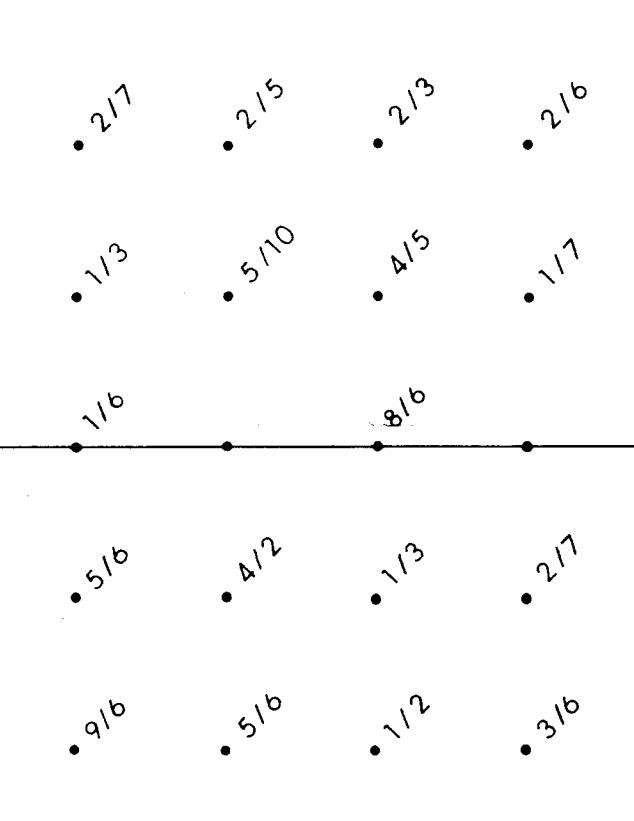
500+00N

400+00N

GLENLYON ZONE

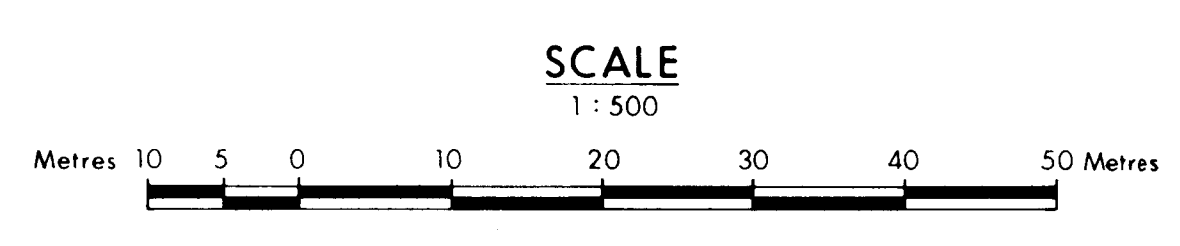


GLENCOE ZONE



Au (ppb), As (ppm)
GEOLOGICAL BRANCH
ASSESSMENT REPORT

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SCALE
1:500

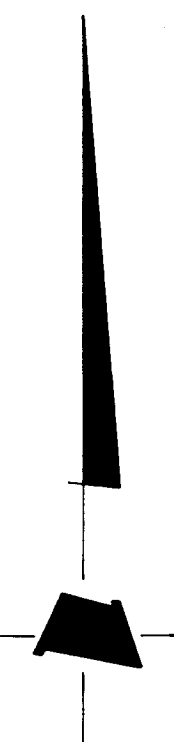
REVISED	BEAU PRE-VALENTINE		
	WOLF GROUP		
	GEOCHEMICAL RESULTS Au & As		
	GLENLYON & GLENCOE ZONE		
PROJ. No. 120	SURVEY BY: T. McIntyre	DATE: October /89	
N.T.S. 928/12	DRAWN BY: J. Serwin	SCALE: 1:500	
DWG No. 11b	NORANDA EXPLORATION		
	OFFICE: Vancouver		

BL 0+00

100+00 E.

200+00 E.

300+00 E.



L. 300+00 N.

7a

8b

L. 200+00 N.

8b

L. 100+00 N.

L. 0+00

B & D ZONE

- 10/60/0.01 • 20/30/2.01 • 40/78/2.01 • 47/99/10.01 • 10/84/2.01
- 21/50/0.01 • 41/54/7.01 • 26/31/2.01 • 45/101/7.02 • 11/52/9.01
- 11/59/9.01 • 31/27/9.01 • 20/18/2.01 • 40/46/11.01
- 30/84/2.00 • 28/78/2.00 • 31/40/1.01 • 29/60/11.02 • 13/31/10.01
- 36/28/9.01 • 43/46/9.01 • 28/25/9.01 • 8/9/4.01 • 4/59/5.01

8b

7a

8b

BERRYLAND ZONE

- 11/86/0.10 • 20/73/4.02 • 27/80/2.00 • 11/41/1.00 • 30/24/0.02
- 37/80/0.10 • 50/80/0.10 • 18/42/0.10 • 35/58/0.10 • 27/54/0.02
- 13/42/0.10 • 33/77/0.10
- 34/87/0.02 • 22/23/0.10 • 42/84/0.10 • 14/88/0.10 • 52/60/4.00
- 44/78/0.10 • 44/22/0.10 • 44/20/0.10 • 15/51/10.00 • 52/27/0.02

7a

GEOLOGICAL BRANCH
ASSESSMENT REPORT

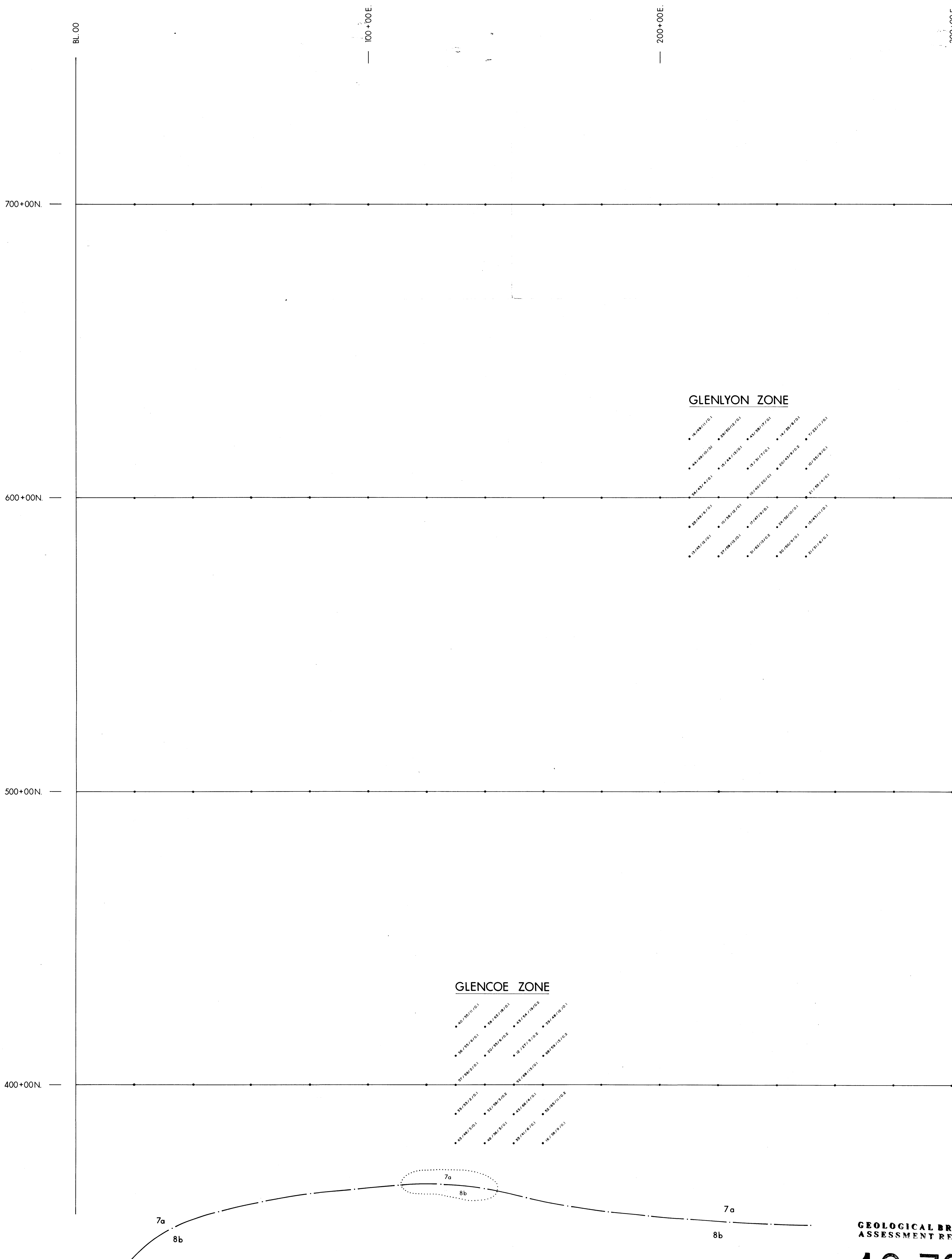
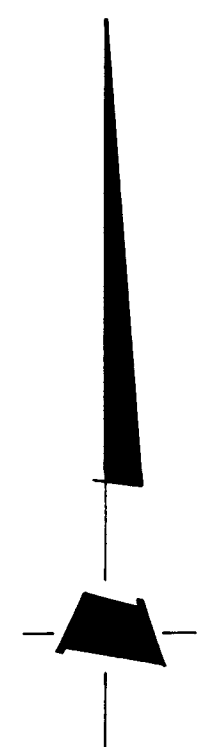
19,381

SCALE
1:500

Metres 10 5 0 10 20 30 40 50 Metres

Cu (ppm), Zn (ppm), Pb (ppm), Ag (ppm)

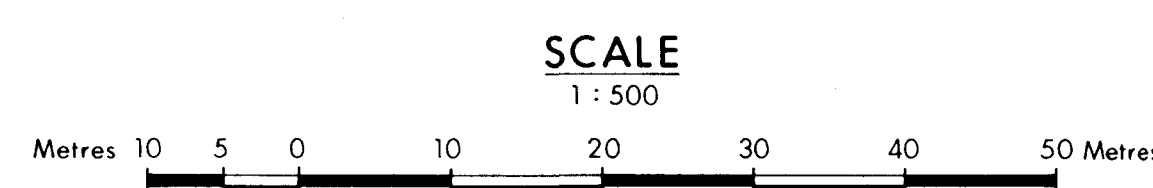
REVISED	BEAU PRE-VALENTINE		
	WOLF GROUP		
	GEOCHEMICAL RESULTS Cu, Zn, Pb & Ag		
	B & D ZONE & BERRYLAND ZONE		
PROJ No 120	SURVEY BY T.McIntyre, Singh, Sharp	DATE July 18/1989	
N.T.S. 928/12	DRAWN BY J.Serwin	SCALE 1:500	
DWG No 12a	NORANDA EXPLORATION		
	OFFICE VANCOUVER		



GEOLOGICAL BRANCH
ASSESSMENT REPORT

19,381

Cu (ppm), Zn (ppm), Pb (ppm), Ag (ppm)



REVISED	BEAU PRE-VALENTINE		
	WOLF GROUP		
	GEOCHEMICAL RESULTS Cu, Zn, Pb & Ag		
	GLENLYON & GLENCOE ZONE		
PROJ. No. 120	SURVEY BY: T. McIntyre	DATE: October /89	
N.T.S. 928/12	DRAWN BY: J. Serwin	SCALE: 1:500	
DWG. No. 12b	NORANDA EXPLORATION		
	OFFICE: Vancouver		